

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 **June 30, 2018**

or

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

For the transition period from _____ to _____

Commission file number: **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 July 25, 2018:

8,437,341

DATA I/O CORPORATION
FORM 10-Q
For the Quarter Ended June 30, 2018

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PART I - FINANCIAL INFORMATION
Item 1. Financial Statements

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

	<u>June 30,</u> <u>2018</u>	<u>December 31,</u> <u>2017</u>
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	\$16,634	\$18,541
Trade accounts receivable, net of allowance for doubtful accounts of \$100 and \$73, respectively	5,363	3,769
Inventories	4,320	4,168
Other current assets	528	708
TOTAL CURRENT ASSETS	<u>26,845</u>	<u>27,186</u>
Property, plant and equipment – net	2,109	2,458
Income tax receivable	598	598
Other assets	220	45
TOTAL ASSETS	<u>\$29,772</u>	<u>\$30,287</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	\$1,238	\$1,301
Accrued compensation	1,842	3,536
Deferred revenue	2,410	1,787
Other accrued liabilities	946	858
Income taxes payable	195	218
TOTAL CURRENT LIABILITIES	<u>6,631</u>	<u>7,700</u>
Long-term other payables	468	527
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, 8,427,884 shares as of June 30, 2018 and 8,276,813 shares as of December 31, 2017	19,219	18,989
Accumulated earnings	2,705	2,089
Accumulated other comprehensive income	749	982
TOTAL STOCKHOLDERS' EQUITY	<u>22,673</u>	<u>22,060</u>
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	<u>\$29,772</u>	<u>\$30,287</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		Six Months Ended	
	June 30,		June 30,	
	2018	2017	2018	2017
Net sales	\$7,204	\$9,135	\$14,834	\$16,359
Cost of goods sold	2,955	3,933	6,169	6,990
Gross margin	4,249	5,202	8,665	9,369
Operating expenses:				
Research and development	1,845	1,771	3,724	3,316
Selling, general and administrative	2,158	2,163	4,351	3,981
Total operating expenses	4,003	3,934	8,075	7,297
Operating income	246	1,268	590	2,072
Non-operating income (expense):				
Interest income	9	6	16	13
Gain on sale of assets	4	80	4	291
Foreign currency transaction gain (loss)	269	(62)	93	(92)
Total non-operating income	282	24	113	212
Income before income taxes	528	1,292	703	2,284
Income tax (expense)	(42)	(86)	(87)	(99)
Net income	\$486	\$1,206	\$616	\$2,185
Basic earnings per share	\$0.06	\$0.15	\$0.07	\$0.27
Diluted earnings per share	\$0.06	\$0.14	\$0.07	\$0.26
Weighted-average basic shares	8,356	8,104	8,321	8,067
Weighted-average diluted shares	8,500	8,408	8,521	8,367

See notes to consolidated financial statements

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

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2018	2017	2018	2017
Net income	\$486	\$1,206	\$616	\$2,185
Other comprehensive income:				
Foreign currency translation gain (loss)	(534)	272	(233)	354
Comprehensive income (loss)	<u>(\$48)</u>	<u>\$1,478</u>	<u>\$383</u>	<u>\$2,539</u>

See notes to consolidated financial statements

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

	For the Six Months Ended June 30,	
	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net income	\$616	\$2,185
Adjustments to reconcile net income to net cash provided by (used in) operating activities:		
Depreciation and amortization	507	328
Gain on sale of assets	(4)	(291)
Equipment transferred to cost of goods sold	336	372
Share-based compensation	650	367
Net change in:		
Trade accounts receivable	(1,650)	(2,299)
Inventories	(179)	(702)
Other current assets	175	(125)
Accounts payable and accrued liabilities	(1,667)	705
Deferred revenue	627	774
Other long-term liabilities	(34)	(34)
Deposits and other long-term assets	(175)	18
Net cash provided by (used in) operating activities	(798)	1,298
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of property, plant and equipment	(495)	(815)
Net proceeds from sale of assets	4	291
Cash provided by (used in) investing activities	(491)	(524)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Net Proceeds from issuance of common stock, less payments for shares withheld to cover tax	(420)	(491)
Cash provided by (used in) financing activities	(420)	(491)
Increase (decrease) in cash and cash equivalents	(1,709)	283
Effects of exchange rate changes on cash	(198)	179
Cash and cash equivalents at beginning of period	18,541	11,571
Cash and cash equivalents at end of period	\$16,634	\$12,033
Supplemental disclosure of cash flow information:		
Cash paid during the period for:		
Income Taxes	\$111	\$48

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 June 30, 2018 and June 30, 2017 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, 2017 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 six months ended June 30, 2018 are not necessarily indicative of the results that may be expected for the year ending December 31, 2018. 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, 2017.

Revenue Recognition

Effective January 1, 2018, the Company adopted ASU 2014-09, Revenue (“Topic 606”): Revenue from Contracts with Customers, using the modified retrospective method. Topic 606 provides a single, principles-based five-step model to be applied to all contracts with customers. It generally provides for the recognition of revenue in an amount that reflects the consideration to which the Company expects to be entitled, net of allowances for estimated returns, discounts or sales incentives, as well as taxes collected from customers when control over the promised goods or services are transferred to the customer. For incremental contract acquisition costs, the Company has elected the practical expedient to capitalize and amortize incremental costs for obtaining contracts, primarily sales commissions, with terms that exceed one year.

Our basic revenue recognition remains essentially the same as it was in 2017, but we have modified our policies and processes to be able to identify and properly defer contract acquisition costs. The adoption of Topic 606 did not have a material impact on our financial results.

We generally recognize revenue at the time the product is shipped or when the service is delivered. The revenue related to products requiring installation that is perfunctory is generally 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. Contracts requiring acceptance are recognized when acceptance is received.

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.

We enter into multiple deliverable arrangements that arise during the sale of a system that may include consumables (adapters), 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 standard compensation provided as a discount to distributors or as additional commission to our representative channel which performs 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 generally 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 license 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 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 and typically are service loaners, rental or test systems, engineering test systems or sales demonstration systems. Once transferred, the systems are sold by our regular sales channels as used inventory. These systems 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 system's net book value and the sale transaction is accounted for as revenue and cost of goods sold.

Deferred revenue relates to contracted amounts that have been invoiced to customers for which remaining performance obligations must be completed before we can recognize revenue. These amounts primarily relate to unamortized software and service contracts and other items invoiced but not recognized due to incomplete performance obligations, such as installation and acceptance requirements for systems.

As of June 30, 2018 deferred revenue was \$2.5 million which consisted of \$2.4 million which will be recognized over the next twelve months, and the remaining balance to be recognized beyond that.

Stock-Based Compensation Expense

All stock-based compensation awards are measured based on estimated fair values on the date of grant and recognized as compensation expense on the straight-line single-option method. Our share-based compensation is reduced for estimated forfeitures at the time of grant and revised as necessary in subsequent periods if actual forfeitures differ from those estimates.

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 months ended June 30, 2018.

Tax Reform impact was included in our 2017 financial statements, which primarily reflected the deemed repatriation (IRC 965 transition tax), the AMT credit receivable as a result of AMT repeal, and the revaluation of net deferred tax assets and valuation allowance as a result of the income tax rate reduction.

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 cyclical 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 will continue to analyze the level of valuation allowance in future periods. There were \$290,000 and \$272,000 of unrecognized tax benefits related to uncertain tax positions and a corresponding valuation allowance as of June 30, 2018 and December 31, 2017, respectively.

Tax years that remain open for examination include 2014 through 2018 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 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 financing lease. The standard excludes leases of intangible assets or inventory. The standard becomes effective beginning January 1, 2019. We are in the process of evaluating the impact of adoption on our consolidated financial statements. Our leases include facilities in Redmond, Washington, and in the Shanghai and Munich areas, as well as a small amount of office equipment and automobiles.

In May 2014, the FASB issued ASU 2014-09, “Revenue from Contracts with Customers” (ASU 2014-09) (“Topic 606”). ASU 2014-09 provides companies with a single model for accounting for revenue arising from contracts with customers and supersedes previous revenue recognition guidance, including industry-specific 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 now takes effect for public entities in fiscal years beginning after December 15, 2017. We have adopted the revenue standard as of January 1, 2018, which did not have a material impact on our consolidated financial statements. We have implemented changes to our accounting policies, internal controls, and disclosures to support the new standard, however, these changes were not material.

NOTE 2 – INVENTORIES

Inventories consisted of the following components:

	June 30, 2018	December 31, 2017
(in thousands)		
Raw material	\$2,695	\$2,392
Work-in-process	1,091	1,091
Finished goods	534	685
Inventories	<u>\$4,320</u>	<u>\$4,168</u>

NOTE 3 – PROPERTY, PLANT AND EQUIPMENT, NET

Property and equipment consisted of the following components:

	June 30, 2018	December 31, 2017
(in thousands)		
Leasehold improvements	\$411	\$416
Equipment	5,411	5,279
Sales demonstration equipment	1,131	1,315
	<u>6,953</u>	<u>7,010</u>
Less accumulated depreciation	<u>4,844</u>	<u>4,552</u>
Property and equipment, net	<u>\$2,109</u>	<u>\$2,458</u>

NOTE 4 – OTHER ACCRUED LIABILITIES

Other accrued liabilities consisted of the following components:

	June 30, 2018	December 31, 2017
(in thousands)		
Product warranty	\$530	\$530
Sales return reserve	99	80
Other taxes	189	109
Other	128	139
Other accrued liabilities	\$946	\$858

The changes in our product warranty liability for the six months ending June 30, 2018 are as follows:

	June 30, 2018
(in thousands)	
Liability, beginning balance	\$530
Net expenses	500
Warranty claims	(500)
Accrual revisions	-
Liability, ending balance	\$530

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)	
2018 (remaining)	\$538
2019	927
2020	925
2021	459
2022	232
Thereafter	-
Total	\$3,081

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 is for approximately 19,400 square feet.

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 is for approximately 4,895 square feet.

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 June 30, 2018, the purchase commitments and other obligations totaled \$1,798,000 of which all but \$9,000 are expected to be paid over the next twelve months.

NOTE 7 – CONTINGENCIES

As of June 30, 2018, 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		Six Months Ended	
	Jun. 30, 2018	Jun. 30, 2017	Jun. 30, 2018	Jun. 30, 2017
(in thousands except per share data)				
Numerator for basic and diluted earnings per share:				
Net income	\$486	\$1,206	\$616	\$2,185
Denominator for basic earnings per share:				
Weighted-average shares	8,356	8,104	8,321	8,067
Employee stock options and awards	144	304	200	300
Denominator for diluted earnings per share:				
Adjusted weighted-average shares & assumed conversions of stock options	8,500	8,408	8,521	8,367
Basic and diluted earnings per share:				
Total basic earnings per share	\$0.06	\$0.15	\$0.07	\$0.27
Total diluted earnings per share	\$0.06	\$0.14	\$0.07	\$0.26

Options to purchase 25,000 and 60,111 shares were outstanding as of June 30, 2018 and 2017, 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 six months ended June 30, 2018 and 2017, respectively, was as follows:

	Three Months Ended		Six Months Ended	
	Jun. 30, 2018	Jun. 30, 2017	Jun. 30, 2018	Jun. 30, 2017
(in thousands)				
Cost of goods sold	\$11	\$8	\$15	\$10
Research and development	107	63	149	88
Selling, general and administrative	355	199	486	269
Total share-based compensation	\$473	\$270	\$650	\$367

Equity awards granted during the three and six months ended June 30, 2018 and 2017 were as follows:

	Three Months Ended		Six Months Ended	
	Jun. 30, 2018	Jun. 30, 2017	Jun. 30, 2018	Jun. 30, 2017
Restricted Stock	204,856	223,600	205,856	235,600

There were no stock option awards granted during the three and six months ended June 30, 2018 and 2017.

Non-employee directors Restricted Stock Units (“RSU’s”) vest over one year and options vest over three years and have a six year exercise period. 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 June 30, 2018 are:

	Jun. 30, 2018
Unamortized future equity compensation expense (in thousands)	\$3,373
Remaining weighted average amortization period (in years)	3.04

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 economic outlook, industry prospects and trends; industry partnerships; future results of operations or financial position; future spending; breakeven revenue point; expected market growth; market acceptance of our newly introduced or upgraded products or services; the sufficiency of our cash to fund future operations and capital requirements; development, introduction and shipment of new products or services; changing foreign operations; 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 Data I/O 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, 2017, describe some, but not all, of the factors that could cause these differences.

OVERVIEW

We continued our focus on managing the core programming business for growth and profitability, while developing and enhancing products to drive future revenue and earnings growth. Our challenge continues to be operating in a cyclical and rapidly evolving industry environment. We are continuing our efforts to balance industry changes, trade issues, industry partnerships, business geography shifts, exchange rate volatility, increasing costs and strategic investments in our business with the level of demand and mix of business we expect. We continue to manage our costs carefully and execute strategies for cost reduction.

Our research and development efforts focus on strategic high growth markets, namely automotive electronics and Internet of Things (“IoT”) related new programming technologies, secure provisioning solutions, automated programming systems and their enhancements for the manufacturing environment and software. We are developing technology to securely provision new categories of semiconductors, including Secure Elements, Authentication Chips, and Secure Microcontrollers. We continue to extend the capabilities and support for our product lines and add additional support for the latest semiconductor devices, including NAND Flash, e-MMC, UFS and microcontrollers on our newer products.

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 sales returns, bad debts, inventories, 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: Effective January 1, 2018, the Company adopted ASU 2014-09, Revenue (“Topic 606”): Revenue from Contracts with Customers, using the modified retrospective method. Topic 606 provides a single, principles-based five-step model to be applied to all contracts with customers. It generally provides for the recognition of revenue in an amount that reflects the consideration to which the Company expects to be entitled, net of allowances for estimated returns, discounts or sales incentives, as well as taxes collected from customers when control over the promised goods or services are transferred to the customer. For incremental contract acquisition costs, the Company has elected the practical expedient to capitalize and amortize incremental costs for obtaining contracts, primarily sales commissions, with terms that exceed one year.

Our basic revenue recognition remains essentially the same as it was in 2017, but we have modified our policies and processes to be able to identify and properly defer contract acquisition costs. The adoption of Topic 606 did not have a material impact on our financial results.

We generally recognize revenue at the time the product is shipped or when the service is delivered. The revenue related to products requiring installation that is perfunctory is generally 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. Contracts requiring acceptance are recognized when acceptance is received.

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.

We enter into multiple deliverable arrangements that arise during the sale of a system that may include consumables (adapters), 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 standard compensation provided as a discount to distributors or as additional commission to our representative channel which performs 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 generally 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 license 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 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 and typically are service loaners, rental or test systems, engineering test systems or sales demonstration systems. Once transferred, the systems are sold by our regular sales channels as

used inventory. These systems 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 system's net book value and the sale transaction is accounted for as revenue and cost of goods sold.

Deferred revenue relates to contracted amounts that have been invoiced to customers for which remaining performance obligations must be completed before we can recognize revenue. These amounts primarily relate to unamortized software and service contracts and other items invoiced but not recognized due to incomplete performance obligations, such as installation and acceptance requirements for systems.

As of June 30, 2018 deferred revenue was \$2.5 million which consisted of \$2.4 million which will be recognized over the next twelve months, and the remaining balance to be recognized beyond that.

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 net realizable value. 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 ongoing cyclical uncertain economic outlook for our industry and capital and geographic spending, we expect to continue to limit the recognition of net deferred tax assets and accounting for uncertain tax positions and maintain the tax valuation allowances. Tax reform related adjustments were recorded in 2017, which impacted the tax valuation allowance. At the current time, we expect, therefore, that reversals of the tax valuation allowance will take place only as we are able to take advantage of the underlying tax loss or other attributes in carry forward. The 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			Six Months Ended		
	Jun. 30, 2018	Change	Jun. 30, 2017	Jun. 30, 2018	Change	Jun. 30, 2017
Net sales by product line (in thousands)						
Automated programming systems	\$5,680	(24.3%)	\$7,502	\$11,654	(13.2%)	\$13,427
Non-automated programming systems	1,524	(6.7%)	1,633	3,180	8.5%	2,932
Total programming systems	<u>\$7,204</u>	<u>(21.1%)</u>	<u>\$9,135</u>	<u>\$14,834</u>	<u>(9.3%)</u>	<u>\$16,359</u>
	Three Months Ended			Six Months Ended		
Net sales by location (in thousands)	Jun. 30, 2018	Change	Jun. 30, 2017	Jun. 30, 2018	Change	Jun. 30, 2017
United States	\$974	8.3%	\$899	\$1,359	(17.4%)	\$1,646
% of total	13.5%		9.8%	9.2%		10.1%
International	\$6,230	(24.4%)	\$8,236	\$13,475	(8.4%)	\$14,713
% of total	86.5%		90.2%	90.8%		89.9%

Net sales in the second quarter of 2018 were \$7.2 million, compared with \$9.1 million in the second quarter of 2017. Automotive Electronics demand from both OEMs and Programming Centers continues to drive revenues and are primarily related to our PSV family of automated programming systems. International sales represented 86.5% of total sales for the second quarter, compared to 90.2% during the same period in 2017. Favorable currency exchange rate changes benefited the second quarter of 2018 revenue by approximately \$138,000, compared to the same period in 2017.

Revenue for the quarter was approximately 65% equipment, 24% consumables and 11% software and services.

Order bookings were \$7.2 million in the second quarter of 2018, down from the prior year period of \$10.1 million. The variation in revenue percentages versus order bookings percentages relates to the change in backlog, deferred revenues and currency translation. Total deferred revenue at the end of the second quarter of 2018 was \$2.5 million (\$2.4 million current and \$117,000 long term) compared to \$1.8 million at the end of the first quarter of 2018, \$2.9 million at the end of the second quarter of 2017 and \$1.9 million at December 31, 2017. Backlog at the end of the second quarter of 2018 was \$1.9 million compared to \$2.7 million at the end of the first quarter of 2018, \$4.7 million at the end of the second quarter of 2017 and \$4.0 million at December 31, 2017.

For the six months ending June 30, 2018, compared to the same period in 2017, the change in net sales were generally due to the same factors discussed above for the second quarter, with a continued trend of higher automated and lower non-automated system sales. On a regional basis, all regions were lower compared to the same periods in 2017 which had unusually strong sales.

GROSS MARGIN

	Three Months Ended			Six Months Ended		
	Jun. 30, 2018	Change	Jun. 30, 2017	Jun. 30, 2018	Change	Jun. 30, 2017
(in thousands)						
Gross margin	\$4,249	(18.3%)	\$5,202	\$8,665	(7.5%)	\$9,369
Percentage of net sales	59.0%		56.9%	58.4%		57.3%

For the second quarter of 2018, gross margin as a percentage of sales was 59.0%, compared to 56.9% in the second quarter of 2017 and 57.9% in the first quarter of 2018. The increase in gross margin as a percentage of revenues when compared to both periods was primarily due to a favorable product mix and factory variances during the quarter as well as continued cost reduction efforts. Favorable currency exchange rate changes benefited the second quarter of 2018 revenue by approximately \$67,000, compared to the same period in 2017.

For the first six months of 2018 compared to the same period in 2017, gross margin as a percentage of sales increased generally due to the same factors discussed above for the second 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			Six Months Ended		
	Jun. 30, 2018	Change	Jun. 30, 2017	Jun. 30, 2018	Change	Jun. 30, 2017
(in thousands)						
Research and development	\$1,845	4.2%	\$1,771	\$3,724	12.3%	\$3,316
Percentage of net sales	25.6%		19.4%	25.1%		20.3%

Research and development (“R&D”) increased \$74,000 in the second quarter of 2018 compared to the same period in 2017, primarily due to additional and higher personnel costs, stock based compensation and SentiX NRE charges, which mostly supported our Managed and Secure Programming initiative, offset in part by lower incentive compensation cost.

For the first six months of 2018 compared to the same period in 2017, the increase in R&D expense was generally due to the same factors discussed above for the second quarter.

SELLING, GENERAL AND ADMINISTRATIVE

	Three Months Ended			Six Months Ended		
	Jun. 30, 2018	Change	Jun. 30, 2017	Jun. 30, 2018	Change	Jun. 30, 2017
(in thousands)						
Selling, general & administrative	\$2,158	(0.2%)	\$2,163	\$4,351	9.3%	\$3,981
Percentage of net sales	30.0%		23.7%	29.3%		24.3%

Selling, General and Administrative (“SG&A”) expenses for the second quarter of 2018 were about the same level as in the second quarter of 2017, with higher stock based compensation, marketing related activity and depreciation, offset by lower incentive compensation and commissions.

For the first six months of 2018 compared to the same period in 2017, the increase in SG&A expense was generally due to the same factors discussed above for the second quarter.

INTEREST

	Three Months Ended			Six Months Ended		
	Jun. 30, 2018	Change	Jun. 30, 2017	Jun. 30, 2018	Change	Jun. 30, 2017
(in thousands)						
Interest income	\$9	50.0%	\$6	\$16	23.1%	\$13

Interest income increased in the second quarter and for the first six months of 2018 compared to the same periods in 2017, due to higher cash balances and minor increases in interest rates.

INCOME TAXES

	Three Months Ended			Six Months Ended		
	Jun. 30, 2018	Change	Jun. 30, 2017	Jun. 30, 2018	Change	Jun. 30, 2017
(in thousands)						
Income tax (expense)	(\$42)	(51.2%)	(\$86)	(\$87)	(12.1%)	(\$99)

Income tax (expense) for the second quarter of 2018 and for the first six months of 2018 was lower when compared to same periods in 2017, and primarily related to foreign subsidiary income.

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 \$6.9 million as of June 30, 2018. Our deferred tax assets and valuation allowance have been reduced by approximately \$290,000 and \$272,000 associated with the requirements of accounting for uncertain tax positions as of June 30, 2018 and December 31, 2017, 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 2018.

Financial Condition

LIQUIDITY AND CAPITAL RESOURCES

(in thousands)	Jun. 30, 2018	Change	Dec. 31, 2017
Working capital	\$20,214	\$728	\$19,486

At June 30, 2018 our cash position was \$16.6 million, with \$10.2 million in the United States and the balance in foreign subsidiaries.

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 currently 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 \$796,000 in the second quarter of 2018 compared to \$1.5 million in the second quarter of 2017. Adjusted EBITDA, excluding equity compensation (a non-cash item) was \$1.3 million in the second quarter of 2018, compared to \$1.7 million in the second quarter of 2017.

EBITDA was \$1.2 million for the first six months of 2018 compared to \$2.6 million in the first six months of 2017. Adjusted EBITDA, excluding equity compensation, was \$1.8 million for the first six months of 2018, compared to \$3.0 million for the first six months of 2017.

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		Six Months Ended	
	Jun. 30, 2018	Jun. 30, 2017	Jun. 30, 2018	Jun. 30, 2017
(in thousands)				
Net Income	\$486	\$1,206	\$616	\$2,185
Interest (income)	(9)	(6)	(16)	(13)
Taxes	42	86	87	99
Depreciation & amortization	277	165	506	328
EBITDA earnings	\$796	\$1,451	\$1,193	\$2,599
Equity compensation	473	270	650	367
Adjusted EBITDA earnings, excluding equity compensation	\$1,269	\$1,721	\$1,843	\$2,966

RECENT ACCOUNTING ANNOUNCEMENTS

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 financing lease. The standard excludes leases of intangible assets or inventory. The standard becomes effective beginning January 1, 2019. We are in the process of evaluating the impact of adoption on our consolidated financial statements. Our leases include facilities in Redmond, Washington, and in the Shanghai and Munich areas, as well as a small amount of office equipment and automobiles.

In May 2014, the FASB issued ASU 2014-09, "Revenue from Contracts with Customers" (ASU 2014-09) ("Topic 606"). ASU 2014-09 provides companies with a single model for accounting for revenue arising from contracts with customers and supersedes previous revenue recognition guidance, including industry-specific 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 now takes effect for public entities in fiscal years beginning after December 15, 2017. We have adopted the revenue standard as of January 1, 2018, which did not have a material impact on our consolidated financial statements. We have implemented changes to our accounting policies, internal controls, and disclosures to support the new standard, however, these changes were not material.

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 June 30, 2018, 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, 2017, 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

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:

None

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: August 13, 2018

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: August 13, 2018

/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: August 13, 2018

/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 June 30, 2018 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)
August 13, 2018

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 June 30, 2018 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)
August 13, 2018