RUDOLPH TECHNOLOGIES INC		
Form 10-Q		
July 29, 2016		
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UNITED STATES		
SECURITIES AND EXCHANGE CO	MMISSION	
WASHINGTON, D.C. 20549		
FORM 10-Q		
(Mark		
One) QUARTERLY REPORT F ACT OF 1934	PURSUANT TO SECTION 13 OR 1	15(d) OF THE SECURITIES EXCHANGE
For the Quarterly Period Ended June 3 OR	0, 2016	
TRANSITION REPORT PURSUAN 1934	IT TO SECTION 13 OR 15(d) OF T	THE SECURITIES EXCHANGE ACT OF
For the transition period from to Commission File No. 001-36226		
RUDOLPH TECHNOLOGIES, INC.	in its shouton)	
(Exact name of registrant as specified	in its charter)	
Delaware 22-353	31208	
(State or other jurisdiction of (I.R.S.	Employer	
incorporation or organization) Identif	ication Number)	
16 Jonspin Road, Wilmington, Massac		
(Address of principal executive offices		
Registrant's telephone number, includ	ing area code: (978) 253-6200	
		· 1, 1 (1 11 (1 12 15/1) (
-		uired to be filed by Section 13 or 15(d) of or such shorter period that the Registrant
		equirements for the past 90 days. Yes [X]
	oistrant has submitted electronically	and posted on its corporate Web site, if
· · · · · · · · · · · · · · · · · · ·	-	ant to Rule 405 of Regulation S-T (Section
•	eceding 12 months (or for such short	er period that the registrant was required to
•		in accelerated filer, a non-accelerated filer,
· · · · · · · · · · · · · · · · · · ·	~ · · · · · · · · · · · · · · · · · · ·	", "accelerated filer", and "smaller reporting
company" in Rule 12b-2 of the Security	_	, decelerated filer, and similar reporting
Large accelerated filer Accelerated to	C'11 F XZ	Smaller reporting company
[]	Non-accelerated filer []	[]
	(Do not check if a smaller to company)	reporting
Indicate by check mark whether the re Yes [_] No [X]	* · ·	ed in Rule 12b-2 of the Exchange Act).
The number of outstanding shares of the	he Registrant's Common Stock on J	uly 13, 2016 was 30,940,333.

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PART I FINANCIAL INFORMATION

Item 1. Financial Statements

RUDOLPH TECHNOLOGIES, INC. CONDENSED CONSOLIDATED BALANCE SHEETS

(In thousands)

	June 30, 2016	December 3 2015	31,
	(Unaudited)		
ASSETS			
Current Assets:			
Cash and cash equivalents	\$66,439	\$ 44,554	
Marketable securities	96,661	116,924	
Accounts receivable, less allowance of \$613 and \$713	64,576	55,492	
Inventories, net	70,561	71,490	
Prepaid expenses and other current assets	22,426	8,137	
Total current assets	320,663	296,597	
Property, plant and equipment, net	13,513	12,346	
Goodwill	22,495	22,495	
Identifiable intangible assets, net	11,403	12,593	
Other assets	35,641	35,532	
Total assets	\$403,715	\$ 379,563	
LIABILITIES AND STOCKHOLDERS' EQUITY			
Current liabilities:			
Accounts payable and accrued liabilities	\$ 20,613	\$ 21,466	
Income tax payable	7,157	1,163	
Deferred revenue	8,258	6,441	
Convertible senior notes	59,885	57,846	
Other current liabilities	10,634	12,415	
Total current liabilities	106,547	99,331	
Other non-current liabilities	10,388	9,554	
Total liabilities	116,935	108,885	
Commitments and contingencies			
Stockholders' equity:			
Common stock	31	31	
Additional paid-in capital	388,233	394,928	
Accumulated other comprehensive loss		(2,623)
Accumulated deficit		(121,658)
Total stockholders' equity	286,780	270,678	
Total liabilities and stockholders' equity	\$403,715	\$ 379,563	

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		Six Months Ended		
	Ended		SIX WORKIS ERICC		
	June 30,		June 30,		
	2016	2015	2016	2015	
Revenues	\$62,701	\$59,466	\$117,063	\$112,036	
Cost of revenues	28,508	27,582	53,825	51,186	
Gross profit	34,193	31,884	63,238	60,850	
Operating expenses (income):					
Research and development	11,879	10,507	24,325	20,867	
Selling, general and administrative	9,488	11,033	18,987	24,007	
Amortization	595	515	1,190	1,030	
Patent litigation judgment		_	(14,632)	_	
Total operating expenses	21,962	22,055	29,870	45,904	
Operating income	12,231	9,829	33,368	14,946	
Interest expense, net	1,446	1,385	2,915	2,767	
Other expense (income)	192	(212)	299	426	
Income before income taxes	10,593	8,656	30,154	11,753	
Provision for income taxes	2,992	2,629	8,614	3,878	
Net income	\$7,601	\$6,027	\$21,540	\$7,875	
Earnings per share:					
Basic	\$0.25	\$0.19	\$0.70	\$0.25	
Diluted	\$0.24	\$0.19	\$0.68	\$0.24	
Weighted average shares outstanding:					
Basic	30,779	31,663	30,869	31,724	
Diluted	31,754	32,339	31,705	32,373	

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,		
	2016	2015		2016	2015	
Net income	\$7,601	\$6,027	•	\$21,540	\$7,875	
Other comprehensive income:						
Change in net unrealized losses on investments, net of tax	29	(5)	23	(6)
Change in currency translation adjustments	596	9		1,234	456	
Total comprehensive income	\$8,226	\$6,031		\$22,797	\$8,325	

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)

(Onaudited)	Six Mont June 30,	hs Ended
	2016	2015
Cash flows from operating activities:		
Net income	\$21,540	\$7,875
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	1,833
Amortization of intangibles	1,190	1,030
Depreciation	1,868	1,907
Foreign currency exchange loss	299	426
Change in fair value of contingent consideration	117	(319)
Share-based compensation	2,387	5,430
Provision for doubtful accounts and inventory valuation	2,278	2,521
Litigation settlement	(14,632)	
Changes in operating assets and liabilities		(6,707)
Net cash and cash equivalents provided by operating activities	11,982	13,996
Cash flows from investing activities:		
Purchases of marketable securities		(109,466)
Proceeds from sales of marketable securities	90,599	104,160
Purchases of property, plant and equipment		(1,744)
Net cash and cash equivalents provided by (used in) investing activities	18,014	(7,050)
Cash flows from financing activities:		
Purchases of common stock		(11,197)
Tax payments related to shares withheld for share-based compensation plans	(1,565)	(1,895)
Payment of contingent consideration for acquired business		(141)
Issuance of shares through share-based compensation plans	275	174
Tax benefit for sale of shares through share-based compensation plans	252	36
Net cash and cash equivalents used in financing activities		(13,023)
Effect of exchange rate changes on cash and cash equivalents	1,065	(302)
Net increase (decrease) in cash and cash equivalents	21,885	(6,379)
Cash and cash equivalents at beginning of period	44,554	43,114
Cash and cash equivalents at end of period	\$66,439	\$36,735
Supplemental disclosure of cash flow information:		
Income taxes paid	\$2,541	\$139
Interest paid	\$1,125	\$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, 2016 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, 2015 ("2015 10-K") filed with the Securities and Exchange Commission ("SEC"). The accompanying condensed consolidated balance sheet at December 31, 2015 has been derived from the audited consolidated financial statements included in the 2015 10-K. Reclassifications

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

Debt Issuance Costs:

In the first quarter of 2016, the Company adopted Accounting Standards Update (ASU) No. 2015-03, "Interest - Imputation of Interest (Subtopic 835-30), Simplifying the Presentation of Debt Issuance Costs," which requires entities to present debt issuance costs related to a debt liability as a direct deduction from the carrying amount of that debt liability on the balance sheet as opposed to being presented as a deferred charge. For all periods presented in this Form 10-Q for the quarter ended June 30, 2016, unamortized debt issuance costs related to the Company's convertible senior notes are reported on the Consolidated Balance Sheets as a reduction of the carrying value of the related debt. Prior to adoption, the Company reported the unamortized debt issuance costs in "Other Assets" on the Consolidated Balance Sheets. As of December 31, 2015, the change in presentation resulted in a reduction of "Other Assets" of \$261 and a corresponding decrease in "Convertible Senior Notes" with no impact on the Company's Consolidated Statements of Operations.

Recent Accounting Pronouncements

In June 2016, the Financial Accounting Standards Board (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 in the process of determining the adoption method as well as the effects the adoption of ASU No. 2016-13 will have on its consolidated financial position, results of operations, and cash flows.

In March 2016, the FASB issued ASU No. 2016-09, "Compensation - Stock Compensation (Topic 718), Improvements to Employee Share-Based Payment Accounting". The standard was issued as part of the Simplification Initiative which involves several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. The standard is effective for annual periods beginning after December 15, 2017, and interim periods within annual periods beginning after December 15, 2018. The Company is in the process of determining the adoption method as well as the effects the adoption of ASU No. 2016-09 will have on its consolidated financial position, results of operations, and cash flows.

In March 2016, the FASB issued ASU No. 2016-07, "Investments-Equity Method and Joint Ventures (Topic 323)." The standard was issued as part of the Simplification Initiative which eliminates the requirement that when an investment qualifies for use of the equity method as a result of an increase in the level of ownership interest or degree of

influence, an investor must adjust the investment, results of operations, and retained earnings retroactively on a step-by-step basis as if the equity method has been in effect during all previous periods that the investment had been held. The standard is effective for annual periods, and

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interim periods within those annual periods, beginning after December 15, 2016. The Company is in the process of evaluating the effects the adoption of ASU No. 2016-07 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 January 2016, the FASB issued ASU 2016-01, "Financial Instruments – Overall: Recognition and Measurement of Financial Assets and Financial Liabilities." The pronouncement requires equity investments (except those accounted for under the equity method of accounting, or those that result in consolidation of the investee) to be measured at fair value with changes in fair value recognized in net income, requires public business entities to use the exit price notion when measuring the fair value of financial instruments for disclosure purposes, requires separate presentation of financial assets and financial liabilities by measurement category and form of financial asset, and eliminates the requirement for public business entities to disclose the method(s) and significant assumptions used to estimate the fair value that is required to be disclosed for financial instruments measured at amortized cost. The standard is effective for annual periods, and interim periods within those annual periods, beginning after December 15, 2017. The Company is in the process of evaluating the effects the adoption of ASU No. 2016-01 will have on its consolidated financial position, results of operations, and cash flows.

In July 2015, the FASB issued ASU No. 2015-11, "Inventory (Topic 330), Simplifying the Measurement of Inventory." This ASU is intended to simplify subsequent measurement of inventory. An entity should measure inventory within the scope of this ASU 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 standard is effective for annual periods and interim periods within those annual periods, beginning after December 15, 2016. The adoption of ASU 2015-11 is not expected to have a material effect on the Company's 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 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.

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, 2016 and December 31, 2015:

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	Carrying Value	Fair Value Met Using Quoted Prices in Significant Active Other Markets Observable for Inputs Identical (Level 2) Assets (Level 1)	Significant
June 30, 2016		•	
Assets:			
Available-for-sale debt securities:	¢05 010	¢ ¢05 010	¢
Municipal notes and bonds Corporate bonds	\$95,819 842	\$ -\$ 95,819 842	ф —
Total Assets	\$96,661	\$_\$96,661	•
Liabilities:	\$ 70,001	φ -φ 90,001	φ —
Foreign currency forward contracts	385	\$ -\$ 385	\$ —
Contingent consideration - acquisitions	3,726	——	3,726
Total Liabilities	\$4,111	\$ -\$ 385	\$ 3,726
	,		,
December 31, 2015			
Assets:			
Available-for-sale debt securities:			
Municipal notes and bonds		\$ -\$ 116,089	\$ —
Corporate bonds	835	—835	-
Total Assets	\$116,924	\$ -\$ 116,924	\$ —
Liabilities:	405	Φ ΦΩΞ	Φ.
Foreign currency forward contracts	\$85	\$ -\$ 85	\$ —
Contingent consideration - acquisitions	3,703	Φ Φ Ω Ε	3,703
Total Liabilities	\$3,788	\$ -\$ 85	\$ 3,703

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. Available-for-sale debt securities 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, estimates of discount rates of 9.1% and timing of cash flows. 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, 2016:

Fair Value Measurements Using

	Significant Unobservable Inputs (Level 3)
Balance at December 31, 2015 Additions Total loss included in selling, general and administrative expense Payments Transfers into (out of) Level 3 Balance at June 30, 2016	\$ 3,703 — 117 (94 — \$ 3,726

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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.

The Company's convertible senior notes are not publicly traded. The estimated fair value of the Company's convertible senior notes was valued using a discounted cash flow model. The Level 3 assumptions, based on data available at the valuation date used in preparing the discounted cash flow model, included estimates of interest rates, timing and amount of cash flows and expected holding periods of the convertible senior notes. The fair value of the contingent interest associated with the convertible senior notes is valued quarterly using the present value under an expected cash flow model incorporating the probabilities of the contingent events occurring.

The following table reflects information pertaining to the Company's convertible senior notes:

	June 30,	December 31	,
	2016	2015	
Net carrying value of convertible senior notes	\$59,885	\$ 57,846	
Estimated fair value of convertible senior notes	\$60,996	\$ 60,630	
Estimated interest rate used in discounted cash flow model	5.0 %	5.0	%
Fair value of contingent interest	\$ —	\$ —	

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 (income)" 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, 2016 and December 31, 2015 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, 2016 and December 31, 2015, marketable securities are categorized as follows:

	GIC	OSS	GIO	OSS	
Amortized	Uni	realized	Un	realized	Fair
Cost	Ho	lding	Ho	lding	Value
	Gai	ins	Los	sses	
\$95,796	\$	27	\$	4	\$95,819
841	1				842
\$96,637	\$	28	\$	4	\$96,661
\$116,086	\$	18	\$	15	\$116,089
838			3		835
\$116,924	\$	18	\$	18	\$116,924
	\$95,796 841 \$96,637 \$116,086 838	Amortized Uni Cost Hol Gai \$95,796 \$ 841 1 \$96,637 \$ \$116,086 \$ 838 —	Cost Holding Gains \$95,796 \$ 27 841 1 \$96,637 \$ 28 \$116,086 \$ 18 838 —	Amortized Unrealized Unrealized Cost Holding Gains Los \$95,796 \$ 27 \$ 841 1 \$96,637 \$ 28 \$ \$116,086 \$ 18 \$ 838 \$3	Amortized Unrealized Unrealized Cost Holding Gains Holding Losses \$95,796 \$ 27 \$ 4 841 1 — \$96,637 \$ 28 \$ 4 \$116,086 \$ 18 \$ 15 838 — 3

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, 2016 and December 31, 2015:

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	· · · · · · · · · · · · · · · · · · ·		December 31, 201. AmortizedFair		
	Cost	Value	Cost	Value	
Due within one year	\$87,562	\$87,574	\$113,542	\$113,549	
Due after one through five years	9,075	9,087	3,382	3,375	
Due after five through ten years	_	_	_	_	
Due after ten years	_	_	_	_	
Total marketable securities	\$96,637	\$96,661	\$116,924	\$116,924	

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, 2016 and December 31, 2015:

I Immediand I ass

	Unrealized Loss Position For Less Than 12 Months		Unrealized Loss Position For Greater Than 12 Months			
	Fair Value		oss realized sses	Fair Value	Gros Unre Losse	alized
June 30, 2016						
Municipal notes and bonds	\$21,501	\$	4	\$ <i>-</i>	\$	
Total	\$21,501	\$	4	\$ <i>-</i>	\$	
December 31, 2015						
Municipal notes and bonds	\$52,638	\$	15	\$ 305	\$	1
Corporate bonds	835	3			_	
Total	\$53,473	\$	18	\$ 305	\$	1

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, 2016 and December 31, 2015, 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 \$300 and \$203 for the six month periods ended June 30, 2016 and 2015, respectively, are recorded within the caption "Other expense (income)" 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, 2016 and December 31, 2015 were as follows:

June 30,December 31, 2016 2015 Notional amount \$3,785 \$ 5,423 Fair value of liability \$385 \$ 85

NOTE 5. Purchased Intangible Assets

Purchased intangible assets as of June 30, 2016 and December 31, 2015 are as follows:

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	Gross Carrying Amount	Accumulated Amortization	Net
June 30, 2016			
Finite-lived intangibles:			
Developed technology	\$65,527	\$ 56,074	\$9,453
Customer and distributor relationships	9,560	8,346	1,214
Trade names	4,361	3,625	736
Total identifiable intangible assets	\$79,448	\$ 68,045	\$11,403
December 31, 2015			
Finite-lived intangibles:			
Developed technology	\$65,527	\$ 55,110	\$10,417
Customer and distributor relationships	9,560	8,170	1,390
Trade names	4,361	3,575	786
Total identifiable intangible assets	\$79,448	\$ 66,855	\$12,593

Intangible asset amortization expense for the three and six month periods ended June 30, 2016 was \$595 and \$1,190, respectively. For the three and six month periods ended June 30, 2015, intangible assets amortization expenses was \$515 and \$1,030, respectively. Assuming no change in the gross carrying value of identifiable intangible assets and estimated lives, estimated amortization expense for the remainder of 2016 will be \$1,130, and for each of the next five years estimated amortization expense amounts to \$1,933 for 2017, \$1,496 for 2018, \$1,496 for 2019, \$1,294 for 2020, and \$546 for 2021.

NOTE 6. Balance Sheet Details

Inventories

Inventories are comprised of the following:

June 30, December 31,

2016 2015

Materials \$36,211\$ 39,022 Work-in-process 21,200 18,918 Finished goods 13,150 13,550 Total inventories \$70,561\$ 71,490

The Company has established reserves of \$11,135 and \$8,896 as of June 30, 2016 and December 31, 2015, respectively, for slow moving and obsolete inventory, which are included in the amounts above.

Prepaid expenses and other current assets

Prepaid expenses and other current assets are comprised of the following:

June 30, December 31,

2016 2015

Patent litigation judgment \$14,632 \$ —
Other 7,794 8,137
Total prepaid expenses and other current assets \$22,426 \$ 8,137

Property, Plant and Equipment

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

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	June 30, 2016	December 31, 2015
Land and building	\$2,584	\$ 5,024
Machinery and equipment	24,244	21,683
Furniture and fixtures	2,676	3,414
Computer equipment	5,712	5,304
Leasehold improvements	8,127	7,884
-	43,343	43,309
Less: Accumulated depreciation	29,830	30,963
Total property, plant and equipment, net	\$13,513	\$ 12,346

In February 2016, the Company consolidated its New Jersey locations into its Budd Lake, NJ facility and vacated its corporate offices in Flanders, NJ. The Flanders, NJ corporate office location is classified as an asset held for sale. The Company believes the facility will be sold within the next 12 months and has classified the facility as current assets held for sale in "Prepaid and other assets". Assets held for sale as of June 30, 2016 consist of land with a cost of \$168 and buildings with a cost and net book value of \$3,072 and \$51, respectively.

Other assets

Other

Other assets is comprised of the following:

June 30, December 31, 2016 2015 Deferred income taxes \$35,047 \$ 34,973 594 559

\$35,641 \$ 35,532

Other current liabilities

Total other assets

Other current liabilities is comprised of the following:

June 30, December 31, 2016 2015 \$3,252 \$ 3,252 Litigation accrual Contingent consideration - acquisitions 717 1,407 Other 6,665 7,756 Total other current liabilities \$10,634 \$ 12,415

Other non-current liabilities

Other non-current liabilities is comprised of the following:

June 30, December 31, 2016 2015 Unrecognized tax benefits (including interest) \$2,991 \$ 3,152 Contingent consideration - acquisitions 3,009 2,296 Deferred revenue 1,128 1,206 Other 3,260 2,900 Total other non-current liabilities \$10,388 \$ 9,554

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

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of New York Mellon Trust Company, N.A., as Trustee, which includes a form of Note. The Notes provide 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% and will mature on July 15, 2016, unless earlier converted or repurchased. The Notes may be converted, under certain circumstances, based on an initial conversion rate of 77.241 shares of Company common stock per \$1 principal amount of Notes, which represents an initial conversion price of approximately \$12.95 per share. 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. The convertible note hedge is intended to reduce the potential future dilution to the Company's common stock associated with the conversion of the Notes. However, the warrant transaction will have a dilutive effect on the Company's earnings per share to the extent that the price of the Company's common stock exceeds the strike price of the warrant. The strike price of the warrant is \$17.00 per share subject to adjustment in accordance with the terms of the agreement. The net proceeds to the Company from the sale of the Notes, including the convertible note hedge and warrant, were \$50,249.

The following table reflects the net carrying value of the Notes:

June 30, December 31, 2016 2015

Convertible senior notes \$60,000 \$ 60,000

Less: Unamortized interest discount 100 1,893

Less: Unamortized debt issuance costs 15 261

Net carrying value of convertible senior notes \$59,885 \$ 57,846

The following table presents the amount of interest cost recognized relating to the Notes during the three and six months ended June 30, 2016 and June 30, 2015:

Three Months Six Months Ended June 30. Ended June 30. 2016 2015 2016 2015 \$563 \$563 \$1,125 \$1,125 Contractual interest coupon Amortization of interest discount 899 815 1.793 1.626 Amortization of debt issuance costs 123 246 104 207 Total interest cost recognized \$1,585 \$1,482 \$3,164 \$2,958

The remaining bond discount of \$100 and debt issuance costs of \$15 relating to the Notes, as of June 30, 2016, will be amortized over the remaining life of the Notes.

See Note 16 for additional discussion regarding the Company's subsequent events.

NOTE 8. Commitments and Contingencies

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 year.

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

Six Months Ended June 30, 2016 2015 \$1,894\$1,574

Balance, beginning of the period \$1,894\$1,574 Accruals 1,261 1,300

Less: Usage 1,319 1,051 Balance, end of the period \$1,836\$1,823

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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 Company's 2015 10-K reflects the status of the Company's litigation with Integrated Technology Corporation ("ITC") and Camtek, Ltd. ("Camtek"). The following reflects the material developments during the six months ended June 30, 2016 with regard to these matters.

Integrated Technology Corporation v. Rudolph Technologies, Inc., No. CV-06-2182 (PHX-ROS): This matter is fully resolved with the sole exception of the issue of remanded attorney's fees which were set by the U.S. District Court for the District of Arizona (the "AZ District Court") at \$3,252. A hearing regarding the Company's appeal of this order was held on October 6, 2015 before the U.S. Federal Court of Appeals (the "Court of Appeals"). The Court of Appeals issued a ruling that the award was improperly established, vacated the amount of the award and remanded the matter back to the AZ District Court for a determination of a proper fee award. The Company believes that it has meritorious defenses regarding this issue and intends to continue to vigorously prosecute the matter. The \$3,252 is held in escrow and is recorded in "Prepaid expenses and other current assets" in the Condensed Consolidated Balance Sheet at June 30, 2016. The corresponding liability is recorded under the caption "Other current liabilities" in the Condensed Consolidated Balance Sheet at June 30, 2016. The Company expects this to be the maximum liability reasonably possible for the attorney's fees, excluding interest, for this lawsuit with respect to both the pre-August 2007 and the post-August 2007 tools which were the subject of this action.

August Technology Corporation and Rudolph Technologies, Inc. v. Camtek, Ltd., No. 05-CV-01396 (JRT/FLN): Subsequent to the ruling by the U.S. District Court for the District of Minnesota (the "MN District Court") in the Company's favor that Camtek's Falcon tools continue to infringe the Company's patent under the revised claim construction of the patent determined by the Court of Appeals, the MN District Court, on February 9, 2015, issued an Order granting the Company's Motion for Final Judgment, reinstating the original damages and applying prejudgment interest for a total award of \$14,512. In addition, the MN District Court issued a permanent injunction against Camtek from "making, using, selling and offering to sell any of its Falcon machines and any machines that are colorable imitations thereof in the United States, intended for sale and use within the United States, until the expiration of the '6,298 patent," which is projected to be in 2020. While, in March of 2015, Camtek filed an appeal with the Court of Appeals challenging the MN District Court's ruling, the Court of Appeals denied Camtek's appeal on February 3, 2016, affirming both the infringement ruling and the damages and interest totaling approximately \$14,632 assessed against Camtek by the MN District Court, the payment of which is guaranteed by a supersedeas bond. All of Camtek's rights to appeal the final judgment have now expired. On March 14, 2016 the Company filed its request to the MN District Court to release payment under the bond which was granted by the MN District Court on June 24, 2016. Payment by Camtek is currently being facilitated. The Company recorded the judgment in "Prepaid expenses and other current assets" in the Condensed Consolidated Balance Sheets as of June 30, 2016 as the gain contingency was realized upon completion of the appeal process.

August Technology Corporation and Rudolph Technologies, Inc. v. Camtek, Ltd., No. 10-CV-2202 (MJD/FLN): With regard to the Company's subsequently filed lawsuit against Camtek in the MN District Court alleging infringement of its U.S. Patent No. 7,729,528, this lawsuit continues to be stayed pending resolution of a re-examination petition filed by Camtek with the U.S. Patent and Trademark Office.

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 '6,298 patent by Camtek's Eagle product with the MN District Court. 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 which is currently pending. On or about April 20, 2015, Camtek filed a complaint in the U.S. District Court for the District of New Jersey (the "NJ District Court") seeking a declaratory

judgment challenging the jurisdiction and venue of the Minnesota court and seeking to have the NJ 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 MN District Court 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 NJ District Court was subsequently dismissed. This matter is currently in discovery phase of the litigation.

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 a percentage of the value of the marketable securities held at the time the line of credit is accessed. The Company has not utilized the line of credit to date.

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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, 2016 is as follows:

		Weighted
	Numbe	rAverage
	of	Grant
	Shares	Date Fair
		Value
Nonvested at December 31, 2015	1,169	\$ 11.40
Granted	386	\$ 12.87
Less: Vested	353	\$ 10.78
Less: Forfeited	17	\$ 11.30
Nonvested at June 30, 2016	1,185	\$ 12.06

As of June 30, 2016 and December 31, 2015, there was \$10,314 and \$8,221 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 3.1 years and 2.6 years for the respective periods.

NOTE 10. Other Expense

	Three Months Ended	Six Months Ended		
	June 30,	June 30,		
	2016 2015	2016 2015		
Foreign currency exchange losses (gains), net	\$192 \$(212)	\$299 \$426		
Total other expense (income)	\$192 \$(212)	\$299 \$426		

NOTE 11. Income Taxes

The following table provides details of income taxes:

	Three Mon	ths Ended	Six Months	Ended
	June 30,		June 30,	
	2016	2015	2016	2015
Income before income taxes	\$10,593	\$8,656	\$30,154	\$11,753
Provision for income taxes	\$2,992	\$2,629	\$8,614	\$3,878
Effective tax rate	28.2 %	30.4 %	28.6 %	33.0 %

The income tax provision for the three and six months ended June 30, 2016 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, 2016 compared to the same period for the prior year are primarily due to changes in the mix of forecasted earnings by jurisdictions, additional IRC Section 199 Manufacturing deduction expected to be generated for the year ended December 31, 2016 and the availability of the research and development credit for the full year 2016 as compared to the enactment of the credit in the fourth quarter 2015. 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 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 \$2,205 as of June 30, 2016 and December 31, 2015.

NOTE 12. Earnings Per Share

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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. For the six months ended June 30, 2016, the weighted average number of stock options and restricted stock units excluded from the computation of diluted earnings per share were 78 and 0, respectively. For the six months ended June 30, 2015, the weighted average number of stock options and restricted stock units totaling 260 and 0, respectively, were excluded from the computation of diluted earnings per share. For the six months ended June 30, 2016, diluted earnings per share-weighted average shares outstanding included the effect resulting from assumed conversion of the Notes and warrants. For the six months ended June 30, 2015 diluted earnings per share-weighted average shares outstanding do not include any effect resulting from assumed conversion of the Notes and warrants at June 30, 2016 as their impact was anti-dilutive. The Company's basic and diluted earnings per share amounts are as follows:

Three N	Months	Six Mon	ths
Ended .	June 30,	Ended Ju	ine 30,
2016	2015	2016	2015
\$7,601	\$6,027	\$21,540	\$7,875
30,779	31,663	30,869	31,724
563	676	630	649
412		206	_
31,754	32,339	31,705	32,373
\$0.25	\$0.19	\$0.70	\$0.25
\$0.24	\$0.19	\$0.68	\$0.24
	Ended 3 2016 \$7,601 30,779 563 412 31,754 \$0.25	2016 2015 \$7,601 \$6,027 30,779 31,663 563 676 412 — 31,754 32,339 \$0.25 \$0.19	Ended June 30, Ended June 2016 2015 2016 2016 2015 2016 \$7,601 \$6,027 \$21,540 30,779 31,663 30,869 \$563 676 630 412 — 206 31,754 32,339 31,705 \$0.25 \$0.19 \$0.70

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:

	Foreign	Net unrealized	Accumulated
	currency	gains on	other
	translation	available-for-sale	comprehensive
	adjustments	investments	loss (income)
Beginning Balance, December 31, 2015	\$ 2,623	\$ —	\$ 2,623
Net current period other comprehensive loss (income)	(1,234)	(23)	(1,257)
Reclassifications			
Ending balance, June 30, 2016	\$ 1,389	\$ (23)	\$ 1,366

NOTE 14. Segment Reporting and Geographic Information

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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 Mont					
	June 30	,			June 30,				
	2016		2015		2016		2015		
Systems and Software:									
Process Control	\$34,464	-55	%\$41,870	70	%\$70,922	61	%\$77,931	70	%
Lithography	11,480	18	%3,826	6	%11,650	10	%3,847	3	%
Software	7,780	12	%5,142	9	% 15,202	13	% 12,936	12	%
Parts	5,993	10	%5,796	10	% 13,153	11	%11,451	10	%
Services	2,984	5	%2,832	5	%6,136	5	%5,871	5	%
Total revenue	\$62,701	100	\$59,466	5100	0%\$117,063	3 100	0%\$112,036	5100)%

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 M	onths	Six Months Ended		
	Ended	Ended		is Effaca	
	June 30,		June 30,		
	2016	2015	2016	2015	
United States	\$5,646	\$11,773	\$13,034	\$29,420	
Taiwan	14,535	16,259	36,570	29,588	
Japan	3,164	3,918	6,101	5,232	
China	10,824	858	19,649	6,945	
South Korea	2,226	6,709	3,849	10,240	
Singapore	14,879	8,541	21,926	10,280	
Other Asia	1,674	818	2,545	857	
Germany	4,235	8,970	4,932	16,025	
Other Europe	5,518	1,620	8,457	3,449	
Total revenue	\$62,701	\$59,466	\$117,063	\$112,036	

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

Six Months Ended June 30, 2016 2015 Customer A 13.4% 8.1% Customer B 10.2% 6.4%

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

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negotiated transactions from time to time. During the three and six month periods ended June 30, 2016, the Company repurchased 245 and 615 shares of common stock, respectively, pursuant to the share repurchase authorization. At June 30, 2016, 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, 2016 and 2015, respectively:

Cost of stock repurchased \$3,344 \$4,411 \$8,045 \$11,19 Average price paid per share \$13.63 \$12.17 \$13.07 \$12.01

NOTE 16. Subsequent Events

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 shares of common stock for the remainder of our conversion, with any fracional shares paid in cash. As a result of this redemption, the Company eliminated its debt and will have cash savings in annual interest payments of \$2,250. The conversion resulted in the issuance of 540 shares of common stock to the bondholders, but resulted in no dilution to Rudolph shareholders as these shares were covered by a convertible note hedge that was entered into by the Company in 2011 at the time of issuance of the notes.

See Note 7 for additional discussion regarding the debt obligation of the Company's Convertible Senior Notes.

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 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 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, 2015 ("2015 10-K") and any subsequent 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.

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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 2015 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 2015 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. Results of Operations for the Three and Six Month Periods Ended June 30, 2016 and 2015

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 capital spending to be flat for 2016. Our revenues and profitability tend to follow the trends of certain segments within the semiconductor market. We monitor capital equipment spending through announced capital spending plans by our customers and monthly-published industry data such as the book-to-bill ratio. The book-to-bill ratio is a 3-month running statistic that compares bookings or orders placed with capital equipment suppliers to billings or shipments. A book-to-bill ratio above 1.0 shows that semiconductor device equipment manufacturers are ordering equipment at a pace that exceeds the equipment suppliers' shipments for the period. The 3-month rolling average North American semiconductor equipment book-to-bill ratio was 1.0 for the month of June 2016, a decrease from book-to-bill ratio of 1.2 for the month of March 2016. The book-to-bill ratio was 1.0 for the month of December 2015.

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, 2016 and for the years ended December 31, 2015, 2014 and 2013, sales to customers that individually represented at least five percent of our revenues accounted for 47.2%, 23.3%, 23.9%, and 41.6% 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 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 two customers accounting for 13.4% and 10.2% of our total revenues for the six month period ended June 30, 2016. The following table lists the average selling price for our systems:

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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.

Revenues. Our revenues are primarily derived from the sale of our systems, services, spare parts and software licensing. Our revenues of \$62.7 million increased 5.4% for the three months ended June 30, 2016 compared to the same period in the prior year when revenues totaled \$59.5 million. For the six month period ended June 30, 2016 and 2015, our revenues totaled \$117.1 million and \$112.0 million, respectively, representing a year-over-year increase of 4.5%.

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,					
	2016			2015			2016			2015		
Systems and Software:												
Process Control	\$34,464	55	%	\$41,870	70	%	\$70,922	61	%	\$77,931	70	%
Lithography	11,480	18	%	3,826	6	%	11,650	10	%	3,847	3	%
Software	7,780	12	%	5,142	9	%	15,202	13	%	12,936	12	%
Parts	5,993	10	%	5,796	10	%	13,153	11	%	11,451	10	%
Services	2,984	5	%	2,832	5	%	6,136	5	%	5,871	5	%
Total revenue	\$62,701	100)%	\$59,466	100	%	\$117,063	100)%	\$112,036	100)%

Total systems and software revenue increased \$3.1 million for the six months ended June 30, 2016 compared to the six months ended June 30, 2015. Process control system revenue decreased \$7.0 million for the six months ended June 30, 2016, compared to the same period in the prior year primarily due to lower metrology system sales in the 2016 period. Lithography system revenue increased \$7.8 million for the six months ended June 30, 2016, compared to the same period in the prior year, primarily due to shipment of a JetStep G system during the second quarter of 2016. Software revenue increased \$2.3 million for the six months ended June 30, 2016, compared to six months ended June 30, 2015, primarily due to increased software licensing sales. Systems revenue generated by our latest product releases and major enhancements in each of our product families amounted to 79% and 74% of total revenues for the three and six month periods ended June 30, 2016, compared to 73% and 68% of total revenues for the three and six month periods ended June 30, 2015. The year-over-year increase in total parts and services revenue for the six months ended June 30, 2016, is primarily due to increased 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 \$9.4 million are recorded in the Condensed Consolidated Balance Sheets within the captions "Deferred revenue" and "Other non-current liabilities" at June 30, 2016 and primarily consist of \$2.8 million for outstanding deliverables and \$6.6 million for deferred maintenance agreements.

Gross Profit. Our gross profit has been and will continue to be affected by a variety of factors, including manufacturing efficiencies, excess and obsolete inventory write-offs, pricing by competitors or suppliers, new product introductions, production volume, customization and reconfiguration of systems, international and domestic sales mix, and parts and service margins. Our gross profit was \$34.2 million and \$63.2 million for the three and six month periods ended June 30, 2016, compared to \$31.9 million and \$60.9 million for the same periods in the prior year. Our

gross profit represented 54.5% and 54.0% of our revenues for the three and six month periods ended June 30, 2016, respectively. For the three and six months ended June 30, 2015, gross profit represented 53.6% and 54.3% of our revenues. The decrease in gross profit as a percentage of revenue for the six month period ended June 30, 2016 compared to the same period in the prior year is primarily due to change in product sales mix.

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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 \$11.9 million and \$24.3 million for the three and six month periods ended June 30, 2016, compared to \$10.5 million and \$20.9 million for the same periods in the prior year. Research and development expense represented 18.9% and 20.8% of our revenues for the three and six month periods ended June 30, 2016, compared to 17.7% and 18.6% of revenues for the prior year periods. Research and development expenses increased for the six month period year-over-year due to increased compensation, project costs and litigation fees to defend one patent.

Selling, General and Administrative. Our selling, general and administrative expense was \$9.5 million and \$19.0 million for the three and six month periods ended June 30, 2016, compared to \$11.0 million and \$24.0 million for the same period in the prior year. Selling, general and administrative expense represented 15.1% and 16.2% of our revenues for the three and six month periods ended June 30, 2016, compared to 18.6% and 21.4% of our revenues for the same period in the prior year. The year-over-year dollar decrease for the six month period ended June 30, 2016 in selling, general and administrative expense was primarily due to a decrease in share-based compensation and legal costs.

Other Expense. Our other expense consists of foreign currency exchange losses, net. For the six month period ended June 30, 2016, we recorded other expense of \$0.3 million, compared to other expense of \$0.4 million, for the same period in the prior year. The year-over-year dollar decrease in other expense for the six month period ended June 30, 2016 was primarily due to strengthening of local currencies at our foreign operations compared to the U.S. dollar. Income Taxes. We recorded an income tax provision of \$3.0 million and \$8.6 million, respectively, for the three and six month periods ended June 30, 2016. Our effective tax rate of 28.6% differs from the statutory rate of 35% for the six month period ended June 30, 2016 primarily due to a projected Section 199 manufacturing deduction, additional foreign tax credits generated and the availability of the research and development credit in 2016. For the three and six month periods ended June 30, 2015, we recorded an income tax provision of \$2.6 million and \$3.9 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. During the six months ended June 30, 2016, we recorded income from patent litigation judgment of \$14.6 million in conjunction with the final court ruling in the patent infringement litigation case against Camtek, Ltd. ("Camtek") with the expiration of all opportunities to appeal. As discussed in Part I, Item 3. "Legal Proceedings" of our 2015 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 on-going litigation with ITC and further litigation with Camtek.

Liquidity and Capital Resources

At June 30, 2016, we had \$163.1 million of cash, cash equivalents and marketable securities and \$214.1 million in working capital. At December 31, 2015, we had \$161.5 million of cash, cash equivalents and marketable securities and \$197.3 million in working capital.

Operating activities provided \$12.0 million in net cash and cash equivalents for the six month period ended June 30, 2016. The net cash and cash equivalents provided by operating activities during the six month period ended June 30, 2016 was primarily a result of net income, adjusted to exclude the effect of non-cash operating charges, of \$17.1 million, partially offset by changes in operating assets and liabilities of \$5.1 million. Operating activities provided \$14.0 million in net cash and cash equivalents for the six month period ended June 30, 2015. The net cash and cash

equivalents provided by operating activities during the six month period ended June 30, 2015 was primarily a result of a net income, adjusted to exclude the effect of non-cash operating charges, of \$20.7 million, partially offset by changes in operating assets and liabilities of \$6.7 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. Net cash and cash equivalents used in investing activities during the six month period ended June 30, 2015 of \$7.1 million was due to the purchase of marketable securities of \$109.5 million and capital expenditures of \$1.7 million, partially offset by the proceeds from sales of marketable securities of \$104.2 million.

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Net cash and cash equivalents used in financing activities during the six month period ended June 30, 2016 of \$9.2 million was 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, partially offset by tax benefit and proceeds from sales of shares through share-based compensation plans of \$0.5 million. For the six month period ended June 30, 2015 financing activities used \$13.0 million resulting primarily from the repurchases of shares of our common stock of \$11.2 million and tax payments related to shares withheld for share-based compensation plans of \$1.9 million, partially offset by tax benefit and proceeds from sales of shares through share-based compensation plans of \$0.2 million.

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, 2016, we repurchased 0.6 million shares of common stock. At June 30, 2016, 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 a percentage of the value of the marketable securities held at the time the line of credit is accessed. We have not utilized the line of credit to date.

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.

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 and 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 or secure any such additional funding 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, 2016, 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

We have branch operations in Taiwan, Singapore and South Korea and wholly-owned subsidiaries in Europe, China and Japan. Our international subsidiaries and branches operate primarily using local functional currencies. The intercompany transactions denominated in U.S. dollars appearing on the financial statements of the subsidiaries and branches are remeasured at each quarter-end resulting in gains and losses which are reflected in net income. A hypothetical 10% appreciation or depreciation in the U.S. dollar relative to the reporting currencies of our foreign

operations at June 30, 2016 would have affected the foreign-currency-denominated non-operating expenses of our foreign operations by approximately \$3.5 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.

A substantial portion of our international 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 expense (income)" in the Condensed Consolidated

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Statements of Operations for each reporting period. As of June 30, 2016, we had eleven forward contracts outstanding with a total notional contract value of \$3.8 million. We do not use derivative financial instruments for trading or speculative purposes.

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 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, 2016, 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 period covered by this Quarterly Report on Form 10-Q 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 2015 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 were no material changes to our risk factors discussed in Part I, Item 1A - Risk Factors in our 2015 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 3.0 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, 2016, the Company repurchased approximately 0.6 million shares of common stock. At June 30, 2016, 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.

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, 2016, we withheld 4 thousand and 122 thousand shares through net share settlements, respectively. For the three and six month periods ended June 30, 2016 net share settlements cost \$56 thousand and \$1.6 million, 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 during the three month period ended June 30, 2016 (in thousands, except per share data):

Total

Maximum

			Total	Maximum
			Number of	Number of
	Total	Average	Shares	Shares that
Period	Number of	Price	Purchased	May Yet
	Shares	Paid per	as Part of	Be
	Purchased	Share	Publicly	Purchased
			Announced	Under the
			Program	Program
April 1, 2016 - April 30, 2016	141	\$ 13.45	139	817
May 1, 2016 - May 31, 2016	108	\$ 13.87	106	711
June 1, 2016 - June 30, 2016		\$ <i>—</i>	_	711
Three months ended June 30, 2016	249		245	711

Item 3. Defaults Upon Senior Securities None.

Item 4. Mine Safety Disclosures None.

Item 5. Other Information None.

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	Exhibits
Exhibit No.	Description
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.SCF	I XBRL Taxonomy Extension Schema Document
101.CAI	L XBRL Taxonomy Extension Calculation Linkbase Document
	F XBRL Taxonomy Extension Definition Linkbase Document
	3 XBRL Taxonomy Extension Label Linkbase Document
101.PRE	E 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: July 29, 2016 By: /s/ Michael P. Plisinski

Michael P. Plisinski Chief Executive Officer

Date: July 29, 2016 By: /s/ Steven R. Roth

Steven R. Roth

Senior Vice President, Chief

Financial Officer and Principal Accounting

Officer

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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