
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-Q**

(Mark One)

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

For the quarterly period ended September 30, 2018

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: 001-36083

**Applied Optoelectronics, Inc.
(Exact name of registrant as specified in its charter)**

**Delaware
(State or other jurisdiction of incorporation or organization)**

**76-0533927
(I.R.S. Employer Identification No.)**

**13139 Jess Pirtle Blvd.
Sugar Land, TX 77478
(Address of principal executive offices)**

**(281) 295-1800
(Registrant's telephone number)**

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 ("Exchange Act") 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 every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

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

Large accelerated filer	<input checked="" type="checkbox"/>
Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>
Smaller reporting company	<input type="checkbox"/>
Emerging growth company	<input type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

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

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date: as of November 1, 2018 there were 19,798,663 shares of the registrant's Common Stock outstanding.

Applied Optoelectronics, Inc.
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Part I. Financial Information**Item 1. Condensed Consolidated Financial Statements**

Applied Optoelectronics, Inc. and Subsidiaries
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited, in thousands, except per share data)

	<u>September 30,</u> <u>2018</u>	<u>December 31,</u> <u>2017</u>
ASSETS		
Current Assets		
Cash and cash equivalents	\$ 56,380	\$ 82,936
Restricted cash	1,695	1,012
Short-term investments	6,022	36
Accounts receivable - trade, net of allowance of \$31 and \$33, respectively	32,028	59,850
Inventories	107,905	75,768
Prepaid income tax	763	1,394
Prepaid expenses and other current assets	10,377	8,701
Total current assets	<u>215,170</u>	<u>229,697</u>
Property, plant and equipment, net	222,545	197,943
Land use rights, net	5,832	804
Intangible assets, net	3,971	4,007
Deferred income tax assets	18,493	12,801
Other assets, net	15,074	7,732
TOTAL ASSETS	<u>\$ 481,085</u>	<u>\$ 452,984</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Current portion of notes payable and long-term debt	\$ 8,275	\$ 559
Accounts payable	53,706	43,624
Accrued income taxes	—	7,422
Accrued liabilities	20,723	19,103
Total current liabilities	<u>82,704</u>	<u>70,708</u>
Notes payable and long-term debt, less current portion	62,896	49,000
TOTAL LIABILITIES	<u>145,600</u>	<u>119,708</u>
Stockholders' equity:		
Preferred Stock; 5,000 shares authorized at \$0.001 par value; no shares issued and outstanding at September 30, 2018 and December 31, 2017, respectively	—	—
Common Stock; 45,000 shares authorized at \$0.001 par value; 19,758 and 19,451 shares issued and outstanding at September 30, 2018 and December 31, 2017, respectively	20	19
Additional paid-in capital	290,070	285,376
Accumulated other comprehensive income	835	9,743
Retained earnings	44,560	38,138
TOTAL STOCKHOLDERS' EQUITY	<u>335,485</u>	<u>333,276</u>
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	<u>\$ 481,085</u>	<u>\$ 452,984</u>

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

Applied Optoelectronics, Inc. and Subsidiaries
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited, in thousands, except share and per share data)

	<u>Three months ended September 30,</u>		<u>Nine months ended September 30,</u>	
	2018	2017	2018	2017
Revenue, net	\$ 56,386	\$ 88,879	\$ 209,447	\$ 302,474
Cost of goods sold	38,849	49,507	132,211	168,348
Gross profit	<u>17,537</u>	<u>39,372</u>	<u>77,236</u>	<u>134,126</u>
Operating expenses				
Research and development	14,180	9,190	38,561	24,695
Sales and marketing	2,370	2,551	7,221	6,612
General and administrative	10,591	9,580	29,945	26,188
Total operating expenses	<u>27,141</u>	<u>21,321</u>	<u>75,727</u>	<u>57,495</u>
Income (loss) from operations	<u>(9,604)</u>	<u>18,051</u>	<u>1,509</u>	<u>76,631</u>
Other income (expense)				
Interest income	86	61	223	166
Interest expense	(274)	(248)	(624)	(792)
Other income (expense), net	766	(354)	1,320	(898)
Total other income (expense), net	578	(541)	919	(1,524)
Income (loss) before income taxes	(9,026)	17,510	2,428	75,107
Income tax (expense) benefit	5,294	1,865	3,994	(6,872)
Net income (loss)	<u>\$ (3,732)</u>	<u>\$ 19,375</u>	<u>\$ 6,422</u>	<u>\$ 68,235</u>
Net income (loss) per share				
Basic	\$ (0.19)	\$ 1.00	\$ 0.33	\$ 3.59
Diluted	\$ (0.19)	\$ 0.95	\$ 0.32	\$ 3.39
Weighted average shares used to compute net income (loss) per share:				
Basic	19,707,036	19,294,022	19,597,181	18,993,068
Diluted	19,707,036	20,422,609	20,038,657	20,133,644

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

Applied Optoelectronics, Inc. and Subsidiaries
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(Unaudited, in thousands)

	<u>Three months ended</u>		<u>Nine months ended</u>	
	<u>September 30,</u>		<u>September 30,</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
Net income (loss)	\$ (3,732)	\$ 19,375	\$ 6,422	\$ 68,235
Gain (loss) on foreign currency translation adjustment	(4,798)	2,032	(8,908)	7,285
Comprehensive income (loss)	<u>\$ (8,530)</u>	<u>\$ 21,407</u>	<u>\$ (2,486)</u>	<u>\$ 75,520</u>

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

Applied Optoelectronics, Inc. and Subsidiaries
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
Three and Nine months ended September 30, 2018 and 2017
(Unaudited, in thousands)

	Preferred Stock		Common Stock		Additional paid-in capital	Accumulated other comprehensive gain (loss)	Retained earnings	Stockholders' equity
	Number of shares	Amount	Number of shares	Amount				
July 1, 2018	—	\$ —	19,634	\$ 20	\$ 288,686	\$ 5,633	\$ 48,292	\$ 342,631
Stock options exercised, net of shares withheld for employee tax	—	—	43	—	(845)	—	—	(845)
Issuance of restricted stock, net of shares withheld for employee tax	—	—	81	—	(665)	—	—	(665)
Share-based compensation	—	—	—	—	2,894	—	—	2,894
Foreign currency translation adjustment	—	—	—	—	—	(4,798)	—	(4,798)
Net income (loss)	—	—	—	—	—	—	(3,732)	(3,732)
September 30, 2018	—	\$ —	19,758	\$ 20	\$ 290,070	\$ 835	\$ 44,560	\$ 335,485

	Preferred Stock		Common Stock		Additional paid-in capital	Accumulated other comprehensive gain (loss)	Retained earnings	Stockholders' equity
	Number of shares	Amount	Number of shares	Amount				
July 1, 2017	—	\$ —	19,192	\$ 19	\$ 290,067	\$ 4,369	\$ 13,047	\$ 307,502
Stock options exercised, net of shares withheld for employee tax	—	—	93	—	(4,753)	—	—	(4,753)
Issuance of restricted stock, net of shares withheld for employee tax	—	—	74	—	(1,795)	—	—	(1,795)
Share-based compensation	—	—	—	—	2,081	—	—	2,081
Foreign currency translation adjustment	—	—	—	—	—	2,032	—	2,032
Other	—	—	—	—	—	(1)	1	—
Net income	—	—	—	—	—	—	19,375	19,375
September 30, 2017	—	\$ —	19,359	\$ 19	\$ 285,600	\$ 6,400	\$ 32,423	\$ 324,442

	Preferred Stock		Common Stock		Additional paid-in capital	Accumulated other comprehensive gain (loss)	Retained earnings	Stockholders' equity
	Number of shares	Amount	Number of shares	Amount				
January 1, 2018	—	\$ —	19,451	\$ 19	\$ 285,376	\$ 9,743	\$ 38,138	\$ 333,276
Stock options exercised, net of shares withheld for employee tax	—	—	121	—	(2,073)	—	—	(2,073)
Issuance of restricted stock, net of shares withheld for employee tax	—	—	186	1	(1,595)	—	—	(1,594)
Share-based compensation	—	—	—	—	8,362	—	—	8,362
Foreign currency translation adjustment	—	—	—	—	—	(8,908)	—	(8,908)
Net income	—	—	—	—	—	—	6,422	6,422
September 30, 2018	—	\$ —	19,758	\$ 20	\$ 290,070	\$ 835	\$ 44,560	\$ 335,485

	Preferred Stock		Common Stock		Additional paid-in capital	Accumulated other comprehensive gain (loss)	Retained earnings	Stockholders' equity
	Number of shares	Amount	Number of shares	Amount				
January 1, 2017	—	\$ —	18,400	\$ 18	\$ 265,264	\$ (885)	\$ (37,013)	\$ 227,384
Public offering of common stock, net	—	—	459	1	21,571	—	—	21,572
Stock options exercised, net of shares withheld for employee tax	—	—	356	—	(4,930)	—	—	(4,930)
Issuance of restricted stock, net of shares withheld for employee tax	—	—	144	—	(2,161)	—	—	(2,161)
Share-based compensation	—	—	—	—	5,849	—	—	5,849
Cumulative effect of previously unrecognized tax benefits	—	—	—	—	—	—	1,207	1,207
Foreign currency translation adjustment	—	—	—	—	—	7,285	—	7,285
Other	—	—	—	—	7	—	(6)	1
Net income	—	—	—	—	—	—	68,235	68,235
September 30, 2017	—	\$ —	19,359	\$ 19	\$ 285,600	\$ 6,400	\$ 32,423	\$ 324,442

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

Applied Optoelectronics, Inc. and Subsidiaries
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited, in thousands)

	Nine months ended September 30,	
	2018	2017
Operating activities:		
Net income	\$ 6,422	\$ 68,235
Adjustments to reconcile net income to net cash provided by operating activities:		
Lower of cost or market reserve adjustment to inventory	5,546	1,365
Depreciation and amortization	21,807	14,332
Deferred income taxes, net	(5,734)	(2,495)
Loss (gain) on disposal of assets	(5)	51
Share-based compensation	8,362	5,849
Unrealized foreign exchange gain	(580)	(308)
Changes in operating assets and liabilities:		
Accounts receivable, trade	27,822	(23,261)
Prepaid income tax	653	—
Inventories	(41,288)	(21,113)
Other current assets	(2,013)	(6,062)
Accounts payable	10,082	14,618
Accrued income taxes	(7,390)	4,360
Accrued liabilities	1,941	1,927
Net cash provided by operating activities	25,625	57,498
Investing activities:		
Purchase of short-term investments	(15,023)	—
Maturities of short-term investments	9,036	8
Purchase of property, plant and equipment	(52,268)	(46,529)
Purchase of land use rights	(5,591)	—
Proceeds from disposal of equipment	697	171
Deposits and prepaid for equipment	(7,533)	(2,369)
Purchase of intangible assets	(343)	(407)
Net cash used in investing activities	(71,025)	(49,126)
Financing activities:		
Proceeds from issuance of notes payable and long-term debt	35,899	—
Principal payments of long-term debt and notes payable	(1,883)	(38,300)
Proceeds from line of credit borrowings	113,266	36,000
Repayments of line of credit borrowings	(125,678)	—
Repayments of bank acceptance payable	—	(307)
Exercise of stock options	120	1,399
Payments of tax withholding on behalf of employees related to share-based compensation	(3,788)	(8,490)
Proceeds from common stock offering, net	—	21,572
Net cash provided by financing activities	17,936	11,874
Effect of exchange rate changes on cash	1,591	(208)
Net increase (decrease) in cash, cash equivalents and restricted cash	(25,873)	20,038
Cash, cash equivalents and restricted cash at beginning of period	83,948	51,964
Cash, cash equivalents and restricted cash at end of period	\$ 58,075	\$ 72,002
Supplemental disclosure of cash flow information:		
Cash paid for:		
Interest	\$ 525	\$ 730
Income taxes	8,433	4,992
Non-cash investing and financing activities:		
Net change in accounts payable related to property and equipment additions	1,524	(1,091)

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

Applied Optoelectronics, Inc. and Subsidiaries
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Note 1. Description of Business

Business Overview

Applied Optoelectronics, Inc. (“AOI” or the “Company”) is a Delaware corporation. The Company is a leading, vertically integrated provider of fiber-optic networking products, primarily for four networking end-markets: internet data center, cable television, telecommunications and fiber-to-the-home. The Company designs and manufactures a wide range of optical communications products at varying levels of integration, from components, subassemblies and modules to complete turn-key equipment.

The Company has manufacturing and research and development facilities located in the U.S., Taiwan and China. In the U.S., at its corporate headquarters and manufacturing facilities in Sugar Land, Texas, the Company primarily manufactures lasers and laser components and performs research and development activities for laser component and optical module products. In addition, the Company also has a research and development facility in Duluth, Georgia. The Company operates in Taipei, Taiwan and Ningbo, China through its wholly-owned subsidiary Prime World International Holdings, Ltd. (“Prime World”, incorporated in the British Virgin Islands). Prime World operates a branch in Taipei, Taiwan, which primarily manufactures transceivers and performs research and development activities for the transceiver products. Prime World is also the parent of Global Technology, Inc. (“Global”, incorporated in the People’s Republic of China). Through Global, the Company primarily manufactures certain of our data center transceiver products, including subassemblies, as well as Cable TV Broadband (“CATV”) systems and equipment, and performs research and development activities for the CATV products.

Interim Financial Statements

The unaudited condensed consolidated financial statements of the Company as of September 30, 2018 and December 31, 2017 and for the three and nine months ended September 30, 2018 and September 30, 2017, have been prepared in accordance with accounting principles generally accepted in the United States of America (“GAAP”) for interim information and with the instructions on Form 10-Q and Rule 10-01 of Regulation S-X pursuant to the rules and regulations of the Securities and Exchange Commission (“SEC”). In accordance with those rules and regulations, the Company has omitted certain information and notes required by GAAP for annual consolidated financial statements. In the opinion of management, the condensed consolidated financial statements contain all adjustments, except as otherwise noted, necessary for the fair presentation of the Company’s financial position and results of operations for the periods presented. The year-end condensed balance sheet data was derived from audited financial statements. These condensed consolidated financial statements should be read in conjunction with the Consolidated Financial Statements and Notes thereto included in the Company’s Annual Report on Form 10-K (“Annual Report”) for the fiscal year ended December 31, 2017. The results of operations for the three and nine months ended September 30, 2018 are not necessarily indicative of the results expected for the entire fiscal year. All significant intercompany accounts and transactions have been eliminated.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported. Actual results could differ from those estimates in the consolidated financial statements and accompanying notes. Significant estimates and assumptions that impact these financial statements and the accompanying notes relate to, among other things, allowance for doubtful accounts, inventory reserve, product warranty costs, share-based compensation expense, estimated useful lives of property and equipment, and taxes.

Note 2. Significant Accounting Policies

There have been no changes in the Company's significant accounting policies for the three and nine months ended September 30, 2018, as compared to the significant accounting policies described in its 2017 Annual Report, except as described below.

Recent Accounting Pronouncements

Recent Accounting Pronouncements Adopted in 2018

In May 2014, the FASB issued Accounting Standards Update (ASU) No. 2014-09, Revenue from Contracts with Customers (Topic 606). The new revenue recognition guidance establishes a new control-based revenue recognition model, changes the basis for deciding when revenue is recognized over time or at a point in time, provides new and more detailed guidance on specific topics and expands and improves disclosures about revenue. The Company evaluated its revenues and the new guidance had immaterial impact to recognition practices upon adoption on January 1, 2018. As part of the adoption, the Company elected to apply the new guidance on a modified retrospective basis. The Company did not record a cumulative effect adjustment to retained earnings for initially applying the new guidance as no revenue recognition differences were identified in the timing or amount of revenue. See Note 3, "Revenue Recognition" for additional information on the required disclosures related to the impact of adopting this standard.

The FASB issued ASU No. 2016-01, Financial Instruments – Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities with further clarifications made in February 2018 with the issuance of ASU No. 2018-03. The amended guidance requires certain equity investments that are not consolidated and not accounted for under the equity method to be measured at fair value with changes in fair value recognized in net income rather than as a component of accumulated other comprehensive income (loss). It further states that an entity may choose to measure equity investments that do not have readily determinable fair values using a quantitative approach, or measurement alternative, which is equal to its cost minus impairment, if any, plus or minus changes resulting from observable price changes in orderly transactions for the identical or a similar investment of the same issuer. The Company adopted this amended guidance on January 1, 2018, with no impact on its financial statements.

In March 2018, the FASB issued ASU No. 2018-05, Income Taxes (Topic 740): Amendments to SEC Paragraphs Pursuant to SEC Staff Accounting Bulletin No. 118. ASU No. 2018-05, effective 2018, expands income tax accounting and disclosure guidance to include SAB 118 issued by the SEC in December 2017. SAB 118 provides guidance on accounting for the income tax effects of the U.S. Tax Cuts and Jobs Act of 2017 (the "Tax Act") and among other things allows for a measurement period not to exceed one year for companies to finalize the provisional amounts recorded as of December 31, 2017. See Note 14, "Income Taxes" for additional information on the Company's accounting for the Tax Act.

Recent Accounting Pronouncements Yet to be Adopted

On February 25, 2016, the FASB released ASU No. 2016-02, Leases, to complete its project to overhaul lease accounting. The ASU codifies ASC 842, Leases, which will replace the guidance in ASC 840. The new standard establishes a right-of-use model (ROU) that requires a lessee to recognize a ROU asset and lease liability on the balance sheet for all leases with a term longer than 12 months. The guidance is effective for public business entities in fiscal years beginning after December 15, 2018. The Company expects that this standard will have a material effect on its financial statements. While the Company continues to assess all of the effects of adoption, the Company currently believes the most significant effects relate to the recognition of new ROU assets and lease liabilities on its balance sheet for its Taiwan branch. Upon adoption, the Company expects to recognize additional operating liabilities ranging from \$9.5 million to \$11.5 million, with corresponding ROU assets of the same amount based on the present value of the remaining minimum rental payments under the current leasing standards for existing operating leases."

Note 3. Revenue Recognition

Revenue from Contracts with Customers

On January 1, 2018, the Company adopted Topic 606 using the modified retrospective method. Under the modified retrospective method, the Company did not record a cumulative effect adjustment to retained earnings for initially applying the new guidance as no revenue recognition differences were identified in the timing or amount of revenue. Results for reporting periods beginning after January 1, 2018 are presented under Topic 606, while prior period amounts are not adjusted and continue to be reported in accordance with our historic accounting under Revenue Recognition ("Topic 605").

The adoption of Topic 606 represents a change in accounting principle that will provide financial statement readers with enhanced revenue recognition disclosures. In accordance with Topic 606, revenue is recognized when obligations under the terms of a contract with our customer are satisfied; generally this occurs with the transfer of control of products or services. Revenue is measured as the amount of consideration the Company expects to receive in exchange for transferring products or providing services. Certain customers may receive cash and/or non-cash incentives, which are accounted for as variable consideration. To achieve this core principle, the Company applies the following five steps:

1. Identify the contract with a customer

A contract with a customer exists when (i) the Company enters into an agreement with a customer that defines each party's rights regarding the products or services to be transferred and identifies the payment terms related to these products or services, (ii) both parties to the contract are committed to perform their respective obligations, (iii) the contract has commercial substance, and (iv) the Company determines that collection of substantially all consideration for products or services that are transferred is probable based on the customer's intent and ability to pay the promised consideration. The Company applies judgment in determining the customer's ability and intention to pay, which is based on a variety of factors including the customer's payment history or, in the case of a new customer, published credit and financial information pertaining to the customer.

2. Identify the performance obligations in the contract

Performance obligations promised in a contract are identified based on the products or services that will be transferred to the customer that are both capable of being distinct, whereby the customer can benefit from the product or service either on its own or together with other resources that are readily available from third parties or from the Company, and are distinct in the context of the contract, whereby the transfer of the products or services is separately identifiable from other promises in the contract. To the extent a contract includes multiple promised products or services, the Company must apply judgment to determine whether promised products or services are capable of being distinct and distinct in the context of the contract. If these criteria are not met, the promised products or services are accounted for as a combined performance obligation. The Company has elected to account for shipping and handling activities as a fulfillment cost as permitted by the standard.

3. Determine the transaction price

The transaction price is determined based on the consideration to which the Company will be entitled in exchange for transferring products or services to the customer. To the extent the transaction price is variable, revenue is recognized at an amount equal to the consideration to which the Company expects to be entitled. This estimate includes customer sales incentives which are accounted for as a reduction to revenue and estimated using either the expected value method or the most likely amount method, depending on the nature of the program. The Company will adjust its consideration for any rebates if it is more likely than not that the rebate conditions will be met.

4. Allocate the transaction price to performance obligations in the contract

If the contract contains a single performance obligation, the entire transaction price is allocated to the single performance obligation. Contracts that contain multiple performance obligations require an allocation of the transaction price to each performance obligation based on a relative standalone selling price basis unless a portion of the variable

consideration related to the contract is allocated entirely to a performance obligation. The Company determines standalone selling price based on the price at which the performance obligation is sold separately.

5. Recognize revenue when or as the Company satisfies a performance obligation

The Company generally satisfies performance obligations at a point in time. Revenue is recognized based on the transaction price at the time the related performance obligation is satisfied by transferring a promised product or service to a customer.

Disaggregation of Revenue

Revenue is classified based on the location of where the product is manufactured. For additional information on the disaggregated revenues by geographical region, see Note 15, "Geographic Information."

Revenue is also classified by major product category and is presented below (in thousands):

	Three months ended September 30,			
	2018	% of Revenue	2017	% of Revenue
Data Center	\$ 38,954	69.1%	\$ 65,819	74.1%
CATV	14,295	25.4%	18,932	21.3%
Telecom	2,656	4.7%	3,474	3.9%
FTTH	221	0.4%	182	0.2%
Other	260	0.5%	472	0.5%
Total Revenue	\$ 56,386	100.0%	\$ 88,879	100.0%

	Nine months ended September 30,			
	2018	% of Revenue	2017	% of Revenue
Data Center	\$ 158,577	75.7%	\$ 244,711	80.9%
CATV	39,047	18.6%	46,430	15.4%
Telecom	10,399	5.0%	9,722	3.2%
FTTH	498	0.2%	405	0.1%
Other	926	0.4%	1,206	0.4%
Total Revenue	\$ 209,447	100.0%	\$ 302,474	100.0%

Note 4. Cash, Cash Equivalents and Restricted Cash

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within the statement of financial position that sum to the total of the same such amounts in the statement of cash flows (in thousands):

	September 30,	December 31,
	2018	2017
Cash and cash equivalents	\$ 56,380	\$ 82,936
Restricted cash	1,695	1,012
Total cash, cash equivalents and restricted cash shown in the statement of cash flows	\$ 58,075	\$ 83,948

Restricted cash includes guarantee deposits for customs duties and compensating balances required for certain credit facilities.

Note 5. Earnings Per Share

Basic net income (loss) per share has been computed using the weighted-average number of shares of common stock outstanding during the period. Diluted net income (loss) per share has been computed using the weighted-average number of shares of common stock and dilutive potential common shares from stock options and restricted stock units outstanding during the period. In periods with net losses, normally dilutive shares become anti-dilutive. Therefore, basic and diluted earnings per share are the same.

The following table sets forth the computation of the basic and diluted net income (loss) per share for the periods indicated (in thousands, except per share amounts):

	<u>Three months ended September 30,</u>		<u>Nine months ended September 30,</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
Numerator:				
Net income (loss)	\$ (3,732)	\$ 19,375	\$ 6,422	\$ 68,235
Denominator:				
Weighted average shares used to compute net income (loss) per share				
Basic	19,707	19,294	19,597	18,993
Effect of dilutive options and restricted stock units	—	1,129	442	1,141
Diluted	19,707	20,423	20,039	20,134
Net income (loss) per share				
Basic	\$ (0.19)	\$ 1.00	\$ 0.33	\$ 3.59
Diluted	\$ (0.19)	\$ 0.95	\$ 0.32	\$ 3.39

The following potentially dilutive securities were excluded from the diluted net income (loss) per share as their effect would have been antidilutive:

	<u>Three months ended September 30,</u>		<u>Nine months ended September 30,</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
Employee stock options	247	—	—	—
Restricted stock units	231	—	—	—
Total antidilutive shares	478	—	—	—

Note 6. Inventories

Inventories, net of inventory writedowns, consist of the following for the periods indicated (in thousands):

	<u>September 30, 2018</u>	<u>December 31, 2017</u>
Raw materials	\$ 27,343	\$ 26,648
Work in process and sub-assemblies	64,994	31,060
Finished goods	15,568	18,060
Total inventory	\$ 107,905	\$ 75,768

The lower of cost or market adjustment expensed for inventory for the three months ended September 30, 2018 and 2017 was \$3.2 million and \$0.7 million, respectively. The lower of cost or market adjustment expensed for inventory for the nine months ended September 30, 2018 and 2017 was \$5.5 million and \$1.4 million, respectively.

Note 7. Property, Plant & Equipment

Property, plant and equipment consisted of the following for the periods indicated (in thousands):

	<u>September 30, 2018</u>	<u>December 31, 2017</u>
Land improvements	\$ 806	\$ 806
Building and improvements	80,206	78,785
Machinery and equipment	194,951	168,993
Furniture and fixtures	4,866	4,663
Computer equipment and software	9,094	8,248
Transportation equipment	658	718
	<u>290,581</u>	<u>262,213</u>
Less accumulated depreciation and amortization	(87,652)	(70,194)
	<u>202,929</u>	<u>192,019</u>
Construction in progress	18,515	4,823
Land	1,101	1,101
Total property, plant and equipment, net	<u>\$ 222,545</u>	<u>\$ 197,943</u>

For the three months ended September 30, 2018 and 2017, depreciation expense of property, plant and equipment was \$7.4 million and \$5.3 million, respectively. For the nine months ended September 30, 2018 and 2017, depreciation expense of property, plant and equipment was \$21.4 million and \$14.0 million, respectively.

Included in depreciation expense was \$3.7 million and \$3.4 million recorded as cost of sales for the three months ended September 30, 2018 and 2017, respectively. Included in depreciation expense was \$11.3 million and \$8.7 million recorded as cost of sales for the nine months ended September 30, 2018 and 2017, respectively.

Note 8. Intangible Assets, net

Intangible assets consisted of the following for the periods indicated (in thousands):

	<u>September 30, 2018</u>		
	<u>Gross Amount</u>	<u>Accumulated amortization</u>	<u>Intangible assets, net</u>
Patents	\$ 6,853	(2,884)	\$ 3,969
Trademarks	15	(13)	2
Total intangible assets	<u>\$ 6,868</u>	<u>\$ (2,897)</u>	<u>\$ 3,971</u>

	<u>December 31, 2017</u>		
	<u>Gross Amount</u>	<u>Accumulated amortization</u>	<u>Intangible assets, net</u>
Patents	\$ 6,524	\$ (2,519)	\$ 4,005
Trademarks	14	(12)	2
Total intangible assets	<u>\$ 6,538</u>	<u>\$ (2,531)</u>	<u>\$ 4,007</u>

For the three months ended September 30, 2018 and 2017, amortization expense for intangible assets, included in general and administrative expenses on the income statement, was each \$0.1 million. For the nine months ended September 30, 2018 and 2017, amortization expense for intangible assets, included in general and administrative expenses on the income statement, was each \$0.4 million.

The remaining weighted average amortization period for intangible assets is approximately 8 years.

Note 9. Fair Value of Financial Instruments

The following table represents a summary of the Company's financial instruments measured at fair value on a recurring basis for the periods indicated (in thousands):

	As of September 30, 2018				As of December 31, 2017			
	(Level 1)	(Level 2)	(Level 3)	Total	(Level 1)	(Level 2)	(Level 3)	Total
Assets:								
Cash and cash equivalents	\$ 56,380	\$ —	\$ —	\$ 56,380	\$ 82,936	\$ —	\$ —	\$ 82,936
Restricted cash	1,695	—	—	1,695	1,012	—	—	1,012
Short term investments	—	6,022	—	6,022	36	—	—	36
Total assets	\$ 58,075	\$ 6,022	\$ —	\$ 64,097	\$ 83,984	\$ —	\$ —	\$ 83,984

The carrying value amounts of accounts receivable, prepaid expenses and other current assets, accounts payable, accrued expenses and other current liabilities approximate fair value because of the short-term maturity of these instruments.

Note 10. Notes Payable and Long-Term Debt

Notes payable and long-term debt consisted of the following for the periods indicated (in thousands):

	September 30, 2018	December 31, 2017
Revolving line of credit with a U.S. bank up to \$60,000 with interest at LIBOR plus 1.4%, maturing September 28, 2020	\$ 33,313	\$ 49,000
Term loan with a U.S. bank with monthly payments of principal and interest at LIBOR plus 1.15%, maturing April 1, 2024	20,604	—
Term loan with a U.S. bank with monthly payments of principal and interest at LIBOR plus 1.3%, maturing April 1, 2023	4,634	—
Term loan with a U.S. bank with monthly payments of principal and interest at LIBOR plus 1.3%, maturing October 1, 2023	9,344	—
Revolving line of credit with a Taiwan bank up to \$9,828 with interest at 2%, maturing May 31, 2019	3,276	—
Notes payable to a finance company due in monthly installments with 4.5% interest, which matured May 27, 2018	—	559
Total	71,171	49,559
Less current portion	(8,275)	(559)
Non-current portion	\$ 62,896	\$ 49,000

The current portion of long-term debt is the amount payable within one year of the balance sheet date of September 30, 2018. The one-month London Interbank Offered Rate (LIBOR) was 2.26% on September 30, 2018.

Maturities of long-term debt are as follows for the future one-year periods ending September 30, (in thousands):

2019	\$ 8,275
2020	38,312
2021	4,999
2022	4,999
2023	4,578
2024 and thereafter	10,008
Total outstanding	\$ 71,171

On June 14, 2016, the Company executed a Change in Terms Agreement, Notice of Final Agreement and Modification of the Construction Loan Agreement (the "Modification Agreement") in connection with the Construction Loan Agreement with East West Bank for up to \$22.0 million dollars to finance the construction of the Company's

campus expansion plan in Sugar Land, Texas, originally dated January 26, 2015 (the “Construction Loan Agreement”). Under the Construction Loan Agreement, the loan bore interest at an annual rate based on the one-month LIBOR Borrowing Rate plus 2.75%, and the interest rate was adjusted to LIBOR Borrowing Rate plus 2.0% under the Modification Agreement.

On October 5, 2016, the Company executed a Change in Terms Agreement, Notice of Final Agreement and Second Modification to the Construction Loan Agreement (the “Second Modifications”) to the Construction Loan Agreement with East West Bank. The Second Modifications amended and restated in part the Company’s Promissory Note and Construction Loan Agreement, which was originally executed on January 26, 2015, and the Modification Agreement. The draw down period end date, under the Second Modifications, was amended from July 31, 2016 to September 30, 2016. On September 28, 2017, the Company repaid the outstanding balance of \$11.2 million and terminated the loan.

On June 24, 2016, the Company entered into a First Amendment to the Credit Agreement with East West Bank and Comerica Bank (“First Amendment”), a second lien deed of trust, multiple security agreements and promissory notes evidencing two credit facilities and a term loan originally entered into on June 30, 2015. The First Amendment increased the Company’s revolving lines of credit from \$25 million to \$40 million, which would have matured on June 30, 2018, and retained a \$10.0 million term loan which would have matured on June 30, 2020. The First Amendment also provided for an additional \$10.0 million equipment term loan with a one year drawdown period commencing on April 1, 2016 and maturing five years from the closing date of the First Amendment. The interest rate on these loans was adjusted by the First Amendment from the LIBOR Borrowing Rate plus 2.75% or 3.0% to LIBOR Borrowing Rate plus 2.0%. On September 28, 2017, the Company terminated the Credit Agreement and all outstanding balances of the loans had been repaid.

On September 28, 2017, the Company entered into a Loan Agreement, a Promissory Note, an Addendum to the Promissory Note, a BB&T Security Agreement, a Trademark Security Agreement, and a Patent Security Agreement (together the “Credit Facility”) with Branch Banking and Trust Company (“BB&T”). The Credit Facility provides the Company with a three year, \$50 million, revolving line of credit. Borrowings under the Credit Facility will be used for general corporate purposes. The Company will make monthly payments of accrued interest with the final monthly payment being for all principal and all accrued interest not yet paid. The Company’s obligations under the Credit Facility will be secured by the Company’s accounts receivable, inventory, intellectual property, all business assets with the exception of real estate and equipment. Borrowings under the Credit Facility will bear interest at a rate equal to the one-month LIBOR plus 1.50%. The Credit Facility requires the Company to maintain certain financial covenants and also contains representations and warranties, and events of default applicable to the Company that are customary for agreements of this type.

On March 30, 2018, the Company executed a First Amendment to Loan Agreement, a Note Modification Agreement and Addendum to Promissory Note for \$60 million, a Promissory Note and Addendum to Promissory Note for \$26 million, a Promissory Note and Addendum to Promissory Note for \$21.5 million, a Texas Deed of Trust and Security Agreement, an Assignment of Lease and Rent, and an Environmental Certification and Indemnity Agreement, (collectively, the “Amended Credit Facility”), with BB&T. The Amended Credit Facility amends the Company’s three-year \$50 million line of credit with BB&T, originally executed on September 28, 2017 (the “Existing Loan”). The Amended Credit Facility (1) increases the principal amount of the three-year line of credit from \$50 million to \$60 million (the “Line of Credit”); (2) allows the Company to borrow an additional \$26 million from BB&T in the form of a five-year capital expenditure loan (the “CapEx Loan”) and (3) allows the Company to borrow an additional \$21.5 million in the form of a seventy-month real estate term loan (the “Term Loan”) to refinance the Company’s plant and facilities in Sugar Land, Texas. Borrowings under the Line of Credit will bear interest at a rate equal to the one-month LIBOR plus a Line of Credit margin ranging between 1.40% and 2.0%. Borrowings under the CapEx Loan will bear interest at a rate equal to the one-month LIBOR plus a CapEx Loan margin ranging between 1.30% and 2.0%. Borrowings under the Term Loan will bear interest at a rate equal to the one-month LIBOR plus a Term Loan margin ranging between 1.15% and 2.0%. The Company will make monthly payments of principal and accrued interest with the final monthly payments being for all principal and accrued interest not yet paid. The Company’s obligations under the Amended Credit Facility will be secured by the Company’s accounts receivable, inventory, equipment, intellectual property, real property, and virtually all business assets. As of September 30, 2018, the Company was in compliance with all covenants under the Amended Credit Facility. As of September 30, 2018, \$33.3 million was outstanding under the Line of Credit, \$20.6 million was outstanding under the Term Loan and \$14.0 million was outstanding under the CapEx Loan.

On May 27, 2015, the Company's Taiwan branch entered into a Purchase and Sale Contract and a Finance Lease Agreement with Chailease Finance Co, Ltd. ("Chailease") in connection with certain equipment, structured as a sale lease-back transaction. Pursuant to the Purchase and Sale contract, the Company's Taiwan branch sold certain equipment to Chailease for a purchase price of 180,148,532 New Taiwan dollars, or NTD, or approximately \$5.9 million, and simultaneously leased the equipment back from Chailease pursuant to the Finance Lease Agreement. The monthly lease payments range from 3,784,000 NTD, to 3,322,413 NTD, or approximately \$0.1 million each, during the term of the Finance Lease Agreement, including an initial payment in an amount of 60,148,532 New Taiwan dollars, or approximately \$2.0 million. The Finance Lease Agreement had a three-year term, which matured on May 27, 2018. The title to the equipment was transferred to Prime World upon the expiration of the Finance Lease Agreement. On May 27th, 2018, the Company repaid the outstanding balance and terminated the loan, and title to the equipment was transferred to its Taiwan branch.

On June 19, 2018, Prime World entered into a one year revolving credit facility totaling 300 million New Taiwan dollars, or approximately \$9.8 million, (the "Taiwan Credit Facility") with Taishin International Bank in Taiwan (the "Bank"). Borrowing under the Taiwan Credit Facility will be used for short-term working capital. Prime World may draw upon the Taiwan Credit Facility from June 19, 2018 until May 31, 2019. The term of each draw shall be either 90 or 120 days. Borrowings under the Taiwan Credit Facility will bear interest at a rate of 2.00% for 90 day draws and 1.95% for 120 day draws. At the end of the draw term, Prime World will make payment for all principal and accrued interest. The agreements for the Taiwan Credit Facility contain representations and warranties, and events of default applicable to Prime World that are customary for agreements of this type. As of September 30, 2018, \$3.3 million was outstanding under the Taiwan Credit Facility.

On September 21, 2018, the Company's China subsidiary, Global, entered into a five-year revolving credit line agreement, totaling 129,000,000 Chinese Renminbi, or RMB, or approximately \$18.8 million, (the "Credit Line") and a security agreement (the "Security Agreement"), with China Construction Bank Co., Ltd., in Ningbo, China (the "Bank"). Borrowing under the Credit Line will be used for general corporate and capital investment purposes. The Company may draw upon the Credit Line between September 21, 2018 and September 17, 2023; however, the amount of available credit under the Credit Line may be reduced by the Bank without notice to the Company and may be decreased due to changes in Chinese government regulations. Each draw will bear interest equal to the Bank's commercial banking interest rate effective on the day of the applicable draw. The Company's obligations under the Credit Line will be secured by real property owned by the Company in China and mortgaged to the Bank under the terms of the Security Agreement. As of September 30, 2018, there was no outstanding balance under the Credit Line.

As of September 30, 2018 and December 31, 2017, the Company had \$63.6 million and \$1.0 million of unused borrowing capacity, respectively.

As of September 30, 2018 and December 31, 2017, there were no restricted cash, investments or security deposit associated with the loan facilities, respectively.

Note 11. Accrued Liabilities

Accrued liabilities consisted of the following for the periods indicated (in thousands):

	September 30, 2018	December 31, 2017
Accrued payroll	\$ 11,649	\$ 11,693
Accrued rent	1,198	1,180
Accrued employee benefits	2,236	2,035
Accrued state and local taxes	792	951
Advance payments	320	441
Accrued product warranty	1,218	1,118
Accrued commission expenses	209	425
Accrued professional fees	443	181
Accrued capital expenditures	1,131	—
Accrued other	1,527	1,079
Total accrued liabilities	\$ 20,723	\$ 19,103

Note 12. Other Income and Expense

Other income and (expense) consisted of the following for the periods indicated (in thousands):

	<u>Three months ended September 30,</u>		<u>Nine months ended September 30,</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
Foreign exchange transaction gain (loss)	549	(442)	798	(1,141)
Government subsidy income	202	41	471	116
Other non-operating gain	15	58	46	178
Gain (loss) on disposal of assets	—	(11)	5	(51)
Total other income (expense), net	<u>\$ 766</u>	<u>\$ (354)</u>	<u>\$ 1,320</u>	<u>\$ (898)</u>

Note 13. Share-Based Compensation
Equity Plans

The Company's board of directors and stockholders approved the following equity plans:

- the 1998 Share Incentive Plan
- the 2000 Share Incentive Plan
- the 2004 Share Incentive Plan
- the 2006 Share Incentive Plan
- the 2013 Equity Incentive Plan ("2013 Plan")

The Company issued stock options, restricted stock awards ("RSAs") and restricted stock units ("RSUs") to employees, consultants and non-employee directors. Stock option awards generally vest over a four year period and have a maximum term of ten years. Stock options under these plans have been granted with an exercise price equal to the fair market value on the date of the grant. Nonqualified and Incentive Stock Options, RSAs and RSUs may be granted from these plans. Prior to the Company's initial public offering in September 2013, the fair market value of the Company's stock had been historically determined by the board of directors and from time to time with the assistance of third party valuation specialists.

Stock Options

Options have been granted to the Company's employees under the five incentive plans and generally become exercisable as to 25% of the shares on the first anniversary date following the date of grant and 12.5% on a semi-annual basis thereafter. All options expire ten years after the date of grant.

The following is a summary of option activity (in thousands, except per share data):

	<u>Number of shares</u>	<u>Weighted Average Exercise Price</u>	<u>Weighted Average Share Price on Date of Exercise</u>	<u>Weighted Average Fair Value</u>	<u>Remaining Contractual Life</u>	<u>Aggregate Intrinsic Value</u>
			(in thousands, except price data)			
Outstanding, January 1, 2018	536	\$ 10.04		\$ 5.19		\$ 14,888
Exercised	(122)	9.79	\$ 36.18	5.00		3,223
Forfeited	(127)	9.92		5.10		1,886
Outstanding, September 30, 2018	<u>287</u>	\$ 10.19		\$ 5.31	4.86	\$ 4,153
Exercisable, September 30, 2018	<u>287</u>	\$ 10.19			4.86	\$ 4,153
Vested and expected to vest	<u>287</u>	\$ 10.19			4.86	\$ 4,153

As of September 30, 2018, there was no unrecognized stock option expense.

Restricted Stock Units/Awards

The following is a summary of RSU/RSA activity (in thousands, except per share data):

	Number of shares	Weighted Average Share Price on Date of Release	Weighted Average Fair Value	Aggregate Intrinsic Value
(in thousands, except price data)				
Outstanding at January 1, 2018	707		\$ 29.23	\$ 26,732
Granted	523		33.83	17,704
Released	(279)	\$ 37.66	28.92	10,519
Cancelled/Forfeited	(34)		32.58	844
Outstanding, September 30, 2018	<u>917</u>		\$ 31.82	\$ 22,605
Vested and expected to vest	<u>917</u>			\$ 22,605

As of September 30, 2018, there was \$27.1 million of unrecognized compensation expense related to these RSUs and RSAs. This expense is expected to be recognized over 2.7 years.

Share-Based Compensation

Employee share-based compensation expenses recognized for the periods indicated (in thousands):

	Three months ended September 30,		Nine months ended September 30,	
	2018	2017	2018	2017
Share-based compensation - by expense type				
Cost of goods sold	\$ 205	\$ 124	\$ 593	\$ 336
Research and development	624	400	1,876	1,106
Sales and marketing	181	118	669	367
General and administrative	1,884	1,439	5,224	4,040
Total share-based compensation expense	<u>\$ 2,894</u>	<u>\$ 2,081</u>	<u>\$ 8,362</u>	<u>\$ 5,849</u>
	Three months ended September 30,		Nine months ended September 30,	
	2018	2017	2018	2017
Share-based compensation - by award type				
Employee stock options	\$ 12	\$ 263	\$ 12	\$ 810
Restricted stock units	2,882	1,818	8,350	5,039
Total share-based compensation expense	<u>\$ 2,894</u>	<u>\$ 2,081</u>	<u>\$ 8,362</u>	<u>\$ 5,849</u>

Note 14. Income Taxes

The Company's tax provision or benefit from income taxes for interim periods is determined using an estimate of its annual effective tax rate, adjusted for discrete items, if any, that are taken into account in the relevant period. The Company's quarterly tax provision, and its quarterly estimate of its annual effective tax rate, are subject to significant variation due to several factors, including variability in accurately predicting its pre-tax income and loss and the mix of jurisdictions to which they relate, tax law developments and relative changes in permanent tax benefits or expenses.

The Company's effective tax rate for the three months ended September 30, 2018 and 2017 was 58.7% and (10.65%), respectively. For the three months ended September 30, 2018, the effective tax rate varied from the federal statutory rate of 21% primarily due to the level and mix of earnings among tax jurisdictions, share-based compensation, tax benefits related to research and development, recognition of the U.S. global intangible low-taxed income ("GILTI") and an overall net tax benefit from certain tax reform measurement-period adjustments. For the three months ended September 30, 2017, the effective tax rate varied from the federal statutory rate of 35% primarily due to the level and mix of earnings among tax jurisdictions, the release of the valuation allowances recorded on the deferred tax assets in China and the recognition of employee share-based compensation in accordance with ASU No. 2016-09.

The Company's effective tax rate for the nine months ended September 30, 2018 and 2017 was (164.5%) and 9.15%, respectively. For the nine months ended September 30, 2018, the effective tax rate varied from the federal statutory rate of 21% primarily due to the level and mix of earnings among tax jurisdictions, share-based compensation, tax benefits related to research and development, recognition of the U.S. global intangible low-taxed income ("GILTI") and an overall net tax benefit from certain tax reform measurement-period adjustments. For the nine months ended September 30, 2017, the effective tax rate varied from the federal statutory rate of 35% primarily due to the level and mix of earnings among tax jurisdictions, the release of the valuation allowances recorded on the deferred tax assets in China and the recognition of employee share-based compensation in accordance with ASU No. 2016-09.

On December 22, 2017, the President of the United States signed Public Law No. 115-97, commonly referred to as the Tax Cut and Jobs Act of 2017 (the "Tax Act"). The Tax Act makes significant changes to the U.S. tax code, which include, but are not limited to: a U.S. federal corporate tax rate decrease from 35% to 21%, effective January 1, 2018; a shift to a modified territorial tax regime, which requires companies to pay a one-time transition tax on the mandatory deemed repatriation of the cumulative earnings of certain foreign subsidiaries as of December 31, 2017; a new provision designed to tax GILTI of foreign subsidiaries; a limitation of the deduction for net operating losses; elimination of net operating loss carrybacks; immediate deductions for depreciation expense for certain qualified property; additional limitations on the deductibility of executive compensation and limitations on the deductibility of interest.

In December 2017, SEC issued Staff Accounting Bulletin No. 118 due to the Tax Act which allows the Company to record provisional amounts during a measurement period. As of September 30, 2018, the Company has completed the assessment of the corporate income tax impact expected to result from the Tax Act. The material impact of the Tax Act is described below.

The deemed repatriation transition tax (the "Transition Tax") is a tax on certain previously untaxed accumulated and current earnings and profits (E&P) of our foreign subsidiaries. The Company was able to reasonably estimate the Transition Tax and recorded a provisional Transition Tax obligation of \$5.0 million, with a corresponding adjustment of \$5.0 million to income tax expense for the year ended December 31, 2017. On the basis of revised E&P computations that were completed during the reporting period, the Company recognized an additional measurement-period adjustment of (\$1.8) million to the Transition Tax obligation, with a corresponding adjustment of (\$1.8) million to income tax expense during the nine months ended September 30, 2018. The effect of the measurement-period adjustment on the 2018 effective tax rate was approximately (106.3%). The Transition Tax, which has now been determined to be complete, resulted in recording a total Transition Tax obligation of \$3.2 million, with a corresponding adjustment of \$3.2 million to income tax expense.

Additionally, the Company considers the earnings in its non-U.S. subsidiaries to be indefinitely reinvested and, accordingly, has recorded no deferred income taxes. While the transition tax resulted in the reduction of the excess of the amount for financial reporting over the tax basis in our foreign subsidiaries, an actual repatriation from its non-U.S. subsidiaries could be subject to additional foreign and U.S. state income taxes. Accordingly, the Company has not recorded any deferred taxes attributable to our investments in its foreign subsidiaries. The Company will record the tax effects of any change in its prior assertion should this assertion change and the Company is able to make a reasonable estimate, and disclose any unrecognized deferred tax liability for temporary differences related to our foreign investments, if practicable.

Note 15. Geographic Information

The Company operates in one reportable segment. The Company's Chief Executive Officer, who is considered to be the chief operating decision maker, manages the Company's operations as a whole and reviews financial information presented on a consolidated basis, accompanied by information about product revenue, for purposes of evaluating financial performance and allocating resources.

The following tables set forth the Company's revenue and asset information by geographic region. Revenue is classified based on the location of where the product is manufactured. Long-lived assets in the tables below comprise only property, plant, equipment and intangible assets (in thousands):

	Three months ended September 30,		Nine months ended September 30,	
	2018	2017	2018	2017
Revenues:				
United States	\$ 2,927	\$ 4,887	\$ 10,258	\$ 13,519
Taiwan	29,883	19,405	92,056	183,906
China	23,576	64,587	107,133	105,049
	<u>\$ 56,386</u>	<u>\$ 88,879</u>	<u>\$ 209,447</u>	<u>\$ 302,474</u>
			As of the period ended	
			September 30,	December 31,
			2018	2017
Long-lived assets:				
United States			\$ 82,852	\$ 75,446
Taiwan			64,605	67,379
China			84,891	59,929
			<u>\$ 232,348</u>	<u>\$ 202,754</u>

Note 16. Contingencies

Litigation

Overview

From time to time, the Company may be subject to legal proceedings and litigation arising in the ordinary course of business, including, but not limited to, inquiries, investigations, audits and other regulatory proceedings, such as described below. The Company records a loss provision when it believes it is both probable that a liability has been incurred and the amount can be reasonably estimated. Unless otherwise disclosed, the Company is unable to estimate the possible loss or range of loss for the legal proceeding described below.

Except for the lawsuit described below, the Company believes that there are no claims or actions pending or threatened against it, the ultimate disposition of which would have a material adverse effect on it.

Class Action and Shareholder Derivative Litigation

On August 5, 2017, a lawsuit was filed in the U.S. District Court for the Southern District of Texas against the Company and two of its officers in *Mona Abouzied v. Applied Optoelectronics, Inc., Chih-Hsiang (Thompson) Lin, and Stefan J. Murry, et al.*, Case No. 4:17-cv-02399. The complaint in this matter seeks class action status on behalf of the Company's shareholders, alleging violations of Sections 10(b) and 20(a) of the Exchange Act against the Company, its chief executive officer, and its chief financial officer, arising out of its announcement on August 3, 2017 that "we see softer than expected demand for our 40G solutions with one of our large customers that will offset the sequential growth and increased demand we expect in 100G." A second, related action was filed by Plaintiff Chad Ludwig on August 16, 2017 (Case No. 4:17-cv-02512) in the Southern District of Texas. The two cases were consolidated before Judge Vanessa D. Gilmore. On January 22, 2018, the court appointed Lawrence Rougier as Lead Plaintiff and Levi & Korinsky LLP as Lead Counsel. Lead Plaintiff filed an amended consolidated class action complaint on March 6, 2018. The amended complaint requests unspecified damages and other relief. The Company disputes the allegations and intends to

vigorously contest the matter. The Company filed a motion to dismiss on April 4, 2018. Lead Plaintiff filed a response in opposition to the motion to dismiss on May 4, 2018, and briefing was completed on May 21, 2018. Further deadlines in this matter have been stayed until the court issues a decision on the pending motion to dismiss.

On August 7, 2018, Plaintiff Lei Jin filed a purported derivative action on behalf of nominal defendant Applied Optoelectronics, Inc. in the U.S. District Court for the Southern District of Texas against the Company's chief executive officer, chief financial officer and board of directors (Case No. 4:18-cv-02713). The allegations in the derivative complaint are substantially similar to those underlying the *Abouzi* securities class action. The parties have agreed to stay the derivative action until the court rules on the pending motion to dismiss in the *Abouzi* securities class action. The court signed the stay order on September 25, 2018.

On October 1, 2018, a lawsuit was filed in the U.S. District Court for the Southern District of Texas against the Company and two of its officers in *Gaurav Taneja v. Applied Optoelectronics, Inc., Thompson Lin, and Stefan Murry*, Case No. 4:18-cv-03544. The complaint in this matter seeks class action status on behalf of the Company's shareholders, alleging violations of Sections 10(b) and 20(a) of the Exchange Act against the Company, its chief executive officer, and its chief financial officer, arising out of its announcement on September 28, 2018 that it was revising its third quarter revenue guidance due to "an issue with a small percentage of 25G lasers within a specific customer environment." A second, related action was filed by Plaintiff Davin Pokoik on October 10, 2018 (Case No. 4:18-cv-03722) in the Southern District of Texas. The Company disputes the allegations and intends to vigorously contest the matter.

Note 17. Subsequent Events

The Company has evaluated subsequent events through the date the financial statements were available to be issued.

On October 3, 2018, Prime World entered into a revolving credit facility for up to \$7 million (the "Credit Facility") with the Development Bank of Singapore (Taiwan) Ltd. (the "Bank"). Borrowing under the Credit Facility will be used for short-term working capital. Prime World may draw upon the Credit Facility from October 3, 2018 until July 26, 2019. The term of each draw shall be either 60 or 90 days depending on the purpose of the draw. Borrowings under the Credit Facility will bear interest at a rate equal to the Bank's cost of funds rate plus 1.25% for draws in U.S. Dollars and 1.35% plus the Bank's cost of funds rate for draws in NTD. As of the execution of the Credit Facility, the Bank's cost of fund's rate is 0.77% for loans made in NTD and 2.54% for loans made in U.S. Dollars. The Bank's cost of fund's rate is adjusted daily. Prime World will make monthly payments of accrued interest with the final monthly payment being for all principal and all accrued interest not yet paid. Prime World's obligations under the Credit Facility will be secured by promissory notes executed between Prime World and the Bank at the time of each draw. The agreements for the Credit Facility contain representations and warranties, and events of default applicable to Prime World that are customary for agreements of this type.

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

You should read the following discussion and analysis of our financial condition and results of operations in conjunction with our consolidated financial statements and the accompanying notes appearing elsewhere in this Quarterly Report on Form 10-Q for the period ended September 30, 2018 and the audited consolidated financial statements and notes thereto and management’s discussion and analysis of financial condition and results of operations for the fiscal year ended December 31, 2017 included in our Annual Report on Form 10-K. References to “Applied Optoelectronics” “we,” “our” and “us” are to Applied Optoelectronics, Inc. and its subsidiaries unless otherwise specified or the context otherwise requires.

This Quarterly Report on Form 10-Q contains “forward-looking statements” that involve risks and uncertainties, as well as assumptions that, if they never materialize or prove incorrect, could cause our results to differ materially from those expressed or implied by such forward-looking statements. The statements contained in this Quarterly Report that are not purely historical are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Terminology such as “believe,” “may,” “estimate,” “continue,” “anticipate,” “intend,” “should,” “could,” “would,” “target,” “seek,” “aim,” “believe,” “predicts,” “think,” “objectives,” “optimistic,” “new,” “goal,” “strategy,” “potential,” “is likely,” “will,” “expect,” “plan,” “project,” “permit,” or by other similar expressions that convey uncertainty of future events or outcomes are intended to identify forward-looking statements.

We have based these forward-looking statements largely on our current expectations and projections about future events and industry and financial trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. Such forward-looking statements are subject to risks, uncertainties and other important factors that could cause actual results and the timing of events to differ materially from future results expressed or implied by such forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those identified in “Part II —Item 1A. Risk Factors” provided below, and those discussed in other documents we file with the SEC, including our Report on Form 10-K for the year ended December 31, 2017 and subsequent Quarterly Reports on Form 10-Q. Furthermore, such forward-looking statements speak only as of the date of this Quarterly Report. Except as required by law, we undertake no obligation to update any forward-looking statements to reflect events or circumstances after the date of this Quarterly Report.

Overview

We are a leading, vertically integrated provider of fiber-optic networking products, primarily for four networking end-markets: internet data center, cable television, or CATV, telecommunication, or telecom and fiber-to-the-home, or FTTH. We design and manufacture a range of optical communications products at varying levels of integration, from components, subassemblies and modules to complete turn-key equipment.

In designing products for our customers, we begin with the fundamental building blocks of lasers and laser components. From these foundational products, we design and manufacture a wide range of products to meet our customers’ needs and specifications, and such products differ from each other by their end market, intended use and level of integration. We are primarily focused on the higher-performance segments within all four of our target markets, which increasingly demand faster connectivity and innovation.

The four end markets we target are all driven by significant bandwidth demand fueled by the growth of network-connected devices, video traffic, cloud computing and online social networking. To address this increased bandwidth demand, CATV and telecommunications service providers are competing directly against each other by providing bundles of voice, video and data services to their subscribers and investing to enhance the capacity, reliability and capability of their networks. The trend of rising bandwidth consumption also impacts the internet data center market, as reflected in the shift to higher speed server connections. As a result of these trends, fiber-optic networking technology is becoming essential in all four of our target markets, as it is often the only economic way to deliver the desired bandwidth.

Our vertically integrated manufacturing model provides us several advantages, including rapid product development, fast response times to customer requests and control over product quality and manufacturing costs. We design, manufacture and integrate our own analog and digital lasers using a proprietary Molecular Beam Epitaxy, or MBE, and Metal Organic Chemical Vapor Deposition (MOCVD) fabrication process, which we believe is unique in our

industry. We manufacture the majority of the laser chips and optical components that are used in our products. The lasers we manufacture are proven to be reliable over time and highly tolerant of changes in temperature and humidity, making them well-suited to the CATV and FTTH markets where networking equipment is often installed outdoors.

We have three manufacturing sites: Sugar Land, Texas, Ningbo, China and Taipei, Taiwan. Our research and development functions are generally partnered with our manufacturing locations, and we have an additional research and development facility in Duluth, Georgia. In our Sugar Land facility, we manufacture laser chips (utilizing our MBE and MOCVD processes), subassemblies and components. The subassemblies are used in the manufacture of components by our other manufacturing facilities or sold to third parties as modules. We manufacture our laser chips only within our Sugar Land facility, where our laser design team is located. In our Taiwan location, we manufacture optical components, such as our butterfly lasers, which incorporate laser chips, subassemblies and components manufactured within our Sugar Land facility. In addition, in our Taiwan location, we manufacture transceivers for the internet data center, telecom, FTTH and other markets. In our China facility, we take advantage of lower labor costs and manufacture certain more labor intensive components and optical equipment systems, such as optical subassemblies and transceivers for the internet data center market, CATV transmitters (at the headend) and CATV outdoor equipment (at the node). Each manufacturing facility conducts testing on the components, modules or subsystems it manufactures and each facility is certified to ISO 9001:2015. Our facilities in Ningbo, China, Taipei, Taiwan, and Sugar Land, Texas are all certified to ISO 14001:2015.

Our sales model focuses on direct engagement and close coordination with our customers to determine product design, qualifications, and performance through coordination of our sales, product engineering and manufacturing teams. Our strategy is to use our direct sales force to sell to key accounts within our markets, increasing product penetration within those customers while also growing our overall customer base in certain international and domestic markets. We have direct sales personnel in each of our U.S., Taiwan and China locations focusing on a direct and local interaction with our internet data center, CATV, telecom and FTTH customers. Throughout our sales cycle, we work closely with our customers to achieve design wins that we believe provide long-lasting relationships and promote higher customer retention.

Our principal executive offices are located at 13139 Jess Pirtle Blvd., Sugar Land, TX 77478, and our telephone number is (281) 295-1800.

Results of Operations

The following table set forth our consolidated results of operations for the periods presented and as a percentage of our revenue for those periods (in thousands, except percentages):

	Three months ended September 30, 2018		Three months ended September 30, 2017		Nine months ended September 30, 2018		Nine months ended September 30, 2017	
Revenue, net	\$56,386	100.0 %	\$88,879	100.0 %	\$209,447	100.0 %	\$302,474	100.0 %
Cost of goods sold	38,849	68.9 %	49,507	55.7 %	132,211	63.1 %	168,348	55.7 %
Gross profit	17,537	31.1 %	39,372	44.3 %	77,236	36.9 %	134,126	44.3 %
Operating expenses								
Research and development	14,180	25.1 %	9,190	10.3 %	38,561	18.4 %	24,695	8.1 %
Sales and marketing	2,370	4.2 %	2,551	2.9 %	7,221	3.5 %	6,612	2.2 %
General and administrative	10,591	18.8 %	9,580	10.8 %	29,945	14.3 %	26,188	8.7 %
Total operating expenses	27,141	48.1 %	21,321	24.0 %	75,727	36.2 %	57,495	19.0 %
Income (loss) from operations	(9,604)	(17.0)%	18,051	20.3 %	1,509	0.7 %	76,631	25.4 %
Other income (expense)								
Interest income	86	0.1 %	61	0.1 %	223	0.1 %	166	0.1 %
Interest expense	(274)	(0.5)%	(248)	(0.3)%	(624)	(0.3)%	(792)	(0.3)%
Other income (expense), net	766	1.4 %	(354)	(0.4)%	1,320	0.6 %	(898)	(0.3)%
Total other income (expense), net	578	1.0 %	(541)	(0.6)%	919	0.4 %	(1,524)	(0.5)%
Income (loss) before income taxes	(9,026)	(16.0)%	17,510	19.7 %	2,428	1.1 %	75,107	24.9 %
Income tax benefit (expense)	5,294	9.4 %	1,865	2.1 %	3,994	1.9 %	(6,872)	(2.2)%
Net income (loss)	<u>\$ (3,732)</u>	<u>(6.6)%</u>	<u>\$19,375</u>	<u>21.8 %</u>	<u>\$ 6,422</u>	<u>3.0 %</u>	<u>\$ 68,235</u>	<u>22.7 %</u>

Comparison of Financial Results

Revenue

We generate revenue through the sale of our products to equipment providers and network operators for the internet data center, CATV, telecom and FTTH markets. We derive a significant portion of our revenue from our top ten customers, and we anticipate that we will continue to do so for the foreseeable future. The following charts provide the revenue contribution from each of the markets we served for the three and nine months ended September 30, 2018 and 2017 (in thousands, except percentages):

	Three months ended September 30,				Change	
	2018	% of Revenue	2017	% of Revenue	Amount	%
Data Center	\$38,954	69.1%	\$65,819	74.1%	\$(26,865)	(40.8)%
CATV	14,295	25.4%	18,932	21.3%	(4,637)	(24.5)%
Telecom	2,656	4.7%	3,474	3.9%	(818)	(23.5)%
FTTH	221	0.4%	182	0.2%	39	21.4 %
Other	260	0.5%	472	0.5%	(212)	(44.9)%
Total Revenue	<u>\$56,386</u>	<u>100.0%</u>	<u>\$88,879</u>	<u>100.0%</u>	<u>\$(32,493)</u>	<u>(36.6)%</u>

	Nine months ended September 30,				Change	
	2018	% of Revenue	2017	% of Revenue	Amount	%
Data Center	\$158,577	75.7%	\$244,711	80.9%	\$(86,134)	(35.2)%
CATV	39,047	18.6%	46,430	15.4%	(7,383)	(15.9)%
Telecom	10,399	5.0%	9,722	3.2%	677	7.0 %
FTTH	498	0.2%	405	0.1%	93	23.0 %
Other	926	0.4%	1,206	0.4%	(280)	(23.2)%
Total Revenue	<u>\$209,447</u>	<u>100.0%</u>	<u>\$302,474</u>	<u>100.0%</u>	<u>\$(93,027)</u>	<u>(30.8)%</u>

The decrease in revenue during the three months ended September 30, 2018 was driven primarily by decreased shipments of certain of our 100 Gbps transceivers products to one of our customers during the quarter, due to customer concerns about failures of similar products shipped previously. During the quarter, we conducted extensive testing of our products to demonstrate that any potentially affected units could be nearly eliminated from future shipments. Prior to the end of the quarter, with the customer's agreement, we resumed shipments. During the time that this issue was being investigated, production activity was reduced as resources were redirected to efforts to identify the root cause of any failures observed, and in order to avoid manufacturing product that could not be proven to meet acceptable quality standards.

In addition, recently one of our largest customers informed us that a new architecture being implemented in their datacenters may reduce their demand for 100 Gbps optical transceivers, compared to their prior expectations. We have had recent success in attracting new customers, and we believe that orders from these new customers will compensate for any decline in business from this customer. We believe that this reduction in forecast is unrelated to any quality or delivery concerns as we believe that our comprehensive testing data indicates that all known quality issues have been resolved and the customer has agreed with this conclusion.

The decrease in revenue during the nine months ended September 30, 2018 was driven primarily by decreased demand for our 40 Gbps and 100 Gbps transceivers as one of our customers reduced its demand for optical transceivers due to changes in the way they architect their network as well as the decrease in shipments to another customer during the three months ended September 30, 2018, as discussed above. This decrease was partially offset by an increase in demand for 100 Gbps transceivers from other customers, as well as by increased telecom revenue which is related to new deployments of telecom infrastructure. The decrease in revenue in the CATV market for the nine months ended September 30, 2018 was a result of decreased available production capacity in our China factory associated with staff turnover related to the Lunar New Year. The increase in revenue in our telecom market for the nine month period ended September 30, 2018 was primarily attributable to increased demand for telecom products by our customers as they supply new deployments of telecom infrastructure. The increase in revenue in our FTTH market was due to the fluctuation in demand for certain older legacy products and this demand is expected to continue to fluctuate.

For the three months ended September 30, 2018 and 2017, our top ten customers represented 92.9% and 91.6% of our revenue, respectively. For the nine months ended September 30, 2018 and 2017, our top ten customers represented 94.0% and 94.8% of our revenue, respectively. We believe that diversifying our customer base is critical for our future success, since reliance on a small number of key customers makes our ability to forecast future results dependent upon the accuracy of the forecasts we receive from those key customers. For example, we previously disclosed that we believed that the value of a certain previously-filed contract for sales of 100 Gps transceiver products to Facebook would be approximately \$125 million for 2018. In light of shipment delays for certain of these products, we now believe that the value of this contract with Facebook for 2018 will be approximately \$90 million.

Cost of goods sold and gross margin

	Three months ended September 30,				Change	
	2018		2017			
	Amount	% of Revenue	Amount	% of Revenue	Amount	%
	(in thousands, except percentages)					
Cost of goods sold	\$38,849	68.9 %	\$49,507	55.7 %	\$(10,658)	(21.5)%
Gross margin	17,537	31.1 %	39,372	44.3 %		

	Nine months ended September 30,				Change	
	2018		2017			
	Amount	% of Revenue	Amount	% of Revenue	Amount	%
	(in thousands, except percentages)					
Cost of goods sold	\$132,211	63.1 %	\$168,348	55.7 %	\$(36,137)	(21.5)%
Gross margin	77,236	36.9 %	134,126	44.3 %		

Cost of goods sold decreased by \$10.7 million, or 21.5%, and \$36.1 million, or 21.5%, for the three and nine months ended September 30, 2018, respectively, as compared to the three and nine months ended September 30, 2017, primarily due to the decrease in revenue over the prior year. The decrease in gross margin for the three and nine months ended September 30, 2018 compared to the same periods ended September 30, 2017 was primarily the result of lower

capacity utilization, resulting in higher fixed cost absorption for 100 Gps products produced and shipped in the quarter. As noted in the revenue discussion above, production was reduced while we investigated customer reports of failures of similar products shipped previously.

Operating expenses

	Three months ended September 30,				Change	
	2018		2017			
	Amount	% of revenue	Amount	% of revenue	Amount	%
	(in thousands, except percentages)					
Research and development	\$14,180	25.1 %	\$ 9,190	10.3 %	\$4,990	54.3 %
Sales and marketing	2,370	4.2 %	2,551	2.9 %	(181)	(7.1)%
General and administrative	10,591	18.8 %	9,580	10.8 %	1,011	10.6 %
Total operating expenses	\$27,141	48.1 %	\$21,321	24.0 %	\$5,820	27.3 %

	Nine months ended September 30,				Change	
	2018		2017			
	Amount	% of revenue	Amount	% of revenue	Amount	%
	(in thousands, except percentages)					
Research and development	\$38,561	18.4 %	\$24,695	8.2 %	\$13,866	56.1 %
Sales and marketing	7,221	3.4 %	6,612	2.2 %	609	9.2 %
General and administrative	29,945	14.3 %	26,188	8.7 %	3,757	14.3 %
Total operating expenses	\$75,727	36.2 %	\$57,495	19.0 %	\$18,232	31.7 %

Research and development expense

Research and development expense increased by \$5.0 million, or 54.3%, for the three months ended September 30, 2018 as compared to the three months ended September 30, 2017. Research and development expense increased by \$13.9 million, or 56.1%, for the nine months ended September 30, 2018 as compared to the nine months ended September 30, 2017. Research and development costs consist of R&D work orders, R&D material usage and other project related costs related to 40 Gbps, 100 Gbps, and 200/400 Gbps data center products, DOCSIS 3.1 capable CATV products, including remote-PHY products, and other new product development, and depreciation expense resulting from R&D equipment investments. Research and development costs increased for the three and nine months ended September 30, 2018 as compared to the three and nine months ended September 30, 2017 due mainly to increases in personnel-related costs, depreciation expenses associated with new R&D equipment purchased or transferred during the year, materials and supplies used in R&D activities and an increase in costs from R&D work orders.

Sales and marketing expense

Sales and marketing expense decreased by \$0.2 million, or 7.1%, for the three months ended September 30, 2018 as compared to the three months ended September 30, 2017. This decrease was due to decreases in customs taxes, duties and freight and commissions, partially offset by increases in personnel costs and trade show expenses.

Sales and marketing expense increased by \$0.6 million, or 9.2%, for the nine months ended September 30, 2018 as compared to the nine months ended September 30, 2017. This increase was due to increases in personnel costs, duties and freight and trade show expenses, offset by decreased commissions, customs taxes and professional fees.

General and administrative expense

General and administrative expense increased by \$1.0 million, or 10.6%, for the three months ended September 30, 2018 compared to the three months ended September 30, 2017. These increases were primarily due to an increase in personnel-related costs, share-based compensation expenses, depreciation expenses and insurance expenses. These increases were offset by a decrease in professional service fees.

General and administrative expense increased by \$3.8 million, or 14.3%, for the nine months ended September 30, 2018 compared to the nine months ended September 30, 2017. These increases were primarily due to an increase in

personnel-related costs, share-based compensation expenses, depreciation expenses, insurance expenses and professional service fees.

Other income (expense), net

	Three months ended September 30,				Change	
	2018		2017			
	Amount	% of revenue	Amount	% of revenue	Amount	%
	(in thousands, except percentages)					
Interest income	\$ 86	0.2 %	\$ 61	0.1 %	\$ 25	41.0 %
Interest expense	(274)	(0.5)%	(248)	(0.3)%	(26)	10.5 %
Other income (expense), net	766	1.4 %	(354)	(0.4)%	1,120	(316.4)%
Total other income (expense), net	<u>\$ 578</u>	<u>1.0 %</u>	<u>\$(541)</u>	<u>(0.6)%</u>	<u>\$1,119</u>	<u>(206.8)%</u>

	Nine months ended September 30,				Change	
	2018		2017			
	Amount	% of revenue	Amount	% of revenue	Amount	%
	(in thousands, except percentages)					
Interest income	\$ 223	0.1 %	\$ 166	0.1 %	\$ 57	34.3 %
Interest expense	(624)	(0.3)%	(792)	(0.3)%	168	(21.2)%
Other income (expense), net	1,320	0.6 %	(898)	(0.3)%	2,218	(247.0)%
Total other income (expense), net	<u>\$ 919</u>	<u>0.4 %</u>	<u>\$(1,524)</u>	<u>(0.5)%</u>	<u>\$2,443</u>	<u>(160.3)%</u>

Interest income increased 41.0% for the three months ended September 30, 2018 as compared to the three months ended September 30, 2017, due to higher interest rates. Interest income increased 34.3% for the nine months ended September 30, 2018 as compared to the nine months ended September 30, 2017, due to larger cash balances.

Interest expense increased 10.5% for the three months ended September 30, 2018 as compared to the three months ended September 30, 2017. This increase was due to higher debt balances along with higher interest rates in the current period. Interest expense decreased 21.2% for the nine months ended September 30, 2018 as compared to the nine months ended September 30, 2017. This decrease was due to higher debt balances during the prior period as compared to the current period.

Other income (expense) for the three months ended September 30, 2018 was income of \$0.8 million, a \$1.1 million increase compared to the three months ended September 30, 2017. Other income (expense) for the nine months ended September 30, 2018 was income of \$1.3 million, a \$2.2 million increase compared to the nine months ended September 30, 2017. These increases were due to the increase of foreign exchange gains resulting from the favorable fluctuation of certain Asian currencies against the U.S. dollar.

Benefit (provision) for income taxes

	Three months ended September 30,			Change
	2018		2017	
	(in thousands, except percentages)			
Benefit for income taxes	\$ 5,294	\$ 1,865	3,429	183.9 %

	Nine months ended September 30,			Change
	2018		2017	
	(in thousands, except percentages)			
Benefit (provision) for income taxes	\$ 3,994	\$(6,872)	10,866	158.1 %

Our tax provision or benefit from income taxes for interim periods is determined using an estimate of our annual effective tax rate, adjusted for discrete items, if any, that are taken into account in the relevant period. Our quarterly tax provision, and our quarterly estimate of our annual effective tax rate, are subject to significant variation due to several factors, including variability in accurately predicting our pre-tax income and loss and the mix of jurisdictions to which they relate, tax law developments and relative changes in permanent tax benefits or expenses.

Our effective tax rate for the three months ended September 30, 2018 and 2017 was 58.7% and (10.65%), respectively. For the three months ended September 30, 2018, the effective tax rate varied from the federal statutory rate of 21% primarily due to the level and mix of earnings among tax jurisdictions, share-based compensation, tax benefits related to research and development, recognition of the U.S. global intangible low-taxed income ("GILTI"), and an overall net tax benefit from certain tax reform measurement-period adjustments. For the three months ended September 30, 2017, the effective tax rate varied from the federal statutory rate of 35% primarily due to the level and mix of earnings among tax jurisdictions, the release of the valuation allowances recorded on the deferred tax assets in China and the recognition of employee share-based compensation in accordance with ASU No. 2016-09.

Our effective tax rate for the nine months ended September 30, 2018 and 2017 was (164.5%) and 9.15%, respectively. For the nine months ended September 30, 2018, the effective tax rate varied from the federal statutory rate of 21% primarily due to the level and mix of earnings among tax jurisdictions, share-based compensation, tax benefits related to research and development, recognition of the U.S. global intangible low-taxed income ("GILTI") and an overall net tax benefit from certain tax reform measurement-period adjustments. For the nine months ended September 30, 2017, the effective tax rate varied from the federal statutory rate of 35% primarily due to the level and mix of earnings among tax jurisdictions, the release of the valuation allowances recorded on the deferred tax assets in China and the recognition of employee share-based compensation in accordance with ASU No. 2016-09.

On December 22, 2017, the President of the United States signed Public Law No. 115-97, commonly referred to as the Tax Cut and Jobs Act of 2017 (the "Tax Act"). The Tax Act makes significant changes to the U.S. tax code, which include, but are not limited to, a U.S. federal corporate tax rate decrease from 35% to 21% effective January 1, 2018, a shift to a modified territorial tax regime, which requires companies to pay a one-time transition tax on the mandatory deemed repatriation of the cumulative earnings of certain foreign subsidiaries as of December 31, 2017, a new provision designed to tax GILTI of foreign subsidiaries, a limitation of the deduction for net operating losses, elimination of net operating loss carrybacks, immediate deductions for depreciation expense for certain qualified property, additional limitations on the deductibility of executive compensation and limitations on the deductibility of interest.

In December 2017, SEC issued Staff Accounting Bulletin No. 118 due to the Tax Act which allows the Company to record provisional amounts during a measurement period. As of September 30, 2018, we have completed the assessment of the corporate income tax impact expected to result from the Tax Act. The material impact of the Tax Act is described below.

The deemed repatriation transition tax (the "Transition Tax") is a tax on certain previously untaxed accumulated and current earnings and profits (E&P) of our foreign subsidiaries. We were able to reasonably estimate the Transition Tax and recorded a provisional Transition Tax obligation of \$5.0 million, with a corresponding adjustment of \$5.0 million to income tax expense for the year ended December 31, 2017. On the basis of revised E&P computations that were completed during the reporting period, we recognized an additional measurement-period adjustment of (\$1.8) million to the Transition Tax obligation, with a corresponding adjustment of (\$1.8) million to income tax expense during the nine months ended September 30, 2018. The effect of the measurement-period adjustment on the 2018 effective tax rate was approximately (106.3%). The Transition Tax, which has now been determined to be complete, resulted in recording a total Transition Tax obligation of \$3.2 million, with a corresponding adjustment of \$3.2 million to income tax expense.

Additionally, we consider the earnings in our non-U.S. subsidiaries to be indefinitely reinvested and, accordingly, have recorded no deferred income taxes. While the transition tax resulted in the reduction of the excess of the amount for financial reporting over the tax basis in our foreign subsidiaries, an actual repatriation from our non-U.S. subsidiaries could be subject to additional foreign and U.S. state income taxes. Accordingly, we have not recorded any deferred taxes attributable to our investments in our foreign subsidiaries. We will record the tax effects of any change in our prior assertion, should this assertion change and we are able to make a reasonable estimate, and disclose any unrecognized deferred tax liability for temporary differences related to our foreign investments, if practicable.

Liquidity and Capital Resources

As of September 30, 2018, we had \$63.6 million of unused borrowing capacity from all of our loan agreements. As of September 30, 2018, our cash, cash equivalents, restricted cash and short-term investments totaled \$64.1 million. Cash and cash equivalents are held for working capital purposes and are invested primarily in money market or time

deposit funds. We do not enter into investments for trading or speculative purposes. On October 17, 2016, we filed a Registration Statement on Form S-3 with the Securities and Exchange Commission, which was declared effective on November 1, 2016, providing for the public offer and sale of certain securities of the Company from time to time, at our discretion, up to an aggregate amount of \$250 million. Between November 22, 2016 and March 2, 2017, the Company sold 1.6 million shares of common stock at a weighted average price of \$31.55 per share, providing proceeds of \$48.8 million, net of expenses and underwriting discounts and commissions. No shares of common stock were sold pursuant to this Registratin Statement on Form S-3 in the three or nine months ended September 30, 2018.

The table below sets forth selected cash flow data for the periods presented (in thousands):

	Nine months ended	
	September 30,	
	2018	2017
Net cash provided by operating activities	\$ 25,625	\$ 57,498
Net cash used in investing activities	(71,025)	(49,126)
Net cash provided by financing activities	17,936	11,874
Effect of exchange rates on cash and cash equivalents	1,591	(208)
Net increase (decrease) in cash and cash equivalents	<u>\$ (25,873)</u>	<u>\$ 20,038</u>

Operating activities

For the nine months ended September 30, 2018, net cash provided by operating activities was \$25.6 million. Net cash provided by operating activities consisted of our net income of \$6.2 million, after the exclusion of non-cash items of \$29.4 million as well as an increase in accounts payable to our vendors of \$10.1 million and a decrease in accounts receivable from our customers of \$27.8 million. These cash increases were offset by an increase in inventories of \$41.3 million and a decrease in accrued income tax liabilities of \$7.4 million.

For the nine months ended September 30, 2017, net cash provided by operating activities was \$57.5 million. Net cash provided by operating activities consisted of our net income of \$68.3 million, after the exclusion of non-cash items of \$18.8 million, as well as an increase in accounts payable to our vendors of \$14.6 million and an increase in accrued liabilities of \$1.9 million and accrued income tax liabilities of \$4.4 million. These cash increases were offset by an increase in accounts receivable from our customers of \$23.2 million, an increase in inventories of \$21.1 million and an increase in prepaid assets of \$6.1 million.

Investing activities

For the nine months ended September 30, 2018, net cash used in investing activities was \$71.0 million, consisting of the purchase of additional machinery and equipment and land use rights of \$57.9 million, an increase in non-current assets of \$7.5 million and net purchases of short-term investments of \$6.0 million.

For the nine months ended September 30, 2017, net cash used in investing activities was \$49.1 million mainly for the purchase of additional machinery and equipment.

Financing activities

For the nine months ended September 30, 2018, our financing activities provided \$17.9 million in cash. This increase in cash was due to net borrowings of \$21.6 million offset by \$3.8 million of withholding taxes paid on behalf of employees related to their share-based compensation.

For the nine months ended September 30, 2017, our financing activities provided \$11.9 million in cash. We received \$21.6 million in net proceeds from the sale of our common stock pursuant to an at-the-market offering. This increase in cash was offset by the repayment of net borrowings of \$2.6 million and \$8.5 million of withholding taxes on behalf of employees related to their share-based compensation.

Loans and commitments

We have lending arrangements with several financial institutions, including a revolving line of credit with Branch, Banking and Trust Company (“BB&T”) in the U.S., a revolving credit facility from Taishin International Bank

in Taiwan for Prime World's Taiwan branch and a revolving line of credit in China. As of September 30, 2018, we had \$63.6 million of unused borrowing capacity. See Note 10 and Note 17 of our Condensed Consolidated Financial Statements for a description of our notes payable and long-term debt.

Future liquidity needs

We believe that our existing cash and cash equivalents, and cash flows from our operating activities and borrowings from our lenders will be sufficient to meet our anticipated cash needs for the next 12 months. Our future capital requirements will depend on many factors including our growth rate, the timing and extent of spending to support our research and development efforts, the expansion of our sales and marketing activities, the introduction of new and enhanced products, the expansion of our manufacturing capacity and the continuing market acceptance of our products. In the event that additional liquidity is required to meet our long-term investments, we may need to explore additional sources of liquidity by additional bank credit facilities or raising capital through additional equity or debt financing including our equity financing under our Registration Statement filed with the SEC in October 2016. The sale of additional equity or convertible securities could result in additional dilution to our stockholders, and the terms and prices of any such sale may not be acceptable to us. If we are unable to raise additional capital when desired, our business, operating results and financial condition would be adversely affected.

Contractual Obligations and Commitments

The following summarizes our contractual obligations as of September 30, 2018 (in thousands):

	Payments due by period				
	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
Notes payable and long-term debt ⁽¹⁾	\$ 75,193	\$ 9,398	\$ 45,033	\$ 10,593	\$ 10,169
Operating leases ⁽²⁾	11,035	1,030	1,979	2,008	6,018
Total commitments	\$ 86,228	\$ 10,428	\$ 47,012	\$ 12,601	\$ 16,187

- (1) We have several loan and security agreements in Taiwan and the U.S. that provide various credit facilities, including lines of credit and term loans. The amount presented in the table represents the principal portion and estimated interest expense for the obligations.
- (2) We have entered into various non-cancellable operating lease agreements for our offices in Taiwan and in the U.S.

Inflation

We believe that the relatively low rate of inflation in the U.S. over the past few years has not had a significant impact on our net sales and revenues or on income from continuing operations or on the prices of raw materials. To the extent we expand our operations in China and Taiwan, such actions may result in inflation having a more significant impact on our operating results in the future.

Off-Balance Sheet Arrangements

For the three months ended September 30, 2018, we did not, and we do not currently, have any off-balance sheet arrangements.

Critical Accounting Policies and Estimates

In our annual report on Form 10-K for the year ended December 31, 2017 and in the Notes to the Financial Statements herein, we identify our most critical accounting policies. In preparing the financial statements, we make assumptions, estimates and judgments that affect the amounts reported. We periodically evaluate our estimates and judgments that are most critical in nature which are related to revenue recognition, allowance for doubtful accounts, inventory reserves, impairment of long-lived assets (excluding goodwill and other indefinite-lived intangible assets), goodwill and other indefinite-lived intangible assets, purchase price allocation of acquisitions, service and product warranties, and income taxes. Our estimates are based on historical experience and on our future expectations that we believe are reasonable. The combination of these factors forms the basis for making judgments about the carrying values

of assets and liabilities that are not readily apparent from other sources. Actual results are likely to differ from our current estimates and those differences may be material.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

For quantitative and qualitative disclosures about market risk affecting the Company, see Item 7A – Quantitative and Qualitative Disclosures about Market Risk in our Annual Report on Form 10-K for the fiscal year ended December 31, 2017. We do not believe the Company’s exposure to market risk has changed materially since December 31, 2017.

Item 4. Controls and Procedures

The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company’s management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Our disclosure controls and procedures are designed to provide reasonable assurance of achieving their control objectives.

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of September 30, 2018. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of the end of the period covered by this report, our disclosure controls and procedures were effective.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting during the three month period covered by this Quarterly Report on Form 10-Q, which were identified in connection with management’s evaluation required by the Rules 13a-15(d) and 15d-15(d) under the Exchange Act that occurred during our last fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Part II. Other Information

Item 1. Legal Proceedings

From time to time, we may be subject to legal proceedings and litigation arising in the ordinary course of business, including, but not limited to, inquiries, investigations, audits and other regulatory proceedings, such as described below. Except for the lawsuits described below, we believe that there are no claims or actions pending or threatened against us, the ultimate disposition of which would have a material adverse effect on us.

On August 5, 2017, a lawsuit was filed in the U.S. District Court for the Southern District of Texas against us and two of our officers in *Mona Abouzied v. Applied Optoelectronics, Inc., Chih-Hsiang (Thompson) Lin, and Stefan J. Murry, et al.*, Case No. 4:17-cv-02399. The complaint in this matter seeks class action status on behalf of our shareholders, alleging violations of Sections 10(b) and 20(a) of the Exchange Act against the Company, our chief executive officer, and our chief financial officer, arising out of our announcement on August 3, 2017 that “we see softer than expected demand for our 40G solutions with one of our large customers that will offset the sequential growth and increased demand we expect in 100G.” A second, related action was filed by Plaintiff Chad Ludwig on August 16, 2017 (Case No. 4:17-cv-02512) in the Southern District of Texas. The two cases were consolidated before Judge Vanessa D. Gilmore. On January 22, 2018, the court appointed Lawrence Rougier as Lead Plaintiff and Levi & Korinsky LLP as Lead Counsel. Lead Plaintiff filed an amended consolidated class action complaint on March 6, 2018. The amended complaint requests unspecified damages and other relief. We dispute the allegations and intend to vigorously contest the matter. We filed a motion to dismiss on April 4, 2018. Lead Plaintiff filed a response in opposition to the motion to dismiss on May 4, 2018, and briefing was completed on May 21, 2018. Further deadlines in this matter have been stayed until the court issues a decision on the pending motion to dismiss.

On August 7, 2018, Plaintiff Lei Jin filed a purported derivative action on behalf of nominal defendant Applied Optoelectronics, Inc. in the U.S. District Court for the Southern District of Texas against our chief executive officer, chief financial officer and board of directors (Case No. 4:18-cv-02713). The allegations in the derivative complaint are substantially similar to those underlying the *Abouzied* securities class action. The parties have agreed to stay the derivative action until the court rules on the pending motion to dismiss in the *Abouzied* securities class action. The court signed the stay order on September 25, 2018.

On October 1, 2018, a lawsuit was filed in the U.S. District Court for the Southern District of Texas against us and two of our officers in *Gaurav Taneja v. Applied Optoelectronics, Inc., Thompson Lin, and Stefan Murry*, Case No. 4:18-cv-03544. The complaint in this matter seeks class action status on behalf of our shareholders, alleging violations of Sections 10(b) and 20(a) of the Exchange Act against the Company, our chief executive officer, and our chief financial officer, arising out of its announcement on September 28, 2018 that we were revising our third quarter revenue guidance due to “an issue with a small percentage of 25G lasers within a specific customer environment.” A second, related action was filed by Plaintiff Davin Pokoik on October 10, 2018 (Case No. 4:18-cv-03722) in the Southern District of Texas. We dispute the allegations and intend to vigorously contest the matter.

Item 1A. Risk Factors

Investing in our common stock involves a high degree of risk. You should carefully consider the following risk factors and all other information contained in our Quarterly Report on Form 10-Q, including our consolidated financial statements and related notes. If any of the following risks actually occur, we may be unable to conduct our business as currently planned and our financial condition and results of operations could be seriously harmed. In addition, the trading price of our common stock could decline due to the occurrence of any of these risks and you may lose all or part of your investment.

Risks Inherent in Our Business

We are dependent on our key customers for a significant portion of our revenue and the loss of, or a significant reduction in orders from, any of our key customers would adversely impact our revenue and results of operations.

We generate much of our revenue from a limited number of customers. For each year ended 2017, 2016 and 2015 and the three and nine months ended September 30, 2018, our top ten customers represented 94.9%, 95.5%, 88.7%, 92.9% and 94.0% of our revenue, respectively. In 2017, Amazon represented 35.4% of our revenue, Facebook represented 28.6% of our revenue and Microsoft represented 13.8% of our revenue. As a result, the loss of, or a significant reduction in orders from any of our key customers would materially and adversely affect our revenue and results of operations. We typically do not have long-term contracts with our customers and instead rely on recurring purchase orders. However, many of our current revenue expectations and forecasts reflect significant anticipated orders from a limited number of key customers. If our key customers do not continue to purchase our existing products or fail to purchase additional products from us, our revenue would decline and our results of operations would be adversely affected.

Changes in our customers' demands may negatively affect our sales and revenue. For example, one of our largest customers recently informed us that new architecture being implemented in their datacenters may reduce their demand for 100 Gbps optical transceivers compared to their prior forecasts. This would negatively impact our anticipated revenue from this customer. We have had recent success in attracting new customers that may provide a partial offset, but if we cannot sufficiently increase revenue from these new customers and our other existing customers, then our overall revenue may be adversely affected.

Adverse events affecting our key customers could also negatively affect our ability to retain their business and obtain new purchase orders, which could adversely affect our revenue and results of operations. For example, in recent years, there has been consolidation among various network equipment manufacturers and this trend is expected to continue. We are unable to predict the impact that industry consolidation would have on our existing or potential customers. We may not be able to offset any potential decline in revenue arising from the consolidation of our existing customers with revenue from new customers or additional revenue from the merged company.

Customer demand is difficult to forecast accurately and, as a result, we may be unable to match production with customer demand.

We make planning and spending decisions, including determining the levels of business that we will seek and accept, production schedules, component procurement commitments, personnel needs and other resource requirements, based on our estimates of product demand and customer requirements. Our products are typically purchased pursuant to individual purchase orders. While our customers may provide us with their demand forecasts, they are typically not contractually committed to buy any quantity of products beyond firm purchase orders. Furthermore, many of our customers may increase, decrease, cancel or delay purchase orders already in place without significant penalty. The short-term nature of commitments by our customers and the possibility of unexpected changes in demand for their products reduce our ability to accurately estimate future customer requirements. On occasion, customers may require rapid increases in production, which can strain our resources, cause our manufacturing to be negatively impacted by materials shortages, necessitate more onerous procurement commitments and reduce our gross margin. We may not have sufficient capacity at any given time to meet the volume demands of our customers, or one or more of our suppliers may not have sufficient capacity at any given time to meet our volume demands. If any of our major customers decrease, stop or delay purchasing our products for any reason, we will likely have excess manufacturing capacity or inventory and our business and results of operations would be harmed.

If our customers do not qualify our products for use on a timely basis, our results of operations may suffer.

Prior to the sale of new products, our customers typically require us to “qualify” our products for use in their applications. At the successful completion of this qualification process, we refer to the resulting sales opportunity as a “design win.” Additionally, new customers often audit our manufacturing facilities and perform other evaluations during this qualification process. The qualification process involves product sampling and reliability testing and collaboration with our product management and engineering teams in the design and manufacturing stages. If we are unable to accurately predict the amount of time required to qualify our products with customers, or are unable to qualify our products with certain customers at all, then our ability to generate revenue could be delayed or our revenue would be lower than expected and we may not be able to recover the costs associated with the qualification process or with our product development efforts, which would have an adverse effect on our results of operations.

In addition, due to rapid technological changes in our markets, a customer may cancel or modify a design project before we have qualified our product or begun volume manufacturing of a qualified product. It is unlikely that we would be able to recover the expenses for cancelled or unutilized custom design projects. Some of these unrecoverable expenses for cancelled or unutilized custom design projects may be significant. It is difficult to predict with any certainty whether our customers will delay or terminate product qualification or the frequency with which customers will cancel or modify their projects, but any such delay, cancellation or modification would have a negative effect on our results of operations.

Our ability to successfully qualify and scale capacity for new technologies and products is important to our ability to grow our business and market presence, and we may invest a significant amount to scale our capacity to meet potential demand from customers for our new technologies and products. If we are unable to qualify and sell any of our new products in volume, on time, or at all, our results of operations may be adversely affected.

We face intense competition which could negatively impact our results of operations and market share.

The markets into which we sell our products are highly competitive. Our competitors range from large, international companies offering a wide range of products to smaller companies specializing in niche markets. Current and potential competitors may have substantially greater name recognition, financial, marketing, research and manufacturing resources than we do, and there can be no assurance that our current and future competitors will not be more successful than us in specific product lines or markets. Some of our competitors may also have better-established relationships with our current or potential customers. Some of our competitors have more resources to develop or acquire new products and technologies and create market awareness for their products and technologies. In addition, some of our competitors have the financial resources to offer competitive products at below-market pricing levels that could prevent us from competing effectively and result in a loss of sales or market share or cause us to lower prices for our products. In recent years, there has been consolidation in our industry and we expect such consolidation to continue. Consolidation involving our competitors could result in even more intense competition. Network equipment manufacturers, who are our customers, and network service providers may decide to manufacture the optical subsystems incorporated into their network systems in-house instead of outsourcing such products to companies such as us. We also encounter potential customers that, because of existing relationships with our competitors, are committed to the products offered by our competitors.

We must continually develop successful new products and enhance existing products, and if we fail to do so or if our release of new or enhanced products is delayed, our business may be harmed.

The markets for our products are characterized by frequent new product introductions, changes in customer requirements and evolving industry standards, all with an underlying pressure to reduce cost and meet stringent reliability and qualification requirements. Our future performance will depend on our successful development, introduction and market acceptance of new and enhanced products that address these challenges. If we are unable to make our new or enhanced products commercially available on a timely basis, we may lose existing and potential customers and our financial results would suffer.

In addition, due to the costs and length of research, development and manufacturing process cycles, we may not recognize revenue from new products until long after such expenditures, if at all, and our margins may decrease if our costs are higher than expected, adversely affecting our financial condition and results of operation.

Although the length of our product development cycle varies widely by product and customer, it may take 18 months or longer before we receive our first order. As a result, we may incur significant expenses long before customers accept and purchase our products.

Product development delays may result from numerous factors, including:

- modification of product specifications and customer requirements;
- unanticipated engineering complexities;
- difficulties in reallocating engineering resources and overcoming resource limitations; and
- rapidly changing technology or competitive product requirements.

The introduction of new products by us or our competitors and other changes in our customers demands could result in a slowdown in demand for our existing products and could result in a write-down in the value of our inventory. We have in the past experienced periodic fluctuations in demand for existing products and delays in new product development, and such fluctuations will likely occur in the future. To the extent we fail to qualify our products and obtain their approval for use, which we refer to as a design win, or experience product development delays for any reason, our competitive position would be adversely affected and our ability to grow our revenue would be impaired.

Furthermore, our ability to enter a market with new products in a timely manner can be critical to our success because it is difficult to displace an existing supplier for a particular type of product once a customer has chosen a supplier, even if a later-to-market product provides better performance or cost efficiency.

The development of new, technologically advanced products is a complex and uncertain process requiring frequent innovation, highly-skilled engineering and development personnel and significant capital, as well as the accurate anticipation of technological and market trends. We cannot assure you that we will be able to identify, develop, manufacture, market or support new or enhanced products successfully or on a timely basis. Further, we cannot assure you that our new products will gain market acceptance or that we will be able to respond effectively to product introductions by competitors, technological changes or emerging industry standards. We also may not be able to develop the underlying core technologies necessary to create new products and enhancements, license these technologies from third parties, or remain competitive in our markets.

Our revenues, growth rates and operating results are likely to fluctuate significantly as a result of factors that are outside our control, which could adversely impact our operating results.

Our revenues, growth rates and operating results are likely to fluctuate significantly in the future as a result of factors that are outside our control. We may not achieve similar revenues, growth rates or operating results in future periods. Our revenues, growth rates and operating results for any prior quarterly or annual period should not be relied upon as any indication of our future revenues, growth rates or operating results. The timing of order placement, size of orders and satisfaction of contractual customer acceptance criteria, changes in the pricing of our products due to competitive pressures as well as order or shipment delays or deferrals, with respect to our products, may cause material fluctuations in revenues. For example, revenues for the three months ended March 31, 2018 decreased by 32 percent as compared to the three months ended March 31, 2017 due primarily to lower sales of 40 Gbps data center transceivers, which includes a reduction in average selling prices for certain products as a result of price negotiations with our customers. Our lengthy sales cycle, which may extend to more than one year, may cause our revenues and operating results to vary from period to period and it may be difficult to predict the timing and amount of any variation. Delays or deferrals in purchasing decisions by our customers may increase as we develop new or enhanced products for existing and new markets, including automotive and biotechnology markets. Our current and anticipated future dependence on a small number of customers increases the revenue impact of each such customer's decision to delay or defer purchases from us, or decision not to purchase products from us. Our expense levels in the future will be based, in large part, on our expectations regarding future revenue sources and, as a result, operating results for any quarterly period in which anticipated material orders fail to occur, or are delayed or deferred, could be significantly harmed.

We are subject to the cyclical nature of the markets in which we compete and any future downturn will likely reduce demand for our products and revenue.

In each of our target markets, including the CATV market, our sales depend on the aggregate capital expenditures of service providers as they build out and upgrade their network infrastructure. These markets are highly cyclical and characterized by constant and rapid technological change, price erosion, evolving standards and wide fluctuations in product supply and demand. In the past, these markets have experienced significant downturns, often connected with, or in anticipation of, the maturation of product cycles. These downturns have been characterized by diminished product demand, production overcapacity, high inventory levels and accelerated erosion of average selling prices. Our historical results of operations have been subject to these cyclical fluctuations, and we may experience substantial period to period fluctuations in our future results of operations. Any future downturn in any of the markets in which we compete could significantly reduce the demand for our products and therefore may result in a significant reduction in our revenue. Our revenue and results of operations may be materially and adversely affected in the future due to changes in demand from individual customers or cyclical changes in any of the markets utilizing our products. We may not be able to accurately predict these cyclical fluctuations and the impact that these fluctuations may have on our revenue and operating results.

Increasing costs and shifts in product mix may adversely impact our gross margins.

Our gross margins on individual products and among products fluctuate over each product's life cycle. Our overall gross margins have fluctuated from period to period as a result of shifts in product mix, the introduction of new products, decreases in average selling prices and our ability to reduce product costs, and these fluctuations are expected to continue in the future. We may not be able to accurately predict our product mix from period to period, and as a result we may not be able to forecast accurately our overall gross margins. The rate of increase in our costs and expenses may exceed the rate of increase in our revenue, either of which would materially and adversely affect our business, our results of operations and our financial condition.

If the CATV market does not continue to develop as we expect, or if there is any downturn in this market, our business would be adversely affected.

Historically, we have generated much of our revenue from the CATV market. In 2017, 2016 and 2015, the CATV market represented 15.9%, 16.7% and 28.3% of our revenue, respectively. In the CATV market, we are relying on expected increasing demand for bandwidth-intensive services and applications such as on-demand television programs, high-definition television channels, or HDTV, social media, peer-to-peer file sharing and online video creation and viewing from network service providers. Without network and bandwidth growth, the need for our products will not increase and may decline, adversely affecting our financial condition and results of operations. Although demand for broadband access is increasing, network and bandwidth growth may be limited by several factors, including an uncertain regulatory environment, high infrastructure costs to purchase and install equipment and uncertainty as to which competing content delivery solution, such as telecommunications, wireless or satellite, will gain the most widespread acceptance. If the trend of outsourcing for the design and manufacture of CATV equipment does not continue, or continues at a slower pace than currently expected, our customers' demand for our design and manufacturing services may not grow as quickly as expected. If expectations for the growth of the CATV market are not realized, our financial condition and results of operations will be adversely affected. In addition, if the CATV market is adversely impacted, whether due to competitive pressure from telecommunication service providers, regulatory changes, or otherwise, our business would be adversely affected. We may not be able to offset any potential decline in revenue from the CATV market with revenue from new customers in other markets.

We have limited operating history in the telecom and FTTH markets, and our business could be harmed if these markets do not develop as we expect.

For 2017 and 2016, respectively, we generated 3.4% and 5.0% of our revenue from the telecom market and 0.1%, and 0.6% of our revenue from the FTTH market. In the telecom market, we generally have sold products that were originally designed for other markets (such as internet data center or FTTH) or are variations of such products. As we gain experience in this market, we have begun to develop products specifically designed for telecom customers. Given our limited experience in this market, the products that we develop may prove to be unsuitable for customer use, or we may be unable to derive profit margins from this market that are similar to what we derive from our other markets. The products that we offer in the FTTH market are relatively new and have not yet gained widespread customer acceptance.

For example, our WDM-PON products designed for the FTTH market, have not, and may never, gain widespread acceptance by large internet service providers. Our business in this market is dependent on the deployment of our optical components, modules and subassemblies. We are relying on increasing demand for bandwidth-intensive services and telecommunications service providers' acceptance and deployment of WDM-PON as a technology supporting 1 Gbps service to the home. Without network and bandwidth growth and adoption of our solutions by operators in these markets, we will not be able to sell our products in these markets in high volume or at our targeted margins, which would adversely affect our financial condition and results of operations. For example, WDM-PON technology may not be adopted by equipment and service providers in the FTTH market as rapidly as we expect or in the volumes we need to achieve acceptable margins. Network and bandwidth growth may be limited by several factors, including an uncertain regulatory environment, high infrastructure costs to purchase and install equipment and uncertainty as to which competing content delivery solution, such as CATV, will gain the most widespread acceptance. In addition, as we enter new markets or expand our product offerings in existing markets, our margins may be adversely affected due to competition in those markets and commoditization of competing products. If our expectations for the growth of these markets are not realized, our financial condition and results of operations will be adversely affected.

If we encounter manufacturing problems, we may lose sales and damage our customer relationships.

We may experience delays, disruptions or quality control problems in our manufacturing operations. These and other factors may cause less than acceptable yields at our facility. Manufacturing yields depend on a number of factors, including the quality of available raw materials, the degradation or change in equipment calibration and the rate and timing of the introduction of new products. Changes in manufacturing processes required as a result of changes in product specifications, changing customer needs and the introduction of new product lines may significantly reduce our manufacturing yields, resulting in low or negative margins on those products. In addition, we use our Molecular Beam Epitaxy, or MBE, fabrication process to make our lasers, in addition to Metal Organic Chemical Vapor Deposition, or MOCVD, the technique most commonly used in optical manufacturing by communications optics vendors, and our MBE fabrication process relies on custom-manufactured equipment. If our MBE or MOCVD fabrication facility in Sugar Land, Texas were to be damaged or destroyed for any reason, our manufacturing process would be severely disrupted. Any such manufacturing problems would likely delay product shipments to our customers. For example, shipments of certain of our 100 Gbps transceiver products to one of our customers decreased during the three months ended September 30, 2018 due to customer concerns about failures of similar products shipped previously. During the quarter, we conducted extensive testing of our products to demonstrate that any potentially affected units could be nearly eliminated from future shipments, and we subsequently resumed shipments with the customer's agreement. Manufacturing problems and any such delays would negatively affect our sales and revenue and could negatively affect our competitive position and reputation. We may also experience delays in production, typically in February, during the Lunar New Year holiday when our facilities in China and Taiwan are closed.

Given the high fixed costs associated with our vertically integrated business, a reduction in demand for our products will likely adversely impact our gross profits and our results of operations.

We have a high fixed cost base due to our vertically integrated business model, including the fact that 2,655 of our employees as of December 31, 2017 were employed in manufacturing and research and development operations. We may not be able to adjust these fixed costs quickly to adapt to rapidly changing market conditions. Our gross profit and gross margin are greatly affected by our sales volume and volatility on a quarterly basis and the corresponding absorption of fixed manufacturing overhead expenses. In addition, because we are a vertically integrated manufacturer, insufficient demand for our products may subject us to the risk of high inventory carrying costs and increased inventory obsolescence. Given our vertical integration, the rate at which we turn inventory has historically been low when compared to our cost of sales. We do not expect this to change significantly in the future and believe that we will have to maintain a relatively high level of inventory compared to our cost of sales. As a result, we continue to expect to have a significant amount of working capital invested in inventory. We may be required to write down inventory costs in the future and our high inventory costs may have an adverse effect on our gross profits and our results of operations.

Our financial results may vary significantly from quarter-to-quarter due to a number of factors, which may lead to volatility in our stock price.

Our quarterly revenue and operating results have varied in the past and will likely continue to vary significantly from quarter-to-quarter. This variability may lead to volatility in our stock price as research analysts and investors respond to these quarterly fluctuations. These fluctuations are due to numerous factors, including:

- the timing, size and mix of sales of our products;
- fluctuations in demand for our products, including the increase, decrease, rescheduling or cancellation of significant customer orders;
- our ability to design, manufacture and deliver products which meet customer requirements in a timely and cost-effective manner;
- new product introductions and enhancements by us or our competitors;
- the gain or loss of key customers;
- the rate at which our present and potential customers and end users adopt our technologies;
- changes in our pricing and sales policies or the pricing and sales policies of our competitors;
- seasonality of certain of our products and manufacturing capabilities;
- quality control or yield problems in our manufacturing operations;
- supply disruption for certain raw materials and components used in our products;
- capacity constraints of our outside contract manufacturers for a portion of the manufacturing process for some of our products;
- length and variability of the sales cycles of our products;
- unanticipated increases in costs or expenses;
- the loss of key employees;
- different capital expenditure and budget cycles for our customers, affecting the timing of their spending for our products;
- political stability in the areas of the world in which we operate;
- fluctuations in foreign currency exchange rates;
- changes in accounting rules;
- the evolving and unpredictable nature of the markets for products incorporating our solutions; and
- general economic conditions and changes in such conditions specific to our target markets.

The foregoing factors are difficult to forecast, and these, as well as other factors, could materially adversely affect our quarterly and annual operating results. In addition, a significant amount of our operating expenses is relatively fixed in nature due to our internal manufacturing, research and development, sales and general administrative efforts. Any failure to adjust spending quickly enough to compensate for a revenue shortfall could magnify the adverse impact of such revenue shortfall on our results of operations. For these reasons, you should not rely on quarter-to-quarter comparisons of our results of operations as an indicator of future performance. Moreover, our operating results may not meet our announced guidance or the expectations of research analysts or investors, in which case the price of our common stock could decrease significantly. There can be no assurance that we will be able to successfully address these risks.

We depend on key personnel to develop and maintain our technology and manage our business in a rapidly changing market.

The continued services of our executive officers and other key engineering, sales, marketing, manufacturing and support personnel is essential to our success. For example, our ability to achieve new design wins depends upon the experience and expertise of our engineers. Any of our key employees, including our Chief Executive Officer, Chief Financial Officer, Senior Vice President and North America General Manager and Senior Vice President and Asia General Manager, may resign at any time. We do not have key person life insurance policies covering any of our employees. To implement our business plan, we also intend to hire additional employees, particularly in the areas of engineering, manufacturing and sales. Our ability to continue to attract and retain highly skilled employees is a critical factor in our success. Competition for highly skilled personnel is intense. We may not be successful in attracting, assimilating or retaining qualified personnel to satisfy our current or future needs. Our ability to develop, manufacture and sell our products, and thus our financial condition and results of operations, would be adversely affected if we are unable to retain existing personnel or hire additional qualified personnel.

We depend on a limited number of suppliers and any supply interruption could have an adverse effect on our business.

We depend on a limited number of suppliers for certain raw materials and components used in our products. Some of these suppliers could disrupt our business if they stop, decrease or delay shipments or if the materials or components they ship have quality or reliability issues. Some of the raw materials and components we use in our products are available only from a sole source or have been qualified only from a single supplier. Furthermore, other than our current suppliers, there are a limited number of entities from whom we could obtain certain materials and components. We may also face shortages if we experience increased demand for materials or components beyond what our qualified suppliers can deliver. Our inability to obtain sufficient quantities of critical materials or components could adversely affect our ability to meet demand for our products, adversely affecting our financial condition and results of operations.

We typically have not entered into long-term agreements with our suppliers and, therefore, our suppliers could stop supplying materials and components to us at any time or fail to supply adequate quantities of materials or components to us on a timely basis. It is difficult, costly, time consuming and, on short notice, sometimes impossible for us to identify and qualify new suppliers. Our customers generally restrict our ability to change the components in our products. For more critical components, any changes may require repeating the entire qualification process. Our reliance on a limited number of suppliers or a single qualified vendor may result in delivery and quality problems, and reduced control over product pricing, reliability and performance.

We depend upon outside contract manufacturers for a portion of the manufacturing process for some of our products.

Almost all of our products are manufactured internally. However we also rely upon manufacturers in China, Taiwan and other Asia locations to provide back-end manufacturing and produce the finished portion of a few of our products. Our reliance on a contract manufacturer for these products makes us vulnerable to possible capacity constraints and reduced control over delivery schedules, manufacturing yields, manufacturing quality/controls and costs. If one or more of our contract manufacturers is unable to meet our customer demand in a timely fashion, this could have a material adverse effect on the revenue from our products. If one or more contract manufacturers for one of our products was unable or unwilling to manufacture such product in required volumes and at high quality levels or to continue our existing supply arrangement, we would have to identify, qualify and select an acceptable alternative contract manufacturer or move these manufacturing operations to our internal manufacturing facilities. An alternative contract manufacturer may not be available to us when needed or may not be in a position to satisfy our quality or production requirements on commercially reasonable terms, including price. Any significant interruption in manufacturing our products would require us to reduce our supply of products to our customers, which in turn, would reduce our revenue, harm our relationships with the customer of these products and cause us to forego potential revenue opportunities.

Our products could contain defects that may cause us to incur significant costs or result in a loss of customers.

Our products are complex and undergo quality testing as well as formal qualification by our customers. Our customers' testing procedures are limited to evaluating our products under likely and foreseeable failure scenarios and over varying amounts of time. For various reasons, such as the occurrence of performance problems that are unforeseeable in testing or that are detected only when products age or are operated under peak stress conditions, our products may fail to perform as expected long after customer acceptance. Failures could result from faulty components or design, problems in manufacturing or other unforeseen reasons. As a result, we could incur significant costs to repair or replace defective products under warranty, particularly when such failures occur in installed systems. Our products are typically embedded in, or deployed in conjunction with, our customers' products, which incorporate a variety of components, modules and subsystems and may be expected to interoperate with modules produced by third parties. As a result, not all defects are immediately detectable and when problems occur, it may be difficult to identify the source of the problem. We face this risk because our products are widely deployed in many demanding environments and applications worldwide. In addition, we may in certain circumstances honor warranty claims after the warranty has expired or for problems not covered by warranty to maintain customer relationships. Any significant product failure could result in litigation, damages, repair costs and lost future sales of the affected product and other products, divert the attention of our engineering personnel from our product development efforts and cause significant customer relations problems, all of which would harm our business. Although we carry product liability insurance, this insurance may not adequately cover our costs arising from defects in our products or otherwise.

Data breaches and cyber attacks could compromise our operations, our customers' operations, or the operations of our contract manufacturers upon whom we rely, and cause significant damage to our business and reputation.

Cyber attacks have become more prevalent and much harder to detect and defend against. Companies, including companies in our industry, have been increasingly subject to a wide variety of security incidents, cyber attacks and other attempts to gain unauthorized access to their systems or to deny access and disrupt their systems and operations. These threats can come from a variety of sources, ranging in sophistication from an individual hacker to a state-sponsored attack. Cyber threats may be generic, or they may be custom-crafted against our information systems.

In the ordinary course of our business, we and our data center customers maintain sensitive data on our respective networks, including intellectual property, employee personal information and proprietary or confidential business information relating to our business and that of our customers and business partners. The secure maintenance of this information is critical to our business and reputation. Despite our implementation of network security measures, our network and storage applications may be subject to computer viruses, denial of service attacks, ransomware and other forms of cyber terrorism, unauthorized access by hackers or may be breached due to operator error, malfeasance or other system disruptions. Our customers' network and storage applications may be subject to similar disruptions. It is often difficult to anticipate or immediately detect such incidents and the damage caused by such incidents. Data breaches and any unauthorized access or disclosure of our information, employee information or intellectual property could compromise our intellectual property, trade secrets and other sensitive business information, any of which could result in legal action against us, exposure of our intellectual property to our competitors, damages, fines and other adverse effects. A data security breach could also lead to public exposure of personal information of our employees, customers and others. Any such theft, loss or misuse of personal data collected, used, stored or transferred by us to run our business could result in significantly increased security costs or costs related to defending legal claims. Cyber attacks, such as computer viruses or other forms of cyber terrorism, may disrupt access to our network or storage applications. Such disruptions could result in delays or cancellations of customer orders or the production or shipment of our products. Data security breaches involving our data center customers could affect their financial condition and ability to continue to purchase our products. Further, cyber attacks may cause us to incur significant remediation costs, result in product development delays, disrupt key business operations and divert attention of management and key information technology resources. These incidents could also subject us to liability, expose us to significant expense and cause significant harm to our reputation and business.

Changes in U.S. and international trade policies, particularly with regard to China, may materially and adversely impact our business and operating results.

The U.S. government has recently made statements and taken certain actions that have led and may lead to further changes to U.S. and international trade policies, including recently-imposed tariffs affecting certain products manufactured in China. It is unknown whether and to what extent new tariffs (or other new laws or regulations) will be adopted, or the effect that any such actions would have on us or our industry. A significant portion of our manufacturing operations is based in Ningbo, China; therefore, if any new tariffs, legislation and/or regulations are implemented, or if existing trade agreements are renegotiated or if China or other affected countries take further retaliatory trade actions, such changes could have a material adverse effect on our business, financial condition, results of operations or cash flows.

We face a variety of risks associated with our international sales and operations.

We currently derive, and expect to continue to derive, a significant portion of our revenue from sales to international customers. In 2017, 2016 and 2015, 22.7%, 15.8% and 19.0% of our revenue was derived from sales that occurred outside of North America, respectively. In addition, a significant portion of our manufacturing operations is based in Ningbo, China and Taipei, Taiwan. Our international revenue and operations are subject to a number of material risks, including:

- difficulties in staffing, managing and supporting operations in more than one country;
- difficulties in enforcing agreements and collecting receivables through foreign legal systems;
- fewer legal protections for intellectual property in foreign jurisdictions;
- foreign and U.S. taxation issues and international trade barriers, including the adoption or expansion of governmental trade tariffs;
- difficulties in obtaining any necessary governmental authorizations for the export of our products to certain foreign jurisdictions;
- fluctuations in foreign economies;
- fluctuations in the value of foreign currencies and interest rates;
- trade and travel restrictions;
- domestic and international economic or political changes, hostilities and other disruptions in regions where we currently operate or may operate in the future;
- difficulties and increased expenses in complying with a variety of U.S. and foreign laws, regulations and trade standards, including the Foreign Corrupt Practices Act; and
- different and changing legal and regulatory requirements in the jurisdictions in which we currently operate or may operate in the future.

Negative developments in any of these factors in China or Taiwan or other countries could result in a reduction in demand for our products, the cancellation or delay of orders already placed, difficulties in producing and delivering our products, threats to our intellectual property, difficulty in collecting receivables, and a higher cost of doing business. Although we maintain certain compliance programs throughout the Company, violations of U.S. and foreign laws and regulations may result in criminal or civil sanctions, including material monetary fines, penalties and other costs against us or our employees, and may have a material adverse effect on our business.

Our business operations conducted in China and Taiwan are important to our success. A substantial portion of our property, plant and equipment is located in China and Taiwan. We expect to make further investments in China and Taiwan in the future. Therefore, our business, financial condition, results of operations and prospects are subject to

economic, political, legal, and social events and developments in China and Taiwan. Factors affecting military, political or economic conditions in China and Taiwan could have a material adverse effect on our financial condition and results of operations, as well as the market price and the liquidity of our common shares.

In some instances, we rely on third parties to assist in selling our products, and the failure of those parties to perform as expected could reduce our future revenue.

Although we primarily sell our products through direct sales, we also sell our products to some of our customers through third party sales representatives and distributors. Many of such third parties also market and sell products from our competitors. Our third party sales representatives and distributors may terminate their relationships with us at any time, or with short notice. Our future performance will also depend, in part, on our ability to attract additional third party sales representatives and distributors that will be able to market and support our products effectively, especially in markets in which we have not previously distributed our products. If our current third party sales representatives and distributors fail to perform as expected, our revenue and results of operations could be harmed.

Changes in our effective tax rate may adversely affect our results of operation and our business.

We are subject to income taxes in the U.S. and other foreign jurisdictions, including China and Taiwan. In addition, we are subject to various state taxes in states where we have nexus. We base our tax position on the anticipated nature and conduct of our business and our understanding of the tax laws of the countries and states in which we have assets or conduct activities. Our tax position may be reviewed or challenged by tax authorities. Moreover, the tax laws currently in effect may change, and such changes may have retroactive effect, such as the recently enacted U.S. tax reform legislation commonly referred to as the U.S. Tax Cuts and Jobs Act of 2017 (the “Tax Act”). We have inter-company arrangements in place providing for administrative and financing services and transfer pricing, which involve a significant degree of judgment and are often subject to close review by tax authorities. The tax authorities may challenge our positions related to these agreements. If the tax authorities successfully challenge our positions, our effective tax rate may increase, adversely affecting our results of operation and our business.

The Tax Act significantly changes how the U.S. taxes corporations. The Tax Act requires complex computations to be performed that were not previously required in U.S. tax law, significant judgments to be made in interpretation of the provisions of the Tax Act and significant estimates in calculations, and the preparation and analysis of information not previously relevant or regularly produced. The U.S. Treasury Department, the IRS, and other standard-setting bodies could interpret or issue guidance on how provisions of the Tax Act will be applied or otherwise administered that is different from our interpretation. As we interpret any additional guidance, we may make adjustments to provisional amounts that we have recorded that may materially impact our provision for income taxes in the period in which the adjustments are made.

Failure to manage our growth effectively may adversely affect our financial condition and results of operations.

Successful implementation of our business plan in our target markets requires effective planning and management. Production volumes for some of our products are increasing and we have announced plans to increase our production capacity in response to demand for certain of our current and future products, including adding personnel in some of our locations as well as expanding our physical manufacturing facilities. We currently operate facilities in Sugar Land, Texas, Ningbo, China, Taipei, Taiwan, and Duluth, Georgia. We currently manufacture our lasers using a proprietary process and customized equipment located only in our Sugar Land, Texas facility, and it will be costly to duplicate that facility, to scale our laser manufacturing capacity or to mitigate the risks associated with operating a single facility. The challenges of managing our geographically dispersed operations have increased and will continue to increase the demand on our management systems and resources. Moreover, we are continuing to improve our financial and managerial controls, reporting systems and procedures. Any failure to manage our expansion and the resulting demands on our management systems and resources effectively may adversely affect our financial condition and results of operations.

Our loan agreements contain restrictive covenants that may adversely affect our ability to conduct our business.

We have lending arrangements with several financial institutions, including loan agreements with BB&T Bank in the U.S., credit facilities with Taishin International Bank and Development Bank of Singapore in Taiwan and a credit facility with China Construction Bank Co. in China. Our loan agreements governing our long-term debt obligations in the U.S. and Asia contain certain financial and operating covenants that limit our management's discretion with respect to certain business matters. Among other things, these covenants require us to maintain certain financial ratios and restrict our ability to incur additional debt, create liens or other encumbrances, change the nature of our business, sell or otherwise dispose of assets and merge or consolidate with other entities. These restrictions may limit our flexibility in responding to business opportunities, competitive developments and adverse economic or industry conditions. Any failure by us or our subsidiaries to comply with these agreements could harm our business, financial condition and operating results. In addition, our obligations under our loan agreements with BB&T are secured by our accounts receivable, inventory, intellectual property, and all business assets including real estate and equipment. Our credit facilities with China Construction Bank Co. are secured by our accounts receivable, inventory and all business assets including real estate and equipment. A breach of any of covenants under our loan agreements, or a failure to pay interest or indebtedness when due under any of our credit facilities could result in a variety of adverse consequences, including the acceleration of our indebtedness.

We may not be able to obtain additional capital when desired, on favorable terms or at all.

We operate in a market that makes our prospects difficult to evaluate and, to remain competitive, we will be required to make continued investments in capital equipment, facilities and technological improvements. We expect that substantial capital will be required to expand our manufacturing capacity and fund working capital for anticipated growth. If we do not generate sufficient cash flow from operations or otherwise have the capital resources to meet our future capital needs, we may need additional financing to implement our business strategy, which includes:

- expansion of research and development;
- expansion of manufacturing capabilities;
- hiring of additional technical, sales and other personnel; and
- acquisitions of complementary businesses.

If we raise additional funds through the issuance of our common stock or convertible securities, the ownership interests of our stockholders could be significantly diluted. These newly issued securities may have rights, preferences or privileges senior to those of existing stockholders. Additional financing may not, however, be available on terms favorable to us, or at all, if and when needed, and our ability to fund our operations, take advantage of unanticipated opportunities, develop or enhance our infrastructure or respond to competitive pressures could be significantly limited. If we cannot raise required capital when needed, including under our Registration Statement filed with the SEC in October 2016, we may be unable to meet the demands of existing and prospective customers, adversely affecting our sales and market opportunities and consequently our business, financial condition and results of operations.

Future acquisitions may adversely affect our financial condition and results of operations.

As part of our business strategy, we may pursue acquisitions of companies that we believe could enhance or complement our current product portfolio, augment our technology roadmap or diversify our revenue base. Acquisitions involve numerous risks, any of which could harm our business, including:

- difficulties integrating the acquired business;
- unanticipated costs, capital expenditures or liabilities or changes related to research in progress and product development;
- diversion of financial and management resources from our existing business;
- difficulties integrating the business relationships with suppliers and customers of the acquired business with our existing business relationships;
- risks associated with entering markets in which we have little or no prior experience; and
- potential loss of key employees, particularly those of the acquired organizations.

Acquisitions may also result in the recording of goodwill and other intangible assets subject to potential impairment in the future, adversely affecting our operating results. We may not achieve the anticipated benefits of an

acquisition if we fail to evaluate it properly, and we may incur costs in excess of what we anticipate. A failure to evaluate and execute an acquisition appropriately or otherwise adequately address these risks may adversely affect our financial condition and results of operations.

We may be subject to disruptions or failures in information technology systems and network infrastructures that could have a material adverse effect on our business and financial condition.

We rely on the efficient and uninterrupted operation of complex information technology systems and network infrastructures to operate our business. A disruption, infiltration or failure of our information technology systems as a result of software or hardware malfunctions, system implementations or upgrades, computer viruses, third-party security breaches, employee error, theft or misuse, malfeasance, power disruptions, natural disasters or accidents could cause a breach of data security, loss of intellectual property and critical data and the release and misappropriation of sensitive competitive information and partner, customer, and employee personal data. Any of these events could harm our competitive position, result in a loss of customer confidence, cause us to incur significant costs to remedy any damages and ultimately materially adversely affect our business and financial condition.

Our future results of operations may be subject to volatility as a result of exposure to fluctuations in currency exchange rates.

We have significant foreign currency exposure and are affected by fluctuations among the U.S. dollar, the Chinese renminbi, or RMB, and the New Taiwan dollar, or NT dollar, because a substantial portion of our business is conducted in China and Taiwan. Our sales, raw materials, components and capital expenditures are denominated in U.S. dollars, RMB and NT dollars in varying amounts.

Foreign currency fluctuations may adversely affect our revenue and our costs and expenses, and hence our results of operations. The value of the NT dollar or the RMB against the U.S. dollar and other currencies may fluctuate and be affected by, among other things, changes in political and economic conditions. The RMB currency is no longer being pegged solely to the value of the U.S. dollar. In the long term, the RMB may appreciate or depreciate significantly in value against the U.S. dollar, depending upon the fluctuation of the basket of currencies against which it is currently valued, or it may be permitted to enter into a full float, which may also result in a significant appreciation or depreciation of the RMB against the U.S. dollar. In addition, our currency exchange variations may be magnified by Chinese exchange control regulations that restrict our ability to convert RMB into foreign currency.

Our sales in Europe are denominated in U.S. dollars and fluctuations in the Euro or our customers' other local currencies relative to the U.S. dollar may impact our customers and affect our financial performance. If our customers' local currencies weaken against the U.S. dollar, we may need to lower our prices to remain competitive in our international markets which could have a material adverse effect on our margins. If our customers' local currencies strengthen against the U.S. dollar and if the local sales prices cannot be raised due to competitive pressures, we will experience a deterioration of our margins.

To date, we have not entered into any hedging transactions in an effort to reduce our exposure to foreign currency exchange risk. While we may decide to enter into hedging transactions in the future, the availability and effectiveness of these hedging transactions may be limited and we may not be able to successfully hedge our exposure.

Natural disasters or other catastrophic events could harm our operations.

Our operations in the U.S., China and Taiwan could be subject to significant risk of natural disasters, including earthquakes, hurricanes, typhoons, flooding and tornadoes, as well as other catastrophic events, such as epidemics, terrorist attacks or wars. For example, our corporate headquarters and wafer fabrication facility in Sugar Land, Texas is located near the Gulf of Mexico, an area that is susceptible to hurricanes. We use a proprietary MBE laser manufacturing process that requires customized equipment, and this process is currently conducted and located solely at our wafer fabrication facility in Sugar Land, Texas, such that a natural disaster, terrorist attack or other catastrophic event that affects that facility would materially harm our operations. In addition, our manufacturing facility in Taipei, Taiwan, is susceptible to typhoons and earthquakes, and our manufacturing facility in Ningbo, China, has from time to time, suffered electrical outages. Any disruption in our manufacturing facilities arising from these and other natural disasters or other catastrophic events could cause significant delays in the production or shipment of our products until we are able to shift production to different facilities or arrange for third parties to manufacture our products. We may not be able to

obtain alternate capacity on favorable terms or at all. Our property insurance coverage with respect to natural disaster is limited and is subject to deductible and coverage limits. Such coverage may not be adequate or continue to be available at commercially reasonable rates and terms. The occurrence of any of these circumstances may adversely affect our financial condition and results of operation.

Our business could be negatively impacted as a result of shareholder activism.

In recent years, shareholder activists have become involved in numerous public companies. Shareholder activists frequently propose to involve themselves in the governance, strategic direction, and operations of the Company. We may in the future become subject to such shareholder activity and demands. Such demands may disrupt our business and divert the attention of our management and employees, and any perceived uncertainties as to our future direction resulting from such a situation could result in the loss of potential business opportunities, be exploited by our competitors, cause concern to our current or potential customers, and make it more difficult to attract and retain qualified personnel and business partners, all of which could adversely affect our business. In addition, actions of activist shareholders may cause significant fluctuations in our stock price based on temporary or speculative market perceptions or other factors that do not necessarily reflect the underlying fundamentals and prospects of our business.

The unfavorable outcome of any pending or future litigation or administrative action and expenses incurred in connection with litigation could result in financial losses or harm to our business.

We are, and in the future may be, subject to legal actions in the ordinary course of our operations, both domestically and internationally. There can be no assurances as to the favorable outcome of any litigation. In addition it can be costly to defend litigation and these costs could negatively impact our financial results. As disclosed in "Item 3. Legal Proceedings," on August 5, 2017, we and certain of our officers are currently subject to class action litigation related to allegations that we made materially false and misleading statements or failed to disclose material facts. Such litigation includes requests for damages and other relief. This litigation and any other such litigation could result in substantial costs and divert our management's attention from other business concerns, which could seriously harm our business.

If we fail to protect, or incur significant costs in defending, our intellectual property and other proprietary rights, our business and results of operations could be materially harmed.

Our success depends on our ability to protect our intellectual property and other proprietary rights. We rely on a combination of patent, trademark, copyright, trade secret and unfair competition laws, as well as license agreements and other contractual provisions, to establish and protect our intellectual property and other proprietary rights. We have applied for patent registrations in the U.S. and in other foreign countries, some of which have been issued. In addition, we have registered certain trademarks in the U.S. We cannot guarantee that our pending applications will be approved by the applicable governmental authorities. Moreover, our existing and future patents and trademarks may not be sufficiently broad to protect our proprietary rights or may be held invalid or unenforceable in court. A failure to obtain patents or trademark registrations or a successful challenge to our registrations in the U.S. or other foreign countries may limit our ability to protect the intellectual property rights that these applications and registrations intended to cover.

Policing unauthorized use of our technology is difficult and we cannot be certain that the steps we have taken will prevent the misappropriation, unauthorized use or other infringement of our intellectual property rights. Further, we may not be able to effectively protect our intellectual property rights from misappropriation or other infringement in foreign countries where we have not applied for patent protections, and where effective patent, trademark, trade secret and other intellectual property laws may be unavailable, or may not protect our proprietary rights as fully as U.S. law. We may seek to secure comparable intellectual property protections in other countries. However, the level of protection afforded by patent and other laws in other countries may not be comparable to that afforded in the U.S.

We also attempt to protect our intellectual property, including our trade secrets and know-how, through the use of trade secret and other intellectual property laws, and contractual provisions. We enter into confidentiality and invention assignment agreements with our employees and independent consultants. We also use non-disclosure agreements with other third parties who may have access to our proprietary technologies and information. Such measures, however, provide only limited protection, and there can be no assurance that our confidentiality and non-disclosure agreements will not be breached, especially after our employees end their employment, and that our trade secrets will not otherwise become known by competitors or that we will have adequate remedies in the event of

unauthorized use or disclosure of proprietary information. Unauthorized third parties may try to copy or reverse engineer our products or portions of our products, otherwise obtain and use our intellectual property, or may independently develop similar or equivalent trade secrets or know-how. If we fail to protect our intellectual property and other proprietary rights, or if such intellectual property and proprietary rights are infringed or misappropriated, our business, results of operations or financial condition could be materially harmed.

In the future, we may need to take legal actions to prevent third parties from infringing upon or misappropriating our intellectual property or from otherwise gaining access to our technology. Protecting and enforcing our intellectual property rights and determining their validity and scope could result in significant litigation costs and require significant time and attention from our technical and management personnel, which could significantly harm our business. We may not prevail in such proceedings, and an adverse outcome may adversely impact our competitive advantage or otherwise harm our financial condition and our business.

We may be involved in intellectual property disputes in the future, which could divert management's attention, cause us to incur significant costs and prevent us from selling or using the challenged technology.

Participants in the markets in which we sell our products have experienced frequent litigation regarding patent and other intellectual property rights. While we have a policy in place that is designed to reduce the risk of infringement of intellectual property rights of others and we have conducted a limited review of other companies' relevant patents, there can be no assurance that third parties will not assert infringement claims against us. We cannot be certain that our products would not be found infringing on the intellectual property rights of others. Regardless of their merit, responding to such claims can be time consuming, divert management's attention and resources and may cause us to incur significant expenses. Intellectual property claims against us could force us to do one or more of the following:

- obtain from a third party claiming infringement a license to the relevant technology, which may not be available on reasonable terms, or at all;
- stop manufacturing, selling, incorporating or using our products that use the challenged intellectual property;
- pay substantial monetary damages; or
- expend significant resources to redesign the products that use the technology and to develop non-infringing technology.

Any of these actions could result in a substantial reduction in our revenue and could result in losses over an extended period of time.

In any potential intellectual property dispute, our customers could also become the target of litigation. Because we often indemnify our customers for intellectual property claims made against them with respect to our products, any claims against our customers could trigger indemnification claims against us. These obligations could result in substantial expenses such as legal expenses, damages for past infringement or royalties for future use. Any indemnity claim could also adversely affect our relationships with our customers and result in substantial costs to us.

If we fail to obtain the right to use the intellectual property rights of others that are necessary to operate our business, and to protect their intellectual property, our business and results of operations will be adversely affected.

From time to time we may choose to or be required to license technology or intellectual property from third parties in connection with the development of our products. We cannot assure you that third party licenses will be available to us on commercially reasonable terms, if at all. Generally, a license, if granted, would include payments of up-front fees, ongoing royalties or both. These payments or other terms could have a significant adverse impact on our results of operations. Our inability to obtain a necessary third party license required for our product offerings or to develop new products and product enhancements could require us to substitute technology of lower quality or performance standards, or of greater cost, either of which could adversely affect our business. If we are not able to obtain licenses from third parties, if necessary, then we may also be subject to litigation to defend against infringement claims from these third parties. Our competitors may be able to obtain licenses or cross-license their technology on better terms than we can, which could put us at a competitive disadvantage.

If we fail to maintain an effective system of disclosure controls and internal control over financial reporting, the accuracy and timing of our financial reporting may be adversely affected.

Preparing our consolidated financial statements involves a number of complex manual and automated processes, which are dependent upon individual data input or review and require significant management judgment. One or more of these elements may result in errors that may not be detected and could result in a material misstatement of our consolidated financial statements. The Sarbanes-Oxley Act requires, among other things, that as a publicly-traded company we disclose whether our internal control over financial reporting and disclosure controls and procedures are effective.

In addition, since we no longer qualify as an “emerging growth company” under the JOBS Act as of December 31, 2017, we have to provide an auditor’s attestation report on our internal controls in annual reports on Form 10-K as required by Section 404(b) of the Sarbanes-Oxley Act. During the course of any evaluation, documentation or attestation, we or our independent registered public accounting firm may identify weaknesses and deficiencies that we may not otherwise identify in a timely manner or at all as a result of the deferred implementation of this additional level of review.

We have implemented a system of disclosure and internal controls that we believe provide reasonable assurance that we will be able to timely report our financial results and avoid accounting errors or material weaknesses in future periods. However, our internal controls cannot guarantee that no accounting errors exist or that all accounting errors, no matter how immaterial, will be detected because a control system, no matter how well designed and operated, can provide only reasonable, but not absolute assurance that the control system’s objectives will be met. If we are unable to implement and maintain an effective system of disclosure controls and internal control over financial reporting, our ability to accurately and timely report our financial results could be adversely impacted. This could result in late filings of our annual and quarterly reports under the Exchange Act, restatements of our consolidated financial statements, a decline in our stock price, suspension or delisting of our common stock by NASDAQ, or other material adverse effects on our business, reputation, results of operations or financial condition.

Our ability to use our net operating losses and certain other tax attributes may be limited.

As of December 31, 2017, we had U.S. accumulated net operating losses, or NOLs, of approximately \$37.7 million, federal and state research and development credits (“R&D credits”) of \$4.6 million, and foreign tax credits of \$2.0 million for U.S. federal income tax purposes. Under Section 382 of the Internal Revenue Code of 1986, as amended, if a corporation undergoes an “ownership change,” the corporation’s ability to use its pre-change NOLs, tax credits and other pre-change tax attributes to offset its post-change income may be limited. An ownership change is generally defined as a greater than 50% change in equity ownership by value over a 3-year period. Based upon an analysis of our equity ownership, we believe that we have experienced ownership changes; however, we do not believe those limitations would result in a loss of tax benefits. In addition, should we experience additional ownership changes, our NOL carry forwards and tax credits may be further limited.

Our manufacturing operations are subject to environmental regulation that could limit our growth or impose substantial costs, adversely affecting our financial condition and results of operations.

Our properties, operations and products are subject to the environmental laws and regulations of the jurisdictions in which we operate and sell products. These laws and regulations govern, among other things, air emissions, wastewater discharges, the management and disposal of hazardous materials, the contamination of soil and groundwater, employee health and safety and the content, performance, packaging and disposal of products. Our failure to comply with current and future environmental laws and regulations, or the identification of contamination for which we are liable, could subject us to substantial costs, including fines, clean-up costs, third-party property damages or personal injury claims, and make significant investments to upgrade our facilities or curtail our operations. Liability under environmental, health and safety laws can be joint and several and without regard to fault or negligence. For example, pursuant to environmental laws and regulations, including but not limited to the Comprehensive Environmental Response Compensation and Liability Act, or CERCLA, we may be liable for the full amount of any remediation-related costs at properties we currently own or formerly owned, such as our currently owned Sugar Land, Texas facility, or at properties at which we previously operated, as well as at properties we will own or operate in the future, and properties to which we have sent hazardous substances, whether or not we caused the contamination. Identification of presently

unidentified environmental conditions, more vigorous enforcement by a governmental authority, enactment of more stringent legal requirements or other unanticipated events could give rise to adverse publicity, restrict our operations, affect the design or marketability of our products or otherwise cause us to incur material environmental costs, adversely affecting our financial condition and results of operations.

We are exposed to increased expenses and business risk as a result of Restriction on Hazardous Substances, or RoHS directives.

Following the lead of the European Union, or EU, various governmental agencies have either already put into place or are planning to introduce regulations that regulate the permissible levels of hazardous substances in products sold in various regions of the world. For example, the RoHS directive for EU took effect on July 1, 2006. The labeling provisions of similar legislation in China went into effect on March 1, 2007. Consequently, many suppliers of products sold into the EU have required their suppliers to be compliant with the new directive. Many of our customers have adopted this approach and have required our full compliance. Though we have devoted a significant amount of resources and effort in planning and executing our RoHS program, it is possible that some of our products might be incompatible with such regulations. In such events, we could experience the following consequences: loss of revenue, damaged reputation, diversion of resources, monetary penalties, and legal action.

Failure to comply with the U.S. Foreign Corrupt Practices Act could subject us to penalties and other adverse consequences.

We are subject to the U.S. Foreign Corrupt Practices Act which generally prohibits U.S. companies from engaging in bribery or other prohibited payments to foreign officials for the purpose of obtaining or retaining business. In addition, we are required to maintain records that accurately and fairly represent our transactions and have an adequate system of internal accounting controls. Foreign companies, including some that may compete with us, may not be subject to these prohibitions, and therefore may have a competitive advantage over us. If we are not successful in implementing and maintaining adequate preventative measures, we may be responsible for acts of our employees or other agents engaging in such conduct. We could suffer severe penalties and other consequences that may have a material adverse effect on our financial condition and results of operations.

We are subject to governmental export and import controls that could subject us to liability or impair our ability to compete in international markets.

We are subject to export and import control laws, trade regulations and other trade requirements that limit which products we sell and where and to whom we sell our products. Specifically, the Bureau of Industry and Security of the U.S. Department of Commerce is responsible for regulating the export of most commercial items that are so called dual-use goods that may have both commercial and military applications. Our products are classified under Export Control Classification Numbers, or ECCNs, 5A991 and 6A995. Export Control Classification requirements are dependent upon an item's technical characteristics, the destination, the end-use, the end-user, and other activities of the end-user. Should the regulations applicable to our products change, or the restrictions applicable to countries to which we ship our products change, then the export of our products to such countries could be restricted. As a result, our ability to export or sell our products to certain countries could be restricted, which could adversely affect our business, financial condition and results of operations. Changes in our products or any change in export or import regulations or related legislation, shift in approach to the enforcement or scope of existing regulations, or change in the countries, persons or technologies targeted by such regulations, could result in delayed or decreased sales of our products to existing or potential customers. In such event, our business and results of operations could be adversely affected.

Rapidly changing standards and regulations could make our products obsolete, which would cause our revenue and results of operations to suffer.

We design our products to conform to regulations established by governments and to standards set by industry standards bodies worldwide, such as the American National Standards Institute, the European Telecommunications Standards Institute, the International Telecommunications Union and the Institute of Electrical and Electronics Engineers, Inc. Various industry organizations are currently considering whether and to what extent to create standards applicable to our products. Because certain of our products are designed to conform to current specific industry standards, if competing or new standards emerge that are preferred by our customers, we would have to make significant

expenditures to develop new products. If our customers adopt new or competing industry standards with which our products are not compatible, or the industry groups adopt standards or governments issue regulations with which our products are not compatible, our existing products would become less desirable to our customers and our revenue and results of operations would suffer.

Compliance with regulations related to conflict minerals could increase costs and affect the manufacturing and sale of our products.

Public companies are required to disclose the use of tin, tantalum, tungsten and gold (collectively, “conflict minerals”) mined from the Democratic Republic of the Congo and adjoining countries (the “covered countries”) if a conflict mineral(s) is necessary to the functionality of a product manufactured, or contracted to be manufactured, by the Company. We filed our latest conflict minerals report on Form SD on May 30, 2018. We have previously determined, as part of our compliance efforts, that certain products or components we obtain from our suppliers contain conflict minerals. Based on our Reasonable Country of Origin Inquiry on the source of our conflict minerals for the year ended December 31, 2017, we had reason to believe that certain of such conflict minerals likely originated in covered countries. If we are unable to conclude in the future that all our products are free from conflict minerals originating from covered countries, this could have a negative impact on our business, reputation and/or results of operations. We may also encounter challenges to satisfy customers who require that our products be certified as conflict free, which could place us at a competitive disadvantage if we are unable to substantiate such a claim. Compliance with these rules could also affect the sourcing and availability of some of the minerals used in the manufacture of products or components we obtain from our suppliers, including our ability to obtain products or components in sufficient quantities and/or at competitive prices. Certain of our customers are requiring additional information from us regarding the origin of our raw materials, and complying with these customer requirements may cause us to incur additional costs, such as costs related to determining the origin of any minerals used in our products. Our supply chain is complex and we may be unable to verify the origins for all metals used in our products. We may also encounter challenges with our customers and stockholders if we are unable to certify that our products are conflict free.

Some provisions of our named executive officers’ agreements regarding change of control or separation of service contain obligations for us to make separation payments to them upon their termination.

Certain provisions contained in our employment agreements with our named executive officers regarding change of control or separation of service may obligate us to make lump sum severance payments and related payments upon the termination of their employment with us, other than such executive officer’s resignation without good reason or our termination of their employment as a result of their disability or for cause. In the event we are required to make these separation payments, it could have a material adverse effect on our results of operations for the fiscal period in which such payments are made.

Risks Related to Our Operations in China

Our business operations conducted in China are critical to our success. A total of \$122.3 million, \$57.4 million and \$20.6 million or 32.0%, 22.0% and 11.0%, of our revenue in the years ended December 31, 2017, 2016 and 2015 was attributable to our product manufacturing plants in China, respectively. Additionally, a substantial portion of our property, plant and equipment, 29.9%, 23.0% and 22% as of December 31, 2017, 2016 and 2015, was located in China, respectively. We expect to make further investments in China in the foreseeable future. Therefore, our business, financial condition, results of operations and prospects are to a significant degree subject to economic, political, legal, and social events and developments in China.

Adverse changes in economic and political policies in China, or Chinese laws or regulations could have a material adverse effect on business conditions and the overall economic growth of China, which could adversely affect our business.

The Chinese economy differs from the economies of most developed countries in many respects, including the level of government involvement, level of development, growth rate, control of foreign exchange and allocation of resources. The Chinese economy has been transitioning from a planned economy to a more market-oriented economy. Despite reforms, the government continues to exercise significant control over China’s economic growth by way of the

allocation of resources, control over foreign currency-denominated obligations and monetary policy and provision of preferential treatment to particular industries or companies.

In addition, the laws, regulations and legal requirements in China, including the laws that apply to foreign-invested enterprises, or FIEs, are subject to frequent changes. The interpretation and enforcement of such laws is uncertain. Protections of intellectual property rights and confidentiality in China may not be as effective as in the U.S. or other countries or regions with more developed legal systems. Any litigation in China may be protracted and result in substantial costs and diversion of resources and management attention. Any adverse changes to these laws, regulations and legal requirements or their interpretation or enforcement could have a material adverse effect on our business.

Furthermore, while China's economy has experienced rapid growth in the past 20 years, growth has been uneven across different regions, among various economic sectors and over time. China has also in the past and may in the future experience economic downturns due to, for example, government austerity measures, changes in government policies relating to capital spending, limitations placed on the ability of commercial banks to make loans, reduced levels of exports and international trade, inflation, lack of financial liquidity, stock market volatility and global economic conditions. Any of these developments could contribute to a decline in business and consumer spending in addition to other adverse market conditions, which could adversely affect our business.

The termination and expiration or unavailability of our preferential tax treatments in China may have a material adverse effect on our operating results.

Prior to January 1, 2008, entities established in China were generally subject to a 30% state and 3% local enterprise income tax rate. In accordance with the China Income Tax Law for Enterprises with Foreign Investment and Foreign Enterprises, effective through December 31, 2007, our China subsidiary enjoyed preferential income tax rates. Effective January 1, 2008, the China Enterprise Income Tax Law, or the EIT law, imposes a single uniform income tax rate of 25% on all Chinese enterprises, including FIEs, and eliminates or modifies most of the tax exemptions, reductions and preferential treatment available under the previous tax laws and regulations. As a result, our China subsidiary may be subject to the uniform income tax rate of 25% unless we are able to qualify for preferential status. Since calendar year 2012, we have qualified for a preferential 15% tax rate that is available for state-encouraged new high technology enterprises. In order to retain this preferential tax rate, we must meet certain operating conditions, satisfy certain product requirements, meet certain headcount requirements and maintain certain levels of research expenditures. In November 2017, we received approval from the Chinese government to extend this preferential tax treatment for an additional three years, ending November 2020. If we fail to continue to qualify for this preferential rate in the future, we may incur higher tax rates on our income in China. Any future increase in the enterprise income tax rate applicable to us or the expiration or other limitation of preferential tax rates available to us could increase our tax liabilities and reduce our net income.

The turnover of direct labor in manufacturing industries in China is high, which could adversely affect our production, shipments and results of operations.

Employee turnover of direct labor in the manufacturing sector in China is extremely high and retention of such personnel is a challenge to companies located in or with operations in China. Although direct labor costs do not represent a high proportion of our overall manufacturing costs, direct labor is required for the manufacture of our products. If our direct labor turnover rates are higher than we expect, or we otherwise fail to adequately manage our direct labor turnover rates, then our results of operations could be adversely affected.

Chinese regulation of loans to and direct investment by offshore holding companies in China entities may delay or prevent us from making loans or additional capital contributions to our China subsidiary.

Any loans that we wish to make to our China subsidiary are subject to Chinese regulations and approvals. For example, any loans to our China subsidiary to finance their activities cannot exceed statutory limits, must be registered with State Administration of Foreign Exchange, or SAFE, or its local counterpart, and must be approved by the relevant government authorities. Any capital contributions to our China subsidiary must be approved by the Ministry of Commerce or its local counterpart. In addition, under Circular 142, our China subsidiary, as a FIE, may not be able to convert our capital contributions to them into RMB for equity investments or acquisitions in China.

We cannot assure you that we will be able to obtain these government registrations or approvals on a timely basis, if at all, with respect to our future loans or capital contributions to our China subsidiary. If we fail to receive such registrations or approvals, our ability to capitalize our China subsidiary may be negatively affected, which could materially and adversely affect our liquidity and ability to fund and expand our business.

Our China subsidiary is subject to Chinese labor laws and regulations, and Chinese labor laws may increase our operating costs in China.

Chinese labor laws and regulations provide certain protections for our employees located in China, and changes to those labor laws and regulations may increase our costs and reduce our flexibility. The China Labor Contract Law, which went into effect in 2008, together with its implementing rules, provides increased rights to Chinese employees compared to prior employment laws in China. Under the rules under the China Labor Contract Law, the probation period varies depending on contract terms and the employment contract can only be terminated during the probation period for cause upon three days' notice. Additionally, an employer may not be able to terminate a contract during the probation period on the grounds of a material change of circumstances or a mass layoff. The law also has specific provisions on conditions when an employer has to sign an employment contract with open-ended terms. If an employer fails to enter into an open-ended contract in certain circumstances, the employer must pay the employee twice their monthly wage beginning from the time the employer should have executed an open-ended contract. Additionally, an employer must pay severance for nearly all terminations, including when an employer decides not to renew a fixed-term contract. Any further changes to these laws may increase our costs and reduce our flexibility.

An increase in our labor costs in China may adversely affect our business and our profitability.

A significant portion of our workforce is located in China. Labor costs in China have been increasing recently due to labor unrest, strikes and changes in employment laws. If labor costs in China continue to increase, our costs will increase. If we are not able to pass these increases on to our customers, our business, profitability and results of operations may be adversely affected.

We may have difficulty establishing and maintaining adequate management and financial controls over our China operations.

Businesses in China have historically not adopted a western style of management and financial reporting concepts and practices, which includes strong corporate governance, internal controls and computer, financial and other control systems. Moreover, familiarity with U.S. GAAP principles and reporting procedures is less common in China. As a consequence, we may have difficulty finding accounting personnel experienced with U.S. GAAP, and we may have difficulty training and integrating our China-based accounting staff with our U.S.-based finance organization. As a result of these factors, we may experience difficulty in establishing and maintaining management and financial controls over our China operations. These difficulties include collecting financial data and preparing financial statements, books of account and corporate records and instituting business practices that meet U.S. public-company reporting requirements. We may, in turn, experience difficulties in implementing and maintaining adequate internal controls as required under Section 404 of the Sarbanes-Oxley Act.

Risks Related to Our Common Stock

Our stock price has been and is likely to be volatile.

The market price of our common stock has been and is likely to be subject to wide fluctuations in response to, among other things, the risk factors described in this section of this Quarterly Report on Form 10-Q, and other factors beyond our control, such as fluctuations in the valuation of companies perceived by investors to be comparable to us. For example, announcements made by competitors regarding factors influencing their business may cause fluctuations in the valuation of companies throughout our industry, including fluctuations in the valuation of our stock.

Furthermore, the stock markets have experienced price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies. These fluctuations often have been unrelated or disproportionate to the operating performance of those companies. These broad market and industry fluctuations, as well as general economic, political and market conditions, such as recessions, interest rate changes or international currency fluctuations, may negatively affect the market price of our common stock.

In the past, many companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We have been and may become the target of this type of litigation in the future. For example, on August 3, 2017 we provided guidance for the third quarter of 2017, and on August 4, 2017 the market price of our stock decreased significantly. As disclosed in "Item 3. Legal Proceedings," on August 5, 2017, a class action lawsuit was filed against us and two of our officers. The complaint in this matter alleges that we made materially false and misleading statements or failed to disclose material facts and requests damages and other relief. On August 7, 2018, a derivative class action lawsuit was filed against our chief executive officer, chief financial officer and board of directors. The allegations are substantially similar to those under the August 5, 2017 lawsuit. On October 1, 2018, another class action lawsuit was filed in the U.S. District Court for the Southern District of Texas against us and two of our officers. The complaint in this matter alleges that we made materially false and misleading statements or failed to disclose material facts and a related action was filed on October 10, 2018. These lawsuits and any other such litigation could result in substantial costs and divert our management's attention from other business concerns, which could seriously harm our business.

We have incurred and will continue to incur significant increased expenses and administrative burdens as a public company, which could have a material adverse effect on our operations and financial results.

We face increased legal, accounting, administrative and other costs and expenses as a public company that we did not incur as a private company, and greater expenditures may be necessary in the future with the advent of new laws, regulations and stock exchange listing requirements pertaining to public companies. These increased costs will require us to divert a significant amount of money that we could otherwise use to expand our business and achieve our strategic objectives. The Sarbanes-Oxley Act, including the requirements of Section 404, as well as rules and regulations subsequently implemented by the SEC, the Public Company Accounting Oversight Board and the NASDAQ Global Market, impose additional reporting and other obligations on public companies. Compliance with public company requirements has increased our costs and made some activities more time-consuming. For example, we have created board committees and adopted internal controls and disclosure controls and procedures. In addition, we have incurred and will continue to incur additional expenses associated with our SEC reporting requirements. Furthermore, if we identify any issues in complying with those requirements (for example, if we or our auditors identify a material weakness or significant deficiency in our internal control over financial reporting), we could incur additional costs rectifying those issues, and the existence of those issues could adversely affect us, our reputation or investor perceptions of us. Advocacy efforts by stockholders and third parties may also prompt additional changes in governance and reporting requirements, which could further increase our costs. As of December 31, 2017, we became a "large accelerated filer" and, accordingly, no longer qualify as an emerging growth company and are no longer able to rely on certain exemptions that were available to us as an emerging growth company. Legal, accounting, administrative and other costs and expenses may increase in the future as we continue to incur both increased external audit fees as well as additional spending to ensure continued regulatory compliance.

We currently do not intend to pay dividends on our common stock and, consequently, your only opportunity to achieve a return on your investment is if the price of our common stock appreciates.

We currently do not plan to declare or pay dividends on shares of our common stock in the foreseeable future. Consequently, your only opportunity to achieve a return on any shares of our common stock that you may acquire will be if the market price of our common stock appreciates and you sell your shares at a profit. There is no guarantee that the price of our common stock in the market will ever exceed the price that you pay.

Our charter documents, stock incentive plans and Delaware law could prevent a takeover that stockholders consider favorable and could also reduce the market price of our stock.

Our amended and restated certificate of incorporation and our amended and restated bylaws and our stock incentive plans contain provisions that could delay or prevent a change in control of our company. These provisions could also make it more difficult for stockholders to elect directors and take other corporate actions. These provisions include:

- providing for a classified board of directors with staggered, three-year terms;
- not providing for cumulative voting in the election of directors;

- authorizing our board of directors to issue, without stockholder approval, preferred stock rights senior to those of common stock;
- prohibiting stockholder action by written consent;
- limiting the persons who may call special meetings of stockholders;
- requiring advance notification of stockholder nominations and proposals; and
- change of control provisions in our stock incentive plans, and the individual stock option agreements, which provide that a change of control may accelerate the vesting of the stock options and equity awards issued under such plans.

In addition, we are governed by the provisions of Section 203 of the Delaware General Corporate Law. These provisions may prohibit large stockholders, in particular those owning 15% or more of our outstanding common stock, from engaging in certain business combinations without the approval of substantially all of our stockholders for a certain period of time.

These and other provisions in our amended and restated certificate of incorporation, our amended and restated bylaws and under Delaware law could discourage potential takeover attempts, reduce the price that investors might be willing to pay for shares of our common stock in the future and result in the market price being lower than it would be without these provisions.

If research analysts do not publish research about our business or if they issue unfavorable commentary or downgrade our common stock, our stock price and trading volume could decline.

The trading market for our common stock depends on the research and reports that research analysts publish about us and our business. The price of our common stock could decline if one or more research analysts downgrade our common stock or if those analysts issue other unfavorable commentary or cease publishing reports about us or our business. If one or more of the research analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our stock could decrease, which could cause our stock price or trading volume to decline.

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

None.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

See Exhibit Index.

EXHIBIT INDEX

Number	Description
3.1*	Amended and Restated Certificate of Incorporation, as currently in effect (filed as Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 14, 2013).
3.2*	Amended and Restated Bylaws, as currently in effect (filed as Exhibit 3.2 to the Registrant's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 14, 2013).
4.1*	Common Stock Specimen (filed as Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on July 15, 2015).
10.1*	Translation of the Maximum Loan (Credit Line) Agreement, dated September 21, 2018, between Global Technology, Inc. and China Construction Bank Co., Ltd. (filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on September 27, 2018).
10.2*	Translation of the Security Agreement, dated September 21, 2018, between Global Technology, Inc. and China Construction Bank Co., Ltd. (filed as Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on September 27, 2018).
31.1**	Certification of Chief Executive Officer pursuant to Exchange Act Rule, 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2**	Certification of Chief Financial Officer pursuant to Exchange Act Rule, 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1**	Certification pursuant to 18 U.S.C. 1350, adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, by Chief Executive Officer and Chief Financial Officer.
101.INS**	XBRL Instance Document.
101.SCH**	XBRL Taxonomy Extension Schema Document.
101.CAL**	XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF**	XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB**	XBRL Taxonomy Extension Label Linkbase Document.
101.PRE**	XBRL Taxonomy Extension Presentation Linkbase Document.

* Incorporated herein by reference to the indicated filing.

** Filed herewith.

SIGNATURES

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

APPLIED OPTOELECTRONICS, INC.

Date: November 8, 2018

By: /s/ STEFAN J. MURRY
Stefan J. Murry
Chief Financial Officer
(principal financial officer and principal accounting officer)

Certification

I, Chih-Hsiang (Thompson) Lin, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Applied Optoelectronics, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of , and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 8, 2018

/s/ CHIH-HSIANG (THOMPSON) LIN

CHIH-HSIANG (THOMPSON) LIN

President and Chief Executive Officer

Certification

I, Stefan J. Murry, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Applied Optoelectronics, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of , and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 8, 2018

/s/ STEFAN J. MURRY

STEFAN J. MURRY

Chief Financial Officer

Certification

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and Section 1350 of Chapter 63 of Title 18 of the U.S. Code (18 U.S.C. § 1350), Chih-Hsiang (Thompson) Lin, President and Chief Executive Officer of Applied Optoelectronics, Inc. (the "Company"), and Stefan J. Murry, Chief Financial Officer and Senior Vice President of the Company, each hereby certifies that, to the best of his knowledge;

1. The Company's Quarterly Report on Form 10-Q for the period ended September 30, 2018, to which this Certification is attached as Exhibit 32.1 (the "Quarterly Report") fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act; and
2. The information contained in the Quarterly Report fairly presents, in all material respects, the financial condition and results of the operation of the Company.

In Witness Whereof, the undersigned have set their hands hereto as of the 8th day of November, 2018.

/s/ CHIH-HSIANG (THOMPSON) LIN

CHIH-HSIANG (THOMPSON) LIN

President and Chief Executive Officer

/s/ STEFAN J. MURRY

STEFAN J. MURRY

Chief Financial Officer

This certification accompanies the Quarterly Report to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Applied Optoelectronics, Inc. under the Securities Act of 1933, as amended, or the Securities Act of 1934, as amended (whether made before or after the date of the Quarterly Report), irrespective of any general incorporation language contained in such filing.
