UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

/x/ 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 No. 0-12695

INTEGRATED DEVICE TECHNOLOGY, INC.

(Exact Name of Registrant as Specified in Its Charter)

DELAWARE	**94-2669985**
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)
6024 SILVER CREEK VALLEY ROAD, SAN JOSE, CALIFORNIA	**95138**
(Address of Principal Executive Offices)	(Zip Code)

Registrant's Telephone Number, Including Area Code: **(408) 284-8200**

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T of this chapter) 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 or a smaller reporting company. See definition of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

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

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

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

The number of outstanding shares of the registrant's Common Stock, $.001 par value, as of November 2, 2018 was approximately 129,020,313.

INTEGRATED DEVICE TECHNOLOGY, INC.

QUARTERLY REPORT ON FORM 10-Q

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PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

INTEGRATED DEVICE TECHNOLOGY, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS

(Unaudited, in thousands)	September 30, 2018	April 1, 2018
Assets		
Current assets:		
Cash and cash equivalents	$ 200,645	$ 136,873
Short-term investments	192,032	222,026
Accounts receivable, net	129,405	108,779
Inventories	61,078	68,702
Prepayments and other current assets	12,358	12,734
Total current assets	595,518	549,114
Property, plant and equipment, net	88,986	86,845
Goodwill	420,117	420,117
Intangible assets, net	174,886	180,781
Deferred tax assets	8,453	11,764
Other assets	50,202	61,910
Total assets	$ 1,338,162	$ 1,310,531
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 42,106	$ 41,070
Accrued compensation and related expenses	39,900	44,002
Current portion of bank loan	1,980	2,000
Other accrued liabilities	44,091	26,524
Total current liabilities	128,077	113,596
Deferred tax liabilities	11,362	10,221
Long-term income tax payable	23,539	25,034
Convertible notes	306,827	299,551
Long-term bank loan, net	190,513	191,073
Other long-term liabilities	30,286	25,684
Total liabilities	690,604	665,159
Commitments and contingencies (Note 13)		
Stockholders' equity:		
Preferred stock: $0.001 par value: 10,000 shares authorized; no shares issued	—	—
Common stock: $0.001 par value: 350,000 shares authorized; 128,999 and 129,531 shares outstanding as of September 30, 2018 and April 1, 2018, respectively	129	130
Additional paid-in capital	2,792,906	2,752,784
Treasury stock at cost: 131,140 and 128,518 shares as of September 30, 2018 and April 1, 2018, respectively	(1,889,110)	(1,801,624)
Accumulated deficit	(248,906)	(301,155)
Accumulated other comprehensive loss	(7,461)	(4,763)
Total stockholders' equity	647,558	645,372
Total liabilities and stockholders' equity	$ 1,338,162	$ 1,310,531

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

INTEGRATED DEVICE TECHNOLOGY, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(Unaudited, in thousands, except per share data)	Three Months Ended September 30, 2018	Three Months Ended October 1, 2017	Six Months Ended September 30, 2018	Six Months Ended October 1, 2017
Revenues	$ 235,484	$ 204,398	$ 464,000	$ 401,111
Cost of revenues	91,900	87,636	183,809	174,311
Gross profit	143,584	116,762	280,191	226,800
Operating expenses:				
Research and development	55,509	48,742	107,743	97,191
Selling, general and administrative	46,753	44,485	89,748	86,427
Total operating expenses	102,262	93,227	197,491	183,618
Operating income	41,322	23,535	82,700	43,182
Other-than-temporary impairment loss on investment	—	—	(2,000)	—
Interest expense	(7,045)	(6,834)	(14,230)	(13,731)
Interest income and other, net	2,437	1,948	4,108	4,930
Income before income taxes	36,714	18,649	70,578	34,381
Benefit from (provision for) income taxes	(1,214)	31	(4,358)	1,013
Net income	$ 35,500	$ 18,680	$ 66,220	$ 35,394
Net income per share:				
Basic	$ 0.27	$ 0.14	$ 0.51	$ 0.27
Diluted	$ 0.26	$ 0.14	$ 0.49	$ 0.26
Weighted average shares:				
Basic	129,155	133,269	129,357	133,286
Diluted	134,755	136,059	133,957	136,434

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

INTEGRATED DEVICE TECHNOLOGY, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	Three Months Ended		Six Months Ended	
(Unaudited, in thousands)	**September 30, 2018**	**October 1, 2017**	**September 30, 2018**	**October 1, 2017**
Net income	$ 35,500	$ 18,680	$ 66,220	$ 35,394
Other comprehensive income (loss), net of taxes:				
Currency translation adjustments	(291)	1,228	(2,999)	2,631
Change in net unrealized gain on investments, net of tax	272	78	301	212
Total other comprehensive income (loss)	(19)	1,306	(2,698)	2,843
Comprehensive income	$ 35,481	$ 19,986	$ 63,522	$ 38,237

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

INTEGRATED DEVICE TECHNOLOGY, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

	Six Months Ended	
(Unaudited, in thousands)	September 30, 2018	October 1, 2017
Cash flows from operating activities:		
Net income	$ 66,220	$ 35,394
Adjustments:		
Depreciation	13,506	13,173
Amortization of intangible assets	20,767	21,626
Amortization of debt issuance costs and debt discount	7,686	7,326
Other-than-temporary impairment loss on investment	2,000	—
Stock-based compensation expense, net of amounts capitalized in inventory	30,700	24,769
Deferred income tax	4,452	(7,550)
Changes in assets and liabilities, net of acquisitions:		
Accounts receivable, net	(9,662)	(1,569)
Inventories	7,656	7,111
Prepayments and other assets	(2,831)	1,112
Accounts payable	1,889	(7,633)
Accrued compensation and related expenses	(4,103)	852
Deferred income on shipments to distributors	—	838
Income taxes payable and receivable	(3,432)	4,573
Other accrued liabilities and long-term liabilities	4,774	(1,413)
Net cash provided by operating activities	139,622	98,609
Cash flows from investing activities:		
Business acquisitions, net of cash acquired	—	(237,716)
Asset acquisition	—	(12,956)
Purchases of property, plant and equipment, net	(17,294)	(15,531)
Purchases of intangible assets	(3,045)	(259)
Purchase of non-marketable equity securities	(950)	(10,000)
Purchases of short-term investments	(13,096)	(128,718)
Proceeds from sales of short-term investments	4,455	77,287
Proceeds from maturities of short-term investments	38,436	21,292
Net cash provided by (used in) investing activities	8,506	(306,601)
Cash flows from financing activities:		
Proceeds from issuance of common stock	9,389	5,154
Repurchases of common stock	(87,486)	(58,312)
Payment of capital lease obligations	(581)	(587)
Proceeds of Initial Term B Loan, net of discount and issuance costs	—	194,252
Principal payments of long-term bank loan	(990)	(1,000)
Payment of contingent consideration	(2,790)	—
Net cash provided by (used in) financing activities	(82,458)	139,507
Effect of exchange rates on cash and cash equivalents	(1,898)	1,828
Net increase (decrease) in cash and cash equivalents	63,772	(66,657)
Cash and cash equivalents at beginning of period	136,873	214,554
Cash and cash equivalents at end of period	$ 200,645	$ 147,897

Supplemental disclosure of cash flow information	Six Months Ended	
(Unaudited, in thousands)	**September 30, 2018**	**October 1, 2017**
Non-cash investing and financing activities:		
Additions to property, plant and equipment included in accounts payable	$ 661	$ 1,109
Additions to intangible assets included in accounts payable and other accrued liabilities	$ 12,605	$ 4,768
Fair value of partially vested employee equity awards related to pre-combination services that were assumed as part of the business acquisition	$ —	$ 3,400
Contingent consideration in connection with the asset acquisition included in other accrued liabilities and other long-term liabilities	$ —	$ 4,080

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

INTEGRATED DEVICE TECHNOLOGY, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

Note 1. Summary of Significant Accounting Policies

Nature of Business. Integrated Device Technology, Inc. (IDT or the Company) designs, develops, manufactures and markets a broad range of integrated circuits for the advanced communications, computing, consumer and automotive industries.

Pending Merger with Renesas Electronics Corporation. On September 10, 2018, the Company entered into an Agreement and Plan of Merger (the "Merger Agreement") with Renesas Electronics Corporation, a Japanese corporation ("Renesas"). The Merger Agreement and the Merger (as defined below) have been approved by the boards of directors of both companies.

The Merger Agreement provides that a wholly owned direct subsidiary of Renesas ("Merger Sub") will be merged with and into IDT (the "Merger"), with IDT continuing as the surviving corporation and a direct wholly owned subsidiary of Renesas.

At the effective time of the Merger, each outstanding share of common stock, par value $0.001 per share, of IDT (a "Company Share"), other than shares held by stockholders who have validly exercised their appraisal rights under Delaware law, and certain shares owned by IDT, Renesas and their subsidiaries, will be automatically converted into the right to receive $49.00 in cash, without interest.

The Merger Agreement contains customary representations, warranties and covenants. The consummation of the Merger is conditioned on the receipt of the approval of IDT's stockholders, as well as the satisfaction of other customary closing conditions, including domestic and foreign regulatory approvals and performance in all material respects by each party of its obligations under the Merger Agreement. Consummation of the Merger is not subject to a financing condition. Closing of the Merger is expected in the first half of calendar 2019 subject to two three-month extensions in order to obtain required regulatory approvals.

The Merger Agreement contains certain termination rights for IDT and Renesas, including if a governmental body prohibits the Merger or if the Merger is not consummated before June 10, 2019, subject to the two three-month extensions mentioned above. Upon termination of the Merger Agreement under specified circumstances, IDT or Renesas will be required to pay the other party a termination fee of $166.4 million.

The Company recorded transaction-related costs of $3.9 million, principally for outside financial advisory, legal and related fees and expenses associated with the pending acquisition in the three months ended September 30, 2018. These costs are recorded in selling, general and administrative expense included in the Condensed Consolidated Statement of Operations for the three and six months ended September 30, 2018. Additional transaction-related costs are expected to be incurred through the closing of the Merger.

Basis of Presentation. The Company's fiscal year is the 52 or 53 week period ending on the Sunday closest to March 31. In a 52 week year, each fiscal quarter consists of 13 weeks. In a 53 week year, the additional week is usually added to the third quarter, making such quarter consist of 14 weeks. The first and second quarters of fiscal 2019 and fiscal 2018 were 13 week periods.

Principles of Consolidation. The condensed consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All inter-company accounts and transactions have been eliminated.

Use of Estimates. The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

Significant Accounting Policies. For a description of significant accounting policies, see Note 1, Summary of Significant Accounting Policies to the consolidated financial statements included in the Company's annual report on Form 10-K for the fiscal year ended April 1, 2018. There have been no material changes to the Company's significant accounting policies since the filing of the annual report on Form 10-K other than Revenue Recognition Policy detailed below.

Revenue Recognition Policy Effective April 2, 2018

Effective April 2, 2018, the Company adopted Financial Accounting Standards Board or FASB ASU No. 2014-09, *Revenue from Contracts with Customers* (ASC Topic 606) using the modified retrospective method applied to those contracts which were not completed as of April 2, 2018.

The Company recognizes revenue when control of its goods and services is transferred to its customers, in an amount that reflects the consideration the Company expects to be entitled to in exchange for its services. Sales taxes are excluded from revenue. The Company determines revenue recognition through the following steps:

- Identification of the contract or contracts with a customer
- Identification of the performance obligation in the contract
- Determination of the transaction price

- Allocation of the transaction price to the performance obligations in the contract
- Recognition of revenue when, or as, the Company satisfies a performance obligation

The Company's revenue results from semiconductor products sold through three channels: direct sales to original equipment manufacturers (OEMs) and electronic manufacturing service providers (EMSs), consignment sales to OEMs and EMSs, and sales through distributors. Revenue for semiconductor products is recognized when the control is transferred to the customer, which is typically upon shipment to customers. Distributors have rights to price protection, ship from stock pricing credits and stock rotation. The Company accounts for the right of returns, rebates and other pricing adjustments as variable consideration and uses the portfolio approach to estimate these amounts based on the expected amount to be provided to customers and reduce the revenue recognized. The Company utilizes historical experience and market trends to estimate the reserves. Historically, differences between actual and estimated credits have not been material.

For proprietary software licenses that constitute functional intellectual properties, revenue is recognized at the later of when (i) the license term starts and (ii) the software is made available to customers.

The Company recognizes revenue from per-unit royalty-based IP licenses in the period the licensee consumes the licenses. The revenues from fixed-price support or maintenance performance obligations are recognized ratably over the support period consistently with the stand-ready nature of these performance obligations.

The Company's non-recurring engineering ("NRE") contracts with customers may include multiple performance obligations. For NRE arrangements, the Company allocates revenue to each performance obligation based on its relative standalone selling price. Revenue is recognized over time in the amount to which the Company has a right to invoice, if the right to consideration from the customer is in an amount that corresponds reasonably with the value to the customer of the entity's performance completed to date.

Practical Expedients and Elections

The Company recognizes commission costs as incurred for costs to obtain a contract when the amortization period would have been one year or less. As a result, no commission costs are capitalized.

The Company does not disclose the value of unsatisfied performance obligations for (i) contracts with an original expected length of one year or less and (ii) contracts for which the Company recognizes revenue at the amount to which the Company has the right to invoice for services performed. The Company does not disclose the nature of the performance obligations and the remaining duration of the performance obligations.

The Company has elected to account for shipping and handling costs as fulfillment costs after the customer obtains control of the goods.

The Company also elects to exclude amounts collected from customers for all sales taxes from the transaction price.

The Company has adopted the practical expedient which states an entity need not adjust the promised amount of consideration for the effects of a significant financing component if the entity expects, at contract inception, that the period between when the entity transfers a promised good or service to the customer and when the customer pays for that good or service will be one year or less.

In the opinion of management, these condensed consolidated financial statements, consisting only of normal recurring adjustments, reflect all adjustments which are necessary for the fair statement of the condensed consolidated financial statements for the interim period.

Accounting Pronouncements Recently Adopted

Adoption of ASC Topic 606:

On May 28, 2014, FASB issued ASC Topic 606, which creates a single source of revenue guidance under US generally accepted accounting principles for all companies, in all industries, effective for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period. Under the new standard, an entity is required to recognize revenue upon transfer of promised goods or services to customers in an amount that reflects the expected consideration received in exchange for goods and services. The FASB also issued additional guidance that defines a five-step process in order to achieve this core principle, which may require the use of judgment and estimates, and also requires expanded qualitative and quantitative disclosures relating to the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers, including significant judgments and estimates used. The new standard permits adoption either by using (i) a full retrospective approach for all periods presented in the period of adoption or (ii) a modified retrospective approach with the cumulative effect of initially applying the new standard recognized at the date of initial application and providing certain additional disclosures. This new guidance supersedes the revenue recognition requirements in ASC Topic 605, *Revenue Recognition*, and most industry-specific guidance throughout the industry topics of the standard.

Effective April 2, 2018, the Company adopted ASC Topic 606 using the modified retrospective method applied to those contracts which were not completed as of April 2, 2018. Results for reporting periods beginning after April 2, 2018 are presented under ASC Topic 606. Prior period amounts are not adjusted and continue to be reported in accordance with its historic accounting under ASC Topic 605. The sale of semiconductor products accounts for the substantial majority of the Company's consolidated revenue and recognition for such product sales has remained the same under ASC Topic 606 as that under Topic 605. Additionally, other revenue streams remain substantially unchanged. Hence, there was no impact on the opening accumulated deficit as of April 2, 2018 due to the adoption of Topic 606. The Company expects the ongoing impact of the new revenue standard to be immaterial to the consolidated financial statements. Additionally, the balance sheet presentation of certain reserve balances previously shown net within accounts receivable are now presented as refund liabilities within "Other Accrued Liabilities" on the Condensed Consolidated Balance Sheets. Refer to Significant Accounting Policies section above for the Company's practical expedients and elections.

Other recently adopted pronouncements:

In January 2016, the FASB issued ASU No. 2016-01, *Recognition and Measurement of Financial Assets and Financial Liabilities*, which changes the current accounting related to (i) the classification and measurement of certain equity investments, (ii) the presentation of changes in the fair value of financial liabilities measured under the fair value option that are due to instrument-specific credit risk, and (iii) certain disclosures associated with the fair value of financial instruments. Most notably, ASU 2016-01 requires that equity investments, with certain exemptions, be measured at fair value with changes in fair value recognized in net income as opposed to other comprehensive income. The guidance further clarifies that an entity should evaluate the need for a valuation allowance on a deferred tax asset related to available-for-sale securities in combination with the entity's other deferred tax assets. The Company adopted this guidance in the first quarter of fiscal 2019 on a retrospective basis and concluded that there is no cumulative effect adjustment. The Company has elected to measure equity investments that do not have readily determinable fair values at 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 (referred to as the measurement alternative). See Note 6 for details.

In October 2016, the FASB issued ASU 2016-16, *Intra-Entity Transfers of Assets Other Than Inventory*, which requires entities to recognize the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs. This amends current GAAP which prohibits recognition of current and deferred income taxes for all types of intra-entity asset transfers until the asset has been sold to a third party or otherwise recovered through use. The Company adopted the new guidance in the first quarter of fiscal 2019. Upon adoption, the Company applied a modified retrospective transition approach and recognized the unamortized portion of the deferred tax charge of $13.9 million through a cumulative-effect adjustment to accumulated deficit.

In March 2018, the FASB issued ASU 2018-05, Amendments to SEC Paragraphs Pursuant to SEC Staff Accounting Bulletin No. 118. The amendments allow companies to record provisional amounts during a measurement period that is similar to the measurement period used when accounting for business combinations. As of April 1, 2018, the Company has made reasonable estimates of the effects on its existing deferred tax balances and the one-time repatriation tax recording provisional charges as a component of income tax expense from continuing operations. As of September 30, 2018, the Company had not fully completed its accounting for the tax effects of the enactment of the TCJA. The Company's provision for income taxes is based in part on a reasonable estimate of the effects on its transition tax and existing deferred tax balances. The Company will continue to assess the impact of the recently enacted tax law and expected further guidance from federal and state tax authorities as well as further guidance for the associated income tax accounting on its business and consolidated financial statements.

In January 2017, the FASB issued ASU 2017-01, *Business Combinations* (Topic 805), which clarifies the definition of business. The update provides a more robust framework to use in determining when a set of assets and activities is a business. The new guidance provides a screen to determine when a set of assets and activities is not a business. The screen requires that when substantially all of the fair value of the gross assets acquired (or disposed of) is concentrated in a single identifiable asset or a group of similar identifiable assets, the set is not a business. The new guidance becomes effective in fiscal years beginning after December 15, 2017, though early adoption is permitted. The Company adopted the new guidance prospectively in the first quarter of fiscal 2019. There was no material impact in the period of adoption.

In May 2017, the FASB issued ASU No. 2017-09, *Compensation–Stock Compensation* (Topic 718): Scope of Modification Accounting, which amends the requirements related to accounting in changes to stock compensation awards. The guidance in ASU 2017-09 is effective for annual periods beginning after December 15, 2017, including interim periods within those fiscal years. The Company adopted the new guidance in the first quarter of fiscal 2019. There was no material impact in the period of adoption.

Accounting Pronouncements Not Yet Effective for Fiscal 2019

In February 2018, the FASB issued ASU 2018-02, *Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income,* which allows an entity to elect to reclassify the stranded tax effects resulting from the change in income tax rate from the Tax Cuts and Jobs Act from accumulated other comprehensive income to retained earnings. The amendments in this update are effective for periods beginning after December 15, 2018. The Company plans to adopt the new standard effective the first quarter of fiscal 2020. The Company does not believe that the adoption of this new accounting guidance will have any material impact on its consolidated financial statements.

In January 2017, the FASB issued ASU 2017-04, *Intangibles–Goodwill and Other* (Topic 350), which simplifies the measurement of goodwill by eliminating the Step 2 impairment test. Step 2 measures a goodwill impairment loss by comparing the implied fair value of a reporting unit’s goodwill with the carrying amount of that goodwill. The new guidance requires an entity to compare the fair value of a reporting unit with its carrying amount and recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit’s fair value. Additionally, an entity should consider income tax effects from any tax deductible goodwill on the carrying amount of the reporting unit when measuring the goodwill impairment loss, if applicable. The new guidance becomes effective for goodwill impairment tests in fiscal years beginning after December 15, 2019, though early adoption is permitted. The Company does not believe that the adoption of this new accounting guidance will have any material impact on its consolidated financial statements.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments–Credit Losses*, which changes the accounting for recognizing impairments of financial assets. Under the new guidance, credit losses for certain types of financial instruments will be estimated based on expected losses. The new guidance also modifies the impairment models for available-for-sale debt securities and for purchased financial assets with credit deterioration since their origination. The new guidance will be effective for the Company starting in the first quarter of fiscal 2021. Early adoption is permitted starting in the first quarter of fiscal 2020. The Company is in the process of determining the effects the adoption will have on its consolidated financial statements.

In February 2016, the FASB issued an ASU 2016-02, *Leases* (Topic 842). In July 2018, the FASB issued ASU 2018-10, Codification Improvements to Topic 842, Leases which clarifies, corrects or consolidates authoritative guidance issued in ASU 2016-02 and is effective upon adoption of ASU 2016-02. The core principle of Topic 842 is that a lessee should recognize the assets and liabilities that arise from leases. All leases create a right-of-use asset and a liability for the lessee in accordance with FASB Concepts Statement No. 6, Elements of Financial Statements, and, therefore, recognition of those lease assets and lease liabilities represents an improvement over previous GAAP, which did not require lease assets and lease liabilities to be recognized for most leases. The new guidance is effective for annual and interim periods beginning after December 15, 2018 and must be applied using a modified retrospective approach, with certain practical expedients available. The Company plans to adopt the new standard effective the first quarter of fiscal 2020 and expects to elect certain available transitional practical expedients. The Company is currently assessing the impact that the new standard will have on its consolidated financial statements, which will consist primarily of a balance sheet gross up of right-of-use assets and lease liabilities on the Condensed Consolidated Balance Sheets upon adoption, which will increase the Company's total assets and liabilities.

Note 2. Net Income Per Share

Basic net income per share is computed using the weighted-average number of common shares outstanding during the period. Diluted net income per share is computed using the weighted-average number of common and dilutive potential common shares outstanding during the period. Potential common shares include employee stock options, restricted stock units, performance-based stock units and convertible notes. For purposes of computing diluted net income per share, weighted average potential common shares do not include potential common shares that are anti-dilutive under the treasury stock method.

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

	Three Months Ended		Six Months Ended	
(in thousands, except per share amounts)	September 30, 2018	October 1, 2017	September 30, 2018	October 1, 2017
Numerator (basic and diluted):				
Net income	$ 35,500	$ 18,680	$ 66,220	$ 35,394
Denominator:				
Weighted average common shares outstanding, basic	129,155	133,269	129,357	133,286
Dilutive effect of employee stock options, restricted stock units and performance stock units	4,100	2,790	4,052	3,148
Dilutive effect of convertible notes	1,500	—	548	—
Weighted average common shares outstanding, diluted	134,755	136,059	133,957	136,434
Basic net income per share	$ 0.27	$ 0.14	$ 0.51	$ 0.27
Diluted net income per share	$ 0.26	$ 0.14	$ 0.49	$ 0.26

Potential dilutive common shares of seven thousand and 18 thousand pertaining to employee stock options, restricted stock units and performance-based stock units were excluded from the calculation of diluted earnings per share for the three months ended September 30, 2018 and October 1, 2017, respectively, because the effect would have been anti-dilutive. Potential dilutive common shares of 11 thousand and 55 thousand pertaining to employee stock options, restricted stock units and performance stock units were excluded from the calculation of diluted earnings per share for the six months ended September 30, 2018 and October 1, 2017, respectively, because the effect would have been anti-dilutive.

In accordance with ASC 260, *Earnings per Share*, the Convertible Notes will not impact the denominator for diluted net income per share unless the average price of the Company's common stock, as calculated under the terms of the Convertible Notes, exceeds the conversion price of $33.45 per share. Likewise, the denominator for diluted net income per share will not include any effect from the warrants unless the average price of the Company's common stock, as calculated under the terms of the warrants, exceeds $48.66 per share. For the three and six months ended September 30, 2018, the Company included the Convertible Notes in the calculation of diluted earnings per share of common stock because the average market price of the Company's stock was above the conversion price. The Company could potentially exclude the Convertible Notes in the future if the average market price is below the conversion price. The denominator for diluted net income per share for the three and six months ended October 1, 2017 does not include any effect from the Convertible Notes.

The denominator for diluted net income per share for each of the three and six months ended September 30, 2018 and October 1, 2017 also does not include any effect from the convertible note hedge transaction, or the Note Hedges. In future periods, the denominator for diluted net income per share will exclude any effect of the Note Hedges, as their effect would be anti-dilutive. In the event an actual conversion of any or all of the Convertible Notes occurs, the shares that will be delivered to us under the Note Hedges are designed to neutralize the dilutive effect of the shares that the Company will issue under the Convertible Notes. Refer to Note 15 for further discussion regarding the Convertible Notes.

Note 3. Revenue

*Disaggregated Revenue by Timing of Recognition**	Three Months Ended		Six Months Ended	
(in thousands)	**September 30, 2018**	**October 1, 2017**	**September 30, 2018**	**October 1, 2017**
Goods/services transferred at a point in time	$ 233,630	$ 204,159	$ 460,221	$ 400,647
Goods/services transferred over time	1,854	239	3,779	464
Total Revenue	$ 235,484	$ 204,398	$ 464,000	$ 401,111

** For other disaggregated revenue information, refer to Note 18.*

Contract Balances and Refund Liabilities

The following table provides information about contract assets, refund liabilities and contract liabilities on the condensed consolidated balance sheets:

(in thousands)	**September 30, 2018**	**April 2, 2018 (as adjusted**)**
Contract assets - unbilled revenue	$ 751	$ 1,595
Refund liabilities - price adjustment and other revenue reserves	$ (11,448)	$ (10,964)
Contract Liabilities - short-term	$ (774)	$ (778)
Contract Liabilities - long-term	$ (967)	$ (1,354)

*** The "as adjusted" balances at April 2, 2018 reflect the comparative amounts under ASC Topic 606.*

Contract assets consist of the Company’s unbilled revenue to transfer goods or services to a customer for which the Company has yet to receive consideration or the amount is due from the customer. Contract assets are included in “Accounts Receivable, Net” on the Condensed Consolidated Balance Sheets.

The beginning and ending balances of contract assets in the second quarter of fiscal 2019 were $2.1 million and $0.8 million, respectively. During the three and six months ended September 30, 2018, contract assets increased by $0.8 million and $2.8 million, respectively, associated with unbilled revenue for additional goods and services transferred to customers, which was offset by decreases of $2.1 million and $3.6 million, respectively, primarily due to invoices issued to customers.

Refund liabilities consist of variable consideration estimates for returns, rebates, price protection, ship from stock pricing credits and stock rotation. Such reserves were previously shown net within “Accounts Receivable, Net” and are now presented within “Other Accrued Liabilities” on the Condensed Consolidated Balance Sheets effective April 2, 2018.

Contract liabilities consist of the Company’s obligation to transfer goods or services to a customer for which the Company has received consideration or the amount is due from the customer. Contract liabilities are classified as short-term or long-term within “Other Accrued Liabilities” or “Other Long-term Liabilities”, respectively, on the Condensed Consolidated Balance Sheets.

Remaining Performance Obligations

As of the end of a reporting period, some of the performance obligations associated with contracts will have been unsatisfied or only partially satisfied. In accordance with the practical expedients available in the guidance, the Company does not disclose the value of unsatisfied performance obligations for contracts with an original expected duration of one year or less, and the remaining duration of the performance obligations for contracts with an original expected duration of greater than one year. As of September 30, 2018, the Company’s remaining performance obligations from contracts with an original expected duration of greater than one year is $7.9 million.

Practical Expedients

The Company has elected to apply the practical expedient to expense commission costs as incurred for costs to obtain a contract when the amortization period would have been one year or less. As a result, no commission costs are capitalized. The Company records these costs within selling, general and administrative expenses on the Condensed Consolidated Statements of Operations.

The Company has adopted the practical expedient which states an entity need not adjust the promised amount of consideration for the effects of a significant financing component if the entity expects, at contract inception, that the period between when the entity transfers a promised good or service to the customer and when the customer pays for that good or service will be one year or less. The Company does not have payments associated with performance obligations outside this one-year time frame.

Note 4. Acquisitions

GigPeak, Inc.

On April 4, 2017, the Company completed its purchase all of the outstanding shares of GigPeak, Inc, a publicly held company mainly operating in the United States, for approximately $250.1 million (the "Acquisition"). GigPeak was a global supplier of semiconductor integrated circuits and software solutions for high-speed connectivity and high-quality video compression over the network and the cloud. The Company funded the Acquisition from its available cash on hand and net proceeds from borrowings under its credit facility entered into on April 4, 2017 with JP Morgan Chase Bank, N.A. as administrative agent and the various lenders signatory thereto (the "Credit Agreement"). The Credit Agreement provides for a $200.0 million term loan facility (the "Initial Term B Loan"). Refer to Note 16 for details.

Total consideration consisted of the following:

(in thousands)		
Cash paid to GigPeak shareholders	$	246,717
Fair value of partially vested employee equity awards related to pre-combination services		3,400
Total purchase price		250,117
Less: cash acquired		(9,001)
Total purchase price, net of cash acquired	$	241,116

In connection with the Acquisition, the Company assumed unvested restricted stock units ("RSUs") originally granted by GigPeak and converted them into IDT RSUs. IDT included $3.4 million, representing the portion of the fair value of the assumed GigPeak unvested equity awards associated with service rendered through the date of the Acquisition, as a component of the total estimated acquisition consideration. As of April 4, 2017, the total unrecognized stock-based compensation expense, net of estimated forfeitures, was also $3.4 million, which is expected to be recognized over the remaining weighted average service period of 2.6 years.

The Company allocated the purchase price to the tangible and intangible assets acquired and liabilities assumed based on their estimated fair values. The excess purchase price over those fair values was recorded as goodwill. Because the Acquisition was structured as a stock acquisition for income tax purposes, none of the asset step-up or asset recognition required by purchase accounting, including the goodwill described below, is deductible for tax purposes.

The fair value of accounts receivable, other current assets, accounts payable, and other accrued liabilities were generally determined using historical carrying values given the short-term nature of these assets and liabilities. The fair values for acquired inventory, property, plant and equipment and intangible assets were determined with the assistance of a third-party valuation using discounted cash flow analysis, and estimate made by management. The fair values of certain other assets and liabilities were determined internally using historical carrying values and estimates made by management. During the second quarter of fiscal 2018, the Company obtained additional information in regards to inventory, deferred tax assets, accounts receivable and assumed liabilities and recorded purchase accounting adjustments which were not considered to be material.

The financial results of the GigPeak business have been included in the Company’s Condensed Consolidated Statements of Operations from April 4, 2017, the closing date of the acquisition. Goodwill is primarily attributable to the assembled workforce of GigPeak, anticipated synergies and economies of scale expected from the operations of the combined company.

The Company's allocation of the purchase price is as follows:

(in thousands)	Estimated Fair Value
Cash and cash equivalents	$ 9,001
Accounts receivable	14,806
Inventories	18,399
Prepayments and other current assets	2,641
Property, plant and equipment	2,434
Goodwill	113,192
Intangible assets	97,860
Deferred tax assets	7,610
Other assets	1,501
Accounts payable	(5,753)
Accrued compensation and related expenses	(3,279)
Other accrued liabilities	(3,538)
Long-term income tax payable	(1,253)
Other long-term liabilities	(3,504)
Total purchase price	$ 250,117

A summary of the fair value of intangible assets and their estimated useful lives is as follows:

(in thousands)	Estimated Fair Value	Estimated Useful Life
Developed technology	$ 56,000	5 years
Customer contracts and related relationships	28,900	5 years
Order backlog	200	1 year
Software licenses	2,560	less than a year
In-process research and development ("IPR&D")	10,200	
Total	$ 97,860	

IPR&D represents the fair value of incomplete research and development projects that had not reached technological feasibility as of the date of acquisition. IPR&D consisted of various projects. As of the acquisition date, the estimated remaining costs to complete and the estimated fair value of the IPR&D projects were approximately $7.5 million and $10.2 million, respectively. The IPR&D projects will either be amortized or impaired depending upon whether the project is completed or abandoned. The fair value of IPR&D was determined using the MPEE method under the income approach. This method reflects the present value of the projected cash flows that are expected to be generated by the IPR&D less charges representing the contribution of other assets to those cash flows. A discount rate of 17% was used to discount the cash flows to the present value. The acquired IPR&D will not be amortized until completion of the related products which is determined by when the underlying projects reach technological feasibility and commence commercial production. In fiscal 2018, $1.2 million of purchased IPR&D projects reached technological feasibility and was reclassified as core and developed technology and began being amortized over its estimated useful life. In addition, in fiscal 2018, the Company recognized a total of $2.0 million impairment charge related to certain IPR&D projects, which was recorded in Research and Development Expense in the Condensed Consolidated Statements of Operations. During the three and six months ended September 30, 2018, $1.2 million and $3.1 million of purchased IPR&D projects, respectively, reached technological feasibility and were reclassified as core and developed technology and began being amortized over its estimated useful life. The Company expects to complete the remaining projects within fiscal 2019. Refer to Note 11 for additional information.

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Note 5. Fair Value Measurements

Financial Assets Measured at Fair Value on a Recurring Basis:

The following table summarizes the Company's financial assets measured at fair value on a recurring basis as of September 30, 2018:

	Fair Value at Reporting Date Using		
(in thousands)	**Quoted Prices in Active Markets for Identical Assets (Level 1)**	**Significant Other Observable Inputs (Level 2)**	**Total**
Assets			
Cash Equivalents and Short-Term Investments:			
US government treasuries and agencies securities	$ 60,358	$ —	$ 60,358
Money market funds	101,034	—	101,034
Asset-backed securities	—	13,863	13,863
Corporate bonds	—	107,864	107,864
International government bonds	—	—	—
Corporate commercial paper	—	17,402	17,402
Bank deposits	—	17,216	17,216
Repurchase agreement	—	103	103
Total assets measured at fair value	$ 161,392	$ 156,448	$ 317,840

The following table summarizes the Company's financial assets measured at fair value on a recurring basis as of April 1, 2018:

	Fair Value at Reporting Date Using		
(in thousands)	**Quoted Prices in Active Markets for Identical Assets (Level 1)**	**Significant Other Observable Inputs (Level 2)**	**Total**
Assets			
Cash Equivalents and Short-Term Investments:			
US government treasuries and agencies securities	$ 60,272	$ —	$ 60,272
Money market funds	48,847	—	48,847
Asset-backed securities	—	16,687	16,687
Corporate bonds	—	109,605	109,605
International government bonds	—	2,638	2,638
Corporate commercial paper	—	9,034	9,034
Bank deposits	—	45,080	45,080
Repurchase agreements	—	142	142
Total assets measured at fair value	$ 109,119	$ 183,186	$ 292,305

U.S. government treasuries and U.S. government agency securities as of September 30, 2018 and April 1, 2018 do not include any U.S. government guaranteed bank issued paper.

The securities in Level 1 are highly liquid and actively traded in exchange markets or over-the-counter markets. Level 2 fixed income securities are priced using quoted market prices for similar instruments, non-binding market prices that are corroborated by observable market data. There were no transfers into or out of Level 1 or Level 2 financial assets during the three and six months ended September 30, 2018.

Deferred Compensation Plan:

The deferred compensation plan assets of $18.7 million and $16.9 million as of September 30, 2018 and April 1, 2018, respectively, are carried on the Condensed Consolidated Balance Sheets at their fair value which were determined on the basis of market prices observable for similar instruments and are considered Level 2 in the fair value hierarchy. See Note 14 for additional information on the Employee Benefit Plans.

Convertible Notes:

The Convertible Notes are carried on the Condensed Consolidated Balance Sheets at their original issuance value including accreted interest, net of unamortized debt discount and issuance cost. The Convertible Notes are not marked to fair value at the end of each reporting period. The fair value of Convertible Notes was $561.7 million and $422.0 million as of September 30, 2018 and April 1, 2018, respectively, which was determined on the basis of market prices observable for similar instruments and is considered Level 2 in the fair value hierarchy. See Note 15 for additional information on the Convertible Notes.

Bank Loan:

The Term B-1 Loan is carried on the Condensed Consolidated Balance Sheets at its outstanding principal balance including accreted interest, net of unamortized debt discount and issuance cost. The fair value of the Term B-1 Loan and the Initial Term B Loan was $198.5 million and $199.6 million as of September 30, 2018 and April 1, 2018, respectively. The Company classified the Term B-1 Loan as Level 2 fair value measurement hierarchy as the debt is not actively traded and has variable interest structure based upon market rates currently available to the Company for debt with similar terms and maturities. Refer to Note 16 for additional information.

Others:

In fiscal 2017, IDT purchased substantially all of the assets and liabilities of Synkera Technologies, Inc. (Synkera) for total purchase consideration of approximately $2.8 million, of which $1.5 million was paid in cash at closing and $1.3 million was recorded as a liability representing the fair value of contingent cash consideration of up to $1.5 million. The liability was recognized for the Company's estimate of the fair value of contingent consideration on the acquisition date based on probability-based attainment of certain milestones. This fair value measurement is based on significant inputs not observed in the market and thus represents a Level 3 measurement, which reflects the Company's own assumptions concerning the milestones related to the acquired business in measuring fair value. During the six months ended September 30, 2018, the Company paid $0.7 million upon the achievement of certain milestones. The fair value of the liability measured using significant unobservable inputs (Level 3) was approximately $0.6 million and $1.3 million as of September 30, 2018 and April 1, 2018, respectively.

In fiscal 2018, the Company purchased certain assets of SpectraBeam, LLC ("SpectraBeam") for a total purchase consideration of $17.0 million, of which $12.9 million was paid in cash at closing and $4.1 million was recorded as a liability representing the contingent cash consideration. The liability was recognized for the Company's estimate of the fair value of contingent consideration on the acquisition date based on probability-based attainment of certain milestones. The fair value measurement is based on significant inputs not observed in the market and thus represents a Level 3 measurement, which reflects the Company's own assumptions concerning the milestones related to the asset acquisition in measuring fair value. During the six months ended September 30, 2018, the Company paid $2.1 million upon the achievement of certain milestones. The fair value of the liability measured using significant unobservable inputs (Level 3) was approximately $2.0 million and $4.1 million as of September 30, 2018 and April 1, 2018, respectively.

Note 6. Investments

Available-for-Sale Securities

The amortized cost and fair value of available-for-sale investments as of September 30, 2018 were as follows:

(in thousands)	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
U.S. government treasuries and agencies securities	$ 61,203	$ —	$ (845)	$ 60,358
Money market funds	101,034	—	—	101,034
Asset-backed securities	13,931	—	(68)	13,863
Corporate bonds	109,327	41	(1,504)	107,864
International government bonds	—	—	—	—
Corporate commercial paper	17,402	—	—	17,402
Bank deposits	17,216	—	—	17,216
Repurchase agreements	103	—	—	103
Total available-for-sale investments	320,216	41	(2,417)	317,840
Less amounts classified as cash equivalents	(125,808)	—	—	(125,808)
Short-term investments	$ 194,408	$ 41	$ (2,417)	$ 192,032

The amortized cost and fair value of available-for-sale investments as of April 1, 2018 were as follows:

(in thousands)	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
U.S. government treasuries and agencies securities	$ 61,166	$ —	$ (894)	$ 60,272
Money market funds	48,847	—	—	48,847
Asset-backed securities	16,797	—	(110)	16,687
Corporate bonds	111,266	43	(1,704)	109,605
International government bonds	2,650	—	(12)	2,638
Corporate commercial paper	9,034	—	—	9,034
Bank deposits	45,080	—	—	45,080
Repurchase agreements	142	—	—	142
Total available-for-sale investments	294,982	43	(2,720)	292,305
Less amounts classified as cash equivalents	(70,279)	—	—	(70,279)
Short-term investments	$ 224,703	$ 43	$ (2,720)	$ 222,026

The cost and estimated fair value of available-for-sale securities as of September 30, 2018, by contractual maturity, were as follows:

(in thousands)	Amortized Cost	Estimated Fair Value
Due in 1 year or less	$ 200,786	$ 200,171
Due in 1-2 years	83,229	82,094
Due in 2-5 years	36,201	35,575
Total investments in available-for-sale securities	$ 320,216	$ 317,840

The following table shows the gross unrealized losses and fair value of the Company's investments with unrealized losses as of September 30, 2018, aggregated by investment category and length of time that individual securities have been in a continuous loss position.

	Less Than 12 Months		12 Months or Greater		Total	
(in thousands)	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
Corporate bonds	$ 48,989	$ (814)	$ 51,168	$ (690)	$ 100,157	$ (1,504)
Asset-backed securities	9,546	(45)	3,929	(23)	13,475	(68)
U.S. government treasuries and agencies securities	15,522	(155)	44,836	(690)	60,358	(845)
Total	$ 74,057	$ (1,014)	$ 99,933	$ (1,403)	$ 173,990	$ (2,417)

The following table shows the gross unrealized losses and fair value of the Company's investments with unrealized losses, as of April 1, 2018, aggregated by investment category and length of time that individual securities have been in a continuous unrealized loss position.

	Less Than 12 Months		12 Months or Greater		Total	
(in thousands)	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
Corporate bonds	$ 78,726	$ (1,324)	$ 23,286	$ (380)	$ 102,012	$ (1,704)
Asset-backed securities	14,147	(90)	2,540	(20)	16,687	(110)
U.S. government treasuries and agencies securities	25,352	(221)	34,920	(673)	60,272	(894)
International government bonds	—	—	2,638	(12)	2,638	(12)
Total	$ 118,225	$ (1,635)	$ 63,384	$ (1,085)	$ 181,609	$ (2,720)

Currently, a significant portion of the Company's available-for-sale investments that it holds are high grade instruments. As of September 30, 2018, the unrealized losses on the Company's available-for-sale investments represented an insignificant amount in relation to its total available-for-sale portfolio. Substantially all of the Company's unrealized losses on its available-for-sale marketable debt instruments can be attributed to fair value fluctuations in an unstable credit environment that resulted in a decrease in the market liquidity for debt instruments. Because the Company has the ability to hold these investments until a recovery of fair value, which maybe maturity, the Company did not consider these investments to be other-than-temporarily impaired as of September 30, 2018 and April 1, 2018.

Non-marketable Equity Securities

As of September 30, 2018 and April 1, 2018, the Company holds capital stock of privately-held companies with total amount of $26.2 million and $27.3 million, respectively. During the three months ended September 30, 2018, the Company purchased preferred shares of a privately-held company for $1.0 million. These investments in stocks (included in Other Assets on the Condensed Consolidated Balance Sheets) are accounted for as cost-method investments, as the Company owns less than 20% of the voting securities and does not have the ability to exercise significant influence over operating and financial policies of each entity. The Company measures equity investments that do not have readily determinable fair values at 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 (referred to as the measurement alternative). The Company recorded an impairment charge of $2.0 million for certain investment during the first quarter of fiscal 2019. There was no impairment charge during the three months ended September 30, 2018 and the three and six months ended October 1, 2017.

Note 7. Stock-Based Employee Compensation

Total stock-based compensation expense, related to all of the Company's share-based awards, was comprised as follows:

	Three Months Ended		Six Months Ended	
(in thousands)	September 30, 2018	October 1, 2017	September 30, 2018	October 1, 2017
Cost of revenues	$ 829	$ 763	$ 1,857	$ 1,396
Research and development	7,829	6,094	14,965	12,056
Selling, general and administrative	6,979	6,092	13,878	11,317
Total stock-based compensation expense	$ 15,637	$ 12,949	$ 30,700	$ 24,769

The amount of stock-based compensation expense that was capitalized during the periods presented above was immaterial.

Note 8. Stockholders' Equity

Stock Repurchase Program. On April 24, 2018, the Company's Board of Directors approved an increase to the share repurchase authorization of $400 million. In the three and six months ended September 30, 2018, the Company repurchased 1.1 million shares for $38.1 million and 2.6 million shares for $87.5 million, respectively. As of September 30, 2018, approximately $419.3 million was available for future purchase under the share repurchase program. Shares repurchased were recorded as treasury stock and resulted in a reduction of stockholder's equity. Due to the pending merger with Renesas, the Company suspended further repurchases under its repurchase program effective September 11, 2018.

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Note 9. Balance Sheet Detail

(in thousands)		September 30, 2018		April 1, 2018
Inventories, net				
Raw materials	$	4,264	$	4,345
Work-in-process		36,017		45,713
Finished goods		20,797		18,644
Total inventories, net	$	61,078	$	68,702
Accounts receivable, net				
Accounts receivable, gross	$	131,283	$	120,953
Allowance for returns, price credits and doubtful accounts (1)		(1,878)		(12,174)
Total accounts receivable, net	$	129,405	$	108,779
Property, plant and equipment, net				
Land	$	11,535	$	11,535
Machinery and equipment		298,818		285,784
Building and leasehold improvements		51,134		50,722
Total property, plant and equipment, gross		361,487		348,041
Less: accumulated depreciation (2)		(272,501)		(261,196)
Total property, plant and equipment, net	$	88,986	$	86,845
Other accrued liabilities				
Accrued restructuring costs (3)	$	2,340	$	4,637
Current income tax payable		4,736		6,281
Refund liabilities (1)		11,448		—
Other (4)		25,567		15,606
Total other accrued liabilities	$	44,091	$	26,524
Other long-term obligations				
Deferred compensation related liabilities	$	18,207	$	16,310
Other (5)		12,079		9,374
Total other long-term liabilities	$	30,286	$	25,684

(1) Upon adoption of ASC Topic 606 under the modified retrospective method, price adjustment and other revenue reserves were presented in “Other Accrued Liabilities” effective April 2, 2018. Those reserves were previously included in “Accounts Receivable, Net”. Refer to Note 3 for additional information.

(2) Depreciation expense was $6.9 million and $7.1 million for the three months ended September 30, 2018 and October 1, 2017, respectively. Depreciation expense was $13.5 million and $13.2 million for the six months ended September 30, 2018 and October 1, 2017, respectively.

(3) Includes accrued severance costs related to various restructuring actions. Refer to Note 12 for additional information.

(4) Other current liabilities consist primarily of current portion of liability for contingent consideration, merger-related expenses associated with the pending merger with Renesas, current portion of deferred revenue and other accrued unbilled expenses.

(5) Other long-term obligations consist primarily of non-current portion of deferred revenue and other long-term accrued liabilities.

Note 10. Accumulated Other Comprehensive Income (Loss)

Changes in the balance of accumulated other comprehensive income (loss) by component, net of tax, for the six months ended September 30, 2018 consisted of the following:

(in thousands)	Cumulative translation adjustments	Unrealized gain (loss) on available-for-sale investments	Pension adjustments	Total
Balance as of April 1, 2018	$ (2,151)	$ (2,677)	$ 65	$ (4,763)
Other comprehensive income (loss) before reclassifications	(2,999)	301	—	(2,698)
Net current-period other comprehensive income (loss)	(2,999)	301	—	(2,698)
Balance as of September 30, 2018	$ (5,150)	$ (2,376)	$ 65	$ (7,461)

There was no reclassification out of accumulated other comprehensive income or loss during the six months ended September 30, 2018.

Note 11. Goodwill and Intangible Assets, Net

During the first quarter of fiscal 2019, the Company revised the composition of its reportable segments as a result of certain organizational changes (Refer to Note 18 for details). Goodwill was reallocated between the two reportable segments using a relative fair value approach. As a result, the Company completed assessments of any potential goodwill impairment for all reportable segments immediately prior to and after the reallocation and determined that no impairment existed.

Goodwill balances by reportable segment as of September 30, 2018 and April 1, 2018 are as follows:

	Reportable Segments		
(in thousands)	Communications	Computing, Consumer and Industrial	Total
Balance as of April 1, 2018	$ 141,300	$ 278,817	$ 420,117
Reallocation of goodwill	(21,206)	21,206	—
Balance as of September 30, 2018	$ 120,094	$ 300,023	$ 420,117

Goodwill balances as of September 30, 2018 and April 1, 2018 were net of $920.3 million in accumulated impairment losses. Intangible asset balances as of September 30, 2018 and April 1, 2018 are summarized as follows:

	September 30, 2018		
(in thousands)	Gross Assets	Accumulated Amortization	Net Assets
Purchased intangible assets:			
Developed technology	$ 339,521	$ (236,496)	$ 103,025
Trademarks	5,391	(5,391)	—
Customer relationships	201,997	(155,501)	46,496
Intellectual property licenses	7,500	(4,500)	3,000
Software licenses	20,894	(2,411)	18,483
Total amortizable purchased intangible assets	575,303	(404,299)	171,004
In-process research and development (IPR&D)	3,882	—	3,882
Total purchased intangible assets	$ 579,185	$ (404,299)	$ 174,886

	April 1, 2018			
(in thousands)	Gross Assets	Impairment	Accumulated Amortization	Net Assets
Purchased intangible assets:				
Developed technology	$ 336,402	$ —	$ (223,882)	$ 112,520
Trademarks	5,391	—	(5,391)	—
Customer relationships	201,997	—	(149,416)	52,581
Intellectual property licenses	7,500	—	(3,901)	3,599
Software licenses	6,023	—	(943)	5,080
Total amortizable purchased intangible assets	557,313	—	(383,533)	173,780
In-process research and development (IPR&D)	9,017	(2,016)	—	7,001
Total purchased intangible assets	$ 566,330	$ (2,016)	$ (383,533)	$ 180,781

During the three months ended September 30, 2018, the Company purchased $14.7 million of software licenses.

Amortization expense for the three months ended September 30, 2018 and October 1, 2017 was $10.7 million and $9.9 million, respectively. Amortization expense for the six months ended September 30, 2018 and October 1, 2017 was $20.8 million and $21.6 million, respectively. In the six months ended October 1, 2017, the Company recorded an accelerated amortization charge of $2.0 million related to certain software licenses as the estimated future cash flows expected resulting from the use of the assets were less than the carrying amount.

The intangible assets are being amortized over estimated useful lives of 1 to 7 years.

Based on the intangible assets recorded as of September 30, 2018, the expected future amortization expense for intangible assets is as follows (in thousands):

Fiscal Year	Amount
2019 (Remaining 6 months)	$ 22,585
2020	45,812
2021	44,856
2022	39,595
2023 and thereafter	18,156
Total amortizable purchased intangible assets	171,004
IPR&D	3,882
Total intangible assets	$ 174,886

Note 12. Restructuring

The following table shows the provision of the restructuring charges and the liability remaining as of September 30, 2018:

(in thousands)		Amount
Severance and related charges:		
Balance as of April 1, 2018	$	4,637
Provision		1,891
Payments and other adjustments		(4,188)
Balance as of September 30, 2018	$	2,340
Facility and related charges:		
Balance as of April 1, 2018	$	2,281
Provision		315
Payments and other adjustments		(2,113)
Balance as of September 30, 2018	$	483

As part of an effort to streamline operations with changing market conditions and to create a more efficient organization, the Company has undertaken restructuring actions to reduce its workforce and consolidate facilities. The Company's restructuring expenses consist primarily of severance and termination benefit costs related to the reduction of its workforce, asset impairment charges and lease obligation charges related to a facility that is no longer used.

Integration-related Restructuring Plans

In fiscal 2018, the Company implemented planned cost reduction and restructuring activities in connection with the acquisition of GigPeak. Accordingly, the Company reduced headcount by 46 and recorded severance costs of approximately $2.7 million, of which $2.1 million was paid during fiscal 2018 and $0.6 million was paid in the six months ended September 30, 2018.

In connection with the GigPeak integration, the Company recorded $2.8 million in fiscal 2018 for lease obligation charges related to a facility that the Company had determined to meet the cease-use date criteria. The fair value of this liability at the cease-use date was determined based on the remaining cash flows for lease rentals, and minimum lease payments, reduced by estimated sublease rentals, discounted using a credit adjusted risk free rate in accordance with ASC 420, *Exit or Disposal Cost Obligations*. During the three months ended September 30, 2018, the Company entered into a lease termination agreement and paid a lease termination fee of $1.5 million for the early termination of the lease. No penalties were incurred as a result of the early termination. As of September 30, 2018, the total accrued balance was $0.2 million, which is expected to be paid by the fourth quarter of fiscal 2019.

Other Restructuring Plans

In fiscal 2018, the Company exited certain non-strategic businesses and reduced headcount by 63. The Company recorded employee severance costs of approximately $5.1 million, of which $2.3 million was paid during fiscal 2018. The Company recorded additional accruals of $0.5 million and paid $3.3 million in the six months ended September 30, 2018. During the three months ended September 30, 2018, the Company reduced headcount by 18 and recorded an accrual of $1.4 million related to this action. As of September 30, 2018, the total accrued balance for employee severance costs related to those actions was $1.4 million, which is expected to be paid by the first quarter of fiscal 2020. The balance of facility and related charges also included a $0.3 million lease liability related to the cease-use of a design center, which is expected to be fully paid in fiscal 2022.

In fiscal 2017, the Company prepared a workforce-reduction plan with respect to employees and closed its remaining business in France. The Company has substantially completed payments of termination benefits and the total accrued balance related to this action was $0.8 million as of April 1, 2018. The Company paid $0.5 million during the first quarter of fiscal 2019. Accordingly, the total accrued balance for employee severance costs related to this action was $0.3 million as of September 30, 2018. The Company expects to complete this action by the fourth quarter of fiscal 2019.

In fiscal 2015, the Company prepared a workforce-reduction plan with respect to employees of its HSC business in France and the Netherlands. The Company has substantially completed payments of termination benefits and the total accrued balance related to this action was $0.6 million as of April 1, 2018 and September 30, 2018. The Company expects to complete this action by the fourth quarter of fiscal 2019.

Note 13. Commitments and Contingencies

Warranty

The Company maintains an accrual for obligations it incurs under its standard product warranty program and customer, part, or process specific matters. The Company's standard warranty period is one year, however in certain instances the warranty period may be extended to as long as two years. Management estimates the fair value of the Company's warranty liability based on actual past warranty claims experience, its policies regarding customer warranty returns and other estimates about the timing and disposition of product returned under the standard program. Customer, part, or process specific accruals are estimated using a specific identification method. Historical profit and loss impact related to warranty returns activity has been minimal. The total warranty accrual was $0.3 million as of both September 30, 2018 and April 1, 2018.

Litigation

In January 2012, Maxim I Properties, a general partnership that had purchased a certain parcel of real property (the Property) in 2003, filed a complaint in the Northern District of California naming approximately 30 defendants, including the Company ("Defendants"), alleging various environmental violations of the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Resource Conservation and Recovery Act (RCRA), the California Hazardous Substance Account Act (HSAA), and other common law claims (the Complaint). The Complaint alleged that Defendants including the Company "…generated, transported, and/or arranged for the transport and/or disposal of hazardous waste to the Property." On August 15, 2012, Maxim I Properties voluntarily dismissed its Complaint without prejudice. However, another defendant, Moyer Products, Inc., counter-claimed against the plaintiff, Maxim, and cross-claimed against the remaining co-Defendants, including the Company. Thus, the Company remains a cross-defendant in this action.

In a related, but independent action, the California Department of Toxic Substances Control (DTSC) notified the Company in September 2012 that the Company, and more than 50 other entities, were being named as respondents to DTSC's Enforcement Order, as "a generator of hazardous waste." In April 2013, the Company, along with the other "respondent" parties, entered into a Corrective Action Consent Agreement (CACA) with the DTSC, agreeing to conduct the Property investigation and corrective action selection. The CACA supersedes the DTSC's Enforcement Order. The District Court for the Northern District of California stayed the Maxim/Moyer litigation pending the Property investigation under the CACA and DTSC's corrective action selection.

Property investigation activity took place between April 2013 and June 2015. On June 23, 2015, the DTSC deemed the Property investigation complete. The DTSC continues to evaluate corrective action alternatives. The Company will continue to vigorously defend itself against the allegations in the Complaint and evaluate settlement options with Moyer upon notification from DTSC of its corrective action selection. No specific corrective action has been selected yet, and thus no specific monetary demands have been made.

The Company may also be a party to various other legal proceedings and claims arising in the normal course of business from time to time. With regard to the matters listed above, along with various other legal proceedings and claims and future matters that may arise, potential liability and probable losses or ranges of possible losses due to an unfavorable litigation outcome cannot be reasonably estimated at this time. Generally, litigation is subject to inherent uncertainties, and no assurance can be given that the Company will prevail in any particular lawsuit or claim. Pending lawsuits, claims as well as potential future litigation, could result in substantial costs and diversion of resources and could have a material adverse effect on the Company's financial condition, results of operations or cash flows.

Note 14. Employee Benefit Plans

401(k) Plan

The Company sponsors a 401(k) retirement matching plan for qualified domestic employees. The Company recorded expenses of approximately $1.8 million and $1.4 million in matching contributions under the plan during the six months ended September 30, 2018 and October 1, 2017, respectively.

Deferred Compensation Plans

Effective November 1, 2000, the Company established an unfunded deferred compensation plan to provide benefits to executive officers and other key employees. Under the plan, participants can defer any portion of their salary and bonus compensation into the plan and may choose from a portfolio of funds from which earnings are measured. Participant balances are always 100% vested. As of September 30, 2018 and April 1, 2018, obligations under the plan totaled approximately $18.2 million and $16.3 million, respectively. Additionally, the Company has set aside assets in a separate trust that is invested in corporate owned life insurance intended to substantially fund the liability under the plan. As of September 30, 2018 and April 1, 2018, the deferred compensation plan assets were approximately $18.7 million and $16.9 million, respectively.

During the first quarter of fiscal 2013, the Company assumed a deferred compensation plan associated with the acquisition of Fox Enterprises, Inc. Under this plan, participants in retirement are entitled to receive a fixed amount from the Company on a monthly basis. The Company has purchased life insurance policies with the intention of funding the liability under this plan. As of both September 30, 2018 and April 1, 2018, the deferred compensation plan assets were approximately $0.4 million. As of both September 30, 2018 and April 1, 2018, the liabilities under this plan were approximately $0.8 million.

Note 15. Convertible Senior Notes, Warrants and Hedges

Convertible Notes Offering

On October 29, 2015, the Company priced its private offering of $325.0 million in aggregate principal amount of 0.875% Convertible Senior Notes due 2022 ("Initial Convertible Notes"). On November 3, 2015, the initial purchasers in such offering exercised in full the over-allotment option to purchase an additional $48.8 million in aggregate principal amount of Convertible Notes (“Additional Convertible Notes”, and together “Convertible Notes”). The aggregate principal amount of Convertible Notes is $373.8 million. The net proceeds from this offering were approximately $363.4 million, after deducting the initial purchasers’ discounts and commissions and the offering expenses.

The Convertible Notes are governed by the terms of an indenture, dated November 4, 2015 (“Indenture”), between the Company and a trustee. The Convertible Notes are the senior unsecured obligations of the Company and bear interest at a rate of 0.875% per annum, payable semi-annually in arrears on May 15 and November 15 of each year, commencing May 15, 2016. The Convertible Notes will mature on November 15, 2022, unless earlier repurchased or converted. At any time prior to the close of business on the business day immediately preceding August 15, 2022, holders may convert their Convertible Notes at their option only under the certain circumstances as defined in the Indenture. On or after August 15, 2022 until the close of business on the second scheduled trading day immediately preceding the maturity date, holders may convert their notes at any time, regardless of such circumstances.

The conversion rate for the Convertible Notes will initially be 29.8920 shares of common stock per $1,000 principal amount of Convertible Notes, which corresponds to an initial conversion price of approximately $33.45 per share of common stock. The conversion rate is subject to adjustment from time to time upon the occurrence of certain events, including, but not limited to, the issuance of certain stock dividends on common stock, the issuance of certain rights or warrants, subdivisions, combinations, distributions of capital stock, indebtedness, or assets, the payment of cash dividends and certain issuer tender or exchange offers.

As of September 30, 2018, none of the conditions allowing holders of the Notes to convert had been met.

At the debt issuance date, the Convertible Notes, net of issuance costs, consisted of the following:

(in thousands)	November 3, 2015
Liability component	
Principal	$ 274,435
Less: Issuance cost	(7,568)
Net carrying amount	266,867
Equity component *	
Allocated amount	99,316
Less: Issuance cost	(2,738)
Net carrying amount	96,578
Convertible Notes, net	$ 363,445

* Recorded on the Condensed Consolidated Balance Sheets within additional paid-in capital.

The following table includes total interest expense recognized related to the Convertible Notes during the three and six months ended September 30, 2018 and October 1, 2017:

	Three Months Ended		Six Months Ended	
(in thousands)	September 30, 2018	October 1, 2017	September 30, 2018	October 1, 2017
Contractual interest expense	$ 827	$ 827	$ 1,654	$ 1,653
Amortization of debt discount	3,391	3,210	6,736	6,377
Amortization of debt issuance costs	270	270	540	540
	$ 4,488	$ 4,307	$ 8,930	$ 8,570

The net liability component of Convertible Notes is comprised of the following as of September 30, 2018:

(in thousands)	September 30, 2018
Net carrying amount as of April 1, 2018	$ 299,551
Amortization of debt issuance costs during the period	540
Amortization of debt discount during the period	6,736
Net carrying amount as of September 30, 2018	$ 306,827

During both the six months ended September 30, 2018 and October 1, 2017, the Company paid contractual interest on the Convertible Notes of approximately $1.6 million. See Note 5 to the Company's condensed consolidated financial statements for fair value disclosures related to the Company's Convertible Notes.

Convertible Note Hedge and Warrant Transactions

In connection with the pricing of the Convertible Notes, on October 29, 2015, the Company entered into convertible note hedge transaction (the "Initial Bond Hedge"), with JPMorgan Chase Bank, National Association (the “Option Counterparty”) and paid $81.9 million.

On October 29, 2015, the Company also entered into separate warrant transaction (the "Initial Warrant Transaction") with the Option Counterparty and received $49.4 million.

In connection with the exercise of the Over-Allotment Option, on November 3, 2015, the Company entered into a convertible note hedge transaction (the “Additional Bond Hedge”, and together with the Initial Bond Hedges, the “Bond Hedge”) with the Option Counterparty and paid $12.3 million. On November 3, 2015, the Company also entered into separate additional warrant transaction (the “Additional Warrant Transaction”, and together with the Initial Warrant Transaction, the “Warrant Transactions”) with the Option Counterparty and received $7.4 million. Total amount paid for the purchase of bond hedge and total amount received for the sale of warrants were $94.2 million and $56.8 million, respectively.

The Bond Hedges are generally expected to reduce the potential dilution upon conversion of the Convertible Notes and/or offset any payments in cash, shares of common stock or a combination of cash and shares of common stock, at the Company’s election, that the Company is required to make in excess of the principal amount of the Convertible Notes upon conversion of any Convertible Notes, as the case may be, in the event that the market price per share of common stock, as measured under the terms of the Bond Hedges, is greater than the strike price $33.45 of the Bond Hedges, which initially corresponds to the conversion price of the Convertible Notes and is subject to anti-dilution adjustments substantially similar to those applicable to the conversion rate of the Convertible Notes. The Warrant Transactions will separately have a dilutive effect to the extent that the market value per share of common stock, as measured under the terms of the Warrant Transactions, exceeds the applicable strike price of the warrants issued pursuant to the Warrant Transactions (the “Warrants”). The initial strike price of the Warrants is $48.66 per share. The Bond Hedges and Warrants are not marked to market. The value of the Bond Hedges and Warrants were initially recorded in stockholders' equity and continue to be classified as stockholders' equity in accordance with ASC 815-40, *Derivatives and Hedging–Contracts in Entity's Own Equity*. As of September 30, 2018 and April 1, 2018, no warrants have been exercised.

Note 16. Term B Loan

On April 4, 2017, the Company, JP Morgan Chase bank, N.A.("JP Morgan") as administrative agent and a group of lenders entered into a credit agreement that provides for variable rate term loans in aggregate principal amount of $200.0 million, with an original term of 7 years (the "Initial Term B Loan"). After payment of transaction costs associated with the Credit Agreement, the Company received net proceeds from the Initial Term B Loan of approximately $194.3 million, which was used to partially finance the acquisition of GigPeak and other payments related to such transaction.

On May 29, 2018 (the "Closing Date"), the Company entered into Amendment No. 1 (the “Amendment”) to its Credit Agreement, for the purpose of, among other things, reducing the interest margin applicable to loans under the Credit Agreement by 0.50%, all of which was treated as a debt modification. On the Closing Date, the aggregate principal amount of the term loans outstanding under the Credit Agreement was approximately $198.0 million. Under the Amendment, the lenders agreed to provide to IDT new term loans (the “Term B-1 Loan”) in the same aggregate principal amount as the outstanding Initial Term B Loan. Such Term B-1 Loan was used to refinance the outstanding Initial Term B Loan in full. The maturity date of the Term B-1 Loan is April 4, 2024; provided that if any of the Company's Convertible Notes are outstanding on August 16, 2022, the maturity date of which had not otherwise been extended to a date that is no earlier than 91 days after April 4, 2024, the Term B-1 Loan maturity date shall instead be August 16, 2022, unless the Company and its guarantors shall have cash, permitted investments and/or unwithdrawn revolving credit commitments in an aggregate amount not less than the aggregate principal amount of then outstanding Convertible Notes.

The Company will repay the principal amount of the Term B-1 Loan on the last day of each March 31, June 30, September 30 and December 31, in an amount equal to 0.25% of the principal amount of the Term B-1 Loan; and on the maturity date, as described above, in an amount equal to the remainder of the outstanding principal amount of the Term B-1 Loan. The Company may prepay the Term B-1 Loan, in whole or in part, at any time without premium or penalty, subject to certain conditions, and amounts repaid or prepaid may not be reborrowed. The interest rate of the Term B-1 Loan is based on adjusted LIBO rate which is equal to the LIBO rate for such interest period multiplied by statutory reserve rate, plus an applicable margin of 2.5% (3.0% prior to the Amendment. For the three-month periods ended September 30, 2018 and October 1, 2017, the interest rate on the Term B-1 Loan and the Initial Term B Loan was approximately 4.59% and 4.15%, respectively.

The following table summarizes the outstanding borrowings as of September 30, 2018 and April 1, 2018:

(in thousands)	September 30, 2018	April 1, 2018
Outstanding principal balance	$ 197,010	$ 198,000
Unamortized debt issuance costs and debt discount	(4,517)	(4,927)
Outstanding principal, net of unamortized debt issuance costs and debt discount	$ 192,493	$ 193,073
Classified as follows:		
Current portion of bank loan	$ 1,980	$ 2,000
Long-term bank loan	$ 190,513	$ 191,073

The Company made payments totaling $0.5 million and $1.0 million towards the outstanding principal balance of the long-term bank loan during the three and six months ended September 30, 2018, respectively. The following table includes the total interest expense recognized during the three and six months ended September 30, 2018 and October 1, 2017, respectively:

	Three Months Ended		Six Months Ended	
(in thousands)	September 30, 2018	October 1, 2017	September 30, 2018	October 1, 2017
Contractual interest expense	$ 2,314	$ 2,275	$ 4,659	$ 4,381
Amortization of debt issuance costs and debt discount	205	205	410	409
Total	$ 2,519	$ 2,480	$ 5,069	$ 4,790

The Credit Agreement contains customary affirmative and negative covenants, including covenants that limit or restrict the Company and its subsidiaries' ability to, among other things, incur indebtedness, grant liens, merge or consolidate, dispose of assets, make investments, make acquisitions, enter into transactions with affiliates, pay dividends or make distributions and repurchase stock. The Credit Agreement includes customary events of default, including among others, nonpayment of principal or interest, material inaccuracy of representations and failure to comply with covenants. Under certain circumstances, a default interest rate will apply on all overdue obligations under the Credit Agreement at a per annum rate equal to 2.00% above the applicable interest rate for any overdue principal and 2.00% above the rate applicable for base rate loans for any other overdue amounts. The occurrence of an event of default could result in the acceleration of obligations. The Company is in compliance with the covenants as of September 30, 2018.

See Note 5 to the Company's consolidated financial statements for fair value determination.

Note 17. Income Taxes

During the three and six months ended September 30, 2018, the Company recorded an income tax expense of $1.2 million and $4.4 million, respectively. The Company recorded an income tax benefit of $31 thousand and $1.0 million during the three and six months ended October 1, 2017, respectively.

The income tax expense recorded in the three and six months ended September 30, 2018 was primarily due to the impacts of the current year U.S. taxation of certain income of the Company's foreign subsidiaries and an increase in higher-taxed earnings in foreign jurisdictions, partially offset by tax benefits from U.S. research and development and future foreign tax credit arising from withholding taxes on unrepatriated foreign earnings. The income tax benefit recorded in the six months ended October 1, 2017 was primarily due to the reduction of the deferred tax liability related to amortization of acquired intangible assets as well as the tax benefit from excess tax benefits on stock-based compensation.

The Company's effective tax rate was significantly less than the U.S. federal statutory rate of 21% in all periods primarily due to the benefits of lower-taxed earnings in foreign jurisdictions, including Malaysia, where a tax holiday is in effect through fiscal 2021.

On December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act ("TCJA"). The TCJA provides for numerous significant tax law changes and modifications including, among other things, reducing the U.S. federal corporate tax rate from 35 percent to 21 percent; requiring companies to pay a one-time transition tax on certain unremitted earnings of foreign subsidiaries; generally eliminating U.S. federal income taxes on dividends from foreign subsidiaries; requiring a current inclusion in U.S. federal taxable income of certain earnings of controlled foreign corporations; and creating a new limitation on deductible interest expense. Certain provisions of the TCJA began to impact the Company fiscal year 2018, while other provisions began to impact the Company beginning in fiscal year 2019.

The SEC staff issued Staff Accounting Bulletin 118 which allows companies to record provisional amounts during a measurement period that is similar to the measurement period used when accounting for business combinations. As of April 1, 2018, the Company has made reasonable estimates of the effects on its existing deferred tax balances and the one-time repatriation tax recording provisional charges of $10.3 million and $103.9 million, respectively, as a component of income tax expense from continuing operations.

The $10.3 million charge for the effect on the Companies deferred tax balances resulted from the reduction of the corporate income tax rate to 21%. U.S. GAAP requires companies to remeasure their deferred tax assets and liabilities as of the date of enactment, with resulting tax effects accounted for in the reporting period of enactment. The Company remeasured deferred tax assets and liabilities based on the rates at which they are expected to reverse in the future.

The $103.9 million charge for the one-time repatriation tax increased other accrued liabilities by $1.5 million, increased long-term income taxes payable by $24.1 million, and reduced deferred tax assets, for the utilization of tax attributes, by $78.3 million. The liabilities resulting from the repatriation tax are payable over a period of up to eight years. The provisional amount was based on the Company's total post-1986 earnings and profits ("E&P") of its foreign subsidiaries. The majority of these earnings were historically permanently reinvested outside the United States, thus no taxes had previously been provided for these earnings. In addition, the one-time repatriation tax is based in part on the amount of those earnings held in cash and other specified assets either as of the end of fiscal year 2018 or the average of the year-end balances for fiscal years 2016 and 2017.

The TCJA creates a new Global Intangible Low-Taxed Income ("GILTI") requirement under which certain income earned by controlled foreign corporations ("CFC"s) must be included currently in the gross income of the CFCs' U.S. shareholder. GILTI is the excess of the shareholder's "net CFC tested income" over the net deemed tangible income return, which is currently defined as the excess of (1) 10 percent of the aggregate of the U.S. shareholder's pro rata share of the qualified business asset investment of each CFC with respect to which it is a U.S. shareholder over (2) the amount of certain interest expense taken into account in the determination of net CFC-tested income.

Because of the complexity of the new GILTI tax rules, the Company is continuing to evaluate this provision of the TCJA and the application of ASC 740. Under U.S. GAAP, the Company is allowed to make an accounting policy choice of either (1) treating taxes due on future U.S. inclusions in taxable income related to GILTI as a current-period expense when incurred (the "period cost method") or (2) factoring such amounts into a company's measurement of its deferred taxes (the "deferred method"). The Company's selection of an accounting policy with respect to the new GILTI tax rules will depend, in part, on analyzing the Company's global income to determine what the impact is expected to be. The Company is not yet able to reasonably estimate the effect of this provision of the TCJA. Therefore, the Company has not made a policy decision regarding whether to record deferred taxes on GILTI. As a result, for the period ended September 30, 2018, the Company has treated GILTI as a period cost and will continue to refine the calculations as additional analysis is completed.

As of September 30, 2018, the Company had not fully completed its accounting for the tax effects of the enactment of the TCJA. The Company's provision for fiscal year 2018 was based in part on a reasonable estimate of the effects on its transition tax and existing deferred tax balances. The Company will continue to assess the impact of the recently enacted tax law and expected further guidance from federal and state tax authorities as well as further guidance for the associated income tax accounting on its business and consolidated financial statements.

In fiscal year 2018, in connection with the TCJA and review of the Company's projected offshore cash flows, and global cash requirements, the Company determined that historical foreign earnings would no longer be permanently reinvested. The Company plans to continue to repatriate its offshore earnings to the U.S. for domestic operations, and has accrued for the related tax impacts accordingly.

In October 2016, the FASB issued ASU 2016-16, *Intra-Entity Transfers of Assets Other Than Inventory*, which requires entities to recognize the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs. This amends current GAAP which prohibits recognition of current and deferred income taxes for all types of intra-entity asset transfers until the asset has been sold to a third party or otherwise recovered through use. The Company adopted the new guidance in the first quarter of fiscal 2019. Upon adoption, the Company applied a modified retrospective transition approach and recognized the unamortized portion of the deferred tax charge of $13.9 million through a cumulative-effect adjustment to accumulated deficit.

As of September 30, 2018, the Company continues to maintain a valuation allowance against the Company's net deferred tax assets in certain foreign and state jurisdictions, as the Company is not able to conclude that it is more likely than not that these deferred tax assets will be realized. The Company reached this decision based on judgment, which included consideration of historical operating results and projections of future profits. The Company will continue to monitor the need for the valuation allowance on a quarterly basis.

The Company benefits from tax incentives granted by local tax authorities in certain foreign jurisdictions. In the fourth quarter of fiscal 2011, the Company agreed with the Malaysia Industrial Development Board to enter into a new tax incentive agreement which is a full tax exemption on statutory income for a period of 10 years commencing April 4, 2011. This tax incentive agreement is subject to the Company meeting certain financial targets, investments, headcounts and activities in Malaysia.

As of September 30, 2018, the Company is under examination in Malaysia for fiscal years 2012 through 2015, in Canada for fiscal years 2016 through 2017, in France for calendar year 2013 through 2014, and in India for fiscal years 2017 through 2018. Although the final outcome of each examination is uncertain, based on currently available information, the Company believes that the ultimate outcome will not have a material adverse effect on its financial position, cash flows or results of operations.

The Company's open years in the U.S. federal jurisdiction are fiscal year 2015 and later years. In addition, the Company is effectively subject to federal tax examination adjustments for tax years ended on or after fiscal year 2000, in that the Company has tax attribute carryforwards from these years that could be subject to adjustments, if and when utilized. The Company's open years in various state and foreign jurisdictions are fiscal years 2011 and later.

The Company does not expect a material change in unrecognized tax benefits within the next twelve months.

Note 18. Segment Information

The Chief Operating Decision Maker is the Company's President and Chief Executive Officer.

During the first quarter of fiscal 2019, the Company reorganized its operating segment structure resulting in a change to the composition of its reportable segments. Prior to the reorganization, some product groups of the acquired GigPeak business were aggregated into the Communications segment while the rest were included in the Computing, Consumer and Industrial segment. As a result of the reorganization, the entire GigPeak business was aggregated to the Computing, Consumer and Industrial segment. The segment financial results for the three and six months ended October 1, 2017 have been adjusted to conform to the new reportable segment structure effective April 2, 2018.

The Company's reportable segments include the following:

- Communications segment: includes clock and timing solutions, radio frequency (RF), flow-control management such as multi-port products, telecommunication interface, high-speed static random access memory, first in and first out memory, digital logic and frequency control solutions and Serial RapidIO® switching solutions.
- Computing, Consumer and Industrial segment: includes clock generation and distribution products, high-performance server memory interfaces, wireless power, PCI Express®, signal integrity, power management solutions, signal integrity products, optical interconnect, video distribution and contribution solutions and sensing products for mobile, automotive and industrial solutions.

The tables below provide information about these segments:

Revenues by segment	Three Months Ended		Six Months Ended	
	September 30, 2018	October 1, 2017	September 30, 2018	October 1, 2017
(in thousands)		*(1)*		*(1)*
Communications	$ 73,384	$ 61,957	$ 140,470	$ 118,505
Computing, Consumer and Industrial	162,100	142,441	323,530	282,606
Total revenues	$ 235,484	$ 204,398	$ 464,000	$ 401,111

Income by segment	Three Months Ended		Six Months Ended	
	September 30, 2018	October 1, 2017	September 30, 2018	October 1, 2017
(in thousands)		*(1)*		*(1)*
Communications	$ 35,118	$ 24,284	$ 66,495	$ 44,920
Computing, Consumer and Industrial	36,974	28,782	73,359	57,829
Unallocated expenses:				
Amortization of intangible assets	(9,365)	(8,963)	(18,699)	(19,804)
Inventory fair market value adjustment	—	(2,011)	(790)	(6,092)
Assets impairment and other	—	(917)	—	(917)
Stock-based compensation	(15,637)	(12,949)	(30,700)	(24,769)
Severance, retention and facility closure costs	(1,226)	(4,179)	(1,714)	(4,832)
Acquisition-related costs and other	—	—	—	(2,225)
Merger-related expenses	(3,884)	—	(3,884)	—
Other-than-temporary impairment loss on investment	—	—	(2,000)	—
Interest expense and other, net	(5,266)	(5,398)	(11,489)	(9,729)
Income before income taxes	$ 36,714	$ 18,649	$ 70,578	$ 34,381

(1) Prior period numbers have been adjusted to conform to the current organizational structure.

The Company does not allocate goodwill and intangible assets impairment charge, IPR&D, severance, acquisition-related costs, stock-based compensation, interest income and other, and interest expense to its segments. In addition, the Company does not allocate assets to its segments. The Company excludes these items consistent with the manner in which it internally evaluates its results of operations.

Revenues from unaffiliated customers by geographic area, based on the customers' shipment locations, were as follows:

	Three Months Ended		Six Months Ended	
(in thousands)	September 30, 2018	October 1, 2017	September 30, 2018	October 1, 2017
Hong Kong	$ 89,796	$ 70,810	$ 170,471	$ 134,698
Rest of Asia Pacific	64,458	62,781	131,750	127,317
Europe	31,219	32,024	60,973	56,356
Korea	25,246	21,275	52,773	39,437
Americas *(2)*	24,765	17,508	48,033	43,303
Total revenues	$ 235,484	$ 204,398	$ 464,000	$ 401,111

(2) The revenues from the customers in the U.S. were $20.3 million and $14.8 million in the three months ended September 30, 2018 and October 1, 2017, respectively. The revenues from the customers in the U.S. were $40.6 million and $36.9 million in the six months ended September 30, 2018 and October 1, 2017, respectively.

The Company utilizes global and regional distributors around the world, that buy products directly from the Company on behalf of their customers. Two distributors, Uniquest and its affiliates and Avnet and its affiliates, accounted for 12% and 16%, respectively, of the Company's revenues in the three months ended September 30, 2018. Two distributors, Uniquest and its affiliates and Avnet and its affiliates, accounted for 13% and 15%, respectively, of the Company's revenues in the six months ended September 30, 2018. One distributor, Avnet and its affiliates accounted for 15% of the Company's revenues in the three months ended October 1, 2017. One distributor, Avnet and its affiliates accounted for 14% of the Company's revenues in the six months ended October 1, 2017.

One direct original equipment manufacturer (OEM) customer, SK Hynix, accounted for 10% of the Company's revenues in the six months ended September 30, 2018. One direct original equipment manufacturer (OEM) customer, Samsung Electronics, accounted for 10% of the Company's revenues in the three and six months ended October 1, 2017.

As of September 30, 2018, one distributor represented approximately 20% of the Company's gross accounts receivable. As of April 1, 2018, one distributor represented approximately 15% of the Company's gross accounts receivable.

The Company's significant operations outside of the United States include test facilities in each of Malaysia and Germany, design centers in the U.S., Canada and China, and sales subsidiaries in APAC and Europe. The Company's net property, plant and equipment are summarized below by geographic area:

(in thousands)	September 30, 2018	April 1, 2018
United States	$ 40,224	$ 41,230
Malaysia	32,430	28,264
Germany	9,233	10,210
All other countries	7,099	7,141
Total property, plant and equipment, net	$ 88,986	$ 86,845

Note 19. Interest Income and Other, Net

The components of interest income and other, net are summarized as follows:

	Three Months Ended		Six Months Ended	
(in thousands)	September 30, 2018	October 1, 2017	September 30, 2018	October 1, 2017
Interest income	$ 1,170	$ 836	$ 2,345	$ 1,593
Other income, net	1,267	1,112	1,763	3,337
Interest income and other, net	$ 2,437	$ 1,948	$ 4,108	$ 4,930

Interest income is derived from earnings on cash and short-term investments. Other income, net primarily consists of gains or losses in the value of deferred compensation plan assets, foreign currency gains or losses and other non-operating gains or losses.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This report contains 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 (the Exchange Act). Any statements contained herein that are not statements of historical facts may be deemed to be forward-looking. Forward-looking statements, which are generally identified by words such as “anticipates,” “expects,” “plans,” “intends,” “seeks,” “targets,” “believes,” “can,” “may,” “might,” “could,” “should,” “would,” “will” and similar terms, include statements related to, among others, revenues and gross profit, research and development activities, selling, general and administrative expenses, restructuring costs, intangible expenses, interest income and other, taxes, capital spending and financing transactions, as well as statements regarding successful development and market acceptance of new products, industry and overall economic conditions and demand, and capacity utilization. Forward-looking statements are based upon current expectations, estimates, forecasts and projections that involve a number of risks and uncertainties. These risks and uncertainties include, but are not limited to: global business and economic conditions; operating results; new product introductions and sales; competitive conditions; capital expenditures and resources; manufacturing capacity utilization; customer demand and inventory levels; product performance; intellectual property matters; mergers and acquisitions and integration activities; and the risk factors set forth in Part II, Item 1A, “Risk Factors” to this Quarterly Report on Form 10-Q. As a result of these risks and uncertainties, actual results could differ significantly from those expressed or implied in the forward-looking statements. Unless otherwise required by law, we undertake no obligation to publicly revise these statements for future events or new information after the date of this Quarterly Report on Form 10-Q.

This discussion and analysis should be read in conjunction with our Consolidated Financial Statements and accompanying Notes included in this report and the Audited Consolidated Financial Statements and Notes thereto included in our Annual Report on Form 10-K for the year ended April 1, 2018 filed with the SEC on May 18, 2018. Operating results for the three and six months ended September 30, 2018 are not necessarily indicative of operating results for an entire fiscal year.

Critical Accounting Policies

Our condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the U.S. The preparation of such statements requires us to make estimates and assumptions that affect the reported amounts of revenues and expenses during the reporting period and the reported amounts of assets and liabilities as of the date of the financial statements. Our estimates and assumptions are based on historical experience and other factors that we consider to be appropriate in the circumstances. However, actual future results may vary from our estimates and assumptions.

For a discussion of our critical accounting policies, see Part II, Item 7, “Management's Discussion and Analysis of Financial Condition and Results of Operations” in our Annual Report on Form 10-K for the fiscal year ended April 1, 2018 and our Condensed Consolidated Financial Statements and accompanying Notes included in this report. We believe that these accounting policies are "critical," as defined by the SEC, in that they are both highly important to the portrayal of our financial condition and results, and they require difficult management judgments, estimates and assumptions about matters that are inherently uncertain. Except for the adoption of ASC Topic 606 and other newly adopted accounting policies discussed in Note 1 to the Condensed Consolidated Financial Statements included in this report, we believe that there have been no other significant changes during the three and six months ended September 30, 2018 to the items that we disclosed as our critical accounting policies in our Annual Report on Form 10-K for the fiscal year ended April 1, 2018.

Business Overview

We develop system-level solutions that optimize our customers’ applications in key markets. IDT’s market-leading products in radio frequency (RF), timing, real-time interconnect, wireless power transfer, serial switching, memory interfaces, automotive application-specific integrated circuits (ASICs), optical interconnect, video distribution and contribution, sensor signal conditioner integrated circuits (ICs) and environmental sensors are among our broad array of complete mixed-signal solutions for the communications, computing, consumer, automotive and industrial segments. These products are used for development in areas such as 4G/5G infrastructure, network communications, cloud datacenters, autonomous driving, connected homes, smart appliances and power management for computing and mobile devices.

Our top talent and technology, paired with an innovative product-development philosophy, allows us to solve complex customer problems when designing communications, computing, consumer, automotive and industrial applications.

On a worldwide basis, we primarily market our products to original equipment manufacturers (OEMs) through a variety of channels, including direct sales, distributors, electronic manufacturing suppliers (EMSs) and independent sales representatives.

For more information on our business, please see Part I, Item 1, “Business,” in our Annual Report on Form 10-K for the fiscal year ended April 1, 2018.

Recent developments

Pending Merger with Renesas Electronics Corporation

On September 10, 2018, we entered into an Agreement and Plan of Merger (the “Merger Agreement”) with Renesas Electronics Corporation, a Japanese corporation (“Renesas”). The Merger Agreement and the Merger (as defined below) have been approved by the boards of directors of both companies.

The Merger Agreement provides that, upon the terms and subject to the satisfaction or waiver of the conditions set forth therein, a wholly owned direct subsidiary of Renesas (“Merger Sub”) will be merged with and into IDT (the “Merger”), with IDT continuing as the surviving corporation and a direct wholly owned subsidiary of Renesas.

At the effective time of the Merger, each outstanding share of common stock, par value $0.001 per share, of IDT (a “Company Share”), other than shares held by stockholders who have validly exercised their appraisal rights under Delaware law, and certain shares owned by IDT, Renesas and their subsidiaries, will be automatically converted into the right to receive $49.00 in cash, without interest.

The consummation of the Merger is conditioned on the receipt of the approval of our stockholders, as well as the satisfaction of other customary closing conditions, including domestic and foreign regulatory approvals and performance in all material respects by each party of its obligations under the Merger Agreement. Consummation of the Merger is not subject to a financing condition. Closing of the Merger is expected in the first half of 2019, subject to two three-month extensions in order to obtain required regulatory approvals.

The Merger Agreement contains certain termination rights for us and Renesas, including if a governmental body prohibits the Merger or if the Merger is not consummated before June 10, 2019 subject to the two three-month extensions mentioned above. Upon termination of the Merger Agreement under specified circumstances, we or Renesas will be required to pay the other party a termination fee of $166.4 million. The foregoing description of the Merger Agreement and the Merger does not purport to be complete and is subject to, and qualified in its entirety by the full text of the Merger Agreement. For additional details on the transaction, refer to the copy of the Merger Agreement attached as an Exhibit 2.1 to the Form 8-K filed with the U.S. Securities and Exchange Commission on September 10, 2018.

We recorded transaction-related costs of $3.9 million, principally for outside financial advisory, legal and related fees and expenses associated with the pending acquisition, in the three months ended September 30, 2018. Additional transaction-related costs are expected to be incurred through the closing of the Merger.

The pending transaction with Renesas may have significant effects on us, including, among others, deferrals, delays or cancellation of purchase orders by our customers and the significant diversion of management and employee attention from ordinary course matters. For a more extensive discussion of those and other possible effects, refer to “Risk Factors.”

Refinancing of Term B Loan

On May 29, 2018 (the "Closing Date"), we entered into Amendment No. 1 (the “Amendment”) to our Credit Agreement dated April 4, 2017, for the purpose of, among other things, reducing the interest margin applicable to loans under the Credit Agreement by 0.50%, all of which was treated as a debt modification. On the Closing Date, the aggregate principal amount of the term loans outstanding under the Credit Agreement was approximately $198.0 million. Under the Amendment, the lenders agreed to provide to IDT new term loans (the “Term B-1 Loan”) in the same aggregate principal amount as the outstanding Initial Term B Loan. Such Term B-1 Loan was used to refinance the outstanding Initial Term B Loan in full. Refer to Note 16 for details.

Asset Acquisition

On August 10, 2017, we purchased certain assets of SpectraBeam for a total purchase consideration of $17.0 million, of which $12.9 million was paid in cash at closing and $4.1 million was recorded as a liability representing the fair value of contingent cash consideration. The acquisition did not meet the criteria for a business combination in accordance with ASC 805, *Business Combinations*, and accordingly, was accounted for as an asset acquisition. Aside from developed technology classified as an intangible asset, there was no other asset or liability that was allocated value in the purchase price allocation. The contingent cash consideration will be paid based upon achievement of certain milestones to be completed within two years from the closing date. Given that the milestones are probable of being achieved and the related amounts are estimable, the fair value of the contingent consideration was recognized as part of the cost of asset acquired at closing date. Accordingly, the total purchase consideration of $17.0 million was allocated to the developed technology.

Acquisition of GigPeak, Inc.

On April 4, 2017, we completed the acquisition of all of the outstanding common stock of GigPeak, a publicly held company mainly operating in the United States in an all-cash transaction for approximately $250.1 million (the "Acquisition"). As a result of this Acquisition, we recorded amortizable intangible assets of $97.9 million and goodwill of $113.2 million during the first quarter of fiscal 2018. In addition, we recorded approximately $2.2 million of acquisition related costs during the first quarter of fiscal 2018, which were included in Selling, General and Administrative Expenses in the Condensed Consolidated Statements of Operations. Refer to Note 4 for details.

Overview

The following table and discussion provide an overview of our operating results for the three and six months ended September 30, 2018 and October 1, 2017:

	Three Months Ended		Six Months Ended	
(in thousands, except for percentage)	**September 30, 2018**	**October 1, 2017**	**September 30, 2018**	**October 1, 2017**
Revenues	$ 235,484	$ 204,398	$ 464,000	$ 401,111
Gross profit	$ 143,584	$ 116,762	$ 280,191	$ 226,800
As a % of revenues	61%	57%	60%	57%
Operating income	$ 41,322	$ 23,535	$ 82,700	$ 43,182
As a % of revenues	18%	12%	18%	11%
Net income	$ 35,500	$ 18,680	$ 66,220	$ 35,394
As a % of revenues	15%	9%	14%	9%

Our revenues increased by $31.1 million, or 15%, to $235.5 million during the quarter ended September 30, 2018 compared to the quarter ended October 1, 2017. The increase was primarily due to increased demand for memory interface products and wireless power products, higher revenue contribution from automotive/industrial/sensing and radio frequency products, and revenue increases from other communications and certain legacy products. These increases were partially offset by revenue decreases from other computing, consumer and industrial products. Gross profit percentage and operating income percentage were 61% and 18%, respectively, for the quarter ended September 30, 2018; and 57% and 12%, respectively, for the quarter ended October 1, 2017. Net income was $35.5 million in the second quarter of fiscal 2019, as compared to net income $18.7 million in the second quarter of fiscal 2018. The increase in net income was primarily driven by higher revenue and gross margin as compared to the same period in prior fiscal year.

Results of Operations

Revenues

Revenues by segment:	Three Months Ended		Six Months Ended	
	September 30, 2018	**October 1, 2017**	**September 30, 2018**	**October 1, 2017**
(in thousands)		*(1)*		*(1)*
Communications	$ 73,384	$ 61,957	$ 140,470	$ 118,505
Computing, Consumer and Industrial	162,100	142,441	323,530	282,606
Total revenues	$ 235,484	$ 204,398	$ 464,000	$ 401,111

Product groups representing greater than 10% of net revenues:

	Three Months Ended		Six Months Ended	
As a percentage of net revenues	**September 30, 2018**	**October 1, 2017**	**September 30, 2018**	**October 1, 2017**
Communications:		*(1)*		*(1)*
Communications timing products	11%	12%	11%	11%
All others less than 10% individually *(2)*	20%	18%	19%	19%
Total Communications	31%	30%	30%	30%
Computing, Consumer and Industrial:				
Memory interface products	28%	26%	28%	26%
Automotive, industrial and sensing products	14%	14%	15%	14%
Wireless power products	12%	10%	11%	11%
All others less than 10% individually *(2)*	15%	20%	16%	19%
Total Computing, Consumer and Industrial	69%	70%	70%	70%
Total	100%	100%	100%	100%

(1) Prior period numbers have been adjusted to conform to our current organizational structure. See Note 18 for details.

(2) Includes product group with less than 10% of net revenue individually in a given year.

Communications Segment

Revenues in our Communications segment increased by $11.4 million, or 18.4%, to $73.4 million during the quarter ended September 30, 2018 as compared to the quarter ended October 1, 2017. The increase was primarily due to a $4.4 million revenue increase in our radio frequency products, a $2.7 million revenue increase in our communication timing products and a $4.3 million revenue increase in our legacy products.

Revenues in our Communications segment increased by $22.0 million, or 18.5%, to $140.5 million in the six months ended September 30, 2018 as compared to the six months ended October 1, 2017. The increase was primarily due to an $8.9 million revenue increase in our radio frequency products, a $5.1 million revenue increase in our communication timing products and an $8.0 million revenue increase in our legacy products.

Computing, Consumer and Industrial Segment

Revenues in our Computing, Consumer and Industrial segment increased by $19.7 million, or 13.8% to $162.1 million during the quarter ended September 30, 2018 as compared to the quarter ended October 1, 2017. The increase was primarily due to a $12.7 million revenue increase in our memory interface products, a $6.8 million revenue increase in our wireless power products and a $5.2 million revenue increase in our automotive/industrial/sensing products. The increase was partially offset by a $5.0 million revenue decrease from other computing, consumer and industrial products.

Revenues in our Computing, Consumer and Industrial segment increased $40.9 million, or 14.5%, to $323.5 million in the six months ended September 30, 2018 as compared to the six months ended October 1, 2017. The increase was primarily due to a $28.1 million revenue increase in our memory interface products, a $13.3 million revenue increase in our automotive/industrial/sensing products and an $8.3 million revenue increase in our wireless power products. The increase was partially offset by a $8.8 million revenue decrease from other computing, consumer and industrial products.

Revenues by Region

Revenues, based on shipped to locations, in Hong Kong, rest of APAC, Europe, Korea and Americas accounted for 38%, 27%, 13%, 11% and 11%, respectively, of consolidated revenues in the quarter ended September 30, 2018, compared to 35%, 31%, 15%, 10% and 9%, respectively, of our consolidated revenues in the quarter ended October 1, 2017.

Revenues, based on shipped to locations, in Hong Kong, rest of APAC, Europe, Korea and Americas accounted for 37%, 28%, 14%, 11% and 10%, respectively, of consolidated revenues in the six months ended September 30, 2018, compared to 34%, 32%, 13%, 10% and 11%, respectively, of our consolidated revenues in the six months ended October 1, 2017. The APAC region continues to be our strongest region, as many of our largest customers utilize manufacturers in that region.

Gross Profit

	Three Months Ended		Six Months Ended	
(in thousands, except for percentages)	**September 30, 2018**	**October 1, 2017**	**September 30, 2018**	**October 1, 2017**
Gross Profit	$ 143,584	$ 116,762	$ 280,191	$ 226,800
Gross Profit Percentage	61.0%	57.1%	60.4%	56.5%

Gross profit increased by $26.8 million in the three months ended September 30, 2018 compared to the three months ended October 1, 2017, as a result of increased revenues. Gross profit as a percentage of revenues increased by 3.9% in the three months ended September 30, 2018 compared to the three months ended October 1, 2017. Gross profit increased by $53.4 million in the six months ended September 30, 2018 compared to the six months ended October 1, 2017, as a result of increased revenues. Gross profit as a percentage of revenues increased by 3.9% in the six months ended September 30, 2018 compared to the six months ended October 1, 2017. Gross profit percentage increased for the three and six months ended September 30, 2018 compared to the same periods in prior year primarily due to an improved shipment mix of higher margin products.

Operating Expenses

The following table presents our operating expenses for the three and six months ended September 30, 2018 and October 1, 2017:

	Three Months Ended				Six Months Ended			
	September 30, 2018		October 1, 2017		September 30, 2018		October 1, 2017	
(in thousands, except for percentages)	**Dollar Amount**	**% of Net Revenue**	**Dollar Amount**	**% of Net Revenue**	**Dollar Amount**	**% of Net Revenue**	**Dollar Amount**	**% of Net Revenue**
Research and development	$ 55,509	24%	$ 48,742	24%	$ 107,743	23%	$ 97,191	24%
Selling, general and administrative	$ 46,753	20%	$ 44,485	22%	$ 89,748	19%	$ 86,427	22%

Research and Development (R&D)

R&D expense increased by $6.8 million, or 13.9%, to $55.5 million in the quarter ended September 30, 2018 compared to the quarter ended October 1, 2017. The increase was primarily driven by higher personnel-related costs (including stock-based compensation) which resulted from a mix of increased variable compensation, salary increases and new hires to support future product development. In addition, the increase was attributed to higher masks and materials and variable R&D spending.

R&D expense increased by $10.6 million, or 10.9%, to $107.7 million during the six months ended September 30, 2018 compared to the six months ended October 1, 2017. The increase was primarily driven by a $12.6 million increase from variable and stock-based compensation. This increase was partially offset by a $2.0 million decrease in acquisition-related expenses associated with the GigPeak acquisition in fiscal 2018.

Selling, General and Administrative (SG&A)

SG&A expense increased by $2.3 million, or 5.1%, to $46.8 million in the quarter ended September 30, 2018 as compared to the quarter ended October 1, 2017. The increase was primarily driven by transaction-related costs of $3.9 million associated with the pending merger with Renesas, and a $2.3 million increase from personnel-related costs (including stock-based compensation) which resulted from a mix of increased variable compensation and salary increases. This increase was partially offset by a $3.9 million decrease in restructuring related expenses associated with the GigPeak integration in fiscal 2018.

SG&A expense increased by $3.3 million, or 3.8%, to $89.7 million in the six months ended September 30, 2018 as compared to the six months ended October 1, 2017. The increase was primarily driven by transaction-related costs of $3.9 million associated with the pending merger with Renesas, and a $5.6 million increase from personnel-related costs (including stock-based compensation) which resulted from a mix of increased variable compensation and salary increases. The increase was partially offset by a $6.2 million decrease in acquisition and restructuring related expenses in connection with the GigPeak acquisition and integration in fiscal 2018.

Interest Expense

The components of interest expense for the three and six months ended September 30, 2018 and October 1, 2017 are summarized as follows:

	Three Months Ended		Six Months Ended	
(in thousands)	**September 30, 2018**	**October 1, 2017**	**September 30, 2018**	**October 1, 2017**
Contractual interest expense	3,141	3,102	6,313	6,034
Amortization of debt discount	3,391	3,210	6,736	6,377
Amortization of debt issuance costs	475	475	950	949
Other	38	47	231	371
Total interest expense	$ 7,045	6,834	$ 14,230	13,731

Interest expense for the three and six months ended September 30, 2018 and October 1, 2017 was primarily related to the Convertible Notes and the term loans.

Interest Income and Other, Net

The components of interest income and other, net are summarized as follows:

	Three Months Ended		Six Months Ended	
(in thousands)	September 30, 2018	October 1, 2017	September 30, 2018	October 1, 2017
Interest income	$ 1,170	$ 836	$ 2,345	$ 1,593
Other income, net	1,267	1,112	1,763	3,337
Interest income and other, net	$ 2,437	$ 1,948	$ 4,108	$ 4,930

Interest income is derived from earnings on our cash and short-term investments. Other income, net primarily consists of gains or losses in the value of deferred compensation plan assets, foreign currency gains or losses and other non-operating gains or losses. The increase in interest income in the three and six months ended September 30, 2018 as compared to the same periods in prior year was primarily attributable to higher average interest rates and higher average invested balances for the period. The decrease in other income in the six months ended September 30, 2018 as compared to the same periods in prior year was primarily driven by the unfavorable impact of foreign currency fluctuations which were partially offset by the increase in fair value of the underlying investments of the deferred compensation plan.

Income Tax Expense (Benefit)

During the three and six months ended September 30, 2018, we recorded an income tax expense of $1.2 million and $4.4 million, respectively. We recorded an income tax benefit of $31 thousand and $1.0 million during the three and six months ended October 1, 2017 respectively. The income tax expense recorded in the three and six months ended September 30, 2018 was primarily due to the impacts of the current year U.S. taxation of certain income of our foreign subsidiaries and an increase in higher-taxed earnings in foreign jurisdictions, partially offset by tax benefits from U.S. research and development and future foreign tax credit arising from withholding taxes on unrepatriated foreign earnings. The income tax benefit recorded in the six months ended October 1, 2017, was primarily due to the reduction to the deferred tax liability related to amortization of acquired intangible assets as well as the tax benefit from excess tax benefits on stock-based compensation.

As of September 30, 2018, we continue to maintain a valuation allowance against our net deferred tax assets in certain foreign and state jurisdictions, as we are not able to conclude that is more likely than not that these deferred tax assets will be realized. We reached this decision based on judgment, which included consideration of historical operating results and projections of future profits. We will continue to monitor the need for the valuation allowance on a quarterly basis.

In fiscal year 2018, in connection with the TCJA and review of our projected offshore cash flows, and global cash requirements, we determined that historical foreign earnings would no longer be permanently reinvested. We plans to continue to repatriate its offshore earnings to the U.S. for domestic operations, and has accrued for the related tax impacts accordingly.

The SEC staff issued Staff Accounting Bulletin 118 which allows companies to record provisional amounts during a measurement period that is similar to the measurement period used when accounting for business combinations. As of April 1, 2018, we have made reasonable estimates of the effects on our existing deferred tax balances and the one-time repatriation tax recording provisional charges as a component of income tax expense from continuing operations. As of September 30, 2018, we had not fully completed our accounting for the tax effects of the enactment of the TCJA. Our provision for income taxes is based in part on a reasonable estimate of the effects on our transition tax and existing deferred tax balances. We will continue to assess the impact of the recently enacted tax law and expected further guidance from federal and state tax authorities as well as further guidance for the associated income tax accounting on our business and consolidated financial statements.

We benefit from tax incentives granted by local tax authorities in certain foreign jurisdictions. In the fourth quarter of fiscal 2011, we agreed with the Malaysia Industrial Development Board to enter into a new tax incentive agreement which is a full tax exemption on statutory income for a period of 10 years commencing April 4, 2011. This tax incentive agreement is subject to the Company meeting certain financial targets, investments, headcounts and activities in Malaysia.

As of September 30, 2018, we are under examination in Malaysia for fiscal years 2012 through 2015, in Canada for fiscal years 2016 through 2017, in France for calendar year 2013 through 2014, and in India for fiscal years 2017 through 2018. Although the final outcome of each examination is uncertain, based on currently available information, we believe that the ultimate outcome will not have a material adverse effect on our financial position, cash flows or results of operations.

Our open years in the U.S. federal jurisdiction are fiscal year 2015 and later years. In addition, we are effectively subject to federal tax examination adjustments for tax years ended on or after fiscal year 2000, in that we have tax attribute carryforwards from these years that could be subject to adjustments, if and when utilized. Our open years in various state and foreign jurisdictions are fiscal years 2011 and later.

We do not expect a material change in unrecognized tax benefits within the next twelve months.

Liquidity and Capital Resources

Our cash and cash equivalents and short-term investments were $392.7 million as of September 30, 2018, an increase of $33.8 million compared to April 1, 2018. We had an outstanding debt in the form of Convertible Notes amounting to $373.8 million as of September 30, 2018 and April 1, 2018, and term loans with outstanding principal balance of $197.0 million and $198.0 million as of September 30, 2018 and April 1, 2018, respectively.

The Convertible Notes are governed by the terms of an indenture, dated November 4, 2015, between the Company and a trustee. The Convertible Notes are the senior unsecured obligations of the Company and bear interest at a rate of 0.875% per annum, payable semi-annually in arrears on May 15 and November 15 of each year, commencing May 15, 2016. The Convertible Notes will mature on November 15, 2022, unless earlier repurchased or converted. At any time prior to the close of business on the business day immediately preceding August 15, 2022, holders may convert their Convertible Notes at their option only under the certain circumstances as defined in the indenture. On or after August 15, 2022 until the close of business on the second scheduled trading day immediately preceding the maturity date, holders may convert their notes at any time, regardless of such circumstances. The conversion rate for the Convertible Notes will initially be 29.8920 shares of common stock per $1,000 principal amount of Convertible Notes, which corresponds to an initial conversion price of approximately $33.45 per share of common stock. The conversion rate is subject to adjustment from time to time upon the occurrence of certain events, including, but not limited to, the issuance of certain stock dividends on common stock, the issuance of certain rights or warrants, subdivisions, combinations, distributions of capital stock, indebtedness, or assets, the payment of cash dividends and certain issuer tender or exchange offers. As of September 30, 2018, none of the conditions allowing holders of the Convertible Notes to convert had been met.

On May 29, 2018 (the "Closing Date"), we entered into Amendment No. 1 (the “Amendment”) to its Credit Agreement, for the purpose of, among other things, reducing the interest margin applicable to loans under the Credit Agreement by 0.50%, all of which was treated as a debt modification. On the Closing Date, the aggregate principal amount of the term loans outstanding under the Credit Agreement was approximately $198.0 million. Under the Amendment, the lenders agreed to provide to IDT new term loans (the “Term B-1 Loan”) in the same aggregate principal amount as the outstanding Initial Term B Loan. Such Term B-1 Loan was used to refinance the outstanding Initial Term B Loan in full. The maturity date of the Term B-1 Loan is April 4, 2024; provided that if any of our Convertible Notes are outstanding on August 16, 2022, the maturity date of which had not otherwise been extended to a date that is no earlier than 91 days after April 4, 2024, the Term B-1 Loan maturity date shall instead be August 16, 2022, unless we and its guarantors shall have cash, permitted investments and/or unwithdrawn revolving credit commitments in an aggregate amount not less than the aggregate principal amount of then outstanding Convertible Notes.

We will repay the principal amount of the Term B-1 Loan on the last day of each March 31, June 30, September 30 and December 31, in an amount equal to 0.25% of the original principal amount of the Initial Term B Loan; and on the maturity date, as described above, in an amount equal to the remainder of the outstanding principal amount of the Term B-1 Loan. We may prepay the Term B-1 Loan, in whole or in part, at any time without premium or penalty, subject to certain conditions, and amounts repaid or prepaid may not be reborrowed. The interest rate of the Term B-1 Loan is based on adjusted LIBO rate which is equal to the LIBO rate for such interest period multiplied by statutory reserve rate, plus an applicable margin of 2.5% (3.0% prior to the Amendment. For the three-month periods ended September 30, 2018 and October 1, 2017, the interest rate on the Term B-1 Loan and the Initial Term B Loan was approximately 4.59% and 4.15%, respectively.

Cash Flows from Operating Activities

Net cash provided by operating activities totaled $139.6 million in the six months ended September 30, 2018 compared to $98.6 million in the six months ended October 1, 2017. Cash provided by operating activities in the six months ended September 30, 2018 consisted of our net income of $66.2 million, adjusted to add back non-cash items such as stock-based compensation, depreciation, amortization, impairment charges, amortization of debt issue cost and debt discount and deferred income tax which totaled $79.1 million; and less net cash used for working capital requirements of $5.7 million.

Cash Flows from Investing Activities

Net cash provided by investing activities in the six months ended September 30, 2018 was $8.5 million compared to net cash used of $306.6 million in the six months ended October 1, 2017. Net cash provided by investing activities in the six months ended September 30, 2018 was primarily due to $42.9 million of proceeds from short-term investments. Those were partly offset by $13.1 million net purchases of short-term investments, $20.3 million of expenditures to purchase capital equipment and intangible assets, and a $1.0 million purchase of a non-marketable security.

Cash Flows from Financing Activities

Net cash used by financing activities in the six months ended September 30, 2018 was $82.5 million compared to net cash provided of $139.5 million in the six months ended October 1, 2017. Cash used in financing activities in the six months ended September 30, 2018 was primarily due to $87.5 million of proceeds used in the repurchase of our common stock, $2.8 million of payment of contingent consideration and $1.6 million of payment of capital lease and bank loan. Those were partly offset by $9.4 million of proceeds from exercise of employee stock options and the issuance of stock under our employee stock purchase plan.

We anticipate capital expenditures of approximately $30.0 million to $40.0 million during the next 12 months to be financed through cash generated from operations and existing cash and investments.

In addition, as much of our revenues are generated outside the U.S., a significant portion of our cash and investment portfolio accumulates in the foreign countries in which we operate. As of September 30, 2018, we had cash, cash equivalents and investments of approximately $196.0 million invested overseas in accounts belonging to various IDT foreign operating entities. While these amounts are primarily invested in U.S. dollars, a portion is held in foreign currencies, and all offshore balances are exposed to local political, banking, currency control and other risks. In addition, these amounts may be subject to tax and other transfer restrictions.

We believe that existing cash and investment balances, together with cash flows from operations, will be sufficient to meet our working capital and capital expenditure needs through at least the next 12 months. We may choose to investigate other financing alternatives to supplement U.S. liquidity; however, we cannot be certain that additional financing will be available on satisfactory terms.

Off-Balance Sheet Arrangements

As of September 30, 2018, we did not have any significant off-balance sheet arrangement, as defined under SEC Regulation S-K Item 303(a)(4)(ii), other than the items discussed and in "Note 13 - Commitments and Contingencies - Commitments" in Part I, Item 1 of this quarterly report on Form 10-Q.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Our interest rate risk relates primarily to our short-term investments of $192.0 million and $222.0 million as of September 30, 2018 and April 1, 2018, respectively. By policy, we limit our exposure to long-term investments and mitigate the credit risk through diversification and adherence to a policy requiring the purchase of highly rated securities. As of September 30, 2018 and April 1, 2018, our cash, cash equivalents and investment portfolio was concentrated in securities with same day liquidity and a substantial majority of securities in our investment portfolio had maturities of less than two years. A hypothetical 10% change in interest rates would not have a material effect on the value of our investment portfolio as of September 30, 2018. We do not currently use derivative financial instruments in our investment portfolio.

As of September 30, 2018, we had an outstanding principal balance in our Term B-1 Loan of $197.0 million. The interest rate of the Term B-1 Loan is based on adjusted LIBO rate which is equal to the LIBO rate for such interest period multiplied by statutory reserve rate, plus an applicable margin of 2.5%. As the applicable interest rate is based on a floating rate index, we are exposed to interest rate risk. A one hundred basis point change in the contractual interest rate would increase the interest expense for the next 12 months on our outstanding Term B-1 Loan by $2.0 million.

At September 30, 2018 and April 1, 2018, we had an outstanding debt of $373.8 million in the form of convertible note. The fair value of our Convertible Notes is subject to interest rate risk, market risk and other factors due to the convertible feature. The fair value of the Convertible Notes will generally increase as interest rates fall and decrease as interest rates rise. In addition, the fair value of the Convertible Notes will generally increase as our common stock price increases and will generally decrease as our common stock price declines in value. The interest and market value changes affect the fair value of our Convertible Notes but do not impact our financial position, cash flows or results of operations due to the fixed nature of the debt obligation.

We are exposed to foreign currency exchange rate risk as a result of international sales, assets and liabilities of foreign subsidiaries, local operating expenses of our foreign entities and capital purchases denominated in foreign currencies. We may use derivative financial instruments to help manage our foreign currency exchange exposures. We do not enter into derivatives for speculative or trading purposes. We have foreign exchange facilities used for hedging arrangements with banks that allow us to enter into foreign exchange contracts totaling approximately $32.0 million, all of which was available at September 30, 2018. As of September 30, 2018 and April 1, 2018, we had no material outstanding foreign exchange contracts.

A substantial majority of our sales is denominated in U.S. dollars. We therefore do not have material foreign currency risk associated with sale of products. We performed a sensitivity analysis for the three months ended September 30, 2018 and October 1, 2017 and determined that, without hedging the exposure, a 10% change in foreign currency exchange rates would result in an approximate 0.6% and 0.7% impact on our revenues (as a percentage of revenue), respectively. For the three months ended September 30, 2018 and October 1, 2017, a 10% change in foreign currency exchange rates would result in an approximate 0.5% and 0.9% impact on gross profit margin percentage, respectively, as we operate manufacturing testing facilities in Malaysia and Germany. For the three months ended September 30, 2018 and October 1, 2017, a 10% change in foreign currency exchange rates would result in an approximate 0.6% impact to operating expenses (as a percentage of revenue), as we operate sales offices in Japan, Taiwan and South Korea and throughout Europe and design centers in China and Canada.

Additionally, a relatively small amount of our monetary assets and liabilities are denominated in foreign currencies. Fluctuations in these currencies relative to the United States dollar will result in transaction gains or losses included in net earnings. To date, foreign currency transaction gains or losses due to fluctuations in foreign currency exchange rates were not material.

We did not have any material currency exposure related to any outstanding capital purchases as of September 30, 2018 and April 1, 2018.

ITEM 4. CONTROLS AND PROCEDURES

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating our disclosure controls and procedures, our management recognizes that any disclosure controls and procedures, no matter how well designed and operated, can provide only reasonable, not absolute, assurance of achieving the desired control objectives, and our management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible disclosure controls and procedures.

As of September 30, 2018, the end of the quarter covered by this report, we carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that our disclosure control and procedures were effective at a reasonable assurance level. There have been no changes in our internal control over financial reporting during the most recent fiscal quarter that have materially affected, or are reasonable likely to materially affect, our internal controls over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

Litigation

In January 2012, Maxim I Properties, a general partnership that had purchased a certain parcel of real property (the Property) in 2003, filed a complaint in the Northern District of California naming approximately 30 defendants, including the Company ("Defendants"), alleging various environmental violations of the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Resource Conservation and Recovery Act (RCRA), the California Hazardous Substance Account Act (HSAA), and other common law claims (the Complaint). The Complaint alleged that Defendants including the Company "…generated, transported, and/or arranged for the transport and/or disposal of hazardous waste to the Property." On August 15, 2012, Maxim I Properties voluntarily dismissed its Complaint without prejudice. However, another defendant, Moyer Products, Inc., counter-claimed against the plaintiff, Maxim, and cross-claimed against the remaining co-Defendants, including the Company. Thus, the Company remains a cross-defendant in this action. In a related, but independent action, the California Department of Toxic Substances Control (DTSC) notified the Company in September 2012 that the Company, and more than 50 other entities, were being named as respondents to DTSC's Enforcement Order, as "a generator of hazardous waste." In April 2013, the Company, along with the other "respondent" parties, entered into a Corrective Action Consent Agreement (CACA) with the DTSC, agreeing to conduct the Property investigation and corrective action selection. The CACA supersedes the DTSC's Enforcement Order. The District Court for the Northern District of California stayed the Maxim/Moyer litigation pending the Property investigation under the CACA and DTSC's corrective action selection. Property investigation activity took place between April 2013 and June 2015. On June 23, 2015, the DTSC deemed the Property investigation complete. The DTSC continues to evaluate corrective action alternatives. The Company will continue to vigorously defend itself against the allegations in the Complaint and evaluate settlement options with Moyer upon notification from DTSC of its corrective action selection. No specific corrective action has been selected yet, and thus no specific monetary demands have been made.

The Company may also be a party to various other legal proceedings and claims arising in the normal course of business from time to time. With regard to the matters listed above, along with various other legal proceedings and claims and future matters that may arise, potential liability and probable losses or ranges of possible losses due to an unfavorable litigation outcome cannot be reasonably estimated at this time. Generally, litigation is subject to inherent uncertainties, and no assurance can be given that the Company will prevail in any particular lawsuit or claim. Pending lawsuits, claims as well as potential future litigation, could result in substantial costs and diversion of resources and could have a material adverse effect on the Company's financial condition, results of operations or cash flows.

ITEM 1A. RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below and all information contained in this report before you decide to purchase our common stock. These risk factors are intended to highlight certain factors that may affect our financial condition and results of operations and are not meant to be an exhaustive discussion of risks that we may face. Our operations could also be affected by factors that are not presently known to us or that we currently consider to be immaterial to our operations. Due to risk and uncertainties, both known and unknown, we may be unable to conduct our business as currently planned and our financial condition and operating results could be adversely impacted.

In addition, the price of our securities is subject to volatility and could decline due to the occurrence of any of these risks, causing investors to lose all or part of their investment.

The announcement and pendency of our agreement to be acquired by Renesas may have an adverse effect on our business, operation and stock price.

Our pending acquisition by Renesas could have an adverse effect on our revenue in the near term if our customers delay, defer or cancel purchases pending completion of the Merger. While we are attempting to address this risk through communications with our customers, current and prospective customers may be reluctant to purchase our products due to uncertainty about the direction of our product offerings and the support and service of our products after the Merger is consummated. Additionally, we are subject to additional risks in connection with the announcement and pendency of the Merger, including:

- various conditions to the closing of the Merger may not be satisfied or waived;
- the pendency and outcome of any legal proceedings that may be instituted against us, our directors and others relating to the transactions contemplated by the Merger Agreement;
- potential adverse effects on our relationships with our current suppliers and other business partners, or those with which we are seeking to establish business relationships;
- the restrictions imposed on our business and operations under the Merger Agreement, which may prevent us from pursuing opportunities without Renesas' approval or taking other actions, whether in the form of dividend payments, stock repurchases, restructurings, asset dispositions or otherwise, that we might have undertaken in the absence of this transaction;
- that the Merger Agreement contains customary provisions that may limit our ability to pursue alternative sale proposals;
- that we may forego opportunities we might otherwise have pursued absent the Merger Agreement;
- the required regulatory approvals from governmental entities may delay the Merger or result in the imposition of conditions that could cause Renesas to abandon the Merger;
- potential adverse effects on our ability to attract, recruit, retain and motivate current and prospective employees who may be uncertain about their future roles and relationships with us following the completion of the Merger; and
- the significant diversion of our employees' and management's attention resulting from the transactions contemplated by the Merger Agreement.

The failure of our pending acquisition by Renesas to be completed may adversely affect our business, results of operations and stock price.

Each of our and Renesas's obligations to consummate the Merger is subject to a number of conditions specified in the Merger Agreement, including the following: (a) adoption of the Merger Agreement by at least a majority of all outstanding Company shares, (b) the absence of certain laws, orders, judgments and injunctions that restrain, enjoin or otherwise prohibit the consummation of the Merger, (c) expiration or termination of the applicable Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended (the "HSR Act"), waiting period and receipt of specified governmental and regulatory consents and approvals, (d) subject to certain exceptions, the accuracy of representations and warranties with respect to the businesses of IDT and Renesas and compliance in all material respects by IDT, Renesas and Merger Sub with their respective covenants contained in the Merger Agreement, and (e) the absence of a material adverse effect on IDT's business. The waiting period under the HSR Act expired at 11:59 p.m., Eastern time, on October 22, 2018, but there can be no assurance that these other conditions to the completion of the transaction will be satisfied in a timely manner or at all.

If the transaction is not completed, our stock price could fall to the extent that our current price reflects an assumption that the acquisition will be completed. Furthermore, if the acquisition is not completed, we may suffer other consequences that could adversely affect our business, results of operations and stock price, including the following:

- we could be required to pay a termination fee of up to $166.4 million to Renesas under circumstances as described in the Merger Agreement;
- we have incurred, and will continue to incur, significant costs, expenses and fees for professional services and other transaction costs in connection with the Merger, and these fees and costs are payable by us regardless of whether the Merger is consummated;
- the failure of the acquisition to be consummated may result in adverse publicity and a negative impression of us in the investment community;
- the pendency and outcome of any legal proceedings may be instituted against us, our directors and others relating to the transactions contemplated by the Merger Agreement;
- any disruptions to our business resulting from the announcement and pendency of the acquisition, including any adverse changes in our relationships with our customers, vendors and employees, may continue or intensify in the event the Merger is not consummated;

- we may not be able to take advantage of alternative business opportunities or effectively respond to competitive pressures; and
- we may experience employee departures.

Any delay in completing the Merger may significantly reduce the benefits expected to be obtained from the Merger.

In addition to the required regulatory clearances and approvals described above under “The failure of our pending acquisition by Renesas to be completed may adversely affect our business, results of operations and stock price,” the Merger is subject to a number of other conditions described in the Merger Agreement that are beyond our control. We cannot predict whether and when these conditions, and the other required regulatory clearances and approvals will be satisfied. Any delay in completing the Merger within the expected timeframe may significantly reduce the synergies and other benefits that we expect to achieve as a result of the Merger.

Our operating results can fluctuate dramatically.

Our operating results have fluctuated in the past and are likely to vary in the future. Past financial results may not be a reliable indicator of future performance. Fluctuations in operating results can result from a wide variety of factors, including:

- global economic conditions, including those related to the credit markets;
- the cyclicality of the semiconductor industry;
- changes in the demand for and mix of products sold and in the markets we and our customers serve;
- the availability of industry-wide wafer processing capacity;
- the availability of industry-wide and package specific assembly subcontract capacity and related raw materials;
- competitive pricing pressures;
- the success and timing of new product and process technology announcements and introductions from us or our competitors;
- potential loss of market share among a concentrated group of customers;
- difficulty in attracting and retaining key personnel;
- difficulty in predicting customer product requirements;
- production difficulties and interruptions caused by our complex manufacturing and logistics operations;
- limited control over our manufacturing and product delivery as a result of our reliance on subcontractors, foundry and other manufacturing services;
- unrealized potential of acquired businesses and resulting assets impairment;
- availability and costs of raw materials from a limited number of suppliers;
- political, economic and health conditions in various geographic areas;
- trade-relations disputes and/or tariffs imposed by various countries;
- imposition and/or enforcement of U.S. export control restrictions or similar regulatory trade limitations;
- timing and execution of plans and programs subject to foreign labor law requirements, including consultation with work councils;
- reduced customer demand as a result of the impact from natural and/or man-made disasters which may adversely impact our customer's manufacturing capability or reduce our customer's ability to acquire critical materials or components to manufacture their end products;
- costs associated with other events, such as intellectual property disputes or other litigation; and
- legislative, tax, accounting, or regulatory changes or changes in their interpretation.

Global economic and geo-political conditions may adversely affect our business and results of operations.

We have and/or rely on facilities and operations in many countries throughout the world and some of our operations are concentrated in one or more geographic regions. A significant portion of our revenue comes from shipments to locations outside the United States. As a result of the breadth of our international operations, we are subject to the potential for substantial volatility in global capital markets and the global demand for semiconductor product. Our financial results and operations, including our ability to manufacture, assemble and test, design, develop and sell products, may be adversely affected by various global economic and geo-political conditions which can include:

- slow, uneven economic growth throughout the world;
- uncertainty regarding macroeconomic conditions and/or an institutional or economic collapse in a geographic region;
- geo-political events and security breaches throughout the world, such as armed conflict, civil or military unrest, political instability, terrorist activity, cyber attacks and data fraud or theft;
- natural disasters and public health issues including pandemics and outbreaks of infectious diseases;
- large scale disruptions in transportation, communications and information technology networks;
- disruption from trade-relations disputes and/or tariffs imposed by various countries; and
- imposition and/or enforcement of U.S. export control restrictions or similar regulatory trade limitations.

The cyclicality of the semiconductor industry exacerbates the volatility of our operating results.

The semiconductor industry is highly cyclical and has experienced significant downturns, often in connection with product cycles of both semiconductor companies and their customers, but also related to declines in general economic conditions. These downturns have been characterized by volatile customer demand, high inventory levels and accelerated erosion of average selling prices. Any future economic downturns could materially and adversely affect our business from one period to the next relative to demand and product pricing. In addition, the semiconductor industry may experience periods of increased demand, during which we may experience internal and external manufacturing constraints. We may also experience substantial changes in future operating results due to the cyclical nature of the semiconductor industry.

Our acquisitions and the integration of businesses, operations and employees with our own will involve risks and the failure to integrate successfully in the expected time frame may adversely affect our future results.

Any failure to successfully integrate the business, operations and employees of acquired companies could harm our results of operations. Our ability to realize these benefits will depend, in part, on the timely integration and consolidation of organizations, operations, facilities, procedures, policies and technologies, and the harmonization of differences in the business cultures between the companies and their personnel. Implementation and integration of acquired businesses will be complex and time-consuming, will involve additional expense and could disrupt our business and divert management's attention from ongoing business concerns. The challenges involved in integrating acquired businesses will include:

- preserving customer, supplier and other important relationships of the acquired companies and the Company;
- coordinating and integrating operations;
- integrating financial forecasting and controls, procedures and reporting cycles;
- combining and integrating information technology systems; and
- integrating employees and related human resources systems and benefits, maintaining employee morale and retaining key employees.

The benefits we expect to realize from acquisitions are, necessarily, based on projections and assumptions about the combined businesses of the Company and the acquired businesses and assume, among other things, the successful integration of the acquired companies into our business and operations. We may not successfully integrate such acquired businesses and our operations in a timely manner, or at all. If we do not realize the anticipated benefits of such transaction, our growth strategy and future profitability could be affected. In addition, an acquisition could significantly increase the amount of our goodwill and other intangible assets, which could adversely affect our future results of operations.

We have a substantial amount of indebtedness which could adversely affect our financial position and prevent us from implementing our strategy or fulfilling our contractual obligations.

We borrowed $198.0 million in a term loan facility (Term B-1 Loan) with a maturity date of April 4, 2024. In November 2015, we issued $373.8 million of 0.875% Convertible Senior Notes due 2022 (Convertible Notes). Our substantial indebtedness may:

- limit our ability to use our cash flow or borrow additional funds for working capital, capital expenditures, acquisitions and general corporate and other purposes;
- make it difficult for us to satisfy our financial obligations;
- place us at a competitive disadvantage compared to our less leveraged competitors; and
- increase our vulnerability to the impact of adverse economic and industry conditions.

Our Credit Agreement related to the Term B-1 Loan contains customary affirmative and negative covenants, including covenants that limit or restrict our and our subsidiaries' ability to, among other things, incur indebtedness, grant liens, merge or consolidate, dispose of assets, make investments, make acquisitions, enter into transactions with affiliates, pay dividends or make distributions and repurchase stock. Any of these factors could materially and adversely affect our business, financial condition and results of operations. In addition, if we incur additional indebtedness, the risks related to our business and our ability to service or repay our indebtedness would increase.

The exercise of warrants issued to JPMorgan Chase Bank concurrently with our Convertible Notes would, and the conversion of our Conversion Notes could, dilute the ownership interest of our existing shareholders.

If the market price per share of our common stock, as measured under the terms of the warrant transactions, exceeds the strike price of the warrants during the measurement period at the maturity of the warrants, we will owe JPMorgan Chase Bank a number of shares of our common stock in an amount based on the excess of such market price per share of our common stock over the strike price of the warrants. Any issuance by us of additional shares to JPMorgan Chase Bank upon exercise of the warrants will dilute the ownership interest of our existing shareholders. In addition, the conversion of our Convertible Notes will dilute the ownership interests of our existing shareholders and could have a dilutive effect on our net income per share to the extent that the price of our common stock exceeds the conversion price of the Convertible Notes. Any sales in the public market by JPMorgan Chase Bank of our common stock upon exercise of the warrants or sales in the public market of our common stock issuable upon conversion of the Convertible Notes could adversely affect prevailing market prices of our common stock.

We have made and may continue to make acquisitions and divestitures which could divert management's attention, cause ownership dilution to our stockholders, be difficult to integrate, and/or adversely affect our financial results.

Acquisitions and divestitures are commonplace in the semiconductor industry and we have acquired and divested, and may continue to acquire or divest, businesses and technologies. Mergers, acquisitions and divestitures include a number of risks and present financial, managerial and operational challenges. Acquisitions or divestitures could divert our management's attention and other resources from other business concerns. Integrating newly acquired businesses or technologies, or in the case of a divestiture, separating businesses or technologies, could put a strain on our resources, could be costly and time consuming, and might not be successful. In addition, we might lose key employees while integrating new organizations or might incur increased expenses, including but not limited to legal, administrative and compensation expenses, related to newly hired or terminated employees. Acquisitions and divestitures could also result in customer dissatisfaction, performance problems with an acquired company or technology, dilutive or potentially dilutive issuances of equity securities, the incurrence of debt, the assumption or incurrence of contingent liabilities, or other unanticipated events or circumstances, any of which could harm our business. Consequently, we might not be successful in acquiring or integrating any new businesses, products, or technologies, and might not achieve anticipated revenues and cost benefits. In addition, we might be unsuccessful in finding or completing acquisition or divestiture opportunities on acceptable terms in a timely manner. For all these reasons, our pursuit of an acquisition, investment, divestiture, merger or joint venture could cause our actual results to differ materially from those anticipated.

Demand for our products depends primarily on demand in the communications, enterprise computing, consumer, automotive and industrial markets which can be significantly affected by concerns over macroeconomic issues.

Our product portfolio consists predominantly of semiconductor solutions for the communications, computing, consumer, automotive and industrial markets. Our strategy and resources are directed at the development, production and marketing of products for these markets. The markets for our products will depend on continued and growing demand for communications equipment, servers, consumer electronics, and automotive and industrial solutions. These end-user markets may experience changes in demand that could adversely affect our business and could be greater in periods of economic uncertainty and contraction. To the extent demand or markets for our products do not grow, our business could be adversely affected.

We rely upon subcontractors and third-party foundries.

We are dependent on third-party subcontractors for all of our assembly operations. We are also dependent on third-party outside foundries for the manufacture of our silicon wafers. Our reliance on subcontractors and third-party foundries for our current products presents certain risks because we will have less control over manufacturing quality and delivery schedules, maintenance of sufficient capacity to meet our orders and maintaining in place the manufacturing processes we require. Due to production lead times and potential capacity constraints, any failure on our part to adequately forecast the mix of product demand and resulting foundry and subcontractor requirements could adversely affect our operating results. In addition, we cannot be certain that these foundries and subcontractors will continue to manufacture, assemble, package and test products for us on acceptable economic and quality terms, or at all, and it may be difficult for us to find alternatives in a timely and cost-effective manner if they do not do so.

We build most of our products based on estimated demand forecasts.

Demand for our products can change rapidly and without advance notice. Demand can be affected by changes in our customers' levels of inventory and differences in the timing and pattern of orders from their end customers. Also, product recalls or delays and/or discontinuance of product development activities of our customers can impact the demand for our products. A large percentage of our revenue in the APAC region is recognized upon shipment to our distributors. Consequently, we have less visibility over both inventory levels at our distributors and end customer demand for our products. Further, the distributors have assumed more risk associated with changes in end demand for our products. Accordingly, significant changes in end demand in the semiconductor business in general, or for our products in particular, may be difficult for us to detect or otherwise measure, which could cause us to incorrectly forecast end-market demand for our products. If we are not able to accurately forecast end demand for our products, we may be left with large amounts of unsold products, may not be able to fill all actual orders, and may not be able to efficiently utilize our existing manufacturing capacity or make optimal investment and other business decisions. As a result, we may end up with excess and obsolete inventory or we may be unable to meet customer short-term demands, either of which could have an adverse impact on our operating results.

If we are unable to execute our business strategy successfully, our revenues and profitability may be adversely affected.

Our future financial performance and success are largely dependent on our ability to execute our business strategy successfully. Our present business strategy to be a leading provider of essential mixed signal semiconductor solutions will be affected, without limitation, by: (1) our ability to continue to aggressively manage, maintain and refine our product portfolio including focus on the development and growth of new applications; (2) our ability to continue to maintain existing customers, aggressively pursue and win new customers; (3) our ability to successfully develop, manufacture and market new products in a timely manner; (4) our ability to develop new products in a more efficient manner; (5) our ability to sufficiently differentiate and enhance our products; (6) our ability to successfully deploy research and development (R&D) investment in the areas of displays, silicon timing, power management, signal integrity and radio frequency; and (7) our ability to improve our results of operations.

Our business strategy is based on our assumptions about the future demand for our current products and the new products and applications that we are developing and on our ability to produce our products profitably. We may not be successful in carrying out our business strategy. Further, some or all of our assumptions may be incorrect and our business strategy may not sustain or improve our results of operations. In particular, we may not be able to build our position in markets with high growth potential, increase our volume or revenue, rationalize our manufacturing operations or reduce our costs and expenses.

In addition, circumstances beyond our control and changes in our business or industry may require us to change our business strategy at any given time.

We face significant competition.

The semiconductor industry is highly competitive and subject to rapid market developments and changes in industry standards, trends and desirable technology. If we do not anticipate and respond to these developments, our competitive position may weaken and our products and/or technologies may become undesirable or obsolete. Further, the price and product development pressures that result from competition may lead to reduced profit margins and lost business opportunities in the event that we are unable to match the price decline or cost efficiencies or advancements of our competitors.

Our results are dependent on the success of new products.

The markets we serve are characterized by competition, rapid technological change, evolving standards, short product life cycles and continuous erosion of average selling prices. Consequently, our future success will be highly dependent upon our ability to continually develop new products using the latest and most cost-effective technologies, introduce our products in commercial quantities to the marketplace ahead of the competition and have our products selected for inclusion in leading system manufacturers' products. In addition, the development of new products will continue to require significant R&D expenditures. If we are unable to successfully develop, produce and market new products in a timely manner, have our products available in commercial quantities ahead of competitive products or have our products selected for inclusion in products of systems manufacturers and sell them at gross margins comparable to or better than our current products, our future results of operations could be adversely affected. In addition, our future revenue growth is also partially dependent on our ability to penetrate new markets in which we have limited experience and where competitors are already entrenched. Future success for certain new products will also depend on the development of product solutions for new emerging markets and new applications for existing markets. The success of such products is dependent on the ability of our customers and their customers to successfully develop new markets and gain market acceptance for new product solutions in those markets. Even if we are able to develop, produce and successfully market new products in a timely manner, such new products may not achieve market acceptance. The above described events could have a variety of negative effects on our competitive position and our financial results, such as reducing our revenue, increasing our costs, lowering our gross margin percentage, and ultimately leading to impairment of assets.

The loss of the services of any key personnel may adversely affect our business and growth prospects.

Our performance is substantially dependent on the performance of our executive officers and key employees. The loss of the services of any of our executive officers, technical personnel or other key employees could adversely affect our business. In addition, our future success depends on our ability to successfully compete with other technology firms in attracting and retaining specialized technical and management personnel. If we are unable to identify, hire, and retain highly qualified technical and managerial personnel, our business and growth prospects could be adversely affected.

We are dependent on a concentrated group of customers for a significant part of our revenues.

A large portion of our revenues depends on sales to a limited number of customers. If these relationships were to diminish, or if these customers were to develop their own solutions or adopt a competitor's solution instead of buying our products, our results could be adversely affected.

Many of our end-customer OEMs have outsourced their manufacturing to a concentrated group of global EMSs and original design manufacturers (ODMs) who then buy products directly from us or from our distributors on behalf of the OEM. These EMSs and ODMs have achieved greater autonomy in the design win, product qualification and product purchasing decisions, especially for commodity products. Competition for the business from EMSs and ODMs is intense and there is no assurance we can remain competitive and retain our existing market share with these customers. If these companies were to allocate a higher share of commodity or second-source business to our competitors instead of buying our products, our results would be adversely affected. Furthermore, as EMSs and ODMs have represented a growing percentage of our overall business, our concentration of credit and other business risks with these customers has increased. Competition among global EMSs and ODMs is intense as they operate on very low margins. If any one or more of our global EMSs or ODMs customers were to file for bankruptcy or otherwise experience significantly adverse financial conditions, our business would be adversely affected as well.

In addition, we utilize a relatively small number of global and regional distributors around the world, who buy product directly from us on behalf of their customers. If our business relationships with any of these distributors were to diminish or any of these distributors were to file for bankruptcy or otherwise experience significantly adverse financial conditions, our business could be adversely affected. Because we continue to be dependent on product demand from a small group of OEM end customers and global and regional distributors, any material delay, cancellation or reduction of orders from or loss of these or other major customers could cause our revenue to decline significantly.

We face competitive pressures and unique requirements from our automotive business customers.

Our automotive business is highly competitive and we may face significant pricing and price reduction pressures from our automotive business customers. Our automotive business results could be adversely impacted if we are unable to offset pricing reduction pressures by improving operating efficiencies and reducing expenditures. In addition to aggressive pricing and ongoing price reductions, our automotive business customers may require longer term product supply commitments and greater contractual penalties and/or liability terms than those or our non-automotive business customers. Our automotive business customers' products may also carry a risk of personal injury or property damage to end users in the event of a component failure and our participation in such business segment carries an increased risk that we will be required to respond to product liability and other similar types of claims.

We are dependent on a limited number of suppliers.

Our manufacturing operations depend upon obtaining adequate raw materials on a timely basis. The number of suppliers of certain raw materials, such as silicon wafers, ultra-pure metals and certain chemicals and gases needed for our products, is very limited. In addition, certain packages for our products require long lead times and are available from only a few suppliers. From time to time, suppliers have extended lead times or limited supply to us due to capacity constraints. Our results of operations would be materially and adversely affected if we were unable to obtain adequate supplies of raw materials in a timely manner or if there were significant increases in the costs of raw materials, or if foundry or assembly subcontractor capacity were not available, or if capacity were only available at unfavorable prices.

Our operations and business could be significantly harmed by natural disasters or acts of terrorism.

A majority of the third-party foundries and subcontractors we currently use are located in Malaysia, South Korea, the Philippines, Taiwan, Thailand, China, and Germany. In addition, we own test facilities in Malaysia and Germany. The risk of an earthquake or tsunami in these Pacific Rim locations is significant. The occurrence of an earthquake, drought, flood, fire, or other natural disaster near any of these locations could cause a significant reduction of end-customer demand and/or availability of materials, a disruption of the global supply chain, an increase in the cost of products that we purchase, and otherwise interfere with our ability to conduct business. In addition, public health issues, acts of terrorism, armed conflicts or other catastrophic events could significantly delay the production or shipment of our products. Although we maintain insurance for some of the damage that may be caused by natural disasters, our insurance coverage may not be sufficient to cover all of our potential losses and would not cover us for lost business. As a result, a natural disaster in one or more of these regions could have a material adverse effect on our financial condition and results of operations.

We are exposed to risks related to cybersecurity threats and incidents.

In the conduct of our business, we collect, use, transmit and store data on information technology systems. These data include confidential information belonging to us or our customers or other business partners, as well as personally-identifiable information of individuals. Unauthorized persons or employees may gain access to our facilities or information technology systems to steal trade secrets or other proprietary information, compromise confidential information, create system disruptions or cause shutdowns. These parties may also be able to develop and deploy viruses, worms, and other malicious software programs that disrupt our operations and create security vulnerabilities. We devote significant resources to network security, data encryption and other measures to protect our systems and data from unauthorized access or misuse. However, depending on their nature and scope, cybersecurity incidents could result in: business disruption; the misappropriation, corruption or loss of confidential information; reputational damage; litigation with third parties; data privacy issues; and increased cybersecurity protection and remediation costs. Attempted or successful attacks against our products and services could damage our reputation with customers or users and reduce demand for our products and services; which could have a material adverse effect on our business, financial condition and results of operation.

Costs related to product defects and errata may harm our results of operations and business.

Costs associated with unexpected product defects and errata, or deviations from published specifications, due to, for example, unanticipated problems in our design and manufacturing processes, could include:

- writing off the value of inventory of such products;
- disposing of products that cannot be fixed;
- recalling such products that have been shipped to customers;
- providing product replacements for, or modifications to, such products;
- defending against litigation related to such products; and
- paying penalties or damages attributable to the defect.

These costs could be substantial and may therefore increase our expenses and lower our gross margin. In addition, our reputation with our customers or users of our products could be damaged as a result of such product defects and errata, and the demand for our products could be reduced. The announcement of product defects and/or errata could cause customers to purchase products from our competitors as a result of anticipated shortages of our components or for other reasons. These factors could harm our financial results and the prospects for our business.

Intellectual property claims against and/or on behalf of us could adversely affect our business and operations.

The semiconductor industry is characterized by vigorous protection and pursuit of intellectual property rights, which has resulted in significant and often protracted and expensive litigation. We have been involved with patent litigation and asserted intellectual property claims in the past, both as a plaintiff and a defendant, some of which have adversely affected our operating results. Although we have obtained patent licenses from certain semiconductor manufacturers, we do not have licenses from a number of semiconductor manufacturers that have broad patent portfolios. Claims alleging infringement of intellectual property rights have been asserted against us in the past and could be asserted against us in the future.

As a result of these claims, we may have to discontinue the use of certain processes, license certain technologies, cease the manufacture, use, and sale of infringing products, incur significant litigation costs and damages, indemnify customers against certain claims made against them, and develop non-infringing technology. We might not be able to obtain such licenses on acceptable terms or develop non-infringing technology. Further, the failure to renew or renegotiate existing licenses on favorable terms, or the inability to obtain a key license, could materially and adversely affect our business. Future litigation, either as a plaintiff or a defendant, could adversely affect our operating results, as a result of increased expenses, the cost of settled claims, and/or payment of damages.

We may be unable to enforce or protect our intellectual property rights.

We rely on patents, copyrights, trade secrets, mask rights, and other intellectual property rights as well as confidentiality and licensing agreements to protect our intellectual property interests. Our ability to enforce these rights is subject to general litigation risks, as well as uncertainty as to the enforceability of these rights in various countries. Should we seek to enforce our intellectual property rights, we could be subject to claims that our intellectual property rights are invalid or otherwise not enforceable. Our assertion of our intellectual property rights may result in the other party seeking to assert claims against us, which could be disruptive to and/or harm our business. Our inability to enforce our intellectual property rights under any of these circumstances may harm our competitive position and business.

We rely on access to third-party intellectual property, which may not be available to us on commercially reasonable terms or at all.

Some of our products include third-party intellectual property and/or implement industry standards, which may require licenses from third parties. Based on past experience and industry practice, we believe such licenses generally can be obtained on commercially reasonable terms. However, there is no assurance that the necessary licenses can be obtained on acceptable terms or at all. Failure to obtain the right to use third-party intellectual property, or to use such intellectual property on commercially reasonable terms, could preclude us from selling certain products or otherwise have a material adverse impact on our financial condition and operating results.

Our product manufacturing operations are complex and subject to interruption.

From time to time, we have experienced production difficulties, including lower manufacturing yields or products that do not meet our or our customers' specifications, which has resulted in delivery delays, quality problems and lost revenue opportunities. While delivery delays have been infrequent and generally short in duration, we could experience manufacturing problems, capacity constraints and/or product delivery delays in the future as a result of, among other things, the complexity of our manufacturing processes, changes to our process technologies (including transfers to other facilities and die size reduction efforts), and difficulties in ramping production. In addition, any significant quality problems could damage our reputation with our customers and could take focus away from the development of new and enhanced products. These could have a significant negative impact on our financial results.

We are dependent upon electric power and water provided by public utilities where we operate our manufacturing facility. We maintain limited backup generating capability, but the amount of electric power that we can generate on our own is insufficient to fully operate this facility, and prolonged power interruptions and restrictions on our access to water could have a significant adverse impact on our business.

Tax benefits we receive may be terminated or reduced in the future, which would increase our costs.

As a result of our international manufacturing operations, a significant portion of our worldwide profits are in jurisdictions outside the United States, primarily Malaysia, which has granted the Company significant reductions in tax rates. These lower tax rates allow us to record a relatively low tax expense on a worldwide basis.

We were granted a tax incentive in Malaysia during fiscal 2009. The tax incentive was contingent upon us continuing to meet specified investment criteria in fixed assets, and to operate as an APAC regional headquarters center. In the fourth quarter of fiscal 2011, we agreed with the Malaysian Industrial Development Authority (MIDA) to cancel the previously granted tax incentive and enter into a new tax incentive agreement which provides a full tax exemption on statutory income for a period of 10 years commencing April 4, 2011. We are required to meet several conditions as to financial targets, investment, headcount and activities in Malaysia to retain this status. Our inability to renew this tax incentive or other exemptions, when they expire, or to meet certain conditions of the agreement with MIDA may adversely impact our effective tax rate.

Our financial results may be adversely affected by higher than expected tax rates or exposure to additional tax liabilities. Tax audits may have a material adverse effect on our profitability.

As a global company, our effective tax rate is highly dependent upon the geographic composition of worldwide earnings and tax regulations governing each region in which we operate. We are subject to income taxes in the United States and various foreign jurisdictions, and significant judgment is required to determine worldwide tax liabilities.

On December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act ("TCJA"). The changes included in the TCJA are broad and complex. The final transition impacts of the TCJA may differ from the estimates provided elsewhere in our financial results, possibly materially, due to, among other things, changes in interpretations of the TCJA, any legislative action to address questions that arise because of the TCJA, any changes in accounting standards for income taxes or related interpretations in response to the TCJA, or any updates or changes to estimates we have utilized to calculate the transition impacts, including impacts from changes to post-1986 earnings and profits for our foreign entities and current year earnings estimates. Additionally, other countries where we do business have been considering changes in relevant tax laws applicable to multinational corporations such as ours. These potential changes could adversely affect our effective tax rate or result in higher cash tax liabilities.

Our effective tax rate could be adversely affected by changes in the mix of earnings between countries with differing statutory tax rates, by changes in the valuation of deferred tax assets, or by material audit assessments, which could affect our profitability. In particular, the carrying value of deferred tax assets, which are predominantly in the United States, is dependent upon our ability to generate future taxable income in the United States. Further, the amount of income taxes we pay is subject to ongoing audits in various jurisdictions, and a material assessment by a governing tax authority such as the Internal Revenue Service in the United States could have a material effect on our profitability.

The costs associated with legal proceedings can be substantial, specific costs are unpredictable and not completely within our control, and unexpected increases in litigation costs could adversely affect our operating results.

We have been, and continue to be, involved in various legal proceedings from time to time, such as those described below in Part I, Item 3 "Legal Proceedings." We may face legal claims or regulatory matters involving stockholder, consumer, competition and other issues on a global basis. The costs associated with legal proceedings are typically high, relatively unpredictable, and are not completely within our control. The costs may be materially more than expected, which could adversely affect our operating results. Moreover, we may become involved in unexpected litigation with additional litigants at any time, which would increase our aggregate litigation costs, and could adversely affect our operating results. We are not able to predict the outcome of any legal action, and an adverse decision in any legal action could significantly harm our business and financial performance.

If the credit market conditions deteriorate, it could have a material adverse impact on our investment portfolio.

Although we manage our investment portfolio by purchasing only highly-rated securities and diversifying our investments across various sectors, investment types, and underlying issuers, recent volatility in the short-term financial markets has been high. We have no securities in asset-backed commercial paper and hold no auction rated or mortgage-backed securities. However, it is uncertain as to the full extent of the current credit and liquidity crisis and with possible further deterioration, particularly within one or several of the large financial institutions, the value of our investments could be negatively impacted.

Our results of operations could vary as a result of the methods, estimates, and judgments we use in applying our accounting policies.

The methods, estimates, and judgments we use in applying our accounting policies have a significant impact on our results of operations. Such methods, estimates, and judgments are, by their nature, subject to substantial risks, uncertainties and assumptions, and factors may arise over time that lead us to change our methods, estimates, and judgments. Changes in those methods, estimates, and judgments could significantly affect our results of operations. In particular, the calculation of stock-based compensation expense under the authoritative guidance requires us to use valuation methodologies that were not developed for use in valuing employee stock options and make a number of assumptions, estimates, and conclusions regarding matters such as expected forfeitures, expected volatility of our share price and the exercise behavior of our employees. Changes in these variables could affect our stock-based compensation expense and have a significant and potentially adverse effect on our gross margins, research and development expense and selling, general and administrative expense. For more information, see "Critical Accounting Policies and Estimates" in Part II, Item 7 and "Note 1. Summary of Significant Accounting Policies" in Part II, Item 8 of this Form 10-K.

International operations add increased volatility to our operating results.

A substantial percentage of our total revenues are derived from international sales, based on the customers' shipment locations, as summarized below:

	Three Months Ended		Six Months Ended	
(percentage of total revenues)	**September 30, 2018**	**October 1, 2017**	**September 30, 2018**	**October 1, 2017**
Hong Kong	38%	35%	37%	34%
Rest of Asia Pacific	27%	31%	28%	32%
Europe	13%	15%	14%	13%
Korea	11%	10%	11%	10%
Americas	11%	9%	10%	11%
Total	**100%**	**100%**	**100%**	**100%**

In addition, our test facilities in Malaysia and Germany, our design centers in Canada, China, and Germany, and our foreign sales offices incur payroll, facility, and other expenses in local currencies. Accordingly, movements in foreign currency exchange rates can impact our revenues and costs of goods sold, as well as both pricing and demand for our products.

Our non-U.S. offshore sites, manufacturing subcontractors and export sales are also subject to risks associated with foreign operations, including:

- political instability and acts of war or terrorism, which could disrupt our manufacturing and logistical activities;
- regulations regarding use of local employees and suppliers;
- exposure to foreign employment practices and labor laws;
- currency controls and fluctuations, devaluation of foreign currencies, hard currency shortages and exchange rate fluctuations;
- changes in local economic conditions;
- governmental regulation of taxation of our earnings and those of our personnel; and

- changes in tax laws, import and export controls, tariffs and freight rates.

Our international locations are subject to local labor laws, which are often significantly different from U.S. labor laws and which may under certain conditions result in large separation costs upon termination.

Contract pricing for raw materials and equipment used in the fabrication and assembly processes, as well as for foundry and subcontract assembly services, may also be affected by currency controls, exchange rate fluctuations and currency devaluations. We sometimes hedge currency risk for currencies that are highly liquid and freely quoted, but may not enter into hedge contracts for currencies with limited trading volume. In addition, as much of our revenues are generated outside the United States, a significant portion of our cash and investment portfolio accumulates in the foreign countries in which we operate. As of September 30, 2018, we had cash, cash equivalents and investments of approximately $196.0 million invested overseas in accounts belonging to our foreign subsidiaries. While these amounts are primarily invested in U.S. dollars, a portion is held in foreign currencies, and all offshore balances are exposed to local political, banking, currency control and other risks. In addition, these amounts may be subject to tax and other transfer restrictions.

We rely upon certain critical information systems for the operation of our business.

We maintain and rely upon certain critical information systems for the effective operation of our business. These information systems include telecommunications, the Internet, our corporate intranet, various computer hardware and software applications, network communications, and e-mail. These information systems are subject to attacks, failures, and access denials from a number of potential sources including viruses, destructive or inadequate code, power failures, and physical damage to computers, communication lines and networking equipment. To the extent that these information systems are under our control, we have implemented security procedures, such as virus protection software and emergency recovery processes, to address the outlined risks. While we believe that our information systems are appropriately controlled and that we have processes in place to adequately manage these risks, security procedures for information systems cannot be guaranteed to be failsafe and our inability to use or access these information systems at critical points in time could unfavorably impact the timely and efficient operation of our business.

We are exposed to potential impairment charges on certain assets.

Over the past several years, we have made several acquisitions. As a result of these acquisitions, we had $420.1 million of goodwill and $174.9 million of intangible assets on our Condensed Consolidated Balance Sheets as of September 30, 2018. In determining fair value, we consider various factors, including our market capitalization, forecasted revenue and costs, risk-adjusted discount rates, future economic and market conditions, determination of appropriate market comparables and expected periods over which our assets will be utilized and other variables. If our assumptions regarding forecasted cash flow, revenue and margin growth rates of certain long-lived asset groups and reporting units are not achieved, an impairment review may be triggered for the remaining balance of goodwill and long-lived assets prior to the next annual review in the fourth quarter of fiscal 2019, which could result in material charges that could impact our operating results and financial position.

Our reported financial results may be adversely affected by new accounting pronouncements or changes in existing accounting standards and practices.

We prepare our financial statements in conformity with accounting principles generally accepted in the United States. These accounting principles are subject to interpretation by the Financial Accounting Standards Board (FASB), SEC and various organizations formed to interpret and create appropriate accounting standards and practices. New accounting pronouncements and varying interpretations of accounting standards and practices have occurred and may occur in the future. New accounting pronouncements or a change in the interpretation of existing accounting standards or practices may have a significant effect on our reported financial results and may even affect our reporting of transactions completed before the change is announced or effective.

Our common stock may experience substantial price volatility.

Our stock price has experienced volatility in the past, and volatility in the price of our common stock may occur in the future, particularly as a result of fluctuations in global economic conditions and quarter-to-quarter variations in our actual or anticipated financial results, or the financial results of other semiconductor companies or our customers. Stock price volatility may also result from product announcements by us or our competitors, or from changes in perceptions about the various types of products we manufacture and sell. In addition, our stock price may fluctuate due to price and volume fluctuations in the stock market, especially in the technology sector, and as a result of other considerations or events described in this section.

We depend on the ability of our personnel, raw materials, equipment and products to move reasonably unimpeded around the world.

Any political, military, world health or other issue which hinders the worldwide movement of our personnel, raw materials, equipment or products or restricts the import or export of materials could lead to significant business disruptions. Furthermore, any strike, economic failure, or other material disruption on the part of major airlines or other transportation companies could also adversely affect our ability to conduct business. If such disruptions result in cancellations of customer orders or contribute to a general decrease in economic activity or corporate spending on information technology, or directly affect our marketing, manufacturing, financial and logistics functions, our results of operations and financial condition could be materially and adversely affected.

We invest in companies for strategic reasons and may not realize a return on our investments.

We make investments in companies around the world to further our strategic objectives and support our key business initiatives. Such investments include equity instruments of private companies, and many of these instruments are non-marketable at the time of our initial investment. These companies range from early-stage companies that are often still defining their strategic direction to more mature companies with established revenue streams and business models. The success of these companies is dependent on product development, market acceptance, operational efficiency, and other key business factors as well as their ability to secure additional funding, obtain favorable investment terms for future financings, or participate in liquidity events such as public offerings, mergers, and private sales. If any of these private companies fail, we could lose all or part of our investment in that company. If we determine that other-than-temporary decline in the fair value exists for an equity investment in a private company in which we have invested, we write down the investment to its fair value and recognize the related write-down as an investment loss.

When the strategic objectives of an investment have been achieved, or if the investment or business diverges from our strategic objectives, we may decide to dispose of the investment. We may incur losses on the disposal of our non-marketable investments.

We are subject to a variety of environmental and other regulations related to hazardous materials used in our manufacturing processes.

The manufacturing and testing of our products require the use of hazardous materials that are subject to a broad array of environmental, health and safety laws and regulations. Any failure by us to adequately control the use or discharge of hazardous materials under present or future regulations could subject us to substantial costs or liabilities or cause our manufacturing operations to be suspended.

Existing and future environmental, health and safety laws and regulations could also require us to acquire pollution abatement or remediation equipment, modify our product designs, or incur other expenses associated with such laws and regulations. Many new materials that we are evaluating for use in our operations may be subject to regulation under existing or future environmental laws and regulations that may restrict our use of one or more of such materials in our manufacturing, and test processes, or products. Any of these restrictions could harm our business and results of operations by increasing our expenses or requiring us to alter our manufacturing and test processes.

Our operations could be affected by the complex laws, rules and regulations to which our business is subject.

We are subject to complex laws, rules and regulations affecting our domestic and international operations relating to, for example, environmental, safety and health; exports and imports; International Traffic in Arms Regulations (ITAR), bribery and corruption; tax; data privacy; labor and employment; competition; and intellectual property ownership and infringement. Compliance with these laws, rules and regulations may be onerous and expensive, and if we fail to comply or if we become subject to enforcement activity, our ability to manufacture our products and operate our business could be restricted and we could be subject to fines, penalties or other legal liability. Furthermore, should these laws, rules and regulations be amended or expanded, or new ones enacted, we could incur materially greater compliance costs or restrictions on our ability to manufacture our products and operate our business.

In October 2015, the European Court of Justice invalidated the year 2000 “Safe Harbor” agreement between the European Union and the United States. Before this ruling, companies that complied with the Safe Harbor agreement were deemed to provide an adequate level of protection for European Union citizens’ personally identifiable information that was transferred to, and used in, the United States in the ordinary course of business. Since 2000, we have relied on the Safe Harbor agreement to ensure compliance with data privacy laws in Europe. In light of the October 2015 ruling invalidating the Safe Harbor agreement, we may incur fines, penalties, legal liability and/or additional material costs as we move forward to put in place policies, procedures and practices that ensure compliance with existing and evolving data privacy laws and requirements of the European Union and its member states.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

The following table sets forth information with respect to repurchases of our common stock during the second quarter of fiscal 2019:

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs
July 2, 2018 - July 29, 2018	420,600	$ 33.78	420,600	$ 443,279,770
July 30, 2018 - August 26, 2018	419,200	$ 35.68	419,200	$ 428,319,054
August 27, 2018 - September 30, 2018	224,000	$ 40.06	224,000	$ 419,343,712
Total	1,063,800	$ 35.85	1,063,800	

On April 24, 2018, our Board of Directors approved an increase to the share repurchase authorization of $400 million.
In the three and six months ended September 30, 2018, we repurchased 1.1 million shares for $38.1 million and 2.6 million shares for $87.5 million, respectively. As of September 30, 2018, approximately $419.3 million was available for future purchase under the share repurchase program. Due to the pending merger with Renesas, we suspended further repurchases under our repurchase program effective September 11, 2018.

Share repurchases were recorded as treasury stock and resulted in a reduction of stockholders' equity. The programs are intended to reduce the number of outstanding shares of our common stock to offset dilution from employee equity grants and increase shareholder value.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not Applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

(a) The following exhibits are filed herewith:

Exhibit Number	Exhibit Description
2.1	Agreement and Plan of Merger, dated September 10, 2018, by and between Integrated Device Technology, Inc. and Renesas Electronics Corporation. Incorporated by reference to Exhibit 2.1 to Form 8-K filed on September 11, 2018.
3.1	Restated Certificate of Incorporation, as amended to date. Incorporated by reference to Exhibit 3.1 to Form 10-K filed on May 21, 2012.
3.2	Certificate of Designations specifying the terms of the Series A Junior Participating Preferred Stock of Integrated Device Technology, Inc., as filed with the Secretary of State of the State of Delaware. Incorporated by reference to Exhibit 3.6 to Form 8-A filed on December 23, 1998.
3.3	Amended and Restated Bylaws of the Company, as amended and restated.
4.1	Indenture (including form of note), dated as of November 4, 2015, between Integrated Device Technology, Inc., and Wilmington Trust, National Association, as trustee. Incorporated by reference to Exhibit 4.1 to Form 8-K filed on November 4, 2015.
10.1	Amendment No.1 dated as of May 29, 2018, by and among JPMorgan Chase Bank, N.A. (and the other lenders party thereto) and Integrated Device Technology, Inc.
10.2	Credit Agreement, dated as of April 4, 2017, by and among JPMorgan Chase Bank, N.A. (and the other lenders party thereto) and Integrated Device Technology, Inc.
10.3	Share Purchase and Transfer Agreement, dated October 23, 2015, between Global ASIC GmbH, ELBER GmbH, Freistaat Sachsen, Integrated Device Technology Bermuda Ltd. and Integrated Device Technology, Inc. Incorporated by reference to Exhibit 10.1 to Form 10-Q filed on October 29, 2015.
10.4	Letter Agreement, dated October 29, 2015, between JPMorgan Chase Bank, National Association and Integrated Device Technology, Inc., regarding the Base Warrants. Incorporated by reference to Exhibit 10.1 to Form 8-K filed on November 4, 2015.
10.5	Letter Agreement, dated October 29, 2015, between JPMorgan Chase Bank, National Association and Integrated Device Technology, Inc., regarding the Base Call Option Transaction. Incorporated by reference to Exhibit 10.2 to Form 8-K filed on November 4, 2015.
10.6	Letter Agreement, dated November 3, 2015, between JPMorgan Chase Bank, National Association and Integrated Device Technology, Inc., regarding the Additional Warrants. Incorporated by reference to Exhibit 10.3 to Form 8-K filed on November 4, 2015.
10.7	Letter Agreement, dated November 3, 2015, between JPMorgan Chase Bank, National Association and Integrated Device Technology, Inc., regarding the Additional Call Option Transaction. Incorporated by reference to Exhibit 10.4 to Form 8-K filed on November 4, 2015.
10.8	Master Confirmation—Uncollared Accelerated Share Repurchase dated November 2, 2015 between Integrated Device Technology, Inc. and JPMorgan Chase Bank, National Association. Incorporated by reference to Exhibit 10.5 to Form 8-K filed on November 4, 2015.
10.9	Master Confirmation—Uncollared Accelerated Share Repurchase dated November 2, 2015 between Integrated Device Technology, Inc. and Bank of America, N.A. Incorporated by reference to Exhibit 10.6 to Form 8-K filed on November 4, 2015.
31.1	Certification of Chief Executive Officer as required by Rule 13a-14(a) and 15(d)-14(a) of the Securities Exchange Act of 1934, as amended.
31.2	Certification of Chief Financial Officer as required by Rule 13a-14(a) and 15(d)-14(a) of the Securities Exchange Act of 1934, as amended.
32.1*	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2*	Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document.
101.SCH	XBRL Taxonomy Extension Schema Document.
101.CAL	XBRL Taxonomy 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.

* This certification accompanies this report pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not be deemed “filed” by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.

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.

INTEGRATED DEVICE TECHNOLOGY, INC.
Registrant

	By:	/s/ Gregory L. Waters
November 6, 2018		Gregory L. Waters *President and Chief Executive Officer*
		/s/ Brian C. White
November 6, 2018		Brian C. White *Senior Vice President, Chief Financial Officer* *(Principal Financial and Accounting Officer)*

Exhibit 3.3

AMENDED AND RESTATED BYLAWS
OF
INTEGRATED DEVICE TECHNOLOGY, INC.
(a Delaware corporation)

Effective as of September 10, 2018

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AMENDED AND RESTATED BYLAWS
OF
INTEGRATED DEVICE TECHNOLOGY, INC.
(a Delaware corporation)

ARTICLE I
STOCKHOLDERS

Section 1.1 ***Annual Meetings.*** An annual meeting of stockholders shall be held for the election of directors at such date, time and place, either within or without the State of Delaware, as the Board of Directors shall each year fix. Any other proper business may be transacted at the annual meeting.

Section 1.2 ***Special Meetings.*** Special meetings of the stockholders, for any purpose or purposes described in the notice of the meeting, may be called only by (i) the Board of Directors pursuant to a resolution adopted by a majority of the total number of authorized directors (whether or not there exist any vacancies in previously authorized directorships at the time any such resolution is presented to the Board of Directors for adoption), (ii) the Chairman of the Board, (iii) the Chief Executive Officer, (iv) the President or (v) the holder(s) of a majority of the outstanding shares of the Corporation. Special meetings may not be called by any other person or persons. If a special meeting of stockholders is called by any person or persons other than by a majority of the members of the Board of Directors, then such person or persons shall call such meeting by delivering a written request to call such meeting to each member of the Board of Directors, and the Board of Directors shall then determine the time, date and place of such special meeting, which shall be held not more than one hundred twenty (120) nor less than thirty-five (35) days after the written request to call such special meeting was delivered to each member of the Board of Directors. Business transacted at special meetings shall be confined to the purpose or purposes stated in the Corporation's notice of such meeting.

Section 1.3 ***Notice of Meetings***. Written notice of all meetings of stockholders shall be given stating the place, date and time of the meeting and, in the case of a special meeting, the purpose or purposes for which the meeting is called. Unless otherwise required by applicable law or the Certificate of Incorporation of the Corporation as currently in effect (the "**Certificate of Incorporation**"), such notice shall be given not less than ten (10) nor more than sixty (60) days before the date of the meeting to each stockholder entitled to vote at such meeting, by leaving such notice with him or her or at his or her residence or usual place of business, or by depositing it postage prepaid in the United States mail, directed to each stockholder at his or her address as it appears on the records of the corporation. An affidavit of the Secretary, Assistant Secretary, or transfer agent of the corporation that the notice has been given shall, in the absence of fraud, be prima facie evidence of the facts stated therein. No notice need be given to any person with whom communication is unlawful or to any person who has waived such notice either (a) in writing (which writing need not specify the business to be transacted at, or the purpose of, the meeting) signed by such person before or after the time of the meeting or (b) by attending the meeting except for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened.

Section 1.4 ***Adjournments.*** Any meeting of stockholders may adjourn from time to time to reconvene at the same or another place, and notice need not be given of any such adjourned meeting if the time, date and place thereof are announced at the meeting at which the adjournment is taken; provided, however, that if the adjournment is for more than thirty (30) days, or if after the adjournment a new record date is fixed for the adjourned meeting, then a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting. At the adjourned meeting the Corporation may transact any business that might have been transacted at the original meeting.

Section 1.5 ***Quorum.*** At each meeting of stockholders the holders of a majority of the shares of stock entitled to vote at the meeting, present in person or represented by proxy, shall constitute a quorum for the transaction of business, except if otherwise required by the Certificate of Incorporation or applicable law. Where a separate vote by a class or classes is required, a majority of the shares of such class or classes then outstanding and entitled to vote present in person or by proxy shall constitute a quorum entitled to take action with respect to that vote on that matter. If a quorum shall fail to attend any meeting, the chairman of the meeting or the holders of a majority of the shares entitled to vote who are present, in person or by proxy, at the meeting may adjourn the meeting. Shares of the Corporation's stock belonging to the Corporation (or to another corporation, if a majority of the shares entitled to vote in the election of directors of such other corporation are held, directly or indirectly, by the Corporation), shall neither be entitled to vote nor be counted for quorum purposes; provided, however, that the foregoing shall not limit the right of the Corporation or any other corporation to vote any shares of the Corporation's stock held by it in a fiduciary capacity.

Section 1.6 ***Organization.*** Meetings of stockholders shall be presided over by such person as the Board of Directors may designate, or, in the absence of such a person, the Chairman of the Board, or, in the absence of such person, the President of the Corporation, or, in the absence of such person, such person as may be chosen by the holders of a majority of the shares entitled to vote who are present, in person or by proxy, at the meeting. Such person shall be chairman of the meeting and, subject to Section 1.11 hereof, shall determine the order of business and the procedure at the meeting, including such regulation of the manner of voting and the conduct of discussion as seems to him or her to be in order. The chairman of any meeting shall have the power to convene the meeting on the meeting date and to recess and/or adjourn the meeting to a later time or date for any reason, to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of the chairman of such meeting, are appropriate for the proper conduct of the meeting. The Secretary of the Corporation shall act as secretary of the meeting, but in his or her absence the chairman of the meeting may appoint any person to act as secretary of the meeting.

Section 1.7 ***Voting; Proxies.*** Unless otherwise provided by law, the Certificate of Incorporation or these Bylaws, and subject to the provisions of Section 1.8 of these Bylaws, each stockholder shall be entitled to one (1) vote for each share of stock held by such stockholder of record according to the records of the corporation. Persons holding stock in a fiduciary capacity shall be entitled to vote the shares so held. Persons whose stock is pledged shall be entitled to vote unless the pledgor in a transfer on the books of the corporation has expressly empowered the pledgee to vote the pledged shares, in which case only the pledgee or his or her proxy shall be entitled to vote. Each stockholder entitled to vote at a meeting of stockholders may authorize another person or persons to act for such stockholder by proxy. Such a proxy may be prepared, transmitted and delivered in any manner permitted by applicable law. Voting at meetings of stockholders need not be by written ballot unless such is demanded at the meeting before voting begins by a stockholder or stockholders holding shares representing at least one percent (1%) of the votes entitled to vote at such meeting, or by such stockholder's or stockholders' proxy; provided, however, that an election of directors shall be by written ballot if demand is so made by any stockholder at the meeting before voting begins. If a vote is to be taken by written ballot, then each such ballot shall state the name of the stockholder or proxy voting and such other information as the chairman of the meeting deems appropriate.

Section 1.8 ***Action at Meeting.***

(a) *Generally.* When a quorum is present at any meeting, action of the stockholders on any matter properly brought before such meeting, other than the election of directors, shall require, and may be effected by, the affirmative vote of the holders of a majority in interest of the stock present or represented by proxy and entitled to vote on the subject matter, except where a different vote is expressly required by law, the Certificate of Incorporation or these Bylaws, in which case such express provision shall govern and control. The election of directors shall be determined by a plurality of the votes cast. If the Certificate of Incorporation so provides, no ballot shall be required for the election of directors unless requested by a stockholder present or represented at the meeting and entitled to vote in the election.

(b) *Cumulative Voting.* At a meeting of stockholders at which directors are to be elected, each stockholder shall be entitled to cumulate votes for a candidate if the candidate's name has been properly placed in nomination in accordance with these Bylaws and the stockholder requesting cumulative voting has given notice prior to the commencement of the voting of the stockholder's intention to cumulate votes. If cumulative voting is properly requested, each holder of stock, or of any class or classes or of a series or series thereof, who elects to cumulate votes shall be entitled to as many votes as shall equal the number of votes which (except for this provision as to cumulative voting) such stockholder would be entitled to cast for the election of directors with respect to such stockholder's shares of stock multiplied by the number of directors to be elected, and such stockholder may cast all of such votes for a single candidate or may distribute them among the number to be elected, or for any two or more of them as such stockholder may see fit.

Section 1.9 ***Fixing Date for Determination of Stockholders of Record.***

(a) *Generally.* In order that the Corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof or entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the Board of Directors may fix, in advance, a record date, which shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors and which shall not be more than sixty (60) nor less than ten (10) days before the date of such meeting, nor more than sixty (60) days prior to any other action. If no record date is fixed by the Board of Directors, then the record date shall be as provided by applicable law. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board of Directors may fix a new record date for the adjourned meeting.

(b) *Stockholder Request for Action by Written Consent.* Any stockholder of record seeking to have the stockholders authorize or take corporate action by written consent without a meeting shall, by written notice to the Secretary of the Corporation, request the Board of Directors to fix a record date for such consent. Such request shall include a brief description of the action proposed to be taken. The Board of Directors shall, within ten (10) days after the date on which such a request is received, adopt a resolution fixing the record date. Such record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and shall not be more than ten (10) days after the date upon which the resolution fixing the record date is adopted by the Board of Directors. If no record date has been fixed by the Board of Directors within ten (10) days after the date on which such a request is received, then the record date for determining stockholders entitled to consent to corporate action in writing without a meeting, when no prior action by the Board of Directors is required by applicable law, shall be the first date on which a signed written consent setting forth the action taken or proposed to be taken is delivered to the Corporation by delivery to its registered office in the State of Delaware, to its principal place of business, or to any officer or agent of the Corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery made to the Corporation's registered office shall be by hand or by certified or registered mail, return receipt requested. If no record date has been fixed by the Board of Directors and prior action by the Board of Directors is required by applicable law, then the record date for determining stockholders entitled to consent to corporate action in writing without a meeting shall be at the close of business on the date on which the Board of Directors adopts the resolution taking such prior action.

Section 1.10 ***List of Stockholders Entitled to Vote.*** A complete list of stockholders entitled to vote at any meeting of stockholders, arranged in alphabetical order and showing the address of each stockholder and the number of shares registered in the name of each stockholder, shall be open to the examination of any stockholder, for any purpose germane to the meeting, during ordinary business hours, for a period of at least ten (10) days prior to the meeting, either at a place within the city where the meeting is to be held, which place shall be specified in the notice of the meeting, or, if not so specified, at the place where the meeting is to be held. The list shall also be produced and kept at the time and place of the meeting during the whole time thereof and may be inspected by any stockholder who is present at the meeting.

Section 1.11 ***Inspectors of Elections.***

(a) *Applicability.* Unless otherwise provided in the Corporation's Certificate of Incorporation or required by the Delaware General Corporation Law, the following provisions of this Section 1.11 shall apply only if and when the Corporation has a class of voting stock that is: (i) listed on a national securities exchange; (ii) authorized for quotation on an interdealer quotation system of a registered national securities association; or (iii) held of record by more than 2,000 stockholders; in all other cases, observance of the provisions of this Section 1.11 shall be optional, and at the discretion of the Corporation.

(b) *Appointment.* The Corporation shall, in advance of any meeting of stockholders, appoint one or more inspectors of election to act at the meeting and make a written report thereof. The Corporation may designate one or more persons as alternate inspectors to replace any inspector who fails to act. If no inspector or alternate is able to act at a meeting of stockholders, the person presiding at the meeting shall appoint one or more inspectors to act at the meeting.

(c) *Inspector's Oath.* Each inspector of election, before entering upon the discharge of his duties, shall take and sign an oath faithfully to execute the duties of inspector with strict impartiality and according to the best of his ability.

(d) *Duties of Inspectors.* At a meeting of stockholders, the inspectors of election shall (i) ascertain the number of shares outstanding and the voting power of each share, (ii) determine the shares represented at a meeting and the validity of proxies and ballots, (iii) count all votes and ballots, (iv) determine and retain for a reasonable period of time a record of the disposition of any challenges made to any determination by the inspectors, and (v) certify their determination of the number of shares represented at the meeting, and their count of all votes and ballots. The inspectors may appoint or retain other persons or entities to assist the inspectors in the performance of the duties of the inspectors.

(e) *Opening and Closing of Polls.* The date and time of the opening and the closing of the polls for each matter upon which the stockholders will vote at a meeting shall be announced by the inspectors at the meeting. No ballot, proxies or votes, nor any revocations thereof or changes thereto, shall be accepted by the inspectors after the closing of the polls unless the Court of Chancery upon application by a stockholder shall determine otherwise.

(f) *Determinations.* In determining the validity and counting of proxies and ballots, the inspectors shall be limited to an examination of the proxies, any envelopes submitted with those proxies, any information provided in connection with proxies in accordance with Section 212(c)(2) of the Delaware General Corporation Law, ballots and the regular books and records of the Corporation, except that the inspectors may consider other reliable information for the limited purpose of reconciling proxies and ballots submitted by or on behalf of banks, brokers, their nominees or similar persons which represent more votes than the holder of a proxy is authorized by the record owner to cast or more votes than the stockholder holds of record. If the inspectors consider other reliable information for the limited purpose permitted herein, the inspectors at the time they make their certification of their determinations pursuant to this Section 1.11 shall specify the precise information considered by them, including the person or persons from whom they obtained the information, when the information was obtained, the means by which the information was obtained and the basis for the inspectors' belief that such information is accurate and reliable.

Section 1.12 ***Notice of Business to be Brought Before a Meeting.***

(a) At an annual meeting of the stockholders, only such business shall be conducted as shall have been properly brought before the meeting. To be properly brought before an annual meeting, business must be (i) brought before the meeting by the Corporation and specified in the notice of meeting given by or at the direction of the Board of Directors, (ii) brought before the meeting by or at the direction of the Board of Directors, or (iii) otherwise properly brought before the meeting by a stockholder who (A) was a stockholder of record (and, with respect to any beneficial owner, if different, on whose behalf such business is proposed, only if such beneficial owner was the beneficial owner of shares of the Corporation) both at the time of giving the notice provided for in this Section 1.12 and at the time of the meeting, (B) is entitled to vote at the meeting, and (C) complied with all of the notice procedures set forth in this Section 1.12 as to such business. Except for proposals properly made in accordance with Rule 14a-8 under the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder (as so amended and inclusive of such rules and regulations, the "**Exchange Act"**), and included in the notice of meeting given by or at the direction of the Board, the foregoing clause (iii) shall be the exclusive means for a stockholder to propose business to be brought before an annual meeting of the stockholders. Stockholders seeking to nominate persons for election to the Board of Directors must comply with the notice procedures set forth in Article I, Section 1.13 of these Bylaws, and this Section 1.12 shall not be applicable to nominations except as expressly provided therein; provided, however, that terms defined in this Section 1.12 and used in Article I, Section 1.13 of these Bylaws but not otherwise defined therein shall have the meanings defined in this Section 1.12.

(b) Without qualification, for business to be properly brought before an annual meeting by a stockholder, the stockholder must (i) provide Timely Notice (as defined below) thereof in writing and in proper form to the Secretary of the Corporation and (ii) provide any updates or supplements to such notice at the times and in the forms required by this Section 1.12. To be timely, a stockholder's notice must be delivered to or mailed and received at the principal executive offices of the Corporation not less than ninety (90) days nor more than one hundred twenty (120) days prior to the one year anniversary of the preceding year's annual meeting; provided, however, that in the event that the date of the annual meeting is more than thirty (30) days before or more than sixty (60) days after such anniversary date, notice by the stockholder to be timely must be so delivered not earlier than the one hundred twentieth (120) day prior to such annual meeting and not later than the ninetieth (90th) day prior to such annual meeting or, if later, the tenth (10th) day following the day on which public disclosure of the date of such annual meeting was first made (such notice within such time periods, "**Timely Notice"**). In no event shall any adjournment or postponement of an annual meeting or the announcement thereof commence a new time period for the giving of Timely Notice as described above.

(c) To be in proper form for purposes of this Section 1.12, a stockholder's notice to the Secretary pursuant to this Section 1.12 shall be required to set forth:

(i) As to each Proposing Person (as defined below), (A) the name and address of such Proposing Person (including, if applicable, the name and address that appear on the Corporation's books and records) and (B) the class or series and number of shares of the Corporation that are, directly or indirectly, owned of record or beneficially owned (as defined in Rule 13d-3 under the Exchange Act) by such Proposing Persons, except that such Proposing Person shall in all events be deemed to beneficially own any shares of any class or series of the Corporation as to which Proposing Person has a right to acquire beneficial ownership at any time in the future (the disclosures to be made pursuant to the foregoing clauses (A) and (B) are referred to as "**Stockholder Information"**);

(ii) As to each Proposing Person, (A) any derivative, swap or other transaction or series of transactions engaged in, directly or indirectly, by such Proposing Person, the purpose or effect of which is to give such Proposing Person economic risk similar to ownership of shares of any class or series of the Corporation, including due to the fact that the value of such derivative, swap or other transaction is determined by reference to the price, value or volatility of any shares of any class or series of the Corporation, or which derivative, swap or other transaction provides, directly or indirectly, the opportunity to profit from any increase in the price or value of shares of any class or series of the Corporation ("**Synthetic Equity Interests"**), which such Synthetic Equity Interests shall be disclosed without regard to whether (x) such derivative, swap or other transaction conveys any voting rights in such shares to such Proposing Person, (y) the derivative, swap or other transaction is required to be, or is capable of being, settled through delivery of such shares or (z) such other Proposing Person may have entered into other transactions that hedge or mitigate the economic effect of such derivative, swap or other transaction), (B) any proxy (other than a revocable proxy or consent given in response to a public proxy solicitation made pursuant to, and in accordance with, the Exchange Act), agreement, arrangement, understanding or relationship pursuant to which such Proposing Person has or shares a right to vote any shares of any class or series of the Corporation, (C) any agreement, arrangement, understanding or relationship, including any repurchase or similar so-called stock borrowing agreement or arrangement, engaged in, directly or indirectly, by such Proposing Person, the purpose or effect of which is to mitigate loss to, reduce the economic risk (of ownership or otherwise) of shares of any class or series of the Corporation by, manage the risk of share price changes for, or increase or decrease the voting power of, such Proposing Person with respect to the shares of any class or series of the Corporation, or which provides, directly or indirectly, the opportunity to profit from any decrease in the price or value of the shares of any class or series of the Corporation ("**Short Interests**"), (D) any performance related fees (other than an asset based fee) that such Proposing Person is entitled to based on any increase or decrease in the price or value of shares of any class or series of the Corporation, any Synthetic Equity Interests or Short Interests, if any (the disclosures to be made pursuant to the foregoing clauses (A) through (D) are referred to as "**Disclosable Interests**"); and

(iii) As to each matter the stockholder proposes to bring before the annual meeting, (A) a reasonably brief description of the business desired to be brought before the annual meeting, the reasons for conducting such business at the annual meeting and any material interest in such business of each Proposing Person, (B) the text of the proposal or business (including the text of any resolutions proposed for consideration), and (C) a reasonably detailed description of all agreements, arrangements and understandings (x) between or among any of the Proposing Persons or (y) between or among any Proposing Person and/or any other persons or entities (including their names) in connection with the proposal of such business by such Proposing Person.

For purposes of this Section 1.12, the term "**Proposing Person**" shall mean (i) the stockholder providing the notice of business proposed to be brought before an annual meeting, (ii) the beneficial owner or beneficial owners, if different, on whose behalf the notice of the business proposed to be brought before the annual meeting is made, and (iii) any affiliate or associate of such beneficial owner (as such terms are defined in Rule 12b-2 promulgated under the Exchange Act) of such stockholder or beneficial owner.

(d) A stockholder providing notice of business proposed to be brought before an annual meeting shall further update and supplement such notice, if necessary, so that the information provided or required to be provided in such notice pursuant to this Section 1.12 shall be true and correct as of the record date for the meeting and as of the date that is ten (10) business days prior to the meeting or any adjournment or postponement thereof, and such update and supplement shall be delivered to or mailed and received by the Secretary at the principal executive offices of the Corporation not later than five (5) business days after the record date for the meeting (in the case of the update and supplement required to be made as of the record date), and not later than eight (8) business days prior to the date for the meeting or any adjournment or postponement thereof (in the case of the update and supplement required to be made as of ten (10) business days prior to the meeting or any adjournment or postponement thereof).

(e) Notwithstanding anything in these Bylaws to the contrary, no business shall be conducted at an annual meeting except in accordance with the procedures set forth in this Section 1.12. The presiding officer of an annual meeting shall, if the facts warrant, determine that the business was not properly brought before the meeting in accordance with the provisions of this Section 1.12, and if he or she should so determine, he or she shall so declare to the meeting and any such business not properly brought before the meeting shall not be transacted.

(f) This Section 1.12 is expressly intended to apply to any business proposed to be brought before an annual meeting, other than any proposal is made pursuant to Rule 14a-8 under the Exchange Act. In addition to the requirements of this Section 1.12 with respect to any business proposed to be brought before an annual meeting, each Proposing Person shall comply with all applicable requirements of the Exchange Act and the rules and regulations thereunder with respect to any such business. Nothing in this Section 1.12 shall be deemed to affect the rights of stockholders to request inclusion of proposals in the Corporation’s proxy statement pursuant to Rule 14a-8 under the Exchange Act.

(g) For purposes of these Bylaws, public disclosure shall mean disclosure in a press release reported by a national news service or in a document publicly filed by the Corporation with the Securities and Exchange Commission pursuant to Sections 13, 14 or 15(d) of the Exchange Act and the rules and regulations thereunder.

Section 1.13 ***Notice of Nominations for Election to the Board of Directors.***

(a) Nominations of any person for election to the Board of Directors at an annual meeting or at a special meeting (but only if the election of directors is a matter specified in the notice of meeting given by or at the direction of the person calling such special meeting) may be made at such meeting only (i) by or at the direction of the Board of Directors, including by any committee or persons appointed by the Board of Directors, or (ii) by any stockholder who (A) was a stockholder of record (and, with respect to any beneficial owner, if different, on whose behalf such nomination is proposed to be made, only if such beneficial owner was the beneficial owner of shares of the Corporation) both at the time of giving the notice provided for in this Section 1.13 and at the time of the meeting, (B) is entitled to vote at the meeting, and (C) has complied with the notice procedures set forth in this Section 1.13 as to such nomination. This Section 1.13 shall be the exclusive means for a stockholder to propose any nomination of a person or persons for election to the Board of Directors to be considered by the stockholders at an annual meeting or special meeting.

(b) Without qualification, for a stockholder to make any nomination of a person or persons for elections to the Board of Directors at an annual meeting, the stockholder must (i) provide Timely Notice (as defined in Section 1.12(b)) thereof in writing and in proper form to the Secretary of the Corporation and (ii) provide any updates or supplements to such notice at the times and in the forms required by this Section 1.13. Without qualification, if the election of directors is a matter specified in the notice of meeting given by or at the direction of the person calling such special meeting, then for a stockholder to make any nomination of a person or persons for election to the Board of Directors nominations to be made at a special meeting, the stockholder must (i) provide timely notice thereof in writing and in proper form to the Secretary of the Corporation at the principal executive offices of the Corporation, and (ii) provide any updates or supplements to such notice at the times and in the forms required by this Section 1.13. To be timely, a stockholder's notice for nominations to be made at a special meeting must be delivered to, or mailed and received at, the principal executive offices of the Corporation not earlier than the one hundred twentieth (120th) day prior to such special meeting and not later than the ninetieth (90th) day prior to such special meeting or, if later, the tenth (10th) day following the day on which public disclosure of the date of such special meeting was first made. In no event shall any adjournment or postponement of an annual meeting or special meeting or the announcement thereof commence a new time period for the giving of a stockholder's notice as described above.

(c) To be in proper form for purposes of this Section 1.13, a stockholder's notice to the Secretary pursuant to this Section 1.13 shall be required to set forth:

(i) As to each Nominating Person (as defined below), the Stockholder Information (as defined in Section 1.12(c)(i), except that for purposes of this Section 1.13, the term "**Nominating Person"** shall be substituted for the term "**Proposing Person"** in all places it appears in Section 1.12(c)(i));

(ii) As to each Nominating Person, any Disclosable Interests (as defined in Section 1.12(c)(ii), except that for purposes of this Section 1.13 the term "**Nominating Person"** shall be substituted for the term "**Proposing Person"** in all places it appears in **Section 1.12(c)(ii)**);

(iii) As to each person whom a Nominating Person proposes to nominate for election as a director, (A) all information with respect to such proposed nominee that would be required to be set forth in a stockholder's notice pursuant to this Section 1.13 if such proposed nominee were a Nominating Person, (B) all information relating to such proposed nominee that is required to be disclosed in a proxy statement or other filings required to be made in connection with solicitations of proxies for election of directors in a contested election pursuant to Section 14 under the Exchange Act and the rules and regulations thereunder (including such proposed nominee's written consent to being named in the proxy statement as a nominee and to serving as a director if elected), and (C) a description of all direct and indirect compensation and other material monetary agreements, arrangements and understandings during the past three years, and any other material relationships, between or among any Nominating Person, on the one hand, and each proposed nominee, and his or her respective affiliates and associates, on the other hand, including, without limitation, all information that would be required to be disclosed pursuant to Item 404 promulgated under Regulation S-K if such Nominating Person, as applicable, and/or such Proposing

Persons were the "registrant" for purposes of such rule and the proposed nominee were a director or executive officer of such registrant; and (D) a completed and signed questionnaire, representation and agreement as provided in this Section 1.13(f).

(iv) The Corporation may require any proposed nominee to furnish such other information as may reasonably be required by the Corporation to determine the eligibility of such proposed nominee to serve as an independent director of the Corporation or that could be material to a reasonable stockholder's understanding of the independence or lack of independence of such proposed nominee.

For purposes of this Section 1.13, the term "**Nominating Person"** shall mean (i) the stockholder providing the notice of the nomination proposed to be made at the meeting, (ii) the beneficial owner or beneficial owners, if different, on whose behalf the notice of the nomination proposed to be made at the meeting is made, (iii) any affiliate or associate of such stockholder or beneficial owner (as such terms are defined in Rule 12b-2 promulgated under the Exchange Act) and (iv) any other person with whom such stockholder or such beneficial owner (or any of their respective affiliates or associates) is acting in concert.

(d) A stockholder providing notice of any nomination proposed to be made at a meeting shall further update and supplement such notice, if necessary, so that the information provided or required to be provided in such notice pursuant to this Section 1.13 shall be true and correct as of the record date for the meeting and as of the date that is ten (10) business days prior to the meeting or any adjournment or postponement thereof, and such update and supplement shall be delivered to or mailed and received by the Secretary at the principal executive offices of the Corporation not later than five (5) business days after the record date for the meeting (in the case of the update and supplement required to be made as of the record date), and not later than eight (8) business days prior to the date for the meeting or any adjournment or postponement thereof (in the case of the update and supplement required to be made as of ten (10) business days prior to the meeting or any adjournment or postponement thereof).

(e) Notwithstanding anything in these Bylaws to the contrary, no person shall be eligible for election as a director of the Corporation unless nominated in accordance with this Section 1.13. The presiding officer at the meeting shall, if the facts warrant, determine that a nomination was not properly made in accordance with this Section 1.13, and if he or she should so determine, he or she shall so declare such determination to the meeting and the defective nomination shall be disregarded.

(f) To be eligible to be a nominee for election as a director of the Corporation, the proposed nominee must deliver (in accordance with the time periods prescribed for delivery of notice under this Section 1.13) to the Secretary at the principal executive offices of the Corporation a written questionnaire with respect to the background and qualification of such proposed nominee (which questionnaire shall be provided by the Secretary upon written request) and a written representation and agreement (in form provided by the Secretary upon written request) that such proposed nominee (i) is not and will not become a party to (A) any agreement, arrangement or understanding with, and has not given any commitment or assurance to, any person or entity as to how such proposed nominee, if elected as a director of the Corporation, will act or vote on any issue or question (a "**Voting Commitment"**) that has not been disclosed to the Corporation or (B) any Voting Commitment that could limit or interfere with such proposed nominee's ability to comply, if elected as a director of the Corporation, with such proposed nominee's fiduciary duties under applicable law, (ii) is not, and will not become a party to, any agreement, arrangement or understanding with any person or entity other than the Corporation with respect to any direct or indirect compensation, reimbursement or indemnification in connection with service or action as a director that has not been disclosed to the Corporation and (iii) in such proposed nominee's individual capacity and on behalf of the stockholder (or the beneficial owner, if different) on whose behalf the nomination is made, would be in compliance, if elected as a director of the Corporation, and will comply with applicable publicly disclosed corporate governance, conflict of interest, confidentiality and stock ownership and trading policies and guidelines of the Corporation.

(g) In addition to the requirements of this Section 1.13 with respect to any nomination proposed to be made at a meeting, each Nominating Person shall comply with all applicable requirements of the Exchange Act with respect to any such nominations.

Section 1.14 ***Procedures for Stockholders to Call Special Meetings.***

(a) Special meetings of the stockholders for any purpose or purposes may be called only (i) by the Chairman of the Board of Directors, (ii) by the Board of Directors, pursuant to a resolution approved by a majority of the entire Board of Directors, or (iii) by the Secretary of the Corporation, following his or her receipt of one or more written demands to call a special meeting of the stockholders in accordance with, and subject to, this *Section 1.14* from stockholders of record as of the record date fixed in accordance with Section 1.14(d) who hold, in the aggregate, at least a majority of the outstanding shares of the Corporation. The notice of a special meeting shall state the purpose or purposes of the special meeting, and the business to be conducted at the special meeting shall be limited to the purpose or purposes stated in the notice. Except in accordance with this Section 1.14, stockholders shall not be permitted to propose business to be brought before a special meeting of the stockholders.

(b) No stockholder may demand that the Secretary of the Corporation call a special meeting of the stockholders pursuant to Section 1.14(a) unless a stockholder of record has first submitted a request in writing that the Board of Directors fix a record date for the purpose of determining the stockholders entitled to demand that the Secretary of the Corporation call such special meeting, which request shall be in proper form and delivered to, or mailed and received by, the Secretary of the Corporation at the principal executive offices of the Corporation.

(c) To be in proper form for purposes of this Section 1.14, a request by a stockholder for the Board of Directors to fix a record date shall set forth:

(i) As to each Requesting Person (as defined below), the Stockholder Information (as defined in Section 1.12(c)(i), except that for purposes of this Section 1.14 the term "**Requesting Person**" shall be substituted for the term "**Proposing Person**" in all places it appears in Section 1.12(c)(i));

(ii) As to each Requesting Person, any Disclosable Interests (as defined in Section 1.12(c)(ii), except that for purposes of this Section 1.14 the term "**Requesting Person**" shall be substituted for the term "**Proposing Person**" in all places it appears in Section 1.12(c)(ii); and

(iii) As to the purpose or purposes of the special meeting, (A) a reasonably brief description of the purpose or purposes of the special meeting and the business proposed to be conducted at the special meeting, the reasons for conducting such business at the special meeting and any material interest in such business of each Requesting Person, and (B) a reasonably detailed description of all agreements, arrangements and understandings (x) between or among any of the Requesting Persons or (y) between or among any Requesting Person and any other person or entity (including their names) in connection with the request for the special meeting or the business proposed to be conducted at the special meeting.

For purposes of this Section 1.14(b), the term "**Requesting Person**" shall mean (i) the stockholder making the request to fix a record date for the purpose of determining the stockholders entitled to demand that the Secretary call a special meeting, (ii) the beneficial owner or beneficial owners, if different, on whose behalf such request is made, (iii) any affiliate or associate of such stockholder or beneficial owner, and (iv) any other person with whom such stockholder or beneficial owner (or any of their respective affiliates or associates) is acting in concert.

(d) Within ten (10) days after receipt of a request to fix a record date in proper form and otherwise in compliance with this Section 1.14 from any stockholder of record, the Board of Directors may adopt a resolution fixing a record date for the purpose of determining the stockholders entitled to demand that the Secretary of the Corporation call a special meeting, which date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors. If no resolution fixing a record date has been adopted by the Board of Directors within the ten (10) day period after the date on which such a request to fix a record date was received, the record date in respect thereof shall be deemed to be the twentieth (20th) day after the date on which such a request is received. Notwithstanding anything in this Section 1.14 to the contrary, no record date shall be fixed if the Board of Directors determines that the demand or demands that would otherwise be submitted following such record date could not comply with the requirements set forth in clauses (ii), (iv), (v) or (vi) of Section 1.14(f).

(e) Without qualification, a special meeting of the stockholders shall not be called pursuant to Section 1.14(a) unless stockholders of record as of the record date fixed in accordance with Section 1.14(d) who hold, in the aggregate, a majority of the outstanding shares of the Corporation (the "**Requisite Percentage**") timely provide one or more demands to call such special meeting in writing and in proper form to the Secretary of the Corporation at the principal executive offices of the Corporation. Only stockholders that are holders of record on the record date shall be entitled to demand that the Secretary of the Corporation call a special meeting of the stockholders pursuant to Section 1.14(a), notwithstanding any transfer of any stock on the stock ledger of the Corporation after any such record date. To be timely, a stockholder's demand to call a special meeting must be delivered to, or mailed and received at, the principal executive offices of the Corporation not later than the sixtieth (60th) day following the record date fixed in accordance with Section 1.14(d). To be in proper form for purposes of this Section 1.14, a demand to call a special meeting shall set forth (i) the business proposed to be conducted at the special meeting, (ii) the text of the proposal or business (including the text of any resolutions proposed for consideration), and (iii) with respect to any stockholder or stockholders submitting a demand to call a special meeting (except for any stockholder that has provided such demand in response to a solicitation made pursuant to, and in accordance with, Section 14 of the Exchange Act by way of a solicitation statement filed on Schedule 14A) (a "**Solicited Stockholder**") the information required to be provided pursuant to this Section 1.14 of a Requesting Person. A stockholder may revoke a demand to call a special meeting by written revocation delivered to the Secretary at any time prior to the special meeting. If any such revocation(s) are received by the Secretary after the Secretary's receipt of written demands from the holders of the Requisite Percentage of stockholders, and as a result of such revocation(s), there no longer are unrevoked demands from the Requisite Percentage of stockholders to call a special meeting, the Board of Directors shall have the discretion to determine whether or not to proceed with the special meeting.

(f) The Secretary shall not accept, and shall consider ineffective, a written demand from a stockholder to call a special meeting (i) that does not comply with this Section 1.14, (ii) that relates to an item of business to be transacted at such meeting that is not a proper subject for stockholder action under applicable law, (iii) that includes an item of business to be transacted at such meeting that did not appear on the written request that resulted in the determination of the record date (the "**Current Record Date**") to determine the stockholders entitled to submit such written demand, (iv) that relates to an item of business (other than the election of directors) that is identical or substantially similar to an item of business (a "**Similar Item**") for which a record date (other than the Current Record Date) was previously fixed and such demand is delivered between the time beginning on the 61st day after such previous record date and ending on the one-year anniversary of such previous record date, (v) if a Similar Item will be submitted for stockholder approval at any stockholder meeting to be held on or before the 90th day after the Secretary receives such demand, or (vi) if a Similar Item has been presented at the most recent annual meeting or at any special meeting held within one year prior to receipt by the Secretary of such demand to call a special meeting.

(g) After receipt of demands in proper form and in accordance with this Section 1.14 from a stockholder or stockholders holding the Requisite Percentage, the Board of Directors shall duly call, and determine the place, date and time of, a special meeting of stockholders for the purpose or purposes and to conduct the business specified in the demands received by the Corporation. Notwithstanding anything in these Bylaws to the contrary, the Board of Directors may submit its own proposal or proposals for consideration at such a special meeting. The record date for such a special meeting shall be fixed in accordance with Section 1.9 of these Bylaws. The Board of Directors shall provide written notice of such special meeting to the stockholders in accordance with Section 1.3.

(h) In connection with a special meeting called in accordance with this Section 1.14, the stockholder or stockholders (except for any Solicited Stockholder) who requested that the Board of Directors fix a record date in accordance with this Section 1.14 or who delivered a demand to call a special meeting to the Secretary shall further update and supplement the information previously provided to the Corporation in connection with such request or demand, if necessary, so that the information provided or required to be provided in such request or demand pursuant to this Section 1.14 shall be true and correct as of the record date for the special meeting and as of the date that is ten (10) business days prior to the meeting or any adjournment or postponement thereof, and such update and supplement shall be delivered to, or mailed and received by, the Secretary at the principal executive offices of the Corporation not later than five (5) business days after the record date for the special meeting (in the case of the update and supplement required to be made as of the record date), and not later than eight (8) business days prior to the date for the meeting, if practicable (or, if not practicable, the first practicable date prior to) any adjournment or postponement thereof (in the case of the update and supplement required to be made as of ten (10) business days prior to the special meeting or any adjournment or postponement thereof).

(i) Notwithstanding anything in these Bylaws to the contrary, the Secretary shall not be required to call a special meeting pursuant to this Section 1.14 except in accordance with this Section 1.14. If the Board of Directors shall determine that any request to fix a record date or demand to call and hold a special meeting was not properly made in accordance with this Section 1.14, or shall determine that the stockholder or stockholders requesting that the Board of Directors fix such record date or submitting a demand to call the special meeting have not otherwise complied with this Section 1.14, then the Board of Directors shall not be required to fix a record date or to call and hold the special meeting. In addition to the requirements of this Section 1.14, each Requesting Person shall comply with all requirements of applicable law, including all requirements of the Exchange Act, with respect to any request to fix a record date or demand to call a special meeting.

Section 1.15 ***Action by Written Consent of Stockholders.***

(a) Unless otherwise provided by the Certificate of Incorporation, and except as set forth in Section 1.9(b) above, any action required or permitted to be taken at any annual or special meeting of the stockholders may be taken without a meeting, without prior notice and without a vote, if a consent or consents in writing, setting forth the action so taken, (i) shall be signed by the holders of record on the record date (established as provided below) of outstanding shares of the Corporation's stock having not less than the number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted and (ii) shall be delivered to the Corporation at its registered office in the State of Delaware, at its principal place of business or to an officer or agent of the Corporation having custody of the minute books in which proceedings of meetings of stockholders are recorded. Delivery shall be made by hand or by certified or registered mail, return receipt requested. Every written stockholder consent shall bear the signature of each stockholder who signs the consent, and no written consent shall be effective to take corporate action unless, within sixty (60) days of the earliest dated valid consent delivered in the manner described in this Section 1.15, written consents signed by a sufficient number of holders to take such action are delivered to the Corporation in the manner described in this Section 1.15. Only stockholders that are holders of record on the record date shall be entitled to consent to corporate action in writing without a meeting, notwithstanding any transfer of any stock on the stock ledger of the Corporation after any such record date.

(b) Without qualification, any stockholder of record seeking to have the stockholders authorize or take any action by written consent shall first request in writing that the Board of Directors fix a record date for the purpose of determining the stockholders entitled to take such action, which request shall be delivered to, or mailed and received by, the Secretary of the Corporation at the principal executive offices of the Corporation. Within ten (10) days after receipt of a request in compliance with this Section 1.15(b) from any such stockholder, the Board of Directors may adopt a resolution fixing a record date for the purpose of determining the stockholders entitled to take such action, which date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which date shall not be more than ten (10) days after the date upon which the resolution fixing the record date is adopted by the Board of Directors. If no resolution fixing a record date has been adopted by the Board of Directors within such ten (10) day period after the date on which such a request is received, (i) the record date for determining stockholders entitled to consent to such action, when no prior action of the Board of Directors is required by applicable law, shall be the first date on which a valid signed written consent setting forth the action taken or proposed to be taken is delivered to the Corporation in the manner described in this Section 1.15, and (ii) the record date for determining stockholders entitled to consent to such action, when prior action by the Board of Directors is required by applicable law, shall be at the close of business on the date on which the Board of Directors adopts the resolution taking such prior action.

(c) If the Board of Directors shall determine that any request to fix a record date or to take stockholder action by written consent was not properly made in accordance with this Section 1.15, or the stockholder or stockholders seeking to take such action do not otherwise comply with this Section 1.15, then the Board of Directors shall not be required to fix a record date and the Corporation shall be entitled to take such other actions in connection with any such purported action by written consent as permitted by applicable law. In addition to the requirements of this Section 1.15 with respect to stockholders seeking to take an action by written consent, each Soliciting Person shall comply with all requirements of applicable law, including all requirements of the Exchange Act, with respect to such action.

(d) Prompt notice of the taking of corporate action by stockholders without a meeting pursuant to this Section 1.15 by less than unanimous written consent of the stockholders shall be given to those stockholders who have not consented thereto in writing and, in the case of a Certificate Action (as defined below), if the Delaware General Corporation Law so requires, such notice shall be given prior to filing of the certificate in question. If the action which is consented to requires the filing of a certificate under the Delaware General Corporation Law (a "**Certificate Action**"), then if the Delaware General Corporation Law so requires, the certificate so filed shall state that written stockholder consent has been given in accordance with Section 228 of the Delaware General Corporation Law and that written notice of the taking of corporate action by stockholders without a meeting as described herein has been given as provided in such section.

ARTICLE II
BOARD OF DIRECTORS

Section 2.1 ***Number; Qualifications.*** The Board of Directors shall consist of one or more members. The initial number of directors shall be nine (9), and thereafter shall be fixed from time to time by resolution of the Board of Directors. No decrease in the authorized number of directors constituting the Board of Directors shall shorten the term of any incumbent director. Directors need not be stockholders of the Corporation.

Section 2.2 ***Election; Resignation; Removal; Vacancies.*** The term of office of directors shall be as provided in Section 7.1 of the Certificate of Incorporation. Subject to the provisions of the Certificate of Incorporation, each director shall serve until his or her successor is elected and qualified, or until his or her earlier resignation or removal. Any director may resign at any time upon written notice to the Corporation. In the case of any increase in the number of directors, such additional director(s) shall be elected as provided in Section 7.1 of the Certificate of Incorporation. Directors so chosen or elected shall hold office for the remaining term of the directorship to which appointed. The removal of directors and the filling of vacancies created on the Board of Directors shall be as provided in the Certificate of Incorporation.

Section 2.3 ***Regular Meetings.*** Regular meetings of the Board of Directors may be held at such places, within or without the State of Delaware, and at such times as the Board of Directors may from time to time determine. Notice of regular meetings need not be given if the date, times and places thereof are fixed by resolution of the Board of Directors.

Section 2.4 ***Special Meetings.*** Special meetings of the Board of Directors may be called by the Chairman of the Board, the President or a majority of the members of the Board of Directors then in office and may be held at any time, date or place, within or without the State of Delaware, as the person or persons calling the meeting shall fix. Notice of the time, date and place of such meeting shall be given, orally or in writing, by the person or persons calling the meeting to all directors at least four (4) days before the meeting if the notice is mailed, or at least twenty-four (24) hours before the meeting if such notice is given by telephone, hand delivery, telegram, telex, mailgram, facsimile or similar communication method. Unless otherwise indicated in the notice, any and all business may be transacted at a special meeting.

Section 2.5 ***Telephonic Meetings Permitted.*** Members of the Board of Directors, or any committee of the Board, may participate in a meeting of the Board or such committee by means of conference telephone or similar communications equipment by means of which all persons participating in the meeting can hear each other, and participation in a meeting pursuant to conference telephone or similar communications equipment shall constitute presence in person at such meeting.

Section 2.6 ***Quorum;*** Vote Required for Action. At all meetings of the Board of Directors a majority of the total number of authorized directors shall constitute a quorum for the transaction of business. Except as otherwise provided herein or in the Certificate of Incorporation, or required by law, the vote of a majority of the directors present at a meeting at which a quorum is present shall be the act of the Board of Directors.

Section 2.7 ***Organization.*** Meetings of the Board of Directors shall be presided over by the Chairman of the Board, or in his or her absence by the President, or in his or her absence by a chairman chosen at the meeting. The Secretary shall act as secretary of the meeting, but in his or her absence the chairman of the meeting may appoint any person to act as secretary of the meeting.

Section 2.8 ***Written Action by Directors.*** Any action required or permitted to be taken at any meeting of the Board of Directors, or of any committee thereof, may be taken without a meeting if all members of the Board or such committee, as the case may be, consent thereto in writing, and the writing or writings are filed with the minutes of proceedings of the Board or committee, respectively.

Section 2.9 ***Powers.*** The Board of Directors may, except as otherwise required by law or the Certificate of Incorporation, exercise all such powers and do all such acts and things as may be exercised or done by the Corporation.

Section 2.10 ***Compensation of Directors.*** Directors, as such, may receive, pursuant to a resolution of the Board of Directors, fees and other compensation for their services as directors, including without limitation their services as members of committees of the Board of Directors.

ARTICLE III
COMMITTEES

Section 3.1 ***Committees.*** The Board of Directors may, by resolution passed by a majority of the whole Board, designate one or more committees, each committee to consist of one or more of the directors of the Corporation. The Board may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of the committee, the member or members thereof present at any meeting of such committee who are not disqualified from voting, whether or not he, she or they constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in place of any such absent or disqualified member. Any such committee, to the extent provided in a resolution of the Board of Directors, shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the Corporation and may authorize the seal of the Corporation to be affixed to all papers that may require it; but no such committee shall have the power or authority in reference to amending the Certificate of Incorporation (except that a committee may, to the extent authorized in the resolution or resolutions providing for the issuance of shares of stock adopted by the Board of Directors as provided in subsection (a) of Section 151 of the Delaware General Corporation Law, fix the designations and any of the preferences or rights of such shares relating to dividends, redemption, dissolution, any distribution of assets of the Corporation, or the conversion into, or the exchange of such shares for, shares of any other class or classes or any other series of the same or any other class or classes of stock of the Corporation, or fix the number of shares of any series of stock or authorize the increase or decrease of the shares of any series), adopting an agreement of merger or consolidation under Sections 251 or 252 of the Delaware

General Corporation Law, recommending to the stockholders the sale, lease or exchange of all or substantially all of the Corporation's property and assets, recommending to the stockholders a dissolution of the Corporation or a revocation of a dissolution, or amending the Bylaws of the Corporation; and unless the resolution of the Board of Directors expressly so provides, no such committee shall have the power or authority to declare a dividend, authorize the issuance of stock or adopt a certificate of ownership and merger pursuant to section 253 of the Delaware General Corporation Law.

Section 3.2 ***Committee Rules.*** Unless the Board of Directors otherwise provides, each committee designated by the Board may make, alter and repeal rules for the conduct of its business. In the absence of such rules each committee shall conduct its business in the same manner as the Board of Directors conducts its business pursuant to Article II of these Bylaws.

ARTICLE IV
OFFICERS

Section 4.1 ***Generally.*** The officers of the Corporation shall consist of a Chief Executive Officer and/or a President, one or more Vice Presidents, a Secretary, a Treasurer and such other officers, including a Chairman of the Board of Directors and/or Chief Financial Officer, as may from time to time be appointed by the Board of Directors. All officers shall be elected by the Board of Directors; provided, however, that the Board of Directors may empower the Chief Executive Officer of the Corporation to appoint officers other than the Chairman of the Board, the Chief Executive Officer, the President, the Chief Financial Officer or the Treasurer. Each officer shall hold office until his or her successor is elected and qualified or until his or her earlier resignation or removal. Any number of offices may be held by the same person. Any officer may resign at any time upon written notice to the Corporation. Any vacancy occurring in any office of the Corporation by death, resignation, removal or otherwise may be filled by the Board of Directors.

Section 4.2 ***Chief Executive Officer.*** Subject to the control of the Board of Directors and such supervisory powers, if any, as may be given by the Board of Directors, the powers and duties of the Chief Executive Officer of the Corporation are:

(a) To act as the general manager and, subject to the control of the Board of Directors, to have general supervision, direction and control of the business and affairs of the Corporation;

(b) To preside at all meetings of the stockholders;

(c) To call meetings of the stockholders to be held at such times and, subject to the limitations prescribed by law or by these Bylaws, at such places as he or she shall deem proper; and

(d) To affix the signature of the Corporation to all deeds, conveyances, mortgages, guarantees, leases, obligations, bonds, certificates and other papers and instruments in writing which have been authorized by the Board of Directors or which, in the judgment of the Chief Executive Officer, should be executed on behalf of the Corporation; to sign certificates for shares of stock of the Corporation; and, subject to the direction of the Board of Directors, to have general charge of the property of the Corporation and to supervise and control all officers, agents and employees of the Corporation.

The President shall be the Chief Executive Officer of the Corporation unless the Board of Directors shall designate another officer to be the Chief Executive Officer. If there is no President, and the Board of Directors has not designated any other officer to be the Chief Executive Officer, then the Chairman of the Board shall be the Chief Executive Officer.

Section 4.3 ***Chairman of the Board.*** The Chairman of the Board shall have the power to preside at all meetings of the Board of Directors and shall have such other powers and duties as provided in these Bylaws and as the Board of Directors may from time to time prescribe.

Section 4.4 ***President.*** The President shall be the Chief Executive Officer of the Corporation unless the Board of Directors shall have designated another officer as the Chief Executive Officer of the Corporation. Subject to the provisions of these Bylaws and to the direction of the Board of Directors, and subject to the supervisory powers of the Chief Executive Officer (if the Chief Executive Officer is an officer other than the President), and subject to such supervisory powers and authority as may be given by the Board of Directors to the Chairman of the Board, and/or to any other officer, the President shall have the responsibility for the general management the control of the business and affairs of the Corporation and the general supervision and direction of all of the officers, employees and agents of the Corporation (other than the Chief Executive Officer, if the Chief Executive Officer is an officer other than the President) and shall perform all duties and have all powers that are commonly incident to the office of President or that are delegated to the President by the Board of Directors.

Section 4.5 ***Vice President.*** Each Vice President shall have all such powers and duties as are commonly incident to the office of Vice President, or that are delegated to him or her by the Board of Directors or the Chief Executive Officer. A Vice President may be designated by the Board to perform the duties and exercise the powers of the Chief Executive Officer in the event of the Chief Executive Officer's absence or disability.

Section 4.6 ***Chief Financial Officer.*** Subject to the direction of the Board of Directors and the President, the Chief Financial Officer shall perform all duties and have all powers that are commonly incident to the office of chief financial officer.

Section 4.7 ***Treasurer.*** The Treasurer shall have custody of all monies and securities of the Corporation. The Treasurer shall make such disbursements of the funds of the Corporation as are authorized and shall render from time to time an account of all such transactions. The Treasurer shall also perform such other duties and have such other powers as are commonly incident to the office of Treasurer, or as the Board of Directors or the President may from time to time prescribe.

Section 4.8 ***Secretary.*** The Secretary shall issue or cause to be issued all authorized notices for, and shall keep, or cause to be kept, minutes of all meetings of the stockholders and the Board of Directors. The Secretary shall have charge of the corporate minute books and similar records and shall perform such other duties and have such other powers as are commonly incident to the office of Secretary, or as the Board of Directors or the President may from time to time prescribe.

Section 4.9 ***Delegation of Authority.*** The Board of Directors may from time to time delegate the powers or duties of any officer to any other officers or agents, notwithstanding any provision hereof.

Section 4.10 ***Removal.*** Any officer of the Corporation shall serve at the pleasure of the Board of Directors and may be removed at any time, with or without cause, by the Board of Directors. Such removal shall be without prejudice to the contractual rights of such officer, if any, with the Corporation.

ARTICLE V
STOCK

Section 5.1 ***Certificates.*** Every holder of stock shall be entitled to have a certificate signed by or in the name of the Corporation by the Chairman or Vice-Chairman of the Board of Directors, or the President or a Vice President, and by the Treasurer or an Assistant Treasurer, or the Secretary or an Assistant Secretary, of the Corporation, certifying the number of shares owned by such stockholder in the Corporation. Any or all of the signatures on the certificate may be a facsimile.

Section 5.2 ***Lost, Stolen or Destroyed Stock Certificates;*** Issuance of New Certificates. The Corporation may issue a new certificate of stock in the place of any certificate previously issued by it, alleged to have been lost, stolen or destroyed, and the Corporation may require the owner of the lost, stolen or destroyed certificate, or such owner's legal representative, to agree to indemnify the Corporation and/or to give the Corporation a bond sufficient to indemnify it, against any claim that may be made against it on account of the alleged loss, theft or destruction of any such certificate or the issuance of such new certificate.

Section 5.3 ***Other Regulations.*** The issue, transfer, conversion and registration of stock certificates shall be governed by such other regulations as the Board of Directors may establish.

ARTICLE VI
INDEMNIFICATION

Section 6.1 ***Indemnification of Officers and Directors.*** Each person who was or is made a party to, or is threatened to be made a party to, or is involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (a "**proceeding**"), by reason of the fact that he or she (or a person of whom he or she is the legal representative), is or was a director or officer of the Corporation or a Reincorporated Predecessor (as defined below) or is or was serving at the request of the Corporation or a Reincorporated Predecessor (as defined below) as a director, officer or employee of another corporation, or of a partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans, shall be indemnified and held harmless by the Corporation to the fullest extent permitted by the Delaware General Corporation Law, against all expenses, liability and loss (including attorneys' fees, judgments, fines, ERISA excise taxes and penalties and amounts paid or to be paid in settlement) reasonably incurred or suffered by such person in connection therewith, and such indemnification shall continue as to a person who has ceased to be a director or officer and shall inure to the benefit of his or her heirs, executors and administrators; provided, however, that the Corporation shall indemnify any such person seeking indemnity in connection with a proceeding (or part thereof) initiated by such person only if such proceeding (or part thereof) was authorized by the Board of Directors of the Corporation. As used herein, the term "**Reincorporated Predecessor"** means a corporation that is merged with and into the Corporation in a statutory merger where (a) the Corporation is the surviving corporation of such merger; (b) the primary purpose of such merger is to change the corporate domicile of the Reincorporated Predecessor to Delaware.

Section 6.2 ***Advance of Expenses.*** The Corporation shall pay all expenses (including attorneys' fees) incurred by such a director or officer in defending any such proceeding as they are incurred in advance of its final disposition; provided, however, that if the Delaware General Corporation Law then so requires, the payment of such expenses incurred by such a director or officer in advance of the final disposition of such proceeding shall be made only upon delivery to the Corporation of an undertaking, by or on behalf of such director or officer, to repay all amounts so advanced if it should be determined ultimately that such director or officer is not entitled to be indemnified under this Article VI or otherwise; and provided, further, that the Corporation shall not be required to advance any expenses to a person against whom the Corporation directly brings a claim, in a proceeding, alleging that such person has breached his or her duty of loyalty to the Corporation, committed an act or omission not in good faith or that involves intentional misconduct or a knowing violation of law, or derived an improper personal benefit from a transaction.

Section 6.3 ***Non-Exclusivity of Rights.*** The rights conferred on any person in this Article VI shall not be exclusive of any other right that such person may have or hereafter acquire under any statute, provision of the Certificate of Incorporation, Bylaw, agreement, vote or consent of stockholders or disinterested directors, or otherwise. Additionally, nothing in this Article VI shall limit the ability of the Corporation, in its discretion, to indemnify or advance expenses to persons whom the Corporation is not obligated to indemnify or advance expenses pursuant to this Article VI. The Board of Directors of the Corporation shall have the power to delegate to such officer or other person as the Board of Directors shall specify the determination of whether indemnification shall be given to any person pursuant to this Section 6.3.

Section 6.4 ***Indemnification Contracts.*** The Board of Directors is authorized to cause the Corporation to enter into indemnification contracts with any director, officer, employee or agent of the Corporation, or any person serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, including employee benefit plans, providing indemnification rights to such person. Such rights may be greater than those provided in this Article VI.

Section 6.5 ***Effect of Amendment.*** Any amendment, repeal or modification of any provision of this Article VI shall be prospective only, and shall not adversely affect any right or protection conferred on a person pursuant to this Article VI and existing at the time of such amendment, repeal or modification.

ARTICLE VII
NOTICES

Section 7.1 ***Notice.*** Except as otherwise specifically provided herein or required by law, all notices required to be given pursuant to these Bylaws shall be in writing and may in every instance be effectively given by hand delivery (including use of a delivery service), by depositing such notice in the mail, postage prepaid, or by sending such notice by prepaid telegram, telex, overnight express courier, mailgram or facsimile. Any such notice shall be addressed to the person to whom notice is to be given at such person's address as it appears on the records of the Corporation. The notice shall be deemed given (i) in the case of hand delivery, when received by the person to whom notice is to be given or by any person accepting such notice on behalf of such person, (ii) in the case of delivery by mail, upon deposit in the mail, (iii) in the case of delivery by overnight express courier, on the first business day after such notice is dispatched, and (iv) in the case of delivery via telegram, telex, mailgram, or facsimile, when dispatched.

Section 7.2 ***Waiver of Notice.*** Whenever notice is required to be given under any provision of these Bylaws, a written waiver of notice, signed by the person entitled to notice, whether before or after the time stated therein, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting at the beginning of the meeting to the transaction of any business because the meeting is not lawfully called or convened. Except as otherwise provided by applicable law, the Certificate of Incorporation or these Bylaws, neither the business to be transacted at, nor the purpose of, any regular or special meeting of the stockholders, directors or members of a committee of directors need be specified in any written waiver of notice.

ARTICLE VIII
INTERESTED DIRECTORS

Section 8.1 ***Interested Directors; Quorum.*** No contract or transaction between the Corporation and one or more of its directors or officers, or between the Corporation and any other corporation, partnership, association or other organization in which one or more of its directors or officers are directors or officers, or have a financial interest, shall be void or voidable solely for this reason, or solely because the director or officer is present at or participates in the meeting of the Board or committee thereof that authorizes the contract or transaction, or solely because his, her or their votes are counted for such purpose, if: (i) the material facts as to his, her or their relationship or interest and as to the contract or transaction are disclosed or are known to the Board of Directors or the committee, and the Board or committee in good faith authorizes the contract or transaction by the affirmative votes of a majority of the disinterested directors, even though the disinterested directors be less than a quorum; (ii) the material facts as to his, her or their relationship or interest and as to the contract or transaction are disclosed or are known to the stockholders entitled to vote thereon, and the contract or transaction is specifically approved in good faith by vote of the stockholders; or (iii) the contract or transaction is fair as to the Corporation as of the time it is authorized, approved or ratified by the Board of Directors, a committee thereof, or the stockholders.

Common or interested directors may be counted in determining the presence of a quorum at a meeting of the Board of Directors or of a committee which authorizes the contract or transaction.

ARTICLE IX
MISCELLANEOUS

Section 9.1 ***Fiscal Year.*** The fiscal year of the Corporation shall be determined by resolution of the Board of Directors.

Section 9.2 ***Seal.*** The Board of Directors may provide for a corporate seal, which shall have the name of the Corporation inscribed thereon and shall otherwise be in such form as may be approved from time to time by the Board of Directors.

Section 9.3 ***Form of Records.*** Any records maintained by the Corporation in the regular course of its business, including its stock ledger, books of account and minute books, may be kept on, or be in the form of, magnetic tape, diskettes, photographs, microphotographs or any other information storage device, provided that the records so kept can be converted into clearly legible form within a reasonable time. The Corporation shall so convert any records so kept upon the request of any person entitled to inspect the same.

Section 9.4 ***Reliance Upon Books and Records.*** A member of the Board of Directors, or a member of any committee designated by the Board of Directors shall, in the performance of his or her duties, be fully protected in relying in good faith upon records of the Corporation and upon such information, opinions, reports or statements presented to the Corporation by any of the Corporation's officers or employees, or committees of the Board of Directors, or by any other person as to matters the member reasonably believes are within such other person's professional or expert competence and who has been selected with reasonable care by or on behalf of the Corporation.

Section 9.5 ***Certificate of Incorporation Governs.*** In the event of any conflict between the provisions of the Corporation's Certificate of Incorporation and Bylaws, the provisions of the Certificate of Incorporation shall govern.

Section 9.6 ***Severability.*** If any provision of these Bylaws shall be held to be invalid, illegal, unenforceable or in conflict with the provisions of the Corporation's Certificate of Incorporation, then such provision shall nonetheless be enforced to the maximum extent possible consistent with such holding and the remaining provisions of these Bylaws (including without limitation, all portions of any section of these Bylaws containing any such provision held to be invalid, illegal, unenforceable or in conflict with the Certificate of Incorporation, that are not themselves invalid, illegal, unenforceable or in conflict with the Certificate of Incorporation) shall remain in full force and effect.

Section 9.7 ***Stockholder Rights Plan.*** The Corporation will not adopt or extend a stockholder rights plan, rights agreement or any other form of "poison pill" which is designed to make, or has the effect of making, the acquisition of large holdings of the corporation's stock more difficult or expensive (a "**Stockholder Rights Plan**") without obtaining the prior approval of the stockholders of the Corporation by the affirmative vote of a majority of the votes cast with respect to the matter by the shares represented and entitled to vote thereon at an annual or special meeting of the stockholders at which a quorum is present; provided, however, that the corporation may adopt a Stockholder Rights Plan without such prior approval if a majority of the independent directors (as determined in accordance with applicable Nasdaq rules and listing requirements and any additional criteria set forth in the corporation's Corporate Governance Guidelines), in the exercise of their fiduciary duties, determines that adoption of a Stockholder Rights Plan is in the best interest of stockholders under the circumstances. If a Stockholder Rights Plan is adopted without prior stockholder approval as contemplated by the preceding sentence, such plan shall expire within twelve (12) months from the date of adoption unless, prior to such date, it is approved by the affirmative vote of a majority of the votes cast with respect to the matter by the shares represented and entitled to vote thereon at an annual or special meeting of the stockholders at which a quorum is present. For purposes of this Section 9.7, a "majority of the votes cast" means that the number of votes cast "for" approval of a Stockholder Rights Plan exceeds the number of votes cast "against" approval of a Stockholder Rights Plan.

Section 9.8 ***Forum for Adjudication of Disputes.*** Unless the Corporation consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the Corporation, (ii) any action asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee of the Corporation to the Corporation or the Corporation's stockholders, (iii) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law or the Corporation's Certificate of Incorporation or these Bylaws, or (iv) any action asserting a claim governed by the internal affairs doctrine. Any person or entity purchasing or otherwise acquiring any interest in shares of capital stock of the Corporation shall be deemed to have notice of and consented to the provisions of this Section 9.8.

ARTICLE X
AMENDMENT

Section 10.1 ***Amendments.*** Subject to Section 6.5 of these Bylaws, and except as provided in Section 2.1, stockholders of the Corporation holding at least a majority of the Corporation's outstanding voting stock shall have the power to adopt, amend or repeal Bylaws. To the extent provided in the Certificate of Incorporation, the Board of Directors of the Corporation shall also have the power to adopt, amend or repeal Bylaws of the Corporation, except insofar as Bylaws adopted by the stockholders shall otherwise provide.

Exhibit 31.1

Certification of Chief Executive Officer

I, Gregory L. Waters, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Integrated Device Technology, 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 6, 2018

By: /s/ Gregory L. Waters

Gregory L. Waters
President and Chief Executive Officer

Exhibit 31.2

Certification of Chief Financial Officer

I, Brian C. White, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Integrated Device Technology, 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 6, 2018

By: /s/ Brian C. White

Brian C. White
Senior Vice President, Chief Financial Officer
(Principal Financial and Accounting Officer)

Exhibit 32.1

Certification of Chief Executive Officer

I, Gregory L. Waters, of Integrated Device Technology, Inc. (the “Company”), pursuant to the requirement set forth in Rule 13a-14(b) or Rule 15d-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. § 1350, certify to my knowledge that:

(i) the Quarterly Report on Form 10-Q of the Company for the quarterly period ended September 30, 2018 (the “Report”) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

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

By: /s/ Gregory L. Waters

Date: November 6, 2018

Gregory L. Waters
President and Chief Executive Officer

A signed original of this written statement required by Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. § 1350 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

The foregoing certification is being furnished solely to accompany the Report pursuant to 18 U.S.C. § 1350, and is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and is not to be incorporated by reference into any filing of the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

Exhibit 32.2

Certification of Chief Financial Officer

I, Brian C. White, of Integrated Device Technology, Inc. (the "Company"), pursuant to the requirement set forth in Rule 13a- 14(b) or Rule 15d-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. § 1350, certify to my knowledge that:

(i) the Quarterly Report on Form 10-Q of the Company for the quarterly period ended September 30, 2018 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

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

		By:	/s/ Brian C. White
Date:	November 6, 2018		Brian C. White *Senior Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)*

A signed original of this written statement required by Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. § 1350 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

The foregoing certification is being furnished solely to accompany the Report pursuant to 18 U.S.C. § 1350, and is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and is not to be incorporated by reference into any filing of the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing.