ELECTRONICS FOR IMAGING INC

FORM 10-Q
(Quarterly Report)

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended March 31, 2017

or

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

For the transition period from to

Commission File Number: 000-18805

ELECTRONICS FOR IMAGING, INC.

(Exact name of registrant as specified in its charter)

Delaware	**94-3086355**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

6750 Dumbarton Circle, Fremont, CA 94555
(Address of principal executive offices) (Zip code)

(650) 357-3500
(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark 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 (§ 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 ☒ No ☐

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

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
Emerging growth company	☐		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. Yes ☐ No ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The number of shares of Common Stock outstanding as of April 17, 2017 was 46,520,513.

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PART I – FINANCIAL INFORMATION

Item 1: Condensed Consolidated Financial Statements

Electronics For Imaging, Inc.
Condensed Consolidated Balance Sheets
(unaudited)

(in thousands)	March 31, 2017	December 31, 2016
Assets		
Current assets:		
Cash and cash equivalents	$ 151,096	$ 164,313
Short-term investments, available for sale	292,403	295,428
Accounts receivable, net of allowances of $24.9 and $23.3 million, respectively	225,529	220,813
Inventories	113,810	99,075
Income taxes receivable	1,031	975
Assets held for sale	3,781	3,781
Other current assets	35,201	31,881
Total current assets	822,851	816,266
Property and equipment, net	103,181	103,304
Restricted investments and cash equivalents	10,660	6,252
Goodwill	371,674	359,841
Intangible assets, net	136,458	122,997
Deferred tax assets	58,562	58,477
Other assets	16,132	14,359
Total assets	$ 1,519,518	$ 1,481,496
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 109,835	$ 114,287
Accrued and other liabilities	98,925	85,505
Deferred revenue	65,408	53,813
Income taxes payable	9,815	10,256
Total current liabilities	283,983	263,861
Convertible senior notes, net	308,000	304,484
Imputed financing obligation related to build-to-suit lease	14,024	14,152
Noncurrent contingent and other liabilities	54,048	42,786
Deferred tax liabilities	14,940	16,351
Noncurrent income taxes payable	11,864	12,030
Total liabilities	686,859	653,664
Commitments and contingencies (Note 8)		
Stockholders' equity:		
Preferred stock, $0.01 par value; 5,000 shares authorized; none issued and outstanding	—	—
Common stock, $0.01 par value; 150,000 shares authorized; 53,546 and 53,038 shares issued, respectively	535	530
Additional paid-in capital	722,031	705,901
Treasury stock, at cost; 6,950 and 6,457 shares, respectively	(296,185)	(273,730)
Accumulated other comprehensive loss	(18,334)	(24,694)
Retained earnings	424,612	419,825
Total stockholders' equity	832,659	827,832
Total liabilities and stockholders' equity	$ 1,519,518	$ 1,481,496

See accompanying notes to condensed consolidated financial statements.

Electronics For Imaging, Inc.
Condensed Consolidated Statements of Operations
(unaudited)

(in thousands, except per share amounts)	Three months ended March 31, 2017	2016
Revenue	$228,691	$234,133
Cost of revenue (1)	105,161	115,736
Gross profit	123,530	118,397
Operating expenses:		
Research and development (1)	39,627	37,122
Sales and marketing (1)	43,035	41,530
General and administrative (1)	21,029	20,832
Restructuring and other (Note 11)	918	2,715
Amortization of identified intangibles	10,778	9,229
Total operating expenses	115,387	111,428
Income from operations	8,143	6,969
Interest expense	(4,660)	(4,358)
Interest income and other income (expense), net	287	(221)
Income before income taxes	3,770	2,390
Benefit from (provision for) income taxes	1,017	(287)
Net income	$ 4,787	$ 2,103
Net income per basic common share	$ 0.10	$ 0.04
Net income per diluted common share	$ 0.10	$ 0.04
Shares used in basic per-share calculation	46,551	47,215
Shares used in diluted per-share calculation	47,208	47,923

(1) Includes stock-based compensation expense as follows:

	2017	2016
Cost of revenue	$ 834	$ 697
Research and development	3,570	3,039
Sales and marketing	2,295	2,349
General and administrative	3,581	5,199

See accompanying notes to condensed consolidated financial statements.

Electronics For Imaging, Inc.
Condensed Consolidated Statements of Comprehensive Income
(unaudited)

(in thousands)	Three months ended March 31, 2017	Three months ended March 31, 2016
Net income	$ 4,787	$2,103
Net unrealized investment gains:		
Unrealized holding gains, net of tax provisions of less than $0.1 million and $0.5 million, respectively	135	776
Reclassification adjustments included in net income, net of tax benefit of less than $0.1 million and tax provision of less than $0.1 million, respectively	(4)	18
Net unrealized investment gains	131	794
Currency translation adjustments, net of no tax benefit and a tax benefit of $0.8 million, respectively	6,174	6,446
Net unrealized gains on cash flow hedges	55	51
Comprehensive income	$11,147	$9,394

See accompanying notes to condensed consolidated financial statements.

Electronics For Imaging, Inc.
Condensed Consolidated Statements of Cash Flows
(unaudited)

(in thousands)	Three months ended March 31, 2017	2016
Cash flows from operating activities:		
Net income	$ 4,787	$ 2,103
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	14,929	13,008
Deferred taxes	(899)	(3,827)
Provisions for bad debt and sales-related allowances	2,822	4,140
Provision for inventory obsolescence	752	2,272
Stock-based compensation, net of cash settlements	10,280	11,265
Non-cash accretion of interest expense on convertible notes and imputed financing obligation	3,672	3,273
Other non-cash charges and credits	2,486	2,878
Changes in operating assets and liabilities, net of effect of acquired businesses	(23,931)	(26,147)
Net cash provided by operating activities	14,898	8,965
Cash flows from investing activities:		
Purchases of short-term investments	(35,149)	(58,323)
Proceeds from sales and maturities of short-term investments	38,235	110,417
Purchases of restricted investments and cash equivalents	(4,405)	—
Purchases, net of proceeds from sales, of property and equipment	(3,789)	(5,213)
Businesses purchased, net of cash acquired	(5,700)	(7,982)
Net cash (used for) provided by investing activities	(10,808)	38,899
Cash flows from financing activities:		
Proceeds from issuance of common stock	5,855	4,909
Purchases of treasury stock and net share settlements	(22,455)	(23,092)
Repayment of debt assumed through business acquisitions and debt issuance costs	(411)	(4,492)
Contingent consideration payments related to businesses acquired	(1,265)	(1,443)
Net cash used for financing activities	(18,276)	(24,118)
Effect of foreign exchange rate changes on cash and cash equivalents	969	2,319
(Decrease) Increase in cash and cash equivalents	(13,217)	26,065
Cash and cash equivalents at beginning of quarter	164,313	164,091
Cash and cash equivalents at end of quarter	$151,096	$190,156

See accompanying notes to condensed consolidated financial statements.

Electronics For Imaging, Inc.
Notes to Condensed Consolidated Financial Statements

1. Basis of Presentation and Significant Accounting Policies

Basis of Presentation

The accompanying unaudited interim condensed consolidated financial statements ("condensed consolidated financial statements") include the accounts of Electronics For Imaging, Inc. and its subsidiaries ("EFI" or "Company"). All intercompany accounts and transactions have been eliminated in consolidation.

These condensed consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States ("U.S. GAAP" or "GAAP") for interim financial information, rules and regulations of the Securities and Exchange Commission ("SEC") for interim financial statements, and accounting policies consistent in all material respects with those applied in preparing our audited annual consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2016. These condensed consolidated financial statements and accompanying notes should be read in conjunction with our annual consolidated financial statements and the notes thereto for the year ended December 31, 2016, included in our Annual Report on Form 10-K. In the opinion of management, these condensed consolidated financial statements reflect all adjustments, including normal recurring adjustments, management considers necessary for the fair presentation of our financial position, operating results, comprehensive income, and cash flows for the interim periods presented. Our results for the interim periods are not necessarily indicative of results for the entire year.

Recent Accounting Pronouncements

Inventory Valuation. In July 2015, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2015-11, Simplifying the Measurement of Inventory, which became effective in the first quarter of 2017. ASU 2015-11 requires that inventory be valued at the lower of cost or net realizable value, which is defined as the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. We previously valued inventory at the lower of cost or net realizable value less a reasonable profit margin as allowed by previous inventory valuation guidance. The adoption of ASU 2015-11 increased our inventory valuation by $0.4 million in 2017.

Revenue Recognition. ASU 2014-09, Revenue from Contracts with Customers, issued in May 2014, and ASU 2016-10, Revenue from Contracts with Customers: Identifying Performance Obligations and Licensing, and subsequent amendments, enhances the comparability of revenue recognition practices across entities, industries, jurisdictions, and capital markets. The principles-based guidance provides a framework for addressing revenue recognition issues comprehensively. The standard requires that revenue be recognized in an amount that reflects the consideration that the entity expects to be entitled in exchange for goods or services, which are referred to as performance obligations.

The guidance requires comprehensive annual and interim disclosures regarding the nature, amount, timing, and uncertainty of recognized revenue. Qualitative and quantitative disclosures will be required regarding:

- contracts with customers, including revenue and impairments recognized, disaggregation, and information about contract balances and performance obligations,
- significant judgments and changes in judgments required to determine the transaction price, amounts allocated to performance obligations, and the timing for recognizing revenue resulting from the satisfaction of performance obligations, and
- assets recognized from the costs to obtain or fulfill a contract.

ASU 2014-09 will be effective in the first quarter of 2018. Two adoption methods are allowed under ASU 2014-09. Under the full retrospective method, the revised guidance is applied to all contracts in all reporting periods presented in the financial statements, subject to certain allowable exceptions. Retained earnings is adjusted for the cumulative effect of the change as of January 1, 2016. Under the modified retrospective method, the revised guidance is applied to all contracts existing as of January 1, 2018, with an adjustment to beginning retained earnings for the cumulative effect of the change and providing additional disclosures comparing results to previous guidance. We are evaluating the impact of each transition method on our financial statements and related disclosures.

Upon initial evaluation, we believe the key changes in the guidance that impact our revenue recognition relate to the allocation of contract revenue between various services and software licenses, and the timing of when those revenues are recognized. The requirement to defer incremental contract acquisition costs and recognize them over the contract period or expected customer life will result in the recognition of a deferred charge on our balance sheet. We are currently assessing the impact of these requirements on our consolidated financial statements upon adoption.

Principal vs Agent. ASU 2016-08, Principal vs. Agent Considerations (Reporting Revenue Gross vs Net), issued in March 2016, streamlines and clarifies the criteria for identifying whether an entity is satisfying a performance obligation as the principal or agent in the transaction. The entity that is responsible for fulfilling the contractual obligations related to the good or service is acting as the principal and recognizes the gross amount of consideration. The entity that is responsible only for arranging delivery to the customer is acting as the agent and recognizes revenue in the amount of the fee or commission related to arranging for the delivery of the good or service.

Several indicators of the nature of the relationship that are considered under current guidance have been streamlined and clarified in the new guidance by focusing more specifically on the performance obligations that must be fulfilled in the transaction, which entity carries the inventory risk in the transaction, and which entity controls the pricing of the good or service. Credit risk will no longer be a criterion. This guidance will be effective in the first quarter of 2018. We are evaluating its impact on our revenue and results of operations.

Stock-based Compensation. In March 2016, the FASB issued ASU 2016-09, which became effective in the first quarter of 2017 with early adoption permitted. We elected to early adopt this standard in the second quarter of 2016, which required retroactive application of this standard as of the first quarter in 2016 resulting in the following:

- Under this guidance, all excess tax benefits and deficiencies were recognized as income tax expense. Excess tax benefits of less than $0.1 million that were charged to additional paid-in capital in the first quarter of 2016 were reversed upon adoption. We recorded $2.2 million of deferred tax assets related to excess tax benefits for federal research and development income tax credits not previously benefitted.
- The requirement to reclassify gross excess tax benefits related to stock-based compensation from operating to financing activities in the statement of cash flows was eliminated. The reclassification of $0.2 million in the first quarter of 2016 has been reversed upon adoption. We applied this guidance retrospectively to all prior periods to maintain the comparability of presentation between periods, which resulted in a $0.2 million increase in cash flows provided by operating activities during the three months ended March 31, 2016, and a corresponding decrease in cash flows provided by financing activities.
- We elected to account for forfeitures when they occur instead of estimating the expected forfeiture rate. Adoption of this provision during the second quarter of 2016 resulted in a retroactive net income adjustment of $0.2 million, net of tax effect, in the first quarter of 2016 and a cumulative effect adjustment to retained earnings of $2.1 million, net of tax, as of January 1, 2016.
- Statutory tax withholding is permitted up to the maximum statutory tax rate in applicable jurisdictions. The retrospective impact of this provision on prior period financial statements is not material.

Financial Instruments. ASU 2016-13, Measurement of Credit Losses on Financial Instruments, issued in June 2016, amends current guidance regarding other-than-temporary impairment of available-for-sale debt securities. The new guidance requires an estimate of expected credit loss when fair value is below the amortized cost of the asset without regard for the length of time that the fair value has been below the amortized cost or the historical or implied volatility of the asset. In addition, credit losses on available-for-sale debt securities will be limited to the difference between the security's amortized cost basis and its fair value. The use of an allowance to record estimated credit losses (and subsequent recoveries) will also be required under the new guidance.

ASU 2016-13 will be effective in the first quarter of 2020. We are evaluating its impact on the carrying value of our available-for-sale securities and results of operations.

Settlement of Convertible Debt. ASU 2016-15, Statement of Cash Flows: Classification of Certain Cash Receipts and Cash Payments, issued in August 2016, requires that cash settlements of principal amounts of debt instruments with coupon interest rates that are insignificant in relation to the effective interest rate of the debt must classify the portion of the principal payment attributable to the accreted interest related to the debt discount as cash outflows from operating activities. This is consistent with the classification of the coupon interest payments.

ASU 2016-15 will be effective in the first quarter of 2018. Accordingly, $63.6 million debt discount attributable to the difference between the 0.75% coupon interest rate on our 0.75% Convertible Senior Notes Due 2019 ("Notes") and the 4.98% (5.46% inclusive of debt issuance costs) effective interest rate will be classified as an operating cash outflow in the Condensed Consolidated Statement of Cash Flows upon cash settlement in 2019.

Restricted Cash. In November 2016, the FASB issued ASU 2016-18, Statement of Cash Flows: Restricted Cash, requiring that the statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. Therefore, amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. Under current guidance, changes in restricted cash and restricted cash equivalents are included in operating or investing activities in the condensed consolidated statements of cash flows.

ASU 2016-18 will be effective in the first quarter of 2018. We are evaluating its impact on our statement of cash flows.

Lease Arrangements. Under current guidance, the classification of a lease by a lessee as either an operating lease or a capital lease determines whether an asset and liability is recognized on the balance sheet. ASU 2016-02, issued in February 2016 and effective in the first quarter of 2019, requires that a lessee recognize an asset and liability on its balance sheet related to all leases with terms in excess of one year. For all leases, a lessee will be required to recognize a right-of-use asset and a lease liability, initially measured at the present value of the lease payments, in the statement of financial position. The right-to-use asset represents the right to use the underlying asset during the lease term.

The recognition, measurement, and presentation of expenses and cash flows by a lessee have not significantly changed from previous guidance. There continues to be a differentiation between finance leases and operating leases. The criteria for determining whether a lease is a financing or operating lease are substantially the same as existing guidance except that the "bright line" percentages have been removed.

- For finance leases, interest is recognized on the lease liability separately from depreciation of the right-of-use asset in the statement of operations. Principal repayments are classified within financing activities and interest payments are classified as operating activities in the statement of cash flows.
- For operating leases, a lessee is required to recognize lease expense generally on a straight-line basis. All operating lease payments are classified as operating activities in the statement of cash flows.

The current build-to-suit lease accounting guidance will be rescinded by the new guidance, although simplified guidance will remain regarding lessee control during the construction period. Consequently, the accounting for build-to-suit leases will be the same as finance leases unless the lessee control provisions are applicable.

We have not quantified the impact, but we expect our consolidated financial position and results of operations to be materially affected.

Definition of a Business. ASU 2017-01, Business Combinations: Clarifying the Definition of a Business, was issued in January 2017. Under current guidance, a business is defined as an integrated set of assets and activities that usually consists of inputs, processes, and outputs. However, outputs are not required to be present and only some inputs and processes must be present if the acquiring entity can produce outputs by integrating the acquired set of assets and activities with its own inputs and processes. Under ASU 2017-01, when substantially all of the fair value of the gross assets acquired (or disposed of) is concentrated in a single asset or group of similar identifiable assets, then we must determine whether the acquired (or disposed) gross assets and activities include an input and a substantive process that together significantly contribute to the ability to create an output. A framework and specific criteria are provided to assist with this evaluation. "Output" is narrowly defined to be consistent with the description in the new revenue guidance. Missing inputs and processes may not be replaced by integration with our own inputs and processes under the new guidance.

Our condensed consolidated financial statements may be impacted if an acquisition does not qualify as a business combination after ASU 2017-01 is effective in the first quarter of 2018.

Nonfinancial Asset Derecognition. In February 2017, the FASB issued ASU 2017-05, Other Income — Gains and Losses from the Derecognition of Nonfinancial Assets: Clarifying the Scope of Asset Derecognition and Accounting for Partial Sales of Nonfinancial Assets, which clarifies the scope of recent guidance as it relates to nonfinancial asset derecognition and the accounting for partial sales of nonfinancial assets. The ASU conforms the derecognition guidance as it relates to nonfinancial assets with the derecognition guidance in the new revenue standard (ASU 2014-09) and is expected to have a material impact on the accounting for real estate dispositions.

ASU 2017-05 will be effective in the first quarter of 2018. This guidance may be adopted using either the full retrospective or modified retrospective method as defined in ASU 2014-09; however, we are not required to adopt the same method for ASU 2014-09 and ASU 2017-05.

Supplemental Cash Flow Information

(in thousands)	Three Months Ended March 31, 2017	2016
Net cash paid for income taxes	$ 2,092	$ 1,960
Cash paid for interest expense	$ 1,661	$ 1,694
Acquisitions of businesses:		
Cash paid for businesses purchased, excluding contingent consideration	$ 5,700	$ 8,238
Cash acquired in business acquisition	—	(256)
Net cash paid for businesses purchased, net of cash acquired	$ (5,700)	$ 7,982
Common stock issued in connection with Reggiani Macchine SpA (“Reggiani”) acquisition	$ —	$ 73
Non-cash investing and financing activities:		
Non-cash settlement of vacation liabilities by issuing restricted stock units (“RSUs”)	$ —	$ 2,733
Property, equipment, and intellectual property received, but not paid	1,060	1,478
	$ 1,060	$ 4,211

2. Earnings Per Share

Net income per basic common share is computed using the weighted average number of common shares outstanding during the period. Net income per diluted common share is computed using the weighted average number of common and dilutive potential common shares outstanding during the period. Potential common shares result from the assumed exercise of outstanding common stock options having a dilutive effect using the treasury stock method, non-vested shares of restricted stock having a dilutive effect, non-vested restricted stock for which the performance criteria have been met, shares to be purchased under our Employee Stock Purchase Plan (“ESPP”) having a dilutive effect, the assumed release of shares from escrow related to the acquisition of Corrugated Technologies, Inc. (“CTI”), the assumed conversion of our Notes having a dilutive effect using the treasury stock method when the stock price exceeds the conversion price of the Notes, and the assumed exercise of our warrants having a dilutive effect using the treasury stock method when the stock price exceeds the warrant strike price. Any potential shares that are anti-dilutive as defined in Accounting Standards Codification (“ASC”) 260, Earnings Per Share, are excluded from the effect of dilutive securities.

Performance-based and market-based restricted stock and stock options that would be issuable if the end of the reporting period were the end of the vesting period, if the result would be dilutive, are assumed to be outstanding for purposes of determining net income per diluted common share as of the later of the beginning of the period or the grant date in accordance with ASC 260-10-45-48. Accordingly, performance-based RSUs, which vested on various dates during the three months ended March 31, 2017 and 2016, based on achievement of specified performance criteria related to revenue, cash flows from operating activities, and non-GAAP operating income targets, and performance-based stock options, which vested during the three months ended March 31, 2016 based on achievement of specified targets related to non-GAAP return on equity are included in the determination of net income per diluted common share as of the beginning of each period.

Basic and diluted earnings per share during the three months ended March 31, 2017 and 2016 are reconciled as follows (in thousands, except per share amounts):

	Three months ended March 31, 2017	2016
Basic net income per share:		
Net income available to common shareholders	$ 4,787	$ 2,103
Weighted average common shares outstanding	46,551	47,215
Basic net income per share	$ 0.10	$ 0.04
Diluted net income per share:		
Net income available to common shareholders	$ 4,787	$ 2,103
Weighted average common shares outstanding	46,551	47,215
Diluted stock options and non-vested restricted stock	657	708
Weighted average common shares outstanding for purposes of computing diluted net income per share	47,208	47,923
Diluted net income per share	$ 0.10	$ 0.04

Potential shares of common stock that are not included in the determination of diluted net income per share because they are anti-dilutive consist of ESPP purchase rights having an anti-dilutive effect of less than 0.1 million shares for the three months ended March 31, 2017 and 2016.

The weighted-average number of common shares outstanding does not include the effect of the potential common shares from conversion of our Notes and exercise of our Warrants. The effects of these potentially outstanding shares were not included in the calculation of diluted net income per share because the effect would have been anti-dilutive since the conversion price of the Notes and the strike price of the warrants exceeded the average market price of our common stock. We have the option to pay cash, issue shares of common stock, or any combination thereof for the aggregate amount due upon conversion of the Notes. Our intent is to settle the principal amount of the Notes in cash upon conversion. As a result, only amounts payable in excess of the principal amount of the Notes are considered in diluted net income per share under the treasury stock method. The Note Hedges are also not included in the calculation of diluted net income per share because the effect of any exercise of the Note Hedges would be anti-dilutive. Please refer to Note 6 – Convertible Senior Notes, Note Hedges, and Warrants of the Notes to Condensed Consolidated Financial Statements for additional information.

3. Balance Sheet Details

Inventories

Inventories, net of allowances, as of March 31, 2017 and December 31, 2016 are as follows (in thousands):

	March 31, 2017	December 31, 2016
Raw materials	$ 49,675	$ 45,798
Work in process	10,633	7,362
Finished goods	53,502	45,915
	$113,810	$ 99,075

Deferred Cost of Revenue

Deferred cost of revenue related to unrecognized revenue on shipments to customers was $3.5 and $3.4 million as of March 31, 2017 and December 31, 2016, respectively, and is included in other current assets in our Condensed Consolidated Balance Sheets.

Product Warranty Reserves

The changes in product warranty reserves during the three months ended March 31, 2017 and 2016 are as follows (in thousands):

	2017	2016
Balance at January 1,	$10,319	$ 9,635
Liability assumed upon acquiring FreeFlow print server (“FFPS”)	9,368	—
Provisions, net of releases	3,564	3,073
Settlements	(4,144)	(3,041)
Balance at March 31,	$19,107	$ 9,667

Accumulated Other Comprehensive Loss (“OCI”)

OCI classified within stockholders’ equity in our Condensed Consolidated Balance Sheets as of March 31, 2017 and December 31, 2016 is as follows (in thousands):

	March 31, 2017	December 31, 2016
Net unrealized investment losses	$ (342)	$ (473)
Currency translation losses	(18,056)	(24,230)
Net unrealized gains on cash flow hedges	64	9
Accumulated other comprehensive loss	$(18,334)	$ (24,694)

Amounts reclassified out of OCI were less than $0.1 million, net of tax, during the three months ended March 31, 2017 and 2016, and consisted of unrealized gains and losses from investments in debt securities that are reported within interest income and other income (expense), net, in our Condensed Consolidated Statements of Operations.

4. Acquisition

We acquired certain assets comprising the FFPS business from Xerox Corporation ("Xerox"), a New York corporation headquartered in Norwalk, Connecticut, on January 31, 2017. FFPS is included in our Fiery operating segment. Acquisition-related transaction costs were $0.7 million during the three months ended March 31, 2017.

We purchased FFPS for cash consideration of $23.9 million consisting of $5.9 million paid at closing, $9.0 million payable in July 2017, and $9.0 million payable in July 2018, which have been discounted at our incremental borrowing rate of 4.98%, resulting in a purchase price of $23.0 million. FFPS is a digital front end ("DFE") that previously competed with our Fiery DFE.

This acquisition was accounted for as a purchase business combination. We allocated the purchase price to the tangible and identifiable intangible assets acquired and liabilities assumed based on their estimated fair value on January 31, 2017, which is the acquisition date. Excess purchase consideration was recorded as goodwill. Factors contributing to a purchase price that results in goodwill include, but are not limited to, the opportunity to cross-sell FFPS DFEs to existing customers, the positive reputation of FFPS in the market, the opportunity to sell Fiery DFEs to FFPS customers, and the opportunity to expand our presence in the DFE market through the synergy of FFPS technology with existing Fiery products.

We engaged a third party valuation firm to aid management in its analyses of the fair value of FFPS. All estimates, key assumptions, and forecasts were either provided by or reviewed by us. While we chose to utilize a third party valuation firm, the fair value analyses and related valuations represent the conclusions of management and not the conclusions or statements of any third party.

The purchase price allocation is preliminary and subject to change within the measurement period as the valuation is finalized. We expect to continue to obtain information to assist us in finalizing the fair value of the net assets acquired during the measurement period, which ends on January 31, 2018. Measurement period adjustments will be recognized in the reporting period in which the adjustment amounts are determined, if any.

Valuation Methodologies

Intangible assets acquired from FFPS consist of a purchasing agreement between the parties, "take-or-pay" contractual penalty, trade name, existing technology, and in-process research & development ("IPR&D"). Each intangible asset valuation methodology for the FFPS acquisition assumes either a risk-free discount rate of 4.98% or probability-adjusted discount rates between 18% and 20%.

Purchasing Agreement was valued using the excess earnings method, which is an income approach. According to the Master Purchasing Agreement (the "Purchasing Agreement") entered into with Xerox, we will be their preferred supplier of DFEs provided that we meet quality, cost, delivery, and services requirements. The value of purchasing agreement lies in the generation of a consistent and predictable revenue source without incurring the costs normally required to acquire the Purchasing Agreement. The Purchasing Agreement was valued by estimating the revenue attributable to the Purchasing Agreement and probability-weighted in each forecast year to reflect the uncertainty of maintaining the existing relationship with Xerox beyond the initial five-year term of the agreement.

Take-or-pay Contract was valued using the Monte Carlo method, which is an income approach. If Xerox's purchases of Fiery and FFPS DFEs during each of four consecutive 12-month periods is less than the minimum level defined for each purchase period, then Xerox shall make a one-time payment in an amount equal to a percentage of such shortfall compared to the minimum level, subject to the maximum payment amount agreed between the parties for each purchase period. Key assumptions include a risk-free discount rate of 4.98%, asset volatility of 27%, and probability-adjusted DFE revenue. If Xerox's purchases of Fiery and FFPS DFEs exceed the minimum purchase levels defined for each purchase period, then we will pay a percentage of such excess to Xerox.

Trade Name was valued using the relief from royalty method, which is an income approach, with royalty rates based on various factors including an analysis of market data, comparable trade name agreements, and historical advertising dollars spent supporting the trade name.

Existing Technology was valued using the relief from royalty method based on royalty rates for similar technologies. The value of existing technology is derived from consistent and predictable revenue, including the opportunity to cross-sell to existing customers, and the avoidance of the costs associated with developing the technology. Revenue related to existing technology was adjusted in each forecast year to reflect the evolution of the technology and the cost of sustaining research and development required to maintain the technology.

IPR&D was valued using the relief from royalty method by estimating the cost to develop purchased IPR&D into commercially viable products, estimating the net cash flows resulting from the sale of those products, and discounting the net cash flows back to their present value. Project schedules were 63% complete as of the acquisition date and 75% as of March 31, 2017 based on management's estimate of tasks completed to achieve technical and commercial feasibility. IPR&D is subject to amortization after product completion over the product life or otherwise assessed for impairment in accordance with acquisition accounting guidance. Additional costs incurred to complete IPR&D after the acquisition are expensed.

The allocation of the FFPS purchase price to the assets acquired and liabilities assumed (in thousands) is summarized as follows:

	Weighted average useful life	Purchase Price Allocation
Purchasing agreement	10 years	$ 8,800
Take-or-pay contract	4 years	9,000
Existing technology	2 years	2,570
Trade name	5 years	1,020
IPR&D	—	70
Goodwill	—	7,120
		28,580
Net tangible liabilities		(5,537)
Total purchase price		$ 23,043

Pro forma results of operations for FFPS have not been presented because they are not material to our Condensed Consolidated Results of Operations for the three months ended March 31, 2017 and 2016. Goodwill, which represents the excess of the purchase price over the net tangible and intangible assets acquired, that was generated by our acquisition of FFPS is not deductible for tax purposes.

5. Investments and Fair Value Measurements

We invest our excess cash on deposit with major banks in money market, U.S. Treasury and government-sponsored entity, corporate, municipal government, asset-backed, and mortgage-backed residential debt securities. By policy, we invest primarily in high-grade marketable securities. We are exposed to credit risk in the event of default by the financial institutions or issuers of these investments to the extent of amounts recorded in our Condensed Consolidated Balance Sheets.

We consider all highly liquid investments with an original maturity of three months or less at the time of purchase to be cash equivalents. Typically, the cost of these investments has approximated fair value. Marketable investments with a maturity greater than three months are classified as available-for-sale short-term investments. Available-for-sale securities are stated at fair value with unrealized gains and losses reported as a separate component of OCI, adjusted for deferred income taxes. The credit portion of any other-than-temporary impairment is included in net income. Realized gains and losses on sales of financial instruments are recognized upon sale of the investments using the specific identification method.

Our available-for-sale short-term investments as of March 31, 2017 and December 31, 2016 are as follows (in thousands):

	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value
March 31, 2017				
U.S. Government and sponsored entities	$ 70,895	$ 38	$ (328)	$ 70,605
Corporate debt securities	197,310	133	(427)	197,016
Municipal government	1,661	—	—	1,661
Asset-backed securities	21,789	71	(29)	21,831
Mortgage-backed securities – residential	1,291	2	(3)	1,290
Total short-term investments	$ 292,946	$ 244	$ (787)	$292,403
December 31, 2016				
U.S. Government and sponsored entities	$ 70,893	$ 49	$ (348)	$ 70,594
Corporate debt securities	198,166	102	(621)	197,647
Municipal government	1,278	—	(1)	1,277
Asset-backed securities	24,233	79	(17)	24,295
Mortgage-backed securities – residential	1,615	3	(3)	1,615
Total short-term investments	$ 296,185	$ 233	$ (990)	$295,428

The fair value and duration that investments, including cash equivalents, have been in a gross unrealized loss position as of March 31, 2017 and December 31, 2016 are as follows (in thousands):

	Less than 12 Months		More than 12 Months		TOTAL	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
March 31, 2017						
U.S. Government and sponsored entities	$ 43,964	$ (328)	$ —	$ —	$ 43,964	$ (328)
Corporate debt securities	127,857	(417)	6,190	(10)	134,047	(427)
Asset-backed securities	8,973	(22)	2,742	(7)	11,715	(29)
Mortgage-backed securities – residential	382	(1)	129	(2)	511	(3)
Total	$181,176	$ (768)	$ 9,061	$ (19)	$190,237	$ (787)
December 31, 2016						
U.S. Government and sponsored entities	$ 39,810	$ (348)	$ —	$ —	$ 39,810	$ (348)
Corporate debt securities	133,382	(581)	13,158	(40)	146,540	(621)
Municipal government	1,268	(1)	—	—	1,268	(1)
Asset-backed securities	4,540	(7)	4,611	(10)	9,151	(17)
Mortgage-backed securities – residential	428	(1)	153	(2)	581	(3)
Total	$179,428	$ (938)	$17,922	$ (52)	$197,350	$ (990)

For fixed income securities that have unrealized losses as of March 31, 2017, we have determined that we do not have the intent to sell any of these investments and it is not more likely than not that we will be required to sell any of these investments before recovery of the entire amortized cost basis. We have evaluated these fixed income securities and determined that no credit losses exist. Accordingly, management has determined that the unrealized losses on our fixed income securities as of March 31, 2017 were temporary in nature.

Amortized cost and estimated fair value of investments as of March 31, 2017 are summarized by maturity date as follows (in thousands):

	Amortized cost	Fair value
Mature in less than one year	$ 99,520	$ 99,463
Mature in one to three years	193,426	192,940
Total short-term investments	$ 292,946	$292,403

Net realized gains of less than $0.1 million from sales of investments were recognized in interest income and other income (expense), net, during the three months ended March 31, 2017 and 2016. Net unrealized losses of 0.5 and $0.8 million were included in OCI in the accompanying Condensed Consolidated Balance Sheets as of March 31, 2017 and December 31, 2016, respectively.

Fair Value Measurements

ASC 820, Fair Value Measurements, identifies fair value as the exchange price, or exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As a basis for considering market participant assumptions in fair value measurements, ASC 820 establishes a three-tier fair value hierarchy as follows:

Level 1: Inputs that are quoted prices in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date;

Level 2: Inputs that are other than quoted prices included within Level 1, that are either directly or indirectly observable for the asset or liability through correlation with market data at the measurement date for the duration of the instrument's anticipated life or by comparison to similar instruments; and

Level 3: Inputs that are unobservable or reflect management's best estimate of what market participants would use in pricing the asset or liability at the measurement date. These include management's own judgments about market participant assumptions developed based on the best information available in the circumstances.

We utilize the market approach to measure the fair value of our fixed income securities. The market approach is a valuation technique that uses the prices and other relevant information generated by market transactions involving identical or comparable assets or liabilities. The fair value of our fixed income securities is obtained using readily-available market prices from a variety of industry standard data providers, large financial institutions, and other third-party sources for the identical underlying securities. The fair value of our investments in certain money market funds is expected to maintain a Net Asset Value of $1 per share and, as such, is priced at the expected market price.

We obtain the fair value of our Level 2 financial instruments from several third party asset managers, custodian banks, and the accounting service providers. Independently, these service providers use professional pricing services to gather pricing data, which may include quoted market prices for identical or comparable instruments or inputs other than quoted prices that are observable either directly or indirectly. As part of this process, we engaged a pricing service to assist management in its pricing analysis and assessment of other-than-temporary impairment. All estimates, key assumptions, and forecasts were either provided by or reviewed by us. While we chose to utilize a third party pricing service, the impairment analysis and related valuations represent conclusions of management and not conclusions or statements of any third party.

Our investments and liabilities measured at fair value have been presented in accordance with the fair value hierarchy specified in ASC 820 as of March 31, 2017 and December 31, 2016 in order of liquidity as follows (in thousands):

	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant other Observable Inputs (Level 2)	Unobservable Inputs (Level 3)
March 31, 2017				
Assets:				
Money market funds	$ 9,585	$ 9,585	$ —	$ —
U.S. Government and sponsored entities	70,605	51,143	19,462	—
Corporate debt securities	197,016	—	197,016	—
Municipal government	1,661	—	1,661	—
Asset-backed securities	21,831	—	21,767	64
Mortgage-backed securities – residential	1,290	—	1,290	—
	$301,988	$ 60,728	$241,196	$ 64
Liabilities:				
Contingent consideration, current and noncurrent	$ 58,192	$ —	$ —	$ 58,192
Self-insurance	1,641	—	—	1,641
	$ 59,833	$ —	$ —	$ 59,833
December 31, 2016				
Assets:				
Money market funds	$ 23,575	$ 23,575	$ —	$ —
U.S. Government and sponsored entities	70,594	51,870	18,724	—
Corporate debt securities	197,647	—	197,647	—
Municipal government	1,277	—	1,277	—
Asset-backed securities	24,295	—	24,228	67
Mortgage-backed securities – residential	1,615	—	1,615	—
	$319,003	$ 75,445	$243,491	$ 67
Liabilities:				
Contingent consideration, current and noncurrent	$ 56,463	$ —	$ —	$ 56,463
Self-insurance	1,542	—	—	1,542
	$ 58,005	$ —	$ —	$ 58,005

Money market funds consist of $9.6 and $23.6 million, which have been classified as cash equivalents as of March 31, 2017 and December 31, 2016, respectively.

Investments are generally classified within Level 1 or Level 2 of the fair value hierarchy because they are valued using quoted market prices or alternative pricing sources with reasonable levels of price transparency. Investments in U.S. Treasury obligations and overnight money market mutual funds have been classified as Level 1 because these securities are valued based on quoted prices in active markets or are actively traded at $1.00 Net Asset Value. There have been no transfers between Level 1 and 2 during the three months ended March 31, 2017 and 2016.

Government agency investments and corporate debt instruments, including investments in asset-backed and mortgage-backed securities, have generally been classified as Level 2 because markets for these securities are less active or valuations for such securities utilize significant inputs, which are directly or indirectly observable. We hold asset-backed securities with income payments derived from and collateralized by a specified pool of underlying assets. Asset-backed securities in the portfolio are predominantly collateralized by credit cards and auto loans. We also hold two asset-backed securities collateralized by mortgage loans, which have been fully reserved.

Liabilities for Contingent Consideration

Acquisition-related liabilities for contingent consideration (i.e., earnouts) are related to the purchase business combinations of Optitex Ltd. ("Optitex") and Rialco Limited ("Rialco") in 2016; Shuttleworth Business Systems Limited and CDM Solutions Limited (collectively, "Shuttleworth"), CTI, and Reggiani in 2015; DiMS! organizing print BV ("DIMS"), DirectSmile GmbH ("DirectSmile"), and SmartLinc, Inc. ("SmartLinc") in 2014; Outback Software Pty. Ltd. doing business as Metrix Software ("Metrix") and PrintLeader Software ("PrintLeader") in 2013.

The fair value of these earnouts is estimated to be $58.2 and $56.5 million as of March 31, 2017 and December 31, 2016, respectively, by applying the income approach in accordance with ASC 805-30-25-5, Business Combinations. Key assumptions include risk-free discount rates between 0.6% and 4.98% (Monte Carlo valuation method) and discount rates between 4.7% and 6.0% (probability-adjusted method), as well as probability-adjusted revenue and earnings before interest and taxes ("EBIT") levels. Probability-adjusted revenue, gross profit, operating profit, and EBIT are significant inputs that are not observable in the market, which ASC 820-10-35 refers to as Level 3 inputs. These contingent liabilities have been reflected in the Condensed Consolidated Balance Sheet as of March 31, 2017 as current and noncurrent liabilities of $21.9 and $36.3 million, respectively.

The fair value of contingent consideration increased by $1.3 million primarily due to an increase in the Optitex earnout performance probability, including $0.4 million of earnout interest accretion related to all acquisitions during the three months ended March 31, 2017. The fair value of contingent consideration increased by $6.8 million primarily due to increased Rialco, Optitex, Reggiani, DirectSmile, and CTI earnout performance probabilities, partially offset by decreased DIMS and Shuttleworth earnout performance probabilities, and including $2.7 million of earnout interest accretion related to all acquisitions during the year ended December 31, 2016. In accordance with ASC 805-30-35-1, changes in the fair value of contingent consideration subsequent to the acquisition date have been recognized in general and administrative expense.

Earnout payments during the three months ended March 31, 2017 of $1.3 million are primarily related to the previously accrued Shuttleworth contingent consideration liability. Earnout payments during the year ended December 31, 2016 of $23.8, $3.6, $0.4, and $0.2 million are primarily related to the previously accrued Reggiani, DirectSmile, SmartLinc, and Metrix contingent consideration liabilities, respectively.

Changes in the fair value of contingent consideration are summarized as follows (in thousands):

Fair value of contingent consideration at January 1, 2016	$ 54,796
Fair value of Rialco contingent consideration at March 1, 2016	2,109
Fair value of Optitex contingent consideration at June 16, 2016	22,300
Changes in valuation	6,813
Payments	(28,111)
Foreign currency adjustment	(1,444)
Fair value of contingent consideration at December 31, 2016	$ 56,463
Changes in valuation	$ 1,283
Payments	(1,265)
Foreign currency adjustment	1,711
Fair value of contingent consideration at March 31, 2017	$ 58,192

Since the primary inputs to the fair value measurement of contingent consideration liability are the discount rate and probability-adjusted revenue, we reviewed the sensitivity of the fair value measurement to changes in these inputs. We assessed the probability of achieving the revenue performance targets for contingent consideration associated with each acquisition at percentage levels between 60% and 100% as of each respective acquisition date based on an assessment of the historical performance of each acquired entity, our current expectations of future performance, and other relevant factors. A change in probability-adjusted revenue of five percentage points from the level assumed in the current valuations would result in an increase in the fair value of contingent consideration of $1.6 million or a decrease of $2.6 million resulting in a corresponding adjustment to general and administrative expense. A change in the discount rate of one percentage point results in an increase in the fair value of contingent consideration of $0.2 million or a decrease of $0.9 million. The potential undiscounted amount of future contingent consideration cash payments that we could be required to make related to our business acquisitions, beyond amounts currently accrued, is $11.9 million as of March 31, 2017.

Fair Value of Derivative Instruments

We utilize the income approach to measure the fair value of our derivative assets and liabilities. The income approach uses pricing models that rely on market observable inputs such as yield curves, currency exchange rates, and forward prices, and are therefore classified as Level 2 measurements. The notional amount of our derivative assets and liabilities was $165.5 and $161.8 million as of March 31, 2017 and December 31, 2016, respectively. The fair value of our derivative assets and liabilities that were designated for cash flow hedge accounting treatment having notional amounts of $3.3 and $3.2 million as of March 31, 2017 and December 31, 2016, respectively, was not material.

Fair Value of Convertible Senior Notes

In September 2014, we issued $345 million aggregate principal amount of our Notes. The Notes are carried at their original issuance value, net of unamortized debt discount, and are not marked to market each period. The approximate fair value of the Notes as of March 31, 2017 was approximately $377 million and was considered a Level 2 fair value measurement. Fair value was estimated based upon actual quotations obtained at the end of the reporting period or the most recent date available. A substantial portion of the market value of our Notes in excess of the outstanding principal amount relates to the conversion premium.

6. Convertible Senior Notes ("Notes"), Note Hedges, and Warrants

0.75% Convertible Senior Notes Due 2019

In September 2014, we completed a private placement of $345 million principal amount of 0.75% Convertible Senior Notes due 2019 ("Notes"). The Notes were sold to the initial purchasers for resale to qualified institutional buyers pursuant to Rule 144A under the Securities Act of 1933, as amended. The net proceeds from this offering were approximately $336.3 million, after deducting the initial purchasers' commissions and the offering expenses paid by us. We used approximately $29.4 million of the net proceeds to purchase the Note Hedges described below, net of the proceeds from the Warrant transactions also described below.

The Notes are senior unsecured obligations of EFI with interest payable semiannually in arrears on March 1 and September 1 of each year, commencing March 1, 2015. The Notes are not callable and will mature on September 1, 2019, unless previously purchased or converted in accordance with their terms prior to such date. Holders of the Notes who convert in connection with a "fundamental change," as defined in the indenture governing the Notes ("Indenture"), may require us to purchase for cash all or any portion of their Notes at a purchase price equal to 100 percent of the principal amount of the Notes to be repurchased, plus accrued and unpaid interest, if any.

The initial conversion rate is 18.9667 shares of common stock per $1,000 principal amount of Notes, which is equivalent to an initial conversion price of approximately $52.72 per share of common stock. Upon conversion of the Notes, holders will receive cash, shares of common stock or a combination thereof, at our election. Our intent is to settle the principal amount of the Notes in cash upon conversion. If the conversion value exceeds the principal amount, we would deliver shares of our common stock for our conversion obligation in excess of the aggregate principal amount. As of March 31, 2017, none of the conditions listed below allowing holders of the Notes to convert had been met.

Throughout the term of the Notes, the conversion rate may be adjusted upon the occurrence of certain events. Holders of the Notes will not receive any cash payment representing accrued and unpaid interest upon conversion of a Note. Holders may convert their Notes only under the following circumstances:

- if the last reported sale price of our common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price on each applicable trading day;
- during the five business day period after any five consecutive trading day period ("Notes Measurement Period") in which the "trading price" (as the term is defined in the Indenture) per $1,000 principal amount of Notes for each trading day of such Notes Measurement Period was less than 98% of the product of the last reported stock price on such trading day and the conversion rate on each such trading day;
- upon the occurrence of specified corporate events; or
- at any time on or after March 1, 2019 until the close of business on the second scheduled trading day immediately preceding the maturity date.

We separated the Notes into liability and equity components. The carrying amount of the liability component was calculated by measuring the estimated fair value of a similar liability that does not have an associated convertible feature. The carrying amount of the equity component representing the conversion option was determined by deducting the fair value of the liability component from the face value of the Notes as a whole. The excess of the principal amount of the liability component over its carrying amount ("debt discount") is amortized to interest expense over the term of the Notes using the effective interest method with an effective interest rate of 4.98% per annum (5.46% inclusive of debt issuance costs). The equity component is not remeasured as long as it continues to meet the conditions for equity classification.

We allocated the total transaction costs incurred by the Notes issuance to the liability and equity components based on their relative values. Issuance costs of $7.0 million attributable to the $281.4 million liability component are being amortized to expense over the term of the Notes, and issuance costs of $1.6 million attributable to the $63.6 million equity component were offset against the equity component in stockholders' equity. Additionally, we recorded a deferred tax liability of $23.7 million on the debt discount, which is not deductible for tax purposes.

The Notes consist of the following as of March 31, 2017 and December 31, 2016 (in thousands):

	March 31, 2017	December 31, 2016
Liability component	$345,000	$ 345,000
Debt discount, net of amortization	(32,973)	(36,115)
Debt issuance costs, net of amortization	(4,027)	(4,401)
Net carrying amount	$308,000	$ 304,484
Equity component	$ 63,643	$ 63,643
Less: debt issuance costs allocated to equity	(1,582)	(1,582)
Net carrying amount	$ 62,061	$ 62,061

Interest expense recognized related to the Notes during the three months ended March 31, 2017 and 2016 was as follows (in thousands):

	2017	2016
0.75% coupon	$ 640	$ 640
Amortization of debt issuance costs	374	355
Amortization of debt discount	3,142	2,976
	$4,156	$3,971

Note Hedges

We paid an aggregate of $63.9 million in convertible note hedge transactions with respect to our common stock ("Note Hedges") in September 2014. The Note Hedges will expire upon maturity of the Notes. The Note Hedges are intended to offset the potential dilution upon conversion and/or offset any cash payments we are required to make in excess of the principal amount upon conversion of the Notes in the event that the market value per share of our common stock, as measured under the terms of the Note Hedges, is greater than the strike price of the Note Hedges. The strike price of the Note Hedges initially correspond to the conversion price of the Notes and is subject to anti-dilution adjustments substantially similar to those applicable to the conversion price of the Notes. The Note Hedges are separate transactions and are not part of the Notes. Holders of the Notes will not have any rights with respect to the Note Hedges.

Warrants

Concurrently with entering into the Note Hedges, we separately entered into warrant transactions ("Warrants"), whereby we sold warrants to acquire shares of our common stock at a strike price of $68.86 per share. We received aggregate proceeds of $34.5 million from the sale of the Warrants. If the average market value per share of our common stock for the reporting period, as measured under the Warrants, exceeds the strike price of the Warrants, the Warrants will have a dilutive effect on our earnings per share. The Warrants are separate transactions and are not part of the Notes or the Note Hedges and are accounted for as a component of additional paid-in capital. Holders of the Notes and Note Hedges will not have any rights with respect to the Warrants.

7. Income taxes

We recognized a tax benefit of $1.0 million and a provision of $0.3 million on pretax net income of $3.8 and $2.4 million during the three months ended March 31, 2017 and 2016, respectively. The provisions for income taxes before discrete items reflected in the table below were $1.1 and $0.5 million during the three months ended March 31, 2017 and 2016, respectively. The increase in the provision for income taxes before discrete items for the three months ended March 31, 2017, compared with the same period in the prior year, is primarily due to the increase in profitability before income taxes.

Primary differences between our provision for income taxes before discrete items and the income tax provision at the U.S. statutory rate of 35% include lower taxes on permanently reinvested foreign earnings and the tax effects of stock-based compensation expense pursuant to ASC 718-740, Stock Compensation – Income Taxes, which are non-deductible for tax purposes.

Our tax provision before discrete items is reconciled to our recorded provision for income taxes during the three months ended March 31, 2017 and 2016 as follows (in millions):

	Three Months Ended March 31,	
	2017	2016
Provision for income taxes before discrete items	$ 1.1	$ 0.5
Interest related to unrecognized tax benefits	0.1	0.2
Benefit related to stock based compensation, including ESPP dispositions	(1.6)	(0.1)
Benefit from reassessment of taxes upon filing tax returns	(0.1)	(0.3)
Benefit from reassessment of taxes upon tax law change	(0.5)	—
(Benefit from) Provision for income taxes	$ (1.0)	$ 0.3

As of March 31, 2017 and December 31, 2016, gross unrecognized benefits that would affect the effective tax rate if recognized were $32.3 and $32.0 million, respectively. Over the next twelve months, our existing tax positions will continue to generate increased liabilities for unrecognized tax benefits. It is reasonably possible that our gross unrecognized tax benefits will decrease up to $3.5 million in the next twelve months primarily due to the lapse of the statute of limitations for federal and state tax purposes. These adjustments, if recognized, would positively impact our effective tax rate, and would be recognized as additional tax benefits in our Condensed Consolidated Statements of Operations.

In accordance with ASU 2013-11, Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, Similar Tax Loss, or Tax Credit Carryforward Exists, $20.4 million of gross unrecognized tax benefits were offset against deferred tax assets as of March 31, 2017, and the remaining $11.9 million has been recorded as noncurrent income taxes payable.

We recognize potential accrued interest and penalties related to unrecognized tax benefits in income tax expense. As of March 31, 2017 and December 31, 2016, we have accrued $0.6 and $0.5 million, respectively, for potential payments of interest and penalties.

We are subject to examination by the Internal Revenue Service ("IRS") for the 2013-2015 tax years, state tax jurisdictions for the 2012-2015 tax years, the Netherlands tax authority for the 2012-2015 tax years, the Spanish tax authority for the 2012-2015 tax years, the Israel tax authority for the 2011-2015 tax years, and the Italian tax authority for the 2012-2015 tax years.

8. Commitments and Contingencies

Contingent Consideration

We are required to make payments to the former stockholders of acquired companies based on the achievement of specified performance targets as more fully explained in Note 5 – Investments and Fair Value Measurements.

Lease Commitments and Contractual Obligations

As of March 31, 2017, we have leased certain of our current facilities under noncancellable operating lease agreements. We are required to pay property taxes, insurance, and nominal maintenance costs for certain of these facilities and any increases over the base year of these expenses on the remainder of our facilities.

Assets Held for Sale

Management approved a plan to sell the office building located at 1340 Corporate Center Curve, Eagan, Minnesota, consisting of 43,682 square feet and 5.6 acres of land, then enter into a lease agreement with the purchaser of the facility to lease 22,000 square feet under a ten-year lease agreement at market rental rates. The gain on the sale of the facility and land will be deferred over the lease term. Assets held for sale of $3.8 million as of March 31, 2017 consist of $2.9 million net book value of the facility and $0.9 million of related land.

On April 13, 2017, we entered into an agreement with MSP Metro Operating Company, LLC ("MSP"), under which the facility, improvements, and land were sold for a total price of $4.8 million. We simultaneously entered into a lease agreement with MSP to lease 22,000 square feet under a ten-year lease agreement for minimum lease payments of $3.3 million. The transaction is expected to close within six months, upon completion of due diligence.

Off-Balance Sheet Financing - Lease Arrangements

On August 26, 2016, we entered into a lease agreement and have accounted for a lease term of 48.5 years, inclusive of two renewal options of 5.0 and 3.5 years, with the City of Manchester to lease 16.9 acres adjacent to the Manchester Regional Airport. The land is subleased to Bank of Tokyo – Mitsubishi UFJ Leasing & Finance LLC ("BTMU") during the term of the lease related to the manufacturing facility that is being constructed on the site, which is described below. Minimum lease payments are $13.1 million during the 48.5 year term of the land lease, excluding four months of the land lease that is financed into the manufacturing facility lease.

On August 26, 2016, we entered into a six-year lease with BTMU whereby a 225,000 square foot manufacturing and warehouse facility is under construction related to our super-wide format industrial digital inkjet printer business in the Industrial Inkjet operating segment at a projected cost of $40 million and a construction period of 18 months. Minimum lease payments during the initial six-year term are $1.8 million. Upon completion of the initial term, we have the option to renew the lease, purchase the facility, or return the facility to BTMU subject to an 89% residual value guarantee under which we would recognize additional rent expense in the form of a variable rent payment. We have assessed our exposure in relation to the residual value guarantee and believe that there is no deficiency to the guaranteed value with respect to funds expended by BTMU as of March 31, 2017. We are treated as the owner of the facility for federal income tax purposes.

The funds pledged under the lease represent 115% of the total expenditures made by BTMU through March 31, 2017. The funds are invested in $6.2 and $4.5 million of U.S. government securities and cash equivalents, respectively, with a third party trustee and will be restricted during the construction period. Upon completion of construction, the funds will be released as cash and cash equivalents. The portion of released funds that represents 100% of the total expenditures made by BTMU will be deposited with BTMU and restricted as collateral until the end of the underlying lease period.

The funds pledged as collateral are invested in U.S. government securities and cash equivalents as of March 31, 2017, and are classified as Level 1 in the fair value hierarchy as more fully defined in Note 5—Investments and Fair Value Measurements. Net unrealized gains of less than $0.1 million were included in OCI in the accompanying Condensed Consolidated Balance Sheet as of March 31, 2017.

We have evaluated the BTMU lease agreement to determine if the arrangement qualifies as a variable interest entity ("VIE") under ASC 810-10, Consolidation. We have determined that the lease agreement does not qualify as a VIE, and as such, we are not required to consolidate the VIE in our condensed consolidated financial statements.

Legal Proceedings

We may be involved, from time to time, in a variety of claims, lawsuits, investigations, or proceedings relating to contractual disputes, securities laws, intellectual property rights, employment, or other matters that may arise in the normal course of business. We assess our potential liability in each of these matters by using the information available to us. We develop our views on estimated losses in consultation with inside and outside counsel, which involves a subjective analysis of potential results and various combinations of appropriate litigation and settlement strategies. We accrue estimated losses from contingencies if a loss is deemed probable and can be reasonably estimated.

As of March 31, 2017, we are subject to the matter discussed below.

Matan Digital Printing (“MDG”) Matter

EFI acquired Matan Digital Printers (“Matan”) in 2015 from sellers (the “2015 Sellers”) that acquired Matan Digital Printing Ltd. from other sellers in 2001 (the “2001 Sellers”). The 2001 Sellers have asserted a claim against the 2015 Sellers and Matan asserting that they are entitled to a portion of the 2015 Sellers’ proceeds from EFI’s acquisition. The 2015 Sellers dispute this claim and have agreed to indemnify EFI against the 2001 Sellers’ claim.

Although we are fully indemnified and we do not believe that it is probable that we will incur a loss, it is reasonably possible that our financial statements could be materially affected by the unfavorable resolution of this matter. Accordingly, it is reasonably possible that we could incur a material loss in this matter. We estimate the range of loss to be between one dollar and $10.1 million. If we incur a loss in this matter, it will be offset by a receivable of an equal amount representing a claim for indemnification against the escrow account established in connection with the Matan acquisition.

Other Matters

As of March 31, 2017, we were subject to various other claims, lawsuits, investigations, and proceedings in addition to the matter discussed above. There is at least a reasonable possibility that additional losses may be incurred in excess of the amounts that we have accrued. However, we believe that these claims are not material to our financial statements or the range of reasonably possible losses is not reasonably estimable. Litigation is inherently unpredictable, and while we believe that we have valid defenses with respect to legal matters pending against us, our financial statements could be materially affected in any particular period by the unfavorable resolution of one or more of these contingencies or because of the diversion of management’s attention and the incurrence of significant expenses.

9. Segment Information and Geographic Data

Operating segment information is required to be presented based on the internal reporting used by the chief operating decision making group (“CODM”) to allocate resources and evaluate operating segment performance. Our CODM is comprised of our Chief Executive Officer and Chief Financial Officer. The CODM group is focused on assessment and resource allocation among the Industrial Inkjet, Productivity Software, and Fiery operating segments.

Our operating segments are integrated through their reporting and operating structures, shared technology and practices, shared sales and marketing, and combined production facilities. Our enterprise management processes use financial information that is closely aligned with our three operating segments at the gross profit level. Relevant discrete financial information is prepared at the gross profit level for each of our three operating segments, which is used by the CODM to allocate resources and assess the performance of each operating segment.

We classify our revenue, operating segment profit (i.e., gross profit), assets, and liabilities in accordance with our operating segments as follows:

Industrial Inkjet, which consists of our VUTEk and Matan super-wide and wide format display graphics, Reggiani textile, Jetrion label and packaging, and Cretaprint ceramic tile decoration and construction material industrial digital inkjet printers; digital ultra-violet (“UV”) curable, light-emitting diode (“LED”) curable, ceramic, water-based, and thermoforming ink, as well as a variety of textile ink including dye sublimation, pigmented, reactive dye, acid dye, pure disperse dye, and water-based dispersed printing ink; digital inkjet printer parts; and professional services. Printing surfaces include paper, vinyl, corrugated, textile, glass, plastic, aluminum composite, ceramic tile, wood, and many other flexible and rigid substrates.

Productivity Software, which consists of a complete software suite that enables efficient and automated end-to-end business and production workflows for the print and packaging industry. This *Productivity Suite* also provides tools to enable revenue growth, efficient scheduling, and optimization of processes, equipment, and personnel. Customers are provided the financial and technical flexibility to deploy locally within their business or to be hosted in the cloud. The Productivity Suite addresses all segments of the print industry and consists of the: (i) *Packaging Suite,* with Radius at its core, for tag & label, cartons, and flexible packaging businesses; (ii) *Corrugated Packaging Suite,* with CTI at its core, for corrugated packaging businesses; (iii) *Enterprise Commercial Print Suite,* with Monarch at its core, for enterprise print businesses; (iv) *Publication Print Suite,* with Monarch or Technique at its core, for publication print businesses; (v) *Mid-market Print Suite,* with Pace at its core, for medium size print businesses; (vi) *Quick Print Suite,* with PrintSmith at its core, for small printers and in-plant sites; and (vii) *Value Added Products,* available with the suite and standalone, such as web-to-print, e-commerce, cross media marketing, warehousing, fulfillment, shop floor data collection, and shipping to reduce costs, increase profits, and offer new products and services to their existing and future customers. We also market Optitex computer-aided fashion design (“fashion CAD”) software, which facilitates fast fashion and increased efficiency in the textile and fashion industries.

Fiery, which consists of DFEs, including the recently acquired FFPS DFE from Xerox, that transform digital copiers and printers into high performance networked printing devices for the office, industrial, and commercial printing markets. This operating segment is comprised of (i) stand-alone DFEs connected to digital printers, copiers, and other peripheral devices, (ii) embedded DFEs and design-licensed solutions used in digital copiers and multi-functional devices, (iii) optional software integrated into our DFE solutions such as Fiery Central and Graphics Arts Package, (iv) Fiery Self Serve, our self-service and payment solution, and (v) stand-alone software-based solutions such as our proofing solutions.

Our CODM evaluates the performance of our operating segments based on net sales and gross profit. Gross profit for each operating segment includes revenue from sales to third parties and related cost of revenue attributable to the operating segment. Cost of revenue for each operating segment excludes certain expenses managed outside the operating segments consisting primarily of stock-based compensation expense.

Operating income is not reported by operating segment because operating expenses include significant shared expenses and other costs that are managed outside of the operating segments. Such operating expenses include various corporate expenses such as stock-based compensation, corporate sales and marketing, research and development, amortization of identified intangibles, various non-recurring charges, and other separately managed general and administrative expenses.

Operating segment profit (i.e., gross profit), excluding stock-based compensation expense and acquisition-related inventory charges, during the three months ended March 31, 2017 and 2016 is summarized as follows (in thousands):

	Three months ended March 31,	
	2017	2016
Industrial Inkjet		
Revenue	$ 123,263	$ 125,798
Gross profit	49,070	42,450
Gross profit percentages	39.8%	33.7%
Productivity Software		
Revenue	$ 35,058	$ 32,540
Gross profit	25,596	23,694
Gross profit percentages	73.0%	72.8%
Fiery		
Revenue	$ 70,370	$ 75,795
Gross profit	49,698	53,264
Gross profit percentages	70.6%	70.3%

Operating segment profit (i.e., gross profit) is reconciled to our Condensed Consolidated Statements of Operations during the three months ended March 31, 2017 and 2016 as follows (in thousands):

	Three months ended March 31,	
	2017	2016
Segment gross profit	$ 124,364	$ 119,408
Stock-based compensation expense	(834)	(697)
Other items excluded from segment profit	—	(314)
Gross profit	$ 123,530	$ 118,397

The Fiery gross profit percentage is impacted by $1.0 million charged to cost of revenue, which reflects the FFPS cost of manufacturing plus a portion of the expected profit margin. Inventory acquired in the acquisition of FFPS is required to be recorded at fair value rather than historical cost in accordance with ASC 805. This amount is not included in the financial information regularly reviewed by the CODM as this acquisition-related charge is not indicative of the gross margin trends in the FFPS business. Excluding this charge, the Fiery gross profit percentage would be 72.1%.

Tangible and intangible assets, net of liabilities, are summarized by operating segment as follows (in thousands):

March 31, 2017	Industrial Inkjet	Productivity Software	Fiery	Corporate and Unallocated Net Assets	Total
Goodwill	$143,472	$ 157,721	$70,481	$ —	$371,674
Identified intangible assets, net	80,277	35,557	20,624	—	136,458
Tangible assets, net of liabilities	188,954	(41,270)	8,465	168,378	324,527
Net tangible and intangible assets	$412,703	$ 152,008	$99,570	$ 168,378	$832,659
December 31, 2016					
Goodwill	$141,068	$ 155,475	$63,298	$ —	$359,841
Identified intangible assets, net	84,465	38,440	92	—	122,997
Tangible assets, net of liabilities	156,202	(27,689)	33,325	183,156	344,994
Net tangible and intangible assets	$381,735	$ 166,226	$96,715	$ 183,156	$827,832

Corporate and unallocated assets consist of cash and cash equivalents, short-term investments, restricted investments and cash equivalents, corporate headquarters facility, convertible notes, imputed financing obligation, income taxes receivable, and income taxes payable.

Geographic Regions

Our revenue originates in the U.S., China, the Netherlands, Germany, Italy, France, the U.K., Spain, Israel, Brazil, Australia, and New Zealand. We report revenue by geographic region based on ship-to destination. Shipments to some of our significant printer manufacturer/distributor customers are made to centralized purchasing and manufacturing locations, which in turn sell through to other locations. As a result of these factors, we believe that sales to certain geographic locations might be higher or lower, as the ultimate destinations are difficult to ascertain.

Our revenue by ship-to destination during the three months ended March 31, 2017 and 2016 was as follows (in thousands):

	Three months ended March 31, 2017	Three months ended March 31, 2016
Americas	$ 109,895	$ 120,266
Europe, Middle East, and Africa (“EMEA”)	88,033	83,583
Asia Pacific (“APAC”)	30,763	30,284
Total revenue	$ 228,691	$ 234,133

10. Derivatives and Hedging

We are exposed to market risk and foreign currency exchange risk from changes in foreign currency exchange rates, which could affect operating results, financial position, and cash flows. We manage our exposure to these risks through our regular operating and financing activities and, when appropriate, through the use of derivative financial instruments. These derivative financial instruments are used to hedge monetary assets and liabilities, intercompany balances, trade receivables, anticipated cash flows, and to reduce earnings and cash flow volatility resulting from shifts in market rates. Our objective is to offset gains and losses resulting from these exposures with losses and gains on the derivative contracts used to hedge them, thereby reducing volatility of earnings or protecting fair values of assets and liabilities. We do not have any leveraged derivatives, nor do we use derivative contracts for speculative purposes. ASC 815, Derivatives and Hedging, requires the fair value of all derivative instruments, including those embedded in other contracts, to be recorded as assets or liabilities in our Condensed Consolidated Balance Sheet. The related cash flow impacts of our derivative contracts are reflected as cash flows from operating activities.

Our exposures are primarily related to non-U.S. dollar-denominated revenue in Europe, the U.K., Latin America, China, Israel, Australia, New Zealand, and Canada, and to non-U.S. dollar-denominated operating expenses in Europe, India, Japan, the U.K., China, Israel, Brazil, and Australia. We hedge our operating expense cash flow exposure in Indian rupees. We hedge balance sheet remeasurement exposure associated with British pound sterling, Israeli shekel, Australian dollar, New Zealand dollar, Japanese yen, Chinese renminbi, and Euro-denominated intercompany balances; Brazilian real, British pound sterling, Australian dollar, Canadian dollar, Israeli shekel, and Euro-denominated trade receivables; and British pound sterling, Indian rupee, and Euro-denominated-denominated net monetary assets.

By their nature, derivative instruments involve, to varying degrees, elements of market and credit risk. The market risk associated with these instruments resulting from currency exchange movement is expected to offset the market risk of the underlying transactions, assets, and liabilities being hedged (i.e., operating expense exposure in Indian rupees; the collection of trade receivables denominated in currencies other than their functional currency and the settlement of intercompany balances denominated in currencies other than their functional currency). We do not believe there is significant risk of loss from non-performance by the counterparty associated with these instruments because, by policy, we deal with counterparties having a minimum investment grade or better credit rating. Credit risk is managed through the continuous monitoring of exposures to such counterparties.

Cash Flow Hedges

Foreign currency derivative contracts with notional amounts of $3.3 million and $3.2 million have been designated as cash flow hedges of our Indian rupee operating expense exposure at March 31, 2017 and December 31, 2016, respectively. The fair value of the net assets (liabilities) related to these cash flow hedges are not material. The changes in fair value of these contracts are reported as a component of OCI and reclassified to operating expense in the periods of payment of the hedged operating expenses. The amount of ineffectiveness that was recorded in the Condensed Consolidated Statements of Operations for these designated cash flow hedges was immaterial. All components of each derivative’s gain or loss were included in the assessment of hedge effectiveness.

Balance Sheet Hedges

Forward contracts not designated for hedge accounting treatment with notional amounts of $162.2 and $158.7 million are used to hedge foreign currency balance sheet exposures at March 31, 2017 and December 31, 2016, respectively. They are not designated for hedge accounting treatment since there is a natural offset for the remeasurement of the underlying foreign currency denominated asset or liability. We recognize changes in the fair value of non-designated derivative instruments in earnings in the period of change. Gains and losses on foreign currency forward contracts used to hedge balance sheet exposures are recognized in interest income and other income (expense), net, in the same period as the remeasurement gain or loss of the related foreign currency denominated assets and liabilities. Forward contracts not designated as hedging instruments consist of hedges of British pound sterling, Israeli shekel, Australian dollar, New Zealand dollar, Japanese yen, Chinese renminbi, and Euro-denominated intercompany balances with notional amounts of $87.6 and $90.7 million; hedges of Brazilian real, British pound sterling, Australian dollar, Canadian dollar, Israeli shekel, and Euro-denominated trade receivables with notional amounts of $49.0 and $39.8 million; and hedges of British pounds sterling, Indian rupee, and Euro-denominated other net monetary assets with notional amounts of $25.6 and $28.2 million at March 31, 2017 and December 31, 2016, respectively.

11. Restructuring and Other

During the three months ended March 31, 2017 and 2016, cost reduction actions were taken to lower our operating expense run rate as we analyze and re-align our cost structure following our business acquisitions. These charges primarily relate to cost reduction actions undertaken to integrate recently acquired businesses, consolidate facilities, and lower our operating expense run rate. Restructuring and other consists primarily of restructuring, severance, retention, facility downsizing and relocation, and acquisition integration expenses. Our restructuring and other plans are accounted for in accordance with ASC 420, Exit or Disposal Cost Obligations, ASC 712, Compensation – Non-Retirement Postemployment Benefits, and ASC 820.

Restructuring and other costs were $0.9 and $2.7 million during the three months ended March 31, 2017 and 2016, respectively. Restructuring and other costs include severance charges of $0.4 and $2.5 million related to reductions in head count of 18 and 71 during the three months ended March 31, 2017 and 2016, respectively. Severance costs include severance payments, related employee benefits, outplacement fees, and employee relocation costs.

Facilities relocation and downsizing expenses were $0.1 million during the three months ended March 31, 2017 and 2016, primarily related to the relocation of certain manufacturing and administrative locations due to reduced space requirements. Integration expenses of $0.5 and $0.1 million during the three months ended March 31, 2017 and 2016, respectively, were required to integrate our business acquisitions.

Restructuring and other reserve activities during the three months ended March 31, 2017 and 2016 are summarized as follows (in thousands):

	2017	2016
Reserve balance at January 1,	$ 1,824	$ 3,019
Restructuring charges	285	1,846
Other charges	633	868
Non-cash restructuring and other	(63)	(403)
Payments	(684)	(1,828)
Reserve balance at March 31,	$ 1,995	$ 3,502

12. Stock-based Compensation

We account for stock-based payment awards in accordance with ASC 718, Stock Compensation, which requires the measurement and recognition of compensation expense for all equity awards granted to our employees and directors, including RSUs, ESPP purchase rights, and employee stock options related to all stock-based compensation plans based on the fair value of such awards on the date of grant. We amortize stock-based compensation cost on a graded vesting basis over the vesting period reduced by forfeitures, after assessing the probability of achieving the requisite performance criteria with respect to performance-based awards. Stock-based compensation cost is recognized over the requisite service period for each separately vesting tranche of the award as though the award were, in substance, multiple awards.

Stock-based compensation expense related to stock options, ESPP purchase rights, and RSUs during the three months ended March 31, 2017 and 2016 is summarized as follows (in thousands):

	Three months ended March 31, 2017	Three months ended March 31, 2016
RSUs	$ 9,237	$ 10,563
ESPP purchase rights	1,043	766
Employee stock options	—	(45)
Total stock-based compensation	10,280	11,284
Income tax benefit	(2,873)	(2,659)
Stock-based compensation expense, net of tax	$ 7,407	$ 8,625

Valuation Assumptions for Stock Options and ESPP Purchase Rights

We use the Black-Scholes-Merton ("BSM") option pricing model to value stock-based compensation for all equity awards, except market-based awards, which are valued using the Monte Carlo valuation model.

The BSM model determines the fair value of stock-based payment awards based on the stock price on the date of grant and is affected by assumptions regarding a number of highly complex and subjective variables. These variables include, but are not limited to, our expected stock price volatility over the term of the awards, expected term, interest rates, and actual and projected employee stock option exercise behavior. Expected volatility is based on the historical volatility of our stock over a preceding period commensurate with the expected term of the option. The expected term is based upon management's consideration of the historical life, vesting period, and contractual period of the options granted. The risk-free interest rate for the expected term of the option is based on the U.S. Treasury yield curve in effect at the time of grant. Expected dividend yield was not considered in the option pricing formula since we do not pay dividends and have no current plans to do so in the future.

Stock options were not granted during the three months ended March 31, 2017 and 2016. The estimated weighted average fair value per share of ESPP purchase rights issued and the underlying weighted average assumptions for the three months ended March 31, 2017 and 2016 are as follows:

	Three months ended March 31, 2017	Three months ended March 31, 2016
Weighted average fair value per share	$ 12.03	$ 10.39
Expected volatility	24% - 28%	22% - 25%
Risk-free interest rate	0.7% - 1.2%	0.5% - 0.8%
Expected term (in years)	0.5 - 2.0	0.5 - 2.0

Stock options outstanding and exercisable, including performance-based and market-based options, as of March 31, 2017 and activity during the three months ended March 31, 2017 are summarized below (in thousands, except weighted average exercise price and remaining contractual term):

	Shares outstanding	Weighted average exercise price	Weighted average remaining contractual term (years)	Aggregate intrinsic value
Options outstanding at January 1, 2017	315	$ 13.86		
Options exercised	(63)	12.31		
Options outstanding at March 31, 2017	252	$ 14.26	1.40	$ 8,713
Options vested and expected to vest at March 31, 2017	252	$ 14.26	1.40	$ 8,713
Options exercisable at March 31, 2017	252	$ 14.26	1.40	$ 8,713

Aggregate intrinsic value for stock options represents the difference between the closing price per share of our common stock on the last trading day of the fiscal period and the option exercise price multiplied by the number of in-the-money stock options outstanding, vested and expected to vest, and exercisable at March 31, 2017.

Non-vested RSUs as of March 31, 2017 and activity during the three months ended March 31, 2017 are summarized below (shares in thousands):

	Time-based		Performance-based		Market-based		Total	
	Shares	Weighted average grant date fair value	Shares	Weighted average grant date fair value	Shares	Weighted average grant date fair value	Shares	Weighted average grant date fair value
Non-vested at January 1, 2017	795	$ 43.79	1,265	$ 42.64	23	$ 33.16	2,083	$ 43.34
Granted	53	45.96	358	46.95	—	—	411	46.83
Vested	(56)	42.48	(235)	40.64	—	—	(291)	40.99
Forfeited	(14)	44.12	(367)	40.61	—	—	(381)	40.73
Non-vested at March 31, 2017	778	$ 44.03	1,021	$ 45.34	23	$ 33.16	1,822	$ 44.62

Performance-based and Market-based RSUs and Stock Options

Performance-based RSUs that vested based on financial results are included in the period that the performance and related service criteria were met. The grant date fair value of RSUs vested during the three months ended March 31 2017 was $11.9 million. The aggregate intrinsic value at March 31, 2017 for RSUs expected to vest was $59.4 million and the remaining weighted average vesting period was 1.13 years. Aggregate intrinsic value for RSUs vested and expected to vest represents the closing price per share of our common stock on the last trading day of the fiscal period, multiplied by the number of RSUs vested and expected to vest as of March 31, 2017. RSUs expected to vest represent time-based RSUs unvested and outstanding at March 31, 2017, and performance-based RSUs for which the requisite service period has not been rendered, but are expected to vest based on the achievement of performance conditions.

Performance-based and market-based stock options were not granted during the three months ended March 31, 2017. We use the BSM option pricing model to value performance-based RSUs. The weighted average grant date fair value per share of performance-based RSUs granted and the assumptions used to estimate grant date fair value during the three months ended March 31, 2017 and 2016 are as follows:

	Performance-based RSUs	
	Short-term	Long-term
Three months ended March 31, 2017 Grants		
Grant date fair value per share	$ 47.28	$ 45.89
Service period (years)	1.0	2.0 - 3.0
Three months ended March 31, 2016 Grants		
Grant date fair value per share	$ 39.47	$ 36.78
Service period (years)	1.0	3.0

Our performance-based RSUs generally vest when specified performance criteria are met based on bookings, revenue, cash provided by operating activities, non-GAAP operating income, non-GAAP earnings per share, revenue growth compared to market comparables, non-GAAP earnings per share growth compared to cash flow from operating activities growth, or other targets during the service period; otherwise, they are forfeited. Non-GAAP operating income is defined as operating income determined in accordance with GAAP, adjusted to remove the impact of certain expenses and gains. Non-GAAP earnings per share is defined as net income determined in accordance with GAAP, adjusted to remove the impact of certain expenses and gains, and the related tax effects, divided by the weighted average number of common shares and dilutive potential common shares outstanding during the period as more fully defined in Note 2 – Earnings Per Share of the Notes to Consolidated Financial Statements.

The grant date fair value per share determined in accordance with the BSM valuation model is being amortized over the service period of the performance-based awards. The probability of achieving the awards was determined based on review of the actual results achieved thus far by each business unit compared with the operating plan during the pertinent service period as well as the overall strength of the business unit. Stock-based compensation expense was adjusted based on this probability assessment. As actual results are achieved during the service period, the probability assessment is updated and stock-based compensation expense adjusted accordingly.

Market-based awards vest when our average closing stock price exceeds defined multiples of the closing stock price on a specified date for 90 consecutive trading days. If these multiples were not achieved by another specified date, the awards are forfeited. The grant date fair value is being amortized over the average derived service period of the awards. The average derived service period and total fair value were determined using a Monte Carlo valuation model based on our assumptions, which include a risk-free interest rate and implied volatility.

13. Common Stock Repurchase Programs

On November 9, 2015, the board of directors approved the repurchase of $150 million of outstanding common stock commencing January 1, 2016. This authorization expires December 31, 2018. Under this publicly announced plan, we repurchased 0.4 and 0.5 million shares for an aggregate purchase price of $17.5 and $20.0 million during the three months ended March 31, 2017 and 2016, respectively.

Our employees have the option to surrender shares of common stock to satisfy their tax withholding obligations that arise on the vesting of RSUs. In connection with stock option exercises, certain employees can surrender shares to satisfy the exercise price of certain stock options and any tax withholding obligations incurred in connection with such exercises. Employees surrendered 0.1 million shares for an aggregate purchase price of $5.0 and $3.1 million during the three months ended March 31, 2017 and 2016, respectively.

These repurchased shares reduce shares outstanding and are recorded as treasury stock under the cost method thereby reducing stockholders’ equity by the cost of the repurchased shares. Our buyback program is limited by SEC regulations and is subject to compliance with our insider trading policy.

14. Accounts Receivable

Financing Receivables

ASC 310, Receivables, requires disclosure regarding the credit quality of our financing receivables and allowance for credit losses including disclosure of credit quality indicators, past due information, and modifications of our financing receivables. Our financing receivables of $32.3 and $31.0 million consisting of $19.7 and $17.8 million of sales-type lease receivables, included within other current assets and other assets at March 31, 2017 and December 31, 2016, respectively, and $12.6 and $13.2 million of trade receivables having an original contractual maturity in excess of one year, included within accounts receivable, net of allowance, at March 31, 2017 and December 31, 2016, respectively. The trade receivables of $12.6 and $13.2 million having an original total contractual maturity in excess of one year at March 31, 2017 and December 31, 2016, include $6.4 and $7.1 million, respectively, which are scheduled to be received in less than one year. The credit quality of financing receivables is evaluated on the same basis as trade receivables. We do not have material past due financing receivables.

Accounts Receivable Sales Arrangements

In accordance with ASC 860-20, Transfers and Servicing, trade receivables are derecognized from our Condensed Consolidated Balance Sheet when sold to third parties upon determining that such receivables are presumptively beyond the reach of creditors in a bankruptcy proceeding. The recourse obligation is measured using market data from similar transactions and the servicing liability is determined based on the fair value that a third party would charge to service these receivables. These liabilities were determined to not be material at March 31, 2017 and December 31, 2016.

We have facilities in the U.S. and Italy that enable us to sell to third parties, on an ongoing basis, certain trade receivables with recourse. Trade receivables sold with recourse are generally short-term receivables with payment due dates of less than 10 days from the date of sale, which are subject to a servicing obligation. Trade receivables sold under these facilities were $4.2 and $19.8 million during the three months ended March 31, 2017 and the year ended December 31, 2016, respectively, which approximates the cash received.

We have facilities in Spain and Italy that enable us to sell to third parties, on an ongoing basis, certain trade receivables without recourse. Trade receivables sold without recourse are generally short-term receivables with payment due dates of less than one year, which are secured by international letters of credit. Trade receivables sold under these facilities were $1.0 and $3.5 million during the three months ended March 31, 2017 and the year ended December 31, 2016, respectively, which approximates the cash received.

We report collections from the sale of trade receivables to third parties as operating cash flows in the Condensed Consolidated Statements of Cash Flows.

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

Forward-looking Statements

This Quarterly Report on Form 10-Q ("Report"), including "Management's Discussion and Analysis of Financial Condition and Results of Operations," contains forward-looking statements regarding future events and the future results of the Company that are based on current expectations, estimates, forecasts, and projections about the industry in which the Company operates and the beliefs and assumptions of the management of the Company. Words such as "address," "anticipate," "believe," "consider," "continue," "develop," "estimate," "expect," "further," "goal," "intend," "may," "plan," "potential," "project," "seek," "should," "target," "will," variations of such words, and similar expressions are intended to identify such forward-looking statements. Such statements reflect the current views of the Company and its management with respect to future events and are subject to certain risks, uncertainties, and assumptions. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, the Company's actual results, performance, or achievements could differ materially from the results expressed in, or implied by, these forward-looking statements. Factors that might cause or contribute to such differences include, but are not limited to, those discussed in this Report under the section entitled "Risk Factors" in Item 1A of Part II of this report and Item 1A of Part I of our Annual Report on Form 10-K for the year ended December 31, 2016 and elsewhere and in other reports the Company files with the SEC. The following discussion should be read in conjunction with our Annual Report on Form 10-K for the fiscal year ended December 31, 2016 and the condensed consolidated financial statements and notes thereto included elsewhere in this Report. The Company assumes no obligation to revise or update these forward-looking statements to reflect actual results, events, or changes in factors or assumptions affecting such forward-looking statements.

Business Overview

We are a world leader in customer-centric digital printing innovation focused on the transformation of the printing, packaging, ceramic tile decoration, and textile industries from the use of traditional analog based printing to digital on-demand printing.

Our products include industrial super-wide and wide format display graphics, label and packaging, textile, and ceramic tile decoration digital inkjet printers that utilize our digital ink, industrial digital inkjet printer parts, and professional services; print production workflow, web-to-print, cross-media marketing, fashion design, and business process automation solutions; and color printing DFEs creating an on-demand digital printing ecosystem. Our ink includes digital UV curable, LED curable, ceramic, water-based, and thermoforming ink, as well as a variety of textile ink including dye sublimation, pigmented, reactive dye, acid dye, pure disperse dye, and water-based dispersed printing ink. Our award-winning business process automation solutions are integrated from creation to print and are vertically integrated with our industrial digital inkjet printers and products produced by the leading production digital color page printer manufacturers that are driven by our Fiery DFEs.

Our product portfolio includes industrial super-wide and wide format digital inkjet products ("Industrial Inkjet") including VUTEk and Matan display graphics super-wide and wide format, Reggiani textile, Jetrion label and packaging, and Cretaprint ceramic tile decoration and construction material industrial digital inkjet printers and ink; print production workflow, web-to-print, cross-media marketing, Optitex textile two-dimensional ("2D") and three-dimensional ("3D") fashion CAD applications, and business process automation software ("Productivity Software"), which provides corporate printing, label and packaging, publishing, and mailing and fulfillment solutions for the printing and packaging industry; and Fiery DFEs ("Fiery"). Our integrated solutions and award-winning technologies are designed to automate print and business processes, streamline workflow, provide profitable value-added services, and produce accurate digital output.

Critical Accounting Policies

The preparation of financial statements and related disclosures in conformity with U.S. GAAP requires management to make judgments, assumptions, and estimates that affect the amounts reported. An accounting policy is deemed to be critical if it requires an accounting estimate to be made based on assumptions about matters that are highly uncertain at the time the estimate is made, if different estimates reasonably could have been used, or if changes in the estimate that are reasonably possible could materially impact the financial statements. Management believes there have been no significant changes during the three months ended March 31, 2017 to the items that we disclosed as our critical accounting policies and estimates in Management's Discussion and Analysis of Financial Condition and Results of Operations in our Annual Report on Form 10-K for the year ended December 31, 2016.

Recent Accounting Pronouncements

See Note 1 of our Notes to Condensed Consolidated Financial Statements for a full description of recent accounting pronouncements including the respective expected dates of adoption.

Overview

Key financial results during the three months ended March 31, 2017 were as follows:

- Our results of operations during the three months ended March 31, 2017 compared with the three months ended March 31, 2016 reflect a 2% revenue shortfall, gross profit improvement, and increased investment income resulting from increased interest rates. We completed our acquisitions of FFPS and Rialco in the first quarters of 2017 and 2016, respectively. Their results are included in our results of operations commencing on their respective acquisition dates.
- Our consolidated revenue decreased by 2%, or $5.4 million, during the three months ended March 31, 2017 compared with the three months ended March 31, 2016. Industrial Inkjet and Fiery revenue decreased by $2.5 and $5.4 million, respectively, while Productivity Software revenue increased by $2.5 million during the three months ended March 31, 2017. Recurring ink and maintenance revenue increased by 12% during the three months ended March 31, 2017 compared with the same period in the prior year and represented 34% of consolidated revenue during the three months ended March 31, 2017.
- Our gross profit percentage increased to 54% during the three months ended March 31, 2017 from 51% during the three months ended March 31, 2016, primarily due to a 6.1 percentage point increase in the Industrial Inkjet operating segment. The improved Industrial Inkjet gross profit percentage was due to higher gross profit percentages on the newly launched three and five meter roll-to-roll printer models and reduced discounting of mature printer models, which resulted in reduced sales of these products and fewer units in our product mix.
- Operating expenses increased by $4.0 million to $115.4 million during the three months ended March 31, 2017 from $111.4 million during the three months ended March 31, 2016. The increase in operating expenses was primarily due to head count increases related to our business acquisitions, prototype and non-recurring engineering expenses related to future product launches, trade show and marketing program expenses, amortization of intangible assets, and increased fair value of contingent consideration, partially offset by decreased stock-based compensation and restructuring and other expenses.
- Interest expense increased by $0.3 million during the three months ended March 31, 2017 compared with the three months ended March 31, 2016, primarily due to interest accretion on our Notes.
- Interest income and other income (expense), net, increased to a gain of $0.3 million during the three months ended March 31, 2017 from a loss of $0.2 million during the three months ended March 31, 2016, primarily due to increased investment income.
- We recognized a tax benefit of $1.0 million on pre-tax net income of $3.8 million during the three months ended March 31, 2017, compared to a tax provision of $0.3 million on pre-tax net income of $2.4 million during the three months ended March 31, 2016. The changes in the income tax provision are primarily due to increased tax benefits related to stock-based compensation.

Results of Operations

Our Condensed Consolidated Statements of Operations as a percentage of total revenue during the three months ended March 31, 2017 and 2016 is as follows:

	Three months ended March 31,	
	2017	2016
Revenue	100%	100%
Gross profit	54	51
Operating expenses:		
Research and development	17	16
Sales and marketing	19	18
General and administrative	9	9
Restructuring and other	—	1
Amortization of identified intangibles	5	4
Total operating expenses	50	48
Income from operations	4	3
Interest expense	(2)	(2)
Interest income and other income (expense), net	—	—
Income before income taxes	2	1
Benefit from (provision for) income taxes	—	—
Net income	2%	1%

Revenue

We classify our revenue, gross profit, assets, and liabilities in accordance with our three operating segments as follows:

"Industrial Inkjet," which consists of our VUTEk and Matan super-wide and wide format display graphics, Reggiani textile, Jetrion label and packaging, and Cretaprint ceramic tile decoration and construction material industrial digital inkjet printers; digital UV curable, LED curable, ceramic, water-based, and thermoforming ink, as well as a variety of textile ink including dye sublimation, pigmented, reactive dye, acid dye, pure disperse dye, and water-based dispersed printing ink; digital inkjet printer parts; and professional services. Printing surfaces include paper, vinyl, corrugated, textile, glass, plastic, aluminum composite, ceramic tile, wood, and many other flexible and rigid substrates.

"Productivity Software," which consists of a complete software suite that enables efficient and automated end-to-end business and production workflows for the print and packaging industry. This *Productivity Suite* also provides tools to enable revenue growth, efficient scheduling, and optimization of processes, equipment, and personnel. Customers are provided the financial and technical flexibility to deploy locally within their business or to be hosted in the cloud. The Productivity Suite addresses all segments of the print industry and consists of the: (i) *Packaging Suite,* with Radius at its core, for tag & label, cartons, and flexible packaging businesses; (ii) *Corrugated Packaging Suite,* with CTI at its core, for corrugated packaging businesses; (iii) *Enterprise Commercial Print Suite,* with Monarch at its core, for enterprise print businesses; (iv) *Publication Print Suite,* with Monarch or Technique at its core, for publication print businesses; (v) *Mid-market Print Suite,* with Pace at its core, for medium size print businesses; (vi) *Quick Print Suite,* with PrintSmith at its core, for small printers and in-plant sites; and (vii) *Value Added Products,* available with the suite and standalone, such as web-to-print, e-commerce, cross media marketing, warehousing, fulfillment, shop floor data collection, and shipping to reduce costs, increase profits, and offer new products and services to their existing and future customers. We also market Optitex fashion CAD software, which facilitates fast fashion and increased efficiency in the textile and fashion industries.

"Fiery," which consists of DFEs, including the recently acquired FFPS DFE from Xerox, that transform digital copiers and printers into high performance networked printing devices for the office, industrial, and commercial printing markets. This operating segment is comprised of (i) stand-alone DFEs connected to digital printers, copiers, and other peripheral devices, (ii) embedded DFEs and design-licensed solutions used in digital copiers and multi-functional devices, (iii) optional software integrated into our DFE solutions such as Fiery Central and Graphics Arts Package, (iv) Fiery Self Serve, our self-service and payment solution, and (v) stand-alone software-based solutions such as our proofing solutions.

Ex-Currency. To better understand trends in our business, we believe it is helpful to adjust our condensed consolidated statement of operations to exclude the impact of year-over-year changes in the translation of foreign currencies into U.S. dollars. This is a non-GAAP measure that is calculated by adjusting revenue, gross profit, and operating expenses by using historical exchange rates in effect during the comparable prior period and removing the balance sheet currency remeasurement impact from interest income and other income (expense), net, including removal of any hedging gains and losses. We refer to these adjustments as "ex-currency." The year-over-year currency impact can be determined as the difference between year-over-year actual growth rates and year-over-year ex-currency growth rates.

Management believes the ex-currency measures provide investors with an additional perspective on year-over-year financial trends and enables investors to analyze our operating results in the same way management does. A reconciliation of the ex-currency adjustments to GAAP results for the three months ended March 31, 2017 and 2016 and an explanation of how management uses non-GAAP financial information to evaluate its business, the substance behind management's decision to use this non-GAAP financial information, the material limitations associated with the use of non-GAAP financial information, the manner in which management compensates for those limitations, and the substantive reasons management believes that this non-GAAP financial information provides useful information to investors is included under "Non-GAAP Financial Information" below.

Revenue by Operating Segment during the Three Months Ended March 31, 2017 and 2016

Our revenue by operating segment during the three months ended March 31, 2017 and 2016 was as follows (in thousands):

	Three months ended March 31,					
	2017	Percent of total	2016	Percent of total	Change $	Change %
Industrial Inkjet	$123,263	54%	$125,798	54%	$(2,535)	(2)%
Productivity Software	35,058	15	32,540	14	2,518	8
Fiery	70,370	31	75,795	32	(5,425)	(7)
Total revenue	$228,691	100%	$234,133	100%	$(5,442)	(2)%

Overview

Our consolidated revenue decreased by 2% (1% ex-currency), or $5.4 million, to $228.7 million during the three months ended March 31, 2017 from $234.1 million for the three months ended March 31, 2016, primarily due to decreased super-wide format printer and Fiery revenue, partially offset by increased Reggiani textile and Cretaprint ceramic tile decoration digital inkjet printer revenue, increased ink revenue, post-acquisition Rialco revenue, and post-acquisition Optitex revenue.

Industrial Inkjet

Industrial Inkjet revenue decreased by 2% (zero percent ex-currency) during the three months ended March 31, 2017 compared with the three months ended March 31, 2016. Industrial Inkjet revenue decreased primarily due to:

- super-wide format industrial digital inkjet printer revenue was reduced because we offered less discounting on mature printer models, which was only partially offset by sales of our recently launched LX3 Hybrid printer and our roll-to-roll three and five meter printer models due to limited production quantities in the launch quarter.

The reduced super-wide format industrial digital inkjet printer revenue was partially offset by the following:

- increased textile printer revenue led by the FabriVu 180/340 soft signage super wide-format roll-to-roll digital inkjet graphics printers manufactured in our Reggiani facility in Italy, as well as increased recurring textile ink revenue,
- a full quarter of post-acquisition Rialco ink products revenue, which closed March 1, 2016,
- increased revenue from the M4, which is a wider-format ceramic tile decoration digital inkjet printer, which was launched in 2016, which can print with a variety of print heads,
- increased digital UV curable and LED curable ink revenue as a result of the high utilization that our digital UV curable printers are experiencing in the field, and
- increased ceramic tile decoration digital inkjet printer and ink revenue as our internally formulated ceramic ink gains market share.

Productivity Software

Productivity Software revenue increased by 8% (also 8% ex-currency) during the three months ended March 31, 2017 compared with the three months ended March 31, 2016 primarily due to post-acquisition Optitex revenue, which was acquired in June 2016, and annual price increases related to our maintenance contracts.

Fiery

Fiery revenue decreased by 7% (also 7% ex-currency) during the three months ended March 31, 2017 compared with the three months ended March 31, 2016. Although end customer and reseller preference for Fiery products drives demand, most Fiery revenue relies on printer manufacturers to design, develop, and integrate Fiery technology into their print engines. The leading printer manufacturers continued to reduce their inventory levels during the quarter.

Revenue by Geographic Area

Shipments to some of our significant printer manufacturer customers are made to centralized purchasing and manufacturing locations, which in turn ship to other locations, making it difficult to obtain accurate geographical shipment data. Accordingly, we believe that export sales of our products into each region may differ from what is reported.

Our revenue by geographic area during the three months ended March 31, 2017 and 2016 was as follows (in thousands):

	Three months ended March 31,					
	2017	Percent of total	2016	Percent of total	Change $	Change %
Americas	$109,895	48%	$120,266	51%	$(10,371)	(9)%
EMEA	88,033	39	83,583	36	4,450	5
APAC	30,763	13	30,284	13	479	2
Total revenue	$228,691	$ 100%	$234,133	$ 100%	$ (5,442)	(2)%

Overview

Our consolidated revenue decreased by 2% (1% ex-currency), or $5.4 million, to $228.7 million during the three months ended March 31, 2017 from $234.1 million during the three months ended March 31, 2016, primarily due to decreased revenue in the Americas.

Americas

Americas revenue decreased by $10.4 million, or 9% (also 9% ex-currency), during the three months ended March 31, 2017 compared with the three months ended March 31, 2016 primarily due to decreased industrial digital inkjet super-wide format, textile digital inkjet printer, and Fiery revenue, partially offset by increased digital UV curable and LED curable ink and Productivity Software revenue. Increased Productivity Software revenue resulted primarily from our acquisition of Optitex in June 2016.

EMEA

EMEA revenue increased by $4.5 million, or 5% (8% ex-currency), during the three months ended March 31, 2017 compared with the three months ended March 31, 2016 primarily due to increased Reggiani industrial digital inkjet textile printer revenue, post-acquisition Rialco ink products revenue, and post-acquisition Optitex revenue, partially offset by decreased industrial digital inkjet super-wide format and Fiery revenue.

APAC

APAC revenue increased by $0.5 million, or 2% (3% ex-currency), during the three months ended March 31, 2017 compared with the three months ended March 31, 2016 primarily due to increased ceramic tile decoration digital inkjet printer, post-acquisition Optitex revenue, and Fiery revenue, partially offset by decreased textile digital inkjet printer revenue.

Revenue Concentration

A substantial portion of our revenue over the years has been attributable to sales of products through the leading printer manufacturers and independent distributor channels. We have a direct relationship with several leading printer manufacturers and work closely to design, develop, and integrate Fiery technology into their print engines. The printer manufacturers act as distributors and sell our DFE products to end customers through reseller channels. End customer and reseller channel preference for our DFE and software solutions drive demand for Fiery products through the printer manufacturers.

Although end customer and reseller channel preference for Fiery products drives demand, most Fiery revenue relies on printer manufacturers to design, develop, and integrate Fiery technology into their print engines. A significant portion of our revenue is, and has been, generated by sales of our Fiery DFE products to a relatively small number of leading printer manufacturers. During the three months ended March 31, 2017 and 2016, Xerox provided 10% and 12% of our consolidated revenue, respectively. We expect that if we increase our revenue in the Industrial Inkjet and Productivity Software operating segments in the future, the percentage of our revenue from the leading printer manufacturer customers will decrease.

Gross Profit

Gross profit by operating segment, excluding stock-based compensation and acquisition-related inventory charges, during the three months ended March 31, 2017 and 2016 was as follows (in thousands):

	Three months ended March 31,	
	2017	**2016**
Industrial Inkjet		
Revenue	$ 123,263	$ 125,798
Gross profit	49,070	42,450
Gross profit percentages	39.8%	33.7%
Productivity Software		
Revenue	$ 35,058	$ 32,540
Gross profit	25,596	23,694
Gross profit percentages	73.0%	72.8%
Fiery		
Revenue	$ 70,370	$ 75,795
Gross profit	49,698	53,264
Gross profit percentages	70.6%	70.3%

A reconciliation of our segment gross profit to our condensed consolidated statements of operations during the three months ended March 31, 2017 and 2016 was as follows (in thousands):

	Three months ended March 31, 2017	Three months ended March 31, 2016
Segment gross profit	$ 124,364	$ 119,408
Stock-based compensation expense	(834)	(697)
Other items excluded from segment profit	—	(314)
Gross profit	$ 123,530	$ 118,397

The Fiery gross profit percentage is impacted by $1.0 million charged to cost of revenue, which reflects the FFPS cost of manufacturing plus a portion of the expected profit margin. Inventory acquired in the acquisition of FFPS is required to be recorded at fair value rather than historical cost in accordance with ASC 805. This amount is not included in the financial information regularly reviewed by management as this acquisition-related charge is not indicative of the gross margin trends in the FFPS business. Excluding this charge, the Fiery gross profit percentage would be 72.1%.

Overview

Our gross profit percentage increased to 54% during the three months ended March 31, 2017 from 51% during the three months ended March 31, 2016. Excluding acquisition-related inventory fair value adjustments, our gross profit percentage increased to 55% (also 55% ex-currency) during the three months ended March 31, 2017 from 51% during the three months ended March 31, 2016. The improved gross profit percentage was primarily due to a 6.1 percentage point increase in the Industrial Inkjet operating segment.

Industrial Inkjet Gross Profit

The Industrial Inkjet gross profit percentage increased to 39.8% (40.2% ex-currency) during the three months ended March 31, 2017 from 33.7% during the three months ended March 31, 2016, primarily due to higher gross profit percentages on the newly launched three and five meter roll-to-roll printer models and reduced discounting and sales of mature printer models. Gross profit percentages also improved by leveraging efficiencies in our worldwide digital inkjet printer manufacturing operations, centralizing super wide-format textile digital inkjet printer production in Italy, transferring production of super wide-format roll-to-roll digital inkjet printer production to Israel to leverage the lower cost platform that Matan provides, reducing warranty expense as a percentage of revenue due to engineering and quality improvements, and increasing ink revenue as a percentage of consolidated Industrial Inkjet revenue. Our ink business generates a higher gross profit percentage than other elements of our Industrial Inkjet operating segment.

Productivity Software Gross Profit

The Productivity Software gross profit percentages increased to 73.0% (72.6% ex-currency) during the three months ended March 31, 2017 from 72.8% during the three months ended March 31, 2016, primarily due to a favorable foreign currency impact and price increases on annual maintenance renewal contracts.

Fiery Gross Profit

The Fiery gross profit percentage increased to 70.6% (also 70.6% ex-currency) during the three months ended March 31, 2017 from 70.3% during the three months ended March 31, 2016. The Fiery gross profit percentage, excluding the fair value adjustment related to acquired FFPS inventories, increased to 72.1% (also 72.1% ex-currency) during the three months ended March 31, 2017 from 70.3% during the three months ended March 31, 2016. The revenue mix between lower margin DFEs compared with higher margin professional services and software solutions accounts for this margin fluctuation between the periods.

Operating Expenses

Operating expenses during the three months ended March 31, 2017 and 2016 were as follows (in thousands):

	Three months ended March 31, 2017	2016	Change $	Change %
Research and development	$ 39,627	$ 37,122	$ 2,505	7%
Sales and marketing	43,035	41,530	1,505	4
General and administrative	21,029	20,832	197	1
Restructuring and other	918	2,715	(1,797)	(66)
Amortization of identified intangibles	10,778	9,229	1,549	17
Total operating expenses	$115,387	$111,428	$ 3,959	4%

Operating expenses increased by $4.0 million, or 4% (also 4% ex-currency) to $115.4 million during the three months ended March 31, 2017 from $111.4 million during the three months ended March 31, 2016. The increase in operating expenses was primarily due to head count increases related to our business acquisitions, prototype and non-recurring engineering expenses related to future product launches, trade show and marketing program expenses, amortization of intangible assets, and increased fair value of contingent consideration, partially offset by decreased stock-based compensation and restructuring and other expenses.

Research and Development

Research and development expenses include personnel, consulting, travel, research and development facilities, prototype materials, and non-recurring engineering expenses.

Research and development expenses during the three months ended March 31, 2017 were $39.6 million, or 17% of revenue, compared to $37.1 million, or 16% of revenue, during the three months ended March 31, 2016, which is an increase of $2.5 million, or 7% (also 7% ex-currency). Personnel-related expenses increased by $0.4 million primarily due to head count increases related to our business acquisitions. Prototypes and non-recurring engineering, consulting, contractor, freight, and related travel expenses increased by $1.7 million related to future product launches. Stock-based compensation expense increased by $0.5 million primarily due to increased ESPP participation by employees compared to the prior year.

We expect that if the U.S. dollar remains volatile against the Indian rupee, Euro, British pound sterling, Israeli shekel, Canadian dollar or Brazilian real, research and development expenses reported in U.S. dollars could fluctuate, although we hedge our operating expense exposure to the Indian rupee, which partially mitigates this risk.

Sales and Marketing

Sales and marketing expenses include personnel, trade shows, marketing programs and promotional materials, sales commissions, travel and entertainment, depreciation, and worldwide sales office expenses.

Sales and marketing expenses during the three months ended March 31, 2017 were $43.0 million, or 19% of revenue, compared to $41.5 million, or 18% of revenue, during the three months ended March 31, 2016, which is an increase of $1.5 million, or 4% (4% ex-currency). Personnel-related expenses increased by $1.2 million primarily due to head count increases related to our business acquisitions. Trade show and marketing program spending, including consulting, contractor, travel, and freight, increased by $0.1 million. Stock-based compensation expense decreased by $0.1 million primarily due to reduced probability of achieving performance awards. Facilities and information technology expenses related to our sales and marketing activities increased by $0.3 million.

Over time, our sales and marketing expenses may increase in absolute terms if revenue increases in future periods, as we continue to actively promote our products and introduce new services and products. We expect that if the U.S. dollar remains volatile against the Euro, British pound sterling, Brazilian real, Israeli shekel, Australian dollar, and other currencies, sales and marketing expenses reported in U.S. dollars could fluctuate.

General and Administrative

General and administrative expenses consist primarily of human resources, legal, and finance expenses.

General and administrative expenses during the three months ended March 31, 2017 were $21.0 million, or 9% of revenue, compared to $20.8 million, or 9% of revenue, during the three months ended March 31, 2016, which is an increase of $0.2 million, or 1% (2% ex-currency). Acquisition costs increased by $0.3 million primarily due to increased expense in 2017 related to the FFPS acquisition, which closed on January 31, 2017, and anticipated acquisitions compared with acquisition costs related to the Rialco acquisition, which closed on March 1, 2016. Reserves for litigation and doubtful accounts decreased by $0.2 million. Stock-based compensation expense decreased by $1.6 million primarily due to reduced probability of achieving performance awards. Facilities and information technology expenses related to general and administrative activities increased by $0.2 million.

The estimated probability of achieving the Optitex earnout performance target increased during the three months ended March 31, 2017, resulting in an increase in the associated liability and a charge to general and administrative expense of $1.3 million, including accretion of interest on all acquisitions. The estimated probability of achieving the DIMS earnout performance target was reduced, partially offset by interest accretion on all acquisitions and the increased probability of achieving the Reggiani earnout performance target, during the three months ended March 31, 2016, resulting in a reduction of the associated liability and a credit to general and administrative expense of $0.2 million.

We expect that if the U.S. dollar remains volatile against the Euro, British pound sterling, Indian rupee, Israeli shekel, Brazilian real, or other currencies, general and administrative expenses reported in U.S. dollars could fluctuate.

Stock-based Compensation

We account for stock-based payment awards in accordance with ASC 718, which requires stock-based compensation expense to be recognized based on the fair value of such awards on the date of grant. We amortize compensation cost on a graded vesting basis over the vesting period, after assessing the probability of achieving requisite performance criteria with respect to performance-based and market-based awards. Stock-based compensation cost is recognized over the requisite service period for each separately vesting tranche of the award as though the award were, in substance, multiple awards. This results in greater stock-based compensation expense during the initial years of the vesting period.

Stock-based compensation expenses were $10.3 and $11.3 million during the three months ended March 31, 2017 and 2016, respectively, a decrease of $1.0 million. Stock-based compensation expense decreased primarily due to reduced probability of achieving performance awards.

Restructuring and Other

Restructuring and other costs during the three months ended March 31, 2017 and 2016 were $0.9 and $2.7 million, respectively. Restructuring and other costs include severance charges of $0.4 and $2.5 million related to reductions in head count of 18 and 71 during the three months ended March 31, 2017 and 2016, respectively. Severance costs include severance payments, related employee benefits, outplacement fees, and employee relocation costs.

Facilities relocation and downsizing expenses during the three months ended March 31, 2017 and 2016 were $0.1 million, primarily related to the relocation of certain manufacturing and administrative locations due to reduced space requirements. Integration expenses of $0.5 and $0.1 million during the three months ended March 31, 2017 and 2016, respectively, were required to integrate our business acquisitions.

Amortization of Identified Intangibles

Amortization of identified intangibles during the three months ended March 31, 2017 was $10.8 million, or 5% of revenue, compared to $9.2 million, or 4% of revenue, during the three months ended March 31, 2016, an increase of $1.6 million, or 17%. Intangible amortization increased primarily due to intangible amortization of identified intangibles resulting from the FFPS and Optitex acquisitions, partially offset by decreased amortization due to certain intangible assets from prior year acquisitions becoming fully amortized.

Interest Expense

Interest expense during the three months ended March 31, 2017 was $4.7 million compared to $4.4 million during the three months ended March 31, 2016, an increase of $0.3 million primarily due interest accretion on our Notes.

Interest Income and Other Income (Expense), Net

Interest income and other income (expense), net, includes interest income on our cash equivalents and short-term investments, gains and losses from sales of our cash equivalents and short-term investments, and net foreign currency transaction gains and losses.

Interest income and other income (expense), net, increased to a gain of $0.3 million during the three months ended March 31, 2017 from a loss of $0.2 million during the three months ended March 31, 2016, primarily due to increased investment income of $0.4 million.

Income Before Income Taxes

The components of income before income taxes during the three months ended March 31, 2017 and 2016 are as follows (in thousands):

	Three Months Ended March 31,	
	2017	2016
U.S.	$ (3,247)	$ 1,158
Foreign	7,017	1,232
Total	$ 3,770	$ 2,390

During the three months ended March 31, 2017, pretax net income of $3.8 million consisted of U.S. pretax net loss of $3.2 million and foreign pretax net income of $7.0 million, respectively. Pretax net loss attributable to U.S. operations included amortization of identified intangibles of $2.9 million, stock-based compensation of $10.3 million, restructuring and other of $0.7 million, acquisition-related costs of $0.7 million, cost of revenue resulting from the fair value adjustment to FFPS inventory of $0.4 million, and interest expense related to our Notes of $4.2 million. Pretax net income attributable to foreign operations included amortization of identified intangibles of $7.9 million, restructuring and other of $0.2 million, cost of revenue resulting from the fair value adjustment to FFPS inventory of $0.6 million, earnout interest accretion of $0.4 million, and change in fair value of contingent consideration of $0.8 million. The exclusion of these items from pretax net income would result in U.S. and foreign pretax net income of $15.1 and $16.8 million, respectively, during the three months ended March 31, 2017.

For the three months ended March 31, 2016, pretax net income of $2.4 million consisted of U.S. and foreign pretax net income of $1.2 million. Pretax net income attributable to U.S. operations included amortization of identified intangibles of $1.9 million, stock-based compensation of $11.3 million, restructuring and other of $1.0 million, acquisition-related costs of $0.2 million, litigation settlement expense of $0.3 million, and interest expense and amortization of debt issuance costs related to our Notes of $4.0 million. The pretax net loss attributable to foreign operations included amortization of identified intangibles of $7.3 million, restructuring and other of $1.7 million, acquisition-related costs of $0.3 million, earnout interest accretion of $0.6 million, and foreign exchange fluctuation related to contingent consideration of $0.5 million, partially offset by the change in fair value of contingent consideration of $0.8 million. The exclusion of these items from net income would result in U.S. and foreign pretax net income of $19.9 and $11.1 million, respectively, for the three months ended March 31, 2016.

Provision for (Benefit from) Income Taxes

We recognized a tax benefit of $1.0 million and a provision of $0.3 million on pretax net income of $3.8 and $2.4 million during the three months ended March 31, 2017 and 2016, respectively. The provisions for income taxes before discrete items reflected in the table below were $1.1 and $0.5 million during the three months ended March 31, 2017 and 2016, respectively. The increase in the provision for income taxes before discrete items during the three months ended March 31, 2017, compared with the same period in the prior year, is primarily due to the increase in profitability before income taxes.

Primary differences between our provision for income taxes before discrete items and the income tax provision at the U.S. statutory rate of 35% include lower taxes on permanently reinvested foreign earnings and the tax effects of stock-based compensation expense pursuant to ASC 718-740, which are non-deductible for tax purposes.

Our tax provision before discrete items is reconciled to our recorded provision for income taxes during the three months ended March 31, 2017 and 2016 as follows (in millions):

	Three months ended March 31, 2017	Three months ended March 31, 2016
Provision for income taxes before discrete items	$ 1.1	$ 0.5
Interest related to unrecognized tax benefits	0.1	0.2
Benefit related to stock based compensation, including ESPP dispositions	(1.6)	(0.1)
Benefit from reassessment of taxes upon filing tax returns	(0.1)	(0.3)
Benefit from reassessment of taxes upon tax law change	(0.5)	—
(Benefit from) Provision for income taxes	$ (1.0)	$ 0.3

We earn a significant amount of our operating income outside the U.S., which is deemed to be permanently reinvested in foreign jurisdictions. Of the income generated in jurisdictions with tax rates materially lower than the statutory U.S. tax rate of 35%, most is earned in the Netherlands, Spain, United Kingdom, Italy, and the Cayman Islands. Our effective tax rate could fluctuate significantly and be adversely impacted if anticipated earnings in the Netherlands, Spain, and the Cayman Islands are proportionally lower than current projections and earnings in all other jurisdictions are proportionally higher than current projections.

While we currently do not foresee a need to repatriate the earnings of foreign operations, should we require more capital in the U.S. than is generated by our U.S. operations, we may elect to repatriate funds held in our foreign jurisdictions or raise capital in the U.S. through debt or equity issuances. These alternatives could result in higher effective tax rates, the cash payments of taxes and/or increased interest expense.

As of March 31, 2017, and December 31, 2016, gross unrecognized tax benefits that would affect the effective tax rate if recognized were $32.3 and $32.0 million, respectively, which would affect the effective tax rate, if recognized. Over the next twelve months, our existing tax positions will continue to generate increased liabilities for unrecognized tax benefits. It is reasonably possible that our gross unrecognized tax benefits will decrease up to $3.5 million in the next twelve months. These adjustments, if recognized, would positively impact our effective tax rate, and would be recognized as additional tax benefits in our Condensed Consolidated Statement of Operations. The reduction in unrecognized tax benefits relates primarily to a lapse of the statute of limitations for federal and state tax purposes.

In accordance with ASU 2013-11, we recorded $20.4 million of gross unrecognized tax benefits as an offset to deferred tax assets as of March 31, 2017, and the remaining $11.9 million has been recorded as noncurrent income taxes payable.

We recognize potential accrued interest and penalties related to unrecognized tax benefits in income tax expense. As of March 31, 2017 and December 31, 2016, we have accrued $0.6 and $0.5 million, respectively, for potential payments of interest and penalties.

As of March 31, 2017, we were subject to examination by the Internal Revenue Service for the 2013-2015 tax years, state tax jurisdictions for the 2012-2015 tax years, the Netherlands tax authority for the 2012-2015 tax years, the Spanish tax authority for the 2012-2015 tax years, the Israel tax authority for the 2011-2015 tax years, and the Italian tax authority for the 2012-2015 tax years.

In Altera Corp. v. Commissioner, the U.S Tax Court issued an opinion on July 27, 2015, related to the treatment of stock-based compensation expense in an intercompany cost-sharing arrangement. To date, the U.S. Department of the Treasury has not withdrawn the requirement to include stock-based compensation in intercompany cost-sharing arrangements from its regulations. Due to the uncertainty related to the status of the current regulations and the basis of the appeal that has been filed by the Internal Revenue Service, we have not recorded any benefit as of March 31, 2017 in our Condensed Consolidated Statement of Operations. We will continue to monitor ongoing developments and potential impacts to our condensed consolidated financial statements.

We assess the likelihood that our deferred tax assets will be recovered from future taxable income by considering both positive and negative evidence relating to their recoverability. If we believe that recovery of these deferred tax assets is not more likely than not, we establish a valuation allowance.

Significant judgment is required in determining any valuation allowance recorded against deferred tax assets. In assessing the need for a valuation allowance, we considered all available evidence, including recent operating results, projections of future taxable income, our ability to utilize loss and credit carryforwards, and the feasibility of tax planning strategies. Other than valuation allowances on deferred tax assets related to California, Luxembourg, Israel, Netherlands, and Turkey deferred tax assets that will not be realized based on the size of the net operating loss and research and development credits being generated, we have determined that is more likely than not that we will realize the benefit related to all other deferred tax assets. To the extent we increase a valuation allowance, we will include an expense in the Condensed Consolidated Statement of Operations in the period in which such determination is made.

Non-GAAP Financial Information

Use of Non-GAAP Financial Information

To supplement our condensed consolidated financial results prepared in accordance with GAAP, we use non-GAAP measures of net income and earnings per diluted share that are GAAP net income and earnings per diluted share adjusted to exclude certain costs, expenses, and gains.

We believe the presentation of non-GAAP net income and non-GAAP earnings per diluted share provides important supplemental information regarding certain costs, expenses, gains, and significant items that we believe are important to understanding financial and business trends relating to our financial condition and results of operations. Non-GAAP net income and non-GAAP earnings per diluted share are among the primary indicators used by management as a basis for planning and forecasting future periods and by management and our Board of Directors to determine whether our operating performance has met specified targets and thresholds. Management uses non-GAAP net income and non-GAAP earnings per diluted share when evaluating operating performance because it believes the exclusion of the items described below, for which the amounts and/or timing may vary significantly depending on our activities and other factors, facilitates comparability of our operating performance from period to period. We have chosen to provide this information to investors so they can analyze our operating results in the same way that management does and use this information in their assessment of our business and the valuation of our Company.

Use and Economic Substance of Non-GAAP Financial Measures

We compute non-GAAP net income and non-GAAP earnings per diluted share by adjusting GAAP net income and GAAP earnings per diluted share to remove the impact of the amortization of acquisition-related intangibles, stock-based compensation expense, non-cash settlement of vacation liabilities, restructuring and other expense, acquisition-related transaction expenses, costs to integrate such acquisitions into our business, incremental cost of revenue due to the fair value adjustment to inventories acquired in business acquisitions, changes in the fair value of contingent consideration including the related foreign exchange fluctuation impact, litigation settlement charges, and non-cash interest expense related to our Notes. We use a constant non-GAAP tax rate of 19%, which we believe reflects the long-term average tax rate based on our international structure and geographic distribution of revenue and profit.

Ex-Currency. To better understand trends in our business, we believe it is helpful to adjust our Condensed Consolidated Statements of Operations to exclude the impact of year-over-year changes in the translation of foreign currencies into U.S. dollars. This is a non-GAAP measure that is calculated by adjusting revenue, gross profit, and operating expenses by using historical exchange rates in effect during the comparable prior period and removing the balance sheet currency remeasurement impact from interest income and other income (expense), net, including removal of any hedging gains and losses. We refer to these adjustments as “ex-currency.” Management believes the ex-currency measures provide investors with an additional perspective on year-over-year financial trends and enables investors to analyze our operating results in the same way management does. The year-over-year currency impact can be determined as the difference between year-over-year actual growth rates and year-over-year ex-currency growth rates.

These excluded items are described below:

- *Inventory acquired in the acquisition of FFPS* is required to be recorded at fair value rather than historical cost in accordance with ASC 805. The fair value of FFPS inventory reflects the manufacturing cost plus a portion of the expected gross profit. We have adjusted our cost of revenue to reflect the expected gross profit that was included in the inventory valuation under ASC 805. We believe this adjustment is useful to investors to understand the gross profit trends of our ongoing business.
- *Intangible assets acquired to date are being amortized* on a straight-line basis.
- *Stock-based compensation expense* recognized in accordance with ASC 718.
- *Non-cash settlement of vacation liabilities* through the issuance of RSUs, which are not included in the GAAP presentation of our stock-based compensation expense.
- Restructuring and other consists of:
  - *Restructuring charges* incurred as we consolidate the number and size of our facilities and, as a result, reduce the size of our workforce.
  - *Expenses incurred to integrate businesses acquired* of $0.5 and $0.1 million during the three months ended March 31, 2017 and 2016, respectively.
- *Acquisition-related transaction costs* associated with businesses acquired during the periods reported and anticipated transactions of $0.7 and $0.5 million during the three months ended March 31, 2017 and 2016, respectively.
- *Changes in fair value of contingent consideration.* Our management determined that we should analyze the total return provided by the investment when evaluating operating results of an acquired entity. The total return consists of operating profit generated from the acquired entity compared to the purchase price paid, including the final amounts paid for contingent consideration without considering any post-acquisition adjustments related to changes in the fair value of the contingent consideration. Because our management believes the final purchase price paid for the acquisition reflects the accounting value assigned to both contingent consideration and to the intangible assets, we exclude the GAAP impact of any adjustments to the fair value of acquisition-related contingent consideration from the operating results of an acquisition in subsequent periods, including the related foreign exchange fluctuation impact. We believe this approach is useful in understanding the long-term return provided by our acquisitions and that investors benefit from a supplemental non-GAAP financial measure that excludes the impact of this adjustment.
- *Non-cash interest expense on our Notes.* Our Notes may be settled in cash on conversion. We are required to separately account for the liability (debt) and equity (conversion option) components of the Notes in a manner that reflects our non-convertible debt borrowing rate. Accordingly, for GAAP purposes, we are required to amortize a debt discount equal to the fair value of the conversion option as interest expense on our $345 million of 0.75% convertible senior notes that were issued in a private placement in September 2014 over the term of the Notes.

- *Litigation Settlements.* We settled, or accrued reserves related to, litigation claims of $0.3 million during the three months ended March 31, 2016.
- *Tax effect of non-GAAP adjustments* . We use a constant non-GAAP tax rate of 19%, which we believe reflects the long-term average tax rate based on our international structure and geographic distribution of revenue and profit. The long-term average tax rate is calculated in accordance with the principles of ASC 740, Income Taxes, after excluding the tax effect of the non-GAAP items described above.

Usefulness of Non-GAAP Financial Information to Investors

These non-GAAP measures, including ex-currency, are not in accordance with or an alternative to GAAP and may be materially different from other non-GAAP measures, including similarly titled non-GAAP measures, used by other companies. The presentation of this additional information should not be considered in isolation from, as a substitute for, or superior to, revenue, gross profit, operating expenses, net income, or earnings per diluted share prepared in accordance with GAAP. Non-GAAP financial measures have limitations in that they do not reflect certain items that may have a material impact upon our reported financial results. We expect to continue to incur expenses of a nature similar to the non-GAAP adjustments described above, and exclusion of these items from our non-GAAP net income and non-GAAP earnings per diluted share should not be construed as an inference that these costs are unusual, infrequent, or non-recurring.

RECONCILIATION OF GAAP NET INCOME TO NON-GAAP NET INCOME
(unaudited)

(in millions, except per share data)	Three Months Ended March 31, 2017	2016	Ex-Currency 2017
Net income	$ 4.8	$ 2.1	$ 4.8
Cost of revenue adjustment - FFPS inventory valuation	1.0	—	$ 1.0
Amortization of identified intangibles assets and in-process R&D	10.8	9.2	10.8
Ex-currency adjustment	—	—	1.1
Restructuring and other	0.9	2.7	0.9
Stock-based compensation	10.3	11.3	10.3
Non-cash settlement of vacation liabilities by issuing RSUs	—	2.7	—
General and administrative:			
Acquisition-related transaction costs	0.7	0.5	0.7
Changes in fair value of contingent consideration	1.3	(0.2)	1.3
Litigation settlements	—	0.3	—
Interest and other expense, net:			
Non-cash interest expense related to our Notes	3.2	3.0	3.2
Foreign exchange fluctuation related to contingent consideration	(0.1)	0.5	(0.1)
Balance sheet currency remeasurement impact	—	—	1.1
Tax effect of non-GAAP adjustments	(7.1)	(5.9)	(7.5)
Non-GAAP net income	$25.8	$26.2	$ 27.6
Non-GAAP net income per diluted share	$0.55	$0.55	$ 0.58
Shares for purposes of computing diluted non-GAAP net income per share	47.2	47.9	47.2

RECONCILIATION OF GAAP REVENUE BY OPERATING SEGMENT TO NON-GAAP EX-CURRENCY
(unaudited)

(in millions)	GAAP 2017	GAAP Percent of total	Ex-Currency Adjustments	Ex-Currency 2017	Ex-Currency Percent of total	GAAP 2016	GAAP Percent of total	GAAP Change from 2016 GAAP $	GAAP Change from 2016 GAAP %	Ex-Currency Change from 2016 GAAP $	Ex-Currency Change from 2016 GAAP %
Industrial Inkjet	$123.2	54%	$ 2.5	$125.7	54%	$125.8	54%	$ (2.6)	(2)%	$ (0.1)	— %
Productivity Software	35.1	15	0.2	35.3	15	32.5	14	2.5	8	2.7	8
Fiery	70.4	31	—	70.4	31	75.8	32	(5.4)	(7)	(5.4)	(7)
Total revenue	$228.7	100%	$ 2.7	$231.4	100%	$234.1	100%	$ (5.5)	(2)%	$ (2.8)	(1)%

(All columns of this table fall under "Three Months Ended March 31,".)

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RECONCILIATION OF GAAP REVENUE BY GEOGRAPHIC AREA TO NON-GAAP EX-CURRENCY (unaudited)

(in millions)	Three Months Ended March 31, GAAP 2017	GAAP Percent of total	Ex-Currency Adjustments	Ex-Currency 2017	Ex-Currency Percent of total	GAAP 2016	GAAP Percent of total	Change from 2016 GAAP $	Change from 2016 GAAP %	Ex-Currency Change from 2016 GAAP $	Ex-Currency Change from 2016 GAAP %
Americas	$109.9	48%	$ (0.2)	$109.7	47%	$120.3	51%	$ (10.4)	(9)%	$ (10.6)	(9)%
EMEA	88.0	39	2.5	90.5	39	83.5	36	4.5	5	7.0	8
APAC	30.8	13	0.4	31.2	14	30.3	13	0.5	2	0.9	3
Total revenue	$228.7	100%	$ 2.7	$231.4	100%	$234.1	100%	$ (5.4)	(2)%	$ (2.7)	(1)%

RECONCILIATION OF GAAP REVENUE BY GEOGRAPHIC AREA TO NON-GAAP EX-CURRENCY (unaudited)

(in millions)	Three Months Ended March 31, GAAP 2017	Ex-Currency Adjustments	Ex-Currency 2017	GAAP 2016
Industrial Inkjet				
Revenue	$123.3	$ 2.5	$ 125.8	$125.8
Gross profit	49.1	1.5	50.6	42.5
Gross profit percentages	39.8%		40.2%	33.7%
Productivity Software				
Revenue	$ 35.1	$ 0.2	$ 35.3	$ 32.5
Gross profit	25.6	—	25.6	23.7
Gross profit percentages	73.0%		72.6%	72.8%
Fiery				
Revenue	$ 70.4	$ —	$ 70.4	$ 75.8
Gross profit	49.7	—	49.7	53.3
Gross profit percentages	70.6%		70.6%	70.3%

Operating segment profit (i.e., gross profit) is reconciled to our Condensed Consolidated Statements of Operations during the three months ended March 31, 2017 and 2016 as follows (in thousands):

(in millions)	Three Months Ended March 31, GAAP 2017	Ex-Currency Adjustments	Ex-Currency 2017	GAAP 2016
Segment gross profit	$124.4	$ 1.5	$ 125.9	$119.3
Stock-based compensation expense	(0.9)	—	(0.9)	(0.7)
Other items excluded from segment profit	—	—	0.0	(0.3)
Gross profit	$123.5	$ 1.5	$ 125.0	$118.3

RECONCILIATION OF GAAP OPERATING EXPENSES TO NON-GAAP EX-CURRENCY (unaudited)

(in millions)	Three Months Ended March 31, GAAP 2017	Ex-Currency Adjustments	Ex-Currency 2017	GAAP 2016	GAAP Change from 2016 GAAP $	GAAP Change from 2016 GAAP %	Ex-Currency Change from 2016 GAAP $	Ex-Currency Change from 2016 GAAP %
Research and development	$ 39,627	$ 50	$ 39,677	$ 37,122	$ 2,505	7%	$ 2,555	7%
Sales and marketing	43,035	281	43,316	41,530	1,505	4	1,786	4
General and administrative	21,029	139	21,168	20,832	197	1	336	2
Restructuring and other	918	(50)	868	2,715	(1,797)	(66)	(1,847)	(68)
Amortization of identified intangibles	10,778	(12)	10,766	9,229	1,549	17	1,537	17
Total operating expenses	$115,387	$ 408	$115,795	$111,428	$ 3,959	4%	$ 4,367	4%

Liquidity and Capital Resources

Overview

Cash, cash equivalents, and short-term investments decreased by $16.2 million to $443.5 million as of March 31, 2017 from $459.7 million as of December 31, 2016. The decrease was primarily due to cash consideration paid for the acquisition of FFPS of $5.9 million, treasury stock purchases of $17.5 million, settlement of shares for employee common stock related tax liabilities and the stock option exercise price of certain stock options of $5.0 million, cash payments for property and equipment of $3.8 million, funding $4.4 million in the restricted collateral account related to the lease of the Manchester construction project, acquisition-related contingent consideration payments of $1.3 million, partially offset by cash flows provided by operating activities of $14.9 million, proceeds from ESPP purchases and stock option exercises of $5.9 million, and the impact of foreign exchange rate changes of $1.0 million.

(in thousands)	March 31, 2017	December 31, 2016	Change
Cash and cash equivalents	$ 151,096	$ 164,313	$ (13,217)
Short term investments	292,403	295,428	(3,025)
Total cash, cash equivalents, and short-term investments	$ 443,499	$ 459,741	$ (16,242)

	Three months ended March 31,		
(in thousands)	2017	2016	Change
Net cash provided by operating activities	$ 14,898	$ 8,965	$ 5,933
Net cash (used for) provided by investing activities	(10,808)	38,899	(49,707)
Net cash used for financing activities	(18,276)	(24,118)	5,842
Effect of foreign exchange rate changes on cash and cash equivalents	969	2,319	(1,350)
(Decrease) Increase in cash and cash equivalents	$ (13,217)	$ 26,065	$ (39,282)

Cash, cash equivalents, and short-term investments held outside of the U.S. in various foreign subsidiaries were $113.2 and $94.2 million as of March 31, 2017 and December 31, 2016, respectively, will be used to fund local operations and finance international acquisitions. If these funds are needed for our operations in the U.S., we would be required to accrue and pay U.S. federal and state income taxes on some or all of these funds. However, our intent is to indefinitely reinvest these funds outside of the U.S. and our current plans do not demonstrate a need to repatriate them to fund our U.S. operations.

Based on past performance and current expectations, we believe that our cash, cash equivalents, short-term investments, and cash generated from operating activities will satisfy our working capital, capital expenditure, investment, stock repurchase, commitments (see Note 8 – Commitments and Contingencies of the Notes to Consolidated Financial Statements), and other liquidity requirements associated with our existing operations through at least the next twelve months. We believe that the most strategic uses of our cash resources include business acquisitions, strategic investments to gain access to new technologies, repurchases of shares of our common stock, and working capital. At March 31, 2017, cash, cash equivalents, and short-term investments available were $443.5 million. We believe that our liquidity position and capital resources are sufficient to meet our operating and working capital needs.

Operating Activities

During the three months ended March 31, 2017, our cash provided by operating activities was approximately $14.9 million.

Net cash provided by operating activities consists primarily of net income of $4.8 million and non-cash charges and credits of $34.0 million, partially offset by the net change in operating assets and liabilities of $23.9 million. Non-cash charges and credits of $34.0 million consist primarily of $14.9 million in depreciation and amortization, $10.3 million of stock-based compensation expense, net of cash settlements, non-cash accretion of interest expense of $3.7 million, provision for bad debts and sales-related allowances of $2.8 million, provision for inventory obsolescence of $0.8 million, and other non-cash charges and credits of $2.5 million, partially offset by deferred tax credits of $0.9 million. The net change in operating assets and liabilities of $23.9 million consists primarily of increased gross accounts receivable of $6.4 million, increased gross inventories of $10.3 million, increased other current assets of $5.5 million, and decreased net income taxes payable of $2.1 million, partially offset by increased accounts payable and accrued liabilities of $0.3 million.

Accounts Receivable

Our primary source of operating cash flow is the collection of accounts receivable from our customers. One measure of the effectiveness of our collection efforts is average days sales outstanding for accounts receivable (“DSO”). DSOs were 89 and 76 days at March 31, 2017 and December 31, 2016, respectively. We calculate DSO by dividing net accounts receivable at the end of the quarter by revenue recognized during the quarter, multiplied by the total days in the quarter.

DSOs increased during the three months ended March 31, 2017, compared with December 31, 2016, primarily due to sales with extended payment terms and a non-linear sales cycle resulting in significant billings at the end of the quarter. We expect DSOs to vary from period to period because of changes in the mix of business between direct customers and end user demand driven through the leading printer manufacturers, the effectiveness of our collection efforts both domestically and overseas, and variations in the linearity of our sales. As the percentage of Industrial Inkjet and Productivity Software related revenue increases, we expect DSOs will trend higher. Our DSOs related to the Industrial Inkjet and Productivity Software operating segments are traditionally higher than those related to the significant printer manufacturer customers / distributors in our Fiery operating segment as, historically, these Fiery customers have been granted shorter payment terms and have paid on a more timely basis.

We have facilities in the U.S. and Italy that enable us to sell to third parties, on an ongoing basis, certain trade receivables with recourse. Trade receivables sold with recourse are generally short-term receivables with payment due dates of less than 10 days from date of sale, which are subject to a servicing obligation. We also have facilities in Spain and Italy that enable us to sell to third parties, on an ongoing basis, certain trade receivables without recourse. Trade receivables sold without recourse are generally short-term receivables with payment due dates of less than one year, which are secured by international letters of credit.

Trade receivables sold cumulatively under these facilities were $4.2 and $1.0 million during the three months ended March 31, 2017 on a recourse and nonrecourse basis, respectively, which approximates the cash received. The receivables that were sold to third parties were removed from the Condensed Consolidated Balance Sheet and were reflected as cash provided by operating activities in the Condensed Consolidated Statements of Cash Flows.

Inventories

Our inventories are procured primarily in support of the Industrial Inkjet and Fiery operating segments. The majority of our Industrial Inkjet products are manufactured internally, while Fiery production is primarily outsourced. The result is lower inventory turnover for Industrial Inkjet inventories compared with Fiery inventories.

Our net inventories increased by $14.7 million to $113.8 million at March 31, 2017 from $99.1 million at December 31, 2016 primarily due to the increase in Industrial Inkjet inventories and acquisition of FFPS inventories. Inventory turnover was 3.7 during the quarter ended March 31, 2017 compared with 5.0 turns during the quarter ended December 31, 2016. We calculate inventory turnover by dividing annualized current quarter cost of revenue by ending inventories.

Investing Activities

Acquisitions

On January 31, 2017, we purchased the FFPS business from Xerox for cash consideration of $5.9 million, plus $18.0 million of future cash payments, of which $9.0 million is due in July 2017 and $9.0 million is due in July 2018. Effective immediately after the acquisition, we will be supplying FFPS digital front ends (“DFEs”) within our Fiery operating segment.

We received a net working capital adjustment of $0.2 million related to the Optitex acquisition during the first quarter of 2017, which was recorded as a purchase price adjustment.

On March 1, 2016, we purchased Rialco for cash consideration of $8.4 million, net of cash acquired, plus an additional potential future cash earnout, which is contingent on achieving revenue and gross profit targets. Rialco is a leading European supplier of dye powders and color products for the textile, digital print, and other decorating industries.

The escrow of $1.5 million related to the Reggiani acquisition was remitted to us in return for the issuance of shares of common stock during the three months ended March 31, 2016.

A tax recovery liability of $1.0 million related to the Cretaprint acquisition was paid during the three months ended March 31, 2016.

Investments

Proceeds from sales and maturities of marketable securities, net of purchases, were $3.1 million during the three months ended March 31, 2017. We have classified our investment portfolio as “available for sale.” Our investments are made with a policy of capital preservation and liquidity as primary objectives. We may hold investments in fixed income debt securities to maturity; however, we may sell an investment at any time if the quality rating of the investment declines, the yield on the investment is no longer attractive, or we have better uses for the cash. Since we invest primarily in investment securities that are highly liquid with a ready market, we believe the purchase, maturity, or sale of our investments has no material impact on our overall liquidity.

Property and Equipment, Net

Our property and equipment additions have historically been funded from operating activities. Net purchases of property and equipment were $3.8 and $5.2 million during the three months ended March 31, 2017 and 2016, respectively, including the purchase of single pass digital inkjet printer manufacturing and engineering equipment in the Americas and Spain.

Financing Activities

Stock Option and ESPP Proceeds

Historically, our recurring cash flows provided by financing activities have been from the receipt of cash from the issuance of common stock through the exercise of stock options and employee purchases of ESPP shares. We received proceeds from the exercise of stock options of $0.8 and $0.1 million and employee purchases of ESPP shares of $5.1 and $4.8 million during the three months ended March 31, 2017 and 2016, respectively. While we may continue to receive proceeds from these plans in future periods, the timing and amount of such proceeds are difficult to predict and are contingent on a number of factors including the price of our common stock, the timing and number of stock options exercised by employees that had participated in these plans, net settlement options, employee participation in our ESPP, and general market conditions. We anticipate that cash provided from the exercise of stock options will decline as we have shifted to issuance of RSUs, rather than stock options.

Treasury Stock Purchases

The primary use of funds for financing activities during the three months ended March 31, 2017 and 2016 was $22.5 and $23.1 million, respectively, of cash used to repurchase outstanding shares of our common stock. Such repurchases included $5.0 and $3.1 million used for net settlement of shares for the exercise price of certain stock options and any tax withholding obligations incurred in connection with such exercises and tax withholding obligations that arose on the vesting of RSUs during the three months ended March 31, 2017 and 2016, respectively.

On November 9, 2015, the board of directors approved the repurchase of $150 million of outstanding common stock commencing January 1, 2016. This authorization expires December 31, 2018. Under this publicly announced plan, we repurchased 0.4 and 0.5 million shares for an aggregate purchase price of $17.5 and $20.0 million during the three months ended March 31, 2017 and 2016, respectively.

Earnout Payments

Earnout payments during the three months ended March 31, 2017 of $1.3 million are primarily related to the previously accrued Shuttleworth contingent consideration liability. Earnout payments during the three months ended March 31, 2016 of $1.2 and $0.2 million are primarily related to the previously accrued DirectSmile and Metrix contingent consideration liabilities, respectively

We paid approximately $4.5 million of indebtedness, which was assumed in the Matan acquisitions during the three months ended March 31, 2016.

Other Commitments

Our Industrial Inkjet inventories consist of materials required for our internal manufacturing operations and finished goods and sub-assemblies purchased from third party contract manufacturers. Raw materials and finished goods, print heads, frames, digital UV curable ink, ceramic digital ink, various textile printing inks, and other components are required to support our internal manufacturing operations. Label and packaging digital inkjet printers, branded textile ink, and certain sub-assemblies are purchased from third party contract manufacturers and branded third party ink manufacturers.

Our Fiery inventory consists primarily of raw materials and finished goods, memory subsystems, processors, and ASICs, which are sold to third party contract manufacturers responsible for manufacturing our products. Should we decide to purchase components and manufacture Fiery DFEs internally, or should it become necessary for us to purchase and sell components other than memory subsystems, processors, and ASICs to our contract manufacturers, inventory balances and potentially property and equipment would increase significantly, thereby reducing our available cash resources. Further, the inventories we carry could become obsolete, thereby negatively impacting our financial condition and results of operations.

We are also reliant on several sole source suppliers for certain key components and could experience a significant negative impact on our financial condition and results of operations if such supplies were reduced or not available. We may be required to compensate our subcontract manufacturers for components purchased for orders subsequently cancelled by us. We periodically review the potential liability and the adequacy of the related allowance.

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Indemnifications

In the normal course of business and to facilitate the sales of our products, we sometimes indemnify other parties, including customers, lessors, and parties to other transactions with us. When we indemnify these parties, typically those provisions protect other parties against losses arising from our infringement of third party intellectual property rights or other claims made by third parties arising from the use or distribution of our products. Those provisions often contain various limitations including limits on the amount of protection provided.

As permitted under Delaware law, pursuant to our bylaws, charter, and indemnification agreements with our current and former executive officers, directors, and general counsel, we are required, subject to certain limited qualifications, to indemnify our executive officers, directors, and general counsel for certain events or occurrences while the executive officer, director, or general counsel is or was serving at our request in such capacity. The indemnification period covers all pertinent events and occurrences during the executive officer's, director's, or general counsel's lifetime. The maximum potential future payments we may be obligated to make under these indemnification agreements is unlimited; however, we have director and officer insurance coverage that limits our exposure and may enable us to recover a portion of any future amounts paid.

Legal Proceedings

Please refer to "Part II – Other Information, Item 1: Legal Proceedings" in this Report for more information regarding our legal proceedings.

Off-Balance Sheet Financing

On August 26, 2016, we entered into a lease agreement and have accounted for a lease term of 48.5 years, inclusive of two renewal options of 5.0 and 3.5 years, with the City of Manchester to lease 16.9 acres of land adjacent to the Manchester Regional Airport. The land is subleased to BTMU during the term of the lease related to the manufacturing facility that is being constructed on the site, which is described below. Minimum lease payments are $13.1 million during the 48.5 year term of the land lease, excluding four months of the land lease that is financed into the manufacturing facility lease.

On August 26, 2016, we entered into a six-year lease with BTMU whereby a 225,000 square foot manufacturing and warehouse facility is under construction related to our super-wide format industrial digital inkjet printer business in the Industrial Inkjet operating segment at a projected cost of $40 million and a construction period of 18 months. Minimum lease payments during the initial six-year term are $1.8 million. Upon completion of the initial term, we have the option to renew the lease, purchase the facility, or return the facility to BTMU subject to an 89% residual value guarantee under which we would recognize additional rent expense in the form of a variable rent payment. We have assessed our exposure in relation to the residual value guarantee and believe that there is no deficiency to the guaranteed value with respect to funds expended by BTMU as of March 31, 2017. We are treated as the owner of the facility for federal income tax purposes.

The funds pledged under the lease represent 115% of the total expenditures made by BTMU through March 31, 2017. The funds are invested in $6.2 and $4.5 of million U.S. government securities and cash equivalents, respectively, with a third party trustee and will be restricted during the construction period. Upon completion of construction, the funds will be released as cash and cash equivalents. The portion that represents 100% of the total expenditures made by BTMU will be deposited with BTMU and restricted as collateral until the end of the underlying lease period.

Contractual Obligations

Please refer to Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital Resources – Contractual Obligations" presented in our Annual Report on Form 10-K during the year ended December 31, 2016. There were no material changes during the three months ended March 31, 2017.

Item 3: Quantitative and Qualitative Disclosures About Market Risk

Market Risk

We are exposed to various market risks. Market risk is the potential loss arising from adverse changes in market rates and prices, general credit, foreign currency exchange rate fluctuations, liquidity, and interest rate risks, which may be exacerbated by the tight global credit market and increase in economic uncertainty that have affected various sectors of the financial market and continue to cause credit and liquidity issues. We do not enter into derivatives or other financial instruments for trading or speculative purposes. We may enter into financial instrument contracts to manage and reduce the impact of changes in foreign currency exchange rates on earnings and cash flows. The counterparties to such contracts are major financial institutions. We hedge our operating expense exposure in Indian rupees. The notional amount of our Indian rupee cash flow hedge was $3.3 million at March 31, 2017. We hedge balance sheet remeasurement exposures using forward contracts not designated for hedge accounting treatment with notional amounts of $162.2 million at March 31, 2017 consisting of hedges of British pound sterling, Israeli shekel, Australian dollar, New Zealand dollar, Japanese yen, Chinese renminbi, and Euro-denominated intercompany balances with notional amounts of $87.6 million, hedges of Brazilian real, British pound sterling, Australian dollar, Canadian dollar, Israeli shekel, and Euro-denominated trade receivables with notional amounts of $49.0 million, and hedges of British pounds sterling, Indian rupee, and Euro-denominated other net monetary assets with notional amounts of $25.6 million.

Since Europe represents a significant portion of our revenue and cash flow, SEC encourages disclosure of our European concentrations of credit risk regarding gross receivables, related reserves, and aging on a region or country basis, and the impact on liquidity with respect to estimated timing of receivable payments. Since Europe is composed of varied countries and regional economies, our European risk profile is somewhat more diversified due to the varying economic conditions among the countries. Approximately 26% of our receivables are with European customers as of March 31, 2017. Of this amount, 26% of our European receivables (7% of consolidated receivables) are in the higher risk southern European countries (mostly Italy, Spain, and Portugal), which are adequately reserved.

Marketable Securities

We maintain an investment portfolio of short-term fixed income debt securities of various holdings, types, and maturities. These short-term investments are generally classified as available-for-sale and, consequently, are recorded on our Condensed Consolidated Balance Sheets at fair value with unrealized gains and losses reported as a separate component of OCI. We attempt to limit our exposure to interest rate risk by investing in securities with maturities of less than three years; however, we may be unable to successfully limit our risk to interest rate fluctuations. At any time, a sharp rise in interest rates could have a material adverse impact on the fair value of our investment portfolio. Conversely, declines in interest rates could have a material favorable impact on the fair value of our investment portfolio. Increases or decreases in interest rates could have a material impact on interest earnings related to new investments during the period. We do not currently hedge these interest rate exposures.

Interest Rate Risk

Hypothetical changes in the fair values of financial instruments held by us at March 31, 2017 that are sensitive to changes in interest rates are presented below. The modeling technique measures the change in fair value arising from selected potential changes in interest rates. Market changes reflect immediate hypothetical parallel shifts in the yield curve of plus or minus 100 basis points over a twelve month time horizon (in thousands):

Valuation of securities given an interest rate decrease of 100 basis points	No change in interest rates	Valuation of securities given an interest rate increase of 100 basis points
$ 305,524	$ 301,988	$ 298,446

We have European debt by counterparty (i.e., sovereign and non-sovereign) and by country should be addressed. We have no European sovereign debt investments. Our European debt and investments consist of non-sovereign corporate debt securities of $28.1 million, which represents 14% of our corporate debt instruments (10% of our short-term investments) at March 31, 2017. European debt investments are with corporations domiciled in the northern and central European countries of Sweden, Netherlands, Switzerland, Norway, France, and the U.K. We do not have any short-term investments with corporations domiciled in the higher risk "southern European" countries (i.e., Italy, Spain, Greece, and Portugal) or in Ireland. We believe that we do not have significant exposure with respect to our money market and corporate debt investments in Europe.

As of March 31, 2017, we have $345 million principal amount of Notes outstanding. We carry these instruments at face value less unamortized discount on our Condensed Consolidated Balance Sheets. Since these instruments bear interest at fixed rates, we have no financial statement risk associated with changes in interest rates. Although the fair value of these instruments fluctuates when interest rates change, a substantial portion of the market value of our Notes in excess of the outstanding principal amount relates to the conversion premium. Please refer to Note 5 – Investments and Fair Value Measurements and Note 6 – Convertible Senior Notes, Note Hedges, and Warrants of the Notes to Consolidated Financial Statements.

Foreign Currency Exchange Risk

A large portion of our business is conducted in countries other than the U.S. We are primarily exposed to changes in exchange rates for the Euro, British pound sterling, Indian rupee, Japanese yen, Brazilian real, Chinese renminbi, Israeli shekel, New Zealand dollar, and Australian dollar. Although the majority of our receivables are invoiced and collected in U.S. dollars, we have exposure from non-U.S. dollar-denominated sales (consisting of the Euro, British pound sterling, Brazilian real, Chinese renminbi, Israeli shekel, Australian dollar, and Canadian dollar) and operating expenses (primarily the Euro, British pound sterling, Brazilian real, Chinese renminbi, Israeli shekel, Japanese yen, Indian rupee, and Australian dollar) in foreign countries. We can benefit from or be adversely affected by either a weaker or stronger U.S. dollar relative to major currencies worldwide with respect to our condensed consolidated financial statements. Accordingly, we can benefit from a stronger U.S. dollar due to the corresponding reduction in our foreign operating expenses translated in U.S. dollars and at the same time we can be adversely affected by a stronger U.S. dollar due to the corresponding reduction in foreign revenue translated in U.S. dollars.

We hedge our operating expense exposure in Indian rupees. The notional amount of our Indian rupee cash flow hedge was $3.3 million at March 31, 2017. We hedge balance sheet remeasurement exposures using forward contracts not designated for hedge accounting treatment with notional amounts of $162.2 million at March 31, 2017 consisting of hedges of British pound sterling, Israeli shekel, Australian dollar, New Zealand dollar, Japanese yen, Chinese renminbi, and Euro-denominated intercompany balances with notional amounts of $87.6 million, hedges of Brazilian real, British pound sterling, Australian dollar, Canadian dollar, Israeli shekel, and Euro-denominated trade receivables with notional amounts of $49.0 million, and hedges of British pounds sterling, Indian rupee, and Euro-denominated other net monetary assets with notional amounts of $25.6 million.

The impact of hypothetical changes in foreign exchanges rates on revenue and income from operations are presented below. The modeling technique measures the change in revenue and income from operations resulting from changes in selected foreign exchange rates with respect to the Euro and British pound sterling of plus or minus one percent during the three months ended March 31, 2017 as follows (in thousands):

	Impact of a foreign exchange rate decrease of one percent	No change in foreign exchange rates	Impact of a foreign exchange rate increase of one percent
Revenue	$ 229,332	$ 228,691	$ 228,050
Income from operations	$ 8,262	$ 8,143	$ 8,026

Item 4: Controls and Procedures

Evaluation of Disclosure Controls and Procedures

As of the quarter ended March 31, 2017, under the supervision and with the participation of our management, including our chief executive officer and chief financial officer, we conducted an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures, as such term is defined in Rule 13a-15(e) and Rule 15d-15(e) promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Based on that evaluation, our chief executive officer and chief financial and accounting officer concluded that our disclosure controls and procedures were effective as of March 31, 2017 to ensure that information we are required to disclose in reports that we file or submit under the Exchange Act is (i) recorded, processed, summarized, and reported within the time periods specified in SEC rules and forms, and (ii) accumulated and communicated to our management, including our chief executive officer and chief financial and accounting officer, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

During the first quarter of 2017, there were no changes in our internal control over financial reporting or in other factors that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

PART II – OTHER INFORMATION

Item 1: Legal Proceedings

We may be involved, from time to time, in a variety of claims, lawsuits, investigations, or proceedings relating to contractual disputes, securities laws, intellectual property rights, employment, or other matters that may arise in the normal course of business. We assess our potential liability in each of these matters by using the information available to us. We develop our views on estimated losses in consultation with inside and outside counsel, which involves a subjective analysis of potential results and various combinations of appropriate litigation and settlement strategies. We accrue estimated losses from contingencies if a loss is deemed probable and can be reasonably estimated.

As of March 31, 2017, we are subject to the matter discussed below.

MDG Matter

EFI acquired Matan in 2015 from sellers (the "2015 Sellers") that acquired Matan Digital Printing Ltd. from other sellers in 2001 (the "2001 Sellers"). The 2001 Sellers have asserted a claim against the 2015 Sellers and Matan asserting that they are entitled to a portion of the 2015 Sellers' proceeds from EFI's acquisition. The 2015 Sellers dispute this claim and have agreed to indemnify EFI against the 2001 Sellers' claim.

Although we are fully indemnified and we do not believe that it is probable that we will incur a loss, it is reasonably possible that our financial statements could be materially affected by the unfavorable resolution of this matter. Accordingly, it is reasonably possible that we could incur a material loss in this matter. We estimate the range of loss to be between one dollar and $10.1 million. If we incur a loss in this matter, it will be offset by a receivable of an equal amount representing a claim for indemnification against the escrow account established in connection with the Matan acquisition.

Other Matters

As of March 31, 2017, we were subject to various other claims, lawsuits, investigations, and proceedings in addition to the matter discussed above. There is at least a reasonable possibility that additional losses may be incurred in excess of the amounts that we have accrued. However, we believe that these claims are not material to our financial statements or the range of reasonably possible losses is not reasonably estimable. Litigation is inherently unpredictable, and while we believe that we have valid defenses with respect to legal matters pending against us, our financial statements could be materially affected in any particular period by the unfavorable resolution of one or more of these contingencies or because of the diversion of management's attention and the incurrence of significant expenses.

Item 1A: Risk Factors

In addition to information regarding risk factors that appears in "Management's Discussion and Analysis – Forward-looking Statements" in Part I, Item 2, of this Quarterly Report on Form 10-Q, you should carefully consider the factors discussed in Part I, Item 1A, and Part II, Items 7 and 7A, of our Annual Report on Form 10-K for the year ended December 31, 2016 (the "2016 Form 10-K"), which could materially affect our business, financial condition, or future results. The risks described herein and in our 2016 Form 10-K are not the only risks facing us. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition, and/or operating results.

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

Our stock repurchases during the quarter ended March 31, 2017 are as follows (in thousands, except for per share amounts):

Table of Contents

Issuer Purchases of Equity Securities

Total	Total Number of Shares Purchased (2)	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans (1)
January 2017	178	$ 44.30	170	$ 68,262
February 2017	253	46.17	163	60,795
March 2017	62	46.63	54	58,299
Totals	493	$ 45.55	387	

(1) In November 2015, our board of directors authorized $150 million for the repurchase of our outstanding common stock commencing January 1, 2016. This authorization expires December 31, 2018. Under this publicly announced plan, we repurchased 0.4 million shares for an aggregate purchase price of $17.5 million during the three months ended March 31, 2017.

(2) Includes 0.1 million shares purchased from employees to satisfy the exercise price of certain stock options and any tax withholding obligations incurred in connection with such exercises and minimum tax withholding obligations that arose on the vesting of RSUs.

Item 3: Defaults Upon Senior Securities

None.

Item 4: Mine Safety Disclosure

Not applicable.

Item 5: Other Information

Not applicable.

Item 6: Exhibits

No.	Description
3.1	Amended and Restated Certificate of Incorporation (1)
3.2	Amended and Restated Bylaws of Electronics For Imaging, Inc. (as amended August 12, 2009) (2)
10.1	EFI 2017 Bonus
12.1	Computation of Ratio of Earnings to Fixed Charges
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Chief Executive Officer Certification pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and Chief Financial Officer Certification pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

(1) Filed as an exhibit to the Company's Annual Report on Form 10-K filed on February 22, 2017 (File No. 000-18805) and incorporated herein by reference.

(2) Filed as an exhibit to the Company's Current Report on Form 8-K filed on August 17, 2009 (File No. 000-18805) and incorporated herein by reference.

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.

	ELECTRONICS FOR IMAGING, INC.
Date: May 1, 2017	/s/ Guy Gecht
	Guy Gecht Chief Executive Officer (Principal Executive Officer)
Date: May 1, 2017	/s/ Marc Olin
	Marc Olin Chief Financial Officer (Principal Financial and Accounting Officer)

EXHIBIT INDEX

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[Section 16 Officers]
EFI 2017 Bonus Program

We are pleased to offer you participation in the EFI 2017 Bonus Program (the " Program ") on the terms below.

Each participant (the " Participant ") in the Program will, provided that the Participant remains employed by EFI through the date of grant of such awards, be granted an award of restricted stock units that is subject to vesting requirements based on the performance of Electronics For Imaging, Inc. (" EFI " or the " Company ") for 2017 and the Participant's continued employment as set forth below.

Equity Bonus and Performance Targets

Your Target Equity Bonus Eligibility amount is:

Target Equity Bonus Eligibility: **[$]**
Number of RSUs granted for Target Bonus: [*****]
Total Granted RSUs (including Maximum Overachievement of Performance Metrics): [*****]

The performance goals applicable to your equity bonus opportunity are:

Component % of Total Award		Threshold	Target Achievement	Target Over-Achievement
40%	**Company Revenue**	$ ______	$ ______	$ ______
	(% of bonus earned for this Component)	0%	100%	200%
	(% of RSU award vesting for this Component)	0%	50%	100%
40%	**Company Non-GAAP Operating Income**	$ ______	$ ______	$ ______
	(% of bonus earned for this Component)	0%	100%	200%
	(% of RSU award vesting for this Component)	0%	50%	100%
20%	**Cash From Operations as a Percentage of Non-GAAP Net Income (Company)**	______%	______%	______%
	(% of bonus earned for this Component)	0%	100%	200%
	(% of RSU award vesting for this Component)	0%	50%	100%

Target Achievement Metrics

If the Company's performance for a Program Component is at or above the threshold level set forth above, a percentage of the Total Granted RSUs associated with that Program Component will vest on a pro-rata, straight-line basis between 0% and 50%, starting at 0% at or below the Threshold level for that Program Component up to 50% at the Target level for that Program Component (representing 100% Target Bonus Achievement earned for that component).

Overachievement Metrics

If the Company's performance for a Program Component is at or above the Target Achievement level set forth above, a percentage of the Total Granted RSUs associated with that Program Component will vest on a pro-rata, straight-line basis between 50% and 100%, starting at 50% at the Target Achievement level for that Program Component up to 100% at or above the Overachievement level for that Program Component (representing 200% Target Bonus Achievement earned for that component).

The number of Total Granted RSUs that vest will be determined based on the Company's performance in 2017 for each Program Component, as certified by the Compensation Committee.

The total number of RSUs that vest will be calculated by *multiplying* (a) the vesting percentage for each Program Component of your award *times* (b) the number of RSUs associated with the corresponding Program Component based on the Component Percentage of Total Award set forth above and the actual number of RSUs granted to you in your RSU Award, and (c) adding together the resulting number of RSUs (if any) associated with each Program Component, each rounded down to the nearest whole share. The sum of the numbers described in subsection (c) of the previous sentence shall be the number of Total Granted RSUs that vest.

Performance Equity Bonus Terms

- Per the approval by the Company's Board of Directors' Compensation Committee (the " Compensation Committee ") and subject to your continued employment with the Company through the date of grant, you will be granted a performance-based restricted stock unit (" RSU ") award with respect to the Program. The RSU award (the " RSU Award ") will be subject to vesting based on the achievement of the Company performance goals for 2017 as set forth above (the " Program Components ") and your continued employment as set forth below. In addition, no portion of the RSU Awards will vest if the Company's 2017 Non-GAAP Operating Income is less than $148.0 million.
- The number of RSUs that you will be granted will equal your "Target Equity Bonus Eligibility" amount (expressed in U.S. Dollars) above, divided by the closing price of EFI's common stock on February 17, 2017, multiplied by two to reflect the maximum possible overachievement of the Company performance metrics above (in total, the " Total Granted RSUs "). The total number of RSUs granted will be rounded down to the nearest whole share.
- The RSUs will be granted under and will be subject to the terms and conditions of EFI's 2009 Equity Incentive Award Plan, as amended (the " 2009 Equity Plan ") and the Restricted Stock Unit Award Notice and Restricted Stock Unit Award Agreement used by EFI to evidence RSU awards granted under the 2009 Equity Plan, except as otherwise expressly set forth herein. Each RSU Award will have a grant date that is the grant date that the Compensation Committee approves for such award (the " Grant Date "). The RSU awards are also subject to the individual and other share limits of the 2009 Plan.
- During the first quarter of 2018, the Program Administrator (as defined below) will determine whether (and the extent to which) the performance conditions applicable to the RSUs were achieved for 2017, subject to approval by the Compensation Committee (the date of the Compensation Committee's approval is referred to as the " Determination Date "). Subject to your continued employment by the Company through the applicable Vesting Date, if the Program Administrator determines that the applicable performance condition related to the RSUs was achieved for 2017, subject to the Compensation Committee's approval, the related RSUs will vest (the " Vesting Date ") on the later of (1) February 24, 2018 or (2) the vesting date as determined by the Compensation Committee on the Determination Date (such vesting date to be no more than four business days after the Determination Date). Each RSU that vests in accordance with the terms of the Program will be paid in one share of the Company's common stock as soon as practicable after (and in all events within two and one-half months after) the Vesting Date.

Maximum Award - In no event shall the RSU Award vest with respect to more than 100% of the Total Granted RSUs.

Non-GAAP Operating Income is defined as operating income determined in accordance with GAAP, as adjusted to remove the impact of certain recurring and non-recurring expenses, in each case consistent with the determination of non-GAAP operating income in the Company's financial reporting.

Non-GAAP Net Income is defined as net income determined in accordance with GAAP, as adjusted to remove the impact of certain expenses and gains and the tax effect of these adjustments, in each case consistent with the determination of non-GAAP net income in the Company's financial reporting.

Adjustments - The results will be adjusted for certain material items which are not included in the original calculation of the performance targets as follows:

(a) Bookings achieved in 2017 and revenue deferred from 2017 into a subsequent reporting period will be included in calculation of the achievement of the performance metrics; and

(b) Revenue and operating income from each acquisition completed during 2017 will be used to calculate the achievement of the performance metrics to the extent that such revenue and operating income are generated through sales by Company sales channels existing prior to the completion each such acquisition; revenue and operating income generated by sales channels acquired as part of each such acquisition will not be included (Company sales channels shall be defined as all existing sales channels, both direct and indirect, that sell Company products in advance of the acquisition); and

(c) All performance metrics targets shall be adjusted using the currency exchange rates used in the preparation of the Company's Annual Operating Plan.

The number of RSUs that vest (if any) will be rounded down to the nearest whole share, and is subject to your continued employment in good standing through the date of vesting. Any portion of the award that does not vest (including as a result of the failure to satisfy either or both of the Conditions or the failure to achieve the target level of performance indicated above) will terminate and you will have no rights with respect thereto.

Other Terms

Program Participants

Participants in this Program are not eligible for participation in other variable compensation arrangement, program or plan, such as commission-based plans or other similar plans, for 2017.

Leaves of Absences

Periods of leave of absence will be considered when determining the vesting of the RSU Award. Specifically, RSU vesting will (unless otherwise required by applicable law) be calculated on a pro-rata basis excluding any leave of absence period(s) during the applicable Program Year.

Termination of Employment

Except as may otherwise be expressly provided below, in the applicable Restricted Stock Unit Award Notice and Restricted Stock Unit Award Agreement (as to RSUs), or your written employment agreement (if any) with the Company, you will have no right to any bonus for 2017 and no right to any payment with respect to your RSUs for 2017 (and your RSUs will automatically and immediately terminate and you will have no right with respect thereto) should you cease to be employed by the Company or one of its subsidiaries before the Vesting Date set forth above (regardless of the reason for such termination of employment).

Notwithstanding anything to the contrary in the applicable Restricted Stock Unit Award Notice and Restricted Stock Unit Award Agreement or your written employment agreement (if any) with the Company, if you are involuntarily terminated Without Cause or are terminated for Good Reason outside of a Change of Control (as these terms are defined in the applicable employment agreement), you will be eligible for pro-rata vesting of your RSUs related to this Program. The pro-rata RSU vesting will be determined with respect to the number of RSUs that would have vested under this Program had your employment continued through the Vesting Date, multiplied by a fraction (x) the numerator of which is the number of whole months you were employed by the Company during 2017, and (y) the denominator of which is twelve. Payment of such pro-rata amount will be made at the same time that payment would have been made had you continued to be employed through the Vesting Date. In the event that you are entitled to a pro-rata payment of your RSUs, payment may, at EFI's discretion, be made in cash (as opposed to shares or other property) with the cash payment in respect of a vested RSU to equal (subject to applicable tax withholding) the closing price of a share of EFI common stock on the Determination Date.

With respect to any RSUs granted under this Program, in the event of any conflict between the provisions of your employment agreement regarding acceleration of performance equity outside of a Change of Control and this Program, this Program shall control.

No Right to Continued Employment

Nothing contained in this Program, the RSUs, or any related document constitutes an employment or service commitment by the Company (or any affiliate), affects your status (if you are employed at will) as an employee at will who is subject to termination at any time and for any reason, confers upon you any right to remain employed by or in service to the Company (or any affiliate), or interferes in any way with the right of the Company (or any affiliate) to terminate your employment or to change your compensation or other terms of employment at any time.

Program Administration and Interpretation

The Program will be administered by, and interpretation of the Program, as it may apply to any one individual person, matter or circumstance, will be made by the CEO and Vice President of Human Resources (the " Program Administrator "); provided, however, that as to any RSU Award intended to qualify as "performance-based" compensation under Section 162(m) of the Internal Revenue Code, the Compensation Committee will be the Program Administrator. This Program is not intended and shall not be construed to imply an employment contract between EFI and any of its employees. In the event of any conflict between the provisions of the Program and the RSU Agreement, this Program shall control. All actions taken and all interpretations and determinations made by the Program Administrator in respect of such documents and matters shall be conclusive and binding on all persons and shall be given the maximum deference permitted by law.

Clawback Policy

This Program, the RSU Award, any securities or other consideration you may receive in payment of or with respect to the RSU Award, as well as any bonus opportunity under this Program, is subject to the terms of the EFI recoupment, clawback or similar policy as it may be in effect from time to time, as well as any similar provisions of applicable law, any of which could in certain circumstances require repayment or forfeiture of your bonus, awards or any shares of stock or other cash or property received with respect to your bonus or awards (including any value received from a disposition of any shares of stock you may receive in payment of the RSU Award).

Construction

This Program and the RSU Award contemplated above are also intended to satisfy, and not be subject to any tax, penalty or interest under, Section 409A of the Internal Revenue Code. These arrangements shall be construed in accordance with such intents.

Program Changes and Duration of the Program

This Program is effective as of January 1, 2017. It supersedes all prior performance based bonus programs and shall not be modified or terminated unless authorized in writing by the Program Administrator and/or approved by the Compensation Committee. The Company reserves the right to modify, change or terminate the Program at any time including to revise goals, corporate objectives or to correct bona fide errors in the Program, or for any other reason. Notices of such changes will be made in writing or via electronic mail to all Participants affected by such changes.

These terms apply to the Program Year 2017 only and your bonus eligibility, targets, and any unvested RSUs do not carry over to the following year.

By signing this Program, you acknowledge and accept that the potential value of your award is subject to market risk and any decline in EFI's common stock price may result in a lower realizable value upon vesting. You agree that any decline in the stock price impacting your bonus shall not be the responsibility of the Company and shall not constitute Good Reason under your employment agreement. You agree that your award is subject to termination as described above, and that you may not be eligible for any cash bonus with respect to 2017.

I have read and understand the terms of this Program and the documents referred to herein, I acknowledge and agree to the preceding paragraph and to all of the terms and conditions of this Program and such other documents.

[Participant Name]	**[Date]**

Exhibit 12.1

Electronics For Imaging, Inc.
Computation of Ratio of Earnings to Fixed Charges
(in thousands, except for ratio of earnings to fixed charges)

	Years Ended December 31, 2012	2013	2014	2015	2016	Three Months Ended March 31, 2017
Income (loss) from continuing operations before income taxes	$35,023	$173,138	$42,087	$37,522	$39,382	$ 3,770
Fixed charges:						
Interest expense	709	3,406	5,859	17,364	17,716	4,660
Interest relating to rental expense (1)	1,912	2,024	2,039	2,530	2,924	1,239
Total fixed charges	2,621	5,430	7,898	19,894	20,640	5,899
Earnings available for fixed charges	$37,644	$178,568	$49,985	$57,416	$60,022	$ 9,669
Ratio of earnings to fixed charges	14.36	32.89	6.33	2.89	2.91	1.64

(1) The representative interest portion of rental expense was deemed to be one-third of all rental expense, except for the rental expense related to off-balance sheet financing leases, which was deemed to be all interest.

Exhibit 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Guy Gecht, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Electronics For Imaging, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: May 1, 2017

/s/ Guy Gecht
Guy Gecht
Chief Executive Officer

Exhibit 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Marc Olin, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Electronics For Imaging, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 1, 2017

/s/ Marc Olin
Marc Olin
Chief Financial Officer

Exhibit 32.1

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

Pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Electronics For Imaging, Inc. (the "Company") hereby certifies, to such officer's knowledge, that:

(i) the accompanying Quarterly Report on Form 10-Q of the Company for the quarter ended March 31, 2017 (the "Report") fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: May 1, 2017

/s/ Guy Gecht

Guy Gecht
Chief Executive Officer

**CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

Pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Electronics For Imaging, Inc. (the "Company") hereby certifies, to such officer's knowledge, that:

(i) the accompanying Quarterly Report on Form 10-Q of the Company for the quarter ended March 31, 2017 (the "Report") fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: May 1, 2017

/s/ Marc Olin

Marc Olin
Chief Financial Officer