

STMICROELECTRONICS NV  
Form 20-F  
March 14, 2003  
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As filed with the Securities and Exchange Commission on March 14, 2003

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## SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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### FORM 20-F

REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2002

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number: 1-13546

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# STMicroelectronics N.V.

(Exact name of registrant as specified in its charter)

**Not Applicable**  
(Translation of registrant's

name into English)

**The Netherlands**  
(Jurisdiction of incorporation

or organization)

**39, Chemin du Champ des Filles**

**1228 Plan-Les-Ouates**

**Geneva**

**Switzerland**

(Address of principal executive offices)

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**Securities registered or to be registered pursuant to Section 12(b) of the Act:**

**Title of each class:**

**Name of each exchange on which registered:**

**Common shares, nominal value 1.04 per share  
Liquid Yield Option™ Notes due September 22, 2009**

**New York Stock Exchange  
New York Stock Exchange**

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**Securities registered or to be registered pursuant to Section 12(g) of the Act:**

**None**

**Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:**

**None**

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Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report:

**887,523,554 common shares**

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days:

Yes  No

Indicate by check mark which financial statement item the registrant has elected to follow:

Item 17  Item 18

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**PRESENTATION OF FINANCIAL AND OTHER INFORMATION**

In this annual report on Form 20-F (the "Form 20-F"), references to "we" and "us" are to STMicroelectronics N.V. together with its consolidated subsidiaries, references to "EU" are to the European Union, references to the "euro" and the "euro currency" are to the euro currency of the EU, references to the "United States" and "U.S." are to the United States of America and references to "\$" or to "U.S. dollars" are to United States dollars.

We have compiled the market share, market size and competitive ranking data in this annual report using statistics and other information obtained from several third-party sources. References in this annual report to published industry data are references to data published by Gartner, Inc., IC Insights Inc., iSuppli, International Data Corporation, DataBeans Incorporated and Strategy Analytics, and references to trade association data are references to World Semiconductor Trade Statistics ("WSTS"). Except as otherwise disclosed herein, all references to our market positions in this Form 20-F are based on 2002 revenues according to published industry data. Certain terms used in this Form 20-F are defined in "Certain Terms".

Various amounts and percentages used in this annual report have been rounded and, accordingly, they may not total 100%. All share data have been adjusted for the 2-for-1 stock split effected in June 1999 and the 3-for-1 stock split effected in May 2000.

We and our affiliates own or otherwise have rights to the trademarks and trade names, including those mentioned in this annual report, used in conjunction with the marketing and sale of our products.

**CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS**

Some of the statements contained in this Form 20-F that are not historical facts, particularly in Item 4. Information on the Company and Item 5. Operating and Financial Review and Prospects, are statements of future expectations and other forward-looking statements (within the meaning of Section 27A of the Securities Act) that are based on management's current views and assumptions and involve known and unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those in such statements due to, among other factors:

demand for our products;

competitive pricing environment;

business conditions in the end-user markets, in particular demand for products made by our customers and their ability to accurately forecast such demand;

excess manufacturing capacity in the semiconductor industry and its effect on pricing;

status of and future growth of the economies in our major world and regional markets;

possible disruption in commercial activities occasioned by major events in the world such as armed conflict or terrorism;

impact of foreign currency fluctuations, in particular increases in the value of the euro versus the U.S. dollar;

our ability to operate our manufacturing facilities efficiently;

success of our alliances and agreements with other companies to develop new technologies;

ability of our subcontractors to perform in accordance with our requirements to the extent we rely on them;

competitive factors such as the timely development of new products and designs in line with market and customer requirements; and

excess or obsolete inventory and variations in inventory valuation.

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Certain such forward-looking statements can be identified by the use of forward-looking terminology such as believes , expects , may , are expected to , will , will continue , should , would be , seeks or anticipates or similar expressions or the negative th other variations thereof or comparable terminology, or by discussions of strategy, plans or intentions. Some of these risk factors are set forth and are discussed in more detail in Item 3. Key Information Risk Factors . Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described in this Form 20-F as anticipated, believed or expected. We do not intend, and do not assume any obligation, to update any industry information or forward-looking statements set forth in this Form 20-F to reflect subsequent events or circumstances.

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## PART I

**Item 1. Identity of Directors, Senior Management and Advisers**

Not applicable.

**Item 2. Offer Statistics and Expected Timetable**

Not applicable.

**Item 3. Key Information****Selected Financial Data**

The table below sets forth our selected consolidated financial data for each of the years in the five-year period ended December 31, 2002. Such data have been derived from our consolidated financial statements. Consolidated audited financial statements for each of the years in the three-year period ended December 31, 2002, including the Notes thereto (collectively, the Consolidated Financial Statements), are included in Item 18 of this Form 20-F.

The following information should be read in conjunction with Item 5. Operating and Financial Review and Prospects and the Consolidated Financial Statements and the related Notes thereto included elsewhere in this Form 20-F.

	Year ended December 31,				
	1998(1)	1999(1)	2000(1)	2001(1)	2002(1)
	(in millions except shares, per share and ratio data)				
<b>Consolidated Statement of Income Data:</b>					
Net sales	\$ 4,211	\$ 5,023	\$ 7,764	\$ 6,304	\$ 6,270
Other revenues	37	33	49	53	48
Net revenues	4,248	5,056	7,813	6,357	6,318
Cost of sales	(2,623)	(3,054)	(4,217)	(4,047)	(4,020)



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Gross profit	1,625	2,002	3,596	2,310	2,298
Operating expenses:					
Selling, general and administrative	(488)	(534)	(704)	(641)	(648)
Research and development(2)	(690)	(836)	(1,026)	(978)	(1,022)
Other income and expenses(2)	77	40	(83)	(6)	7
Impairment, restructuring charges & other related closure costs				(346)	(34)
Total operating expenses	(1,102)	(1,330)	(1,813)	(1,971)	(1,697)
Operating income	523	671	1,783	339	601
Interest income (expense), net	9	36	46	(13)	(68)
Equity in loss of joint ventures				(5)	(11)
Income before income taxes and minority interests	532	707	1,829	321	522
Income tax expense	(120)	(157)	(375)	(61)	(89)
Income before minority interests	412	550	1,454	260	433
Minority interests	(1)	(3)	(2)	(3)	(4)
Net income	\$ 411	\$ 547	\$ 1,452	\$ 257	\$ 429
Earnings per share (basic)(3)	\$ 0.49	\$ 0.64	\$ 1.64	\$ 0.29	\$ 0.48
Earnings per share (diluted)(3)	\$ 0.48	\$ 0.62	\$ 1.58	\$ 0.29	\$ 0.48
Number of shares used in calculating earnings per share (basic) (3)	845,112,048	859,111,668	885,728,493	893,267,868	887,577,627
Number of shares used in calculating earnings per share (diluted) (3)	864,333,180	901,223,911	936,059,212	901,982,965	893,036,782
Ratio of earnings to fixed charges(4)	12.7	16.3	29.3	3.8	5.5
Dividends per share(3)	\$	\$ 0.03	\$ 0.03	\$ 0.04	\$ 0.04

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	Year ended December 31,				
	1998(1)	1999(1)	2000(1)	2001(1)	2002(1)
(in millions except shares, per share and ratio data)					
<b>Consolidated Balance Sheet Data (end of period):</b>					
Cash, cash equivalents and marketable securities(1)	\$ 1,101	\$ 1,823	\$ 2,331	\$ 2,444	\$ 2,564
Working capital(5)	855	398	372	557	919
Total assets	6,434	7,930	11,880	10,798	12,004
Short-term debt (including current portion of long-term debt)	191	123	142	130	165
Long-term debt (excluding current portion)(1)	756	1,348	2,700	2,772	2,797
Shareholders' equity(1)	4,083	4,564	6,125	6,075	6,994
Capital stock(6)	2,232	2,508	2,824	2,978	3,008
<b>Consolidated Operating Data:</b>					
Capital expenditures(7)	\$ 947	\$ 1,347	\$ 3,328	\$ 1,700	\$ 995
Net cash provided by operating activities	1,012	1,469	2,423	2,057	1,713
Depreciation and amortization(7)	704	807	1,108	1,320	1,382

- (1) On November 16, 2000, we issued \$1,480 million initial aggregate principal amount of zero-coupon unsubordinated convertible notes, due 2010, for net proceeds of \$1,458 million. On September 22, 1999, we completed an equity offering of 8,970,000 shares of capital stock at \$24.88 per share (adjusted for the 3-for-1 stock split) for net proceeds of \$217 million. On September 22, 1999, we also completed a debt offering of \$721 million initial aggregate principal amount of zero-coupon convertible Liquid Yield Option Notes, due 2009, for net proceeds of \$708 million. On June 10, 1998, we completed an equity offering of 18,000,000 shares of capital stock at \$12.03 per share (adjusted for the 2-for-1 stock split in June 1999 and 3-for-1 stock split in May 2000) for net proceeds of \$209 million. On June 10, 1998, we also completed a debt offering of \$432 million initial aggregate principal amount of zero-coupon convertible Liquid Yield Option Notes (LYONs), due 2008, for net proceeds of \$422 million. On April 27, 2001, we issued a redemption notice for the remaining outstanding LYONs, due 2008, which were redeemed and converted into common shares in May and June 2001; the residual aggregate principal amount converted into common shares was \$52 million. In 2001, we repurchased 9,400,000 common shares for \$233 million and in 2002 additionally 4,000,000 shares for \$115 million. We have reflected these purchases at cost as a reduction of shareholders' equity. The repurchased shares have been designated to fund our most recent employee stock option plan.
- (2) Other income and expenses includes, among other things, funds received through government agencies for research and development expenses, the cost of new plant start-ups, foreign currency gains and losses, gains on sales of marketable securities, the costs of certain activities relating to intellectual property and, for the periods prior to 2002 goodwill amortization. Our reported research and development expenses are mainly in the areas of product design, technology and development, and do not include marketing design center costs which are accounted for as selling expenses, or process engineering, pre-production and process-transfer costs, which are accounted for as cost of sales.
- (3) All share information has been adjusted to reflect the 2-for-1 stock split effected in June 1999 and the 3-for-1 stock split effected in May 2000. See Notes 2.10, 2.21, 14 and 15 to the Consolidated Financial Statements.
- (4) For purposes of calculating the ratio of earnings to fixed charges, earnings consist of income before income taxes and minority interests, plus fixed charges. Fixed charges consist of interest expenses.
- (5) Working capital is calculated as current assets (excluding cash, cash equivalents and marketable securities) less current liabilities (excluding bank overdrafts and current portion of long-term debt).
- (6) Capital stock consists of common stock and capital surplus.
- (7) Capital expenditures are net of certain funds received through government agencies, the effect of which is to decrease depreciation.

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**RISK FACTORS**

**Risks related to the semiconductor industry**

***The semiconductor industry is highly cyclical, and severe downturns have had a negative impact on our results of operations***

The semiconductor industry is highly cyclical and has been subject to significant economic downturns at various times. In 2001, the industry experienced the most severe downturn in its history. Downturns are typically characterized by production overcapacity, accelerated erosion of average selling prices and reduced revenues. When downturns occur, such as in 1991, from 1996 through 1998, and from the third quarter 2000 through the first quarter 2002, as well as during the current difficult market conditions, our results of operations are adversely affected. In addition, the markets for semiconductors and electronic systems that use semiconductor products are characterized by rapid technological change, leading to more complex and powerful products, evolving industry standards, intense competition, and fluctuations in end-user demand. For a detailed summary of historical semiconductor industry performance, see Item 4. Information on the Company Industry Background The Semiconductor Market .

***Changes in industry capacity have led to overcapacity which exacerbated the recent industry downturn through price declines and may exacerbate future downturns***

In the last ten years, many companies invested in building or improving semiconductor manufacturing capacity. According to data published IC Insights Inc. and other industry sources, investments in worldwide semiconductor fabrication capacity totaled approximately \$28 billion in 1998, \$33 billion in 1999, \$61 billion in 2000, \$39 billion in 2001 and an estimated \$28 billion in 2002, or approximately 22%, 22%, 30%, 28% and an estimated 20%, respectively, of the total available market for such years. Capital investments in the semiconductor industry are made not only by integrated semiconductor companies like us, but also by companies specializing in operating semiconductor foundries (i.e., companies providing outsourcing capacity on a third-party basis) primarily located in Asia, such as Chartered Semiconductor, Taiwan Semiconductor Manufacturing Co. Ltd. ( TSMC ), or United Microelectronics Corp. ( UMC ). The industry capacity additions contributed to an increase of supply over demand during 1998, 2001 and 2002, to declines in average selling prices and to a decline in the total available market (or TAM ) during these periods. There has also been a shift in existing industry capacity to production of products that compete with our products. We believe that future fluctuations in the rate of industry capacity additions relative to the growth rate in demand for semiconductor products or the transformation of manufacturing facilities to produce products that compete with our products could continue to contribute to fluctuations in average selling prices and affect our results of operations. On average, market selling prices declined in 2002 by approximately 11% compared to 2001. In the fourth quarter of 2000, we had reached a historic record in net quarterly revenues of approximately \$2.2 billion. In the fourth quarter of 2002, our net revenues had decreased to approximately \$1.8 billion. Concurrently, the products we shipped increased from approximately 2.9 billion units in the fourth quarter of 2000 to approximately 3.0 billion units in the fourth quarter of 2002. This example illustrates the impact of price declines and product mix both for the market in general and for our products over the last two years.

In periods of market downturn, we may face overcapacity in our fabrication facilities. As with other semiconductor manufacturers, older manufacturing facilities using mature process technologies had difficulties operating at maximum capacity in 2001 and 2002.

Overcapacity may have a material adverse effect on our results of operations if we do not significantly and proportionately reduce costs or if we are unable to otherwise realize savings.

***We may face overcapacity and obsolescence in some of our fabrication facilities that may lead to plant closures, impairments and inventory write-offs***

In difficult market conditions, we may face overcapacity issues, particularly in our older fabrication facilities that use mature process technologies. Like other semiconductor manufacturers, we could have mature fabrication facility capacity being only partially used, which may affect our cost of operations. These considerations led us to record an asset impairment and restructuring charge of \$296 million in the second quarter 2001, with respect to certain of our more mature 150mm wafer fabs as well as to announce and complete the closing in 2001 of our wafer fab manufacturing facility in Ottawa, Canada. During the third quarter of 2001, we also initiated a plan for the closure of our plant in Rancho Bernardo, California, resulting in an additional asset impairment charge of

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\$23 million recorded in 2001. The closure of Rancho Bernardo was completed in April 2002. We are continuously reviewing our strategy with respect to our more mature 150mm wafer fabs in order to maintain flexibility and efficiency through difficult market conditions. Without the expected pickup in demand and/or pricing, we may incur further impairment and restructuring charges. Further actions may include the sale, wafer production curtailment or closure of other similar facilities. In addition, in 2001, we recorded a special inventory charge for obsolescence of \$71 million in cost of sales due to significant cancellations of customer orders that resulted in unuseable quantities of work in process and finished goods inventories. In 2002, we recorded expenses of \$34 million, of which (i) \$26 million relates to the closure of facilities in Ottawa, Canada and Rancho Bernardo, California, (ii) \$7 million relates to impairment of long-term investments and (iii) \$1 million for the discontinuation of the graphic division of the Consumer and Microcontroller Group. If we are unable in difficult market conditions to simultaneously and proportionately cut our manufacturing costs, or make other necessary savings in due time to compensate for the decline in our selling prices and in our manufacturing plant utilization, our gross margin could be adversely affected in the future.

***In difficult market conditions, our high fixed costs adversely impact our results***

In less favorable industry environments, we are driven to reduce prices in response to competitive pressures and we are also faced with a decline in the utilization rates of our manufacturing facilities due to decreases in product demand. Since the semiconductor industry is characterized by high fixed costs, we are not always able to reduce our total costs in line with revenue declines. Reduced average selling prices for our products therefore adversely affect our results of operations. Furthermore, in periods of reduced customer demand for our products, such as in 2001 and 2002, our fabrication facilities, or fabs, do not operate at full capacity, thereby increasing our fixed costs. In the case of underutilization of manufacturing facilities, the costs associated with the excess capacity are charged directly to cost of sales. Our gross profit margin declined from 38.9% in 1997 to 38.3% in 1998 during difficult market conditions. Our gross profit margin was 46.0% in 2000, 36.3% in 2001 and 36.4% in 2002. In the difficult market conditions encountered since 2001, our gross profit margin has varied significantly from quarter to quarter and was respectively 44.5% in the first quarter of 2001, 33.6% in the second quarter of 2001, 33.0% in the third quarter of 2001 and 31.7% in the fourth quarter of 2001; and 33.4% for the first quarter of 2002, 37.6% for the second quarter of 2002, 37.0% for the third quarter of 2002 and 37.0% in the fourth quarter of 2002. We cannot guarantee that difficult market conditions will not continue to affect the loading of our fabs and consequently our future gross margins. We cannot guarantee that increased competition in our core product markets will not lead to further price erosion, lower revenue growth rates and lower margins in the future.

***Our sales and results may be adversely impacted by worldwide economic downturns***

Our sales and results are increasingly linked to worldwide economic trends, especially in the United States, the European Union, Japan and Asia. The economic situation in Asia in 1998 had a negative effect on the worldwide semiconductor market and made semiconductor and end-user market requirements more difficult to predict. The deterioration of the economic conditions registered during 2001 and 2002 in the United States and in most economically developed countries has been negatively impacting the semiconductor market since 2001. Indeed, according to industry data, following a growth of 36.8% in 2000, the semiconductor market declined by 32% in 2001, and remained basically flat in 2002. We believe that economic uncertainties have caused in the past, and may cause in the future, our customers to experience reduced demand for their products that include our products and therefore, our results of operations have been in the past, and may be in the future, adversely affected.

***Competitive factors in our industry make the competitive environment intense***

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We compete on the basis of a variety of factors, and our success depends on our ability to compete successfully in all of the relevant areas. We compete in different product lines to various degrees on the following bases:

price

technical performance

product features

product system compatibility

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product design

availability

manufacturing yields

sales and technical support

Our ability to compete successfully also depends on factors partially outside of our control, including:

successful and timely development of new products and manufacturing processes

product availability

industry and general economic trends

performance of our key customers in the markets they serve

***Because we operate in an industry where technology changes rapidly, our design and process technologies and our products may become obsolete and we may not be able to develop new ones in a timely manner***

The market for our products is characterized by rapidly changing technology. Some of our products have average life cycles of less than one year. Therefore, our success is highly dependent upon our ability to develop and manufacture increasingly complex new products on a cost effective basis, to introduce new products in the marketplace on a timely basis, and to have them selected for design into future products of leading systems manufacturers. Semiconductor design and process technologies are also subject to constant technological improvements and require large expenditures for capital investment, advanced research and technology development. We have committed and intend to continue to commit substantial resources to the development of new products, designs and process technologies. Because new product development commitments must be made well in advance of sales, however, our new product decisions must anticipate both future demand and the technology that will be available to supply such demand. If we experience substantial delays in developing new design or process technologies, our results of operations could be adversely affected. In certain cases, it may be necessary to incur costs to acquire technology from third parties, which may affect our results of operations and margins without any guarantee of success. As of December 31, 2002, the value registered in our balance sheets for technologies and licenses acquired from third parties was \$223 million, net of amortization, and we charged \$67 million of this amount as annual amortization expense on our statement of income in 2002. Delays in developing new products with anticipated technological advances and failure to win new design projects for customers or in commencing volume shipments of new products may have an adverse effect on our business. In addition, there can be no assurance that new products, if introduced, will gain market acceptance or will not be adversely affected by new technological changes or new product announcements by others.

***Loss of key employees could hurt our competitive position***

As is common in the semiconductor industry, success depends to a significant extent upon our key senior executives and research and development, engineering, marketing, sales, manufacturing, support and other personnel. Our success also depends upon our ability to continue to attract, retain and motivate qualified personnel. The competition for such employees is intense, and the loss of the services of any of these key personnel without adequate replacement or the inability to attract new qualified personnel could have a material adverse effect on us. Mr. Pasquale Pistorio, age 67, has been the sole member of our Managing Board and our president and chief executive officer since our formation in 1987. Mr. Pistorio was reappointed at our 2002 annual shareholders meeting for a three-year term expiring at our annual general meeting to be held in 2005.

Several of our executive officers are also over 60 and may retire in the near term. We do not maintain insurance with respect to the loss of any of our key personnel.



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***Some of our production processes and materials are environmentally sensitive, which could lead to increased costs due to environmental regulations or to damage to the environment***

We are subject to a variety of governmental regulations relating to the use, storage, discharge and disposal of chemicals, gases and other hazardous substances used in our manufacturing processes. We have established proactive environmental policies with respect to the handling of chemicals, gases, emissions and waste disposals from our manufacturing operations, and we have not suffered material environmental claims in the past. We believe that our activities comply with presently applicable environmental regulations in all material respects. We have engaged outside consultants to audit all of our environmental activities and created environmental management teams, information systems and training. We have also instituted environmental control procedures for new processes used by us as well as our suppliers. Most of our manufacturing facilities have been certified to conform to International Organization for Standardization or ISO international quality standards and Eco Management and Audit Scheme ( EMAS ). We are participating in various working groups set up by the European Commission to propose new legislation regarding the collection, recovery and disposal of electronic equipment, as well as banning the use of lead and some flame retardants in manufacturing electronic components. We intend to proactively implement such new legislation when enacted, in line with our commitment towards environmental protection.

The implementation of any such legislation could adversely affect our manufacturing costs or product sales by requiring us to acquire costly equipment or materials, or to incur other significant expenses in adapting our manufacturing processes or waste and emission disposal processes. Furthermore, environmental claims or our failure to comply with present or future regulations could result in the assessment of damages or imposition of fines against us, suspension of production or a cessation of operations and, as with other companies engaged in similar activities, any failure by us to control the use of, or adequately restrict the discharge of hazardous substances could subject us to future liabilities.

***Because we depend on a limited number of suppliers for raw materials, we may experience supply disruptions or pricing pressure***

Our manufacturing operations depend upon obtaining adequate supplies of quality raw materials on a timely basis. A number of materials are available only from a limited number of suppliers, or only from a limited number of suppliers in a particular region. In addition, we purchase raw materials such as silicon wafers, lead frames, mold compounds, ceramic packages and chemicals and gases from a number of suppliers on a just-in-time basis. Although supplies for the raw materials we use are currently adequate, shortages could occur in various essential materials due to interruption of supply or increased demand in the industry. In addition, suppliers may extend lead times, limit our supply or increase prices due to capacity constraints or other factors. Our quarterly or annual results of operations would be adversely affected if we were unable to obtain adequate supplies of raw materials in a timely manner or if there were significant increases in the costs of raw materials or problems with the quality of these raw materials.

***Our manufacturing processes are highly complex, costly and potentially vulnerable to impurities and disruptions and inefficient implementation of production changes that can significantly increase our costs and delay product shipments to our customers***

Our manufacturing processes are highly complex, require advanced and increasingly costly equipment and are continuously being modified in an effort to improve yields and product performance. Impurities or other difficulties in the manufacturing process can lower yields, interrupt production or result in losses of products in process. As system complexity has increased and sub-micron technology has become more advanced, manufacturing tolerances have been reduced and requirements for precision have become even more demanding. Although in the past few years we have significantly enhanced our manufacturing capability in terms of efficiency, precision and capacity, we have from time to time experienced production difficulties that have caused delivery delays and quality control problems, as is common in the semiconductor industry. We cannot guarantee that we will be able to increase the capacity, efficiency or precision of our manufacturing capabilities in the future to the same extent as in the past. We might also experience production or transition difficulties in the future. In addition, during past periods of high demand for our products, our manufacturing facilities have operated at high capacity, which has led to production constraints.

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As is common in the semiconductor industry, we have, from time to time, experienced difficulty in ramping up production at new facilities or effecting transitions to new manufacturing processes. As a result, we have suffered delays in product deliveries or reduced yields. In the future, we may face:

construction delays;

delays in ramping up production at our new facilities or on our new lines, in upgrading or expanding our existing facilities, or in changing our process technologies;

interruptions in production;

delivery delays;

manufacturing problems in achieving acceptable yields;

capacity constraints; and/or

contamination or fires, storms, earthquakes or other acts of nature, for which we have been unable to obtain insurance coverage on acceptable terms and conditions.

In addition, our development of fabrication facilities that include 200mm or 300mm capabilities, or which require advanced technologies, has increased the potential for losses associated with production difficulties, imperfections, or other causes of defects. If production is interrupted at a manufacturing facility, we may not be able to shift production to other facilities on a timely basis or customers may decide to purchase products from another supplier. In either case, the loss of revenues and impact on our relationships with our customers could be significant. Our operating results could also be adversely affected by the increase in fixed costs and operating expenses related to increases in production capacity if revenues do not increase commensurately.

***Following recent changes in the insurance market, the terms and conditions of our main insurance policies are becoming less favorable to us***

In the current state of the insurance market, terms and conditions of coverage, including deductibles and maximum payouts for our main risks, have become both more restrictive and more onerous to subscribe. We currently have global insurance policies covering our following main risks: general civil liability, directors and officers liability, property damage and business interruption loss, and transportation risks. Our insurance policy on property damage and business interruption, which covers all of our operational activities, includes a \$25 million deductible per event, certain exclusions and a maximum payout of \$300 million. We no longer carry insurance for immaterial, nonconsequential damages for product defects. In addition, we only subscribe insurance coverage with first-tier insurers on the insurance market and do not have any alternative-risk financing or our own captive insurance company. Our results of operations could be materially adversely affected by the occurrence of a catastrophic event, to the extent

that the resulting loss or claim is not covered under the terms of the then existing insurance policies held by us.

**Risk factors related to our operations**

***Our operating results may vary significantly from quarter to quarter and annually***

Our operating results are affected by a wide variety of factors that could materially and adversely affect revenues and profitability or lead to significant variability of operating results. These factors include, among others, the cyclical nature of the semiconductor and electronic systems industries, capital requirements, inventory management, availability of funding, competition, new product developments, technological changes, and manufacturing problems. Furthermore, our effective tax rate takes into consideration certain tax benefits which in the future may not be available to us. See Note 23 to the Consolidated Financial Statements. In addition, a number of other factors could lead to fluctuations in quarterly and annual operating results, including:

order cancellations or reschedulings by customers

excess inventory held by customers leading to reduced bookings or product returns by key customers

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manufacturing capacity and utilization rates

restructuring and impairment charges

changes in distribution and sales arrangements

intellectual property developments

failure to win new design projects

problems with product quality or manufacturing yields

litigation

possible acquisitions

problems in obtaining adequate raw materials on a timely basis

the loss of key personnel

property damage or business interruption losses resulting from a catastrophic event not covered by insurance.

Unfavorable changes in the above and other factors have in the past and may in the future adversely affect our operating results. In addition, during periods of industry overcapacity and declining selling prices, customer orders are not generally made as far in advance of the scheduled shipment date as during periods of capacity constraints, and since 2001, we have experienced an increasing reliance on orders placed and shipped within the same quarter. Customer orders in periods of industry overcapacity are also more exposed to cancellations, reductions, or postponements. Therefore, during difficult market conditions, we experience lower and more unstable levels of backlog, which in turn reduce our management's ability to forecast production levels, revenues and margins. See Item 4. Information on the Company Backlog and Customers.

***We face intense competition in our core product lines as well as in emerging applications from both large integrated manufacturers and smaller niche companies***

The semiconductor industry is intensely competitive and we face significant competition in each of our product lines. Some of our competitors are large integrated manufacturing groups that compete with us in most of our product lines. A few of these large

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companies have substantially greater financial and other resources than we do. As a result, these companies may be able to invest more than us in research and development, in the construction of large-scale, advanced, cost-effective manufacturing plants and in the marketing of products, and this may adversely affect our ability to take advantage of potentially profitable business opportunities. In addition, some of our competitors have redirected their research and development activities, marketing focus and manufacturing capacity toward products that compete with our products. Such large competitors include:

Advanced Micro Devices

Agere Systems

Agilent Technologies

Analog Devices

Atmel

Broadcom

Fairchild

Fujitsu

Hitachi

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IBM Microelectronics

Infineon Technologies AG

Intel

LSI Logic

Matsushita

Microchip Technology

Mitsubishi Electric Corporation

Motorola Inc.

National Semiconductor

NEC

ON Semiconductor

Philips Semiconductors International B.V.

Qualcomm

Samsung

Texas Instruments

Toshiba

In addition, we are facing increased competition from some of the above companies as well as from smaller niche companies, especially design companies, that specialize in certain product lines and decide to invest more than we do in research and development and marketing of selected products.

These competitors may also use semiconductor foundry companies that produce high volume products and may offer competitive pricing benefiting from larger economies of scale. Foundry companies such as Chartered Semiconductor, TSMC and UMC have expanded significantly in recent years, particularly in Asia. Other smaller niche competitors include manufacturers of standard semiconductors, integrated circuits for specific applications and fully customized integrated circuits, including both chip and board-level products. In addition, some of our customers have their own integrated circuit products and foundry operations.

***Disruptions in our relationships with any one of our key customers could adversely affect our results of operations***

We have several large customers, some of whom have entered into strategic alliances with us. As of December 31, 2002, our largest customer was Nokia, which accounted for 17.6% of our 2002 net revenues, compared to 19.3% in 2001 and 13.4% in 2000. Our top ten customers accounted for approximately 51% of our 2002 net revenues compared to approximately 50% of our net revenues in 2001 and 47% in 2000. We cannot guarantee that our largest customers will continue to book the same level of sales with us that they have in the past. Many of our key customers operate in cyclical businesses that are also highly competitive, and their own demands and market positions may vary considerably. Our customers have in the past, and may in the future, vary order levels significantly from period to period. In addition, approximately 16% of our net revenues were made through distributors in 2002 and 2001, compared to 18% in 2000. We cannot guarantee that customers or distributors will continue to place orders with us in the future at the same levels as in prior periods. If we were to lose one or more of our major customers or distributors, or if any other key customer were to reduce its bookings, increase its product returns or fail to meet its payment obligations, our operating results could be adversely affected. If orders are cancelled, we may not be able to resell products previously made or require the customers who have ordered these products to pay for them. Furthermore, developing industry trends, including customers' use of outsourcing and



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their deployment of new and revised supply chain models, may reduce our ability to forecast changes in customer demand and may increase our working capital requirements.

***Because we have our own manufacturing facilities, our capital needs are high compared to competitors who do not produce their own products, and they remain significant during industry downturns***

As a result of our strategic choice to maintain control of our advanced proprietary manufacturing technologies to serve our customer base and develop our strategic alliances, we require significant amounts of capital to build, expand, modernize and maintain our facilities. Some of our competitors, however, do not manufacture their own products, and therefore do not require significant capital expenditures for their facilities. Our capital expenditures totaled \$0.9 billion in 1998, \$1.3 billion in 1999 and \$3.3 billion in 2000. Due to market conditions, we reduced our capital expenditures for 2001 from an initial plan of \$2.5 billion to \$1.7 billion. For 2002, we further reduced capital expenditures to total approximately \$1.0 billion. We currently intend to invest approximately the same amount in capital expenditures in 2003 as we did in 2002. We seek to modulate such investments in line with market requirements although we may continue to invest significantly in the coming years as the requirements of new technologies increase the cost of production equipment and facilities. We will continue to monitor our level of capital spending taking into consideration factors such as trends in the semiconductor market and capacity utilization.

The semiconductor industry also requires heavy commitments of funds for research and development necessary to keep up with the rapid pace of technological change and to consistently develop innovative, well performing and cost-effective products. We intend to continue to increase research and development expenditures in the future, although not necessarily as a percentage of net revenues.

***Our research and development efforts in the field of CMOS process development are dependent on alliances and our business, results of operations and prospects could be materially adversely affected by the failure of such alliances in developing new process technologies in line with market requirements***

We are cooperating with Motorola Inc. and Philips Semiconductors International B.V. for the joint research and development of complementary metal-on silicon oxide semiconductor ( CMOS ) process technology to provide 90 nanometer to 32 nanometer chip technologies on 300mm wafers, as well as the building and operations of a 300mm wafer pilot line fabrication facility (or fab ) in Crolles, France. Joint investment may reach \$1.5 billion in capital expenditures in the coming years with the stated goal of accelerating the development of future technologies and their proliferation throughout the semiconductor industry. TSMC is also involved in specific aspects of the cooperation agreement. There can be no assurance that our alliances with Philips Semiconductors International B.V., Motorola Inc. and/or TSMC will enable us to develop new technologies in due time, in a cost-effective manner and/or to meet customer demands, or that our operations will not be adversely affected by unforeseen events and/or the sizeable risks related to the development of new technologies, including unforeseen extra costs, which could materially adversely affect our business, results of operations and prospects.

***We may be required to redeem our convertible debt securities in cash and in advance of their maturity dates***

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At December 31, 2002, we had a negative net financial position (cash, cash equivalents and marketable securities net of total financial debt) of \$397.6 million, compared to a negative net financial position of \$456.6 million at December 31, 2001. On September 16, 1999, we issued Liquid Yield Option Notes due 2009 (the 2009 convertible bonds ) for net proceeds of \$708 million, and on November 3, 2000, we issued Zero Coupon Senior Convertible Notes due 2010 (the 2010 convertible bonds ) for net proceeds of \$1,458 million. As of December 31, 2002, the amounts outstanding under the 2009 convertible bonds and the 2010 convertible bonds recorded in our balance sheet as long-term debt amounted to \$780 million and \$1,601 million, respectively.

Pursuant to the terms of the 2009 and 2010 convertible bonds, holders have the right, subject to certain conditions, to put such notes back to us on September 22, 2004 and January 17, 2005, respectively. Because the market price of our common shares is currently significantly below the respective conversion prices of the 2009 and 2010 convertible bonds, and if our share price does not sufficiently increase by the respective put-option dates, holders may require us to make early redemption on the respective put-option dates.

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On March 6, 2003, we repurchased approximately \$429 million of the aggregate principal at maturity of our 2010 convertible bonds, representing nearly 20% of the total outstanding issue, for which we paid approximately \$328 million. The repurchased 2010 convertible bonds will be cancelled. In the event the 2009 and 2010 convertible bonds were put back to us, the amounts payable would be \$813 million on September 22, 2004 (payable at our option in cash or shares) and \$1,383 million on January 17, 2005 (payable in cash), respectively, causing our cash resources to be significantly reduced. We may proceed with future repurchases of our 2010 convertible bonds in accordance with applicable laws, regulations and stock exchange requirements.

***We may also need additional funding in the coming years to finance our investments***

The cost of new manufacturing facilities is increasing due to the requirements of advanced sub-micron facilities and technologies as well as the migration from 200mm wafer to the new, more complex and more expensive 300mm wafer manufacturing equipment. Furthermore, we have built the facility for a 300mm research and development pilot line in Crolles, which is in the process of being fully equipped, pursuant to a joint investment agreement with Philips Semiconductors International B.V., Motorola Inc. and TSMC, for an amount that may reach \$1.5 billion in capital expenditures in the coming years. We have not yet built our own facility for the volume production of 300mm wafers. Since the costs for fully equipping such a facility are considerably higher than for a 200mm facility, such an investment could require significant additional resources compared to those required in the past. In addition, in an increasingly complex and competitive environment, we may need to invest in the acquisition of technology developed by third parties, to maintain our competitive position in the market. Furthermore, if we proceed with acquisitions, we may incur additional indebtedness, which could increase our interest costs and adversely affect our results. In such circumstances, we may need to issue additional debt or equity, or both.

***If our outside wafer suppliers fail to perform, this could adversely affect our ability to exploit growth opportunities***

In order to meet anticipated requirements for high-speed complementary metal-on silicon oxide semiconductor ( HCMOS ) wafers and nonvolatile memory technology, we have used outside suppliers, or foundries, for the supply of up to 15% of our requirements for these wafers. We do not intend to increase our reliance on front-end manufacturing through external foundries substantially beyond this level. In fact, in a period of market downturn as in 2001 and 2002, our reliance on such suppliers significantly decreased. However, when our markets grow, we may face capacity constraints and we expect to continue to rely on third-party wafer suppliers without having the same degree of management control and supervision over their operations as we do over our own. If these suppliers are unable to satisfy our demand, or experience manufacturing difficulties, delays, or reduced yields, our results of operations and ability to satisfy customer demand could suffer. In addition, purchasing rather than manufacturing these products may adversely affect our gross profit margin if the purchase costs of these products are higher than our own manufacturing costs.

***Our common share price, operating results, net income and net income per share may be negatively affected by potential acquisitions***

While our growth to date has primarily been organic, we have in the past and may in the future make selected acquisitions that we believe would complement or expand our existing business. In 2002, we made our most significant acquisition to date, when we acquired Alcatel Microelectronics for a net cash consideration of approximately \$307 million after the resale of Alcatel

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Microelectronics mixed-signal business to AMI Semiconductors (USA). See Item 5. Operating and Financial Review and Prospects Other Developments . We may pay for future acquisitions with cash, our common shares or some combination of both. Acquisitions, if they occur, may have a dilutive effect for existing shareholders and, whether they are paid for in cash or common shares, may negatively affect our common share price. Announcements concerning potential acquisitions could be made at any time.

Acquisitions involve a number of risks that could adversely affect our operating results, including:

the diversion of management s attention

the assimilation of the operations and personnel of the acquired companies

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the assumption of potential liabilities, disclosed or undisclosed, associated with the business acquired, which liabilities may exceed the amount of indemnification available from the seller

the risk that the financial and accounting systems utilized by the business acquired will not meet our standards

the risk that the businesses acquired will not maintain the quality of products and services that we have historically provided

the inability to attract and retain qualified management for the acquired business

our inability to retain customers of the acquired entity

the risk of goodwill impairment.

There can be no assurance that (a) we will be able to consummate future acquisitions on satisfactory terms, if at all, (b) adequate financing will be available for future acquisitions on terms acceptable to us, if at all, or (c) any operations acquired will be successfully integrated or that such operations will ultimately have a positive impact on our business.

***Our financial results can be adversely affected by changes in interest rates***

In the course of our business, we are exposed to changes in interest rates, linked primarily to the structure of our investments in available cash, which is typically at variable market rates, and our long-term indebtedness used to finance our operations, which is typically at fixed rates. The nature and amount of this long-term indebtedness can vary significantly due to our future financing needs, market conditions and other factors. If interest rates decline, we receive less interest on our cash investments, while we continue to pay higher interest on our fixed rate indebtedness, which could have an effect on our financial condition and results of operations. In 2000, we had in our income statement \$46 million as interest income (net of interest expense); in 2002, we registered a net interest expense (net of interest income) of \$68 million, increasing from the expense of \$13 million in 2001, principally due to the decline in interest rates for U.S. dollar-denominated funds, while our interest expenses are mainly related to our convertible bonds, which are at fixed rates. In 2002, interest income was approximately \$49 million compared to \$100 million in 2001 and \$111 million in 2000. Our net interest income (expense) increased from expense of \$13 million in 2001 to expense of \$68 million in 2002. See Note 22 to the Consolidated Financial Statements.

***Our financial results can be adversely affected by fluctuations in exchange rates, principally in the value of the U.S. dollar***

A material variation in the value of the U.S. dollar against the principal currencies which have a material impact on us (primarily the euro, but also certain Asian and other currencies of countries where we are located) could result in a favorable impact on our net income in the case of an appreciation of the U.S. dollar, or a negative impact on our net income if the U.S. dollar depreciates relative to these currencies. As a market rule, the reference currency for the semiconductor industry is the U.S. dollar and the prices are mainly denominated in U.S. dollars. However, revenues for certain of our products (primarily dedicated products sold in

Europe and Japan) that are quoted in currencies other than the U.S. dollar are directly affected by fluctuations in the value of the U.S. dollar. Revenues for all other products, which are either quoted in U.S. dollars and which are either billed in U.S. dollars or translated into local currencies for payment, tend not to be affected significantly by fluctuations in exchange rates except to the extent that there is a lag between changes in currency rates and adjustments in the local currency equivalent price paid for such products. Appreciation of the euro compared to the U.S. dollar can increase our level of revenues when reported in U.S. dollars. Such an impact on revenues is due to the fact that a large part of our sales are made in Europe and a majority of our invoices in Europe are denominated in euro. However, the appreciation of the euro compared to the U.S. dollar will have a negative impact on cost of sales and operating expenses, due to the fact that the majority of our facilities and employees are located in Europe, and that their associated costs are mainly denominated in euro. The appreciation registered by the U.S. dollar in 2000 and 2001 against the euro and principal Asian currencies (excluding the Japanese yen, which appreciated compared to the U.S. dollar) resulted in a negative impact on revenues and a favorable impact on operating income for 2001 because of the favorable impact on cost of sales and operating expenses which exceeded the negative impact on net revenues. On the other hand, the recent depreciation of the U.S. dollar had a negative impact on our operating income in 2002 and could have a more significant negative impact in 2003, especially if depreciation of the U.S. dollar relative to the euro accelerates further. Due to the location of the majority of our facilities and employees in Europe, further depreciation in the value of the U.S. dollar relative to the euro would negatively impact our results of operations, especially if we are unable to balance or shift our euro-denominated costs to other currency areas or to U.S. dollars. Any such actions may not be immediately effective, could prove costly and their implementation could prove demanding on our management resources. In addition, the balance sheet impact of translation adjustments has been, and may be expected to continue to be, material from period to period. The results of these translation adjustments are reflected in our consolidated statement of changes in shareholders' equity as other comprehensive income (loss). In 2002, it was significantly favorable while it was negative in both 2000 and 2001. See our consolidated statements of changes in shareholders' equity in our Consolidated Financial Statements. Our policy is to monitor and cover a portion of our exchange rate exposure, and we manage our operations to mitigate, but not eliminate, the positive or negative impact of exchange rate fluctuations. See Item 5. Operating and Financial Review and Prospects Impact of Changes in Exchange Rates .

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ST Microelectronics Holding II B.V. ( ST Holding II ), a wholly owned subsidiary of STMicroelectronics Holding N.V. ( ST Holding ), owns 320,483,280 or approximately 35.6% of our issued common shares as of December 31, 2002. This amount includes 56,420,000 shares that have been placed in escrow and that underlie the exchangeable notes issued by France Telecom in 2001 and 2002, for which the voting rights and economic benefits remain with ST Holding II at least until January 2004. ST Holding is therefore effectively in a position to control actions that require shareholder approval, including corporate actions, the election of our Supervisory Board and our Managing Board and the issuance of new shares or other securities. As permitted by our articles of association, the Supervisory Board has specified further selected actions by the Managing Board that require the approval of the Supervisory Board.

For a description of our indirect shareholders Areva Group, Finmeccanica S.p.A. and France Telecom, each of which is ultimately controlled by the French or Italian government, see Item 7. Major Shareholders and Related Party Transactions Major Shareholders . These French and Italian shareholder groups of ST Holding have entered into a shareholders' agreement which enables each group to designate three members of the Supervisory Board and includes provisions requiring the approval of the Supervisory Board of ST Holding for actions by ST Holding, with respect to us and our subsidiaries. In December 2001, the French and Italian shareholder groups of ST Holding signed a 2001 shareholders agreement (the 2001 shareholders agreement ) to facilitate in December 2001 the offering of 69 million of our existing common shares by ST Holding (held indirectly by France Telecom and Finmeccanica), as well as the offering by France Telecom of exchangeable notes, exchangeable into 30 million of our existing common shares on or after January 2, 2004. The 2001 shareholders agreement also permitted the sale by France Telecom in August 2002 of exchangeable notes due August 2005, mandatorily exchangeable from January 2, 2004 into a maximum of 26.42 million of our common shares and a minimum of 20.13 million of our common shares, depending on the price of our common shares at maturity, representing between 2.94% and 2.24% of our then-issued common shares. The 2001 shareholders agreement provides that for a two-year period, FT1CI (the holding company for the two indirect French shareholders of ST Holding) and Finmeccanica will share equal voting rights with respect to ST Holding and us, despite their difference in indirect economic interest in us resulting from intervening dispositions, provided that each of FT1CI and Finmeccanica retain holdings in ST Holding of between 47.5% and 52.5%. The 2001 shareholders agreement also provides for additional disposals by our major shareholders of our existing common shares, or financial instruments convertible into our common shares. See Item 7. Major Shareholders and Related Party Transactions Major Shareholders Shareholders Agreements 2001 Shareholders Agreement Disposals of Our Common Shares .

Finally, the 2001 shareholders agreement continues the requirement that unanimous approval of the ST Holding shareholders be obtained before the Supervisory Board members can take certain actions, notwithstanding the reduction in their indirect ownership interest in us. The actions covered by these provisions include, among other things, any alteration in our authorized share capital, any new issue of shares by us, any merger, acquisition or joint venture agreement to which we are to be a party, and any items on the agenda for our general shareholders meeting.

France Telecom and Areva, the shareholders of FT1CI, are parties to a separate shareholders agreement that requires the approval of the board of directors of each such company before members of the Supervisory Board appointed by the group of French shareholders may approve specified actions to be taken by ST Holding, ST Holding II, us or our subsidiaries. In addition, as is the case with other companies controlled by the French government, certain ministries of the Republic of France may veto any decision taken by the board of directors of FT1CI. In addition, Finmeccanica is subject to the Italian privatization law. Pursuant to the principal Italian privatization law, certain special government powers may be introduced into the bylaws of firms considered strategic by the Italian government. See Item 7. Major Shareholders and Related Party Transactions Major Shareholders Shareholders Agreements Other Shareholders Agreements .

These various requirements for the prior approval of various actions to be taken by us and our subsidiaries may give rise to a conflict of interest between our interests and investors' interests, on the one hand, and the interests of the individual shareholders approving such actions, on the other, and may result in a delay in the ability of our Managing Board to respond as quickly as may be necessary in the rapidly changing environment of the semiconductor industry. In particular, our ability to issue new shares or other securities may be limited by the existing shareholders' desire to maintain their proportionate shareholding,



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and aggregate shareholding level, at a certain minimum level, such as the 30% threshold that applies to the option agreement relating to preference shares discussed below. Such approval process is, however, subject to the provisions of Dutch law requiring members of our Supervisory Board to act independently in supervising our management.

We may also have contractual and other business relationships with our indirect shareholders and/or their affiliates and may engage in significant transactions from time to time. Although it is anticipated that any such transactions and agreements will be on terms no less favorable to us than we could obtain in comparable contracts with unaffiliated third parties, conflicts of interest may arise between us and our indirect shareholders and their affiliates in a number of circumstances.

***The sale by our direct or indirect shareholders of our existing common shares or the issue by such shareholders of financial instruments exchangeable into our common shares could occur at any time and adversely affect our share price***

The 2001 shareholders agreement permitted our indirect shareholder, France Telecom, to dispose of its indirect interest in our common shares, which it did in two issuances of notes exchangeable for our common shares. In December 2001, France Telecom issued exchangeable notes redeemable by way of exchange for 30 million of our common shares after January 2, 2004, representing approximately 3.3% of our then issued common shares. In August 2002, France Telecom sold exchangeable notes due August 2005, mandatorily exchangeable from January 2, 2004 into a maximum of 26.42 million of our common shares and a minimum of 20.13 million of our common shares, depending on the price of our common shares at maturity, representing between 2.94% and 2.24% of our then-issued common shares. The interests of France Telecom as the issuer of the exchangeable notes may not necessarily coincide with our interests.

The 2001 shareholders agreement also provides for Areva's freedom to dispose of its stake after a 24-month period from the date of such agreement, as well as the possibility of rebalancing its stake to equal Finmeccanica's stake. Finmeccanica has the right, subject to certain conditions, to dispose of up to a maximum of 65,423,404 of our existing common shares before December 10, 2003, representing 7.3% of our currently issued common shares. Such dispositions may occur either through a sale of our common shares, or through the issuance of financial instruments exchangeable into our common shares. An announcement with respect to such disposition could be made at any time. Under the 2001 shareholders agreement, sales of additional amounts of our common shares by ST Holding II on behalf of its indirect shareholders will not necessarily affect the relative voting rights of our indirect shareholders. For a description of these provisions, see Item 7. Major Shareholders and Related Party Transactions Major Shareholders Shareholders Agreements 2001 Shareholders Agreement Disposals of Our Common Shares .

***Our shareholder structure and our preference shares may deter a change of control***

On May 31, 1999, our shareholders at the annual general meeting approved the creation of up to 180,000,000 preference shares. Pursuant to the 3-for-1 stock split effected in May 2000, the number of such preference shares has increased to 540,000,000. These preference shares entitle a holder to full voting rights at any meeting of shareholders and to a preferential right to dividends and distributions upon liquidation. On the same day, in order to protect ourselves from a hostile takeover or other similar action, we entered into an option agreement with ST Holding II, which provides that (taking into account the 3-for-1 stock split of May 2000) up to 540,000,000 preference shares shall be issued to ST Holding II upon its request and subject to the adoption of a resolution of our Supervisory Board giving our consent to the exercise of the option and upon payment of at least 25% of the par value of the preference shares to be issued. Following an amendment to the ST Holding II option agreement, the option is contingent upon ST Holding II retaining at least 30% of our issued share capital at the time of exercise. No preference shares have been issued to date.

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The preference shares, if issued, would have priority with respect to dividends and distributions upon liquidation over the common shares. The effect of the preference shares may be to deter potential acquirers from effecting an unsolicited acquisition resulting in a change of control. In addition, any issuance of additional capital within the limits of our authorized share capital, as approved by our shareholders, is subject to the approval of our Supervisory Board. Upon conversion of the existing France Telecom exchangeable notes for our existing common shares, which in any case cannot occur until January 2, 2004, as well as the dilution due to the exercise of stock options held by our Supervisory Board members, management and employees and the conversion of the convertible bonds issued by us, the ST Holding II ownership may fall below the 30% threshold.

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***Substantial sales of our common shares into the market could cause the market price of our common shares to drop significantly***

At December 31, 2002, 887,523,554 of our common shares were outstanding, not including (i) common shares issuable under our various employee stock option plans or employee share purchase plans, (ii) common shares issuable upon conversion of our outstanding convertible debt securities and (iii) 13.4 million common shares repurchased in 2001 and 2002. As of December 31, 2002, our total issued common shares, including shares held in treasury from repurchases by us in 2001 and 2002, was 900,923,554. Substantial sales of our common shares or securities exchangeable into our existing shares, or newly issued shares or convertible bonds by us or our shareholders, as well as any announcement containing a potential sale, could cause the market price of our common shares to drop significantly. The timing and size of any future primary or secondary offerings will depend upon market conditions as well as a variety of factors.

***We depend on patents to protect our rights to our technology***

We depend in part on patents and other intellectual property rights covering our products and their design and manufacturing processes. We hold patents and patent licenses and we intend to continue to seek patents on our inventions relating to product designs and manufacturing processes. We have negotiated in the past broad patent cross-licenses with many of our competitors enabling us to design, manufacture and sell semiconductor products, without fear of infringing patents held by such competitors. The process of seeking patent protection can be long and expensive, however, and we cannot guarantee that we will receive patents from currently pending or future applications. Even if patents are issued, they may not be of sufficient scope or strength to provide meaningful protection or any commercial advantage. In addition, effective patent, copyright and trade secret protection may be unavailable or limited in some countries. Competitors may also develop technologies that are protected by patents and other intellectual property and therefore either be unavailable to us or be made available to us subject to adverse terms and conditions. We may not be able to obtain licenses or other rights to necessary intellectual property on acceptable terms.

Because patent and other intellectual property litigation is costly and unpredictable, our attempts to protect our rights or to defend ourselves against claims made by others could impose high costs and risks on our business.

Litigation that could demand financial and management resources may be necessary to enforce our patents or other intellectual property rights. Also, we may become involved in costly litigation brought against us regarding patents, mask works, copyrights, trademarks or trade secrets. If we cannot obtain licenses or other intellectual property rights, or if we have litigation expenses or judgments that are contrary to us, our results of operations or financial condition could be hurt. We have from time to time received, and may in the future receive, communications alleging possible infringement of patents and other intellectual property rights of others. We have negotiated in the past broad patent cross-licenses with many of our competitors enabling us to design, manufacture and sell semiconductor products, without fear of infringing patents held by such competitors. As our sales increase compared to those of our competitors, the strength of our patent portfolio may not be sufficient to guarantee the conclusion or renewal of broad patent cross-licenses on terms which do not affect our results of operations. Furthermore, regardless of the validity or the successful assertion of any third-party patent or other intellectual property claims, we could incur significant costs with respect to the defense thereof that could have a material adverse effect on our results of operations or financial condition.

***We benefit from state funding which might become unavailable, and as a result our costs could increase***

Like many other manufacturers operating in Europe, we benefit from governmental funding for research and development expenses, industrialization costs (which include some of the costs incurred to bring prototype products to the production stage) as well as from incentive programs for the economic development of underdeveloped regions. Public funding may also be characterized by grants and/or low-interest financing for capital investment. See Item 4. Information on the Company Public Funding . We have entered into funding agreements with France and Italy, which set forth the parameters for state support to us under selected programs. These funding agreements require compliance with European Union ( EU ) regulations and approval by EU authorities and annual and project-by-project reviews and approvals.

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We cannot guarantee that we will continue to benefit from public funding for which we are currently eligible, or that any committed funding will not be revoked or discontinued, or that it will not be reviewed or challenged.

We rely on receiving funds allocated by state governments on a timely basis. However, funding of programs in France and Italy is subject to annual appropriation, available government resources, and to our continuing compliance with all eligibility requirements. If these governments were unable to provide anticipated funding on a timely basis, or if existing government-funded programs were curtailed or discontinued, or if we were unable to fulfill our eligibility requirements, this could have a material adverse effect on our business, operating results and financial condition. From time to time, we have experienced delays in the receipt of funding under these programs.

***Generally accepted accounting principles in the United States ( U.S. GAAP ) are in flux and may lead to significant changes in the way we account for our convertible debt instruments and stock options. These changes may lead to significant changes in our financial statements***

Proposals to amend accounting rules under U.S. GAAP have been published for public comment, and additional proposed amendments are likely to be made. Certain of these proposed changes may bring U.S. GAAP more closely into line with International Accounting Standards ( IAS ) while others are independent of the move to converge generally accepted accounting principles. This state of flux makes it difficult for us to predict how accounting rules may evolve over the near- and medium-term.

In particular, the Financial Accounting Standards Board ( FASB ) has identified accounting for zero coupon convertible debt instruments as an emerging accounting issue. FASB 's current proposal would involve uncoupling the debt and equity components of convertible debt instruments such that we would recognize interest expense over the life of the convertible debt instrument in line with market interest. Recognition of interest expense under the FASB proposal may be considerably higher than the interest currently being charged in respect of our existing zero coupon convertible debt instruments, which are included in net interest income/(expense) on our income statement. Balance sheets of companies with outstanding convertible debt instruments would also be impacted because shareholders' equity would be adjusted to show increased additional paid-in capital for the value of the embedded conversion option less the debt portion of the instrument. The current proposal could apply both to outstanding instruments and those to be issued in the future. FASB 's proposal would potentially take effect as of January 1, 2004. If a new rule is adopted in line with the current proposals, and if there is no provision that limits its applicability to only those instruments issued in the future, we may be required to change the accounting of the convertible debt instruments on our statement of income and on our balance sheet. There can be no assurance that these proposed rules and regulations or any other laws, rules or regulations, will not be adopted in the future, any of which could adversely affect our financial statements, make compliance more difficult or expensive, or otherwise adversely affect our business, financial condition or prospects.

Under current accounting rules, our convertible debt instruments generate interest income for us, which are included in net interest income/(expense) on our income statement and the cost of issuing the convertible debt instruments are amortized in other income and expenses on a straight line basis until the date of the first put option by holders of such convertible debt instruments.

FASB is also considering changes that may require expensing the costs relating to the issuance of stock options. The potential impact of such a change is described in Note 2.22 to the Consolidated Financial Statements.

***We may invest our cash in short-term financial instruments as part of our treasury management strategy, which has certain inherent risks***

From time to time, we may use cash on hand to purchase short-term financial instruments as part of our treasury management strategy. These instruments may have returns that depend on certain credit events of reference debt obligations issued by reference issuers consisting of us and/or different banks with a minimum credit rating. Interest is payable to us on such instruments through the final maturity, typically before the end of the financial year, unless suspended upon an earlier credit event under the relevant reference debt or of the relevant reference issuer. For certain short-term financial instruments, principal would be repaid to us at final maturity, unless such a credit event occurs, in which event early repayment of principal would be reduced based on the decline in value of the relevant reference debt. For swap instruments, no additional payments would occur at maturity, except that if such a credit event occurs before maturity, we would owe an additional payment equal to the decline in value of the relevant reference debt. While we place our cash and cash equivalents with high credit quality financial institutions and manage the credit risks associated with financial instruments through credit approvals, investment limits and centralized monitoring procedures, we do not normally require collateral or other security from the parties to the financial instruments. Thus, no assurance can be given that a rapid, unanticipated crisis in the global financial

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system would not have an adverse impact on our results of operations and cash flow. See Item 11. Quantitative and Qualitative Disclosures about Market Risk .

***Because we are a Dutch company subject to the corporate law of The Netherlands, U.S. investors might have more difficulty protecting their interests in a court of law or otherwise than if we were a U.S. company***

Our corporate affairs are governed by our articles of association and by the laws governing corporations incorporated in The Netherlands. The corporate affairs of each of our consolidated subsidiaries are governed by the articles of association and by the laws governing such corporations in the jurisdiction in which such consolidated subsidiary is incorporated. The rights of the investors and the responsibilities of members of our Supervisory Board and Managing Board under Dutch law are not as clearly established as under the rules of some U.S. jurisdictions. Therefore, U.S. investors may have more difficulty in protecting their interests in the face of actions by our management, members of our Supervisory Board or our controlling shareholders than U.S. investors would have if we were incorporated in the United States.

Our executive offices and a substantial portion of our assets are located outside the United States. In addition, ST Holding II and most members of our Managing and Supervisory Boards are residents of jurisdictions other than the United States and Canada. As a result, it may be difficult or impossible for shareholders to effect service within the United States or Canada upon us, ST Holding II, or members of our Managing or Supervisory Boards. It may also be difficult or impossible for shareholders to enforce outside the United States or Canada judgments obtained against such persons in U.S. or Canadian courts, or to enforce in U.S. or Canadian courts judgments obtained against such persons in courts in jurisdictions outside the United States or Canada. This could be true in any legal action, including actions predicated upon the civil liability provisions of the U.S. securities laws. In addition, it may be difficult for shareholders to enforce, in original actions brought in courts in jurisdictions located outside the United States, rights predicated upon the U.S. securities laws.

We have been advised by our Dutch counsel, De Brauw Blackstone Westbroek N.V., that the United States and The Netherlands do not currently have a treaty providing for reciprocal recognition and enforcement of judgments (other than arbitration awards) in civil and commercial matters. As a consequence, a final judgment for the payment of money rendered by any federal or state court in the United States based on civil liability, whether or not predicated solely upon the federal securities laws of the United States, would not be directly enforceable in The Netherlands. However, if the party in whose favor such final judgment is rendered brings a new suit in a competent court in The Netherlands, such party may submit to The Netherlands court the final judgment that has been rendered in the United States. If The Netherlands court finds that the jurisdiction of the federal or state court in the United States has been based on grounds that are internationally acceptable and that proper legal procedures have been observed, the court in The Netherlands would, under current practice, give binding effect to the final judgment that has been rendered in the United States unless such judgment contravenes The Netherlands' public policy.

***Removal of our common shares from the CAC 40 on Euronext Paris or the MIB 30 on the Borsa Italiana could cause the market price of our common shares to drop significantly***

Our common shares have been included in the CAC 40 index on Euronext Paris since November 12, 1997 and the MIB 30 on the Borsa Italiana since March 18, 2002. However, our common shares could be removed from the CAC 40 or the MIB 30 at any time, and any such removal or announcement thereof could cause the market price of our common shares to drop significantly.

**Item 4. Information on the Company**

**History and Development of the Company**

STMicroelectronics N.V. was formed in 1987 under the name of SGS-Thomson Microelectronics N.V. and resulted from the combination of the semiconductor business of SGS Microelettronica (then owned by Società Finanziaria Telefonica (S.T.E.T.), an Italian corporation) and the non-military business of Thomson Semiconducteurs (then owned by the former Thomson-CSF, now Thales, a French corporation). We were incorporated in 1987, and our length of life is indefinite. We are organized under the laws of The Netherlands, have our corporate legal seat in Amsterdam and our head offices at WTC Schipol Airport, Schipol Boulevard 265, 1118 BH Schipol Airport, Amsterdam, The Netherlands. Our telephone number there is +31-20 406-9604. Our headquarters and operational offices are located at 39 Chemin du Champ des Filles, 1228 Plan-Les-Ouates, Geneva,



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Switzerland. Our main telephone number is (41-22) 929-2929. Our agent for service of process in the United States is STMicroelectronics, Inc., 1310 Electronics Drive, Carrollton, Texas, 75006-5039; telephone: +1 (972) 466-6000. STMicroelectronics N.V. is our parent company and we also conduct our operations through our consolidated subsidiaries.

For information on our principal capital expenditures and divestitures, see Item 5. Operating and Financial Review and Prospects .

**Business Overview**

We are a global independent semiconductor company that designs, develops, manufactures and markets a broad range of semiconductor integrated circuits ( ICs ) used in a wide variety of microelectronic applications, including automotive products, computer peripherals, telecommunications systems, consumer products, industrial automation and control systems. According to preliminary 2002 rankings published by Gartner Inc. and IC Insights, Inc., we were ranked as the fourth-largest semiconductor company based on estimated 2002 sales. According to final 2002 rankings published by iSuppli, we are the fifth-largest semiconductor company based on 2002 sales. According to iSuppli, based on final 2002 sales, and Databeans Incorporated, based on estimated 2002 sales, we are the world's largest supplier of Analog ICs. On the basis of final 2002 sales, iSuppli ranked us the world's leading supplier of application specific ICs. According to Gartner, Inc., based on 2001 sales, we are the world's leading supplier of erasable programmable read-only memory ( EPROM ) and thyristors and the second-leading supplier of electronically erasable programmable read-only memory ( EEPROM ) and power diodes. On the same basis, according to International Data Corporation, we were the world's leading supplier of hard-disk drive ( HDD ) ICs. We believe we are the world's leading supplier of ICs for set-top boxes and second-leading supplier of digital versatile disk ( DVD ) ICs. In addition, according to Strategy Analytics, we were the world's third-leading supplier of automotive ICs based on 2001 sales. We currently offer more than 3,000 main types of products to approximately 1,200 direct customers. Major customers include Alcatel, Bosch, DaimlerChrysler, Delphi, Delta, Echostar, Ericsson, Hewlett-Packard/Compaq, Marelli, Matsushita, Maxtor, Nokia, Nortel Networks, Philips, Pioneer, Samsung, Schlumberger, Scientific Atlanta, Seagate Technology, Siemens, Sony, Thomson and Western Digital. We also sell standard products through global distributors and retailers, including Arrow Electronics, Avnet Inc., Eurodis, Funai and Yosuri.

We offer a diversified product portfolio and develop products for a wide range of market applications to reduce our dependence on any single product, application or end market. Within our diversified portfolio, we have focused on developing products that leverage our technological strengths in creating customized, system-level solutions with high-growth digital and mixed-signal content. Products include differentiated ICs (which we define as being our dedicated products, semicustom devices and microcontrollers) and analog ICs (including mixed-signal ICs), the majority of which are also differentiated ICs, as well as certain Flash products which are sold for specific applications and to particular customers. As a leading provider of differentiated ICs, we have developed close relationships with customers, resulting in early knowledge of their evolving requirements and enabling us to increase the penetration of our standard products. Differentiated ICs, which are less vulnerable to market cycles than standard commodity products, accounted for approximately 68% of our net revenues in 2002, compared to approximately 66% in 2001 and 63% in 2000. We also target applications that require substantial analog and mixed-signal content and can exploit our system-level expertise. Analog ICs accounted for approximately 53% of our net revenues in 2002, compared to approximately 51% in 2001 and 49% in 2000, while discrete devices accounted for approximately 12% of our net revenues in 2002, compared to approximately 10% in each of 2001 and 2000.

Our products are manufactured and designed using a broad range of manufacturing processes and proprietary design methods. We use all of the prevalent function-oriented process technologies, including complementary metal-on silicon oxide semiconductor ( CMOS ), bipolar and nonvolatile memory technologies. In addition, by combining basic processes, we have developed advanced systems-oriented technologies that enable us to produce differentiated and application-specific products, including bipolar CMOS technologies BiCMOS for mixed-signal applications, BCD technologies (BiCMOS and diffused metal-on silicon oxide

semiconductor or DMOS ) for intelligent power applications and embedded memory technologies. This broad technology portfolio, a cornerstone of our strategy for many years, enables us to meet the increasing demand for System-on-a-Chip ( SoC ) solutions. Complementing this depth and diversity of process and design technology is our broad intellectual property portfolio that we also use to enter into important patent cross-licensing agreements with other major semiconductor companies.

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Our products are organized into the following principal groups:

Telecommunications, Peripherals and Automotive

Consumer and Microcontroller

Memory Products

Discrete and Standard ICs

We also have a Subsystems Product Group that produces subsystems for industrial and other applications, and a New Ventures Group which, since the beginning of 2003, consists solely of our ongoing development activities in the field of TouchChip™ technology, designed for biometric subsystem applications, such as fingerprint verification for handheld devices, personal computer peripherals, locks and automotive products.

**Results of Operations**

The tables below set forth information on our net revenues by product group and by geographic region:

	Year ended December 31,				
	1998	1999	2000	2001	2002
	(in millions)				
<b>Net Revenues by Product Group:(1)</b>					
Telecommunications, Peripherals and Automotive(1)	\$ 1,855	\$ 2,305	\$ 3,482	\$ 3,031	\$ 3,074
Discrete and Standard ICs(1)	817	928	1,213	942	1,055
Memory Products	660	836	1,553	1,382	1,055
Consumer and Microcontrollers(1)(4)	806	886	1,466	896	1,026
New Ventures Group and Others(2)(4)	110	101	99	106	108
<b>Total</b>	<b>\$ 4,248</b>	<b>\$ 5,056</b>	<b>\$ 7,813</b>	<b>\$ 6,357</b>	<b>\$ 6,318</b>
<b>Net Revenues by Geographic Region:(3)</b>					
Europe	\$ 1,769	\$ 1,834	\$ 2,629	\$ 2,169	\$ 1,832
North America	937	1,156	1,843	1,161	919
Asia Pacific	1,248	1,658	2,615	2,302	2,748
Japan	181	240	402	331	275

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Emerging Markets(3)	113	168	324	394	544
<b>Total</b>	<b>\$ 4,248</b>	<b>\$ 5,056</b>	<b>\$ 7,813</b>	<b>\$ 6,357</b>	<b>\$ 6,318</b>

(as a percentage of net revenues)

**Net Revenues by Product Group:(1)**

Telecommunications, Peripherals and Automotive(1)	43.6%	45.6%	44.6%	47.7%	48.7%
Discrete and Standard ICs(1)	19.2	18.4	15.5	14.8	16.7
Memory Products	15.5	16.5	19.9	21.7	16.7
Consumer and Microcontrollers(1)(4)	19.0	17.5	18.8	14.1	16.2
New Ventures Group and Others(2)(4)	2.7	2.0	1.2	1.7	1.7
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

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Europe	41.6%	36.3%	33.6%	34.1%	29.0%
North America	22.1	22.9	23.6	18.3	14.5
Asia Pacific	29.4	32.8	33.5	36.2	43.5
Japan	4.3	4.7	5.2	5.2	4.4
Emerging Markets(3)	2.6	3.3	4.1	6.2	8.6
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

- (1) In January 1999, we implemented organizational changes to better orient our product groups to end-use applications. As a result, net revenues have been restated for prior periods to reflect these changes. In addition, the former Dedicated Products Group has become the Telecommunications, Peripherals and Automotive Groups, while the former Programmable Products Group has become the Consumer and Microcontrollers Groups.
- (2) Includes revenues from sales of subsystems and other products and from the New Ventures Group, which was created in May 1994 to act as a center for our new business opportunities, and since the beginning of 2003, is solely comprised of our development activities in the field of TouchChip™ technology.
- (3) Revenues are classified by location of customer invoiced. For example, products ordered by U.S.-based companies to be invoiced to Asia Pacific affiliates are classified as Asia Pacific revenues. Net revenues by geographic region have been reclassified to reflect the creation of Region Five in January 1998, which includes emerging markets such as South America, Africa, Eastern Europe, the Middle East and India. In the fourth quarter of 2000, Region Five changed its name to become the Emerging Markets region.
- (4) In 2001, we implemented organizational changes to better orient our product groups to end-use applications. These changes affected the Consumer and Microcontrollers Groups and the New Ventures Group and Others. As a result, net revenues have been restated for prior periods to reflect these changes.

**Strategy**

Our mission is to offer strategic independence to our partners worldwide, as a profitable and viable broad-range semiconductor supplier. Our strategy is multifaceted, incorporating many complementary elements. The key elements of our strategy, which are discussed below, have enabled us to:

grow revenues at a compounded rate of 10.4% over the past five years compared to a compounded annual growth rate for the industry of 2.9% over the same period, thereby increasing our market share from 3.4% of the total available semiconductor market (or TAM ) in 1998 to 4.5% of the TAM in 2002;

remain profitable in 2001 and 2002, two very difficult years for the semiconductor industry; and

rank among the world's five largest semiconductor companies based on sales in 2001 and 2002.

The TAM includes all semiconductor products as a percentage of worldwide revenues from production of electronic equipment, according to published industry data. See Industry Background The Semiconductor Market.

*Market Share Gains.* Building market share in our targeted market segments, telecommunications, digital consumer, automotive, Smart cards and computer peripherals, is an ongoing priority for us. To date, our success in increasing our market share position has been largely a function of organic growth achieved by deepening our partnerships with our existing strategic customers and broadening our customer base. However, while market share gains are an important element of our strategy, we are careful to strike a balance between growth and profitability. We intend to continue to align our product group resources and global sales and marketing activities in order to progressively and profitably grow our market share.

*Broad product portfolio.* We offer a diversified product portfolio and develop products for a wide range of market applications, thereby reducing our dependence on any single product, application or end market. Within our diversified portfolio, we have focused on developing products that leverage our technological strengths in creating customized, system-level solutions for high-growth digital and mixed-signal applications. Such products include differentiated ICs (which we define as being our dedicated products, semicustom devices, non-standard Flash memories and microcontrollers) and analog ICs (including mixed-signal ICs), the majority of which are also differentiated ICs. Differentiated ICs help drive our strategic alliances with customers and, as a result of their application-specific features, generally command higher prices and provide lower gross margin volatility across the semiconductor cycles than standard products. Differentiated ICs accounted for approximately 69% of our net revenues in 2002 compared to approximately 66% in 2001 and approximately 63% in 2000.

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Standard products (including nonvolatile memories, discrete devices, Smart card ICs, all standard logic and linear ICs and standard Flash memories) represented approximately 31% of our net revenues in 2002 compared to approximately 34% in 2001 and approximately 37% in 2000. Our standard product families (with the exception of Flash memories) require less capital investment, thereby offering an opportunity to improve our cash flow. They also extend the life cycle of our equipment and facilities bring volume production to our manufacturing infrastructure, thereby helping to reduce the overall cost of production for our differentiated products, and give us the opportunity to benefit from any short-term increases in certain standard product pricing. We believe that the balance between differentiated and standard products contributes to cost effective manufacturing and represents a strategic advantage for us.

*Broad range of process and design technologies.* We continue to utilize our expertise and experience with a wide range of process and design technologies to further develop our capabilities. We are committed to maintaining and, in certain areas to increasing expenditures on core research and development projects as well as to developing alliances with other semiconductor companies and suppliers of software development tools, as appropriate. Technological advances in the areas of transistor performance and interconnection technologies are being developed through our CMOS logic products and semicustom devices. We work, on an ongoing basis, with key suppliers to develop advanced and standardized design methodologies for our CMOS, mixed signals and nonvolatile memory processes as well as libraries of macrofunctions and megafunctions for many of our products, and are focusing on improving our concurrent engineering practices to better coordinate design activities and reduce overall product development time.

*Leading global customer base with focus on strategic alliances.* We work with our key customers to identify evolving needs and new applications and to develop innovative products and product features. We also leverage our position as a supplier of application-specific products in seeking to cross-sell a broad range of products. Alliances with our strategic customers allow us and our customers to share certain product development risks and give our customers access to our process technologies and manufacturing infrastructure. We have formed alliances in our key targeted application segments: telecommunications, automotive, consumer and computer peripherals with customers such as Alcatel, Bosch, Hewlett-Packard, Marelli, Nokia, Nortel Networks, Pioneer, Seagate Technology, Siemens VDO, Thomson and Western Digital, among others. Our strategic alliances with key customers have been a major growth driver for us. In 2000, 2001 and 2002, revenues from strategic customer alliances accounted for approximately 43%, 47% and 47% respectively, of our net revenues.

*Industry partnerships.* Partnerships with other semiconductor companies enable us to share the increasing costs and technological risks involved in the research and development of state-of-the-art processes, product architectures and digital cores and to shorten the product development time of certain products. In 2002, we announced joint research and development cooperation programs in Crolles 2 with Motorola Inc. and Philips Semiconductors International B.V., as well as TSMC, and an initiative with Texas Instruments for the joint development of an open standard for wireless application processor interfaces.

We also work closely with many of our key suppliers on joint development programs to develop easy-to-use design tools for specific applications and to cooperate on manufacturing sciences. In 2002, we signed an agreement with Dai Nippon Co Ltd. for the development and supply of leading-edge, high-end photomasks and with UMC for foundry services and cooperation on manufacturing science.

*Global integrated manufacturing infrastructure.* We have a diversified, leading-edge manufacturing infrastructure capable of producing silicon wafers using our broad process technology portfolio, including our complementary metal oxide semiconductor (or

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CMOS ), proprietary bipolar CMOS (or BiCMOS ) and BiCMOS-DMOS (or BCD) technologies. Assembling, testing and packaging of our semiconductor products takes place in our large and modern back-end facilities which are located in low-cost areas. We have also developed relationships with outside contractors for foundry and back-end services. Thus, depending on market demand, we could outsource 15% to 20% of each of our front-end and back-end production requirements, enabling us to manage the supply-chain to our customers without a commensurate increase in capital spending.

*Integrated presence in key regional markets.* We have sought to develop a competitive advantage by building an integrated presence in each of the world's three major economic zones: Europe, Asia and North America. An integrated presence means having manufacturing, design and sales and marketing capabilities in each region, in order to ensure that we are well positioned to anticipate and respond to our customers' business requirements. We have leading-edge, front-end manufacturing facilities in Europe, in the United States and in Asia;



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our more labor-intensive back-end facilities have been located in Malaysia, Malta, Morocco, Singapore and China, enabling us to take advantage of favorable production costs (particularly lower labor costs). Major design centers and local sales and marketing groups are within close proximity of key customers in each region, which we believe enhances our ability to maintain strong relationships with our customers. As appropriate, we intend to continue to build our integrated local presence in those regions where we compete and to expand in high-growth potential markets, such as China, where we have both a back-end facility and a design center, and India, where we have design and software development centers. We have also continued to develop our sales organization for emerging markets.

*Balanced sales by application in high-growth market segments.* We have a geographically diverse customer base across a broad range of market applications. We have developed a strong product portfolio serving major growth applications with our target market segments, including computer peripherals, wireless communications, internet access, networking, digital consumer appliances, and power management. Ongoing investments in research and development and design resources are underway to bring to market the next generation of high-growth applications.

*Pioneer in System-on-Chip and application convergence.* Since our inception, we have combined our silicon know-how with the system know-how of a broad range of industries to integrate different system functions on a single chip, pioneering the trend towards system evolution on silicon and super-integration. We currently supply highly integrated products in all our main applications, and particularly in high volume domains, such as wireless communications, hard-disk-drives (disk controllers), set-top boxes, digital versatile disk ( DVD ) drives and digital car radios.

We believe that application convergence built around mobility, connectivity, multimedia, storage and security will be a further significant growth driver for new System-on-Chip products that address different applications on a single chip. We plan to use our broad range of capabilities, including technology, system know-how, strategic and industry alliances and our intellectual property portfolio to continue to anticipate and respond to this rapidly developing market and to new end market demand.

*Pervasive TQEM Culture and Social Responsibility.* We are fostering a corporate-wide Total Quality and Environmental Management ( TQEM ) culture that defines a common set of objectives and performance measurements for employees in all geographic regions, at every stage of product design, development, production and consignment for all product lines. TQEM in our company is based on five key principles: management commitment, employee empowerment, continuous improvement, management by fact and customer focus. TQEM has become an integral part of our culture and is designed to develop a self-directed workforce with a common set of values, objectives and problem-solving processes.

In recent years, our regional subsidiaries have been recognized with several prestigious awards, underscoring our long-standing commitment to business excellence: the prestigious Malcolm Baldrige National Quality Award in the U.S., the Singapore Quality Award, the Moroccan National Quality Award, the EPA Climate Protection Award, the Malaysian Prime Minister Quality Award, and the Malta Quality Award. We were also recognized with the European Quality Award for Business Excellence in the category of large businesses by the European Foundation for Quality Management. These awards illustrate the success of our unified TQEM philosophy on the four continents in which we have operations.

Our TQEM culture supports our belief that there is no contradiction between building shareholders and stakeholders value. We are therefore pursuing our program to continually strengthen our efforts in the area of corporate social responsibility. In the field of environmental protection, we are actively involved in reducing landfilled waste, lowering total energy consumption per unit of

production and developing renewable energy sources. With respect to occupational health and safety, we have received the OHSAS (Occupational Health and Safety Assessment Series) 18001 qualification for three of our plants, and this qualification process for all of our plants is underway. Our initiative to help bridge the digital divide between those who do have access to modern digital information and communications technology and those who do not involves our active membership in the United Nations Information and Communications Technologies Task Force, as well as our corporate program to offer basic computer literacy internet access and computers.

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**Products and Technology**

We design, develop, manufacture and market a broad range of products used in a wide variety of microelectronic applications, including telecommunications systems, computer systems, consumer goods, automotive products and industrial automation and control systems. Our products include standard commodity components, full custom devices, semicustom devices and application-specific standard products ( ASSPs ) for analog, digital and mixed-signal applications. Historically, we have not produced dynamic random access memory ( DRAMs ) or x86 microprocessors, despite seeking to develop or acquire the necessary IP (intellectual property) to use them as components in System-on-Chip ( SoC ).

We are organized into four principal products groups; Telecommunications Peripherals and Automotive, Consumer and Microcontroller, Memory Products and, also, Discrete and Standard ICs. As part of our activities outside the principal product groups, we also have a Subsystem Product Group, which produces subsystems for industrial and other applications and our New Ventures Group, since the beginning of 2003, regroups our development activities in the field of TouchChip™ technology, designed for biometric subsystem applications, such as fingerprint verification for handheld devices, personal computer peripherals, locks and automotive products. For a breakdown of net revenues by product group and geographic region each of the five years ended December 31, 2002, see Business Overview .

***Telecommunications, Peripherals and Automotive Groups***

The Telecommunications, Peripherals and Automotive Groups ( TPA ) are responsible for the design, development and manufacture of application-specific products using advanced bipolar, CMOS, BiCMOS mixed-signal and power technologies, as well as mixed analog/digital semicustom-devices and Micro-Electro-Mechanical System ( MEMS ) products. The TPA Groups offer complete system solutions to customers in several application markets. All products are ASSPs, full-custom or semicustom devices that may also include digital signal processor ( DSP ) and microcontroller cores. The TPA Groups particularly emphasize dedicated integrated circuits ( ICs ) for automotive, computer peripherals and industrial application segments, as well as for communication, computing and networking application segments.

The TPA Groups work closely with customers to develop application-specific products using our technologies, intellectual property, and manufacturing capabilities. The breadth of our customer and application base provides us with a better source of stability in the cyclical semiconductor market.

In 2002, we changed the internal organization of the TPA Groups. The Telecommunications Group now has four divisions: cellular terminal, cellular infrastructure, network and access. The Peripherals Group has three divisions: data storage, printer and power conversion and industrial. The Audio and Automotive Group is organized in three business divisions: car communication, automotive and audio. The three groups are supported by three technical centers: digital signal processing and microcontroller cores, digital and mixed analog semicustom and the multimedia strategy center, which is a new support division.

***Telecommunications Group***

(i) *Cellular Terminal Division.* We focus our product offerings on cellular phones serving the major original-equipment manufacturers, or OEMs, with differentiated ICs. In this market, we have key positioning in energy management, audio coding and decoding function ( CODEC ) and radio frequency ICs. In 2002, we began shipping mobile-phone energy-management devices in volume to three new customers. These products are now being delivered in volume to four of the world's top five manufacturers. We also began volume deliveries of liquid crystal display (or LCD) driver chips for mobile phones.

In February 2002, we announced a new cooperation agreement with Alcatel for the development of future GSM/GPRS chipsets for mobile phones and other wireless connectivity applications. GSM/GPRS mobile phones are the European standard for mobile phones. See *Certain Terms*. Under the terms of the agreement, Alcatel has transferred to us its team of mobile-phone integrated-circuit designers. Additionally, we integrated in early 2003 the engineers from the Alcatel software development team for mobile-phones. We now have access to the know-how and intellectual property related to GSM/GPRS developed by these organizations. The resulting chipsets will be available for the open market. This cooperation also includes a multi-year supply agreement associated with new chipsets for Alcatel's cellular products.

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We recently unveiled details of our multimedia application processor chips, known as the Nomadik family of products, for 2.5/3G mobile phones and portable wireless products. The Nomadik devices are compliant with the new OMAP1™ open standard for multimedia application processor interfaces. The OMAP1 standard, first announced in December of 2002, is a joint initiative with Texas Instruments to define and promote an open standard for wireless application interfaces and should promote faster and broader deployment of multimedia-enhanced mobile devices and applications. This new piece of silicon is expected to be an important element in the evolution of the wireless communications devices. Increasing our role in the mobile market and reinforcing our commitment to the Open Mobile Alliance (OMA), we joined the OMA board of directors and upgraded our status to sponsor member.

(ii) *Cellular Infrastructure Division.* In February 2002, we announced the formation of a new Wireless Communications Infrastructure Products business unit that is developing dedicated infrastructure chip solutions focused on primarily the new third-generation telecom standards, but supporting existing standards as well. We have already developed all of the technologies required for the wireless infrastructure application specific IC ( ASIC ) market due to our many years of experience in this field. For the digital baseband chips that handle complex digital processing tasks, we have developed the ST100 family of digital signal processor cores. We have already developed other key radio frequency and mixed signal technologies for the demanding wireless terminal market.

(iii) *Network Division.* Our wireline telecommunications products are used in telephone sets, modems, subscriber line interface cards ( SLICs ) for digital central-office switching equipment and high-speed electronic and optical communications networks. In the networking market, we had important design wins for high-speed (10 Gbit/sec) chips built in our cost-optimized silicon-germanium ( SiGe ) technology. We also gained a major ASIC design win from a market leader for a device that will be used in wireless local area network (or LAN ) products.

(iv) *Access Division.* In April 2002, as part of our agreement with Alcatel to acquire Alcatel Microelectronics, important know-how and experienced engineers have been added to our existing resources, significantly enhancing our overall capabilities to compete in the telecommunication arena for Bluetooth ICs and Digital Subscriber Line ( DSL ) chipsets. The addition of this know-how will allow us to further enhance our technical expertise and expand our significant market offering in central office and mass market DSL modem chipsets, positioning us to become the one of the worldwide leading supplier of DSL semiconductor products. We also announced our intention to enter into a cooperation agreement with Alcatel for the joint development of DSL chipsets that will also be made available to the open market. Finally, this new agreement calls for us to become a preferred supplier of Alcatel expanding our long-standing strategic alliance.

In February 2002, along with several industry players, we launched an initiative to ensure interoperability in the discrete multi-tone-very-high-rate digital subscriber line ( DMT-VDSL ) market. Pursuing our efforts to support the DMT modulation technique as a worldwide standard for VDSL, we demonstrated working prototypes of our Zipper-DMT VDSL modem technology that combines the very high bandwidth of VDSL with ADSL spectrum compatibility. In February 2002, we also signed an agreement to acquire the co-ownership rights to the intellectual property and product range of Tioga Technologies for Digital Subscriber Line (xDSL) chipsets. These xDSL products include an integrated Asymmetric DSL (ADSL) multi-channel processor for central office applications. When used together with our existing line of advanced analog front-end and power-efficient line drivers, this chipset provides a competitive, compact and power-efficient solution. In January 2003, we exercised our option to purchase the remaining assets of Tioga Technologies.

Regarding recent design wins, we announced that our latest 12 line chipset technology was integrated into Alcatel's latest digital subscriber line access multiplexer ( DSLAM ). This permitted Alcatel to double its line density. Also in the DSL market, we gained a design win from Telecom Italia for the Unicorn ADSL chipset. We offered a new ADSL modem chipset aimed at both desktop and laptop computers that was the first on the market to employ a controller-less design with USB or PCI interface.

***Peripherals Group***

(i) *Data Storage.* We produce ICs for several data storage applications, specializing in disk drives with advanced solutions for read and write digital channels, controllers, host interfaces, digital power processing and micromachinery. We are actively working on super-integrating these macro-functions into System-on-Chip ( SoC ) solutions. We believe that we are one of the largest semiconductor companies supplying the hard-disk-drive market based on sales. In February 2002, we entered into a service and license agreement with APT Technologies to develop chip level solutions for serial interfaces, which will be adopted in a wide range of applications.

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In September 2002, we introduced a new low dissipation CMOS read/write channel IC targeting mobile disk drive applications. We unveiled the industry's first hard disk drive ( HDD ) read/write channel chip that fully supports vertical recording for HDDs. The new chip is designed in our advanced 130nm CMOS technology and fully exploits the process's low-power options to extend battery life in laptop and similar mobile applications. We also gained two major 130nm SoC design wins in the HDD marketplace, one in the high-volume desktop segment and one in the high-performance enterprise segment. The first reinforces our SoC leadership in the desktop HDD segment, while the second represents a key milestone for our penetration into this high-margin market segment.

(ii) *Printers.* We are focusing on inkjet printer components and are an important supplier of pen chips, motor drivers, head drivers, digital engines, high-performance photo-quality applications and digital color copiers. We are also expanding our offerings to the laser printer market. We are an important partner of Hewlett-Packard for technology development and manufacturing and are currently developing printer SoC platforms. Other notable successes in the printer field included our increased cooperation with Lexmark regarding the development of an SoC device for next-generation printers. We also gained a new SoC design win with another leading printer manufacturer.

(iii) *Power conversion and industrial.* We design and manufacture products for industrial automation systems, lighting applications (lamp ballast), battery chargers and switch mode power supplies ( SMPS ). Our key products are power ICs for motor controllers and read/write amplifiers, intelligent power ICs for spindle motor control and head positioning in computer disk drives and battery chargers for portable electronic systems, particularly mobile telephone sets.

### ***Audio and Automotive Groups***

Our audio products include audio power amplifiers, audio processors and graphic-equalizer ICs. Our automotive products include alternator regulators, airbag controls, anti-skid braking systems, ignition circuits, injection circuits, multiplex wiring kits and products for body and chassis electronics, engine management, instrumentation systems and car multimedia.

(i) *Automotive Division.* In March 2002, our leading position in the automotive arena was reinforced by the introduction of a new 16-bit automotive-grade microcontroller chip with embedded Flash memory based on the industry standard ST10 core. The chip was designed for single-chip engine control units and I/O intensive automotive applications. In addition, we gained numerous design wins including chips for a power-steering application for a US customer, a powertrain chipset for a Japanese customer, and further designs in powertrain applications for European- and US-based customers. We also won a contract for the next generation digital core for airbag controller units by a world-leading airbag manufacturer and began production of a Gasoline Direct Injection (GDI) engine management chipset for a major Japanese original equipment manufacture, or OEM.

(ii) *Audio Division.* In the car radio field, we achieved a major technical milestone with XM Satellite Radio, the satellite radio broadcaster. By December 2002, we had shipped one million XM Satellite Radio chipsets. Moreover, in July 2002, we announced that we were sampling a new AM/FM radio receiver chipset that digitizes directly the 10.7MHz intermediate frequency, allowing both enhanced performance and convergence with In-Band On-Channel ( IBOC ) digital radio in the future. We also introduced a chipset for a digital car radio tuning system, based on a powerful dual 24-bit DSP platform. Production of this product began in the fourth quarter of 2002 for a major Japanese OEM. We also introduced a family of direct digital amplifications ( DDX ) digital audio amplifier chips that improve sound quality while reducing power consumption, size and cost. Aimed primarily at applications in DVD home theater systems and mini component stereos, these chips allow powerful surround sound systems to be housed in a compact enclosure. DDX was developed by Apogee Technology Inc. and licensed exclusively to us. In November, we announced that total

shipments of DDX-based digital amplifier integrated circuits, including those with Apogee Technology, had exceeded five million devices. The added value of DDX's all-digital design, high efficiency operation and numerous features has enabled the technology to become the leading amplifier solution for all-in-one home theater systems. We also signed a new agreement with Apogee Technology for the development of a second generation DDX digital audio amplifier chipset.



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(iii) *Car Communication.* In 2002, we delivered fully working samples of a single chip navigator to a major automotive OEM in Europe for production that will start in March 2003, and also delivered fully working samples of a new global positioning by satellite ( GPS ) processor, built in 0.18um embedded Flash technology.

***Consumer and Microcontroller Groups***

The Consumer and Microcontroller Groups ( CMG ) are responsible for the design, development and manufacture of microcontrollers, and application-specific standard products ( ASSP ) for consumer applications targeting the high-growth digital consumer segment, including digital set-top boxes, digital versatile disk ( DVD ) players, digital cameras and displays and digital TV.

The Consumer and Microcontroller Groups are divided into the Consumer Group and the Microcontroller Group. The Consumer Group is further divided into four divisions: Set-top Box, DVD, Digital TV and Display, and Imaging. During the year 2002, the Display business unit was transferred from the Imaging Division to the Digital TV and Display Division.

***Consumer Group***

We consolidated our leadership in digital consumer applications on the basis of shipments in 2002, particularly for set-top boxes, DVDs and digital TVs, and we shipped more than 40 million MPEG2 decoder ICs in 2002. Shipments of MPEG2 decoders to set-top box and DVD manufacturers passed the 100-million-unit mark in November 2002, demonstrating our leadership and strength in this important digital consumer market. In January 2002, we signed a five-year technology agreement with Thomson to expand our strategic partnership in the field of System-on-Chip ( SoC ) for digital consumer applications to bring cost-effective and innovative solutions quickly to market. We have been successfully partnering for a decade in the development of state-of-the-art SoCs and intellectual property for TV, set-top boxes and DVD products. During the term of the initial agreement, we and Thomson pioneered the development of MPEG video decoding. After enabling the launch of the world's first MPEG2 satellite TV service (DirecTV in 1994), both we and Thomson have secured a leadership position in our respective markets. According to Gartner, Inc., we have been the world's largest supplier of MPEG decoder chips for the last three consecutive years and, according to our estimates, are also the world's largest supplier of differentiated ICs for consumer electronics.

(i) *Set-top Box Division.* We continued to expand our product and customer base introducing solutions for set-top boxes with web-browsing, video recording and time-shifting capabilities. We reinforced the market leadership of our STi5500 (OMEGA) family of set-top box back-end decoders with the introduction of the STi5516, the latest member of our OMEGA family of STB decoder solutions. The new SoC device sets unprecedented standards in terms of performance and integration level while retaining compatibility with earlier solutions. We also announced that we were supplying chips for the next generation of low-cost set-top boxes that will allow consumers in the UK to receive FreeView, the free digital terrestrial TV channels on their analog TV receivers. We broadened our product range with the STV0399 front-end solution for Satellite STB decoders and introduced the industry's most advanced demodulator for digital satellite television applications, the STV0499. During the year, the major middleware vendors reached agreement with us for the development and deployment of Multimedia Home Platform (MHP) solutions including Philips, ADB and Alticast. These turnkey solutions for building advanced digital set-top boxes and integrated digital televisions will dramatically cut back development and production times for consumer electronics manufacturers seeking to build MHP-compliant set-top boxes and digital TV receivers.

(ii) *DVD Division.* In December 2002, we announced the industry's most advanced silicon solution for DVD playback. We began implementing all of the analog and digital electronic circuitry required for all DVD playback in just two chips: the STm5589 and the STm6316. In May 2002, we announced that we were supplying Pioneer with production volumes of a complete DVD chipset for its high volume 2002 DVD players. We also agreed to work together with Pioneer to develop optimized solutions for the 2003 generation of DVD players. In addition, we announced that we were providing Pioneer with a complete DVD playback software solution, customized to meet Pioneer's advanced feature and user interface requirements.

(iii) *Digital TV and Display Division.* We address both the analog and digital television markets with a wide range of highly integrated ASSPs and application-specific microcontrollers. We introduced a family of TV vertical deflection boosters that use Class D amplification to deliver a significant reduction in power consumption compared to existing linear devices.

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The new STV9380/90 devices not only provide a more cost-effective solution than linear boosters but also allow the power consumption of a TV set to be reduced by as much as 7 watts. We introduced the STi7020, the world's most advanced HDTV (high-definition television) decoder IC. The STi7020 brings greater integration, containing multiple-stream video decoding, audio decoding, a powerful 2D/3D graphics subsystem and numerous ancillary functions. We introduced a new hardware and software platform that bridges the gap between conventional analog TV and the forthcoming digital TV technology. In the flat panel display space, we achieved significant design wins for LCD scaler ICs and plasma driver ICs placing us in a strong position to achieve leadership in one of the industry's fastest growing markets. The research firm iSuppli expects the market for LCD and plasma monitors to overtake the traditional CRT (cathode ray tube) monitor market by 2006.

(iv) *Imaging Division.* Our Imaging Division focuses on digital still cameras, video cameras and imaging for a wide variety of industrial, consumer, computer and telecommunications markets. In the field of digital still cameras, we announced in October 2002 immediate availability of our new 1.3 million pixel CMOS sensor designed for high-quality and low-cost digital still camera and camcorder markets. The new sensor rivals the resolution of charge-coupled devices (CCDs), but with substantial benefits in cost, size, weight, power management, and integration. In the mobile phone arena, we were awarded major design wins for our CMOS sensor technology by a market-leading wireless device manufacturer. We shipped the first camera module to this client at the end of 2002.

### ***Microcontroller Group***

Our Microcontroller Group provides competitive, high-volume 8-, 16- and 32- bit microcontrollers for all major application segments. This family of products has been developed with a wide portfolio of processes capable of embedding nonvolatile memories such as EPROM (erasable programmable read-only memory), EEPROM (electrically erasable programmable read-only memory) and Flash memories. In 2002, we announced an extension to our ST7 family of 8-bit micros with the launch of the ST72324 general-purpose Microcontroller, available in several Flash and ROM versions.

### ***Memory Products Group***

The Memory Products Group (MPG) designs, develops and manufactures a broad range of semiconductor memory products.

Our Memory Products Group is organized into the following divisions: (i) Flash memories; (ii) Smart card products; (iii) EPROMs; (iv) EEPROMs and serial nonvolatile memories; (v) nonvolatile random access memory (NVRAM) and dedicated memories; (vi) static random access memory (SRAM) and (vii) programmable systems memories (PSM).

(i) *Flash Memories.* Flash memories must have many capabilities because they are used in a wide variety of applications, each with different requirements and thus are more comparable to dedicated products than pure standard products. We offer a broad variety of Flash memories, which we sell to customers in different fields, such as wireless telephony, digital consumer, automotive and computer products. Regarding our advanced process technologies, in 2002, we manufactured the first products built using next-generation 0.13-micron technology. On the product side, we introduced a pair of multiple bank Flash memories targeted at high-performance next-generation mobile phones. The 64-Mbit devices combine a multiple bank architecture, a 1.8v power supply voltage and a Synchronous Burst Read mode to increase the performance of more complex 3G mobile phones. As a result of our

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advanced product portfolio we significantly increased the number of 64-Mbit Flash sockets wins at major cellular phone manufacturers and achieved our first design win at a major set-top-box manufacturer with a new secure 64-Mbit Flash memory. We also introduced a new multiple-bank 128-Mbit Flash device targeted at high-performance next-generation mobile phones and confirmed our commitment to multi-bit/cell technology with the successful production of a 128-Mbit, 3V, 2-bit/cell device.

Additionally, we introduced a new family of Flash memories, called LightFlash, optimized for digital consumer and office peripheral applications. Built using 0.15-micron process technology, these devices are compatible with standard Flash memories, but allow easier code updates during the engineering phase of a product ramp-up and faster code updates during production.

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(ii) *Smart card Products.* Smart cards are card devices containing integrated circuits that store data and provide an array of security capabilities. They are used in a wide and growing variety of applications, including public pay telephone systems, cellular telephone systems and banks, as well as pay television systems. Other applications include medical record applications, card-access security systems, toll-payment secure transactions over the Internet and ID/passport cards applications. In 2002, we started volume deliveries of the ST19XT34, the first secure microcontroller in the world to receive USB certification for use in Smart cards and tokens. We also teamed up with Fujitsu to develop the ST19ZR01, the first contactless Smart card IC with FRAM (Ferroelectric Random Access Memory) and ROM. The new device is particularly suited to applications such as transport ticketing and access control.

We also announced the world's most advanced Smart card memory technology, Page Flash, a high performance Flash memory technology that will in the future, address the needs of high memory density Smart card requirements and increased capabilities.

(iii) *EPROMs.* We produce a broad range of erasable programmable read-only memory ( EPROM ), from 16-Kbit to 32-Mbit. The EPROM market is relatively mature. We have retained our market leadership because of our EPROM technology, which has allowed us to build one of the broadest product portfolios currently offered in the market. At the same time, this technology has permitted continuous improvement of manufacturing yields and reduction of die size, giving us an advantageous cost position. Efficient manufacturing in our Singapore assembly plant, together with our sales and distribution channels, has contributed to the exploitation of our technological advantage. We have introduced a new family called Flexible ROM, offering a cost-effective alternative to mask ROMs.

(iv) *EEPROM and Serial Nonvolatile Memories.* We offer serial electronically erasable programmable read-only memory (or EEPROM ) up to 512 Kbit, and serial nonvolatile memories (or SVMs ). Serial EEPROMs are the most popular type of EEPROMs and are used in computer, automotive and consumer applications. EEPROM and serial NVM support a new family of products based on Flash technologies. The serial Flash technique allows integration of high density ICs (up to 16Mbit) in very inexpensive 8-inch lead packages for a large variety of applications. Building on our technical prowess and manufacturing know-how and market leadership, we continue to build on our advantages and intend to work closely with our key customers and strategic allies to identify and develop added-value application-specific memories.

(v) *NVRAM and Dedicated Memories.* We are producing a wide range of nonvolatile RAMs (battery backed-up SRAM) used in computers, industrial and telecommunications equipment. We are also extending our range with new real time clock ( RTC ) and SRAM supervisors families.

(vi) *SRAM.* We have introduced a range of low power SRAM-products from 256k to 8-Mbit in various voltages. These are aimed primarily at satisfying the memory requirements of wireless applications, as a complement of our Flash offerings, specifically to stack them together with Flash in the same multi-chip package.

(vii) *Programmable System Memories ( PSM ).* Our strategy of developing innovative, differentiated and value-added products allows us to offer configurable memory systems, integrating multiple memory types and control logic.

***Discrete and Standard ICs Group***

The Discrete and Standard ICs Group ( DSG ) designs, develops and manufactures discrete power devices, power transistors, standard linear and logic ICs, and radio frequency products.

Our discrete and standard products are manufactured using mature technology processes. Although such products are less capital-intensive than our other principal products, we are continuously improving product performance and developing new product features. We have a diverse customer base, and a large percentage of our discrete and standard products are sold through distributors.

(i) *Discrete Power Devices.* We manufacture and sell a variety of discrete power devices, including rectifiers, protection devices and thyristors (silicon controlled rectifiers or SCRs and triacs). Our devices are used in various applications, including telecommunications systems (telephone sets, modems and line cards), household appliances and industrial systems (motor control and power control devices). More specifically, rectifiers are used in voltage converters and voltage regulators, protection devices to protect electronic equipment from power supply spikes or surges, and thyristors vary current flows through a variety of electrical devices, including lamps and household appliances.

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We offer a highly successful range of standard products built with our proprietary Application Specific Discretes (ASD™) technology, which allows a variety of discrete structures to be merged into a single device optimized for specific applications such as interference filtering ( EMI ) for cellular phones. We have recently started development of electronic devices integrating both passive and active components on the same chip, IPAD or Integrated Passive and Active Devices.

(ii) *Power Transistors.* We design, manufacture and sell power transistors, which (like our discrete power devices) operate at high current and voltage levels in a variety of switching and pulse-mode systems. We have three power transistor divisions: bipolar transistors, power MOSFETs (metal-oxide-silicon field effect transistors) and new power transistors such as insulated gate bipolar transistors ( IGBTs ).

Our bipolar power transistors are used in a variety of high-speed, high-voltage applications, including SMPS (switch-mode power supply) systems, television/monitor deflection circuits and lighting systems.

We also offer a family of VIPower (vertical integration power) products, as well as omnifets and application-specific devices. VIPower products exhibit the operating characteristics of power transistors while incorporating full thermal, short-circuit and overcurrent protection and allowing logic-level input. VIPower products are used in consumer goods (lamp ballasts) and automotive products (ignition circuits, central locking systems and transmission circuits). Omnifets are power MOSFETs with fully integrated protection devices for a variety of sophisticated automotive and industrial applications. Application-specific devices are semicustom ICs that integrate diodes, rectifiers and thyristors on the same chip, thereby providing cost-effective and space-saving components with a short design time.

(iii) *Standard Logic and Linear ICs.* We produce a variety of bipolar and high-speed complimentary metal-on silicon oxide semiconductor ( HCMOS ) logic devices, including clocks, registers, gates and latches. Such devices are used in a wide variety of applications, including increasingly in portable computers, computer networks and telecommunications systems. We also offer standard linear ICs covering a variety of applications, including amplifiers, comparators, decoders, detectors, filters, modulators, multipliers and voltage regulators.

(iv) *Radio Frequency Products.* We supply components for radio frequency ( RF ) transmission systems used in television broadcasting equipment, radar systems, telecommunications systems and avionic equipment. We are targeting new applications for our RF products, including two-way wireless communications systems (in particular, cellular telephone systems) and commercial radio communication networks for business and government applications.

### **Strategic Alliances with Customers and Industry Partnerships**

We believe that strategic alliances with customers and industry partnerships are critical to success in the semiconductor industry. We have entered into several strategic customer alliances, including alliances with Alcatel, Bosch, Hewlett-Packard, Marelli, Nokia, Nortel Networks, Pioneer, Seagate Technology, Siemens VDO, Thomson and Western Digital, among others. Customer alliances provide us with valuable systems and application know-how and access to markets for key products, while allowing our customers to share some of the risks of product development with us and to gain access to our process technologies and manufacturing infrastructure.

Partnerships with other semiconductor industry manufacturers permit costly research and development and manufacturing resources to be shared to mutual advantage for joint technology development. We have been collaborating with Philips Semiconductors International B.V. for the joint development of CMOS process technologies in Crolles, France, since 1992. We are cooperating with Motorola Inc. and Philips Semiconductors International B.V. for the joint research and development of CMOS process technology to provide 90 nanometer to 32 nanometer chip technologies on 300mm wafers, as well as the building and operations of a 300mm wafer pilot line fabrication facility (or fab ) in Crolles, France. Joint investment may reach \$1.5 billion in capital expenditures in the coming years with the stated goal of accelerating the development of future technologies and their proliferation throughout the semiconductor industry. TSMC is also involved in such cooperation for specific programs.

We entered into an industry partnership in May 2002 with Dai Nippon Printing Co, Ltd., a leading manufacturer of photomasks, for the development and supply of leading-edge and high-end photomasks which are critical components in the manufacture of silicon integrated circuits. As part of this agreement, a new company named DNP Photomask Europe will build and operate a photomask production facility close to our site in Agrate, Italy.



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The new plant is expected to start operations in mid-2003, and capital investment by the new company is expected to be approximately \$150 million over three years. We have an equity interest of 19% in the new company. The close proximity of the planned site to our existing research and development and manufacturing centers in Agrate, Italy and Crolles, France, which are dedicated to complex System-on-Chip and Flash memory chips, coupled with barrier-free exchange of information on wafer and photomask processes, are expected to ensure rapid turn-around of new photomasks for products built using the most advanced technologies, from 130 and 90 nanometers and beyond.

We also work closely with many of our key suppliers on joint development programs; for example, to develop easy-to-use design tools for specific applications and to cooperate on manufacturing sciences. In 2002, we signed an industry partnership with UMC for foundry services and cooperation on manufacturing science. The agreement defines mutual access to manufacturing and engineering methodologies developed by both companies. We also have an agreement with Cypress Semiconductor, Inc. for the purchase by us of SRAM products made by Cypress. Pursuant to the Cypress agreement, we have financed certain capital investments made by Cypress for the production of SRAM products for a residual amount of approximately \$54 million.

We announced a significant initiative in December 2002 with Texas Instruments to jointly define and promote an open standard for wireless application processor interfaces. The Open Mobile Application Processor Interfaces ( OMAPI ) standard is designed to promote faster and broader deployment of multimedia-enhanced mobile devices and applications. In January, we announced our first multimedia application processor for 2.56/3G mobile phones and portable wireless products, the Nomadik family, based on the OMAPI standard. Technical details about the new OMAPI standard are expected to be announced in the near future.

We announced an agreement in January 2003 with Datang Mobile Communications Equipment Co., Ltd. for us to license from Datang know-how and intellectual property rights in the field of Time Division Synchronous Code Division Multiple Access ( TD-SCDMA ), one of the third-generation ( 3G ) wireless interface specifications that has been adopted by the International Telecommunications Union ( ITU ). We intend to use the acquired know-how to develop a mobile multimedia multimode TD-SCDMA/GPRS System-on-Chip ( SoC ) products, initially in the Chinese market, and potentially in the future, for other markets worldwide, capitalizing on the recently announced 155 MHz Time Division Duplex ( TDD ) spectrum allocations in China, the world's largest mobile phone market in the world.

We have also established joint development programs with leading suppliers such as Air Liquide, Applied Materials, ASM Lithography, Canon, Hewlett-Packard, KLA-Tencor, LAM Research, MEMC, Schlumberger, Teradyne and Wacker and with computer-aided design ( CAD ) tool producers, including Cadence, Co Ware and Synopsys. We are active in joint European research efforts such as the MEDIA+ and ITEA programs, and also cooperate with major research institutions and universities.

### **Customers and Applications**

We design, develop, manufacture and market over 3,000 main types of products that we sell to approximately 1,200 direct customers. We also sell our products through distributors. Major customers include Alcatel, Bosch, DaimlerChrysler, Delphi, Delta, Echostar, Ericsson, Hewlett-Packard/Compaq, Marelli, Matsushita, Maxtor, Nokia, Nortel Networks, Philips, Pioneer, Samsung, Schlumberger, Scientific Atlanta, Seagate Technology, Siemens, Sony, Thomson and Western Digital. To many of our key customers we provide a wide range of products, including dedicated products, discrete devices, memory products and programmable products. Our position as a strategic supplier of application-specific products to certain customers fosters close relationships that provide us with opportunities to supply such customers' requirements for other products, including discrete

devices, programmable products and memory products.

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The following table sets forth certain of our significant customers and certain applications for our products:

**Telecommunications**

Customers:	Alcatel Humax Huawei	Kyocera Motorola Nokia	Nortel Networks Philips Sagem	Siemens Sony Ericsson Thomson
Applications:	Central office switching systems			
	Digital cellular telephones Wireless networking (Bluetooth)		Telephone terminals (wireline and wireless) Internet access (xDSL) Data transport (routing, switching for electronic and optical networks)	

**Computer Systems**

Customers:	Acer Agilent Technologies Alpine Delta	Creative Technology Hewlett-Packard/Compaq IBM	Lexmark Maxtor Microsoft	Samsung Seagate Western Digital
Applications:	Data storage Monitors and displays Webcams		Printers Imaging Power management	

**Automotive**

Customers:	Bosch Conti	DaimlerChrysler Delphi Denso	Lear Marelli Motorola	Pioneer Siemens Valeo Visteon
Applications:	Airbags  Antiskid braking systems Car radio Body and chassis electronics		Engine management systems (ignition and injection) Multiplex wiring kits Global positioning systems Car multimedia	

**Consumer Products**

Customers:	Agilent Technologies Bose Corporation Echostar Goldstar	Grundig Hughes Kenwood Matsushita Olympus	Philips Pioneer Samsung Scientific Atlanta	Sony Thomson Vestel
Applications:	Audio processing (CD, DVD, Hi-Fi) Digital cameras Digital music players Digital TVs		DVDs Set-top boxes Analog TVs VCRs	

**Industrial and Other Applications**

Customers:	American Power	Delta	Magnetek	Schlumberger
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	Conversion	Gemplus	Nagra	Siemens
	Astec	IBM	Oberthur	Toppan
	Autostrade	Liton	Philips	
Applications:	Battery chargers		Lighting systems (lamp ballasts)	
	Smart cards ICs		Motor controllers	
	Industrial automation and control systems		Power supplies	
	Intelligent power switches		Switch mode power supplies	

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In 2002, our largest customer, Nokia, represented 17.6% of our net revenues, compared to 19.3% in 2001 and 13.4% in 2000. No other single customer accounted for more than 10% of our net revenues. Sales to our top ten customers accounted for approximately 51% of our net revenues in 2002, rising from approximately 50% of our net revenues in 2001 and 47% in 2000. We have several large customers, certain of whom have entered into strategic alliances with us. Many of our key customers operate in cyclical businesses and have in the past, and may in the future, vary order levels significantly from period to period. In addition, approximately 16% of our net revenues in 2002 were made through distributors, compared to 16% in 2001 and 18% in 2000. There can be no assurance that such customers or distributors, or any other customers, will continue to place orders with us in the future at the same levels as in prior periods. The loss of one or more of our customers or distributors, reduced bookings or product returns by our key customers or distributors, could adversely affect our operating results. In addition, in a declining market, we have been in the past and may in the future be driven to lower prices in response to competitive pressures and may expect a higher number of order cancellations, particularly by distributors and for commodity products.

**Sales, Marketing and Distribution**

We operate regional sales organizations in Europe, North America, Asia Pacific, Japan and, since January 1, 1998, in Emerging Markets which include South America, Africa, Eastern Europe, the Middle East and India. For a breakdown of net revenues by product group and geographic region for each of the five years ended December 31, 2002, see Business Overview .

The European region is divided into seven business units: automotive, consumer and computers, industrial, Smart card, telecom, EMS and distribution. Additionally, for standard products, we actively promote and support the sales of these products throughout the region. This effort includes sales force, field application engineers, supply-chain management and customer-service, and a technical competence center for system-solutions, with support functions provided locally.

In the North America region, the sales and marketing team was recently reorganized into eight business units. They are located near major centers of activity for either a particular application or geographic region: automotive (Detroit, Michigan), industrial (Boston, Massachusetts), consumer (Chicago, Illinois), computer and peripheral equipment (San Jose, California and Longmont, Colorado), data storage (San Jose, California and Longmont, Colorado), communications (Dallas, Texas) and distribution (Boston, Massachusetts). Each regional business unit has a sales force that specializes in the relevant business sector, providing local customer service, market development and specialized application support for differentiated system-oriented products. This structure allows us to monitor emerging applications, to provide local design support, and to identify new products for development in conjunction with the various product divisions as well as to develop new markets and applications with our current product portfolio. A central product marketing operation in Boston provides product support and training for standard products for the North American region, while a logistics center in Phoenix supports just-in-time delivery throughout North America. In addition, a comprehensive distribution business unit provides product and sales support for the nationwide distribution network.

In the Asia Pacific region, sales and marketing is organized by country and is managed from our regional sales headquarters in Singapore. We have sales offices in Taiwan, Korea, China, Hong Kong, Malaysia, Thailand and Australia. The Singapore sales organization provides central marketing, customer service, technical support, logistics, application laboratory and design services for the entire region. In addition, there are design centers in Taiwan, Korea, Hong Kong and Shenzhen.

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In Japan, the large majority of our sales are made through distributors, as is typical for foreign suppliers to the Japanese market. However, our sales and marketing engineers in Japan work directly with customers as well as with the distributors to meet customers' needs. We provide marketing and technical support services to customers through sales offices in Tokyo and Osaka. In addition, we have established a design center and application laboratory in Tokyo. The design center designs custom ICs for Japanese clients, while the application laboratory allows Japanese customers to test our products in specific applications.

The Emerging Markets region (designated as Region Five until January 1, 2001) was created on January 1, 1998 and includes South America, Africa, Eastern Europe, the Middle East and India. Prior to that time, these markets had been covered, where appropriate, by the other existing sales and marketing organizations.

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Emerging Markets also includes the design and software development center in India, which employs approximately 1,000 people in a wide range of activities. We intend to increase our focus on this region to enhance our presence in these new markets.

The sales and marketing activities carried out by our regional sales organizations are supported by the product marketing that is carried out by each product division, which also include product development functions. This matrix system reinforces our sales and marketing activities and our broader strategic objectives.

We are pursuing the Gold Standard program, a long-term commitment to excellence in standard products. The program consists of manufacturing and offering standard products at the same price level as the market but with a superior level of quality, service and lead time. The related initiatives include worldwide advertising, promotional task forces in all regions, special distribution initiatives and worldwide training of salespeople and marketing personnel.

Each of the five regional sales organizations operates dedicated distribution organizations. To support the distribution network, we operate logistic centers in Saint Genis, France; Phoenix, Arizona; and Singapore, and have made considerable investments in warehouse computerization and logistics support.

We also use distributors and representatives to distribute our products around the world. Typically, distributors handle a wide variety of products, including products that compete with our products, and fill orders for many customers. Most of our sales to distributors are made under agreements allowing for price protection and/or the right of return on unsold merchandise. We recognize revenues upon transfer of ownership of the goods at shipment. Sales representatives generally do not offer products that compete directly with our products, but may carry complementary items manufactured by others. Representatives do not maintain a product inventory; instead, their customers place large quantity orders directly with us and are referred to distributors for smaller orders.

At the request of certain of our customers, we are also selling and delivering our products to Electronic Manufacturing Suppliers (EMS), which, on a contractual basis with our customers, incorporate our products into the dedicated products which they manufacture for our customers.

### **Research and Development**

We believe that research and development is critical to our success and we are committed to increasing research and development expenditures in the future. In periods of industry downturn, such as in 2001, 1998 and 1997, we continue to invest strongly in R&D, while reducing our other general expenses. In 2002, we spent \$1,022.3 million on research and development, which represented a 4.5% increase from \$978 million in 2001, while 2001 spending represented a 4.7% decrease from \$1,026 million in 2000. The table below sets forth information with respect to our research and development spending since 1998. Our reported research and development expenses are mainly in the areas of product design, technology and development, and do not include marketing design center costs which are accounted for as selling expenses, or process engineering, pre-production and process-transfer costs, which are accounted for as cost of sales:

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	Year ended December 31,				
	1998	1999	2000	2001	2002
	(in millions, except percentages)				
Expenditures	\$ 689.8	\$ 836.0	\$ 1,026.3	\$ 977.9	\$ 1,022.3
As a percentage of net revenues	16.2%	16.5%	13.1%	15.4%	16.2%

Approximately 84% of our research and development expenses in 2002 were incurred in Europe, primarily in France and Italy. See Public Funding . As of December 31, 2002, approximately 7,700 employees were employed in research and development activities worldwide.

Our policy in the field of research and development is market driven, focused on leading-edge products and technologies, in close collaboration with strategic alliance partners, leading universities and research institutes, key customers and blue chip equipment manufacturers working at the cutting edge of their own markets. We invest in a variety of research and development projects ranging from long term advanced research for the acceleration, in line with industry requirements and roadmaps, of our broad range of process technologies including BICMOS,



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bipolar, CMOS, and DMOS ( BCD ), High Performance Logic, stand-alone and embedded Flash and other nonvolatile memories, to the continued expansion of our system level design expertise and IP creation for advanced architecture for System-on-Chip integration, as well as new products for many key applications in the field of digital consumer wireless communications and networking, computer peripherals, Smart cards and car multimedia among others.

Our research and development activities focus on the very large scale integration ( VLSI ) technology platform, new system architectures, new product developments and emerging technologies in microsystems and photonics. The development of the technology platform (VLSI technologies and design tools) is conducted by Central Research and Development ( CRD ) while new systems architectures are studied in the Advanced System Technology ( AST ) units. New product research and development is conducted within each product group in conjunction with customers. The highest concentration of our CRD activities is located in the two main VLSI facilities of Crolles, France and Agrate, Italy. Other CRD activities are located in Catania, Italy; Rousset, France; Carrollton, Texas; Berkeley, California; and Noida, India. We also have an important research and development facility for process technology development in Castelletto, Italy.

The central research and development units participate in several strategic partnerships. Our manufacturing facility at Crolles, France houses a research and development center that is operated in the legal form of a French *Groupement d'intérêt économique* ( GIE ) named *Centre Commun de Microelectronique de Crolles - Laboratoire d'Electronique de Technologie d'Instrumentation* ( LETI ), a research laboratory of *Commissariat de l'Energie Atomique* ( CEA ) an affiliate of Areva Group (one of our indirect controlling shareholders), is our partner. Until December 31, 2002, France Telecom R&D (France Telecom is also one of our indirect controlling shareholders) was a member of the GIE. We also cooperate with Philips Semiconductors International B.V., Motorola Inc. and TSMC to jointly develop sub-micron CMOS logic processes to provide 90-nanometer to 32-nanometer chip technologies on 300mm wafers and with Philips Semiconductor International B.V. and Motorola Inc. build and operate an advanced 300mm wafer pilot line in Crolles, France. During 2002, the shell building and facilities for such new 300mm pilot line in Crolles were completed. Joint investment is intended to reach \$1.5 billion in the coming years, with the stated goal of accelerating the development of future technologies and their proliferation throughout the semiconductor industry. However, there can be no assurance that we will be able to achieve this objective on satisfactory terms, that the alliance will enable us to effectively partner to meet customer demands, or that its operations will not be adversely affected by unforeseen events and the sizeable risks related to the development of new technologies, which could materially adversely affect our business, results of operations and prospects. See Item 3. Key Information Risk Factors Risk factors related to our operations Our research and development efforts in the field of CMOS process development are dependent on alliances and our business, results of operations and prospects could be materially adversely affected by the failure of such alliances in developing new process technologies in line with market requirements .

The CRD activities performed in our 200mm facility of Agrate, Italy, are focused on the development of new generation sub 0.13 micron Flash memories from which other nonvolatile memory products are derived, such as embedded memories, EEPROM and one-time programmable ( OTP ) memories. Current Flash developments, which are one of our technology drivers, are targeting very high density multilevel memories and the introduction of innovative materials for nonvolatile applications.

A technical center in Noida, India, develops design software and computer-aided design ( CAD ) libraries and tools. We have developed a wide network of cooperation with several universities in the United Kingdom (Bristol and Newcastle), Italy (Bologna, Catania, Milan, Pavia and Turin), France (Grenoble, Marseille, Toulouse and Tours), the United States (Carnegie Mellon, Stanford, Berkeley and UCLA) and Singapore for basic research projects on design and process development.

In addition to central research and development, each operating division also conducts independent research and development activities on specific processes and products focusing on developing an advanced range of the key technological building blocks required by targeted applications. These building blocks include (i) motion picture experts group ( MPEG2 ) decoder ICs, (ii) a family

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of 16-bit (ST10, super 10), 32-bit (ST20) and 64-bit (ST50) microcontrollers, (iii) a family of general purpose DSP cores for embedded applications based on the current D950 solution and the ST100 as well as several dedicated DSP cores (MMDSP, SAFIRE, EMIRALDA) for specific applications, and (iv) embedded volatile (DRAM and SRAM) and nonvolatile (EPROM, EEPROM and Flash) memories. Applying our broad range of technologies and our expertise in diverse application domains, we are currently embedding dedicated, semicustom circuits and these advanced building blocks on the same chip, in addition to the many dedicated and semicustom ICs developed using power analog, digital and mixed signal technologies.

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**Intellectual Property**

Intellectual property rights that apply to our various products include patents, copyrights, trade secrets, trademarks and maskwork rights. We own more than 20,000 patents or pending patent applications corresponding to more than 11,000 original inventions, most of which have been registered in several countries around the world. In 2002, we filed 680 new patent applications around the world, and acquired an additional 82 new patent applications, for a total of 762 new patent applications. Management believes that our intellectual property represents valuable property and intends to protect our investment in technology by enforcing all of our intellectual property rights. We have entered into several patent cross-licenses with several major semiconductor companies, including Infineon.

Our success depends in part on our ability to obtain patents, licenses and other intellectual property rights covering our products and their design and manufacturing processes. To that end, we have acquired certain patents and patent licenses and intend to continue to seek patents on our inventions and manufacturing processes. In addition, we have in the past negotiated broad patent cross-licenses with many of our competitors enabling us to design, manufacture and sell semiconductor products, without fear of infringing patents held by such competitors. The process of seeking patent protection can be long and expensive, and there can be no assurance that patents will issue from currently pending or future applications or that, if patents are issued, they will be of sufficient scope or strength to provide meaningful protection or any commercial advantage to us. In addition, effective copyright and trade secret protection may be unavailable or limited in certain countries. Competitors may also develop technologies that are protected by patents and other intellectual property rights and therefore such technologies may be unavailable to us or available to us subject to adverse terms and conditions. As our sales increase compared to those of our competitors, the strength of our patent portfolio may not be sufficient to guarantee the conclusion or renewal of broad patent cross-licenses on terms which do not affect our results of operations. Furthermore, litigation, which could demand financial and management resources, may be necessary to enforce our patents or other intellectual property rights.

Also, there can be no assurance that litigation will not be commenced in the future against us regarding patents, maskworks, copyrights, trademarks or trade secrets, or that any licenses or other rights to necessary intellectual property could be obtained on acceptable terms. The failure to obtain licenses or other intellectual property rights, as well as the expense or outcome of litigation, could adversely affect our results of operations or financial condition. We have from time to time received, and we may in the future receive, communications alleging possible infringement of certain patents and other intellectual property rights of others. Regardless of the validity or the successful assertion of such claims, we could incur significant costs with respect to the defense thereof, which could have a material adverse effect on our results of operations or financial condition.

**Backlog**

Our sales are made primarily pursuant to standard purchase orders that are generally booked from one to twelve months in advance of delivery. Quantities actually purchased by customers, as well as prices, are subject to variations between booking and delivery to reflect changes in customer needs or industry conditions. During periods of economic slowdown and/or industry overcapacity and/or declining selling prices, customer orders are not generally made far in advance of the scheduled shipment date. Such reduced lead time can reduce management's ability to forecast production levels and revenues. During periods of capacity constraints, customer demand can exceed our manufacturing capacity.

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Our backlog decreased steadily in 2001 from the levels of 2000 reflecting the industry downturn. In 2002, particularly during the first half, we registered an increase in backlog (including frame orders) compared to 2001. We are entering 2003 with a backlog (including frame orders) approximately 30% higher than we had entering 2002. In difficult market conditions, customers tend to order products for immediate delivery, which leads us to build up inventory of key products in anticipation of orders and lowers our backlog.

We also sell certain products to key customers pursuant to frame contracts. Frame contracts are annual contracts with customers setting forth quantities and prices on specific products that may be ordered in the future. These contracts allow us to schedule production capacity in advance and allow customers to manage their inventory levels consistent with just-in-time principles while shortening the cycle times required to produce ordered products.

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Orders under frame contracts are also subject to risks of price reduction, order cancellation and modifications as to quantities actually ordered.

Furthermore, developing industry trends, including customers' use of outsourcing and their deployment of new and revised supply chain models, may reduce our ability to forecast changes in customer demand and may increase our working capital requirements.

### **Competition**

Markets for our products are intensely competitive. While only a few companies compete with us in all of our product lines, we face significant competition in each of our product lines. We compete with major international semiconductor companies, some of which have substantially greater financial and other resources than us with which to pursue engineering, manufacturing, marketing and distribution of their products. Smaller niche companies are also increasing their participation in the semiconductor market, and semiconductor foundry companies have expanded significantly, particularly in Asia. Competitors include manufacturers of standard semiconductors, application-specific ICs and fully customized ICs, including both chip and board-level products, as well as customers who develop their own integrated circuit products and foundry operations. Some of our competitors are also our customers.

According to preliminary 2002 rankings published by Gartner Inc. and IC Insights, Inc., we were ranked as the fourth-largest semiconductor company based on estimated 2002 sales. According to final 2002 rankings published by iSuppli, we are the fifth-largest semiconductor company based on 2002 sales. According to iSuppli, based on final 2002 sales, and Databeans Incorporated, based on estimated 2002 sales, we are the world's largest supplier of Analog ICs. On the basis of final 2002 sales, iSuppli also ranked us as the world's leading supplier of application specific ICs. According to Gartner, Inc., based on 2001 sales, we are the world's leading supplier of EPROM memory and thyristors and the second-leading supplier of EEPROM memory and power diodes. On the same basis, according to International Data Corporation, we were the world's leading supplier of HDD or hard disk-drive ICs based on 2001 sales. We believe we are the world's leading supplier of ICs for set-top boxes and second-leading supplier of digital versatile disk ( DVD ) ICs. In addition, according to Strategy Analytics, we were the world's third-leading supplier of automotive ICs based on 2001 sales.

The primary international semiconductor companies that compete with us include Advanced Micro Devices, Agere Systems, Analog Devices, Broadcom, Hitachi, IBM, Infineon Technologies, Intel, Mitsubishi Electric, Motorola, National Semiconductor, Nippon Electric Company, Philips Semiconductors, Samsung, Texas Instruments and Toshiba.

According to published industry data and other industry sources, investment in worldwide semiconductor fabrication capacity totaled approximately \$61 billion in 2000, approximately \$39 billion in 2001 and an estimated \$28 billion in 2002, or approximately 30%, approximately 28% and an estimated 20% respectively, of the total available market ( TAM ) for such years. Such capacity investment is made not only by international semiconductor companies, but also companies specializing in operating semiconductor foundries, particularly in Asia, such as Chartered Semiconductors, TSMC and UMC.

We compete in different product lines to various degrees on the basis of price, technical performance, product features, product system compatibility, customized design, availability, quality and sales and technical support. In particular, standard products may

involve greater risk of competitive pricing, inventory imbalances and severe market fluctuations than differentiated products. Our ability to compete successfully depends on elements both within and outside of our control, including successful and timely development of new products and manufacturing processes, product performance and quality, manufacturing yields and product availability, customer service, pricing, industry trends and general economic trends.

### **Organizational Structure**

We are a multinational group of companies that designs, develops, manufactures and markets a broad range of products used in a wide variety of microelectronic applications, including telecommunications systems, computer systems, consumer goods, automotive products and industrial automation and control systems. We are organized in a matrix structure with geographical regions interacting with product divisions, both being supported by central functions, bringing all levels of management closer to the customer and facilitating communication among research and development, production, marketing and sales organizations.

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Except for our subsidiaries in Shenzhen (China), in which we own indirectly 60% of the shares and voting rights, and Accent S.r.L. (Italy), in which we own 51% of the shares and voting rights, STMicroelectronics N.V. owns directly or indirectly 100% of all of our significant operating subsidiaries' shares and voting rights, which have their own organization and management bodies, and are operated independently in compliance with the laws of their country of incorporation. We provide certain administrative, human resources, legal, treasury, strategy, manufacturing, marketing and other overhead services to our subsidiaries pursuant to service agreements for which we receive compensation. For a list of our subsidiaries, see note 3 to our Consolidated Financial Statements (the economic and voting stakes listed in note 3 are identical).

**Property, Plants and Equipment**

We currently operate 17 main manufacturing sites around the world. The 150mm semiconductor manufacturing facility which we acquired in June 2000 from Nortel Networks in Ottawa, Canada was closed at the end of 2001 and our Rancho Bernardo facility in California was also closed at the end of April 2002. The table below sets forth certain information with respect to our current manufacturing facilities, products and technologies. Front-end manufacturing facilities are wafer fabrication plants (known as fabs) and back-end facilities are assembly, packaging and final testing plants.

<u>Location</u>	<u>Products</u>	<u>Technologies</u>	<b>Gross floor area size (including clean room, facilities and production offices)  (in square meters)</b>
<b>Front-end facilities</b>			
Crolles, France	Semicustom devices, microcontrollers and dedicated products	Fab: 200mm 0.35/0.13-micron, CMOS and 0.7/0.18-micron BiCMOS; R&D on VLSI sub-micron technologies	51,600
Crolles2		Fab: 300mm R&D submicron (0.09-micron and below) CMOS technology development	35,000
Phoenix, Arizona	Dedicated products	Fab: 200mm 0.45/0.35-micron CMOS, 0.45/0.35-micron BiCMOS, 0.35-micron BCD	46,400
Agrate, Italy	Nonvolatile memories, microcontrollers and dedicated products	Fab 1: 150mm 2.0/0.35-micron BCD, nonvolatile memories	47,500
		Fab 2: 200mm 0.35/0.13-micron Flash, embedded Flash, R&D on nonvolatile memories and BCD technologies	32,800
Rousset, France	Microcontrollers, nonvolatile memories and Smart card ICs and dedicated products	Fab 1: 150mm 0.8/0.4-micron CMOS, Smart card	32,000
		Fab 2: 200mm 0.35/0.15-micron CMOS, Flash, Smart card, Embedded Flash	66,500

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Catania, Italy	Power transistors, smart power ICs and nonvolatile memories	Fabs 1/2: 150mm-4/1-micron MOS power, BCD-4/1-micron MOS power and pilot line RF Fab 3: 200mm 0.35/0.15-micron, Flash, Smart card, EEPROM	32,500 45,000
Rennes, France	Dedicated and power products	Fab: 150mm 3/2-micron BiCMOS, BCD and bipolar	17,500
Castelletto, Italy	Smart power BCD	Fab: 150mm 4.0/0.8-micron BCD and MEMS pilot line	12,500
Tours, France	Protection thyristors, diodes and application-specific discrete-power transistors	Fab: 125mm and 150mm discrete	36,500
Ang Mo Kio, Singapore	Dedicated products, microcontrollers, power	Fab 1: 125mm 4/1.5-micron, power MOS, bipolar transistor, bipolar ICs, standard linear	61,500



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<u>Location</u>	<u>Products</u>	<u>Technologies</u>	<u>Gross floor area size (including clean room, facilities and production offices)</u>
	transistors, commodity products; nonvolatile memories and dedicated products	Bipolar & CMOS      Fab 2: 150mm 2.5/0.45-micron bipolar, power MOS and BCD, EEPROM, Smart card, Micros  Fab 3: 200mm 0.35/0.13-micron BiCMOS, Flash	16,900      61,000
Carrollton, Texas	Memories, microcontrollers, dedicated products; and semicustom devices	Fab: 150mm 1.5/0.45micron BiCMOS, BCD and CMOS	41,500
<b>Back-end facilities</b> Muar, Malaysia	Dedicated and standard products, microcontrollers		63,050
Kirkop, Malta	Dedicated products, microcontrollers, semicustom devices		27,200
Tuas, Singapore	Dedicated products and nonvolatile memories		12,400
Toa Payoh, Singapore	Nonvolatile memories and power ICs		17,150
Ain Sebaa, Morocco	Discrete and standard products		30,000
Bouskoura, Morocco	Nonvolatile memories, discrete and standard products, micromodules, RF and subsystems		60,000
Shenzhen, China(1)	Nonvolatile memories, discrete and standard products		40,000

(1) Jointly operated with SHIC, a subsidiary of Shenzhen Electronics Group.

At the end of 2002, our front-end facilities had total capacity of approximately 180,000, 150mm equivalent wafer starts per week. The number of wafer starts per week varies from facility to facility and from period to period as a result of changes in product mix. We have six 200mm wafer production facilities currently in operation. Of these, four (at Crolles, France, Agrate, Italy, Catania, Italy and Phoenix, Arizona) have full capacity installed as of December 31, 2002; one (in Rousset, France ) has roughly half of the ultimate capacity installed as of the same date; one (in Singapore) started production in the fourth quarter of 2001 and has less

than 30% of installed capacity.

We have completed the construction of the building shell for an advanced 300mm wafer pilot-line fabrication facility in Crolles (France) and have proceeded with our partners Philips Semiconductors International B.V. and Motorola Inc. with the tool set installation. The first wafer was processed during the first quarter of 2003. The pilot line is initially designed to produce up to 1,000 wafers per week, with potential to ramp up to 2,000 wafers per week. Volume production of the first 300mm wafers is expected to start at the end of 2003.

We are completing the civil work for the future 300mm wafer volume manufacturing fabrication facility at Catania (Italy). The building shell is currently expected to be completed in August 2003 with scheduled production expected to start in 2004.

We have historically subcontracted approximately 15% of total volumes for back-end operations to external suppliers. In 2000, we significantly increased our use of external foundries for front-end manufacturing, to reach approximately 12% of our wafer needs. In periods of high demand, we intend to outsource 15% to 20% of our front-end production requirements to external foundries, reducing outsourcing as needed to meet market conditions,

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such as in 2001 and 2002, when due to reduced customer demand, the average level of front-end subcontracting was significantly lower.

During the most recent downturn in the industry, we limited our capital investment, allocating it to strategic projects such as the evolution of the production capability to lower geometries in the 200mm facilities; the development of advanced manufacturing processes (0.13 micron); the relentless improvement in the quality of our operations; the start-up of the new 200mm production facility in Singapore; the continuation of the two 300mm projects (Crolles, France, for pilot-line, Catania, Italy, for volume manufacturing); the ramp up to volume manufacturing of the new Bouskoura, Morocco back-end facility; and the completion of the extension of the back-end Shenzhen (China) facility. We have also increased overall installed front-end capacity, as a result of the completion of the expansion projects started in year 2000.

According to present visibility, we currently expect that capital spending for full year 2003 will be in the range of \$1.0 billion, consistent with the 2002 level, one-half of which is related to maintenance and optimization of existing plants and with the majority of the expenditures planned for the second part of the year. This investment will primarily be used for the start-up of production at the Crolles2 (France) 300mm facility; the construction of the building shell at the 300mm facility of Catania (Italy); pursuing R&D effort towards most advanced processes (0.10 micron); continuing the upgrade of the manufacturing capability of our 200mm facilities to finer geometries (0.15/0.13 micron); expanding the capacity installed in the 200mm facilities of Singapore and Rousset, (France); continuing the improvement of the quality of our operations; and adapting the back-end and testing capacities to the production mix requested in the market. As of December 31, 2002, we had commitments of approximately \$346 million for equipment purchases. We will continue to monitor our level of capital spending, taking into consideration factors such as trends in the semiconductor market, capacity utilization and announced additions.

Although each fabrication plant is dedicated to specific processes, our strategy is to develop local presences, better serve customers and mitigate manufacturing risks by having key processes operated in different manufacturing plants. In certain countries, we have been granted tax incentives by local authorities in line with local regulations, being recognized as an important contributor to the economies where our plants are located. In 2000, we sought to take advantage of industry capacity limitations by purchasing from subcontractors both wafer foundry and back-end services and thereby minimizing our capital expenditure needs. In difficult market conditions, we may face overcapacity issues, particularly in our older fabrication facilities that use mature process technologies. Like other semiconductor manufacturers, we could have mature fabrication facility capacity being only partially used, which may affect our cost of operations. These considerations led us to record an asset impairment and restructuring charge of \$296 million in the second quarter 2001, with respect to certain of our more mature 150mm wafer fabs as well as to announce and complete the closing in 2001 of our wafer fab manufacturing facility in Ottawa, Canada. During the third quarter of 2001, we also initiated a plan for the closure of our plant in Rancho Bernardo, California, which was completed in April 2002, resulting in an additional asset impairment charge of \$23 million recorded in 2001. We are continuously reviewing our strategy with respect to our more mature 150mm wafer fabs in order to maintain flexibility and efficiency through difficult market conditions. Without the expected pickup in demand and/or pricing, we may incur further impairment and restructuring charges. Further actions may include the sale, wafer production curtailment or closure of other similar facilities. In addition, in 2001, we recorded a special inventory charge for obsolescence of \$71 million in cost of sales due to significant cancellations of customer orders that resulted in unuseable quantities of work in process and finished goods inventories. In 2002, we recorded expenses of \$34 million, of which (i) \$26 million relates to the closure of facilities in Ottawa, Canada and Rancho Bernardo, California, (ii) \$7 million relates to impairment of long-term investments and (iii) \$1 million for the discontinuation of the graphic division of the Consumer and Microcontroller Group. If we are unable to simultaneously and proportionately cut our manufacturing costs, or make other necessary savings in due time to incorporate the decline in billing prices of our products in difficult market conditions, our gross margin could be adversely affected in the future.

Our manufacturing processes are highly complex, require advanced and costly equipment and are continuously being modified in an effort to improve yields and product performance. Impurities or other difficulties in the manufacturing process can lower yields,

interrupt production or result in losses of products in process. As system complexity has increased and sub-micron technology has become more advanced, manufacturing tolerances have been reduced and requirements for precision and excellence have become even more demanding. Although our increased manufacturing efficiency has been an important factor in our improved results of operations, we have from time to time experienced production difficulties that have caused delivery delays and quality control problems, as is common in the semiconductor industry.

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No assurance can be given that we will be able to increase manufacturing efficiency in the future to the same extent as in the past or that we will not experience production difficulties in the future.

As is common in the semiconductor industry, we have from time to time experienced difficulty in ramping up production at new facilities or effecting transitions to new manufacturing processes and, consequently, have suffered delays in product deliveries or reduced yields. There can be no assurance that we will not experience manufacturing problems in achieving acceptable yields, product delivery delays or interruptions in production in the future as a result of, among other things, capacity constraints, construction delays, ramping up production at new facilities, upgrading or expanding existing facilities, changing our process technologies, or contamination or fires, storms, earthquakes or other acts of nature, any of which could result in a loss of future revenues. In addition, the development of larger fabrication facilities that require state-of-the-art sub-micron technology and larger-sized wafers has increased the potential for losses associated with production difficulties, imperfections, or other causes of defects. In the event of an incident leading to an interruption of production at a fab, we may not be able to shift production to other facilities on a timely basis or the customer may decide to purchase products from other suppliers, and in either case the loss of revenues and impact on our relationship with our customers could be significant. Our operating results could also be adversely affected by the increase in fixed costs and operating expenses related to increases in production capacity if revenues do not increase commensurately. Finally, in periods of high demand, we increase our reliance on external contractors for foundry and back-end service. Any failure to perform by such subcontractors could impact our relationship with our customers and could materially affect our results of operations.

### **Public Funding**

We participate in certain programs established by the European Commission and individual countries in Europe (principally France and Italy), which provide public funding for research and development, industrialization costs (which include some of the costs incurred to bring prototype products to the production stage) as well as incentive programs for the economic development of underdeveloped regions. These programs are characterized by capital investment and low-interest financing.

Public funding in France, Italy and Europe generally is open to all companies, regardless of their ownership or country of incorporation, for research and development and for capital investment and low-interest-financing related to incentive programs for the economic development of under-developed regions. Eligibility for public funding projects may require, among other things, compliance with European Commission ( EC ) regulations and approval by EU authorities and annual and project-by-project reviews and approvals.

The main programs for research and development in which we are involved include: (i) the Micro-Electronics Development for European Application ( MEDEA+ ) cooperative research and development program, (ii) European Union research and development projects with FWP5 for Information Technology; and (iii) national programs for research and development and for industrialization in the electronics industries involving many companies and laboratories. The pan-European programs cover a period of several years, while national programs in France and Italy are subject to annual budget appropriation.

The MEDEA+ cooperative research and development program was launched in June 2000 by the Eureka Conference and is designed to bring together many of Europe's top researchers in a 12,000 man-year program that will cover the period 2000-2008. The MEDEA+ program replaced the joint European research program called MEDEA, which was a European cooperative project in microelectronics among several countries that covered the period 1996 through 2000 and involved more than 80 companies. In

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Italy, the *Programma Nazionale per la Bioelettronica* has more than 10 participants, and various programs for intervention in the *Mezzogiorno* (southern Italy) are open to eligible companies, including non-European companies, operating in the region and regulated by specific laws. Italian programs often cover several years, but funding is typically subject to annual budget appropriation. In France, support for microelectronics is provided to over 30 companies manufacturing or using semiconductors. The amount of support under French programs is decided annually and subject to budget appropriation.

Public authority funding for research and development is reported in *Other Income and Expenses* in our consolidated statements of income. See Note 18 to the Consolidated Financial Statements. Such funding has totaled \$42 million, \$58 million and \$76 million in the years 2000, 2001 and 2002, respectively. Government

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support for capital expenditures funding has totaled \$95 million, \$77 million and \$55 million in the years 2000, 2001 and 2002, respectively. Such funding has been used to support our capital investment. Although receipt of these funds is not directly reflected in our results of operations, the resulting lower amounts recorded in property, plant and equipment costs reduce the level of depreciation recognized by us. Public funding reduced depreciation charges by \$58 million, \$87 million and \$74 million in 2000, 2001 and 2002 respectively.

Low interest financing has been made available (principally in Italy) under programs such as the Italian Republic's Fund for Applied Research, established in 1988 for the purpose of supporting Italian research projects meeting specified program criteria. At year-end 2000, 2001 and 2002, we had \$31 million, \$58 million and \$62 million, respectively, of indebtedness outstanding under state-assisted financing programs at an average interest cost of 1.4%, 1.2% and 1.2%, respectively.

Funding of programs in France and Italy is subject to annual appropriation, and if such governments were unable to provide anticipated funding on a timely basis or if existing government-funded programs were curtailed or discontinued, or if we were unable to fulfill our eligibility requirements, such an occurrence could have a material adverse effect on our business, operating results and financial condition. From time to time, we have experienced delays in the receipt of funding under these programs. As the availability and timing of such funding are substantially outside our control, there can be no assurance that we will continue to benefit from such government support, that funding will not be delayed from time to time, that sufficient alternative funding would be available if necessary or that any such alternative funding would be provided on terms as favorable to us as those previously committed.

Due to changes in legislation and/or review by the competent administrative or judicial bodies, there can be no assurance that government funding granted to us may not be revoked or challenged or discontinued in whole or in part, by any competent state or European authority, until the legal time period for challenging or revoking such funding has fully lapsed.

## **Suppliers**

The quality and technology of equipment used in the integrated circuit ( IC ) manufacturing process defines the limits of our technology. Demand for increasingly smaller chip structures means that semiconductor producers must quickly incorporate the latest advances in process technology to remain competitive. Advances in process technology cannot be brought about without commensurate advances in equipment technology, and equipment costs tend to increase as the equipment becomes more sophisticated.

In the front-end process we use steppers, scanners, track equipment, strippers, chemo-mechanical polishing equipment, cleaners, inspection equipment, etchers, physical and chemical vapor-deposition equipment, implanters, furnaces, testers, probes and other specialized equipment. The manufacturing tools that we use in the back-end process include bonders, burn-in ovens, testers and other specialized equipment.

Our manufacturing processes use many raw materials, including silicon wafers, lead frame, mold compound, ceramic packages and chemicals and gases. The prices of many of these raw materials are volatile. We obtain our raw materials and supplies from diverse sources on a just-in-time basis. Although supplies for the raw materials used by us are currently adequate, shortages could

occur in various essential materials due to interruption of supply or increased demand in the industry.

### **Environmental Matters**

Our manufacturing operations use many chemicals, gases and other hazardous substances, and we are subject to a variety of governmental regulations related to the use, storage, discharge and disposal of such chemicals and gases and other hazardous substances, emissions and wastes. Consistent with our TQEM principles, we have established proactive environmental policies with respect to the handling of chemicals, gases, emissions and waste disposals from our manufacturing operations, and we have not suffered material environmental claims in the past. We believe that our activities comply with presently applicable environmental regulations in all material respects. We have engaged outside consultants to audit all of our environmental activities and created environmental management teams, information systems and training. We have also instituted environmental control procedures for new processes used by us as well as our suppliers. Most of our manufacturing facilities have been certified to conform to ISO international quality standards and Eco Management and Audit Scheme ( EMAS ). We are participating in various working groups set up by the European Commission to propose new legislation regarding



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the collection, recovery and disposal of electronic equipment, as well as banning the use of lead and some flame retardants in manufacturing electronic components. We intend to proactively implement such new legislation when enacted, in line with our commitment toward environmental protection.

The implementation of any such legislation could adversely affect our manufacturing costs or product sales by requiring us to acquire costly equipment or materials, or to incur other significant expenses in adapting our manufacturing processes or waste and emission disposal processes. Furthermore, environmental claims or our failure to comply with present or future regulations could result in the assessment of damages or imposition of fines against us, suspension of production or a cessation of operations and, as with other companies engaged in similar activities, any failure by us to control the use of, or adequately restrict the discharge of hazardous substances could subject us to future liabilities.

Because we have manufacturing facilities located in southern Italy (Catania, Sicily), we face the risk that an earthquake could damage these facilities, which would cause a reduction in our revenue and profitability. Any disruption in our product development capability or our manufacturing capability arising from earthquakes could cause significant delays in the production or shipment of our products until we are able to shift development or production to different facilities or arrange for third parties to manufacture our products. We may not be able to obtain alternate capacity on favorable terms or at all. The risk of earthquakes to our manufacturing facilities in southern Italy (Catania, Sicily) is significant due to the proximity of major earthquake fault lines to these manufacturing facilities. In addition, some of our suppliers are located in regions where there is a risk of earthquake.

## **Industry Background**

### ***The Semiconductor Market***

Semiconductors are the basic building blocks used to create an increasing variety of electronic products and systems. Since the invention of the transistor in 1948, continuous improvements in semiconductor process and design technologies have led to smaller, more complex and more reliable devices at a lower cost per function. As performance has increased and size and cost have decreased, semiconductors have expanded beyond their original primary applications (military applications and computer systems) to applications such as telecommunications systems, consumer goods, automotive products and industrial automation and control systems. In addition, system users and designers have demanded systems with more functionality, higher levels of performance, greater reliability and shorter design cycle times, all in smaller packages at lower costs. These demands have resulted in increased semiconductor content as a percentage of system cost. Calculated on the basis of the total available market (the TAM), which includes all semiconductor products, as a percentage of worldwide revenues from production of electronic equipment according to published industry data, semiconductor content has increased from approximately 12% in 1992 to approximately 18% in 2002.

Semiconductor sales have increased significantly over the long term but have experienced significant cyclical variations in growth rates. According to trade association data, the TAM increased from \$32.5 billion in 1987 to \$140.7 billion in 2002 (growing at a compound annual growth rate of approximately 10.3%). To better reflect our corporate strategy and our current product offering, we measure our performance against our serviceable available market (the SAM), redefined as the TAM without DRAMs, microprocessors and optoelectronic products. The SAM increased from approximately \$27.8 billion in 1987 to \$94.8 billion in 2002, growing at a compound annual rate of approximately 8.5%. In 2001, the TAM decreased by 32% and in 2002 increased by 1.2%. Based on trade association data, the TAM increased in the first quarter 2002 compared to the fourth quarter 2001 by 5.2%. In the

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second quarter 2002, the TAM increased by 5.8% over the first quarter 2002, and in the third quarter 2002, the TAM increased by 8.2% over the second quarter 2002, and during the fourth quarter 2002, the TAM increased by 1.9% compared to the third quarter 2002. The SAM decreased by approximately 2% in 2002 compared to 2001. In 2002, approximately 22.2% of all semiconductors were shipped to the Americas, 19.7% to Europe, 21.7% to Japan, and 36.4% to the Asia Pacific region.

The following table sets forth information with respect to worldwide semiconductor sales by type of semiconductor and geographic region:

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	Worldwide Semiconductor Sales(1)					Compound Annual Growth Rates(2)			
	1987	1997	2000	2001	2002	87-97	87-02	00-01	01-02
	(in billions of \$)					(expressed as percentages)			
Integrated Circuits	\$ 25.4	\$ 119.5	\$ 176.9	\$ 118.5	\$ 120.5	16.7%	10.9%	(33.0)%	1.7%
Analog (linear and mixed-signal)	6.0	19.8	30.5	23.2	23.9	12.7	9.7	(24.0)	3.0
Digital Logic	14.0	70.4	97.2	70.4	69.6	17.5	11.3	(27.6)	(1.1)
Memory:									
DRAM	2.4	19.8	28.9	11.2	15.2	23.5	13.1	(61.3)	35.7
Others	3.0	9.5	20.3	13.7	11.8	12.2	9.6	(32.7)	(13.9)
<b>Total Memory</b>	<b>5.4</b>	<b>29.3</b>	<b>49.2</b>	<b>24.9</b>	<b>27.0</b>	<b>18.4</b>	<b>11.3</b>	<b>(49.5)</b>	<b>8.4</b>
<b>Total digital</b>	<b>19.4</b>	<b>99.7</b>	<b>146.4</b>	<b>95.3</b>	<b>96.6</b>	<b>17.8</b>	<b>11.3</b>	<b>(34.9)</b>	<b>1.4</b>
Discrete	5.8	13.2	17.7	13.1	13.4	8.6	5.7	(25.8)	2.3
Optoelectronics	1.3	4.5	9.8	7.4	6.8	13.2	11.7	(24.8)	(8.1)
<b>TAM</b>	<b>\$ 32.5</b>	<b>\$ 137.2</b>	<b>\$ 204.4</b>	<b>\$ 139.0</b>	<b>\$ 140.7</b>	<b>15.5%</b>	<b>10.3%</b>	<b>(32.0)%</b>	<b>1.2%</b>
Europe	6.2	29.1	42.3	30.2	27.8	16.7%	10.5%	(28.6)	(7.9)
Americas	10.3	45.8	64.1	35.8	31.2	16.1	7.7	(44.2)	(12.8)
Asia Pacific	3.3	30.2	51.3	39.8	51.2	24.8	20.1	(22.3)	28.6
Japan	12.7	32.1	46.7	33.2	30.5	9.7	6.0	(29.1)	(8.1)
<b>TAM</b>	<b>\$ 32.5</b>	<b>\$ 137.2</b>	<b>\$ 204.4</b>	<b>\$ 139.0</b>	<b>\$ 140.7</b>	<b>15.5%</b>	<b>10.3%</b>	<b>(32.0)%</b>	<b>1.2%</b>

(1) Source: WSTS

(2) Calculated using end points of the periods specified.

Although cyclical changes in production capacity in the semiconductor industry and demand for electronic systems have resulted in pronounced cyclical changes in the level of semiconductor sales and fluctuations in prices and margins for semiconductor products from time to time, the semiconductor industry has experienced substantial growth over the long term. Factors that are contributing to long-term growth include the development of new semiconductor applications, increased semiconductor content as a percentage of total system cost, emerging strategic partnerships and growth in the electronic systems industry in the Asia Pacific region.

**Semiconductor Classifications**

The process technologies, levels of integration, design specificity, functional technologies and applications for different semiconductor products vary significantly. As differences in these characteristics have increased, the semiconductor market has become highly diversified as well as subject to constant and rapid change. Semiconductor product markets may be classified according to each of these characteristics.

Semiconductors can be manufactured using different process technologies, each of which is particularly suited to different applications. Since the mid-1970s, the two dominant processes have been bipolar (the original technology used to produce integrated circuits) and complementary metal-on silicon oxide semiconductor ( CMOS ). Bipolar devices typically operate at higher speeds than CMOS devices, but CMOS devices consume less power and permit more transistors to be integrated on a single IC. CMOS has become the prevalent technology, particularly for devices used in personal computers and consumer applications. Advanced technologies have been developed during the last decade that are particularly suited to more systems-oriented semiconductor applications. BiCMOS technologies have been developed to combine the high-speed and high-voltage characteristics of bipolar technologies with the low power consumption and high integration of CMOS technologies. BCD technologies have been developed that combine bipolar, CMOS and diffused metal-on silicon oxide semiconductor ( DMOS ) technologies. Such systems-oriented technologies require more process steps and mask levels, and are more complex than the basic function-oriented technologies.

Semiconductors are often classified as either discrete devices (such as individual diodes, thyristors, transistors as well as optoelectronic products) or integrated circuits (in which thousands of functions are combined on a single chip of silicon to form a more complex circuit). Compared to the market for ICs, there is typically less differentiation among discrete products supplied by different semiconductor manufacturers. Also, discrete markets have generally grown at slower, but more stable, rates than IC markets.

Semiconductors may also be classified as either standard components, application-specific standard products ( ASSPs ) or applications specific integrated-circuits ( ASICs ). Standard components are used for a broad range of applications, while ASSPs and ASICs are designed to perform specific functions in specific applications.

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The two basic functional technologies for semiconductor products are analog and digital. Mixed-signal products combine both analog and digital functionality. Analog devices monitor, condition, amplify or transform analog signals, which are signals that vary continuously over a wide range of values.

Analog/digital (or mixed-signal ) ICs combine analog and digital devices on a single chip to process both analog signals and digital data. System designers are increasingly demanding system level integration in which complete electronic systems containing both analog and digital functions are integrated on a single IC.

Digital devices are divided into two major types: memory products and logic devices. Memory products, which are used in electronic systems to store data and program instructions, are classified as either volatile memories (which lose their data content when power supplies are switched off) or nonvolatile memories (which retain their data content without the need for constant power supply).

The primary volatile memory devices are DRAMs (dynamic random access memory), which accounted for approximately 10.8% of semiconductor memory sales in 2002, and SRAMs (static RAMs). SRAMs are roughly four times as complex as DRAMs. DRAMs are used in a computer's main memory. SRAMs are principally used as caches and buffers between a computer's microprocessor and its DRAM-based main memory and in other applications such as mobile handsets.

Nonvolatile memories are used to store program instructions. Among such nonvolatile memories, read-only memories ( ROMs ) are permanently programmed when they are manufactured while programmable ROMs ( PROMs ) can be programmed by system designers or end-users after they are manufactured. Erasable PROMs ( EPROMs ) may be erased after exposure to ultraviolet light and reprogrammed several times using an external power supply. Electrically erasable PROMs ( EEPROMs ) can be erased byte by byte and reprogrammed in-system without the need for removal.

Flash memories are products that represent an intermediate solution between EPROMs and EEPROMs based on their cost and functionality. Because Flash memories can be erased and reprogrammed electrically and in-system, they are more flexible than EPROMs and, therefore, are progressively replacing EPROMs in many of their current applications. Flash memories are typically used in high volume in digital mobile phones and digital consumer applications (set-top boxes, DVDs, digital cameras, MP3 digital music players) and are also suitable for solid-state mass storage of data and emerging high-volume applications.

Logic devices process digital data to control the operation of electronic systems. The largest segment of the logic market includes microprocessors, microcontrollers and digital signal processors. Microprocessors are the central processing units of computer systems. Microcontrollers are complete computer systems contained on single integrated circuits that are programmed to specific customer requirements. Microcontrollers control the operation of electronic and electromechanical systems by processing input data from electronic sensors and generating electronic control signals and are used in a wide variety of consumer, communications, automotive, industrial and computer products. DSPs are parallel processors used for high complexity, high-speed real-time computations in a wide variety of applications.

**Item 5. Operating and Financial Review and Prospects**

*The following discussion should be read in conjunction with our Consolidated Financial Statements and Notes thereto included elsewhere in this Form 20-F. The following discussion contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended. Our actual results may differ significantly from those projected in the forward-looking statements. For a discussion of factors that might cause future actual results to differ materially from our recent results or those projected in the forward-looking statements in addition to those set forth below, see Cautionary Statement Regarding Forward-Looking Statements and Item 3. Key Information Risk Factors . We assume no obligation to update the forward-looking statements or such factors.*

**Business Outlook**

In 2002, the semiconductor industry registered another year of difficult economic conditions following the severe industry downturn of 2001. While the year 2002 produced a strong recovery in units sold, it was also characterized by a persistent negative trend in prices due to existing manufacturing overcapacity. As a result, total revenues for the semiconductor industry in 2002 remained basically unchanged compared to the previous year.

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The total available market is defined as TAM, while the serviceable available market, the SAM, is defined as the market for products produced by us (which consists of the TAM and excludes PC motherboard major devices such as microprocessors, dynamic random access memories ( DRAMs ), and optoelectronics devices).

According to trade association data, for the year 2002, the TAM was \$140.7 billion, a 1.2% increase compared to 2001, while the SAM was at \$94.8 billion, a decrease of 2% compared to 2001.

In 2001, the TAM was \$139 billion, a 32% decrease compared to 2000, while the SAM was \$97 billion, a 28% decrease compared to 2000.

According to trade association data, the TAM increased by 23.1% in the fourth quarter of 2002 compared to the fourth quarter of 2001, and the SAM increased by 21% during the same period. In the fourth quarter of 2002 compared to the third quarter of 2002, revenues increased by 1.9% for the TAM and did not vary significantly for the SAM; in the third quarter of 2002 compared to the second quarter of 2002, revenues increased 8.2% for the TAM and 9.1% for the SAM.

Our revenues showed progressive improvement in 2002 in line with the general trend of industry participants, rising steadily from the low registered in the first quarter of the year. Net revenues for 2002 were \$6,318 million, representing a marginal 0.6% decrease compared to \$6,357 million in revenues for 2001. During the fourth quarter of 2002, there was a sequential increase of 8.6% in our net revenues to \$1,786 million from \$1,645 million registered in the third quarter of 2002 and our revenues were 23.4% above the \$1,448 million achieved during last year's fourth quarter. In the fourth quarter of 2002, each of our product groups achieved sequential revenue growth and posted operating profits.

Based on preliminary industry data, we believe that we gained market share against the SAM in 2002 by increasing our penetration with certain key customers and broadening our reach. This was an important accomplishment in light of the volatile pricing environment and limited visibility that characterized 2002. We expect difficult market conditions to persist in the first half of 2003. However, assuming a more favorable market environment based upon currently available data and customers' input, we believe 2003 should be a year of progressive improvement, during which we will be able to increasingly raise our levels of revenues and profitability. We anticipate that our gross margin will steadily improve throughout 2003, fueled by manufacturing efficiencies, better product mix and higher sales volumes, within a more favorable market environment. Visibility is limited, however, as industry and market conditions remain volatile, and the present uncertain geopolitical environment makes it difficult to accurately predict industry trends.

Maintaining a strong financial position takes on added importance during periods of economic uncertainties and we believe that we have distinguished ourselves as a result of our emphasis on liquidity and a conservative debt to equity ratio. Cash generation remained a priority in 2002 and, despite the Alcatel acquisition, we ended the year with a positive free cash flow (defined as net cash from operating activities less net cash used in investing activities), a significant improvement from 2001. We significantly reduced capital expenditures in 2002 to ensure that our resources were aligned with market demand and we affirm that capital expenditures in 2003 will approximate the level of \$1 billion in 2002. We ended 2002 with cash and marketable securities exceeding \$2.56 billion, providing us with important flexibility to navigate current market conditions, as well as to take advantage of strategically sound opportunities as they arise.

## Other Developments

In February 2002, we announced the acquisition and co-ownership of certain intellectual property of Tioga Technologies Ltd. for Digital Subscriber Line ( xDSL ) chipsets for approximately \$10 million. We also signed an option agreement with Tioga Technologies Ltd. that provides us with a call option to merge (or to effect an asset transfer with) Tioga Technologies Ltd. with one of our wholly owned subsidiaries for an additional \$12 million. During January 2003, we exercised this call option for the acquisition of Tioga s activities. We are currently finalizing the terms of this transaction, which is expected to close during the second quarter of 2003.

In March 2002, we announced the extension of our partnership with Philips Semiconductors International B.V. for the joint development of advanced process technologies at our 300mm wafer fabrication site known as Crolles 2 in our Crolles, France research and development center, to include Motorola Inc. . On June 30, 2002, we signed a cooperation agreement with Philips Semiconductors International B.V. and Motorola Inc., for the setting-up of a 300mm wafer pilot line for advanced research, process integration and manufacturing activities at Crolles 2. In November 2002, we, Motorola Inc. and Philips Semiconductors International B.V. signed an agreement with TSMC for certain joint technology development programs in 300mm wafers, to be performed at Crolles 2.



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At our Annual General Meeting held on March 27, 2002, shareholders approved all the proposed resolutions, including:

The re-appointment of the current Supervisory Board members for a three-year term;

The re-appointment of Mr. Pasquale Pistorio to a three-year term as our President and Chief Executive Officer; and

The distribution of a cash dividend of \$0.04 per share, consistent with the prior year's cash dividend payment.

On April 22, 2002, we paid cash dividends for a total amount of \$36 million.

In early May 2002, we repurchased four million common shares totaling \$115 million, in order to fund further stock option grants under our most recent employee stock option plan.

In June 2002, we acquired a 19% interest in a joint venture company established with Daï Nippon Printing to build and operate a photomask production facility next to our manufacturing facility in Agrate, Italy, which is expected to start operations during 2003. As of December 31, 2002, our total investment amount was \$4 million.

On June 26, 2002, we acquired the semiconductor chip manufacturing unit, Alcatel Microelectronics, from Alcatel for approximately \$368 million. This transaction includes an agreement with Alcatel to cooperate on the joint development of DSL chip-sets that will also be made available to the open market and calls for us to become a preferred supplier of Alcatel, thus expanding our long-standing strategic alliance. Simultaneously with this acquisition, we sold to Idaho-based AMIS the just-acquired mixed signal business activities of Alcatel Microelectronics for approximately \$61 million. This second transaction includes Alcatel Microelectronics' fabrication facilities located in Oudenaarde, Belgium, approximately 1,000 employees and the associated process technologies.

On July 30, 2002, we were informed that France Telecom, one of our indirect shareholders, had finalized the private placement to institutional investors of 442 million of 6 3/4% notes due August 2005, mandatorily exchangeable into our existing common shares. France Telecom announced that the notes will be exchangeable for our common shares from January 2, 2004 and that France Telecom will deliver to the holders of these notes a maximum of 26.42 million shares and a minimum of 20.13 million shares, depending on the price of our shares at maturity.

During the fourth quarter of 2002, we changed the internal organization of the Telecommunications, Peripherals and Automotive Groups. The Telecom Group now has four divisions: cellular terminal, cellular infrastructure, network and access. The Peripherals Group has three divisions: data storage, printer and power conversion and industrial. The Audio and Automotive Group is organized in three business units: car communication, automotive and audio. The three groups are supported by three technical centers: digital signal processing and microcontroller cores, digital and mixed analog semi-custom and the multimedia strategy

center, which is a new support division.

On December 12, 2002, we announced a significant initiative with Texas Instruments to jointly define and promote an open standard for wireless application processor interfaces. The Open Mobile Application Processor Interfaces ( OMAPI ) will target 2.5G and 3G mobile phones, personal digital assistants ( PDAs ) and other portable and multimedia products. Technical details about the new standard are expected to be announced in the near future.

In January 2003, we executed an agreement with a subsidiary of Alcatel for the transfer of a team of fifty-one engineers to us, together with associated assets, including certain intellectual property rights, and for the enhancement of an existing cooperation agreement between the two parties in the mobile phone market. The agreed purchase price for these assets was approximately 1 million.

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During January 2003, we exercised the call option for the acquisition of the Tioga Technologies Ltd. s activities. The asset purchase amounting to \$12 million should become effective during the second quarter of 2003.

On March 6, 2003, we repurchased approximately \$429 million of the aggregate principal amount at maturity of our Zero Coupon Senior Convertible Notes due 2010, representing nearly 20% of the total outstanding issue, for a total amount paid of approximately \$328 million. The repurchased 2010 convertible bonds will be cancelled. These repurchases will have a negative impact as a one-time loss on our net income in the first quarter 2003, which is estimated to be approximately \$9 million after taxes. Based on current market interest rates, the 2010 convertible bond repurchase made on March 6, 2003 will provide us with savings of approximately \$6 million in interest in 2003, which will reduce the estimated negative impact of such repurchase on our net income to approximately \$3 million after taxes in 2003, and a further estimated savings of approximately \$10 million in interest for 2004. We may proceed with future repurchases of our 2010 convertible bonds in accordance with applicable laws, regulations and stock exchange requirements.

At our Annual General Meeting held on March 12, 2003, shareholders approved all the proposed resolutions, including the distribution of a cash dividend of \$0.08 per share, doubling the level of the prior year s cash dividend payment.

**Critical Accounting Policies Using Significant Estimates**

The preparation of our consolidated financial statements requires us to make estimates and assumptions that affect the amounts reported in the financial statements of assets, liabilities, revenues and expenses and of the disclosures of contingent assets and liabilities in accompanying notes to the financial statements. On an ongoing basis, we evaluate our estimates, including those related to volume rebates and price protection, product returns, doubtful debts, inventories allowances, investments, carrying values of intangible, goodwill and fixed assets, income taxes, restructuring, pensions, contingencies litigation and claims. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. However, actual results could materially differ from these estimates and may affect our financial results.

We believe the following critical accounting policies affect our most significant judgments and estimates used in the preparation of our consolidated financial statements.

*Revenue recognition.* Our policy is to recognize revenues from sales of products to our customers when the rights and risks of ownership of the goods are passed to our customers, which usually occurs at shipment. A portion of our sales is made to distributors who participate in certain programs common in the semiconductor industry whereby the distributors are allowed to return merchandise or receive potential price reductions on existing stock on hand under certain circumstances. Provisions are made for estimated product returns and price protection, which may occur under the contractual terms agreed with these customers. The provisions are based on the latest historical data and expected market prices evolution. If market conditions differ from our assumptions, this could have an impact on future periods; in particular, if the market conditions were to worsen, this could result in a reduction of net revenues due to higher product returns and price reductions at the time these adjustments will occur.

Our customers return our products from time to time for technical reasons. In some cases, these returned products are reworked and shipped back to customers. We analyze the status of product returns and record provisions accordingly . We determine the amount of reported revenues based on certain judgments or estimates and this amount of reported revenue may vary if we elect to make different judgments or estimates.

Our allowances for doubtful accounts take into consideration losses that could arise from certain of our customers inability to make their payments. We base our estimates on historical trends, specific customers credit ratings and current economic trends. Although we have determined that our most significant customers are creditworthy, any failure on their part to make their payments would lead us to increase our allowances for doubtful accounts.

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*Intangible assets subject to amortization.* Intangible assets subject to amortization include the cost of technologies and licenses purchased from third parties, internally developed software which is capitalized and purchased software. These are amortized over a period ranging from three to seven years. The carrying value of intangible assets subject to amortization is evaluated whenever changes in circumstances indicate that the carrying amount may not be recoverable. In determining recoverability, we estimate the expected discounted future cash flows associated with the intangible assets and compare this to the carrying value. An impairment loss is recognized for the excess of the carrying amount over the fair value. Significant estimates used in determining discounted future cash flows include the applicable industry's sales volume forecast and selling price evolution, our market penetration and the market acceptance of certain new technologies. Our evaluations are based on financial plans updated with the latest available projections of the semiconductor market evolution and our sales expectations. Future adverse change in market conditions or poor operating results of businesses acquired may require impairment of certain intangible assets.

*Goodwill.* From January 1, 2002, goodwill acquired in business combinations is no longer amortized and is subject to an annual impairment test to determine whether the carrying value should be reduced. Goodwill subject to potential impairment is determined by comparing the fair value of each reporting unit for which goodwill is allocated to the total carrying amount of relevant net assets allocated to such reporting unit. In determining the fair value of reporting unit, we usually estimate the expected discounted future cash flows associated with the reporting unit. We define our reporting units at an individual business level, which is one level below the four semiconductor product groups described in Note 28. Significant estimates used in determining discounted future cash flows include the applicable industry's sales volume forecast and selling prices, the reporting unit market penetration and the market acceptance of certain new technologies. Our evaluations are based on financial plans updated with the latest available projections of the semiconductor market evolution and our sales expectations. Future adverse change in market conditions or poor operating results of businesses acquired may require impairment of certain goodwill.

*Inventories.* Inventories are stated at the lower of cost or market value. Cost is computed by adjusting standard cost to approximate actual manufacturing costs on a quarterly basis; the cost is therefore dependent on our manufacturing performance. In the case of underutilization of our manufacturing facilities, the costs associated with the excess capacity are not included in the valuation of inventories but charged directly to cost of sales. Provisions for obsolescence are estimated for uncommitted inventories based on order backlog and the previous quarter's sales and production-plans. To the extent that future negative market conditions generate order backlog cancellations and declining sales, this would require additional inventory write-down charges, negatively impacting cost of sales.

*Property, plant and equipment.* Our business requires substantial investments in technologically advanced manufacturing facilities, which can quickly become significantly underutilized or obsolete as a result of rapid changes in demand and ongoing technological evolution.

We estimate the useful life of our manufacturing equipment, which is the largest component of our long-lived assets, to be six years. This estimate is based on our experience with using equipment over time. Depreciation expense is a major element of our manufacturing cost structure. We begin to depreciate new equipment when it is put into use for production.

We assess the carrying value of our property, plant and equipment whenever changes in circumstances indicate the carrying amount may not be recoverable. In determining recoverability, we estimate the expected future cash flows associated with the tangible asset or group of assets and compare this to the carrying value. Significant estimates used in determining the undiscounted future cash flows include the industry evolution, the utilization of our fabrication facilities and the ability to upgrade such facilities, changes in selling price and the adoption of new technologies. Any impairment is determined by comparing the carrying value of a tangible asset to the fair value estimated from its expected future cash flows. Our evaluations are based on financial plans updated with the latest projections of the semiconductor market and of our sales expectations,



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from which we derive the future production needs and loading of our manufacturing facilities; these plans are highly variable due to the high volatility of the semiconductor business and therefore subject to continuous modifications. If the future evolution will differ from the basis of our plans, both in terms of market evolution and production allocation to our manufacturing plants, this could require a further review of the carrying amount of our tangible assets for potential impairment. Factors we consider important which could trigger an impairment review include: significant negative industry trends, significant underutilization of the assets, and significant changes in how we use the assets in our plants for their use.

*Patent and other intellectual property litigation or claims.* We have from time to time received, and may in the future receive, communications alleging possible infringements of patents and similar intellectual property rights of others. We constantly monitor, with the support of our outside attorneys when deemed necessary or advisable, the chances of such intellectual property claims being successfully asserted. We will record a provision when we estimate that the claim could successfully be asserted in a court of law, and in the absence of a valid offset or counterclaim. In the event of litigation, which is adversely determined with respect to our interests, or in the event we need to change our evaluation of a potential third party intellectual property claim, based on new evidence or communications, this could have a material adverse effect on our results of operations or financial condition at the time it were to materialize.

*Other claims.* We are subject to the possibility of various loss contingencies arising in the ordinary course of business. These include, but are not limited to: warranty costs on our products not covered by insurance, breach of contract claims, tax claims and claims for environmental damages. When determining loss contingencies, we consider the likelihood of a loss of an asset or the incurrence of a liability, as well as our ability to reasonably estimate the amount of such loss or liability. An estimated loss is recorded when it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. We regularly reevaluate any losses and claims and determine whether they need to be readjusted based on the current information available to us. We will record a provision when we estimate that the claim could successfully be asserted. In the event of litigation, which is adversely determined with respect to our interests, or in the event we need to change our evaluation of a potential third party claim, based on new evidence or communications, this could have a material adverse effect on our results of operations or financial condition at the time it were to materialize.

Table of ContentsIndex to Financial Statements**Results of Operations**

The tables below set forth information on our net revenues by product group and by geographic region:

	Year ended December 31,				
	1998	1999	2000	2001	2002
	(in millions)				
<b>Net Revenues by Product Group:(1)</b>					
Telecommunications, Peripherals and Automotive(1)	\$ 1,855	\$ 2,305	\$ 3,482	\$ 3,031	\$ 3,074
Discrete and Standard ICs(1)	817	928	1,213	942	1,055
Memory Products	660	836	1,553	1,382	1,055
Consumer and Microcontrollers(1)(4)	806	886	1,466	896	1,026
New Ventures Group and Others(2)(4)	110	101	99	106	108
<b>Total</b>	<b>\$ 4,248</b>	<b>\$ 5,056</b>	<b>\$ 7,813</b>	<b>\$ 6,357</b>	<b>\$ 6,318</b>
<b>Net Revenues by Geographic Region:(3)</b>					
Europe	\$ 1,769	\$ 1,834	\$ 2,629	\$ 2,169	\$ 1,832
North America	937	1,156	1,843	1,161	919
Asia Pacific	1,248	1,658	2,615	2,302	2,748
Japan	181	240	402	331	275
Emerging Markets(3)	113	168	324	394	544
<b>Total</b>	<b>\$ 4,248</b>	<b>\$ 5,056</b>	<b>\$ 7,813</b>	<b>\$ 6,357</b>	<b>\$ 6,318</b>
	(as a percentage of net revenues)				
<b>Net Revenues by Product Group:(1)</b>					
Telecommunications, Peripherals and Automotive(1)	43.6%	45.6%	44.6%	47.7%	48.7%
Discrete and Standard ICs(1)	19.2	18.4	15.5	14.8	16.7
Memory Products	15.5	16.5	19.9	21.7	16.7
Consumer and Microcontrollers(1)(4)	19.0	17.5	18.8	14.1	16.2
New Ventures Group and Others(2)(4)	2.7	2.0	1.2	1.7	1.7
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
<b>Net Revenues by Geographic Region:(3)</b>					
Europe	41.6%	36.3%	33.6%	34.1%	29.0%
North America	22.1	22.9	23.6	18.3	14.5
Asia Pacific	29.4	32.8	33.5	36.2	43.5
Japan	4.3	4.7	5.2	5.2	4.4
Emerging Markets(3)	2.6	3.3	4.1	6.2	8.6
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>



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- (1) In January 1999, we implemented organizational changes to better orient our product groups to end-use applications. As a result, net revenues have been restated for prior periods to reflect these changes. In addition, the former Dedicated Products Group has become the Telecommunications, Peripherals and Automotive Groups, while the former Programmable Products Group has become the Consumer and Microcontrollers Groups.
  - (2) Includes revenues from sales of subsystems and other products and from the New Ventures Group, which was created in May 1994 to act as a center for our new business opportunities.
  - (3) Revenues are classified by location of customer invoiced. For example, products ordered by U.S.-based companies to be invoiced to Asia Pacific affiliates are classified as Asia Pacific revenues. Net revenues by geographic region have been reclassified to reflect the creation of Region Five in January 1998, which includes emerging markets such as South America, Africa, Eastern Europe, the Middle East and India. In the fourth quarter of 2000, Region Five changed its name to become the Emerging Markets region.

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- (4) In 2001, we implemented organizational changes to better orient our product groups to end-use applications. These changes affected the Consumer and Microcontrollers Groups and the New Ventures Group and Others. As a result, net revenues have been restated for prior periods to reflect these changes.

The following table sets forth certain financial data from our consolidated statements of income since 1998, expressed in each case as a percentage of net revenues:

	Year ended December 31,				
	1998	1999	2000	2001	2002
Net sales	99.1%	99.3%	99.4%	99.2%	99.2%
Other revenues	0.9	0.7	0.6	0.8	0.8
<b>Net revenues</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Cost of sales	(61.7)	(60.4)	(54.0)	(63.7)	(63.6)
<b>Gross profit</b>	<b>38.3</b>	<b>39.6</b>	<b>46.0</b>	<b>36.3</b>	<b>36.4</b>
Operating Expenses:					
Selling, general and administrative	(11.5)	(10.6)	(9.0)	(10.1)	(10.3)
Research and development	(16.2)	(16.5)	(13.1)	(15.4)	(16.2)
Other income and expenses	1.7	0.8	(1.1)	(0.1)	0.1
Impairment and restructuring charges and other related closure costs				(5.4)	(.5)
<b>Total operating expenses</b>	<b>(26.0)</b>	<b>(26.3)</b>	<b>(23.2)</b>	<b>(31.0)</b>	<b>(26.9)</b>
<b>Operating income</b>	<b>12.3</b>	<b>13.3</b>	<b>22.8</b>	<b>5.3</b>	<b>9.5</b>
Net interest income (expense)	0.2	0.7	0.6	(0.2)	(1.0)
Equity in loss of joint venture				(0.1)	(0.2)
<b>Income before income taxes and minority interests</b>	<b>12.5</b>	<b>14.0</b>	<b>23.4</b>	<b>5.0</b>	<b>8.3</b>
Income tax expense	(2.8)	(3.1)	(4.8)	(1.0)	(1.4)
<b>Income before minority interests</b>	<b>9.7</b>	<b>10.9</b>	<b>18.6</b>	<b>4.0</b>	<b>6.9</b>
Minority interests		(0.1)			(0.1)
<b>Net income</b>	<b>9.7%</b>	<b>10.8%</b>	<b>18.6%</b>	<b>4.0%</b>	<b>6.8%</b>

**2002 vs. 2001**

In 2002, our results were negatively impacted by the continuing difficulties in the business cycle of the semiconductor industry. Our operating income, net income and diluted earnings per share improved in 2002 on an as reported basis, however they decreased compared to 2001 when excluding the impairment and restructuring charges and other related closure costs registered in 2001. Our research and development expenses increased again in 2002, reflecting our continued commitment to invest in our strategic and core programs. No significant impairment and restructuring charges and other related closure costs were incurred in 2002. We

significantly reduced our capital spending during 2002 in order to maintain a solid financial position.

*Net revenues.* Net sales decreased 0.5%, from \$6,304 million in 2001 to \$6,270 million in 2002. The slight decrease in net sales was the result of a strong overall decline in selling prices, which was largely offset by a significant recovery in the volume of units sold. In addition, our acquisition of Alcatel Microelectronics in June 2002 contributed approximately \$85 million to our net revenues in 2002 during the second part of the year. In 2002, the average selling prices of our products declined by approximately 12%, primarily due to persisting oversupply in the semiconductor market. Other revenues decreased from \$53 million in 2001 to \$48 million in 2002, due primarily to a decline in co-development contract fees. We will no longer profit from such co-development fees in 2003 since our contract generating these fees has expired at the end of 2002. Total net revenues decreased 0.6% in 2002, from \$6,357 million in 2001 to \$6,318 million in 2002. The exchange rate impact on net revenues in 2002 was estimated to be marginally favorable during 2002 due to the depreciation of the U.S. dollar, in particular as compared to the euro and the Japanese yen.

With respect to our segments the Telecommunications, Peripherals and Automotive Groups net revenues increased 1.4%, primarily as a result of increased sales volumes in Automotive, Data Storage, Audio and Cellular Terminals, which offset a significant decline in sales volumes in Network and falling prices in almost all product families. The Discrete and Standard ICs Group's net revenues increased 12.0%, due to strong increases in sales volumes, which offset the price declines registered by virtually all of our major product families.

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The Memory Products Group's net revenues decreased by 23.6% as a result of significantly lower prices in its major product families and decreased sales volumes, mainly in Smart cards and EPROM. The Consumer and Microcontrollers Groups' net revenues increased 14.7% as a result of a significant increase in sales volumes for its digital versatile disk ( DVD ) players, display TVs and microcontrollers.

In 2002, we continued to focus on Differentiated ICs, which accounted for 69.3% of our net revenues, compared to 66.1% in 2001. Such products foster close relationships with customers, resulting in early knowledge of their evolving requirements and opportunities to access their markets for other products. Analog ICs (including mixed-signal ICs), the majority of which are also differentiated ICs, accounted for approximately 52.8% of our net revenues in 2002 compared to 51.5% in 2001, while discrete devices accounted for approximately 11.9% of our net revenues in 2002 compared to approximately 10.4% in 2001. In recent years, these families of products, in particular analog ICs, have experienced less volatility in sales growth rates and average selling prices than the overall semiconductor industry. However, the difficult competitive environment in the semiconductor market in more recent years has led to price pressures in these product families as well.

In 2002, approximately 29.0% of our net revenues were realized in Europe, 14.5% in North America, 43.5% in Asia Pacific, 4.4% in Japan and 8.6% in Emerging Markets. All the major regions registered significant declines in revenues in 2002 versus 2001, with North America particularly impacted and declining 20.8%, due to the local unfavorable economic environment, while Emerging Markets revenues increased 38.1% in 2002 versus 2001, due in part to the move of some customers' production facilities to lower labor cost areas.

In 2002, our top ten customers (including original equipment manufacturers and distributors) represented approximately 51% of our consolidated net revenues compared to approximately 50% in 2001. One customer, the Nokia group of companies, represented 17.6% of our 2002 net revenues, compared to 19.3% in 2001.

*Gross profit.* Cost of sales decreased from \$4,047 million in 2001 to \$4,020 million in 2002, primarily due to improved manufacturing performances resulting in part from higher capacity utilizations caused by increased production volumes and the closing of two 150mm fabs. We also used fewer outsourced wafers manufactured by external foundries and recorded an increase in depreciation associated with new capital investments. In addition, in 2001 cost of sales, we recorded a special obsolete inventory charge of \$71 million in the second quarter of 2001 due to significant cancellations of certain customers' orders.

Our gross profit decreased 0.5%, from \$2,310 million in 2001 to \$2,298 million in 2002, primarily as a result of lower net revenues. As a percentage of net revenues, gross margin remained flat from 36.3% in 2001 to 36.4% in 2002, since the impact of declining sales prices was generally offset by increases in sales volumes and improved manufacturing efficiency resulting from lower levels of capacity under-utilization and the closures of our Ottawa (Canada) and Rancho Bernardo (USA) fabs. The exchange rate impact on gross profit in 2002 compared to 2001 was estimated to be negligible, since the depreciation of the U.S. dollar versus the euro and the Japanese yen had a favorable impact on net revenues, which was offset by an equivalent unfavorable impact on cost of sales.

*Selling, general and administrative expenses.* Selling, general and administrative expenses increased slightly by 1.0%, from \$641 million in 2001 to \$648 million in 2002, reflecting an increase in activities in line with volume increase and some additional hiring mainly in marketing. We continued the cost reduction actions initiated in 2001 to respond to the continued market downturn, which mainly consisted of controlling discretionary expenses and hiring. As a percentage of net revenues, selling, general and

administrative expenses remained basically flat from 10.1% in 2001 to 10.3% in 2002.

*Research and development expenses.* Research and development expenses increased 4.5%, from \$978 million in 2001 to \$1,022 million in 2002. This increase in research and development expenses was due primarily to greater spending in product design and technology for our core activities. We continued in 2002 to invest heavily in research and development and to increase our research and development staff. We continue to allocate significant financial resources to strengthen our market leadership in key applications, reflecting our commitment to service and continuous innovation. Our reported research and development expenses are mainly in the areas of product design, technology and development, and do not include marketing design center costs which are accounted for as selling expenses, or process engineering, pre-production and process-transfer costs, which are accounted for as cost of sales. As a percentage of net revenues and due to declining revenues, research and development expenses increased from 15.4% in 2001 to 16.2% in 2002.

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*Impairment, restructuring charges and other related closure costs.* Total impairment, restructuring charges and other related closure costs in 2002 was \$34 million compared to \$346 million in 2001.

In 2002, these costs and charges related almost completely to costs associated with the closure of the Rancho Bernardo (USA), and Ottawa (Canada) fabrication facilities, including decommissioning costs, and costs for retention bonuses and contracts obligations. In 2002, there was a significant reduction in impairment, restructuring charges and other related closure costs compared to 2001. In 2001, due to a significant and rapid deterioration in the business climate of the semiconductor industry, we registered a total charge of \$346 million related to impairment of some of our most mature fabrication sites, of purchased technologies, goodwill on previous acquisitions and on certain investments; in addition, we recorded restructuring charges for the closure of our facilities in Ottawa, Canada and Rancho Bernardo, California. The production of these two wafer fabrication facilities has been moved to other plants inside our group.

*Other income and expenses.* Other income and expenses for 2002 totaled \$7 million in income, compared to expenses of \$6 million in 2001. Other income and expenses include primarily funds received from government agencies in connection with our research and development programs, the cost of new plant start-ups, the amortization of goodwill and related acquisition costs for the periods prior to 2002, as well as foreign currency gains and losses, the gains realized on certain sales of marketable securities, the costs of certain activities relating to intellectual property and miscellaneous revenues and expenses of non recurring nature. The improved balance in other income and expenses in 2002 resulted primarily from increased research and development fundings and significantly lower start-up costs, partially offset by gains on sales of certain marketable securities realized in 2001. In addition, in 2001 we charged \$28 million to goodwill amortization, which under FAS 142 is not required to be recorded starting in 2002. See Note 20 to our Consolidated Financial Statements.

*Operating income.* Our operating income increased from \$339 million in 2001 to \$601 million in 2002. The increase was mainly due to the negative impact on 2001 of impairment and restructuring charges. Excluding these costs from 2001, our operating income in 2001 on a pro forma basis was \$755 million. On a pro forma basis, our 2002 operating income decreased approximately 20% compared to 2001, mainly due to lower gross profits resulting from lower selling prices and increased total operating expenses. The exchange rate impact on operating income in 2002 was estimated to be unfavorable since the depreciation of the U.S. dollar against the euro had an unfavorable impact on cost of sales and operating expenses, which exceeded the positive impact on revenues.

In 2002, our Telecom, Peripherals and Automotive Groups an operating income increased to \$630 million, improving from \$589 million in 2001. Our Discrete and Standard ICs Group s operating income also made significant improvements in 2002, rising \$75 million in 2001 to \$135 in 2002. Our Consumer and Microcontroller operating income improved from a loss of \$78 million in 2001 to an income of \$57 million in 2002. Due to the negative market conditions and strong price decline, our Memory Products Group s operating income dropped sharply from \$340 million in 2001 to \$7 million in 2002. As per our internal procedures, we do not charge restructuring and impairment charges to the operating income of our business segments.

*Net interest income (expense).* Net interest expense increased from expense of \$13 million in 2001 to expense of \$68 million in 2002 primarily as a result of the decrease in interest income from our available cash due to the significant decline in interest rates for U.S. dollar-denominated funds, while our interest expenses are mainly related to our convertible bonds, which are at fixed rates. Interest income in 2002 was \$49 million significantly decreasing from \$100 million in 2001, while interest expense remained basically unchanged. See Note 22 to the Consolidated Financial Statements.

*Income tax expense.* Provision for income tax was \$89 million in 2002 compared to \$61 million in 2001, primarily as a result of the increase in income before income taxes and minority interests. Our accrued effective tax rate decreased from 19.0% in 2001 to 17.0% in 2002. Our tax rate is variable and depends on changes in the level of operating profits within various local jurisdictions and on changes in the applicable taxation rates of these jurisdictions. We currently enjoy certain tax benefits in some countries; as such benefits may not be available in the future due to changes within the local jurisdictions, our effective tax rate could increase in the coming years.

*Net income.* Our net income increased by 67.0%, from \$257 million in 2001 to \$429 million in 2002. This increase was mainly due to the negative impact on 2001 of impairment and restructuring charges. As a percentage of net revenues, 2002 net income was 6.8%, up from 4.0% in 2001. Diluted earnings per share reached \$0.48,

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an increase of 65.5% compared to diluted earnings per share of \$0.29 in 2001. All per share numbers have been adjusted to reflect the 3-for-1 stock split effected in May 2000.

**2001 vs. 2000**

In 2001, we were negatively impacted by the downward cycle of the semiconductor industry, which contributed to the significant decrease in our net revenues, operating income, net income and diluted earnings per share. However, we maintained our commitment to invest significant amounts in research and development on our core and strategic programs. We have largely reduced our capital spending during the year, in line with the decline of end customers' demand in order to maintain a solid financial position.

*Net revenues.* Net sales decreased 18.8%, from \$7,764 million in 2000 to \$6,304 million in 2001. The decrease in net sales was primarily the result of lower volume due to a decline in semiconductor market demand. Average selling prices were also under pressure, which resulted in a general overall decline in pricing of our products, estimated at approximately 6%. Other revenues increased from \$49 million in 2000 to \$53 million in 2001 due primarily to an increase in co-development contract fees. Net revenues decreased 18.6%, from \$7,813 million in 2000 to \$6,357 million in 2001. The exchange rate impact on net revenues in 2001 was estimated to be marginally negative due to the appreciation of the U.S. dollar, in particular as compared to the euro.

With respect to the product groups, the Telecommunications, Peripherals and Automotive Groups' net revenues decreased 12.9% primarily as a result of volume decreases in wireline telecommunications, automotive products and data storage devices partially offset by an increase in volume in wireless telecommunications. The Discrete and Standard ICs Group's net revenues decreased 22.3%, due to the volume and price declines across virtually all major product families. Net revenues of the Memory Products Group decreased by 11.0% as a result of price declines in its major product families and volume decreases, mainly in EPROM (erasable programmable read-only memory), EEPROM (electrically erasable programmable read-only memory) and Smart cards; an improved mix in Flash memories partially offset these declines. The Consumer and Microcontrollers Groups' net revenues decreased 37.9% as a result of significantly lower volume in digital consumer applications such as set-top boxes, consumer TV and imaging products, as well as a general decrease in prices in most major product families.

In 2001, we continued to focus on differentiated ICs, which accounted for 66.1% of our net revenues, compared to 63.3% in 2000. Such products foster close relationships with customers, resulting in early knowledge of their evolving requirements and opportunities to access their markets for other products. Analog ICs (including mixed signal ICs), the majority of which are also differentiated ICs, accounted for approximately 51% of our net revenues in 2001 compared to 49% in 2000, while discrete devices accounted for approximately 10% of our net revenues in 2001 compared to approximately 10% in 2000. In recent years, these families of products, in particular analog ICs, have experienced less volatility in sales growth rates and average selling prices than the overall semiconductor industry. However, the difficult competitive environment in the semiconductor market in more recent years has led to price pressures in these product families as well.

In 2001, approximately 34.1% of our net revenues were realized in Europe, 18.3% in North America, 36.2% in Asia Pacific, 5.2% in Japan and 6.2% in Emerging Markets. All the major regions registered significant declines in revenues in 2001 versus 2000, with North America particularly impacted and declining 37.0%, due to the local unfavorable economic environment, while Emerging Markets revenues increased 21.6% in 2001 versus 2000, due in part to the move of some customers' production facilities to low labor cost areas.



In 2001, our top ten customers represented approximately 50% of our consolidated net revenues compared to approximately 47% in 2000. One customer, the Nokia group of companies, represented 19.3% of 2001 net revenues, up from 13.4% in 2000.

*Gross profit.* Cost of sales decreased from \$4,217 million in 2000 to \$4,047 million in 2001, primarily due to a significant decrease in production volume and the decrease in the cost of outsourced wafers manufactured by external foundries, while there was an increase in depreciation associated with new capital investments. Additionally, in cost of sales we recorded a special obsolete inventory charge of \$71 million in the second quarter of 2001 due to significant cancellations of certain customers' orders.

Our gross profit decreased 35.8%, from \$3,596 million in 2000 to \$2,310 million in 2001, primarily as a result of lower net revenues. As a percentage of net revenues, gross margin decreased from 46.0% in 2000 to 36.3% in 2001, due to the lower level of net sales, declining selling prices and under-utilization of our manufacturing facilities.

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The exchange rate impact on gross profit in 2001 compared to 2000 was estimated to be marginally favorable, since the appreciation of the U.S. dollar versus the euro had a favorable impact on cost of sales that was higher than the unfavorable impact on net revenues. See [Impact of Changes in Exchange Rates](#) .

*Selling, general and administrative expenses.* Selling, general and administrative expenses decreased 8.9%, from \$704 million in 2000 to \$641 million in 2001, reflecting the results of the cost reduction actions taken by us to respond to the market downturn on discretionary expenses, as well as of a hiring freeze. As a percentage of net revenues, selling, general and administrative expenses increased from 9.0% in 2000 to 10.1% in 2001 due to the decrease in net revenues.

*Research and development expenses.* Research and development expenses decreased 4.7%, from \$1,026 million in 2000 to \$978 million in 2001. The decrease in research and development was mainly due to lower spending in non-core activities and cost reduction in certain external development contracts. However, we continued to invest heavily in research and development and plan to continue increasing our research and development staff. We continue to allocate significant financial resources to expand our market leadership in key applications, reflecting our commitment to service and continuous innovation. Our reported research and development expenses do not include marketing design center, process engineering, pre-production or industrialization costs. As a percentage of net revenues and due to the declining revenues, research and development expenses increased from 13.1% in 2000 to 15.4% in 2001.

*Impairment and restructuring charges.* Total impairment and restructuring charges in 2001 were \$346 million, while no such charge was booked in 2000.

In the second quarter of 2001, we recorded an impairment charge of \$296 million. This charge includes impairment losses of (i) \$177 million associated with the tangible assets of some of our fabrication sites; (ii) \$97 million related to purchased technologies and goodwill on previous acquisitions; and (iii) \$22 million for financial assets with an other than temporary decline in value. This impairment charge resulted from a significant deterioration in the business climate in the semiconductor industry. Due to these market changes, we revised our production forecasts and we foresee an under-utilization of the capacities of certain 150mm fabrication facilities.

Additionally, in the second quarter of 2001, we recorded restructuring charges of \$15 million related to the closure of our facility in Ottawa, Canada. These restructuring charges related to the severance of plant personnel and were paid in 2001.

In the third quarter of 2001, we recorded an impairment charge of \$23 million relating to the building and facilities of our Rancho Bernardo, California, 150mm wafer fabrication plant to be closed by April 2002. This impairment charge was based on quoted market value and resulted from our decision to close the plant.

In the fourth quarter of 2001, we recorded expenses of \$11 million relating to severance costs and retention bonuses for plant employees during the closure of our facilities in Ottawa, Canada and Rancho Bernardo, California. Any costs of relocating personnel from the facilities and for transferring equipment to other fabrication sites will be recognized as incurred during 2002.

*Other income and expenses.* Other income and expenses decreased from expenses of \$84 million in 2000 to expenses of \$6 million in 2001. Other income and expenses include primarily funds received from government agencies in connection with our research and development programs, the cost of new plant start-ups, the amortization of goodwill and related acquisition costs, as well as foreign currency gains and losses, the gains realized on certain sales of marketable securities, the costs of certain activities relating to intellectual property and miscellaneous revenues and expenses. The decrease of the negative balance in other income and expenses resulted primarily from the gains on sales of marketable securities, lower start-up costs of new production facilities and higher income from public funding for research and development. Goodwill amortization also increased due to recent acquisitions such as WSI, in late 2000 and Ravisent, in early 2001. See Note 20 to our Consolidated Financial Statements.

*Operating income.* Our operating income decreased by 81.0%, from \$1,783 million in 2000 to \$339 million in 2001. The exchange rate impact on operating income in 2001 was estimated to be favorable since the appreciation of the U.S. dollar against the euro had a favorable impact on cost of sales and operating expenses, which more than offset the negative impact on revenues.

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*Net interest income (expense).* Net interest decreased from income of \$46 million in 2000 to expense of \$13 million in 2001 primarily as a result of the decrease in interest income from our available cash due to the significant decline in interest rates for U.S. dollar-denominated funds, while our interest expenses are mainly related to our convertible bonds, which are at fixed rates. See Note 22 to our Consolidated Financial Statements.

*Income tax expense.* Provision for income tax was \$61 million in 2001 compared to \$375 million in 2000, primarily as a result of the decrease in income before income taxes and minority interests. Our accrued effective tax rate decreased from 20.5% in 2000 to 19.0% in 2001. Our tax rate is variable and depends on changes in the level of operating profits within various local jurisdictions and on changes in the applicable taxation rates of these jurisdictions. We currently enjoy certain tax benefits in some countries; as such benefits may not be available after 2001 due to changes within the local jurisdictions, our effective tax rate could increase in the coming years.

*Net income.* Our net income decreased 82.3%, from \$1,452 million in 2000 to \$257 million in 2001. As a percentage of net revenues, 2001 net income was 4.0%, down from 18.6% of 2000 net income. The decrease in net income in 2001 is primarily due to the strong decline in net revenues and the impairment and restructuring charges incurred during the year. These negative items were partially offset by the reduction in selling, general and administrative expenses and in research and development expenses, reflecting our cost reduction measures taken in 2001. Diluted earnings per share reached \$0.29, a decrease of 81.6% compared to diluted earnings per share of \$1.58 in 2000. All per share numbers have been adjusted to reflect the 3-for-1 stock split effected in May 2000.

**Related Party Transactions**

There has been no material transactions during the last three fiscal years between us and any director, executive officer or 5% shareholder, or any relative or spouse of which any of them was party. There is no significant outstanding indebtedness owed to us by any director, executive officer or 5% shareholder. There have been no material transactions with enterprises controlled by us or under common control with us or any of our associates. See note 27 to our Consolidated Financial Statements.

**Quarterly Results of Operations**

The following table sets forth certain financial information for the years 2001 and 2002. Such information is derived from unaudited consolidated financial statements, prepared on a basis consistent with the audited consolidated financial statements, that include, in the opinion of management, only normal recurring adjustments necessary for a fair presentation of the information set forth therein. Operating results for any quarter are not necessarily indicative of results for any future period. In addition, in view of the significant growth experienced by us in recent years, the increasingly competitive nature of the markets in which we operate, the changes in product mix and the currency effects of changes in the composition of sales and production among different geographic regions, we believe that period-to-period comparisons of our operating results should not be relied upon as an indication of future performance.

Our quarterly and annual operating results are also affected by a wide variety of other factors that could materially and adversely affect revenues and profitability or lead to significant variability of operating results, including, among others, capital requirements and the availability of funding, competition, new product development and technological change and manufacturing. In addition, a number of other factors could lead to fluctuations in operating results, including order cancellations or reduced bookings by key customers or distributors, intellectual property developments, international events, currency fluctuations, problems in obtaining adequate raw materials on a timely basis, and the loss of key personnel. As only a portion of our expenses varies with our revenues, there can be no assurance that we will be able to reduce costs promptly or adequately in relation to revenue declines to compensate for the effect of any such factors. As a result, unfavorable changes in the above or other factors have in the past and may in the future adversely affect our operating results. Quarterly results have also been and may be expected to continue to be substantially affected by the cyclical nature of the semiconductor and electronic systems industries, the speed of some process and manufacturing technology developments, market demand for existing products, the timing and success of new product introductions and the levels of provisions and other unusual charges incurred.

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	Quarter ended (unaudited)							
	March 31, 2001	June 30, 2001	Sept. 29, 2001	Dec. 31, 2001	March 29, 2002	June 28, 2002	Sept. 30, 2002	Dec. 31, 2002
	(in millions, except percentages and per share data)(1)							
<b>Consolidated Statement of Income Data</b>								
Net revenues	\$ 1,921	\$ 1,587	\$ 1,401	\$ 1,448	\$ 1,355	\$ 1,531	\$ 1,645	\$ 1,786
Cost of sales	(1,065)	(1,055)	(939)	(988)	(903)	(955)	(1,036)	(1,125)
Gross profit	856	532	462	460	452	576	609	661
Operating expenses:								
Selling, general and administrative	(177)	(180)	(144)	(140)	(141)	(160)	(163)	(184)
Research and development	(272)	(256)	(229)	(221)	(224)	(258)	(258)	(282)
Other income and expenses	5	23	(17)	(17)	(17)	(3)	7	19
Impairment and restructuring charges and other related closure costs		(311)	(24)	(11)	(10)	(8)	(12)	(4)
Total operating expenses	(444)	(724)	(414)	(389)	(392)	(429)	(424)	(451)
Operating income (loss)	412	(192)	48	71	60	147	185	210
Net interest income (expense)	3	1	(5)	(12)	(15)	(16)	(20)	(17)
Equity in loss of joint ventures			(1)	(4)	(4)	(3)	(4)	0
Income (loss) before income taxes and minority interests	415	(191)	42	55	41	128	161	193
Income tax expense	(74)	28	(6)	(9)	(8)	(22)	(29)	(31)
Income (loss) before minority interests	341	(163)	36	46	33	106	132	162
Minority interests		(1)		(1)		(1)	(1)	(1)
Net income (loss)	\$ 341	\$ (165)	\$ 36	\$ 45	\$ 33	\$ 105	\$ 131	\$ 161
Diluted earnings (loss) per share	\$ 0.38	\$ (0.18)	\$ 0.04	\$ 0.05	\$ 0.04	\$ 0.12	\$ 0.15	\$ 0.18
Number of shares used in calculating earnings per share (basic)	890.1	894.5	898.1	890.5	889.8	887.5	886.4	886.8
Number of shares used in calculating earnings per share (diluted)	951.5	894.5	905.1	898.1	897.6	894.0	890.3	890.4

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	Quarter ended (unaudited)							
	March 31, 2001	June 30, 2001	Sept. 29, 2001	Dec. 31, 2001	March 29, 2002	June 28, 2002	Sept. 30, 2002	Dec. 31, 2002
	(as a percentage of net revenues)							
Net revenues	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Cost of sales	(55.5)	(66.4)	(67.0)	(68.3)	(66.6)	(62.4)	(63.0)	(63.0)
Gross profit	44.5	33.6	33.0	31.7	33.4	37.6	37.0	37.0
Operating expenses:								
Selling, general and administrative	(9.2)	(11.4)	(10.3)	(9.7)	(10.4)	(10.5)	(9.9)	(10.3)
Research and development	(14.2)	(16.1)	(16.4)	(15.2)	(16.5)	(16.9)	(15.7)	(15.8)
Other income and expenses	0.4	1.4	(1.2)	(1.2)	(1.3)	(0.2)	0.5	1.1
Impairment and restructuring charges		(19.6)	(1.7)	(0.8)	(0.7)	(0.5)	(0.7)	(0.2)
Total operating expenses	(23.0)	(45.7)	(29.6)	(26.9)	(29.0)	(28.0)	(25.8)	(25.3)
Operating income (loss)	21.5	(12.1)	3.4	4.9	4.4	9.6	11.2	11.8
Net interest income (expense)	0.2		(0.3)	(0.8)	(1.1)	(1.0)	(1.2)	(1.0)
Equity in loss of joint ventures			(0.1)	(0.3)	(0.3)	(0.2)	(0.2)	0
Income (loss) before income taxes and minority interests	21.6	(12.1)	3.0	3.8	3.0	8.3	9.8	10.8
Income tax expense	(3.8)	1.8	(0.4)	(0.6)	(0.6)	(1.4)	(1.8)	(1.7)
Income (loss) before minority interests	17.8	(10.3)	2.6	3.2	2.4	6.9	8.0	9.1
Minority interests	(0.1)	(0.1)		(0.1)		(0.1)	0	(0.1)
Net income (loss)	17.7%	(10.4)%	2.6%	3.1%	2.4%	6.8%	8.0%	9.0%

(1) All share information has been adjusted to reflect the 3-for-1 stock split effected in May 2000.

*Net revenues.* We recorded net revenues for the fourth quarter of 2002 of \$1,786 million with an increase of 23.4% compared to \$1,448 million for the fourth quarter of 2001, experiencing significant revenues increases across all our product groups and our main geographic regions, excluding North America. Our acquisition of Alcatel Microelectronics, which closed on June 26, 2002, contributed approximately \$44 million during the fourth quarter of 2002. We recorded a 8.6% sequential improvement over the \$1,645 million reported in the third quarter of 2002, reflecting a strong sequential revenues increase from the Memory Products Group and from the Telecom Group. During the fourth quarter of 2002, due to ongoing price pressure in the semiconductor market, other net revenues and margins were negatively impacted by declining selling prices.

With respect to our product segments, in the fourth quarter of 2002, net revenues from the Telecommunications, Peripherals and Automotive Groups were \$871 million, increasing 22.2% over the corresponding quarter in 2001 and 6.7% sequentially over the third quarter of 2002, reflecting stronger sales of cellular terminals, data storage applications and industrial and power supplies, while sales of audio and car multimedia products decreased slightly. The Memory Products Group net revenues in the fourth quarter of 2002 were \$321 million, increasing 13.7% in comparison to the fourth quarter of 2001, and increasing 27.2% in comparison to the third quarter of 2002, reflecting significant progress in sales of Flash products, EEPROM and Smart card products. Net revenues for the Consumer and Microcontrollers Groups were \$271 million, increasing 27.7% compared to the fourth

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quarter of 2001 and sequentially 1.3% versus the third quarter of 2002, due to a strong increase in sales of our Set-Top Boxes, Microcontrollers, Display and TV and Imaging divisions, while sales of digital versatile disk or DVD products declined due to the seasonality of the market. Net revenues for the Discrete and Standard ICs Products Group were \$287 million, increasing 31.5% in the fourth quarter of 2002 over the fourth quarter of 2001 and 1.7% sequentially over the third quarter of 2002.

During the fourth quarter of 2002, net revenues from differentiated products totaled \$1,218 million, a 6.3% increase over the previous quarter, and accounted for 68.2% of fourth quarter 2002 revenues. In the fourth quarter 2001, differentiated products net revenues equaled \$1,012 million and accounted for 69.9% of our total fourth quarter 2001 net revenues.



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In the fourth quarter of 2002, we realized 29.1% of our net revenues in Europe, 13.9% in North America, 43.6% in Asia Pacific, 4.5% in Japan and 8.9% in Emerging Markets. All the major regions registered increases in revenues in the fourth quarter of 2002 versus the fourth quarter of 2001, except for North America, which registered a decrease due to unfavorable local economic environment. Emerging Markets revenues increased 32.3% in the fourth quarter of 2002 versus the fourth quarter of 2001, also due to the move of some customers' production facilities to low labor cost areas.

*Gross profit.* In the fourth quarter of 2002, gross profit was \$661 million, 43.8% above the corresponding period in the preceding year. Gross profit margin in the fourth quarter of 2002 was 37.0%, representing a significant increase compared to 31.7% in the fourth quarter of 2001. This increase was mainly due to higher sales volumes, higher utilization of our manufacturing facilities and improved manufacturing performances, which exceeded the negative impact of the drop in selling prices. In the fourth quarter of 2002, gross margin was equivalent to gross margin in the prior quarter despite an increase in net revenues. During the fourth quarter of 2002, our gross margin remained at the bottom of our expected 37-38% range, reflecting ongoing pricing pressure and higher sales of lower margin products.

*Selling, general and administrative expenses.* Selling, general and administrative expenses were \$184 million for the fourth quarter of 2002, 12.9% above the prior quarter's \$163 million, and 30.9% above the \$140 million incurred in the corresponding period in 2001. This increase in selling, general and administrative expenses was mainly associated with the increased volume of our activities. As a percentage of net revenues, selling general and administrative expenses increased only modestly, to 10.3% from 9.9% in the third quarter of 2002, and from 9.7% in the fourth quarter of 2001.

*Research and development expenses.* In the fourth quarter of 2002, research and development expenses were \$282 million, a 9.5% increase compared to the \$258 million costs incurred in the third quarter of 2002, and a 27.9% increase compared to the \$220.8 million costs incurred in the corresponding period in 2001, as a result of our continued commitment to reinforce our investment in our strategic and core programs. Research and development expenses represented 15.8% of net revenues in the fourth quarter of 2002 compared to 15.7% of net revenues in the third quarter of 2002 and 15.2% of net revenues in the fourth quarter of 2001.

*Other income and expenses.* Other income and expenses was \$19 million in the fourth quarter of 2002 compared to expenses of \$17 million in the fourth quarter of 2001. The improved balance was due to lower startup costs in the fourth quarter of 2002 and an increase in public funding received in connection with our research and development programs. In the fourth quarter of 2002, we included \$4 million for unused leases following the early adoption of FAS 146. Other income and expenses in the fourth quarter of 2002 also improved compared to the \$7 million in the third quarter of 2002 due to an increase in public fundings.

*Impairment, restructuring charges and other related closure costs.* In the fourth quarter of 2002, we recorded expenses of \$4 million mainly related to the closure of the Rancho Bernardo facility (USA). In the corresponding period of the preceding year, we recorded expenses of \$11 million related to the severance costs and retention bonuses for plant employees during the closure of the facilities in Ottawa (Canada), and Rancho Bernardo (USA).

*Operating income.* Operating income was \$210 million in the fourth quarter of 2002, compared to \$71 million in the fourth quarter of 2001, which represented approximately an increase of approximately 194% compared to the fourth quarter of 2001. This

increase was due primarily to the significant increase in our net revenues during the fourth quarter of 2002. Our operating income margin for the fourth quarter of 2002 was 11.7% compared to 4.8 % for the fourth quarter of 2001. Operating income within our Telecommunications, Peripherals and Automotive Groups was \$180 million in the fourth quarter of 2002, a 16% sequential increase over the third quarter of 2002 and a 54% increase compared to the fourth quarter of 2001. Operating income within our Discrete and Standard Product Groups was \$35 million in the fourth quarter of 2002, a sequential decrease of 13% compared to the third quarter of 2002, but with significant improvement compared to the \$3 million in operating income recorded in the fourth quarter of 2001. Operating income within our Consumer and Microcontrollers Groups was \$19 million, sequentially flat compared to the third quarter of 2002, but a strong recovery from the \$11 million loss recorded in the fourth quarter of 2001. Operating income within our Memory Products Groups was \$11 million in the fourth quarter of 2002, a significant improvement from the \$8 million loss recorded in the third quarter of 2002, but with a decline of 39% compared to the fourth quarter of 2001.

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*Income tax expense.* Provision for income tax was \$31 million in the fourth quarter of 2002 compared to \$9.3 million in the fourth quarter of 2001, primarily as a result of the increase in income before income taxes and minority interests. Our accrued effective tax rate remained practically unchanged from 16.8% in the fourth quarter of 2001 to 16.1% in the fourth quarter of 2002. Our tax rate is variable and depends on changes in the level of operating profits within various local jurisdictions and on changes in the applicable taxation rates of these jurisdictions. We currently enjoy certain tax benefits in some countries; as such benefits may not be available in the future due to changes in the local jurisdictions, our effective tax rate could increase in the coming years.

*Net income.* Net income for the fourth quarter of 2002 increased significantly to \$161 million, an increase of 256.9% compared to \$45 million in the fourth quarter of 2001, and 22.4% compared to \$131 million in the third quarter of 2002. This increase can be largely attributed to the increase in our net revenues. Diluted earnings per share increased to \$0.18 in the fourth quarter of 2002, an increase of 22.4% in the fourth quarter of 2001 and 20% from \$0.15 in the third quarter of 2002. All per share figures have been adjusted to reflect the 3-for-1 stock-split effected in May 2000.

**Impact of Changes in Exchange Rates**

Our results of operations and financial condition can be significantly affected by changes in exchange rates between the U.S. dollar and other currencies, particularly the euro, the Japanese yen and other Asian currencies.

As a market rule, the reference currency for the semiconductor industry is the U.S. dollar and the prices are mainly denominated in U.S. dollars. However, revenues for certain of our products (primarily dedicated products sold in Europe and Japan) that are quoted in currencies other than the U.S. dollar are directly affected by fluctuations in the value of the U.S. dollar. Revenues for all other products, which are either quoted in U.S. dollars and which are either billed in U.S. dollars or translated into local currencies for payment, tend not to be affected significantly by fluctuations in exchange rates except to the extent that there is a lag between changes in currency rates and adjustments in the local currency equivalent price paid for such products. Appreciation of the euro compared to the U.S. dollar can increase our level of revenues when reported in U.S. dollars.

Certain significant costs incurred by us, such as manufacturing labor costs and depreciation charges, selling, general and administrative expenses, and research and development expenses, are incurred in the currencies of jurisdictions in which our operations are located. Significant fluctuations in the value of these currencies, particularly the euro, compared to the U.S. dollar can affect our costs and therefore our profitability, principally because most of our manufacturing activities and operating expenses are concentrated in Europe.

Our principal strategies to reduce the risks associated with exchange rate fluctuations have been to balance as much as possible the proportion of sales to our customers denominated in U.S. dollars with the amount of purchases of raw materials and services from our suppliers denominated in U.S. dollars, thereby reducing the potential exchange rate impact for certain variable costs relative to revenues. However, there is no guarantee that we will be at any time capable of reaching this balance, and, consequently, our result of operations could be impacted by significant fluctuations in the exchange rates. In addition, in order to avoid potential exchange rate risks on our commercial transactions, from time to time, we may purchase or sell forward foreign currency exchange contracts and currency options to cover currency risk in payables or receivables. We have not experienced significant gains or losses as a result of exchange coverage activities. Our management strategies to reduce exchange rate risks

have served to mitigate, but not eliminate, the positive or negative impact of exchange rate fluctuations. Furthermore, the introduction of the euro as of January 1, 1999, has served to reduce the number of currencies whose exchange rate fluctuations versus the U.S. dollar may impact our results, thus making our exposure to exchange rate fluctuations more concentrated.

Assets and liabilities of subsidiaries are, for consolidation purposes, translated into U.S. dollars at the period-end exchange rate. Income and expenses are translated at the average exchange rate for the period. The balance sheet impact of such translation adjustments has been, and may be expected to be, significant from period to period. Adjustments resulting from the translation are recorded directly in shareholders' equity, and are shown as accumulated other comprehensive income (loss) in the consolidated statements of changes in shareholders' equity. At December 31, 2002, our outstanding indebtedness was denominated principally in U.S. dollars, euro, and to a limited extent Singapore dollars.

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**Liquidity and Capital Resources**

Treasury activities are regulated by our policies, which define procedures, objectives and controls. The policies focus on the management of our financial risk in terms of exposure to currency rates and interest rates. Our objectives are to neutralize our exposure to changes in exchange rates, to optimize the use of credit facilities and funds available, and to obtain the best possible market conditions for our financial and treasury operations. Our treasury controls include systematic reporting to senior management and are subject to internal audits. Most of our treasury activities are centralized, with any local treasury activities subject to oversight from our head treasury office. Basically all of our cash and cash equivalents are held in U.S. dollars and are placed with financial institutions rated A+ or higher. Marginal amounts are held in other currencies. Foreign currency operations and hedging transactions are performed only to cover commercial positions. From time to time, we may use cash on hand to purchase short-term financial instruments as part of our treasury management strategy. See Item 11. Quantitative and Qualitative Disclosures about Market Risk .

Our priority in 2002 has been to maintain a strong financial position during a period of economic uncertainties. Our operating cash flow position for the year 2002 increased significantly compared to 2001. We measure operating cash flow as net cash from operating activities less net cash used in investing activities. We have been able to reduce our negative net financial position compared to the end of 2001.

At December 31, 2002, cash, cash equivalents and marketable securities totaled \$2,564 million, compared to \$2,444 million at December 31, 2001, and \$2,331 million at December 31, 2000.

*Cash from operating activities.* The major sources of cash during 2002 and in prior years were cash provided by operating activities. Our net cash generated from operating activities totaled \$1,713 million in 2002 compared to \$2,057 million in 2001 and \$2,423 million in 2000.

Net cash from operating activities before changes in working capital increased from \$1,902 million in 2001 to \$1,958 million in 2002, due to the increase of net income. In 2001, net income from operating activities before changes in working capital decreased to \$1,902 million from \$2,588 million in 2000, mainly due to the significant decrease in net income.

Change in our working capital, current assets and current liabilities resulted in the net use of cash of \$245 million and \$145 million in 2002 and 2001, and \$165 million of net cash provided in 2000. This was mainly the result of an increase in accounts receivable and inventory balances at December 31, 2002. Accounts receivables increased from December 31, 2001, primarily due to higher levels of sales in the last quarter of 2002, while day sales outstanding slightly improved. The increases in account receivables included in 2002 \$50 million of receivables that will fall due in 2003 sold without recourse to financial institutions. At December 31, 2001, we also sold without recourse to financial institutions \$139 million of receivables that fell due in 2002. Inventory also increased at December 31, 2002, mostly because most of our wafer fabrication plants were operating at full capacity in 2002 while several plants were temporarily shut down at the end of 2001. Inventory of finished products also marginally increased as we rebuilt our inventory from relatively low levels. Inventory turns, based on cost of sales, improved in 2002 compared to 2001.

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*Cash used in investing activities.* Net cash used in investing activities was \$1,370 million in 2002 compared to \$1,801 million in 2001 and \$3,558 million in 2000. Major use of cash during 2002 and in prior years consisted primarily of capital spending for tangible assets.

Payment for purchases of tangible assets was \$995 million in 2002, decreasing significantly from \$1,700 million in 2001; in 2000, such payments accounted for \$3,328 million. Capital expenditures for 2002 were principally allocated to:

- the upgrading of our 200mm wafer fabrication facility and the completion of the shell building and facilities for our advanced 300mm front-end plant which we will operate in partnership with Philips Semiconductors International B.V. and Motorola Inc. in Crolles (France)
- the upgrading of our 200mm front-end plant in Agrate (Italy)
- the capacity expansion of our 200mm front-end facility in Catania (Italy)

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- the construction of the building for our 300mm front-end facility in Catania (Italy)
- the expansion of our 200mm and 150mm front-end facilities in Singapore
- the expansion of our 200mm front-end facility in Rousset (France) and
- some limited expansions of our back-end facilities in Muar (Malaysia) and Malta.

Capital expenditures for 2001 were devoted principally to:

- the expansion of our 200mm facility in Catania (Italy)
- the completion of construction of our new 200mm front-end wafer fabrication facility in Singapore
- the upgrading of our 200mm front-end plant in Agrate (Italy)
- the upgrading of our 200mm front-end plants in Crolles and in Rousset (France) and
- some limited expansion of the back-end facilities in Muar (Malaysia) and Bouskoura (Morocco)

Major capital expenditures in 2000 were associated with the expansion of our manufacturing facilities with our two new 200mm wafer fabrication plants in Italy and Singapore and a new back-end facility, and the upgrading of our other existing facilities.

In 2002, we also paid \$307 million in cash for the acquisition of Alcatel Microelectronics and \$69 million principally for the acquisitions of licenses and technologies. In 2001, we paid \$132 million in cash for other investing activities; including the acquisition of Ravisent for approximately \$56 million and Veridicom for approximately \$4 million. In 2001, we also paid approximately \$15 million for the formation of SuperH Inc., a joint venture with Hitachi, Ltd. In 2000 we used \$241 million in cash for other investing activities, which included the acquisition from Nortel Networks of its semiconductor business for approximately \$60 million. In 2000, we also acquired Portland Group Inc., for approximately \$18 million, and Wafer Scale Integration, Inc. for approximately \$78 million.

*Cash from financing activities.* Net cash used in financing activities was \$232 million in 2002, \$98 million in 2001; whereas net cash provided by financing activities was \$1,616 million in 2000.

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During 2002, long-term debt repayment, net of proceeds from issuance, was \$93 million. In 2002, we repurchased 4,000,000 shares of our common stock totaling \$115 million to fund the latest stock options plan and paid cash dividends of \$36 million. Capital increases relating to the employee stock purchase plan and options exercised provided cash of \$29 million.

During 2001, the proceeds from issuance of long-term debt, net of repayment, were \$123 million. During 2001, we paid cash dividends of \$36 million and repurchased 9,400,000 shares of our common stock totaling \$233 million to fund the latest stock option plan. We also received cash of \$44 million relating to the employee stock purchase plan and options exercised.

During 2000, we issued Zero Coupon Senior Convertible Notes due 2010 that generated \$1,458 million. We also paid cash dividends of \$27 million and received cash of \$35 million relating to the employee stock purchase plan and options exercised.

*Net financial position.* Significant amounts of net cash generated from operating activities in 2000, 2001 and 2002, coupled with the convertible bond offering undertaken by us in November 2000 (\$1,458 million in net proceeds), and the equity and convertible bond offerings in September 1999 (\$217 million and \$708 million in net proceeds, respectively), enabled us to finance capital expenditures and further strengthen our balance sheet during the period.

We had a negative net financial position (calculated as cash, cash equivalents and marketable securities net of total debt) of \$398 million at December 31, 2002, compared to a negative net financial position of \$457 million at December 31, 2001, and a favorable net financial position of \$511 million at December 31, 2000.



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As of December 31, 2002, the aggregate amount of our long-term debt was approximately \$2,797 million, of which \$780 million consisted of zero-coupon convertible Liquid Yield Option Notes (LYONs) due 2009 (the 2009 convertible bonds ) and \$1,601 million of Zero Coupon Senior Convertible Notes due 2010 (the 2010 convertible bonds ). At December 31, 2002, we had approximately \$146 million of long-term indebtedness that will become due within one year and we expect to fund such debt repayments from available cash.

As of December 31, 2002:, debt payments due by period and based on the assumption that convertible debt redemptions are at maturity, are as follows

	<u>Total</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>thereafter</u>
Long-term debt	2,943	146	131	108	106	33	2,419

During 2002, certain holders of our 1999 convertible bonds requested conversion of the LYONs into our common shares. The converted amount was negligible. During the second quarter of 2001, we issued a redemption notice for the 1998 LYONs for a conversion into common shares and all the residual 1998 LYONs were converted.

Pursuant to the terms of the 2009 convertible bonds, we have agreed to purchase, at the option of the holder of a 2009 convertible bond, any outstanding 2009 convertible bond on September 22, 2004 for which a written purchase notice may be delivered by the holder, subject to certain conditions. The purchase price for a 2009 convertible bond will be \$885.91 per \$1,000 principal amount at maturity, which is equal to the issue price plus accrued original issue discount to the purchase date. We may, at our option, elect to pay the purchase price in cash or common shares, or any combination thereof.

Pursuant to the terms of the 2010 convertible bonds, we have agreed to purchase for cash, at the option of the holder of a 2010 convertible bond, any outstanding 2010 convertible bond on January 17, 2005 for which a written purchase notice may be delivered by the holder, subject to certain additional conditions. The purchase price for a convertible bond will be \$805.15 per \$1,000 principal amount at maturity in cash.

On March 6, 2003, we repurchased approximately \$429 million of the aggregate principal amount at maturity of our 2010 convertible bonds, representing nearly 20% of the total outstanding issue, for a total amount paid of approximately \$328 million. The repurchased 2010 convertible bonds will be cancelled. From time to time, we may proceed with future repurchases of our 2010 convertible bonds in accordance with applicable laws, regulations and stock exchange requirements. In the event the 2009 and 2010 convertible bonds were put back to us, the amounts payable would be \$813 million on September 22, 2004 (in cash or shares at our option) and \$1,383 million on January 17, 2005 (in cash) respectively.

As of the end of 2002, we had the following credit ratings on our remaining convertible debt:

	<u>Moody's Investors Services</u>	<u>Standard &amp; Poor's</u>
LYONs due 2009	Baa1	BBB+
Convertible bonds due 2010	A3	A-

In the event of a downgrade of these ratings, we believe we could continue to have access to sufficient liquidity.

*Commitments and contingencies.* Our commitments as of December 31, 2002 were as follows:

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	Payments due by period						
	Total	2003	2004	2005	2006	2007	thereafter
	(in millions of U.S.\$)						
Operating leases(1)	(173)	(30)	(25)	(22)	(14)	(17)	(60)
Purchase commitments(2)	(681)	(681)					
Contingent obligations(3)	(19)	(19)					
	<b>(873)</b>	<b>(750)</b>	<b>(25)</b>	<b>(22)</b>	<b>(14)</b>	<b>(17)</b>	<b>(60)</b>

- (1) Operating leases are mainly related to building leases.
- (2) Purchase obligations include primarily commitments for the purchase of equipment, purchase contracts for outsourced foundry wafers and for the purchase of software licenses.
- (3) Contingent obligations related to additional contractual amounts which could be paid for the manufacturing facility in Ottawa, Canada, acquired from Nortel Networks and for the joint venture with Hitachi, Ltd.

***Contractual obligations***

	As of December 31, 2002
	(in millions of U.S.\$)
Capital lease	32
Minimum payments for future leases (from 2003 to 2007)	173
Equipment purchases	346
Foundry purchases	168
License fees	167
Capital increase or share purchases(1)	19
Subsidiary guarantees	281
<b>Total</b>	<b>1,186</b>

(1) Includes capital increases or repurchases, subject to certain conditions, in agreements with DNP Photmask Europe S.p.A., Tioga Technologies Ltd and Tecdis.

*Financial outlook.* We currently expect that capital spending for 2003 will be in the range of \$1 billion, equivalent to 2002, although we have the ability to adjust that amount up or down in response to the changes in market conditions. As of December 31, 2002, we had \$346 million in outstanding commitments for purchases of equipment. We expect difficult market conditions to persist during the first half of 2003. As a consequence, we do not plan massive investments for capacity expansion, but rather we have elected to focus on selected key projects. The most significant of our 2003 capital expenditure projects are expected to be (i) the completion of the first phase of the joint project with Philips Semiconductors International B.V. and Motorola towards the start-up of the 300mm pilot line in Crolles (France); (ii) the upgrading of the 200mm front-end facility in Agrate (Italy); (iii) the expansion of our

200 and 150mm front-end facilities in Singapore; (iv) the construction of the building for our 300mm wafer volume manufacturing fabrication facility in Catania (Italy); (v) the expansion of the 200mm front-end plant in Rousset (France); and (vi) increases in back-end capacity in Malaysia, Singapore, Morocco, Malta and Shenzhen. We will continue to monitor our level of capital spending, however, taking into consideration factors such as trends in the semiconductor market, capacity utilization and announced additions.

We expect to have significant capital requirements in the coming years and intend to continue to devote a substantial portion of our net revenues to research and development. We plan to fund our capital requirements from cash from operations, available funds and available support from third parties (including state support), and may make recourse to borrowings under available credit lines and, to the extent necessary or attractive based on market conditions prevailing at the time, the sale of debt or additional equity securities. A substantial deterioration of our economic results and consequently of our profitability could generate a deterioration of the cash generated by our operating activities. Therefore, there can be no assurance that, in future periods, we will generate the same level of cash as in the previous years to fund our capital expenditures for expansion plans, our working capital requirements, research and development and industrialization costs.

In addition, pursuant to the terms of the 2009 and 2010 convertible bonds, we have agreed to purchase, at the option of the holder, any outstanding 2009 convertible bond for cash or shares on September 22, 2004 and any outstanding 2010 convertible bond for cash on January 17, 2005. At December 31, 2002, the amount of our long-term debt consisting of 2009 convertible bonds was \$780 million and of 2010 convertible bonds was \$1,601 million. On March 6, 2003, we repurchased approximately \$429 million of the aggregate principal amount at maturity of our 2010 convertible bonds, representing nearly 20% of the total outstanding issue, for a total amount of approximately \$328 million.

There can be no assurance that additional financing will be available as necessary, or that any such financing, if available, will be on terms acceptable to us.

However, we believe that our cash generated from operations, existing funds, available support from third parties, and additional borrowings will be sufficient to meet our anticipated needs for liquidity through at least 2003.

#### **Recent Issued U.S. Accounting Standards**

In July 2001, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 141, *Business Combinations* (FAS 141), which is applicable for all business combinations initiated after June 30, 2001. This statement eliminates the use of the pooling-of-interests method and provides specific

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criteria for the recognition of intangible assets apart from goodwill. In the second half of 2001, we did not enter into any combination which would require the application of FAS 141. During 2002, we acquired Alcatel Microelectronics and applied the concepts of FAS 141. This acquisition is further described in Note 4.

In July 2001, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 142, *Goodwill and Other Intangible Assets* ( FAS 142 ), which is effective for fiscal years beginning after December 15, 2001. FAS 142 primarily addresses the accounting that must be applied to goodwill and intangible assets subsequent to initial recognition. In particular, the statement requires that goodwill and indefinite lived intangible assets no longer be amortized but be subject to annual impairment tests to determine the appropriate carrying value. Had FAS 142 not been adopted, we would have recorded an additional amortization expense of \$28 million during 2002. FAS 142 also requires the reclassification of any intangible assets which do not meet the FAS 141 definition of an identifiable intangible asset. The statement requires all unidentifiable intangible assets to be reclassified to goodwill. We adopted the standards required by this statement in the first quarter of 2002. In connection with the adoption of FAS 142, we reclassified \$3 million of our intangible assets for acquired workforce to goodwill.

In the first quarter of 2002, we performed the transitional impairment review required by FAS 142 and determined that no adjustment for impairment loss was required as a result of adopting the standard. In the fourth quarter of 2002, we performed the yearly impairment review required by FAS 142, which did not require any adjustment for impairment loss. There can be no assurance that future goodwill impairment tests will not result in a charge to earnings.

The following table presents the impact of FAS 142 on net income and earnings per share ( EPS ) had the standard been in effect for the year ended December 31:

	December 31, 2000	December 31, 2001	December 31, 2002
	(in millions of U.S.\$, except per share amounts)		
Net income as reported	1,452	257	429
Adjustments:			
Amortization of goodwill	24	26	
Amortization of acquired workforce previously classified as intangible assets	1	2	
Income tax effects	(2)	(1)	
Net income as adjusted	1,475	284	429
Basic EPS as reported	1.64	0.29	0.48
Basic EPS as adjusted	1.67	0.32	0.48
Diluted EPS as reported	1.58	0.29	0.48
Diluted EPS as adjusted	1.61	0.32	0.48

In August 2001, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets* ( FAS 144 ). This statement retains the requirements of FAS 121 to recognize an impairment loss only if the carrying amount of a long-lived asset is not recoverable from its undiscounted cash flows. We adopted FAS 144 during the first quarter of 2002 and determined that the standard has had no material effect on our financial position, or results of operations at December 31, 2002.



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In July 2002, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 146, Accounting for Costs Associated with Exit or Disposal Activities ( FAS 146 ), which is effective for exit or disposal activities that are initiated after December 31, 2002, with early application encouraged. FAS 146 addresses the recognition, measurement, and reporting of costs associated with exit and disposal activities, including restructuring activities, and nullifies the guidance in Emerging Issues Task Force Issue 94-3 (EITF 94-3) Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring). FAS 146 applies to costs associated with an exit activity that does not involve an entity newly acquired in a business combination or with a disposal activity covered by FAS 144. Those costs include, but are not limited to, the following: one-time termination benefits provided to current employees, costs to terminate a contract that is not a capital lease, costs to consolidate facilities or relocate employees. FAS 146 differs from EITF 94-3 because of the requirement to recognize the fair value of a liability for costs associated with an exit or disposal activity when the liability is incurred; whereas under EITF 94-3, a liability for an exit cost is recognized at the date of an entity's commitment to an exit plan. FAS 146 states that an entity's commitment to a plan, by itself, does not create a permanent obligation to others that meets the definition of a liability. We adopted FAS 146 before its effective date in the third quarter of 2002, and management believes that FAS 146 has had no material effect on our financial position, or results of operations at December 31, 2002.

In November 2002, the Financial Accounting Standards Board issued FASB Interpretation No. 45, Guarantor's Accounting and Disclosure Requirements for Guarantees Including Indirect Guarantees of Indebtedness of Others, an Interpretation of FASB Statement No. 5, 57, and 107 and Rescission of FASB Interpretation No. 34 ( FIN 45 ). FIN 45 clarifies the requirements of FASB Statement No.5, Accounting for Contingencies, relating to the guarantor's accounting for, and disclosure of, the issuance of certain types of guarantees. FIN 45 clarifies that a guarantor is required to recognize a liability for the fair value of the obligation under taken at the inception of the guarantee. The disclosure requirements of this interpretation are effective for interim or annual financial statement periods ending after December 15, 2002. The initial measurement provisions are effective prospectively for all guarantees subject to this interpretation that are issued or modified after December 31, 2002.

In December 2002, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 148, Accounting for Stock-Based Compensation Transition and Disclosure an amendment of FASB Statement No. 123 ( FAS 148 ). This statement provides alternative transition methods for voluntary changes to the fair value based method of accounting for stock-based employee compensation and amends the disclosure requirement of Statement 123 for annual and interim financial statements. Under the statement, the interim required disclosures will be significantly similar to the annual disclosures. The transitional provisions and annual disclosure requirements are effective for financial statements for fiscal years ending after December 15, 2002. We incorporated the required disclosures in our Consolidated Financial Statements.

In January 17, 2003, the Financial Accounting Standards Board issued Interpretation of Financial Accounting Standards No. 46, Consolidation of Variable Interest Entities, an Interpretation of ARB No. 51 ( FIN 46 ). The primary objective of FIN 46 is to provide guidance on the identification of, and financial reporting for, entities over which control is achieved through means other than voting rights; such entities are known as Variable Interest Entities ( VIEs ). An entity is considered a VIE if any of the following factors are present: the equity investment in the entity is insufficient to finance the operations of that entity without additional subordinated financial support from other parties; the equity investors of the entity lack decision-making rights; an equity investor holds voting rights that are disproportionately low in relation to the actual economics of the investor's relationship with the entity and substantially all of the entity's activities involve or are conducted on behalf of that investor; other parties protect the equity investors from expected losses; or parties, other than the equity holders, hold the right to receive the entity's expected residual returns, or the equity investors' rights to expect residual returns is capped. FIN 46 requires existing unconsolidated VIEs to be consolidated by their primary beneficiaries if the entities do not effectively disperse risk among the parties involved. The primary beneficiary of a VIE is the party that absorbs the majority of the entity's expected losses, receives the majority of its expected residual returns, or both as a result of holding variable interests. Assets, liabilities, and non-controlling interest of newly consolidated VIEs generally will be initially measured at their fair values with any resulting loss reported immediately as an extraordinary item or resulting gain as a reduction of the amounts assigned to assets in the same manner as if the consolidation resulted from a business combination. The

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provisions of FIN 46 are effective by June 15, 2003 for VIEs created prior to February 1, 2003. For VIEs created after January 31, 2003, the provisions are immediately effective. Transitional disclosures are required for all financial statements issued after January 31, 2003. We have adopted FIN 46 and identified the following possible VIEs under the existing contracts:



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- the agreement with Philips Semiconductors International B.V. and Motorola to build and operate a 300mm pilot line in Crolles (France), where the partners will contribute to capital expenditure and share related expenses;
- a new joint venture established with Dai Nippon for the development and production of photomask, in which we have a 19% ownership and have committed to contribute certain future capital increases so as not to reduce our equity ownership;
- the joint venture in Super H with Hitachi where we own 44% and have commitments for future capital increases; and
- Tioga on which we have at December 31, 2002 an option to buy their assets. The option has been exercised during January 2003 and will become effective during second quarter 2003 for a cost of \$12 million.

For all these possible VIEs, we estimate that there are no material exposures to loss that could impact our results of operations and our financial position.

**Business combinations**

In the first quarter of 2002, we purchased Alcatel Business Systems to acquire certain assets dedicated to custom application specific integrated circuits (ASICs) activities in the mobile phone market; the agreement also included the transfer from Alcatel Business Systems to us of a dedicated development team. The purchase price was approximately \$1 million.

On June 26, 2002, we completed the acquisition of Alcatel Microelectronics, a company of Alcatel Group which manufactures and markets semiconductor integrated circuits. Concurrently, we sold the acquired mixed-signal business activities of Alcatel Microelectronics and also its fabrication facility to AMI Semiconductors, Inc. The consideration for the purchase of Alcatel Microelectronics, net of the proceeds of \$61 million from the resale to AMI Semiconductors, was \$306 million, which was fully paid as of December 31, 2002. The acquisition was conducted to further develop our strategic relationships with the Alcatel Group. Purchase price allocations resulted in the recording of intangible assets of \$111 million for core technologies, \$58 million for a supply contract signed with the Alcatel Group and \$92 million as goodwill. The core technologies and supply contract have average useful lives of four years. We also recorded a charge of \$8 million in the second quarter of 2002 for in-process research and development as certain of the acquired technologies had not reached technological feasibility and had no other alternative future use. The purchase price allocation is based on a third party independent appraisal and makes reference to the future business assumptions made by us, based on management's best knowledge of the acquired company and the industry. Such assumptions may be revised as management acquires further knowledge of the acquired company, which could result in revisions to the purchase price allocation within one year of the acquisition.

The pro forma information below assumes that Alcatel Microelectronics, acquired in June 2002, had been acquired at the beginning of 2001. The results related to mixed-signal business sold to AMI Semiconductors, Inc. have been excluded in the pro forma information below; restructuring costs of \$56 million incurred in 2001 by Alcatel Microelectronics have been included. The impact of the \$8 million charge for in-process research and development has been excluded. Such information is presented by management based on its best knowledge of the acquired company. This is presented for informational purposes only and is not necessarily

indicative of the results of future operations or results that would have been achieved had the acquisitions taken place as of the beginning of 2001.

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	Year ended	Year ended
	December 31, 2001	December 31, 2002
	(unaudited)	(unaudited)
	(in millions of U.S.\$, except per share amounts)	
Net revenues	6,545	6,353
Gross profit	2,383	2,309
Operating expenses	(2,092)	(1,717)
Operating profit	291	592
Net income	208	418
Earnings per share (basic)	0.23	0.47
Earnings per share (diluted)	0.23	0.47

**As reported statement of income**

	Year ended	Year ended
	December 31, 2001	December 31, 2002
	(unaudited)	(unaudited)
	(in millions of U.S.\$)	
Net revenues	6,357	6,318
Gross profit	2,310	2,298
Operating expenses	(1,971)	(1,697)
Operating profit	339	601
Net income	257	429
Earnings per share (basic)	0.29	0.48
Earnings per share (diluted)	0.29	0.48

**Impairment, Restructuring and Other Related Closure Costs**

In the second quarter of 2001, we recorded an impairment charge of \$296. This charge included impairment losses of (i) \$177 million associated with tangible assets at our fabrication sites; (ii) \$100 million (net of \$3 million tax benefit) related to purchased technologies and goodwill on previous acquisitions; and (iii) \$22 million for financial assets with an other than temporary decline in value. This impairment charge resulted from a significant deterioration in the business climate in the semiconductor industry. Due to these market changes, we revised our production forecasts and foresaw an underutilization of the capacities of certain 150mm fabrication facilities. The fair value for tangible and intangible assets was determined using the discounted expected future cash flows model. Quoted market values were used in determining the fair value of financial assets. Additionally, in the second quarter of

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2001, we recorded restructuring charges of \$15 million relating to the closure of its facility in Ottawa, Canada. These restructuring charges related to the severance of plant personnel and were paid in 2001.

In the third quarter of 2001, we recorded an impairment charge of \$23 million relating to the building and facilities of its Rancho Bernardo, California, 150mm fabrication plant; this impairment charge was based on quoted market value and resulted from management's decision to close the plant by April 2002. The closing was completed in line with the plan. In the fourth quarter of 2001, we recorded expenses of \$11 million related to severance costs and retention bonuses for plant employees during the closure of the facilities in Ottawa, Canada, and Rancho Bernardo, California.

In 2002, we recorded expenses of \$34 million including (i) \$26 million relating to decommissioning costs, retention bonuses and contract obligations incurred during the closure of our facilities in Ottawa, Canada, and Rancho Bernardo, California; (ii) \$7 million impairment charges for long term investments; and (iii) \$1 million for employee severance costs of our graphics division. All closing costs have been paid as of December 31, 2002.

### **Equity in Loss of Joint Venture**

During the third quarter of 2001, we formed a joint venture, SuperH, Inc., with Hitachi Ltd. to develop and license RISC microprocessors. We have accounted for our 44% share in SuperH, Inc. under the equity method and it has been included on our balance sheet under investments and other non-current assets.

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At December 31, 2001, our investment totaled \$10 million. During the second quarter of 2002, we contributed \$4 million in cash as a capital increase to SuperH; our 44% share in SuperH, Inc. remained unchanged. We recorded a charge of \$11 million in the first nine months of 2002 and after assessing the fair value of our investment, we recorded an impairment charge of \$3 million for the remaining investment value and \$3 million for future capital increases. In addition, we recorded an additional \$1 million charge in the fourth quarter of 2002 for future capital increases. At December 31, 2002, our investment after impairment was recorded at zero value for our share in this joint venture.

**Backlog and Customers**

Our backlog decreased steadily in 2001 from the levels of 2000 reflecting the industry downturn. Our backlog increased in 2002 in line with the progressive recovery of the semiconductor industry, driven mainly by increased sales volumes that are partially offset by low selling prices. Our new order booking rate (including new frame orders) was particularly strong in the first part of 2002, and was coupled with a cycle of inventory replenishment by the electronic industry that followed a significant reduction in demand in 2001. During the fourth quarter of 2002, bookings increased again compared to the third quarter of 2002. At December 31, 2002, our backlog in the first quarter of 2003 was higher than in the first quarter of 2002 at December 31, 2001. We are entering 2003 with a backlog (including frame orders) approximately 30% higher than we had entering 2002. In difficult market conditions, customers tend to order products for immediate delivery, which leads us to build up inventory of key products in anticipation of orders and lowers our backlog.

In 2002, we had several large customers, with the Nokia group of companies being the largest and accounting for 17.6% of our revenues. Total original equipment manufacturers ( OEMs ) accounted for approximately 83% of our net revenues, of which the top ten customers accounted for 49%. Distributors accounted for 16% of our net revenues. We have no assurance that the Nokia group of companies, or any other customer, will continue to generate revenues for us at the same levels. If we were to lose one or more of our key customers, or if they were to significantly reduce their bookings, or fail to meet their payment obligations, our operating results and financial condition could be adversely affected.

**Contractual obligations**

	<b>As of December 31, 2002</b>
	<b>(in millions of U.S.\$)</b>
Capital lease	32
Minimum payments for future leases (from 2003 to 2007)	173
Equipment purchases	346
Foundry purchases	168
License fees	167
Capital increase or share repurchases(1)	19
Subsidiary guarantees	281
<b>Total</b>	<b>1,186</b>

(1)

Includes capital increases or repurchases, subject to certain conditions, in agreements with DNP Photmask Europe S.p.A., Tioga Technologies Ltd and Tecdis.

**Item 6. *Directors, Senior Management and Employees***

**Directors and Senior Management**

***Supervisory Board***

Our management is entrusted to the Managing Board under the supervision of the Supervisory Board. The Supervisory Board advises the Managing Board and is responsible for supervising the policies pursued by the Managing Board and the general course of our affairs and business. In fulfilling their duties under Dutch law, the members of the Supervisory Board must serve our interests and business.

The Supervisory Board consists of such number of members as is resolved by the general meeting of shareholders upon proposal of the Supervisory Board, with a minimum of six members. The members of the Supervisory Board are appointed upon proposal of the Supervisory Board by the general shareholders' meeting by a majority of the votes cast at a meeting where at least one-third of the outstanding share capital is present or represented.

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Pursuant to the terms of the various shareholders agreements of our principal indirect shareholder, ST Holding, effective through March 2004, the membership of our Supervisory Board must include three members designated by the French shareholders from the Board of Directors of FT1CI (a corporation jointly owned by Areva Group and France Telecom), and three members designated by the Italian shareholder. The French shareholders designated Messrs. Noblanc, Dullieux and Gavois. The Italian shareholders designated Messrs. Steve, Gallo and Ovi. See Item 7. Major Shareholders and Related Party Transactions Shareholders Agreements. None of the remaining members of our Supervisory Board, Messrs. De Waard, Dunn or White, were selected pursuant to any shareholder agreement or other arrangement. According to Dutch law, all members of our Supervisory Board, however originally selected, are required to act independently in the supervision of our management.

The members of the Supervisory Board appoint a Chairman and Vice-Chairman of the Supervisory Board from among the members of the Supervisory Board (with approval of at least three-quarters of the members of the Supervisory Board). Resolutions of the Supervisory Board require the approval of at least three-quarters of its members. The Supervisory Board must meet upon request by two or more of its members or by the Managing Board. The Supervisory Board has established procedures for the preparation of Supervisory Board resolutions and the calendar for Supervisory Board meetings. The Supervisory Board meets at least once a quarter to approve our quarterly and annual accounts and their release. Furthermore, the Supervisory Board has adopted internal regulations to clarify the manner by which it carries out the supervisory duties imposed upon it by law, our Articles of Association and resolutions of the shareholders and the Supervisory Board itself. By such resolution the Supervisory Board has authorized (i) the establishment of a secretariat (headed by an individual approved by it and appointed for a one-year renewable term) whose functions are to: (a) assist the Chairman and Vice-Chairman of the Supervisory Board in the operations of the Board, (b) implement and oversee the execution within our company of decisions adopted by the Supervisory Board, and (c) cooperate in and contribute to the execution of the functions of the designated Secretary and Assistant Secretary of the Supervisory Board; (ii) (a) the possibility for the Supervisory Board members to appoint assistants and (b) the appointment by the Supervisory Board of two controllers to exercise operational and financial control over our operations who, with assistants appointed by the Supervisory Board, will also review operation reports and the implementation of Supervisory Board decisions; and (iii) the establishment by the Supervisory Board of advisory committees.

There is no longer a mandatory retirement age for members of our Supervisory Board. Members of the Supervisory Board may be suspended or dismissed by the general meeting of shareholders. The Supervisory Board may make a proposal to the general meeting of shareholders for the suspension or dismissal of one or more of its members. The members of the Supervisory Board may receive compensation if authorized by the general meeting of shareholders.

The shareholders agreement between the group of French shareholders and the Italian shareholder, as shareholders of ST Holding, also includes certain provisions requiring the approval of the Supervisory Board of ST Holding for certain actions by ST Holding, us and our subsidiaries. In addition, pursuant to the shareholders agreement among the group of French shareholders and a decree issued by certain Ministries of The Republic of France, the approval by members of the Supervisory Board appointed by the French shareholders of certain actions to be taken by us or our subsidiaries requires the approval of the Board of Directors of FT1CI and is subject to a veto by certain Ministries of The Republic of France. These requirements for the prior approval of various actions to be taken by us and our subsidiaries may give rise to a conflict of interest between our interests and the individual shareholders approving such actions, and may result in a delay in the ability of the Managing Board to respond as quickly as may be necessary in the rapidly changing environment of the semiconductor industry. Such approval process is subject to the provisions of Dutch law requiring members of the Supervisory Board to act independently in the supervision of our management.

Following the renewal of all Supervisory Board members by our annual shareholders meeting held in Amsterdam on March 27, 2002, details of our Supervisory Board members are set forth below:





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<b>Name</b>	<b>Position</b>	<b>Year Appointed(1)</b>	<b>Term Expires</b>	<b>Age</b>
Bruno Steve	Chairman	1989	2005	61
Jean-Pierre Noblanc	Vice-Chairman	1994	2005	64
Tom de Waard	Member	1998	2005	56
Rémy Dullieux	Member	1993	2005	52
Douglas Dunn	Member	2001	2005	59
Riccardo Gallo	Member	1997	2005	59
Francis Gavois	Member	1998	2005	67
Alessandro Ovi	Member	1994	2005	59
Robert M. White	Member	1996	2005	64

(1) As a member of the Supervisory Board

Bruno Steve has been a member of our Supervisory Board since 1989 and Chairman since March 27, 2002. He served as Vice-Chairman of the Supervisory Board from 1989 to July 1990 and from May 1999 through March 2002. From July 1990 to March 1993 and from June 1996 until May 1999, Mr. Steve also served as Chairman of our Supervisory Board. He has been with Istituto per la Ricostruzione Industriale IRI S.p.A. ( I.R.I. ), a former shareholder of Finmeccanica, Finmeccanica and other affiliates of I.R.I. in various senior positions for over 17 years. Mr. Steve is currently President of the board of statutory auditors of Alitalia S.p.a., Atitech S.p.A. and Alitalia Airport S.p.A. Until December 1999, he served as Chairman of MEI. He served as the Chief Operating Officer of Finmeccanica from 1988 to July 1997 and Chief Executive Officer from May 1995 to July 1997. He was Senior Vice President of Planning, Finance and Control of I.R.I. from 1984 to 1988. Prior to 1984, Mr. Steve served in several key executive positions at Telecom Italia, I.R.I.'s holding company for the telecommunications sector. He is also a professor at LUISS Guido Carli University in Rome.

Jean-Pierre Noblanc is Vice-Chairman of our Supervisory Board. Mr. Noblanc was the Chairman of the Supervisory Board from April 1994 to June 1996, and from May 1999 until March 2002, and has been a member of the Supervisory Board since 1994. He served as Vice-Chairman of the Supervisory Board from June 1996 to May 1999. Mr. Noblanc is presently Advisor to the CEO for the Components Sector of Areva Group (formerly known as CEA Industrie). Prior to joining Areva Group, Mr. Noblanc served at CNET, the Research Center of France Telecom, as Director of the Applied Research Center of Bagnoux and of the Microelectronics Center of Grenoble. Mr. Noblanc holds a degree in engineering from the Ecole Supérieure d'Electricité and a doctoral degree in physical sciences from the University of Paris. Mr. Noblanc is a Member of the French Academy of Technology and serves on the Board of Directors of FT1CI and Picogiga S.A. He is also the Chairman of the Board of MEDEA+, an industry research and development program on microelectronics belonging to the EUREKA organization.

Tom de Waard was appointed to the Supervisory Board in 1998. Mr. de Waard was appointed chairman of the Audit Committee by the Supervisory Board in 1999. Mr. de Waard has been a partner of Clifford Chance, a leading international law firm since March 2000 and has been the Managing Partner of Clifford Chance Amsterdam office since May 1, 2002. Prior to that, he was a partner at Stibbe, where he held several positions since 1971 and gained extensive experience working with major international companies, particularly with respect to corporate finance. He is a member of the Amsterdam bar and was President of the Netherlands Bar Association from 1993 through 1995. He received his law degree from Leiden University in 1971. Mr. De Waard is a member of the Supervisory Board of BEST N.V..

Rémy Dullieux has been a member of the Supervisory Board since 1993. Mr. Dullieux was chairman of the Audit Committee from 1996 to 1999. He is a graduate of the Ecole Polytechnique. Since June 1996, Mr. Dullieux has served as a France Telecom Executive Manager for the Northern and Eastern areas of France. From 1991 to June 1996, Mr. Dullieux served as Group

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Executive Vice President for Strategic Procurement and Development of France Télécom. From 1985 to 1988, Mr. Dullieux served as Regional Manager of Créteil. Mr Dullieux also serves on the Board of Directors of FT1CI.

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Douglas Dunn was appointed to the Supervisory Board in 2001. He is President and Chief Executive Officer of ASM Lithography Holding N.V. Mr. Dunn currently serves on the Board of Directors of ARM plc and Sendo plc, both UK companies. Mr. Dunn also serves on the Board of MEDEA+. He was a member of the Managing Board of Royal Philips Electronics in 1998. From 1996 to 1998 he was Chairman and Chief Executive Officer of Philips Consumer Electronics and from 1993 to 1996 Chairman and Chief Executive Officer of Philips Semiconductors. From 1980 to 1993 he held various positions at Plessey Semiconductors. Prior to 1980, Mr. Dunn served in executive positions at Motorola Semiconductors.

Riccardo Gallo was appointed to the Supervisory Board in 1997. He is Associate Professor of Industrial Economics at the Engineering Faculty of La Sapienza University in Rome. He has also been a member of the board of directors of Comitato Sir from 1981 until the present. From 1982 to 1991, he served as Director General at the Italian Ministry of the National Budget. In the early 1990s, he served as Vice-Chairman of I.R.I. In 1994, he was appointed by the Italian Minister of Industry as Extraordinary Commissioner of Fidia, a research-oriented pharmaceutical company. Mr. Gallo resigned from ST Holding.

Francis Gavois was appointed to the Supervisory Board in 1998. Mr. Gavois is the Chairman of the Supervisory Board of ODDO et Cie. He is also a member of the Boards of Directors of Plastic Omnium and FT1CI and of the Supervisory Board of the Consortium de Réalisation (CDR). From 1984 to 1997, Mr. Gavois held several positions, including Chairman of the Board of Directors and Chief Executive Officer of Banque Française du Commerce Extérieur (BFCE). Prior to that time Mr. Gavois held positions in the French government. He is *Inspecteur des Finances* and a graduate of the Institut d Etudes Politiques de Paris and the Ecole Nationale d Administration.

Alessandro Ovi has been a member of the Supervisory Board since 1994. He received a doctoral degree in Nuclear Engineering from the Politecnico in Milan and a masters degree in operations research from Massachusetts Institute of Technology. He currently is Special Advisor to the President of the European Community and serves on the boards of Seat S.p.A., Carnegie Mellon University, N.W. Fund (Capital Group, E.U.P.A.C. (Capital Group) and Corporation Development Committee of the Massachusetts Institute of Technology. Until April 2000, Mr. Ovi was the Chief Executive Officer of Tecnitel S.p.A., a subsidiary of Telecom Italia Group. Prior to joining Tecnitel S.p.A., Mr. Ovi was the Senior Vice President of International Affairs and Communications at I.R.I.

Robert M. White was appointed to the Supervisory Board in June 1996. Mr. White is a University Professor and Director of the Data Storage Systems Center at Carnegie Mellon University and serves as a member of several corporate boards, including those of Read-Rite, Inc and Silicon Graphics, Inc. He is a member of the U.S. National Academy of Engineering. From 1990 to 1993, Mr. White served as Under Secretary of Commerce for Technology in the United States Government. Prior to 1990, Mr. White served in several key executive positions at Xerox Corporation, Control Data Corporation and MCC. He received a doctoral degree in physics from Stanford University and graduated with a degree in physics from Massachusetts Institute of Technology.

***Supervisory Board Committees***

***Membership and Attendance.*** Detailed information on attendance at full Supervisory Board and Supervisory Board Committee meetings is as follows:

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<u>Number of meetings attended in 2002</u>	<u>Full Board</u>	<u>Audit Committee</u>	<u>Compensation Committee</u>	<u>Strategic Committee</u>
Bruno Steve	8		5	6
Jean-Pierre Noblanc	8		5	6
Tom de Waard	6	6	3	
Rémy Dullieux	6			
Douglas Dunn	6	2		
Riccardo Gallo	8	3		
Francis Gavois	8	6		
Alessandro Ovi	8	6		6
Robert M. White	8	6	2	2

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*Audit Committee.* The Audit Committee was established in 1996 to assist the Supervisory Board in fulfilling its oversight responsibilities relating to corporate accounting, reporting practices, and the quality and integrity of our financial reports as well as our auditing practices, legal and regulatory related risks, execution of our auditors' recommendations regarding corporate auditing rules and the independence of our external auditors. The Audit Committee met in executive session six times during 2002. The Audit Committee also met with our Chief Financial Officer, our Deputy CFO, our General Counsel, our internal and external auditors and, on two occasions, our outside U.S. counsel to understand and analyze the implications of the United States Sarbanes-Oxley Act of 2002.

At the end of each quarter, prior to each Supervisory Board meeting that approved our results and quarterly earnings release, the Audit Committee reviewed our financial statements, the proposed press release and all relevant issues and discussed with the external auditors the matters required by Statement on Accounting Standards No. 61, as amended by Statement on Accounting Standards No. 90.

The Audit Committee also proceeded with its annual review of the activities of our Internal Audit Group, as well as the scope, planning, staffing and cost of our external audit activities. Following the adoption in the United States of the Sarbanes-Oxley Act of 2002, the Audit Committee, with the assistance of our outside U.S. counsel, revised its Charter, clarifying its duties and responsibilities, in compliance with the Act to the extent consistent with Dutch company law.

Our Audit Committee has determined that meeting all of the proposed requirements under proposed Rule 10A-3 of the Securities Exchange Act of 1934 (as proposed by the Securities and Exchange Commission to implement Section 301 of the Sarbanes-Oxley Act of 2002), notably, the proposed requirement that a listed company's audit committee select and appoint the external auditors, would contravene certain aspects of Dutch company law. For example, Dutch company law provides that the appointment of the external auditors is the sole prerogative of the general meeting of shareholders. After consultation with external U.S. and Dutch counsel, the Supervisory Board has decided that the Audit Committee will select the external auditors to be proposed by our Supervisory Board at the general meeting of shareholders for approval (the Audit Committee's selection will be ratified by the Supervisory Board).

Before considering our draft Consolidated Financial Statements for approval, the Audit Committee reviewed with the external auditor's its statement of independence. In addition, the Audit Committee approved the external auditor's compensation, the scope of the audit, and all audit-related and non-audit-related services, held separate meetings with the external auditor's and discussed with the external auditor's all critical accounting policies used in connection with the preparation by our management of the draft Consolidated Financial Statements.

Our Audit Committee is composed of five Supervisory Board members, and meets at least five times annually, or more frequently as circumstances dictate. It is currently chaired by Mr. de Waard and is also comprised of Messrs. Dunn, Gallo, Gavois and White.

*Compensation Committee.* Our Compensation Committee approves the compensation for our President and Chief Executive Officer, the sole member of our Managing Board. It also approves any increase in the incentive component of compensation for our executive officers. Finally, the Compensation Committee is informed of the compensation plans for our executive officers. Among its activities, the Compensation Committee defined the remuneration package of the President and Chief Executive Officer for the

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year 2002, including the assigned objectives for becoming eligible for the bonus in 2003 and proposed the package to the Supervisory Board, which approved it. The Compensation Committee also reviewed the bonus to the President and Chief Executive Officer, based on his achievement of 2001 objectives and proposed its adoption to the Supervisory Board. Finally, the Compensation Committee made a recommendation on the number of stock options to be granted.

In the presence of our President and Chief Executive Officer and Director of Human Resources, the Compensation Committee approved on April 25, 2002 the proposed allocation of stock options to our executives and managers, in accordance with the provisions of our 2001 Stock Option Plan, and furthermore reviewed the remuneration policy for executive committee and senior executives as well as the Executive Incentive Program for all our executives.

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The Compensation Committee also monitored the results of the two tranches of our Employee Stock Purchase Plan, which were implemented in 2002.

Our Compensation Committee is currently comprised of the Chairman (Mr. Steve), the Vice-Chairman (Mr. Noblanc) and Mr. de Waard. In 2002, the Compensation Committee met five times.

*Strategic Committee.* Our Strategic Committee was instituted to monitor key developments within the semiconductor industry and our overall strategy, and is particularly involved in supervising the execution of significant transactions. Our Strategic Committee does not have a charter or regular meetings, but meets as often as is required by our ongoing business or any significant new opportunities.

Among its main activities, the Strategic Committee reviewed our Five-Year Plan and various possible scenarios and opportunities for growth to meet the challenges of the semiconductor market, including the ever-increasing costs of R&D and capital investments for advanced production technologies.

The Strategic Committee was fully briefed prior to and during the negotiation process concerning the acquisition of Alcatel Microelectronics, and also monitored the conclusion of our major research and development alliance with Philips Semiconductors International B.V., Motorola Inc. and TSMC in Crolles (France) for 12-inch CMOS process technologies to provide 90-nanometer to 32-nanometer chip technologies on 300mm wafers.

The Strategic Committee met five times in 2002, in the presence of our President and Chief Executive Officer, our Director of Strategic Planning and, in certain cases, our Chief Financial Officer. It is currently comprised of Messrs. Steve, Noblanc, Ovi and White.

***Managing Board***

Our management is entrusted to the Managing Board under the supervision of the Supervisory Board. Mr. Pasquale Pistorio, our President and Chief Executive Officer, is currently the sole member of the Managing Board. Following the renewal of his mandate by the annual general meeting of shareholders held in Amsterdam on March 27, 2002, his present term expires in 2005. There is no mandatory retirement age for members of our Managing Board.

Under the Articles of Association, the Managing Board must obtain prior approval from the Supervisory Board for (i) all proposals to be submitted to a vote at the general meeting of shareholders; (ii) the formation of all companies, acquisition or sale of any participation, and conclusion of any cooperation and participation agreement; (iii) all of our multi-year plans and the budget for the coming year, covering investment policy, policy regarding research and development, as well as commercial policy and objectives,

general financial policy, and policy regarding personnel; and (iv) all acts, decisions or operations covered by the foregoing and constituting a significant change with respect to decisions already taken by the Supervisory Board. The Managing Board must seek approval from the general meeting of shareholders for decisions relating to (i) the sale of all or of an important part of our assets or concerns; and (ii) all mergers, acquisitions or joint ventures which we wish to enter into and which the Supervisory Board considers to be of material significance. In addition, under the Articles of Association, the Supervisory Board may specify by resolution certain actions by the Managing Board that require its prior approval. Following the adoption of such a resolution, the actions by the Managing Board requiring such prior approval include the following: (i) modification of our Articles of Association; (ii) change in our authorized share capital, issue, acquisition or disposal of our own shares, change in any shareholder rights or issue of any instruments granting an interest in our capital or profits; (iii) liquidation or disposal of all or a substantial and material part of our assets or any shares we hold in any of our subsidiaries; (iv) entering into any merger, acquisition or joint venture agreement (and, if substantial and material, any agreement relating to intellectual property) or formation of a new company; (v) approval of such company's draft consolidated balance sheets and financial statements or any profit distribution by such company; (vi) entering into any agreement with any of the direct or indirect French or Italian shareholders outside the normal course of business; (vii) submission of documents reporting on (a) approved policy, expected progress and results and (b) strategic long-term business plans and consolidated annual budgets or any modifications to such; (viii) preparation of long-term business plans and annual budgets; (ix) adoption and implementation of such long-term business plans and annual budgets; (x) approval of all operations outside the normal course of business, including operations already provided for in the annual budget; and (xi) approval of the quarterly, semiannual and annual Consolidated Financial Statements prepared in accordance with internationally accepted accounting principles. Such resolution also requires that the Managing Board obtain prior approval from the Supervisory Board for (i) the appointment of the members of the statutory management, administration and control bodies of our French and Italian subsidiaries; and (ii) the nomination of our statutory management, administration and control bodies and each of our other direct and indirect subsidiaries followed by confirmation to the Supervisory Board of such nominees' appointments.



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The general meeting of shareholders may also specify certain actions of the Managing Board that require shareholder approval. Our Articles of Association provide that the Managing Board must obtain shareholder approval prior to (i) the sale of all or an important part of our assets and concerns; and (ii) all mergers, acquisitions or joint ventures which we wish to enter into and which the Supervisory Board considers to be of material significance. However, during a meeting held on September 23, 2000, the Supervisory Board authorized the Managing Board to proceed with acquisitions without prior consent of the Supervisory Board subject to a maximum amount of \$25 million per transaction, provided the Managing Board keeps the Supervisory Board informed of progress regarding such transactions and gives a full report once the transaction is completed. See Item 4. Information on the Company and Item 7. Major Shareholders and Related Party Transactions Related Party Transactions .

The Managing Board shall consist of such number of members as resolved by the general meeting of shareholders upon the proposal of the Supervisory Board. The members of the Managing Board are appointed for three-year terms upon proposal by the Supervisory Board at the general shareholders meeting by a majority of the votes cast at a meeting where at least one-third of the outstanding share capital is present or represented. The Supervisory Board appoints one of the members of the Managing Board to be chairman of the Managing Board for a three-year term (upon approval of at least three-quarters of the members of the Supervisory Board). Resolutions of the Managing Board require the approval of a majority of its members.

The general meeting of shareholders may suspend or dismiss one or more members of the Managing Board at a meeting at which at least one-half of the outstanding share capital is present or represented. No quorum is required if a suspension or dismissal is proposed by the Supervisory Board. The Supervisory Board may suspend members of the Managing Board, but a general meeting of shareholders must be convened within three months after such suspension to confirm or reject the suspension. The Supervisory Board shall appoint one or more persons who shall, at any time, in the event of absence or inability to act of all the members of the Managing Board, be temporarily responsible for our management.

***Executive Officers***

Our executive officers support the Managing Board in its management of us, without prejudice to the Managing Board's ultimate responsibility. We are organized in a matrix structure with geographical regions interacting with product divisions, bringing all levels of management closer to the customer and facilitating communication among research and development, production, marketing and sales organizations. Our executive officers are:

<b>Name</b>	<b>Position</b>	<b>Years with Company(1)</b>	<b>Years in Semi-conductor Industry</b>	<b>Age</b>
Pasquale Pistorio	President and Chief Executive Officer	23	40	67
Georges Auguste	Corporate Vice President, Total Quality and Environmental Management	16	29	54
Laurent Bosson	Corporate Vice President, Front-end Manufacturing	20	20	60
Carlo Bozotti	Corporate Vice President, Memory Products Group	26	26	50
Salvatore Castorina	Corporate Vice President, Discrete and Standard ICs Group	21	37	66

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Andrea Cuomo	Corporate Vice President, Application Systems and Technology Group	20	20	49
Alain Dutheil	Corporate Vice President, Strategic Planning and Human Resources	20	33	58
Philippe Geyres	Corporate Vice President, Consumer and Microcontroller Group	19	26	50

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<b>Name</b>	<b>Position</b>	<b>Years with Company(1)</b>	<b>Years in Semi-conductor Industry</b>	<b>Age</b>
Maurizio Ghirga	Corporate Vice President, Chief Financial Officer (to retire effective May 1, 2003)	20	20	65
Jean-Claude Marquet	Corporate Vice President, Asia/Pacific Region	17	36	61
Pier Angelo Martinotti	Corporate Vice President, New Ventures Group (retired effective January 1, 2003)	22	35	62
Joël Monnier	Corporate Vice President, Central Research and Development	20	29	57
Piero Mosconi	Corporate Vice President, Treasurer	39	39	63
Carmelo Papa	Corporate Vice President, Emerging Markets	19	19	54
Richard Pieranunzi	Corporate Vice President, Americas Region	22	37	64
Aldo Romano	Corporate Vice President, Telecommunications, Peripherals and Automotive Group	38	38	62
Giordano Seragnoli	Corporate Vice President, Back-end Manufacturing and Subsystems Products Group	38	40	66
Keizo Shibata	Corporate Vice President, Japan Region	11	38	66
Enrico Villa	Corporate Vice President, European Region	36	36	62

(1) Including years with Thomson Semiconducteurs or SGS Microelettronica.

Pasquale Pistorio has more than 39 years of experience in the semiconductor industry. After graduating in Electrical Engineering from the Polytechnical University of Turin in 1963, he started his career selling Motorola Inc. products. Mr. Pistorio joined Motorola Inc. in 1967, becoming Director of World Marketing in 1977 and General Manager of the International Semiconductor Division in 1978. Mr. Pistorio joined SGS Microelettronica as President and Chief Executive Officer in 1980 and became our President and Chief Executive Officer upon our formation in 1987. Mr. Pistorio also serves on the board of directors of MEDEA+.

Georges Auguste has served as Corporate Vice President, Total Quality and Environmental Management since 1999. Mr. Auguste received a degree in engineering from the Ecole Supérieure d'Electricité (SUPELEC) in 1974 and a diploma in business administration from Caen University in 1976. Prior to joining us, Mr. Auguste worked with Philips Components from 1974 to 1986, in various positions in the field of manufacturing. From 1990 to 1997 he headed our operations in Morocco, and from 1997 to 1999, Mr. Auguste served as director of Total Quality and Environmental Management.

Laurent Bosson has served as Corporate Vice President, Front-end Manufacturing and VLSI Fabs since 1989 and from 1992 to 1996 he was given additional responsibility as President and Chief Executive Officer of our operations in the Americas. Mr. Bosson remains Chairman of the Board of STMicroelectronics Inc., our affiliate in the United States. Mr. Bosson received a Masters degree in Chemistry from the University of Dijon in 1969. He joined Thomson-CSF in 1964 and has held several positions in engineering and manufacturing. In 1982, Mr. Bosson was appointed General Manager of the Tours and Alençon facilities of Thomson Semiconducteurs. In 1985, he joined the French subsidiary of SGS Microelettronica as General Manager of the Rennes, France manufacturing facility.

Carlo Bozotti has served as Corporate Vice President, Memory Products since August 1998. Mr. Bozotti joined SGS Microelettronica in 1977 after graduating in Electronic Engineering from the University of Pavia. Mr. Bozotti served as Product

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Manager for the Industrial, Computer Peripheral and Telecom divisions and as Product Manager for the Monolithic Microsystems Telecom business unit from 1986 to 1987. He was appointed Director of Corporate Strategic Marketing and Key Accounts for the Headquarters Region in 1988 and became Vice President, Marketing and Sales, Americas Division in 1991. Mr. Bozotti has served as Corporate Vice President, Memory Products since August 1998, after having served as Corporate Vice President, Europe and Headquarters Region from 1994 to 1998.

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Salvatore Castorina has served as Corporate Vice President, Discrete and Standard ICs Group since 1989. Mr. Castorina received his engineering degree in Electronics from the Polytechnical University of Turin and began his career as a teacher of electrical and electronic technologies prior to joining Thomson-CSF in Milan in 1965. In 1967, he joined Motorola Semiconductors and held various positions in sales and marketing. In 1981, Mr. Castorina joined us as General Manager of Transistors in Catania and became the General Manager of our Discrete Division in 1989.

Andrea Cuomo has served as Corporate Vice President Application System Technology Group since 2002. After graduating at Milano Politecnico in Nuclear Sciences, with a special focus on analog electronics, Mr. Cuomo joined us in 1983 as a System Testing engineer, and from 1985 to 1989 held various positions to become Marketing Manager in the automotive, computer and industrial product segment. In 1989, Andrea Cuomo was appointed Director of Strategy and Market Development for the Dedicated Products Group, and in 1994 became Vice President responsible for Marketing and Strategic Accounts within the Headquarters Region. In 1998, Mr. Cuomo was appointed as Vice President responsible for Advanced System Technology.

Alain Dutheil has served as Corporate Vice President, Strategic Planning and Human Resources since 1994 and 1992, respectively. After graduating in Electrical Engineering from the Ecole Supérieure d'Ingénieurs de Marseilles (ESIM), Mr. Dutheil joined Texas Instruments in 1969 as a Production Engineer, becoming Director for Discrete Products in France and Human Resources Director for Texas Instruments, France in 1980 and Director of Operations for Texas Instruments, Portugal in 1982. He joined Thomson Semiconducteurs in 1983 as General Manager of a plant in Aix-en-Provence, France and then became General Manager of our Discrete Products Division. From 1989 to 1994, Mr. Dutheil served as Director for Worldwide Back-end Manufacturing, in addition to serving as Corporate Vice President for Human Resources from 1992 until the present.

Philippe Geyres has served as Corporate Vice President, General Manager Consumer and Microcontroller Group (formerly Programmable Products Group) since 1990. Mr. Geyres graduated from the École Polytechnique in 1973 and began his career with IBM in France before joining Schlumberger Group in 1980 as Data Processing Director. He was subsequently appointed Deputy Director of the IC Division at Fairchild Semiconductors. Mr. Geyres joined Thomson Semiconducteurs in 1983 as Director of the Bipolar Integrated Circuits Division. He was appointed Strategic Programs Director in 1987 and, later the same year, became our Corporate Vice President, Strategic Planning until 1990.

Maurizio Ghirga became Corporate Vice President, Chief Financial Officer in 1987, after having served as chief financial controller of SGS Microelettronica since 1983. Mr. Ghirga has a degree in Business Administration from the University of Genoa. He spent more than ten years of his career in various financial capacities at ESSO Company (an Exxon subsidiary in Italy) and prior to joining us was Financial Controller of one of the largest refinery plants in Italy and of an ESSO chemical subsidiary. Mr. Ghirga will retire effective May 1, 2003 and will be succeeded in his functions by Carlo Ferro, currently serving as Deputy Chief Financial Officer.

Jean-Claude Marquet has served as Corporate Vice President, Asia/Pacific Region since July 1995. After graduating in Electrical and Electronics Engineering from the Ecole Breguet Paris, Mr. Marquet began his career in the French National Research Organization and later joined Alcatel. In 1969, he joined Philips Components. He remained at Philips until 1978, when he joined Ericsson, eventually becoming President of Ericsson's French operations. In 1985, Mr. Marquet joined Thomson Semiconducteurs as Vice President Sales and Marketing, France. Thereafter, Mr. Marquet served as Vice President Sales and Marketing for France and Benelux, and Vice President Asia Pacific and Director of Sales and Marketing for the region.

Pier Angelo Martinotti served as Corporate Vice President, General Manager New Ventures Group from 1994 and retired effective January 1, 2003. A graduate in Electronic Engineering from the Polytechnical University of Turin, Mr. Martinotti began his career with us in 1965 as an Application and Marketing Engineer. In 1968, he joined Motorola Semiconductors in the area of strategic marketing in Europe, and in 1975 became the Marketing (Sales) Director for Europe. From 1986 to 1990, Mr. Martinotti was Chief Executive Officer of Innovative Silicon Technology, our former subsidiary. Mr. Martinotti was appointed Director of Corporate Strategic Planning in 1990, a position which he occupied until 1994.

Joël Monnier has served as Corporate Vice President, Director of Central Research and Development since 1989. After graduating in Electrical Engineering from the Institut National Polytechnique of Grenoble, Ecole Nationale Supérieure de Radio Electricité, Mr. Monnier obtained a doctoral degree in microelectronics at LETI/CENG.

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He began his career in the semiconductor industry in 1968 as a researcher with CENG, and subsequently joined the research and development laboratories of Texas Instruments in Villeneuve Loubet, France and Houston, Texas, eventually becoming Engineering Manager and Operations Manager at Texas Instruments. Mr. Monnier joined Thomson-CSF in 1983 as head of the research and manufacturing unit of Thomson Semiconducteurs. In 1987, he was appointed Vice President and Corporate Director of Manufacturing, a position which he occupied until 1989.

Piero Mosconi has served as Corporate Vice President, Treasurer since 1987. After graduating in accounting from Monza in 1960, Mr. Mosconi joined the faculty at the University of Milan. Mr. Mosconi worked with an Italian bank before joining the Foreign Subsidiaries Department at SGS Microelettronica in 1964 and becoming Corporate Director of Finance in 1980.

Carmelo Papa has served as Corporate Vice President, Emerging Markets since January 2000. Mr. Papa received his degree in nuclear physics at Catania University. Mr. Papa joined us in 1983 and since 1986 has been Director of Product Marketing and Customer Service for Transistors and Standard ICs.

Richard Pieranunzi has served as Corporate Vice President, Americas Region since August 1996. Mr. Pieranunzi received his BSEE from the University of Rhode Island, and started his career in process engineering. Later, he joined Motorola Inc. s international marketing organization, including in Europe where he held management positions in sales and strategic marketing and applications. Mr. Pieranunzi joined SGS Semiconducteurs in 1981 as Marketing and Sales Manager, and upon our formation in 1987, he became Vice President Marketing and Sales for the U.S. organization. For three years, Mr. Pieranunzi headed our Corporate Strategic Marketing and Corporate Key Account programs.

Aldo Romano has served as Corporate Vice President, General Manager Telecommunications, Peripherals and Automotive Group (formerly Dedicated Products Group) since 1987. Mr. Romano is also Managing Director of our Italian subsidiary. A graduate in Electronic Engineering from the University of Padua in 1963, Mr. Romano joined SGS Microelettronica in 1965 as a designer of linear ICs, becoming head of the linear IC design laboratory in 1968 and head of Marketing and Applications in 1976. Mr. Romano became Director of the Bipolar IC Division (which has evolved into the Dedicated Products Group) in 1980.

Giordano Seragnoli has served as Corporate Vice President, General Manager Subsystems Products Group since 1987 and since 1994, Director for Worldwide Back-end Manufacturing. After graduating in Electrical Engineering from the University of Bologna, Mr. Seragnoli joined the Thomson Group as RF Application Designer in 1962 and joined SGS Microelettronica in 1965. Thereafter, Mr. Seragnoli served in various capacities within our management, including Strategic Marketing Manager and Subsystems Division Manager, Subsystems Division Manager (Agrate), Technical Facilities Manager, Subsystems Division Manager and Back-End Manager.

Keizo Shibata has served as Corporate Vice President and President of our Japanese subsidiary since 1992. Mr. Shibata obtained bachelor s and master s degrees in Engineering from Osaka University and has 32 years of experience in the semiconductor industry. Prior to joining us, Mr. Shibata was employed by Toshiba Corporation since 1964 in various capacities. From 1987 to 1988, Mr. Shibata served as Chairman of both World Semiconductor Trade Statistics and the Trade Policy Committee of the Electric Industry Association of Japan.

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Enrico Villa has served as Corporate Vice President, Europe since January 1, 2000. Mr. Villa has served in various capacities within our management since 1967 after obtaining a degree in Business Administration from the University of Milan and has 36 years of experience in the semiconductor industry. He is currently President of the European Electronics Companies Association ( EECA ) as well as Chairman for Europe at the Joint Steering Committee of the World Semiconductor Council.

Carlo Ferro became our Deputy Chief Financial Officer in April 2002. In January 2003 we announced that Mr. Ferro will succeed Mr. Ghirga as Chief Financial Officer effective in May 2003. Mr. Ferro, 42, graduated with a degree in Business and Economics from the LUISS Guido Carli University in Rome, Italy in 1984, and has a professional qualification as a Certified Public Accountant. From 1984 through 1992, Mr. Ferro held a series of positions in finance and control at Istituto per la Ricostruzione Industriale IRI S.p.A. ( IRI ), and Finmeccanica S.p.A. Mr. Ferro served as one of our Supervisory Board controllers from 1992 to 1997. Mr. Ferro was also a part-time university professor of Planning and Control until 1996. From 1996 to 1999, Mr. Ferro held positions at EBPA NV, a process control company listed on the NYSE, rising to Vice President Planning and Control and principal



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financial officer. Mr. Ferro rejoined us in June 1999 as Group Vice President Corporate Finance, overseeing finance and accounting for all affiliates worldwide.

As is common in the semiconductor industry, our success depends to a significant extent upon, among other factors, the continued service of our key senior executives and research and development, engineering, marketing, sales, manufacturing, support and other personnel, and on our ability to continue to attract, retain and motivate qualified personnel. The competition for such employees is intense, and the loss of the services of any of these key personnel without adequate replacement or the inability to attract new qualified personnel could have a material adverse effect on us. We do not maintain insurance with respect to the loss of any of our key personnel.

**Compensation**

The aggregate compensation accrued by us in 2002 for the members of our Supervisory Board was approximately \$618,000.

The compensation amounts actually paid in 2002 to the members of our Supervisory Board are set forth in the following table.

<b>Supervisory Board Member</b>	<b>Directors Fees</b>
Bruno Steve	\$ 89,000
Jean-Pierre Noblanc	\$ 89,000(1)
Tom de Waard	\$ 74,000(2)
Rémy Dullieux	\$ 46,000(3)
Douglas Dunn	\$ 38,000
Riccardo Gallo	\$ 52,000
Francis Gavois	\$ 62,000
Alessandro Ovi	\$ 66,000
Robert M. White	\$ 70,000
<b>Total</b>	<b>\$ 586,000</b>

- (1) Compensation, including attendance fees of \$2,000 per meeting of the Supervisory Board or committee thereof, were paid to Areva Group.
- (2) Compensation, including attendance fees of \$2,000 per meeting of the Supervisory Board or committee thereof, were paid to Clifford Chance LLP.
- (3) Compensation, including attendance fees of \$2,000 per meeting of the Supervisory Board or committee thereof, were paid to France Telecom.

The amount of compensation paid in 2002 to our executive officers and members of our Managing Board as a group by us was approximately \$8 million.

<u>Sole member of the Managing Board</u>	<u>Salary</u>	<u>Bonus(1)</u>	<u>Total</u>
Pasquale Pistorio	\$ 770,000	\$ 654,000	\$ 1,424,000

(1) The bonus paid to the sole member of our Managing Board during the 2002 financial year was approved by the Compensation Committee and the Supervisory Board in 2002 in respect of the 2001 financial year, based on fulfillment of a number of predefined objectives for that year.

The following table sets forth the number of Stock options granted to Supervisory Board Members in each of 2002 and 2001:

	<u>2002</u>		<u>2001</u>	
	<u>Number of options granted</u>	<u>Grant price U.S.\$</u>	<u>Number of options granted</u>	<u>Granted price U.S.\$</u>
B. Steve	12,000	31.11	9,000	39.00
J. P. Noblanc	12,000	31.11	9,000	39.00
R. Dullieux(1)	12,000	31.11	9,000	39.00
F. Gavois	12,000	31.11	9,000	39.00
A. Ovi	12,000	31.11	9,000	39.00
R. Gallo	12,000	31.11	9,000	39.00
R. White	12,000	31.11	9,000	39.00

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T. de Waard	12,000	31.11	9,000	39.00
D. Dunn	12,000	31.11		

(1) Options waived.

None of the members of the Supervisory Board members exercised stock options in 2002.

In 2002, the sole member of our Managing Board, President and Chief Executive Officer was granted 80,000 options at a grant price of \$31.09 and 330,000 options at a grant price of \$31.11, and exercised a total of 210,000 options during 2002.

We did not extend any loans, overdrafts or warranties to our Supervisory Board members or to the sole member of our Managing Board.

In 1989, we established a Corporate Executive Incentive Program (the "EIP") that entitles selected executives and members of the Managing Board to a yearly bonus based upon the individual performance of such executives. The maximum bonus awarded under the EIP is based upon a percentage of the executive or member's salary and is adjusted to reflect our overall performance. The participants in the EIP must satisfy certain personal objectives that are focused on customer service, profit, cash flow and market share.

For information regarding stock options granted to members of our Supervisory Board, the Managing Board and our executive officers, please refer to "Stock Options" "Stock Option Plans" below.

The executive officers and the Managing Board were also covered in 2002 under certain group life and medical insurance programs provided by us. The aggregate additional amount set aside by us in 2002 to provide pension, retirement or similar benefits for executive officers and our Managing Board as a group is estimated to have been approximately \$3 million, which includes statutory employer contributions for state-run retirement and similar benefit programs. We do not have any service agreements with members of our Supervisory Board. The service agreement with the sole member of our Managing Board provides for an indemnity in the event of termination of his employment by us of one year's compensation.

**Share Ownership**

None of the members of our Supervisory and Managing Boards or our executive officers holds more than 1% of our shares and/or options.

**Stock Options**

***Stock Option Plans***

The following description of our stock options plans has been adjusted for the 2:1 stock split effected on June 16, 1999 and the 3:1 stock split effected on May 5, 2000. Taking into account these stock splits, the total options outstanding as of December 31, 2002 give the right to acquire 46,208,261 common shares by our employees and 609,500 common shares by members and professionals of our Supervisory Board, or a total of 46,817,761 shares.

On October 20, 1995, our shareholders approved resolutions authorizing the Supervisory Board for a period of five years to adopt and administer a stock option plan that provides for the granting to our managers and professionals of options to purchase up to a maximum of 33.0 million common shares (the 1995 Stock Option Plan ). We granted options to acquire a total of 31,561,941 shares pursuant to the 1995 Stock Option Plan as follows:

- On March 1, 1996, we granted options to purchase 7,200,000 common shares with an exercise price per common share of \$6.04, which will expire on March 1, 2004. As of December 31, 2002, options to purchase 2,218,110 common shares were outstanding, of which 544,700 were held by the sole member of the Managing Board and our executive officers, as a group.
- On September 12, 1997, we granted options to purchase 3,873,000 common shares with an exercise price per common share of \$14.23, which will expire on September 12, 2005. As of December 31, 2002, options to purchase 2,912,655 common shares were outstanding, of which 736,800 were held by the sole member of the Managing Board and our executive officers, as a group.

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- On July 28, 1998, we granted options to purchase 3,900,000 common shares with an exercise price per common share of \$12.03, which will expire on July 28, 2006. As of December 31, 2002, options to purchase 3,276,550 common shares were outstanding, of which 810,840 were held by the sole member of the Managing Board and our executive officers, as a group.
- On September 16, 1999, we granted options to purchase 8,878,200 common shares with an exercise price per common share of \$24.88, which will expire on September 16, 2007. As of December 31, 2002, options to purchase 8,321,220 common shares were outstanding, of which 1,772,400 were held by the sole member of the Managing Board and our executive officers, as a group.
- On January 24, 2000, we made a special grant of options to purchase 150,000 common shares to former employees of Arithmos with an exercise price per common share of \$55.25, which expire on January 24, 2008. As of December 31, 2002, options to purchase 81,900 common shares were outstanding pursuant to this grant.
- On June 16, 2000, we granted options to purchase 5,331,250 common shares with an exercise price per common share of \$62.01, which will expire on June 16, 2008. As of December 31, 2002, options to purchase 4,998,560 common shares were outstanding, of which 712,000 were held by the sole member of the Managing Board and our executive officers, as a group.
- On September 18, 2000, we made a special grant of options to purchase 70,000 common shares to former employees of Waferscale Integration Inc. with an exercise price per common share of \$52.88, which will expire on September 18, 2008. As of December 31, 2002, options to purchase 45,290 common shares were outstanding.
- On December 11, 2000, we granted options to purchase 2,019,640 common shares with an exercise price per common share of \$50.69, which will expire on December 11, 2008. As of December 31, 2002, options to purchase 1,787,410 common shares were outstanding, none of which were held by the sole member of the Managing Board and our executive officers, as a group.
- On December 18, 2000, we made a special grant of options to purchase 26,501 common shares to former employees of PGI with an exercise price per common share of \$44.00, which will expire on December 18, 2008. As of December 31, 2002, options to purchase 25,439 common shares were outstanding.
- On March 1, 2001, we made a special grant of options to purchase 113,350 common shares with an exercise price per common share of \$31.65, which will expire on March 1, 2009. As of December 31, 2002, options to purchase 95,510 common shares were outstanding, none of which were held by the sole member of the Managing Board and our executive officers, as a group.

On April 25, 2001, our shareholders approved resolutions authorizing the Supervisory Board for a period of five years to adopt and administer a new stock option plan that provides for the granting to our managers and professionals of options to purchase up to a maximum of 60 million common shares (the 2001 Stock Option Plan ).

We granted options to acquire a total of 23,350,393 common shares pursuant to the 2001 Stock Option Plan as follows:

- On April 27, 2001, we granted options to purchase 9,521,100 common shares with an exercise price per common share of \$39.00, which will expire on April 27, 2011. As of December 31, 2002, options to purchase 9,074,935 common shares were outstanding, of which 981,000 were held by the sole member of the Managing Board and our executive officers, as a group.

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- On September 4, 2001, we made a special grant of options to purchase 16,000 common shares with an exercise price per common share of \$29.70, which will expire on September 4, 2011. As of December 31, 2002, options to purchase 16,000 common shares were outstanding, none of which were held by the sole member of the Managing Board and our executive officers, as a group.
- On November 1, 2001, we made a special grant of options to purchase 61,900 common shares with an exercise price per common share of \$29.61, which will expire on November 1, 2011. As of December 31, 2002, options to purchase 60,070 common shares were outstanding, none of which were held by the sole member of the Managing Board and our executive officers, as a group.
- On January 2, 2002, we made a special grant of options to purchase 29,400 common shares with an exercise price per common share of \$33.70, which will expire on January 2, 2012. At December 31, 2002, options to purchase 28,900 common shares were outstanding, none of which were held by the sole member of the Managing Board and our executive officers, as a group.
- On January 25, 2002, we made a special grant of options to purchase 3,656,103 options with an exercise price per common share of \$31.09, which will expire on January 25, 2012. At December 31, 2002, options to purchase 3,349,803 common shares were outstanding, of which 355,000 were held by the sole member of the Managing Board and our executive officers, as a group.
- On April 25, 2002, we granted options to purchase 9,708,390 common shares with an exercise price per common share of \$31.11, which will expire on April 25, 2012. At December 31, 2002, options to purchase 9,579,509 common shares were outstanding, of which 1,006,000 were held by the sole member of the Managing Board and our executive officers, as a group.
- On June 26, 2002, we granted option to purchase 318,600 common shares with an exercise price per common share of \$22.30, which will expire on June 26, 2012. At December 31, 2002, options to purchase 297,500 common shares were outstanding, none of which were held by the Sole Member of the Managing Board and our executive officers, as a group.
- On August 1, 2002, we granted options to purchase 24,500 common shares with an exercise price per common share of \$20.02, which will expire on August 2, 2012. At December 31, 2002, options to purchase 24,500 common shares were outstanding, none of which were held by the sole member of the Managing Board and our executive officers, as a group.
- On December 17, 2002, we granted options to purchase 14,400 common shares with an exercise price per common share of \$21.59, which will expire on December 17, 2012. At December 31, 2002, options to purchase 14,400 common shares were outstanding, none of which were held by the sole member of the Managing Board and our executive officers, as a group.

As of December 31, 2002, of the total options outstanding under the 1995 and 2001 Stock Option Plans, options to purchase 6,918,740 common shares were held by the sole member of the Managing Board and executive officers, as a group.

As of December 31, 2002, the global amount of options held by the ten highest allocated non-director employees was 683,500.

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On March 14, 2003, we granted options to our managers and professionals to purchase 11,533,690 common shares with an exercise price per common share corresponding to the closing price on the NYSE on March 14, 2003, which will expire on March 14, 2013, out of which 400,000 were attributed to the sole member of our Managing Board.

In June 1996, the general meeting of shareholders approved the granting of options to members and professionals of the Supervisory Board for the right to purchase approximately 378,000 of our common shares over a period of three years, beginning in 1996. Following this grant, certain persons have renounced the right to retain the stock options granted to them. The following options were granted to members and professionals of our Supervisory Board:



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- On October 22, 1996, we granted to members and professionals of the Supervisory Board options to purchase 198,000 common shares with an exercise price per common share of \$9.00, which will expire on October 22, 2004. As of December 31, 2002, options to purchase 54,000 common shares were outstanding.
- On September 12, 1997, we granted to members and professionals of the Supervisory Board options to purchase 90,000 common shares with an exercise price per common share of \$14.23, which will expire on September 12, 2005. As of December 31, 2002, options to purchase 30,500 common shares were outstanding.
- On July 28, 1998, we granted to members and professionals of the Supervisory Board options to purchase 103,500 common shares with an exercise price per common share of \$12.03, which will expire on July 28, 2006. As of December 31, 2002, options to purchase 45,000 common shares were outstanding.

In 1999, the general meeting of the shareholders voted to renew the Supervisory Board Option Plan to grant members of the Supervisory Board, during the three-year period 1999-2001, at least the same number of options as were granted during the first three-year period. The following options were granted:

- On September 16, 1999, we granted options to members and professionals of the Supervisory Board to purchase 180,000 common shares with an exercise price per common share of \$24.88, which will expire on September 16, 2007. As of December 31, 2002, options to purchase 171,000 common shares were outstanding.
- On June 16, 2000, we granted options to members and professionals of the Supervisory Board to purchase 103,500 common shares with an exercise price per common share of \$62.01, which will expire on June 16, 2008. As of December 31, 2002, options to purchase 90,000 common shares were outstanding.
- On April 27, 2001, we granted options to members and professionals of the Supervisory Board to purchase 112,500 common shares with an exercise price per common share of \$39.00, which will expire on April 27, 2009. As of December 31, 2002, options to purchase 99,000 common shares were outstanding.

On March 27, 2002, the annual general meeting of shareholders voted to renew the Supervisory Board Option Plan whereby members of the Supervisory Board may receive, during the three-year period 2002-2005, at least the same number of options as were granted during the first three-year period. The following options were granted:

- On April 25, 2002, we granted options to purchase 132,000 common shares with an exercise price per common share of \$31.11, which will expire on April 25, 2012. At December 31, 2002, options to purchase 120,000 common shares were outstanding.

As of December 31, 2002, of the total options outstanding under the 1996 and 1999 Supervisory Board Option Plans, options to purchase 489,500 common shares were outstanding. Options to purchase 120,000 common shares are outstanding under the 2002 Supervisory Board Option Plan.

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At December 31, 2002, the total number of options granted and outstanding was 46,817,761.

On March 14, 2003, we granted options to members and professionals of our Supervisory Board to purchase 132,000 common shares with an exercise price per common share corresponding to the closing price on the NYSE on March 14, 2003, which will expire on March 14, 2013. Each Supervisory Board member was granted 12,000 options.

### ***Summary of Stock Options***

The following table summarizes the amounts authorized to be granted, exercised, cancelled and outstanding as of December 31, 2002.

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	<u>1995 Plan</u>	<u>2001 Plan</u>	<u>Supervisory Board Plans</u>	<u>Total</u>
Remaining Amount Authorized to be Granted	0	13,751,393	132,000	13,883,393
Amount Exercised	609,445	0	3,000	612,445
Amount Cancelled	377,787	726,001	21,000	1,124,788
Amount Outstanding	23,762,644	22,445,617	609,500	46,817,761

**Employees**

The tables below set forth the breakdown of employees by main category of activity and geographic area for the past three years.

	<u>At December 31,</u>		
	<u>2000</u>	<u>2001</u>	<u>2002</u>
France	9,600	8,950	9,670
Italy	9,200	9,300	10,000
Rest of Europe	1,050	1,050	1,290
United States	4,350	3,500	3,170
Malta and Morocco	7,450	6,700	7,150
Asia	12,000	10,800	11,890
<b>Total</b>	<b>43,650</b>	<b>40,300</b>	<b>43,170</b>

	<u>At December 31,</u>		
	<u>2000</u>	<u>2001</u>	<u>2002</u>
Research and Development	6,800	6,850	7,700
Marketing and Sales	2,250	2,200	2,350
Manufacturing	30,450	27,250	29,050
Administration and General Services	2,200	2,100	2,100
Divisional Functions	1,950	1,900	1,970
<b>Total</b>	<b>43,650</b>	<b>40,300</b>	<b>43,170</b>

Our future success, in particular in a period of strong increased demand will also depend on our ability to continue to attract, retain and motivate highly qualified technical, marketing, engineering and management personnel. Unions are present in France, Italy, Malta, Morocco and Singapore. We use temporary employees if required during production spikes and in Europe during the summer vacations. We have not experienced any significant strikes or work stoppages in recent years, other than in connection with national strikes, and management believes that our relations with employees are good.

As part of our commitment to the principles of TQEM, we decided in July 1994 to develop an internal education organization called ST University, responsible for organizing training courses to executives, engineers, technicians and sales personnel within STMicroelectronics and coordinating all training for our employees.

We have also established an Employee Stock Purchase Plan that includes the following provisions:

- A total of 4.5 million common shares are to be offered to employees of STMicroelectronics N.V. and its majority-owned subsidiaries in 20 specified countries and such other countries to which the Supervisory Board may extend the Plan, on the recommendation of our Managing Board.
- The first 2.5 million common shares offered will be new shares. The source of the remaining 0.5 million common shares is to be decided by the Supervisory Board in due course.
- The Plan has a three-year term, from 2000 to 2003, and features semiannual offering periods.
- For each offering period, the subscription price will be equal to 85% of the lesser of the NYSE closing price for shares on the first day of the offering period and the last day of the offering period.

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- The maximum fair value of the common shares that may be subscribed to per employee per offering period is \$12,500.

To date, the first five tranches of the Employees Stock Purchase Plan have been launched. In November 2000, 559,929 common shares were subscribed to by 4,830 employees at a price of \$38.675 per common share. In May 2001, 580,817 common shares were subscribed to by 3,701 employees at a price of \$32.32 per common share. In December 2001, 384,566 common shares were subscribed to by 2,084 employees at a price of \$28.60 per common share. In July 2002, 461,164 common shares were subscribed to by 2,072 employees at a price of \$20.05 per common share. In December 2002, 749,819 common shares were subscribed to by 2,981 employees at a price of \$17.49 per common share.

**Item 7. Major Shareholders and Related Party Transactions****Major Shareholders**

The following table sets forth certain information with respect to the ownership of our issued common shares based on information available to us as of December 31, 2002:

<b>Shareholders</b>	<b>Common Shares Owned(1)</b>	
	<b>Number</b>	<b>%</b>
STMicroelectronics Holding II B.V. ( ST Holding II )	320,483,280	35.6
Capital Research International	52,151,860	5.8

- (1) Following the 2:1 stock split and 3:1 stock split effected by us on June 16, 1999, and May 5, 2000, respectively, and including 56,423,404 of our common shares held in escrow accounts underlying the France Telecom 1.0% and 6<sup>3</sup>/<sub>4</sub>% exchangeable notes, which in each case will be exchangeable for our common shares beginning from January 2, 2004.

ST Holding II is a wholly owned subsidiary of STMicroelectronics Holding N.V. ( ST Holding ). ST Holding is jointly held by FT1CI and Finmeccanica based on voting rights. As of December 31, 2002, based on economic interests, FT1CI and Finmeccanica hold approximately 49% and 51%, respectively, of ST Holding. FT1CI consists of two principal French shareholders, France Telecom, the French state-controlled telecommunications company, and Areva (formerly known as CEA-Industrie), a corporation controlled by the French atomic energy commission. Finmeccanica is an Italian holding company owned by both the Italian Ministero dell' Economia e delle Finanze ( the Italian Ministry of Economics and Finance ), which controls important actions of Finmeccanica due to its significant holding in it, Fintecna S.p.A. (in which Istituto per la Ricostruzione Industriale-IRI S.p.A. *in liquidazione*, the holding company for Italian state-owned industrial and commercial interests, was merged), and the public. Finmeccanica is listed on the Italian Mercato Telematico Azionario ( *Telematico* ) and is included in the MIB 30 stock index. The Italian Ministry of Economics and Finance has appointed a majority of the members of Finmeccanica's Board of Directors and pursuant to the provisions of its articles of association and Italian law, retains veto rights over certain major transactions involving Finmeccanica. The shares of France Telecom are listed on Euronext Paris and its American Depositary Receipts on the New York Stock Exchange. *Certificats d' investissement* of Areva are listed on Euronext Paris.

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ST Holding owned 90% of our shares before our initial public offering in 1994, and has since then gradually reduced its participation, going below the 66% threshold in 1997 and below the 50% threshold in 1999. ST Holding may further dilute its shares as provided below in Shareholders Agreements 2001 Shareholders Agreement Disposals of Our Common Shares and pursuant to the eventual conversion of our outstanding convertible instruments. Set forth below is a table of ST Holding II's holdings in us as of the end of each of the past three financial years:

	Common Shares Owned	
	Number	%
December 31, 2002	320,483,280	35.6
December 31, 2001	320,483,280	36.2
December 31, 2000	389,483,280	43.6

Announcements about additional disposals by ST Holding may come at any time.

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The chart below illustrates the current shareholding structure as of December 31, 2002:

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- (1) Based on voting rights, which will be shared equally until 2004. According to the 2001 shareholders agreement, each of Finmeccanica and FT1CI must hold at least 47.5% of ST Holding until December 2003. As of December 31, 2002, based on economic interests, FT1CI and Finmeccanica hold approximately 49% and 51%, respectively, of ST Holding.
  - (2) Includes 1.5% of our share capital held by us in treasury; and the 5.8% held by Capital Research International.

All other former members of the shareholding group have either sold or otherwise disposed of their holdings in our shares.

On December 17, 2001, France Telecom issued 1,522,950,000 aggregate principal amount of 1.0% notes due December 17, 2004, redeemable by way of exchange for up to 30 million of our existing common shares on or after January 2, 2004. On July 30, 2002, we were informed that France Telecom had finalized the private placement to institutional investors of 442.2 million of 6<sup>3</sup>/<sub>4</sub>% notes due August 2005, mandatorily exchangeable into our existing common shares held by France Telecom. France Telecom announced that the 6<sup>3</sup>/<sub>4</sub>% notes are exchangeable for our common shares from January 2, 2004 and that the number of shares that France Telecom will deliver to the holders of the notes is a maximum of 26.42 million shares and a minimum of 20.13 million shares, depending on the price of our shares at maturity. Assuming the France Telecom 1.0% notes are exchanged for our common shares at the initial exchange ratio, the France Telecom 6<sup>3</sup>/<sub>4</sub>% notes are exchanged for our common shares at the maximum exchange ratio, ST Holding II would own approximately 29% of our current issued common shares. Making the same assumptions, the indirect economic interests of FT1CI, Areva, France Telecom and Finmeccanica in us would be approximately 11%, 11%, 0% and 18%, respectively.

**Shareholders Agreements**

In connection with our formation, Thomson-CSF (now called Thales) and STET (now called Telecom Italia S.p.A.) as our shareholders, entered into a shareholders agreement on April 30, 1987 (as amended, the Holding Shareholders Agreement). The current parties to the Holding Shareholders Agreement are FT1CI and Finmeccanica.

The Holding Shareholders Agreement contemplates that the parties shall agree upon common proposals and jointly exercise their powers of decision and their full control of the strategies and actions of ST Holding and us. Under the Holding Shareholders Agreement, the Supervisory Board of ST Holding, which is composed of three representatives of FT1CI and three representatives of Finmeccanica, and our Supervisory Board, each one within its respective sphere of competence, must give their respective prior approval before ST Holding may vote in favor of a resolution that we, or any of our subsidiaries may: (i) modify our articles of incorporation; (ii) change our authorized share capital, issue, acquire or dispose of our shares, change any shareholder rights or issue any instruments granting an interest in our capital or profits;

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(iii) be liquidated or dispose of all or a substantial and material part of our assets or any shares we hold in any of our subsidiaries; (iv) enter into any merger, acquisition or joint venture agreement (and, if substantial and material, any agreement relating to intellectual property) or form a new company; (v) approve such company's draft consolidated balance sheets and financial statements or any profit distribution by such company; or (vi) enter into any agreement with any of the direct or indirect ST Holding shareholders outside the normal course of business. The Holding Shareholders Agreement also provides that our long-term business plans and annual budgets and for our subsidiaries, as well as any significant modifications thereto, shall be approved in advance by the Supervisory Board of each of ST Holding and us, each one within its respective sphere of competence. In addition, the Supervisory Board of ST Holding shall also decide upon operations of exceptional importance contained in the annual budget even after financing thereof shall have been approved.

Pursuant to the terms of the Holding Shareholders Agreement, neither we nor ST Holding are permitted, as a matter of principle, to operate outside the field of semiconductor products. The parties to the Holding Shareholders Agreement also undertake to refrain directly or indirectly from competing with us in the area of semiconductor products, subject to certain exceptions, and to offer us opportunities to commercialize or invest in any semiconductor product developments by them. Any financing or capital provided by the parties to ST Holding or us is intended to be provided pro rata based on the parties' respective shareholdings in ST Holding. See further details below.

The admission of a third party to the share capital of ST Holding, whether through the sale of ST Holding's outstanding shares or through the issue by ST Holding of new shares, or by any other means, must be unanimously agreed upon. In the event of a disagreement that cannot be resolved between the parties as to the conduct of the business and actions contemplated by the Holding Shareholders Agreement, each party has the right to offer its interest in ST Holding to the other, which then has the right to acquire, or to have a third party acquire, such interest. If neither party agrees to acquire or have acquired the other party's interest, then together the parties are obligated to try to find a third party to acquire their collective interests, or such part thereof as is suitable to change the decision to terminate the agreement. The Holding Shareholders Agreement otherwise terminates in the event that one of the parties thereto ceases to hold shares in ST Holding.

Pursuant to the terms of the Holding Shareholders Agreement and for the duration of such agreement, FT1CI, on the one hand, and Finmeccanica, on the other hand, have agreed to maintain equal interests in our share capital. See further details below.

### ***2001 Shareholders Agreement***

On December 10, 2001, FT1CI, Finmeccanica, France Telecom and Areva signed a new shareholders agreement (the 2001 shareholders agreement) to restructure their holdings in ST Holding. The agreement permits the shareholders to (i) restructure the holding companies as desirable, (ii) provide for new corporate governance principles, (iii) provide for the terms and conditions of disposals of our common shares and (iv) ensure stability in the shareholding structure and future flexibility. To the extent the 2001 shareholders agreement conflicts with existing agreements among the shareholders, the provisions of the 2001 shareholders agreement shall prevail.

### ***Restructuring of the Holding Companies***



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If necessary, the parties have agreed to restructure the two holding companies (ST Holding and ST Holding II) to simplify the structure to the extent possible or desirable for tax efficiency. In any case, at least one holding company will continue to exist to hold our common shares. The company that now holds or may hold our shares in the future for indirect shareholders is referred to below as the holding company . The 2001 shareholders agreement provides that FT1CI may be replaced as a shareholder in the holding company by France Telecom and/or Areva, at their request.

The 2001 shareholders agreement contains a standstill provision that precludes any of the parties and the parties affiliates from acquiring, directly or indirectly, any of our common shares or any instrument providing for the right to acquire any of our common shares other than through the holding company until 24 months after such party ceases to be an indirect shareholder of us.

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*Corporate Governance*

Under the 2001 shareholders agreement, the parties have agreed to modify the corporate governance rights within the holding company so that they will be shared equally by FT1CI and Finmeccanica, referred to below as the *shareholders*, despite the difference in indirect economic interest in us, for 24 months after the date of the 2001 shareholders agreement plus the three-month period thereafter, referred to as the *Balance Period*, during which each of FT1CI and Finmeccanica will have an option to rebalance their shareholdings, referred to as the *Rebalancing Option*. The Balance Period is stated to continue as long as each shareholder in the holding company owns at least 47.5% of its shares subject to the exercise of the Rebalancing Option. In the case where one shareholder's stake exceeds 52.5% after the Balance Period, control of ST Holding will automatically be granted to it, while certain rights will be preserved for the minority shareholder.

During the Balance Period, the shareholders agree that the holding company will have a managing board comprised of two members (one designated by each shareholder) and a supervisory board comprised of eight members (four designated by each shareholder). The chairman of the supervisory board of the holding company shall be designated for a three-year term by one shareholder (with the other shareholder entitled to designate the Vice-Chairman), such designation to alternate between Finmeccanica and FT1CI. The current chairman of the supervisory board is Mr. Steve and the current Vice-Chairman is Mr. Noblanc.

During the Balance Period, any other decision, to the extent that a resolution of the holding company is required, must be pursuant to the unanimous approval of the shareholders, including but not limited to the following: (i) the definition of the role and structure of our Managing Board and Supervisory Board, and those of the holding company; (ii) the powers of the chairman and the Vice-Chairman of our Supervisory Board, and that of the holding company; (iii) information by our Managing Board and by our Supervisory Board, and those of the holding company; (iv) treatment of confidential information; (v) appointment of any additional members of our Managing Board and that of the holding company; (vi) remuneration of the members of our Managing Board and those of the holding company; (vii) internal audit of us and of the holding company; (viii) industrial and commercial relationships between us and Finmeccanica or us and either or both FT1CI shareholders, or any of their affiliates; and (ix) any of the decisions listed in article 16.1 of our Articles of Association including our budget and pluri-annual plans.

However, in the case of a hostile take-over bid for us, any shareholder may, upon its sole request, obtain the activation by the holding company of the option agreement relating to the preference shares described below (provided that such activation is triggered by the Supervisory Board), in which case both shareholders shall be required to finance the subscription by the holding company of the preference shares, and such subscription and payment shall be completed only to the extent required to implement the option agreement so as to consolidate a majority of our voting rights (and to the exclusion of any further acquisitions of our common shares, which require the unanimous approval of our shareholders).

As regards us during the Balance Period: (i) each shareholder shall have the right to insert on a list prepared for proposal by the holding company to our general meeting of shareholders the same number of members for election to the Supervisory Board, and the holding company shall vote in favor of such members; (ii) the shareholders will cause the holding company to submit to our general meeting of shareholders and to vote in favor of a common proposal for the appointment of the Managing Board; and (iii) any decision relating to the voting rights of the holding company in us shall require the unanimous approval of the holding company shareholders and shall be submitted by the holding company to our general meeting of shareholders.

In addition, the following resolutions, to the extent that a resolution of the holding company is required, must be resolved upon by a shareholders resolution of the holding company, which shall require the unanimous approval of the shareholders: (i) any alteration in the holding company's articles of association; (ii) any issue, acquisition or disposal by the holding company of its shares or change in share rights; (iii) any alteration in our authorized share capital or issue by us of new shares and/or of any financial instrument giving rights to subscribe for our common shares; any acquisition or disposal by the holding company of our shares and/or any right to subscribe for our common shares; any modification to the rights attached to our common shares; any merger, acquisition or joint venture agreement to which we are or are proposed to be a party; and any other items on the agenda of our general shareholders meeting; (iv) the liquidation or dissolution of the holding company; (v) any legal merger, legal de-merger, acquisition or joint-venture agreement to which the holding company is proposed to be a party; and (vi) the adoption or approval of our annual accounts or those of the holding company or a resolution concerning a dividend distribution by us,

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it being understood that a dividend distribution by us and the holding company will be regulated by tracking stocks issued by the holding company to the shareholders.

After the end of the Balance Period, unanimous approval by the shareholders of the holding company remains required to approve:

(i) As long as any of the shareholders indirectly owns at least 3% of our issued and outstanding share capital, with respect to the holding company, any changes to the articles of association, any issue, acquisition or disposal of shares in the holding company or change in the rights of its shares, its liquidation or dissolution and any legal merger, de-merger, acquisition or joint venture agreement to which the holding company is proposed to be a party. However the minority shareholder may not prevent the other shareholder from increasing the capital of the holding company in order to finance the acquisition of additional shares of us as a defense against a hostile takeover bid for us.

(ii) As long as any of the shareholders indirectly owns at least 33% of the holding company, certain changes to our articles of association (including any alteration in our authorized share capital, or any issue of share capital and/or financial instrument giving the right to subscribe for our common shares, changes to the rights attached to our shares, changes to the preemptive rights, issues relating to the form, rights and transfer mechanics of the shares, the composition and operation of the Managing and Supervisory Boards, matters subject to the Supervisory Board's approval, the Supervisory Board's voting procedures, extraordinary meetings of shareholders and quorums for voting at shareholders' meetings).

(iii) Any decision to vote our shares held by the holding company at any general meeting of our shareholders with respect to any substantial and material merger decision. In the event of a failure by the shareholders to reach a common decision on the relevant merger proposal, our shares attributable to the minority shareholder and held by the holding company will be counted as present for purposes of a quorum of shareholders at one of our shareholders' meetings, but will not be voted (i.e., will be abstained from the vote in a way that they will not be counted as a negative vote or as a positive vote).

(iv) In addition, the minority shareholder will have the right to designate at least one member of the list of candidates for the Supervisory Board to be proposed by the holding company if that shareholder Indirectly owns at least 3% of our total issued and outstanding share capital.

At the end of the Balance Period, the members of our Supervisory Board and Managing Board and those of the holding company nominated by the minority shareholder will immediately resign upon request of the other shareholders, subject to the rights described in the previous paragraph.

*Disposals of Our Common Shares*

Pursuant to the 2001 shareholders agreement, ST Holding and France Telecom have entered into transactions disposing of our common shares.

In December 2001, ST Holding sold 69 million of our existing common shares, reducing its holdings from 389,483,280 shares to 320,483,280 shares. In this sale, France Telecom's indirect stake in us was reduced by 39,000,000 shares and Finmeccanica's stake was reduced by 30,000,000 shares.

Also in December 2001, France Telecom issued 1,522,950,000 aggregate principal amount of 1.0% notes due December 17, 2004, redeemable by way of exchange for up to 30 million of our existing common shares on or after January 2, 2004.

On July 30, 2002, we were informed that France Telecom sold 442.2 million of 6/4 % notes due August 2005, mandatorily exchangeable into a maximum of 26.42 million of our existing common shares (depending on our share price at the maturity date or redemption), disposing of appreciably all of its remaining interest in us.

The 2001 shareholders agreement also provided for ST Holding II to enter into an escrow arrangement with France Telecom with respect to our common shares underlying the exchangeable notes sold in December 2001 and July 2002. The 2001 shareholders agreement states that France Telecom will have a call option over those shares upon exchange of the exchangeable notes for common shares.

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The voting rights with respect to the shares held in escrow will at all times be exercised by ST Holding II. The agreement further provides that in connection with the December 2001 common share and exchangeable note offerings, each of the shareholders may request ST Holding to enter into hedging agreements.

The 2001 shareholders agreement provides that Finmeccanica may, subject to certain conditions, at any time before December 10, 2003, effect one or more transactions with respect to our existing common shares, or require that ST Holding effect such transactions, up to a maximum amount of 65,423,404 shares.

In addition, the 2001 shareholders agreement provides that Areva has both the freedom to dispose of its stake after a 24-month period following the agreement, as well as the possibility of rebalancing its stake to equal Finmeccanica's stake during a three-month period beginning December 10, 2003.

At any time, whether during or after the 24-month period from the date of the agreement, FT1CI and Finmeccanica may offer to each other for sale and/or transfer any or all of their respective shares in ST Holding. Likewise, France Telecom and Areva may, during the same period, offer to each other for sale and/or transfer any or all of their respective shares in FT1CI.

Under the 2001 shareholders agreement, after the December 2001 ST Holding share offering and France Telecom exchangeable note offerings, further disposals by the shareholders before December 2003, are subject to the following restrictions:

(i) The shareholders can make further disposals through the issuance of exchangeable debt instruments (although the instruments may not be exchangeable before the end of the 24-month period), equity swaps, subject to certain conditions, and straight sales or other transfers.

(ii) In the case of straight sales, the total percentage of our common shares held by the holding company after the sale may not be less than the relevant threshold percentage related to the preference shares described below, which percentage will be calculated taking into consideration the total number of our common shares outstanding on the date of the sale and the number of shares that may be issued upon the exercise of equity-linked instruments such as convertible bonds or options that can be exercised before the end of the 24-month period. Finmeccanica has the right to cause ST Holding II to sell a number of our shares equal to the difference between our shares actually disposed of by France Telecom in the common share offering and by way of exchange of the exchangeable bonds minus 29,968,421, the number of common shares actually sold by Finmeccanica in December 2001 (the buffer). In addition, France Telecom and Finmeccanica each have the right to cause ST Holding II to sell, for their respective accounts, 50% of the difference, if positive, between the total number of our common shares held by the holding company and the number of shares, calculated on a fully diluted basis, multiplied by the relevant threshold percentage for the preference shares as described below, less the buffer.

(iii) The disposal by the holding company of our common shares corresponding to the interest held by any minority shareholder will always be upon the sole decision of the minority shareholder, subject to compliance with the shareholders agreement.

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(iv) Any disposal by ST Holding II of our common shares corresponding to the interest of any shareholder is subject to tag-along rights. The disposals must be made either through a public offering or by a private placement to institutional investors with the objective of ensuring adequate distribution of our common shares in the market.

(v) Further disposals by the shareholders after the end of the 24-month period and any further lock-up periods, if any, are subject to the following agreements: in the event that a shareholder intends to participate in any public offering for all of our common shares or private placements to institutional investors, the shareholder may do so, subject to a right of first refusal granted to the other shareholders. In the event that a shareholder wishes to dispose of all of its remaining holding in the holding company in a private transaction outside any regulated market, it may do so only through a sale of its shares in the holding company and the new party becomes party to the then relevant shareholders' agreement.

Any transaction in our shares by our principal indirect shareholders (FT1CI or Finmeccanica, or the shareholders of FT1CI, Areva and France Telecom) pursuant to the 2001 shareholders agreement, or any publicity concerning such a potential transaction,

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could affect the price of our common shares and cause the market price of our shares to drop significantly.

As long as any of the parties to the shareholders agreement has a direct or indirect interest in us, subject to the public offer exception listed in paragraph (v) above, no sales by a party to the 2001 shareholders agreement may be made of any of our shares or of FT1CI, ST Holding or ST Holding II to any of our top ten competitors, or any company that controls such competitor.

*Change of Control Provision*

The 2001 shareholders agreement provides for tag-along rights, pre-emptive rights, and provisions with respect to a change of control of any of the shareholders or any controlling shareholder of FT1CI, on the one hand, and Finmeccanica, on the other hand. The shareholders may transfer shares of the holding company or FT1CI to any of the shareholder's affiliates, which would include the Italian state or the French state with respect to entities controlled by a state. The shareholders and their ultimate shareholders will be prohibited from launching any takeover process on any of the other shareholders.

***Preference Shares***

On May 31, 1999, our shareholders at the annual general meeting approved the creation of 180,000,000 preference shares (540,000,000 preference shares, as adjusted for the 3-to-1 stock split implemented in May 2000). These preference shares entitle a holder to full voting rights at any meeting of shareholders and to a preferential right to dividends. On the same day, we entered into an option agreement with ST Holding II, which was recently amended, which provides that preference shares shall be issued to ST Holding II upon request, subject to the adoption of a resolution of our Supervisory Board recognizing that a hostile takeover or similar action exists and giving our consent to the exercise of the option and upon payment of at least 25% of the par value of the preference shares to be issued. Following the recent amendment to the ST Holding II option agreement, the option is contingent upon ST Holding II retaining at least 30% of our issued share capital at the time of exercise of the option.

Under the 2001 shareholders agreement, any shareholder can cause the holding company to exercise the option to acquire the preference shares in the event of a hostile takeover bid for us.

***Other Shareholders Agreements***

The shareholders of FT1CI entered into a separate shareholders agreement in January 1993. On December 28, 2001, France Telecom and Areva modified this agreement in its entirety to reflect the 2001 shareholders agreement between the shareholders of ST Holding. The new FT1CI shareholders agreement provided for the capital reduction of FT1CI to reflect the sale by France Telecom of a portion of its indirect interest in us. At the end of the two-year period described under Disposals of Our Common Shares, Areva can either require an additional capital reduction of FT1CI or buy France Telecom's remaining shares in FT1CI. We are not a party to these agreements.



The new FT1CI shareholders agreement provides for new corporate governance arrangements based on France Telecom's level of ownership of us. It provides that FT1CI shall continue to have five directors, three of whom shall be chosen by Areva and two of whom shall be chosen by France Telecom, provided that France Telecom shall only choose one director once its interest in FT1CI falls below 30%. Also, France Telecom will have the right to nominate a number of FT1CI representatives to the supervisory board of ST Holding, ST Holding II and us in proportion to its holdings, with at least one member to the extent that FT1CI has at least two on those supervisory boards as long as France Telecom owns at least 20% of the capital of FT1CI. France Telecom will cause its appointed directors to these entities to resign as necessary if and when its interest in FT1CI is reduced. Except as set forth below, decisions with respect to ST Holding, us and our subsidiaries may be taken by simple majority. Certain actions by FT1CI will continue to require the approval of the France Telecom director or directors. These include (i) all borrowings above 2 million, (ii) certain loans and advances, (iii) issuance of guarantees, (iv) changes to any shareholder agreements entered into by FT1CI, (v) distribution of any dividends and (vi) introduction of any new shareholder.

In case ST Holding II requests the issuance of preference shares pursuant to the option agreement with us, the new FT1CI shareholders agreement provides that the payment by FT1CI for the subscription price will be shared on a pro rata basis between Areva and France Telecom according to the number of our common shares attributed to each on the date of exercise. Each has undertaken to pay such subscription amounts according to their respective pro rata stakes.

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Following the 24-month period from the ST Holding shareholders agreement, should Finmeccanica exercise its right to make a public offering of our common shares, FT1CI's right of first refusal may be exercised by Areva in the first instance, and then by France Telecom. In addition, in case of a Finmeccanica public offering, both Areva and France Telecom may cause FT1CI to exercise its tag-along rights to offer our common shares corresponding to the respective indirect holding. If either party were to exercise its right of first refusal or tag-along rights, Areva and France Telecom undertake to cause FT1CI to undertake all appropriate actions.

Transfers of shares in FT1CI to third parties are subject to a right of preemption, a right of first refusal of the other shareholders, as well as other provisions. In the event Areva proposes to sell its interest in FT1CI, in whole or in part, France Telecom has the right to require the acquirer to purchase its interest as well. The FT1CI shareholders agreement terminates upon the termination of FT1CI or when either party ceases to be a shareholder of FT1CI.

As is the case with other companies controlled by the French government, the French government has appointed a Commissaire du Gouvernement and a Contrôleur d'Etat for FT1CI. Pursuant to Decree No. 94-214, dated March 10, 1994, these government representatives have the right (i) to attend any board meeting of FT1CI, and (ii) to veto any board resolution or any decision of the president of FT1CI within ten days of such board meeting (or, if they have not attended the meeting, within ten days of the receipt of the board minutes or the notification of such president's decision); such veto lapses if not confirmed within one month by the Ministry of the Economy or the *Secrétariat d'Etat à l'Industrie* (Secretary of Industry). FT1CI is subject to certain points of the *arrêté* of August 9, 1953 pursuant to which the Ministry of the Economy and any other relevant ministries (a) have the authority to approve decisions of FT1CI relating to budgets or forecasts of revenues, operating expenses and capital expenditures, and (b) may set accounting principles and rules of evaluation of fixed assets and amortization.

Pursuant to the principal Italian privatization law, certain special government powers may be introduced into the bylaws of firms considered strategic by the Italian government. In the case of Finmeccanica, these powers were established by decrees adopted by the Minister of the Treasury on November 8, 1999 and Finmeccanica's bylaws were subsequently amended on November 23, 1999. The special powers of the Minister of the Treasury (who will act in agreement with the Minister of Industry) include (i) the approval or disapproval of the acquisition of material interests in Finmeccanica's share capital, (ii) approval of material shareholders agreements relating to Finmeccanica's share capital, (iii) appointment of members of Finmeccanica's board of directors and board of statutory auditors, and (iv) powers to veto resolutions to dissolve Finmeccanica, transfer its business, merge, conduct spin-offs, sell businesses or lines of business, including the transfer of equity participations in subsidiaries or affiliates, transfer its registered office outside of Italy, change Finmeccanica's corporate purposes or amend or modify any of the Minister of the Treasury's special powers.

In connection with our initial public offering, we entered into a registration rights agreement with ST Holding II pursuant to which we agreed that, upon request from ST Holding II, we will file a registration statement under the Securities Act of 1933, as amended, to register common shares held by ST Holding II, subject to a maximum number of five requests in total as well as a maximum of one request in any twelve-month period. Subject to certain conditions, we will grant ST Holding II the right to include our common shares in any registration statements covering offerings of common shares by us. ST Holding II will pay a portion of the costs of any requested or incidental registered offering based upon its proportion of the total number of common shares being registered, except that ST Holding II will pay any underwriting commissions relating to common shares that it sells in such offerings and any fees and expenses of its separate advisors, if any. Our registration rights agreement with ST Holding II will terminate upon the earlier of December 15, 2004 and such time as ST Holding II and its affiliates own less than 10% of our outstanding common shares.

**Related Party Transactions**

We have in the normal course of our business taken certain equity positions in companies with which we have simultaneously entered into development contracts where certain of these companies provide us services on arm's-length terms. These contracts are not material to our business.

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Our manufacturing facility at Crolles, France houses a research and development center that is operated in the legal form of a French *Groupement d'intérêt économique* ( GIE ) named *Centre Commun de Microelectronique de Crolles - Laboratoire d'Electronique de Technologie d'Instrumentation* ( LETI ), a research laboratory of *Commissariat de l'Energie Atomique* ( CEA ), an affiliate of Areva Group (one of our indirect controlling shareholders), is our partner. Until December 31, 2002, France Telecom R&D (France Telecom is also one of our indirect controlling shareholders) was a member of the GIE. See Item 4. Information on the Company Research and Development and Major Shareholders . The activity of the *Centre Commun de Microélectronique de Crolles* is directed towards sub 0.13-micron technologies with a view to preparing the technology to begin production of 300mm wafers and associated wafer-fabrication processes. The costs recorded as R&D expenses for the GIE in 2002, 2001 and 2000 were \$3 million, \$3 million and \$5 million, respectively. At December 31, 2002, we had a net receivable amount of \$7 million, while at December 31, 2001 we had net liability amount of \$17 million.

We participate in certain programs sponsored by the French and Italian governments for the funding of research and development and industrialization through direct grants as well as low interest financing. See Item 4. Information on the Company Public Funding . The shareholders of ST Holding, the corporate parent of our principal shareholder, are controlled, directly or indirectly, by the governments of the Republics of France and Italy. See Major Shareholders .

Sales to our shareholders and our affiliates totaled approximately \$1 million in 2002. For the years ended December 31, 2000, 2001 and 2002, the related party transactions were primarily with Areva, France Telecom, Finmeccanica, Equant and Orange. For further information, see Note 27 to our Consolidated Financial Statements.

**Item 8. Financial Information**

**Financial Statements**

Please see Item 18. Financial Statements for a list of the financial statements filed with this document.

**Legal Proceedings**

As is the case with many companies in the semiconductor industry, we have from time to time received communications alleging possible infringement of certain intellectual property rights of others. In the event that claims are successfully asserted against us, we could suffer a material adverse effect on our results of operations. Furthermore, irrespective of the validity or the successful assertion of such claims, we could incur significant costs with respect to the defense thereof, which could have a material adverse effect on our results of operations or financial condition.

We are involved in an arbitration against a former supplier, European Semiconductor Manufacturing Ltd. ( ESM ), which is in administrative receivership. ESM has alleged that we breached the terms of an agreement relating to the licencing of our HCMOS 5 and HCMOS 6 technologies. We do not believe that the ESM claim has any merit nor that it or any other pending legal proceedings will have a material adverse effect on our financial condition. Accordingly, we do not currently have any reserves for litigation risk. We have declared to our insurers two product liability claims relating to defective microcontroller products for which we carry a reserve corresponding to the deductible amount under the applicable insurance policies.

### **Dividend Policy**

#### **In the past five years, we have paid the following dividends:**

On March 12, 2003, our shareholders approved the payment of a cash dividend with respect to the year ended December 31, 2002 of \$0.08 per share payable to Dutch Registry shareholders of record as of April 17, 2003 and New York Registry shareholders as of April 26, 2003. This dividend was approximately 17% of our earnings for 2002.

In 2002, we paid a cash dividend with respect to the year ended December 31, 2001 of \$0.04 per share. This dividend was approximately 14% of our earnings for 2001.

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In 2001, we paid a cash dividend with respect to the year ended December 31, 2000 of \$0.04 per share. This dividend was approximately 2.5% of our earnings for 2000.

In 2000, we paid a dividend of \$0.03 per share, which represented 4.9% of our earnings for 1999.

In 1999, we paid a dividend of \$0.027 per share, which represented approximately 5.5% of our earnings for 1998.

In the future, we may consider proposing dividends representing a similar proportion of our earnings for a particular year.

### **Item 9. *Listing***

#### **Trading History of the Company's Shares**

Since 1994, our common shares have been traded on the New York Stock Exchange under the symbol **STM** and on Euronext Paris (formerly known as ParisBourse) and were quoted on SEAQ International. On June 5, 1998, our common shares were also listed for the first time on the Italian Stock Exchange, where they have been traded since that date.

Our common shares have been included in the CAC 40, the principal index published by Euronext Paris, since November 12, 1997. The CAC 40 is derived daily by comparing the total market capitalization of 40 stocks included in the monthly settlement market of Euronext Paris to a baseline established on December 31, 1987. Adjustments are made to allow for expansion of the sample due to new issues. The CAC 40 indicates the trends in the French stock market as a whole and is one of the most widely followed stock price indices in France.

On March 18, 2002, we were admitted into the MIB 30 Index, which is comprised of the 30 leading stocks, based upon market capitalization and liquidity, listed on the Milan Stock Exchange. The MIB 30 Index is sponsored by the Italian Stock Exchange Council, is calculated every minute, and accounts for over 70% of the total market capitalization and about 75% of the total trading volume.

The table below indicates the range of the high and low prices in U.S. dollars for the ADSs on the New York Stock Exchange and the high and low prices in euro for the common shares on Euronext Paris and the Italian Stock Exchange during each quarter in 2001, 2002 and to date in 2003. In December 1994, we completed the Initial Public Offering of 21,000,000 common shares at an initial price to the public of \$22.25 per share. On June 16, 1999, we effected a 2-to-1 stock split and on May 5, 2000, we effected a 3-to-1 stock split. The table below has been adjusted to reflect the split. Each range is based on the highest or lowest rate within each day for common share price ranges for the relevant exchange.

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Calendar Period	Italian Stock Exchange price per common share(2)		Euronext Paris price per common share(1)		New York Stock Exchange price per common share	
	High	Low	High	Low	High	Low
	( )		( )		(\$)	
<b>Annual information for the past five years</b>						
1998	11.96	5.08	14.15	5.01	15.29	5.98
1999	51.67	10.68	51.67	11.47	51.33	13.42
2000	76.67	40.35	76.93	39.53	73.88	39.06
2001	52.35	18.89	52.45	18.88	48.70	17.88
2002	39.65	11.09	39.70	11.10	35.81	11.00
<b>Quarterly information for the past two years</b>						
<b>2001</b>						
First quarter	52.35	31.60	52.45	31.55	48.70	29.35
Second quarter	48.80	35.20	48.84	35.00	42.29	30.51
Third quarter	40.60	18.89	40.70	18.88	35.45	17.89
Fourth quarter	42.75	22.71	42.80	22.75	38.37	21.31
<b>2002</b>						
First quarter	39.65	31.50	39.70	31.50	35.81	27.62
Second quarter	38.70	21.85	38.72	21.50	34.44	21.38
Third quarter	26.40	12.98	26.53	12.99	26.29	13.02
Fourth quarter	26.95	11.09	26.95	11.10	26.59	11.00

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Calendar Period	Italian Stock Exchange price per common share(2)		Euronext Paris price per common share(1)		New York Stock Exchange price per common share	
	High	Low	High	Low	High	Low
	( )		( )		(\$)	
<b>Monthly information for most recent six months</b>						
October 2002	20.50	11.09	20.50	11.10	20.29	11.00
November 2002	26.44	18.84	26.46	18.85	26.19	18.97
December 2002	26.95	18.81	26.95	18.32	26.59	19.34
January 2003	21.44	16.15	21.66	16.15	22.65	17.86
February 2003	17.68	15.43	17.68	15.43	18.93	16.67
March 2003 (until March 11, 2003)	17.60	15.21	17.67	15.20	19.04	17.13

Source: Reuters

- (1) For periods prior to January 1, 1999, the share prices on Euronext Paris have been converted into euro at the official exchange rate of 1.00 = FF 6.55957.
- (2) For periods prior to January 1, 1999, the share prices on the Italian Stock Exchange have been converted into euro at the official exchange rate of 1.00 = Lit. 1,936.27. The shares have been listed on the Italian Stock Exchange since June 5, 1998.

At December 31, 2002, there were 887,523,554 common shares outstanding, not including (i) common shares issuable under our various employee stock option plans or employee share purchase plans, (ii) common shares issuable upon conversion of our outstanding convertible debt securities and (iii) 13.4 million common shares repurchased in 2001 and 2002. Of the 887,523,554 common shares outstanding, 86,429,669 or 9.7% were registered in the common share registry maintained on our behalf in New York.

**1999 Liquid Yield Option™ Notes**

Our 1999 Liquid Yield Option™ Notes ( LYONs ) are traded on the New York Stock Exchange and Euronext Paris. The table below indicates the range of the high and low prices on the New York Stock Exchange and the high and low prices for the LYONs on Euronext Paris, in both cases as a percentage of principal amount at maturity, during each quarter in 2000, 2001 and to date in 2002. Each range is based on the highest or lowest rate at the end of each closing day on the relevant exchange.

Calendar Period	New York Stock Exchange price per LYON		Euronext Paris price per LYON	
	High	Low	High	Low
	(%)		(%)	

Annual information for the past five years



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1999	138.09	81.56	140.25	81.94
2000	192.10	118.27	192.10	118.44
2001	132.62	79.23	146.50	88.00
2002	105.64	79.22	105.05	79.70
<b>Quarterly information for the past two years</b>				
<b>2001</b>				
First quarter	132.62	94.54	146.50	102.50
Second quarter	119.60	97.15	142.13	113.60
Third quarter	104.27	79.23	113.60	89.13
Fourth quarter	110.27	82.92	121.13	88.00
<b>2002</b>				
First quarter	105.64	93.70	105.05	93.16
Second quarter	101.93	85.24	99.87	83.00
Third quarter	89.98	80.00	89.50	79.70
Fourth quarter	92.05	79.22	91.75	86.55
<b>Monthly information for most recent six months</b>				
October 2002	86.16	79.22	79.20	85.90
November 2002	92.05	86.49	86.50	92.00
December 2002	91.98	87.02	91.75	86.55
January 2003	89.91	86.93	89.63	86.53
February 2003	87.83	86.14	87.74	86.14
March 2003 (until March [•], 2003)	87.72	86.90	87.77	86.82

Source: Bloomberg

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**Market Information**

***Euronext***

*General*

On September 22, 2000, upon successful completion of an exchange offer, the ParisBourse<sup>SBF</sup> SA, or the SBF, the Amsterdam Stock Exchanges and the Brussels Stock Exchanges merged to create Euronext, the first pan-European stock exchange. Through the exchange offer, all the shareholders of SBF, the Amsterdam Stock Exchanges and the Brussels Stock Exchanges contributed their shares to Euronext N.V. ( Euronext ), a Dutch holding company. Following the creation of Euronext, the SBF changed its name to Euronext Paris S.A. ( Euronext Paris ). Securities quoted on exchanges participating in Euronext cash markets are traded and cleared over common Euronext platforms but remain listed on their local exchanges. NSC is the common Euronext platform for trading and clearing 21 for clearing. In addition, Euronext, through Euroclear, anticipates, but not before 2008, implementation of central settlement and custody structure over a common system. As part of Euronext, Euronext Paris retains responsibility for the admission of shares to Euronext Paris trading markets as well as the regulation of those markets.

Euronext has been listed on the *Premier Marché* of Euronext Paris since July 2001. In January 2002, Euronext acquired the London International Financial Futures and Options Exchange (LIFFE), London's derivatives market. The combination of LIFFE and Euronext N.V. will triple the volume of derivatives business conducted through LIFFE CONNECT trading platform.

Since February 6, 2002, Bolsa de Valores de Lisboa e Porto (BVLPL) has become a wholly owned subsidiary of Euronext and has been renamed Euronext Lisbon.

***Euronext Paris***

Securities approved for listing by Euronext Paris are traded in one of three regulated markets: the *Premier Marché*, *Second Marché* and *Nouveau Marché*. The securities of most large public companies are listed on the *Premier Marché* with the *Second Marché* available for small and medium-sized companies. Trading on the *Nouveau Marché* was introduced in March 1996 to allow companies seeking development capital to access the stock market. In addition, securities of certain other companies are traded on a non-regulated over-the-counter market, the *Marché Libre-OTC*, which is also operated by Euronext Paris.

The common shares are listed on the *Premier Marché* under the Sicovam Code 12970. Shares listed on Euronext Paris are placed in one of two categories depending on the volume of transactions. The common shares are listed in the category known as *Continu*, which includes the most actively traded shares. The minimum yearly trading volume required for a security of a listed company on a regulated market of Euronext Paris in the *Continu* category is 2,500 trades. Securities listed on Euronext Paris are

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traded through providers of investment services (investment companies and other financial institutions). Trades take place continuously on each business day from 9:00 a.m. to 5:25 p.m. (Paris time), with a pre-opening session from 7:15 a.m. to 9:00 a.m. (Paris time) and a pre-closing session from 5:25 p.m. to 5:30 p.m. (Paris time) during which transactions are recorded but not executed and a closing auction at 5:30 p.m. (Paris time). Any trade effected after the close of a stock exchange session will be recorded, on the next Euronext Paris trading day, at the closing price for the relevant security at the end of the previous day's session. Euronext Paris publishes a daily Official Price List that includes price information on each listed security. Euronext Paris has introduced continuous trading by computer for most listed securities.

Trading in the listed securities of an issuer may be suspended by Euronext Paris if quoted prices exceed certain price limits defined by the relevant regulations. In particular, if the quoted price of a *Continu* security varies by more than ten percent from the previous day's closing price (reference price), trading may be suspended for up to 4 minutes. Further suspensions for up to 4 minutes are also possible if the price again varies by more than ten percent from a new reference price equal to the price which caused the first trading suspension. If the quoted price of a *Continu* security varies by more than two percent from the last quoted price, trading may be suspended for up to 4 minutes. Euronext Paris may also suspend trading of a listed security in certain other limited circumstances, including, for example, the occurrence of unusual trading activity in such security.

Trades of securities listed on the *Premier Marché* are settled on a cash basis on the third trading day following the trade. Market intermediaries are also permitted to offer investors a deferred settlement service (which

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we refer to as *ordre stipulé à règlement différé* or OSRD ) for a fee. The OSRD is only available for trades in securities which either (i) are a component of the SBF 120 Index or (ii) have both a total market capitalization of at least 1 billion and a daily average volume of trades of at least 1 million and which are cited on a list published by Euronext Paris. The OSRD allows shareholders to benefit from certain leverages and other special features of the previous monthly settlement market (formerly *Marché à Règlement Mensuel*). Investors in securities eligible for the OSRD can elect on the determination date (*date de liquidation*), which is, at the latest, the fifth trading day before the end of the month, either to settle the trade by the last trading day of the month or to pay an additional fee and postpone the settlement decision to the determination date of the following month. Our common shares are eligible for the OSRD.

Ownership of equity securities traded on a deferred settlement basis passes at the time of registration of the securities in the shareholders' account. In accordance with French securities regulations, any sale of securities traded on a deferred settlement basis during the month of a dividend payment date is deemed to occur after the payment of the dividend. In such cases, the purchaser's account is credited with an amount equal to the dividend paid and the seller's account is debited by the same amount.

Prior to any transfer of securities held in registered form on the *Premier Marché*, the securities must be converted into bearer form and accordingly inscribed in an account maintained by an accredited intermediary with Euroclear France S.A., a registered clearing agency. Transactions in securities are initiated by the owner giving instructions (through an agent, if appropriate) to the relevant accredited intermediary. Trades of securities listed on the *Premier Marché* are cleared through clearing 21 and settled through Euroclear France S.A. using a continuous net settlement system. A fee or a commission is payable to the broker-dealer or other agent involved in the transaction.

Our common shares have been included in the CAC 40, the principal index published by Euronext Paris, since November 12, 1997. The CAC 40 is derived daily by comparing the total market capitalization of 40 stocks included in the monthly settlement market of Euronext Paris to a baseline established on December 31, 1987. Adjustments are made to allow for expansion of the sample due to new issues. The CAC 40 indicates the trends in the French stock market as a whole and is one of the most widely followed stock price indices in France. Our common shares could be removed from the CAC 40 at any time, and the exclusion or the announcement thereof could cause the market price of our common shares to drop significantly.

***Securities Trading in Italy***

The Mercato Telematico Azionario (the MTA ), the Italian automated screen-based quotation system on which our common shares are listed, is organized and administered by Borsa Italiana S.p.A. ( Borsa Italiana ) subject to the supervision of the CONSOB, the public authority charged, *inter alia*, with regulating investment companies, securities markets and public offerings of securities in Italy to ensure the transparency and regularity of dealings and protect investors. Borsa Italiana was established to manage the Italian regulated financial markets (including the MTA) as part of the implementation in Italy of the EU Investment Services Directive pursuant to Legislative Decree No. 415 of July 23, 1996 (the Eurosime Decree ) and as modified by Legislative Decree 58 of February 24, 1998 (the Financial Act ). Borsa Italiana became operative in January 1998, replacing the administrative body Consiglio di Borsa, and has issued rules governing the organization and the administration of the Italian stock exchange, futures and options markets as well as the admission to listing on and trading in these markets. The shareholders of Borsa Italiana are primarily financial intermediaries.

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A three-day rolling cash settlement period applies to all trades of equity securities in Italy effected on a regulated market. Any person, through an authorized intermediary, may purchase or sell listed securities following (i) in the case of sales, deposit of the securities; and (ii) in the case of purchases, deposit of 100% of such securities' value in cash, or deposit of listed securities or government bonds of an equivalent amount. No closing price is reported for the electronic trading system, but an official price, calculated for each security as a weighted average of all trades effected during the trading day net of trades executed on a cross-order basis, and a reference price, calculated for each security as a weighted average of the last 10% of the trades effected during such day, are reported daily.

If the opening price of a security (established each trading day prior to the commencement of trading based on bids received) differs by more than 10% (or such other amount established by Borsa Italiana) from the previous day's reference price, trading in that security will not be permitted until Borsa Italiana authorizes it. If in

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the course of a trading day the price of a security fluctuates by more than 5% from the last reported sale price (or 10% from the previous day's reference price), an automatic five minute suspension in the trading of that security will be declared by the Borsa Italiana. In the event of such a suspension, orders already placed may not be modified or cancelled and new orders may not be processed. Borsa Italiana has the authority to suspend trading in any security, among other things, in response to extreme price fluctuations. In urgent circumstances, CONSOB may, where necessary, adopt measures required to ensure the transparency of the market, orderly trading and protection of investors.

Italian law requires that trading of equity securities, as well as any other investment services, may be carried out on behalf of the public only by registered securities dealing firms and banks (with minor exceptions). Banks and investment services firms organized in a member nation of the EU are permitted to operate in Italy provided that the intent of the bank or investment services firm to operate in Italy is communicated to (i) the Bank of Italy and to (ii) the Bank of Italy and CONSOB, respectively, by the competent authority of the member state. Non-EU banks and non-EU investment services firms may operate in Italy subject to a specific authorization granted by the Bank of Italy and CONSOB upon consultation with the Bank of Italy, respectively.

The Borsa Italiana, with the approval of CONSOB, has laid out new obligations on information deriving from the modifications brought to the Instructions pertaining to Market Regulations. Such modifications are aimed at allowing companies incorporated outside Italy and meeting the necessary capitalization requirements to be eligible for admission into the MIB 30 Index. The Index is comprised of the 30 leading stocks, based upon market capitalization and liquidity, listed on the Milan Stock Exchange. In November 2001, we confirmed our compliance with these new obligations and are now admitted into the Italian MIB 30 Index.

The settlement of stock exchange transactions is facilitated by Monte Titoli, a centralized securities clearing system owned by the Banca d'Italia and certain major Italian banks and financial institutions. Almost all Italian banks and some registered securities dealing firms have securities accounts with Monte Titoli. Beneficial owners of shares may hold their interests through specific deposit accounts with any depository having an account with Monte Titoli. Beneficial owners of shares held with Monte Titoli may transfer their shares, collect dividends, create liens and exercise other rights with respect to those shares through such accounts.

Participants in Euroclear and Cedelbank may hold their interests in shares and transfer the shares, collect dividends and exercise their shareholders' rights through Euroclear and Cedelbank. A holder may require Euroclear and Cedelbank to transfer its shares to an account of such holder with an Italian bank or any authorized broker.

On March 18, 2002, we were admitted into the MIB 30 Index, which is comprised of the 30 leading stocks, based upon market capitalization and liquidity, listed on the Milan Stock Exchange. The MIB 30 Index is sponsored by the Italian Stock Exchange Council, is calculated every minute, and accounts for over 70% of the total market capitalization and about 75% of the total trading volume. Our common shares could be removed from the MIB 30 at any time, and the exclusion or announcement thereof could cause the market price of our common shares to drop significantly.

**Item 10. *Additional Information***

**Memorandum and Articles of Association**

We were incorporated under the law of The Netherlands by deed of May 21, 1987. Set forth below is a summary of certain provisions of our Articles of Association and relevant Dutch corporate law. The summary below does not purport to be complete and is qualified in its entirety by reference to the articles of association and relevant Dutch corporate law. References herein to shares include common and preference shares and references herein to shareholders include common and preference shareholders, unless otherwise provided.

***Purposes of the Company***

Article 2 of our Articles of Association sets forth the purposes of our company. For a description of our purposes, please refer to Item 4. Information on the Company Business Overview .

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Our authorized share capital amounts to 1,809,600,000, consisting of 1,200,000,000 common shares and 540,000,000 preference shares, with a nominal value of 1.04 per share. As of December 31, 2002, 887,523,554 common shares were outstanding, not including (i) common shares issuable under our various employee stock option plans or employee share purchase plans, (ii) common shares issuable upon conversion of our outstanding convertible debt securities and (iii) 13.4 million shares repurchased in 2001 and 2002. As of December 31, 2002, options to acquire 46,817,761 common shares were outstanding. No preference shares are currently outstanding. Shares can be issued in registered form only. Pursuant to a shareholders' resolution adopted at the annual general meeting of shareholders on March 27, 2002, our Supervisory Board has been authorized for a period of five years to resolve upon (i) the issuance of any number of new ordinary or preference shares, (ii) the terms and conditions of an issuance of shares; (iii) waiver of existing shareholders' *pro rata* preemptive rights; and (iv) granting of rights to subscribe for ordinary shares and/or preference shares. If the Supervisory Board so decides, share certificates may be issued for common shares.

Share registers are maintained in New York by The Bank of New York, the New York Transfer Agent and Registrar (the New York Registry), and in Amsterdam, The Netherlands, by Netherlands Management Company B.V., the Dutch Transfer Agent and Registrar (the Dutch Registry). Shares of New York Registry held through The Depository Trust Company (DTC) are registered in the name of Cede & Co., the nominee of DTC, and shares of Dutch Registry held through the French clearance and settlement system, Euroclear France, are registered in the name of Euroclear France or its nominee.

The preference shares are intended to protect us from a hostile take-over or similar action. The preference shares entitle a holder to full voting rights at any meeting of shareholders. On May 31, 1999, we entered into an option agreement with ST Holding II in order to protect ourselves from a hostile take-over or other similar action. The option agreement provides that (giving effect to the 3-for-1 stock split of May 2000) up to 540,000,000 preference shares shall be issued to ST Holding II (i) upon its request and subject to the adoption of a resolution of the Supervisory Board giving its consent to the exercise of the option and (ii) upon payment of at least 25% of the par value of the preference shares to be issued. Following a recent amendment, to the option agreement, the option is contingent upon ST Holding II retaining at least 30% of our issued share capital. The preference shares, if issued, would have priority over the common shares with respect to dividends and distributions upon liquidation.

***Changes to Our Share Capital and Stock Option Grants***

Year	Transaction	Number of Shares	Nominal Value (euro)	Amount of increase capital (euro)	Cumulative number of shares	Nominal value of		Cumulative -issue premium (euro)
						increase / reduction in capital	Amount of issue premium (euro)	
March 31, 2002	Exercise of options	140,455	1.04	935,209,221	899,239,636	146,073	1,081,691	1,649,250,511



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September 28, 2002	Conversion of LYONs	945	1.04	935,210,204	899,240,581	983	30,482	1,649,280,993
September 28, 2002	Exercise of options and employee stock purchases	601,284	1.04	935,835,540	899,841,865	625,335	10,830,842	1,660,111,835
December 31, 2002	Exercise of options and employee stock purchases	1,081,689	1.04	936,960,496	900,923,554	1,124,957	15,671,916	1,675,783,751

**Dividends**

Subject to certain exceptions, dividends may only be paid out of the profits as shown in the adopted annual accounts. The profits must first be used to set up and maintain reserves required by Dutch law and our articles of association. The Supervisory Board may, upon proposal of the Managing Board, also establish reserves out of our annual profits. The portion of our annual profits that remains after the establishment or maintaining of reserves is at the disposal of the general meeting of shareholders. If the general meeting of shareholders resolves to distribute profits, preference shareholders shall first be paid a dividend if such preference shares are outstanding, which will be a percentage of the paid up part of the nominal value of their preference shares.

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The profits remaining after payment has been made to preference shareholders may be distributed to the common shareholders.

Our general meeting of shareholders may, upon the proposal of the Supervisory Board, declare distributions out of our share premium reserve and other reserves available for shareholder distributions under Dutch law. Pursuant to a resolution of our Supervisory Board, distributions approved by the general meeting of shareholders may be fully or partially made in the form of our new shares to be issued. We may not pay dividends if the payment would reduce shareholders' equity below the paid-up and called portion of the share capital, plus the reserves which are required by statute. Our Supervisory Board may, subject to certain statutory provisions, distribute one or more interim dividends in respect of any year before the accounts for such year have been approved and adopted at a general meeting of shareholders. Rights to cash dividends and distributions that have not been collected within five years after the date on which they became due and payable shall revert to us.

At December 31, 2002, the amount of retained earnings available to pay dividends under Dutch law was approximately \$5,983 million. Retained earnings for purposes of this calculation are based on our unconsolidated accounts using generally accepted accounting principles in The Netherlands ( Dutch GAAP ). The only material difference between our Dutch GAAP and U.S. GAAP accounts resulted because we canceled our accumulated deficit through a share capital reduction in 1993. Under U.S. GAAP, as this operation was not a quasi-reorganization, the net effect of the par value reduction was applied against capital surplus. At December 31, 2002, under U.S. GAAP, we had accumulated earnings of approximately \$4,592 million.

***Goodwill Accounting***

Under Dutch GAAP, we are required to amortize each year the goodwill and as such the relevant charge has been included in our statement of income as per Dutch Rules. Starting 2002, with the introduction FASB 142, US GAAP does not require anymore the amortization of goodwill which is subject to yearly tests for potential impairment.

For the history of dividends paid by us to our shareholders in the past five years, see Item 8. Financial Information Dividend Policy .

***Shareholder Meetings and Voting Rights***

Each registered shareholder has the right to attend general meetings of shareholders, either in person or represented by a person holding a written proxy, to address shareholder meetings and to exercise voting rights, subject to the provisions of the articles of association. Our ordinary general meetings of shareholders are held at least annually, within six months after the close of each financial year, in Amsterdam, Haarlemmermeer (Schiphol Airport), Rotterdam or The Hague, The Netherlands. Extraordinary general meetings of shareholders may be held as often as our Supervisory Board deems necessary, and must be held upon the written request of registered holders of at least 10% of the total outstanding share capital to our Managing Board or our Supervisory Board specifying in detail the business to be dealt with.

We will give notice by mail to registered holders of shares of each shareholders meeting, and will publish notice thereof in a national daily newspaper distributed throughout The Netherlands and in at least one daily newspaper in France and Italy country s in which our shares are also admitted for official quotation. Such notice shall be given no later than the twenty-first day prior to the day of the meeting and shall either state the business to be considered or state that the agenda is open to inspection by the shareholders at our offices. We are exempt from the proxy rules under the United States Securities Exchange Act of 1934. Euroclear France will provide notice of general meetings of shareholders to, and compile voting instructions from, holders of shares held directly or indirectly through Euroclear France. DTC will provide notice of general meetings of shareholders to holders of shares held directly or indirectly through DTC and the New York Transfer Agent and Registrar will compile voting instructions. In order for holders of shares held directly or indirectly through Euroclear France to attend general meetings of shareholders in person, such holders must withdraw their shares from Euroclear France and have such shares registered directly in their name or in the name of their nominee. In order for holders of shares held directly or indirectly through DTC to attend general meetings of shareholders in person, such holders need not withdraw such shares from DTC but must follow rules and procedures established by the New York Transfer Agent and Registrar.

Each share is entitled to one vote. Unless otherwise required by the articles of association or Dutch law, resolutions of general meetings of shareholders require the approval of a majority of the votes cast at a meeting at which at least one-third of the outstanding share capital is present or represented. We may not vote our common shares held in treasury.

The articles of association allow for separate meetings for holders of common shares and for holders of preference shares. At a meeting of holders of preference shares at which the entire issued capital of shares of such class is represented,

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valid resolutions may be adopted even if the requirements in respect of the place of the meeting and the giving of notice have not been observed, *provided* that such resolutions are adopted by unanimous vote. Also, valid resolutions of preference shareholder meetings may be adopted outside a meeting if all holders of preference shares and holders of a right of usufruct on preference shares indicate by letter, telegram, telex communication or facsimile that they vote in favor of the proposed resolution, provided that no depositary receipts for preference shares have been issued with our cooperation.

***Approval of Annual Accounts and Discharge of Management Liability***

Each year, our Managing Board must prepare annual accounts and submit them to the general meeting of shareholders for approval within five months after the end of our financial year, unless the general meeting of shareholders has extended this period by a maximum of six months on account of special circumstances.

Each year, our general meeting of shareholders votes whether or not to discharge the members of our Supervisory Board and of our Managing Board for their supervision and management, respectively, during the previous financial year. Under Dutch law, this discharge does not extend to matters not disclosed to shareholders.

***Liquidation Rights***

In the event of our dissolution and liquidation, after payment of all debts and liquidation expenses, the holders of preference shares shall, if possible, receive the paid up portion of the nominal amount of their preference shares. Any assets then remaining shall be distributed among the registered holders of common shares in proportion to the nominal value of their shareholdings.

***Issue of Shares; Preemptive Rights***

Unless limited or eliminated by the general meeting of shareholders or our Supervisory Board as described below, registered holders of common shares have a *pro rata* preemptive right to subscribe for any newly issued common shares, except for common shares issued for consideration other than cash and common shares issued to our employees or of one of our group companies. Shareholders do not have a preemptive right to subscribe for any newly issued preference shares. Holders of preference shares have no preemptive rights.

The general meeting of shareholders, upon proposal and on the terms and conditions set by our Supervisory Board, has the power to issue shares. The general meeting of shareholders may also authorize our Supervisory Board, for a period of no more than five years, to issue shares and to determine the terms and conditions of share issuances. At the general meeting of shareholders held on March 27, 2002, the Supervisory Board was delegated this authority for a period of five years.

The general meeting of shareholders, upon proposal by the Supervisory Board, also has the power to limit or exclude preemptive rights in connection with new issuances of shares. Such a resolution of the general meeting of shareholders requires the approval of at least two-thirds of the votes cast if at such general meeting of shareholders less than 50% of the outstanding share capital is present or represented. The general meeting of shareholders may authorize our Supervisory Board, for a period of no more than five years, to limit or exclude preemptive rights. At the general meeting of shareholders held on March 27, 2002, our Supervisory Board was delegated this authority for a period of five years.

***Acquisition of Shares in Our Own Share Capital***

We may acquire our own shares, subject to certain provisions of Dutch law and of our Articles of Association, if and to the extent that (i) the shareholders' equity less the payment required to make the acquisition does not fall below the sum of the paid-up and called-up portion of the share capital and any reserves required by Dutch law and (ii) the aggregate nominal value of shares that we or our subsidiaries acquire, hold or hold in pledge would not exceed one-tenth of our issued share capital. Share acquisitions may be effected by our Managing Board, subject to the approval of our Supervisory Board, only if the general meeting of shareholders has authorized the Managing Board to effect such repurchases, which authorization may apply for a maximum period of 18 months. We may not vote shares we hold in treasury. Our articles of association have been amended effective as of May 5, 2000, implementing a resolution of the general meeting of shareholders held on April 26, 2000, to provide that we shall be able to acquire shares in our own share capital in order to transfer these shares under employee stock option or stock purchase plans, without an authorization of the general meeting of shareholders being required.

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In 2001, we acquired 9.4 million of our common shares, and in May 2002, we acquired an additional four million of our common shares to fund attributions of stock options to managers and employees pursuant to our 2001 Stock Option Plan, which was adopted by our shareholders on April 25, 2001. We may in the future proceed with additional repurchases of our common shares to fund further attributions of stock options pursuant to the 2001 plan.

***Capital Reduction***

Upon proposal by our Supervisory Board, the general meeting of shareholders may resolve to reduce our issued share capital by canceling shares held by us or by reducing the nominal value of shares, subject to certain statutory provisions. Upon proposal by our Supervisory Board, the general meeting of shareholders also may cancel all preference shares against payment of the amount paid up on those shares, subject to certain statutory provisions.

***Amendment of the Articles of Association***

The articles of association may be amended if amendments are proposed by our Supervisory Board and approved by a simple majority of the votes cast at a general meeting of shareholders at which at least one-third of the outstanding share capital is present or represented. The complete proposal for the amendment must be made available for inspection by the shareholders and the other persons entitled to attend general meetings of shareholders at our offices as from the day of the notice convening such meeting until the end of the meeting. Any amendment of the articles of association that negatively affects the rights of the holders of a certain class of shares requires the prior approval of the meeting of holders of such class of shares.

***Managing Board***

Responsibility for our management lies with our Managing Board. Our Managing Board consists of such number of members as resolved by the general meeting of shareholders upon the proposal of the Supervisory Board.

The member of the Managing Board is appointed for three-year terms by the general meeting of shareholders. Since our creation in 1987, our Managing Board has consisted of a single member, Mr. Pasquale Pistorio. In the event several members are appointed, our Supervisory Board appoints one of the members of the Managing Board to be chairman of the Managing Board. The remuneration and other conditions of employment of the members of the Managing Board are determined by the Supervisory Board.

The Managing Board and each member of the Managing Board is authorized to represent us. Resolutions of our Managing Board require the approval of a majority of its members. Under the articles of association, the Managing Board is required to obtain prior approval from the Supervisory Board for:

all proposals to be submitted to a vote at the general meeting of the shareholders;

the formation of all companies, acquisition or sale of any participation and the entering into of any joint venture or participation agreement;

all of our multi-annual plans and the budget for the upcoming year, covering investment policy, policy regarding research and development, as well as commercial policy and objectives, general financial policy and policy regarding personnel; and

all acts, decisions or operations covered by the above list and constituting a significant change with respect to decisions already adopted by the Supervisory Board or not provided for in the above list and as specifically laid down by the Supervisory Board in a resolution adopted by it to that effect. The Supervisory Board has, by resolution, specified additional resolutions of the Managing Board that require its approval.

In addition, under the articles of association, our Managing Board must obtain prior approval from the general meeting of shareholders for decisions relating to:

the sale of all or of an important part of our assets or business enterprise(s), and

the entering into of mergers, acquisitions or joint ventures that the Supervisory Board considers of material significance.

The general meeting of shareholders may by resolution specify additional resolutions that require its approval.

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The general meeting of shareholders may suspend or dismiss one or more members of the Managing Board at a meeting at which at least one-half of the outstanding share capital is present or represented. A quorum of one-third is required if a suspension or dismissal is proposed by the Supervisory Board. The Supervisory Board may suspend members of the Managing Board, but a general meeting of shareholders must be convened within three months after such suspension to confirm or reject the suspension.

***Supervisory Board***

Our Supervisory Board advises our Managing Board and is responsible for supervising the policies pursued by the Managing Board and the general course of our affairs. In addition, certain resolutions by the Managing Board require the prior approval of the Supervisory Board, and the Supervisory Board may by resolution specify additional resolutions that require such approval. Resolutions of the Supervisory Board require the approval of three-quarters of its members. In fulfilling their duties, members of the Supervisory Board must serve our interests.

The members of the Supervisory Board are appointed by the general meeting of shareholders. The general meeting of shareholders, upon proposal of the Supervisory Board, determines the number of the members of the Supervisory Board, provided that there shall always be at least six supervisory directors. The remuneration of the members of the Supervisory Board is determined by the general meeting of shareholders. The general meeting of shareholders may dismiss or suspend the members of the Supervisory Board with a simple majority vote.

Each member of the Supervisory Board must resign no later than three years after he has been appointed, but may offer himself for re-election following the expiry of his term of office. Since April 23, 2002, there is no longer a statutory maximum age.

**Disclosure of Holdings**

Under the Dutch Act on Disclosure of Holdings in listed companies ( *Wet melding zeggenschap in ter beurze genoteerde vennootschappen 1996* ), registered shareholders and beneficial owners must promptly notify us and the Authority of the Financial Markets of The Netherlands established in Amsterdam if their holding in us reaches, exceeds or falls below 5%, 10%, 25%, 50% or 66.66% of the capital interest and/or voting rights, including rights to acquire capital interest and/or voting rights, of us. Failure to comply constitutes a criminal offense and could result in criminal as well as civil sanctions, including suspension of voting rights and the right to acquire the same. We must in turn inform the *Conseil des Marchés Financiers* of all such notifications provided by registered shareholders and beneficial owners to us.

**Limitations on Right to Hold or Vote Shares**



There are currently no limitations imposed by Dutch law or by the articles of association on the right of non-resident holders to hold or vote the shares.

### **Exchange Controls**

None.

### **Taxation**

#### ***Dutch Taxation***

This taxation summary solely addresses the principal Dutch tax consequences of the ownership and disposition of LYONs or common shares, together, as securities. This summary does not discuss every aspect of taxation that may be relevant to a particular holder of securities under special circumstances or who is subject to special treatment under applicable law. This summary also assumes that we are organized, and that our business will be conducted, in the manner outlined in this Form 20-F. Changes in the organizational structure or the manner in which we conduct our business may invalidate this summary.

The laws upon which this summary is based are subject to change, possibly with retroactive effect. A change to such laws may invalidate all or part of this summary, which will not be updated to reflect changes in laws.

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This summary is based on the tax laws of The Netherlands as they are in force and in effect on the date of this Form 20-F. It assumes that each transaction with respect to securities is at arm's length.

*This is a general summary and the tax consequences as described here may not apply to you. You should consult your own tax adviser for more information about the tax consequences of acquiring, owning and disposing of securities in light of your particular circumstances.*

**General**

This section Dutch Taxation only applies to a holder of securities who is a non-resident holder of securities.

For purposes of this section, you will be considered a non-resident holder of securities if:

(i) you are neither resident, nor deemed to be resident, in The Netherlands for purposes of Dutch taxation and, in the case of an individual, have not elected to be treated as a resident of The Netherlands for Dutch income tax purposes; and

(ii) in the case of an individual, you neither are nor have been, nor are deemed to be nor have been deemed to be our employee nor that of any entity related to us; and

(iii) you do not have and are not deemed to have a substantial interest (*aanmerkelijk belang*) in us.

If you hold an interest in us, such interest forms part or is deemed to form part of a substantial interest in us if any one or more of the following circumstances is present:

(i) You alone or, in the case of an individual, together with your partner (*partner*) have, directly or indirectly, the ownership of shares in us representing 5% or more of our total issued and outstanding capital (or the issued and outstanding capital of any class of our shares), or rights to acquire, directly or indirectly, shares, whether or not already issued, that represent 5% or more of our total issued and outstanding capital (or the issued and outstanding capital of any class of our shares), or the ownership of profit participating certificates (*winstbewijzen*) that relate to 5% or more of our annual profit or to 5% or more of our liquidation proceeds.

(ii) Your partner or any of your relatives by blood or by marriage in the direct line (including foster-children) of you or of your partner has a substantial interest in us.

(iii) Shares, profit participating certificates or rights to acquire shares or profit participating certificates in us have been acquired by you or are deemed to have been acquired by you under a non-recognition provision.

For purposes of the above, a person who is only entitled to the benefits from shares or profit participating certificates (for instance, a holder of a right of usufruct) is deemed to be a holder of shares or profit participating certificates, as the case may be, and such person's entitlement to benefits is considered a share or a profit participating certificate, as the case may be.

### ***Withholding tax***

#### *LYONs*

All payments of interest, if any, and principal under the LYONs may be made free of withholding or deduction of, for or on account of any taxes of whatever nature imposed, levied, withheld or assessed by the Netherlands or any political subdivision or taxing authority thereof or therein. Where payments are made by or on behalf of us which relate to the fair market value of the conversion right (for example, if we purchase LYONs from you in the open market for a price greater than their issue price plus accumulated yield), these payments may be subject to dividend withholding tax, generally at a rate of 25%.

#### *Common shares*

Dividends distributed by us on common shares to a non-resident holder of securities are generally subject to a withholding tax imposed by The Netherlands at a rate of 25%.

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The concept dividends distributed by us as used in this section includes, but is not limited to, the following:

- (i) distributions in cash or in kind, deemed and constructive distributions (including, as a rule, consideration for the repurchase of our common shares (other than a repurchase as a temporary investment) in excess of the average capital recognized as paid-in for Dutch dividend withholding tax purposes), and repayments of capital not recognized as paid-in for Dutch dividend withholding tax purposes;
  
- (ii) liquidation proceeds and proceeds of redemption of our common shares in excess of the average capital recognized as paid-in for Dutch dividend withholding tax purposes;
  
- (iii) the par value of our common shares issued to a holder of shares or an increase of the par value of our common shares, as the case may be, to the extent that it does not appear that a contribution, recognized for Dutch dividend withholding tax purposes, has been made or will be made; and
  
- (iv) partial repayment of capital, recognized as paid-in for Dutch dividend withholding tax purposes, if and to the extent that there are net profits (*zuivere winst*), unless (a) our general meeting of shareholders has resolved, in advance, to make such repayment and (b) the par value of the shares concerned has been reduced by an equal amount by way of an amendment to our articles of association.

If a double-taxation treaty is in effect between The Netherlands and the country of residence of a non-resident holder of securities, such holder may be eligible for a full or partial relief from the Dutch dividend withholding tax, provided that such relief is duly claimed. Dividend withholding tax relief will only be available to the beneficial owner (*uiteindelijk gerechtigde*) of dividends distributed by us. The Dutch tax authorities have taken the position that this beneficial ownership test can also be applied to deny relief from Dutch dividend withholding tax under double tax treaties and the tax arrangement for the Kingdom of The Netherlands.

If a non-resident holder of securities is resident in The Netherlands Antilles or Aruba or in a member state of the European Union or in a country that has concluded a double tax treaty with The Netherlands, we are not required to withhold Dutch dividend withholding tax from a dividend distributed by us to such holder of shares to the extent that the temporary special distribution tax, discussed below in Distribution tax , applies to the distribution.

Under the convention of December 18, 1992, between the Kingdom of The Netherlands and the United States of America for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with respect to Taxes on Income (the U.S./NL Income Tax Treaty ), the Dutch dividend withholding tax rate on dividends distributed by us on common shares held by a non-resident holder of securities who is resident in the United States and who is entitled to the benefits of the U.S./NL Income Tax Treaty will generally be reduced to 15%. The U.S./NL Income Tax Treaty provides for a complete exemption for dividends received by exempt pension trusts and exempt organizations, as defined therein. Except in the case of exempt organizations, the reduced dividend withholding tax rate under the U.S./NL Income Tax Treaty may be available at source, upon payment of a dividend in respect of such shares, provided that the holder thereof or, if applicable, the paying agent, has supplied us with the appropriate Netherlands tax forms in

accordance with the Dutch implementation regulations under the U.S./NL Income Tax Treaty. If such forms are not duly and timely supplied, we generally will be required to withhold the dividend withholding tax at the Dutch statutory rate of 25%. In such case, a non-resident holder of securities who holds shares, who is resident in the United States and who is entitled to the benefits of the U.S./NL Income Tax Treaty may obtain a refund of the difference between the amount withheld and the amount that The Netherlands was entitled to levy in accordance with the U.S./NL Income Tax Treaty by filing the appropriate forms with the Dutch tax authorities within the term set therefore.

*Reduction*

If we receive a profit distribution from a foreign entity, or a repatriation of foreign branch profit, that is exempt from Dutch corporate income tax and that has been subject to a foreign withholding tax of at least 5%, we would be entitled to a reduction of the amount of Dutch dividend withholding tax withheld that must be paid over to the Dutch tax authorities in respect of dividends distributed by us.

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*Non-resident holders of securities are urged to consult their tax advisors regarding the general creditability or deductibility of Netherlands dividend withholding tax and, in particular, the impact to such investors of our potential ability to receive a reduction as meant in the previous paragraph.*

***Taxes on income and capital gains***

*Individuals*

If you are an individual and a non-resident holder of securities, you will not be subject to any Netherlands taxes on income or capital gains in respect of any benefit derived or deemed to be derived from securities, including any payment under the securities, any gain realized on the disposal of securities and any gain realized on the conversion of LYONs into common shares, provided that both of the following conditions are satisfied.

(i) If you derive profits from an enterprise, whether as an entrepreneur (*ondernemer*) or pursuant to a co-entitlement to the net worth of such enterprise, other than as an entrepreneur or a holder of securities, which enterprise is either managed in the Netherlands or, in whole or in part, carried on through a permanent establishment or a permanent representative in The Netherlands as the case may be, your securities are not attributable to such enterprise.

(ii) You do not derive benefits from securities that are taxable as benefits from miscellaneous activities in The Netherlands (*resultaat uit overige werkzaamheden in Nederland*).

If you are an individual and a non-resident holder of securities you may, *inter alia*, derive benefits from LYONs that are taxable as benefits from miscellaneous activities in the following circumstances, if such activities are performed or deemed to be performed in The Netherlands:

(i) if your investment activities go beyond the activities of an active portfolio investor, for instance in case of the use of insider knowledge (*voorkennis*) or comparable forms of special knowledge; or

(ii) if you make securities available or are deemed to make securities available, legally or in fact, directly or indirectly, to certain parties as meant in the articles 3.91 and 3.92 of the Netherlands Income Tax Act 2001 (*Wet inkomstenbelasting 2001*) under circumstances described therein.

*Entities*

A non-resident holder of securities other than an individual will not be subject to any Dutch taxes on income or capital gains in respect of any payment under the terms of the securities, any gain realized on the conversion of LYONs into common shares, or in respect of any gain realized on the disposal of securities, provided that if such non-resident holder of securities derives profits from an enterprise that is either managed in The Netherlands or, in whole or in part, carried on through a permanent establishment or a permanent representative in The Netherlands, whether as an entrepreneur (*ondernemer*) or pursuant to a co-entitlement to the net worth of such enterprise (other than as an entrepreneur or as a holder of securities), the securities are not attributable to such enterprise.

***Gift and inheritance taxes***

If you acquire securities as a gift, in form or in substance, or acquire or are deemed to acquire securities on the death of an individual, you will not be subject to Dutch gift tax or to Dutch inheritance tax, as the case may be, unless:

(i) the donor or the deceased is resident or deemed to be resident in The Netherlands for purposes of gift or inheritance tax, as the case may be; or

(ii) the securities are or were attributable to an enterprise or part of an enterprise that the donor or the deceased carried on through a permanent establishment or a permanent representative in The Netherlands at the time of the gift or of the death of the deceased; or

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(iii) the donor makes a gift of securities, then becomes a resident or deemed resident of The Netherlands, and dies as a resident or deemed resident of The Netherlands within 180 days after the date of the gift.

If the donor or the deceased is an individual who holds Dutch nationality, he will be deemed to be resident in The Netherlands for purposes of Dutch gift and inheritance taxes if such donor has been resident in The Netherlands at any time during the ten years preceding the date of the gift or such donor's death. If the donor is an individual who does not hold Dutch nationality, or an entity, such donor will be deemed to be resident in The Netherlands for purposes of Dutch gift tax if such donor has been resident in The Netherlands at any time during the twelve months preceding the date of the gift. Furthermore, in exceptional circumstances, the donor or the deceased will be deemed to be resident in The Netherlands for purposes of Dutch gift and inheritance taxes if the beneficiary of the gift or all beneficiaries under the estate jointly, as the case may be, make an election to that effect.

***Distribution tax***

We are subject to a temporary special distribution tax at a rate of 20% to the extent that dividends distributed by us during the period from January 1, 2001 up to and including December 31, 2005 are classified as excessive. For purposes of this distribution tax, dividends distributed by us are considered to be excessive to the extent that, during a particular calendar year, the total thereof exceeds the highest of the following three amounts:

- (i) 4% of our market capitalization at the beginning of the relevant calendar year;
- (ii) twice the amount of the average annual dividends (exclusive of extraordinary distributions) distributed in the three calendar years immediately preceding January 1, 2001; and
- (iii) our consolidated commercial results for the preceding book year, subject to certain adjustments.

See **Withholding tax** for a description of the concept dividends distributed by us.

The special distribution tax will not be due if and to the extent the aggregate of dividends distributed by us during the period from January 1, 2001 up to and including December 31, 2005 exceeds the fair market value of the assets at the end of the book year ending on December 31, 2000, net of liabilities and provisions and reduced by the paid-in capital. The special distribution tax will be reduced in proportion to the percentage of our shares that were held, at the time of the excessive distribution, during an uninterrupted period of three years, by individuals or entities (other than investment institutions (*beleggingsinstellingen*) as defined in the Dutch Corporate Income Tax Act 1969) holding at least 5% of the nominal paid-in capital, provided such shareholders are resident in The Netherlands, The Netherlands Antilles or Aruba, or in a member state of the EU, or in a country that has concluded a double tax treaty with The Netherlands.



The special distribution tax is not a withholding tax; it is imposed directly on us. Therefore, if it is reduced because certain shareholders own at least 5% of the nominal paid-in capital, we will receive the benefit of the reduction and it will inure indirectly not only to the shareholders whose shareholdings caused the reduction to apply.

***Capital tax***

We are subject to Netherlands capital tax at a rate of 0.55% on any contribution we receive or are deemed to receive to our share capital, unless an exemption applies.

**United States Taxation**

The following discussion is a summary of the material U.S. federal income tax consequences of the ownership and disposition of LYONs or common shares by you if you are a U.S. Holder, as defined below. This summary applies to you only if you are a beneficial owner of LYONs or common shares (a) who owns (directly, indirectly or by attribution), less than 10% of our outstanding share capital or voting stock, (b) who is (i) an individual citizen or resident of the United States for U.S. federal income tax purposes, (ii) a U.S. domestic corporation or certain other entities created in or organized under the laws of the United States or any state thereof, (iii) an estate the income of which is subject to U.S. federal income taxation regardless of its source, or (iv) a trust if a court within the United States is able to exercise primary supervision over its administration and one or more U.S. persons have the authority to control all of the substantial decisions of the trust, (c) who holds the LYONs or

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common shares as capital assets, (d) whose functional currency is the U.S. dollar, (e) who is a resident of the United States and not also a resident of The Netherlands for purposes of the Dutch-U.S. Treaty, (f) who is entitled under the limitation on benefits provisions contained in the Dutch-U.S. Treaty to the benefits of the Dutch-U.S. Treaty and (g) who does not have a permanent establishment or fixed base in The Netherlands (a U.S. Holder). Certain holders (including, but not limited to, United States expatriates, tax-exempt organizations, persons subject to the alternative minimum tax, securities broker-dealers and certain other financial institutions, persons holding the LYONs or common shares in a hedging transaction or as part of a straddle or conversion transaction or holders whose functional currency is not the U.S. dollar) may be subject to special rules not discussed below. Because this is a general summary, investors are advised to consult their own tax advisors with respect to the U.S. federal, state, local and applicable foreign tax consequences of the ownership and disposition of LYONs or common shares.

If a partnership holds LYONs or common shares, the tax treatment of a partner generally will depend upon the status of the partner and the activities of the partnership. If a U.S. holder is a partner in a partnership that holds LYONs or common shares, the holder is urged to consult its own tax advisor regarding the specific tax consequences of the ownership and disposition of such LYONs or shares.

This summary is based on the Internal Revenue Code of 1986, as amended, the Dutch-U.S. Treaty, judicial decisions, administrative pronouncements and existing, proposed and temporary Treasury regulations as of the date hereof, all of which are subject to change or changes in interpretation, possibly with retroactive effect.

***LYONs***

The following summary applies to you if you purchased the LYONs at the issue price. The issue price of a LYON is the first price to the public (not including bond houses, brokers or similar persons or organizations acting in the capacity of underwriters, placement agents or wholesalers) at which a substantial amount of LYONs is sold for money.

*Original Issue Discount*

The LYONs were issued at a substantial discount from their principal amount at maturity. For U.S. federal income tax purposes, the excess of the amount payable at the stated maturity of a LYON over the issue price of the LYON constitutes original issue discount (OID). As a result, you will be required to include the OID in income as it accrues in accordance with a constant yield method based on a compounding of interest, before the receipt of cash payments attributable to such income, regardless of your regular method of tax accounting. Under this method, you generally will be required to include in income increasingly greater amounts of OID in later accrual periods.

*Sale or Other Disposition of LYONs*

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Upon the sale, exchange or retirement of a LYON (other than a conversion of a LYON into common shares, the tax consequences of which are described below), you will recognize capital gain or loss equal to the difference between the amount realized on the sale, exchange or retirement and your adjusted tax basis in the LYON. Your adjusted tax basis in a LYON generally will equal to the cost of the LYON, increased by the amount of OID you previously included in income with respect to the LYON. Gain or loss generally will be U.S. source gain or loss, and will be treated as long-term capital gain or loss if the holding period exceeds one year. If you are an individual, capital gains generally will be subject to U.S. federal income tax at preferential rates if specified minimum holding periods are met. The deductibility of capital losses is subject to significant limitations.

### *Conversion of LYONs*

In general, you will not recognize gain or loss on the conversion of LYONs into common shares, except with respect to cash received in lieu of a fractional share upon conversion (as described below). Your tax basis in a common share received in such an exchange will be equal to your adjusted tax basis in the LYONs so converted, less any portion thereof allocable to cash received in lieu of a fractional share. You will recognize gain or loss upon the receipt of cash paid in lieu of fractional common shares to the extent of the difference between the amount of cash received for the fractional share interest in your tax basis in such fractional share interest. The holding period for common shares received in exchange will include the holding period for the LYONs tendered to STMicroelectronics in exchange therefore, except that the holding period for the common shares allocable to accrued OID would commence on the day following the date of conversion.

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*Constructive Dividend*

Adjustments to the conversion rate of the LYONs, or the failure to make adjustments to the conversion rate upon the occurrence of certain events, may result in the receipt of constructive dividends by you. You should consult your own tax advisors with respect to the tax consequences of any conversion adjustment.

***Common Shares***

*Dividends*

For U.S. federal income tax purposes, the gross amount of distributions made by us with respect to the common shares (including the amount of any Netherlands taxes withheld therefrom, but not including certain distributions, if any, of common shares distributed pro rata to all our shareholders) generally will be includable in your gross income in the year received as foreign source dividend income to the extent that such distributions are paid out of our current or accumulated earnings and profits as determined under U.S. federal income tax principles. To the extent, if any, that the amount of any such distribution exceeds our current and accumulated earnings and profits, it will be treated first as a tax-free return of your tax basis in the common shares (thereby increasing the amount of any gain or decreasing the amount of any loss realized on the subsequent sale or disposition of such common shares) and thereafter any excess will be treated as capital gain. No dividends-received deduction will be allowed with respect to dividends paid by us. The amount of any distribution paid in euro (including the amount of any Netherlands withholding tax thereon) will be equal to the U.S. dollar value of such euro on the date of receipt, regardless of whether the payment is in fact converted into U.S. dollars at that time. Gain or loss, if any, realized on a subsequent sale or other disposition of such euro generally will be U.S. source ordinary income or loss. The amount of any distribution of property other than cash will be the fair market value of such property determined on the date of distribution.

Subject to certain limitations, Netherlands taxes withheld from a distribution paid to you at the rate provided in the Dutch-U.S. Treaty will be eligible for credit against your U.S. federal income tax liability. Under current Dutch law, we, under certain circumstances, may be permitted to deduct and retain from such withholding a portion of the amount that would otherwise be required to be remitted to the taxing authorities in The Netherlands. This amount generally may not exceed 3% of the total dividend distributed by us. To the extent that we have withheld an amount from dividends paid to shareholders which we then are not required to remit to any taxing authority in The Netherlands, such amount in all likelihood would not qualify as a creditable tax for U.S. tax purposes. We will endeavor to provide to you information concerning the extent to which we have applied the reduction described above to dividends paid to you. The limitation on foreign taxes eligible for credit is calculated separately with respect to specific classes of income. For this purpose, dividends distributed by us with respect to the common shares generally will constitute passive income or, in the case of certain U.S. Holders, financial services income. The rules relating to the determination of the U.S. foreign tax credit are complex and holders should consult their tax advisors to determine whether and to what extent a credit would be available. If you do not elect to claim a foreign tax credit you may instead claim an itemized deduction for all foreign taxes paid in the taxable year.

*Sale or Other Disposition of Common Shares*

Upon a sale or other disposition of common shares, you will recognize capital gain or loss for U.S. federal income tax purposes in an amount equal to the difference between the U.S. dollar value of the amount realized and your tax basis (determined in U.S. dollars) in such common shares. Any such gain or loss generally will be U.S. source gain or loss and will be treated as long-term gain or loss if your holding period in the common shares exceeds one year. If you are an individual, any capital gain generally will be subject to U.S. federal income tax at preferential rates if specified minimum holding periods are met. The deductibility of capital losses is subject to significant limitations.

*Passive Foreign Investment Company Status*

A non-U.S. corporation such as STMicroelectronics will be classified as a Passive Foreign Investment Company (a PFIC ) for any taxable year if at least 75% of its gross income consists of passive income (such as dividends, interest, rents, royalties, or gains on the disposition of certain minority interests), or at least 50% of the average value of its assets consist of assets that produce, or are held for the production of, passive income. If we were characterized as a PFIC for any taxable year, US holders would suffer adverse tax consequences. These

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consequences may include having gains realized on the disposition of common shares treated as ordinary income rather than capital gains and being subject to punitive interest charges on certain dividends and on the proceeds of the sale or other disposition of the common shares. US holders should consult their own tax advisors regarding the potential application of the PFIC rules to their ownership of our common shares.

**U.S. Information Reporting and Backup Withholding**

Payments of interest, if any (including the accrual of OID), dividend payments with respect to common shares and proceeds from the sale, exchange, retirement or other disposition of LYONs or common shares may be subject to information reporting to the Internal Revenue Service ( IRS ) and possible U.S. backup withholding at a current rate of 30%. Backup withholding will not apply, however, to a holder who furnishes a correct taxpayer identification number or certificate of foreign status and makes any other required certification or who is otherwise exempt from backup withholding. U.S. persons who are required to establish their exempt status generally must provide such certification on IRS Form W-9 (Request for Taxpayer Identification Number and Certification). Non-U.S. holders generally are not subject to U.S. information reporting or backup withholding. However, such holders may be required to provide certification of non-U.S. status in connection with payments received in the United States or through U.S.-related financial intermediaries. Holders of LYONs or common shares should consult their tax advisors regarding the application of the U.S. information reporting and backup withholding rules.

Backup withholding is not an additional tax. Amounts withheld as backup withholding may be credited against a holder s U.S. federal income tax liability, and a holder may obtain a refund of any excess amounts withheld under the backup withholding rules by filing the appropriate claim for refund with the IRS and furnishing any required information.

**Documents On Display**

Any statement in this Form 20-F about any of our contracts or other documents is not necessarily complete. If the contract or document is filed as an exhibit to this Form 20-F the contract or document is deemed to modify the description contained in this Form 20-F. You must review the exhibits themselves for a complete description of the contract or document.

You may review a copy of our filings with the U.S. Securities and Exchange Commission (the SEC ), including exhibits and schedules filed with it, at the SEC s public reference facilities in Room 1024, Judiciary Plaza, 450 Fifth Street, N.W., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information. In addition, the SEC maintains an Internet site at <http://www.sec.gov> that contains reports and other information regarding issuers that file electronically with the SEC. These SEC filings are also available to the public from commercial document retrieval services.

WE ARE REQUIRED TO FILE REPORTS AND OTHER INFORMATION WITH THE SEC UNDER THE SECURITIES EXCHANGE ACT OF 1934. REPORTS AND OTHER INFORMATION FILED BY U.S. WITH THE SEC MAY BE INSPECTED AND COPIED AT THE SEC S PUBLIC REFERENCE FACILITIES DESCRIBED ABOVE OR THROUGH THE INTERNET AT [HTTP://WWW.SEC.GOV](http://www.sec.gov). AS A FOREIGN PRIVATE ISSUER, WE ARE EXEMPT FROM THE RULES UNDER THE EXCHANGE ACT PRESCRIBING THE FURNISHING AND CONTENT OF PROXY STATEMENTS AND OUR OFFICERS, DIRECTORS AND PRINCIPAL SHAREHOLDERS ARE EXEMPT FROM THE REPORTING AND SHORT-SWING PROFIT RECOVERY

PROVISIONS CONTAINED IN SECTION 16 OF THE EXCHANGE ACT. UNDER THE EXCHANGE ACT, AS A FOREIGN PRIVATE ISSUER, WE ARE NOT REQUIRED TO PUBLISH FINANCIAL STATEMENTS AS FREQUENTLY OR AS PROMPTLY AS UNITED STATES COMPANIES.

In addition, material filed by us with the SEC can be inspected at the offices of the New York Stock Exchange at 20 Broad Street, New York, New York 10005 and at the offices of The Bank of New York, as New York Share Registrar, at One Wall Street, New York, NY 10286 (telephone: 1-888-269-2377).

#### **Matters Related to Auditors**

PricewaterhouseCoopers N.V. has served as our independent public accountants for each of the fiscal years since 1996. The auditors are elected by the Annual General Meeting once every three years. PricewaterhouseCoopers N.V. was reelected for a three-year term by our March 2002 shareholders meeting to expire at our shareholders meeting in 2005.

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The following table presents the aggregate fees for professional audit services and other services rendered by PricewaterhouseCoopers to us in 2002 .

	2002	Percentage of Total Fees
	\$	
<b>Audit Fees</b>		
Statutory audit, certification, audit of individual and consolidated financial statements	1,123,360	50%
Audit-related fees	593,721	26%
<b>Non-audit Fees</b>		
Legal, tax compliance and consulting services fees	495,422	22%
Other fees	50,000	2%
<b>Total</b>	<b>2,262,503</b>	<b>100%</b>

**Item 11. Quantitative and Qualitative Disclosures About Market Risk**

We are exposed to changes in financial market conditions in the normal course of business due to our operations in different foreign currencies and our ongoing investing and financing activities. Market risk is the uncertainty to which future earnings or asset/liability values are exposed due to operating cash flows denominated in foreign currencies and various financial instruments used in the normal course of operations. We have established policies, procedures and internal processes governing our management of market risks and the use of financial instruments to manage our exposure to such risks.

We are exposed to changes in interest rates primarily as a result of our borrowing activities which include long-term debt used to fund business operations. We borrow in U.S. dollars as well as in other currencies from banks and other sources. We primarily enter into debt obligations to support general corporate and local purposes including capital expenditures and working capital needs. The nature and amount of our long-term debt can be expected to vary as a result of future business requirements, market conditions, and other factors. The principal interest rate risks to which we are exposed relate to our investment portfolio and long-term debt obligations. We primarily utilize fixed-rate debt and do not expect changes in interest rates to have a material effect on income or cash flows in 2003.

The functional currency of our subsidiaries is generally the local currency. Our operating cash flows are denominated in various foreign currencies as a result of our international business activities and certain of our borrowings are exposed to changes in foreign exchange rates. We continually evaluate our foreign currency exposure based on current market conditions and the business environment. In order to mitigate the impact of changes in foreign currency exchange rates, we enter into forward exchange contracts. The magnitude and nature of such activities are explained further in Note 26.1 to the Consolidated Financial Statements.



We place our cash and cash equivalents with high credit quality financial institutions. We manage the credit risks associated with financial instruments through credit approvals, investment limits and centralized monitoring procedures but do not normally require collateral or other security from the parties to the financial instruments. We are averse to principal loss and manage the safety and preservation of our invested funds by limiting default risk, market risk and reinvestment risk.

From time to time, we may use cash on hand to purchase short-term financial instruments as part of our treasury management strategy. These instruments may have returns that depend on certain credit events of reference debt obligations issued by reference issuers consisting of us and/or different banks with a minimum credit rating. Interest is payable to us on such instruments through the final maturity, typically before the end of the financial year, unless suspended upon an earlier credit event under the relevant reference debt or of the relevant reference issuer. For certain short-term financial instruments, principal would be repaid to us at final maturity, unless such a credit event occurs, in which event early repayment of principal would be reduced based on the decline in value of the relevant reference debt. For swap instruments, no additional payments would occur at maturity, except that if such a credit event occurs before maturity, we would owe an additional payment equal to the decline in value of the

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relevant reference debt. While we place our cash and cash equivalents with high credit quality financial institutions and manage the credit risks associated with financial instruments through credit approvals, investment limits and centralized monitoring procedures, we do not normally require collateral or other security from the parties to the financial instruments. Thus, no assurance can be given that a rapid, unanticipated crisis in the global financial system would not have an adverse impact on our results of operations and cash flow.

We enter into forward contracts and foreign currency options to protect against the volatility of foreign currency exchange rates and to cover a portion of both our probable anticipated, but not firmly committed, transactions and transactions with firm foreign currency commitments. The risk of loss associated with purchased options is limited to premium amounts paid for the option contracts. The risk of loss associated with forward contracts is equal to the exchange rate differential from the date the contract is made until the time it is settled.

Forward contracts outstanding as of December 31, 2002 have remaining terms of one to five months, which mature on average after 40 days. The notional amounts of foreign exchange forward contracts totaled \$1,138,795 and \$648,574,366 at December 31, 2001 and 2002, respectively. The principal currencies covered are the U.S. dollar, the euro, the Japanese yen and the Swiss franc.

We do not anticipate any material adverse effect on our financial position, result of operations or cash flows resulting from the use of our instruments in the future. There can be no assurance that these strategies will be effective or that transaction losses can be minimized or forecasted accurately. We do not use financial instruments for speculative or trading purposes.

The information below summarizes our market risks associated with cash equivalents, debt obligations, and other significant financial instruments as of December 31, 2002. The information below should be read in conjunction with Notes 26.1 and 26.3 to the Consolidated Financial Statements.

The table below presents principal amounts and related weighted-average interest rates by year of maturity for our investment portfolio and debt obligations (in millions of U.S. dollars, except percentages):

	2003	2004	2005	2006	2007	Thereafter	TOTAL	Fair value at December 31, 2002
<b>Assets:</b>								
Cash equivalents							2,562	2,562
Average interest rate							2.08%	
<b>Long-term debt:</b>								
Fixed rate	146	131	108	106	32	2,420	2,943	2,986
Average interest rate	3.70%	3.32%	3.67%	3.60%	3.08%	3.31%	3.35%	

Amounts in thousands

of U.S. dollars

Long-term debt by currency as of December 31, 2002:	
U.S. dollar	2,449
Euro	294
Other currencies	200
<b>TOTAL in U.S. dollars</b>	<b>2,943</b>

Amounts in thousands

of U.S. dollars

Long-term debt by currency as of December 31, 2001	
U.S. dollar	2,410
Euro	269
Other currencies	189
<b>TOTAL in U.S. dollars</b>	<b>2,868</b>

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The following table provides information about our foreign exchange forward contracts at December 31, 2002 (in thousands of U.S. dollars):

<u>Buy</u>	<u>Sell</u>	<u>Notional Amount</u>	<u>Average Contractual Forward Exchange Rate</u>	<u>Fair Value</u>
Foreign currency forward exchange contracts to buy U.S. dollars for foreign currencies:				
U.S. dollar	Euro	130	1.05	(2)
U.S. dollar	Singapore dollar	36	0.58	0
U.S. dollar	Canadian dollar	20	0.63	0
<b>Total</b>		<b>186</b>		<b>(2)</b>
Foreign currency forward exchange contracts to buy euros for foreign currencies:				
Euro	Malaysian ringgit	0	0.25	0
Euro	U.S. dollar	40	0.95	2
Euro	Japanese yen	80	0.01	(3)
Euro	Canadian dollar	32	0.63	0
<b>Total</b>		<b>152</b>		<b>(1)</b>
Foreign currency forward exchange contracts to buy Japanese yen for foreign currencies:				
Japanese yen	Euro	27	123.08	0
Japanese yen	Singapore dollar	3	68.28	0
Japanese yen	Malaysian ringgit	5	31.09	0
Japanese yen	U.S. dollar	17	118.45	1
<b>Total</b>		<b>52</b>		<b>1</b>
Foreign currency forward exchange contracts to buy Swiss francs for foreign currencies:				
Swiss francs	Euro	43	1.38	2
Foreign currency forward exchange contracts to buy Malaysian ringgits for foreign currencies:				
Malaysian ringgit	U.S. dollar	27	0.26	0
Foreign currency forward exchange contracts to buy Maltese lira for foreign currencies:				
Maltese lira	U.S. dollar	140	2.49	5
Foreign currency forward exchange contracts to buy Singapore dollar for foreign currencies:				
Singapore dollar	Euro	12	1.82	0
Foreign currency forward exchange contracts to buy Swedish krone for foreign currencies:				
Swedish krone	Euro	37	8.73	0
<b>Total</b>		<b>649</b>		<b>6</b>

(1) Forward exchange rate for 100 Japanese yen.

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The following table provides information about our foreign exchange forward contracts at December 31, 2001 (in thousands of U.S. dollars):

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<u>Buy</u>	<u>Sell</u>	<u>Notional Amount</u>	<u>Average Contractual Forward Exchange Rate</u>	<u>Fair Value</u>
Foreign currency forward exchange contracts to buy U.S. dollars for foreign currencies:				
U.S. dollar	Euro	668	0.88	4
U.S. dollar	Japanese yen	23	0.01	0
U.S. dollar	Canadian dollar	10	0.64	0
U.S. dollar	Malaysian ringgit	124	0.26	0
U.S. dollar	Singapore dollar	35	0.54	0
<b>Total</b>		<b>860</b>		<b>4</b>
Foreign currency forward exchange contracts to buy euro for foreign currencies:				
Euro	Maltese lira	4	2.47	0
Euro	Malaysian ringgit	3	0.30	0
Euro	U.S. dollar	40	0.89	0
<b>Total</b>		<b>47</b>		<b>0</b>
Foreign currency forward exchange contracts to buy Japanese yen for foreign currencies:				
Japanese yen	Euro	37	110.83	(2)
Japanese yen	Singapore dollar	6	71.04	0
<b>Total</b>		<b>43</b>		<b>(2)</b>
Foreign currency forward exchange contracts to buy Singapore dollars for foreign currencies:				
Singapore dollar	Malaysian ringgit	2	0.48	0
Singapore dollar	Euro	2	1.63	0
Singapore dollar	U.S. dollar	20	0.54	0
<b>Total</b>		<b>24</b>		<b>0</b>
Foreign currency forward exchange contracts to buy Malaysian ringgits for foreign currencies:				
Malaysian ringgits	U.S. dollar	23	0.26	0
Foreign currency forward exchange contracts to buy Maltese lira for foreign currencies:				
Maltese lira	U.S. dollar	140	2.22	(1)
Foreign currency forward exchange contracts to buy Swiss francs for foreign currencies:				
Swiss franc	Euro	1	1.48	0
Foreign currency forward exchange contracts to buy British pounds for foreign currencies:				
British pound	Euro	1	0.61	0
<b>Total</b>		<b>1,139</b>		<b>1</b>

(1) Forward exchange rate for 100 Japanese yen.

**Item 12. *Description of Securities Other Than Equity Securities***

Not applicable.

**PART II**

**Item 13. *Defaults, Dividend Arrearages and Delinquencies***

None.

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**Item 14. *Material Modifications to the Rights of Security Holders and Use of Proceeds***

None.

**Item 15. *Controls and Procedures***

Our chief executive officer and chief financial officer, after evaluating the effectiveness of our disclosure controls and procedures (as defined in Exchange Act Rule 13a-14(c)) within 90 days of the date of this report, have concluded that, as of such date, our disclosure controls and procedures were effective to ensure that material information relating to our company was made known to them by others within our company, particularly during the period in which this Form 20-F was being prepared.

There were no significant changes in our internal controls or in other factors that could significantly affect these controls subsequent to the date our chief executive officer and chief financial officer completed their evaluation, nor were there any significant deficiencies or material weaknesses in our internal controls requiring corrective actions.

**Item 16. *[Reserved]***

**PART III**

**Item 17. *Financial Statements***

Not applicable.

**Item 18. *Financial Statements***

**Financial Statements:**

Report of Independent Accountants for Years Ended December 31, 2002, 2001 and 2000

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**Item 19. Exhibits**

- 1.1 Articles of Association, as amended and approved by the annual general meeting of shareholders on March 27, 2002, of STMicroelectronics N.V. (incorporated by reference to the Annual Report for the year ended December 31, 2001, as filed with the Commission on May 24, 2002)
- 4.1 2002 Stock Option Plan for Supervisory Board Members and Professionals of the Supervisory Board
- 4.2 Amendment No.1 to the Option Agreement between us and ST Holding II B.V. dated August 12, 2002
- 8.1 Subsidiaries of the Company (see Note 3 to the Consolidated Financial Statements)
- 10.1 Certification of Pasquale Pistorio, President and Chief Executive Officer of STMicroelectronics N.V. and Maurizio Ghirga, Group Vice-President and Chief Financial Officer pursuant to Section 18 U.S.C. Section 1350, as adopted by Section 906 of the Sarbanes-Oxley Act of 2002
- 10.2 Consent of PricewaterhouseCoopers N.V.

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ADSL	assymetrical digital subscriber line
ASD	application-specific discrete technology
ASIC	application-specific IC
ASSP	application-specific standard product
BCD	bipolar, CMOS and DMOS process technology
BiCMOS	bipolar and CMOS process technology
CAD	computer aided design
CIM	computer integrated manufacturing
CMOS	complementary metal-on silicon oxide semiconductor
CODEC	audio coding and decoding functions
DDX	direct digital amplifications
DMOS	diffused metal-on silicon oxide semiconductor
DMT	Discrete Multi Tone
DMT-VDSL	discrete multi-tone-very-high-rate digital subscriber line
DRAMs	dynamic random access memory
DSL	digital subscriber line
DSLAM	digital subscriber line access multiplexer
DSP	digital signal processor
EMAS	the Eco-Management and Audit Scheme (EAMS) is the voluntary European Community scheme for companies performing industrial activities for the evaluation and improvement of environmental performance
EEPROM	electrically erasable programmable read-only memory or E2prom
EPROM	erasable programmable read-only memory
FRAM	ferroelectric RAMtron memories
GPRS	Global Packet Radio Service
GPS	global positioning system
GSM	Global System for Mobile communications
GSM/GPRS	The European standard for mobile phones
HCMOS	high-speed complementary metal-on silicon oxide semiconductor
HDD	hard-disk drive
IC	integrated circuit
ICU	Intelligent Controller Units
IGBT	insulated gate bipolar transistors
IPAD	Integrated Passive and Active Devices
ISO	International Organization for Standardization
Kbit	Kilobit
LAN	local area network
LCD	liquid crystal display
Mbit	Megabit
MEMS	Micro-Electro-Mechanical System
MOS	metal-on silicon oxide semiconductor process technology
MOSFET	metal-on silicon oxide semiconductor field effect transistor
MPEG	motion picture experts group
NVRAM	nonvolatile RAM
OEM	original equipment manufacturer
OMAPI	open mobile application processor interfaces, the name of the joint open standard for wireless application processor interfaces being developed with Texas Instruments to promote faster and broder deployment of multimedia-enhanced mobile devices and applications
OTP	one-time programmable
PDA	personal digital assistant
PROM	programmable read-only memory

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PSM	Programmable System Memories
RAM	random access memory
RF	radio frequency
RISC	reduced instruction set computing
ROM	read-only memory
RTC	real-time clock or RTC families within NVRAM and Dedicated Memories division of our Memory Products Group
SAM	serviceable available market
SCR	silicon controlled rectifier
SiGe	silicon-germanium
SLIC	subscriber line interface card
SMPS	switch-mode power supply
SOC	System-on-Chip
SRAM	static RAM
SRAM	static random access memory
SVM	serial nonvolatile memories
TAM	total available market
TDD	Time Division Duplex, wireless communication spectrum
TD-SCDMA	Time Division Synchronous Code Division Multiple Access, one of the 3G wireless interface specifications that has been adopted by the International Telecommunications Union
USB	universal serial bus
VIPOWER	vertical integration power
VLSI	very large scale integration
VDSL	very high-bit rate digital subscriber line
VDSL	very-high-rate digital subscriber line
VoIP	voice over Internet protocol
XDSL	Digital Subscriber Line

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**SIGNATURES**

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

STMICROELECTRONICS N.V.

By: /s/ PASQUALE  
PISTORIO

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**Pasquale Pistorio  
President and Chief  
Executive Officer**

Date: March 14, 2003

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**CERTIFICATION**

I, Pasquale Pistorio, certify that:

1. I have reviewed this annual report on Form 20-F of STMicroelectronics N.V.;
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:
  - a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
  - b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the Evaluation Date); and
  - c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of the registrant's Supervisory Board:
  - a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
  - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and
- 6.

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The registrant's other certifying officers and I have indicated in this annual report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: March 14 , 2003

By: /s/ PASQUALE  
PISTORIO

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**Pasquale Pistorio**  
**President and Chief**  
**Executive Officer**

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**CERTIFICATION**

I, Maurizio Ghirga, certify that:

1. I have reviewed this annual report on Form 20-F of STMicroelectronics N.V.;
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:
  - a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
  - b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the Evaluation Date); and
  - c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's Supervisory Board:
  - a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
  - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and
- 6.



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The registrant's other certifying officers and I have indicated in this annual report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: March 14, 2003

By: /s/ MAURIZIO  
GHIRGA

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**Maurizio Ghirga**  
**Corporate Vice**  
**President and Chief**  
**Financial Officer**

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**REPORT OF INDEPENDENT ACCOUNTANTS**

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of income, of cash flows and of changes in shareholders' equity present fairly, in all material respects, the financial position of STMicroelectronics N.V. and its subsidiaries at December 31, 2002 and December 31, 2001, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2002, in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

Amsterdam, February 19, 2003

PricewaterhouseCoopers Accountants N.V.

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PricewaterhouseCoopers is the trade name of amongst others the following companies: PricewaterhouseCoopers Accountants N.V. (registered with the Trade Register under number 34180285), PricewaterhouseCoopers Belastingadviseurs N.V. (registered with the Trade Register under number 34180284), PricewaterhouseCoopers Corporate Finance & Recovery N.V. (registered with the Trade Register under number 34180287) and PricewaterhouseCoopers B.V. (registered with the Trade Register under number 34180289). The services rendered by these companies are governed by General Terms & Conditions, which include provisions regarding our liability. These General Terms & Conditions are filed with the Amsterdam Chamber of Commerce and can also be viewed at [www.pwcglobal.com/nl](http://www.pwcglobal.com/nl).

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## STMICROELECTRONICS N.V.

## CONSOLIDATED STATEMENTS OF INCOME

	Year ended		
	December 31, 2000	December 31, 2001	December 31, 2002
	(In millions of U.S. dollars, except per share amounts)		
Net sales	7,764	6,304	6,270
Other revenues	49	53	48
<b>Net revenues</b>	<b>7,813</b>	<b>6,357</b>	<b>6,318</b>
Cost of sales	(4,217)	(4,047)	(4,020)
<b>Gross profit</b>	<b>3,596</b>	<b>2,310</b>	<b>2,298</b>
Selling, general and administrative	(704)	(641)	(648)
Research and development	(1,026)	(978)	(1,022)
Other income and expenses, net	(83)	(6)	7
Impairment, restructuring charges and other related closure costs		(346)	(34)
<b>Operating income</b>	<b>1,783</b>	<b>339</b>	<b>601</b>
Interest income (expense), net	46	(13)	(68)
Equity in loss of joint ventures		(5)	(11)
<b>Income before income taxes and minority interests</b>	<b>1,829</b>	<b>321</b>	<b>522</b>
Income tax expense	(375)	(61)	(89)
<b>Income before minority interests</b>	<b>1,454</b>	<b>260</b>	<b>433</b>
Minority interests	(2)	(3)	(4)
<b>Net income</b>	<b>1,452</b>	<b>257</b>	<b>429</b>
<b>Earnings per share (Basic)</b>	<b>1.64</b>	<b>0.29</b>	<b>0.48</b>
<b>Earnings per share (Diluted)</b>	<b>1.58</b>	<b>0.29</b>	<b>0.48</b>

The accompanying notes are an integral part of these Consolidated Financial Statements



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## STMICROELECTRONICS N.V.

## CONSOLIDATED BALANCE SHEETS

	As of	
	December 31, 2001	December 31, 2002
	In millions of U.S. dollars	
<b>ASSETS</b>		
<b>Current assets:</b>		
Cash and cash equivalents	2,439	2,562
Marketable securities	5	2
Trade accounts receivable	902	1,095
Inventories	743	930
Deferred tax assets	53	35
Other receivables and assets	416	567
<b>Total current assets</b>	<b>4,558</b>	<b>5,191</b>
Goodwill, net	63	159
Other intangible assets, net	150	311
Property, plant and equipment, net	5,888	6,220
Long-term deferred tax assets	18	28
Investments and other non-current assets	121	95
	<b>6,240</b>	<b>6,813</b>
<b>Total assets</b>	<b>10,798</b>	<b>12,004</b>
<b>LIABILITIES AND SHAREHOLDERS EQUITY</b>		
<b>Current liabilities:</b>		
Bank overdrafts	33	19
Current portion of long-term debt	97	146
Trade accounts payable	936	912
Other payables and accrued liabilities	409	606
Deferred tax liabilities	8	6
Accrued income tax	204	184
<b>Total current liabilities</b>	<b>1,687</b>	<b>1,873</b>
Long-term debt	2,772	2,797
Reserves for pension and termination indemnities	116	173
Long-term debt deferred tax liabilities	75	86
Other non-current liabilities	37	39
	<b>3,000</b>	<b>3,095</b>
<b>Total liabilities</b>	<b>4,687</b>	<b>4,968</b>

**Commitment and contingencies**

<b>Minority interests</b>	<b>36</b>	<b>42</b>
Common stock	1,142	1,144
Preferred stock: 540,000,000 shares authorized, not issued		
Common stock: Euro 1.04 nominal value, 1,200,000,000 shares authorized, 900,923,554 shares issued, 887,523,554 shares outstanding		
Capital surplus	1,836	1,864
Accumulated result	4,199	4,592

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Accumulated other comprehensive loss	(869)	(258)
Treasury stock	(233)	(348)
	<hr/>	<hr/>
<b>Shareholders equity</b>	<b>6,075</b>	<b>6,994</b>
	<hr/>	<hr/>
<b>Total liabilities and shareholders equity</b>	<b>10,798</b>	<b>12,004</b>
	<hr/>	<hr/>

The accompanying notes are an integral part of these Consolidated Financial Statements

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## STMICROELECTRONICS N.V.

## CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year ended		
	Dec. 31, 2000	Dec. 31, 2001	Dec. 31, 2002
	In millions of U.S. dollars		
<b>Cash flows from operating activities:</b>			
Net income	1,452	257	429
Add (deduct) non-cash items:			
Depreciation and amortization	1,108	1,320	1,382
Amortization of discount on convertible debt	29	79	87
Impairment charges		345	11
Gain on the sale of marketable securities	(9)	(27)	(1)
Other non-cash items	10	13	27
Minority interest in net income of subsidiaries	2	3	4
Deferred income tax	(4)	(83)	14
Equity in loss of joint ventures		5	11
Changes in assets and liabilities:			
Trade receivables	(631)	545	(129)
Inventories	(300)	94	(71)
Trade payables	580	(445)	(21)
Other assets and liabilities, net	186	(49)	(30)
	2,423	2,057	1,713
<b>Net cash from operating activities</b>	<b>2,423</b>	<b>2,057</b>	<b>1,713</b>
<b>Cash flows from investing activities:</b>			
Payment for purchases of tangible assets	(3,328)	(1,700)	(995)
Proceeds from the sale of marketable securities	10	31	1
Investment in intangible and financial assets	(240)	(132)	(69)
Payment for acquisitions, net of cash received of \$61			(307)
	(3,558)	(1,801)	(1,370)
<b>Net cash used in investing activities</b>	<b>(3,558)</b>	<b>(1,801)</b>	<b>(1,370)</b>
<b>Cash flows from financing activities:</b>			
Proceeds from issuance of long-term debt	1,661	557	65
Repayment of long-term debt	(87)	(433)	(158)
Increase (decrease) in short-term facilities	31	4	(16)
Capital increase	38	43	29
Payments to acquire treasury stock		(233)	(115)
Dividends paid	(27)	(36)	(36)
Other financing activities			(1)
	1,616	(98)	(232)
<b>Net cash from (used in) financing activities</b>	<b>1,616</b>	<b>(98)</b>	<b>(232)</b>
Effect of changes in exchange rates	(8)	(15)	12
	473	143	123
<b>Net cash increase</b>	<b>473</b>	<b>143</b>	<b>123</b>

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Cash and cash equivalents at beginning of the year	1,823	2,296	2,439
Cash and cash equivalents at end of the year	2,296	2,439	2,562

The accompanying notes are an integral part of these Consolidated Financial Statements

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## STMICROELECTRONICS N.V.

## CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS EQUITY

	Common Stock	Capital Surplus	Treasury Stock	Accumulated Result	Accumulated Other Comprehensive Loss	Shareholders Equity
In millions of U.S. dollars, except per share amounts						
Balance as of December 31, 1999	1,113	1,395		2,552	(496)	4,564
Capital increase	21	295				316
Comprehensive income:						
Net Income				1,452		1,452
Other comprehensive loss, net of tax					(180)	(180)
Comprehensive income						1,272
Dividends, \$0.03 per share				(27)		(27)
Balance as of December 31, 2000	1,134	1,690		3,977	(676)	6,125
Capital increase	8	146				154
Repurchase of common stock			(233)			(233)
Comprehensive income:						
Net Income				257		257
Other comprehensive loss, net of tax					(193)	(193)
Comprehensive income						64
Dividends, \$0.04 per share				(35)		(35)
Balance as of December 31, 2001	1,142	1,836	(233)	4,199	-869	6,075
Capital increase	2	28	(115)			(85)
Comprehensive income:						
Net Income				429		429
Other comprehensive income, net of tax					611	611
Comprehensive income						1,040
Dividends, \$0.04 per share				(36)		(36)
Balance as of December 31, 2002	1,144	1,864	-348	4,592	(258)	6,994

The accompanying notes are an integral part of these Consolidated Financial Statements

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**STMICROELECTRONICS N.V.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**(in millions of U.S. dollars, except per share amounts)**

**1. The Company**

STMicroelectronics N.V. (the Company) is registered in The Netherlands with its statutory domicile in Amsterdam. The Company was formed in 1987 with the name of SGS-THOMSON Microelectronics by the combination of the semiconductor business of SGS Microelettronica (then owned by Società Finanziaria Telefonica (S.T.E.T.), an Italian corporation) and the non-military business of Thomson Semiconducteurs (then owned by Thomson-CSF, a French corporation) whereby each company contributed their respective semiconductor businesses in exchange for a 50% interest in the Company.

The Company is a global independent semiconductor company that designs, develops, manufactures and markets a broad range of semiconductor integrated circuits ( ICs ) and discrete devices. The Company offers a diversified product portfolio and develops products for a wide range of market applications, including automotive products, computer peripherals, telecommunications systems, consumer products, industrial automation and control systems. Within its diversified portfolio, the Company has focused on developing products that leverage its technological strengths in creating customized, system-level solutions with high-growth digital and mixed-signal content.

The Company's products are manufactured and designed using a broad range of manufacturing processes and proprietary design methods. The Company uses all of the prevalent function-oriented process technologies, including complementary metal oxide silicon ( CMOS ), bipolar and nonvolatile memory technologies. In addition, by combining basic processes, the Company has developed advanced systems-oriented technologies that enable it to produce differentiated and application-specific products, including BiCMOS technologies (bipolar and CMOS) for mixed-signal applications, BCD technologies (bipolar, CMOS and diffused metal oxide silicon (DMOS)) for intelligent power applications and embedded memory technologies.

The Company's major shareholders have established holding companies and a shareholder agreement to enable them to manage their interests in STMicroelectronics N.V.

At December 31, 2002, 35.6% of issued shares of the Company (December 31, 2001: 35.6%) was owned by STMicroelectronics Holding II B.V., 62.9% was owned by the public (December 31, 2001: 63.3%), and 1.5% constituted treasury shares (December 31, 2001: 1.1%).

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At December 31, 2002 and 2001, STMicroelectronics Holding II B.V. was 100% owned by STMicroelectronics Holding N.V.

At December 31, 2001, STMicroelectronics Holding N.V. was owned as follows:

49% by FT1CI, a French holding company, whose shareholders are Areva (64%) (formerly known as CEA-Industrie) and France Telecom (36%)

51% by Finmeccanica, an Italian holding company, whose shareholders are the Italian Ministry of Treasury (32%) and the public (68%).

At December 31, 2002, STMicroelectronics Holding N.V. was owned as follows:

49% by FT1CI, a French holding company, whose shareholders were Areva (63.8%) and France Telecom (36.2%)

51% by Finmeccanica, an Italian holding company, whose shareholders were Fintecna (1.7%), the Italian Ministry of Treasury (32.3%) and the public (66.0%)

Under a shareholder s agreement terminating in December 2003, the French shareholder, FT1CI, and the Italian shareholder, Finmeccanica, have agreed to manage their interest in the Company through equal voting rights in STMicroelectronics Holding II B.V.

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**STMICROELECTRONICS N.V.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**2. Accounting policies**

The accounting policies of the Company conform with accounting principles generally accepted in the United States of America ( U.S. GAAP ). All balances and values in the current and prior periods are in millions of dollars, except share and per-share amounts.

*2.1 Principles of consolidation*

The consolidated financial statements of the Company have been prepared in conformity with U.S. GAAP. The Company s consolidated financial statements include the assets, liabilities, results of operations and cash flows of its majority-owned subsidiaries. The ownership of other interest holders is reflected as minority interests. Intercompany balances and transactions have been eliminated in consolidation.

*2.2 Use of estimates*

The preparation of financial statements in accordance with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes to the financial statements. Actual results could materially differ from those estimates and may affect amounts reported in future periods.

The primary areas that require significant estimates and judgments by management include, but are not limited to, inventory provisions, allowance for doubtful accounts, sales returns and warranty costs, evaluation of the impact of litigation and claims, valuation of acquired intangibles and goodwill as well as the impairment of their related carrying values, other non-recurring special charges, valuation of the carrying value of tangible assets, assumptions used in calculating pension plan accruals and provisions for specifically identified income tax exposures.

*2.3 Foreign currency*



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The U.S. dollar is the reporting currency for the Company. This is consistent with the worldwide semiconductor industry's use of the U.S. dollar as a currency of reference for actual pricing in the market. Furthermore, there is no single currency in which the majority of the Company's transactions are denominated, and revenues from external sales in U.S. dollars exceed revenues in any other currency. However, labor costs are concentrated primarily in the countries that have adopted the Euro currency.

The functional currency of each subsidiary throughout the group is generally the local currency. For consolidation purposes, assets and liabilities of these subsidiaries are translated at current rates of exchange at the balance sheet date. Income and expense items are translated at the average exchange rate for the period. The effects of translating the financial position and results of operations from local functional currencies are included in other comprehensive loss.

Assets, liabilities, revenue, expenses, gains or losses arising from foreign currency transactions are recorded in the functional currency of the recording entity at the exchange rate in effect at the date of the transaction. At each balance sheet date, recorded balances denominated in a currency other than the recording entity's functional currency are translated at the exchange rate prevailing at that date. The related exchange gains and losses are recorded in the consolidated statements of income.

The Company conducts its business on a global basis in various major international currencies. As a result, the Company is exposed to adverse movements in foreign currency exchange rates. The Company enters into foreign currency exchange forward contracts and currency options to neutralize its exposure to changes in exchange rates and the associated risk arising from the denomination of certain assets and liabilities in foreign currencies at the Company's subsidiaries.

For the year ended December 31, 2000, the recognition of gains and losses for foreign currency exchange forward contracts and currency options that were designated as hedges was deferred until settlement of the underlying commitments. Realized gains and losses were recorded as other income or expense when the underlying exposure materialized or the hedged transaction was no longer expected to occur. The discount or premium on these foreign currency exchange forward contracts designated as a hedge was recorded as an asset or liability and amortized to interest expense over the term of the contract. For the foreign currency exchange forward contracts and currency options that were not considered identifiable hedges, gains and losses were recorded at each reporting

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**STMICROELECTRONICS N.V.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

period as other income or expense based on the fair market value of the foreign currency exchange forward contract or option.

During the first quarter of 2001, the Company adopted *Statement of Financial Accounting Standards No. 133* (FAS 133), *Accounting for Derivative Instruments and Hedging Activities* and determined that the statement did not have a material impact on its consolidated results of operations, financial position or financial disclosure. This statement establishes accounting and reporting standards for derivative instruments and requires recognition of all derivatives as assets or liabilities in the balance sheet, and the measurement of those instruments at fair value. The Company's only derivative instruments include foreign currency exchange forward contracts and currency options that do not qualify as hedging instruments under FAS 133. These instruments are marked-to-market based on the forward rates and option prices provided by independent banking institutions with the associated gains or losses recorded as other income or expense.

**2.4 Reclassifications**

Certain prior year amounts have been reclassified to conform to the current year presentation.

**2.5 Revenue recognition**

In December 1999, the Securities and Exchange Commission released Staff Accounting Bulletin No. 101, *Revenue Recognition in Financial Statements* (SAB 101), providing the staff's view on applying generally accepted accounting principles to selected revenue recognition issues. The Company adopted SAB 101 in the fourth quarter of 2000, as required. The adoption of SAB 101 did not have a material effect on the Company's financial position or overall trends in results of operations.

**Net Sales**

The policy of the Company is to recognize revenue from sales to customers when the rights and risks of ownership are passed to customers, which usually occurs at shipment. A portion of the Company's sales are made to distributors who participate in certain programs common in the semiconductor industry whereby the distributors are allowed to return merchandise or receive potential price reductions on existing stock on-hand under certain circumstances. Provision is made at the time of sale for estimated product returns and price protection, which may occur under the contractual terms agreed with the distributor. The provision is based on the previous two months of sales data and the expected market price evolution.

***Other revenue***

Other revenue primarily consists of fees invoiced to partners under a co-development contract and is recognized as the related costs are incurred. These related costs under such contracts are recorded in cost of sales. Other revenue also includes certain contract indemnity payments and patent royalty income, which are recognized ratably over the term of the agreements.

***Fundings***

Fundings received by the Company are mainly from governmental agencies. Fundings for research and development costs are recognized as the related costs are incurred, after the finalization and signing of the fundings contract with the relevant government department or agency and are included in other income and expenses. Fundings for capital expenditures are deducted from the cost of the related fixed assets and reduce depreciation over the assets remaining estimated useful lives.

***2.6 Advertising costs***

Advertising costs are expensed as incurred. Advertising expenses for 2000, 2001 and 2002 were \$30, \$21 and \$11 respectively.

***2.7 Research and development***

Research and development costs are charged to expense as incurred. Research and development costs include costs incurred by the Company, the Company's share of costs incurred by other research and development interest groups, and costs associated with co-development contracts. Research and development expenses do not

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**STMICROELECTRONICS N.V.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

include marketing design center, process engineering, pre-production or process transfer costs, which are recorded as selling expenses or cost of sales.

*2.8 Start-up costs*

Start-up costs representing manufacturing costs incurred in the Company's new manufacturing facilities, before reaching a minimum level of production, are included in other income and expenses in the consolidated statements of income.

*2.9 Income taxes*

The provision for current taxes represents the income taxes expected to be payable related to the current year income or loss. Additional provisions for specific tax exposures are estimated and recorded when a loss is determined probable. Deferred tax assets and liabilities are recorded for all temporary differences arising between the tax and book bases of assets and liabilities and for the benefits of tax credits and loss carry-forwards. Those deferred tax assets and liabilities are measured using the enacted tax rates at which they are expected to be realized or paid. A valuation allowance is provided where necessary to reduce deferred tax assets to the amount for which management considers the possibility of recovery to be more likely than not.

*2.10 Earnings per share*

Basic earnings per share are computed by dividing net income by the weighted average number of common shares outstanding during the period. Diluted earnings per share are computed by dividing net income (adding-back interest expense, net of tax effects, related to convertible debt if determined to be dilutive) by the weighted average number of common shares and common share equivalents outstanding during the period. The weighted average shares used to compute diluted earnings per share include the incremental shares of common stock relating to outstanding options and convertible debt to the extent such incremental shares are dilutive.

*2.11 Cash and cash equivalents*

Highly liquid investments with insignificant interest rate risk purchased with an original maturity of ninety days or less are considered to be cash and cash equivalents.

#### *2.12 Marketable securities*

Management determines the appropriate classification of investments in debt and equity securities at the time of purchase and reassesses the classification at each reporting date. For those marketable securities with a readily determinable fair value and that are classified as available-for-sale, the securities are reported at fair value with net unrealized gains or losses recorded as a separate component of comprehensive loss in the statements of shareholders' equity. Other than temporary losses are recorded in net income based on the Company's assessment of any significant, sustained reductions in the investment's market value and of the market indicators affecting the securities. Gains and losses on securities sold are determined based on the specific identification method and are recorded as other income or expense.

#### *2.13 Trade accounts receivable*

Trade accounts receivable are stated net of allowances for doubtful accounts. In addition to any specifically identified amounts, the Company records a provision of 1.5% for potentially uncollectable balances, based on a historical collection trend.

#### *2.14 Inventories*

Inventories are stated at the lower of cost or market. Cost is computed by adjusting standard cost to approximate actual manufacturing costs on a quarterly basis; the inventory value is therefore dependent on manufacturing performance. In the case of underutilization of manufacturing facilities, the costs associated with the excess capacity are not included in the valuation of inventories but charged directly to cost of sales. Provisions for obsolescence are estimated for uncommitted inventories based on order backlog and the previous quarter's sales.

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Intangible assets subject to amortization include the cost of technologies and licenses purchased from third parties, capitalized internally developed software and the purchased software that are amortized over a period ranging from three to seven years. Intangible assets subject to amortization are reflected net of any impairment losses. The carrying value of intangibles subject to amortization is evaluated whenever changes in circumstances indicate the carrying amount may not be recoverable. In determining recoverability, the Company estimates fair value based on the expected aggregate amount of discounted future cash flows associated with the intangibles subject to amortization and compares this to the carrying value. An impairment loss is recognized for the excess of the carrying amount over the fair value. Significant estimates used in determining expected discounted future cash flows include, among others, the applicable industry's volume forecasts and average selling price evolution, the Company's market penetration and the market acceptance of certain new technologies.

Amortization is computed using the straight-line method over the following estimated useful lives:

Technologies & licenses	3-7 years
Internally developed software	3-5 years
Software	3 years

The Company evaluates the remaining useful life of an intangible asset each reporting period to determine whether events and circumstances warrant a revision to the remaining period of amortization.

*2.16 Goodwill*

As of January 1, 2002, goodwill acquired in business combinations is no longer amortized and is subject to an annual impairment test to determine whether the carrying value should be reduced. Potential impairment is based upon a comparison of fair value of each reporting unit with associated goodwill and the carrying value of such reporting unit. The Company defines its reporting units at an individual business level, which is one level below the four semiconductor product groups described in Note 28. The fair value is based on the reporting unit's expected discounted future cash flows; impairments are recognized when the carrying value exceeds the fair value. Significant estimates used in the determination of future cash flows include the applicable reporting unit's volume forecasts and average selling price evolution, the reporting unit's market penetration and the market acceptance of certain new technologies.

*2.17 Property, plant and equipment*

Property, plant and equipment are stated at cost, net of government funding and any impairment losses. Major additions and improvements are capitalized; minor replacements, maintenance and repairs are charged to current operations.

Depreciation is computed using the straight-line method over the following estimated useful lives:

Buildings	33 years
Facilities & leasehold improvements	10 years
Machinery and equipment	6 years
Computer and R&D equipment	3-6 years
Other	2-5 years

The carrying value of a tangible asset is evaluated whenever changes in circumstances indicate the carrying amount may not be recoverable. In determining recoverability, the Company estimates the expected future cash flow associated with the tangible asset or group of assets and compares this to the carrying value. If the anticipated undiscounted future cash flows are less than the carrying amount, the Company recognizes an impairment loss for the difference between the carrying amount of the tangible asset or group of assets and their estimated fair value. Significant estimates used in determining the undiscounted future cash flows include the utilization of the Company's fabrication facilities and the ability to upgrade such facilities, changes in selling price and the adoption of new technologies.

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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

Assets subject to leasing agreements and classified as capital leases are included in property, plant and equipment and depreciated over the shorter of the estimated useful life or the lease term.

When property, plant or equipment is retired or otherwise disposed of, the net book value of the asset is removed from the Company's books and the net gain or loss is included in other income and expenses.

*2.18 Investments*

Investments are accounted for using the equity method of accounting if the investment gives the Company the ability to exercise significant influence over an investee. Significant influence is generally deemed to exist if the Company has a 20% to 50% ownership interest in the voting stock of the investee and representation in the Board of Directors.

Investments without readily determinable fair values and for which the Company does not have the ability to exercise significant influence are accounted for under the cost method. Under the cost method of accounting, investments are carried at historical cost and are adjusted only for declines in fair value. For investments in public companies that have readily determinable fair values and for which the Company does not exercise significant influence, the Company classifies these investments as available-for-sale and, accordingly, records their fair values with unrealized gains and losses reported as a separate component of comprehensive loss in the consolidated statements of shareholders' equity. Other-than-temporary losses are recorded in net income and are based on the Company's assessment of any significant, sustained reductions in the investment's market value and of the market indicators affecting the securities. Gains and losses on investments sold are determined on the specific identification method and are recorded as other income or expense.

*2.19 Pension and termination indemnities*

The Company sponsors various retirement plans for its employees; such plans include both defined benefit and defined contribution plans. These plans conform to local regulations and practices of the countries in which the Company operates. Significant estimates are used in determining the assumptions incorporated in the calculation of net periodic pension cost, which is supported by input from independent actuaries.

*2.20 Comprehensive income (loss)*



Comprehensive income (loss) is defined as the change in equity of a business during a period except those resulting from investment by shareholders and distributions to shareholders. In the accompanying financial statements, other comprehensive loss consists of foreign currency translation adjustments, the unrealized gain or loss on marketable securities classified as available-for-sale and the change in the excess of the minimum pension liability over the unrecognized prior service cost of certain pension plans.

#### *2.21 Stock splits*

In April 2000, the Company's shareholders approved a three-for-one stock split of the Company's common stock. The record date for the stock split was May 5, 2000, and the distribution date was May 6, 2000. All earnings per share amounts, references to common stock, shareholders' equity amounts and stock option plan data have been restated as if the stock splits had occurred as of the earliest period presented.

#### *2.22 Fair value of stock-based compensation*

At December 31, 2002, the Company has six stock-based employee and Supervisory Board compensation plans which are described in detail in Note 14. The Company applies the intrinsic-value-based method prescribed by Accounting Principles Board Opinion No. 25 *Accounting for Stock Issued to Employees* (APB 25), and related Interpretations, in accounting for stock-based awards to employees. No stock-based employee compensation cost is reflected in net income, as all options granted under those plans had an exercise price equal to the market value of the underlying common stock on the date of grant. Pro forma information regarding net income and earnings per share (EPS) is required by Statement of Financial Accounting Standards No. 123 *Accounting for Stock-Based Compensation* (FAS 123) as if the Company had accounted for its stock-based awards to employees under the fair value method prescribed by FAS 123. The fair value of the Company's stock-based awards to employees was estimated using a Black-Scholes option-pricing model.

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## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The fair value was estimated using the following weighted-average assumptions:

	Year ended December 31,	Year ended December 31,	Year ended December 31,
	2000	2001	2002
Expected life (years)	5	5	5
Volatility	42.2%	57.4%	60.1%
Risk-free interest rate	6.0%	4.5%	4.1%
Dividend yield	0.05%	0.10%	0.20%

The weighted average fair value of options granted during 2000, 2001 and 2002 was \$27.12, \$20.48 and \$16.80 per option, respectively.

The following table illustrates the effect on net income and earnings per share if the Company had applied the fair value recognition provisions of FAS 123 to employee stock-based compensation:

	Year ended December 31,	Year ended December 31,	Year ended December 31,
	2000	2001	2002
Net income, as reported	1,452	257	429
Deduct : Total stock-based employee compensation expense determined under FAS 123, net of related tax effects	(66)	(135)	(200)
Net income, pro forma	1,386	122	229
Earnings per share:			
Basic, as reported	1.64	0.29	0.48
Basic, pro forma	1.56	0.14	0.26
Diluted, as reported	1.58	0.29	0.48
Diluted, pro forma	1.51	0.13	0.26

## 2.23 New accounting pronouncements

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In July 2001, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 141, *Business Combinations* (FAS 141), which is applicable for all business combinations initiated after June 30, 2001. This statement eliminates the use of the pooling-of-interests method and provides specific criteria for the recognition of intangible assets apart from goodwill. In the second half of 2001, the Company did not enter into any combination which would require the application of FAS 141. During 2002, the Company acquired Alcatel Microelectronics and applied the concepts of FAS 141. This acquisition is further described in Note 4.

In July 2001, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 142, *Goodwill and Other Intangible Assets* (FAS 142), which is effective for fiscal years beginning after December 15, 2001. FAS 142 primarily addresses the accounting that must be applied to goodwill and intangible assets subsequent to initial recognition. In particular, the statement requires that goodwill and indefinite lived intangible assets no longer be amortized but be subject to annual impairment tests to determine the appropriate carrying value. Had FAS 142 not been adopted, the Company would have recorded an additional amortization expense of \$28 during 2002. FAS 142 also requires the reclassification of any intangible assets which do not meet the FAS 141 definition of an identifiable intangible asset. The statement requires all unidentifiable intangible assets to be reclassified to goodwill. The Company adopted the standards required by this statement in the first quarter of 2002. In connection with the adoption of FAS 142, the Company reclassified \$3 of its intangible assets for acquired workforce to goodwill.

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## STMICROELECTRONICS N.V.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

In the first quarter of 2002, the Company performed the transitional impairment review required by FAS 142 and determined that no adjustment for impairment loss was required as a result of adopting the standard. In the fourth quarter of 2002, the Company performed the yearly impairment review required by FAS 142, which did not require any adjustment for impairment loss. There can be no assurance that future goodwill impairment tests will not result in a charge to earnings.

The following table presents the impact of FAS 142 on net income and EPS had the standard been in effect for the year ended December 31:

	December 31, 2000	December 31, 2001	December 31, 2002
Net income as reported	1,452	257	429
Adjustments:			
Amortization of goodwill	24	26	
Amortization of acquired workforce previously classified as intangible assets	1	2	
Income tax effects	(2)	(1)	
Net income as adjusted	1,475	284	429
Basic EPS as reported	1.64	0.29	0.48
Basic EPS as adjusted	1.67	0.32	0.48
Diluted EPS as reported	1.58	0.29	0.48
Diluted EPS as adjusted	1.61	0.32	0.48

In August 2001, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets (FAS 144). This statement retains the requirements of FAS 121 to recognize an impairment loss only if the carrying amount of a long-lived asset is not recoverable from its undiscounted cash flows. The Company adopted FAS 144 during the first quarter of 2002 and determined that the standard has had no material effect on the Company's financial position, or results of operations at December 31, 2002.

In July 2002, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 146, Accounting for Costs Associated with Exit or Disposal Activities (FAS 146), which is effective for exit or disposal activities that are initiated after December 31, 2002, with early application encouraged. FAS 146 addresses the recognition, measurement, and reporting of costs associated with exit and disposal activities, including restructuring activities, and nullifies the guidance in Emerging Issues Task Force Issue 94-3 (EITF 94-3) Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring). FAS 146 applies to costs associated with an exit activity that does not involve an entity newly acquired in a business combination or with a disposal activity covered by FAS 144. Those costs include, but are not limited to, the following: one-time termination benefits provided to current employees, costs to terminate a contract that is not a capital lease, costs to consolidate facilities or relocate employees. FAS 146 differs from EITF 94-3 because of the requirement to

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recognize the fair value of a liability for costs associated with an exit or disposal activity when the liability is incurred; whereas under EITF 94-3, a liability for an exit cost is recognized at the date of an entity's commitment to an exit plan. FAS 146 states that an entity's commitment to a plan, by itself, does not create a permanent obligation to others that meets the definition of a liability. The Company early adopted FAS 146 in the third quarter of 2002, and management believes that FAS 146 has had no material effect on the Company's financial position, or results of operations at December 31, 2002.

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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

In November 2002, the Financial Accounting Standards Board issued FASB Interpretation No. 45, Guarantor's Accounting and Disclosure Requirements for Guarantees Including Indirect Guarantees of Indebtedness of Others, an Interpretation of FASB Statement No. 5, 57, and 107 and Rescission of FASB Interpretation No. 34 (FIN 45). FIN 45 clarifies the requirements of FASB Statement No. 5, Accounting for Contingencies, relating to the guarantor's accounting for, and disclosure of, the issuance of certain types of guarantees. FIN 45 clarifies that a guarantor is required to recognize a liability for the fair value of the obligation under taken at the inception of the guarantee. The disclosure requirements of this interpretation are effective for interim or annual financial statement periods ending after December 15, 2002. The initial measurement provisions are effective prospectively for all guarantees subject to this interpretation that are issued or modified after December 31, 2002.

In December 2002, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 148, Accounting for Stock-Based Compensation Transition and Disclosure an amendment of FASB Statement No. 123 (FAS 148). This statement provides alternative transition methods for voluntary changes to the fair value based method of accounting for stock-based employee compensation and amends the disclosure requirement of Statement 123 for annual and interim financial statements. Under the statement, the interim required disclosures will be significantly similar to the annual disclosures. The transitional provisions and annual disclosure requirements are effective for financial statements for fiscal years ending after December 15, 2002. Management has incorporated the required disclosures in the consolidated financial statements.

In January 17, 2003, the Financial Accounting Standards Board issued Interpretation of Financial Accounting Standards No. 46, Consolidation of Variable Interest Entities, an Interpretation of ARB No. 51 (FIN 46). The primary objective of FIN 46 is to provide guidance on the identification of, and financial reporting for, entities over which control is achieved through means other than voting rights; such entities are known as Variable Interest Entities (VIEs). An entity is considered a VIE if any of the following factors are present: the equity investment in the entity is insufficient to finance the operations of that entity without additional subordinated financial support from other parties; the equity investors of the entity lack decision-making rights; an equity investor holds voting rights that are disproportionately low in relation to the actual economics of the investor's relationship with the entity and substantially all of the entity's activities involve or are conducted on behalf of that investor; other parties protect the equity investors from expected losses; or parties, other than the equity holders, hold the right to receive the entity's expected residual returns, or the equity investors' rights to expect residual returns is capped. FIN 46 requires existing unconsolidated VIEs to be consolidated by their primary beneficiaries if the entities do not effectively disperse risk among the parties involved. The primary beneficiary of a VIE is the party that absorbs the majority of the entity's expected losses, receives the majority of its expected residual returns, or both as a result of holding variable interests. Assets, liabilities, and non-controlling interest of newly consolidated VIEs generally will be initially measured at their fair values with any resulting loss reported immediately as an extraordinary item or resulting gain as a reduction of the amounts assigned to assets in the same manner as if the consolidation resulted from a business combination. The provisions of FIN 46 are effective by June 15, 2003 for VIEs created prior to February 1, 2003. For VIEs created after January 31, 2003, the provisions are immediately effective. Transitional disclosures are required for all financial statements issued after January 31, 2003. The Company has adopted FIN 46 and identified the following possible VIEs under the existing contracts: the agreement with Philips Semiconductors and Motorola Semiconductor to build and operate a 300mm pilot line in Crolles (France) where the partners will contribute to capital expenditure and share related expenses; a new joint venture established with Dai Nippon for the development and production of photomask in which the Company has a 19% ownership and has committed to contribute certain future capital increases; the joint venture in Super H with Hitachi where the Company owns 44% and has commitments for future capital increases; Tioga on which the Company has at December 31, 2002 an option to buy their assets, the option has been exercised during January 2003 and will become effective during second quarter 2003 for a cost of \$12. For all these possible VIEs, the Company estimates that there are no material exposure to loss that could impact the results of operations and the financial position.

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The consolidated financial statements include the accounts of STMicroelectronics N.V. and the following entities as of December 31, 2002:

<u>Legal Seat</u>	<u>Name</u>	<u>Percentage Ownership (Direct or Indirect)</u>
Australia-Sydney	STMicroelectronics PTY Ltd	100
Belgium-Zaventem	STMicroelectronics Belgium N.V.	100
Brazil-Sao Paolo	STMicroelectronics Ltda	100
Canada-Ottawa	STMicroelectronics (Canada), Inc.	100
China-Shenzhen	Shenzhen STS Microelectronics Co. Ltd	60
China-Shanghai	STMicroelectronics (Shanghai) Co. Ltd	100
Czech Republic-Prague	STMicroelectronics Design and Application s.r.o.	100
Finland-Lohja	STMicroelectronics OY	100
France Meudon la Foret	MIETEC France S.A.S.	100
France-Saint Genis Pouilly	STMicroelectronics S.A.	100
France-Rousset	STMicroelectronics (Rousset) S.A.S.	100
France-Palaiseau	Waferscale Integration Sarl	100
Germany-Grasbrunn	STMicroelectronics GmbH	100
Germany-Grasbrunn	STMicroelectronics Design and Application GmbH	100
Hong Kong Hong Kong	STMicroelectronics LTD	100
India Noida	STMicroelectronics Pvt Ltd	100
Israel-Netanya	STMicroelectronics Ltd	100
Italy-Vimercate	Accent S.r.l.	51
Italy-Catania	CO.RI.M.ME.	100
Italy Aosta	DORA S.p.a.	100
Italy-Naples	STMicroelectronics Services S.r.l.	100
Italy Agrate Brianza	STMicroelectronics S.r.l.	100
Japan-Tokyo	STMicroelectronics KK	100
Malaysia-Kuala Lumpur	STMicroelectronics Marketing SDN BHD	100
Malaysia-Muar	STMicroelectronics SDN BHD	100
Malta-Kirkop	STMicroelectronics Ltd	100
Morocco-Rabat	Electronic Holding S.A.	100
Morocco-Casablanca	STMicroelectronics S.A.	100
Singapore-Ang Mo Kio	STMicroelectronics ASIA PACIFIC Pte Ltd	100
Singapore-Ang Mo Kio	STMicroelectronics Pte Ltd	100
Spain-Madrid	STMicroelectronics S.A.	100



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Sweden-Kista	STMicroelectronics A.B.	100
Switzerland-Geneva	STMicroelectronics S.A.	100
United Kingdom-Marlow	STMicroelectronics Limited	100
United Kingdom-Marlow	STMicroelectronics (Research & Development) Limited	100
United Kingdom-Bristol	Inmos Limited	100
United States-Carrollton	STMicroelectronics Inc.	100
United States-Carrollton	STMicroelectronics Leasing Co. Inc.	100
United States-Wilsonville	The Portland Group, Incorporated	100

#### 4. Business combinations

In the first quarter of 2002, the Company purchased Alcatel Business Systems to acquire certain assets dedicated to custom ASICs (Application Specific Integrated Circuits) activities in the mobile phone market; the

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## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

agreement also included the transfer from Alcatel Business Systems to the Company of a dedicated development team. The purchase price was approximately \$1.

On June 26, 2002 the Company completed the acquisition of Alcatel Microelectronics, a company of Alcatel Group which manufactures and markets semiconductor integrated circuits. Concurrently, the Company sold the acquired mixed signal business activities of Alcatel Microelectronics and also its fabrication facility to AMI Semiconductors, Inc. The consideration for the purchase of Alcatel Microelectronics, net of the proceeds of \$61 from the resale to AMI Semiconductors, was \$306, which has been fully paid as of December 31, 2002. The acquisition was conducted to further develop our strategic relationships with the Alcatel Group. Purchase price allocations resulted in the recording of intangible assets of \$111 for core technologies, \$58 for a supply contract signed with the Alcatel Group and \$92 as goodwill. The core technologies and supply contract have average useful live of 4 years. The Company also recorded a charge of \$8 in the second quarter of 2002 for in-process research and development as certain of the acquired technologies had not reached technological feasibility and had no other alternative future use. The purchase price allocation is based on a third party independent appraisal and makes reference to the future business assumptions made by the Company, based on management's best knowledge of the acquired company and the industry. Such assumptions may be revised as management acquires further knowledge of the acquired company, which could result in revisions to the purchase price allocation within one year of the acquisition.

The pro forma information below assumes that Alcatel Microelectronics, acquired in June 2002, had been acquired at the beginning of 2001. The results related to mixed-signal business sold to AMI Semiconductors, Inc. have been excluded in the pro forma information below; restructuring costs of \$56 incurred in 2001 by Alcatel Microelectronics have been included. The impact of the \$8 charge for in-process research and development has been excluded. Such information is presented by management based on its best knowledge of the acquired company. This is presented for informational purposes only and is not necessarily indicative of the results of future operations or results that would have been achieved had the acquisitions taken place as of the beginning of 2001.

*Pro forma statement of income*

	Year ended December 31, 2001 (unaudited)	Year ended December 31, 2002 (unaudited)
<i>Net revenues</i>	6,545	<b>6,353</b>
<i>Gross profit</i>	2,383	<b>2,309</b>
<i>Operating expenses</i>	(2,092)	<b>(1,717)</b>
<i>Operating profit</i>	291	<b>592</b>
<i>Net income</i>	208	<b>418</b>
<i>Earnings per share (basic)</i>	0.23	<b>0.47</b>

<i>Earnings per share (diluted)</i>	0.23	<b>0.47</b>
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*As reported statement of income*

	Year ended December 31, 2001 (unaudited)	Year ended December 31, 2002 (unaudited)
<i>Net revenues</i>	6,357	<b>6,318</b>
Gross profit	2,310	<b>2,298</b>
Operating expenses	(1,971)	<b>(1,697)</b>
Operating profit	339	<b>601</b>
Net income	257	<b>429</b>
Earnings per share (basic)	0.29	<b>0.48</b>
Earnings per share (diluted)	0.29	<b>0.48</b>

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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**5. Joint venture**

During the third quarter of 2001, the Company and Hitachi, Ltd. formed a joint venture to develop and license RISC microprocessors. The joint venture, Super H, Inc., was initially capitalized with the Company's contribution of \$15 of cash plus internally developed technologies with an agreed intrinsic value of \$14 for a 44% interest. Hitachi, Ltd. contributed \$37 of cash for a 56% interest. At December 31, 2001, the Company's investment totaled \$10 and was reflected in investment and other non-current asset.

The Company is accounting for its share of in SuperH, Inc. joint venture under the equity method based on the actual results of the joint venture. The Company recorded charges for its equity interest of \$5 at December 31, 2001 and \$ 11 at December 31, 2002 separately in the consolidated statements of income for its participation in the losses from the joint venture.

During 2002, the Company contributed \$5 in cash to the Super H joint venture. As a result of deteriorating market conditions and the inability of Super H to meet its projected business plan objectives, the Company wrote off the \$4 remaining book value of its investment in SuperH, Inc. and provisioned an additional \$3 for future capital commitments that the Company is contractually obliged to contribute. The Company's 44% share in the joint venture has remained unchanged at December 31, 2002 and had a zero carrying value.

Under the agreement, the Company could be required to additionally contribute up to \$19 in cash to the joint venture through September 2003.

**6. Available for sale marketable securities**

The Company has classified certain marketable securities as available-for-sale, which relate to equity securities held as strategic investments in various companies. These marketable securities are classified as current and non-current assets and consist of the following:

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	<u>Cost</u>	<u>Unrealized gain</u>	<u>Unrealized loss</u>	<u>Fair value</u>
Equity securities classified as current assets	1	2		3
Equity securities classified as non-current assets	5		(2)	3
<b>Total</b>	<b>6</b>	<b>2</b>	<b>(2)</b>	<b>6</b>

December 31, 2002

	<u>Cost</u>	<u>Unrealized gain</u>	<u>Unrealized loss</u>	<u>Fair value</u>
Equity securities classified as current assets	1	1		2
Equity securities classified as non-current assets	1			1
<b>Total</b>	<b>2</b>	<b>1</b>		<b>3</b>

For fiscal years 2000, 2001 and 2002, gross realized gains associated with the sale of the marketable securities were \$9, \$25 and \$1, respectively.

**7. Trade accounts receivable**

Trade accounts receivable consist of the following:

	<u>December 31, 2001</u>	<u>December 31, 2002</u>
Trade accounts receivable	921	1,118
Less valuation allowance	(19)	(23)
<b>Total</b>	<b>902</b>	<b>1,095</b>

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## STMICROELECTRONICS N.V.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

In December 2002 the Company sold without recourse \$50 of receivables due in 2003. In December 2001, \$139 of receivables were sold without recourse due in 2002.

In 2000, 2001 and 2002, one customer, the Nokia group of companies, represented 13.4%, 19.3% and 17.6% of consolidated net revenues, respectively.

**8. Inventories**

Inventories consist of the following:

	December 31, 2001	December 31, 2002
	<u>          </u>	<u>          </u>
Raw materials	53	53
Work-in-process	534	656
Finished products	156	221
	<u>          </u>	<u>          </u>
<b>Total</b>	<b>743</b>	<b>930</b>
	<u>          </u>	<u>          </u>

The Company recorded a special inventory charge for obsolescence of \$71 in cost of sales in the second quarter of 2001. This charge was due to the cancellation of customers' order backlog that resulted in unusable quantities of work-in-process and finished goods inventory.

**9. Other receivables and assets**

Other receivables and assets consist of the following:

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	December 31, 2001	December 31, 2002
Receivables from government agencies	72	125
Taxes and other government receivables	2	65
Down payment to suppliers	22	11
Loans to employees	9	7
Prepaid expenses	152	145
Sundry debtors	121	142
Other	38	72
<b>Total</b>	<b>416</b>	<b>567</b>

Receivables from government agencies relate to research and development contracts, industrialization contracts and capital investment projects.

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## STMICROELECTRONICS N.V.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## 10. Goodwill

Changes in the carrying amount of goodwill are as follows:

	Opening net value	Acquisitions	Amortization	Impairment	Other	Closing net value
December 31, 2000	53	63	(24)			92
Acquisitions:						
Ravisent		30				
Wafer Scale Integration		24				
Veridicom		4				
Amortization/Impairment			(26)	(61)		
December 31, 2001	92	58	(26)	(61)		63
Acquisitions:						
Alcatel Microelectronics,		92				
Alcatel Mobile Phone,		1				
Transitional reclassification of acquired workforce previously classified as intangible assets					3	
<b>December 31, 2002</b>	<b>63</b>	<b>93</b>			<b>3</b>	<b>159</b>

As required by FAS 142, which was adopted by the Company during the first quarter of 2002, goodwill is no longer amortized.

In the second quarter of 2001, an impairment charge was recorded to reduce the carrying value of goodwill by \$ 61. See Note 21.



**11. Intangible assets**

Intangible assets consist of the following:

	December 31, 2001		
	Gross	Accumulated Amortization	Net
Technologies & licenses	159	(56)	103
Internally developed software	50	(36)	14
Software	68	(35)	33
<b>Total</b>	<b>277</b>	<b>(127)</b>	<b>150</b>
	December 31, 2002		
	Gross	Accumulated Amortization	Net
Technologies & licenses	321	(98)	223
Internally developed software	102	(44)	58
Software	87	(57)	30
<b>Total</b>	<b>510</b>	<b>(199)</b>	<b>311</b>

The aggregate amortization expense for 2000, 2001 and 2002 was \$36, \$45 and \$67, respectively.

In the second quarter of 2001, an impairment charge was recorded to reduce the carrying value of intangible assets by \$ 39. See Note 21.

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## STMICROELECTRONICS N.V.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The estimated amortization expense for the following years is:

Year	
2003	85
2004	74
2005	59
2006	44
2007	20
Thereafter	29
<b>Total</b>	<b>311</b>

**12. Property, plant and equipment**

Property, plant and equipment consist of the following:

	December 31, 2001		
	Gross Cost	Accumulated Depreciation	Net Cost
Land and buildings	827	(145)	682
Machinery and equipment	9,028	(4,173)	4,855
Other tangible fixed assets	390	(256)	134
Construction in progress	217		217
<b>Total</b>	<b>10,462</b>	<b>(4,574)</b>	<b>5,888</b>
	December 31, 2002		
	Gross Cost	Accumulated Depreciation	Net Cost
Land and buildings	916	(181)	735

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Machinery and equipment	10,711	(5,849)	4,862
Other tangible fixed assets	486	(318)	168
Construction in progress	455		455
<b>Total</b>	<b>12,568</b>	<b>(6,348)</b>	<b>6,220</b>

The depreciation charges for 2000, 2001 and 2002 were \$1,047, \$1,248 and \$1,315, respectively.

In the second and third quarter of 2001, impairment charges were recorded to reduce the carrying value of property, plant and equipment by \$177 and \$23, respectively. See Note 21.

### 13. Investments and other non-current assets

Investments and other non-current assets consist of the following:

	December 31, 2001	December 31, 2002
Investments	32	24
Long-term deposits	58	50
Debt issuance costs, net	31	21
<b>Total</b>	<b>121</b>	<b>95</b>

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**STMICROELECTRONICS N.V.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**14. Shareholders equity**

*14.1 Outstanding shares*

The authorized share capital of the Company is EUR 1,810, consisting of 1,200,000,000 common shares and 540,000,000 preference shares each with a nominal value of EUR 1.04. As of December 31, 2000, 2001, and 2002 the number of shares of common stock issued was 889,881,287 shares, 899,099,181 shares, and 900,923,554 shares, respectively. There were no preference shares issued as of December 31, 2000, 2001 and 2002.

As of December 31, 2001 and 2002 the number of shares of common stock outstanding was 889,699,181 and 887,523,554, respectively.

*14.2 Preference shares*

The 540,000,000 preference shares entitle a holder to full voting rights and to a preferential right to dividends and distributions upon liquidation. The Company entered into an option agreement with STMicroelectronics Holding II B.V. in order to protect the Company from a hostile takeover or other similar action. The option agreement provides for 540,000,000 preference shares to be issued to STMicroelectronics Holding II B.V. upon their request based on approval by the Company's Supervisory Board. STMicroelectronics Holding II B.V. would be required to pay at least 25% of the par value of the preference shares to be issued, and to retain ownership of at least 30% of the Company's issued share capital.

*14.3 Treasury shares*

As of December 31, 2002, 13,400,000 shares of common stock totaling \$348 have been repurchased and reflected at cost as a reduction of shareholders' equity. In 2002, 4,000,000 shares were repurchased for a cost of \$115, and 9,400,000 of shares were repurchased in 2001 for a cost of \$233. No treasury shares were acquired in 2000. The repurchased shares have been designated to fund the Company's most recent employee stock option plan.

14.4 *Stock option plans*

In 1995, the Shareholders voted to adopt the 1995 Stock Option Plan (the 1995 Plan ) whereby options for up to 33,000,000 shares may be granted in installments over a five-year period. Under the 1995 Plan, the options may be granted to purchase shares of common stock at a price not lower than the market price of the shares on the date of grant. Under the 1995 Plan at December 31, 2002, 16,728,535 of the granted options outstanding vest 50% after three years and 50% after four years following the date of the grant; 7,034,109 of the granted options vest 32% after two years, 32% after three years and 36% after four years following the date of the grant.

In 1996, the Shareholders voted to adopt the Supervisory Board Option Plan whereby each member of the Supervisory Board was eligible to receive, during the three-year period 1996-1998, 18,000 options for 1996 and 9,000 options for both 1997 and 1998, to purchase shares of common stock at the closing market price of the shares on the date of the grant. In the same three-year period, the professional advisors to the Supervisory Board was eligible to receive 9,000 options for 1996 and 4,500 options for both 1997 and 1998. Under the Plan, the options vest over one year and are exercisable for a period expiring eight years from the date of grant.

In 1999, the Shareholders voted to renew the Supervisory Board Option Plan whereby each member of the Supervisory Board may receive, during the three-year period 1999-2001, 18,000 options for 1999 and 9,000 options for both 2000 and 2001, to purchase shares of capital stock at the closing market price of the shares on the date of the grant. In the same three-year period, the professional advisors to the Supervisory Board may receive 9,000 options for 1999 and 4,500 options for both 2000 and 2001. Under the Plan, the options vest over one year and are exercisable for a period expiring eight years from the date of grant.

In 2001, the Shareholders voted to adopt the 2001 Stock Option Plan (the 2001 Plan ) whereby options for up to 60,000,000 shares may be granted in installments over a five-year period. The options may be granted to purchase shares of common stock at a price not lower than the market price of the shares on the date of grant. Under the 2001 Plan at December 31, 2002, 3,349,803 of the granted options outstanding vest 50% after one year and 50% after two years following the date of the grant; 19,095,814 of the granted options vest 32% after two years, 32% after three years and 36% after four years following the date of the grant.

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## STMICROELECTRONICS N.V.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

In 2002, the Shareholders voted a Stock Option Plan for Supervisory Board Members and Professionals of the Supervisory Board. Under this plan, 12,000 options can be granted by year to each member of the Supervisory Board and 6,000 options per year to each professional advisor to the Supervisory Board. Options will vest 30 days after the date of grant.

A summary of stock option activity for the plans for the three years ended December 31, 2002, follows:

	Number of Shares	Price Per Share	
		Range	Weighted Average
Outstanding at December 31, 1999	21,717,690	\$6.04-\$24.88	\$ 16.41
Options granted:			
1995 Plan	7,570,890	\$50.69-\$62.01	\$ 58.77
Supervisory Board Plan	103,500	\$62.01	\$ 62.01
Options cancelled	(253,950)	\$6.04-\$62.01	\$ 27.57
Options exercised	(1,988,195)	\$6.04-\$24.88	\$ 6.94
Outstanding at December 31, 2000	27,149,935	\$6.04-\$62.01	\$ 28.98
Options granted:			
1995 Plan	139,851	\$31.65-\$44.00	\$ 33.99
2001 Plan	9,599,000	\$29.61-\$39.00	\$ 38.92
Supervisory Board Plan	112,500	\$39.00	\$ 39.00
Options cancelled	(956,750)	\$6.04-\$62.01	\$ 39.90
Options exercised	(1,372,935)	\$6.04-\$24.88	\$ 10.36
Outstanding at December 31, 2001	34,671,601	\$6.04-\$62.01	\$ 32.22
Options granted:			
2001 Plan	13,751,393	\$20.02-\$33.70	\$ 30.88
Supervisory Board Plan	132,000	\$31.11	\$ 31.11
Options cancelled	(1,124,788)	\$6.04-\$62.01	\$ 36.21
Options exercised	(612,445)	\$6.04-\$24.88	\$ 10.88
<b>Outstanding at December 31, 2002</b>	<b>46,817,761</b>	<b>\$6.04-\$62.01</b>	<b>\$ 32.01</b>

Stock options exercisable were as follows:

	December 31, 2000	December 31, 2001	December 31, 2002
Options exercisable	5,149,338	7,640,893	<b>15,277,776</b>
Weighted average exercise price	\$ 9.72	\$ 11.91	<b>\$ 22.49</b>

The weighted average remaining contractual life of options outstanding as of December 31, 2000, 2001 and 2002 was 6.1, 6.3 and 6.5 years, respectively.

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## STMICROELECTRONICS N.V.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The range of exercise prices, the weighted average exercise price and the weighted average remaining contractual life of options outstanding as of December 31, 2002 was as follows:

<u>Number of shares</u>	<u>Option price</u> <u>range</u>	<u>Weighted</u> <u>average</u> <u>exercise price</u>	<u>Weighted</u> <u>average</u> <u>remaining</u> <u>contractual life</u>
8,536,815	\$ 6.04-\$14.23	\$ 11.21	2.6 years
8,904,690	\$ 20.02-\$29.70	\$ 24.81	4.9 years
22,347,657	\$ 31.09-\$44.00	\$ 34.35	8.9 years
7,028,599	\$ 44.00-\$62.01	\$ 58.93	5.6 years

The range of exercise prices, the weighted average exercise price and the weighted average remaining contractual life of options exercisable as of December 31, 2002 was as follows:

<u>Number of shares</u>	<u>Option price</u> <u>range</u>	<u>Weighted</u> <u>average</u> <u>exercise price</u>	<u>Weighted</u> <u>average</u> <u>remaining</u> <u>contractual life</u>
8,536,815	\$ 6.04-\$14.23	\$ 11.21	2.6 years
4,331,610	\$24.88	\$ 24.88	4.7 years
107,140	\$39.00-\$44.00	\$ 39.38	8.0 years
2,302,211	\$50.69-\$62.01	\$ 59.06	5.5 years

## 14.5 Employee stock purchase plans



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In 2000, 2001 and 2002 the Company offered to certain of its employees worldwide the right to acquire shares of capital stock:

	Number of shares offered per employee	Price per share		Discount from the market price	Number of shares issued
		In U.S. Dollars	In Euro		
November 2000	275	38.68	45.00	15%	559,929
May 2001	328	32.32	36.81	15%	580,817
December 2001	371	28.60	32.14	15%	384,566
July 2002	529	23.59	24.94	15%	461,164
December 2002	402	20.58	20.78	15%	749,819

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## STMICROELECTRONICS N.V.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## 14.6 Other comprehensive loss

The accumulated balances related to each component of other comprehensive loss were as follows:

	Foreign currency translation loss	Unrealized gain (loss) on securities	Minimum pension liability adjustment	Accumulated other comprehensive loss
Balance as of December 31, 1999	(496)			(496)
Other comprehensive income (loss), net of tax	(190)	10		(180)
Balance as of December 31, 2000	(686)	10		(676)
Other comprehensive loss, net of tax	(171)	(10)	(12)	(193)
Balance as of December 31, 2001	(857)		(12)	(869)
Other comprehensive income (loss), net of tax	631	1	(21)	611
<b>Balance as of December 31, 2002</b>	<b>(226)</b>	<b>1</b>	<b>(33)</b>	<b>(258)</b>

## 14.7 Dividends

In 2002 and 2001, the Company paid cash dividends of \$0.04 per share in each year for a total amount of \$36 and 35, respectively. In 2000 the Company paid a cash dividend of \$0.03 per share totalling \$27.

## 15. Earnings per share

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For the years ended December 31, 2000, 2001 and 2002, earnings per share (EPS) was calculated as follows:

	Year ended December 31, 2000	Year ended December 31, 2001	Year ended December 31, 2002
<b>Basic EPS</b>			
Net income	1,452	257	429
Weighted average shares outstanding	885,728,493	893,267,868	887,577,627
Basic EPS	1.64	0.29	0.48
<b>Diluted EPS</b>			
Net income	1,452	257	429
Convertible debt interest, net of tax	28		
Net income adjusted	1,480	257	429
Weighted average shares outstanding	885,728,493	893,267,868	887,577,627
Dilutive effect of stock options	13,831,539	8,715,097	5,459,155
Dilutive effect of convertible debt	36,499,180		
Number of shares used in calculating EPS	936,059,212	901,982,965	893,036,782
Diluted EPS	1.58	0.29	0.48

Outstanding convertible debt at December 31, 2002 was convertible into 44,135,073 shares, which were anti-dilutive.

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## STMICROELECTRONICS N.V.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## 16. Retirement plans

The Company and its subsidiaries have a number of defined benefit pension plans covering employees in various countries. The plans provide for pension benefits, the amounts of which are calculated based on factors such as years of service and employee compensation levels. Eligibility is generally determined in accordance with local statutory requirements.

	December 31, 2001	December 31, 2002
	_____	_____
<b>Change in benefit obligation:</b>		
Benefit obligation at beginning of year	123	139
Service cost	9	10
Interest cost	8	9
Benefits paid	(2)	(1)
Actuarial losses	4	7
Foreign currency translation adjustments	(3)	12
Other		(5)
	_____	_____
Benefit obligation at end of year	139	171
	_____	_____
<b>Change in plan assets:</b>		
Plan assets at fair value at beginning of year	95	91
Actual return on plan assets	(7)	(10)
Employer contributions	7	10
Benefits paid	(2)	(1)
Foreign currency translation adjustments	(2)	7
Other		(5)
	_____	_____
Plan assets at fair value at end of year	91	92
	_____	_____
Funded status	(48)	(79)
Unrecognized prior service cost	6	5
Unrecognized transition obligation	(2)	(2)
Unrecognized actuarial loss	34	59
	_____	_____
<b>Accrued benefit cost</b>	(10)	(17)
	_____	_____
<b>Net amount recognized in the balance sheet consists of the following:</b>		

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Prepaid benefit cost	1	2
Accrued benefit liability	(25)	(54)
Intangible asset	2	2
Accumulated other comprehensive loss	12	33
	<hr/>	<hr/>
<b>Net amount recognized</b>	<b>(10)</b>	<b>(17)</b>
	<hr/>	<hr/>

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## STMICROELECTRONICS N.V.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The weighted average assumptions used in the determination of the net pension cost for the pension plans were as follows:

Assumptions	Year ended	Year ended	Year ended
	December 31,	December 31,	December 31,
	2000	2001	2002
Discount rate	6.22%	6.09%	5.95%
Salary increase rate	4.15%	4.03%	3.97%
Expected rate of return on funds	6.20%	6.65%	7.28%

The components of the net periodic benefit cost include the following:

	Year ended	Year ended	Year ended
	December 31,	December 31,	December 31,
	2000	2001	2002
Service cost	8	9	10
Interest cost	6	8	9
Expected return on plan assets	(7)	(7)	(8)
Amortization of unrecognized transition obligation			
Recognized gains and losses			1
Recognition of prior service cost	1	1	1
<b>Net periodic benefit cost</b>	<b>8</b>	<b>11</b>	<b>13</b>

The projected benefit obligation, accumulated benefit obligation, and fair value of plan assets for the pension plans with accumulated benefit obligations in excess of plan assets were \$113, \$93 and \$84, respectively, as of December 31, 2001 and \$167, \$135 and \$87, respectively, as of December 31, 2002.

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The Company also has defined contribution pension plans, which provide retirement benefits to certain of its employees. The benefit accrues to the employees on a pro-rata basis, adjusted for inflation, during their employment period and is based on the individuals' salary. As of December 31, 2001 and 2002, the Company accrued \$102 and \$129, respectively, for these defined contribution pension plans. The annual cost of these plans amounted to approximately \$18, \$30 and \$32 in 2000, 2001 and 2002, respectively.

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## STMICROELECTRONICS N.V.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## 17. Long-term debt

Long-term debt consists of the following:

	December 31,	December 31,
	2001	2002
	<u>          </u>	<u>          </u>
STMicroelectronics SA (France)		
4.90% bank loan due 2002	7	
4.88% bank loan due 2002	7	
3.46% (weighted average) bank loans due 2006	134	160
2.53% (weighted average) other bank loans	7	3
4.79% (weighted average) capital leases		32
STMicroelectronics S.r.l. (Italy)		
5.68% bank loan due 2002	32	
5.78% (weighted average) bank loans due 2005	4	3
5.35% bank loan due 2006	22	21
0.90% bank loan due 2008	24	32
1.50% (weighted average) bank loans due 2009	14	19
3.43% (weighted average) other bank loans	8	13
STMicroelectronics N.V. (Netherlands)		
2.44% Liquid Yield Option Notes (LYONs) due 2009	762	780
3.75% convertible bonds due 2010	1,543	1,601
STMicroelectronics PTE (Singapore)		
4.00% bank loan due 2007	162	144
2.01% (weighted average) other bank loans	1	29
STMicroelectronics (others)		
3.68% (weighted average) other bank loans	142	106
	<u>          </u>	<u>          </u>
Total long-term debt	2,869	2,943
Less current portion	97	146
	<u>          </u>	<u>          </u>
Total long-term debt, less current portion	2,772	2,797
	<u>          </u>	<u>          </u>



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## STMICROELECTRONICS N.V.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Long-term debt is denominated in the following currencies:

	December 31, 2001	December 31, 2002
	<u>2001</u>	<u>2002</u>
U.S. dollar	2,410	2,449
Euro	269	294
Other	189	200
	<u>2,868</u>	<u>2,943</u>
<b>Total</b>	<b>2,868</b>	<b>2,943</b>

Aggregate future maturities of long-term debt outstanding are as follows:

	December 31, 2002
	<u>2002</u>
2003	146
2004	131
2005	108
2006	106
2007	32
Thereafter	2,420
	<u>2,943</u>
<b>Total</b>	<b>2,943</b>

In September 1999, the Company issued \$919 face value of zero-coupon subordinated convertible notes (LYONs), due 2009, for net proceeds of \$708. The notes are convertible at any time by the holders at the rate of 26.292 shares of the Company's common stock for each one thousand dollar face value of the notes. The holders may redeem their LYONs on September 22, 2004 at a price of \$885.91 per one thousand dollar face value of the LYONs. The Company may choose to pay the redemption price in cash or in common shares or a combination of both. On or after September 22, 2002 and prior to September 22, 2004, the Company may redeem for cash all, but not a portion of the LYONs. On or after September 22, 2004, the Company may redeem all or a portion of the LYONs for cash. The notes are subordinated to all existing and future indebtedness of the Company.

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In November 2000, the Company issued \$2,146 face value of zero-coupon unsubordinated convertible bonds, due 2010, for net proceeds of \$1,458. The debt discount of \$666 is amortized straight-line over the term of the debt and recorded as interest expense. The notes are convertible at any time by the holders at the rate of 9.32 shares of the Company's common stock for each one thousand dollar face value of the notes. The holders may redeem their convertible bonds for cash on January 17, 2005, at a price of \$805.15 per one thousand dollar face value of the convertible notes. On or after November 16, 2003 and prior to November 16, 2005, the Company may redeem for cash all, but not a portion of the convertible bonds. On or after November 16, 2005, the Company may redeem for cash all or a portion of the convertible bonds. The notes are unsubordinated to all existing and future indebtedness of the Company.

During 2000 and 2001, convertible bonds with face values of \$334 and \$128 respectively, were converted into 17,908,743 and 6,879,576 shares of common stock, respectively. No significant conversion occurred in 2002.

The conversion of the convertible notes in 2000, 2001 and 2002 resulted in non-cash transactions in financing activities of \$283, \$112 and \$ 29, respectively.

### *Credit facilities*

The Company has revolving line of credit agreements with several financial institutions totalling \$1,075. At December 31, 2002, amounts available under the lines of credit were reduced by borrowings of \$19 at an average interest rate of 2.81%.

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## STMICROELECTRONICS N.V.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

**18. Other payables and accrued liabilities**

Other payables and accrued liabilities consist of the following:

	December 31, 2001	December 31, 2002
Taxes other than income taxes	36	57
Salaries and wages	130	199
Social charges	63	88
Advances received on fundings	19	13
Commercial rebates	11	15
Royalties payable	39	41
Other	111	193
<b>Total</b>	<b>409</b>	<b>606</b>

**19. Other revenues**

Other revenues consist of the following:

	Year ended December 31, 2000	Year ended December 31, 2001	Year ended December 31, 2002
Co-development contract fees	41	49	47
Other	8	4	1
<b>Total</b>	<b>49</b>	<b>53</b>	<b>48</b>

**20. Other income and expenses**

Other income and expenses consist of the following:

	Year ended December 31, 2000	Year ended December 31, 2001	Year ended December 31, 2002
Research and development funding	42	58	76
Start-up costs	(115)	(89)	(57)
Exchange gain, net	16	11	17
Gain on sale of marketable securities	9	27	1
Patent studies costs	(14)	(8)	(8)
Other non-recurring items, net	(21)	(5)	(22)
<b>Total</b>	<b>(83)</b>	<b>(6)</b>	<b>7</b>

**21. Impairment, restructuring and other related closure costs**

In the second quarter of 2001, the Company recorded an impairment charge of \$296. This charge included impairment losses of (i) \$177 associated with tangible assets at the Company's fabrication sites; (ii) \$100 (net of \$3 tax benefit) related to purchased technologies and goodwill on previous acquisitions; and (iii) \$22 for financial assets with an other than temporary decline in value. This impairment charge resulted from a significant

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## STMICROELECTRONICS N.V.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

deterioration in the business climate in the semiconductor industry. Due to these market changes, the Company revised its production forecasts and foresaw an underutilization of the capacities of certain 150mm fabrication facilities. The fair value for tangible and intangible assets was determined using the discounted expected future cash flows model. Quoted market values were used in determining the fair value of financial assets. Additionally, in the second quarter of 2001, the Company recorded restructuring charges of \$15 relating to the closure of its facility in Ottawa, Canada. These restructuring charges related to the severance of plant personnel and were paid in 2001.

In the third quarter of 2001, the Company recorded an impairment charge of \$23 relating to the building and facilities of its Rancho Bernardo, California, 150mm fabrication plant; this impairment charge was based on quoted market value and resulted from management's decision to close the plant by April 2002. The closing was completed in line with the plan. In the fourth quarter of 2001, the Company recorded expenses of \$11 related to severance costs and retention bonuses for plant employees during the closure of the facilities in Ottawa, Canada, and Rancho Bernardo, California.

In 2002, the Company recorded expenses of \$34 including i) \$26 relating to decommissioning costs, retention bonuses and contract obligations incurred during the closure of the facilities in Ottawa, Canada, and Rancho Bernardo, California; ii) \$7 impairment charges for long term investments; and iii) \$1 for employee severance costs of the Company's graphics division. All closing costs have been paid as of December 31, 2002.

**22. Interest income (expense), net**

Interest income (expense), net consists of the following:

	Year ended December 31, 2000	Year ended December 31, 2001	Year ended December 31, 2002
Income	111	100	49
Expense	(65)	(113)	(117)
<b>Total</b>	<b>46</b>	<b>(13)</b>	<b>(68)</b>

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Cash paid for interest was \$61, \$111 and \$ 116 in 2000, 2001 and 2002 respectively. Capitalized interest was \$2, \$9, and \$3 in 2000, 2001 and 2002, respectively.

**23. Income tax**

Income before income tax expense is comprised of the following:

	Year ended December 31, 2000	Year ended December 31, 2001	Year ended December 31, 2002
Loss recorded in The Netherlands	(6)	(32)	(1)
Income from foreign operations	1,835	353	523
Income before income tax expense	1,829	321	522

STMicroelectronics N.V. and its subsidiaries are individually liable for income tax. Tax losses can only offset profits generated by the taxable entity incurring such loss.

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## STMICROELECTRONICS N.V.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Income tax expense is comprised of the following:

	Year ended December 31, 2000	Year ended December 31, 2001	Year ended December 31, 2002
Domestic taxes current	(7)	(5)	25
Foreign taxes current	(343)	(139)	(100)
Current taxes	(350)	(144)	(75)
Deferred taxes	(25)	83	(14)
Income tax expense	(375)	(61)	(89)

The principal items comprising the differences in income taxes computed at The Netherlands statutory rate (35%) and the effective income tax rate are the following:

	Year ended December 31, 2000	Year ended December 31, 2001	Year ended December 31, 2002
Income tax expense computed at statutory rate	(640)	(112)	(183)
Permanent differences	(7)	(50)	(33)
Change in valuation allowance	(7)	(2)	(25)
Impact of final tax assessments relating to prior years	(3)		27
Other tax and credits	41	(2)	37
Benefits from tax holidays	225	81	62
Earnings of subsidiaries taxed at different rates	16	24	26

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Income tax expense	(375)	(61)	(89)
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Permanent differences reflect mainly the effects of capital allowance programs and special tax incentive programs existing in some Asia Pacific and Mediterranean countries, and of various non-deductible items. The tax holidays represent a tax exemption period aimed to attract foreign technological investment in certain tax jurisdictions. The effect of the tax benefits on basic earnings per share was \$0.25, \$0.09 and \$0.06 for the years ended December 31, 2000, 2001 and 2002, respectively. The Company will continue to benefit from these tax holidays up to nine years.

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## STMICROELECTRONICS N.V.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Deferred tax assets and liabilities consist of the following:

	December 31, 2001	December 31, 2002
	<u>2001</u>	<u>2002</u>
Tax loss carryforwards and investment credits	30	74
Inventory valuation	28	19
Impairment charges	24	20
Fixed asset depreciation in arrears	12	27
Receivables for government funding	7	9
Other temporary differences	53	55
	<u>154</u>	<u>204</u>
Total deferred tax assets	154	204
Valuation allowance	(1)	(26)
	<u>153</u>	<u>178</u>
Deferred tax assets, net	153	178
	<u>(124)</u>	<u>(156)</u>
Accelerated fixed assets depreciation	(124)	(156)
Acquired intangible assets	(11)	(8)
Advances of government funding	(6)	(17)
Other temporary differences	(24)	(26)
	<u>(165)</u>	<u>(207)</u>
Deferred tax liabilities	(165)	(207)
	<u>(12)</u>	<u>(29)</u>
Net deferred income tax liability	(12)	(29)

As of December 31, 2002, the Company and its subsidiaries have net operating loss carryforwards of \$82 that expire between 2003 and 2008.

The Company paid \$243, \$264, and \$39 in cash for income taxes in 2000, 2001, and 2002, respectively.

**24. Commitments***Lease commitments*

The Company leases land, buildings, plants, and equipment under operating leases that expire at various dates under non-cancellable lease agreements.

At December 31, 2002, the Company had a non-cancellable capital lease of \$32 for a building recorded in work-in-progress, which resulted in a non-cash transaction in investing activities.

Operating leases expenses were \$32, \$42, and \$37 in 2000, 2001 and 2002, respectively.

As of December 31, 2002 the future minimum lease payments to which the Company was committed under operating were as follows:

<b>Year</b>	
2003	<b>30</b>
2004	<b>25</b>
2005	<b>22</b>
2006	<b>19</b>
2007	<b>17</b>
Thereafter	<b>60</b>
<b>Total</b>	<b>173</b>

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**STMICROELECTRONICS N.V.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

*Other commitments*

As of December 31, 2002, the Company had commitments of \$346 for equipment purchases, \$168 for foundry wafers purchases and \$167 for software purchases. Additional commitments up to a total amount of \$19 include either capital increases or the purchase of shares under certain conditions outlined in individual agreements with the following companies: DNP Photomask Europe S.P.A. (Italy), Tioga Technologies Ltd. (Israel), and Tecdis (Italy).

The Company has issued guarantees totalling \$281 for related to its subsidiary's debt.

**25. Contingencies**

The Company is involved in various lawsuits, claims, investigations and proceedings incidental to the normal conduct of its operations. These matters mainly include the risks associated with external patents utilization, claims from customers and other disputes primarily related to income tax exposures. Management has accrued for these loss contingencies when the loss is probable and can be estimated.

**26. Financial instruments and risk management**

The Company's treasury activities are regulated by procedures, which define policies, objectives and controls. The policies focus on the management of financial risk in terms of exposure to currency rates and interest rates. The Company's objectives are to neutralize exposure to changes in exchange rates, to optimise the use of credit facilities and funds available, and to obtain the best possible market conditions for financial and treasury operations. Treasury controls include systematic reporting to senior management and are subject to internal audits. Most treasury activities are centralized, with any local treasury activities subject to oversight from head treasury office. The majority of cash and cash equivalents are held in U.S. dollars and are placed with financial institutions rated A+ or higher. Marginal amounts are held in other currencies. Foreign currency operations and hedging transactions are performed only to cover commercial positions.

*26.1 Foreign exchange forward contracts and currency options*

The Company enters into foreign exchange forward contracts and currency options to manage exposure to fluctuations in foreign currency exchange rates and to cover a portion of both its probable anticipated, but not firmly committed, transactions and transactions with firm foreign currency commitments. These transactions include international sales by various subsidiaries in foreign currencies, foreign currency denominated purchases, intercompany sales and other intercompany transactions. Such contracts outstanding as of December 31, 2002 have remaining terms of one to five months, maturing on average after 40 days.

The notional amounts of foreign exchange forward contracts totalled \$1,139 and \$649 at December 31, 2001 and 2002, respectively. The principal currencies covered are the US dollar, the Euro, the Japanese yen and the Swiss franc.

The risk of loss associated with purchased options is limited to premium amounts paid for the option contracts. The risk of loss associated with forward contracts is equal to the exchange rate differential from the time the contract is entered into until the time it is settled. At December 31, 2001 and 2002, no currency options were outstanding.

*26.2 Concentration of credit risk*

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of interest-bearing investments and trade receivables. The Company places its cash and cash equivalents and certain other financial instruments with a variety of high credit quality financial institutions and has not experienced any material losses relating to such instruments. The Company invests its excess cash in accordance with its investment policy which aims to minimize credit risk.

The Company controls the credit risks associated with financial instruments through credit approvals, investment limits and centralized monitoring procedures but does not normally require collateral or other security from the parties to financial instruments. At December 31, 2001 and 2002, one customer, the Nokia group of

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**STMICROELECTRONICS N.V.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

companies, represented 29.4% and 19.3% of trade accounts receivable, respectively. Any remaining concentrations of credit risk with respect to trade receivables are limited due to the large number of customers and their dispersion across many geographic areas. The Company monitors the creditworthiness of its customers to which it grants credit terms in the normal course of business. The Company does not anticipate non-performance by counterparties, which could have a significant impact on its financial position or results of operations.

*26.3 Fair value of financial instruments*

The estimates of fair value were obtained using prevailing financial market information resulting from various valuation techniques. The methodologies used to estimate fair value are as follows:

*Cash and cash equivalents, accounts and notes receivable, bank overdrafts, short-term borrowings, accounts and notes payable*

The carrying amounts reflected in the consolidated financial statements are reasonable estimates of fair value due to the relatively short period of time between the origination of the instruments and their expected realization.

*Long-term debt and current portion of long-term debt*

The fair values of long-term debt were determined based on quoted market prices, and by estimating future cash flows on a borrowing-by-borrowing basis and discounting these future cash flows using the Company's incremental borrowing rates for similar types of borrowing arrangements.

*Foreign exchange forward contracts*

The fair values of these instruments are estimated based upon quoted market prices for the same or similar instruments.

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	2001		2002	
	Carrying Amount	Estimated Fair Value	Carrying Amount	Estimated Fair Value
<b>Balance sheet</b>				
Bank loans (including current portion)	564	574	561	568
Convertible debt	2,304	2,412	2,381	2,403
<b>Off-balance sheet</b>				
Forward exchange contracts	1	1	6	6

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## STMICROELECTRONICS N.V.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

**27. Related party transactions**

Transactions with significant shareholders and their affiliates were as follows:

	December 31, 2000	December 31, 2001	December 31, 2002
Sales & Other Services		1	1
Research and development expenses	(14)	(26)	(29)
Other purchases and expenses	(22)	(31)	(23)
Accounts receivable	1		
Accounts payable	1	5	11

For the years ended December 31, 2000, 2001 and 2002, the related party transactions were primarily with Areva, France Telecom, Finmeccanica, Equant and Orange.

The Company participates in an Economic Interest Group ( E.I.G. ) in France with Commissariat de l' Energie Atomique ( CEA ), an affiliate of Areva and France Telecom to share the costs of certain research and development activities. The costs recorded as research and development expenses for E.I.G during 2000, 2001 and 2002 were \$5, \$3 and \$3, respectively. At December 31, 2001 the Company had net liability amount of \$17 and at December 31, 2002 the Company had net receivable amount of \$7.

**28. Segment information**

The Company operates in two business areas: Semiconductor and Subsystems.

In the Semiconductor business area, the Company designs, develops, manufactures and markets a broad range of products including discrete, memories and standard commodity components, ASICs (full custom devices and semicustom devices) and ASSPs for analog, digital, and mixed-signal applications. The Company's principle resource allocation decisions are based on the Semiconductor business area for ongoing expenditures on research and development and capital investments in front-end and

back-end manufacturing facilities. The Company manages its semiconductor products in four segments, following the Company's four main products groups: Telecommunications, Peripherals and Automotive; Discrete and Standard ICs; Memory Products and Consumer and Microcontroller (collectively referred to as the Groups). The Company manages its revenues and internal operating income performance based on these segments.

In the Subsystems segment, the Company designs, develops, manufactures and markets subsystems and modules for the Telecom, Automotive and Industrial markets including mobile phone accessories, battery chargers, ISDN power supplies and in-vehicle equipment for electronic toll payment. Based on its immateriality to the Company, the Subsystems segment does not meet the requirements for a reportable segment as defined in Statement of Financial Accounting Standards No. 131, *Disclosures about Segments of an Enterprise and Related Information* (FAS 131).

The following tables present the Company's internal net revenues and operating income by semiconductor product segment. For the computation of the Groups' internal financial measurements, the Company is using certain internal rules of allocation for the costs not directly chargeable to the Groups including cost of sales, selling, general & administrative expenses and a significant part of R&D expenses. Additionally as per the Company's rules, certain items of costs are not charged to the Groups, including start-up costs of the new manufacturing facilities, some strategic and special R&D programs, certain corporate level operating expenses, impairment and restructuring charges and other related closure costs as well as certain other miscellaneous charges.



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## STMICROELECTRONICS N.V.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

*Net revenues by product group*

	December 31, 2000	December 31, 2001	December 31, 2002
Telecommunications, Peripherals and Automotive	3,482	3,031	3,074
Discrete and Standard ICs	1,213	942	1,055
Memory Products	1,553	1,382	1,055
Consumer and Microcontroller	1,466	896	1,026
<b>Total</b>	<b>7,714</b>	<b>6,251</b>	<b>6,210</b>

*Operating Income by product group*

	December 31, 2000	December 31, 2001	December 31, 2002
Telecommunications, Peripherals and Automotive	896	589	613
Discrete and Standard ICs	275	75	135
Memory Products	611	340	7
Consumer and Microcontroller	215	(78)	57
<b>Total operating income of product groups</b>	<b>1,997</b>	<b>926</b>	<b>812</b>

## Reconciliation to consolidated operating income:

	December 31, 2000	December 31, 2001	December 31, 2002
Total operating income of product groups	1,997	926	812
Strategic R&D and other R&D programs	(64)	(48)	(83)

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Start-up costs	(116)	(82)	(57)
Impairment & restructuring charges		(416)	(34)
Subsystems	8	10	6
Other non-allocated provisions	(42)	(51)	(43)
	<u>          </u>	<u>          </u>	<u>          </u>
<b>Total consolidated operating income</b>	<b>1,783</b>	<b>339</b>	<b>601</b>
	<b><u>          </u></b>	<b><u>          </u></b>	<b><u>          </u></b>

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## STMICROELECTRONICS N.V.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following is a summary of operations by entities located within the indicated geographic areas for 2000, 2001 and 2002. Long-lived assets consist of net property and equipment and other intangible assets.

*Net revenues*

	December 31, 2000	December 31, 2001	December 31, 2002
The Netherlands	1,324	2,016	1,768
France	651	484	443
Italy	249	229	174
Germany	611	0	0
Other European countries	161	1	0
USA	1,762	958	876
Singapore	2,278	1,989	2,358
Other countries	777	680	699
<b>Total</b>	<b>7,813</b>	<b>6,357</b>	<b>6,318</b>

*Long-lived assets*

	December 31, 2000	December 31, 2001	December 31, 2002
The Netherlands	108	123	404
France	1,890	1,732	2,033
Italy	1,650	1,687	1,872
Germany	2	3	4
Other European countries	238	207	200
USA	1,081	797	610
Singapore	649	749	863
Other countries	869	803	704

<b>Total</b>	<b>6,487</b>	<b>6,101</b>	<b>6,690</b>
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## STMICROELECTRONICS N.V.

## VALUATION AND QUALIFYING ACCOUNTS

(Currency Thousands of U.S. dollars)

Valuation and qualifying accounts deducted from the related asset accounts	Balance at beginning of period	Translation adjustment	Charged to costs and expenses	Deductions	Balance at end of period
<b>2002</b>					
Inventories	78		(36)		42
Accounts Receivable	19	(1)	6	(1)	23
<b>2001</b>					
Inventories	74		4		78
Accounts Receivable	16	(1)	5	(1)	19
<b>2000</b>					
Inventories	42		32		74
Accounts Receivable	12	(1)	5		16

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**Report of the Independent Accountants on  
Financial Statement Schedule**

To the Supervisory Board of STMicroelectronics N.V. :

Our audits of the consolidated financial statements referred to in our report dated February 19, 2003 appearing in this Annual Report on Form 20-F also included an audit of the financial statement schedule listed in Item 18 of this Form 20-F. In our opinion, this financial statement schedule presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements.

Amsterdam, February 19, 2003

PricewaterhouseCoopers Accountants N.V

PricewaterhouseCoopers is the trade name of amongst others the following companies: PricewaterhouseCoopers Accountants N.V. (registered with the Trade Register under number 34180285), PricewaterhouseCoopers Belastingadviseurs N.V. (registered with the Trade Register under number 34180284), PricewaterhouseCoopers Corporate Finance & Recovery N.V. (registered with the Trade Register under number 34180287) and PricewaterhouseCoopers B.V. (registered with the Trade Register under number 34180289). The services rendered by these companies are governed by General Terms & Conditions, which include provisions regarding our liability. These General Terms & Conditions are filed with the Amsterdam Chamber of Commerce and can also be viewed at [www.pwcglobal.com/nl](http://www.pwcglobal.com/nl).

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