

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 **March 31, 2020**
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
425-881-6444

(Address of principal executive offices, including zip code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock	DAIO	NASDAQ

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§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 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

APPLICABLE ONLY TO ISSUERS INVOLVED IN BANKRUPTCY PROCEEDINGS DURING THE PREVIOUS FIVE YEARS:

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Section 12,13 or 15(d) of the Security Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court. Yes No

Shares of Common Stock, no par value, outstanding as of April 30, 2020: 8,221,535

DATA I/O CORPORATION
FORM 10-Q
For the Quarter Ended March 31, 2020

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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)**

	March 31, 2020	December 31, 2019
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	\$13,814	\$13,936
Trade accounts receivable, net of allowance for doubtful accounts of \$79 and \$80, respectively	3,107	4,099
Inventories	4,804	5,020
Other current assets	1,709	924
TOTAL CURRENT ASSETS	23,434	23,979
Property, plant and equipment – net	1,813	1,668
Income tax receivable	-	640
Other assets	1,850	1,994
TOTAL ASSETS	\$27,097	\$28,281
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	\$1,072	\$1,151
Accrued compensation	1,214	1,541
Deferred revenue	1,421	1,387
Other accrued liabilities	1,286	1,372
Income taxes payable	28	31
TOTAL CURRENT LIABILITIES	5,021	5,482
Operating lease liabilities	1,045	1,178
Long-term other payables	67	91
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, 8,221,447 shares as of March 31, 2020 and 8,212,748 shares as of December 31, 2019	19,001	18,748
Accumulated earnings	1,954	2,508
Accumulated other comprehensive income (loss)	9	274
TOTAL STOCKHOLDERS' EQUITY	20,964	21,530
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$27,097	\$28,281

DATA I/O CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share amounts)
(UNAUDITED)

	Three Months Ended	
	March 31,	
	2020	2019
Net sales	\$4,785	\$6,058
Cost of goods sold	<u>2,001</u>	<u>2,373</u>
Gross margin	2,784	3,685
Operating expenses:		
Research and development	1,582	1,681
Selling, general and administrative	<u>1,811</u>	<u>1,975</u>
Total operating expenses	<u>3,393</u>	<u>3,656</u>
Operating income (loss)	(609)	29
Non-operating income:		
Interest income	8	12
Gain on sale of assets	-	60
Foreign currency transaction gain (loss)	<u>52</u>	<u>(104)</u>
Total non-operating income	<u>60</u>	<u>(32)</u>
Income (loss) before income taxes	(549)	(3)
Income tax (expense) benefit	<u>(5)</u>	<u>29</u>
Net income (loss)	<u><u>(\$554)</u></u>	<u><u>\$26</u></u>
Basic earnings (loss) per share	(\$0.07)	\$0.00
Diluted earnings (loss) per share	(\$0.07)	\$0.00
Weighted-average basic shares	8,219	8,303
Weighted-average diluted shares	8,219	8,417

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

	Three Months Ended	
	March 31,	
	<u>2020</u>	<u>2019</u>
Net income (loss)	(\$554)	\$26
Other comprehensive income (loss):		
Foreign currency translation gain (loss)	<u>(265)</u>	<u>128</u>
Comprehensive income (loss)	<u><u>(\$819)</u></u>	<u><u>\$154</u></u>

DATA I/O CORPORATION
CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY
(in thousands, except share amounts)
(UNAUDITED)

	Common Stock		Retained Earnings (Deficit)	Accumulated and Other Comprehensive Income (Loss)	Total Stockholders' Equity
	Shares	Amount			
Balance at December 31, 2018	8,338,628	\$19,254	\$3,695	\$408	\$23,357
Repurchased shares	(57,612)	(313)			(313)
Stock awards issued, net of tax withheld	4,046	(8)	-	-	(8)
Issuance of stock through: ESPP	2,763	15	-	-	15
Share-based compensation	-	287	-	-	287
Net income (loss)	-	-	26	-	26
Other comprehensive income (loss)	-	-	-	128	128
Balance at March 31, 2019	8,287,825	\$19,235	\$3,721	\$536	\$23,492
Balance at December 31, 2019	8,212,748	\$18,748	\$2,508	\$274	\$21,530
Repurchased shares	-	-			-
Stock awards issued, net of tax withheld	5,190	(10)	-	-	(10)
Issuance of stock through: ESPP	3,509	14	-	-	14
Share-based compensation	-	249	-	-	249
Net income (loss)	-	-	(554)	-	(554)
Other comprehensive income (loss)	-	-	-	(265)	(265)
Balance at March 31, 2020	8,221,447	\$19,001	\$1,954	\$9	\$20,964

See notes to consolidated financial statements

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

	For the Three Months Ended March 31,	
	2020	2019
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net income (loss)	(\$554)	\$26
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:		
Depreciation and amortization	197	204
Gain on sale of assets	-	(60)
Equipment transferred to cost of goods sold	(2)	(12)
Share-based compensation	249	287
Net change in:		
Trade accounts receivable	973	(931)
Inventories	189	(514)
Other current assets	(792)	(234)
Accounts payable and accrued liabilities	(468)	(2,050)
Deferred revenue	24	19
Other long-term liabilities	(135)	(312)
Deposits and other long-term assets	771	313
Net cash provided by (used in) operating activities	452	(3,264)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of property, plant and equipment	(340)	(175)
Net proceeds from sale of assets	-	60
Cash provided by (used in) investing activities	(340)	(115)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Net proceeds from issuance of common stock, less payments for shares withheld to cover tax	4	6
Repurchase of common stock	-	(312)
Cash provided by (used in) financing activities	4	(306)
Increase (decrease) in cash and cash equivalents	116	(3,685)
Effects of exchange rate changes on cash	(238)	124
Cash and cash equivalents at beginning of period	13,936	18,343
Cash and cash equivalents at end of period	\$13,814	\$14,782
Supplemental disclosure of cash flow information:		
Cash paid during the period for:		
Income taxes	\$63	\$66

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 March 31, 2020 and March 31, 2019 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, 2019 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 months ended March 31, 2020 are not necessarily indicative of the results that may be expected for the year ending December 31, 2020. 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, 2019.

Revenue Recognition

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.

We have elected the practical expedient to expense contract acquisition costs, primarily sales commissions, for contracts with terms of one year or less and will capitalize and amortize incremental costs with terms that exceed one year. During 2020 and 2019, the impact of capitalization of incremental costs for obtaining contracts was immaterial. We have made a sales tax policy election to exclude sales, use, value added, some excise taxes and other similar taxes from the measurement of the transaction price.

We recognize revenue upon transfer of control of the promised products or services to customers in an amount that reflects the consideration we expect to receive in exchange for those products or services. 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 a separate performance obligation. These systems are standard products with published product specifications and are configurable with standard options. The evidence that these systems could be deemed as accepted was based upon having standardized factory production of the units, results from batteries of tests of product performance to our published specifications, quality inspections and installation standardization, as well as past product operation validation with the customer and the history provided by our installed base of products upon which the current versions were based.

The revenue related to products requiring installation that is perfunctory is recognized upon transfer of control of the product to customers, which generally is at the time of shipment. Installation that is considered perfunctory includes any installation that is expected to be performed by other parties, such as distributors, other vendors, or the customers themselves. This considers the complexity, skill and training needed as well as customer expectations regarding installation.

We enter into arrangements with multiple performance obligations that arise during the sale of a system that includes an installation component, a service and support component and a software maintenance component. The transaction price is allocated to the separate performance obligations on relative standalone sales price. We allocate the transaction price 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 performance obligations, we use the

value of the discount given to distributors who perform these components. For software maintenance performance obligations, we use what we charge for annual software maintenance renewals after the initial year the system is sold. Revenue is recognized on the system sale based on shipping terms, installation revenue is recognized after the installation is performed, and hardware service and support and software maintenance revenue is recognized ratably over the term of the agreement, typically one year. Deferred revenue includes service, support and maintenance contracts and represents the undelivered performance obligation of agreements that are typically for one year.

When we sell software separately, we recognize revenue upon the transfer of control of the software, which is generally upon shipment, provided that only inconsequential performance obligations remain on our part and substantive acceptance conditions, if any, have been met.

We recognize revenue when there is an approved contract that both parties are committed to perform, both parties' rights have been identified, the contract has substance, collection of substantially all the consideration is probable, the transaction price has been determined and allocated over the performance obligations, the performance obligations including substantive acceptance conditions, if any, in the contract have been met, the obligation is not contingent on resale of the product, the buyer's obligation would not be changed in the event of theft, physical destruction or damage to the product, the buyer acquiring the product for resale has economic substance apart from us and we do not have significant obligations for future performance to directly bring about the resale of the product by the buyer. We establish a reserve for sales returns based on historical trends in product returns and estimates for new items. Payment terms are generally 30 days from shipment.

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

The following table represents our revenues by major categories:

	Three Months Ended		
	March 31, 2020	Change	March 31, 2019
<u>Net sales by type</u> (in thousands)			
Equipment Sales	\$2,587	(30.3%)	\$3,711
Adapter Sales	1,345	(7.9%)	1,461
Software and Maintenance Sales	853	(3.7%)	886
Total	<u>\$4,785</u>	<u>(21.0%)</u>	<u>\$6,058</u>

Share-Based Compensation

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

Income taxes are computed at current enacted tax rates, less tax credits using the asset and liability method. Deferred taxes are adjusted both for items that do not have tax consequences and for the cumulative effect of any changes in tax rates from those previously used to determine deferred tax assets or liabilities. Tax provisions include amounts that are currently payable, changes in deferred tax assets and liabilities that arise because of temporary differences between the timing of when items of income and expense are recognized for financial reporting and income tax purposes, and any changes in the valuation allowance caused by a change in judgment about the realization of the related deferred tax assets. A valuation allowance is established when necessary to reduce deferred tax assets to amounts expected to be realized. The CARES Act, enacted in Q1 2020, accelerated the AMT credit refund of \$640,000 to be a current asset instead of non-current.

Recently Adopted Accounting Pronouncements

We adopted the new lease accounting standard, ASC 842, on January 1, 2019 using the modified retrospective transition method, and recorded a balance sheet adjustment on the date of adoption. In 2018, we accounted for leases under ASC 840. The new lease standard requires lessees to recognize right-of-use assets and lease liabilities on the balance sheet for operating leases, and also requires additional quantitative and qualitative disclosures to enable users of the financial statements to assess the amount, timing and uncertainty of cash flows arising from leases. In adopting ASC 842, we utilized certain practical expedients available under the standard. These practical expedients include waiving reassessment of conclusions reached under the previous lease standard as to whether contracts contain leases, not recording right-of-use assets or lease liabilities for leases with terms of 12 months or less, how to classify leases identified and how to account for initial direct costs incurred. We also utilized the practical expedient to use hindsight as of the date of adoption to determine the terms of our leases and to evaluate our right-of-use assets for impairment.

See Note 5 of the accompanying notes to the condensed consolidated financial statements for additional information regarding our operating leases.

NOTE 2 – INVENTORIES

Inventories consisted of the following components:

	March 31, 2020	December 31, 2019
(in thousands)		
Raw material	\$2,159	\$2,416
Work-in-process	1,719	1,832
Finished goods	926	772
Inventories	<u>\$4,804</u>	<u>\$5,020</u>

NOTE 3 – PROPERTY, PLANT AND EQUIPMENT, NET

Property and equipment consisted of the following components:

	March 31, 2020	December 31, 2019
(in thousands)		
Leasehold improvements	\$390	\$395
Equipment	5,575	5,606
Sales demonstration equipment	979	778
	<u>6,944</u>	<u>6,779</u>
Less accumulated depreciation	5,131	5,111
Property and equipment, net	<u>\$1,813</u>	<u>\$1,668</u>

NOTE 4 – OTHER ACCRUED LIABILITIES

Other accrued liabilities consisted of the following components:

	March 31, 2020	December 31, 2019
(in thousands)		
Lease liability - short term	\$640	\$678
Product warranty	361	367
Sales return reserve	77	77
Other taxes	90	126
Other	118	124
Other accrued liabilities	<u>\$1,286</u>	<u>\$1,372</u>

The changes in our product warranty liability for the three months ending March 31, 2020 are as follows:

	March 31, 2020
(in thousands)	
Liability, beginning balance	\$367
Net expenses	175
Warranty claims	(175)
Accrual revisions	(6)
Liability, ending balance	<u>\$361</u>

NOTE 5 – LEASES

Our leasing arrangements are primarily for facility leases we use to conduct our operations. The following table presents our future lease payments for long-term operating leases as of March 31, 2020:

	<u>Operating Lease Commitments</u>
(in thousands)	
2020 (remaining)	\$570
2021	685
2022	315
2023	90
2024	82
Thereafter	139
Total	<u>\$1,881</u>
Less Imputed interest	<u>(196)</u>
Total operating lease liabilities	<u>\$1,685</u>

Cash paid for operating lease liabilities for the three months ended March 31, 2020 and 2019 were \$185,000 and \$196,000 respectively. There were two new leases during the three months ended March 31, 2020.

The following table presents supplemental balance sheet information related to leases as of March 31, 2020:

	<u>Balance at March 31, 2020</u>	<u>Balance at December 31, 2019</u>
(in thousands)		
Right-of-use assets (Long-term other assets)	\$1,430	\$1,574
Lease liability-short term (Other accrued liabilities)	640	678
Lease liability-long term (Long-term other payables)	1,045	1,178

At March 31, 2020, the weighted average remaining lease term is 3.24 and the weighted average discount rate used is 5%.

The components of our lease expense for the three months ended March 31, 2020 and 2019 include operating lease costs of \$163,000 and \$166,000 respectively, and short-term lease costs of \$7,000 and \$5,000 respectively.

Our real estate facility leases are described below:

During the third quarter of 2017, we amended our lease agreement, extending the lease for the Redmond, Washington headquarters facility through July 31, 2022. This lease is for approximately 20,460 square feet.

We signed a lease agreement effective November 1, 2015 that extends the lease for a facility located in Shanghai, China through October 31, 2021. 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 the lease 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 March 31, 2020, the purchase commitments and other obligations totaled \$1.3 million of which all but \$269,000 are expected to be paid over the next twelve months.

NOTE 7 – CONTINGENCIES

As of March 31, 2020, 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	
	March 31, 2020	March 31, 2019
(in thousands except per share data)		
Numerator for basic and diluted earnings (loss) per share:		
Net income (loss)	(\$554)	\$26
Denominator for basic earnings (loss) per share:		
Weighted-average shares	8,219	8,303
Employee stock options and awards	56	114
Denominator for diluted earnings (loss) per share:		
Adjusted weighted-average shares & assumed conversions of stock options	8,275	8,417
Basic and diluted earnings (loss) per share:		
Total basic earnings (loss) per share	(\$0.07)	\$0.00
Total diluted earnings (loss) per share	(\$0.07)	\$0.00

Options to purchase 25,000 and 25,000 shares respectively were outstanding as of March 31, 2020 and 2019, 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 months ended March 31, 2020 and 2019, respectively, were as follows:

	Three Months Ended	
	March 31, 2020	March 31, 2019
(in thousands)		
Cost of goods sold	\$6	\$5
Research and development	64	63
Selling, general and administrative	179	219
Total share-based compensation	<u>\$249</u>	<u>\$287</u>

Equity awards granted during the three months ended March 31, 2020 and 2019 were as follows:

	Three Months Ended	
	March 31, 2020	March 31, 2019
Restricted Stock Units	-	500
Stock Options	-	-

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 typically vest over four years and employee Non-Qualified stock options typically 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 March 31, 2020 are:

	March 31, 2020
Unamortized future equity compensation expense (in thousands)	\$2,133
Remaining weighted average amortization period (in years)	2.27

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, impact of novel coronavirus or COVID-19; industry prospects and trends; expected business reopening; industry partnerships; future results of operations or financial position; future spending; breakeven revenue point; expected market bottom or 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; trade issues and tariffs; 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 Quarterly 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, 2019, describe some, but not all, of the factors that could cause these differences.

OVERVIEW

After a strong Q4 2019, the seasonally soft Q1 was negatively impacted by COVID-19 related country and customer business shutdowns. In response to suddenly changing business conditions, we scaled back planned investments and reduced our current spending. Despite the spending reductions, we continue to invest with a long-term focus towards expanding our markets and creating unique value for our customers. This is true for both our traditional core business as well as the emerging security deployment business.

Our short term challenge continues to be operating in a cyclical, COVID-19 impacted, and rapidly evolving industry environment. We must balance industry changes, industry partnerships, new technologies, business geography shifts, exchange rate volatility, trade issues and tariffs, coronavirus impacts, 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 cash preservation, protecting our employee base and cost reductions.

We are focusing our research and development efforts in our strategic growth markets, namely automotive electronics and IoT new programming technologies, secure supply chain solutions, automated programming systems and their enhancements for the manufacturing environment and software. We are developing technology and products to securely provision new categories of semiconductors, including Secure Elements, Authentication Chips, and Secure Microcontrollers. We plan to deliver new programming technology and automated handling systems for managed and secure programming in the manufacturing environment. We continue to focus on extending the capabilities and support for our product lines and supporting the latest semiconductor devices, including various configurations of NAND Flash, e-MMC, UFS and microcontrollers on our newer products.

Our customer focus has been on global and strategic high-volume manufacturers in key market segments like automotive electronics, IoT, industrial controls and consumer electronics as well as programming centers.

Although the long-term prospects for our strategic growth markets should be good, these markets and our business have been, and are likely to continue to be, adversely impacted by the global pandemic of novel coronavirus or COVID-19.

As a global company with 92% of our 2019 sales in international markets, we have been and expect to continue to be significantly impacted by the COVID-19 pandemic, which started to impact us first in China and has since spread to Asia, USA, Europe and all other markets we serve. We have seen orders delayed due to the pandemic. 31% of our employees are based in Shanghai, China and we have a manufacturing facility there which manufactures some of our equipment and develops most of the adapters and algorithms for our equipment. Although our facilities in Shanghai, Redmond and Germany are currently operating in pandemic related restricted ways, we believe that our classification as essential by certain U.S. customer groups will continue to keep operations open. We source other components from China and other countries that are used to manufacture our equipment in China and in our Redmond, Washington facility and these components may not be readily available or subject to delays. In all of our locations many of our employees and executives are working from home and we are limiting visitors to our facilities as the pandemic continues. All of our facilities are subject to restrictions and closure by governmental entities. The pandemic has and may continue to impact our revenues, our ability to obtain key components and to manufacture our products, as well as sell, install and support our products around the world. We expect to continue to be impacted and respond to customer site restrictions on sales and service visits, travel restrictions, closed borders, cancelled trade shows and industry gatherings, and modifications in our operations to allow social distancing. See also the detailed discussion of the impacts of the coronavirus COVID-19 on our business and markets in Item 1A, Risk Factors in our annual report on Form 10-K. The pandemic could have the effect of heightening many of the other risks described in it. Annual projections on spending, growth, mix, and profitability have been and are likely to be further revised substantially as new information is obtained.

CRITICAL ACCOUNTING POLICY JUDGMENTS AND ESTIMATES

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires that we make estimates and judgments, which affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosures of contingent assets and liabilities. On an on-going basis, we evaluate our estimates, including those related to revenue recognition, 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: 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.

We have elected the practical expedient to expense contract acquisition costs, primarily sales commissions, for contracts with terms of one year or less and will capitalize and amortize incremental costs with terms that exceed one year. During 2019 and 2019, the impact of capitalization of incremental costs for obtaining contracts was immaterial. We have made a sales tax policy election to exclude sales, use, value added, some excise taxes and other similar taxes from the measurement of the transaction price.

We recognize revenue upon transfer of control of the promised products or services to customers in an amount that reflects the consideration we expect to receive in exchange for those products or services. 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 a separate

performance obligation. These systems are standard products with published product specifications and are configurable with standard options. The evidence that these systems could be deemed as accepted was based upon having standardized factory production of the units, results from batteries of tests of product performance to our published specifications, quality inspections and installation standardization, as well as past product operation validation with the customer and the history provided by our installed base of products upon which the current versions were based.

The revenue related to products requiring installation that is perfunctory is recognized upon transfer of control of the product to customers, which generally is at the time of shipment. Installation that is considered perfunctory includes any installation that is expected to be performed by other parties, such as distributors, other vendors, or the customers themselves. This considers the complexity, skill and training needed as well as customer expectations regarding installation.

We enter into arrangements with multiple performance obligations that arise during the sale of a system that includes an installation component, a service and support component and a software maintenance component. The transaction price is allocated to the separate performance obligations on relative standalone sales price. We allocate the transaction price 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 performance obligations, we use the value of the discount given to distributors who perform these components. For software maintenance performance obligations, we use what we charge for annual software maintenance renewals after the initial year the system is sold. Revenue is recognized on the system sale based on shipping terms, installation revenue is recognized after the installation is performed, and hardware service and support and software maintenance revenue is recognized ratably over the term of the agreement, typically one year. Deferred revenue includes service, support and maintenance contracts and represents the undelivered performance obligation of agreements that are typically for one year.

When we sell software separately, we recognize revenue upon the transfer of control of the software, which is generally upon shipment, provided that only inconsequential performance obligations remain on our part and substantive acceptance conditions, if any, have been met.

We recognize revenue when there is an approved contract that both parties are committed to perform, both parties' rights have been identified, the contract has substance, collection of substantially all the consideration is probable, the transaction price has been determined and allocated over the performance obligations, the performance obligations including substantive acceptance conditions, if any, in the contract have been met, the obligation is not contingent on resale of the product, the buyer's obligation would not be changed in the event of theft, physical destruction or damage to the product, the buyer acquiring the product for resale has economic substance apart from us and we do not have significant obligations for future performance to directly bring about the resale of the product by the buyer. We establish a reserve for sales returns based on historical trends in product returns and estimates for new items. Payment terms are generally 30 days from shipment.

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

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

Inventory: Inventories are stated at the lower of cost or 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 current and ongoing cyclical and COVID-19 related uncertain economic outlook for our industry and capital and geographic spending as well as income and current net deferred tax assets by entity and country, 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. At the current time, we expect, therefore, that reversals of the tax valuation allowance will take place as we are able to take advantage of the underlying tax loss or other attributes in carry forward or their use by future income or circumstances allow us to realize these attributes. 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 and an estimated forfeiture rate. 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 (in thousands)	Three Months Ended		
	March 31, 2020	Change	March 31, 2019
Automated programming systems	\$3,418	(28.8%)	\$4,803
Non-automated programming systems	1,367	8.9%	1,255
Total programming systems	<u>\$4,785</u>	<u>(21.0%)</u>	<u>\$6,058</u>

Net sales by location (in thousands)	Three Months Ended		
	March 31, 2020	Change	March 31, 2019
United States	\$272	(23.6%)	\$356
% of total	5.7%		5.9%
International	\$4,513	(20.9%)	\$5,702
% of total	94.3%		94.1%

Net sales by type (in thousands)	Three Months Ended		
	March 31, 2020	Change	March 31, 2019
Equipment sales	\$2,587	(30.3%)	\$3,711
Adapter sales	1,345	(7.9%)	1,461
Software and maintenance	853	(3.7%)	886
Total programming systems	<u>\$4,785</u>	<u>(21.0%)</u>	<u>\$6,058</u>

Net sales in the first quarter of 2020 were \$4.8 million, as compared with \$6.1 million in the prior year period and \$5.9 million in the fourth quarter of 2019. First quarter 2020 booking were \$4.3 million, as compared with \$6.2 million in the prior year period and \$6.9 million in fourth quarter of 2019.

After a stronger Q4 2019, business was down in Q1 2020, we believe, initially due to seasonality and continued cyclical downturn followed by country and customer business shutdowns related to COVID-19. We are now seeing business and factories reopening and resuming business in China. Many of our automotive electronics customers in the Americas and Europe shutdown operations in March, and are setting expectations for reopening in May with a gradual ramp up over the next few quarters to restore their previous business levels. We expect this to continue to impact our capacity related demand during this time frame.

On a geographic basis, international sales represented approximately 94.3% of total net sales for the first quarter of 2020 compared with 94.1% in the prior year period. Total capital equipment sales were 54% of revenues, adapters

were 28% and services revenues were 18% of revenues respectively in the first quarter of 2020 compared with 61% and 24% and 15% respectively for the first quarter of 2019.

Backlog at March 31, 2020 was \$2.3 million, as compared with \$2.9 million at 12/31/19 and up from \$2.0 million at March 31, 2019. Data I/O had \$1.5 million in deferred revenue at the end of the first quarter of 2020, consistent with the end of the fourth quarter of 2019.

GROSS MARGIN

	Three Months Ended		
	March 31, 2020	Change	March 31, 2019
(in thousands)			
Gross margin	\$2,784	(24.5%)	\$3,685
Percentage of net sales	58.2%		60.8%

Gross margin as a percentage of sales in the first quarter of 2020 was 58.2% as compared to 60.8% in the same period last year. For the first quarter of 2020 gross margin was primarily impacted by fixed costs being spread over lower revenues and a 2.7 point reduction relating to tariffs on U.S. and China trade. The revenue mix shift to increased percentages of adapters and recurring sales as a percentage of total revenues benefited gross margins as these generally have higher margins as compared to equipment sales. We expect the lower sales levels to continue to impact gross margin percentages in the second quarter of 2020 and start to reverse as business levels are restored.

RESEARCH AND DEVELOPMENT

	Three Months Ended		
	March 31, 2020	Change	March 31, 2019
(in thousands)			
Research and development	\$1,582	(5.9%)	\$1,681
Percentage of net sales	33.1%		27.7%

Research and development (“R&D”) expenses were lower in the first quarter of 2020 compared to the same period in 2019 primarily due to lower headcount related costs, incentive compensation and stock-based compensation. Due to expense management, planned increases in engineering spending have been deferred to later quarters.

SELLING, GENERAL AND ADMINISTRATIVE

	Three Months Ended		
	March 31, 2020	Change	March 31, 2019
(in thousands)			
Selling, general & administrative	\$1,811	(8.3%)	\$1,975
Percentage of net sales	37.8%		32.6%

Selling, General and Administrative (“SG&A”) expenses were lower in the first quarter of 2020 compared to the same period in 2019 primarily due to lower incentive compensation accruals and sales commissions as well as stock-based compensation. Cost control measures also significantly contributed to the reduction, with most other expense

categories lower than the prior year period. We expect this spending trend to continue in the second quarter of 2020 and start to reverse as business levels are restored.

INTEREST

	Three Months Ended		
	March 31, 2020	Change	March 31, 2019
(in thousands)			
Interest income	\$8	(33.3%)	\$12

Interest income was lower in the first quarter 2020 compared to the same period in 2019 primarily due to lower invested cash funds.

INCOME TAXES

	Three Months Ended		
	March 31, 2020	Change	March 31, 2019
(in thousands)			
Income tax benefit (expense)	(\$5)	(117.2%)	\$29

Income tax benefit (expense) for the first quarter of both 2020 and 2019, primarily related to foreign and state taxes. In addition, in the first quarter of 2019, a US domestic benefit was realized from converting remaining sequestered AMT credits, that had a full valuation allowance on such credits, into a receivable of approximately \$42,000, resulting from IRS rule changes allowing the release of previously sequestered AMT credits.

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 \$7.8 million as of March 31, 2020. As of March 31 for both 2020 and 2019, our deferred tax assets and valuation allowance have been reduced by approximately \$355,000 and \$317,000, respectively, associated with the requirements of accounting for uncertain tax positions. 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 including 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. The CARES Act, initiated in Q1 2020, accelerated the AMT credit refund of \$640,000 to be a current asset instead of non-current.

Financial Condition

LIQUIDITY AND CAPITAL RESOURCES

	March 31, 2020	Change	December 31, 2019
	(in thousands)		
Working capital	\$18,413	(\$84)	\$18,497

At March 31, 2020, our principal sources of liquidity consisted of existing cash and cash equivalents. Cash decreased \$122,000 from December 31, 2019 primarily from funding the operating loss and 2019 year end accruals, offset by collections of accounts receivable.

Net working capital at the end of the first quarter was \$18.4 million, down slightly from \$18.5 million at 12/31/19. The CARES Act acceleration of the AMT credit refund to current assets, offset some of the other declines in current assets. The company continues to have no debt.

Although we have no significant external capital expenditure plans currently, we expect that we will continue to make and manage carefully capital expenditures to support our business. We plan to increase our internally developed rental, security provisioning, 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 cyclical and seasonal industry, significant product development, customer support and 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 or managing down business levels related to COVID-19. We have implemented or have initiatives to implement geographic shifts in our operations, optimize real estate usage, reduce exposure to the impact of currency volatility and tariffs, increase product development differentiation, and reduce costs.

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. We are in the process of liquidating our subsidiary in Canada and repatriating its cash. For any repatriation, 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 (\$359,000) in the first quarter of 2020 compared to \$189,000 in the first quarter of 2019. Adjusted EBITDA, excluding equity compensation (a non-cash item) was (\$110,000) in the first quarter of 2020, compared to \$476,000 in the first quarter of 2019.

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	
	March 31,	
	2020	2019
(in thousands)		
Net Income (loss)	(\$554)	\$26
Interest (income)	(8)	(12)
Taxes	5	(29)
Depreciation & amortization	198	204
EBITDA earnings (loss)	(\$359)	\$189
Equity compensation	249	287
Adjusted EBITDA earnings (loss), excluding equity compensation	(\$110)	\$476

Recently Adopted Accounting Pronouncements

We adopted the new lease accounting standard, ASC 842, on January 1, 2019 using the modified retrospective transition method, and recorded a balance sheet adjustment on the date of adoption. In 2018, we accounted for leases under ASC 840. The new lease standard requires lessees to recognize right-of-use assets and lease liabilities on the balance sheet for operating leases, and also requires additional quantitative and qualitative disclosures to enable users of the financial statements to assess the amount, timing and uncertainty of cash flows arising from leases. In adopting ASC 842, we utilized certain practical expedients available under the standard. These practical expedients include waiving reassessment of conclusions reached under the previous lease standard as to whether contracts contain leases, not recording right-of-use assets or lease liabilities for leases with terms of 12 months or less, how to classify leases identified and how to account for initial direct costs incurred. We also utilized the practical expedient to use hindsight as of the date of adoption to determine the terms of our leases and to evaluate our right-of-use assets for impairment.

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 March 31, 2020, 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, 2019, which could materially affect our business, financial condition or future results. The risks described in our Annual Report on Form 10-K are not the only risks facing our Company. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition and/or operating results. There are no material changes to the Risk Factors described in our Annual Report.

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

None

Item 3. **Defaults Upon Senior Securities**

None

Item 4. **Mine Safety Disclosures**

Not Applicable

Item 5. **Other Information**

None

Item 6. **Exhibits**

(a) **Exhibits**

10 Material Contracts:

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: May 13, 2020

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: May 13, 2020

/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: May 13, 2020

/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 March 31, 2020 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)
May 13, 2020

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 March 31, 2020 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)
May 13, 2020

