UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended **September 30, 2018**

or

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

For the transition period from ________________ to ________________

Commission file number: **0-10394**

DATA I/O CORPORATION

(Exact name of registrant as specified in its charter)

Washington	91-0864123
(State or other jurisdiction of incorporation or organization)	(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 X No __

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes X 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 X

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 _ NoX

Shares of Common Stock, no par value, outstanding as of October 30, 2018:

8,440,427

DATA I/O CORPORATION

FORM 10-Q

For the Quarter Ended September 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)

	September 30, 2018	December 31, 2017
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$18,902	$18,541
Trade accounts receivable, net of allowance for doubtful accounts of $52 and $73, respectively	2,824	3,769
Inventories	4,558	4,168
Other current assets	738	708
TOTAL CURRENT ASSETS	27,022	27,186
Property, plant and equipment – net	2,023	2,458
Income tax receivable	598	598
Other assets	220	45
TOTAL ASSETS	$29,863	$30,287
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	$1,286	$1,301
Accrued compensation	2,211	3,536
Deferred revenue	1,775	1,787
Other accrued liabilities	794	858
Income taxes payable	358	218
TOTAL CURRENT LIABILITIES	6,424	7,700
Long-term other payables	414	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, 8,440,075 shares as of September 30, 2018 and 8,276,813 shares as of December 31, 2017	19,493	18,989
Accumulated earnings	3,047	2,089
Accumulated other comprehensive income	485	982
TOTAL STOCKHOLDERS' EQUITY	23,025	22,060
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$29,863	$30,287

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,	
	2018	**2017**	**2018**	**2017**
Net sales	$6,533	$9,596	$21,367	$25,955
Cost of goods sold	2,415	3,639	8,584	10,629
Gross margin	4,118	5,957	12,783	15,326
Operating expenses:				
Research and development	1,826	1,814	5,550	5,130
Selling, general and administrative	1,888	2,319	6,239	6,300
Total operating expenses	3,714	4,133	11,789	11,430
Operating income	404	1,824	994	3,896
Non-operating income (expense):				
Interest income	10	6	26	19
Gain on sale of assets	-	72	4	363
Foreign currency transaction gain (loss)	108	(66)	201	(158)
Total non-operating income	118	12	231	224
Income before income taxes	522	1,836	1,225	4,120
Income tax (expense)	(180)	(108)	(267)	(207)
Net income	$342	$1,728	$958	$3,913
Basic earnings per share	$0.04	$0.21	$0.11	$0.48
Diluted earnings per share	$0.04	$0.20	$0.11	$0.47
Weighted-average basic shares	8,439	8,201	8,361	8,112
Weighted-average diluted shares	8,507	8,467	8,516	8,400

See notes to consolidated financial statements

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	**2017**	**2018**	**2017**
Net income	$342	$1,728	$958	$3,913
Other comprehensive income:				
Foreign currency translation gain (loss)	(264)	248	(497)	602
Comprehensive income (loss)	$78	$1,976	$461	$4,515

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,	
	2018	**2017**
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net income	$958	$3,913
Adjustments to reconcile net income		
to net cash provided by (used in) operating activities:		
Depreciation and amortization	736	634
Gain on sale of assets	(4)	(363)
Equipment transferred to cost of goods sold	365	725
Share-based compensation	932	540
Net change in:		
Trade accounts receivable	905	(192)
Inventories	(521)	(766)
Other current assets	(54)	(33)
Accounts payable and accrued liabilities	(1,211)	1,497
Deferred revenue	(36)	(485)
Other long-term liabilities	(55)	(52)
Deposits and other long-term assets	(175)	18
Net cash provided by (used in) operating activities	1,840	5,436
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of property, plant and equipment	(668)	(1,642)
Net proceeds from sale of assets	4	363
Cash provided by (used in) investing activities	(664)	(1,279)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Net Proceeds from issuance of common stock, less payments for shares withheld to cover tax	(429)	(895)
Cash provided by (used in) financing activities	(429)	(895)
Increase (decrease) in cash and cash equivalents	747	3,262
Effects of exchange rate changes on cash	(386)	331
Cash and cash equivalents at beginning of period	18,541	11,571
Cash and cash equivalents at end of period	$18,902	$15,164
Supplemental disclosure of cash flow information:		
Cash paid during the period for:		
Income Taxes	$118	$82

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, 2018 and September 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 nine months ended September 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 September 30, 2018 deferred revenue was $1.9 million, of which $1.8 million will be recognized over the next twelve months, with 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 September 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 $298,000 and $272,000 of unrecognized tax benefits related to uncertain tax positions and a corresponding valuation allowance as of September 30, 2018 and December 31, 2017, respectively.

Tax years that remain open for examination include 2015 through 2018 in the United States of America. In addition, tax years from 2000 to 2014 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 2018, the FASB issued ASU 2018-15, "Intangibles" (ASU 2018-15). ASU 2018-15 applies in accounting for implementation costs incurred in a cloud computing arrangement that is a service contract where the guidance in ASC 350-40 for internal-use software shall apply to determine capitalization or expensing of implementation, training or data conversion costs. The standard becomes effective beginning January 1, 2020. We are in the process of evaluating the impact of adoption on 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 financing lease. The standard excludes leases of intangible assets or inventory. ASU 2018-11 provides lessors with a limited practical expedient. The standard becomes effective beginning January 1, 2019. We are in the process of evaluating the impact of adoption on our consolidated financial statements and have not determined the effect yet, which will include recording of right of use assets and liabilities for our leases and recognize a cumulative effect adjustment to the opening balance of retained earnings. 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.

NOTE 2 – INVENTORIES

Inventories consisted of the following components:

	September 30, 2018	December 31, 2017
(in thousands)		
Raw material	$2,696	$2,392
Work-in-process	1,396	1,091
Finished goods	466	685
Inventories	$4,558	$4,168

NOTE 3 – PROPERTY, PLANT AND EQUIPMENT, NET

Property and equipment consisted of the following components:

	September 30, 2018	December 31, 2017
(in thousands)		
Leasehold improvements	$399	$416
Equipment	5,565	5,279
Sales demonstration equipment	954	1,315
	6,918	7,010
Less accumulated depreciation	4,895	4,552
Property and equipment, net	$2,023	$2,458

NOTE 4 – OTHER ACCRUED LIABILITIES

Other accrued liabilities consisted of the following components:

(in thousands)	September 30, 2018	December 31, 2017
Product warranty	$472	$530
Sales return reserve	87	80
Other taxes	99	109
Other	136	139
Other accrued liabilities	$794	$858

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

(in thousands)	September 30, 2018
Liability, beginning balance	$530
Net expenses	737
Warranty claims	(737)
Accrual revisions	(58)
Liability, ending balance	$472

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:

(in thousands)	Operating Leases
2018 (remaining)	$252
2019	915
2020	913
2021	749
2022	232
Thereafter	-
Total	$3,061

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 facility located in Shanghai, China which we moved into during the first quarter of 2016. This 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. This 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 September 30, 2018, the purchase commitments and other obligations totaled $1,486,000 of which all but $5,000 are expected to be paid over the next twelve months.

NOTE 7 – CONTINGENCIES

As of September 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		Nine Months Ended	
	Sep. 30, 2018	Sep. 30, 2017	Sep. 30, 2018	Sep. 30, 2017
(in thousands except per share data)				
Numerator for basic and diluted earnings per share:				
Net income	$342	$1,728	$958	$3,913
Denominator for basic earnings per share:				
Weighted-average shares	8,439	8,201	8,361	8,112
Employee stock options and awards	68	266	155	288
Denominator for diluted earnings per share:				
Adjusted weighted-average shares & assumed conversions of stock options	8,507	8,467	8,516	8,400
Basic and diluted earnings per share:				
Total basic earnings per share	$0.04	$0.21	$0.11	$0.48
Total diluted earnings per share	$0.04	$0.20	$0.11	$0.47

Options to purchase 25,000 and 8,425 shares were outstanding as of September 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 nine months ended September 30, 2018 and 2017, respectively, was as follows:

	Three Months Ended		Nine Months Ended	
	Sep. 30, 2018	Sep. 30, 2017	Sep. 30, 2018	Sep. 30, 2017
(in thousands)				
Cost of goods sold	$4	$4	$19	$14
Research and development	56	39	205	127
Selling, general and administrative	222	130	708	399
Total share-based compensation	$282	$173	$932	$540

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

	Three Months Ended		Nine Months Ended	
	Sep. 30, 2018	Sep. 30, 2017	Sep. 30, 2018	Sep. 30, 2017
Restricted Stock	1,000	51,000	206,856	286,600
Stock Options	-	25,000	-	25,000

There were no stock option awards granted during the three and nine months ended September 30, 2018.

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 September 30, 2018 are:

	Sep. 30, 2018
Unamortized future equity compensation expense (in thousands)	$3,096
Remaining weighted average amortization period (in years)	2.83

NOTE 10– SHARE REPURCHASE PROGRAM

No stock repurchase programs were in effect during the quarter ending September 30, 2018 and 2017.

On October 31, 2018, our Board of Directors approved a share repurchase program with provisions to buy back up to $2 million dollars of our stock during the next one year period.

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 and tariff 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 September 30, 2018 deferred revenue was $1.9 million which consisted of $1.8 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

Net sales by product line	Three Months Ended Sep. 30, 2018	Change	Three Months Ended Sep. 30, 2017	Nine Months Ended Sep. 30, 2018	Change	Nine Months Ended Sep. 30, 2017
(in thousands)						
Automated programming systems	$5,195	(33.1%)	$7,766	$16,849	(20.5%)	$21,193
Non-automated programming systems	1,338	(26.9%)	1,830	4,518	(5.1%)	4,762
Total programming systems	$6,533	(31.9%)	$9,596	$21,367	(17.7%)	$25,955

Net sales by location	Three Months Ended Sep. 30, 2018	Change	Three Months Ended Sep. 30, 2017	Nine Months Ended Sep. 30, 2018	Change	Nine Months Ended Sep. 30, 2017
(in thousands)						
United States	$809	32.6%	$610	$2,168	(3.9%)	$2,256
% of total	12.4%		6.4%	10.1%		8.7%
International	$5,724	(36.3%)	$8,986	$19,199	(19.0%)	$23,699
% of total	87.6%		93.6%	89.9%		91.3%

Net sales in the third quarter of 2018 were $6.5 million, compared with $9.6 million in the third 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. The unusually strong demand in 2017 make the 2018 figures look comparatively weak. International sales represented 87.6% of total sales for the third quarter, compared to 93.6% during the same period in 2017. Unfavorable currency exchange rate changes reduced the third quarter of 2018 revenue by approximately $89,000, compared to the same period in 2017.

Revenue breakdown for the quarter was approximately 62% equipment, 25% consumables and 13% software and services.

Order bookings were $7.0 million in the third quarter of 2018, down from the prior year period of $8.2 million. Automotive Electronics OEM business was 62% of orders in the third quarter of 2018 compared to 51% in the prior year period. Programming Centers related business was 12% of orders in the third quarter of 2018 compared to 27% in the prior year period. 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 third quarter of 2018 was $1.9 million ($1.8 million current and $82,000 long term) compared to $2.5 million at the end of the second quarter of 2018, $1.6 million at the end of the third quarter of 2017 and $1.9 million at December 31, 2017. Backlog at the end of the third quarter of 2018 was $3.1 million compared to $1.9 million at the end of the second quarter of 2018, $4.6 million at the end of the third quarter of 2017 and $4.0 million at December 31, 2017.

For the nine months ending September 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 third quarter, except for the first nine months currency exchange rate changes were net favorable and increased revenue by $463,000. 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			Nine Months Ended		
	Sep. 30, 2018	Change	Sep. 30, 2017	Sep. 30, 2018	Change	Sep. 30, 2017
(in thousands)						
Gross margin	$4,118	(30.9%)	$5,957	$12,783	(16.6%)	$15,326
Percentage of net sales	63.0%		62.1%	59.8%		59.0%

For the third quarter of 2018, gross margin in dollars was down primarily as a result of the lower sales volume. Gross margin as a percentage of sales was 63.0%, compared to 62.1% in the third quarter of 2017 and 59.0% in the second quarter of 2018. The increase in gross margin as a percentage of revenues when compared to both periods was due to a favorable product mixas well as comparatively favorable factory variances during the quarter. Unfavorable currency exchange rate changes reduced the third quarter of 2018 gross margin by approximately $51,000, compared to the same period in 2017.

For the first nine 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 third quarter except for the first nine months currency exchange rate changes were net favorable and increased gross margin by $166,000. 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, 2018	Change	Sep. 30, 2017	Sep. 30, 2018	Change	Sep. 30, 2017
(in thousands)						
Research and development	$1,826	0.7%	$1,814	$5,550	8.2%	$5,130
Percentage of net sales	28.0%		18.9%	26.0%		19.8%

Research and development ("R&D") were relatively flat in the third quarter of 2018 compared to the same period in 2017, however expenses included additional and higher personnel costs, stock based compensation and SentriX NRE charges, which mostly supported our Managed and Secure Programming initiative, offset in part by lower incentive compensation cost.

For the first nine months of 2018 compared to the same period in 2017, the increase in R&D expense was generally due to the higher costs in the first two quarters of 2018 which declined slightly in the third quarter but were related to the same factors discussed above for the third quarter.

SELLING, GENERAL AND ADMINISTRATIVE

	Three Months Ended			Nine Months Ended		
	Sep. 30, 2018	Change	Sep. 30, 2017	Sep. 30, 2018	Change	Sep. 30, 2017
(in thousands)						
Selling, general & administrative	$1,888	(18.6%)	$2,319	$6,239	(1.0%)	$6,300
Percentage of net sales	28.9%		24.2%	29.2%		24.3%

Selling, General and Administrative ("SG&A") expenses for the third quarter of 2018 were lower than the third quarter of 2017, with lower incentive compensation and commissions, offset by higher stock based compensation, marketing related activity and depreciation.

For the first nine months of 2018 compared to the same period in 2017, the decrease 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, 2018	Change	Sep. 30, 2017	Sep. 30, 2018	Change	Sep. 30, 2017
(in thousands)						
Interest income	$10	66.7%	$6	$26	36.8%	$19

Interest income increased in the third quarter and for the first nine 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			Nine Months Ended		
	Sep. 30, 2018	Change	Sep. 30, 2017	Sep. 30, 2018	Change	Sep. 30, 2017
(in thousands)						
Income tax (expense)	($180)	66.7%	($108)	($267)	29.0%	($207)

Income tax (expense) for the third quarter of 2018 and for the first nine months of 2018 was higher 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 $7 million as of September 30, 2018. Our deferred tax assets and valuation allowance have been reduced by approximately $298,000 and $272,000 associated with the requirements of accounting for uncertain tax positions as of September 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)	Sep. 30, 2018	Change	Dec. 31, 2017
Working capital	$20,598	$1,112	$19,486

At September 30, 2018 our cash position was $18.9 million, with $12.0 million in the United States and the balance in foreign subsidiaries. We expect our receivables collections to return to more normal levels during the fourth quarter, which should result in an offset to the higher cash position achieved during the third quarter.

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 at the U.S. headquarters, 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.

SHARE REPURCHASE PROGRAM

No stock repurchase programs were in effect during the quarter ending September 30, 2018 and 2017.

On October 31, 2018, our Board of Directors approved a share repurchase program with provisions to buy back up to $2 million dollars of our stock during the next one year period.

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 $742,000 in the third quarter of 2018 compared to $2.1 million in the third quarter of 2017. Adjusted EBITDA, excluding equity compensation (a non-cash item) was $1.0 million in the third quarter of 2018, compared to $2.3 million in the third quarter of 2017.

EBITDA was $1.9 million for the first nine months of 2018 compared to $4.7 million in the first nine months of 2017. Adjusted EBITDA, excluding equity compensation, was $2.9 million for the first nine months of 2018, compared to $5.3 million for the first nine 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		Nine Months Ended	
	Sep. 30, 2018	Sep. 30, 2017	Sep. 30, 2018	Sep. 30, 2017
(in thousands)				
Net Income	$342	$1,728	$958	$3,913
Interest (income)	(10)	(6)	(26)	(19)
Taxes	180	108	267	207
Depreciation & amortization	230	306	736	634
EBITDA earnings	$742	$2,136	$1,935	$4,735
Equity compensation	282	173	932	540
Adjusted EBITDA earnings, excluding equity compensation	$1,024	$2,309	$2,867	$5,275

Recent Accounting Pronouncements

In 2018, the FASB issued ASU 2018-15, "Intangibles" (ASU 2018-15). ASU 2018-15 applies in accounting for implementation costs incurred in a cloud computing arrangement that is a service contract where the guidance in ASC 350-40 for internal-use software shall apply to determine capitalization or expensing of implementation, training or data conversion costs. The standard becomes effective beginning January 1, 2020. We are in the process of evaluating the impact of adoption on 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 financing lease. The standard excludes leases of intangible assets or inventory. ASU 2018-11 provides lessors with a limited practical expedient. The standard becomes effective beginning January 1, 2019. We are in the process of evaluating the impact of adoption on our consolidated financial statements and have not determined the effect yet, which will include recording of right of use assets and liabilities for our leases and recognize a cumulative effect adjustment to the opening balance of retained earnings. 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.

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, 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:**

10.35 1st Amendment to Negotiation Protocol executed on September 24,2018 between Data I/O Corporation and Robert Bosch GmbH (Portions of this exhibit have been omitted based on a request for confidential treatment made to the SEC. The omitted portions of these exhibits have been filed separately with the SEC.)

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 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: November 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: November 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 September 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)
November 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 September 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)
November 13, 2018

Exhibit 10.35

1st Amendment to Negotiation Protocol

Document no.:	CM 46001350_N1-Z4A
Date:	2018.08.30 (YYYY.MM.DD)
Supplier no.:	394644

Always quote for reference!

Data I/O Corporation

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USA

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Visitors Address: Robert Bosch GmbH, CP/TME4, Robert-Bosch-Straße 200, DE-31139 Hildesheim, Germany

1st Amendment of Negotiation Protocol for the purchase of:

"Pre-Programmer"

We, Robert Bosch GmbH (hereinafter referred to as "BOSCH") conducted negotiations with Data I/O on 2018.08.29 concerning the 1st amendment for negotiation protocol.

Technical execution and scope of supply in accordance with attached price list dated 2018.08.29

The following items form the 1st amendment to the negotiation protocol no. CM 46001350-Z4A dated 2016.06.24.
The same conditions of delivery and agreements shall apply to you in the above mentioned negotiation protocol if not stated otherwise here.

The binding dates, the terms of contract agreed in this Negotiation Protocol and the total net fixed price were agreed upon with Mr. Anthony Ambrose and Mr. Helmut Pflaum acting on behalf of Data I/O in person on 2018.08.29.

Item	Material/Description	Quantity	Price/Year [USD]
001	Full Service Contract FSDSC and APS-Contract Flat Rate	1	[redacted]
002	UFS Price List		New position
003	Payment Terms		[redacted]

The total net value stated is a fixed price.

1. Purchasing / Amendment Procedure

Amendments within the project will be quoted with the confirmed project-discount of <percentage> and will be listed within your supplementary offer.

Amendments have to be contractually confirmed with the BOSCH purchasing department in writing before realization.

2. Property and Right of Use

BOSCH acquires title to the documents prepared in the context of the order and to product-specific documents prepared for BOSCH (drawings, CAD data, etc.), hereinafter referred to as "DOCUMENTS". The DOCUMENTS have to be handed over to BOSCH after completion of the work in the form set forth in section 24 "Confidentiality Obligation and Reservation of Rights" below.

BOSCH receives from Data I/O a non-exclusive, irrevocable, unrestricted as to place, time and subject, and sub-licensable right to use the DOCUMENTS. The right of usage includes any use, modification and reproduction of the DOCUMENTS.

3. Utilization of Machine Data

Data I/O assures that all process data that is generated in the context of the manufacturing process for BOSCH products while utilizing the MAE (e.g. process parameters, process programs, equipment configuration including all changes, product information, process results, condition of equipment, log files, failure messages etc.), herein after referred to as MACHINE DATA, can be read by BOSCH on its own, without the support of the <SUPPLIER> or a third party, and can be utilized in a BOSCH readable format.

Data I/O assures that the MAE is constructed in such manner, that Data I/O or a third party will not have access to the MACHINE DATA without assistance and approval from BOSCH. BOSCH is entitled to the unlimited right of utilization and exploitation of the MACHINE DATA.

BOSCH can provide the MACHINE DATA to the Data I/O in need for maintenance, repair or failure analysis. Data I/O may use the MACHINE DATA exclusively in the context of maintenance, repair or failure analysis.

A utilization of the MACHINE DATA beyond this scope, especially the utilization of the MACHINE DATA for development and realization of business models of <SUPPLIER> or a passing of the MACHINE DATA to a third party is inadmissible.

4. [redacted] Terms of Payment

Meeting at Data I/O GmbH in Gräfelfing with following discussion points as initial position:

1. Bosch requests a [redacted] for the APS contract
2. Data I/O requests a prolongation of the current negotiation protocol from Bosch before validation end 2021.06.30 until new end 2023.12.31 (YYYY.MM.DD).
3. Payment terms:

   The supply of products from Supplier to Bosch is governed by the provisions of the negotiation protocol CM 46001350-Z4A dated 2016.06.24 (YYYY.MM.DD).
   Currently the payment terms are agreed as follows.:
   MAE
   [redacted] % immediately following complete delivery of the MAE to our plant and receipt of the invoice
   [redacted] % immediately following final acceptance in our factory, however 3 (three) months after delivery at the latest
   SERVICE, SPAREPARTS, WEARABLES
   [redacted] days of receipt and no early payment discounts apply.

   Bosch would like to change of the current payment terms and suggests the following new regulation:

   „Machines (MAE)
   The invoice is to be issued for 100 % of the purchase price agreed, of which the following is payable:
   [redacted] % after complete delivery of Pre-Programer in our plant and receipt of invoice,
   [redacted] % after final acceptance at our factory, the latest though 3 months after delivery, if final acceptance is delayed for reasons for which BOSCH is accountable for
   in both cases without deductions, within [redacted] days net.
   Data I/O shall request payment of the remainder from the BOSCH factory in writing.

   Spare-, wear and tear parts & services (MAE)

MRO shall be paid within [redacted] days net, following complete delivery and receipt of the invoice and no early payment discounts apply. "

The respective counter party requests the following concerning these topics:

1. Supplier offers [redacted] for APS and Full Service Contracts according attachments.
2. Bosch agrees to prolong the negotiation protocol until 2023.12.31.
3. Supplier is willing to [redacted] the payment terms to [redacted] days maximum. Supplier points out that the [redacted] of the payment terms causes the following additional costs: …

After the evaluation of various solutions, the parties agree on the following compromise to be considered in the final pricing of this 1st amendment of the negotiation protocol:

1. Bosch agrees [redacted] for APS and Full Service Contracts according attachments.
2. Bosch agrees to prolong the negotiation protocol until 2023.12.31
3. In return Supplier accepts [redacted] of the payment terms to
   MAE: [redacted] days
   MCS: [redacted] days upon receipt of both the invoice and the goods or performance of the services.

5. Payment terms

Machines (MAE)
The invoice is to be issued for 100 % of the purchase price agreed, of which the following is payable:
[redacted] % after complete delivery of Pre-Programer in our plant and receipt of invoice,
[redacted] % after final acceptance at our factory, the latest though 3 months after delivery, if final acceptance is delayed for reasons for which BOSCH is accountable for
in both cases without deductions, within [redacted] days net.
Data I/O shall request payment of the remainder from the BOSCH factory in writing.

SERVICE, SPAREPARTS, WEARABLES

[redacted] % immediately
Invoices shall be payable within [redacted] days of receipt and no early payment discounts apply.

In no case do payments by BOSCH imply acceptance of the goods and services delivered as being in conformity with the contract.

In case BOSCH has outstanding claims towards Data I/O, BOSCH shall be entitled to withhold payments. Delivery dates agreed in the specific Purchase Orders shall not be affected thereby.

6. The following documents form integral components of this Negotiation Protocol and are already in the possession of SUPPLIER:

2018 Aug 29 Service and Support Bosch CM _ V4.ppx
DataIO_ServiceContract from Bosch 2018 08 2 V2.xlxs
2018 Aug 29 UFS price list .xlxs

7. Commencement and Termination of the Negotiation Protocol

The 1st Negotiation Protocol shall become effective at 2018.10.01 and terminates at 2023.12.31. For Purchase Orders executed in accordance with the purchase option in section 1.1 within this timeframe, the conditions of the Negotiation Protocol apply accordingly even though the Negotiation Protocol has expired.

8. 27. Changes

Changes and supplements to this Negotiation Protocol, including this Section 27, and any postponement to the delivery dates agreed in the concrete purchase orders and/or changes to the scope of supply and services must be made in writing to be valid.

9. 28. Ineffectiveness

If any provision of this Negotiation Protocol should be or become ineffective, this shall not affect the validity of the remaining provisions of this Negotiation protocol. In such a case, the respective provision is to be replaced by a ruling approximating most closely the economic content of the original provision. The same shall apply to any gaps in the Negotiation protocol.

10. Applicable Law / Jurisdiction

This Negotiation Protocol as well as all agreements hereunder and disputes arising herefrom shall be governed by German law, excluding the rules on conflicts of laws and UN Convention on Contracts.

The courts of Stuttgart have exclusive jurisdiction over contractual disputes if all the disputing parties have their registered office in Germany, in Switzerland or in any country of the European Union. In cases before local courts, the local court of Stuttgart (*Amtsgericht Stuttgart*, 70190 Stuttgart) shall have jurisdiction. In all other cases, contractual disputes shall be definitively adjudicated in accordance with the arbitration rules of the International Chamber of Commerce by one or more arbitrators appointed in accordance with such rules. The place of arbitration is Stuttgart, Germany, unless otherwise agreed by the parties in dispute. The arbitration language is English. The parties in dispute shall treat in confidence all information which they receive with regard to arbitration proceedings in accordance with this provision, including the existence of arbitration proceedings. In judicial and/or arbitration proceedings, they shall only disclose such information to the extent that this is necessary to exercise their rights. The chairman or a sole arbitrator must be of different nationality to the parties in dispute. Subject to any other ruling returned by the arbitration tribunal, the parties in dispute shall continue to perform the contracts affected by the dispute.

Please confirm to us the agreements reached by signing and returning this "Negotiation Protocol".

Robert Bosch GmbH		**Supplier**
		Data I/O Corporation
/S/ Lars Göbel	/S/ Walter Schäfer	/S/Joel S Hatlen
Signature	Signature	Signature of Supplier
Lars Göbel	Walter Schäfer	September 24, 2018
Name	Name	Date
CP/TME	CP/PIR-EN	Company Stamp
Department	Department	
19.9.18	19. SEP. 2018	
Date	Date	