



Nasdaq: DAIO

Anthony Ambrose

November 2022



Safe Harbor

Statements in this presentation concerning economic outlook, expected revenue, expected margins, expected savings, expected results, orders, deliveries, backlog and financial positions, semiconductor chip shortages, supply chain expectations, as well as any other statement that may be construed as a prediction of future performance or events are forward-looking statements which involve known and unknown risks, uncertainties and other factors which may cause actual results to differ materially from those expressed or implied by such statements. Forward-looking statement disclaimers also apply to the global COVID-19 pandemic, including the expected effects on the Company's business from Shanghai's COVID-19 lockdowns, the duration and scope, impact on the demand for the Company's products, the pace of recovery for the COVID-19 pandemic to subside, and the Russian invasion of Ukraine including any related international trade restrictions. These factors include uncertainties as to the ability to record revenues based upon the timing of product deliveries, shipping availability, installations and acceptance, accrual of expenses, coronavirus related business interruptions, changes in economic conditions, part shortages and other risks including those described in the Company's filings on Forms 10-K and 10-Q with the Securities and Exchange Commission (SEC), press releases and other communications.

Furthermore, 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.



Data I/O at a Glance



Founded in
1972



Patents



ISO 9001:2015
Certifications



Global Service
& Support

What We Do

We enable global automotive and industrial electronics manufacturing

Solutions

We deliver Programming Equipment, Consumables and Services for Global Manufacturers of Electronic Systems



100

Employees

>57

US &
International
Patents

1.5

Billions of
Devices
Programmed
Annually

>430

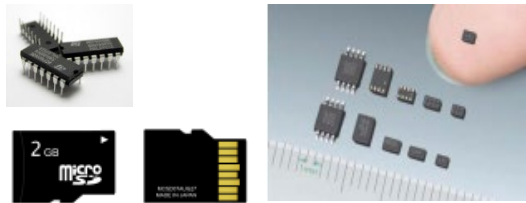
Automated
Programming
Systems Globally

>40

Countries with
Sales & Service

Supporting the Secure Digital World

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



Company Snapshot

Recent Achievements and Trends

- Global Leader in programming revenue. Over 430 PSV systems sold since inception representing over 1.5 billion units/year capacity in the installed base
- Strong momentum in Automotive Electronics for long-term growth
 - 8 of the top 9 and 18 of the top 20 Automotive Electronics companies are customers. ~58% of 2021 orders from Automotive Electronics customers
 - Analysts forecast 10-15% CAGR for Automotive Semiconductors to 2030
- Emerging SentriX® Security Provisioning Platform; Doubling of Revenue in 2021 with key wins in Automotive, Artificial Intelligence, Intelligent metering

Committed to Growing Shareholder Value

- Focusing programming core competencies on higher growth, higher margin vertical markets with greater recurring/consumable sales. Target to reach over 50% recurring revenue within 5 years
- 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

Company Snapshot ⁽¹⁾⁽²⁾

| | |
|-----------------------------------|------------------------|
| NASDAQ: | DAIO |
| Headquarters: | Redmond, WA |
| Established: | 1972 |
| Recent Stock Price: | \$4.09 |
| Market Cap: | \$36M |
| Diluted Shares: | 8.9M |
| 3-M Daily Avg. Volume: | 61,000 shares |
| Sales (TTM): | \$23.3M |
| Net Income (TTM): | \$(1.8)M |
| Diluted EPS (TTM): | \$(0.24) |
| Adj. EBITDA ⁽³⁾ (TTM): | \$317,000 |
| Cash & Sec. (9/30/22): | \$11.0M (\$1.25/share) |
| Debt (9/30/22): | \$0.0 |

(1) Stock price, market cap and volume as of 11/2/22 intraday; Source: Yahoo

(2) Financials for the TTM period ended 9/30/22 or as noted

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

Investment in DAIO



- Publicly traded pure play targeting the rapidly growing automotive electronics market



- Strong cash generator, high operating leverage and no debt -- \$1.25 per share in cash



- Optionality with SentiX security deployment; multiple ways of software monetization targeting all cloud-based and IoT ecosystems

Market Outlook

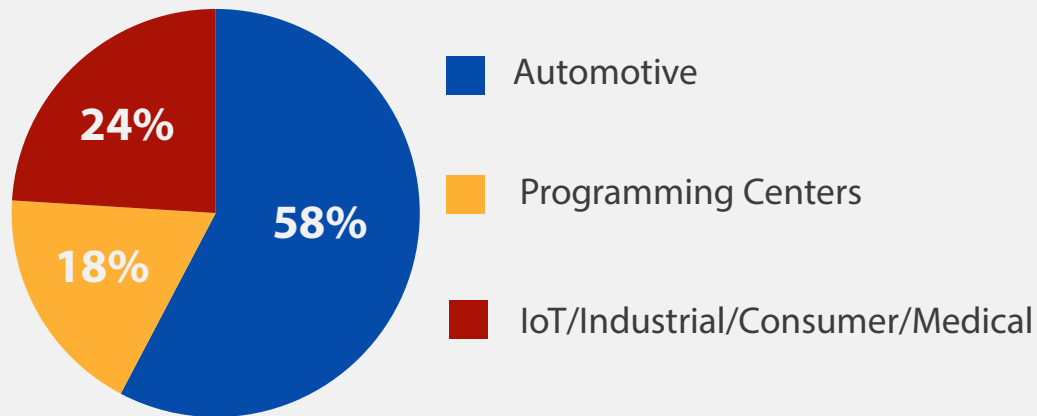
Bringing Devices to Life



Serving Customers Globally in Growing Markets

- The largest programming company in the world, 2-3 times larger than the next programming company
- Trusted supplier to 8 of the top 9 and 18 of the top 20 automotive electronics suppliers
- Providing mission critical medical applications for Class I and Class II devices
- Global footprint with headquarters in Redmond, WA, USA and subsidiary offices in Shanghai, China and Munich, Germany

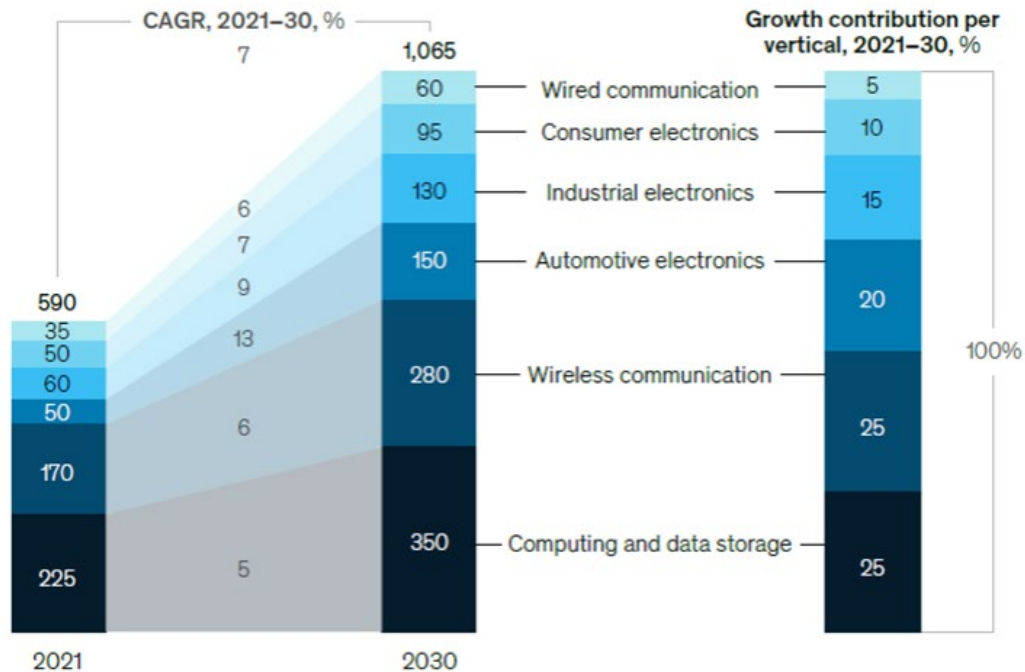
2021 Annual Orders by End Markets



Analysts Predict a Tripling of Automotive Silicon Content in 10 years

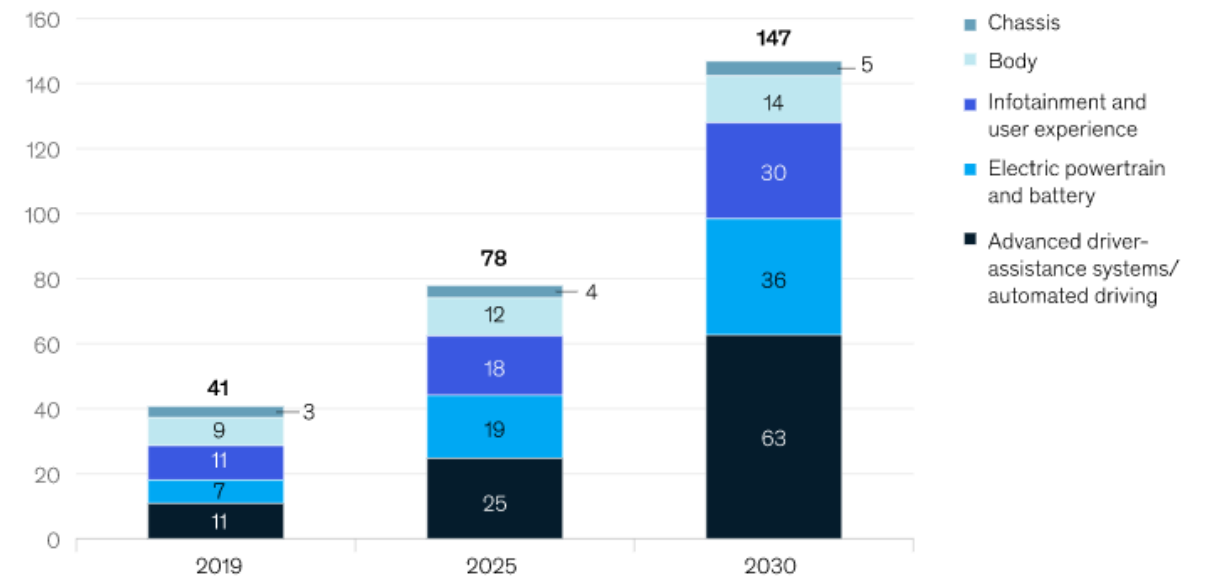
Growth in Global Semiconductor Market Value by Vertical Market

(\$ billions)



Total Automotive Semiconductor Forecast by Application

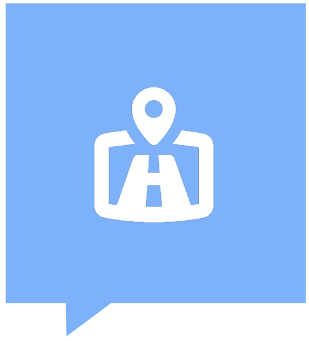
Automotive-semiconductor market, \$ billion



Note: Figures are approximate.

Source: McKinsey & Company report, April 2022

Automotive Electronics Growth Areas

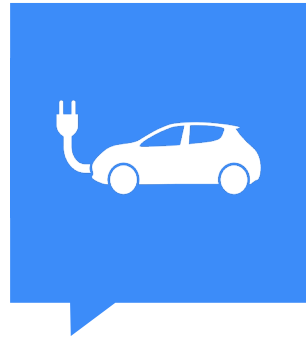


Infotainment/ IVI

2D map / application

Heads-up display

Digital cluster



Electrification

New powertrain

Charging
infrastructure

Better technology

Modularization



ADAS/Autonomous Driving

Sensors

High performance
computing

Big data / analytics

Artificial intelligence / deep
learning

Navigation & guidance



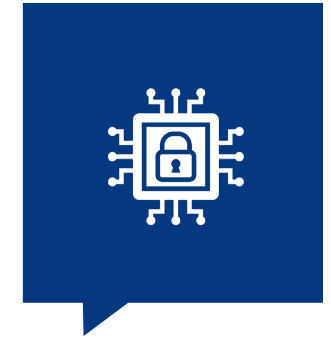
Connectivity

Vehicle

Infrastructure

Cloud

Wearables &
personal devices



Security

Ridesharing

Car sharing

Flexible bus

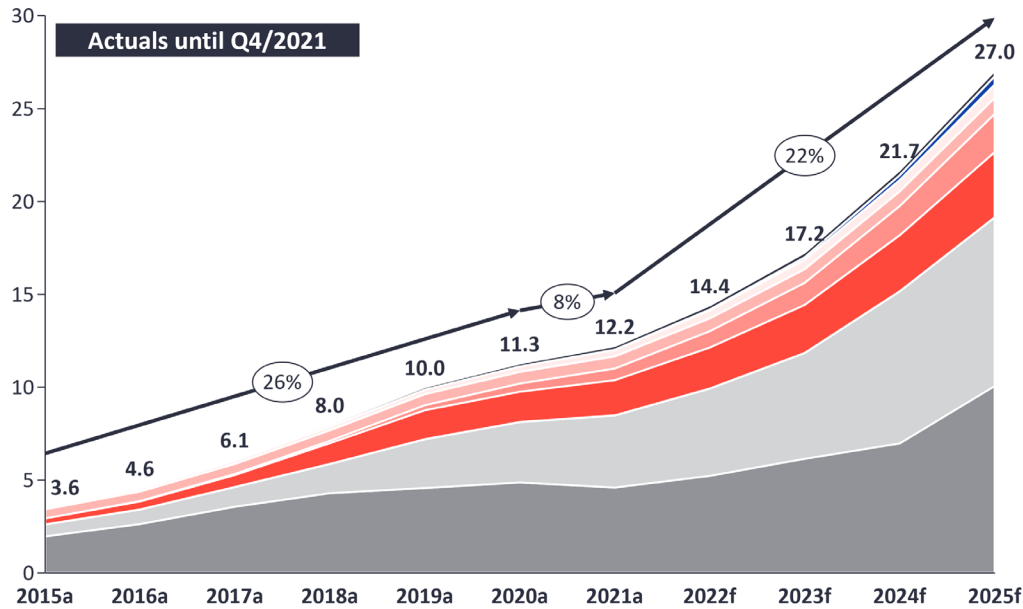
Micromobility

Delivery

IoT Growth Across a Number of Markets

Global IoT Market Forecast [in billion connected IoT devices]

Number of global active IoT Connections (installed base) in Bn



| CONNECTIVITY TYPE | CAGR 20-21 | CAGR 21-25 |
|--|------------|------------|
| Wireless Neighborhood Area Networks (WNAN) | 17% | 11% |
| 5G IoT | - | 159% |
| Other | 22% | 20% |
| Wired IoT | 4% | 7% |
| LPWA | 42% | 34% |
| Legacy Cellular (2G/3G/4G) | 16% | 17% |
| Wireless Local Area Networks (WLAN) | 19% | 24% |
| Wireless Personal Area Networks (WPAN) | -6% | 22% |

XX% = CAGR

Note: IoT Connections do not include any computers, laptops, fixed phones, cellphones or tablets. Counted are active nodes/devices or gateways that concentrate the end-sensors, not every sensor/actuator. Simple one-directional communications technology not considered (e.g., RFID, NFC). Wired includes Ethernet and Fieldbuses (e.g., connected industrial PLCs or I/O modules); Cellular includes 2G, 3G, 4G; LPWAN includes unlicensed and licensed low-power networks; WPAN includes Bluetooth, Zigbee, Z-Wave or similar; WLAN includes Wi-fi and related protocols; WNAN includes non-short range mesh, such as Wi-SUN; Other includes satellite and unclassified proprietary networks with any range.

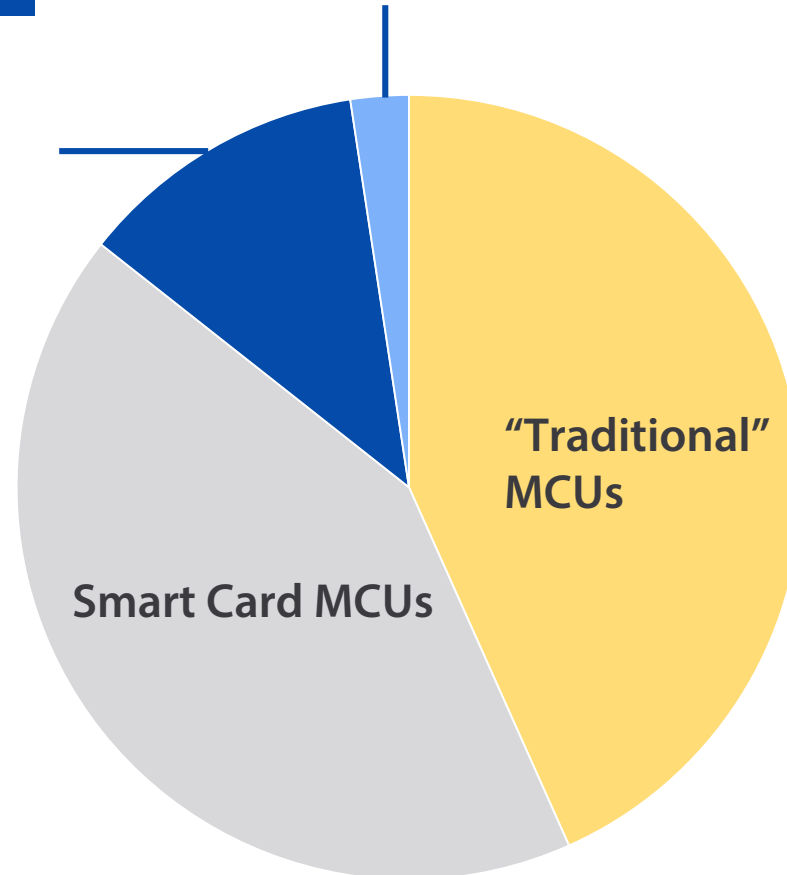
Source: IoT Analytics Research 2022. We welcome republishing of images but ask for source citation with a link to the original post and company website.

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:
>25 Billion Units

IoT Device Security by SentiX[®]

Based on Data I/O's award-winning PSV family of products, the SentiX security deployment platform supports hardware-based security for mass-market IoT edge devices and enables OEMs to protect revenue generating business models and secure their supply chain.

OEMs require robust hardware and software security for IoT devices to protect their brand and meet regulation, data privacy, and safety requirements. The best design approach is to build hardware-based security into their products.

SentiX secures the global electronics supply chain and protects IoT device intellectual property from point of inception to deployment in the field and provisions security objects and secrets into semiconductor devices for low volume prototyping applications and high-volume production through an automated programming system which enables secure provisioning of credentials into security ICs and microcontrollers.

With more than 20 security patents granted, SentiX from Data I/O offers a unique and highly differentiated approach for a large and fast-growing market addressing unmet cybersecurity concerns.



Brand Protection



IP Protection



Regulation



Supply Chain Integrity



OEMs Using Our SentiX[®] Technology

Smart Lock Company

Smart locks and the brands of the OEMs manufacturing them depend on robust security and low power consumption found in hardware security-based microcontrollers.



Water Meter OEM

Heated and chilled water metering is being mandated in Germany and requires strong security to protect revenue and meet regulations.



Electric Meter OEM

A large smart meter manufacturer is using pre-programmed provisioning to secure their supply chain and protect their revenue and brand.



Electric Vehicle Manufacturer

An electric vehicle manufacturer is using a trusted platform module to secure its supply chain and prevent cloning of its charging network.



Industrial Marking OEM

An industrial marking and traceability solutions OEM protects accessory revenue and enables supply chain integrity with a secure microcontroller.



Logistics Solution Provider

A logistics technology provider uses hardware RoT to protect user data and maintain privacy.



New Partnerships for Growth

SentriX
Deployments



Silicon Partners



Technology Partners



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 430 PSV family systems already deployed
- Per Part Fees and Licensing drives high margin recurring revenue growth
- Capital equipment system sale with annual software license made available in 2021 – recorded first sale
- Next generation SentiX Security Deployment as-a-Service including updated hardware and SentiX Product Creator™ to support fully customizable and SentiX GO™ pre-configured security profiles

Financial Overview

Bringing Devices to Life



Financial Overview

Third Quarter 2022 Highlights

- Net sales of \$7.2 million; bookings of \$7.1 million
- Quarter-end backlog of \$4.9 million
- Gross margin as a percentage of sales of 57.0%
- Net income of \$847,000 or \$0.10 per share
- Adjusted EBITDA* of \$1.4 million
- Cash & Equivalents of \$11.0 million; no debt
- Automotive Electronics represented 70% of third quarter 2022 bookings
- VerifyBoost™ Technology announced with up to 4.5x improvement in programming verify performance for automotive UFS applications
- SentiX® customer going into production in Asia
- 4 new customer wins

*Adjusted EBITDA is a non-GAAP financial measures. A reconciliation is provided in the tables of this presentation.

Balance Sheet and Capital Structure Overview

Balance Sheet Highlights

At September 30, 2022:

- \$11.0 million in cash and cash equivalents
- No debt
- \$16.5 million of net working capital
- Total stockholders' equity of \$17.9 million, or approx. \$2.02 per diluted share outstanding
- EV/Sales at 1.08⁽³⁾
- NOLs of approximately \$13.0 million

Enterprise Value (\$K)

| | |
|---|------------------|
| Market Cap ⁽¹⁾ | \$ 36,233 |
| Plus Total Debt ⁽²⁾ | 0 |
| Less Total Cash ⁽²⁾ | <u>\$ 11,041</u> |
| Enterprise Value | \$ 25,192 |
| Diluted Shares Outstanding ⁽²⁾ | 8,859,000 |

⁽¹⁾ At 11/2/22

⁽²⁾ At 9/30/22

⁽³⁾ Sales based on TTM through 9/30/22 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

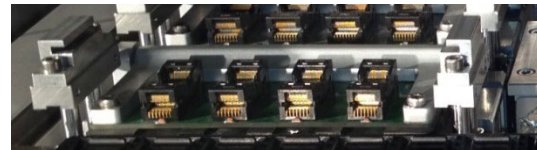
Growing Recurring Revenue Mix

Capital Equipment

- Approx. 58% of 2021 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. 30% of 2021 sales
- Usually last 3-24 months



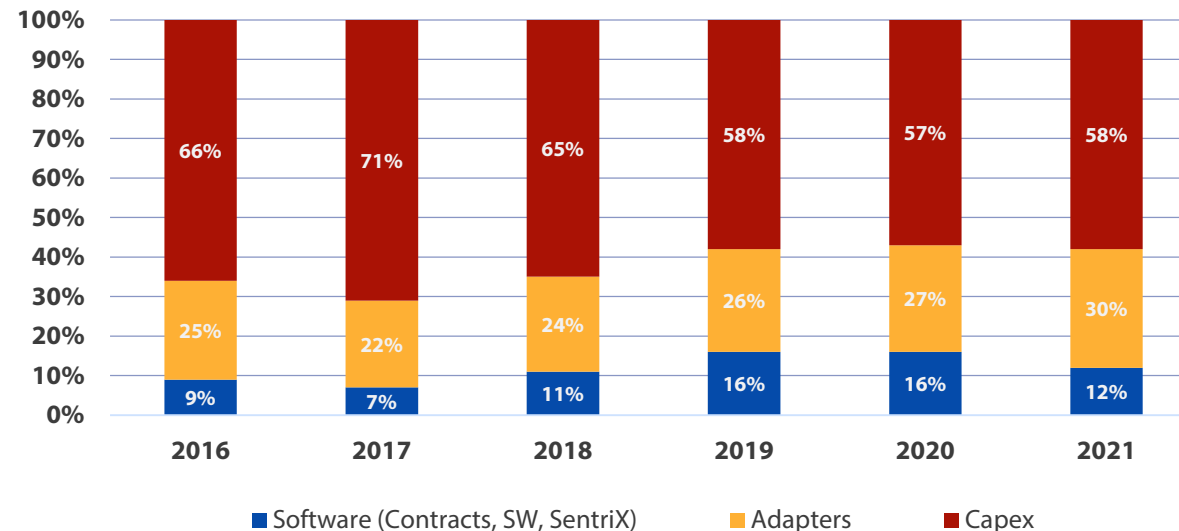
Software, SentiX, Service

- Approx. 12% of 2021 sales
- Annual Software/Service Contracts
- Device Supports
- SentiX Revenues

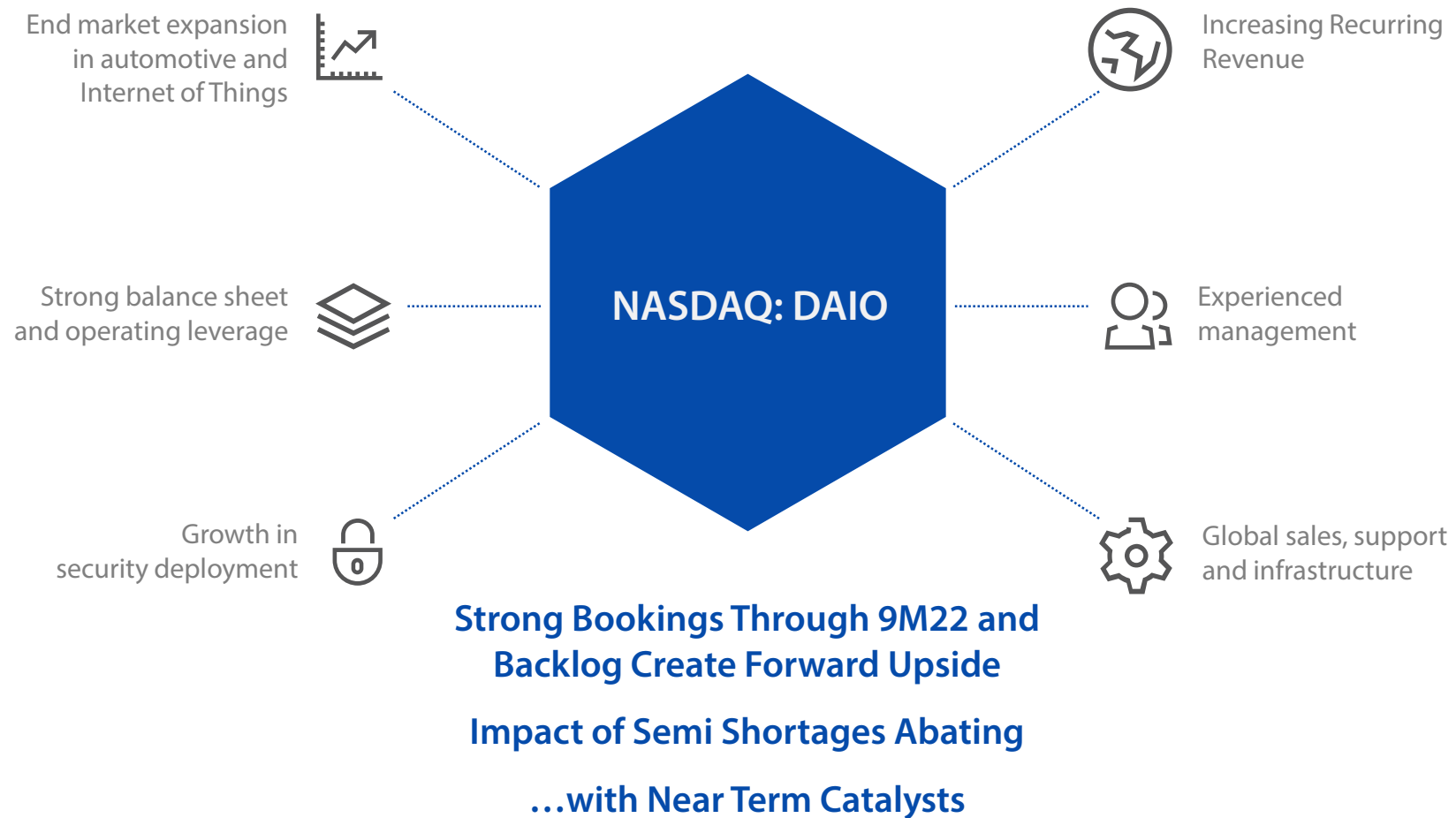


2021 Highlight

Total consumable revenue grew for the fourth consecutive year on strength of adapter sales



Investment Merits: Positioned for Long-Term Growth



The Data IO logo is displayed on a large screen at the front of a conference room. The room is filled with an audience seated at desks with laptops, facing the screen. The overall scene is dimly lit, with the screen being the primary light source.

Thank You!

NASDAQ: DAIO

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

The Data IO logo is located in the bottom right corner of the slide. It features the text "Data IO" in a bold, sans-serif font, with a stylized blue and yellow swoosh element.

Backup & Financial Reconciliation

Bringing Devices to Life



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 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 AI 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.



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 ~57 U.S. and International utility patents. Currently, Data I/O has approximately 20 patents related to the SentiX platform and security provisioning technology

Over 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

Adjusted EBITDA Reconciliation

NON-GAAP FINANCIAL MEASURE RECONCILIATION

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|--|-------------------------------------|--------------|------------------------------------|----------------|
| | 2022 | 2021 | 2022 | 2021 |
| (in thousands) | | | | |
| Net Income (loss) | \$847 | \$12 | (\$1,630) | (\$350) |
| Interest (income) | (9) | (8) | (11) | (11) |
| Taxes | 181 | 112 | 700 | 219 |
| Depreciation and amortization | 148 | 168 | 441 | 516 |
| EBITDA earnings (loss) | \$1,167 | \$284 | (\$500) | \$374 |
| Equity compensation | 264 | 280 | 935 | 960 |
| Adjusted EBITDA, excluding equity compensation | <u>\$1,431</u> | <u>\$564</u> | <u>\$435</u> | <u>\$1,334</u> |

Adjusted EBITDA Reconciliation – 2014-2021

NON-GAAP FINANCIAL MEASURE RECONCILIATION

| (in thousands) | Twelve Months Ended December 31, | | | | | | | |
|--|-------------------------------------|-----------|-----------|---------|---------|---------|---------|---------|
| | 2021 | 2020 | 2019 | 2018 | 2017 | 2016 | 2015 | 2014 |
| Net Income (loss) | (\$555) | (\$3,964) | (\$1,187) | \$1,606 | \$5,449 | \$1,656 | \$927 | \$1,099 |
| Interest (income) expense | (\$11) | (\$14) | (\$53) | (\$37) | (\$29) | (\$44) | (\$105) | (\$159) |
| Taxes | \$112 | \$387 | \$31 | \$291 | (\$288) | \$36 | (\$5) | \$7 |
| Depreciation and amortization | \$667 | \$815 | \$868 | \$955 | \$822 | \$602 | \$542 | \$593 |
| EBITDA earnings (loss) | \$213 | (\$2,776) | (\$341) | \$2,815 | \$5,954 | \$2,250 | \$1,359 | \$1,540 |
| Equity compensation | \$1,238 | \$1,467 | \$1,171 | \$1,230 | \$714 | \$520 | \$435 | \$400 |
| Restructure/Impairment charge | - | 943 | - | - | - | - | - | \$13 |
| Adjusted EBITDA earnings (loss), excluding equity compensation and restructure/impairment charge | \$1,451 | (\$366) | \$830 | \$4,045 | \$6,668 | \$2,770 | \$1,794 | \$1,953 |

Income Statement

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

| | <u>Three Months Ended</u> <u>September 30,</u> | | <u>Nine Months Ended</u> <u>September 30,</u> | |
|---|---|--------------|--|----------------|
| | <u>2022</u> | <u>2021</u> | <u>2022</u> | <u>2021</u> |
| Net Sales | \$7,212 | \$6,730 | \$16,946 | \$19,478 |
| Cost of goods sold | <u>3,101</u> | <u>2,642</u> | <u>7,774</u> | <u>8,215</u> |
| Gross margin | 4,111 | 4,088 | 9,172 | 11,263 |
| Operating expenses: | | | | |
| Research and development | 1,432 | 1,730 | 4,605 | 5,009 |
| Selling, general and administrative | <u>1,967</u> | <u>2,216</u> | <u>5,943</u> | <u>6,332</u> |
| Total operating expenses | <u>3,399</u> | <u>3,946</u> | <u>10,548</u> | <u>11,341</u> |
| Operating income (loss) | 712 | 142 | (1,376) | (78) |
| Non-operating income (loss): | | | | |
| Interest income | 9 | 8 | 11 | 11 |
| Gain on sale of assets | - | - | 57 | - |
| Foreign currency transaction gain (loss) | <u>307</u> | <u>(26)</u> | <u>378</u> | <u>(64)</u> |
| Total non-operating income (loss) | <u>316</u> | <u>(18)</u> | <u>446</u> | <u>(53)</u> |
| Income (loss) before income taxes | 1,028 | 124 | (930) | (131) |
| Income tax (expense) benefit | <u>(181)</u> | <u>(112)</u> | <u>(700)</u> | <u>(219)</u> |
| Net income (loss) | <u>\$847</u> | <u>\$12</u> | <u>(\$1,630)</u> | <u>(\$350)</u> |
| Basic earnings (loss) per share | \$0.10 | \$0.00 | (\$0.19) | (\$0.04) |
| Diluted earnings (loss) per share | \$0.10 | \$0.00 | (\$0.19) | (\$0.04) |
| Weighted-average basic shares | 8,816 | 8,621 | 8,715 | 8,519 |
| Weighted-average diluted shares | 8,859 | 8,760 | 8,715 | 8,519 |

Balance Sheet

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

| | <u>September 30, 2022</u> | <u>December 31, 2021</u> |
|--|-------------------------------|------------------------------|
| ASSETS | | |
| CURRENT ASSETS: | | |
| Cash and cash equivalents | \$11,041 | \$14,190 |
| Trade accounts receivable, net of allowance for doubtful accounts of \$98 and \$89, respectively | 4,412 | 3,995 |
| Inventories | 7,104 | 6,351 |
| Other current assets | 615 | 737 |
| TOTAL CURRENT ASSETS | <u>23,172</u> | <u>25,273</u> |
| Property, plant and equipment – net | 983 | 946 |
| Other assets | 2,314 | 2,838 |
| TOTAL ASSETS | <u><u>\$26,469</u></u> | <u><u>\$29,057</u></u> |
| LIABILITIES AND STOCKHOLDERS' EQUITY | | |
| CURRENT LIABILITIES: | | |
| Accounts payable | \$1,533 | \$1,373 |
| Accrued compensation | 1,631 | 2,496 |
| Deferred revenue | 1,805 | 1,507 |
| Other accrued liabilities | 1,543 | 1,413 |
| Income taxes payable | 170 | - |
| TOTAL CURRENT LIABILITIES | <u>6,682</u> | <u>6,789</u> |
| Operating lease liabilities | 1,659 | 2,277 |
| Long-term other payables | 203 | 138 |
| 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, 8,816,381 shares as of September 30, 2022 and 8,621,007 shares as of December 31, 2021 | 21,656 | 20,886 |
| Accumulated earnings (deficit) | (3,641) | (2,011) |
| Accumulated other comprehensive income | (90) | 978 |
| TOTAL STOCKHOLDERS' EQUITY | <u>17,925</u> | <u>19,853</u> |
| TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY | <u><u>\$26,469</u></u> | <u><u>\$29,057</u></u> |