



Nasdaq: DAIO

Anthony Ambrose

September 25, 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.

Data I/O, Lumen®X, SentiX®, ConneX , FLASHCore are trademarks of Data I/O Corporation. All rights reserved.



CONFIDENTIAL

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



**Founded
in 1972**



**NASDAQ:
DAIO**



**ISO 9001:2015
Certifications**



**Global Service
& Support**



100

Employees

1B

**Devices Programmed
Annually**

~300

**Automated Programming
Systems Globally**

>40

**Countries with
Sales & Service**

What We Do

Silicon Device
Programming Equipment
Security Deployment as-a-
Service

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 SentiX[®] platform
- Over 300 PSV systems sold. 1 Billion units/year capacity in the installed base
- Traction for SentiX Security Provisioning Platform

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. 16% of stock 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:	\$3.19
Market Cap:	\$26M
Diluted Shares:	8.3M
3-M Daily Avg. Volume:	24,000 shares
Sales (TTM):	\$19.1M
Net Income (TTM):	\$(3.0)M
Diluted EPS (TTM):	\$(0.27)
Adj. EBITDA ⁽³⁾ (TTM):	\$(719,000)
Cash & Sec. (6/30/20):	\$13.3M (\$1.60/share)
Debt (6/30/20):	\$0.0

(1) Stock price, market cap and volume as of 9/17/20; Source: Yahoo

(2) Financials for the TTM period ended 6/30/20 or as noted

(3) Adj. EBITDA is a non-GAAP financial measure. A reconciliation is provided in this presentation

Supporting the Secure Digital World

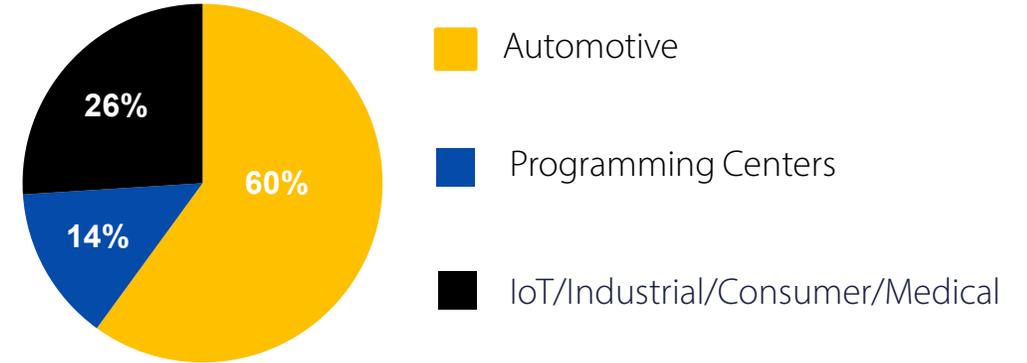
Data I/O's programming systems are used by the world's leading manufacturers, programming centers, and contract manufacturers, to securely program integrated circuits and bring their devices to life.



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

2019 Annual Orders by End Markets



Sample Customers

Automotive	IoT/ Industrial/ Medical/Consumer
	<h3>Programming Centers and EMS</h3>

How Data I/O Markets Grow

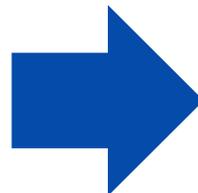
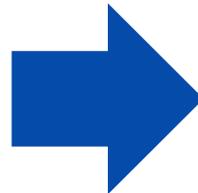
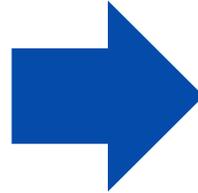
Market Forces

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

$$\text{Programming Demand} = \text{Units} \times \text{Bits} \times \text{Security}$$

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 **LUMENX**

Market Outlook

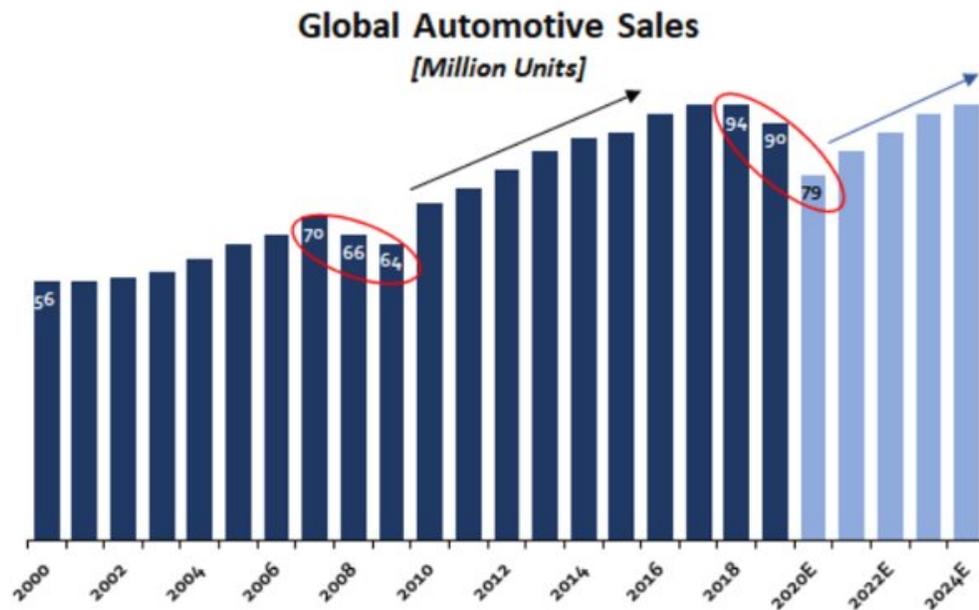
Bringing Devices to Life



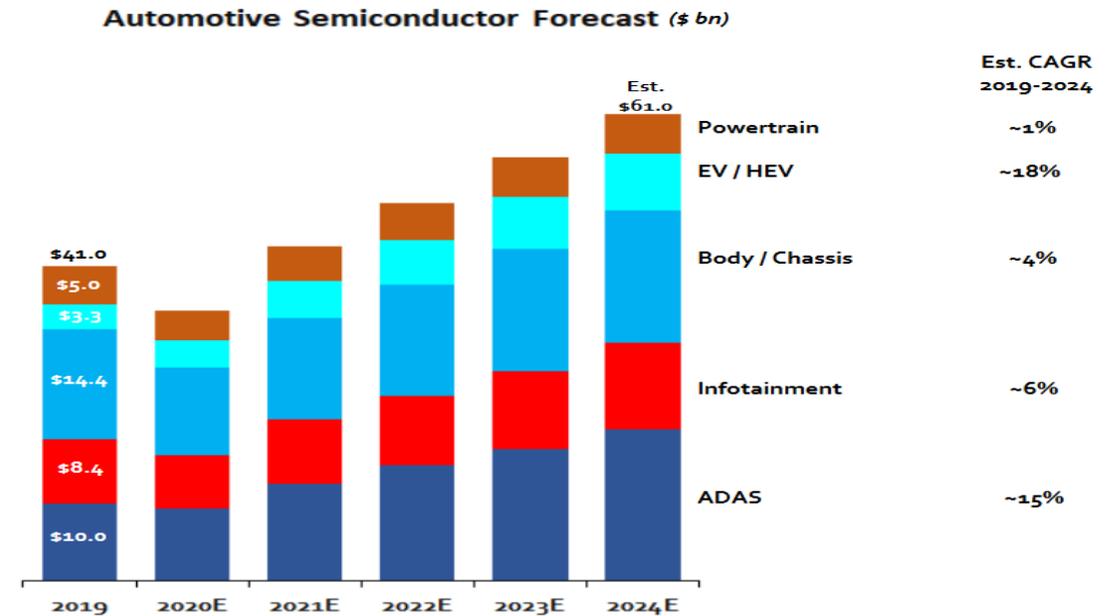
Automotive Recovery Driven by Electronics Content Growth

...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.



Source: Gartner (March 2020, December 2019)



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

Automotive Electronics Growth Areas



Infotainment



ADAS/Autonomous Driving



Electrification



Connectivity



Security

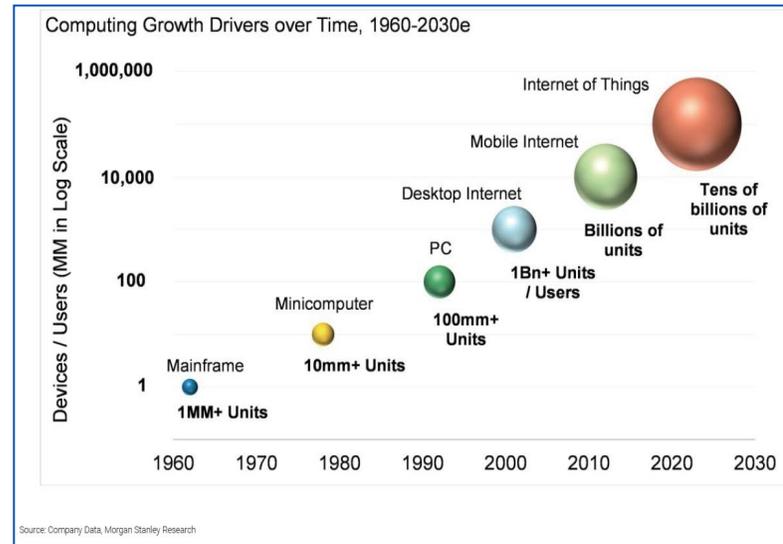
IoT Market Drivers - Multi-Year Secular Growth

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



Computing
NSA Hacking Chief: Internet of Things Security Keeps Me Up at Night
 The leader of the National Security Agency is putting industrial control systems on the Internet to secure.
 by Tom Simonite January 2014

Internet of Things: Shoddy security and IoT hackers are putting human lives at risk
 Experts say need for IoT security isn't overhyped

Hackers demonstrated first ransomware for IoT thermostats at DEF CON

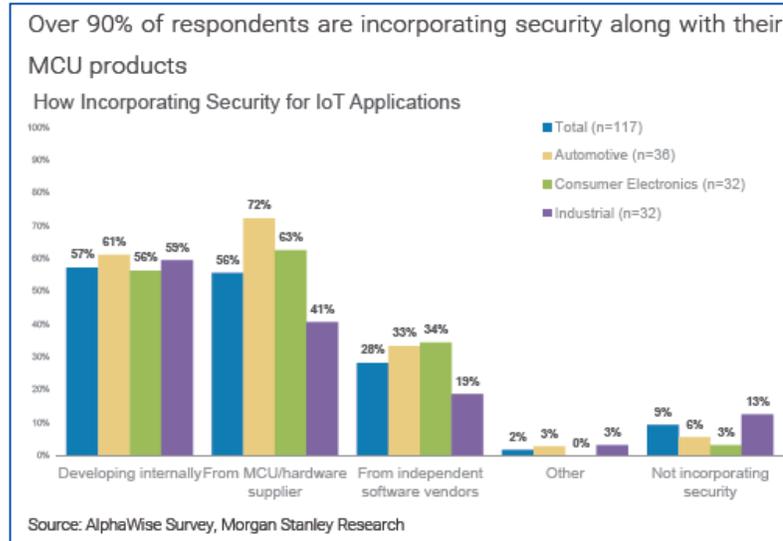
Ha! You Suck! Pay 1 Bitcoin to get control back

MORE LIKE THIS

- Thugs developing ransomware for Android
- Cryptoworms: The future of ransomware hell
- Your router won't protect you when smartphones smart homes

on IDG Answers → How to set network location in Windows so that PC can be seen by other...

Credit: Ken Murro



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

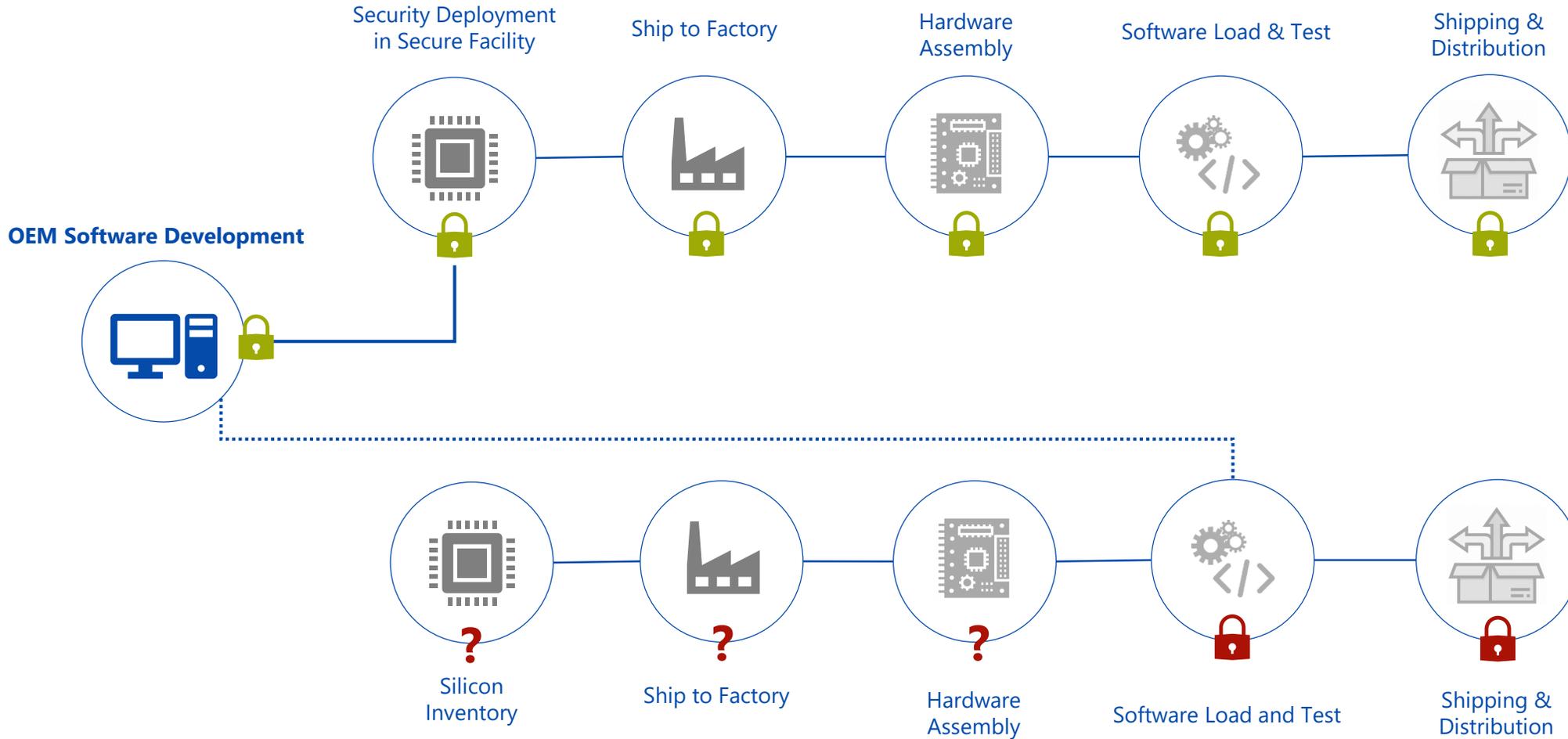
- Preconfigured security use cases
- Intuitive collaboration tool
- Low or high-volume production
- Optional services, e.g. automated cloud onboarding



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



SentriX Security Deployment-as-a-Service

- Per part fee, no MOQ
- Reduced attack surface

Traditional Security Deployment

- Large upfront & operating expense
- Increased attack surface

New Partnerships for Growth

SentriX Deployments



Silicon Partners



Technology Partners

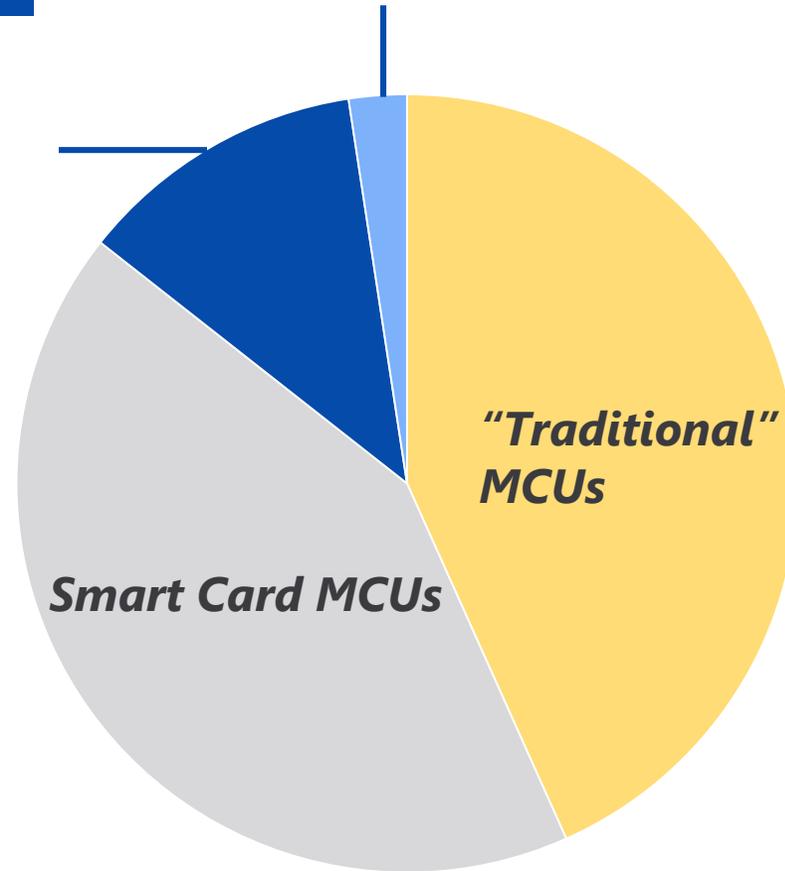


Billions of Security Enabled Devices

**2023 Security Market:
3-4 Billion Units**

**Standalone Secure
Elements**
AICs, ESEs, TPMs

***"Secure" MCUs with
Embedded Secure Elements***



**Total Market:
>20 Billion Units**

Source: ABI Research

Our Opportunity with SentiX

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 SentiX 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 SentiX.

Data I/O can now scale SentiX capabilities to over 300 PSV family systems already deployed

Per Part Fee model drives high margin recurring revenue growth

Investment Merits: Positioned for Long-Term Growth



Financial Overview

Bringing Devices to Life



Financial Overview

Second Quarter 2020 Highlights

- Net sales of \$4.7 million; bookings of \$5.0 million
- Gross margin as a percentage of sales of 52.4 %
- Net loss of (\$1,057,000) or (\$0.13) per share
- Adjusted earnings before interest, taxes, depreciation and amortization (EBITDA)*, excluding equity compensation, of (\$231,000)
- Cash & Equivalents of \$13.3 million; no debt
- Automotive electronics, advanced programming and secure provisioning leadership
 - Automotive Electronics represented approximately 50% of second quarter 2020 bookings
 - Wins in UFS infotainment, vehicle electrification, and competitive replacement within the automotive sector
 - Win at Asia-based IoT manufacturer for multiple PSV family systems
 - 300th PSV family system deployed
 - Shipments began for the SentiX[®] supported PSoC 64 Standard Secure Amazon Web Services (AWS) microcontroller (MCU)

Balance Sheet and Capital Structure Overview

Balance Sheet Highlights

At June 30, 2020:

- \$13.3 million in cash and cash equivalents
- No debt
- \$18.0 million of net working capital
- Total stockholders' equity of \$20.3 million, or approx. \$2.45 per diluted share outstanding
- EV/Sales at 0.7x⁽³⁾
- NOLs of approximately \$13.0 million

Enterprise Value (\$K)

Market Cap ⁽¹⁾	\$ 26,400
Plus Total Debt ⁽²⁾	0
Less Total Cash ⁽²⁾	<u>\$ 13,300</u>
Enterprise Value	\$ 13,100
Diluted Shares Outstanding ⁽²⁾	8,300,000

⁽¹⁾ At 9/17/20

⁽²⁾ At 6/30/20

⁽³⁾ Sales based on TTM through 6/30/20 financial results

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

Growing Recurring Revenue Mix

Capital Equipment

- Approx. 58% of 2019 sales; 54% in 1H20
- 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

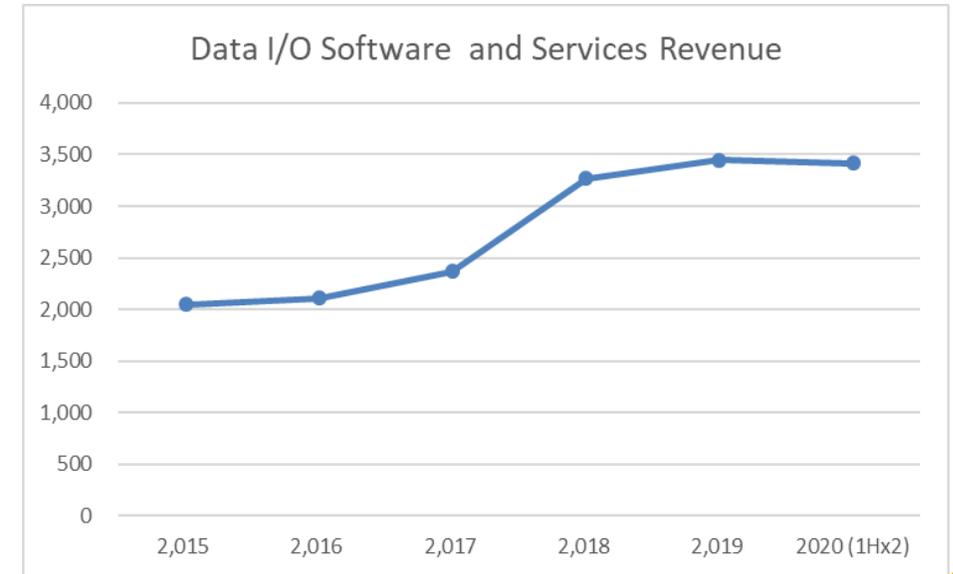
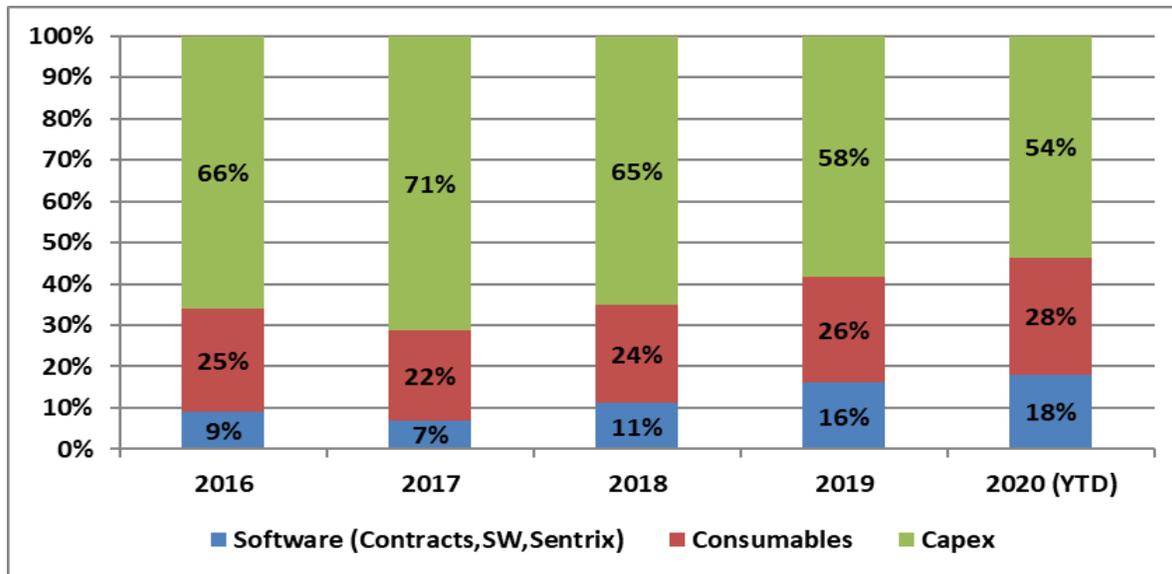


- Approx. 28% of 1H20 sales
- Usually last 3-24 months

Software, SentiX, Service

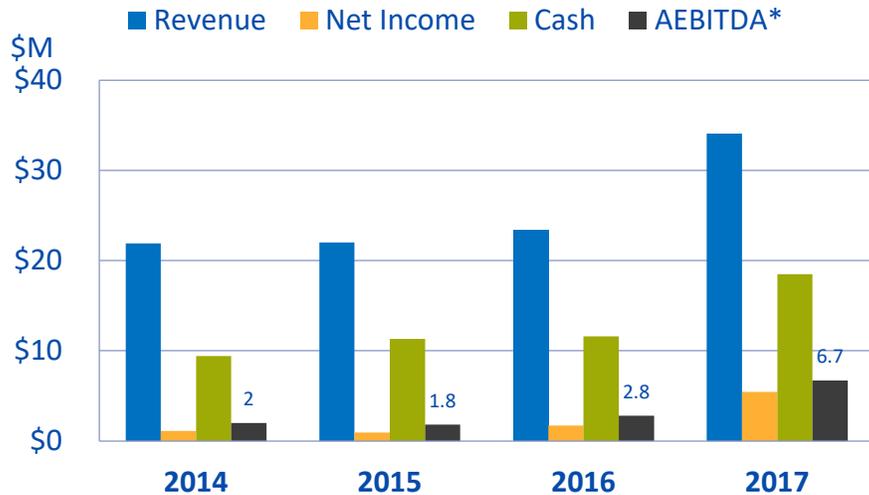


- Approx. 18% of 1H20 sales
- Annual Software/Service Contracts
- Device Supports
- SentiX Revenues



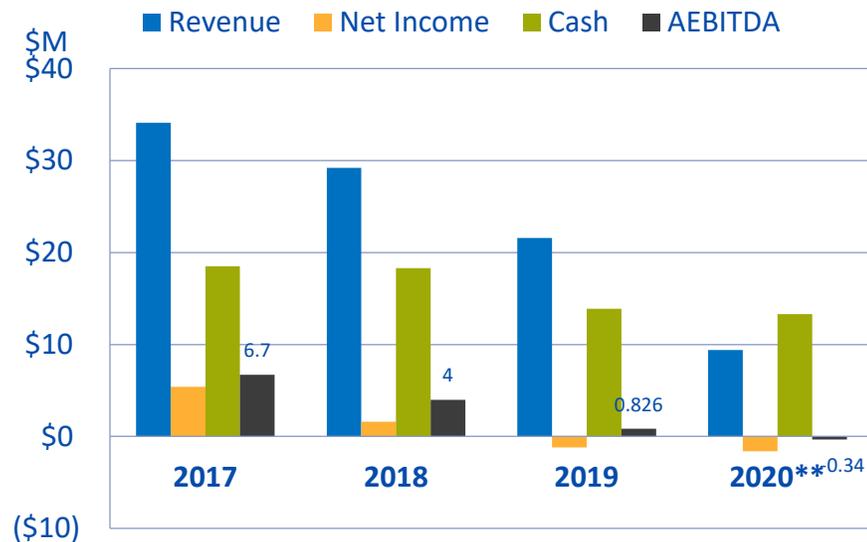
Operating Leverage Poised for Upcycle

Last Upcycle: 2014-2017



*Adjusted EBITDA is a non-GAAP measure; reconciliation to GAAP provided.

Current Downturn: 2017-2020



**Through first six months of year.

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%

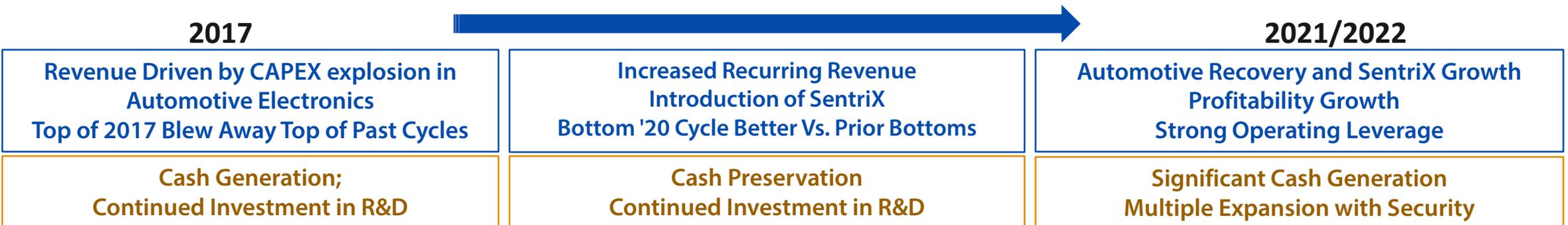
Current Downturn: 2018-2020

- 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
- SentiX launched

Next Upcycle:

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

Path to the Next Upcycle



A large audience is seated in a conference room, facing a stage. On the stage, a large screen displays the Data iO logo. A person is standing on the stage, possibly presenting. The room has a modern design with wood paneling and recessed lighting.

Data iO

Thank You!

**For more information, please go to
<https://www.dataio.com/Company/Investor-Relations/Data-I-O-Profile>**

Data iO

Backup Financial Reconciliation

Bringing Devices to Life



Adjusted EBITDA Reconciliation – 2Q20

NON-GAAP FINANCIAL MEASURE RECONCILIATION

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
(in thousands)				
Net Income (loss)	(\$1,057)	\$127	(\$1,611)	\$153
Interest (income)	(1)	(10)	(9)	(22)
Taxes	97	27	102	(2)
Depreciation and amortization	249	220	447	424
EBITDA earnings (loss)	(\$712)	\$364	(\$1,071)	\$553
Equity compensation	481	364	730	651
Adjusted EBITDA earnings (loss), excluding equity compensation	(\$231)	\$728	(\$341)	\$1,204

Income Statement – 2Q20

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Net Sales	\$4,655	\$5,834	\$9,440	\$11,892
Cost of goods sold	2,216	2,250	4,217	4,623
Gross margin	2,439	3,584	5,223	7,269
Operating expenses:				
Research and development	1,614	1,680	3,196	3,361
Selling, general and administrative	1,703	1,829	3,514	3,803
Total operating expenses	3,317	3,509	6,710	7,164
Operating income (loss)	(878)	75	(1,487)	105
Non-operating income:				
Interest income	1	10	9	22
Gain on sale of assets	-	-	-	60
Foreign currency transaction gain (loss)	(83)	69	(31)	(36)
Total non-operating income (loss)	(82)	79	(22)	46
Income (loss) before income taxes	(960)	154	(1,509)	151
Income tax (expense) benefit	(97)	(27)	(102)	2
Net income (loss)	(\$1,057)	\$127	(\$1,611)	\$153
Basic earnings (loss) per share	(\$0.13)	\$0.02	(\$0.19)	\$0.02
Diluted earnings (loss) per share	(\$0.13)	\$0.02	(\$0.19)	\$0.02
Weighted-average basic shares	8,302	8,257	8,261	8,280
Weighted-average diluted shares	8,302	8,332	8,261	8,375

Balance Sheet – 2Q20

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

	June 30, 2020	December 31, 2019
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	\$13,273	\$13,936
Trade accounts receivable, net of allowance for doubtful accounts of \$73 and \$80, respectively	2,840	4,099
Inventories	4,731	5,020
Other current assets	2,000	924
TOTAL CURRENT ASSETS	22,844	23,979
Property, plant and equipment – net	1,602	1,668
Income tax receivable	-	640
Other assets	1,717	1,994
TOTAL ASSETS	<u>\$26,163</u>	<u>\$28,281</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	\$908	\$1,151
Accrued compensation	1,304	1,541
Deferred revenue	1,334	1,387
Other accrued liabilities	1,259	1,372
Income taxes payable	64	31
TOTAL CURRENT LIABILITIES	4,869	5,482
Operating lease liabilities	834	1,178
Long-term other payables	150	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, 8,390,943 shares as of June 30, 2020 and 8,212,748 shares as of December 31, 2019	19,319	18,748
Accumulated earnings	897	2,508
Accumulated other comprehensive income	94	274
TOTAL STOCKHOLDERS' EQUITY	<u>20,310</u>	<u>21,530</u>
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	<u>\$26,163</u>	<u>\$28,281</u>

Adjusted EBITDA Reconciliation – 2019

NON-GAAP FINANCIAL MEASURE RECONCILIATION

	Three Months Ended December 31,		Twelve Months Ended December 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

(in thousands)	Six Months Ended June 30			Twelve Months Ended December 31,			
	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 December 31,		Twelve Months Ended 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)

	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, respectively	4,099	3,771
Inventories	5,020	5,185
Other current assets	<u>924</u>	<u>621</u>
TOTAL CURRENT ASSETS	23,979	27,920
Property, plant and equipment – net	1,668	1,985
Income tax receivable	640	598
Other assets	<u>1,994</u>	<u>220</u>
TOTAL ASSETS	<u><u>\$28,281</u></u>	<u><u>\$30,723</u></u>
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	<u>31</u>	<u>47</u>
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 Participating		
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 31, 2018	18,748	19,254
Accumulated earnings	2,508	3,695
Accumulated other comprehensive income	<u>274</u>	<u>408</u>
TOTAL STOCKHOLDERS' EQUITY	<u>21,530</u>	<u>23,357</u>
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	<u><u>\$28,281</u></u>	<u><u>\$30,723</u></u>