

RUDOLPH TECHNOLOGIES INC
Form 10-Q
November 02, 2011

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: September 30, 2011

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. 000-27965

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

Delaware
(State or other jurisdiction of
incorporation or organization)
One Rudolph Road, PO Box 1000, Flanders, New Jersey 07836
(Address of principal executive offices, including zip code)
Registrant's telephone number, including area code: (973) 691-1300

22-3531208
(I.R.S. Employer
Identification Number)

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

Large accelerated filer [] Accelerated filer [X] Non-accelerated filer [] Smaller reporting 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]

The number of outstanding shares of the Registrant's Common Stock on October 20, 2011 was 31,861,941.

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PART I FINANCIAL INFORMATION

Item 1. Financial Statements

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

| | September 30, 2011 (unaudited) | December 31, 2010 |
|---|--------------------------------------|----------------------|
| ASSETS | | |
| Current assets: | | |
| Cash and cash equivalents | \$ 133,114 | \$ 71,120 |
| Marketable securities | 24,662 | 629 |
| Accounts receivable, less allowance of \$271 as of September 30, 2011 and \$306 as of December 31, 2010 | 39,664 | 59,758 |
| Inventories | 57,783 | 52,311 |
| Prepaid expenses and other current assets | 4,840 | 2,711 |
| Total current assets | 260,063 | 186,529 |
| Property, plant and equipment, net | 11,563 | 13,677 |
| Goodwill | 4,492 | 4,492 |
| Identifiable intangible assets, net | 8,239 | 9,571 |
| Other assets | 6,029 | 4,784 |
| Total assets | \$ 290,386 | \$ 219,053 |
| LIABILITIES AND STOCKHOLDERS' EQUITY | | |
| Current liabilities: | | |
| Accounts payable and accrued liabilities | \$ 12,137 | \$ 14,686 |
| Other current liabilities | 10,826 | 12,098 |
| Total current liabilities | 22,963 | 26,784 |
| Convertible senior notes | 45,944 | — |
| Other non-current liabilities | 7,281 | 7,235 |
| Total liabilities | 76,188 | 34,019 |
| Commitments and contingencies | — | — |
| Stockholders' equity: | | |
| Common stock | 32 | 31 |
| Additional paid-in capital | 404,404 | 393,456 |
| Accumulated other comprehensive loss | (1,711 |) (930 |
| Accumulated deficit | (188,527 |) (207,523 |
| Total stockholders' equity | 214,198 | 185,034 |
| Total liabilities and stockholders' equity | \$ 290,386 | \$ 219,053 |

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

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

| | Three Months Ended | | Nine Months Ended | | |
|--------------------------------------|--------------------|----------|-------------------|-----------|---|
| | September 30, | | September 30, | | |
| | 2011 | 2010 | 2011 | 2010 | |
| Revenues | \$41,434 | \$52,323 | \$143,576 | \$141,294 | |
| Cost of revenues | 19,180 | 23,051 | 66,166 | 66,545 | |
| Gross profit | 22,254 | 29,272 | 77,410 | 74,749 | |
| Operating expenses: | | | | | |
| Research and development | 8,275 | 8,327 | 26,720 | 24,654 | |
| Selling, general and administrative | 8,353 | 10,148 | 28,086 | 29,163 | |
| Amortization | 445 | 432 | 1,332 | 1,258 | |
| Total operating expenses | 17,073 | 18,907 | 56,138 | 55,075 | |
| Operating income | 5,181 | 10,365 | 21,272 | 19,674 | |
| Interest income (expense) | (892 |) 43 | (807 |) 123 | |
| Other income (expense) | 1,044 | (902 |) 948 | (151 |) |
| Income before income taxes | 5,333 | 9,506 | 21,413 | 19,646 | |
| Provision for income taxes | 33 | 603 | 2,417 | 2,185 | |
| Net income | \$5,300 | \$8,903 | \$18,996 | \$17,461 | |
| Earnings per share: | | | | | |
| Basic | \$0.17 | \$0.28 | \$0.60 | \$0.56 | |
| Diluted | \$0.16 | \$0.28 | \$0.59 | \$0.56 | |
| Weighted average shares outstanding: | | | | | |
| Basic | 31,829 | 31,365 | 31,700 | 31,245 | |
| Diluted | 32,309 | 31,534 | 32,188 | 31,454 | |

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

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

| | Nine Months Ended September 30, | |
|--|------------------------------------|------------|
| | 2011 | 2010 |
| Cash flows from operating activities: | | |
| Net income | \$ 18,996 | \$ 17,461 |
| Adjustments to reconcile net income to net cash and cash equivalents provided by operating activities: | | |
| Amortization | 1,597 | 1,523 |
| Amortization of convertible note discount and issuance costs | 494 | — |
| Depreciation | 3,178 | 2,753 |
| Foreign currency exchange (gain) loss | (946 |) 151 |
| Share-based compensation | 3,770 | 4,085 |
| Provision for (recovery of) doubtful accounts and inventory valuation | 1,380 | (1,248) |
| Deferred income taxes | 43 | — |
| Change in operating assets and liabilities: | | |
| Accounts receivable | 20,198 | (8,539) |
| Inventories | (6,485 |) (5,641) |
| Prepaid expenses and other assets | (2,919 |) 229 |
| Accounts payable and accrued liabilities | (2,495 |) 6,134 |
| Other current liabilities | (1,389 |) 1,315 |
| Non-current liabilities | 90 | (588) |
| Net cash and cash equivalents provided by operating activities | 35,512 | 17,635 |
| Cash flows from investing activities: | | |
| Purchases of marketable securities | (29,092 |) (7,585) |
| Proceeds from sales of marketable securities | 5,255 | 7,748 |
| Purchases of property, plant and equipment | (1,366 |) (3,242) |
| Purchase of business | — | (849) |
| Net cash and cash equivalents used in investing activities | (25,203 |) (3,928) |
| Cash flows from financing activities: | | |
| Net proceeds from issuance of convertible senior notes | 57,749 | — |
| Proceeds from sale of warrant | 7,007 | — |
| Purchase of convertible note hedge | (14,507 |) — |
| Issuance of shares through share-based compensation plans | 161 | 217 |
| Tax benefit for sale of shares through share-based compensation plans | 555 | — |
| Net cash and cash equivalents provided by financing activities | 50,965 | 217 |
| Effect of exchange rate changes on cash and cash equivalents | 720 | 159 |
| Net increase in cash and cash equivalents | 61,994 | 14,083 |
| Cash and cash equivalents at beginning of period | 71,120 | 57,839 |
| Cash and cash equivalents at end of period | \$ 133,114 | \$ 71,922 |

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

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 only of normal recurring accruals, necessary for their fair presentation in accordance with accounting principles generally accepted in the United States of America. 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 those amounts. The interim results for the three and nine month periods ended September 30, 2011 are not necessarily indicative of results to be expected for the entire year. 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, as amended, for the year ended December 31, 2010 filed with the Securities and Exchange Commission ("SEC").

Recent Accounting Pronouncements

In September 2011, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2011-08, "Intangibles-Goodwill and Other (Topic 350): Testing Goodwill for Impairment." The ASU is to simplify how entities, both public and non public, test goodwill for impairment. The amendments in the ASU permit an entity to first assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount as a basis for determining whether it is necessary to perform the two-step goodwill impairment test described in Topic 350. The more-likely-than-not threshold is defined as having a likelihood of more than 50 percent. This ASU is effective for annual and interim goodwill impairment tests performed for fiscal years beginning after December 15, 2011. The Company does not believe that this guidance will have a material impact on its consolidated financial position, results of operations, or cash flows.

In June 2011, the FASB issued ASU No. 2011-05, "Comprehensive Income (Topic 220): Presentation of Comprehensive Income." The ASU is to improve the comparability, consistency, and transparency of financial reporting and to increase the prominence of items reported in other comprehensive income and to facilitate convergence of U.S. generally accepted accounting principles (GAAP) and International Financial Reporting Standards (IFRS). The FASB decided to eliminate the option to present components of other comprehensive income as part of the statement of changes in stockholders' equity, among other amendments in this ASU. This ASU should be applied retrospectively, and is effective for fiscal years and interim periods within those years, beginning after December 15, 2011. The Company does not believe that this guidance will have a material impact on its consolidated financial position, results of operations, or cash flows, as it is disclosure-only in nature.

In May 2011, the FASB issued ASU No. 2011-04, "Fair Value Measurement (Topic 820): Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRS." The ASU will improve the comparability of fair value measurements presented and disclosed in financial statements prepared in accordance with U.S. GAAP and IFRS. This ASU is effective during interim and annual periods beginning after December 15, 2011. The Company does not believe that this guidance will have a material impact on its consolidated financial position, results of operations, or cash flows, as it is disclosure-only in nature.

In December 2010, the FASB issued amended guidance related to Business Combinations. The amendments affect any public entity that enters into business combinations that are material on an individual or aggregate basis. The amendments specify that if a public entity presents comparative financial statements, the entity should disclose revenue and earnings of the combined entity as though the business combination(s) that occurred during the current year had occurred as of the beginning of the comparable prior annual reporting period only. The amendments also expand the supplemental pro forma disclosures to include a description of the nature and amount of material, nonrecurring pro forma adjustments directly attributable to the business combination included in the reported pro

forma revenue and earnings. The amendments are effective prospectively for business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2010. The amendment did not have a material impact on the Company's consolidated financial position, results of operations or cash flows.

In April 2010, the FASB issued ASU No. 2010-13, "Compensation - Stock Compensation (Topic 718)," which provides guidance on the classification of a share-based payment award as either equity or a liability. A share-based payment award that contains a condition that is not a market, performance, or service condition is required to be classified as a liability. This ASU is effective for fiscal years, and interim periods within those fiscal years, beginning on or after December 15, 2010. The Company

adopted this ASU in the first quarter of 2011 and the adoption of this ASU did not have a material impact on the Company's consolidated financial position, results of operations or cash flows.

In January 2010, the FASB issued ASU No. 2010-06, "Fair Value Measurements and Disclosures (Topic 820) - Improving Disclosures about Fair Value Measurements." This ASU requires new disclosures regarding significant transfers in and out of Levels 1 and 2, and information about activity in Level 3 fair value measurements. In addition, this ASU clarifies existing disclosures regarding input and valuation techniques, as well as the level of disaggregation for each class of assets and liabilities. This ASU was effective for interim and annual reporting periods beginning after December 15, 2009, except for certain Level 3 activity disclosure requirements, which are effective for reporting periods beginning after December 15, 2010. The Company adopted the new guidance in the first quarter of 2010, except for the disclosures related to purchases, sales, issuance and settlements, which became effective on January 1, 2011. The adoption of this guidance, which affects new disclosures only, did not have a material impact on the Company's consolidated financial position, results of operations or cash flows, as it is disclosure-only in nature.

Revenue Recognition for Certain Arrangements with Software Elements and/or Multiple Deliverables

In October 2009, the FASB amended the accounting standards for revenue recognition to remove tangible products containing software components and non-software components that function together to deliver the product's essential functionality from the scope of industry-specific software revenue recognition guidance.

In October 2009, the FASB also amended the accounting standards for multiple-deliverable revenue arrangements to:

- provide updated guidance on how the deliverables in an arrangement should be separated, and how the consideration should be allocated;
- eliminate the use of the residual method and require an entity to allocate revenue using the relative selling price method; and
- require an entity to allocate revenue in an arrangement using estimated selling prices ("ESP") of deliverables if it does not have vendor-specific objective evidence ("VSOE") or third-party evidence ("TPE") of selling price. Valuation terms are defined as follows:
 - » VSOE - the price at which the Company sells the element in a separate stand-alone transaction.
 - » TPE - evidence from the Company or other companies of the value of a largely interchangeable element in a transaction.
 - » ESP - the Company's best estimate of the selling price of an element in a transaction.

The Company adopted this accounting guidance on January 1, 2011. The implementation resulted in additional qualitative disclosures that are included below but did not have a material impact on the Company's consolidated financial position, results of operations or cash flows. The adoption of the new standards did not change the units of accounting for the Company's revenue transactions.

Revenue is recognized provided that there is persuasive evidence of an arrangement, delivery has occurred or services have been rendered, the sales price is fixed or determinable, and collection of the related receivable is reasonably assured. Revenue recognition generally results at the following points: (1) for all transactions where legal title passes to the customer upon shipment, revenue is recognized upon shipment for all products that have been demonstrated to meet product specifications prior to shipment; the portion of revenue associated with certain installation-related tasks is deferred, and that revenue is recognized upon completion of the installation-related tasks; (2) for products that have not been demonstrated to meet product specifications prior to shipment, revenue is recognized at customer technical acceptance; (3) for transactions which have occurred prior to January 1, 2011, revenue for arrangements with multiple elements, such as sales of products that include software and services, was allocated to each element using the residual method based on the fair value of the undelivered items as determined using the prior guidance for revenue arrangements with multiple deliverables. Under the residual method, the amount of revenue allocated to delivered elements equals the total arrangement consideration less the aggregate fair value of any undelivered elements; (4) for transactions occurring on or after January 1, 2011 containing multiple elements, the revenue relating to the undelivered elements is deferred using the relative selling price method utilizing VSOE or estimated sales prices until delivery of the deferred elements. TPE is not typically used to determine selling prices as to limited availability of reliable competitor products' selling prices. The ESP is established considering multiple factors including, but not limited to, gross margin objectives, internal costs and competitor pricing strategies.

Revenues from parts sales are recognized at the time of shipment. Revenue from training and service contracts is recognized ratably over the training period and contract period. A provision for the estimated cost of fulfilling warranty obligations is recorded at the time the related revenue is recognized.

Revenue from software license fees is recognized upon shipment if collection of the resulting receivable is probable, the fee is fixed or determinable, and vendor-specific objective evidence exists to allocate a portion of the total fee to any undelivered

elements of the arrangement. License support and maintenance revenue is recognized ratably over the contract period.

NOTE 2. Business Combinations

Yield Dynamics

On August 11, 2010, the Company announced that it had acquired selected assets of the Yield Dynamics software business from MKS Instruments, headquartered in Andover, Massachusetts. The acquired business has been integrated into the Company's Data Analysis and Review group of product offerings. The impact of the acquisition was not material to the Company's consolidated financial position or results of operations.

NOTE 3. 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 carried at fair value measured on a recurring basis at September 30, 2011 and December 31, 2010:

| | Carrying Value | Fair Value Measurements Using Quoted Prices in Active Markets for Identical Assets (Level 1) | Significant Observable Inputs (Level 2) | Significant Unobservable Inputs (Level 3) |
|--|----------------|--|---|---|
| September 30, 2011 | | | | |
| Available-for-sale debt securities: | | | | |
| Municipal notes and bonds | \$ 24,403 | \$ 24,403 | \$ — | \$ — |
| Auction rate securities | 259 | — | — | 259 |
| Total available-for-sale debt securities | 24,662 | 24,403 | — | 259 |
| Derivatives: | | | | |
| Foreign currency forward contracts | (145) | (145) | — | — |
| Total derivatives | (145) | (145) | — | — |
| Total | \$ 24,517 | \$ 24,258 | \$ — | \$ 259 |
| December 31, 2010 | | | | |
| Available-for-sale debt securities: | | | | |
| U.S. Treasury notes | \$ 362 | \$ 362 | \$ — | \$ — |
| Auction rate securities | 267 | — | — | 267 |
| Total available-for-sale debt securities | 629 | 362 | — | 267 |
| Derivatives: | | | | |
| Foreign currency forward contracts | (163) | (163) | — | — |
| Total derivatives | (163) | (163) | — | — |
| Total | \$ 466 | \$ 199 | \$ — | \$ 267 |

The Company's investments classified as Level 1 are based on quoted prices that are available in active markets. 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. The U.S. Treasury Notes and municipal notes and bonds are measured based on quoted market prices.

Level 2 investments 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. Investment prices are obtained

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from third party pricing providers, which models prices utilizing the above observable inputs, for each asset class. Level 3 investments consist of an auction rate security for which the Company uses a discounted cashflow model to value this investment. This table presents a reconciliation for all assets and liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) for the nine months ended September 30, 2011:

| | Fair Value Measurements Using Significant Unobservable Inputs (Level 3) |
|--|---|
| Balance at December 31, 2010 | \$ 267 |
| Total gains or losses (realized and unrealized) included in: | |
| Accumulated other comprehensive income (loss) | (8) |
| Purchases, sales, issuances, and settlements | — |
| Transfers into (out of) Level 3 | — |
| Balance at September 30, 2011 | \$ 259 |

See Note 4 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 maturity of these instruments. The Company's convertible senior notes are not publicly traded. The carrying amount and fair value of our convertible senior notes was \$45,944 as of September 30, 2011. 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 4. 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 income (expense)." There was no realized gain or loss on available-for-sale securities for both the three and nine months ended September 30, 2011 and September 30, 2010, respectively. 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.

As of September 30, 2011, the Company held one auction-rate security with a fair value of \$259. The underlying asset of the Company's auction-rate security consisted of a municipal bond with an auction reset feature. Due to auction failures in the marketplace, the Company will not have access to these funds unless (a) future auctions occur and are successful, (b) the security is called by the issuer, (c) the Company sells the security in an available secondary market, or (d) the underlying note matures. Currently, there are no active secondary markets. As of September 30, 2011, the Company has recorded a cumulative temporary unrealized impairment loss of \$241 within "Accumulated other comprehensive loss" based upon its assessment of the fair value of this security. The Company believes that this impairment is temporary as it does not intend to sell this security, the Company will not be required to sell this security before recovery, and the Company expects to recover the amortized cost basis of this security.

The Company has determined that the gross unrealized losses on its marketable securities at September 30, 2011 and December 31, 2010 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.

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At September 30, 2011 and December 31, 2010, marketable securities are categorized as follows:

| | Amortized Cost | Gross Unrealized Holding Gains | Gross Unrealized Holding Losses | Fair Value |
|--|----------------|--------------------------------|---------------------------------|-------------|
| September 30, 2011 | | | | |
| Municipal notes and bonds | \$ 24,403 | \$ 7 | \$(7) |) \$ 24,403 |
| Tax-free auction rate securities | 500 | — | (241) |) 259 |
| Total marketable securities | \$ 24,903 | \$ 7 | \$(248) |) \$ 24,662 |
| December 31, 2010 | | | | |
| Treasury notes and obligations of agencies | \$ 359 | \$ 3 | \$— | \$ 362 |
| Tax-free auction rate securities | 500 | — | (233) |) 267 |
| Total marketable securities | \$ 859 | \$ 3 | \$(233) |) \$ 629 |

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 September 30, 2011 and December 31, 2010:

| | September 30, 2011 | | December 31, 2010 | |
|----------------------------------|--------------------|------------|-------------------|------------|
| | Amortized Cost | Fair Value | Amortized Cost | Fair Value |
| Due within one year | \$ 16,488 | \$ 16,489 | \$ 359 | \$ 362 |
| Due after one through five years | 7,506 | 7,505 | — | — |
| Due after five through ten years | 409 | 409 | — | — |
| Due after ten years | 500 | 259 | 500 | 267 |
| Total marketable securities | \$ 24,903 | \$ 24,662 | \$ 859 | \$ 629 |

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 September 30, 2011 and December 31, 2010.

| | In Unrealized Loss Position For Less Than 12 Months | | In Unrealized Loss Position For Greater Than 12 Months | |
|----------------------------------|---|-------------------------|--|-------------------------|
| | Fair Value | Gross Unrealized Losses | Fair Value | Gross Unrealized Losses |
| September 30, 2011 | | | | |
| Municipal notes and bonds | \$ 7,506 | \$(7) | \$— | \$— |
| Tax-free auction rate securities | — | — | 259 | (241) |
| Total | \$ 7,506 | \$(7) | \$ 259 | \$(241) |
| December 31, 2010 | | | | |
| Municipal notes and bonds | \$— | \$— | \$— | \$— |
| Tax-free auction rate securities | — | — | 267 | (233) |
| Total | \$— | \$— | \$ 267 | \$(233) |

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

NOTE 5. 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 September 30, 2011 and December 31, 2010, these contracts included the future sale of Japanese Yen to purchase U.S. dollars. The foreign currency forward contracts were entered into by our Japanese

subsidiary to economically hedge a portion of certain intercompany obligations. The forward contracts are not designated as hedges for accounting purposes and therefore, the change in fair value is recorded in Selling, general and administrative expenses in the Condensed Consolidated Statements of Operations.

The dollar equivalent of the U.S. dollar forward contracts and related fair values as of September 30, 2011 and December 31, 2010 were as follows:

| | September 30, 2011 | December 31, 2010 |
|-------------------------|--------------------|-------------------|
| Notional amount | \$ 3,861 | \$ 2,247 |
| Fair value of liability | \$ 145 | \$ 163 |

The Company evaluated the convertible senior notes, convertible note hedge and warrant under ASC 815, "Derivatives and Hedging" and determined that the conversion feature in the convertible senior notes, convertible note hedge and warrant do not meet the definition of a derivative and are classified as equity transactions. See Note 8 "Debt Obligations" for further discussion regarding the convertible senior notes, convertible note hedge and warrant.

NOTE 6. Identifiable Intangible Assets and Goodwill

Identifiable Intangible Assets

Identifiable intangible assets as of September 30, 2011 and December 31, 2010 are as follows:

| | Gross Carrying Amount | Accumulated Amortization | Net |
|--|-----------------------|--------------------------|----------|
| September 30, 2011 | | | |
| Developed technology | \$ 53,826 | \$ 47,530 | \$ 6,296 |
| Customer and distributor relationships | 7,446 | 6,876 | 570 |
| Trade names | 4,361 | 2,988 | 1,373 |
| Total identifiable intangible assets | \$ 65,633 | \$ 57,394 | \$ 8,239 |
| December 31, 2010 | | | |
| Developed technology | \$ 53,826 | \$ 46,484 | \$ 7,342 |
| Customer and distributor relationships | 7,446 | 6,789 | 657 |
| Trade names | 4,361 | 2,789 | 1,572 |
| Total identifiable intangible assets | \$ 65,633 | \$ 56,062 | \$ 9,571 |

Intangible assets amortization expense for the three and nine months ended September 30, 2011 was \$445 and \$1,332, respectively. For the three and nine months ended September 30, 2010, intangible assets amortization expense was \$432 and \$1,258, respectively. Assuming no change in the gross carrying value of identifiable intangible assets and estimated lives, estimated amortization expense for the remainder of 2011 will be \$425, and for each of the next five years estimated amortization expense amounts to \$1,664 for 2012, \$1,664 for 2013, \$1,405 for 2014, \$1,033 for 2015, and \$925 for 2016.

Goodwill

Goodwill was \$4,492 at both September 30, 2011 and December 31, 2010.

NOTE 7. Balance Sheet Details

Inventories

The following is a summary of the components of inventories:

| | September 30, 2011 | December 31, 2010 |
|-------------------|-----------------------|----------------------|
| Materials | \$ 29,403 | \$ 25,579 |
| Work-in-process | 13,228 | 13,480 |
| Finished goods | 15,152 | 13,252 |
| Total inventories | \$ 57,783 | \$ 52,311 |

The Company has established reserves of \$8,709 and \$7,536 as of September 30, 2011 and December 31, 2010, respectively, for slow moving and obsolete inventory, which are included in the amounts above.

Property, Plant and Equipment

The following is a summary of the components of property, plant and equipment, net:

| | September 30, 2011 | December 31, 2010 |
|--|-----------------------|----------------------|
| Land and building | \$ 4,997 | \$ 4,997 |
| Machinery and equipment | 15,707 | 15,547 |
| Furniture and fixtures | 3,318 | 2,944 |
| Computer equipment | 6,829 | 6,375 |
| Leasehold improvements | 6,330 | 6,314 |
| | 37,181 | 36,177 |
| Accumulated depreciation | (25,618 |) (22,500 |
| Total property, plant and equipment, net | \$ 11,563 | \$ 13,677 |
| Other non-current liabilities | | |

The following is a summary of the components of other non-current liabilities:

| | September 30, 2011 | December 31, 2010 |
|--|-----------------------|-------------------|
| Unrecognized tax benefits (including interest) | \$ 5,002 | \$ 4,831 |
| Other | 2,279 | 2,404 |
| Total other non-current liabilities | \$ 7,281 | \$ 7,235 |

NOTE 8. 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 (the "Indenture"), between the Company and Bank of New York Mellon Trust Company, N.A., as Trustee, which includes a form of Note. The Notes will pay 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 77.2410 shares of Company common stock per \$1,000 principal amount of Notes, which represents an initial conversion price of approximately \$12.95 per share. The net proceeds to the Company from the sale of the Notes, including the convertible note hedge and warrant discussed below, were \$50,249.

The following table reflects the net carrying value of the Notes as of September 30, 2011:

| | September 30, 2011 | December 31, 2010 |
|--|-----------------------|-------------------|
| Convertible senior notes | \$ 60,000 | \$— |
| Less: Unamortized interest discount | (14,056) |) — |
| Net carrying value of convertible senior notes | \$ 45,944 | \$— |

The Notes may be converted at any time prior to the close of business on the business day immediately preceding April 15, 2016, at the option of the holder, upon satisfaction of one or more of the following conditions: 1) during any calendar quarter commencing after September 30, 2011, if the last reported sale price of the Company's common stock for at least 20 trading days (whether or not consecutive) during the period of 30 consecutive trading days ending on the last trading day of the immediately preceding calendar quarter exceeds 130% of the applicable conversion price on each applicable trading day; 2) during the five business day period after any five consecutive trading-day period (the "measurement period") in which the "trading price" (as defined in the Indenture) per \$1,000 principal amount of the Notes for each trading day of such measurement period was less than 98% of the product of the last reported sale price of the Company's common stock and the applicable conversion rate on such trading day; or 3) upon the occurrence of specified corporate events. On and after April 15, 2016 until the close of business on the second scheduled trading day immediately preceding the maturity date of July 15, 2016, holders may convert their notes, in multiples of \$1,000 principal amount, regardless of whether any of the foregoing conditions have been met.

Upon conversion, the Company will deliver to holders in respect of each \$1,000 principal amount of Notes being converted a "settlement amount" equal to the sum of the daily settlement amounts for each of the 40 consecutive trading days during the applicable cash settlement averaging period. The conversion value of each Note will be paid in: 1) cash equal to the principal amount of the Notes to be converted, and 2) to the extent the conversion value exceeds the aggregate principal amount of the Notes being converted, the Company's common stock in respect of the remainder (plus cash in lieu of any fractional shares of common stock). The conversion rate will be subject to adjustment in certain circumstances but will not be adjusted for any accrued and unpaid interest. Upon a "fundamental change" at any time, as defined in the Indenture, the Company will, under certain circumstances, increase the conversion rate for a holder who elects to convert its Notes in connection with a "make whole fundamental change," as defined in the Indenture. In addition, the holders may, subject to certain conditions, require the Company to repurchase for cash all or a portion of their Notes upon a "fundamental change" at a price equal to 100% of the principal amount of the Notes being repurchased plus accrued and unpaid interest, if any.

The Company separately accounts for the liability and equity components of the Notes. The initial debt component of the Notes were valued at \$45,493 based on the present value of the future cash flows using a discount rate of 10%, the Company's assumed borrowing rate at the date of issuance for similar debt instruments without the conversion feature. The equity component was valued at \$14,507. Total issuance costs were \$2,251, of which \$544 was allocated to additional paid-in capital and \$1,707 was allocated to debt issuance costs and will be amortized to interest expense over the term of the Notes.

The following table presents the amount of interest cost recognized relating to the Notes during the nine months ended September 30, 2011.

| | September 30, 2011 |
|-------------------------------------|--------------------|
| Contractual interest coupon | \$ 437 |
| Amortization of interest discount | 451 |
| Amortization of debt issuance costs | 43 |
| Total interest cost recognized | \$ 931 |

The remaining bond discount of the Notes of \$14,056, as of September 30, 2011 will be amortized over the remaining life of the Notes.

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 "Option Counterparty"). 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 will initially be \$17.00 per share. Each of these components is discussed separately below:

Convertible Note Hedge. The Option Counterparty agreed to sell to the Company up to approximately 4,634 shares of the Company's common stock, which is the number of shares initially issuable upon conversion of the Notes in full, at a price of \$12.95 per share. The convertible note hedge transaction will be settled in shares of the Company's common stock (and cash in lieu of fractional shares) and will expire on the earlier of the "second scheduled trading day" (as defined

in the Indenture) prior to the maturity date of the Notes or the last day any of the Notes remain outstanding. Subject to certain terms and conditions, settlement of the convertible note hedge would result in the Company receiving shares of the Company's common stock equivalent to the number of shares that the Company is obligated to deliver to holders of the Notes upon conversion of the Notes.

The Company will not be required to make any cash payments to the Option Counterparty or its affiliates upon the exercise of the options that are a part of the convertible note hedge transaction, but will be entitled to receive from the Option Counterparty a number of shares of Company common stock generally based on the amount by which the market price per share of Company common stock, as measured under the terms of the convertible note hedge transaction, is greater than the strike price of the convertible note hedge transaction during the relevant valuation period under the convertible note hedge transaction. Additionally, if the market price per share of Company common stock, as measured under the terms of the warrant transaction, exceeds the strike price of the warrant during the valuation period at the maturity of the warrant, the Company will owe the Option Counterparty a number of shares of Company common stock in an amount based on the excess of such market price per share of Company common stock over the strike price of the warrant.

The convertible note hedge transaction cost of \$14,507 has been accounted for as an equity transaction.

Warrant. The Company received \$7,007 from the same counterparties from the sale of the warrant to purchase up to approximately 4,634 shares of the Company's common stock at an exercise price of \$17.00 per share. As of September 30, 2011, the warrant had an expected life of 5.3 years and expires between October 13, 2016 and January 9, 2017. At expiration, the Company may, at its option, elect to settle the warrant on a net share basis. As of September 30, 2011, the warrant had not been exercised and remained outstanding.

The fair value of the warrant was initially recorded in equity and continues to be classified as equity.

The convertible note hedge transaction and the warrant transaction are separate transactions entered into by the Company. Holders of the Notes will not have any rights with respect to the convertible note hedge transaction and the warrant transaction.

NOTE 9. Commitments and Contingencies

Warranty Reserves

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

| | Nine Months Ended September 30, | |
|----------------------------------|---------------------------------|----------|
| | 2011 | 2010 |
| Balance, beginning of the period | \$ 1,654 | \$ 700 |
| Accruals | 1,543 | 1,760 |
| Settlements | (1,718) |) (976) |
| Balance, end of the period | \$ 1,479 | \$ 1,484 |

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

Legal Matters

From time to time we are subject to legal proceedings and claims in the ordinary course of business. In December 2007, we completed our acquisition of specific assets and liabilities of the semiconductor division of Applied Precision LLC ("Applied"). As a result of the acquisition, we assumed certain liabilities of Applied including a lawsuit filed by Integrated Technology Corporation ("ITC") against Applied alleging infringement on two of ITC's patents. While this litigation is currently ongoing, the Company believes that it has meritorious defenses and is vigorously defending the action. It is possible that the Company could realize a loss in this matter such that in the event that we are ultimately found liable, damage estimates related to this case, which have not been accrued for as of September 30, 2011, range from approximately \$25 thousand to \$9 million, depending on multiple factors presented by the parties. A trial date of December 6, 2011 has been set.

In Rudolph's patent infringement suit against Camtek, Ltd., of Migdal Hamek, Israel, concerning Rudolph's proprietary continuous scan wafer inspection technology, the U.S. Federal Court of Appeals issued a ruling on August 22, 2011. In its opinion, the Appellate Court affirmed multiple rulings from trial at the District Court level including (i) finding Rudolph's U.S. Patent No. 6,826,298 valid, (ii) the part of the infringement ruling based on the finding that Camtek's Falcon product strobes "based on velocity," and (iii) the dismissal of Camtek's claim against Rudolph for inequitable conduct against the U.S. Patent and Trademark

Office. The court did, however, revise one claim construction ruling made by the District Court in the original case. As a result, the Appellate Court set aside the verdict delivered by the jury for damages and the District Court's decision to enter an injunction against selling Falcon tools in the U.S. and remanded the case back to the trial court for a limited trial on this the single infringement issue. No trial date has been set for this limited trial. This lawsuit was initially brought in 2005 by August Technology prior to its merger with Rudolph.

NOTE 10. Share-Based Compensation

Restricted Stock Unit Activity

A summary of the Company's nonvested restricted stock unit activity with respect to the nine month period ended September 30, 2011 is as follows:

| | Number of Shares | Weighted Average Grant Date Fair Value |
|---------------------------------|------------------|--|
| Nonvested at December 31, 2010 | 1,455 | \$7.28 |
| Granted | 535 | \$10.25 |
| Vested | (430) |) \$8.45 |
| Forfeited | (74) |) \$6.93 |
| Nonvested at September 30, 2011 | 1,486 | \$8.03 |

As of September 30, 2011 and December 31, 2010, there was \$7,650 and \$6,215 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 2.5 years and 2.0 years for the respective periods.

NOTE 11. Other Income (Expense)

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|----------------------------------|---------|---------------------------------|---------|
| | 2011 | 2010 | 2011 | 2010 |
| Foreign currency exchange gains (losses), net | \$1,044 | \$(902) | \$948 | \$(151) |
| Total other income (expense) | \$1,044 | \$(902) | \$948 | \$(151) |

NOTE 12. Income Taxes

The following table provides details of income taxes:

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|----------------------------|----------------------------------|---------|---------------------------------|----------|
| | 2011 | 2010 | 2011 | 2010 |
| Income before income taxes | \$5,333 | \$9,506 | \$21,413 | \$19,646 |
| Provision for income taxes | \$33 | \$603 | \$2,417 | \$2,185 |
| Effective tax rate | 0.6 | % 6.3 | % 11.3 | % 11.1 |

The income tax provision for the three and nine months ended September 30, 2011 was computed based on the Company's annual forecast of profit by jurisdiction and forecasted effective tax rate for the year. For the three and nine months ended September 30, 2011, the Company's provision for income taxes was less than the federal statutory tax rate primarily due to forecasted utilization of federal credit carryforwards in the current year against which a full valuation allowance had previously been recorded. The change in the Company's effective tax rate for the three and nine months ended September 30, 2011 compared to September 30, 2010 is primarily due to changes in the mix of its pretax income between U.S. and foreign tax jurisdictions.

The Company currently has a valuation allowance recorded against its deferred tax assets. 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 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 the Company's analysis, it concluded that it is more likely than not that substantially all of its net deferred tax assets will not be

realized. Therefore, the Company continues to provide a valuation allowance against its net deferred tax assets. The Company continues to closely monitor available evidence and may reverse some or all of the valuation allowance in future periods, if appropriate. The Company has valuation allowances of \$35,825 as of September 30, 2011.

In the normal course of business, the Company is subject to examination by taxing authorities throughout the world. The Company is currently under a federal income tax examination by the Internal Revenue Service for the tax years ended December 31, 2007 through December 31, 2009. The Company is not under income tax examination by any state, local or foreign tax authority for any open tax year beginning after December 31, 2005.

NOTE 13. Comprehensive Income

The difference between net income and comprehensive income for the Company is due to currency translation adjustments and unrealized gains on investments.

The components of comprehensive income are as follows:

| | Three Months Ended | | Nine Months Ended | |
|--|--------------------|---------|-------------------|----------|
| | September 30, | | September 30, | |
| | 2011 | 2010 | 2011 | 2010 |
| Net income | \$5,300 | \$8,903 | \$18,996 | \$17,461 |
| Change in net unrealized losses on investments, net of tax | (5) | 26 | (11) | 42 |
| Change in currency translation adjustments | (942) | 951 | (770) | 454 |
| Total comprehensive income | \$4,353 | \$9,880 | \$18,215 | \$17,957 |

NOTE 14. 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 antidilutive. In accordance with U.S. GAAP, these shares were not included in calculating diluted earnings per share. For the three and nine months ended September 30, 2011, the weighted average number of stock options and restricted stock units excluded from the computation of diluted earnings per share were 1,714 and 1,640, respectively, because their effect was antidilutive. For the three and nine months ended September 30, 2010, the weighted average number of stock options and restricted stock units excluded from the computation of diluted earnings per share were 2,469 and 2,554, respectively, because their effect was antidilutive. Diluted earnings per share-weighted average shares outstanding do not include any effect resulting from assumed conversion of the Notes and warrants (as described in Note 8) as their impact would be anti-dilutive.

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

| | Three Months Ended | | Nine Months Ended | |
|---|--------------------|---------|-------------------|----------|
| | September 30, | | September 30, | |
| | 2011 | 2010 | 2011 | 2010 |
| Numerator: | | | | |
| Net income | \$5,300 | \$8,903 | \$18,996 | \$17,461 |
| Denominator: | | | | |
| Basic earnings per share -weighted average shares outstanding | 31,829 | 31,365 | 31,700 | 31,245 |
| Effect of potential dilutive securities: | | | | |
| Employee stock options and restricted stock units - dilutive shares | 480 | 169 | 488 | 209 |
| Diluted earnings per share -weighted average shares outstanding | 32,309 | 31,534 | 32,188 | 31,454 |
| Earnings per share: | | | | |
| Basic | \$0.17 | \$0.28 | \$0.60 | \$0.56 |
| Diluted | \$0.16 | \$0.28 | \$0.59 | \$0.56 |

NOTE 15. Segment Reporting and Geographic Information

The Company has one reportable segment. Operating segments are business units that have separate financial information and are separately reviewed by the Company's chief decision maker. The Company's chief decision maker is the Chief Executive Officer. The Company is engaged in the design, development, and manufacture of high-performance control metrology, defect inspection and data analysis systems used by semiconductor device manufacturers. The Company and its subsidiaries currently operate in a single reportable segment: the design, development, manufacture, sale and service of process control systems used in semiconductor device manufacturing. The chief 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 September 30, 2011 | | | 2010 | | | Nine Months Ended September 30, 2011 | | | 2010 | | |
|------------------------|---|-----|---|----------|-----|---|--|-----|---|-----------|-----|---|
| | Systems and Software: | | | | | | | | | | | |
| Inspection | \$21,102 | 51 | % | \$27,135 | 52 | % | \$72,054 | 50 | % | \$80,509 | 57 | % |
| Metrology | 5,892 | 14 | % | 11,843 | 23 | % | 27,235 | 19 | % | 23,630 | 17 | % |
| Data Analysis & Review | 6,048 | 15 | % | 5,627 | 11 | % | 18,199 | 13 | % | 13,405 | 10 | % |
| Parts | 5,461 | 13 | % | 4,856 | 9 | % | 17,291 | 12 | % | 15,302 | 11 | % |
| Services | 2,931 | 7 | % | 2,862 | 5 | % | 8,797 | 6 | % | 8,448 | 5 | % |
| Total revenue | \$41,434 | 100 | % | \$52,323 | 100 | % | \$143,576 | 100 | % | \$141,294 | 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 September 30, 2011 | | 2010 | | Nine Months Ended September 30, 2011 | | 2010 | |
|---------------|---|----------|----------|---------|--|----------|-----------|----------|
| | United States | \$13,387 | | \$8,389 | | \$38,489 | | \$25,353 |
| Taiwan | 3,104 | | 5,993 | | 21,637 | | 41,495 | |
| Japan | 2,553 | | 2,194 | | 8,833 | | 5,502 | |
| China | 999 | | 9,701 | | 9,316 | | 17,157 | |
| South Korea | 5,361 | | 7,458 | | 19,271 | | 14,374 | |
| Other Asia | 5,072 | | 9,931 | | 14,878 | | 20,275 | |
| Austria | 7,048 | | 69 | | 13,714 | | 593 | |
| Germany | 2,108 | | 4,087 | | 11,235 | | 7,651 | |
| Other Europe | 1,802 | | 4,501 | | 6,203 | | 8,894 | |
| Total revenue | \$41,434 | | \$52,323 | | \$143,576 | | \$141,294 | |

Customers comprising 10% or more of revenue:

| | Nine Months Ended September 30, 2011 | | 2010 | |
|------------|---|------|------|-----|
| | Customer A | 14.8 | % | 3.0 |
| Customer B | 10.7 | % | 16.1 | % |
| Customer C | 10.4 | % | 7.2 | % |

NOTE 16. Share Repurchase Program

In July 2008, the Board of Directors authorized a share repurchase program of up to 3,000 shares of the Company's common stock. As of the time of filing this Quarterly Report on Form 10-Q, the Company has not purchased any shares under this program.

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

Certain statements in this Quarterly Report on Form 10-Q are forward looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Forward looking statements may be identified by the words "anticipate," "believe," "expect," "intend," "will," and similar expressions, as they relate to us or our management. These statements include, without limitation, the statement that we believe that our existing cash, cash equivalents and marketable securities will be sufficient to meet our anticipated cash requirements for working capital and capital expenditures for the next twelve months.

The forward looking statements contained herein reflect our current views with respect to future events and are subject to certain risks, uncertainties and assumptions. Actual results may differ materially from those projected in such forward looking statements due to a number of factors, risks and uncertainties, including the risk factors set forth in our Annual Report on Form 10-K, as amended, for the year ended December 31, 2010. We disclaim any obligation to update any forward looking statements as a result of developments occurring after the date of this Quarterly Report, other than 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 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. These changes have been included in the condensed consolidated financial statements as soon as they became known. In addition, management is periodically faced with uncertainties, the outcomes of which are not within its control and will not be known for prolonged periods of time. Certain of these uncertainties are discussed in our Annual Report on Form 10-K, as amended, for the year ended December 31, 2010 and in our Quarterly Reports on Form 10-Q filed with the SEC, in each case 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, management believes that our condensed consolidated financial statements are fairly stated in accordance with accounting principles generally accepted in the United States of America, 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 2010 Annual Report on Form 10-K, as amended.

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

Results of Operations for the Three and Nine Month Periods Ended September 30, 2011 and 2010

We are a worldwide leader in the design, development, manufacture and support of high-performance defect inspection, process control metrology and data analysis systems used by semiconductor device manufacturers. We provide yield management solutions used in both wafer processing and final manufacturing through a family of standalone systems for both macro-defect inspection and transparent and opaque thin film measurements. All of these systems feature production-worthy automation and are backed by worldwide customer support.

On August 11, 2010, we announced that we had acquired selected assets of the Yield Dynamics software business ("YDI") from MKS Instruments, headquartered in Andover, Massachusetts. The acquired business has been integrated into our Data Analysis

and Review group of product offerings. The impact of the acquisition was not material to our consolidated financial position or results of operations.

Rudolph's 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 and other personal electronic device sales. Current forecasts by industry analysts for the semiconductor device manufacturing industry are similar year-over-year capital spending plus or minus 5% for 2011. 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 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 0.8 for the month of September 30, 2011, a decrease from the December 2010 book-to-bill ratio of 0.9.

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 nine month period ended September 30, 2011 and for the years ended December 31, 2010, 2009 and 2008, sales to customers that individually represented at least five percent of our revenues accounted for 44.1%, 44.4%, 44.8%, and 36.3% 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 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. Our macro-defect inspection and probe card and test analysis systems range in average selling price from approximately \$250,000 to \$1.7 million per system, our transparent film measurement systems range in average selling price from approximately \$250,000 to \$1.0 million per system and our opaque film measurement systems range in average selling price from approximately \$1.0 million to \$2.0 million per system.

A significant portion of our revenues has been derived from customers outside of the United States. We expect that revenues generated from customers outside of the United States will continue to account for a significant percentage of our revenues. The following table lists, for the periods indicated, the revenue derived from customers outside of the United States (in percentages of total revenues):

| | Nine Months Ended | Years Ended December 31, | | | |
|-----------------------------|-------------------|--------------------------|--------|--------|---|
| | September 30, | 2010 | 2009 | 2008 | |
| Asia | 51.5 | % 65.7 | % 60.8 | % 57.0 | % |
| Europe | 21.7 | % 11.1 | % 11.6 | % 19.5 | % |
| Total international revenue | 73.2 | % 76.8 | % 72.4 | % 76.5 | % |

The sales cycle for our systems typically ranges from nine to 15 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 revenue was \$41.4 million and \$143.6 million for the three and nine month periods ended September 30, 2011, compared to \$52.3 million and \$141.3 million for the three and nine month periods ended September 30, 2010, representing a decrease of 20.8% and an increase of 1.6% in the year-over-year periods.

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 | | | September 30, | | | Nine Months Ended | | | September 30, | | |
|------------------------|--------------------|-------|----------|---------------|-----------|-------|-------------------|-------|------|---------------|--|------|
| | 2011 | | 2010 | 2011 | | 2010 | 2011 | | 2010 | 2011 | | 2010 |
| Systems and Software: | | | | | | | | | | | | |
| Inspection | \$21,102 | 51 % | \$27,135 | 52 % | \$72,054 | 50 % | \$80,509 | 57 % | | | | |
| Metrology | 5,892 | 14 % | 11,843 | 23 % | 27,235 | 19 % | 23,630 | 17 % | | | | |
| Data Analysis & Review | 6,048 | 15 % | 5,627 | 11 % | 18,199 | 13 % | 13,405 | 10 % | | | | |
| Parts | 5,461 | 13 % | 4,856 | 9 % | 17,291 | 12 % | 15,302 | 11 % | | | | |
| Services | 2,931 | 7 % | 2,862 | 5 % | 8,797 | 6 % | 8,448 | 5 % | | | | |
| Total revenue | \$41,434 | 100 % | \$52,323 | 100 % | \$143,576 | 100 % | \$141,294 | 100 % | | | | |

Systems and software revenue were relatively flat for the nine month period ended September 30, 2011 and 2010. The number of metrology systems sold during the nine month period ended September 30, 2011 increased slightly as compared to the same period in the prior year, resulting in an increase in metrology systems revenue of \$3.6 million, which was offset by a decrease in inspection systems revenue of \$8.5 million for the 2011 period. The year-over-year increase in data analysis and review software for the nine month period ended September 30, 2011 of \$4.8 million is primarily due to increased sales across all data analysis and review software product families. The average selling price of similarly configured systems did not significantly change for the 2011 nine month period as compared to the prior year period. As a result, the increase in revenue for the 2011 period was caused by increased volume rather than pricing changes. Systems revenue generated by our latest product releases and major enhancements in each of our product families amounted to 63% and 54% of total revenues for the three and nine month periods ended September 30, 2011, compared to 51% and 59% of total revenues for the three and nine month periods ended September 30, 2010. The year-over-year increase in total parts and services revenue for the nine month periods ended September 30, 2011 and 2010 is primarily due to increased spending by our customers on 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 \$7.4 million are recorded in Other current liabilities at September 30, 2011 and primarily consist of \$2.5 million for systems awaiting acceptance and outstanding deliverables and \$4.9 million for deferred maintenance agreements.

Gross Profit. Our gross profit has been and will continue to be affected by a variety of factors, including inventory step-up from purchase accounting, 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 \$22.3 million and \$77.4 million for the three and nine month periods ended September 30, 2011, compared to \$29.3 million and \$74.7 million for the three and nine month periods ended September 30, 2010. Our gross profit represented 53.7% and 53.9% of our revenues for the three and nine month periods ended September 30, 2011 and 55.9% and 52.9% of our revenues for the same periods in the prior year. The increase in gross profit as a percentage of revenue for the nine month period ended September 30, 2011 compared to the nine month period ended September 30, 2010 is primarily due to product mix.

Operating Expenses.

Operating expenses consist of:

Research and Development. Our research and development expense was \$8.3 million and \$26.7 million for the three and nine month periods ended September 30, 2011, compared to \$8.3 million and \$24.7 million for the same periods in the prior year. Research and development expense represented 20.0% and 18.6% of our revenues for the three and nine month periods ended September 30, 2011, compared to 15.9% and 17.4% of revenues for the prior year periods. The year-over-year dollar increase for the nine month period ended September 30, 2011 and 2010 in research and

development expenses primarily reflects increased compensation costs associated with our annual review process, increased patent litigation costs and the inclusion of research and development expense of the YDI acquisition completed in the third quarter of 2010.

Selling, General and Administrative. Our selling, general and administrative expense was \$8.4 million and \$28.1 million for the three and nine month periods ended September 30, 2011, compared to \$10.1 million and \$29.2 million for the same periods in the prior year. Selling, general and administrative expense represented 20.2% and 19.6% of our revenues for the three and nine month periods ended September 30, 2011, compared to 19.4% and 20.6% of our

revenues for the same periods in the prior year. The year-over-year dollar decrease for the nine month period ended September 30, 2011 and 2010 in selling, general and administrative expense was primarily due to decreased compensation and corporate litigation costs.

The Company currently anticipates that operating expenses for the fourth quarter of 2011 will be approximately \$18.0 million to \$19.0 million. However, there can be no assurance that our operating expenses will fall within this range. Income Taxes. For the three and nine month periods ended September 30, 2011, we recorded an income tax provision of \$33 thousand and \$2.4 million, respectively, as compared to the income tax provision of \$0.6 million and \$2.2 million for the comparable periods in 2010. Our effective tax rate differs from the statutory rate of 35% for the three and nine month periods ended September 30, 2011 primarily due to forecasted utilization of federal credit carryforwards in the current year against which a full valuation allowance has been recorded.

We currently have a valuation allowance recorded against our deferred tax assets. Each quarter we assess the likelihood that we will be able to recover our deferred tax assets. 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 substantially all of our net deferred tax assets will not be realized. Therefore, we continue to provide a valuation allowance against our net deferred tax assets. We continue to closely monitor available evidence and may reverse some or all of the valuation allowance in future periods, if appropriate.

Liquidity and Capital Resources

At September 30, 2011, we had \$157.8 million of cash, cash equivalents and marketable securities and \$237.1 million in working capital. At December 31, 2010, we had \$71.7 million of cash, cash equivalents and marketable securities and \$159.7 million in working capital.

Typically during periods of revenue growth, changes in accounts receivable and inventories represent a use of cash as we incur costs and expend cash in advance of receiving cash from our customers. Similarly, during periods of declining revenue, changes in accounts receivable and inventories represent a source of cash as inventory purchases decline and revenue from prior periods is collected.

Operating activities provided \$35.5 million in cash and cash equivalents for the nine month period ended September 30, 2011. The net cash and cash equivalents provided by operating activities during the nine month period ended September 30, 2011 was primarily a result of net income, adjusted to exclude the effect of non-cash operating charges of \$28.5 million, a decrease in accounts receivable of \$20.2 million, partially offset by increase in inventory of \$6.5 million, a decrease in accounts payable and accrued liabilities of \$2.5 million, a decrease in other current liabilities of \$1.4 million, and an increase in prepaid expenses and other assets of \$2.9 million. Operating activities provided \$17.6 million in cash and cash equivalents for the nine month period ended September 30, 2010. The net cash and cash equivalents provided by operating activities during the nine month period ended September 30, 2010 was primarily a result of net income, adjusted to exclude the effect of non-cash operating charges, of \$24.7 million, an increase in accounts payable and accrued liabilities of \$6.1 million, an increase in other current liabilities of \$1.3 million, and a decrease of \$0.2 million in prepaid and other assets, partially offset by an increase in accounts receivable of \$8.5 million, an increase in inventory of \$5.6 million, and a decrease in other non-current liabilities of \$0.6 million.

Net cash and cash equivalents used in investing activities during the nine month period ended September 30, 2011 of \$25.2 million was due to the purchase of marketable securities of \$29.1 million and capital expenditures of \$1.4 million, partially offset by the proceeds from sales of marketable securities of \$5.3 million. Net cash and cash equivalents used in investing activities during the nine month period ended September 30, 2010 of \$3.9 million was due to purchases of marketable securities of \$7.6 million, capital expenditures of \$3.2 million and a purchase of a business of \$0.8 million, partially offset by proceeds from sales of marketable securities of \$7.7 million.

Net cash and cash equivalents provided by financing activities of \$51.0 million for the nine month period ended September 30, 2011 was due primarily to net proceeds from the issuance of convertible senior notes of \$57.7 million, proceeds from the sale of a warrant of \$7.0 million, tax benefit from employee stock plans of \$0.6 million and proceeds received for sales of shares through share-based compensation plans of \$0.2 million, partially offset by the

purchase of the convertible note hedge of \$14.5 million. Net cash and cash equivalents provided by financing activities of \$0.2 million for the nine month period ended September 30, 2010 was due to proceeds received for sales of shares through share-based compensation plans.

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 July 2008, our Board of Directors approved a stock repurchase program of up to 3 million shares of Company common stock. As of the time of filing this Quarterly Report on Form 10-Q, we have not purchased any shares under this program.

On July 25, 2011, the Company issued \$60 million aggregate principal amount of 3.75% convertible senior notes, which mature on July 15, 2016 and pay interest semiannually commencing on January 15, 2012. In connection with the issuance, the Company entered into convertible note hedge and warrant transactions. The convertible note hedge transaction is intended to reduce potential dilution in the Company's stock upon 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. Net proceeds realized from the sale of the convertible senior notes, the convertible note hedge and warrant transactions were \$50.2 million. We intend to use the net proceeds for general corporate purposes, which may include financing potential acquisitions and strategic transactions, growth initiatives and working capital. For additional information, see Note 8 to the condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q.

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 believe that our existing cash, cash equivalents and marketable securities will be sufficient to meet our anticipated cash requirements for working capital and capital expenditures 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 and our convertible senior notes. Our available-for-sale securities consist of fixed and variable rate income investments (Municipal notes, bonds and an auction rate security). We continually monitor our exposure to changes in interest rates, market liquidity and credit ratings of issuers from 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 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 September 30, 2011, 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. The interest rate on our convertible senior notes is fixed. Therefore, any change in interest rates will not have an 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 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 subsidiaries at September 30, 2011 would have affected the foreign-currency-denominated non-operating expenses of our foreign subsidiaries by approximately \$1.1 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 the Condensed Consolidated Statements of Operations each reporting period. As of September 30, 2011, we had twenty-eight forward contracts outstanding with a total notional contract value of \$3.9 million. We do not use derivative financial instruments for trading or speculative purposes.

Item 4. Controls and Procedures

The Company maintains a set of disclosure controls and procedures, as defined in Rule 13a-15(e) or Rule 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), designed to ensure that information required to be disclosed by the Company in reports that it files or submits 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 the Company's management, including its 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

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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. 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 September 30, 2011, an evaluation was carried out under the supervision and with the participation of the Company's management, including the CEO and CFO. Based on this evaluation, the CEO and CFO have concluded that the Company's 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 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

From time to time we are subject to legal proceedings and claims in the ordinary course of business. As previously disclosed, in December 2007, we completed our acquisition of specific assets and liabilities of the semiconductor division of Applied Precision LLC ("Applied"). As a result of the acquisition, we assumed certain liabilities of Applied including a lawsuit filed by Integrated Technology Corporation ("ITC") against Applied alleging infringement on two of ITC's patents. While this litigation is currently ongoing, the Company believes that it has meritorious defenses and is vigorously defending the action. It is possible that the Company could realize a loss in this matter such that in the event that we are ultimately found liable, damage estimates related to this case, which have not been accrued for as of September 30, 2011, range from approximately \$25 thousand to \$9 million, depending on multiple factors presented by the parties. A trial date of December 6, 2011 has been set.

In Rudolph's patent infringement suit against Camtek, Ltd., of Migdal Hamek, Israel, concerning Rudolph's proprietary continuous scan wafer inspection technology, the U.S. Federal Court of Appeals issued a ruling on August 22, 2011. In its opinion, the Appellate Court affirmed multiple rulings from trial at the District Court level including (i) finding Rudolph's U.S. Patent No. 6,826,298 valid, (ii) the part of the infringement ruling based on the finding that Camtek's Falcon product strobes "based on velocity," and (iii) the dismissal of Camtek's claim against Rudolph for inequitable conduct against the U.S. Patent and Trademark Office. The court did, however, revise one claim construction ruling made by the District Court in the original case. As a result, the Appellate Court set aside the verdict delivered by the jury for damages and the District Court's decision to enter an injunction against selling Falcon tools in the U.S. and remanded the case back to the trial court for a limited trial on this the single infringement issue. No trial date has been set for this limited trial. This lawsuit was initially brought in 2005 by August Technology prior to its merger with Rudolph.

Item 1A. Risk Factors

Except as set forth below, there were no material changes to the Company's risk factors as discussed in Item 1A - Risk Factors in the Company's Annual Report on Form 10-K, as amended, for the year ended December 31, 2010:

Add the following risk factors:

The earthquake and tsunami, and other collateral events, in Japan may negatively impact our supply of components and subassemblies included in our systems, which could have a material adverse effect on the Company's business

As a result of the effects of the earthquake and tsunami that occurred in Japan, including the resultant nuclear crisis, certain of the Company's vendors may be unable to deliver sufficient quantities of components or deliver them in a timely manner. Further, depending on the length of these disruptions, we may need to locate alternate suppliers to fulfill our customers' needs. To date, this event has not had a material impact on the Company's supply of components and subassemblies; however, it is too early to predict the ultimate impact this crisis may have, and it could have a material adverse affect on the Company's business.

Our debt service obligations may adversely affect our financial condition and cash flows from operations.

As a result of our sale of \$60.0 million of 3.75% convertible senior notes on July 25, 2011 (the "Notes"), we now have long-term debt that we have not had to maintain in the past.

Our maintenance of indebtedness could have important consequences because:

- it may impair our ability to obtain additional financing in the future;
- an increased portion of our cash flows from operations will have to be dedicated towards making semi-annual interest payments and repaying the principal in 2016;
- it may make us more vulnerable to downturns in our business, our industry or the economy in general.

Our ability to generate sufficient cash to pay our expenses and debt obligations will depend on our future performance, which will be affected by financial, business, economic, regulatory and other factors. We will not be able to control many of these factors, such as economic conditions and governmental regulations. If we are at any time unable to generate sufficient cash to pay our debt obligations, we may be required to attempt to renegotiate the terms of our debt obligations, seek to refinance all or a portion of our debt obligations or obtain additional financing. There can be no assurance that we will be able to successfully renegotiate such terms, that any such refinancing would be possible or that any additional financing could be obtained on terms that are favorable or acceptable to us. Failure to make a payment on our debt obligations could also result in acceleration of all of our debt obligations, including the Notes, which would materially adversely affect our business, financial condition and results of operations.

We may not have the ability to raise the funds necessary to settle conversions of the Notes or to repurchase the Notes upon a "fundamental change", and our future debt may contain limitations on our ability to pay cash upon conversion or to repurchase the Notes.

Upon the occurrence of a "fundamental change" (as defined in the indenture that governs the Notes), subject to certain conditions, holders of the Notes will have the right to require us to repurchase their Notes for cash at 100% of their principal amount plus accrued and unpaid interest, if any. In addition, upon conversion of the Notes, we will be required to make cash payments of up to \$1,000 for each \$1,000 in principal amount of Notes converted. However, we may not have enough available cash or be able to obtain financing at the time we are required to make repurchases of Notes surrendered for repurchase upon a fundamental change or to make cash payments in respect of Notes that are being converted. In addition, our ability to repurchase the Notes or to pay cash upon conversions of the Notes may be limited by law, by regulatory authority or by agreements governing our future indebtedness. Our failure to repurchase Notes at a time when the repurchase is required by the indenture or to pay any cash payable on future conversions of the Notes as required by the indenture would constitute a default under the indenture. A default under the indenture or a fundamental change itself could also lead to a default under agreements governing our future indebtedness. If the repayment of the related indebtedness were to be accelerated after any applicable notice or grace periods, we may not have sufficient funds to repay the indebtedness and repurchase the Notes or make cash payments upon conversions thereof.

Replace the comparable risk factor in the Company's Annual Report on Form 10-K, as amended, for the year ended December 31, 2010 with the following risk factor:

If we deliver systems with defects, our credibility will be harmed and the sales and market acceptance of our systems will decrease

Our systems are complex and have occasionally contained errors, defects and bugs when introduced. Defects may be created during probing, bumping, dicing or general handling, and can have a major impact on device and process quality. When this occurs, our credibility and the market acceptance and sales of our systems could be harmed.

Further, if our systems contain errors, defects or bugs, computer viruses or malicious code as a result of cyber attacks to our computer networks, we may be required to expend significant capital and resources to alleviate these problems. Defects could also lead to product liability as a result of product liability lawsuits against us or against our customers. We have agreed to indemnify our customers under certain circumstances against liability arising from defects in our systems. Our product liability policy currently provides \$2.0 million of

aggregate coverage, with an overall umbrella limit of \$14.0 million. In the event of a successful product liability claim, we could be obligated to pay damages significantly in excess of our product liability insurance limits.

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

In July 2008, our Board of Directors authorized a share repurchase program of up to 3 million shares of the Company's common stock. The program may be discontinued or modified at anytime. As of the time of filing this Quarterly Report on Form 10-Q, we have not purchased any shares under this program.

Item 6. Exhibits

Exhibit No. Description

- | | |
|------|--|
| 3.1 | Restated Certificate of Incorporation of Registrant (incorporated by reference to Exhibit (3.1(c)) to the Registrant's Registration Statement on Form S-1, as amended (SEC File No. 333-86821 filed on October 5, 1999). |
| 3.2 | Restated Bylaws of Registrant (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on August 1, 2007, No. 000-27965). |
| 3.3 | Amendment to Amended and Restated Bylaws of Registrant (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on February 2, 2009, No. 000-27965). |
| 4.1 | Indenture, dated as of July 25, 2011, by and between The Bank of New York Mellon Trust Company, N.A., as Trustee, and Rudolph Technologies, Inc. (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed on July 25, 2011, No. 000-27965). |
| 10.1 | Purchase Agreement, dated July 19, 2011, among Rudolph Technologies, Inc. and Credit Suisse Securities (USA) LLC (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed on July 25, 2011, No. 000-27965). |
| 10.2 | Confirmation of Convertible Note Hedge Transaction dated July 19, 2011, by and between Rudolph Technologies, Inc. and Credit Suisse International (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed on July 25, 2011, No. 000-27965). |
| 10.3 | Amendment dated July 22, 2011 to Confirmation of Convertible Note Hedge Transaction dated July 19, 2011, by and between Rudolph Technologies, Inc. and Credit Suisse International (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed on July 25, 2011, No. 000-27965). |
| 10.4 | Confirmation of Issuer Warrant Transaction dated July 19, 2011, by and between Rudolph Technologies, Inc. and Credit Suisse International (incorporated by reference to Exhibit 10.4 to the Registrant's Current Report on Form 8-K filed on July 25, 2011, No. 000-27965). |
| 10.5 | Amendment dated July 22, 2011 to Confirmation of Issuer Warrant Transaction dated July 19, 2011, by and between Rudolph Technologies, Inc. and Credit Suisse International (incorporated by reference to Exhibit 10.5 to the Registrant's Current Report on Form 8-K filed on July 25, 2011, No. 000-27965). |
| 10.6 | Amendment No. 3 dated as of September 27, 2011 to Management Agreement, dated as of July 24, 2000, by and between Rudolph Technologies, Inc. and Paul F. McLaughlin. |
| 31.1 | Certification of Paul F. McLaughlin, 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 Paul F. McLaughlin, 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.

Date: November 2, 2011
Rudolph Technologies, Inc.
By: /s/ Paul F. McLaughlin
Paul F. McLaughlin
Chairman and Chief Executive Officer

Date: November 2, 2011
By: /s/ Steven R. Roth
Steven R. Roth
Senior Vice President, Chief Financial Officer and Principal
Accounting Officer

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