

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

FORM 10-Q

(Mark One)

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

For the quarterly period ended **September 30, 2017**

or

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

For the transition period from _____ to _____

Commission file number: **0-10394**

DATA I/O CORPORATION

(Exact name of registrant as specified in its charter)

Washington
(State or other jurisdiction of incorporation or organization)

91-0864123
(I.R.S. Employer Identification No.)

6645 185th Ave NE, Suite 100, Redmond, Washington, 98052

(Address of principal executive offices, including zip code)

(425) 881-6444

(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

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

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company

Emerging growth company

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

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

Shares of Common Stock, no par value, outstanding as of October 26, 2017:

8,241,049

DATA I/O CORPORATION
FORM 10-Q
For the Quarter Ended September 30, 2017

INDEX		<u>Page</u>
Part I.	Financial Information	
Item 1.	Financial Statements	3
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	14
Item 3.	Quantitative and Qualitative Disclosures About Market Risk	22
Item 4.	Controls and Procedures	22
Part II	Other Information	
Item 1.	Legal Proceedings	22
Item 1A.	Risk Factors	22
Item 2.	Unregistered Sales of Equity Securities and Use of Proceeds	22
Item 3.	Defaults Upon Senior Securities	23
Item 4.	Mine Safety Disclosures	23
Item 5.	Other Information	23
Item 6.	Exhibits	23
Signatures		24

PART I - FINANCIAL INFORMATION
Item 1. Financial Statements

DATA I/O CORPORATION
CONSOLIDATED BALANCE SHEETS
(in thousands, except share data)
(UNAUDITED)

	<u>September 30,</u> <u>2017</u>	<u>December 31,</u> <u>2016</u>
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	\$15,164	\$11,571
Trade accounts receivable, net of allowance for doubtful accounts of \$104 and \$96, respectively	5,233	4,725
Inventories	4,950	4,059
Other current assets	537	483
TOTAL CURRENT ASSETS	<u>25,884</u>	<u>20,838</u>
Property, plant and equipment – net	2,158	1,875
Other assets	45	63
TOTAL ASSETS	<u>\$28,087</u>	<u>\$22,776</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	\$1,598	\$1,428
Accrued compensation	3,273	2,208
Deferred revenue	1,570	1,926
Other accrued liabilities	1,029	703
TOTAL CURRENT LIABILITIES	<u>7,470</u>	<u>6,265</u>
Long-term other payables	438	479
COMMITMENTS	-	-
STOCKHOLDERS' EQUITY		
Preferred stock -		
Authorized, 5,000,000 shares, including 200,000 shares of Series A Junior Participating Issued and outstanding, none	-	-
Common stock, at stated value -		
Authorized, 30,000,000 shares Issued and outstanding, 8,240,711 shares as of September 30, 2017 and 8,015,746 shares as of December 31, 2016	18,836	19,204
Accumulated earnings (deficit)	553	(3,360)
Accumulated other comprehensive income	790	188
TOTAL STOCKHOLDERS' EQUITY	<u>20,179</u>	<u>16,032</u>
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	<u>\$28,087</u>	<u>\$22,776</u>

See notes to consolidated financial statements

DATA I/O CORPORATION

CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share amounts)
(UNAUDITED)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Net sales	\$9,596	\$6,588	\$25,955	\$17,002
Cost of goods sold	3,639	2,945	10,629	7,743
Gross margin	5,957	3,643	15,326	9,259
Operating expenses:				
Research and development	1,814	1,358	5,130	3,655
Selling, general and administrative	2,319	1,664	6,300	4,766
Total operating expenses	4,133	3,022	11,430	8,421
Operating income	1,824	621	3,896	838
Non-operating income (expense):				
Interest income	6	11	19	34
Gain on sale of assets	72	-	363	-
Foreign currency transaction gain (loss)	(66)	(3)	(158)	41
Total non-operating income	12	8	224	75
Income before income taxes	1,836	629	4,120	913
Income tax (expense)	(108)	(4)	(207)	(12)
Net income	\$1,728	\$625	\$3,913	\$901
Basic earnings per share	\$0.21	\$0.08	\$0.48	\$0.11
Diluted earnings per share	\$0.20	\$0.08	\$0.47	\$0.11
Weighted-average basic shares	8,201	7,977	8,112	7,955
Weighted-average diluted shares	8,467	8,183	8,400	8,083

See notes to consolidated financial statements

DATA I/O CORPORATION
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(in thousands)
(UNAUDITED)

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2017	2016	2017	2016
Net income	\$1,728	\$625	\$3,913	\$901
Other comprehensive income:				
Foreign currency translation gain (loss)	248	(17)	602	(77)
Comprehensive income	<u>\$1,976</u>	<u>\$608</u>	<u>\$4,515</u>	<u>\$824</u>

See notes to consolidated financial statements

DATA I/O CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)
(UNAUDITED)

	For the Nine Months Ended September 30,	
	2017	2016
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net income	\$3,913	\$901
Adjustments to reconcile net income to net cash provided by (used in) operating activities:		
Depreciation and amortization	634	409
Gain on sale of assets	(363)	-
Equipment transferred to cost of goods sold	725	720
Share-based compensation	540	409
Net change in:		
Trade accounts receivable	(192)	(2,385)
Inventories	(766)	(211)
Other current assets	(33)	213
Accounts payable and accrued liabilities	1,497	160
Deferred revenue	(485)	163
Other long-term liabilities	(52)	86
Deposits and other long-term assets	18	1
Net cash provided by (used in) operating activities	5,436	466
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of property, plant and equipment	(1,642)	(1,688)
Net proceeds from sale of assets	363	-
Cash provided by (used in) investing activities	(1,279)	(1,688)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Net Proceeds from issuance of common stock, less payments for shares withheld to cover tax	(895)	(76)
Repurchase of common stock	-	(191)
Cash provided by (used in) financing activities	(895)	(267)
Increase/(decrease) in cash and cash equivalents	3,262	(1,489)
Effects of exchange rate changes on cash	331	(54)
Cash and cash equivalents at beginning of period	11,571	11,268
Cash and cash equivalents at end of period	\$15,164	\$9,725
Supplemental disclosure of cash flow information:		
Cash paid during the period for:		
Income Taxes	\$82	\$6

See notes to consolidated financial statements

DATA I/O CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(UNAUDITED)

NOTE 1 - FINANCIAL STATEMENT PREPARATION

Data I/O Corporation ("Data I/O", "We", "Our", "Us") prepared the financial statements as of September 30, 2017 and September 30, 2016 according to the rules and regulations of the Securities and Exchange Commission ("SEC"). These statements are unaudited but, in the opinion of management, include all adjustments (consisting of normal recurring adjustments and accruals) necessary to present fairly the results for the periods presented. The balance sheet at December 31, 2016 has been derived from the audited financial statements at that date. We have condensed or omitted certain information and footnote disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States of America according to such SEC rules and regulations. Operating results for the three and nine months ended September 30, 2017 are not necessarily indicative of the results that may be expected for the year ending December 31, 2017. These financial statements should be read in conjunction with the annual audited financial statements and the accompanying notes included in our Form 10-K for the year ended December 31, 2016.

Revenue Recognition

We recognize revenue at the time the product is shipped. We have determined that our programming equipment has reached a point of maturity and stability such that product acceptance can be assured by testing at the factory prior to shipment and that the installation meets the criteria to be considered a separate element. These systems are standard products with published product specifications and are configurable with standard options. The evidence that these systems could be deemed as accepted was based upon having standardized factory production of the units, results from batteries of tests of product performance to our published specifications, quality inspections and installation standardization, as well as past product operation validation with the customer and the history provided by our installed base of products upon which the current versions were based.

The revenue related to products requiring installation that is perfunctory is recognized at the time of shipment. Installation that is considered perfunctory includes any installation that can be performed by other parties, such as distributors, other vendors, or the customers themselves. This takes into account the complexity, skill and training needed as well as customer expectations regarding installation.

We enter into multiple deliverable arrangements that arise during the sale of a system that includes an installation component, a service and support component and a software maintenance component. We allocate the value of each element based on relative selling prices. Relative selling price is based on the selling price of the standalone system. For the installation and service and support components, we use the value of the discount given to distributors who perform these components. For software maintenance components, we use what we charge for annual software maintenance renewals after the initial year the system is sold. Revenue is recognized on the system sale based on shipping terms, installation revenue is recognized after the installation is performed, and hardware service and support and software maintenance revenue is recognized ratably over the term of the agreement, typically one year.

When we sell software separately, we recognize software revenue upon shipment, provided that only inconsequential obligations remain on our part and substantive acceptance conditions, if any, have been met.

We recognize revenue when persuasive evidence of an arrangement exists, shipment has occurred, the price is fixed or determinable, the buyer has paid or is obligated to pay, collectability is reasonably assured, substantive acceptance conditions, if any, have been met, the obligation is not contingent on resale of the product, the buyer's obligation would not be changed in the event of theft, physical destruction or damage to the product, the buyer acquiring the product for resale has economic substance apart from us and we do not have significant obligations for future performance to directly bring about the resale of the product by the buyer. We establish a reserve for

sales returns based on historical trends in product returns and estimates for new items.

We transfer certain products out of service from their internal use and make them available for sale. The products transferred are our standard products in one of the following areas: service loaners, rental or test units; engineering test units; or sales demonstration equipment. Once transferred, the equipment is sold by our regular sales channels as used equipment inventory. These product units often involve refurbishing and an equipment warranty, and are conducted as sales in our normal and ordinary course of business. The transfer amount is the product unit's net book value and the sale transaction is accounted for as revenue and cost of goods sold.

Stock-Based Compensation Expense

We measure and recognize compensation expense as required for all share-based payment awards, including employee stock options and restricted stock unit awards, based on estimated fair values and estimated forfeiture rate on the grant dates.

Income Tax

Penalties associated with tax matters are classified as general and administrative expense when incurred and amounts related to interest associated with tax matters are classified as interest income or interest expense. We did not incur any interest or penalties associated with tax matters during the three and nine months ended September 30, 2017.

We have incurred net operating losses in certain past years. Given the uncertainty created by our loss history, as well as the volatile and uncertain economic outlook for our industry and capital spending, we have limited the recognition of net deferred tax assets associated with our net operating losses and credit carryforwards and continue to maintain a valuation allowance for the full amount of the net deferred tax asset balance. We expect to further analyze the level of valuation allowance during the remainder of 2017. There were \$249,000 and \$226,000 of unrecognized tax benefits related to uncertain tax positions and related valuation allowance as of September 30, 2017 and December 31, 2016, respectively.

Tax years that remain open for examination include 2014, 2015, 2016 and 2017 in the United States of America. In addition, tax years from 2000 to 2013 may be subject to examination in the event that we utilize the net operating losses and credit carryforwards from those years in our current or future year tax returns.

Recent Accounting Pronouncements

In March 2016, the FASB issued ASU 2016-09, Compensation-Stock Compensation (ASU 2016-09), "Improvements to Employee Share-Based Payment Accounting". ASU 2016-09 requires excess tax benefits to be recognized in the statement of operations as an income tax expense and is applied prospectively by means of a cumulative-effect adjustment of excess tax benefits from equity in the period of adoption. The standard establishes an alternative practical expedient for estimating the expected term of an award by recognizing the effects of forfeitures in compensation cost when the forfeitures occur. Adoption of the alternative practical expedient is applied prospectively on an entity-wide basis. The standard requires that amounts paid to a taxing authority on the employee's behalf as a result of directly withholding shares for tax-withholding purposes are to be presented on a retrospective basis as a financing activity on the statement of cash flows. The standard became effective beginning January 1, 2017. The adoption of ASU 2016-09 was not material to our consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, "Leases" (ASU 2016-02). ASU 2016-02 requires lessees to recognize almost all leases on the balance sheet as a right-of-use asset and a lease liability and requires leases to be classified as either an operating or a finance type lease. The standard excludes leases of intangible assets or inventory. Early adoption of the standard is allowed. The standard becomes effective beginning January 1, 2019. We are in the process of evaluating the impact of adoption on our consolidated financial statements.

In May 2014, the FASB issued ASU 2014-09, “Revenue from Contracts with Customers” (ASU 2014-09). ASU 2014-09 provides companies with a single model for accounting for revenue arising from contracts with customers and supersedes current revenue recognition guidance, including industry-specific revenue guidance. The core principle of the model is to recognize revenue when control of the goods or services transfers to the customer, as opposed to recognizing revenue when the risks and rewards transfer to the customer under the existing revenue guidance.

In August 2015, the FASB issued ASU 2015-14, “Revenue from Contracts with Customers” (ASU 2015-14), deferring the effective date of the new revenue recognition standard by one year and it now takes effect for public entities in fiscal years beginning after December 15, 2017. We plan to adopt the revenue standards as of January 1, 2018, utilizing the modified retrospective transition method. The Company is currently evaluating the potential impact of the adoption on our consolidated financial statements. As part of this process, the Company has identified its revenue streams and an analysis of how we currently account for revenue transactions compared to the revenue accounting required under the new standard. We intend to complete our adoption plan in fiscal year 2017. Because of the nature of the work that remains, at this time, we remain unable to reasonably estimate the impact of adoption on our consolidated financial statements. We will continue our evaluation of revenue from our contracts with customers, and will update our expectations of the impact of adoption of the new revenue standards on our consolidated financial statements in our next filing.

NOTE 2 – INVENTORIES

Inventories consisted of the following components:

	September 30, 2017	December 31, 2016
(in thousands)		
Raw material	\$2,806	\$2,402
Work-in-process	1,465	1,226
Finished goods	679	431
Inventories	<u>\$4,950</u>	<u>\$4,059</u>

NOTE 3 – PROPERTY, PLANT AND EQUIPMENT, NET

Property and equipment consisted of the following components:

	September 30, 2017	December 31, 2016
(in thousands)		
Leasehold improvements	\$409	\$376
Equipment	5,293	4,449
Sales demonstration equipment	1,102	1,158
	<u>6,804</u>	<u>5,983</u>
Less accumulated depreciation	4,646	4,108
Property and equipment, net	<u>\$2,158</u>	<u>\$1,875</u>

NOTE 4 – OTHER ACCRUED LIABILITIES

Other accrued liabilities consisted of the following components:

	September 30, 2017	December 31, 2016
(in thousands)		
Product warranty	\$501	\$371
Sales return reserve	80	50
Other taxes	262	149
Other	186	133
Other accrued liabilities	\$1,029	\$703

The changes in our product warranty liability for the nine months ending September 30, 2017 are as follows:

	September 30, 2017
(in thousands)	
Liability, beginning balance	\$371
Net expenses	609
Warranty claims	(609)
Accrual revisions	130
Liability, ending balance	\$501

NOTE 5 – OPERATING LEASE COMMITMENTS

We have commitments under non-cancelable operating leases and other agreements, primarily for factory and office space, with initial or remaining terms of one year or more as follows:

For the years ending December 31:

	Operating Leases
(in thousands)	
2017 (remaining)	\$197
2018	909
2019	937
2020	919
2021	753
Thereafter	231
Total	\$3,946

During the third quarter of 2017, we amended our lease agreement for the Redmond, Washington headquarters facility effective September 12, 2017, extending the lease to July 31, 2022, waiving a potential space give back provision and receiving lease inducement incentives. Previously on June 8, 2015 the lease had been amended to relocate our headquarters to a nearby building and lower the square footage to approximately 20,460.

In addition to the Redmond facility, approximately 24,000 square feet is leased at two foreign locations, including our sales, service, operations and engineering office located in Shanghai, China, and our German sales, service and engineering office located near Munich, Germany.

We signed a lease agreement effective November 1, 2015 that extends through October 31, 2021 for a new facility located in Shanghai, China which we moved into during the first quarter of 2016. The new lease approximately doubled our space to 19,400 square feet at approximately 54% of the prior lease rental rate.

During the fourth quarter of 2016, we signed a lease agreement for a new facility located near Munich, Germany which was effective March 1, 2017 and extends through February 28, 2022. The new lease slightly increased our space to 4,895 square feet at approximately the same cost per square foot as the prior lease.

NOTE 6 – OTHER COMMITMENTS

We have purchase obligations for inventory and production costs as well as other obligations such as capital expenditures, service contracts, marketing, and development agreements. Arrangements are considered purchase obligations if a contract specifies all significant terms, including fixed or minimum quantities to be purchased, a pricing structure and approximate timing of the transaction. Most arrangements are cancelable without a significant penalty, and with short notice, typically less than 90 days. At September 30, 2017, the purchase commitments and other obligations totaled \$2,058,000 of which all but \$18,000 are expected to be paid over the next twelve months.

NOTE 7 – CONTINGENCIES

As of September 30, 2017, we were not a party to any legal proceedings or aware of any indemnification agreement claims, the adverse outcome of which in management's opinion, individually or in the aggregate, would have a material adverse effect on our results of operations or financial position.

NOTE 8 – EARNINGS PER SHARE

Basic earnings per share is calculated based on the weighted average number of common shares outstanding during each period. Diluted earnings per share is calculated based on these same weighted average shares outstanding plus the effect of potential shares issuable upon assumed exercise of stock options based on the treasury stock method. Potential shares issuable upon the exercise of stock options are excluded from the calculation of diluted earnings per share to the extent their effect would be anti-dilutive.

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

	Three Months Ended		Nine Months Ended	
	Sep. 30, 2017	Sep. 30, 2016	Sep. 30, 2017	Sep. 30, 2016
(in thousands except per share data)				
Numerator for basic and diluted earnings per share:				
Net income	\$1,728	\$625	\$3,913	\$901
Denominator for basic earnings per share:				
weighted-average shares	8,201	7,977	8,112	7,955
Employee stock options and awards	266	206	288	128
Denominator for diluted earnings per share:				
adjusted weighted-average shares & assumed conversions of stock options	8,467	8,183	8,400	8,083
Basic and diluted earnings per share:				
Total basic earnings per share	\$0.21	\$0.08	\$0.48	\$0.11
Total diluted earnings per share	\$0.20	\$0.08	\$0.47	\$0.11

Options to purchase 8,425 and 198,395 shares were outstanding as of September 30, 2017 and 2016, respectively, but were excluded from the computation of diluted earnings per share for the periods then ended because the options were anti-dilutive.

NOTE 9 – SHARE-BASED COMPENSATION

For share-based awards granted, we have recognized compensation expense based on the estimated grant date fair value method. For these awards we have recognized compensation expense using a straight-line amortization method reduced for estimated forfeitures.

The impact on our results of operations of recording share-based compensation, net of forfeitures, for the three and nine months ended September 30, 2017 and 2016, respectively, was as follows:

	Three Months Ended		Nine Months Ended	
	Sep. 30, 2017	Sep. 30, 2016	Sep. 30, 2017	Sep. 30, 2016
(in thousands)				
Cost of goods sold	\$4	\$3	\$14	\$11
Research and development	39	23	127	82
Selling, general and administrative	130	84	399	316
Total share-based compensation	\$173	\$110	\$540	\$409
Impact on net earnings (loss) per share:				
Basic and diluted	(\$0.02)	(\$0.01)	(\$0.07)	(\$0.05)

The fair value of share-based awards for employee stock options was estimated using the Black-Scholes valuation model. The following weighted average assumptions were used to calculate the fair value of stock options granted during the three months and nine months ended September 30, 2017 and 2016:

	Three Months Ended		Nine Months Ended	
	Sep. 30, 2017	Sep. 30, 2016	Sep. 30, 2017	Sep. 30, 2016
Risk-free interest rates	1.72%	N/A	1.72%	N/A
Volatility factors	0.62	N/A	0.62	N/A
Expected life of the option in years	4.00	N/A	4.00	N/A
Expected dividend yield	None	N/A	None	N/A

Equity awards granted during the three and nine months ended September 30, 2017 and 2016 were as follows:

	Three Months Ended		Nine Months Ended	
	Sep. 30, 2017	Sep. 30, 2016	Sep. 30, 2017	Sep. 30, 2016
Restricted Stock	51,000	3,000	286,600	225,100
Stock Options	25,000	-	25,000	-

Non-employee directors Restricted Stock Units ("RSU's") vest over one year, employee RSU's vest over four years and employee Non-Qualified stock options vest quarterly over 4 years and have a six year exercise period.

The remaining unamortized expected future equity compensation expense and remaining amortization period associated with unvested option grants, restricted stock awards and restricted stock unit awards at September 30, 2017 are:

	Sep. 30, 2017
Unamortized future equity compensation expense (in thousands)	\$2,722
Remaining weighted average amortization period (in years)	3.19

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

General

FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q includes forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. This Act provides a “safe harbor” for forward-looking statements to encourage companies to provide prospective information about themselves as long as they identify these statements as forward-looking and provide meaningful cautionary statements identifying important factors that could cause actual results to differ from the projected results. All statements other than statements of historical fact made in this Quarterly Report on Form 10-Q are forward-looking. In particular, statements herein regarding industry prospects or trends; expected revenues; expected level of expense; expected savings; future results of operations; reversals of tax valuation allowances; breakeven point, or financial position; changes in gross margin; economic conditions and capital spending outlook; market acceptance of our newly introduced or upgraded products; development, introduction and shipment of new products; building lease arrangements; sales channels and any other guidance on future periods are forward-looking statements. Forward-looking statements reflect management’s current expectations and are inherently uncertain. Although we believe that the expectations reflected in these forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance, achievements, or other future events. Moreover, neither we nor anyone else assumes responsibility for the accuracy and completeness of these forward-looking statements. We are under no duty to update any of these forward-looking statements after the date of this report. The reader should not place undue reliance on these forward-looking statements. The discussions above and in the section in Item 1A., Risk Factors “Cautionary Factors That May Affect Future Results” in our Annual report on Form 10-K for the year ended December 31, 2016 describe some, but not all, of the factors that could cause these differences.

OVERVIEW

We are managing the core programming business for growth and profitability, while developing and enhancing both our core products and our managed and secure programming platform to drive future revenue and earnings growth. We continue to be in a cyclical, seasonal and rapidly evolving industry environment. We attempt to balance industry changes, business geography shifts, exchange rate volatility, increasing costs and strategic investments in our business with the level of demand and mix of current business opportunities

We are concentrating our research and development efforts in our strategic growth markets, namely automotive electronics and Internet of Things (IoT), focusing on new programming technologies, security provisioning, automated programming systems and their enhancements for the manufacturing environment and software. We are developing technology to securely program new categories of semiconductors, including authentication ICs (especially secure elements) and secure microcontrollers. We are delivering new programming technology and automated handling systems for managed and secure programming in the manufacturing environment. In these new security initiatives, we face a new evolving market; are in a period of rapid learning; and are establishing new industry relationships, business processes, supply chains, and investing heavily in advance of revenue.

We continue to focus on extending the capabilities and support for our product lines and supporting the latest semiconductor devices, including NAND Flash, e-MMC, UFS, microcontrollers, authentication ICs, secure element ICs and secure microcontrollers on our newer products.

Our customer focus remains on strategic high volume manufacturers in key market segments like automotive electronics, IoT, industrial controls, consumer electronics as well as programming centers and contract manufacturing.

CRITICAL ACCOUNTING POLICY JUDGMENTS AND ESTIMATES

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires that we make estimates and judgments, which affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosures of contingent assets and liabilities. On an on-going basis, we evaluate our estimates, including those related to revenue recognition, estimating the percentage-of-completion on fixed-price professional engineering service contracts, sales returns, bad debts, inventories, investments, intangible assets, income taxes, warranty obligations, restructuring charges, contingencies such as litigation, and contract terms that have multiple elements and other complexities typical in the capital equipment industry. We base our estimates on historical experience and other assumptions that we believe are reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions.

We believe the following critical accounting policies affect the more significant judgments and estimates used in the preparation of our financial statements:

Revenue Recognition: We recognize revenue at the time the product is shipped. We have determined that our programming equipment has reached a point of maturity and stability such that product acceptance can be assured by testing at the factory prior to shipment and that the installation meets the criteria to be considered a separate element. These systems are standard products with published product specifications and are configurable with standard options. The evidence that these systems could be deemed as accepted was based upon having standardized factory production of the units, results from batteries of tests of product performance to our published specifications, quality inspections and installation standardization, as well as past product operation validation with the customer and the history provided by our installed base of products upon which the current versions were based.

The revenue related to products requiring installation that is perfunctory is recognized at the time of shipment. Installation that is considered perfunctory includes any installation that can be performed by other parties, such as distributors, other vendors, or in most cases the customers themselves. This takes into account the complexity, skill and training needed as well as customer expectations regarding installation.

We enter into multiple deliverable arrangements that arise during the sale of a system that includes an installation component, a service and support component and a software maintenance component. We allocate the value of each element based on relative selling prices. Relative selling price is based on the selling price of the standalone system. For the installation and service and support components, we use the value of the discount given to distributors who perform these components. For software maintenance components, we use what we charge for annual software maintenance renewals after the initial year the system is sold. Revenue is recognized on the system sale based on shipping terms, installation revenue is recognized after the installation is performed, and hardware service and support and software maintenance revenue is recognized ratably over the term of the agreement, typically one year. Other service revenue is recognized as it is delivered.

When we sell software separately, we recognize software revenue upon shipment provided that only inconsequential obligations remain on our part and substantive acceptance conditions, if any, have been met.

We recognize revenue when persuasive evidence of an arrangement exists, shipment has occurred, the price is fixed or determinable, the buyer has paid or is obligated to pay, collectability is reasonably assured, substantive acceptance conditions, if any, have been met, the obligation is not contingent on resale of the product, the buyer's obligation would not be changed in the event of theft, physical destruction or damage to the product, the buyer acquiring the product for resale has economic substance apart from us and we do not have significant obligations for future performance to directly bring about the resale of the product by the buyer. We establish a reserve for sales returns based on historical trends in product returns and estimates for new items.

We transfer certain products out of service from their internal use and make them available for sale. The products transferred are our standard products in one of the following areas: service loaners, rental or test units; engineering test units; or sales demonstration equipment. Once transferred, the equipment is sold by our regular sales channels as used equipment inventory. These product units often involve refurbishing and an equipment warranty, and are conducted as sales in our normal and ordinary course of business. The transfer amount is the product unit's net book value and the sale transaction is accounted for as revenue and cost of goods sold.

Allowance for Doubtful Accounts: We base the allowance for doubtful accounts receivable on our assessment of the collectability of specific customer accounts and the aging of accounts receivable. If there is deterioration of a major customer's credit worthiness or actual defaults are higher than historical experience, our estimates of the recoverability of amounts due to us could be adversely affected.

Inventory: Inventories are stated at the lower of cost or market. Adjustments are made to standard cost, which approximates actual cost on a first-in, first-out basis. We estimate reductions to inventory for obsolete, slow-moving, excess and non-salable inventory by reviewing current transactions and forecasted product demand. We evaluate our inventories on an item by item basis and record inventory adjustments accordingly. If there is a significant decrease in demand for our products, uncertainty during product line transitions, or a higher risk of inventory obsolescence because of rapidly changing technology and customer requirements, we may be required to increase our inventory adjustments and our gross margin could be adversely affected.

Warranty Accruals: We accrue for warranty costs based on the expected material and labor costs to fulfill our warranty obligations. If we experience an increase in warranty claims, which are higher than our historical experience, our gross margin could be adversely affected.

Tax Valuation Allowances: Given the uncertainty created by our loss history, as well as the volatile and uncertain economic outlook for our industry and capital spending, we have limited the recognition of net deferred tax assets associated with our net operating losses and credit carryforwards and continue to maintain a valuation allowance for the full amount of the net deferred tax asset balance. At the current time, we expect to continue to analyze and evaluate potential reversals of the tax valuation allowance during the remainder of 2017. Any reversals will take place only as we are able to determine that it will be possible to take advantage of the underlying tax loss or other attributes in carry forward. Transfer pricing and expense or cost sharing arrangements are complex areas where judgments, such as the determination of arms-length arrangements, can be subject to challenges by different tax jurisdictions.

Share-based Compensation: We account for share-based awards made to our employees and directors, including employee stock option awards and restricted stock unit awards, using the estimated grant date fair value method of accounting. For options, we estimate the fair value using the Black-Scholes valuation model and an estimated forfeiture rate, which requires the input of highly subjective assumptions, including the option's expected life and the price volatility of the underlying stock. The expected stock price volatility assumption was determined using the historical volatility of our common stock. Changes in the subjective assumptions required in the valuation model may significantly affect the estimated value of the awards, the related stock-based compensation expense and, consequently, our results of operations. Restricted stock unit awards are valued based on the average of the high and low price on the date of the grant. For both options and restricted awards, expense is recognized as compensation expense on the straight-line basis. Employee Stock Purchase Plan ("ESPP") shares were issued under provisions that do not require us to record any equity compensation expense.

Results of Operations

NET SALES

	Three Months Ended			Nine Months Ended		
	Sep. 30, 2017	Change	Sep. 30, 2016	Sep. 30, 2017	Change	Sep. 30, 2016
Net sales by product line (in thousands)						
Automated programming systems	\$7,766	49.5%	\$5,196	\$21,193	58.0%	\$13,417
Non-automated programming systems	1,830	31.5%	1,392	4,762	32.8%	3,585
Total programming systems	<u>\$9,596</u>	<u>45.7%</u>	<u>\$6,588</u>	<u>\$25,955</u>	<u>52.7%</u>	<u>\$17,002</u>

	Three Months Ended			Nine Months Ended		
	Sep. 30, 2017	Change	Sep. 30, 2016	Sep. 30, 2017	Change	Sep. 30, 2016
Net sales by location (in thousands)						
United States	\$610	31.5%	\$464	\$2,256	8.1%	\$2,086
% of total	6.4%		7.0%	8.7%		12.3%
International	\$8,986	46.7%	\$6,124	\$23,699	58.9%	\$14,916
% of total	93.6%		93.0%	91.3%		87.7%

Net sales in the third quarter of 2017 were \$9.6 million, compared with \$6.6 million in the third quarter of 2016. Automotive Electronics demand from both OEMs and Programming Centers drove increased revenues primarily related to our PSV family of automated programming systems. Revenues from adapters, a consumable, increased approximately \$100,000 from the year earlier period. International sales represented 94% of total sales for the third quarter, compared to 93% during the same period in 2016.

Revenue for the quarter was approximately 74% equipment, 20% consumables and 6% software and services.

Order bookings increased 4% to \$8.2 million in the third quarter of 2017, a 10-year third quarter high, compared to \$7.9 million in the third quarter of 2016. The variation in revenue percentages versus order bookings percentages relates to the change in backlog, deferred revenues and currency translation. Deferred revenue at the end of the third quarter was \$1.6 million with all major systems shipments able to be recognized in the quarter. At the end of the second quarter, we had deferred revenue of \$2.8 million, including 3 systems that were recognized in the third quarter. Backlog at the end of the third quarter was \$4.6 million compared to \$4.7 million at the end of the second quarter and \$3.2 million at December 31, 2016.

For the nine months ending September 30, 2017, compared to the same period in 2016, net sales growth was generally due to the same factors discussed above for the third quarter, with a continued trend of higher automated and lower non-automated system sales. On a regional basis, all regions had sales growth compared to the same period in 2016.

GROSS MARGIN

	Three Months Ended			Nine Months Ended		
	Sep. 30, 2017	Change	Sep. 30, 2016	Sep. 30, 2017	Change	Sep. 30, 2016
(in thousands)						
Gross margin	\$5,957	63.5%	\$3,643	\$15,326	65.5%	\$9,259
Percentage of net sales	62.1%		55.3%	59.0%		54.5%

For the third quarter of 2017, gross margin as a percentage of sales was 62.1%, compared to 55.3% in the third quarter of 2016 and 56.9% in the second quarter of 2017. The increase was primarily due to sales volume, which resulted in better fixed factory cost utilization, along with a favorable product mix, a favorable sales channel mix (with more direct sales versus distributor sales), and reduced unfavorable factory variances. Distributor sales are net of a distribution discount where direct sales usually result in channel commissions which are included in selling expense. We increased our capacity during the third quarter with virtually no additional investment.

For the first nine months of 2017 compared to the same period in 2016, gross margin as a percentage of sales increased generally due to the same factors discussed above for the third quarter. Based on past experience, we expect variations in our gross margin as a percentage of sales due to changes in key factors for future periods including: sales volume, product mix, channel mix, pricing, inventory fluctuations, warranty, factory variances and currency exchange rates.

RESEARCH AND DEVELOPMENT

	Three Months Ended			Nine Months Ended		
	Sep. 30, 2017	Change	Sep. 30, 2016	Sep. 30, 2017	Change	Sep. 30, 2016
(in thousands)						
Research and development	\$1,814	33.6%	\$1,358	\$5,130	40.4%	\$3,655
Percentage of net sales	18.9%		20.6%	19.8%		21.5%

Research and development ("R&D") increased \$456,000 in the third quarter of 2017 compared to the same period in 2016, primarily due to additional and higher personnel costs, incentive and stock based compensation as well as SentiX NRE charges, which mostly supported our Managed and Secure Programming initiative.

For the first nine months of 2017 compared to the same period in 2016, the increase in R&D expense was generally due to the same factors discussed above for the third quarter.

SELLING, GENERAL AND ADMINISTRATIVE

	Three Months Ended			Nine Months Ended		
	Sep. 30, 2017	Change	Sep. 30, 2016	Sep. 30, 2017	Change	Sep. 30, 2016
(in thousands)						
Selling, general & administrative	\$2,319	39.4%	\$1,664	\$6,300	32.2%	\$4,766
Percentage of net sales	24.2%		25.3%	24.3%		28.0%

Selling, General and Administrative (“SG&A”) expenses increased \$655,000 in the third quarter of 2017 compared to the same period in 2016, due to the increased level of business activity and include higher incentive, commission and stock based compensation and depreciation, offset in part by lower rent costs.

For the first nine months of 2017 compared to the same period in 2016, the increase in SG&A expense was generally due to the same factors discussed above for the third quarter.

INTEREST

	Three Months Ended			Nine Months Ended		
	Sep. 30, 2017	Change	Sep. 30, 2016	Sep. 30, 2017	Change	Sep. 30, 2016
(in thousands)						
Interest income	\$6	(45.5%)	\$11	\$19	(44.1%)	\$34

Interest income decreased in the third quarter of 2017 compared to the same period in 2016, due to both lower invested cash balances and lower interest rates.

For the first nine months of 2017 compared to the same period in 2016, the decrease in interest income was generally due to the same factors discussed above for the third quarter.

INCOME TAXES

	Three Months Ended		Nine Months Ended	
	Sep. 30, 2017	Sep. 30, 2016	Sep. 30, 2017	Sep. 30, 2016
(in thousands)				
Income tax (expense)	(\$108)	(\$4)	(\$207)	(\$12)

Income tax (expense) for the third quarter of 2017 compared to same period in 2016, primarily resulted from foreign subsidiary income tax.

For the first nine months of 2017 compared to the same period in 2016, the change in income tax expense was generally due to the same factors discussed above for the third quarter.

The effective tax rate differed from the statutory tax rate primarily due to the effect of valuation allowances, as well as foreign taxes. We have a valuation allowance of \$10.6 million as of September 30, 2017. Our deferred tax assets and valuation allowance have been reduced by approximately \$249,000 and \$226,000 associated with the requirements of accounting for uncertain tax positions as of September 30, 2017 and December 31, 2016, respectively. Given the uncertainty created by our loss history, as well as the volatile and uncertain economic outlook for our industry and capital spending, we have limited the recognition of net deferred tax assets associated with our net operating losses and credit carryforwards and continue to maintain a valuation allowance for the full amount of the net deferred tax asset balance. We expect to further analyze the level of valuation allowance during the remainder of 2017.

Financial Condition

LIQUIDITY AND CAPITAL RESOURCES

(in thousands)	Sep. 30, 2017	Change	Dec. 31, 2016
Working capital	\$18,414	\$3,841	\$14,573

At September 30, 2017 our cash position was \$15.2 million, with \$10.8 million in the USA and the balance in foreign subsidiaries. The change in cash during the quarter resulted primarily from earnings for the period and collections of our accounts receivable.

Although we have no significant external capital expenditure plans currently, we expect that we will continue to make capital expenditures to support our business. We plan to increase our internally developed rental, sales demonstration and test equipment as we develop and release new products. Capital expenditures are expected to be funded by existing and internally generated funds.

As a result of our significant product development, customer support, selling and marketing efforts, we have required substantial working capital to fund our operations. We have tried to balance our level of development spending with the goal of profitable operations. We have implemented or have initiatives to implement geographic shifts in our operations, optimized real estate usage, reduced exposure to the impact of currency volatility, and additional product development differentiation and cost reductions.

We believe that we have sufficient cash or working capital available under our operating plan to fund our operations and capital requirements through at least the next one-year period. We may require additional cash for U.S. operations, which could cause potential repatriation of cash that is held in our foreign subsidiaries. Although we have no current repatriation plans, there may be tax and other impediments to any repatriation actions. Our working capital may be used to fund possible losses, business growth, project initiatives, share repurchases and business development initiatives including acquisitions, which could reduce our liquidity and result in a requirement for additional cash before that time. Any substantial inability to achieve our current business plan could have a material adverse impact on our financial position, liquidity, or results of operations and may require us to reduce expenditures and/or seek possible additional financing.

OFF-BALANCE SHEET ARRANGEMENTS

Except as noted in the accompanying consolidated financial statements in Note 5, "Operating Lease Commitments" and Note 6, "Other Commitments", we have no off-balance sheet arrangements.

NON-GENERALLY ACCEPTED ACCOUNTING PRINCIPLES (GAAP) FINANCIAL MEASURES

Earnings Before Interest, Taxes, Depreciation and Amortization ("EBITDA") was \$2.1 million in the third quarter of 2017 compared to \$755,000 in the third quarter of 2016. Adjusted EBITDA, excluding equity compensation (a non-cash item) was \$2.3 million in the third quarter of 2017, compared to \$865,000 in the third quarter of 2016.

EBITDA was \$4.7 million for the first nine months of 2017 compared to \$1.3 million in the first nine months of 2016. Adjusted EBITDA, excluding equity compensation was \$5.3 million for the first nine months of 2017, compared to \$1.7 million for the first nine months of 2016.

Non-GAAP financial measures, such as EBITDA and adjusted EBITDA, should not be considered a substitute for, or superior to, measures of financial performance prepared in accordance with GAAP. We believe that these non-GAAP financial measures provide meaningful supplemental information regarding the Company's results and facilitate the comparison of results. A reconciliation of net income to EBITDA and adjusted EBITDA follows:

NON-GENERALLY ACCEPTED ACCOUNTING PRINCIPLES (GAAP) FINANCIAL MEASURE RECONCILIATION

	Three Months Ended		Nine Months Ended	
	Sep. 30, 2017	Sep. 30, 2016	Sep. 30, 2017	Sep. 30, 2016
(in thousands)				
Net Income	\$1,728	\$625	\$3,913	\$901
Interest (income) expense	(6)	(11)	(19)	(34)
Taxes	108	4	207	12
Depreciation & amortization	306	137	634	409
EBITDA earnings	\$2,136	\$755	\$4,735	\$1,288
Equity compensation	173	110	540	409
Adjusted EBITDA earnings, excluding equity compensation	<u>\$2,309</u>	<u>\$865</u>	<u>\$5,275</u>	<u>\$1,697</u>

RECENT ACCOUNTING ANNOUNCEMENTS

In March 2016, the FASB issued ASU 2016-09, Compensation-Stock Compensation (ASU 2016-09), “Improvements to Employee Share-Based Payment Accounting”. ASU 2016-09 requires excess tax benefits to be recognized in the statement of operations as an income tax expense and is applied prospectively by means of a cumulative-effect adjustment of excess tax benefits from equity in the period of adoption. The standard establishes an alternative practical expedient for estimating the expected term of an award by recognizing the effects of forfeitures in compensation cost when the forfeitures occur. Adoption of the alternative practical expedient is applied prospectively on an entity-wide basis. The standard requires that amounts paid to a taxing authority on the employee’s behalf as a result of directly withholding shares for tax-withholding purposes are to be presented on a retrospective basis as a financing activity on the statement of cash flows. The standard became effective beginning January 1, 2017. The adoption of ASU 2016-09 was not material to our consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, “Leases” (ASU 2016-02). ASU 2016-02 requires lessees to recognize almost all leases on the balance sheet as a right-of-use asset and a lease liability and requires leases to be classified as either an operating or a finance type lease. The standard excludes leases of intangible assets or inventory. Early adoption of the standard is allowed. The standard becomes effective beginning January 1, 2019. We are in the process of evaluating the impact of adoption on our consolidated financial statements.

In May 2014, the FASB issued ASU 2014-09, “Revenue from Contracts with Customers” (ASU 2014-09). ASU 2014-09 provides companies with a single model for accounting for revenue arising from contracts with customers and supersedes current revenue recognition guidance, including industry-specific revenue guidance. The core principle of the model is to recognize revenue when control of the goods or services transfers to the customer, as opposed to recognizing revenue when the risks and rewards transfer to the customer under the existing revenue guidance.

In August 2015, the FASB issued ASU 2015-14, “Revenue from Contracts with Customers” (ASU 2015-14), deferring the effective date of the new revenue recognition standard by one year and it now takes effect for public entities in fiscal years beginning after December 15, 2017. We plan to adopt the revenue standards as of January 1, 2018, utilizing the modified retrospective transition method. The Company is currently evaluating the potential impact of the adoption on our consolidated financial statements. As part of this process, the Company has identified its revenue streams and a preliminary analysis of how we currently account for revenue transactions compared to the revenue accounting required under the new standard. We intend to complete our adoption plan in fiscal year 2017. Because of the nature of the work that remains, at this time, we are unable to reasonably estimate the

impact of adoption on our consolidated financial statements. We will continue our evaluation of revenue from our contracts with customers, and we will update our expectations of the impact of adoption of the new revenue standards on our consolidated financial statements in future filings.

Item 3. **Quantitative and Qualitative Disclosures About Market Risk**

Not applicable.

Item 4. **Controls and Procedures**

EVALUATION OF DISCLOSURE CONTROLS AND PROCEDURES

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) and Rule 15d-15(e) under the Exchange Act) as of the end of the period covered by this report (the "Evaluation Date"). Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that, as of the Evaluation Date, our disclosure controls and procedures were effective at the reasonable level of assurance. Disclosure Controls are controls and procedures designed to reasonably assure that information required to be disclosed in our reports filed under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms. Disclosure Controls are also designed to reasonably assure that such information is accumulated and communicated to our management, including the CEO and CFO, as appropriate to allow timely decisions regarding required disclosure.

CHANGES IN INTERNAL CONTROLS

There were no changes made in our internal controls during the period covered by this report that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting which is still under the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in Internal Control – Integrated Framework (2013).

PART II - OTHER INFORMATION

Item 1. **Legal Proceedings**

From time to time, we may be involved in litigation relating to claims arising out of our operations in the normal course of business. As of September 30, 2017, we were not a party to any material pending legal proceedings.

Item 1A. **Risk Factors**

In addition to the other information set forth in this report, you should carefully consider the factors discussed in Part I, "Item 1A. Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2016, which could materially affect our business, financial condition or future results. The risks described in our Annual Report on Form 10-K are not the only risks facing our Company. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition and/or operating results. There are no material changes to the Risk Factors described in our Annual Report.

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

None

Item 3. **Defaults Upon Senior Securities**

None

Item 4. **Mine Safety Disclosures**

Not Applicable

Item 5. **Other Information**

None

Item 6. **Exhibits**

(a) **Exhibits**

10 Material Contracts:

10.34 Fifth Amendment to Lease, between Data I/O Corporation and BRE WA OFFICE OWNER LLC, made as of September 12, 2017

31 Certification pursuant to Section 302 of the Sarbanes Oxley Act of 2002:

31.1 Chief Executive Officer Certification

31.2 Chief Financial Officer Certification

32 Certification pursuant to Section 906 of the Sarbanes Oxley Act of 2002:

32.1 Chief Executive Officer Certification

32.2 Chief Financial Officer Certification

101 Interactive Data Files Pursuant to Rule 405 of Regulation S-T

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.

DATED: November 9, 2017

DATA I/O CORPORATION (REGISTRANT)

By: //S//Anthony Ambrose
Anthony Ambrose
President and Chief Executive Officer
(Principal Executive Officer and Duly Authorized Officer)

By: //S//Joel S. Hatlen
Joel S. Hatlen
Vice President and Chief Operating and Financial Officer
Secretary and Treasurer
(Principal Financial Officer and Duly Authorized Officer)

Exhibit 31.1

CERTIFICATION

I, Anthony Ambrose, certify that:

- 1) I have reviewed this quarterly report on Form 10-Q of Data I/O Corporation;
- 2) Based on my knowledge, this report does not contain any untrue statement of 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 quarterly report;
- 3) Based on my knowledge, the financial statements, and other financial information included in this quarterly 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 quarterly 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 quarterly 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 quarterly report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this quarterly report based on such evaluation; and
 - d) Disclosed in this quarterly 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.

DATED: November 9, 2017

/s/ Anthony Ambrose

Anthony Ambrose
Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION

I, Joel S. Hatlen, certify that:

- 1) I have reviewed this quarterly report on Form 10-Q of Data I/O 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 quarterly report;
- 3) Based on my knowledge, the financial statements, and other financial information included in this quarterly 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 quarterly 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 quarterly 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 quarterly report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this quarterly report based on such evaluation; and
 - d) Disclosed in this quarterly 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.

DATED: November 9, 2017

/s/ Joel S. Hatlen

Joel S. Hatlen
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

Certification by Chief Executive Officer
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 Data I/O Corporation (the "Company") on Form 10-Q for the period ended September 30, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Anthony Ambrose, 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 as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Anthony Ambrose
Anthony Ambrose
Chief Executive Officer
(Principal Executive Officer)
November 9, 2017

Exhibit 32.2

Certification by Chief Financial Officer
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 Data I/O Corporation (the "Company") on Form 10-Q for the period ended September 30, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Joel S. Hatlen, 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 as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Joel S. Hatlen
Joel S. Hatlen
Chief Financial Officer
(Principal Financial Officer)
November 9, 2017

FIFTH AMENDMENT

THIS FIFTH AMENDMENT (this “**Amendment**”) is made and entered into as of ___ Sept, 12, 2017, by and between **BRE WA OFFICE OWNER LLC, a Delaware limited liability company** (“**Landlord**”), and **DATA I/O CORPORATION, a Washington corporation** (“**Tenant**”).

RECITALS

- A. Landlord (as successor in interest to Arden Realty Limited Partnership, a Maryland limited partnership, as successor in interest to CARR Redmond, LLC, a Delaware limited liability company) and Tenant are parties to that certain Lease dated February 28, 2006, as previously amended by the First Amendment to Lease dated August 24, 2006 (the “**First Amendment**”), the Second Amendment to Lease dated January 31, 2011 (the “**Second Amendment**”), the Third Amendment to Lease dated April 8, 2015 (the “**Third Amendment**”), and the Fourth Amendment to Lease dated May 18, 2016 (as amended, the “**Lease**”). Pursuant to the Lease, Landlord has leased to Tenant space currently containing approximately **20,460** rentable square feet (the “**Premises**”) described as Suites 100 and 200 on the first and second floors of the building commonly known as Redmond East Building 14 located at 6645 185th Avenue NE, Redmond, Washington (the “**Building**”).
- B. The Lease will expire by its terms on April 30, 2021 (the “**Existing Expiration Date**”), and the parties wish to extend the term of the Lease on the following terms and conditions.

NOW, THEREFORE, in consideration of the above recitals which by this reference are incorporated herein, the mutual covenants and conditions contained herein and other valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant agree as follows:

1. [Intentionally Omitted.]
2. **Extension.** The term of the Lease is hereby extended through July 31, 2022 (the “**Second Extended Expiration Date**”). The portion of the term of the Lease beginning on the date immediately following the Existing Expiration Date (the “**Second Extension Date**”) and ending on the Second Extended Expiration Date shall be referred to herein as the “**Second Extended Term**”.

3. **Base Rent.** During the Second Extended Term, the schedule of Base Rent shall be as follows:

Period of Second Extended Term	Annual Rate Per Square Foot (rounded to the nearest 100th of a dollar)	Monthly Base Rent
5/1/21 – 8/31/21	\$17.97	\$30,638.85
9/1/21 – 7/31/22	\$18.50	\$31,542.50

All such Base Rent shall be payable by Tenant in accordance with the terms of the Lease.

4. **Additional Security Deposit.** No additional security deposit shall be required in connection with this Amendment.
5. **Operating Cost Share Rent and Tax Share Rent.** During the Second Extended Term, (a) Tenant shall pay Operating Cost Share Rent and Tax Share Rent in accordance with the terms of the Lease, and (b) Tenant’s Proportionate Share shall be 57.87% of the New Building and 5.07% of the Project.
6. **Configuration and Condition of Premises.** Landlord shall not be required to perform or pay for any alteration or improvement in connection with this Amendment. For the avoidance of doubt, the preceding sentence shall not limit any ongoing repair or maintenance obligation of Landlord under the Lease.
7. **Other Pertinent Provisions.** Landlord and Tenant agree that, effective as of the date of this Amendment (unless different effective date(s) is/are specifically referenced in this Section), the Lease shall be amended in the following additional respects:
- 7.1. **Contraction Option.** Section 8 of the Third Amendment, entitled “Contraction Option,” is hereby deleted in its entirety from the Lease.
- 7.2. **Abatement of Base Rent for October 2017.** Notwithstanding any contrary provision of the Lease, Tenant shall not be required pay Base Rent for the month of October 2017.

8. **Other Provisions.** Notwithstanding any contrary provision of the Lease:

8.1. [Intentionally Omitted.]

8.2. [Intentionally Omitted.]

8.3. **OFAC.** Tenant represents, warrants and covenants that no party that (other than through the passive ownership of interests traded on a recognized securities exchange) constitutes, owns, controls, or is owned or controlled by Tenant or any guarantor or subtenant of Tenant is, or at any time during the term of the Lease will be, (a) in violation of any laws relating to terrorism or money laundering, or (b) among the parties identified on any list compiled pursuant to Executive Order 13224 for the purpose of identifying suspected terrorists or on the most current list published by the U.S. Treasury Department Office of Foreign Assets Control at its official website, <http://www.treas.gov/ofac/tlstdn.pdf> or any replacement website or other replacement official publication of such list.

9. **Miscellaneous.**

9.1. This Amendment sets forth the entire agreement between the parties with respect to the matters set forth herein. There have been no additional oral or written representations or agreements. Tenant shall not be entitled, in connection with entering into this Amendment, to any free rent, allowance, alteration, improvement or similar economic incentive to which Tenant may have been entitled in connection with entering into the Lease, except as may be otherwise expressly provided in this Amendment.

9.2. Except as herein modified or amended, the provisions, conditions and terms of the Lease shall remain unchanged and in full force and effect.

9.3. In the case of any inconsistency between the provisions of the Lease and this Amendment, the provisions of this Amendment shall govern and control.

- 9.4. Submission of this Amendment by Landlord is not an offer to enter into this Amendment but rather is a solicitation for such an offer by Tenant. Landlord shall not be bound by this Amendment until Landlord has executed and delivered it to Tenant.
- 9.5. Capitalized terms used but not defined in this Amendment shall have the meanings given in the Lease.
- 9.6. Tenant shall indemnify and hold Landlord, its trustees, members, principals, beneficiaries, partners, officers, directors, employees, mortgagee(s) and agents, and the respective principals and members of any such agents harmless from all claims of any brokers (other than Broderick Group, Inc., a Washington corporation) claiming to have represented Tenant in connection with this Amendment. Landlord shall indemnify and hold Tenant, its trustees, members, principals, beneficiaries, partners, officers, directors, employees, and agents, and the respective principals and members of any such agents harmless from all claims of any brokers claiming to have represented Landlord in connection with this Amendment. Tenant acknowledges that any assistance rendered by any agent or employee of any affiliate of Landlord in connection with this Amendment has been made as an accommodation to Tenant solely in furtherance of consummating the transaction on behalf of Landlord, and not as agent for Tenant.

[SIGNATURES ARE ON FOLLOWING PAGE]

IN WITNESS WHEREOF, Landlord and Tenant have duly executed this Amendment as of the day and year first above written.

LANDLORD:

BRE WA OFFICE OWNER LLC, a Delaware limited liability company

By: ___/S/Alan Walker_____

Name: ___ Alan Walker_____

Title: ___ SVP_____

TENANT:

DATA I/O CORPORATION, a Washington corporation

By: ___/s/ Joel S Hatlen_____

Name: ___ Joel S Hatlen _____

Title: ___ VP / COO / CFO_____