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

FORM	10-Q
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(Mark One) ⊠ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF TI	HE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period end	ded <u>June 30, 2018</u> or
$\hfill\Box$ Transition report pursuant to section 13 or 15(d) of T	HE SECURITIES EXCHANGE ACT OF 1934
For the transition period from	to
Commission File Nu	mber <u>1-36117</u>
inTEST Corp. (Exact Name of Registrant as S	
<u>Delaware</u>	22-2370659
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)
804 East Gate Driv <u>Mt. Laurel, New J</u> (Address of principal executive o	<u>ersey 08054</u>
(<u>856) 505-8</u> (Registrant's Telephone Number)	
Indicate by check mark whether the registrant (1) has filed all reports required to during the preceding 12 months (or for such shorter period that the registrant was requirements for the past 90 days. YES \boxtimes NO \square	
Indicate by check mark whether the registrant has submitted electronically and perequired to be submitted and posted pursuant to Rule 405 of Regulation S-T (SS shorter period that the registrant was required to submit and post such files). YES \boxtimes NO \square	
Indicate by check mark whether the registrant is a large accelerated filer, an accelemerging growth company. See the definitions of "large accelerated filer," "accelerated filerated filera	
Large accelerated filer \square Non-accelerated filer \square (Do not check if a smaller reporting company) Emerging growth company \square	Accelerated filer \square Smaller reporting company \boxtimes
If an emerging growth company, indicate by check mark if the registrant has elector revised financial accounting standards provided pursuant to Section 13(a) of the	
Indicate by check mark whether the registrant is a shell company (as defined in RYES \square $\:\:$ NO \boxtimes	Rule 12b-2 of the Exchange Act).
Number of shares of Common Stock, \$.01 par value, outstanding as of the close of	of business on July 31, 2018:
10,489,99	58

inTEST CORPORATION

INDEX

PART I.	FINANCIAL INFORMATION	<u>Page</u>
Item 1.	Financial Statements	
	Consolidated Balance Sheets as of June 30, 2018 (Unaudited) and December 31, 2017 Unaudited Consolidated Statements of Operations for the three months and six months ended June 30, 2018 and 2017 Unaudited Consolidated Statements of Comprehensive Earnings for the three months and six months ended June 30, 2018 and 2017 Unaudited Consolidated Statement of Stockholders' Equity for the six months ended June 30, 2018 Unaudited Consolidated Statements of Cash Flows for the six months ended June 30, 2018 and 2017 Notes to Consolidated Financial Statements	1 2 3 4 5
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	19
Item 3.	Quantitative and Qualitative Disclosures About Market Risk	26
Item 4.	Controls and Procedures	26
PART II.	OTHER INFORMATION	
Item 1.	<u>Legal Proceedings</u>	27
Item 1A.	Risk Factors	27
Item 2.	Unregistered Sales of Equity Securities and Use of Proceeds	27
Item 3.	<u>Defaults Upon Senior Securities</u>	27
Item 4.	Mine Safety Disclosures	27
Item 5.	Other Information	27
Item 6.	<u>Exhibits</u>	27
<u>Signatures</u>		28

PART I. FINANCIAL INFORMATION

Item 1. FINANCIAL STATEMENTS

inTEST CORPORATION CONSOLIDATED BALANCE SHEETS

(In thousands, except share and per share data)

	J	June 30, 2018		cember 31, 2017
	(U	naudited)		
ASSETS				
Current assets:				
Cash and cash equivalents	\$	10,713	\$	13,290
Trade accounts receivable, net of allowance for doubtful accounts of \$233 and \$213, respectively		11,596		12,166
Inventories		6,859		4,966
Prepaid expenses and other current assets		434		577
Total current assets		29,602		30,999
Property and equipment:				
Machinery and equipment		5,139		5,033
Leasehold improvements		2,332		822
Gross property and equipment		7,471		5,855
Less: accumulated depreciation		(4,530)		(4,314)
Net property and equipment		2,941		1,541
Goodwill		13,738		13,738
Intangible assets, net		15,551		16,014
Restricted certificates of deposit		175		175
Other assets		30		26
Total assets	\$	62,037	\$	62,493
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities:				
Accounts payable	\$	2,738	\$	2,032
Accrued wages and benefits		2,292		2,781
Customer deposits and deferred revenue		731		886
Domestic and foreign income taxes payable		1,286		1,199
Earnout payable		6,282		5,355
Other current liabilities		2,351		2,166
Total current liabilities	_	15,680	_	14,419
Federal transition tax payable, net of current portion			_	436
Deferred tax liabilities		2,464		2,606
Contingent consideration liability, net of current portion		_,		5,744
Total liabilities		18,144		23,205
Commitments and Contingencies				
Caralla I danni a mitan				
Stockholders' equity: Professed stock 50.01 per visitor 5.000.000 shares outhorized no shares issued or outstanding				
Preferred stock, \$0.01 par value; 5,000,000 shares authorized; no shares issued or outstanding Common stock, \$0.01 par value; 20,000,000 shares authorized; 10,518,535 and 10,427,435 shares issued,		-		-
respectively		105		104
Additional paid-in capital		26,151		25,860
Retained earnings		17,041		12,646
Accumulated other comprehensive earnings, foreign currency translation adjustments		800		882
Treasury stock, at cost; 33,077 shares		(204)		(204)
Total stockholders' equity		43,893		39,288
Total liabilities and stockholders' equity	\$	62,037	\$	62,493

inTEST CORPORATION CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except share and per share data) (Unaudited)

	Three Months Ended June 30,					Six Months Ended June 30,				
	2018		2017		2018		_	2017		
Net revenues	\$	21,097	\$	15,888	\$	39,968	\$	30,068		
Cost of revenues		10,187		7,467		19,663		13,919		
Gross margin		10,910		8,421		20,305		16,149		
Operating expenses:				,						
Selling expense		2,538		1,871		5,014		3,539		
Engineering and product development expense		1,230		982		2,526		1,917		
General and administrative expense		3,335		3,286		6,325		5,280		
Adjustment to contingent consideration liability		(710)		-		1,016		-		
Total operating expenses		6,393		6,139		14,881		10,736		
Operating income		4,517		2,282		5,424		5,413		
Other income (loss)		(121)		54		(46)		95		
Earnings before income tax expense		4,396		2,336		5,378		5,508		
Income tax expense		382		891		983		1,985		
•										
Net earnings	\$	4,014	\$	1,445	\$	4,395	\$	3,523		
Net earnings per common share - basic	\$	0.39	\$	0.14	\$	0.43	\$	0.34		
Weighted average common shares outstanding - basic		10,342,674		10,277,155		10,334,492		10,270,860		
Net earnings per common share - diluted	\$	0.39	\$	0.14	\$	0.42	\$	0.34		
Weighted average common shares and common share equivalents outstanding - diluted		10,370,318		10,334,894		10,367,812		10,315,115		

inTEST CORPORATION CONSOLIDATED STATEMENTS OF COMPREHENSIVE EARNINGS

(In thousands) (Unaudited)

		Three Months Ended June 30,				Six Months Ended June 30,				
		2018		2017	2018		2017			
Net earnings	\$	4,014	\$	1,445	\$	4,395	\$	3,523		
Foreign currency translation adjustments		(120)		155		(82)		183		
Comprehensive earnings	<u>\$</u>	3,894	\$	1,600	\$	4,313	\$	3,706		

inTEST CORPORATION CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY

(In thousands, except share data) (Unaudited)

	Commo	n Stocl	k	 lditional Paid-in	R	etained		cumulated Other prehensive	Tr	easury	Sto	Total ckholders'
	Shares	Am	ount	 Capital	E	arnings	E	Earnings		Stock	_	Equity
Balance, January 1, 2018	10,427,435	\$	104	\$ 25,860	\$	12,646	\$	882	\$	(204)	\$	39,288
Net earnings	-		-	-		4,395		-		-		4,395
Other comprehensive income	-		-	-		-		(82)		-		(82)
Amortization of deferred compensation related to stock-based awards	-		_	292		-		-		_		292
Issuance of unvested shares of restricted stock	91,100		1	(1)		-		-		_		-
Balance, June 30, 2018	10,518,535	\$	105	\$ 26,151	\$	17,041	\$	800	\$	(204)	\$	43,893

inTEST CORPORATION CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands) (Unaudited)

Six Months Ended

		June 30, 2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES			
Net earnings	\$	4,395 \$	3,523
Adjustments to reconcile net earnings to net cash provided by operating activities:			
Depreciation and amortization		840	523
Payment of earnout for 2017 related to Ambrell acquisition		(1,710)	-
Adjustment to earnout payable for 2018		1,016	-
Provision for excess and obsolete inventory		129	90
Foreign exchange gain		(49)	(29)
Amortization of deferred compensation related to stock-based awards		292	186
Loss on disposal of property and equipment		11	-
Proceeds from sale of demonstration equipment, net of gain		99	32
Deferred income tax expense (benefit)		(142)	59
Changes in assets and liabilities:			
Trade accounts receivable		606	(2,884)
Inventories		(2,025)	(697)
Prepaid expenses and other current assets		143	(84)
Other assets		(4)	(3)
Accounts payable		707	35
Accrued wages and benefits		(488)	(134)
Customer deposits and deferred revenue		(153)	(19)
Domestic and foreign income taxes payable		86	324
Long-term portion of Federal transition tax payable		(436)	-
Other current liabilities		186	154
Net cash provided by operating activities		3,503	1,076
CASH FLOWS FROM INVESTING ACTIVITIES			
Acquisition of business, net of cash acquired		-	(21,962)
Purchase of property and equipment		(1,920)	(203)
Proceeds from sale of property and equipment		-	7
Net cash used in investing activities		(1,920)	(22,158)
CASH FLOWS FROM FINANCING ACTIVITIES			
Payment of earnout for 2017 related to Ambrell acquisition		(4,123)	-
Repurchases of common stock		-	(62)
Net cash used in financing activities		(4,123)	(62)
Effects of exchange rates on cash		(37)	129
Net cash used in all activities		(2,577)	(21,015)
Cash and cash equivalents at beginning of period		13,290	28,611
	\$	10,713 \$	7,596
Cash and cash equivalents at end of period	Ψ	10,713 ψ	7,550
Cash payments for:			
Domestic and foreign income taxes	\$	1,425 \$	1,583
Details of acquisition:			
Fair value of assets acquired, net of cash		\$	22,652
Liabilities assumed			(8,599)
Goodwill resulting from acquisition			12,032
Contingent consideration			(4,123)
Net cash paid for acquisition		\$	21,962
1			

inTEST CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Unaudited)

(In thousands, except share and per share data)

(1) NATURE OF OPERATIONS

We are an independent designer, manufacturer and marketer of thermal management products and semiconductor automated test equipment ("ATE") interface solutions. Our products are used by semiconductor manufacturers to perform development, qualifying and final testing of integrated circuits ("ICs") and wafers, and for other electronic testing across a range of industries including the automotive, defense/aerospace, energy, industrial and telecommunications markets. We also offer induction heating products for joining and forming metals in a variety of industrial markets, including automotive, aerospace, machinery, wire & fasteners, medical, semiconductor, food & beverage, and packaging. We manufacture our products in the U.S. Marketing and support activities are conducted worldwide from our facilities in the U.S., Germany, Singapore, the Netherlands and the U.K. The consolidated entity is comprised of inTEST Corporation and our wholly-owned subsidiaries. We have two reportable segments, which are also our reporting units, Thermal Products ("Thermal") and Electromechanical Semiconductor Products ("EMS").

On May 24, 2017, we completed the acquisition of Ambrell Corporation ("Ambrell"). The acquisition was completed by acquiring all of the outstanding capital stock of Ambrell. Ambrell is a manufacturer of precision induction heating systems which are used to conduct fast, efficient, repeatable non-contact heating of metals or other electrically conductive materials, in order to transform raw materials into finished parts. The Ambrell acquisition complements our current thermal technologies and broadens our diverse customer base, allowing expansion within many non-semiconductor related markets, such as consumer product packaging, fiber-optics, automotive and other markets. Ambrell's operations are included in our Thermal segment. Ambrell manufactures its products in the U.S. and conducts marketing and support activities from its facilities in the U.S., the Netherlands and the U.K. This acquisition is discussed further in Note 3.

The ATE market in which we operate is characterized by rapid technological change, competitive pricing pressures and cyclical as well as seasonal market patterns. This market is subject to significant economic downturns at various times. Our financial results are affected by a wide variety of factors, including, but not limited to, general economic conditions worldwide and in the markets in which we operate, economic conditions specific to the ATE market and the other markets we serve, our ability to safeguard patented technology and intellectual property in a rapidly evolving market, downward pricing pressures from customers, and our reliance on a relatively few number of customers for a significant portion of our sales. In addition, we are exposed to the risk of obsolescence of our inventory depending on the mix of future business and technological changes within the markets that we serve. We also continue to implement an acquisition strategy that may cause us to incur substantial expense in reviewing and evaluating potential transactions. We may or may not be successful in locating suitable businesses to acquire. In addition, we may not be able to successfully integrate any business we do acquire with our existing business and we may not be able to operate the acquired business profitably. As a result of these or other factors, we may experience significant period-to-period fluctuations in future operating results.

(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation and Use of Estimates

The accompanying consolidated financial statements include our accounts and those of our wholly-owned subsidiaries. All significant intercompany accounts and transactions have been eliminated upon consolidation. The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP") requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Certain of our accounts, including inventories, long-lived assets, goodwill, identifiable intangibles, contingent consideration liabilities (and related earnout payable), and deferred tax assets and liabilities, including related valuation allowances, are particularly impacted by estimates.

In the opinion of management, the accompanying unaudited consolidated financial statements include all adjustments (consisting only of normal recurring adjustments) necessary to present fairly the financial position, results of operations, and changes in cash flows for the interim periods presented. Certain footnote information has been condensed or omitted from these consolidated financial statements. Therefore, these consolidated financial statements should be read in conjunction with the consolidated financial statements and accompanying footnotes included in our Form 10-K for the year ended December 31, 2017 ("2017 Form 10-K") filed on March 28, 2018 with the Securities and Exchange Commission.

Reclassification

Certain prior period amounts have been reclassified to be comparable with the current period's presentation.

Business Combinations

Acquired businesses are accounted for using the purchase method of accounting, which requires that the purchase price be allocated to the net assets acquired at their respective fair values. Any excess of the purchase price over the estimated fair values of the net assets acquired is recorded as goodwill. Fair values of intangible assets are estimated by valuation models prepared by our management and third party advisors. The assets purchased and liabilities assumed have been reflected in our consolidated balance sheets, and the results are included in the consolidated statements of operations and consolidated statements of cash flows from the date of acquisition. Any change in the fair value of acquisition-related contingent consideration subsequent to the acquisition date, including changes from events after the acquisition date, will be recognized in the period of the estimated fair value change. Acquisition-related transaction costs, including legal and accounting fees and other external costs directly related to the acquisition, are recognized separately from the acquisition and expensed as incurred in general and administrative expense in the consolidated statements of operations.

Fair Value Measurements

The fair values of our financial instruments reflect the amounts that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (exit price).

The carrying amounts of our financial instruments of cash and cash equivalents, trade accounts receivable, accounts payable and accrued liabilities approximate fair value due to their short maturities.

We carry our contingent consideration liability at fair value. In accordance with the three-tier fair value hierarchy, we determined the fair value of our contingent consideration liability (and related earnout payable) using an option-based income approach with a Monte Carlo simulation model. The income approach uses Level 3, or unobservable inputs, as defined under the accounting guidance for fair value measurements. See Notes 3 and 4 for more information regarding our contingent consideration liability.

Goodwill, Intangible and Long-Lived Assets

We account for goodwill and intangible assets in accordance with Accounting Standards Codification ("ASC") 350 (Intangibles - Goodwill and Other). Finite-lived intangible assets are amortized over their estimated useful economic life and are carried at cost less accumulated amortization. Goodwill is assessed for impairment annually in the fourth quarter on a reporting unit basis, or more frequently when events and circumstances occur indicating that the recorded goodwill may be impaired. As a part of the goodwill impairment assessment, we have the option to perform a qualitative assessment to determine whether it is more-likely-than-not that the fair value of a reporting unit is less than its carrying amount. If the qualitative assessment indicates a potential impairment, we are required to perform a two-step goodwill impairment test to identify potential goodwill impairment and measure the amount of goodwill impairment loss to be recognized. The two-step test is discussed below. If we determine that it is more-likely-than-not that the fair value of the reporting unit is greater than its carrying amounts, the two-step goodwill impairment test is not required.

If we determine it is more-likely-than-not that the fair value of a reporting unit is less than its carrying amount as a result of our qualitative assessment, we will perform a quantitative two-step goodwill impairment test. In the Step I test, the fair value of a reporting unit is computed and compared with its book value. If the book value of a reporting unit exceeds its fair value, a Step II test is performed in which the implied fair value of goodwill is compared with the carrying amount of goodwill. If the carrying amount of goodwill exceeds the implied fair value, an impairment loss is recorded in an amount equal to that excess. The two-step goodwill impairment assessment is based upon a combination of the income approach, which estimates the fair value of our reporting units based upon a discounted cash flow approach, and the market approach which estimates the fair value of our reporting units based upon comparable market multiples. This fair value is then reconciled to our market capitalization at year end with an appropriate control premium. The determination of the fair value of our reporting units requires management to make significant estimates and assumptions including the selection of appropriate peer group companies, control premiums, discount rate, terminal growth rates, and forecasts of revenue and expense growth rates, income tax rates, changes in working capital, depreciation, amortization and capital expenditures. Changes in assumptions concerning future financial results or other underlying assumptions could have a significant impact on either the fair value of the reporting unit or the amount of the goodwill impairment charge.

Indefinite-lived intangible assets are assessed for impairment annually in the fourth quarter, or more frequently if events or changes in circumstances indicate that the asset might be impaired. As a part of the impairment assessment, we have the option to perform a qualitative assessment to determine whether it is more likely than not that an indefinite-lived intangible asset is impaired. If, as a result of our qualitative assessment, we determine that it is more-likely-than-not that the fair value of the indefinite-lived intangible asset is less than its carrying amount, the quantitative impairment test is required. Otherwise, no further testing is required. If we choose not to perform a qualitative assessment, then the quantitative impairment test is required. The quantitative impairment test consists of a comparison of the fair value of the intangible asset with its carrying amount. If the carrying amount of the intangible asset exceeds its fair value, an impairment loss is recognized in an amount equal to that excess.

Long-lived assets, which consist of finite-lived intangible assets and property and equipment, are assessed for impairment whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable or that the useful lives of these assets are no longer appropriate. Each impairment test is based on a comparison of the estimated undiscounted cash flows to the recorded value of the asset. If impairment is indicated, the asset is written down to its estimated fair value. The cash flow estimates used to determine the impairment, if any, contain management's best estimates using appropriate assumptions and projections at that time.

Revenue Recognition

As discussed further under "Effect of Recently Adopted Amendments to Authoritative Accounting Guidance" below, effective January 1, 2018, we recognize revenue in accordance with the guidance in ASC Topic 606 (Revenue from Contracts with Customers). We recognize revenue for the sale of products or services when our performance obligations under the terms of a contract with a customer are satisfied and control of the product or service has been transferred to the customer. Generally this occurs when we ship a product or perform a service. In certain cases, recognition of revenue is deferred until the product is received by the customer or at some other point in the future when we have determined that we have satisfied our performance obligations under the contract. Our contracts with customers may include a combination of products and services, which are generally capable of being distinct and accounted for as separate performance obligations. In addition to the sale of products and services, we also lease certain of our equipment under short-term lease agreements. We recognize revenue from equipment leases on a straight-line basis over the lease term.

Revenue is recorded in an amount that reflects the consideration we expect to receive in exchange for those products or services. We do not have any material variable consideration arrangements or any material payment terms with our customers other than standard net 30 or net 60 day payment terms. We generally do not provide a right of return to our customers. Revenue is recognized net of any taxes collected from customers, which are subsequently remitted to governmental authorities.

Nature of Products and Services

We sell thermal management products and semiconductor ATE interface solutions. Our thermal management products include ThermoStreams, ThermoChambers, ThermoChucks and process chillers which we sell under our Temptronic, Sigma and Thermonics product lines, and Ambrell's precision induction heating systems, including EkoHeat and EasyHeat products. Our semiconductor ATE interface solutions include manipulators, docking hardware and electrical interface products. We provide post-warranty service for the equipment we sell. We sell semiconductor ATE interface solutions and certain thermal management products to the ATE market, which provides automated test equipment to the semiconductor market. We also sell our thermal products to markets outside the semiconductor market which include the automotive, defense/aerospace, industrial, telecommunications and other markets.

We lease certain of our equipment under short-term leasing agreements with original lease terms of six months or less. Our lease agreements do not contain purchase options.

Types of Contracts with Customers

Our contracts with customers are generally structured as individual purchase orders which specify the exact products or services being sold or equipment being leased along with the selling price, service fee or monthly lease amount for each individual item on the purchase order. Payment terms and any other customer-specific acceptance criteria are also specified on the purchase order. We generally do not have any customer-specific acceptance criteria, other than that the product performs within the agreed upon specifications. We test all products manufactured as part of our quality assurance process to determine that they comply with specifications prior to shipment to a customer.

Contract Balances

We record accounts receivable at the time of invoicing. Accounts receivable, net of the allowance for doubtful accounts, is included in current assets on our balance sheet. To the extent that we do not recognize revenue at the same time as we invoice, we record a liability for deferred revenue. In certain instances, we also receive customer deposits in advance of invoicing and recording of accounts receivable. Deferred revenue and customer deposits are included in current liabilities on our balance sheets.

The allowance for doubtful accounts reflects our best estimate of probable losses inherent in the accounts receivable balance. We determine the allowance based on known troubled accounts, if any, historical experience, and other currently available evidence.

Costs to Obtain a Contract with a Customer

The only costs we incur associated with obtaining contracts with customers are sales commissions that we pay to our internal sales personnel or third-party sales representatives. These costs are calculated based on an established percentage of the selling price of each product or service sold. Commissions are considered earned by our internal sales personnel at the time we recognize revenue for a particular transaction. Commissions are considered earned by third-party sales representatives at the time that revenue is recognized for a particular transaction. We record commission expense in our consolidated statements of operations at the time the commission is earned. Commissions earned but not yet paid are included in current liabilities on our balance sheets.

Product Warranties

In connection with the sale of our products, we generally provide standard one or two year product warranties which are detailed in our terms and conditions and communicated to our customers. Our standard warranties are not offered for sale separately from our products, therefore there is not a separate performance obligation related to our standard warranties. We record estimated warranty expense for our standard warranties at the time of sale based upon historical claims experience. In very limited cases, we offer customers an option to separately purchase an extended warranty for certain of our products. In the case of extended warranties, we recognize revenue in the amount of the sale price for the extended warranty on a straight-line basis over the extended warranty period. We record costs incurred to provide service under an extended warranty at the time the service is provided. Warranty expense is included in selling expense in our consolidated statements of operations.

Refer to Notes 6 and 12 for further information about our revenue from contracts with customers.

Inventories

Inventories are valued at cost on a first-in, first-out basis, not in excess of market value. Cash flows from the sale of inventories are recorded in operating cash flows. On a quarterly basis, we review our inventories and record excess and obsolete inventory charges based upon our established objective excess and obsolete inventory criteria. These criteria identify material that has not been used in a work order during the prior twelve months and the quantity of material on hand that is greater than the average annual usage of that material over the prior three years. In certain cases, additional excess and obsolete inventory charges are recorded based upon current market conditions, anticipated product life cycles, new product introductions and expected future use of the inventory. The excess and obsolete inventory charges we record establish a new cost basis for the related inventories. We incurred excess and obsolete inventory charges of \$129 and \$90 for the six months ended June 30, 2018 and 2017, respectively.

Stock-Based Compensation

We account for stock-based compensation in accordance with ASC Topic 718 (Compensation - Stock Compensation), which requires that employee share-based equity awards be accounted for under the fair value method and requires the use of an option pricing model for estimating fair value of stock options granted, which is then amortized to expense over the service periods. See further disclosures related to our stock-based compensation plans in Note 10.

Subsequent Events

We have made an assessment of our operations and determined that there were no material subsequent events requiring adjustment to, or disclosure in, our consolidated financial statements for the six months ended June 30, 2018.

Income Taxes

The asset and liability method is used in accounting for income taxes. Under this method, deferred tax assets and liabilities are recognized for operating loss and tax credit carryforwards and for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the results of operations in the period that includes the enactment date. A valuation allowance is recorded to reduce the carrying amounts of deferred tax assets if it is more likely than not that such assets will not be realized.

Net Earnings Per Common Share

Net earnings per common share - basic is computed by dividing net earnings by the weighted average number of common shares outstanding during each period. Net earnings per common share - diluted is computed by dividing net earnings by the weighted average number of common shares and common share equivalents outstanding during each period. Common share equivalents represent unvested shares of restricted stock and stock options and are calculated using the treasury stock method. Common share equivalents are excluded from the calculation if their effect is anti-dilutive.

The table below sets forth, for the periods indicated, a reconciliation of weighted average common shares outstanding - basic to weighted average common shares and common share equivalents outstanding - diluted and the average number of potentially dilutive securities that were excluded from the calculation of diluted earnings per share because their effect was anti-dilutive:

	Three Month June 3		Six Months June 3	
	2018	2017	2018	2017
Weighted average common shares outstanding - basic	10,342,674	10,277,155	10,334,492	10,270,860
Potentially dilutive securities:				
Unvested shares of restricted stock and stock options	27,644	57,739	33,320	44,255
Weighted average common shares and common share equivalents outstanding - diluted	10,370,318	10,334,894	10,367,812	10,315,115
A compared to the control of the con				
Average number of potentially dilutive securities excluded from calculation	275,831	96,000	189,794	71,630

Effect of Recently Adopted Amendments to Authoritative Accounting Guidance

In May 2014, the FASB issued new guidance on the recognition of revenue from contracts with customers. Subsequent to May 2014, the FASB issued additional clarifying guidance on certain aspects of this new guidance. This new guidance is presented in ASC Topic 606 (Revenue from Contracts with Customers) and replaced most existing revenue recognition guidance in U.S. GAAP when it became effective, which for us was on January 1, 2018. During the fourth quarter of 2017, we completed our review of all our revenue streams to identify any differences in timing, measurement or presentation of revenue recognition. This review included the types of revenue arrangements currently in place including a review of individual customer contracts related to each of our major revenue streams. Based on the results of our assessment, we concluded that the implementation of this new guidance would not have a significant impact on the timing or amount of revenue we recognize in any given period in comparison to the amount recognized under prior guidance. In addition, based on our assessment, we determined that we did not need to implement any major changes to existing accounting systems or internal controls. We adopted this guidance as of January 1, 2018 using the modified retrospective method which allowed us to make a cumulative adjustment to retained earnings for any differences in the amounts of revenue or expenses that would have been recognized in prior periods, had this new guidance been in place at that time, rather than retrospectively adjusting those prior periods. However, the implementation of this new guidance did not have any impact on our results of operations or our consolidated balance sheet as of the implementation date, as the timing and amount of revenue we recognized in prior periods did not change under the new guidance. See Notes 6 and 12 for additional disclosures about our revenue from contracts with customers.

In November 2016, the FASB issued amendments to the guidance on presentation of restricted cash within the statement of cash flows. The amendments require that restricted cash be included within cash and cash equivalents on the statement of cash flows. The amendments were effective for us as of January 1, 2018, and have been applied retrospectively. The implementation of these amendments did not have a material impact on our consolidated financial statements.

In January 2017, the FASB issued amendments to clarify the current guidance on the definition of a business. The objective of the amendments is to assist entities with evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. The amendments were effective for us as of January 1, 2018. The implementation of these amendments did not have a material impact on our consolidated financial statements, and will be considered prospectively.

In May 2017, the FASB issued amendments to the guidance on accounting for a change to the terms or conditions (modification) of a share-based payment award. The amendments provide that an entity should account for the effects of a modification unless the fair value and vesting conditions of the modified award and the classification of the modified award (equity or liability instrument) are the same as the original award immediately before the modification. The amendments were effective for us as of January 1, 2018. The amendments are to be applied prospectively to an award modified on or after the adoption date. The implementation of these amendments did not have a material impact on our consolidated financial statements.

Effect of Recently Issued Amendments to Authoritative Accounting Guidance

In January 2017, the FASB issued amendments to the guidance on accounting for goodwill impairment. The amendments simplify the accounting for goodwill impairment by removing Step II of the goodwill impairment test, which requires a hypothetical purchase price allocation. Under the amendments, a goodwill impairment will now be the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. The amendments will be applied prospectively and are effective for us as of January 1, 2020, with early application permitted beginning January 1, 2017. We do not expect the implementation of these amendments to have a material impact on our consolidated financial statements.

In February 2016, the FASB issued amendments to the current guidance on accounting for lease transactions, which is presented in ASC Topic 842 (Leases). Subsequent to February 2016, the FASB has issued additional clarifying guidance on certain aspects of this new guidance. The intent of the updated guidance is to increase transparency and comparability among organizations by requiring lessees to recognize assets and liabilities on the balance sheet for the rights and obligations created by leases and to disclose key information about leasing arrangements. Under the new guidance, a lessee will be required to record a right-of-use asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. The amendments are effective for us as of January 1, 2019. A modified retrospective transition approach is required for lessees for capital and operating leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements, with certain practical expedients available. During the fourth quarter of 2017, we performed a preliminary assessment of the impact that the implementation of this guidance will have on our consolidated financial statements. Our assessment is ongoing, We currently expect that the implementation of this new guidance will have a significant impact on our consolidated balance sheet as a result of recording right-of-use assets and lease liabilities for all of our multi-year leases. Under current guidance, none of these leases has any related asset or liability recorded on our balance sheet. We do not currently expect that the implementation of this new guidance will have a significant impact on our pattern of expense recognition for any of our multi-year leases. However, we are still in the process of completing our assessment and our conclusions about the impact that this new guidance will have on our consolidated financial statements may change as we complete our assessment over the next two quarters.

(3) ACQUISITION

On May 24, 2017, we completed our acquisition of Ambrell. The purchase price for Ambrell was \$22,000 in cash paid at closing, subject to a customary post-closing working capital adjustment, and additional contingent consideration of up to \$18,000 in the form of earnouts paid based upon a multiple of adjusted EBITDA for 2017 and 2018, as further discussed below. The acquisition was completed by acquiring all of the outstanding capital stock of Ambrell. Total acquisition costs incurred to complete this transaction were \$935. Acquisition costs were expensed as incurred and included in general and administrative expense.

The acquisition of Ambrell has been accounted for as a business combination using purchase accounting, and, accordingly, the results of Ambrell have been included in our consolidated results of operations from the date of acquisition. The allocation of the Ambrell purchase price was based on fair values as of May 24, 2017. The determination of fair value reflects our estimates and assumptions based on the information available as of the date the estimate is calculated.

The excess of the purchase price over the identifiable intangible and net tangible assets was allocated to goodwill and is not deductible for tax purposes. Goodwill is attributed to synergies that are expected to result from the operations of the combined businesses.

The total purchase price of \$26,733 was comprised of:

Cash paid to acquire the capital stock of Ambrell	\$ 22,610
Estimated fair value of contingent consideration	4,123
Total purchase price	\$ 26,733

As noted above, the consideration paid for the acquisition of Ambrell includes contingent consideration in the form of earnouts based on the adjusted EBITDA of Ambrell for 2017 and 2018. Adjusted EBITDA is earnings (or loss) from operations before interest expense, benefit or provision for income taxes, depreciation and amortization, and excludes other non-recurring income and expense items as defined in the stock purchase agreement for Ambrell. The first earnout paid after calendar year 2017 was completed was an amount equal to 8x Ambrell's adjusted EBITDA for 2017 minus the \$22,000 paid at closing. This amount was \$5,833 and was paid in April 2018. The second earnout, if any, to be paid after calendar year 2018 is completed, will be an amount equal to 8x Ambrell's adjusted EBITDA for 2018 minus the sum of the \$22,000 paid at closing and \$5,833, the earnout paid with respect to 2017. The 2017 and 2018 earnouts, in the aggregate, are capped at \$18,000. To estimate the fair value of the contingent consideration at the acquisition date and at the end of each quarter, an option based income approach using a Monte Carlo simulation model is utilized due to the non-linear payout structure. As of the acquisition date, this resulted in an estimated fair value of \$4,123 for the 2017 and 2018 earnouts. This amount was recorded as a contingent consideration liability and included in the purchase price as of the acquisition date. At June 30, 2018, this same approach resulted in an estimated fair value of \$6,282 for the 2018 earnout which is recorded as earnout payable on our balance sheet. Changes in the amount of the estimated fair value of the earnouts since the acquisition date are recorded as operating expenses in our statement of operations in the quarter in which they occur.

The total purchase price of \$26,733 has been allocated as follows:

Goodwill	\$ 12,032
Identifiable intangible assets	16,300
Tangible assets acquired and liabilities assumed:	
Cash	648
Trade accounts receivable	3,621
Inventories	1,917
Other current assets	200
Property and equipment	614
Accounts payable	(1,420)
Accrued expenses	(1,280)
Customer advances	(554)
Deferred tax liability	 (5,345)
Total purchase price	\$ 26,733

We estimated the fair value of identifiable intangible assets acquired using a combination of the income, cost and market approaches. Identifiable intangible assets acquired include customer relationships, customer backlog, technology and trademarks. We generally amortize our finite-lived intangible assets over their estimated useful lives on a straight-line basis, unless an alternate amortization method can be reliably determined. Any such alternate amortization method would be based on the pattern in which the economic benefits of the intangible asset are expected to be consumed.

The following table summarizes the estimated fair value of Ambrell's identifiable intangible assets and their estimated useful lives as of the acquisition date:

	_	Fair Value	Weighted Average Estimated Useful Life (in years)
Finite-lived intangible assets:			
Customer relationships	\$	9,000	9.0
Technology		600	9.0
Customer backlog		500	0.3
Total finite-lived intangible assets		10,100	8.6
Indefinite-lived intangible assets:			
Trademarks		6,200	
Total intangible assets	\$	16,300	

The following unaudited pro forma information gives effect to the acquisition of Ambrell as if the acquisition occurred on January 1, 2017. This proforma summary information does not reflect any operating efficiencies or costs savings that may be achieved by the combined businesses. It is presented for informational purposes only and is not necessarily indicative of what the actual results of operations would have been had the acquisition taken place as of that date, nor is it indicative of future consolidated results of operations:

	Tl	ree Months		
		Ended	S	ix Months Ended
	Jı	ıne 30, 2017		June 30, 2017
Net revenues	\$	18,896	\$	37,688
Net earnings	\$	2,059	\$	3,719
Diluted earnings per share	\$	0.20	\$	0.36

The pro forma results shown above do not reflect the impact on general and administrative expense of investment advisory costs, legal costs and other costs of \$935 incurred by us as a direct result of the transaction.

(4) FAIR VALUE MEASUREMENTS

ASC Topic 820 (Fair Value Measurement) establishes a fair value hierarchy for instruments measured at fair value that distinguishes between assumptions based on market data (observable inputs) and our own assumptions (unobservable inputs). Observable inputs are inputs that market participants would use in pricing the asset or liability based on market data obtained from sources independent of us. Unobservable inputs are inputs that reflect our assumptions about the inputs that market participants would use in pricing the asset or liability, and are developed based on the best information available in the circumstances.

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

Level 1 Valuations based on unadjusted quoted prices in active markets for identical assets or liabilities that we have the ability to access.

Level 2 Valuations based on quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, and models for which all significant inputs are observable, either directly or indirectly.

Level 3 Valuations based on inputs that are unobservable and significant to the overall fair value measurement.

To the extent that the valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. Accordingly, the degree of judgment exercised by us in determining fair value is greatest for instruments categorized in Level 3. A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

Recurring Fair Value Measurements

The contingent consideration liability on our balance sheets is measured at fair value on a recurring basis using Level 3 inputs. The current portion of this liability is reflected as an earnout payable on our balance sheets. Our contingent consideration liability is a result of our acquisition of Ambrell on May 24, 2017, and it represents the estimated fair value of the additional cash consideration payable that is contingent upon the achievement of certain financial results by Ambrell, as discussed more fully in Note 3. The fair value of this Level 3 instrument involves generating various scenarios for projected adjusted EBITDA over a specified time period, calculating the associated contingent consideration payments and discounting the average payments to present value. During the first six months of 2018, we recorded a \$1,016 increase in the fair value of our contingent consideration liability as a result of an increase in the projected adjusted EBITDA of Ambrell for the year ended December 31, 2018.

The following fair value hierarchy table presents information about liabilities measured at fair value on a recurring basis:

	Amounts at			Fai	r V	t l	t Using			
	Fair Value		Level 1		Level 2			Leve	13	
As of June 30, 2018										
Earnout payable	\$	6,282	\$		_	\$	-		\$	6,282

Changes in the fair value of our Level 3 contingent consideration liability, including the earnout payable, for the six months ended June 30, 2018 were as follows:

		Six Months Ended June 30, 2018
Balance at beginning of period	\$	11,099
Fair value adjustment		1,016
Payment of 2017 earnout		(5,833)
Balance at end of period	<u>\$</u>	6,282

(5) GOODWILL AND INTANGIBLE ASSETS

Goodwill and intangible assets on our balance sheets are the result of our acquisitions of Sigma Systems Corp. ("Sigma") in October 2008, Thermonics, Inc. ("Thermonics") in January 2012 and Ambrell in May 2017. All of our goodwill and intangible assets are allocated to our Thermal segment. Goodwill totaled \$13,738 at each of June 30, 2018 and December 31, 2017.

Intangible Assets

Changes in the amount of the carrying value of finite-lived intangible assets for the six months ended June 30, 2018 are as follows:

Balance - January 1, 2018	\$ 9,304
Amortization	 (463)
Balance - June 30, 2018	\$ 8,841

The following tables provide further detail about our intangible assets as of June 30, 2018 and December 31, 2017:

		Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Finite-lived intangible assets:				
Customer relationships	\$	10,480	\$ 2,177	\$ 8,303
Technology		600	176	424
Patents		590	483	107
Software		270	263	7
Trade name		140	140	-
Customer backlog		500	500	-
Total finite-lived intangible assets	<u> </u>	12,580	3,739	8,841
Indefinite-lived intangible assets:				
Trademarks		6,710	<u>-</u>	6,710
Total intangible assets	\$	19,290	\$ 3,739	\$ 15,551

	C	Gross arrying amount	Accumulated Amortization	Net Carrying Amount
Finite-lived intangible assets:				
Customer relationships	\$	10,480	\$ 1,828	\$ 8,652
Technology		600	95	505
Patents		590	463	127
Software		270	250	20
Trade name		140	140	-
Customer backlog		500	500	-
Total finite-lived intangible assets		12,580	3,276	9,304
Indefinite-lived intangible assets:				
Trademarks		6,710	-	6,710
Total intangible assets	\$	19,290	\$ 3,276	\$ 16,014

We generally amortize our finite-lived intangible assets over their estimated useful lives on a straight-line basis, unless an alternate amortization method can be reliably determined. Any such alternate amortization method would be based on the pattern in which the economic benefits of the intangible asset are expected to be consumed. None of our intangible assets have any residual value.

Total amortization expense for our finite-lived intangible assets was \$463 and \$303 respectively, for the six months ended June 30, 2018 and 2017. The following table sets forth the estimated annual amortization expense for each of the next five years:

2018 (remainder)	\$ 640
2019	\$ 1,257
2020	\$ 1,233
2021	\$ 1,227
2022	\$ 1.167

(6) REVENUE FROM CONTRACTS WITH CUSTOMERS

Changes in the amount of the allowance for doubtful accounts for the six months ended June 30, 2018 are as follows:

Balance - January 1, 2018	\$ 213
Bad debt expense	50
Write-offs	(30)
Balance - June 30, 2018	\$ 233

The following tables provide additional information about our revenue from contracts with customers, including revenue by customer and product type and revenue by market. See also Note 12 for information about revenue by operating segment and geographic region.

	Three Mor June			Six Mont Jun	hs E e 30,		
	 2018		2017 20		2018		2017
Net revenues by customer type:	 						
End user	\$ 18,173	\$	15,029	\$	34,502	\$	27,515
OEM/Integrator	2,924		859		5,466		2,553
·	\$ 21,097	\$	15,888	\$	39,968	\$	30,068
Net revenues by product type:							
Thermal test	\$ 6,389	\$	6,312	\$	12,420	\$	13,134
Induction heating	5,937		1,725		11,559		1,725
Semiconductor production test	6,809		6,053		12,148		12,216
Service/other	1,962		1,798		3,841		2,993
	\$ 21,097	\$	15,888	\$	39,968	\$	30,068
Net revenues by market:							
Semiconductor	\$ 13,043	\$	10,155	\$	23,582	\$	20,594
Industrial	5,000		2,178		10,653		2,298
Telecommunications	1,343		2,196		2,622		4,891
Other non-semiconductor markets	1,711		1,359		3,111		2,285
	\$ 21,097	\$	15,888	\$	39,968	\$	30,068

(7) MAJOR CUSTOMERS

During the six months ended June 30, 2018 and 2017, Texas Instruments Incorporated accounted for 13% and 15% of our consolidated net revenues, respectively. While both of our segments sold to this customer, these revenues were primarily generated by our EMS segment. During the six months ended June 30, 2017, Hakuto Co., Ltd., one of our distributors, accounted for 13% of our consolidated net revenues. These revenues were generated by our Thermal segment. No other customers accounted for 10% or more of our consolidated net revenues during the six months ended June 30, 2018 and 2017.

(8) INVENTORIES

Inventories held at June 30, 2018 and December 31, 2017 were comprised of the following:

	ine 30,	D	ecember 31,
	 2018		2017
Raw materials	\$ 4,569	\$	3,424
Work in process	1,291		791
Inventory consigned to others	68		64
Finished goods	931		687
Total inventories	\$ 6,859	\$	4,966

(9) **DEBT**

Letters of Credit

We have issued letters of credit as the security deposits for certain of our domestic leases. These letters of credit are secured by pledged certificates of deposit which are classified as Restricted Certificates of Deposit on our balance sheets. The terms of our leases require us to renew these letters of credit at least 30 days prior to their expiration dates for successive terms of not less than one year until lease expiration. Our outstanding letters of credit at June 30, 2018 and December 31, 2017 consisted of the following:

				Letters of Amount O		
	Original L/C	L/C Expiration	Lease Expiration	June 30,		ecember 31,
	Issue Date	Date	Date	2018		2017
Mt. Laurel, NJ	3/29/2010	3/31/2019	4/30/2021	\$ 125	\$	125
Mansfield, MA	10/27/2010	11/08/2018	8/23/2021	50		50
				\$ 175	\$	175

(10) STOCK-BASED COMPENSATION

As of June 30, 2018, we have unvested restricted stock awards and stock options granted under stock-based compensation plans that are described more fully in Note 13 to the consolidated financial statements in our 2017 Form 10-K. On June 27, 2018, our stockholders approved the

amendment and restatement of the 2014 Stock Plan (the "Plan") to increase the number of shares of common stock that may be delivered pursuant to awards granted under the Plan from 500,000 to 1,000,000 shares.

As of June 30, 2018, total unrecognized compensation expense related to unvested restricted stock awards and stock options was \$1,539. The weighted average period over which this expense is expected to be recognized is 3.2 years. The following table shows the allocation of the compensation expense we recorded during the three and six months ended June 30, 2018 and 2017, respectively, related to stock-based compensation:

	Three Months Ended June 30,			Six Months Ended June 30,				
		2018		2017		2018		2017
Cost of revenues	\$	-	\$	1	\$	-	\$	4
Selling expense		-		-		-		-
Engineering and product development expense		2		1		3		4
General and administrative expense		169		96		289		178
	\$	171	\$	98	\$	292	\$	186

There was no stock-based compensation expense capitalized in the three or six months ended June 30, 2018 or 2017.

Restricted Stock Awards

We record compensation expense for restricted stock awards based on the quoted market price of our stock at the grant date and amortize the expense over the vesting period. Restricted stock awards generally vest over four years. However, in March 2018 and 2017, we granted 32,000 and 22,500 shares of restricted stock, respectively, to our independent directors. These shares vest 25% at each of March 31, June 30, September 30, and December 31 of the year in which they were granted. The total compensation expense related to these shares is \$270 and \$143, respectively, and is recorded as the shares vest.

The following table summarizes the activity related to unvested shares of restricted stock for the six months ended June 30, 2018:

	Number of Shares	 Weighted Average Grant Date Fair Value
Unvested shares outstanding, January 1, 2018	75,225	\$ 5.29
Granted	91,100	8.29
Vested	(31,700)	7.09
Forfeited	-	-
Unvested shares outstanding, June 30, 2018	134,625	6.98

The total fair value of the shares that vested during the six months ended June 30, 2018 and 2017 was \$238 and \$197, respectively, as of the vesting dates of these shares.

Stock Options

We record compensation expense for stock options based on the fair market value of the options as of the grant date. No option may be granted with an exercise period in excess of ten years from the date of grant. Generally, stock options will be granted with an exercise price equal to the fair market value of our stock on the date of grant and will vest over four years.

The fair value for stock options granted during the six months ended June 30, 2018 and 2017 was estimated at the date of grant using the Black-Scholes option pricing model with the following weighted average assumptions:

	2018	2017
Risk-free interest rate	2.74%	2.14%
Dividend yield	0.00%	0.00%
Expected common stock market price volatility factor	.39	.39
Weighted average expected life of stock options (years)	6.25	6.25

The per share weighted average fair value of stock options issued during the six months ended June 30, 2018 and 2017 was \$3.52 and \$2.64, respectively.

The following table summarizes the activity related to stock options for the six months ended June 30, 2018:

			eighted verage
	Number		ant Date
_	of Shares	Fai	ir Value
Options outstanding, January 1, 2018 (4,950 exercisable)	76,400	\$	5.98
Granted	176,400		8.21
Exercised	-		-
Forfeited	-		-
Options outstanding, June 30, 2018 (22,700 exercisable)	252,800		7.53

(11) EMPLOYEE BENEFIT PLANS

We have defined contribution 401(k) plans for our employees who work in the U.S. All permanent employees of inTEST Corporation, Temptronic Corporation ("Temptronic") and inTEST Silicon Valley Corporation who are at least 18 years of age are eligible to participate in the inTEST Corporation Incentive Savings Plan. We match employee contributions dollar for dollar up to 10% of the employee's annual compensation, with a maximum limit of \$5. Employer contributions vest ratably over four years. Matching contributions are discretionary. For the six months ended June 30, 2018 and 2017, we recorded \$205 and \$245 of expense for matching contributions, respectively.

All permanent employees of Ambrell are immediately eligible to participate in the Ambrell Corporation Savings & Profit Sharing Plan (the "Ambrell Plan") upon employment and are eligible for employer matching contributions after completing one year of service, as defined in the Ambrell Plan. The Ambrell Plan allows eligible employees to make voluntary contributions up to 100% of compensation, up to the federal government contribution limits. We will make a matching contribution of 25% of each employee's contributions up to a maximum of 2% of such employee's annual compensation. For the six months ended June 30, 2018 and 2017, we recorded \$36 and \$5 of expense for matching contributions, respectively.

(12) SEGMENT INFORMATION

We have two reportable segments, which are also our reporting units, Thermal and EMS.

Thermal includes the operations of Temptronic, Thermonics, Sigma, inTEST Thermal Solutions GmbH (Germany), inTEST Pte, Limited (Singapore) and Ambrell, which we acquired in May 2017, as discussed in Note 3. Sales of this segment consist primarily of temperature management systems which we design, manufacture and market under our Temptronic, Thermonics and Sigma product lines, and precision induction heating systems which are designed, manufactured and marketed by Ambrell. In addition, this segment provides post-warranty service and support.

EMS includes the operations of our manufacturing facilities in Mt. Laurel, New Jersey and Fremont, California. Sales of this segment consist primarily of manipulator, docking hardware and tester interface products, which we design, manufacture and market.

We operate our business worldwide and sell our products both domestically and internationally. Both of our segments sell to semiconductor manufacturers, third-party test and assembly houses, ATE manufacturers and integrators. Thermal also sells into a variety of markets outside of the semiconductor market, including the automotive, consumer electronics, consumer product packaging, defense/aerospace, energy, fiber optics, industrial, telecommunications and other markets.

		Three Mor June	 	Six Months Ended June 30,			
	2018		2017		2018		2017
Net Revenues:	<u> </u>						
Thermal	\$	13,999	\$ 9,194	\$	27,233	\$	16,970
EMS		7,098	6,694		12,735		13,098
	\$	21,097	\$ 15,888	\$	39,968	\$	30,068
Earnings (loss) before income tax expense (benefit):							
Thermal	\$	2,592	\$ 1,350	\$	2,500	\$	3,196
EMS		2,194	2,163		3,486		3,861
Corporate		(390)	(1,177)		(608)		(1,549)
	\$	4,396	\$ 2,336	\$	5,378	\$	5,508
Net earnings (loss):	<u></u>						
Thermal	\$	2,415	\$ 835	\$	1,960	\$	2,045
EMS		1,945	1,338		2,950		2,450
Corporate		(346)	(728)		(515)		(972)
	\$	4,014	\$ 1,445	\$	4,395	\$	3,523

	 June 30, 2018	Dec	ember 31, 2017
Identifiable assets:			
Thermal	\$ 52,156	\$	50,408
EMS	9,881		12,085
	\$ 62,037	\$	62,493

The following table provides information about our geographic areas of operation. Net revenues from unaffiliated customers are based on the location to which the goods are shipped.

	Three Months Ended June 30,				Six Mont June	nded	
	2018		2017	2018			2017
Net revenues:							
U.S.	\$ 6,818	\$	4,580	\$	13,361	\$	7,466
Foreign	14,279		11,308		26,607		22,602
	\$ 21,097	\$	15,888	\$	39,968	\$	30,068

	 June 30, 2018	December 31, 2017
Property and equipment:		
U.S.	\$ 2,571	\$ 991
Foreign	370	550
	\$ 2,941	\$ 1,541

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

Risk Factors and Forward-Looking Statements

In addition to historical information, this report and management's discussion and analysis ("MD&A") contains statements relating to possible future events and results that are considered "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These statements can often be identified by the use of forward-looking terminology such as "believes," "expects," "intends," "may," "will," "should," "plans" or "anticipates" or similar terminology. See Part I, Item 1 - "Business - Cautionary Statement Regarding Forward-Looking Statements" in our 2017 Form 10-K for examples of statements made in this report which may be "forward-looking statements." These statements involve risks and uncertainties and are based on various assumptions. Although we believe that our expectations are based on reasonable assumptions, investors and prospective investors are cautioned that such statements are only projections, and there cannot be any assurance that these events or results will occur. We undertake no obligation to update the information in this report and MD&A to reflect events or circumstances after the date hereof or to reflect the occurrence of anticipated or unanticipated events.

Information about the primary risks and uncertainties that could cause our actual future results to differ materially from our historic results or the results described in the forward-looking statements made in this report or presented elsewhere by management from time to time are included in Part I, Item 1A - "Risk Factors" in our 2017 Form 10-K. Material changes to such risk factors may be reported in subsequent Quarterly Reports on Form 10-Q in Part II, Item 1A. There have been no such changes from the risk factors set forth in our 2017 Form 10-K.

Overview

This MD&A should be read in conjunction with the accompanying consolidated financial statements.

Our business and results of operations are substantially dependent upon the demand for ATE by semiconductor manufacturers and companies that specialize in the testing of ICs. As further discussed below, on May 24, 2017, we acquired Ambrell, which sells its products almost exclusively to customers in the industrial market, which is a non-semiconductor market. We expect that the acquisition of Ambrell will significantly reduce our dependence on customers in the semiconductor market and increase our orders and net revenues from markets outside the semiconductor market. We also expect that our future orders and net revenues will be approximately equally split between the semiconductor and non-semiconductor markets. Demand for ATE is driven by semiconductor manufacturers that are opening new, or expanding existing, semiconductor fabrication facilities or upgrading equipment, which in turn is dependent upon the current and anticipated market demand for semiconductors and products incorporating semiconductors. Such market demand can be the result of market expansion, development of new technologies or redesigned products to incorporate new features, or the replacement of aging equipment. In addition, we continue to focus on design improvements and new approaches for our own products which contribute to our net revenues as our customers adopt these new products.

In the past, the semiconductor market has been highly cyclical with recurring periods of oversupply, which often have a severe impact on the semiconductor market's demand for ATE, including the products we manufacture. This cyclicality can cause wide fluctuations in both our orders and net revenues and, depending on our ability to react quickly to these shifts in demand, can significantly impact our results of operations. Semiconductor and ATE market cycles are difficult to predict and in recent years have become more volatile and, in certain cases, shorter in duration. Because the market cycles are generally characterized by sequential periods of growth or declines in orders and net revenues during each cycle, year over year comparisons of operating results may not always be as meaningful as comparisons of periods at similar points in either up or down cycles. In addition, during both downward and upward cycles in our market, in any given quarter, the trend in both our orders and net revenues can be erratic. This can occur, for example, when orders are canceled or currently scheduled delivery dates are accelerated or postponed by a significant customer or when customer forecasts and general business conditions fluctuate during a quarter.

In addition to being cyclical, the ATE market has also developed a seasonal pattern in the last several years, with the second and third quarters being the periods of strong demand and the first and fourth quarters being periods of weakened demand. We believe this change has been driven by the strong demand for consumer products containing semiconductor content sold during the year-end holiday shopping season.

Third-party market share statistics are not available for the products we manufacture and sell into the ATE market; therefore, comparisons of period over period changes in our market share are not easily determined. As a result, it is difficult to ascertain if ATE market volatility in any period is the result of macro-economic or customer-specific factors impacting ATE market demand, or if we have gained or lost market share to a competitor during the period.

As part of our ongoing strategy to reduce the impact of semiconductor and ATE market volatility on our business operations, we continue to diversify our served markets to address the thermal test requirements of several other markets outside the semiconductor market. These include the automotive, consumer electronics, consumer product packaging, defense/aerospace, energy, fiber optics, industrial, telecommunications and other markets. We believe that these markets usually are less cyclical than the semiconductor and ATE markets. While market share statistics exist for some of the markets we serve outside the semiconductor market, due to the nature of our highly specialized product offerings in these non-semiconductor market, we do not expect broad market penetration in many of these markets and, therefore, do not anticipate developing meaningful market shares in these non-semiconductor markets. In addition, our orders and net revenues in any given period in these markets do not necessarily reflect the overall trends in these non-semiconductor markets due to our limited market shares. Consequently, we are continuing to evaluate buying patterns and opportunities for growth in these non-semiconductor markets that may affect our performance. The level of our orders and net revenues from these non-semiconductor markets has varied in the past, and we expect will vary significantly in the future, as we work to build our presence in these markets and establish new markets for our products.

While the majority of our orders and net revenues are derived from the ATE market, our operating results do not always follow the overall trend in the ATE market in any given period. We believe that these anomalies may be driven by a variety of factors within the ATE market, including, for example, changing product requirements, longer time periods between new product offerings by OEMs and changes in customer buying patterns. In particular, demand for the products sold by EMS, which are sold exclusively within the ATE market, and our operating margins in these product segments have been affected by shifts in the competitive landscape, including (i) customers placing heightened emphasis on shorter lead times (which places increased demands on our available engineering and production capacity increasing unit costs) and ordering in smaller quantities (which prevents us from acquiring component materials in larger volumes at lower cost and increasing unit costs), (ii) the practice of OEMs specifying other suppliers as primary vendors, with less frequent opportunities to compete for such designations, (iii) the in-house manufacturing activities of OEMs building certain products we have historically sold to them, including manipulators, docking hardware and tester interfaces, which has had the impact of significantly reducing the size of the available market for those certain products, (iv) the role of third-party test and assembly houses in the ATE market and their requirement of products with a greater range of use at the lowest cost, (v) customer supply chain management groups demanding lower prices and spreading purchases across multiple vendors, and (vi) certain competitors aggressively reducing their products' sales prices (causing us to either reduce our products' sales prices to be successful in obtaining the sale or causing loss of the sale).

In addition, in recent periods we have seen instances where demand for ATE is not consistent for each of our product segments or for any given product within a particular product segment. This inconsistency in demand for ATE can be driven by a number of factors, but in most cases, we have found that the primary reason is unique customer-specific changes in demand for certain products driven by the needs of their customers or markets served. These shifts in market practices and customer-specific needs have had, and may continue to have, varying levels of impact on our operating results and are difficult to quantify or predict from period to period. Management has taken, and will continue to take, such actions it deems appropriate to adjust our strategies, products and operations to counter such shifts in market practices as they become evident.

Acquisition

On May 24, 2017, we completed the acquisition of Ambrell by acquiring all of its outstanding capital stock. Ambrell is a manufacturer of precision induction heating systems used to conduct fast, efficient, repeatable non-contact heating of metals or other electrically conductive materials, in order to transform raw materials into finished parts. The Ambrell acquisition complements our current thermal technologies and broadens our diverse customer base, allowing expansion within many non-semiconductor related markets, such as consumer product packaging, fiber-optics, automotive and other markets. This acquisition has been accounted for as a business combination using purchase accounting. The purchase price for Ambrell was \$22 million in cash paid at closing, subject to a customary post-closing working capital adjustment, and additional contingent consideration of up to \$18 million in the form of earnouts paid based upon a multiple of adjusted EBITDA for 2017 and 2018. The first earnout paid after calendar year 2017 was completed was an amount equal to 8x Ambrell's adjusted EBITDA for 2017 minus the \$22 million paid at closing; this amount was \$5.8 million and was paid in April 2018. The second earnout, if any, to be paid after calendar year 2018 is completed, will be an amount equal to 8x Ambrell's adjusted EBITDA for 2018 minus the sum of the \$22 million paid at closing and \$5.8 million earnout paid with respect to 2017. The 2017 and 2018 earnouts, in the aggregate, are capped at \$18 million. As of June 30, 2018, we had accrued \$6.3 million in earnout payable based on Ambrell's current projected adjusted EBITDA for 2018. For further discussion of the acquisition, see Notes 3 and 4 to our consolidated financial statements.

Orders and Backlog

The following table sets forth, for the periods indicated, a breakdown of the orders received by operating segment and market (in thousands).

	Th Months	ree s Enc	ded				Three Months Ended				
	Jun	e 30,		Change March 31,					Change		
	2018		2017	\$	%		2018		\$	%	
Orders:											
Thermal	\$ 13,278	\$	8,775	\$ 4,503	5	1% 5	14,501	\$	(1,223)	(8)%	
EMS	 5,988		5,817	171		3% _	6,087		(99)	(2)%	
	\$ 19,266	\$	14,592	\$ 4,674	3	2%	20,588	\$	(1,322)	(6)%	
Semiconductor market	\$ 11,981	\$	8,689	\$ 3,292	3	8% \$	12,531	\$	(550)	(4)%	
Non-semiconductor market	 7,285		5,903	1,382	2	3%	8,057		(772)	(10)%	
	\$ 19,266	\$	14,592	\$ 4,674	3	2%	20,588	\$	(1,322)	(6)%	

	Months	s End e 30,	led	Chang	10
	 2018	e 30,	2017	 Chang \$	<u>%</u>
Orders:	 	_		 	
Thermal	\$ 27,779	\$	16,035	\$ 11,744	73%
EMS	12,075		13,589	(1,514)	(11)%
	\$ 39,854	\$	29,624	\$ 10,230	35%
Semiconductor market	\$ 24,512	\$	20,248	\$ 4,264	21%
Non-semiconductor market	15,342		9,376	5,966	64%
	\$ 39,854	\$	29,624	\$ 10,230	35%

Six

Total consolidated orders for the three months ended June 30, 2018 were \$19.3 million compared to \$14.6 million for the same period in 2017 and \$20.6 million for the three months ended March 31, 2018. As previously discussed, we acquired Ambrell on May 24, 2017. During the three months ended June 30, 2018 and 2017, the orders of our Thermal segment included \$5.7 million and \$2.3 million of orders attributable to Ambrell, respectively. When adjusted to eliminate the impact of the orders attributable to Ambrell, our consolidated orders would have increased \$1.3 million, or 11%, as compared to the same period in 2017. This increase primarily reflects increased demand experienced by our Thermal segment from customers in the semiconductor and industrial markets, which was partially offset by a reduction in orders from this segment's customers in the telecommunications market.

Total consolidated orders for the six months ended June 30, 2018 were \$39.9 million compared to \$29.6 million for the same period in 2017. During the six months ended June 30, 2018 and 2017, the orders of our Thermal segment included \$12.7 million and \$2.3 million of orders attributable to Ambrell, respectively. When adjusted to eliminate the impact of the orders attributable to Ambrell, our consolidated orders would have been relatively flat compared to the same period in 2017. During the first half of 2018, our EMS segment experienced lower levels of demand from certain of its customers as compared to the same period in 2017. For our Thermal segment, a reduction in demand from the telecommunications market was offset by increases from customers in the semiconductor market.

When adjusted to eliminate the orders attributable to Ambrell, orders from customers in non-semiconductor markets for the three and six months ended June 30, 2018 were \$3.3 million, or 24%, and \$6.7 million, or 25%, of total consolidated orders, respectively. This compares to \$3.7 million, or 30%, and \$7.1 million, or 26%, of total consolidated orders for the same periods in 2017, respectively. The level of our orders in these non-semiconductor markets has varied in the past, and we expect it will vary significantly in the future as we build our presence in these markets and establish new markets for our products.

At June 30, 2018, our backlog of unfilled orders for all products was approximately \$13.6 million compared with approximately \$11.1 million at June 30, 2017 and \$15.4 million at March 31, 2018. At June 30, 2018, our backlog included \$5.5 million attributable to Ambrell. Our backlog includes customer orders which we have accepted, substantially all of which we expect to deliver in 2018. While backlog is calculated on the basis of firm purchase orders, a customer may cancel an order or accelerate or postpone currently scheduled delivery dates. Our backlog may be affected by the tendency of customers to rely on short lead times available from suppliers, including us, in periods of depressed demand. In periods of increased demand, there is a tendency towards longer lead times that has the effect of increasing backlog. As a result, our backlog at a particular date is not necessarily indicative of sales for any future period.

Net Revenues

The following table sets forth, for the periods indicated, a breakdown of the net revenues by operating segment and market (in thousands).

							Three				
	Th	ree					Months				
	Months	s Enc	ded								
	Jun	e 30,		Change March 31,					Change		
	 2018		2017	\$	%	_	2018		\$	%	
Net revenues:											
Thermal	\$ 13,999	\$	9,194	\$ 4,805	52	!% \$	13,234	\$	765	6%	
EMS	7,098		6,694	404	ϵ	%	5,637		1,461	26%	
	\$ 21,097	\$	15,888	\$ 5,209	33	% §	18,871	\$	2,226	12%	
Semiconductor market	\$ 13,043	\$	10,155	\$ 2,888	28	8% \$	10,539	\$	2,504	24%	
Non-semiconductor market	8,054		5,733	2,321	40	1%	8,332		(278)	(3)%	
	\$ 21,097	\$	15,888	\$ 5,209	33	%	18,871	\$	2,226	12%	

Si	X
Months	Ended

		Jun	e 30,			Change			
	2018			2017		\$	%		
Net revenues:									
Thermal	\$	27,233	\$	16,970	\$	10,263	60%		
EMS		12,735		13,098		(363)	(3)%		
	\$	39,968	\$	30,068	\$	9,900	33%		
Semiconductor market	\$	23,582	\$	20,594	\$	2,988	15%		
Non-semiconductor market		16,386		9,474		6,912	73%		
	\$	39,968	\$	30,068	\$	9,900	33%		

Total consolidated net revenues for the three months ended June 30, 2018 were \$21.1 million compared to \$15.9 million for the same period in 2017 and \$18.9 million for the three months ended March 31, 2018. During the three months ended June 30, 2018 and 2017, the net revenues of our Thermal segment included \$6.4 million and \$2.0 million of net revenues attributable to Ambrell, respectively. When adjusted to eliminate the impact of the net revenues attributable to Ambrell, our consolidated net revenues would have increased \$762,000, or 5%, as compared to the same period in 2017. This increase reflects higher levels of demand experienced by both of our segments from customers in the semiconductor market. In addition, our Thermal segment experienced an increase in demand from customers in the defense/aerospace market which was partially offset by a reduction in net revenues from customers in the telecommunications and automotive markets.

Total consolidated net revenues for the six months ended June 30, 2018 were \$40.0 million compared to \$30.1 million for the same period in 2017. During the six months ended June 30, 2018 and 2017, the net revenues of our Thermal segment included \$12.7 million and \$2.0 million of net revenues attributable to Ambrell. When adjusted to eliminate the impact of the net revenues attributable to Ambrell, our consolidated net revenues would have decreased \$760,000, or 3%, as compared to the same period in 2017. This decrease represents the aforementioned reduction in net revenues from customers in the telecommunications and automotive markets for our Thermal segment, combined with lower levels of demand experienced by our EMS segment.

When adjusted to eliminate the net revenues attributable to Ambrell, net revenues from customers in non-semiconductor markets for the three and six months ended June 30, 2018 were \$3.5 million, or 24%, and \$6.6 million, or 24%, of total consolidated net revenues, respectively. This compares to \$3.8 million, or 27%, and \$7.5 million, or 27%, respectively, of total consolidated net revenues for the same periods in 2017. The level of our net revenues in these non-semiconductor markets has varied in the past, and we expect it will vary significantly in the future as we build our presence in these markets and establish new markets for our products.

Product/Customer Mix

Both of our operating segments each have multiple products that we design, manufacture and market to our customers. Due to a number of factors, our products have varying levels of gross margin. The mix of products we sell in any period is ultimately determined by our customers' needs. Therefore, the mix of products sold in any given period can change significantly from the prior period. As a result, our consolidated gross margin can be significantly impacted in any given period by a change in the mix of products sold in that period.

We sell most of our thermal test and semiconductor production test products to semiconductor manufacturers and third-party test and assembly houses (end user sales) and to ATE manufacturers (OEM sales), who ultimately resell our equipment with theirs to both semiconductor manufacturers and third-party test and assembly houses. Our Thermal segment also sells into a variety of other markets, including the automotive, consumer electronics, defense/aerospace, energy, industrial and telecommunications markets. As a result of the acquisition of Ambrell, we now also sell into the consumer products packaging, fiber optics and other markets within the broader industrial market. The mix of customers during any given period will affect our gross margin due to differing sales discounts and commissions. For the six months ended June 30, 2018 and 2017, our OEM sales as a percentage of net revenues were 14% and 9%, respectively. The significant increase in OEM sales was attributable to the acquisition of Ambrell. Excluding Ambrell's sales, our OEM sales as a percentage of net revenues for the six months ended June 30, 2018 and 2017 were 4% and 9%, respectively.

OEM sales generally have a lower gross margin than end user sales, as OEM sales historically have had a more significant discount. However, our current net operating margins on most OEM sales, with the exception of Ambrell, are only slightly less than margins on end user sales because of the payment of third party sales commissions on most end user sales. We have also continued to experience demands from certain of our OEM customers' supply chain managers to reduce our sales prices to them. If we cannot further reduce our manufacturing and operating costs, these pricing pressures will negatively affect our gross and operating margins.

Results of Operations

The results of operations for our two operating segments are generally affected by the same factors described in the Overview section above. Separate discussions and analyses for each segment would be repetitive. The discussion and analysis that follows, therefore, is presented on a consolidated basis and includes discussion of factors unique to each segment where significant to an understanding of that segment.

Three Months Ended June 30, 2018 Compared to Three Months Ended June 30, 2017

Net Revenues. Net revenues were \$21.1 million for the three months ended June 30, 2018 compared to \$15.9 million for the same period in 2017, an increase of \$5.2 million, or 33%. Our net revenues for the three months ended June 30, 2018 included \$6.4 million of net revenues attributable to Ambrell compared to \$2.0 million for the same period in 2017. When adjusted to eliminate the impact of Ambrell, we believe the increase in our net revenues during the second quarter of 2018 primarily reflects the factors previously discussed in the Overview.

Gross Margin. Our consolidated gross margin was 52% of net revenues for the three months ended June 30, 2018 compared to 53% of net revenues for the same period in 2017. The decrease in our gross margin as a percentage of net revenues primarily reflects an increase in both our component material costs and our fixed operating costs. The increase in component material costs reflects changes in product and customer mix. Our fixed operating costs increased \$744,000, of which \$660,000 represents the increase in fixed operating costs attributable to Ambrell as a result of having a full quarter of costs for Ambrell in 2018. The remaining increase in our fixed operating costs primarily reflects higher salary and benefits expense for our Thermal segment as a result of increased production activity.

Selling Expense. Selling expense was \$2.5 million for the three months ended June 30, 2018 compared to \$1.9 million for the same period in 2017, an increase of \$667,000, or 36%. Of the \$667,000 increase in our selling expense, \$638,000 represents the increase in expense attributable to Ambrell as a result of having a full quarter of costs for Ambrell in 2018. The remaining increase primarily reflects an increase in commission expense as a result of the higher level of net revenues in the three months ended June 30, 2018 as compared to the same period in 2017.

Engineering and Product Development Expense. Engineering and product development expense was \$1.2 million for the three months ended June 30, 2018 compared to \$982,000 for the same period in 2017, an increase of \$248,000, or 25%. Of the \$248,000 increase in our engineering and product development expense, \$230,000 represents the increase in expense attributable to Ambrell as a result of having a full quarter of costs for Ambrell in 2018. The remaining increase primarily reflects increased spending on legal fees related to our intellectual property during the three months ended June 30, 2018 as compared to the same period in 2017.

General and Administrative Expense. General and administrative expense was \$3.3 million in each of the three months ended June 30, 2018 and 2017. Our expense for the three months ended June 30, 2017 included \$849,000 of transaction costs related to the acquisition of Ambrell. When adjusted to eliminate the impact of these costs, our general and administrative expense would have increased \$898,000 for the three months ended June 30, 2018 as compared to the same period in 2017. Of the \$898,000 increase in our general and administrative expense, \$497,000 represents the increase in expense attributable to Ambrell as a result of having a full quarter of costs for Ambrell in 2018. The remaining increase primarily reflects an increase in fees paid to third party professionals who assist us in a variety of compliance related matters and higher levels of stock-based compensation expense.

Contingent Consideration Liability Adjustment. During the three months ended June 30, 2018, we recorded a decrease in the fair value of our liability for contingent consideration of \$710,000. This liability is a result of our acquisition of Ambrell in May 2017 and is discussed further in Notes 3 and 4 to our consolidated financial statements. The decrease in the fair value is primarily a result of a decrease in the projected adjusted EBITDA of Ambrell for the second half of 2018.

Income Tax Expense. For the three months ended June 30, 2018, we recorded income tax expense of \$382,000 compared to \$891,000 for the same period in 2017. Our effective tax rate was 9% for the three months ended June 30, 2018 compared to 38% for the same period in 2017. On a quarterly basis, we record income tax expense or benefit based on the expected annualized effective tax rate for the various taxing jurisdictions in which we operate our businesses. The significant decline in our effective tax rate primarily reflects recording a reversal of \$476,000 of transition tax payable during the three months ended June 30, 2018. We had recorded this amount as a provisional amount during the fourth quarter of 2017 relating to the impact of the Tax Cuts and Jobs Act ("Tax Act"), as more fully discussed in Note 11 to our consolidated financial statements in our 2017 Form 10-K. We have determined that we do not owe this amount, and, accordingly, have reversed this accrual. In addition, the aforementioned decrease of \$710,000 in our liability for contingent consideration is not taxable.

Six Months Ended June 30, 2018 Compared to Six Months Ended June 30, 2017

Net Revenues. Net revenues were \$40.0 million for the six months ended June 30, 2018 compared to \$30.1 million for the same period in 2017, an increase of \$9.9 million, or 33%. Our net revenues for the six months ended June 30, 2018 included \$12.7 million of net revenues attributable to Ambrell compared to \$2.0 million for the same period in 2017. When adjusted to eliminate the impact of Ambrell, we believe the decrease in our net revenues during the six months ended June 30, 2018 primarily reflects the factors previously discussed in the Overview.

Gross Margin. Our consolidated gross margin was 51% of net revenues for the six months ended June 30, 2018 compared to 54% of net revenues for the same period in 2017. The decrease in our gross margin as a percentage of net revenues primarily reflects an increase in our fixed operating costs. Our fixed operating costs increased \$2.0 million, of which \$1.8 million represents the increase in fixed operating costs attributable to Ambrell as a result of having a full six months of costs for Ambrell in 2018. The remaining increase in our fixed operating costs primarily reflects higher salary and benefits expense for our Thermal segment as a result of increased production activity and, to a lesser extent, a reduction in corporate insurance premiums and better utilization of our internal machine shop in our New Jersey operation.

Selling Expense. Selling expense was \$5.0 million for the six months ended June 30, 2018 compared to \$3.5 million for the same period in 2017, an increase of \$1.5 million, or 42%. There was a \$1.7 million increase in expense attributable to Ambrell as a result of having a full six months of costs for Ambrell in 2018. This increase was partially offset by a decrease in commission expense as a result of the lower level of net revenues in the six months ended June 30, 2018 as compared to the same period in 2017 and reduced travel expenditures.

Engineering and Product Development Expense. Engineering and product development expense was \$2.5 million for the six months ended June 30, 2018 compared to \$1.9 million for the same period in 2017, an increase of \$609,000, or 32%. Of the \$609,000 increase in our engineering and product development expense, \$546,000 represents the increase in expense attributable to Ambrell as a result of having a full six months of costs for Ambrell in 2018. The remaining increase primarily reflects increased spending on legal fees related to our intellectual property during the six months ended June 30, 2018 as compared to the same period in 2017.

General and Administrative Expense. General and administrative expense was \$6.3 million for the six months ended June 30, 2018 compared to \$5.3 million for the same period in 2017, an increase of \$1.0 million, or 20%. Our expense for the six months ended June 30, 2017 included \$849,000 of transaction costs related to the acquisition of Ambrell. When adjusted to eliminate the impact of these costs, our general and administrative expense would have increased \$1.9 million for the six months ended June 30, 2018 as compared to the same period in 2017. Of the \$1.9 million increase in our general and administrative expense, \$1.3 million represents the increase in expense attributable to Ambrell as a result of having a full six months of costs for Ambrell in 2018. The remaining increase primarily reflects an increase in fees paid to third party professionals who assist us in a variety of compliance related matters and higher levels of stock-based compensation expense.

Contingent Consideration Liability Adjustment. During the six months ended June 30, 2018, we recorded an increase in the fair value of our liability for contingent consideration of \$1.0 million. This liability is a result of our acquisition of Ambrell in May 2017 and is discussed further in Notes 3 and 4 to our consolidated financial statements. The increase in the fair value is primarily a result of an increase in the projected adjusted EBITDA of Ambrell for the year ending December 31, 2018.

Income Tax Expense. For the six months ended June 30, 2018, we recorded income tax expense of \$983,000 compared to \$2.0 million for the same period in 2017. Our effective tax rate was 18% for the six months ended June 30, 2018 compared to 36% for the same period in 2017. On a quarterly basis, we record income tax expense or benefit based on the expected annualized effective tax rate for the various taxing jurisdictions in which we operate our businesses. The decrease in our effective tax rate primarily reflects recording a reversal of \$476,000 of transition tax payable during the six months ended June 30, 2018. We had recorded this amount as a provisional amount during the fourth quarter of 2017 relating to the impact of the Tax Act, as more fully discussed in Note 11 to our consolidated financial statements in our 2017 Form 10-K. We have determined that we do not owe this amount, and, accordingly, have reversed this accrual.

Liquidity and Capital Resources

As discussed more fully in the Overview, our business and results of operations are substantially dependent upon the demand for ATE by semiconductor manufacturers and companies that specialize in the testing of ICs. The cyclical and volatile nature of demand for ATE makes estimates of future revenues, results of operations and net cash flows difficult.

Our primary historical source of liquidity and capital resources has been cash flow generated by our operations, and we manage our businesses to maximize operating cash flows as our primary source of liquidity. We use cash to fund growth in our operating assets, for new product research and development, for acquisitions and for stock repurchases.

Liquidity

Our cash and cash equivalents and working capital were as follows (in thousands):

	June 30, 2018		December 31, 2017	
Cash and cash equivalents	\$ 10,713	\$	13,290	
Working capital	\$ 13,922	\$	16,580	

As of June 30, 2018, \$3.8 million of our cash and cash equivalents was held by our foreign subsidiaries. We currently expect our cash and cash equivalents and projected future cash flow to be sufficient to support our short term working capital requirements, the earnout payable and other corporate requirements. However, we may need additional financial resources, which could include debt or equity financings, to consummate a significant acquisition if the consideration in such a transaction would require us to utilize a substantial portion of, or an amount equal to or in excess of, our available cash. We do not currently have any credit facilities under which we can borrow to help fund our working capital or other requirements.

Cash Flows

Operating Activities. Net cash provided by operations for the six months ended June 30, 2018 was \$3.5 million. During the six months ended June 30, 2018, we recorded net earnings of \$4.4 million which included the impact of a \$1.0 million increase in the fair value of the earnout payable which is a result of our acquisition of Ambrell in May 2017 as discussed further in Notes 3 and 4 to our consolidated financial statements. During the six months ended June 30, 2018, we also recorded non-cash charges of \$840,000 for depreciation and amortization and \$292,000 for amortization of deferred compensation expense related to stock-based awards. During the six months ended June 30, 2018, inventories and accounts payable increased \$2.0 million and \$707,000, respectively, reflecting increased business activity. Accounts receivable declined \$606,000 during the first six months of 2018 primarily reflecting improved collection activity for certain of our operations. Accrued wages and benefits declined \$488,000 during the first six months of 2018, primarily reflecting the payout of profit-related bonuses that had been accrued at December 31, 2017 on our results for the year.

Investing Activities. During the six months ended June 30, 2018, purchases of property and equipment were \$1.9 million, primarily reflecting leasehold improvements for the new facility for Ambrell in Rochester, New York which we took occupancy of in May 2018. We have no other significant commitments for capital expenditures for the balance of 2018; however, depending upon changes in market demand or manufacturing and sales strategies, we may make such purchases or investments as we deem necessary and appropriate.

Financing Activities. As discussed in further detail in Notes 3 and 4 to our consolidated financial statements, the purchase price for Ambrell included contingent consideration in the form of earnouts based on adjusted EBITDA targets for Ambrell in 2017 and 2018. In April 2018, we paid \$5.8 million in connection with the earnout earned as a result of Ambrell's achievement of adjusted EBITDA targets in 2017. Of the \$5.8 million paid, \$4.1 million has been classified as financing activities as it was the estimate of the fair value of the earnouts at the date of the acquisition and was, therefore, included in the purchase accounting. The remaining \$1.7 million was classified as operating activity because it is based on changes to Ambrell's adjusted EBITDA in 2017 due to events that occurred after the acquisition date.

New or Recently Adopted Accounting Standards

See the Notes to our consolidated financial statements for information concerning the implementation and impact of new or recently adopted accounting standards.

Critical Accounting Policies

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues, expenses and related disclosure of contingent assets and liabilities. On an on-going basis, we evaluate our estimates, including those related to inventories, long-lived assets, goodwill, identifiable intangibles, contingent consideration liabilities (and the related earnout payable) and deferred income tax valuation allowances. We base our estimates on historical experience and on appropriate and customary assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Some of these accounting estimates and assumptions are particularly sensitive because of their significance to our consolidated financial statements and because of the possibility that future events affecting them may differ markedly from what had been assumed when the financial statements were prepared. As of June 30, 2018, there have been no significant changes to the accounting policies that we have deemed critical. These policies are more fully described in our 2017 Form 10-K.

Off-Balance Sheet Arrangements

There were no off-balance sheet arrangements during the six months ended June 30, 2018 that have or are reasonably likely to have, a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that is material to our interests.

Item 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

This disclosure is not required for a smaller reporting company.

Item 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures, as such term is defined in Rule 13a-15(e) under the Securities Exchange Act of 1934 (the "Exchange Act"). Because there are inherent limitations in all control systems, a control system, no matter how well conceived and operated, can provide only reasonable, as opposed to absolute, assurance that the objectives of the control system are met. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the control. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Our management, including our Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent all error and all fraud. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected. Accordingly, our management has designed the disclosure controls and procedures to provide reasonable assurance that the objectives of the control system were met.

CEO/CFO Conclusions about the Effectiveness of the Disclosure Controls and Procedures. As required by Rule 13a-15(b), management, including our CEO and CFO, conducted an evaluation as of the end of the period covered by this report, of the effectiveness of our disclosure controls and procedures. Based on that evaluation, our CEO and CFO concluded that, as of the end of the period covered by this report, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control Over Financial Reporting

There has been no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the period covered by this Report that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

From time to time we may be a party to legal proceedings occurring in the ordinary course of business. We are not currently involved in any material legal proceedings.

Item 1A. Risk Factors

Information regarding the primary risks and uncertainties that could materially and adversely affect our future performance or could cause actual results to differ materially from those expressed or implied in our forward-looking statements, appears in Part I, Item 1A - "Risk Factors" of our 2017 Form 10-K filed with the Securities and Exchange Commission on March 28, 2018.

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

Bylaws, as amended and restated effective April 23, 2018 (1)

None.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

3.1

Item 6. Exhibits

10.1*	Amended and Restated inTEST Corporation 2014 Stock Plan (2)
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a).
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a).
32.1	Certification of Chief Executive Officer furnished pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-
	Oxley Act of 2002.
32.2	Certification of Chief Financial Officer furnished pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley
	<u>Act of 2002.</u>
101.INS	XBRL Taxonomy 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

- (1) Previously filed as an exhibit to the Company's Current Report on Form 8-K dated April 23, 2018, File No. 001-36117, filed April 25, 2018, and incorporated herein by reference.
- (2) Previously filed as an exhibit to the Company's Current Report on Form 8-K dated June 27, 2018, File No. 001-36117, filed July 2, 2018, and incorporated herein by reference.
- * Management compensatory plan or arrangement.

101.PRE XBRL Taxonomy Extension Presentation Linkbase Document

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.

inTEST Corporation

Date: August 13, 2018 /s/ James Pelrin

James Pelrin

President and Chief Executive Officer

Date: August 13, 2018 /s/ Hugh T. Regan, Jr.

Hugh T. Regan, Jr.

Secretary, Treasurer and Chief Financial Officer

CERTIFICATION

- I, James Pelrin, certify that:
- 1. I have reviewed this quarterly report on Form 10-Q of inTEST Corporation;
- 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: August 13, 2018

/s/ James Pelrin
James Pelrin
President and Chief Executive Officer

CERTIFICATION

- I, Hugh T. Regan, Jr., certify that:
- 1. I have reviewed this quarterly report on Form 10-Q of inTEST Corporation;
- 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: August 13, 2018

<u>/s/ Hugh T. Regan, Jr.</u> Hugh T. Regan, Jr. Secretary, Treasurer and Chief Financial Officer

inTEST CORPORATION

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

In connection with the Quarterly Report of inTEST Corporation (the "Company") on Form 10-Q for the period ending June 30, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, James Pelrin, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 13, 2018

/s/ James Pelrin James Pelrin President and Chief Executive Officer

inTEST CORPORATION

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

In connection with the Quarterly Report of inTEST Corporation (the "Company") on Form 10-Q for the period ending June 30, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Hugh T. Regan, Jr., Secretary, Treasurer and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 13, 2018

<u>/s/ Hugh T. Regan, Jr.</u> Hugh T. Regan, Jr. Secretary, Treasurer and Chief Financial Officer