RAMBUS INC
Form 10-Q
May 03, 2019
Table of Contents

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended March 31, 2019

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: 000-22339

RAMBUS INC.

(Exact name of registrant as specified in its charter)

Delaware 94-3112828

(State or other jurisdiction of incorporation or organization) (I.R.S. Employer Identification No.)

1050 Enterprise Way, Suite 700

Sunnyvale, California

94089

(Address of principal executive offices) (ZIP Code)

Registrant's telephone number, including area code:

(408) 462-8000

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

Title of Each Class Trading Symbol Name of Each Exchange on Which Registered

Common Stock, \$.001 Par Value RMBS The NASDAQ Stock Market LLC

(The NASDAQ Global Select Market)

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

None

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 ý No o Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ý No o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Table of Contents

Large accelerated filer ý Accelerated filer o

Non-accelerated filer o Smaller reporting company o

Emerging growth company o

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. o

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes o No \acute{y}

The number of shares outstanding of the registrant's Common Stock, par value \$.001 per share, was 110,396,011 as of March 31, 2019.

Table of Contents

RAMBUS INC.

TABLE OF CONTENTS

	PAGE
Note Regarding Forward-Looking Statements	<u>4</u>
PART I. FINANCIAL INFORMATION	<u>6</u>
<u>Item 1. Financial Statements (Unaudited):</u>	<u>6</u>
Condensed Consolidated Balance Sheets as of March 31, 2019 and December 31, 2018	<u>6</u>
Condensed Consolidated Statements of Operations for the three months ended March 31, 2019 and 2018	<u>7</u>
<u>Condensed Consolidated Statements of Comprehensive</u> Income (Loss) for the three months ended March 31,	<u>8</u>
2019 and 2018	<u>o</u>
Condensed Consolidated Statements of Stockholders' Equity for the three months ended March 31, 2019 and	9
<u>2018</u>	
Condensed Consolidated Statements of Cash Flows for the three months ended March 31, 2019 and 2018	<u>10</u>
Notes to Unaudited Condensed Consolidated Financial Statements	<u>11</u> <u>29</u>
Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations	<u>29</u>
Item 3. Quantitative and Qualitative Disclosures about Market Risk	<u>40</u>
Item 4. Controls and Procedures	<u>40</u>
PART II. OTHER INFORMATION	<u>42</u>
Item 1. Legal Proceedings	<u>42</u>
<u>Item 1A. Risk Factors</u>	<u>42</u>
<u>Item 2. Unregistered Sales of Equity Securities and Use of Proceeds</u>	40 42 42 42 55 55 56 56
<u>Item 3. Defaults Upon Senior Securities</u>	<u>55</u>
<u>Item 4. Mine Safety Disclosures</u>	<u>56</u>
<u>Item 5. Other Information</u>	<u>56</u>
<u>Item 6. Exhibits</u>	<u>56</u>
<u>Signature</u>	<u>57</u>
Exhibit Index	<u>56</u>
3	

NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q ("Quarterly Report") contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Act of 1934. These forward-looking statements include, without limitation, predictions regarding the following aspects of our future:

Success in the markets of our products and services or our customers' products;

Sources of competition;

Research and development costs and improvements in technology;

Sources, amounts and concentration of revenue, including royalties;

Success in signing and renewing license agreements;

Terms of our licenses and amounts owed under license agreements;

Technology product development;

Dispositions, acquisitions, mergers or strategic transactions and our related integration efforts;

Impairment of goodwill and long-lived assets;

Pricing policies of our customers;

Changes in our strategy and business model, including the expansion of our portfolio of inventions, products,

software, services and solutions to address additional markets in memory, chip, mobile payments, smart ticketing and security;

Deterioration of financial health of commercial counterparties and their ability to meet their obligations to us;

Effects of security breaches or failures in our or our customers' products and services on our business;

Engineering, sales and general and administration expenses;

Contract revenue;

Operating results;

International licenses, operations and expansion;

Effects of changes in the economy and credit market on our industry and business;

Ability to identify, attract, motivate and retain qualified personnel;

Effects of government regulations on our industry and business;

Manufacturing, shipping and supply partners and/or sale and distribution channels;

Growth in our business;

Methods, estimates and judgments in accounting policies;

Adoption of new accounting pronouncements, including adoption in 2019 of the new leasing standard on our financial position and results of operations;

Effective tax rates, including as a result of the new U.S. tax legislation;

Restructurings and plans of termination;

Realization of deferred tax assets/release of deferred tax valuation

allowance;

•Trading price of our common stock;

Internal control environment;

The level and terms of our outstanding debt and the repayment or financing of such debt;

Protection of intellectual property;

Any changes in laws, agency actions and judicial rulings that may impact the ability to enforce intellectual property rights;

Indemnification and technical support obligations;

Equity repurchase plans;

Issuances of debt or equity securities, which could involve restrictive covenants or be dilutive to our existing stockholders;

Table of Contents

Effects of fluctuations in currency exchange rates;

Outcome and effect of potential future intellectual property litigation and other significant litigation; and Likelihood of paying dividends.

You can identify these and other forward-looking statements by the use of words such as "may," "future," "shall," "should," "expects," "plans," "anticipates," "believes," "estimates," "predicts," "intends," "potential," "continue," "projecting" or the neg terms, or other comparable terminology. Forward-looking statements also include the assumptions underlying or relating to any of the foregoing statements.

Actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth under Part II: Item 1A, "Risk Factors." All forward-looking statements included in this document are based on our assessment of information available to us at this time. We assume no obligation to update any forward-looking statements.

PART I—FINANCIAL INFORMATION

Item 1. Financial Statements

RAMBUS INC.

CONDENSED CONSOLIDATED BALANCE SHEETS

(Unaudited)

	March 31, 2019 (In thousands and par value	December 31, 2018 s, except shares
ASSETS	1	,
Current assets:		
Cash and cash equivalents	\$143,016	\$115,924
Marketable securities	162,850	161,840
Accounts receivable	43,810	50,863
Unbilled receivables	170,287	176,613
Inventories	8,192	6,772
Prepaids and other current assets	16,857	15,738
Total current assets	545,012	527,750
Intangible assets, net	55,507	59,936
Goodwill	207,828	207,178
Property, plant and equipment, net	22,637	57,028
Operating lease right-of-use assets	19,458	
Deferred tax assets	4,411	4,435
Unbilled receivables, long-term	459,148	497,003
Other assets	7,419	7,825
Total assets	\$1,321,420	\$1,361,155
LIABILITIES & STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$8,274	\$7,392
Accrued salaries and benefits	13,666	16,938
Deferred revenue	15,774	19,374
Income taxes payable, short-term	16,364	16,390
Operating lease liabilities	9,351	_
Other current liabilities	5,847	9,191
Total current liabilities	69,276	69,285
Convertible notes, long-term	143,612	141,934
Long-term imputed financing obligation		36,297
Long-term operating lease liabilities	12,308	_
Long-term income taxes payable	73,365	77,280
Other long-term liabilities	22,972	24,247
Total liabilities	321,533	349,043
Commitments and contingencies (Notes 11 and 15)		
Stockholders' equity:		
Convertible preferred stock, \$.001 par value:		
Authorized: 5,000,000 shares		
Issued and outstanding: no shares at March 31, 2019 and December 31, 2018		
Common stock, \$.001 par value:		
Authorized: 500,000,000 shares		
	110	109

Issued and outstanding: 110,396,011 shares at March 31, 2019 and 109,017,708 shares at

December 31, 2018

Additional paid-in capital	1,234,846	1,226,588
Accumulated deficit	(226,401)	(204,294)
Accumulated other comprehensive loss	(8,668	(10,291)
Total stockholders' equity	999,887	1,012,112
Total liabilities and stockholders' equity	\$1,321,420	\$1,361,155

See Notes to Unaudited Condensed Consolidated Financial Statements

RAMBUS INC. CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (Unaudited)

	Three Months Ended			
	March 31,			
	2019		2018	
	(In thousan	nd	ls, except p	er
	share amo	ur	its)	
Revenue:				
Royalties	\$ 24,853		\$21,374	
Product revenue	8,964		7,313	
Contract and other revenue	14,567		17,739	
Total revenue	48,384		46,426	
Operating costs and expenses:				
Cost of product revenue*	4,427		4,357	
Cost of contract and other revenue	6,771		12,122	
Research and development*	40,619		40,117	
Sales, general and administrative*	27,645		30,198	
Restructuring charges	331		3,245	
Total operating costs and expenses	79,793		90,039	
Operating loss	(31,409)	(43,613)
Interest income and other income (expense), net	7,413		9,116	
Interest expense	(2,271)	(4,421)
Interest and other income (expense), net	5,142		4,695	
Loss before income taxes	(26,267)	(38,918)
Provision for (benefit from) income taxes	309		(3,229)
Net loss	\$ (26,576)	\$ (35,689)
Net loss per share:				
Basic	\$ (0.24)	\$ (0.33)
Diluted	\$ (0.24)	\$ (0.33)
Weighted average shares used in per share calculation:				
Basic	109,692		109,358	
Diluted	109,692		109,358	

^{*} Includes stock-based compensation:

Cost of product revenue \$1 \$3 Research and development \$3,210 \$3,192 Sales, general and administrative \$3,978 \$4,319

See Notes to Unaudited Condensed Consolidated Financial Statements

RAMBUS INC.

CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS) (Unaudited)

Three Months Ended March 31, (In thousands) 2019 2018 Net loss \$(26,576) \$(35,689) Other comprehensive income (loss): Foreign currency translation adjustment 1,575 2,889 Unrealized gain (loss) on marketable securities, net of tax 48 (804 Total comprehensive loss \$(24,953) \$(33,604)

See Notes to Unaudited Condensed Consolidated Financial Statements

RAMBUS INC. CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (Unaudited)

	Commo	on Stock	Additional	Accumulated	Accumulated		
	Shares	Amount	Paid-in Capital	Deficit	Comprehensiv Gain (Loss)	e Total	
Balances at December 31, 2018 Net loss Foreign currency translation adjustment	(In thou 109,018 —		\$1,226,588 —	\$(204,294) (26,576)		\$1,012,112 (26,576 1,575	2
Unrealized gain on marketable securities, net of tax	_	_	_	_	48	48	
Issuance of common stock upon exercise of options, equity stock and employee stock purchase plan	1,378	1	1,069	_	_	1,070	
Stock-based compensation		_	7,189	_	_	7,189	
Cumulative effect adjustment from the adoption of ASC 842	_	_	_	4,469	_	4,469	
Balances at March 31, 2019	110,396	5 \$ 110	\$1,234,846	\$(226,401)	\$ (8,668	\$999,887	
		on Stock Amount	Additional Paid-in	Accumulated Deficit	Accumulated Other Comprehensiv	re Total	
			Capital		Gain (Loss)		
Balances at December 31, 2017	(In thou 109,764		\$1,212,798	\$(636,227)	\$ (5,097	\$571,584	
Net loss	_	_	-	(35,689)	_	(35,689)
Foreign currency translation adjustment Unrealized loss on marketable securities, ne		_	_	_	2,889	2,889	
of tax	` —						
Issuance of common stock upon exercise of				_	(804	(804)
options, equity stock and employee stock	839	_	(3,842)	_	(804	(3,842))
options, equity stock and employee stock purchase plan Repurchase and retirement of common stock	839	— (3)	,		(804) —	`	
options, equity stock and employee stock	839	— (3)	,		(804) — —	(3,842)
options, equity stock and employee stock purchase plan Repurchase and retirement of common stock under repurchase plan Stock-based compensation Cumulative effect adjustment from adoption of ASU 2016-01	839 (3,118)	(3) —	(20,312)		(804) — — — — — —	(3,842 (50,000)
options, equity stock and employee stock purchase plan Repurchase and retirement of common stock under repurchase plan Stock-based compensation Cumulative effect adjustment from adoption	839 (3,118)	(3) —	(20,312)	(29,685)	(804) — — — — — — —	(3,842 (50,000 7,514)

See Notes to Unaudited Condensed Consolidated Financial Statements

RAMBUS INC.

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited)

	Three M March 3		ns Ended	[
	2019	2	2018	
	(In thous	and	ls)	
Cash flows from operating activities:				
Net loss	\$(26,576	5)\$	\$(35,689)
Adjustments to reconcile net loss to net cash provided by operating activities:				
Stock-based compensation	7,189	7	7,514	
Depreciation	4,809	2	2,942	
Amortization of intangible assets	4,988	1	10,531	
Non-cash interest expense and amortization of convertible debt issuance costs	1,678	2	2,680	
Deferred income taxes	(214) ((8,834)
Non-cash restructuring	<u> </u>	6	670	
Loss on equity investment	81	_	_	
Gain from sale of marketable equity security		((155)
(Gain) loss from disposal of property, plant and equipment	98	(45)
Change in operating assets and liabilities:				
Accounts receivable	7,372	(761)
Unbilled receivables	44,181	,	17,778	
Prepaid expenses and other assets	(1,153		2,236)
Inventories	(1,370		595)
Accounts payable	2,171)
Accrued salaries and benefits and other liabilities	(4,699	,	•)
Income taxes payable	(3,939		562)
Deferred revenue	(3,571)
Operating lease liabilities	(2,284) -		,
Net cash provided by operating activities	28,761	-	16,777	
Cash flows from investing activities:	,,,,		,	
Purchases of property, plant and equipment	(664) ((1,688)
Purchases of marketable securities	(131,601			
Maturities of marketable securities	130,772		14,225	,
Proceeds from sale of property, plant and equipment			10	
Net cash used in investing activities	(1,493		66,660)
Cash flows from financing activities:	(1,1)0	, ((00,000	,
Proceeds received from issuance of common stock under employee stock plans	4,856	1	1,058	
Principal payments against lease financing obligation			241)
Payments of taxes on restricted stock units	(3,786	,	4,900)
Payments under installment payment arrangement	(1,240) -	_	,
Repurchase and retirement of common stock, including prepayment under accelerated	(1,210	,		
share repurchase program		((50,000)
Net cash used in financing activities	(170) (54,083)
Effect of exchange rate changes on cash and cash equivalents			483	,
Net increase (decrease) in cash and cash equivalents	27,098		(103,483)
Cash and cash equivalents at beginning of period	116,252		225,844	,
Cash and cash equivalents at obeginning of period Cash and cash equivalents at end of period	\$143,350		\$122,361	
Cash and Cash equivalents at one of period	Ψ1+3,330	0 4	v 122,301	L

Non-cash investing and financing activities during the period:

Property, plant and equipment received and accrued in accounts payable and other liabilities \$6,828 \$286

See Notes to Unaudited Condensed Consolidated Financial Statements

Table of Contents

RAMBUS INC.

NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

1. Basis of Presentation

The accompanying unaudited condensed consolidated financial statements include the accounts of Rambus Inc. ("Rambus" or the "Company") and its wholly-owned subsidiaries. All intercompany accounts and transactions have been eliminated in the accompanying unaudited condensed consolidated financial statements.

In the opinion of management, the unaudited condensed consolidated financial statements include all adjustments (consisting only of normal recurring items) necessary to state fairly the financial position and results of operations for each interim period presented. Interim results are not necessarily indicative of results for a full year.

The unaudited condensed consolidated financial statements have been prepared in accordance with the rules and regulations of the Securities and Exchange Commission (the "SEC") applicable to interim financial information. Certain information and Note disclosures included in the financial statements prepared in accordance with generally accepted accounting principles have been omitted in these interim statements pursuant to such SEC rules and regulations. The information included in this Form 10-Q should be read in conjunction with the consolidated financial statements and notes thereto in Form 10-K for the year ended December 31, 2018.

Operating Segment Definitions

Operating segments are based upon Rambus' internal organization structure, the manner in which its operations are managed, the criteria used by its Chief Operating Decision Maker ("CODM") to evaluate segment performance and availability of separate financial information regularly reviewed for resource allocation and performance assessment. The Company determined its CODM to be the Chief Executive Officer and determined its operating segments to be: (1) Memory and Interfaces Division ("MID"), which focuses on the design, development, manufacturing through partnerships and licensing of technology and solutions that is related to memory and interfaces; (2) Rambus Security Division ("RSD"), which focuses on the design, development, deployment and licensing of technologies for chip, system and in-field application security, anti-counterfeiting, smart ticketing and mobile payments; and (3) Emerging Solutions Division ("ESD"), which includes the Rambus Labs team and the development efforts in the area of emerging technologies.

For the three months ended March 31, 2019, only MID and RSD were reportable segments as each of them met the quantitative thresholds for disclosure as a reportable segment. The results of the remaining operating segment was shown under "Other."

Comparability

Effective January 1, 2019, Rambus adopted the new lease accounting standards. Prior periods were not retrospectively recast, so the consolidated balance sheet as of December 31, 2018 and results of operations for the three months ended March 31, 2018 were prepared using accounting standards that were different than those in effect as of and for the three months ended March 31, 2019. Therefore, the consolidated balance sheets as of March 31, 2019 and December 31, 2018 are not directly comparable, nor are the results of operations for the three months ended March 31, 2019 and 2018.

Reclassifications

Certain prior periods' amounts were reclassified to conform to the current year's presentation. None of these reclassifications had an impact on reported net income for any of the periods presented.

2. Recent Accounting Pronouncements

Recent Accounting Pronouncements Adopted

In February 2016, the FASB issued ASU No. 2016-02, "Leases." This ASU requires lessees to recognize right-of-use assets and liabilities for operating leases, initially measured at the present value of the lease payments, on the balance sheet. In addition, it requires lessees to recognize a single lease cost, calculated so that the cost of the lease is allocated over the lease term, generally on a straight-line basis. In July 2018, the FASB issued ASU No. 2018-10, "Codification Improvements to Topic 842, Leases," and ASU No. 2018-11, "Leases (Topic 842)," which allow the application of the new guidance at the beginning of the year of adoption, recognizing a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption, in addition to the method of applying the new guidance

retrospectively to each prior reporting period presented. The

amendments in ASU No. 2018-10 and ASU No. 2018-11 have the same effective and transition requirements as ASU 2016-02 (collectively referred to as the "New Leasing Standard").

The Company adopted the New Leasing Standard as of January 1, 2019 using the alternative transition method provided by ASU No. 2018-11 and did not recast comparative periods. The Company elected the package of practical expedients permitted under the transition guidance within the new standard, which among other things, allowed the Company to carry forward the historical lease classification. Additionally, the Company elected the practical expedient related to non-lease components in which the Company will not separate non-lease components from lease components, Finally, the Company made the policy election for the short-term leases exemptions, which allows the Company to not recognize lease assets and liabilities for leases having a term of 12 months or less. Upon adoption, the Company recognized \$21.4 million and \$23.9 million of lease assets and liabilities, respectively, on its unaudited condensed consolidated balance sheet. The difference between the lease assets and lease liabilities, net of the deferred tax impact which was not material, was recorded as an adjustment to the opening accumulated deficit. Additionally, in accordance with the New Leasing Standard, the Company was required to derecognize the Sunnyvale and Ohio facilities as imputed facility obligations (as accounted for under the previous leasing guidance) and recognize these facilities as operating leases on the unaudited condensed consolidated balance sheet. This change resulted in no longer recognizing interest expense associated with these imputed facility lease obligations, but instead, recognizing operating lease costs which will be included in operating costs and expenses on the unaudited condensed consolidated statement of operations. Furthermore, the Company derecognized \$37.6 million of imputed financing obligation related to these facilities and \$32.0 million of capitalized building property upon adoption of the New Leasing Standard. The adoption of the New Leasing Standard impacted the Company's opening accumulated deficit by \$4.5

Recent Accounting Pronouncements Not Yet Adopted

In August 2018, the FASB issued ASU 2018-13, "Fair Value Measurement (Topic 820): Disclosure Framework-Changes to the Disclosure Requirements for Fair Value Measurement." The amendments in this ASU remove certain disclosures, modify certain disclosures and add additional disclosures. This ASU is effective for interim and annual reporting periods beginning after December 15, 2019. Early adoption is permitted. Certain disclosures in ASU 2018-13 would need to be applied on a retrospective basis and others on a prospective basis. The Company is currently evaluating the impact that this guidance will have on its consolidated financial statements. In June 2016, the FASB issued ASU No. 2016-13. The purpose of this ASU is to require a financial asset measured at amortized cost basis to be presented at the net amount expected to be collected. Credit losses relating to available-for-sale debt securities should be recorded through an allowance for credit losses. This ASU is effective for interim and annual reporting periods beginning after December 15, 2019. The Company is currently evaluating the impact that this guidance will have on its financial condition and results of operations.

3. Revenue Recognition

The Company recognizes revenue upon transfer of control of promised goods and services in an amount that reflects the consideration it expects to receive in exchange for those goods and services. Unless indicated otherwise below, all of the goods and services are distinct and are accounted for as separate performance obligations.

Where an arrangement includes multiple performance obligations, the transaction price is allocated to these on a relative standalone selling prices basis. The Company has established standalone selling prices for all of its offerings specifically, a same pricing methodology is consistently applied to all licensing arrangements; all services offerings are priced within tightly controlled bands and all contracts that include support and maintenance state a renewal rate or price that is systematically enforced.

Rambus' revenue consists of royalty, product and contract and other revenue. Royalty revenue consists of patent and technology license royalties. Products consist of memory buffer chipsets sold directly and indirectly to module manufacturers and OEMs worldwide through multiple channels, including our direct sales force and distributors. Contract and other revenue consists of software license fees, engineering fees associated with integration of Rambus' technology solutions into its customers' products and support and maintenance fees.

1.Royalty Revenue

Rambus' patent and technology licensing arrangements generally range between 1 and 7 years in duration and generally grant the licensee the right to use the Company's entire IP portfolio as it evolves over time. These arrangements do not typically grant the licensee the right to terminate for convenience and where such rights exist, termination is prospective, with no refund of fees already paid by the licensee. There is no interdependency or interrelation between the IP included in the portfolio licensed upon contract inception and any IP subsequently made available to the licensee, and the Company would be able to fulfill its promises by transferring the portfolio and the additional IP use rights independently. However, the numbers of additions to, and removals from the portfolio (for example when a patent expires and renewal is not granted to the Company) in

Table of Contents

any given period have historically been relatively consistent; as such, the Company does not allocate the transaction price between the rights granted at contract inception and those subsequently granted over time as a function of these additions.

Patent and technology licensing arrangements result in fixed payments received over time, with guaranteed minimum payments on occasion, variable payments calculated based on the licensee's sale or use of the IP, or a mix of fixed and variable payments.

For fixed-fee arrangements (including arrangements that include minimum guaranteed amounts), variable royalty arrangements that the Company has concluded are fixed in substance and the fixed portion of hybrid fixed/variable arrangements, the Company recognizes revenue upon control over the underlying IP use right transferring to the licensee, net of the effect of significant financing components calculated using customer-specific, risk-adjusted lending rates ranging between 3% and 6%, with the related interest income being recognized over time on an effective rate basis. Where a licensee has the contractual right to terminate a fixed-fee arrangement for convenience without any substantive penalty payable upon such termination, the Company applies the guidance in ASU No. 2014-09, Revenue from Contracts with Customers in Accounting Standards Codification (ASC) Topic 606 ("ASC 606" or "the New Revenue Standard") to the duration of the contract in which the parties have present enforceable rights and obligations and only recognizes revenue for amounts that are due and payable.

For variable arrangements, the Company recognizes revenue based on an estimate of the licensee's sale or usage of the IP during the period of reference, typically quarterly, with a true-up being recorded when the Company receives the actual royalty report from the licensee.

2.Product Revenue

Product revenue is recognized upon shipment of product to customers, net of accruals for estimated sales returns and allowances, and to distributors, net of accruals for price protection and rights of return on products unsold by the distributors. To date, none of these accruals have been significant. The Company transacts with direct customers primarily pursuant to standard purchase orders for delivery of products and generally allows customers to cancel or change purchase orders within limited notice periods prior to the scheduled shipment date.

3. Contract and Other Revenue

Contract and other revenue consists of software license fees and engineering fees associated with integration of Rambus' technology solutions into its customers' related support and maintenance.

An initial software arrangement generally consists of a term-based or perpetual license, significant software customization services and support and maintenance services that include post-implementation customer support and the right to unspecified software updates and enhancements on a when and if available basis. The Company recognizes the license and customization services revenue based on man-days incurred during the reporting period as compared to the estimated total man-days necessary for each contract, and the support and maintenance revenue ratably over term. The Company recognizes license renewal revenue at the beginning of the renewal period. The Company recognizes revenue from professional services purchased in addition to an initial software arrangement on a cumulative catch-up basis if these services are not distinct from the services provided as part of the initial software arrangement, or as a separate contract if these services are distinct.

During the first quarter of 2016, the Company acquired Smart Card Software Ltd., which included Bell Identification Ltd. (Payment Product Group) and Ecebs Ltd. (Ticketing Products Group), which transact mostly in software and Software-as-a-Service arrangements, respectively.

The Company's Payment Product Group derives a significant portion of its revenue from heavily customized software in the mobile market, whereby the Payment Product Group's software solution interacts with third-party solutions and other payment platforms to provide the functionality the customer requires. Historically, these third-party solutions have evolved at a rapid pace, with the Payment Product Group being required to deliver as part of its support and maintenance services the patches and updates needed to maintain the functionality of its own software offering. As the utility of the solution to the end customer erodes very quickly without these updates, these are viewed as critical and the customized software solution and updates are not separately identifiable. As such, these arrangements are treated

as a single performance obligation; revenue is deferred until completion of the customization services, and recognized ratably over the committed support and maintenance term, typically ranging from 1 year to 3 years. The Company's Ticketing Products Group primarily derives revenue from ticketing services arrangements that systematically consist of a software component, support and maintenance, managed services and hosting services. The software could be hosted by third-party hosting service providers or the Company. All arrangements entered into subsequent to the acquisition preclude customers from taking possession of the software at any time during the hosting term and the Company

Table of Contents

has concluded that should a customer that was under contract as of the acquisition date ever request possession of the software, the Ticketing Products Group would have the ability to charge the customer, and enforce a claim to payment of a substantive fee in exchange for such right, and that the costs of setting up the environment needed to run the software would act as a significant disincentive to the customer taking possession of the software. Based on the above, the Company concluded that these services are a single performance obligation, with customers simultaneously receiving and consuming the benefits provided by the Ticketing Products Group's performance, and recognize ticketing services revenue ratably over the term, commencing upon completion of setup activities. The Company recognizes setup fees upon completion. While these activities do not transfer a service to the customer, the Company elected not to defer and amortize these fees over the expected duration of the customer relationship due to the immateriality of the amounts charged.

Significant Judgments

Historically and with the exception noted below, no significant judgment has generally been required in determining the amount and timing of revenue from the Company's contracts with customers.

The Company has adequate tools and controls in place, and substantial experience and expertise in timely and accurately tracking man-days incurred in completing customization and other professional services, and quantifying changes in estimates.

Key estimates used in recognizing revenue predominantly consist of the following:

All fixed-fee arrangements result in cash being received after control over the underlying IP use right has transferred to the licensee, and over a period exceeding a year. As such, all these arrangements include a significant financing component. The Company calculates a customer-specific lending rate using a Daily Treasury Yield Curve Rate that changes depending on the date on which the licensing arrangement was entered into and the term (in years) of the arrangement, and takes into consideration a licensee-specific risk profile determined based on a review of the licensee's "Full Company View" Dun & Bradstreet report obtained on the date the licensing arrangement was signed by the parties, with a risk premium being added to the Daily Treasury Yield Curve Rate considering the overall business risk, financing strength and risk indicators, as listed.

The Company recognizes revenue on variable fee licensing arrangements on the basis of estimates. In connection with the adoption of the New Revenue Standard, the Company has set up specific procedures and controls to ensure timely and accurate quantification of variable royalties, and implemented new systems to enable the preparation of the estimates and reporting of the financial information required by the New Revenue Standard.

Contract Balances

Timing of revenue recognition may differ from the timing of invoicing to the Company's customers. The Company records contract assets when revenue is recognized prior to invoicing, and a contract liability when revenue is recognized subsequent to invoicing.

The contract assets are primarily related to the Company's fixed fee IP licensing arrangements and rights to consideration for performance obligations delivered but not billed as of March 31, 2019. The contract assets are transferred to receivables when the billing occurs.

The Company's contract balances were as follows:

As of

(In thousands) March December 31, 2019 31, 2018

Unbilled receivables \$629,435 \$673,616 Deferred revenue 15,995 19,566

During the three months ended March 31, 2019, the Company recognized \$8.0 million of revenue that was included in the contract balances as of December 31, 2018.

Revenue allocated to remaining performance obligations represents the transaction price allocated to the performance obligations that are unsatisfied, or partially unsatisfied, which includes unearned revenue and amounts that will be

invoiced and recognized as revenue in future periods. Contracted but unsatisfied performance obligations were approximately \$27.7 million as of March 31, 2019, which the Company primarily expects to recognize over the next 2 years.

4. Earnings (Loss) Per Share

Basic earnings (loss) per share is calculated by dividing the net income (loss) by the weighted average number of common shares outstanding during the period. Diluted earnings per share is calculated by dividing the earnings by the weighted average number of common shares and potentially dilutive securities outstanding during the period. Potentially dilutive common shares consist of incremental common shares issuable upon exercise of stock options, employee stock purchases, restricted stock and restricted stock units and shares issuable upon the conversion of convertible notes. The dilutive effect of outstanding shares is reflected in diluted earnings per share by application of the treasury stock method. This method includes consideration of the amounts to be paid by the employees and the amount of unrecognized stock-based compensation related to future services. No potential dilutive common shares are included in the computation of any diluted per share amount when a net loss is reported.

The following table sets forth the computation of basic and diluted net income (loss) per share:

Three Months Ended March 31. 2019 2018 (In thousands, except per Net loss per share: share amounts) Numerator: Net loss \$ (26,576) \$ (35,689) Denominator: Weighted-average shares outstanding - basic 109,692 109,358 Effect of potential dilutive common shares Weighted-average shares outstanding - diluted 109,692 109,358 Basic net loss per share \$ (0.24) \$ (0.33 Diluted net loss per share \$ (0.24) \$ (0.33

For the three months ended March 31, 2019 and 2018, options to purchase approximately 1.7 million and 1.8 million shares, respectively, were excluded from the calculation because they were anti-dilutive after considering proceeds from exercise and related unrecognized stock-based compensation expense. For the three months ended March 31, 2019 and 2018, an additional 0.9 million and 3.6 million shares, respectively, were excluded from the weighted average dilutive shares because there was a net loss position for the periods.

5. Intangible Assets and Goodwill

Goodwill

The following tables present goodwill information for each of the reportable segments for the three months ended March 31, 2019:

As of	Effect of	As of
December	Exchange	March
31, 2018	Rates (1)	31, 2019
(In thousa	nds)	
\$66,643	\$ —	\$66,643
140,535	650	141,185
\$207,178	\$ 650	\$207,828
	December 31, 2018 (In thousa \$66,643 140,535	As of Effect of December Exchange 31, 2018 Rates (1) (In thousands) \$66,643 \$ — 140,535 650 \$207,178 \$ 650

(1) Effect of exchange rates relates to foreign currency translation adjustments for the period.

	As of		
	March 31,	, 2019	
	Gross	Accumulated	Net
Reportable Segment:	Carrying	Impairment	Carrying
	Amount	Losses	Amount
	(In thousa	nds)	
MID	\$66,643	\$ —	\$66,643
RSD	141,185	_	141,185
Other	21,770	(21,770)	_
Total	\$229,598	\$ (21,770)	\$207,828
Intangible Assets			
The commonants of th	. Common	v'a intanaihla	accata ac a

The components of the Company's intangible assets as of March 31, 2019 and December 31, 2018 were as follows:

The components of the company 5 mangiore ass	015 45 01 114	,	ch 31, 2019	110 c 1 51, 2010 We
	Useful Life	Gross Car	r Aireg imulate Amortizati (1)	
Existing technology	3 to 10 years	\$259,389	\$ (217,734) \$ 41,655
Customer contracts and contractual relationships	1 to 10 years	67,395	(55,143) 12,252
Non-compete agreements and trademarks	3 years	300	(300) —
In-process research and development	Not applicable	1,600	_	1,600
Total intangible assets	••		\$ (273,177	
			ember 31, 20	
	Useful Life		r Aing ımulate Amortizati (1)	Nei Carryino
Existing technology	3 to 10 years		\$ (213,824) \$ 45,079
Customer contracts and contractual relationships	1 to 10 years	67,667	(54,410) 13,257
Non-compete agreements and trademarks	3 years	300	(300) —
In-process research and development	Not applicable	1,600	_	1,600
Total intangible assets) \$ 59,936

(1) The changes in gross carrying amount and accumulated amortization reflect the effects of exchange rates during the period.

During the three months ended March 31, 2019 and 2018, the Company did not purchase or sell any intangible assets.

Included in customer contracts and contractual relationships are favorable contracts which are acquired software and service agreements where the Company has no performance obligations. Cash received from these acquired favorable contracts reduces the favorable contract intangible asset. For the three months ended March 31, 2019 and 2018, the Company received \$0.5 million and \$0.9 million, respectively, related to the favorable contracts. As of March 31, 2019 and December 31, 2018, the net balance of the favorable contract intangible assets was \$0.5 million and \$0.9

million, respectively.

Amortization expense for intangible assets for the three months ended March 31, 2019 and 2018 was \$5.0 million and \$10.5 million, respectively. The estimated future amortization of intangible assets as of March 31, 2019 was as follows (amounts in thousands):

Years Ending December 31:	Amount
2019 (remaining 9 months)	\$14,903
2020	20,023
2021	13,317
2022	2,062
2023	1,541
Thereafter	2,061
Total amortizable purchased intangible assets	\$53,907
In-process research and development	1,600
Total intangible assets	\$55,507

It is reasonably possible that the businesses could perform significantly below the Company's expectations or a deterioration of market and economic conditions could occur. This would adversely impact the Company's ability to meet its projected results, which could cause the goodwill in any of its reporting units or long-lived assets in any of its asset groups to become impaired. Significant differences between these estimates and actual cash flows could materially affect the Company's future financial results. If the Company determines that its goodwill or long-lived assets are impaired, it would be required to record a non-cash charge that could have a material adverse effect on its results of operations and financial position.

6. Segments and Major Customers

For the three months ended March 31, 2019, MID and RSD were reportable segments as each of them met the quantitative thresholds for disclosure as a reportable segment. The results of the remaining operating segments were shown under "Other."

The Company evaluates the performance of its segments based on segment operating income (loss), which is defined as revenue minus segment operating expenses. Segment operating expenses are comprised of direct operating expenses.

Segment operating expenses do not include sales, general and administrative expenses and the allocation of certain expenses managed at the corporate level, such as stock-based compensation, amortization, and certain bonus and acquisition costs. The "Reconciling Items" category includes these unallocated sales, general and administrative expenses as well as corporate level expenses.

The tables below present reported segment operating income (loss) for the three months ended March 31, 2019 and 2018, respectively.

, 1	For the Three Months Ended March 31, 2019				
	MID	RSD	Other	Total	
	(In thous	ands)			
Revenues	\$34,490	\$13,894	\$ —	\$48,384	
Segment operating expenses	23,979	14,221	2,483	40,683	
Segment operating income (loss)	\$10,511	\$(327)	\$(2,483)	\$7,701	
Reconciling items				(39,110)	
Operating loss				\$(31,409)	
Interest and other income (expense), net				5,142	
Loss before income taxes				\$(26,267)	

	For the Three Months Ended March 31,				
	2018				
	MID	RSD	Other	Total	
	(In thous	ands)			
Revenues	\$33,967	\$10,018	\$2,441	\$46,426	
Segment operating expenses	22,949	12,786	5,630	41,365	
Segment operating income (loss)	\$11,018	\$(2,768)	\$(3,189)	\$5,061	
Reconciling items				(48,674)	
Operating loss				\$(43,613)	
Interest and other income (expense), net				4,695	
Loss before income taxes				\$(38,918)	

The Company's CODM does not review information regarding assets on an operating segment basis. Additionally, the Company does not record intersegment revenue or expense.

Accounts receivable from the Company's major customers representing 10% or more of total accounts receivable at March 31, 2019 and December 31, 2018, respectively, was as follows:

	As of	•	
Clistomer		lDet,en	nber 31,
		2018	
Customer 1 (MID reportable segment)	*	12	%
Customer 2 (MID reportable segment)	14%	*	
Customer 3 (MID reportable segment)	36%	39	%

^{*} Customer accounted for less than 10% of total accounts receivable in the period

Revenue from the Company's major customers representing 10% or more of total revenue for the three months ended March 31, 2019 and 2018, respectively, was as follows:

Three Months Ended

	Mar	ch 31	,	
Customer	2019	9	201	8
Customer A (MID reportable segment)	*		34	%
Customer B (MID reportable segment)	*		11	%
Customer C (MID reportable segment)	19	%	*	
Customer D (MID reportable segment)	16	%	*	

^{*} Customer accounted for less than 10% of total revenue in the period

Revenue from customers in the geographic regions based on the location of contracting parties was as follows:

Three Months Ended

March 31,

(In thousands)	2019	2018
Taiwan	\$ 2,101	\$ 16,110
South Korea	1,281	8,601
USA	34,239	11,221
Japan	2,619	4,034
Europe	3,375	3,866
Canada	1,058	1,410
Singapore	1,884	92
Asia-Other	1,827	1,092
Total	\$48,384	\$ 46,426

7. Marketable Securities

Rambus invests its excess cash and cash equivalents primarily in U.S. government-sponsored obligations, commercial paper, corporate notes and bonds, money market funds and municipal notes and bonds that mature within three years. As of March 31, 2019 and December 31, 2018, all of the Company's cash equivalents and marketable securities had a remaining maturity of less than one year.

All cash equivalents and marketable securities are classified as available-for-sale. Total cash, cash equivalents and marketable securities are summarized as follows:

	As of March 31, 2019						
(In thousands)	ands) Fair Value Amortized U		Gross Unrealized	Gross Unrealize		Weigh	
(III tilousalius)			Gains	Losses		Rate of Return	
Money market funds	\$10,849	\$ 10,849	\$ —	\$ —		2.35	<i>%</i>
•	•	•	φ —	•			
U.S. Government bonds and notes	41,479	41,482	—	(3))	2.36	%
Corporate notes, bonds, commercial paper and other	212,149	212,209	3	(63))	2.47	%
Total cash equivalents and marketable securities	264,477	264,540	3	(66)		
Cash	41,389	41,389					
Total cash, cash equivalents and marketable securities	\$305,866	\$305,929	\$ 3	\$ (66)		
	As of Dec	ember 31, 2	Λ1 Q				
	As of DCC	EIIIDEI 31, 2	010				
	As of Dec	•	Gross	Gross		Weigl	nted
(In thousands)	Fair Value	Amortized		Gross Unrealize		Weigh Rate	
(In thousands)		Amortized	Gross			_	of
(In thousands) Money market funds		Amortized	Gross Unrealized	Unrealize	d	Rate	of
	Fair Valu	Amortized Cost	Gross Unrealized Gains	Unrealize	d	Rate Retur	of n
Money market funds	Fair Value	Amortized Cost \$ 10,080	Gross Unrealized Gains	Unrealize Losses -\$ —	d :	Rate Retur	of n %
Money market funds U.S. Government bonds and notes	Fair Value \$10,080 32,630	Amortized Cost \$ 10,080 32,634	Gross Unrealized Gains	Unrealize Losses -\$ — (4	d :	Rate Return 2.23 2.28	of n % %
Money market funds U.S. Government bonds and notes Corporate notes, bonds, commercial paper and other	Fair Value \$10,080 32,630 183,998	Amortized Cost \$ 10,080 32,634 184,095	Gross Unrealized Gains	Unrealize Losses -\$ — (4 (97	d :	Rate Return 2.23 2.28	of n % %

Available-for-sale securities are reported at fair value on the balance sheets and classified as follows:

-	As of	
	March 31,	December 31,
	2019	2018
	(In thousa	nds)
Cash equivalents	\$101,627	\$ 64,868
Short term marketable securities	162,850	161,840
Total cash equivalents and marketable securities	264,477	226,708
Cash	41,389	51,056
Total cash, cash equivalents and marketable securities	\$305,866	\$ 277,764

The Company continues to invest in highly rated quality, highly liquid debt securities. As of March 31, 2019, these securities have a remaining maturity of less than one year. The Company holds all of its marketable securities as available-for-sale, marks them to market, and regularly reviews its portfolio to ensure adherence to its investment policy and to monitor individual investments for risk analysis, proper valuation, and unrealized losses that may be other than temporary.

The estimated fair value of cash equivalents and marketable securities classified by the length of time that the securities have been in a continuous unrealized loss position at March 31, 2019 and December 31, 2018 are as follows:

	Fair Value		Gross Unrealized Loss		
	March 31	, December 3	1, March	31,Decembe	er 31,
	2019	2018	2019	2018	
	(In thousa	ands)			
Less than one year					
U.S. Government bonds and notes	\$36,490	\$ 32,630	\$ (3) \$ (4)
Corporate notes, bonds and commercial paper	183,849	183,998	(63) (97)
Total Corporate notes, bonds, and commercial paper and U.S. Government bonds and notes	\$220,339	\$ 216,628	\$ (66) \$ (101)

The gross unrealized loss at March 31, 2019 and December 31, 2018 was not material in relation to the Company's total available-for-sale portfolio. The gross unrealized loss can be primarily attributed to a combination of market conditions as well as the demand for and duration of the U.S. government-sponsored obligations and corporate notes and bonds. There is no need to sell these investments, and the Company believes that it can recover the amortized cost of these investments. The Company has found no evidence of impairment due to credit losses in its portfolio. Therefore, these unrealized losses were recorded in other comprehensive income. However, the Company cannot provide any assurance that its portfolio of cash, cash equivalents and marketable securities will not be impacted by adverse conditions in the financial markets, which may require the Company in the future to record an impairment charge for credit losses which could adversely impact its financial results.

See Note 8, "Fair Value of Financial Instruments," for discussion regarding the fair value of the Company's cash equivalents and marketable securities.

8. Fair Value of Financial Instruments

The following table presents the financial instruments that are carried at fair value and summarizes the valuation of its cash equivalents and marketable securities by the above pricing levels as of March 31, 2019 and December 31, 2018:

	As of Mar	rch 31, 201	9		
	Total	Quoted Market Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobserva Inputs (Level 3)	ble
	(In thousa	inds)			
Money market funds	\$10,849	\$ 10,849	\$ <i>-</i>	\$	
U.S. Government bonds and notes	41,479		41,479	_	
Corporate notes, bonds, commercial paper and other	212,149		212,149	_	
Total available-for-sale securities	\$264,477	\$ 10,849	\$ 253,628	\$	
	As of Dec	ember 31,	2018		
	Total	Quoted Market Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobserva Inputs (Level 3)	ble
	(In thousa	inds)			
Money market funds	\$10,080	\$ 10,080	\$ —	\$	
U.S. Government bonds and notes	32,630		32,630		

Corporate notes, bonds, commercial paper and other 183,998 — 183,998 — Total available-for-sale securities \$226,708 \$10,080 \$216,628 \$

The Company monitors its investments for other-than-temporary impairment and records appropriate reductions in carrying value when necessary. The Company monitors its investments for other-than-temporary losses by considering current factors,

Table of Contents

including the economic environment, market conditions, operational performance and other specific factors relating to the business underlying the investment, reductions in carrying values when necessary and the Company's ability and intent to hold the investment for a period of time which may be sufficient for anticipated recovery in the market. Any other-than-temporary loss is reported under "Interest and other income (expense), net" in the condensed consolidated statement of operations.

During the second half of 2018, the Company made an investment in a non-marketable equity security of a private company. This equity investment is accounted for under the equity method of accounting, and the Company accounts for its equity method share of the income (loss) on a quarterly basis. As of March 31, 2019, the Company's 27.7% ownership percentage amounts to a \$3.2 million equity interest in this equity investment and it is included in other assets on the accompanying consolidated balance sheets. The Company recorded an immaterial amount in its consolidated statements of operations representing its share of the investee's loss for the three months March 31, 2019. For the three months ended March 31, 2019 and 2018, there were no transfers of financial instruments between different categories of fair value.

The following table presents the financial instruments that are not carried at fair value but require fair value disclosure as of March 31, 2019 and December 31, 2018:

	As of Mar	ch 31, 201	9	As of Dec	ember 31,	2018
(In thousands)	Face Value	Carrying Value	Fair Value	Face Value	Carrying Value	Fair Value
1.375% Convertible Senior Notes due 2023 (the "2023 Notes")	\$172,500	\$143,612	\$162,952	\$172,500	\$141,934	\$150,075

The fair value of the convertible notes at each balance sheet date is determined based on recent quoted market prices for these notes which is a level 2 measurement. As discussed in Note 10, "Convertible Notes," as of March 31, 2019, the 2023 Notes are carried at their aggregate face value of \$172.5 million, less any unamortized debt discount and unamortized debt issuance costs. The carrying value of other financial instruments, including accounts receivable, accounts payable and other liabilities, approximates fair value due to their short maturities.

9. Leases

The Company leases office space, domestically and internationally, under operating leases. The Company's leases have remaining lease terms between 1 and 4 years. Operating leases are included in operating lease right-of-use ("ROU") assets, operating lease liabilities, and long-term operating lease liabilities in the Company's unaudited condensed consolidated balance sheets. The Company does not have any finance leases. The Company determines if an arrangement is a lease, or contains a lease, at inception. The Company assesses all relevant facts and circumstances in making the determination of the existence of a lease. For leases with terms greater than 12 months, the Company records the related asset and obligation at the present value of lease payments over the term. Many of the Company's leases include rental escalation clauses, renewal options and/or termination options that are factored into the determination of lease payments when appropriate. Leases with an initial term of 12 months or less are not recorded on the balance sheet, and the Company does not separate non-lease components from lease components. The Company used its incremental borrowing rate to measure the lease liabilities at the adoption date for its existing operating leases that commenced prior to January 1, 2019 which was based on the remaining lease term and remaining lease payments for such leases. On an ongoing basis, as most of the Company's leases do not provide an implicit rate, the Company will use its incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments. The Company will use the implicit rate when readily determinable. The table below reconciles the undiscounted cash flows for the first five years and total of the remaining years to the operating lease liabilities recorded on the unaudited condensed consolidated balance sheet as of March 31, 2019 (in thousands):

Years ending December 31,	Amount
2019 (remaining 9 months)	\$7,788
2020	6,731
2021	4,860
2022	3,107
2023	643
Thereafter	_
Total minimum lease payments	\$23,129
Less: amount of lease payments representing interest	(1,470)
Present value of future minimum lease payments	\$21,659
Less: current obligations under leases	(9,351)
Long-term lease obligations	\$12,308

As of March 31, 2019, the weighted average remaining lease term for the Company's operating leases is 2.9 years, and the weighted average discount rate used to determine the present value of the Company's operating leases is 4.5%. Operating lease costs are included in research and development and selling, general and administrative costs on the statement of operations, and were \$2.2 million for the three months ended March 31, 2019.

Cash paid for amounts included in the measurement of operating lease liabilities was \$2.6 million for the three months ended March 31, 2019.

10. Convertible Notes

The Company's convertible notes are shown in the following table:

	As of	As of
(In thousands)	March 31,	December
	2019	31, 2018
2023 Notes	\$172,500	\$172,500
Unamortized discount - 2023 Notes	(26,964)	(28,517)
Unamortized debt issuance costs - 2023 Notes	(1,924)	(2,049)
Total convertible notes	\$143,612	\$141,934
Less current portion	_	_
Total long-term convertible notes	\$143,612	\$141,934

Table of Contents

Interest expense related to the notes for the three months ended March 31, 2019 and 2018 was as follows:

	Three Mo	onths Ended
	March 3	1,
	2019	2018
	(In thous	ands)
2023 Notes coupon interest at a rate of 1.375%	\$ 593	\$ 593
2023 Notes amortization of discount and debt issuance costs at an additional effective interest rate of 4.9%	1,678	1,590
2018 Notes coupon interest at a rate of 1.125%		53
2018 Notes amortization of discount and debt issuance costs at an additional effective interest rate of 5.5%	_	1,090
Total interest expense on convertible notes	\$ 2,271	\$ 3,326

11. Commitments and Contingencies

As of March 31, 2019, the Company's material contractual obligations were as follows (in thousands):

	Total	Remainder of 2019	2020	2021	2022	2023
Contractual obligations (1) (2)						
Other contractual obligations	1,283	815	234	234		_
Software licenses (3)	8,489	3,997	2,995	1,497		_
Convertible notes	172,500		_	_		172,500
Interest payments related to convertible notes	9,494	1,186	2,372	2,372	2,372	1,192
Total	\$191,766	\$ 5,998	\$5,601	\$4,103	\$2,372	\$173,692

The above table does not reflect possible payments in connection with uncertain tax benefits of approximately \$24.5 million including \$22.2 million recorded as a reduction of long-term deferred tax assets and \$2.3 million in

Refer to Note 2, "Recent Accounting Pronouncements" and Note 9, "Leases," for discussion related to the Company's facility leases due to the adoption of the New Leasing Standard on January 1, 2019.

⁽¹⁾long-term income taxes payable as of March 31, 2019. As noted below in Note 14, "Income Taxes," although it is possible that some of the unrecognized tax benefits could be settled within the next 12 months, the Company cannot reasonably estimate the outcome at this time.

⁽²⁾ For the Company's lease commitments, refer to Note 9, "Leases".

⁽³⁾ The Company has commitments with various software vendors for agreements generally having terms longer than one year.

Table of Contents

Additionally, the Company's lease-related obligations as of December 31, 2018 were as follows (in thousands):

	Total	2019	2020	2021	2022	2023
Lease-related obligations						
Imputed financing obligation (1)	\$8,081	\$5,677	\$2,404	\$ —	\$ —	\$—
Leases	19,415	5,333	4,883	4,960	3,271	968
Total	\$27,496	\$11,010	\$7,287	\$4,960	\$3,271	\$968

With respect to the imputed financing obligation, the main components of the difference between the amount reflected in the table above and the amount reflected on the unaudited condensed consolidated balance sheet are the interest on the imputed financing obligation and the estimated common area expenses over the future periods. The amount includes the amended Ohio lease and the amended Sunnyvale lease.

Indemnification

From time to time, the Company indemnifies certain customers as a necessary means of doing business. Indemnification covers customers for losses suffered or incurred by them as a result of any patent, copyright, or other intellectual property infringement or any other claim by any third party arising as result of the applicable agreement with the Company. The Company generally attempts to limit the maximum amount of indemnification or liability that the Company could be exposed to under these agreements, however, this is not always possible. The fair value of the liability as of March 31, 2019 and December 31, 2018 is not material.

12. Equity Incentive Plans and Stock-Based Compensation

A summary of shares available for grant under the Company's plan is as follows:

Shares Available for Grant

Shares available as of December 31, 2018

Stock options granted

Stock options forfeited

Stock options forfeited

Nonvested equity stock and stock units granted (1) (2) (5,907,629)

Nonvested equity stock and stock units forfeited (1) 315,349

Total available for grant as of March 31, 2019

4,515,733

For purposes of determining the number of shares available for grant under the 2015 Equity Incentive Plan (the "2015 Plan") against the maximum number of shares authorized, each share of restricted stock granted reduces the number of shares available for grant by 1.5 shares and each share of restricted stock forfeited increases shares available for grant by 1.5 shares.

Amount includes approximately 0.9 million shares that have been reserved for potential future issuance related to (2) certain performance unit awards granted in the first quarter of 2019 and discussed under the section titled "Nonvested Equity Stock and Stock Units" below.

General Stock Option Information

The following table summarizes stock option activity under the 2015 Plan for the three months ended March 31, 2019 and information regarding stock options outstanding, exercisable, and vested and expected to vest as of March 31, 2019.

	Options Ou	tsta	anding		
	Number of Shares	Weighted Average Exercise Price Per Share		Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
	(In thousand	ds,	except per sh	are amounts)	
Outstanding as of December 31, 2018	3,235,891	\$	10.25		
Options granted		\$	_		
Options exercised	(704,851)	\$	6.89		
Options forfeited	(33,967)	\$	8.58		
Outstanding as of March 31, 2019	2,497,073	\$	11.22	4.72	\$ 2,779
Vested or expected to vest at March 31, 2019	2,473,989	\$	11.20	4.69	\$ 2,779
Options exercisable at March 31, 2019	1,972,769	\$	10.82	3.70	\$ 2,779

Employee Stock Purchase Plan

No purchases were made under the 2015 Employee Stock Purchase Plan ("2015 ESPP") during the three months ended March 31, 2019 and 2018. As of March 31, 2019, approximately 2.3 million shares under the 2015 ESPP remain available for issuance.

Stock-Based Compensation

For the three months ended March 31, 2019 and 2018, the Company maintained stock plans covering a broad range of potential equity grants including stock options, nonvested equity stock and equity stock units and performance based instruments. In addition, the Company sponsors the 2015 ESPP, whereby eligible employees are entitled to purchase common stock semi-annually, by means of limited payroll deductions, at a 15% discount from the fair market value of the common stock as of specific dates.

Stock Options

There were no stock options granted during the three months ended March 31, 2019. During the three months ended March 31, 2019, the Company recorded stock-based compensation expense related to stock options of \$0.2 million. During the three months ended March 31, 2018, the Company granted approximately 0.6 million stock options with an estimated grant-date fair value of \$2.3 million. During the three months ended March 31, 2018, the Company recorded stock-based compensation expense related to stock options of \$0.6 million.

As of March 31, 2019, there was \$3.5 million of total unrecognized compensation cost, net of expected forfeitures, related to non-vested stock-based compensation arrangements granted under the stock option plans. That cost is expected to be recognized over a weighted-average period of 2.6 years.

Employee Stock Purchase Plan

For the three months ended March 31, 2019, the Company recorded compensation expense related to the 2015 ESPP of \$0.5 million. For the three months ended March 31, 2018, the Company recorded compensation expense related to the 2015 ESPP of \$0.5 million. As of March 31, 2019, there was \$0.2 million of total unrecognized compensation cost related to stock-based compensation arrangements granted under the 2015 ESPP. That cost is expected to be recognized over one month.

Valuation Assumptions

The fair value of stock awards is estimated as of the grant date using the Black-Scholes-Merton ("BSM") option-pricing model assuming a dividend yield of 0% and the additional weighted-average assumptions as listed in the table below.

Table of Contents

The following table presents the weighted-average assumptions used to estimate the fair value of stock options granted that contain only service conditions in the periods presented.

	Stock Option Plan Three Months Ended March 31, 2018		
Stock Option Plan			
Expected stock price volatility	29	%	
Risk free interest rate	2.6	%	
Expected term (in years)	5.8		
Weighted everage feir value of steels entions granted to apple value	¢ 121		

Weighted-average fair value of stock options granted to employees \$ 4.24

There were no stock options granted during the three months ended March 31, 2019.

No shares were issued under the 2015 ESPP during the three months ended March 31, 2019 and 2018, respectively.

Nonvested Equity Stock and Stock Units

The Company grants nonvested equity stock units to officers, employees and directors. During the three months ended March 31, 2019, the Company granted nonvested equity stock units totaling approximately 3.4 million shares under the 2015 Plan. During the three months ended March 31, 2018, the Company granted nonvested equity stock units totaling approximately 2.1 million shares under the 2015 Plan. These awards have a service condition, generally a service period of four years, except in the case of grants to directors, for which the service period is 1 year. For the three months ended March 31, 2019, the nonvested equity stock units were valued at the date of grant giving them a fair value of approximately \$32.2 million. For the three months ended March 31, 2018, the nonvested equity stock units were valued at the date of grant giving them a fair value of approximately \$26.8 million. During the first quarters of 2019 and 2018, the Company granted performance unit awards to certain Company executive officers with vesting subject to the achievement of certain performance conditions. The ultimate number of performance units that can be earned can range from 0% to 200% of target depending on performance relative to target over the applicable period. The shares earned will vest on the third anniversary of the date of grant. The Company's shares available for grant have been reduced to reflect the shares that could be earned at the maximum target.

For the three months ended March 31, 2019, the Company recorded stock-based compensation expense of approximately \$6.4 million related to all outstanding nonvested equity stock grants. For the three months ended March 31, 2018, the Company recorded stock-based compensation expense of approximately \$6.5 million related to all outstanding nonvested equity stock grants. Unrecognized stock-based compensation related to all nonvested equity stock grants, net of estimated forfeitures, was approximately \$53.7 million at March 31, 2019. This amount is expected to be recognized over a weighted average period of 2.9 years.

The following table reflects the activity related to nonvested equity stock and stock units for the three months ended March 31, 2019:

		Weighted-		
Nonvested Equity Stock and Stock Units	Shares	Average		
Nonvested Equity Stock and Stock Offits	Silaics	Grant-Date		
		Fair Value		
Nonvested at December 31, 2018	4,859,135	\$ 12.71		
Granted	3,389,337	\$ 9.56		
Vested	(1,076,198)	\$ 12.49		
Forfeited	(170,752)	\$ 11.89		
Nonvested at March 31, 2019	7,001,522	\$ 11.24		

Table of Contents

13. Stockholders' Equity

Share Repurchase Program

During the three months ended March 31, 2019, the Company did not repurchase any shares of its common stock under its share repurchase program.

On January 21, 2015, the Company's Board approved a share repurchase program authorizing the repurchase of up to an aggregate of 20.0 million shares. Share repurchases under the plan may be made through the open market, established plans or privately negotiated transactions in accordance with all applicable securities laws, rules, and regulations. There is no expiration date applicable to the plan.

As of March 31, 2019, there remained an outstanding authorization to repurchase approximately 3.6 million shares of the Company's outstanding common stock under the current share repurchase program.

The Company records stock repurchases as a reduction to stockholders' equity. The Company records a portion of the purchase price of the repurchased shares as an increase to accumulated deficit when the price of the shares repurchased exceeds the average original proceeds per share received from the issuance of common stock.

14. Income Taxes

The Company recorded a provision for (benefit from) income taxes of \$0.3 million and \$(3.2) million for the three months ended March 31, 2019 and 2018, respectively. The provision for income taxes for the three months ended March 31, 2019 is driven by a combination of the valuation allowance recorded on U.S. deferred tax assets and the projected annual effective tax rate for the foreign jurisdictions for 2019. The benefit from income taxes for the three months ended March 31, 2018 is mainly due to projected pretax losses from which the company can benefit from.

During the three months ended March 31, 2019 and 2018, the Company paid withholding taxes of \$4.3 million and \$6.1 million, respectively.

As of March 31, 2019, the Company's unaudited condensed consolidated balance sheets included net deferred tax assets, before valuation allowance, of approximately \$165.6 million, which consists of net operating loss carryovers, tax credit carryovers, amortization, employee stock-based compensation expenses and certain liabilities. The Company periodically evaluates the realizability of its net deferred tax assets based on all available evidence, both positive and negative. During the third quarter of 2018, the Company assessed the changes in its underlying facts and circumstances and evaluated the realizability of its existing deferred tax assets based on all available evidence, both positive and negative, and the weight accorded to each, and concluded a full valuation allowance associated with U.S. federal and state deferred tax assets was appropriate. The basis for this conclusion was derived primarily from the fact that the Company completed its forecasting process during the third quarter of 2018. At a domestic level, losses are expected in future periods in part due to the impact of the adoption of ASC 606. In addition, the decrease in the U.S. federal tax rate from 35% to 21% as a result of U.S. tax reform has further reduced the Company's ability to utilize its deferred tax assets. In light of the above factors, the Company concluded that it is not more likely than not that it can realize its U.S. deferred tax assets. As such, during the third quarter of 2018, the Company set up and continues to maintain a full valuation allowance against its U.S. federal deferred tax assets. The Company has U.S. federal deferred tax assets related to research and development credits, foreign tax credits and other tax attributes that can be used to offset federal taxable income in future periods. These credit carryforwards will expire if they are not used within certain time periods. It is possible that some or all of these attributes could ultimately expire unused. The Company has U.S. federal deferred tax assets related to research and development credits, foreign tax credits and other tax attributes that can be used to offset federal taxable income in future periods. These credit carryforwards will expire if they are not used within certain time periods. It is possible that some or all of these attributes could ultimately expire unused.

As of March 31, 2019, the Company has a total valuation allowance of \$179.9 million on U.S. federal, state and foreign deferred tax assets, resulting in net deferred tax liability of \$14.3 million.

The Company maintains liabilities for uncertain tax positions within its long-term income taxes payable accounts and as a reduction to existing deferred tax assets to the extent tax attributes are available to offset such liabilities. These liabilities involve judgment and estimation and are monitored by management based on the best information available including changes in tax regulations, the outcome of relevant court cases and other information.

Table of Contents

As of March 31, 2019, the Company had approximately \$24.5 million of unrecognized tax benefits, including \$22.2 million recorded as a reduction of long-term deferred tax assets and \$2.3 million in long-term income taxes payable. If recognized, approximately \$2.3 million would be recorded as an income tax benefit. As of December 31, 2018, the Company had \$23.5 million of unrecognized tax benefits, including \$21.4 million recorded as a reduction of long-term deferred tax assets and \$2.1 million recorded in long-term income taxes payable.

Although it is possible that some of the unrecognized tax benefits could be settled within the next 12 months, the Company cannot reasonably estimate the outcome at this time.

The Company recognizes interest and penalties related to uncertain tax positions as a component of the income tax provision. At March 31, 2019 and December 31, 2018, an immaterial amount of interest and penalties is included in long-term income taxes payable.

Rambus files income tax returns for the U.S., California, India, the U.K., the Netherlands and various other state and foreign jurisdictions. The U.S. federal returns are subject to examination from 2015 and forward. The California returns are subject to examination from 2010 and forward. In addition, any research and development credit carryforward or net operating loss carryforward generated in prior years and utilized in these or future years may also be subject to examination. The India returns are subject to examination from fiscal year ending March 2012 and forward. The Company is currently under examination by the IRS for the 2015 tax year and Cal