

Nasdaq: DAIO

Anthony Ambrose December 2020

Safe Harbor

The matters that we discuss today will include forward-looking statements that involve risks factors that could cause Data I/O Corporation's results to differ materially from management's current expectations. We encourage you to review the Safe Harbor statement contained in the earnings releases as well as our most recent SEC filings for a complete description. Additionally, those forward-looking statements are made as of today, and we take no obligation to update them.



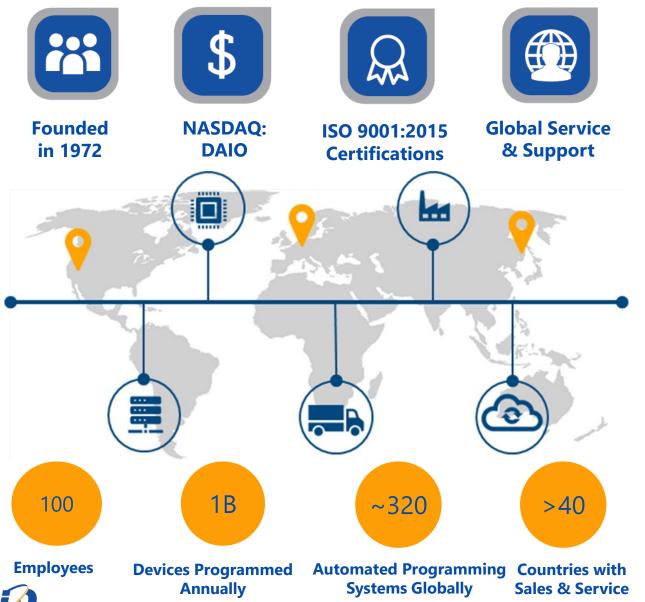
Immediate Term – COVID-19

- Protecting our team and facilities
 - Quick transition of global work from home for 85% of employees
 - Strict policies for the health and safety of our essential workers
 - Tools for global collaboration
- Continuing to serve our customers as an essential supplier
 - Remote install & diagnostics capability keep our customer's factories running
 - Quick deploy program for new medical device customers as they retool production to support COVID-19 efforts
 - Securing new devices & systems against hacking
- Maintaining our strong financial position with controlled expense management
 - Automotive Electronics market recovering from Q2 bottom





At a Glance



What We Do

Silicon Device
Programming Equipment
Security Deployment as-aService

Solutions

We deliver the most secure and efficient systems to deploy firmware, data and secrets into IoT and automotive devices in high volume electronics manufacturing



Company Snapshot

Recent Achievements and Trends

- COVID-19 impact will result in operating losses for 2020. Reduced spending with cash preservation goal for 2020
- Strong momentum in Automotive and IoT devices
 - 8 of top 9 and 16 of top 20 Automotive Electronics companies are customers
 - ~60% of revenue from Automotive Electronics customers
- Expanding new markets with introduction of PSV2800
- Industry and technology awards for Lumen®X, Universal Flash Storage (UFS) support, PSV systems and SentriX® platform
- Over 320 PSV systems sold. 1 Billion units/year capacity in the installed base
- Traction for SentriX Security Provisioning Platform; Release of Next Generation SentriX® Security Deployment System and SentriX Product Creator™ Software Tool Suite

Committed to Growing Shareholder Value

- Focusing programmable core competencies on higher growth, higher margin vertical markets with greater recurring/consumable sales
- Differentiated market position through technology leadership and global support
- Approx. 13% of stock (fully diluted) held or managed by insiders so that management and Board are aligned with shareholders
- 3 buybacks since 2012 for \$8.1 million returned to shareholders

Company	Snapshot (1)(2)

NASDAQ: DAIO

Headquarters: Redmond, WA

Established: 1972

Stock Price: \$4.14

Market Cap: \$35M

Diluted Shares: 8.4M

3-M Daily Avg. Volume: 24,000 shares

Sales (TTM): \$21.3M

Net Income (TTM): \$(2.8)M

Diluted EPS (TTM): \$(0.35)

Adj. EBITDA⁽³⁾ (TTM): \$(241,000)

Cash & Sec. (9/30/20): \$13.0M (\$1.55/share)

Debt (9/30/20): \$0.0

- (1) Stock price, market cap and volume as of 11/27/20; Source: Yahoo
- (2) Financials for the TTM period ended 9/30/20 or as noted
- (3) Adj. EBITDA is a non-GAAP financial measure. A reconciliation is provided in this presentation



Supporting the Secure Digital World

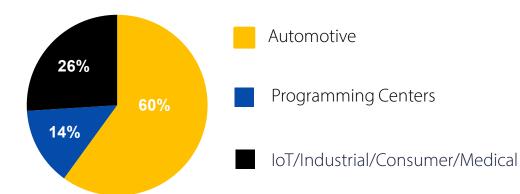
Data I/O's programming systems are used by the world's leading manufacturers, programming centers, and contract manufacturers, to securely program integrated circuits and bring their devices to life.



Serving Customers Globally in Growing Markets

- The largest programming company in the market, 2x larger than nearest competitors
- Trusted supplier to 8 out of the top 9 automotive electronics suppliers
- Providing mission critical medical applications for Class I and II devices
- Global footprint with headquarters in Redmond, WA, USA and subsidiary offices in Shanghai, China and Munich, Germany









How Data I/O Markets Grow

Market Forces

IoT and Automotive Growth

- More Semiconductor Content
- Devices Get Smaller
- Move Towards Automation

Products will increase their code size as customers want more features

Products will be more secure, creating new opportunities



Programming Impact

Unit Growth

Bit Growth



Added Complexity + **Security Requirements**



Programming Demand = Units x Bits x Security

Market Leading Technology

Industry Leading Products

Automated Handlers



Programming Engines



Security Deployment Platforms



History of Innovation

Data I/O's products are viewed as the "gold standard" for advanced programming equipment, IP management and security solutions

Research and Development focused on:

- Security Deployment Platform technology for Internet of Things and Automotive applications
- Programming technology to support explosive demand for automotive electronics using large FLASH Memory and microcontroller devices
- Integration into the Cloud and Factory MES Systems

During the past 15 years, Data I/O has been granted ~50 U.S. and International utility patents. Currently, Data I/O has ~20 U.S. and International utility patents pending

35 Industry Awards



Service Excellence Award for World-Class **Device Programming**



NPI Award & Mexico
Technology Award for New **Job Composer**Software Application



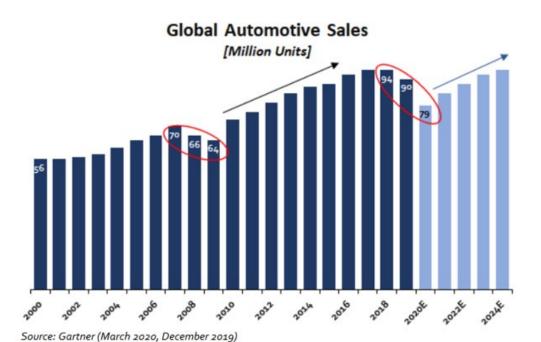
Technology Award, 5th Industry Award for Universal Flash Storage (**UFS**) **Support** on **LUMEN**

Market Outlook



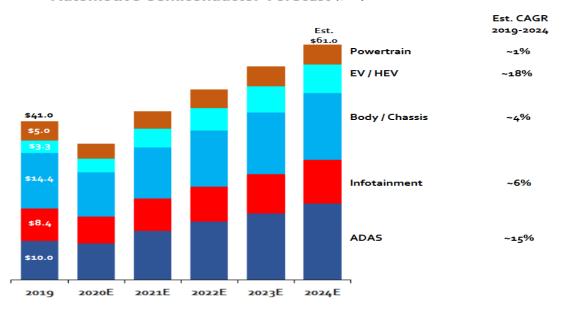
Automotive Recovery Driven by Electronics Content Growth

...while Automotive units may take years to rebound from recent declines....



IC content per vehicle estimated to increase 55% from\$450 in 2018 to \$700 by 2022 according to Gartner, driven by Growth in EV and Hybrid Vehicles.

Automotive Semiconductor Forecast (\$ bn)



Source: Gartner – Semiconductor Forecast Database, Worldwide, Q1'20 Update



Automotive Electronics Growth Areas



Infotainment



ADAS/Autonomous Driving



Electrification



Connectivity



Security



IoT Market Drivers - Multi-Year Secular Growth

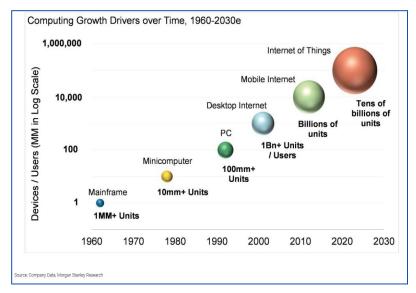
The IoT is forecast to be bigger than the mobile internet and desktop markets

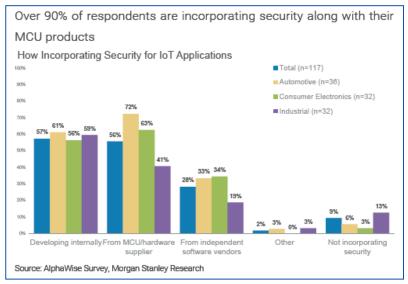
"We believe nearly every single industry will eventually migrate to an IoT model yielding 50 billion connected devices by 2020."

Needham & Company

Security Issues are top of mind and must be addressed









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IoT Device Security in Mass Production



Commercial Attributes

- Low upfront cost
- No minimum order quantities
- Per Part-as-a-Service model
- Available globally



Easy to Use

- Preconfigured security use cases
- Intuitive collaboration tool
- Low or high-volume production
- Optional services, e.g. automated cloud onboarding

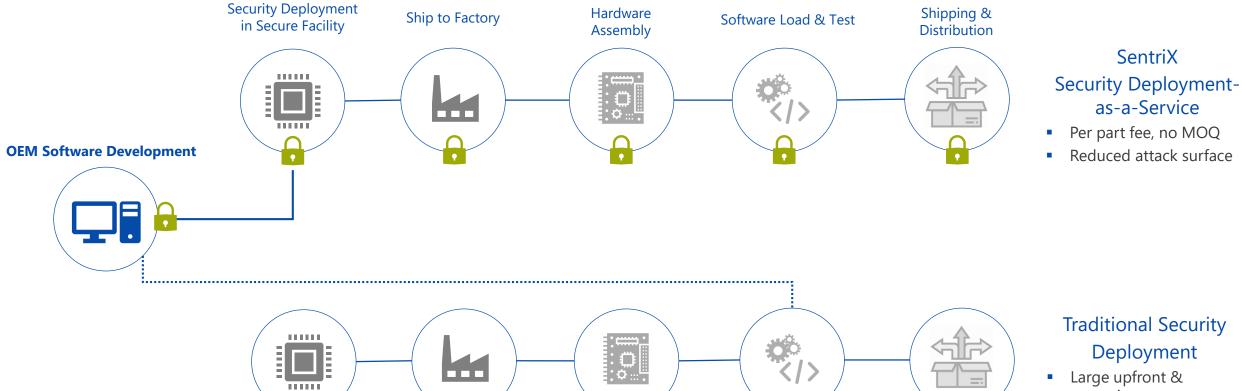


Robust Security

- Pre-manufacturing assembly security deployment
- Authenticates parts
- Cryptographic protection of secrets & firmware
- Supports hardware Roots of Trust
- FIPS 140 compliant hardware security module (HSM)



Security Deployment-as-a-Service



Hardware

Assembly



Silicon

Inventory

Ship to Factory

Traditional Security Deployment

- operating expense
- Increased attack surface

Software Load and Test

Shipping &

Distribution

New Partnerships for Growth

SentriX **Deployments**











Silicon Partners















Technology Partners











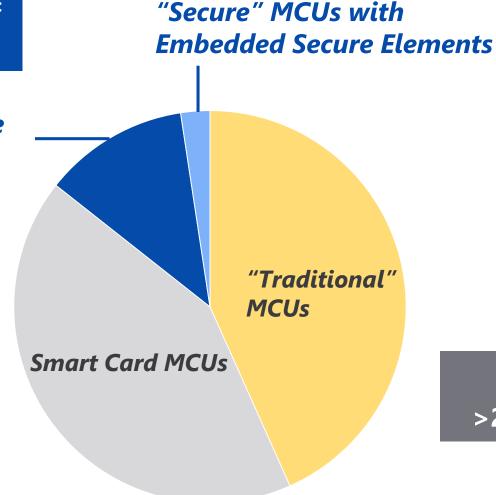


Billions of Security Enabled Devices

2023 Security Market:

3-4 Billion Units

Standalone Secure
Elements
AICs, ESEs, TPMs



Total Market:

>20 Billion Units

Source: ABI Research



Our Opportunity with SentriX

The Internet of Things is a huge growth market, with security of supply chain and protection of firmware top of mind

Data I/O and SentriX Partners provide a scalable, easy to develop and deploy service for customers of all sizes. Initial applications are the 'tip of the iceberg' of what is possible with SentriX.

Data I/O can now scale SentriX capabilities to over 320 PSV family systems already deployed

Per Part Fee model drives high margin recurring revenue growth

October 2020: released next generation SentriX Security Deployment as-a-Service including updated hardware and SentriX Product Creator to support fully customizable and SentriX GO pre-configured security profiles



Investment Merits: Positioned for Long-Term Growth





Financial Overview



Financial Overview

Third Quarter 2020 Highlights

- Net sales of \$5.9 million; bookings of \$5.6 million
- Gross margin as a percentage of sales of 55.1%
- Net loss of (\$707,000) or (\$0.09) per share
- Adjusted earnings before interest, taxes, depreciation and amortization (EBITDA)*, excluding equity compensation, of \$169,000
- Cash & Equivalents of \$13.0 million; no debt
- Automotive electronics, advanced programming and secure provisioning leadership
 - Automotive Electronics represented approximately 60% of third quarter 2020 bookings
 - Win at Asia-based automotive electronics manufacturer for multiple PSV family systems
 - 320th PSV family system deployed
 - Release and installations of Next Generation SentriX® Security Deployment System and SentriX Product Creator™ Software Tool Suite



Balance Sheet and Capital Structure Overview

Balance Sheet Highlights

At September 30, 2020:

- \$13.0 million in cash and cash equivalents
- No debt
- \$18.3 million of net working capital
- Total stockholders' equity of \$20.5 million, or approx. \$2.44 per diluted share outstanding
- EV/Sales at 0.7x⁽³⁾
- NOLs of approximately \$13.0 million

Enterprise Value (\$K)

Market Cap ⁽¹⁾	\$ 28,624
Plus Total Debt ⁽²⁾	0
Less Total Cash ⁽²⁾	<u>\$ 12,982</u>
Enterprise Value	\$ 15,642
Diluted Shares Outstanding ⁽²⁾	8,394,000

⁽¹⁾ At 10/30/20

Balance Sheet Strategy

- Important to maintain strong balance sheet in a cyclical industry, with about 60% of revenues from capital equipment sales
- Financial flexibility allows the company to:
 - Withstand, and advance during, downturns in semi cycle and COVID-19
 - Invest in organic and acquisitive growth opportunities for the long term
 - Develop recurring revenue streams
- \$2 million buyback completed in quarter ended 9/30/19
- Approx. \$8.1 million returned to shareholders from buybacks authorized in '12, '16 and '18



(3) Sales based on TTM through 9/30/20 financial results

⁽²⁾ At 9/30/20

Growing Recurring Revenue Mix

Capital Equipment

- Approx. 58% of 2019 and 2020 sales
- Off-line and in-line programming systems
- Automated systems cost \$68K-\$677K
- Manual systems cost \$10K-\$52K
- Usually last 5-7 years
- Adapters fit to these products
- Installed base drives recurring consumables sales

Adapters



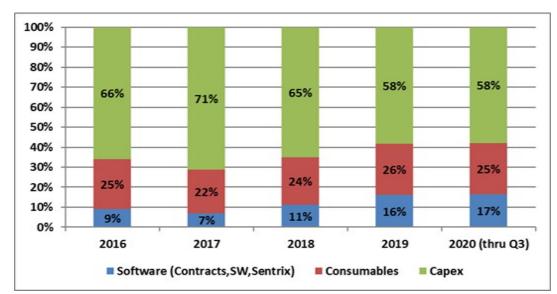
- Approx. 25% of 2020 sales
- Usually last 3-24 months

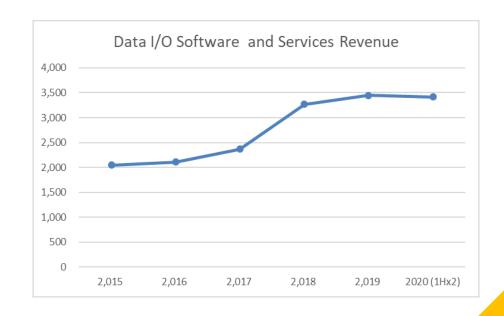
Software, SentriX, Service





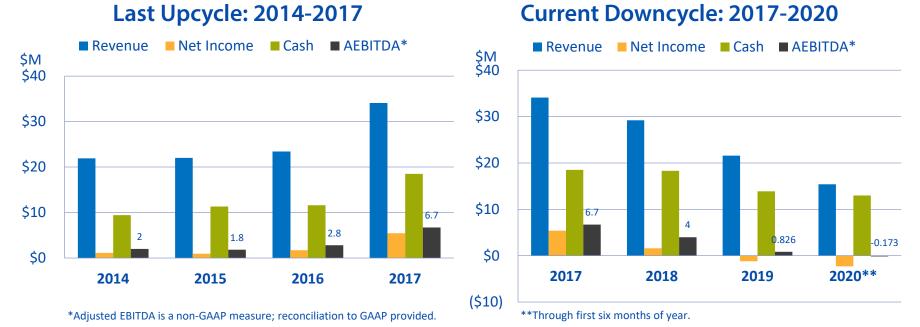
- Approx. 17% of 2020 sales
- Annual Software/Service Contracts
- Device Supports
- SentriX Revenues







Operating Leverage Poised for Upcycle



Last Upcycle: 2014-2017/2018

- PSV programming systems launched
- Revenue increased 56%
- Gross margin peaked at over 62%
- Net Income increased 390%
- Cash increased 97%
- AEBITDA margin from 9.1% to 19.6%

Current Downcycle: 2018-2020

- Consumables increase as % of rev's
- Capital equipment break to upside in 4Q19 interrupted by COVID-19
- Gross margin bottomed at over 52%
- OpEx sustained near \$3.4M
- Cash ~\$4M higher than at 2014
- AEBITDA maintained near breakeven
- PSV installed base of 300+ drives service revenue
- SentriX launched

Next Upcycle:

- Automotive and SentriX Growth
- Improved gross margins
- Higher % of Recurring Revenue
- Operating Leverage accelerated

Path to the Next Upcycle

2017

Revenue Driven by CAPEX explosion in Automotive Electronics Top of 2017 Blew Away Top of Past Cycles

Cash Generation;
Continued Investment in R&D

Increased Recurring Revenue
Introduction of SentriX
Bottom '20 Cycle Better Vs. Prior Bottoms

Cash Preservation
Continued Investment in R&D

2021/2022

Automotive Recovery and SentriX Growth
Profitability Growth
Strong Operating Leverage

Significant Cash Generation Multiple Expansion with Security





Backup Financial Reconciliation



An Experienced Team of Technology Leaders

Anthony Ambrose - President and CEO



Anthony Ambrose joined Data I/O in October 2012 as President, CEO and a Board Member. With a passion for product development and new technology, he led product divisions and global engineering teams at Intel and Radisys for over a decade, creating the standard high-volume server platforms in enterprise and telecom markets.. Mr. Ambrose earned a Bachelor of Science in Engineering, Magna cum Laude, from Princeton University, and completed the Stanford Graduate School of Business Director Symposium. He has two US patents granted and is often requested to speak on connected and mobility innovations within the automotive electronics, industrial information technology, IoT and medical industries.

Joel Hatlen - Vice President, COO and CFO



Joel Hatlen joined Data I/O in September 1991 and has been our Vice President, Chief Financial Officer, Secretary and Treasurer since January 1998. He served as Chief Accounting Officer since February 1997 and served as Corporate Controller from December 1993 to December 1997. Previously, he was Tax Manager and Senior Tax Accountant. From September 1981 until joining Data I/O, Joel was employed by Ernst & Young LLP as a Certified Public Accountant, where his most recent position was Senior Manager. Joel holds a Master's in Taxation from Golden Gate University and a Bachelor's in Business Administration in Accounting from Pacific Lutheran University.

Rajeev Gulati - Vice President and CTO



Rajeev Gulati joined Data I/O in July 2013 and is our Chief Technology Officer and Vice President of Engineering. Prior to Data I/O, Rajeev served as Director of Software Engineering for AMD responsible for tools, compiler strategy and execution from 2006 to 2013. He has an extensive background in software, systems and applying technology to develop new markets. Previously, he served as Director of Strategy and Planning at Freescale from 2004 to 2006; as Director of Embedded Products at Metrowerks from 2000 to 2004 and Director of Compilers, Libraries & Performance Tools from 1997 to 2000; and engineering and programmer positions at Apple Computer, IBM and Pacific-Sierra Research. Rajeev holds a Master's of Science in Electrical & Computer Engineering from the University of Texas, Austin and a BE in Electrical Engineering from Delhi College of Engineering, New Delhi.

Michael Tidwell - Vice President Marketing & Business Development



Michael joined Data I/O in May 2019 and brings a wealth of experience in Software, Security and Product Management to Data I/O. Prior to Data I/O, he was Vice President of Marketing & Business Development at Tignis, an Al and machine learning startup. From 2012 to 2018 Michael was head of Marketing and Business Development at Sansa Security, a leading software security IP provider that was sold to ARM Holdings. Prior to Sansa, Michael was Vice President of Business and Market Development at BSQUARE Corporation. Michael has a Master's of Science in Electrical Engineering from the University of Washington and a Bachelor's of Electrical Engineering (Summa Cum Laude) from Georgia Institute of Technology.



Adjusted EBITDA Reconciliation – 3Q20

NON-GAAP FINANCIAL MEASURE RECONCILIATION

	Three Months Ended September 30,		Nine Mont Septem	
	2020	2019	2020	2019
(in thousands)				
Net Income (loss)	(\$707)	(\$844)	(\$2,318)	(\$691)
Interest (income)	(4)	(25)	(13)	(47)
Taxes	340	55	442	52
Depreciation and amortization	174	248	620	672
EBITDA earnings (loss)	(\$197)	(\$566)	(\$1,269)	(\$14)
Equity compensation	366	260	1,096	911
Adjusted EBITDA earnings (loss),				
excluding equity compensation	\$169	(\$306)	(\$173)	\$897



Income Statement – 3Q20

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

	Three Months Ended September 30,		Nine Mont Septem	
	2020	2019	2020	2019
Net Sales	\$5,947	\$3,808	\$15,387	\$15,700
Cost of goods sold	2,670	1,806	6,887	6,430
Gross margin	3,277	2,002	8,500	9,270
Operating expenses:				
Research and development	1,567	1,507	4,763	4,868
Selling, general and administrative	1,810	1,535	5,324	5,338
Total operating expenses	3,377	3,042	10,087	10,206
Operating income (loss)	(100)	(1,040)	(1,587)	(936)
Non-operating income:				
Interest income	4	25	13	47
Gain on sale of assets	-	-	-	60
Foreign currency transaction gain (loss)	(271)	226	(302)	190
Total non-operating income (loss)	(267)	251	(289)	297
Income (loss) before income taxes	(367)	(789)	(1,876)	(639)
Income tax (expense) benefit	(340)	(55)	(442)	(52)
Net income (loss)	(\$707)	(\$844)	(\$2,318)	(\$691)
Basic earnings (loss) per share	(\$0.09)	(\$0.10)	(\$0.28)	(\$0.08)
Diluted earnings (loss) per share	(\$0.09)	(\$0.10)	(\$0.28)	(\$0.08)
Weighted-average basic shares	8,394	8,217	8,305	8,259
Weighted-average diluted shares	8,394	8,242	8,305	8,259



Balance Sheet – 3Q20

CONSOLIDATED BALANCE SHEETS (in thousands, except per share data) (UNAUDITED)

	September 30,	December 31,
	2020	2019
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	\$12,982	\$13,936
Trade accounts receivable, net of allowance for	Ģ12,502	Ģ13,330
doubtful accounts of \$101 and \$80, respectively	4,152	4,099
Inventories	5,060	5,020
Other current assets	1,731	924
TOTAL CURRENT ASSETS	23,925	23,979
Property, plant and equipment – net	1,516	1,668
Income tax receivable	-	640
Other assets	1,582	1,994
TOTAL ASSETS	\$27,023	\$28,281
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	\$1,760	\$1,151
Accrued compensation	1,381	1,541
Deferred revenue	1,057	1,387
Other accrued liabilities	1,310	1,372
Income taxes payable	144	31
TOTAL CURRENT LIABILITIES	5,652	5,482
Operating lease liabilities	667	1,178
Long-term other payables	238	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, 8,395,600 shares as of September		
30, 2020 and 8,212,748 shares as of December 31, 2019	19,700	18,748
Accumulated earnings	190	2,508
Accumulated other comprehensive income	576	274
TOTAL STOCKHOLDERS' EQUITY	20,466	21,530
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$27,023	\$28,281
CONFIDENTIAL		



Adjusted EBITDA Reconciliation – 2019

NON-GAAP FINANCIAL MEASURE RECONCILIATION

	Three Months Ended		Twelve Months Ended		
	Decemb	er 31,	Decemb	er 31,	
	2019	2018	2019	2018	
(in thousands)					
Net Income(loss)	(\$496)	\$648	(\$1,187)	\$1,606	
Interest (income)	(6)	(11)	(53)	(37)	
Taxes	(21)	24	31	291	
Depreciation and amortization	196	219	868	955	
EBITDA earnings(loss)	(\$327)	\$880	(\$341)	\$2,815	
Equity compensation	260	298	1,171	1,230	
Adjusted EBITDA earnings(loss),					
excluding equity compensation	(\$67)	\$1,178	\$830	\$4,045	



Adjusted EBITDA Reconciliation – 2014-1H2020

NON-GAAP FINANCIAL MEASURE RECONCILIATION

	Six Months			Twelve N	/lonths		
	Ended June 30			Ended Dece	ember 31,		
(in thousands)	1H2020	2019	2018	2017	2016	2015	2014
Net Income (loss)	(\$1,611)	(\$1,187)	\$1,606	\$5,449	\$1,656	\$927	\$1,099
Interest (income) expense	(\$9)	(\$53)	(\$37)	(\$29)	(\$44)	(\$105)	(\$159)
Taxes	\$102	\$31	\$291	(\$288)	\$36	(\$5)	\$7
Depreciation and amortization	\$868	\$868	\$955	\$822	\$602	\$542	\$593
EBITDA earnings (loss)	(\$1,071)	(\$341)	\$2,815	\$5,954	\$2,250	\$1,359	\$1,540
Equity compensation	\$730	\$1,171	\$1,230	\$714	\$520	\$435	\$400
Restructure charge	-	-	-	-	-	-	\$13
Adjusted EBITDA earnings (loss), excluding equity compensation							
and restructure charge	(\$341)	\$830	\$4,045	\$6,668	\$2,770	\$1,794	\$1,953



Income Statement – 2019

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

	Three Months Ended		Twelve Months Ended	
	December 31,		December 31,	
	2019	2018	2019	2018
Net Sales	\$5,868	\$7,857	\$21,568	\$29,224
Cost of goods sold	2,588	3,284	9,018	11,868
Gross margin	3,280	4,573	12,550	17,356
Operating expenses:				
Research and development	1,583	1,811	6,451	7,361
Selling, general and administrative	2,039	2,018	7,377	8,257
Total operating expenses	3,622	3,829	13,828	15,618
Operating income(loss)	(342)	744	(1,278)	1,738
Non-operating income:				
Interest income	6	11	53	37
Gain on sale of assets	4	15	64	19
Foreign currency transaction gain (loss)	(185)	(98)	5	103
Total non-operating income	(175)	(72)	122	159
Income(loss) before income taxes	(517)	672	(1,156)	1,897
Income tax (expense) benefit	21	(24)	(31)	(291)
Net income(loss)	(\$496)	\$648	(\$1,187)	\$1,606
Basic earnings(loss) per share	(\$0.06)	\$0.08	(\$0.14)	\$0.19
Diluted earnings(loss) per share	(\$0.06)	\$0.08	(\$0.14)	\$0.19
Weighted-average basic shares	8,212	8,431	8,247	8,378
Weighted-average diluted shares	8,212	8,509	8,247	8,514



Balance Sheet – 2019

CONSOLIDATED BALANCE SHEETS (in thousands, except per share data) (UNAUDITED)

(0	INAODITED)	December 31, 2019	December 31, 2018
ASSETS			
CURRENT ASSETS:			
Cash and cash equivalents		\$13,936	\$18,343
Trade accounts receivable, net of allowance for			
doubtful accounts of \$80 and \$75, respective	<i>r</i> ely	4,099	3,771
Inventories		5,020	5,185
Other current assets		924	621
TOTAL CURRENT ASSETS		23,979	27,920
Property, plant and equipment – net		1,668	1,985
ncome tax receivable		640	598
Other assets		1,994	220
TOTAL ASSETS		\$28,281	\$30,723
LIABILITIES AND STOCKHOLDERS' EQUITY			
CURRENT LIABILITIES:			
Accounts payable		\$1,151	\$1,755
Accrued compensation		1,541	2,872
Deferred revenue		1,387	1,392
Other accrued liabilities		1,372	789
Income taxes payable		31	47
TOTAL CURRENT LIABILITIES		5,482	6,855
Operating lease liabilities		1,178	-
Long-term other payables		91	511
COMMITMENTS		-	-
STOCKHOLDERS' EQUITY			
Preferred stock -			
Authorized, 5,000,000 shares, including			
200,000 shares of Series A Junior Particip	ating		
Issued and outstanding, none		-	-
Common stock, at stated value -			
Authorized, 30,000,000 shares			
Issued and outstanding, 8,212,748 shares	as of December 31,		
2019 and 8,338,628 shares as of December	er 31, 2018	18,748	19,254
Accumulated earnings		2,508	3,695
Accumulated other comprehensive income		274	408
TOTAL STOCKHOLDERS' EQUITY		21,530	23,357
TOTAL LIABILITIES AND STOCKHOLDERS' E	QUITY	\$28,281	\$30,723
CON	FIDENTIAL		

