

AMBARELLA INC
Form 10-Q
December 09, 2016

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 October 31, 2016

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: 001-35667

AMBARELLA, INC.

(Exact name of registrant as specified in its charter)

Cayman Islands (State or other jurisdiction of incorporation or organization)	98-0459628 (I.R.S. Employer Identification No.)
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3101 Jay Street

Santa Clara, California (Address of principal executive offices)	95054 (Zip Code)
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(408) 734-8888

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

Large accelerated filer

Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company
Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

The number of ordinary shares, \$0.00045 par value, of the Registrant, outstanding as of December 5, 2016 was 33,112,114 shares.

AMBARELLA, INC.

QUARTERLY REPORT ON FORM 10-Q

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PART I – FINANCIAL INFORMATION

ITEM 1. Financial Statements

AMBARELLA, INC.

CONDENSED CONSOLIDATED BALANCE SHEETS

(in thousands, except share and per share data)

(unaudited)

	October 31, 2016	January 31, 2016
ASSETS		
Current assets:		
Cash and cash equivalents	\$313,455	\$268,056
Marketable securities	58,645	39,837
Accounts receivable, net	41,394	39,408
Inventories	23,340	18,167
Restricted cash	8	7
Prepaid expenses and other current assets	4,762	4,170
Total current assets	441,604	369,645
Property and equipment, net	4,291	3,448
Deferred tax assets, non-current	6,024	4,626
Intangible assets, net	4,162	4,178
Goodwill	26,601	26,601
Other non-current assets	2,162	2,117
Total assets	\$484,844	\$410,615
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	28,364	14,175
Accrued liabilities	23,332	23,778
Income taxes payable	1,359	787
Deferred revenue	6,885	10,077
Total current liabilities	59,940	48,817
Other long-term liabilities	2,291	12,342
Total liabilities	62,231	61,159
Commitments and contingencies (Note 13)		
Shareholders' equity:		
Preference shares, \$0.00045 par value per share, 20,000,000 shares		
authorized and no shares issued and outstanding at October 31, 2016 and		
January 31, 2016, respectively	—	—
Ordinary shares, \$0.00045 par value per share, 200,000,000 shares	15	15
authorized at October 31, 2016 and January 31, 2016, respectively;		

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33,105,541 shares issued and outstanding at October 31, 2016; 32,333,359

shares issued and outstanding at January 31, 2016

Additional paid-in capital	198,554	176,306
Accumulated other comprehensive loss	(18)	(7)
Retained earnings	224,062	173,142
Total shareholders' equity	422,613	349,456
Total liabilities and shareholders' equity	\$484,844	\$410,615

See accompanying notes to condensed consolidated financial statements.

AMBARELLA, INC.

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(in thousands, except share and per share data)

(unaudited)

	Three Months Ended October 31,		Nine Months Ended October 31,	
	2016	2015	2016	2015
Revenue	\$100,490	\$93,200	\$222,789	\$248,406
Cost of revenue	34,167	31,938	76,289	86,378
Gross profit	66,323	61,262	146,500	162,028
Operating expenses:				
Research and development	25,967	22,062	74,076	59,485
Selling, general and administrative	10,686	8,873	32,144	26,970
Total operating expenses	36,653	30,935	106,220	86,455
Income from operations	29,670	30,327	40,280	75,573
Other income	132	169	330	323
Income before income taxes	29,802	30,496	40,610	75,896
Provision for income taxes	757	1,035	1,150	4,484
Net income	\$29,045	\$29,461	\$39,460	\$71,412
Net income per share attributable to ordinary shareholders:				
Basic	\$0.89	\$0.93	\$1.21	\$2.27
Diluted	\$0.84	\$0.87	\$1.15	\$2.12
Weighted-average shares used to compute net income per share attributable to ordinary				
shareholders:				
Basic	32,670,784	31,815,588	32,552,077	31,476,668
Diluted	34,599,992	33,899,202	34,242,065	33,758,541

See accompanying notes to condensed consolidated financial statements.

AMBARELLA, INC.

CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(unaudited, in thousands)

	Three Months Ended October 31,		Nine Months Ended October 31,	
	2016	2015	2016	2015
Net income	\$29,045	\$29,461	\$39,460	\$71,412
Other comprehensive income (loss), net of tax:				
Unrealized gains (losses) on investments	(51)	9	(11)	(14)
Other comprehensive income (loss), net of tax	(51)	9	(11)	(14)
Comprehensive income	\$28,994	\$29,470	\$39,449	\$71,398

See accompanying notes to condensed consolidated financial statements.

AMBARELLA, INC.

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(unaudited, in thousands)

	Nine Months Ended October 31,	
	2016	2015
Cash flows from operating activities:		
Net income	\$39,460	\$71,412
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation of property and equipment	1,206	1,164
Amortization/accretion of marketable securities	172	415
Loss on disposal of long-lived assets	28	12
Stock-based compensation	35,474	19,548
Other non-cash items, net	29	127
Changes in operating assets and liabilities, net of impact of acquisition:		
Accounts receivable	(1,986)	(5,612)
Inventories	(5,173)	(994)
Prepaid expenses and other current assets	(581)	13
Deferred tax assets	604	(19)
Other assets	(45)	(18)
Accounts payable	14,189	1,566
Accrued liabilities	825	(12)
Income taxes payable	572	1,012
Deferred tax liabilities	(58)	(7)
Deferred revenue	(3,192)	1,806
Other long-term liabilities	(476)	2,832
Net cash provided by operating activities	81,048	93,245
Cash flows from investing activities:		
Acquisition, net of cash acquired	—	(29,905)
Purchase of investments	(72,950)	(45,957)
Sales of investments	28,368	17,732
Maturities of investments	25,560	25,118
Purchase of property and equipment	(2,070)	(1,289)
Net cash used in investing activities	(21,092)	(34,301)
Cash flows from financing activities:		
Stock repurchase	(20,183)	—
Proceeds from exercise of stock options and employee stock purchase plan	5,626	7,230
Net cash provided by (used in) financing activities	(14,557)	7,230
Net increase in cash and cash equivalents	45,399	66,174
Cash and cash equivalents at beginning of period	268,056	170,291
Cash and cash equivalents at end of period	\$313,455	\$236,465
Supplemental disclosure of cash flow information:		
Cash paid for income taxes	\$914	\$831
Supplemental disclosure of noncash investing activities:		
Increase in accrued liabilities related to non-monetary assets purchases	\$34	\$109

See accompanying notes to condensed consolidated financial statements.

AMBARELLA, INC.

Notes to Condensed Consolidated Financial Statements

(Unaudited)

1. Organization and Summary of Significant Accounting Policies

Organization

Ambarella, Inc. (the “Company”) was incorporated in the Cayman Islands on January 15, 2004. The Company is a developer of semiconductor processing solutions for video that enable high-definition video capture, sharing and display. The Company combines its processor design capabilities with its expertise in video and image processing, algorithms and software to provide a technology platform that is designed to be easily scalable across multiple applications and enable rapid and efficient product development. The Company’s system-on-a-chip, or SoC, designs fully integrate high-definition video processing, image processing, audio processing and system functions onto a single chip, delivering exceptional video and image quality, differentiated functionality and low power consumption.

The Company sells its solutions to leading original design manufacturers, or ODMs, and original equipment manufacturers, or OEMs, globally.

Basis of presentation

The accompanying unaudited condensed consolidated financial statements have been prepared by the Company in accordance with the instructions to Form 10-Q pursuant to the rules and regulations of the Securities and Exchange Commission (“SEC”) and, therefore, do not include all information and notes normally provided in audited financial statements. The accounting policies are described in the “Notes to Consolidated Financial Statements” in the Annual Report on Form 10-K for the 2016 fiscal year filed with the SEC on March 25, 2016 (the “Form 10-K”) and updated, as necessary, in this Form 10-Q. The year-end condensed consolidated balance sheet data presented for comparative purposes was derived from audited financial statements, but does not include all disclosures required by generally accepted accounting principles in the United States (“U.S. GAAP”). In the opinion of management, all adjustments (consisting of normal recurring accruals and adjustments) considered necessary for a fair statement have been included. The results of operations for any interim period are not necessarily indicative of, nor comparable to, the results of operations for any other interim period or for a full fiscal year. These unaudited condensed consolidated financial statements should be read in conjunction with the consolidated financial statements and related notes contained in the Form 10-K.

Basis of Consolidation

The Company’s fiscal year ends on January 31. The condensed consolidated financial statements of the Company and its subsidiaries have been prepared in conformity with U.S. GAAP. All intercompany transactions and balances have been eliminated upon consolidation.

Use of Estimates

The preparation of condensed consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expense during the reported periods. Actual results could differ from those estimates.

On an ongoing basis, management evaluates its estimates and assumptions, including those related to (i) the collectibility of accounts receivable; (ii) write down of excess and obsolete inventories; (iii) intangible assets and goodwill; (iv) the estimated useful lives of long-lived assets; (v) impairment of long-lived assets and financial instruments; (vi) warranty obligations; (vii) the valuation of stock-based compensation awards and financial instruments; (viii) the probability of performance objectives achievement; (ix) the realization of tax assets and estimates of tax liabilities, including reserves for uncertain tax positions; and (x) the recognition and disclosure of contingent liabilities. These estimates and assumptions are based on historical experience and on various other factors which the Company believes to be reasonable under the circumstances. The Company may engage third-party valuation specialists to assist with estimates related to the valuation of financial instruments and assets associated with various contractual arrangements. Such estimates often require the selection of appropriate valuation methodologies and significant judgment. Actual results could differ from these estimates under different assumptions or circumstances.

Concentration of Risk

The Company's products are manufactured, assembled and tested by third-party contractors located primarily in Asia. The Company does not have long-term agreements with these contractors. A significant disruption in the operations of one or more of these contractors would impact the production of the Company's products which could have a material adverse effect on its business, financial condition and results of operations.

A substantial portion of the Company's revenue is derived from sales through its logistics provider, Wintech Microelectronics Co., Ltd., or Wintech, which serves as its non-exclusive sales representative and logistics provider in Asia other than Japan, and through one direct OEM customer, GoPro Inc., or GoPro. Termination of the relationships with these two customers could result in a temporary or permanent loss of revenue and termination of the relationship with Wintech could result in an obligation to repurchase unsold product. Furthermore, any credit issues from these two customers could impair their abilities to make timely payment to the Company. See Note 14 for additional information regarding concentration with these two customers.

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash, cash equivalents, marketable securities and accounts receivable. The Company maintains its cash primarily in checking and money market accounts with reputable financial institutions. Cash deposits held with these financial institutions may exceed the amount of insurance provided on such deposits. The Company has not experienced any material losses on deposits of its cash. The cash equivalents and marketable securities consist primarily of demand deposits, asset-backed securities, commercial paper, U.S. government securities, agency bonds and debt securities of corporations which management assesses to be highly liquid, in order to limit the exposure of each investment. The Company does not hold or issue financial instruments for trading purposes.

The Company performs ongoing credit evaluations of each of its customers and adjusts credit limits based upon payment history and the customer's credit worthiness. The Company regularly monitors collections and payments from its customers.

Cash Equivalents and Marketable Securities

The Company considers all highly liquid investments with original maturities of less than three months at the time of purchase to be cash equivalents. Investments that are highly liquid with original maturities at the time of purchase greater than three months are considered as marketable securities.

The Company classifies these investments as "available-for-sale" securities carried at fair value, based on quoted market prices of similar assets, with the unrealized gains or losses reported, net of tax, as a separate component of shareholders' equity and included in accumulated other comprehensive income (loss) in the condensed consolidated balance sheets. The amortization of security premiums and accretion of discounts and the realized gains and losses are both recorded in other income (loss), net in the condensed consolidated statements of operations. The Company reviews its investments for possible other-than-temporary impairments on a regular basis. If any loss on investment is believed to be other-than-temporary, a charge will be recorded and a new cost basis in the investment will be established. In evaluating whether a loss on a security is other-than-temporary, the Company considers the following factors: 1) general market conditions, 2) the duration and extent to which the fair value is less than cost, 3) the Company's intent and ability to hold the investment.

For securities in an unrealized loss position which is deemed to be other-than-temporary, the difference between the security's then-current amortized cost basis and fair value is separated into (i) the amount of the impairment related to the credit loss (i.e., the credit loss component) and (ii) the amount of the impairment related to all other factors (i.e., the non-credit loss component). The credit loss component is recognized in earnings. The non-credit loss component is recognized in accumulated other comprehensive income (loss). Due to the relative short term nature of the investments, there have been no other-than-temporary impairments recorded to date.

Inventories

The Company records inventories at the lower of cost or market. The cost includes materials and other production costs and is computed using standard cost on a first-in, first-out basis. Inventory reserves are recorded for estimated obsolescence or unmarketable inventories based on forecast of future demand and market conditions. If actual market conditions are less favorable than projected, or if future demand for the Company's products decrease, additional inventory write-downs may be required. Once inventory is written down, a new accounting cost basis is established and, accordingly, any associated reserve is not reversed until the inventory is sold or scrapped. There were no material inventory losses recognized for the three and nine months ended October 31, 2016 and 2015, respectively.

Business Combinations and Intangible Assets

The Company allocates the fair value of purchase price to the assets acquired and liabilities assumed based on their estimated fair values. The excess of the fair value of purchase price over the fair values of these identifiable assets and liabilities is recorded as goodwill. When determining the fair values of assets acquired and liabilities assumed, especially with respect to intangible assets, management makes significant estimates and assumptions.

Critical estimates in valuing certain intangible assets include, but are not limited to, replacement cost. Management's estimates of fair value are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable and, as a result, actual results may differ from estimates.

Goodwill and In-Process Research and Development

Goodwill and in-process research and development ("IPR&D") are required to be tested for impairment at least annually or sooner whenever events or changes in circumstances indicate that the assets may be impaired. The Company has a single reporting unit for goodwill impairment test purposes based on its business and reporting structure.

The Company does not amortize goodwill. Acquired IPR&D is capitalized at fair value as an intangible asset and amortization commences upon completion of the underlying projects. When a project underlying reported IPR&D is completed, the corresponding amount of IPR&D is reclassified as an amortizable purchased intangible asset and is amortized over its estimated useful life.

Revenue Recognition

The Company generates revenue from the sales of its SoCs to OEMs or ODMs, either directly or through logistics providers. Revenue from sales directly to OEMs and ODMs is recognized upon shipment provided that persuasive evidence of an arrangement exists, legal title to the products and risk of ownership have transferred, the fee is fixed or determinable, and collection of the resulting receivable is reasonably assured. The Company provides its logistics providers with the rights to return excess levels of inventory and to future price adjustments. Given the inability to reasonably estimate these price changes and returns, revenue and costs related to shipments to logistics providers are deferred until the Company has received notification from its logistics providers that they have sold the Company's products. Information reported by the Company's logistics providers includes product resale price, quantity and end customer shipment information as well as remaining inventory on hand. At the time of shipment to a logistics provider, the Company records a trade receivable as there is a legally enforceable right to receive payment, reduces inventory for the value of goods shipped as legal title has passed to the logistics provider and defers the related margin as deferred revenue in the condensed consolidated balance sheets. Any price adjustments are recorded as a change to deferred revenue at the time the adjustments are agreed upon.

Arrangements with certain OEM customers provide for pricing that is dependent upon the end products into which the Company's SoCs are used. These arrangements may also entitle the Company to a share of the product margin ultimately realized by the OEM. The minimum guaranteed amount of revenue related to the sale of products subject to these arrangements is recognized when all other elements of revenue recognition are met. Any amounts at the date of shipment invoiced in excess of the minimum guaranteed contract price are deferred until the additional amounts the Company is entitled to are fixed or determinable. Additional amounts earned by the Company resulting from margin sharing arrangements and determination of the end products into which the products are ultimately incorporated are recognized when end customer sales volume is reported to the Company. Revenue from margin sharing arrangements was not material for the three and nine months ended October 31, 2016 and 2015, respectively.

The Company also enters into engineering service agreements with certain customers. These agreements may include multiple deliverables, such as software development services, licensing of intellectual property and post-contract customer support, or PCS. The Company does not sell separately any of these components and does not have Vendor

Specific Objective Evidence, or VSOE, for the deliverables. Accordingly, revenues from these agreements are deferred for any amounts billed until delivery of all the elements. If the agreements include PCS, the revenues are recognized ratably over the estimated supporting periods. Revenue from engineering service agreements was not material for the three and nine months ended October 31, 2016 and 2015, respectively.

Cost of Revenue

Cost of revenue includes cost of materials, cost associated with packaging and assembly, testing and shipping, cost of personnel, stock-based compensation, logistics and quality assurance, warranty cost, royalty expense, write-downs of inventories and allocation of overhead.

Income Taxes

The Company records income taxes using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in its financial statements or tax returns. In estimating future tax consequences, generally all expected future events other than enactments or changes in the tax law or rates are considered. Valuation allowances are provided when necessary to reduce deferred tax assets to the amount expected to be realized.

The Company applies authoritative guidance for the accounting for uncertainty in income taxes. The guidance requires that tax effects of a position be recognized only if it is “more likely than not” to be sustained based solely on its technical merits as of the reporting date. Upon estimating the Company’s tax positions and tax benefits, the Company considered and evaluated numerous factors, which may require periodic adjustments and which may not reflect the final tax liabilities. The Company adjusts its financial statements to reflect only those tax positions that are more likely than not to be sustained under examination.

As part of the process of preparing condensed consolidated financial statements, the Company is required to estimate its taxes in each of the jurisdictions in which it operates. The Company estimates actual current tax exposure together with assessing temporary differences resulting from differing treatment of items, such as accruals and allowances not currently deductible for tax purposes. These differences result in deferred tax assets, which are included in the condensed consolidated balance sheets. In general, deferred tax assets represent future tax benefits to be received when certain expenses previously recognized in the condensed consolidated statements of operations become deductible expenses under applicable income tax laws, or loss or credit carryforwards are utilized.

In assessing whether deferred tax assets may be realized, management considers whether it is more likely than not that some portion or all of deferred tax assets will be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income.

The Company makes estimates and judgments about its future taxable income based on assumptions that are consistent with its plans and estimates. Should the actual amounts differ from estimates, the amount of valuation allowance could be materially impacted. Any adjustment to the deferred tax asset valuation allowance would be recorded in the condensed consolidated income statement for the periods in which the adjustment is determined to be required.

Net Income Per Ordinary Share

Basic earnings per share is computed by dividing net income available to ordinary shareholders by the weighted-average number of ordinary shares outstanding during the period. Diluted earnings per share is computed by dividing net income available to ordinary shareholders by the weighted-average number of ordinary shares outstanding during the period increased to include the number of additional ordinary shares that would have been outstanding if the potentially dilutive securities had been issued. Potentially dilutive securities include outstanding stock options, shares to be purchased under the Company’s employee stock purchase plan, unvested restricted stock and restricted stock units. The dilutive effect of potentially dilutive securities is reflected in diluted earnings per share by application of the treasury stock method.

Comprehensive Income (Loss)

Comprehensive income (loss) includes unrealized gains or losses from available-for-sale securities that are excluded from net income.

Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2014-09, Revenue from Contracts with Customers (Topic 606) (“ASU 2014-09”). The new guidance clarifies the principles and develops a common revenue recognition guidance for U.S. GAAP and International Financial Reporting Standards (the “IFRS”). Under the new guidance, an entity is required to recognize an amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. The original effective date of the ASU would have required the public companies to adopt the standard for annual reporting periods beginning after December 15, 2016, including interim periods within that reporting period. In July 2015, the FASB voted to amend the ASU by approving a one-year deferral of the effective date as well as providing the option to early adopt the standard on the original effective date. The deferral results in this new revenue standard being effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2017. In March 2016, the FASB issued ASU No. 2016-08, Revenue from Contracts with Customers (Topic 606) – Principal versus Agent Considerations (“ASU 2016-08”), which clarifies the implementation guidance for principal versus agent considerations in ASU 2014-09. In April 2016, the FASB issued ASU No. 2016-10, Revenue from Contracts with Customers (Topic 606) – Identifying Performance Obligations and Licensing (“ASU 2016-10”), which amends the guidance in ASU 2014-09 related to identifying performance obligations and accounting for licenses of intellectual property. Accordingly, the Company must adopt ASU 2016-08 and ASU 2016-10 with ASU 2014-09 in its first quarter of fiscal year 2019. The new revenue guidance may be applied retrospectively to each prior period presented or retrospectively with the cumulative effect recognized as of the date of adoption. The Company is currently evaluating the impact of adoption on its financial position, results of operations and disclosures.

In August 2014, the FASB issued ASU No. 2014-15, Disclosure of Uncertainties about an Entity’s Ability to Continue as a Going Concern. In connection with each annual and interim period, management is required to assess whether there is substantial doubt about an entity’s ability to continue as a going concern within one year after the issuance date, and to provide related footnote disclosures in certain circumstances. The new guidance is effective for annual periods ending after December 15, 2016, and interim periods within annual periods beginning after December 15, 2016. Early adoption is permitted. This ASU is not expected to have an impact on the Company’s financial statements or disclosures.

In July 2015, the FASB issued ASU No. 2015-11, Simplifying the Measurement of Inventory. The new guidance changes the measurement principle for inventory from the lower of cost or market to lower of cost and net realizable value. Net realizable value is the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. It applies to entities that measure inventory using a method other than last-in, first-out (“LIFO”) and the retail inventory method (“RIM”). The new guidance will be effective for fiscal years beginning after December 15, 2016, including interim periods within those fiscal years and should be applied prospectively. Early adoption is permitted as of the beginning of an interim or annual reporting period. The Company is currently evaluating the impact of adoption on its financial position, results of operations and disclosures.

In February 2016, the FASB issued ASU 2016-02, Leases (Topic 842). This standard requires entities that lease assets to recognize on the balance sheet the assets and liabilities for the rights and obligations created by those leases. The standard is effective for fiscal years and the interim periods within those fiscal years beginning after December 15, 2018. The guidance is required to be applied by the modified retrospective transition approach. Early adoption is permitted. The Company is currently assessing the impact of the adoption of this new guidance on its financial position, results of operations and disclosures.

In March 2016, the FASB issued ASU 2016-09, Compensation – Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting, to simplify and improve the accounting for employee share-based awards. The new standard amends the accounting for employee share-based payment transactions to require recognition of the tax effects resulting from the settlement of stock-based awards as income tax benefit or expense in the income statement in the reporting period in which they occur. In addition, the tax-related cash flows resulting from

share-based payments will be classified as cash flows from operating activities and cash payments made to the taxing authorities on the employees' behalf for withheld shares will be classified as financing activities on the statement of cash flows. The new guidance also provides an accounting policy election to account for forfeitures as they occur. The Company elected to early adopt this new guidance in the first quarter of its fiscal year 2017. As a result of this adoption, the Company recorded an increase to retained earnings of \$11.7 million to recognize U.S. net operating loss carryforwards attributable to tax benefits from excess stock-based compensation that had not been previously recognized and recorded a decrease to retained earnings of \$0.2 million resulting from the election of accounting policy to account for forfeitures as they occur as of February 1, 2016. The Company also elected to apply the presentation for cash flows related to excess tax benefits prospectively. The presentation requirements for cash flows related to employee taxes paid for withheld shares has no impact on the Company's condensed consolidated statements of cash flows. On February 1, 2016, the cumulative effect adjustment of these changes recognized in the beginning of retained earnings was approximately \$11.5 million.

In June 2016, the FASB issued ASU 2016-13, Financial Instruments – Credit Losses (Topic 326), to introduce a new impairment model for recognizing credit losses on financial instruments based on an estimated of current expected credit losses (ECL). Under the new model, available-for-sale (AFS) debt securities are required to estimate ECL only when the fair value is below the amortized cost of the asset and is no longer based on an impairment being “other-than-temporary”. The new model also requires the impairment calculation on an individual security level and requires an entity use present value of cash flows when estimating the ECL. The credit-related losses are required to be recognized through earnings and non-credit related losses are reported in other comprehensive income. The ASU will be effective for public entities in fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. Early adoption is permitted. The new guidance will require modified retrospective application to all outstanding instruments, with a cumulative effect adjustment recorded to opening retained earnings as of the beginning of the first period in which the guidance becomes effective. The Company does not believe the adoption of this new guidance will have a material impact on its consolidated financial statements.

In October 2016, the FASB issued ASU 2016-16, Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory. The new guidance requires that entities recognize the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs. The new guidance will be effective for annual reporting periods beginning after December 15, 2017, including interim reporting periods within those annual reporting periods. Early adoption is permitted but should be in the first interim period. The new guidance should also be applied on a modified retrospective basis through a cumulative-effect adjustment to retained earnings as of the beginning of the period of adoption. The Company is currently assessing the impact of the adoption of this new guidance on its financial position, results of operations and disclosures.

In November 2016, the FASB issued ASU 2016-18, Statement of Cash Flows (Topic 230), to require entities to show the changes in the total of cash, cash equivalents, restricted cash and restricted cash equivalents in the statement of cash flows. As a result, entities will no longer present transfers between cash and cash equivalents and restricted cash and restricted cash equivalents in the statement of cash flows. When cash, cash equivalents, restricted cash and restricted cash equivalents are presented in more than one line item on the balance sheet, the new guidance requires a reconciliation of the totals in the statement of cash flows to the related captions in the balance sheet. Entities will also have to disclose the nature of restricted cash and restricted cash equivalent balances. The new guidance will be effective for fiscal years beginning after December 15, 2017, including the interim periods within those years. Early adoption is permitted and the new guidance is applied retrospectively. The Company does not believe the adoption of this new guidance will have a material impact on its consolidated statement of cash flows and disclosures.

2. Financial Instruments and Fair Value

The Company invested a portion of its cash in debt securities that are denominated in U.S. dollars. The investment portfolio consists of money market funds, demand deposits, asset-backed securities, commercial paper, U.S. government securities, agency bonds and debt securities of corporations. All of the investments are classified as available-for-sale securities and reported at fair value in the condensed consolidated balance sheets as follows:

	As of October 31, 2016			Fair
	Amortized Cost	Unrealized Gains	Unrealized Losses	Value
	(in thousands)			
Money market funds	\$66	\$ —	\$ —	\$66
Demand deposits	10,000	—	—	10,000
Commercial paper	9,085	—	—	9,085
Corporate bonds	24,086	6	(13)	24,079
Asset-backed securities	9,065	2	(5)	9,062
U.S. government securities	18,424	2	(10)	18,416
Total cash equivalents and marketable securities	\$70,726	\$ 10	\$ (28)	\$70,708

	As of January 31, 2016			Fair
	Amortized Cost	Unrealized Gains	Unrealized Losses	Value
	(in thousands)			
Money market funds	\$530	\$ —	\$ —	\$530
Commercial paper	2,598	—	—	2,598
Corporate bonds	21,342	7	(9)	21,340
Asset-backed securities	4,586	—	(1)	4,585
U.S. government securities	9,274	4	(6)	9,272
Agency bonds	2,044	—	(2)	2,042
Total cash equivalents and marketable securities	\$40,374	\$ 11	\$ (18)	\$40,367

	As of	
	October 31, 2016	January 31, 2016
	(in thousands)	
Included in cash equivalents	\$12,063	\$ 530
Included in marketable securities	58,645	39,837
Total cash equivalents and marketable securities	\$70,708	\$ 40,367

The contractual maturities of the investments at October 31, 2016 and January 31, 2016 were as follows:

	As of	
	October 31, 2016	January 31, 2016
	(in thousands)	
Due within one year	\$50,172	\$ 33,449
Due within one to two years	20,536	6,918
Total cash equivalents and marketable securities	\$70,708	\$ 40,367

The unrealized losses on the available-for-sale securities were caused by fluctuations in market value and interest rates as a result of the economic environment. As the decline in market value was attributable to changes in market conditions and not credit quality, and because the Company neither intended to sell nor was it more likely than not that it would be required to sell these investments prior to a recovery of par value, the Company did not consider these investments to be other-than temporarily impaired as of October 31, 2016 and January 31, 2016, respectively.

The following fair value hierarchy is applied for disclosure of the inputs used to measure fair value. This hierarchy prioritizes the inputs into three broad levels as follows:

Level 1—Inputs are unadjusted quoted prices in active markets for identical assets or liabilities.

Level 2—Inputs are quoted prices for similar assets and liabilities in active markets or inputs that are observable for the assets or liabilities, either directly or indirectly through market corroboration, for substantially the full term of the financial instruments.

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Level 3—Unobservable inputs based on the Company’s own assumptions used to measure assets and liabilities at fair value. The inputs require significant management judgment or estimation.

The Company measures the fair value of money market funds and demand deposits using quoted prices in active markets for identical assets and classifies them within Level 1. The fair value of the Company’s investments in other debt securities are obtained based on quoted prices for similar assets in active markets, or model driven valuations using significant inputs derived from or corroborated by observable market data and are classified within Level 2.

The following table presents the fair value of the financial instruments measured on a recurring basis as of October 31, 2016 and January 31, 2016:

	As of October 31, 2016			Level
	Total	Level 1	Level 2	3
	(in thousands)			
Money market funds	\$66	\$66	\$—	\$ —
Demand deposits	10,000	10,000	—	—
Commercial paper	9,085	—	9,085	—
Corporate bonds	24,079	—	24,079	—
Asset-backed securities	9,062	—	9,062	—
U.S. government securities	18,416	—	18,416	—
Total cash equivalents and marketable securities	\$70,708	\$10,066	\$60,642	\$ —

	As of January 31, 2016			Level
	Total	Level 1	Level 2	3
	(in thousands)			
Money market funds	\$530	\$530	\$—	\$ —
Commercial paper	2,598	—	2,598	—
Corporate bonds	21,340	—	21,340	—
Asset-backed securities	4,585	—	4,585	—
U.S. government securities	9,272	—	9,272	—
Agency bonds	2,042	—	2,042	—
Total cash equivalents and marketable securities	\$40,367	\$530	\$39,837	\$ —

3. Inventories

Inventory at October 31, 2016 and January 31, 2016 consisted of the following:

As of
 October 31, 2016
 and
 January 31, 2016

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	2016	
	(in thousands)	
Work-in-progress	\$ 13,404	\$ 9,474
Finished goods	9,936	8,693
Total	\$ 23,340	\$ 18,167

4. Property and Equipment, Net

Depreciation expense was approximately \$0.4 million for the three months ended October 31, 2016 and 2015, respectively. Depreciation expense was approximately \$1.2 million for the nine months ended October 31, 2016 and 2015, respectively. Property and equipment at October 31, 2016 and January 31, 2016 consisted of the following:

	As of	
	October	January 31, 2016
	31,	
	2016	2016
	(in thousands)	
Computer equipment and software	\$6,585	\$ 6,421
Machinery and equipment	3,427	2,706
Furniture and fixtures	789	492
Leasehold improvements	1,571	1,429
Construction in progress	594	253
	12,966	11,301
Less: accumulated depreciation and amortization	(8,675)	(7,853)
Total property and equipment, net	\$4,291	\$ 3,448

5. Goodwill and Intangible Assets

On June 25, 2015, the Company completed the acquisition of VisLab S.r.l., a privately held Italian company that develops computer vision and intelligent control systems for automotive and other commercial applications, including advanced driver assistance systems and several generations of autonomous vehicle driving systems, for \$30.0 million in cash. As a result, there was \$25.3 million attributed to goodwill, \$4.1 million attributed to intangible assets and \$0.6 million attributed to net assets acquired. A deferred tax liability of \$1.3 million related to the intangible assets was recorded to account for the difference between financial reporting and tax basis at the acquisition date, with an addition to goodwill. The Company does not amortize goodwill. The intangible assets primarily consist of IPR&D. Acquired IPR&D is capitalized at fair value as an intangible asset and amortization commences upon completion of the underlying projects. When a project underlying reported IPR&D is completed, the corresponding amount of IPR&D is reclassified as an amortizable purchased intangible asset and is amortized over its estimated useful life. As of October 31, 2016, there was no IPR&D amortized. There were no goodwill or intangible asset impairments for the three and nine months ended October 31, 2016 and 2015, respectively.

Pro forma results of operations for this acquisition have not been presented because they are not material to the consolidated results of operations.

6. Accrued Liabilities

Accrued liabilities at October 31, 2016 and January 31, 2016 consisted of the following:

	As of	
	October	
	31,	January 31, 2016
	2016	
	(in thousands)	
Accrued employee compensation	\$12,930	\$ 14,512
Accrued warranty	500	234
Accrued rebates	1,119	824
Accrued product development costs	6,289	6,339
Other accrued liabilities	2,494	1,869
Total accrued liabilities	\$23,332	\$ 23,778

7. Deferred Revenue and Deferred Cost

Deferred revenue and related cost at October 31, 2016 and January 31, 2016 consisted of the following:

	As of	
	October	January 31, 2016
	31,	
	2016	2016
	(in thousands)	
Deferred revenue on product shipments	\$6,850	\$ 12,201
Deferred revenue from licenses & services	2,010	1,653
Deferred cost of revenue on product shipments	(1,975)	(3,777)
Total deferred revenue, net	\$6,885	\$ 10,077

8. Other Long-Term Liabilities

Other long-term liabilities at October 31, 2016 and January 31, 2016 consisted of the following:

	As of	
	October	January 31, 2016
	31,	
	2016	2016
	(in thousands)	
Unrecognized tax benefits, including interest	\$925	\$ 10,917
Deferred tax liabilities, non-current	1,364	1,423
Other long-term liabilities	2	2
Total other long-term liabilities	\$2,291	\$ 12,342

On February 1, 2016, upon the adoption of ASU 2016-09, Compensation – Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting, the Company recognized approximately \$11.7 million of tax-effected previously unrecognized excess stock-based compensation deductions. As a result of recognizing these deductions, the Company reduced its unrecognized tax benefits by \$9.5 million pursuant to accounting guidance, which provides that an unrecognized tax benefit shall be presented as a reduction to a deferred tax benefit to the extent such deferred tax benefit is available.

9. Capital Stock

Preference shares

After completion of the Company's initial public offering, a total of 20,000,000 preference shares, with a \$0.00045 par value per share, were authorized. There were no preference shares issued and outstanding as of October 31, 2016 and January 31, 2016, respectively.

Ordinary shares

As of October 31, 2016 and January 31, 2016, a total of 200,000,000 ordinary shares were authorized.

On February 1, 2016, the Company added 1,455,001 ordinary shares to the ordinary shares reserved for issuance, pursuant to an "evergreen" provision contained in the 2012 Equity Incentive Plan, or EIP. Pursuant to such provision, on February 1st of each fiscal year, the number of ordinary shares reserved for issuance under the EIP is automatically increased by a number equal to the lesser of (i) 3,500,000 ordinary shares, (ii) four and one half percent (4.5%) of the aggregate number of ordinary shares outstanding on January 31st of the preceding fiscal year, or (iii) a lesser number of shares that may be determined by the Company's Board of Directors.

On February 1, 2016, the Company added 404,166 ordinary shares to the ordinary shares reserved for issuance, pursuant to an "evergreen" provision contained in the Amended and Restated 2012 Employee Stock Purchase Plan, or ESPP. Pursuant to such provision, on February 1st of each fiscal year, the number of ordinary shares reserved for issuance under the ESPP is automatically increased by a number equal to the lesser of (i) 1,500,000 ordinary shares, (ii) one and one quarter percent (1.25%) of the aggregate number of ordinary shares outstanding on such date, or (iii) an amount determined by the Company's Board of Directors or a duly authorized committee of the Board of Directors.

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As of October 31, 2016 and January 31, 2016, the following ordinary shares were reserved for future issuance under the EIP and ESPP:

	As of	
	October 31, 2016	January 31, 2016
Shares reserved for options, restricted stock and restricted stock units under EIP	5,431,179	5,027,475
Shares reserved for ESPP	1,252,465	974,273
Shares repurchased		

On May 31, 2016, the Company's Board of Directors authorized the repurchase of up to \$75.0 million of the Company's ordinary shares over a six-month period. On November 29, 2016, this authorization was extended until June 30, 2017. Repurchases may be made from time-to-time through open market purchases or through privately negotiated transactions subject to market conditions, applicable legal requirements and other relevant factors. The repurchase program does not obligate the Company to acquire any particular amount of ordinary shares, and it may be suspended at any time at the Company's discretion. The repurchase program is funded using the Company's working capital and any repurchased shares are recorded as authorized but unissued shares. There were no shares repurchased during the three months ended October 31, 2016. As of October 31, 2016, a total of 405,089 shares have been repurchased for approximately \$20.2 million in cash and recorded as a reduction to equity.

10. Stock-based Compensation

The following table presents the classification of stock-based compensation for the periods indicated:

	Three Months Ended October 31, 2016		Nine Months Ended October 31, 2016	
	2015	2015	2015	2015
	(in thousands)			
Stock-based compensation:				
Cost of revenue	\$282	\$157	\$773	\$408
Research and development	7,804	5,201	21,396	11,966
Selling, general and administrative	4,621	2,587	13,305	7,174
Total stock-based compensation	\$12,707	\$7,945	\$35,474	\$19,548

As of October 31, 2016, total unrecognized compensation cost related to unvested stock options was \$9.1 million and is expected to be recognized over a weighted-average period of 2.05 years. Total unrecognized compensation cost related to unvested restricted stock units was \$115.0 million and is expected to be recognized over a weighted-average period of 2.98 years. Total unrecognized compensation cost related to unvested restricted stock awards was \$8.1 million and is expected to be recognized over a weighted-average period of 1.89 years.

The following table sets forth the weighted-average assumptions used to estimate the fair value of stock options and employee stock purchase plan awards for the periods indicated:

	Three Months Ended October 31, 2016		2015		Nine Months Ended October 31, 2016		2015	
Stock Options:								
Volatility	39	%	55	%	38	%	57	%
Risk-free interest rate	1.27	%	1.70	%	1.51	%	1.73	%
Expected term (years)	6.08		6.08		5.98		6.08	
Dividend yield	0	%	0	%	0	%	0	%
Employee stock purchase plan awards:								
Volatility	41	%	63	%	54	%	63	%
Risk-free interest rate	0.49	%	0.27	%	0.51	%	0.21	%
Expected term (years)	0.5		0.5		0.5		0.5	
Dividend yield	0	%	0	%	0	%	0	%

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The following table summarizes stock option activities for the nine months ended October 31, 2016:

	Option Outstanding	Weighted-Average Exercise Price	Weighted-Average Grant-date Fair Value	Total Intrinsic Value of options Exercised (in thousands)	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding at January 31, 2016	1,853,390	\$ 19.36				
Granted	93,100	46.10	\$ 17.99			
Exercised	(205,018)	13.98		\$ 9,469		
Forfeited	(10,753)	50.76				
Expired	(7,721)	14.12				
Outstanding at October 31, 2016	1,722,998	21.27			5.39	\$ 71,043
Exercisable at October 31, 2016	1,345,458	\$ 13.81			4.57	\$ 64,650

The intrinsic value of options outstanding and exercisable options are calculated based on the difference between the fair market value of the Company's ordinary shares on the reporting date and the exercise price. The closing price of the Company's ordinary shares on October 31, 2016 was \$61.37, as reported by The NASDAQ Global Market. The intrinsic value of exercised options is calculated based on the difference between the fair market value of the Company's ordinary shares on the exercise date and the exercise price.

The following table summarizes restricted stock activities for the periods indicated:

	Shares	Weighted-Average Grant-Date Fair Value
Unvested at January 31, 2016	2,495,488	\$ 47.04
Granted	662,573	67.91
Vested	(704,225)	36.48
Forfeited	(22,030)	45.94
Unvested at October 31, 2016	2,431,806	\$ 55.60

As of October 31, 2016, the aggregate intrinsic value of unvested restricted stock was \$149.2 million.

11. Net Income Per Ordinary Share

The following table sets forth the computation of basic and diluted net income per ordinary share for the periods indicated:

	Three Months Ended October 31,		Nine Months Ended October 31,	
	2016	2015	2016	2015
(in thousands, except share and per share data)				
Numerator:				
Net income	\$29,045	\$29,461	\$39,460	\$71,412
Less: amount allocable to unvested early exercised options	—	—	—	—
Net income allocable to ordinary shareholders - basic	\$29,045	\$29,461	\$39,460	\$71,412
Undistributed earnings reallocated to ordinary shareholders	—	—	—	—
Net income allocable to ordinary shareholders - diluted	\$29,045	\$29,461	\$39,460	\$71,412
Denominator:				
Weighted-average ordinary shares outstanding	32,670,784	31,815,588	32,552,077	31,476,724
Less: weighted-average unvested early exercised options subject to repurchase	—	—	—	(56)
Weighted-average ordinary shares - basic	32,670,784	31,815,588	32,552,077	31,476,668
Effect of potentially dilutive securities:				
Employee stock options	1,159,739	1,199,065	1,094,786	1,316,228
Restricted stock and restricted stock units	753,178	881,605	583,144	957,263
Employee stock purchase plan	16,291	2,944	12,058	8,382
Weighted-average ordinary shares - diluted	34,599,992	33,899,202	34,242,065	33,758,541
Net income per ordinary share:				
Basic	\$0.89	\$0.93	\$1.21	\$2.27
Diluted	\$0.84	\$0.87	\$1.15	\$2.12

The following weighted-average potentially dilutive securities were excluded from the computation of diluted net income per ordinary share as their effect would have been antidilutive:

	Three Months Ended October 31,		Nine Months Ended October 31,	
	2016	2015	2016	2015
Options to purchase ordinary shares	189,147	135,617	380,460	73,377
Restricted stock and restricted stock units	606,843	237,285	900,701	110,096
Employee stock purchase plan	24,221	22,865	19,534	12,098
Early exercised options subject to repurchase	—	—	—	56
	820,211	395,767	1,300,695	195,627

12. Income Taxes

The following table provides details of income taxes for the periods indicated:

	Three Months Ended October 31, 2016		2015		Nine Months Ended October 31, 2016		2015	
	(in thousands)							
Income before income taxes	\$29,802		\$30,496		\$40,610		\$75,896	
Provision for income taxes	757		1,035		1,150		4,484	
Effective tax rate	2.5	%	3.4	%	2.8	%	5.9	%

The effective tax rate decreased for the three and nine months ended October 31, 2016 compared to the same periods in the prior fiscal year primarily due to tax benefits of \$2.2 million and \$2.8 million, respectively, from excess stock-based compensation deductions following the Company's early adoption of ASU 2016-09, Compensation – Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting, in the first quarter of fiscal year 2017.

The Company files federal and state income tax returns in the United States and in various foreign jurisdictions. The tax years 2014 to 2016 remain open to examination by U.S. federal tax authorities. The tax years 2004 to 2016 remain open to examination by U.S. state tax authorities. The tax years 2011 to 2016 remain open to examination by foreign tax authorities.

The Company is subject to ongoing examinations of its tax returns by the Internal Revenue Service and other tax authorities in various jurisdictions. The Company regularly assesses the likelihood of adverse outcomes resulting from these examinations to determine the adequacy of its provision for income taxes. These assessments can require considerable estimates and judgments. As of October 31, 2016, the gross amount of unrecognized tax benefits was approximately \$35.9 million. If the estimates of income tax liabilities prove to be less than the ultimate assessment, then a further charge to expense could be required. If events occur and the payment of these amounts ultimately proves to be unnecessary, the reversal of the liabilities could result in tax benefits being recognized in the period in which the Company determines the liabilities are no longer necessary. The Company does not anticipate significant changes to its uncertain tax positions during the next twelve months.

13. Commitments and Contingencies

The Company leases its principal facilities and time-based software licenses under operating lease agreements. Net operating lease expenses for the three months ended October 31, 2016 and 2015 were approximately \$2.0 million and \$1.6 million, respectively. Net operating lease expenses for the nine months ended October 31, 2016 and 2015 were approximately \$5.6 million and \$5.2 million, respectively. Future annual minimum payments under these operating leases with initial lease terms in excess of one year are as follows:

As of
October
31, 2016

Fiscal Year	(in thousands)
2017	\$ 1,970
2018	2,862
2019	2,230
2020	1,813
2021	814
Total future annual minimum lease payments	\$ 9,689

Contract Manufacturer Commitments

The Company's components and products are procured and built by independent contract manufacturers based on sales forecasts. These forecasts include estimates of future demand, historical trends, analysis of sales and marketing activities, and adjustment of overall market conditions. The Company regularly issues purchase orders to independent contract manufacturers which are cancelable only upon the agreement between the Company and the third-party manufacturers. As of October 31, 2016 and January 31, 2016, total manufacturing purchase commitments were approximately \$22.1 million and \$19.7 million, respectively, as a result of seasonal fluctuations.

Indemnification

The Company, from time to time, in the normal course of business, indemnifies certain vendors with whom it enters into contractual relationships. The Company has agreed to hold the other party harmless against third-party claims in connection with the Company's future products. The Company also indemnifies certain customers against third-party claims related to certain intellectual property matters. It is not possible to determine the maximum potential amount of liability under these indemnification obligations due to the limited history of prior indemnification claims and the unique facts and circumstances that are likely to be involved in each particular claim. The Company has not made payments under these obligations and no liabilities have been recorded for these obligations on the condensed consolidated balance sheets as of October 31, 2016 and January 31, 2016, respectively.

14. Segment Reporting

The Company operates in one reportable segment related to the development and sales of low-power, high-definition video products. The Chief Executive Officer of the Company has been identified as the Chief Operating Decision Maker (the "CODM") and manages the Company's operations as a whole and for the purpose of evaluating financial performance and allocating resources, the CODM reviews financial information presented on a consolidated basis accompanied by information by customer and geographic region.

Geographic Revenue

The following table sets forth the Company's revenue by geographic region for the periods indicated:

	Three Months Ended October 31,		Nine Months Ended October 31,	
	2016	2015	2016	2015
	(in thousands)			
Hong Kong	\$92,588	\$84,053	\$197,478	\$228,371
Europe	2,228	2,260	10,862	5,963
United States	1,523	2,190	5,697	4,756
Asia Pacific	2,889	1,015	6,125	2,331
North America other than United States	1,262	3,682	2,627	6,985
Total revenue	\$100,490	\$93,200	\$222,789	\$248,406

As of October 31, 2016, substantially all of the Company's property and equipment, net were located in the United States and Asia Pacific region with approximate net amounts of \$1.8 million and \$2.0 million, respectively.

Major Customers

For the three and nine months ended October 31, 2016, the customers representing 10% or more of revenue and accounts receivable were Wintech, the Company's logistics provider, and GoPro, a direct OEM customer, which combined accounted for approximately 84% and 78% of total revenue, respectively. For the three and nine months ended October 31, 2015, the customers representing 10% or more of revenue and accounts receivable were Wintech and Chicony Electronics Co., Ltd., or Chicony, a direct ODM customer, which combined accounted for approximately 89% and 90% of total revenue, respectively. Accounts receivable with Wintech and GoPro combined accounted for approximately \$31.1 million as of October 31, 2016. Accounts receivable with Wintech and Chicony combined

accounted for approximately \$32.5 million as of January 31, 2016.

15. Related-Party Transactions

The Company considers an entity to be a related party if it owns more than 10% of the Company's total voting stock at the end of each reporting period or if an officer or employee of an entity also serves on the Company's board of directors or if it is a significant shareholder and has material business transactions with the Company.

The Company leases software licenses with Cadence Design Systems, Inc. ("Cadence"). A member of the Company's Board of Directors is also the Chief Executive Officer, President and a Director of Cadence. As of October 31, 2016, the Company had an obligation to pay an aggregate amount of \$0.8 million for these licenses through February 2017. The Company paid \$0.8 million and \$0.7 million under these agreements for the three months ended October 31, 2016 and 2015, respectively. The Company paid \$2.1 million under these agreements for the nine months ended October 31, 2016 and 2015, respectively. License expenses related to these agreements included in research and development expense were approximately \$0.8 million and \$0.6 million for the three months ended October 31, 2016 and 2015, respectively. License expenses related to these agreements included in research and development expense were approximately \$2.2 million and \$2.0 million for the nine months ended October 31, 2016 and 2015, respectively.

In addition to the related party transactions noted above, the Company recognized revenue from sales to Wintech, the Company's logistics provider. Wintech, along with an affiliate, owned approximately 4.6% of the Company's voting stock as of January 31, 2013, but has sold such stock and is no longer a significant shareholder of the Company as of October 31, 2016 and January 31, 2016, respectively. The Company recognized revenue from sales to Wintech of approximately \$53.9 million and \$63.1 million for the three months ended October 31, 2016 and 2015, respectively. The Company recognized revenue from sales to Wintech of approximately \$142.8 million and \$168.2 million for the nine months ended October 31, 2016 and 2015, respectively. As of October 31, 2016 and January 31, 2016, the Company had receivables from Wintech of approximately \$16.3 million and \$20.6 million, respectively.

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with the unaudited condensed consolidated financial statements and related notes included elsewhere in this Quarterly Report on Form 10-Q, and the consolidated financial statements and notes thereto for the fiscal year ended January 31, 2016 and management's discussion and analysis of our financial condition and results of operations included in our Annual Report on Form 10-K for the 2016 fiscal year filed with the Securities and Exchange Commission, or SEC, on March 25, 2016.

This Quarterly Report on Form 10-Q, including this "Management's Discussion and Analysis of Financial Condition and Results of Operations", includes a number of forward-looking statements that involve many risks and uncertainties. Forward-looking statements are identified by the use of the words "would," "could," "will," "may," "expect," "believe," "should," "anticipate," "outlook," "if," "future," "intend," "plan," "estimate," "predict," "potential," "target," "seek," "project," "forecast" and similar words and phrases, including the negatives of these terms, or other variations of these terms, that denote future events. Such statements include, but are not limited to, statements concerning our market opportunity, our ability to develop new solutions, our future financial and operating performance, sales and marketing strategy, investment strategy, research and development, customer and supplier relationships and inventory levels, industry trends, our cash needs and capital requirements, expectations about seasonality, economic conditions, taxes, the availability of third-party components and operating expenses. These statements reflect our current views with respect to future events and our potential financial performance and are subject to risks and uncertainties that could cause our actual results and financial position to differ materially and adversely from what is projected or implied in any forward-looking statements included in this Quarterly Report on Form 10-Q. These factors include, but are not limited to, the risks described under Item 1A of Part II — "Risk Factors," Item 2 of Part I — "Management's Discussion and Analysis of Financial Condition and Results of Operations," elsewhere in this Quarterly Report on Form 10-Q and those discussed in other documents we file with the SEC. We make these forward-looking statements based upon information available on the date of this Quarterly Report on Form 10-Q, and we have no obligation (and expressly disclaim any such obligation) to update or alter any forward-looking statements, whether as a result of new information or otherwise except as otherwise required by securities regulations.

Overview

We are a leading developer of semiconductor processing solutions for video that enable high-definition, or HD, video capture, sharing and display. A device that captures video includes four primary components: a lens, an image sensor, a video processor and storage memory. The video processor converts raw video input into a format that can be stored and distributed efficiently. We combine our processor design capabilities with our expertise in video and image processing algorithms and software to provide a technology platform that is designed to be easily scalable across multiple applications and enable rapid and efficient product development. Our system-on-a-chip, or SoC, designs fully integrate HD video processing, image processing, audio processing and system functions onto a single chip, delivering exceptional video and image quality, differentiated functionality and low power consumption.

We sell our solutions to leading original design manufacturers, or ODMs, and original equipment manufacturers, or OEMs, globally. We refer to ODMs as our customers and OEMs as our end customers, except as otherwise indicated or as the context otherwise requires. In the camera market, our solutions enable the creation of high-quality video content primarily for wearable sports cameras, Internet Protocol, or IP, security cameras, for both professional use and home security and monitoring, unmanned aerial vehicle cameras, also referred to as UAVs, drones or flying cameras, and automotive aftermarket cameras. In the infrastructure market, our solutions efficiently manage IP video traffic, broadcast encoding, transcoding and IP video delivery applications.

Our sales cycles typically require a significant investment of time and a substantial expenditure of resources before we can realize revenue from the sale of our solutions, if any. Our typical sales cycle consists of a multi-month sales and development process involving our customers' system designers and management along with our sales personnel and software engineers. If successful, this process culminates in a customer's decision to use our solutions in its system, which we refer to as a design win. Our sales efforts are typically directed to the OEM of the product that will incorporate our video and image processing solution, but the eventual design and incorporation of our SoC into the product may be handled by an ODM on behalf of the OEM. Volume production may begin within six to 18 months after a design win, depending on the complexity of our customer's product and other factors upon which we may have little or no influence. Once one of our solutions has been incorporated into a customer's design, we believe that our solution is likely to remain a component of the customer's product for its life cycle because of the time and expense associated with redesigning a product or substituting an alternative solution. Conversely, a design loss to a competitor will likely preclude any opportunity for us to generate future revenue from such customer's product. Even if we obtain a design win and our SoC remains a component through the life cycle of a customer's product, the volume and timing of actual sales of our SoCs to the customer depend upon the production, release and market acceptance of that product, none of which are within our control.

Financial Highlights and Trends

• We recorded revenue of \$100.5 million and \$222.8 million for the three and nine months ended October 31, 2016, respectively. This represented an increase of 7.8% for the three months ended October 31, 2016 and a decrease of 10.3% for the nine months ended October 31, 2016 as compared to the same periods in fiscal year 2016. The increase for the three months ended October 31, 2016 was primarily due to a recovery of shipments in the wearable sports camera market led by the ramp of the Hero 5 line of cameras launched by GoPro, Inc., or GoPro, in the third quarter of fiscal year 2017. The increase was also attributable to strong growth in the home security and monitoring camera market and sequential revenue improvement from the professional IP security market. The increase was partially offset by decreased revenue from the UAV market due to the timing of new product launches by customers. The decrease in revenue for the nine months ended October 31, 2016 was primarily due to significant revenue decline in the wearable sports camera market in the first half of fiscal year 2017. The decreased revenue from the wearable sports camera market for the nine months ended October 31, 2016 was partially offset by strong growth in the home security and monitoring market during the period and growth in the UAV market in the first half of this fiscal year. In the professional IP security market, we experienced a decline in revenues in the first half of fiscal year 2017, predominantly from customers located in the China region, but incurred a strong recovery from these customers in the third quarter of fiscal year 2017. Although revenue from the automotive aftermarket, which is dominated by demand from Asia, was down from fiscal year 2016 due to declining business from China, the revenue from recording systems installed as original equipment in automobiles helped offset the decline. For the three and nine months ended October 31, 2016, the infrastructure market was relatively flat due to continued weak market conditions in the United States and Europe as system manufacturers continue to delay investment in network upgrades to the new H.265 video compression technology.

• We experienced a moderate adverse impact to our business in the second and third quarters of fiscal year 2017 due to the disruption in supply of image sensors from Sony Corporation, or Sony, to our customers resulting from the damage to Sony's production facility caused by the April 2016 earthquake in Kumamoto, Japan. This disruption in image sensor supply impacts our customers' ability to build or launch camera devices and, as a result, impacts the timing and scope of demand for our SoCs. We expect the adverse impact will continue into the fourth quarter of fiscal year 2017, although the impact is expected to be at a reduced level compared to the prior two quarters.

• We recorded operating income of \$29.7 million and \$40.3 million for the three and nine months ended October 31, 2016, respectively, as compared to \$30.3 million and \$75.6 million for the three and nine months ended October 31, 2015, respectively. The decrease for the three months ended October 31, 2016 was primarily due to increased stock-based compensation expense. The decrease for the nine months ended October 31, 2016 was primarily due to decreased total revenue, increased stock-based compensation expense, as well as increased research and development costs as a result of timing and number of new SoCs in development.

• We generated cash flows from operating activities of \$81.0 million for the nine months ended October 31, 2016, as compared to \$93.2 million for the nine months ended October 31, 2015. The decreased cash flows from operating activities were primarily due to decreased net income as a result of decreased revenue, adjusted for increased non-cash stock-based compensation expense. The decrease also was attributable to increased inventory purchases and decreased deferred revenue associated with the timing of inventory shipments by our logistics providers. The decrease was partially offset by increased cash receipts associated with the timing of payments from customers and increased liabilities associated with the timing of payments to suppliers.

• On May 31, 2016, our Board of Directors authorized the repurchase of up to \$75.0 million of our ordinary shares over a six-month period. On November 29, 2016, our Board of Directors extended the duration of the repurchase program until June 30, 2017. Repurchases may be made from time-to-time through open market purchases or through privately negotiated transactions subject to market conditions, applicable legal requirements and other relevant factors. The repurchase program does not obligate us to acquire any particular amount of ordinary shares, and it may be suspended at any time at our discretion. The repurchase program is funded using our working capital and any repurchased shares are recorded as authorized but unissued shares. There were no shares repurchased during the three months ended October 31, 2016. As of October 31, 2016, we had repurchased a total of 405,089 shares for

approximately \$20.2 million in cash.

Factors Affecting Our Performance

Design Wins. We closely monitor design wins by customer and end market. We consider design wins to be critical to our future success, although a design win may not successfully materialize into revenue, and even if they result in revenue, the amount generated by each design win can vary significantly. Our long-term sales expectations are based on forecasts from customers and internal estimations of customer demand factoring in the expected time to market for end customer products incorporating our solutions and associated revenue potential. Our ability to accurately forecast demand, however, can be adversely affected by a number of factors, including inaccurate forecasting by our customers, miscalculations by our customers of their inventory requirements, changes in market conditions, adverse changes in our product order mix and fluctuating demand for our customers' products.

Pricing, Product Cost and Margin. Our pricing and margins depend on the volumes and the features of the solutions we provide to our customers. Additionally, we make significant investments in new solutions for both cost improvements and new features that we expect to drive revenue and maintain margins. In general, solutions incorporated into more complex configurations, such as those used in high-performance camera or infrastructure applications, have higher prices and higher gross margins as compared to solutions sold into lower performing, more competitive camera applications. Our average selling price, can vary by market and application due to market-specific supply and demand, the maturation of products launched in previous years and the launch of new products.

We continually monitor the cost of our solutions. As we rely on third-party manufacturers for the production of our products, we maintain a close relationship with these suppliers to continually monitor production yields, component costs and design efficiencies.

Shifting Consumer Preferences. Our revenue is subject to consumer preferences, regarding form factor and functionality, and how those preferences impact the video and image capture electronics that we support. For example, improved smartphone video capture capabilities, and the rapid adoption by consumers, led to the decline of pocket video cameras aimed at the video and image capture market. The current video and image capture market is now characterized by a greater volume of more specialized video and image capture devices that are less likely to be replaced with smartphones, such as wearable, IP security, UAV and automotive aftermarket cameras. This increasing specialization of video capture devices has changed our customer base and end markets and has impacted our revenue. In the future, we expect further changes in the market to continue to impact our business performance.

Continued Concentration of Revenue by End Market. Historically, our revenue has been significantly concentrated in a small number of end markets. In fiscal year 2010, the majority of our revenue came from the pocket video, camcorder and infrastructure markets. Since that time, we have developed technologies to provide solutions for new markets such as the wearable, IP security, UAV and automotive aftermarket camera markets. We believe these new markets can continue to facilitate revenue growth and customer diversification. Since fiscal year 2013, the wearable sports and professional IP security markets have been our largest end markets and sales into these markets collectively generated the majority of our revenue. While we will continue to expand our end market exposure, such as to home security and monitoring cameras, non-sports wearable cameras and UAVs, we anticipate that sales to a limited number of end markets will continue to account for a significant percentage of our total revenue for the foreseeable future. Our end market concentration may cause our financial performance to fluctuate significantly from period to period based on the success or failure of products that our SoCs are designed into as well as the overall growth or decline in the video capture markets in which we compete. In addition, we derive a significant portion of our revenue from a limited number of ODMs who build products on behalf of a limited number of OEMs and from a limited number of OEMs to whom we ship directly. We believe that our operating results for the foreseeable future will continue to depend on sales to a relatively small number of customers.

Ability to Capitalize on Connectivity Trend. Mobile connected devices are ubiquitous today and play an increasingly prominent role in consumers' lives. The constant connectivity provided by these devices has created a demand for connected electronic peripherals such as video and image capture devices. Our ability to capitalize on these trends by

supporting our end customers in the development of connected peripherals that seamlessly cooperate with other connected devices and allow consumers to distribute and share video and images with online media platforms is critical for our success. We have added wireless communication functionality into our solutions for wearable, IP security, UAV and automotive aftermarket cameras. The combination of our compression technology with wireless connectivity enables wireless video streaming and uploading of videos and images to the Internet. Our solutions enable IP security camera systems to stream video content to either cloud infrastructure or connected mobile devices, and our solutions for wearable and UAV cameras allow consumers to quickly stream or upload video and images to social media platforms.

Sales Volume. A typical camera design win that successfully launches into the marketplace can generate a wide range of sales volumes for our solutions, depending on the end market demand for our customers' products. This can depend on several factors, including the reputation of the end customer, market penetration, product capabilities, size of the end market that the product addresses and our end customers' ability to sell their products. In certain cases, we may provide volume discounts on sales of our solutions, which may be offset by lower manufacturing costs related to higher volumes. In general, our customers with greater market penetration and better branding tend to develop products that generate larger volumes over the product life cycle.

Customer Product Life Cycle. We estimate our customers' product life cycles based on the customer, type of product and end market. In general, products launched in the camera market have shorter life cycles than those sold into the infrastructure market. We typically commence commercial shipments from six to 18 months following a design win; however, in some markets, more lengthy product and development cycles are possible, depending on the scope and nature of the project. A portable consumer device typically has a product life cycle of six to 18 months. In the infrastructure market, the product life cycle can range from 24 to 60 months.

Results of Operations

The following table sets forth a summary of our statement of operations for the periods indicated:

	Three Months Ended October 31,		Nine Months Ended October 31,	
	2016	2015	2016	2015
	(dollars in thousands)			
Revenue	\$100,490	\$93,200	\$222,789	\$248,406
Cost of revenue	34,167	31,938	76,289	86,378
Gross profit	66,323	61,262	146,500	162,028
Operating expenses:				
Research and development	25,967	22,062	74,076	59,485
Selling, general and administrative	10,686	8,873	32,144	26,970
Total operating expenses	36,653	30,935	106,220	86,455
Income from operations	29,670	30,327	40,280	75,573
Other income	132	169	330	323
Income before income taxes	29,802	30,496	40,610	75,896
Provision for income taxes	757	1,035	1,150	4,484
Net income	\$29,045	\$29,461	\$39,460	\$71,412

The following table sets forth operating results as a percentage of revenue of each line item for the periods indicated:

	Three Months Ended October 31,		Nine Months Ended October 31,	
	2016	2015	2016	2015
Revenue	100%	100%	100%	100%
Cost of revenue	34	34	34	35
Gross profit	66	66	66	65

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Operating expenses:				
Research and development	26	24	33	24
Selling, general and administrative	11	10	14	11
Total operating expenses	37	34	47	35
Income from operations	29	32	19	30
Other income	—	—	—	—
Income before income taxes	29	32	19	30
Provision for income taxes	—	1	1	2
Net income	29 %	31 %	18 %	28 %

Revenue

We derive substantially all of our revenue from the sale of HD video and image processing SoC solutions to OEMs and ODMs, either directly or through our logistics providers. Our SoC solutions have been used in the camera and infrastructure markets, although we expect the camera market will be the primary market for our solutions for the foreseeable future as the infrastructure market continues to decline due to delays in investments in network upgrades. We derive a substantial portion of our revenue from sales made indirectly through our logistics provider, Wintech Microelectronics Co., Ltd., or Wintech, and directly to one OEM customer, GoPro.

We typically experience seasonal fluctuations in our quarterly revenue with our third fiscal quarter normally being the highest revenue quarter. This fluctuation has been driven primarily by increased sales in the camera market as our customers build inventories in preparation for the holiday shopping season. More generally, our average selling prices fluctuate based on the mix of our solutions sold in a period which reflects the impact of both changes in unit sales of existing solutions as well as the introduction and sales of new solutions. Our solutions are typically characterized by a life cycle that begins with higher average selling prices and lower volumes, followed by broader market adoption, higher volumes and average selling prices that are lower than initial levels.

The end markets into which we sell our products have seen significant changes as consumer preferences have evolved in response to new technologies. As a result, the composition of our revenue may differ meaningfully during periods of technology or consumer preference changes. We expect shifts in consumer use of video capture to continue to change over time, as more specialized use cases emerge and video capture continues to proliferate.

Cost of Revenue and Gross Margin

Cost of revenue includes the cost of materials such as wafers processed by third-party foundries, costs associated with packaging, assembly and testing, and our manufacturing support operations such as logistics, planning and quality assurance. Cost of revenue also includes indirect costs such as warranty, inventory valuation reserves and other general overhead costs.

We expect that our gross margin may fluctuate from period to period as a result of changes in average selling price, product mix and the introduction of new products by us or our competitors. In general, solutions incorporated into more complex configurations, such as those used in high-performance cameras or infrastructure applications, have higher prices and higher gross margins, as compared to solutions sold into the lower performance, more competitive camera applications. As semiconductor products mature and unit volumes sold to customers increase, their average selling prices typically decline. These declines may be paired with improvements in manufacturing yields and lower wafer, packaging and test costs, which offset some of the margin reduction that could result from lower selling prices. We believe that our gross margin will decline in the future as we continue to penetrate the highly competitive camera market.

Research and Development

Research and development expense consists primarily of personnel costs, including salaries, stock-based compensation and employee benefits. The expense also includes costs of development incurred in connection with our collaborations with our foundry vendors, costs of licensing intellectual property from third parties for product development, costs of development for software and hardware tools, cost of fabrication of mask sets for prototype products, and allocated depreciation and facility expenses. All research and development costs are expensed as incurred. We expect our research and development expense to increase in absolute dollars as we continue to enhance and expand our product features and offerings.

Selling, General and Administrative

Selling, general and administrative expense consists primarily of personnel costs, including salaries, stock-based compensation and employee benefits for our sales, marketing, finance, human resources, information technology and administrative personnel. The expense also includes professional service costs related to accounting, tax, legal services, and allocated depreciation and facility expenses. We expect our selling expense to increase in absolute dollars as we expand the size of our sales and marketing organization to support our anticipated growth. We expect our general and administrative expense to increase in absolute dollars as we continue to maintain the infrastructure necessary to operate as a public company, which includes increased audit and legal fees, costs to comply with the Sarbanes-Oxley Act of 2002, the rules and regulations applicable to companies listed on The NASDAQ Stock Market, investor relations costs, and higher insurance premiums.

Other Income

Other income consists primarily of interest income from investment and net of gains and losses from foreign currency transactions and remeasurements.

Provision (Benefit) for Income Taxes

We are incorporated in the Cayman Islands and also conduct business in several countries such as the United States, China, Taiwan, Hong Kong, Italy, South Korea and Japan, and we are subject to taxation in those jurisdictions. As such, our worldwide operating income is subject to varying tax rates and our effective tax rate is highly dependent upon the geographic distribution of our earnings or losses and the tax laws and regulations in each geographical region. It is also subject to fluctuation from changes in the valuation of our deferred tax assets and liabilities; tax benefits from excess stock-based compensation deductions; transfer pricing adjustments and the tax effects of nondeductible compensation. We have historically had lower effective tax rates as a substantial percentage of our operations are conducted in lower-tax jurisdictions. If our operational structure was to change in such a manner that would increase the amount of operating income subject to taxation in higher-tax jurisdictions, or if we were to commence operations in jurisdictions assessing relatively higher tax rates, our effective tax rate could fluctuate significantly on a quarterly basis and/or be adversely affected.

Significant judgment is required in evaluating our uncertain tax positions and determining our provision for income taxes. Although we believe our reserves are reasonable, no assurance can be given that the final tax outcome of these matters will not be different from that which is reflected in our historical provision for income taxes and accruals. We adjust these reserves in light of changing facts and circumstances, such as the closing of a tax audit or the refinement of an estimate. To the extent that the final tax outcome of these matters is different than the amounts recorded, such differences will impact the provision for income taxes in the period in which such determination is made. The provision for income taxes includes the impact of uncertain tax position reserves and changes to reserves that are considered appropriate, as well as the related net interest and penalties.

Significant judgment is also required in determining any valuation allowance recorded against deferred tax assets. In assessing the need for a valuation allowance, we consider all available evidence, including past operating results, estimates of future taxable income, and the feasibility of tax planning strategies. In the event that we change our determination as to the amount of deferred tax assets that can be realized, we will adjust our valuation allowance with a corresponding impact to the provision for income taxes in the period in which such determination is made.

Comparison of the Three and Nine Months Ended October 31, 2016 and 2015

Revenue

	Three Months		Change		Nine Months Ended		Change	
	Ended October 31, 2016	2015	Amount	%	October 31, 2016	2015	Amount	%
	(dollars in thousands)							
Revenue	\$100,490	\$93,200	\$7,290	7.8%	\$222,789	\$248,406	\$(25,617)	(10.3)%

The increased revenue for the three months ended October 31, 2016 was primarily due to a recovery of shipments in the wearable sports camera market led by the ramp of the Hero 5 line of cameras launched by GoPro in the third quarter of fiscal year 2017. The increase was also attributable to strong growth in the home security and monitoring camera market and sequential revenue improvement from the professional IP security market. The increase was partially offset by decreased revenue from the UAV market due to the timing of new product launches by customers.

The decreased revenue for the nine months ended October 31, 2016 was primarily due to significant revenue decline in the wearable sports camera market in the first half of fiscal year 2017. The decreased revenue from the wearable sports camera market for the nine months ended October 31, 2016 was partially offset by strong growth in the home

security and monitoring market during the period and growth in the UAV market in the first half of this fiscal year. In the professional IP security market, we experienced a decline in revenues in the first half of fiscal year 2017, predominantly from customers located in the China region, but incurred a strong recovery from these customers in the third quarter of fiscal year 2017. Although revenue from the automotive aftermarket, which is dominated by demand from Asia, was down from fiscal year 2016 due to declining business from China, the revenue from recording systems installed as original equipment in automobiles helped offset the decline. For the three and nine months ended October 31, 2016, the infrastructure market was relatively flat due to continued weak market conditions in the United States and Europe as system manufacturers continue to delay investment in network upgrades to the new H.265 video compression technology.

Cost of Revenue and Gross Margin

	Three Months				Nine Months Ended			
	Ended October 31,		Change		October 31,		Change	
	2016	2015	Amount	%	2016	2015	Amount	%
	(dollars in thousands)							
Cost of revenue	\$34,167	\$31,938	\$2,229	7.0%	\$76,289	\$86,378	\$(10,089)	(11.7)%
Gross profit	66,323	61,262	5,061	8.3%	146,500	162,028	(15,528)	(9.6)%
Gross margin	66.0 %	65.7 %	—	0.3%	65.8 %	65.2 %	—	0.6 %

Cost of revenue increased for the three months ended October 31, 2016 and decreased for the nine months ended October 31, 2016, primarily due to increased or decreased revenue compared to the same periods in the prior fiscal year.

Gross margin increased for the three and nine months ended October 31, 2016 compared to the same periods in the prior fiscal year primarily due to benefits to cost of revenue of approximately \$1.1 million and \$2.1 million, respectively, received from the recovery and sale of inventory previously written down as a result of yield loss in the manufacturing process. These benefits contributed approximately 1.1% and 0.9% of gross margin for the three and nine months ended October 31, 2016, respectively.

Research and Development

	Three Months				Nine Months			
	Ended October 31,		Change		Ended October 31,		Change	
	2016	2015	Amount	%	2016	2015	Amount	%
	(dollars in thousands)							
Research and development	\$25,967	\$22,062	\$3,905	17.7%	\$74,076	\$59,485	\$14,591	24.5%

Research and development expense increased for the three and nine months ended October 31, 2016 compared to the same periods in the prior fiscal year primarily due to increases in engineering headcount and SoC development costs. Our research and development engineering headcount increased to 477 at October 31, 2016 compared to 455 at October 31, 2015. The increased engineering headcount resulted in increases in salary related expenses of approximately \$0.4 million and \$3.0 million for the three and nine months ended October 31, 2016, respectively. The increased salary related expense for the nine months ended October 31, 2016 were partially offset by approximately \$0.8 million of one-time sign-on bonus and non-compete bonus for certain VisLab shareholder employees that were recorded in the second quarter of fiscal year 2016 that did not recur in fiscal year 2017. The increased research and development expense was also attributable to additional stock-based compensation of approximately \$2.6 million and \$9.4 million for the three and nine months ended October 31, 2016, respectively, as a result of the issuance of options and restricted stock units for newly hired employees and our annual evergreen stock program for existing employees. SoC development related costs increased by approximately \$1.2 million and \$2.6 million for the three and nine months ended October 31, 2016, respectively, due to the timing and number of chips in development.

Selling, General and Administrative

	Three Months Ended October 31,				Nine Months Ended October 31,			
	2016	2015	Change Amount	%	2016	2015	Change Amount	%
	(dollars in thousands)							
Selling, general and administrative	\$10,686	\$8,873	\$1,813	20.4%	\$32,144	\$26,970	\$5,174	19.2%

Selling, general and administrative expense increased for the three and nine months ended October 31, 2016 compared to the same periods in the prior fiscal year primarily due to increased stock-based compensation. Stock-based compensation increased by approximately \$2.0 million and \$6.1 million for the three and nine months ended October 31, 2016, respectively, as a result of the issuance of options and restricted stock units for newly hired employees and our annual evergreen stock program for existing employees. The increases were partially offset by decreases of approximately \$0.2 million and \$0.7 million in expenses for outside professional services for the three and nine months ended October 31, 2016, respectively. The decreased outside professional service expense was primarily due to legal expenses incurred to support the VisLab acquisition in fiscal year 2016 that did not recur in fiscal year 2017.

Other Income

	Three Months Ended October 31, 2016			Change Amount %	Nine Months Ended October 31, 2016			Change Amount %
	2016	2015			2016	2015		
	(dollars in thousands)							
Other income	\$132	\$169	\$(37)	(21.9)%	\$330	\$323	\$7	2.2%

Other income consisted primarily of interest income from debt security investments and net of gains and losses from foreign currency transactions and remeasurements.

Provision for Income Taxes

	Three Months Ended October 31, 2016			Change Amount %	Nine Months Ended October 31, 2016			Change Amount %
	2016	2015			2016	2015		
	(dollars in thousands)							
Provision for income taxes								