

RUDOLPH TECHNOLOGIES INC
Form 10-Q
August 03, 2017
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-Q

(Mark
One)

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

For the Quarterly Period Ended June 30, 2017

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 No. 001-36226

RUDOLPH TECHNOLOGIES, INC.
(Exact name of registrant as specified in its charter)

Delaware 22-3531208
(State or other jurisdiction of (I.R.S. Employer
incorporation or organization) Identification Number)
16 Jonspin Road, Wilmington, Massachusetts 01887
(Address of principal executive offices, including zip code)
Registrant's telephone number, including area code: (978) 253-6200

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 [X] No []

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (Section 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes [X] No []

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 definition of "large accelerated filer", "accelerated filer", "smaller reporting company", and "emerging growth company" in Rule 12b-2 of the Securities Exchange Act.

Large accelerated filer [] Accelerated filer [X] Non-accelerated filer [] Smaller reporting company [] Emerging growth company []

(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes [] No [X]

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.

The number of outstanding shares of the Registrant's Common Stock on July 18, 2017 was 31,540,042.

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PART I FINANCIAL INFORMATION

Item 1. Financial Statements

RUDOLPH TECHNOLOGIES, INC.
 CONDENSED CONSOLIDATED BALANCE SHEETS
 (In thousands)

	June 30, 2017 (Unaudited)	December 31, 2016
ASSETS		
Current Assets:		
Cash and cash equivalents	\$ 57,705	\$ 37,859
Marketable securities	91,244	87,872
Accounts receivable, less allowance of \$495 and \$680	70,564	64,912
Inventories, net	66,835	65,485
Income taxes receivable	—	2,389
Prepaid expenses and other current assets	4,634	4,113
Total current assets	290,982	262,630
Property, plant and equipment, net	15,091	11,858
Goodwill	22,495	22,495
Identifiable intangible assets, net	9,263	10,273
Other assets	32,755	31,443
Total assets	\$ 370,586	\$ 338,699
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 25,928	\$ 21,494
Income taxes payable	1,168	—
Deferred revenue	11,230	7,329
Other current liabilities	7,722	7,139
Total current liabilities	46,048	35,962
Other non-current liabilities	11,247	9,002
Total liabilities	57,295	44,964
Commitments and contingencies		
Stockholders' equity:		
Common stock	32	31
Additional paid-in capital	383,174	381,189
Accumulated other comprehensive loss	(1,481) (2,779
Accumulated deficit	(68,434) (84,706
Total stockholders' equity	313,291	293,735
Total liabilities and stockholders' equity	\$ 370,586	\$ 338,699

The accompanying notes are an integral part of these financial statements.

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RUDOLPH TECHNOLOGIES, INC.
 CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
 (In thousands, except per share data)
 (Unaudited)

	Three Months Ended		Six Months Ended	
	June 30, 2017	2016	June 30, 2017	2016
Revenues	\$67,418	\$62,701	\$128,097	\$117,063
Cost of revenues	31,962	28,508	60,773	53,825
Gross profit	35,456	34,193	67,324	63,238
Operating expenses (income):				
Research and development	12,146	11,879	24,156	24,325
Selling, general and administrative	10,110	9,488	19,778	18,987
Amortization	505	595	1,010	1,190
Patent litigation judgment	—	—	—	(14,632)
Total operating expenses	22,761	21,962	44,944	29,870
Operating income	12,695	12,231	22,380	33,368
Interest (income) expense, net	(223)	1,446	(414)	2,915
Other expense	166	192	435	299
Income before income taxes	12,752	10,593	22,359	30,154
Provision for income taxes	3,559	2,992	6,015	8,614
Net income	\$9,193	\$7,601	\$16,344	\$21,540
Earnings per share:				
Basic	\$0.29	\$0.25	\$0.52	\$0.70
Diluted	\$0.29	\$0.24	\$0.51	\$0.68
Weighted average shares outstanding:				
Basic	31,501	30,779	31,397	30,869
Diluted	32,146	31,754	32,104	31,705

The accompanying notes are an integral part of these financial statements.

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RUDOLPH TECHNOLOGIES, INC.
 CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
 (In thousands)
 (Unaudited)

	Three Months		Six Months	
	Ended		Ended	
	June 30,		June 30,	
	2017	2016	2017	2016
Net income	\$9,193	\$7,601	\$16,344	\$21,540
Other comprehensive income:				
Change in net unrealized gains on investments, net of tax	1	29	45	23
Change in currency translation adjustments	133	596	1,253	1,234
Total comprehensive income	\$9,327	\$8,226	\$17,642	\$22,797

The accompanying notes are an integral part of these financial statements.

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RUDOLPH TECHNOLOGIES, INC.
 CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
 (In thousands)
 (Unaudited)

	Six Months Ended June 30,	
	2017	2016
Cash flows from operating activities:		
Net income	\$16,344	\$21,540
Adjustments to reconcile net income to net cash and cash equivalents provided by operating activities:		
Amortization of convertible note discount and issuance costs	—	2,039
Amortization of intangibles	1,010	1,190
Depreciation	1,880	1,868
Foreign currency exchange loss	435	299
Change in fair value of contingent consideration	132	117
Share-based compensation	2,948	2,387
Provision for doubtful accounts and inventory valuation	2,026	2,278
Patent litigation judgment	—	(14,632)
Changes in operating assets and liabilities	5,198	(4,852)
Net cash and cash equivalents provided by operating activities	29,973	12,234
Cash flows from investing activities:		
Purchases of marketable securities	(62,527)	(70,412)
Proceeds from sales of marketable securities	59,491	90,599
Purchases of property, plant and equipment	(5,301)	(2,173)
Net cash and cash equivalents provided by (used in) investing activities	(8,337)	18,014
Cash flows from financing activities:		
Redemption of stock warrants	(1,025)	—
Purchases of common stock	—	(8,044)
Tax payments related to shares withheld for share-based compensation plans	(1,323)	(1,565)
Payment of contingent consideration for acquired business	(358)	(94)
Issuance of shares through share-based compensation plans	289	275
Net cash and cash equivalents used in financing activities	(2,417)	(9,428)
Effect of exchange rate changes on cash and cash equivalents	627	1,065
Net increase (decrease) in cash and cash equivalents	19,846	21,885
Cash and cash equivalents at beginning of period	37,859	44,554
Cash and cash equivalents at end of period	\$57,705	\$66,439
Supplemental disclosure of cash flow information:		
Income taxes paid	\$2,246	\$2,541
Interest paid	\$—	\$1,125

The accompanying notes are an integral part of these financial statements.

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RUDOLPH TECHNOLOGIES, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(In thousands, except per share data)

(Unaudited)

NOTE 1. Basis of Presentation

The accompanying interim unaudited condensed consolidated financial statements have been prepared by Rudolph Technologies, Inc. (the “Company” or “Rudolph”) and in the opinion of management reflect all adjustments, consisting of normal recurring accruals, necessary for their fair presentation in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”). Preparing financial statements requires management to make estimates and assumptions that affect amounts reported in the financial statements and accompanying notes. Actual amounts could differ materially from reported amounts. The interim results for the three and six month periods ended June 30, 2017 are not necessarily indicative of results to be expected for the entire year or any future periods. This interim financial information should be read in conjunction with the financial statements and the notes thereto included in the Company’s Annual Report on Form 10-K for the year ended December 31, 2016 (“2016 10-K”) filed with the Securities and Exchange Commission (“SEC”). The accompanying condensed consolidated balance sheet at December 31, 2016 has been derived from the audited consolidated financial statements included in the 2016 10-K.

Reclassifications

Certain immaterial prior period amounts have been reclassified to conform to the current financial statement presentation.

Recent Accounting Pronouncements

Recently Adopted

Effective January 1, 2017, the Company adopted the Financial Accounting Standards Board (FASB) Accounting Standard Update (ASU) No. 2016-09, “Improvements to Employee Share-Based Payment Accounting.” The standard update simplifies several aspects of the accounting for employee share-based payment transactions, including accounting for income taxes, forfeitures, and statutory withholding requirements, as well as classification in the Condensed Consolidated Statement of Cash Flows. As a result of the adoption, on a prospective basis, the Company recognized \$623 and \$1,295 of excess tax benefits from stock-based compensation as a benefit in our income tax provision for the three and six months ended June 30, 2017, respectively. Historically, these amounts were recorded as additional paid-in capital. Upon adoption, the Company elected to present excess tax benefits to operating cash flows retrospectively to its Condensed Consolidated Statement of Cash Flows for the six months ended June 30, 2016, which resulted in a reclassification of excess tax benefits from stock-based compensation of \$252 from cash flows from financing activities to cash flows from operating activities. The Company elected to change its policy on accounting for forfeitures and account for forfeitures as they occur. As a result of the forfeiture rate policy change, the Company recorded a reduction to retained earnings of \$72 under the modified retrospective approach. Additional amendments to the accounting for income taxes and minimum statutory withholding requirements had no impact on its results of operations.

Effective January 1, 2017, the Company adopted ASU No. 2015-11, “Inventory (Topic 330): Simplifying the Measurement of Inventory.” This simplifies subsequent measurement of inventory by having an entity measure inventory at the lower of cost and net realizable value. Net realizable value is the estimated selling price in the ordinary course of business, less reasonably predictable cost of completion, disposal, and transportation. The adoption of ASU 2015-11 did not have any impact on the Company's consolidated financial position, results of operations, and cash flows.

Recently Issued

In May 2017, the FASB issued ASU No. 2017-09, “Compensation - Stock Compensation (Topic 718): Scope of Modification Accounting.” This ASU amends the scope of modification accounting for share-based payment arrangements and provides guidance on the types of changes to the terms or conditions of share-based payment awards to which an entity would be required to apply modification accounting under ASC 718. The ASU is effective for the fiscal years beginning after December 15, 2019, and interim periods within those fiscal years. The Company is

currently evaluating the effect the adoption of ASU No. 2017-09 will have on its consolidated financial position, results of operations, and cash flows.

In January 2017, the FASB issued ASU No. 2017-04, "Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment." This ASU eliminates Step 2 from the goodwill impairment test. Accordingly, if the carrying amount of a reporting unit exceeds its fair value, an impairment loss will be recognized in an amount equal to the excess, limited to the total amount of goodwill allocated to the reporting unit. The ASU is effective for the fiscal years beginning after

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December 15, 2019, and interim periods within those fiscal years. The Company is currently evaluating the effect the adoption of ASU No. 2017-04 will have on its consolidated financial position, results of operations, and cash flows. In October 2016, the FASB issued ASU No. 2016-16, "Income Tax (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory." This ASU, which is part of the Board's simplification initiative, is intended to reduce the complexity of U.S. GAAP and diversity in practice related to the tax consequences of certain types of intra-entity asset transfers, particularly those involving intellectual property. This ASU is effective for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. The Company is currently evaluating the effect the adoption of ASU No. 2016-16 will have on its consolidated financial position, results of operations, and cash flows. In August 2016, the FASB issued ASU No. 2016-15, "Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments." This ASU provides guidance on statement of cash flows presentation for eight specific cash flow issues where diversity in practice exists. This ASU is effective for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. The Company is currently evaluating the effect the adoption of ASU No. 2016-15 will have on its consolidated financial position, results of operations, and cash flows. In June 2016, the FASB issued ASU No. 2016-13, "Financial Instruments – Credit Losses (Topic 326)," which introduces new guidance for the accounting for credit losses on instruments within its scope. Given the breadth of that scope, the new ASU will impact both financial services and non-financial services entities. The standard is effective for fiscal years beginning after December 15, 2020. The Company is currently evaluating the effect the adoption of ASU No. 2016-13 will have on its consolidated financial position, results of operations, and cash flows. In February 2016, the FASB issued ASU No. 2016-02, "Leases (Topic 842)." The standard requires that lessees will be required to recognize assets and liabilities on the balance sheet for the rights and obligations created by all leases with terms of more than 12 months. ASU No. 2016-02 also will require disclosures designed to give financial statement users information on the amount, timing, and uncertainty of cash flows arising from leases. These disclosures include qualitative and quantitative information. The standard is effective for annual periods, and interim periods within those annual periods, beginning after December 15, 2018 with earlier adoption permitted. The Company is in the process of evaluating the effects the adoption of ASU No. 2016-02 will have on its consolidated financial position, results of operations, and cash flows. In May 2014, the FASB issued ASU No. 2014-09, "Revenue from Contracts with Customers (Topic 606)." ASU No. 2014-09, as amended, outlines a comprehensive revenue recognition model and supersedes most current revenue recognition guidance as amended. In July 2015, the FASB deferred for one year the effective date of the new revenue standard. The standard is effective for annual periods, and interim periods within those annual periods, beginning after December 15, 2017 with earlier adoption permitted. ASU No. 2014-09 allows for two methods of adoption: (a) "full retrospective" adoption, meaning the standard is applied to all periods presented, or (b) "modified retrospective" adoption, meaning the cumulative effect of applying ASU No. 2014-09 is recognized as an adjustment to the 2018 opening retained earnings balance. The Company is in the process of determining the adoption method as well as the effects the adoption of ASU No. 2014-09 will have on its consolidated financial position, results of operations, and cash flows as well as the impact on our internal controls over financial reporting.

NOTE 2. Fair Value Measurements

The Company applies a three-level valuation hierarchy for fair value measurements. This hierarchy prioritizes the inputs into three broad levels. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities. Level 2 inputs are quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the asset or liability. Level 3 inputs are unobservable inputs based on management's assumptions used to measure assets and liabilities at fair value. A financial asset's or liability's fair value measurement classification within the hierarchy is determined based on the lowest level input that is significant to the fair value measurement. The following tables provide the assets and liabilities carried at fair value measured on a recurring basis at June 30, 2017 and December 31, 2016:

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	Carrying Value	Fair Value Measurements Using Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
June 30, 2017				
Assets:				
Available-for-sale debt securities:				
Municipal notes and bonds	\$ 90,403	\$ 90,403	\$ —	\$ —
Corporate bonds	841	—	841	—
Foreign currency forward contracts	94	—	94	—
Total Assets	\$ 91,338	\$ 91,338	\$ —	\$ —
Liabilities:				
Contingent consideration - acquisitions	3,025	—	—	3,025
Total Liabilities	\$ 3,025	\$ —	\$ —	\$ 3,025
December 31, 2016				
Assets:				
Available-for-sale debt securities:				
Municipal notes and bonds	\$ 87,029	\$ 87,029	\$ —	\$ —
Corporate bonds	843	—	843	—
Foreign currency forward contracts	312	—	312	—
Total Assets	\$ 88,184	\$ 88,184	\$ —	\$ —
Liabilities:				
Contingent consideration - acquisitions	3,251	—	—	3,251
Total Liabilities	\$ 3,251	\$ —	\$ —	\$ 3,251

The Company's investments classified as Level 1 are based on quoted market prices that are available in active markets.

The Company's investments classified as Level 2 are valued using observable inputs to quoted market prices, benchmark yields, reported trades, broker/dealer quotes or alternative pricing sources with reasonable levels of price transparency. The foreign currency forward contracts are primarily measured based on the foreign currency spot and forward rates quoted by the banks or foreign currency dealers. Investment prices are obtained from third party pricing providers, which models prices utilizing the above observable inputs, for each asset class.

Level 3 liabilities consisted of contingent consideration related to an acquisition for which the Company uses a discounted cash flow model to value these liabilities. The Level 3 assumptions used in the discounted cash flow model for the contingent consideration included projected revenues, timing of cash flows and estimates of discount rates of 8.6% and 9.1% for the six months ended June 30, 2017 and 2016, respectively. A significant decrease in the projected revenues or increase in discount rates could result in a significantly lower fair value measurement for the contingent consideration.

This table presents a reconciliation for all liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) for the six months ended June 30, 2017:

Table of ContentsFair Value
Measurements
Using
Significant
Unobservable
Inputs
(Level 3)

Balance at December 31, 2016	\$ 3,251
Additions	—
Total loss included in selling, general and administrative expense	132
Payments	(358)
Transfers into (out of) Level 3	—
Balance at June 30, 2017	\$ 3,025

See Note 3 for additional discussion regarding the fair value of the Company's marketable securities.

Fair Value of Other Financial Instruments

The carrying value of cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities approximates fair value because of the short-term maturity of these instruments. The estimated fair value of these obligations is based, primarily, on a market approach, comparing the Company's interest rates to those rates the Company believes it would reasonably receive upon re-entry into the market. Judgment is required to estimate the fair value, using available market information and appropriate valuation methods.

NOTE 3. Marketable Securities

The Company has evaluated its investment policies and determined that all of its investment securities are to be classified as available-for-sale. Available-for-sale securities are carried at fair value, with the unrealized gains and losses reported in Stockholders' equity under the caption "Accumulated other comprehensive loss." Realized gains and losses on available-for-sale securities are included in "Other expense" in the Condensed Consolidated Statements of Operations. The Company records other-than-temporary impairment charges for its available-for-sale investments when it intends to sell the securities, it is more-likely-than not that it will be required to sell the securities before a recovery, or when it does not expect to recover the entire amortized cost basis of the securities. The cost of securities sold is based on the specific identification method.

The Company has determined that the gross unrealized losses on its marketable securities at June 30, 2017 and December 31, 2016 are temporary in nature. The Company reviews its investment portfolio to identify and evaluate investments that have indications of possible impairment. Factors considered in determining whether a loss is other-than-temporary include the length of time and extent to which fair value has been less than the cost basis, credit quality and the Company's ability and intent to hold the investment for a period of time sufficient to allow for any anticipated recovery in market value.

At June 30, 2017 and December 31, 2016, marketable securities are categorized as follows:

	Amortized Cost	Gross Unrealized Holding Gains	Gross Unrealized Holding Losses	Fair Value
June 30, 2017				
Municipal notes and bonds	\$ 90,389	\$ 21	\$ (7)	\$90,403
Corporate bonds	841	—	—	841
Total marketable securities	\$ 91,230	\$ 21	\$ (7)	\$91,244
December 31, 2016				
Municipal notes and bonds	\$ 87,088	\$ 6	\$ (65)	\$87,029
Corporate bonds	842	1	—	843

Total marketable securities \$ 87,930 \$ 7 \$ (65) \$87,872

The amortized cost and estimated fair value of marketable securities classified by the maturity date listed on the security, regardless of the Condensed Consolidated Balance Sheet classification, is as follows at June 30, 2017 and December 31, 2016:

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	June 30, 2017		December 31, 2016	
	Amortized Cost		Amortized Cost	
	Cost	Fair Value	Cost	Fair Value
Due within one year	\$77,592	\$77,601	\$82,498	\$82,445
Due after one through five years	13,638	13,643	5,432	5,427
Due after five through ten years	—	—	—	—
Due after ten years	—	—	—	—
Total marketable securities	\$91,230	\$91,244	\$87,930	\$87,872

The following table summarizes the estimated fair value and gross unrealized holding losses of marketable securities, aggregated by investment instrument and period of time in an unrealized loss position at June 30, 2017 and December 31, 2016:

	Unrealized Loss Position For Less Than 12 Months		Unrealized Loss Position For Greater Than 12 Months	
	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
June 30, 2017				
Municipal notes and bonds	\$26,062	\$ (7)	\$ —	—
Corporate bonds	—	—	—	—
Total	\$26,062	\$ (7)	\$ —	—
December 31, 2016				
Municipal notes and bonds	\$64,918	\$ (65)	\$ —	—
Corporate bonds	—	—	—	—
Total	\$64,918	\$ (65)	\$ —	—

See Note 2 for additional discussion regarding the fair value of the Company's marketable securities.

NOTE 4. Derivative Instruments and Hedging Activities

The Company, when it considers it to be appropriate, enters into forward contracts to hedge the economic exposures arising from foreign currency denominated transactions. At June 30, 2017 and December 31, 2016, these contracts included the future sale of Japanese Yen to purchase U.S. dollars. Derivative instruments are recognized as either "Prepaid expenses and other current assets" or "Other current liabilities" in the Condensed Consolidated Balance Sheets and are measured at fair value. The foreign currency forward contracts were entered into by the Company's Japanese subsidiary to economically hedge a portion of certain intercompany obligations. The forward contracts are not designated as hedges for accounting purposes and decreases in the fair value of \$218 and \$300 for the six month periods ended June 30, 2017 and 2016, respectively, are recorded within the caption "Other expense" in the Condensed Consolidated Statements of Operations.

The dollar equivalent of the U.S. dollar forward contracts and related fair values as of June 30, 2017 and December 31, 2016 were as follows:

	June 30, 2017	December 31, 2016
Notional amount	\$ 3,148	\$ 3,827
Fair value of asset	\$ 94	\$ 312

NOTE 5. Purchased Intangible Assets

Purchased intangible assets as of June 30, 2017 and December 31, 2016 are as follows:

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	Gross Carrying Amount	Accumulated Amortization	Net
June 30, 2017			
Finite-lived intangibles:			
Developed technology	\$ 65,527	\$ 57,790	\$ 7,737
Customer and distributor relationships	9,560	8,670	890
Trade names	4,361	3,725	636
Total identifiable intangible assets	\$ 79,448	\$ 70,185	\$ 9,263
December 31, 2016			
Finite-lived intangibles:			
Developed technology	\$ 65,527	\$ 56,986	\$ 8,541
Customer and distributor relationships	9,560	8,514	1,046
Trade names	4,361	3,675	686
Total identifiable intangible assets	\$ 79,448	\$ 69,175	\$ 10,273

Intangible asset amortization expense for the three and six month periods ended June 30, 2017 was \$505 and \$1,010, respectively. For the three and six month periods ended June 30, 2016, intangible assets amortization expenses was \$595 and \$1,190, respectively. Assuming no change in the gross carrying value of identifiable intangible assets and estimated lives, estimated amortization expense for the remainder of 2017 will be \$923, and for each of the next five years estimated amortization expense amounts to \$1,496 for 2018, \$1,496 for 2019, \$1,294 for 2020, \$546 for 2021, and \$480 for 2022.

NOTE 6. Balance Sheet Details

Inventories

Inventories are comprised of the following:

	June 30, 2017	December 31, 2016
Materials	\$ 34,739	\$ 32,993
Work-in-process	19,862	18,764
Finished goods	12,234	13,728
Total inventories	\$ 66,835	\$ 65,485

The Company has established reserves of \$11,842 and \$10,545 as of June 30, 2017 and December 31, 2016, respectively, for slow moving and obsolete inventory, which are included in the amounts above.

Property, Plant and Equipment

Property, plant and equipment, net is comprised of the following:

	June 30, 2017	December 31, 2016
Land and building	\$ 2,584	\$ 2,584
Machinery and equipment	26,803	23,493
Furniture and fixtures	3,036	2,699
Computer equipment and software	5,682	5,204
Leasehold improvements	8,952	8,116
	47,057	42,096
Accumulated depreciation	(31,966)	(30,238)
Total property, plant and equipment, net	\$ 15,091	\$ 11,858

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Other assets

Other assets is comprised of the following:

	June 30, December 31,	
	2017	2016
Deferred income taxes	\$32,165	\$ 30,850
Other	590	593
Total other assets	\$32,755	\$ 31,443

Other current liabilities

Other current liabilities is comprised of the following:

	June 30, December 31,	
	2017	2016
Intangible asset acquisition - Stella Alliance	\$ 1,000	\$ 1,000
Contingent consideration - acquisitions	634	855
Warrant settlement payable	—	1,025
Customer deposits	983	996
Other	5,105	3,263
Total other current liabilities	\$ 7,722	\$ 7,139

Other non-current liabilities

Other non-current liabilities is comprised of the following:

	June 30, December 31,	
	2017	2016
Unrecognized tax benefits (including interest)	\$4,866	\$ 3,386
Contingent consideration - acquisitions	2,391	2,396
Deferred revenue	1,299	1,132
Other	2,691	2,088
Total other non-current liabilities	\$11,247	\$ 9,002

NOTE 7. Debt Obligations

On July 25, 2011, the Company issued \$60,000 aggregate principal amount of 3.75% Convertible Senior Notes due 2016 (the "Notes") at par. The Notes were issued pursuant to an indenture, dated as of July 25, 2011, between the Company and Bank of New York Mellon Trust Company, N.A., as Trustee, which includes a form of Note. The Notes provided for the payment of interest semi-annually in arrears on January 15 and July 15 of each year, beginning January 15, 2012, at an annual rate of 3.75%. Concurrently with the issuance of the Notes, the Company purchased a convertible note hedge and sold a warrant. Each of the convertible note hedge and warrant transactions were entered into with an affiliate of the initial purchaser of the Notes.

On July 15, 2016, the Company redeemed all of its outstanding 3.75% Convertible Senior Notes with an aggregate principle amount of \$60,000. Under the terms of the indenture, holders of the Notes were paid cash up to the aggregate principal amount of the Notes and were issued shares of common stock for the remainder of the conversion, with any fractional shares paid in cash. The conversion resulted in the issuance of 540 shares of common stock of the Company to the bondholders, but resulted in no dilution to Rudolph shareholders as these shares were covered by the convertible note hedge that was entered into by the Company in 2011 at the time of issuance of the Notes.

The sale of the warrant gave the holder the right to purchase 4,634 shares of Company common stock at a strike price of \$17.00 per share. The warrant had a series of daily expiration dates beginning in October 2016 and ending in January 2017. In 2016, the holder exercised 4,248 warrants, which settled for 80 shares of Company common stock

and \$10,525 payable in cash, of which \$9,500 was paid as of December 31, 2016 and \$1,025 was paid in January 2017, at a weighted average stock price of

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\$19.82 per share. The remaining 386 warrants were exercised in January 2017 by the holder for 102 shares of Company common stock at a weighted average stock price of \$23.13 per share.

The following table presents the amount of interest cost recognized relating to the Notes during the three and six months ended June 30, 2017 and June 30, 2016:

	Three Months Ended June 30, 2017	Six Months Ended June 30, 2016
Contractual interest coupon	\$-563	\$-1,125
Amortization of interest discount	—899	—1,793
Amortization of debt issuance costs	—123	—246
Total interest cost recognized	\$-1,585	\$-3,164

NOTE 8. Commitments and Contingencies

Intellectual Property Indemnification Obligations

The Company has entered into agreements with customers that include limited intellectual property indemnification obligations that are customary in the industry. These guarantees generally require the Company to compensate the other party for certain damages and costs incurred as a result of third party intellectual property claims arising from these transactions. The nature of the intellectual property indemnification obligations prevents the Company from making a reasonable estimate of the maximum potential amount it could be required to pay to its customers. Historically, the Company has not made any indemnification payments under such agreements and no amount has been accrued in the accompanying consolidated financial statements with respect to these indemnification guarantees.

Warranty Reserves

The Company generally provides a warranty on its products for a period of 12 to 15 months against defects in material and workmanship. The Company estimates the costs that may be incurred during the warranty period and records a liability in the amount of such costs at the time revenue is recognized. The Company's estimate is based primarily on historical experience. The Company periodically assesses the adequacy of its recorded warranty liabilities and adjusts the amounts as necessary. Settlements of warranty reserves are generally associated with sales that occurred during the 12 to 15 months prior to the quarter-end and warranty accruals are related to sales during the same year.

Changes in the Company's warranty reserves are as follows:

	Six Months Ended June 30, 2017	2016
Balance, beginning of the period	\$1,788	\$1,894
Accruals	1,659	1,261
Usage	(1,311)	(1,319)
Balance, end of the period	\$2,136	\$1,836

Warranty reserves are reported in the Condensed Consolidated Balance Sheets within the caption "Accounts payable and accrued liabilities."

Legal Matters

From time to time, the Company is subject to legal proceedings and claims in the ordinary course of business. The following reflects an overview of the material activities with regard to these matters through June 30, 2017.

August Technology Corporation and Rudolph Technologies, Inc. v. Camtek, Ltd., No. 11-CV-03707 (MJD/TNL): A lawsuit against Camtek, Ltd. ("Camtek"), of Migdal Hamek, Israel, was filed by the Company on June 1, 2011 alleging

infringement of its U.S. Patent No. 7,729,528 related to its proprietary continuous scan wafer inspection technology. The relief sought in the lawsuit includes the payment of damages and a permanent injunction against any products found to be infringing. Camtek filed an inter

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partes reexamination petition with the U.S. Patent and Trademark Office (the “PTO”) on January 19, 2012 asserting that certain claims of the patent are unpatentable. In the course of this proceeding the PTO issued a final determination that 35 claims of the patent were valid and 18 claims were rejected. The Company appealed the PTO’s rejection of the 18 claims to the US Court of Appeals for the Federal Circuit. On December 22, 2016, the U.S. Court of Appeals for the Federal Circuit reversed the PTO’s rejection of three of the 18 patent claims, affirmed the PTO’s rejection of nine of the 18 patent claims, and dismissed the remaining six patent claims for procedural reasons. Thus, 38 claims are available to be asserted under the ‘528 patent in this lawsuit. During the pendency of the reexamination process, the parties had stipulated that the lawsuit be stayed. With resolution of Camtek’s petition, the stay in the lawsuit has been lifted and the parties are proceeding with litigation.

Rudolph Technologies, Inc. v. Camtek, Ltd., No. 15-CV-1246 (ADM/BRT): On March 12, 2015, the Company filed and served on Camtek a complaint asserting infringement of Rudolph’s U.S. Patent No. 6,826,298 by Camtek’s Eagle product with the U.S. District Court in Minnesota. The ‘6,298 patent is also related to our proprietary continuous scan wafer inspection technology and was the subject of Rudolph’s prior litigation against the Camtek Falcon system (the “Falcon Litigation”) in which Rudolph prevailed with a final judgment of infringement and damages of \$14.6 million assessed against Camtek. The relief sought in the lawsuit includes the payment of damages and a permanent injunction against any products found to be infringing. On April 21, 2015, the Company filed a Motion for Preliminary Injunction to enjoin Camtek’s sale of the Eagle device in the United States. On or about April 20, 2015, Camtek filed a complaint in the U.S. District Court in New Jersey seeking a declaratory judgment challenging the jurisdiction and venue of the Minnesota District Court and seeking to have the New Jersey District Court find that the ‘6,298 patent is not infringed and, in the alternative, that the ‘6,298 patent is invalid. On August 26, 2015, the U.S. District Court in Minnesota ruled that Minnesota jurisdiction was appropriate for this matter while at the same time denying the Company’s Motion for Preliminary Injunction. Camtek’s complaint filed in the U.S. District Court in New Jersey was subsequently dismissed. On August 8, 2016 the Minnesota District Court issued an order regarding motions for partial summary judgment which we had filed in March 2016 granting (i) that the ‘6,298 patent is valid and Camtek is precluded from contesting its validity at trial, and (ii) that the claim constructions adopted in the Falcon Litigation for four terms are entitled to a preclusive effect and will apply in the course of the present litigation. The Minnesota District Court also ruled that three phrases not subject to claim construction in the Falcon Litigation may be defined in the present case. This matter is currently ongoing in the U.S. District Court in Minnesota with no trial date set.

Camtek, Ltd. v. Rudolph Technologies, Inc., No.: 1:17-CV-11127-PBS: On June 19, 2017, Camtek filed with the U.S. District Court in Massachusetts and served on Rudolph a complaint alleging infringement by Rudolph’s NSX product of Camtek’s U.S. Patent No. 6,192,289 related to kerf inspection. The relief sought in the lawsuit includes the payment of damages and a permanent injunction against any products found to be infringing. This newly served matter is currently ongoing in the U.S. District Court in Massachusetts with no trial date set.

Subsequent to the close of the 2017 second quarter, on July 28, 2017, Rudolph and Camtek entered into a Settlement Agreement (the “Agreement”) resolving each of the three litigations referenced above (the “Litigations”). Pursuant to the Agreement, in exchange for a \$13.0 million cash payment from Camtek to be paid to Rudolph, the parties each agreed to dismiss with prejudice and release the other party from all claims, damages and expenses incurred or raised in the Litigations. The parties also mutually agreed not to pursue further legal actions on any of the claims reflected in the patents which were the subject of the Litigations. Further, subject to limited exceptions, Rudolph and Camtek have agreed not to bring suit against each other for a three year period from the date of the Agreement. Each party expressly denies any liability to the other party with respect to any of the Litigations.

Line of Credit

The Company has a credit agreement with a bank that provides for a line of credit which is secured by the marketable securities the Company has with the bank. The Company is permitted to borrow up to 70% of the value of eligible securities held at the time the line of credit is accessed. The available line of credit as of June 30, 2017 was approximately \$86 million with an available interest rate of 2.8%. The credit agreement is available to the Company until such time that either party terminates the arrangement at their discretion. The Company has not utilized the line of credit to date.

NOTE 9. Share-Based Compensation

Restricted Stock Unit Activity

A summary of the Company's nonvested restricted stock unit activity with respect to the six months ended June 30, 2017 is as follows:

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	Number of Shares	Weighted Average Grant Date Fair Value
Nonvested at December 31, 2016	1,136	\$ 12.30
Granted	273	\$ 22.62
Vested	(277)	\$ 11.35
Forfeited	(30)	\$ 12.30
Nonvested at June 30, 2017	1,102	\$ 15.10

Included in the number of shares granted in the table directly above are 38 market performance-based restricted stock units (MPSUs) granted to executives. Vesting of these MPSUs is contingent upon the Company meeting certain total shareholder return (TSR) levels as compared to a select peer group over the next three years. The MPSUs cliff vest at the end of the three-year period and have a maximum potential to vest at 200% (76 shares) based on TSR performance. The related share-based compensation expense is determined based on the estimated fair value of the underlying shares on the date of grant and is recognized straight-line over the vesting term. The estimated fair value per share of the MPSUs was \$25.30 and was calculated using a Monte Carlo simulation model.

As of June 30, 2017 and December 31, 2016, there was \$12,601 and \$8,697 of total unrecognized compensation cost related to restricted stock units granted under the Company's stock plans, respectively. That cost is expected to be recognized over a weighted average period of 2.6 years and 2.7 years for the respective periods.

NOTE 10. Other Expense

	Three Months Ended		Six Months Ended	
	June 30, 2017	June 30, 2016	June 30, 2017	June 30, 2016
Foreign currency exchange losses, net	\$ 166	\$ 192	\$ 435	\$ 299
Total other expense	\$ 166	\$ 192	\$ 435	\$ 299

NOTE 11. Income Taxes

The following table provides details of income taxes:

	Three Months Ended		Six Months Ended	
	June 30, 2017	June 30, 2016	June 30, 2017	June 30, 2016
Income before income taxes	\$ 12,752	\$ 10,593	\$ 22,359	\$ 30,154
Provision for income taxes	\$ 3,559	\$ 2,992	\$ 6,015	\$ 8,614
Effective tax rate	27.9 %	28.2 %	26.9 %	28.6 %

The income tax provision for the three and six months ended June 30, 2017 was computed based on the Company's annual forecast of profit by jurisdiction and forecasted effective tax rate for the year. The changes in the Company's effective tax rate for the three and six months ended June 30, 2017 compared to the same period for the prior year are primarily due to changes in the mix of forecasted earnings by jurisdictions and the recording of excess tax benefits for stock compensation related to the adoption of FASB ASU No. 2016-09.

The Company currently has a partial valuation allowance recorded against certain foreign and state net operating loss and credit carryforwards where the realizability of such deferred tax assets is substantially in doubt. Each quarter, the

Company assesses the likelihood that it will be able to recover its deferred tax assets. The Company considers available evidence, both positive and negative, including forecasted earnings in assessing the need for a valuation allowance. As a result of the Company's analysis, it concluded that it is more likely than not that a portion of its deferred tax assets will not be realized. Therefore, the Company continues to provide a valuation allowance against certain deferred tax assets. The Company continues to monitor

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available evidence and may reverse some or all of the remaining valuation allowance in future periods, if appropriate. The Company has a recorded valuation allowance against certain of its deferred tax assets of \$1,924 as of June 30, 2017 and December 31, 2016.

NOTE 12. Earnings Per Share

Basic earnings per share is calculated using the weighted average number of shares of common stock outstanding during the period. Diluted earnings per share is computed in the same manner and also gives effect to all dilutive common equivalent shares outstanding during the period. Potential common shares that would have the effect of increasing diluted earnings per share are considered to be anti-dilutive. In accordance with U.S. GAAP, these shares were not included in calculating diluted earnings per share.

The following table sets forth the weighted average number of stock options and restricted stock units that have been excluded from the calculation of diluted earnings per share as their effect would have been antidilutive:

	Three Months Ended June 30, 2017		Six Months Ended June 30, 2016	
Stock options	—	4	—	78
Restricted stock units	1	—	13	—
Total	1	4	13	78

The Company's basic and diluted earnings per share amounts are as follows:

	Three Months Ended June 30, 2017		Six Months Ended June 30, 2016	
Numerator:				
Net income	\$9,193	\$7,601	\$16,344	\$21,540
Denominator:				
Basic earnings per share - weighted average shares outstanding	31,501	30,779	31,397	30,869
Effect of potential dilutive securities:				
Employee stock options and restricted stock units - dilutive shares	645	563	704	630
Convertible senior notes - dilutive shares	—	412	—	206
Warrant - dilutive shares	—	—	3	—
Diluted earnings per share - weighted average shares outstanding	32,146	31,754	32,104	31,705
Earnings per share:				
Basic	\$0.29	\$0.25	\$0.52	\$0.70
Diluted	\$0.29	\$0.24	\$0.51	\$0.68

NOTE 13. Accumulated Other Comprehensive Loss

Comprehensive income includes net income, foreign currency translation adjustments, and net unrealized gains and losses on available-for-sale investments. See the Condensed Consolidated Statements of Comprehensive Income for the effect of the components of comprehensive income on the Company's net income.

The components of accumulated other comprehensive loss, net of tax, are as follows:

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	Foreign currency translation adjustments	Net unrealized (gains) losses on available-for-sale investments	Accumulated other comprehensive loss (income)
Beginning Balance, December 31, 2016	\$ 2,742	\$ 37	\$ 2,779
Net current period other comprehensive income	(1,253)	(45)	(1,298)
Reclassifications	—	—	—
Ending balance, June 30, 2017	\$ 1,489	\$ (8)	\$ 1,481

NOTE 14. Segment Reporting and Geographic Information

The Company is engaged in the design, development, manufacture and support of high-performance control metrology, defect inspection, advanced packaging lithography and data analysis systems used by microelectronics device manufacturers. The Company and its subsidiaries currently operate in a single operating segment: the design, development, manufacture and support of high-performance process control defect inspection and metrology, advanced packaging lithography, and process control software systems used by microelectronics device manufacturers, and therefore the Company has one reportable segment. The Company's chief operating decision maker is the Chief Executive Officer. The chief operating decision maker allocates resources and assesses performance of the business and other activities at the reporting segment level.

The following table lists the different sources of revenue:

	Three Months Ended		Six Months Ended	
	June 30, 2017	2016	June 30, 2017	2016
Systems and software:				
Process Control	\$47,711 71 %	\$34,464 55 %	\$91,586 72 %	\$70,922 61 %
Lithography	3,533 5 %	11,480 18 %	3,550 2 %	11,650 10 %
Software	6,895 10 %	7,780 12 %	14,394 11 %	15,202 13 %
Parts	7,348 11 %	5,993 10 %	13,678 11 %	13,153 11 %
Services	1,931 3 %	2,984 5 %	4,889 4 %	6,136 5 %
Total revenue	\$67,418 100 %	\$62,701 100 %	\$128,097 100 %	\$117,063 100 %

For geographical revenue reporting, revenues are attributed to the geographic location in which the product is shipped. Revenue by geographic region is as follows:

	Three Months Ended		Six Months Ended	
	June 30, 2017	2016	June 30, 2017	2016
United States	\$9,182	\$5,646	\$18,190	\$13,034
Taiwan	20,323	14,535	34,156	36,570
Japan	3,468	3,164	6,677	6,101
China	5,904	10,824	20,005	19,649
South Korea	14,221	2,226	23,751	3,849
Singapore	1,945	14,879	5,211	21,926
Other Asia	1,444	1,674	1,559	2,545
Germany	4,789	4,235	7,869	4,932
Other Europe	6,142	5,518	10,679	8,457
Total revenue	\$67,418	\$62,701	\$128,097	\$117,063

The following customers each accounted for more than 10% of total revenues for the indicated periods.

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	Six Months Ended June 30, 2017		2016
Customer A	11.2%	1.6%	%
Customer B	6.0%	13.4%	%
Customer C	0.9%	10.2%	%

NOTE 15. Share Repurchase Authorization

In January 2015, the Board of Directors authorized the Company to repurchase up to 3,000 shares of the Company's common stock with no established end date. The authorization allows for repurchases to be made in the open market or through negotiated transactions from time to time. During the three and six month periods ended June 30, 2017, the Company did not repurchase any shares of common stock pursuant to the share repurchase authorization. At June 30, 2017, there were 711 shares available for future stock repurchases under this repurchase authorization. Shares of common stock purchased under the share repurchase authorization are retired.

The following table summarizes the Company's stock repurchases for the three and six month periods ended June 30, 2017 and 2016, respectively:

	Three Months Ended June 30, 2017	Six Months Ended June 30, 2016
Shares of common stock repurchased	—245	—615
Cost of stock repurchased	\$—3,344	\$—8,045
Average price paid per share	\$—13.63	\$—13.07

NOTE 16. Subsequent Event

Subsequent to June 30, 2017 and through the Company's financial statement issuance date of August 3, 2017, the Company entered into an agreement with Camtek on July 28, 2017 resolving each of the three Litigations discussed further in Note 8, "Commitments and Contingencies", of these Notes to Condensed Consolidated Financial Statements. Pursuant to the Agreement, in exchange for a \$13,000 cash payment from Camtek to be paid to the Company, the parties each agreed to dismiss with prejudice and release the other party from all claims, damages and expenses incurred or raised in the Litigations.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Certain statements in this Quarterly Report on Form 10-Q of Rudolph Technologies, Inc. (the "Company" or "Rudolph") are forward-looking statements, including those concerning our business momentum and future growth, acceptance of our products and services, our ability to deliver both products and services consistent with our customers' demands and expectations and to strengthen our market position, our expectations of the semiconductor market outlook, future revenues, gross profits, research and development and engineering expenses, selling, general and administrative expenses, product introductions, technology development, manufacturing practices, cash requirements, our dependence on certain significant customers and anticipated trends and developments in and management plans for our business and the markets in which we operate, our anticipated revenue as a result of acquisitions, and our ability to be successful in managing our cost structure and cash expenditures and results of litigation. The statements contained in this Quarterly Report on Form 10-Q that are not purely historical are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements may be identified by words such as, but not limited to, "anticipate," "believe," "expect," "intend,"

“plan,” “should,” “may,” “could,” “will” and words or phrases of similar meaning, as they relate to our management or us.

The forward-looking statements contained herein reflect our expectations with respect to future events and are subject to certain risks, uncertainties and assumptions. Actual results may differ materially from those included in such forward-looking statements for a number of reasons including, but not limited to, the following: variations in the level of orders which can be affected by general economic conditions, seasonality and growth rates in the semiconductor manufacturing industry and in the markets served by our customers, the global economic and political climates, difficulties or delays in product functionality or performance, the delivery performance of sole source vendors, the timing of future product releases, failure to respond adequately

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to either changes in technology or customer preferences, changes in pricing by us or our competitors, our ability to manage growth, changes in management, risk of nonpayment of accounts receivable, changes in budgeted costs, our ability to leverage our resources to improve our position in our core markets, our ability to weather difficult economic environments, our ability to open new market opportunities and target high-margin markets, the strength/weakness of the back-end and/or front-end semiconductor market segments, our ability to successfully integrate acquired businesses into our business and fully realize, or realize within the expected time frame, the expected combination benefits from the acquisitions, and the “Risk Factors” set forth in Item 1A in our Annual Report on Form 10-K for the year ended December 31, 2016 (“2016 10-K”) and any subsequently filed Quarterly Reports on Form 10-Q. The forward-looking statements reflect our position as of the date of this report and we undertake no obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

Critical Accounting Policies

The preparation of condensed consolidated financial statements and related disclosures in conformity with accounting principles generally accepted in the United States (“U.S. GAAP”) requires management to make judgments, assumptions and estimates that affect the amounts reported. Certain of these significant accounting policies are considered to be critical accounting policies, as defined below.

A critical accounting policy is defined as one that is both material to the presentation of our condensed consolidated financial statements and requires management to make difficult, subjective or complex judgments that could have a material effect on our financial condition or results of operations. Specifically, these policies have the following attributes: (1) we are required to make judgments and assumptions about matters that are highly uncertain at the time of the estimate; and (2) different estimates we could reasonably have used, or changes in the estimate that are reasonably likely to occur, could have a material effect on our financial position and results of operations.

Estimates and assumptions about future events and their effects cannot be determined with certainty. We base our estimates on historical experience and on various other assumptions believed to be applicable and reasonable under the circumstances. These estimates may change as new events occur, as additional information is obtained and as our operating environment changes. In addition, management is periodically faced with uncertainties, the outcomes of which are not within our control and will not be known for prolonged periods of time. Certain of these uncertainties are discussed in our 2016 10-K in the sections entitled “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations.” Based on a critical assessment of our accounting policies and the underlying judgments and uncertainties affecting the application of those policies, we believe that our condensed consolidated financial statements are fairly stated in accordance with U.S. GAAP, and provide a fair presentation of our financial position and results of operations.

For more information, please see our critical accounting policies as previously disclosed in our 2016 10-K.

See Note 1 to the condensed consolidated financial statements included in this Quarterly Report on Form 10-Q regarding the impact of recent accounting pronouncements on our financial position and results of operations.

Overview

We are a worldwide leader in the design, development, manufacture and support of process control defect inspection and metrology, advanced packaging lithography, and data analysis systems and software used by microelectronic device manufacturers. We provide process and yield management solutions used in both wafer processing and final manufacturing through a family of standalone systems for macro-defect inspection, lithography, probe card test and analysis, and transparent and opaque thin film measurements. All Rudolph systems feature sophisticated software and production-worthy automation. Rudolph systems are backed by worldwide customer support.

Our business is affected by the annual spending patterns of our customers on semiconductor capital equipment. The amount that our customers devote to capital equipment spending depends on a number of factors, including general worldwide economic conditions as well as other economic drivers such as personal computer, tablet, cell phone, other personal electronic devices and automotive sales. Current forecasts by industry analysts for the semiconductor device manufacturing industry project year-over-year increase in capital equipment spending of approximately 8% - 12% for 2017. Our revenues and profitability tend to follow the trends of certain segments within the semiconductor market.

Historically, a significant portion of our revenues in each quarter and year has been derived from sales to relatively few customers, and we expect this trend to continue. For the six month period ended June 30, 2017 and for the years ended December 31, 2016, 2015 and 2014, sales to customers that individually represented at least five percent of our revenues accounted for 29.6%, 34.5%, 23.3%, and 23.9% of our revenues, respectively.

We do not have purchase contracts with any of our customers that obligate them to continue to purchase our products, and they could cease purchasing products from us at any time. A delay in purchase or a cancellation by any of our large customers

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could cause quarterly revenues to vary significantly. In addition, during a given quarter, a significant portion of our revenues may be derived from the sale of a relatively small number of systems, with one customer accounting for 11.2% of our total revenues for the six month period ended June 30, 2017. The following table lists the average selling price for our systems:

System	Average Selling Price Per System
Process Control	\$250,000 to \$1.8 million
Lithography steppers	\$3.0 million to \$8.0 million

A significant portion of our revenues has been derived from customers outside of the United States. A substantial portion of our international sales are denominated in U.S. dollars. We expect that revenues generated from customers outside of the United States will continue to account for a significant percentage of our revenues.

The sales cycle for our systems typically ranges from six to twenty-four months, and can be longer when our customers are evaluating new technology. Due to the length of these cycles, we invest significantly in research and development and sales and marketing in advance of generating revenues related to these investments.

Results of Operations for the Three and Six Month Periods Ended June 30, 2017 and 2016

Revenues. Our revenues are primarily derived from the sale of our systems, services, spare parts and software licensing. Our revenues of \$67.4 million increased 7.5% for the three months ended June 30, 2017 compared to the same period in the prior year when revenues totaled \$62.7 million. For the six month period ended June 30, 2017 and 2016, our revenues totaled \$128.1 million and \$117.1 million, respectively, representing a year-over-year increase of 9.4%.

The following table lists, for the periods indicated, the different sources of our revenues in dollars (thousands) and as percentages of our total revenues:

	Three Months Ended		Six Months Ended					
	June 30,		June 30,					
	2017	2016	2017	2016				
Systems and software:								
Process Control	\$47,711	71 %	\$34,464	55 %	\$91,586	72 %	\$70,922	61 %
Lithography	3,533	5 %	11,480	18 %	3,550	2 %	11,650	10 %
Software	6,895	10 %	7,780	12 %	14,394	11 %	15,202	13 %
Parts	7,348	11 %	5,993	10 %	13,678	11 %	13,153	11 %
Services	1,931	3 %	2,984	5 %	4,889	4 %	6,136	5 %
Total revenue	\$67,418	100%	\$62,701	100%	\$128,097	100%	\$117,063	100%

Total systems and software revenue increased \$11.8 million for the six months ended June 30, 2017 compared to the six months ended June 30, 2016. Process control system revenue increased \$20.7 million for the six months ended June 30, 2017, compared to the same period in the prior year primarily due to higher metrology system sales in the 2017 period. Lithography system revenue decreased \$8.1 million for the six months ended June 30, 2017, compared to the same period in the prior year, primarily due to the shipment of a JetStep G system during the second quarter of 2016. Software revenue decreased slightly for the six months ended June 30, 2017, compared to six months ended June 30, 2016. Systems revenue generated by our latest product releases and major enhancements in each of our product families amounted to 74% and 72% of total revenues for the three and six month periods ended June 30, 2017, compared to 79% and 74% of total revenues for the three and six month periods ended June 30, 2016. The year-over-year decrease in total services revenue for the six months ended June 30, 2017, is primarily due to decreased spending by our customers on system upgrades and repairs of existing systems. Parts and services revenues are generated from part sales, maintenance service contracts, system upgrades, as well as time and material billable service calls.

Deferred revenues of \$11.2 million were recorded in the Condensed Consolidated Balance Sheet within the caption "Deferred revenue" and \$1.3 million were recorded in "Other non-current liabilities" at June 30, 2017. Deferred revenue

primarily consisted of \$5.8 million for deferred maintenance agreements, \$4.5 million for systems awaiting acceptance and \$2.2 million for outstanding deliverables.

Gross Profit. Our gross profit has been and will continue to be affected by a variety of factors, including manufacturing efficiencies, provision for excess and obsolete inventory, pricing by competitors or suppliers, new product introductions, production volume, customization and reconfiguration of systems, international and domestic sales mix, system and software product mix

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and parts and service margins. Our gross profit was \$35.5 million and \$67.3 million for the three and six month periods ended June 30, 2017, compared to \$34.2 million and \$63.2 million for the same periods in the prior year. Our gross profit represented 52.6% of our revenues for both the three and six month periods ended June 30, 2017. For the three and six months ended June 30, 2016, gross profit represented 54.5% and 54.0% of our revenues. The decrease in gross profit as a percentage of revenue for the six month period ended June 30, 2017 compared to the same period in the prior year is primarily due to a change in our product sales mix.

Operating Expenses. Major components of operating expenses include research and development as well as selling, general and administrative expenses.

Research and Development. Our research and development expense was \$12.1 million and \$24.2 million for the three and six month periods ended June 30, 2017, compared to \$11.9 million and \$24.3 million for the same periods in the prior year. Research and development expense represented 18.0% and 18.9% of our revenues for the three and six month periods ended June 30, 2017, compared to 18.9% and 20.8% of revenues for the prior year periods. Research and development expenses decreased for the six month period year-over-year due to decreased litigation expenses, partially offset by increased project and compensation costs.

Selling, General and Administrative. Our selling, general and administrative expense was \$10.1 million and \$19.8 million for the three and six month periods ended June 30, 2017, compared to \$9.5 million and \$19.0 million for the same periods in the prior year. Selling, general and administrative expense represented 15.0% and 15.4% of our revenues for the three and six month periods ended June 30, 2017, compared to 15.1% and 16.2% of our revenues for the same periods in the prior year. The year-over-year dollar increase for the six month period ended June 30, 2017 in selling, general and administrative expense was primarily due to an increase in compensation costs.

Income Taxes. We recorded an income tax provision of \$3.6 million and \$6.0 million for the three and six month periods ended June 30, 2017. Our effective tax rate of 27.9% differs from the statutory rate of 35% for the six month period ended June 30, 2017 primarily due to a projected IRC Section 199 manufacturing deduction, research and development credit and an excess tax benefit for stock compensation related to the adoption of FASB ASU No. 2016-09. For the three and six month periods ended June 30, 2016, we recorded an income tax provision of \$3.0 million and \$8.6 million, respectively.

We currently have a partial valuation allowance recorded for certain foreign and state loss and credit carryforwards where the realizability of such deferred tax assets is substantially in doubt. Each quarter we assess the likelihood that we will be able to recover our deferred tax assets primarily relating to state research and development credits. We consider available evidence, both positive and negative, including historical levels of income, expectations and risks associated with estimates of future taxable income and ongoing prudent and feasible tax planning strategies in assessing the need for a valuation allowance. As a result of our analysis, we concluded that it is more likely than not that a portion of our net deferred tax assets will not be realized. Therefore, we continue to provide a valuation allowance against certain net deferred tax assets. We continue to monitor available evidence and may reverse some or all of the valuation allowance in future periods, if appropriate.

Litigation. As discussed in Part I, Item 3. "Legal Proceedings" of our 2016 10-K and Note 8 in the accompanying condensed consolidated financial statements included in this Quarterly Report on Form 10-Q, we are subject to separate legal proceedings and claims, which include, among other things, our litigation with Camtek, Ltd. ("Camtek").

Liquidity and Capital Resources

At June 30, 2017, we had \$148.9 million of cash, cash equivalents and marketable securities and \$244.9 million in working capital. At December 31, 2016, we had \$125.7 million of cash, cash equivalents and marketable securities and \$226.7 million in working capital.

Operating activities provided \$30.0 million in net cash and cash equivalents for the six month period ended June 30, 2017. The net cash and cash equivalents provided by operating activities during the six month period ended June 30, 2017 was primarily a result of net income, adjusted to exclude the effect of non-cash operating charges of \$24.8 million and an increase in cash provided from operating assets and liabilities of \$5.2 million. Operating activities provided \$12.2 million in net cash and cash equivalents during the six month period ended June 30, 2016 primarily as a result of net income, adjusted to exclude the effect of non-cash operating charges of \$17.1 million, partially offset by a decrease in cash used from operating assets and liabilities of \$4.9 million.

Net cash and cash equivalents used in investing activities during the six month period ended June 30, 2017 of \$8.3 million was due to the purchase of marketable securities of \$62.5 million and capital expenditures of \$5.3 million, partially offset by proceeds from sales of marketable securities of \$59.5 million. Net cash and cash equivalents provided by investing activities during the six month period ended June 30, 2016 of \$18.0 million was due to proceeds from sales of marketable securities of \$90.6 million, partially offset by the purchase of marketable securities of \$70.4 million and capital expenditures of \$2.2 million.

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Net cash and cash equivalents used in financing activities during the six month period ended June 30, 2017 of \$2.4 million was due primarily to tax payments related to shares withheld for share-based compensation plans of \$1.3 million, the redemption of stock warrants of \$1.0 million and payment of contingent consideration for acquired business of \$0.4 million, partially offset by proceeds from sales of shares through share-based compensation plans of \$0.3 million. For the six month period ended June 30, 2016, financing activities used \$9.4 million, due primarily to the repurchase of shares of our common stock of \$8.0 million and tax payments related to shares withheld for share-based compensation plans of \$1.6 million.

From time to time, we evaluate whether to acquire new or complementary businesses, products and/or technologies. We may fund all or a portion of the purchase price of these acquisitions in cash, stock, or a combination of cash and stock.

In January 2015, our Board of Directors authorized the Company to repurchase up to 3.0 million shares of our common stock with no established end date. The authorization allows for repurchases to be made in the open market or through negotiated transactions from time to time. During the six months ended June 30, 2017, no shares of common stock were repurchased. At June 30, 2017, 0.7 million shares remained available for future stock repurchase under this repurchase authorization. Shares of common stock purchased under the share repurchase authorization are being retired. For further information, see Note 15 in the accompanying condensed consolidated financial statements. We have a credit agreement with a bank that provides for a line of credit which is secured by the marketable securities we have with the bank. We are permitted to borrow up to 70% of the value of eligible securities held at the time the line of credit is accessed. The available line of credit as of June 30, 2017 was approximately \$86 million with an available interest rate of 2.8%. The credit agreement is available to us until such time that either party terminates the arrangement at their discretion. To date, we have not utilized this line of credit.

Our future capital requirements will depend on many factors, including the timing and amount of our revenues and our investment decisions, which will affect our ability to generate additional cash. We expect that our existing cash, cash equivalents, marketable securities and availability under our line of credit will be sufficient to meet our anticipated cash requirements for working capital, capital expenditures and other cash needs for the next twelve months. Thereafter, if cash generated from operations and financing activities is insufficient to satisfy our working capital requirements, we may seek additional funding through bank borrowings, sales of securities or other means. There can be no assurance that we will be able to raise any such capital on terms acceptable to us or at all.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

Interest Rate and Credit Market Risk

We are exposed to changes in interest rates and market liquidity including our investments in certain available-for-sale securities. Our available-for-sale securities consist of fixed and variable rate income investments (municipal notes, municipal bonds and corporate bonds). We continually monitor our exposure to changes in interest rates, market liquidity and credit ratings of issuers for our available-for-sale securities. It is possible that we are at risk if interest rates, market liquidity or credit ratings of issuers change in an unfavorable direction. The magnitude of any gain or loss will be a function of the difference between the fixed or variable rate of the financial instrument and the market rate, and our financial condition and results of operations could be materially affected. Based on a sensitivity analysis performed on our financial investments held as of June 30, 2017, an immediate adverse change of 10% in interest rates (e.g. 3.00% to 3.30%) would result in an immaterial decrease in the fair value of our available-for-sale securities and would not have a material impact on our consolidated financial position, results of operations or cash flows.

Foreign Currency Risk

A substantial portion of our systems and software sales are denominated in U.S. dollars with the exception of Japan and, as a result, we have relatively little exposure to foreign currency exchange risk with respect to these sales. Substantially all our sales in Japan are denominated in Japanese yen. From time to time, we may enter into forward exchange contracts to economically hedge a portion of, but not all, existing and anticipated foreign currency denominated transactions expected to occur within 12 months. The change in fair value of the forward contracts is recognized in "Other (income) expense" in the Condensed Consolidated Statements of Operations for each reporting

period. As of June 30, 2017, we had nineteen forward contracts outstanding with a total notional contract value of \$3.1 million. We do not use derivative financial instruments for trading or speculative purposes.

We have branch operations in Taiwan, Singapore and South Korea and wholly-owned subsidiaries in Europe, Japan and China. Our international subsidiaries and branches operate primarily using local functional currencies. A hypothetical 10% appreciation or depreciation in the U.S. dollar relative to the reporting currencies of our foreign operations at June 30, 2017 would have affected the foreign-currency-denominated non-operating expenses of our foreign operations by approximately \$0.8 million. We cannot accurately predict future exchange rates or the overall impact of future exchange rate fluctuations on our business, results of operations and financial condition.

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Item 4. Controls and Procedures

We maintain a set of disclosure controls and procedures, as defined in Rule 13a-15(e) or Rule 15d-15(e) under the Exchange Act, designed to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms and that such information is accumulated and communicated to our management, including our Chief Executive Officer (CEO) and Chief Financial Officer (CFO), as appropriate, to allow for timely decisions regarding required disclosure. The disclosure controls and procedures are designed to provide reasonable assurance of achieving the desired control objectives.

Scope of the Controls Evaluation

The evaluation of our disclosure controls and procedures included a review of the controls' objectives and design, our implementation of the controls and the effect of the controls on the information generated for use in this Quarterly Report on Form 10-Q. In the course of the evaluation, we sought to identify data errors, control problems or acts of fraud and confirm that appropriate corrective actions, if any, including process improvements, were being undertaken. This type of evaluation is performed on a quarterly basis so that the conclusions of management, including the CEO and CFO, concerning the effectiveness of the controls can be reported in our Quarterly Reports on Form 10-Q and in our Annual Reports on Form 10-K. Many of the components of our disclosure controls and procedures are also evaluated on an ongoing basis by other personnel in our accounting, finance, internal audit and legal functions. The overall goals of these various evaluation activities are to monitor our disclosure controls and procedures and to modify them on an ongoing basis as necessary. A control system can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures. Because of inherent limitations in a cost effective control system, misstatements due to error or fraud may occur and not be detected.

Conclusions

As of June 30, 2017, an evaluation of our disclosure controls and procedures was carried out under the supervision and with the participation of our management, including the CEO and CFO. Based on this evaluation, the CEO and CFO have concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of the end of the period covered by this Quarterly Report on Form 10-Q.

Changes in Internal Control over Financial Reporting

There has been no change in our internal control over financial reporting that occurred during the quarter ended June 30, 2017 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II OTHER INFORMATION

Item 1. Legal Proceedings

For a description of our previously reported legal proceedings refer to "Part I, Item 3 - Legal Proceedings" in our 2016 10-K, as updated in Note 8 in the accompanying unaudited condensed consolidated financial statements.

We are party to other ordinary and routine litigation incidental to our business. We do not expect the outcome of any pending litigation to have a material adverse effect on our consolidated financial position or results of operations.

Item 1A. Risk Factors

There have been no material changes to our risk factors discussed in Part I, Item 1A - Risk Factors in our 2016 10-K.

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Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

In January 2015, our Board of Directors authorized the Company to repurchase up to 3,000 thousand shares of our common stock with no established end date. The authorization allows for repurchases to be made in the open market or through negotiated transactions from time to time. During the six months ended June 30, 2017, the Company repurchased no shares of common stock. At June 30, 2017, 711 thousand shares remained available for future stock repurchase under this repurchase authorization. Shares of common stock purchased under the share repurchase authorization are being retired. For further information, see Note 15 in the accompanying condensed consolidated financial statements.

In addition to our share repurchase program, we withhold common stock shares associated with net share settlements to cover tax withholding obligations upon the vesting of restricted stock unit awards under our equity incentive program. During the three and six months ended June 30, 2017, we withheld 3.9 thousand shares and 35.9 thousand shares through net share settlements, respectively. For the three and six month periods ended June 30, 2017 net share settlements cost were \$88.7 thousand and \$815.8 thousand, respectively. Please refer to Note 9 in the accompanying condensed consolidated financial statements for further additional information regarding our share-based compensation plans.

The following table provides details of common stock purchased and withheld during the three month period ended June 30, 2017 (in thousands, except per share data):

Period	Total Number of Shares Purchased and Withheld	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Program	Maximum Number of Shares that May Yet Be Purchased Under the Program
April 1, 2017 - April 30, 2017	3.6	\$ 22.58	—	711
May 1, 2017 - May 31, 2017	0.3	\$ 24.30	—	711
June 1, 2017 - June 30, 2017	—	\$ —	—	711
Three months ended June 30, 2017	3.9	\$ 22.70	—	711

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

None.

Item 5. Other Information

Decision Regarding the Frequency of Future Advisory Votes on Executive Compensation

At the Company's annual meeting of stockholders held on May 17, 2017, the Company held an advisory vote regarding how frequently the Company should conduct an advisory vote on the compensation of our named executive officers. On an advisory basis, the Company's stockholders indicated their preference for the advisory vote on executive compensation to be held annually. In accordance with the voting results for this item, the Company intends to continue to provide stockholders with an annual opportunity to cast a non-binding advisory vote on executive compensation until the next required advisory vote on the frequency of future advisory votes on executive compensation.

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Item 6. Exhibits

Exhibit No.	Description
10.12	Amended form of Restricted Stock Unit Agreement pursuant to the Rudolph Technologies, Inc. 2009 Stock Plan.
31.1	Certification of Michael P. Plisinski, Chief Executive Officer, pursuant to Securities Exchange Act Rule 13a-14(a).
31.2	Certification of Steven R. Roth, Chief Financial Officer, pursuant to Securities Exchange Act Rule 13a-14(a).
32.1	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, signed by Michael P. Plisinski, Chief Executive Officer of Rudolph Technologies, Inc.
32.2	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, signed by Steven R. Roth, Chief Financial Officer of Rudolph Technologies, Inc.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

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SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Rudolph Technologies, Inc.

Date: August 3, 2017 By: /s/ Michael P. Plisinski

Michael P. Plisinski

Chief Executive Officer

Date: August 3, 2017 By: /s/ Steven R. Roth

Steven R. Roth

Senior Vice President, Chief

Financial Officer and

Principal Accounting

Officer

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