



NASDAQ: DAIO

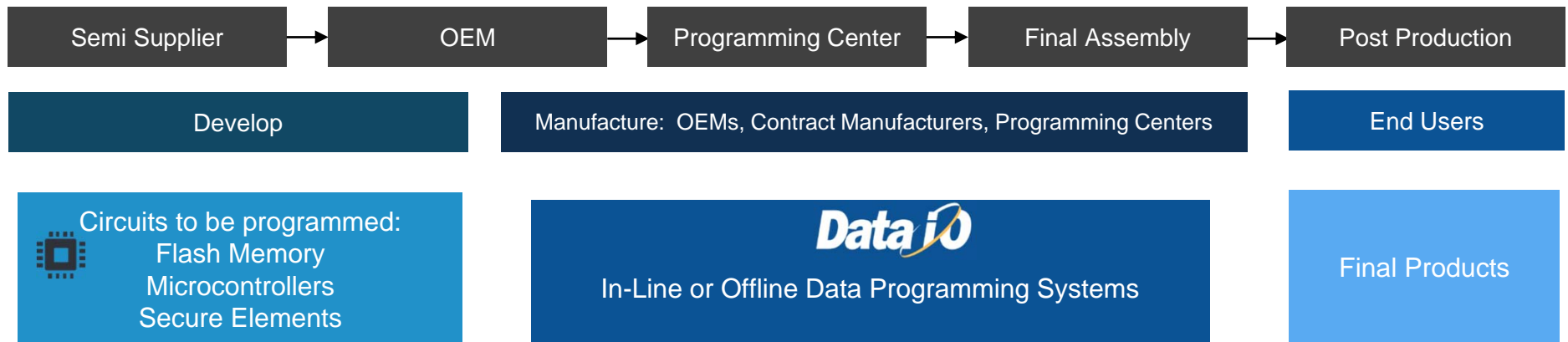
**Data I/O Corporation
September 2019
Investor Presentation**

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 release 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.

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.



Company Snapshot



Recent Achievements and Trends

- 5 consecutive years of profitability
- Strong momentum in Automotive and IoT devices
 - 8 of top 9 Auto electronics companies are customers
 - 5-year global supply agreement with Bosch extended by 2.5 years in 3Q18
 - ~60% of revenue from Automotive Electronics customers
- Puget Sound Business Journal's Fastest Growing Public Technology Companies list – 3 consecutive years
- Industry and technology awards for Lumen®X, Universal Flash Storage (UFS), PSV Lines and SentiX™
- Over 250 PSV systems sold
- Traction for SentiX Security Provisioning Platform

Committed to Growing Shareholder Value

- Focusing programmable core competencies on higher growth, higher margin vertical markets
- Differentiated market position through technology leadership and global support
- Approx. 16% of stock held by insiders so that management and Board are aligned with shareholders
- \$2 million buyback approved in 4Q18

Company Snapshot ⁽¹⁾⁽²⁾

NASDAQ:	DAIO
Headquarters:	Redmond, WA
Established:	1972
Stock Price:	\$4.00
Market Cap:	\$33M
Diluted Shares:	8.3M
10-Day Avg. Volume:	25,000 shares
Sales _(TTM) :	\$26.3M
Net Income _(TTM) :	\$1.1M
Diluted EPS _(TTM) :	\$0.14
Adj. EBITDA ⁽³⁾ _(TTM) :	\$3.4M
Cash & Sec. (6/30/19):	\$15.2M (\$1.84/share)
Debt (6/30/19):	\$0.0

(1) Stock price, market cap and volume as of 8/16/19; Source: Yahoo

(2) Financials for the TTM period ended 6/30/19 or as noted

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

Long Term Growth Focus

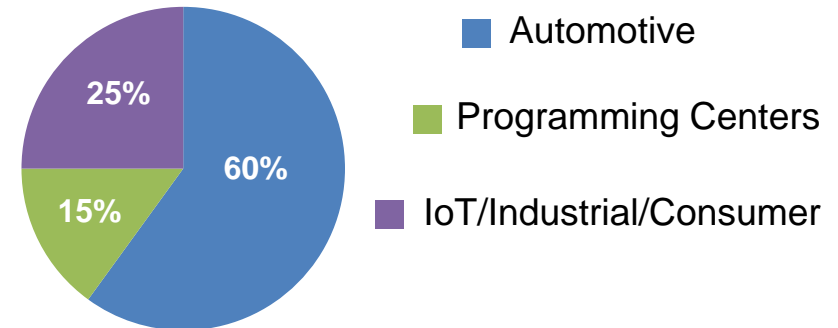
- Growth strategy focused on advanced data and security programming solutions for Automotive Electronics, Internet of Things (IoT) and Industrial markets
 - Expansion of addressable markets
 - Technology leadership through continued heavy R/D investment in intellectual property portfolio
 - Greater balance between capital equipment sales and recurring revenues
- Developing new partnerships for Security Provisioning Platform
- Deploying excess capital and other resources for opportunistic growth; return excess capital to shareholders

Serving Customers Globally in Growing Markets



- The largest programming company in the world, 2-3 times larger than the next programming company
- Global footprint with headquarters in Redmond, USA and subsidiary offices in Shanghai China and Munich Germany

2018 Annual Orders by End Markets



Sample Customers

Automotive



IoT/ Industrial/Consumer



Programming Centers and EMS

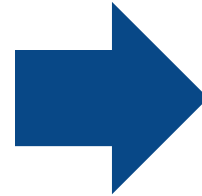


How Data I/O Markets Grow



Market Forces

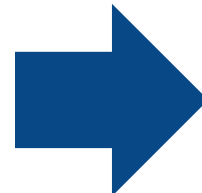
- **IoT and Automotive Growth**
 - **Devices Get Smaller**
 - **Move towards Automation**



Programming Impact

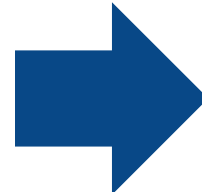
Unit Growth

- **Products will increase their code size as customers want more features**



Bit Growth

- **Products will be more secure, creating new opportunities**



**Added Complexity +
Security Requirements**

Programming Demand = Units x Bits x Security

Market Leading Technology



Industry Leading Products

Automated Handlers



Programming Engines



Managed and Secure Programming Systems



History of Innovation

- Data I/O's products are viewed as the “gold standard” for advanced programming equipment and IP management and security solutions.
- Research and Development focused on:
 - Breakthroughs in programming technology to support explosive demand for automotive infotainment solutions using large FLASH memories and microcontrollers.
 - Security Provisioning Platform technology for Internet of Things applications
 - Introduced Universal Flash Storage (UFS) solution and SentiX™ Security Provisioning Platform
- 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.

Data I/O Sets Blistering Pace for Programming Market



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



NPI Award for New
Job Composer
Software Application



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



Doubles Programming Performance w/ TurboBoost™ for
Programmers **LUMENX**

2x increase in programming performance for eMMC devices shown at IPC APEX Expo 2019



Programming Platform Doubles Download Speed
& Support Next-Generation Microcontrollers



Scripting Interface Upgrade to
SentriX™ Secure Provisioning System



DigiCert's **Certificate Signing Services**
via
Data I/O's **SentriX® Secure Provisioning System**





Financial Overview

Second Quarter 2019 Highlights

- Net sales of \$5.8 million; bookings of \$5.1 million
- Gross margin as a percentage of sales of over 61%
- Net income of \$127,000 or \$0.02 diluted earnings per share
- Adjusted EBITDA*, excluding equity compensation, of \$728,000
- Cash & Equivalents of \$15.2 million; no debt
- Auto. electronics, advanced programming and secure provisioning leadership
 - Automotive represented 56% of bookings year to date through 2Q19
 - Appointed Michael Tidwell as VP Marketing and Business Development
 - Assembly Products LLC expands sales in NY/New England region of USA
 - Embedded Technologies Conference speaking engagements included Managed & Secure Programming for the Automotive World
 - NXP SE050 Secure Element marks 4th NXP product support by SentiX[®]™
 - Ended 2Q19 with 12 partners, 5 system deployments for SentiX system
- Repurchased 188,000 shares as part of \$2 million buyback authorized 10/2018

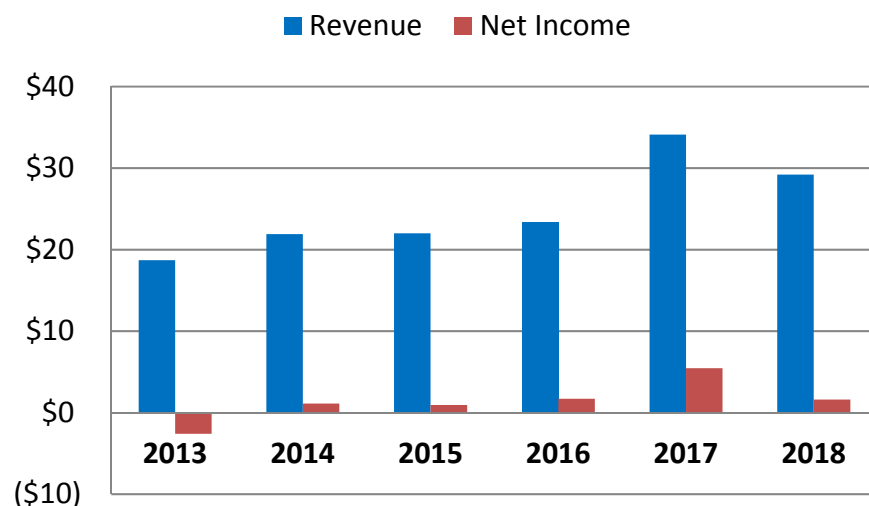
* Adjusted EBITDA is a non-GAAP financial measure. A reconciliation is provided in the **Appendix section of this presentation.**

Operational Performance

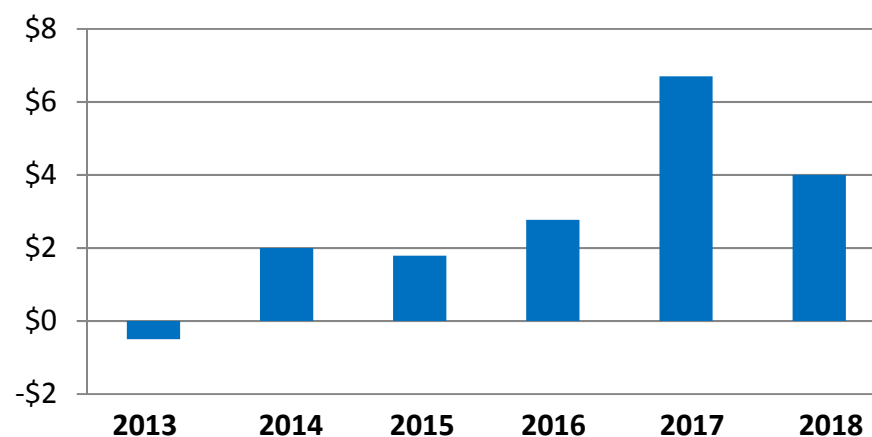


Long Term Performance Improvements through Innovation and Operational Excellence

Revenue and Net Income (\$M)



Adjusted EBITDA (\$M)



EBITDA adjusted for restructuring charges and stock based compensation

Growth Drivers

- Semi-cap equip. cycle
- Automotive Electronics
- Internet-of-Things
- Recurring revenues from installed base
- SentiX revenues (ramping in 2020)

Balance Sheet and Capital Structure Overview



Balance Sheet Highlights

At June 30, 2019:

- \$15.2 million in cash and cash equivalents
- No debt
- \$19.5 million of net working capital
- Total stockholders' equity of \$22.7 million, or approx. \$2.75 per diluted share outstanding
- EV/Sales at 0.7x⁽³⁾
- EV/Adjusted EBITDA at 5.2x⁽³⁾
- NOLs of approximately \$13.0 million

Enterprise Value (\$K)

Market Cap ⁽¹⁾	\$ 33,000
Plus Total Debt ⁽²⁾	0
Less Total Cash ⁽²⁾	<u>\$ 15,200</u>
Enterprise Value	\$ 17,800
Diluted Shares Outstanding ⁽²⁾	8,300,000

⁽¹⁾ At 8/16/19; Source: Yahoo

⁽²⁾ At 6/30/19

⁽³⁾ Sales and Adjusted EBITDA based on TTM through 6/30/19 financial results

Balance Sheet Strategy

- Important to maintain strong balance sheet in a cyclical industry, with about 65% of revenues from capital equipment sales
- Financial flexibility allows the company to:
 - Withstand, and advance during, downturns in semi cycle
 - Invest in organic and acquisitive growth opportunities for the long term
 - Develop recurring revenue streams
- \$2 million buyback approved in 4Q18. \$1.8 million for purchase of 348,000 shares through 6/30/19
- Approx. \$8.0 million returned to shareholders from buybacks authorized in '12, '16 and '18

Capital Equipment to Recurring Revenue



Capital Equipment

- Approx. 65% of 2018 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

Consumables

Adapters



- Approx. 24% of 2018 sales
- Usually last 3-24 months

Software and Maintenance

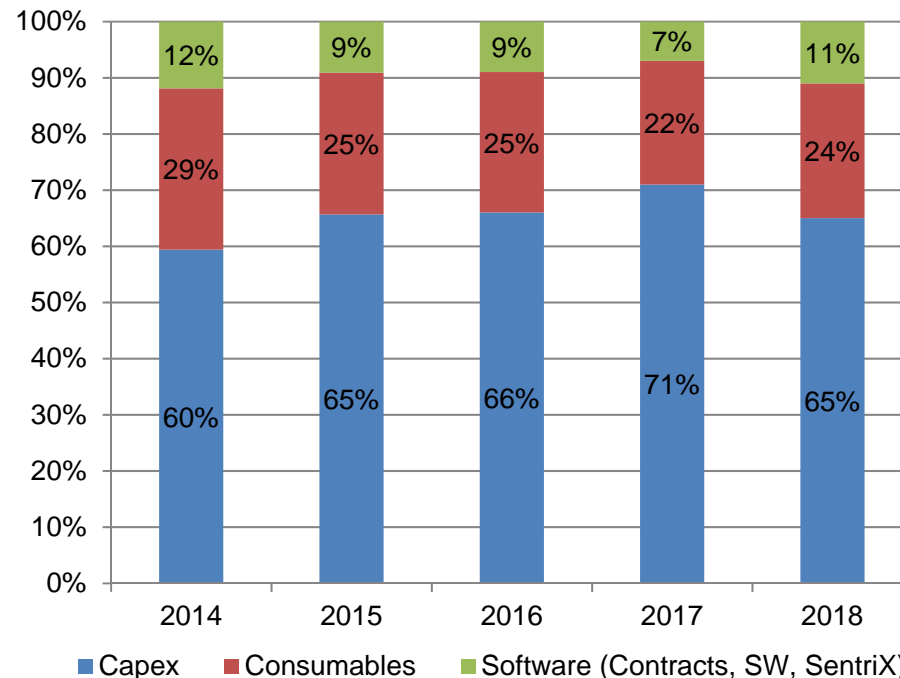


- Approx. 11% of 2018 sales
- Annual software upgrades

Mix Shift in Revenues

- SentiX drives strategy shift toward consumable and recurring revenues over time
- SentiX revenue for security provisioning & programming is recurring
- Lower % capital equipment sales reduces cyclical

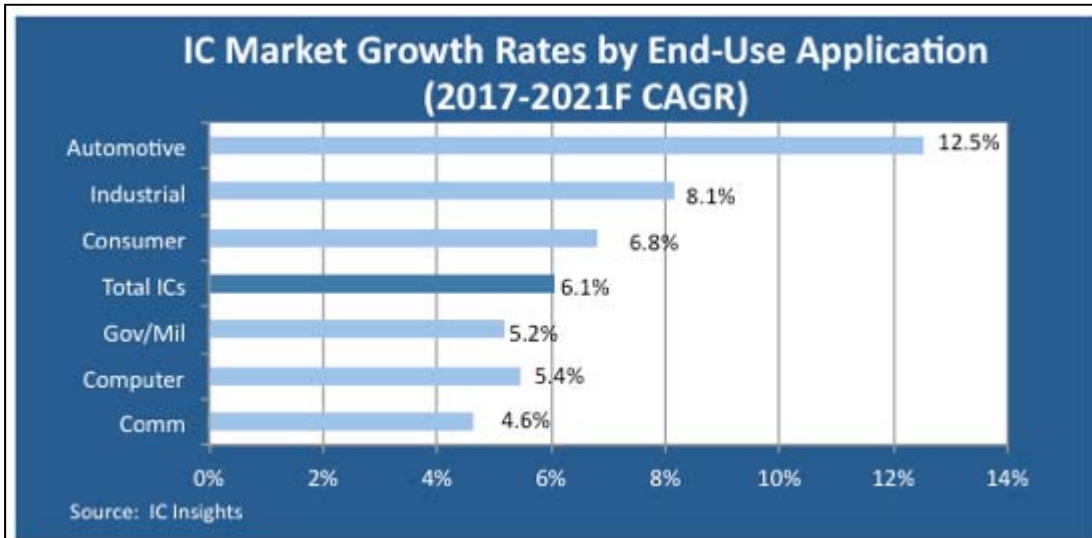
Revenue by Type



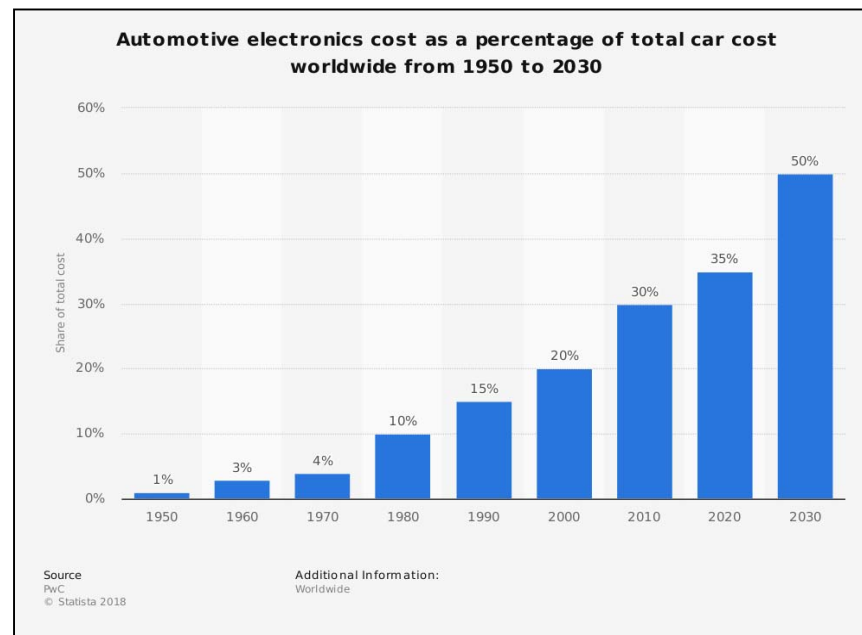


Market Outlook

Automotive & Industrial Semi Growth Drives Programming Market



Automotive & Industrial continue to be fastest growing segments



Automotive Electronics Evolution



Addressing Macro Trends in Automotive

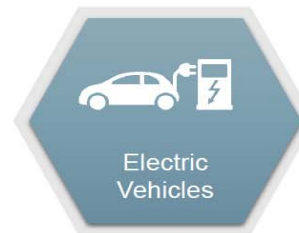
Visteon®



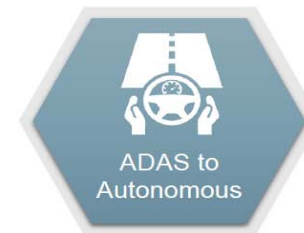
Analog to
Digital



Device & Cloud
Connectivity



Electric
Vehicles



ADAS to
Autonomous

Cockpit of the Future

Visteon®



Smart Mobile Assistant

Fully Digital

- Large, curved digital displays
- Haptic, knob-on-glass for tactile feedback



Connected

- Access to cloud data and services
- Hybrid cloud/edge computing



Automated

- Advanced active safety features
- Self-driving under specific conditions



Learning

- Machine learning based solutions
- Improved voice and identification features

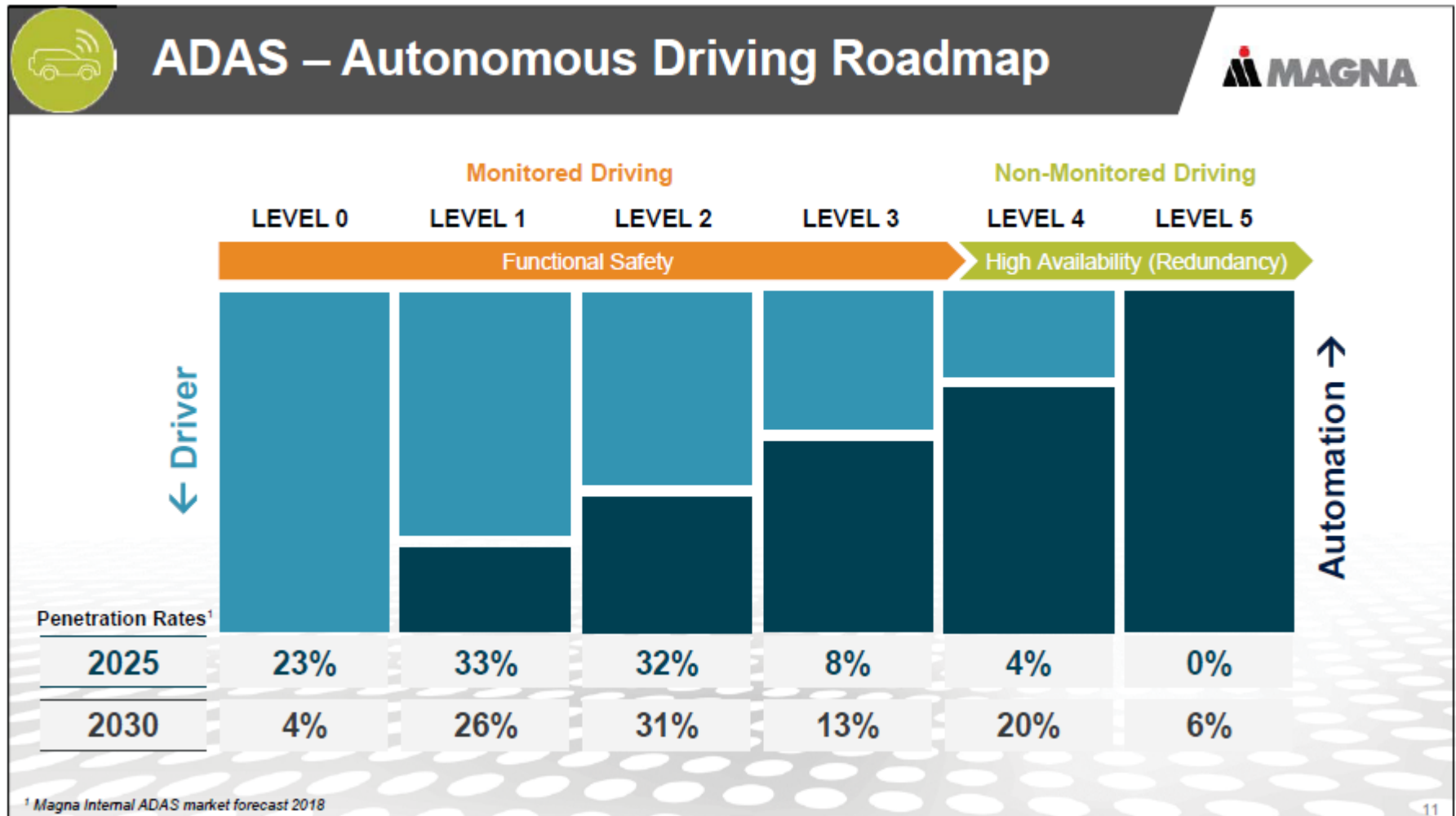


Voice Enabled

- Conversational cockpit assistant
- Natural language voice interaction



ADAS Penetration Over Time



Substantial Growth in Electronics Subsystems Well Before Fully Autonomous Driving

FLASH Memory Growth in the Connected and Autonomous Vehicle



ADAS / Autonomous
Car
8 GB to 16GB

Connectivity
4 GB to 16GB

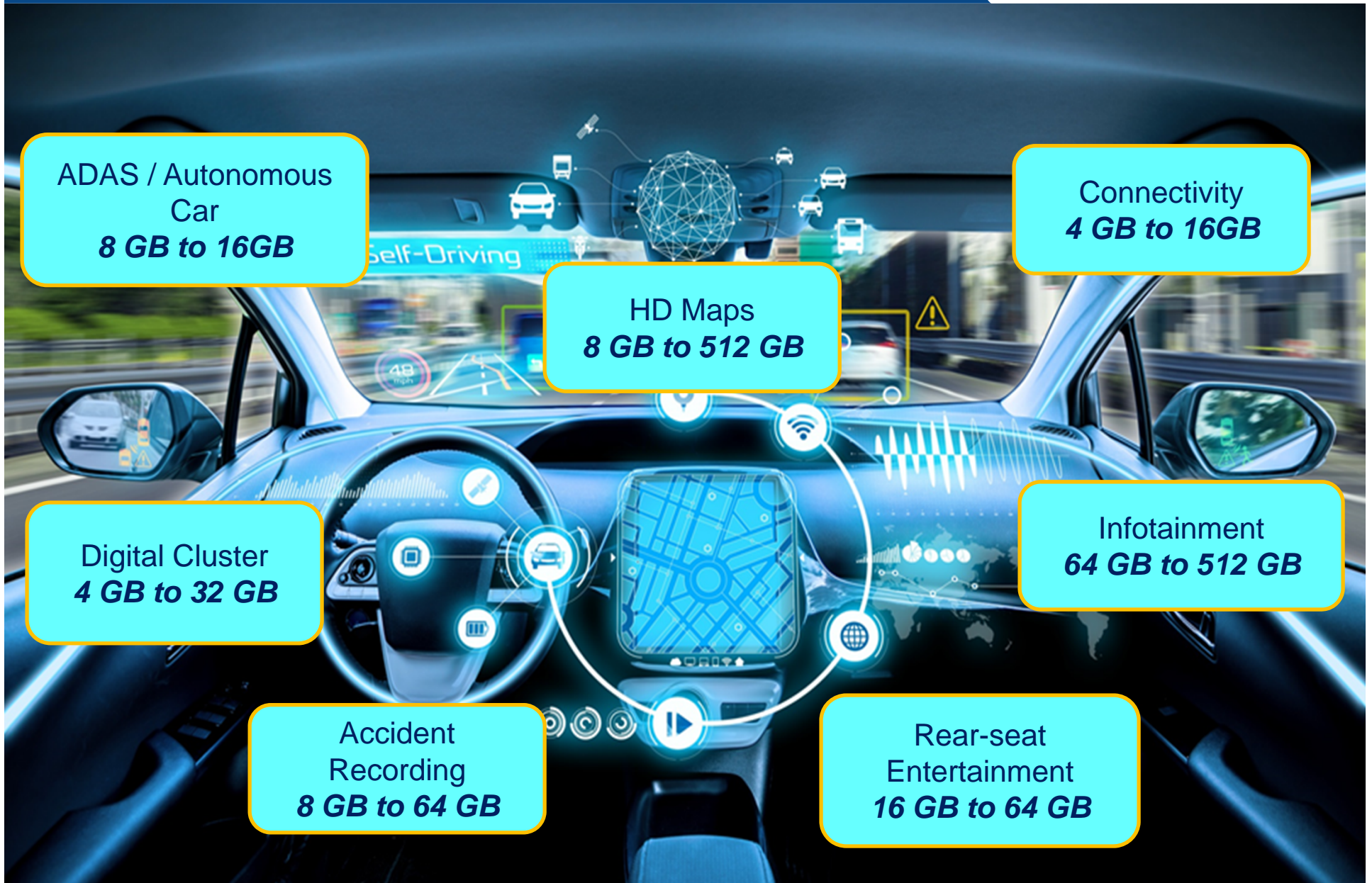
HD Maps
8 GB to 512 GB

Digital Cluster
4 GB to 32 GB

Infotainment
64 GB to 512 GB

Accident
Recording
8 GB to 64 GB

Rear-seat
Entertainment
16 GB to 64 GB



Automotive is Moving to UFS FLASH



Western Digital, Samsung, Micron & Toshiba support Automotive Grade UFS devices

6 out of the top 9 automotive electronics manufacturers are transitioning from eMMC to UFS

8 out of the top 9 automotive electronics suppliers choose Data I/O

Data I/O Delivers Automotive UFS



**Lumen®X
Programmer**



LumenX with 4 UFS Interface Boards







































PSV System



**Maximum Performance
Maximum Flexibility
Investment Protection for Customers**

IoT Market Segmentation



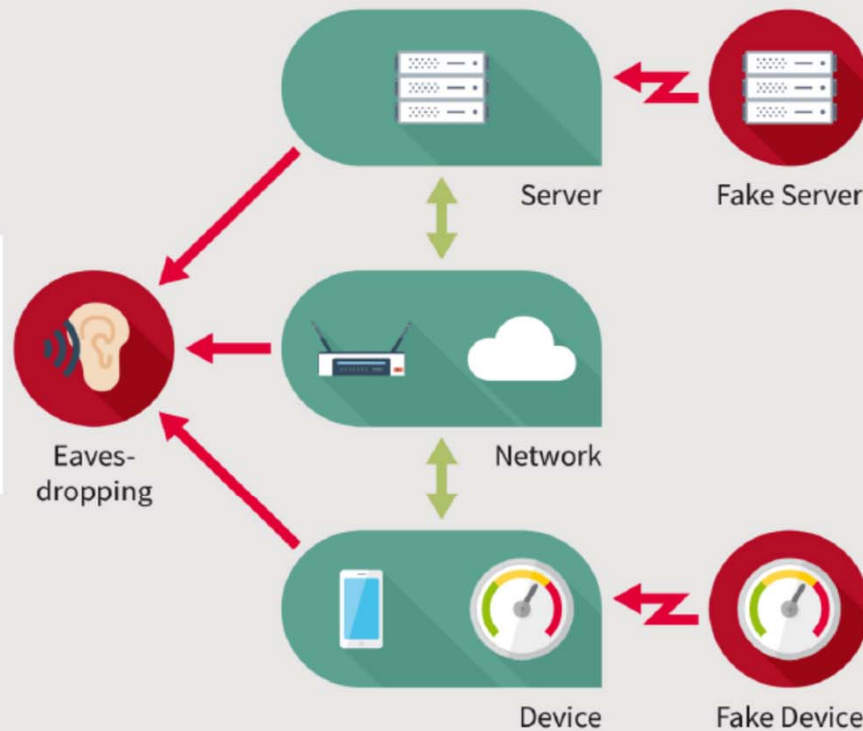
Consumer	Mobility	Energy	Industry & Logistics	ICT	Healthcare	Others
Smart Home 	Cars 	Solar PV 	Industrial Motor Controls & Drives 	Data Centers 	Medical Equipment 	Advertising 
Major Home Appliances 	Trucks & Buses 	Wind Power 	Automation Equipment 	Cellular Networks 	Assisted Living 	Retail 
Small Home Appliances 	Construction Agricultural Vehicles 	Other Power Generation 	Building Automation 	Other WAN 	Lifestyle 	Gambling 
Consumer Electronics (incl. Wearables) 	Traction 	Energy Storage Systems 	Logistics 	Wireless LAN & PAN 		Defense 
Lighting 	Light Electric Vehicles 	Transmission & Distribution 				Aerospace 
Smartcards 		Smart Meters 				
Smartphones & Tablets 		Charging Stations 				
Desktops & Notebooks 						

IoT Device Security Threats



Security threats for IoT

An **Eavesdropper** listening in on data or commands can reveal confidential information about the operation of the infrastructure.



A **Fake Server** sending incorrect commands can be used to trigger unplanned events, to send some physical resource (water, oil, electricity, etc.) to an unplanned destination, and so forth.

A **Fake Device** injecting fake measurements can disrupt the control processes and cause them to react inappropriately or dangerously, or can be used to mask physical attacks.

IoT Market Drivers - Multi-year Secular Growth



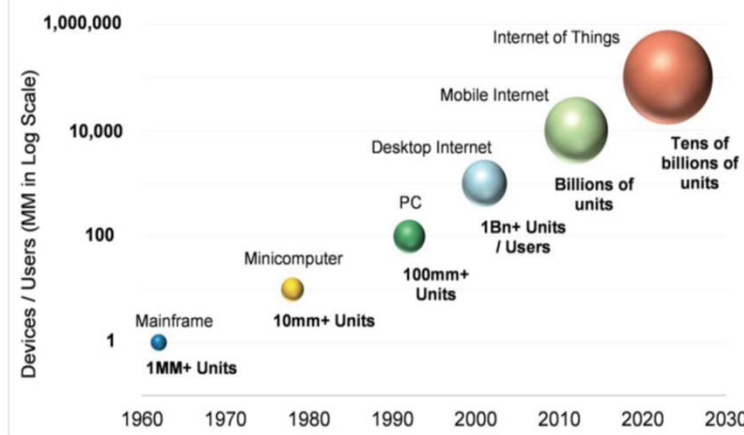
- The IoT is forecast to be bigger than the mobile internet and desktop markets

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

Needham & Company, November 27, 2015

- ...But Security Issues are top of mind and must be addressed

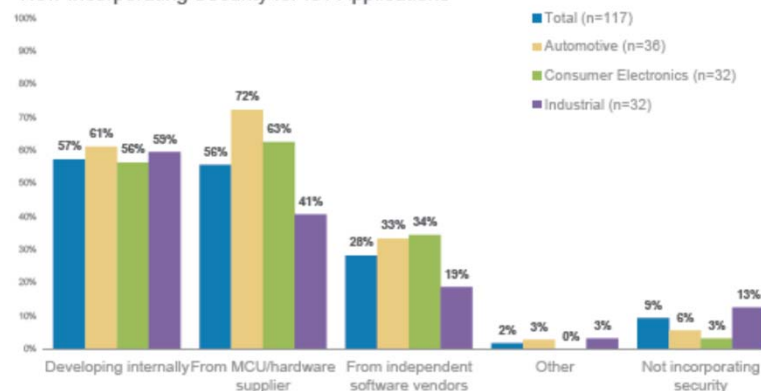
Computing Growth Drivers over Time, 1960-2030e



Source: Company Data, Morgan Stanley Research

Over 90% of respondents are incorporating security along with their MCU products

How Incorporating Security for IoT Applications



Source: AlphaWise Survey, Morgan Stanley Research

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 a secure.

by Tom Simonite January 1, 2015

The trend to connect devices to the Internet is making life easier for hackers—but also keeping...

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

NEWS ANALYSIS

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

MORE LIKE THIS

- Thugs developing ransomware for Android
- Cryptoworms: The future of ransomware
- Your router won't protect your smart home

on IoT Answers

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

Credit: Kim Munro

IN THE

SentriX™ Security Provisioning Platform

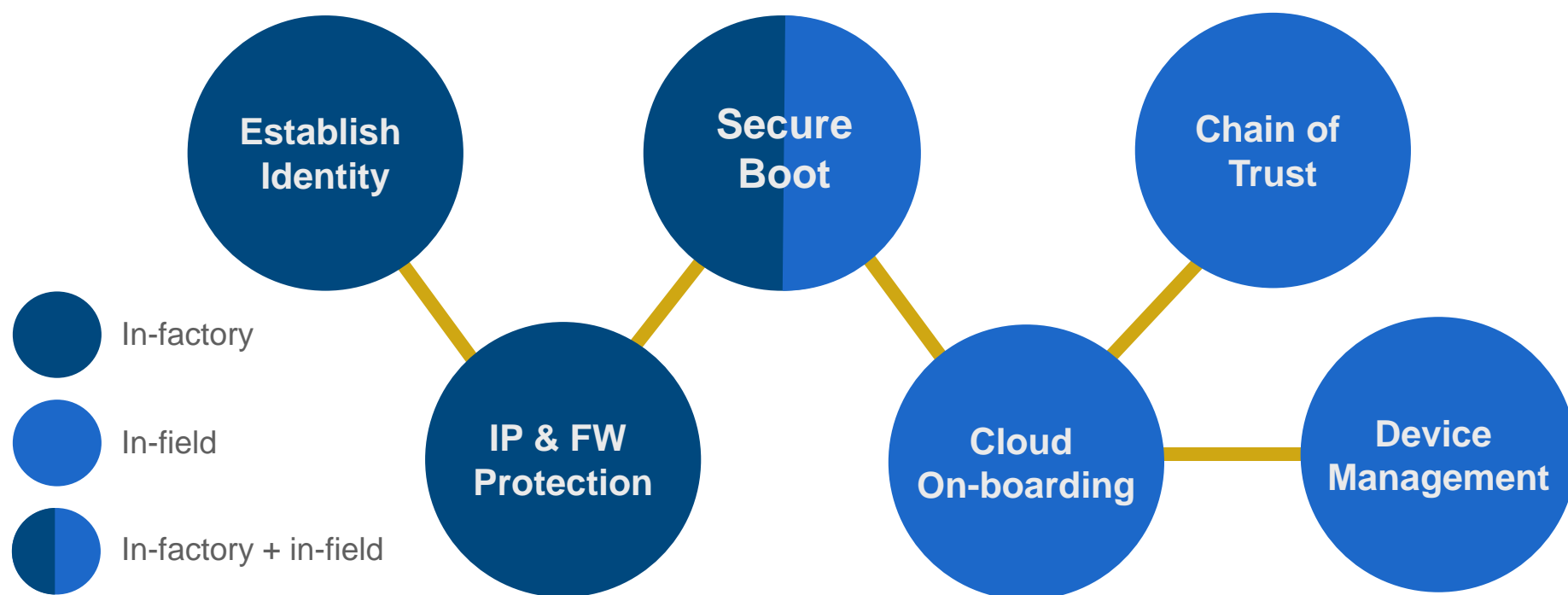


Secure Programming Center Premise

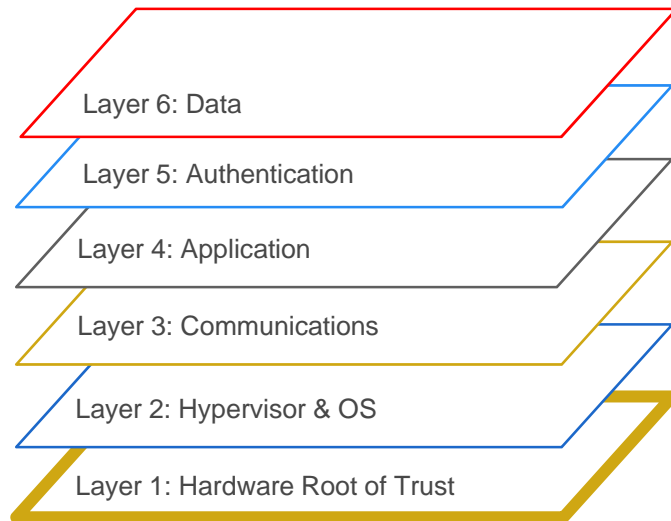


February 28, 2018: Best of Show with Embedded Award for the SentriX Security Provisioning Platform

Leading SentriX Enabled Use Cases

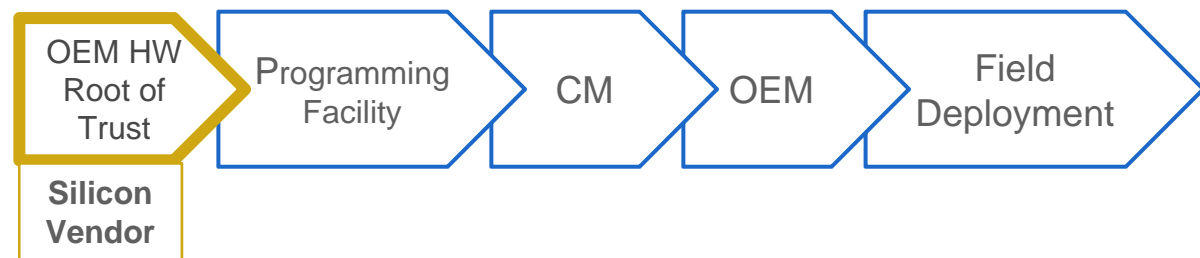


Security By Design



Security Layers

IoT requires a chain of trust built on a secure and **provisioned** hardware root of trust.



New Partnerships for Growth



Technology Partners

arm

digicert

IAR
SYSTEMS

SECURE
THINGZ

Silicon Partners

CYPRESS
EMBEDDED IN TOMORROW™

infineon

maxim
integrated™

MICROCHIP

NXP

SECURE CONNECTIONS
FOR A SMARTER WORLD

RENESAS

Distribution Partners

AVNET

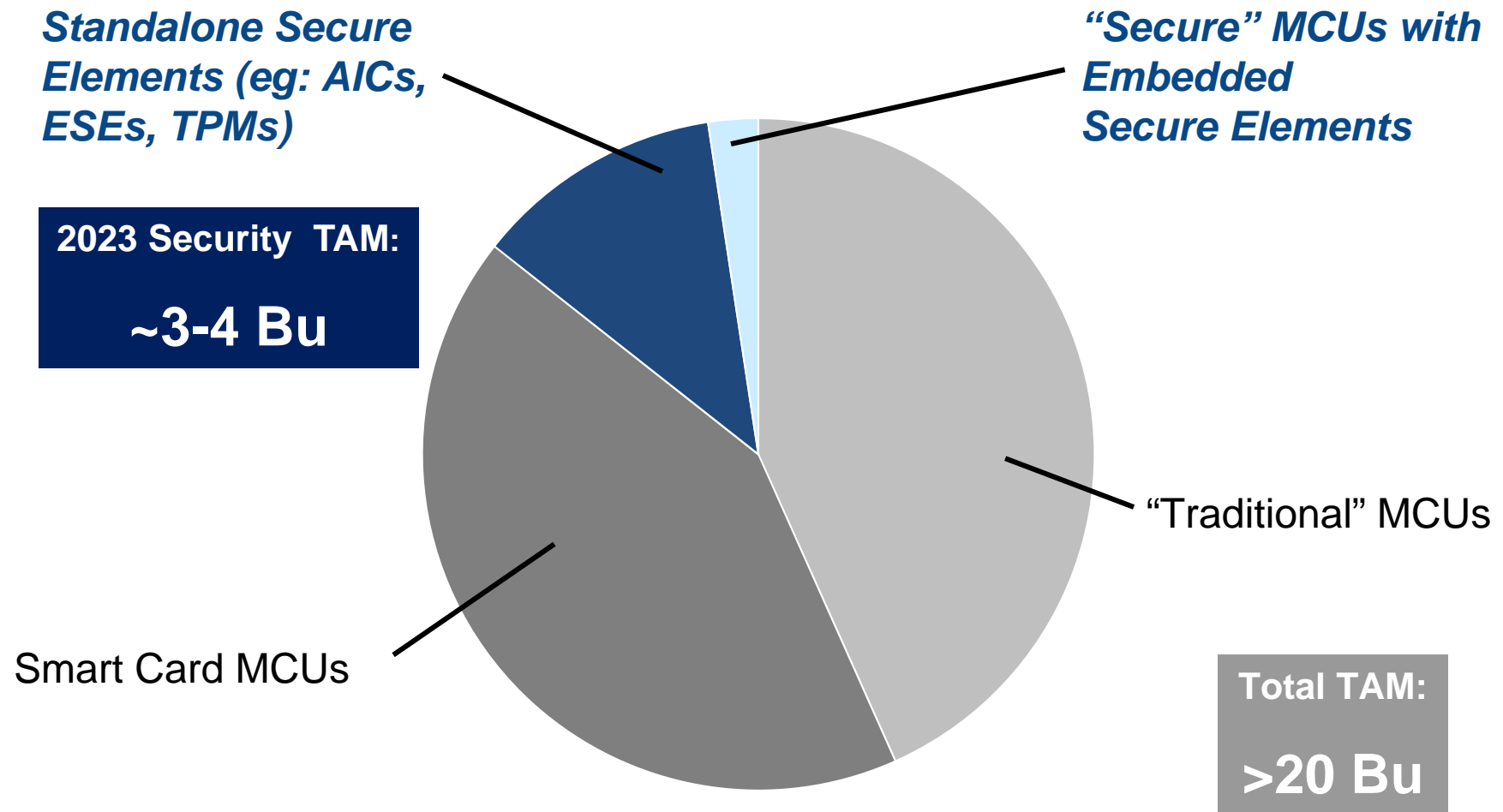
AVNET SILICA

EBV Elektronik
An Avnet Company

SentriX Plan: Securing IoT Devices for OEMs of any Size and Volume

- Deployment in October 2017 of first SentriX Security Provisioning System; 5 deployed at 6/30/19
- Additional Industry support announcements from 2018 through 2019
- Revenue Recognition: scaling begins 2019 with multiyear ramp from win to revenue

The Opportunity: Billions of Security Enabled Devices


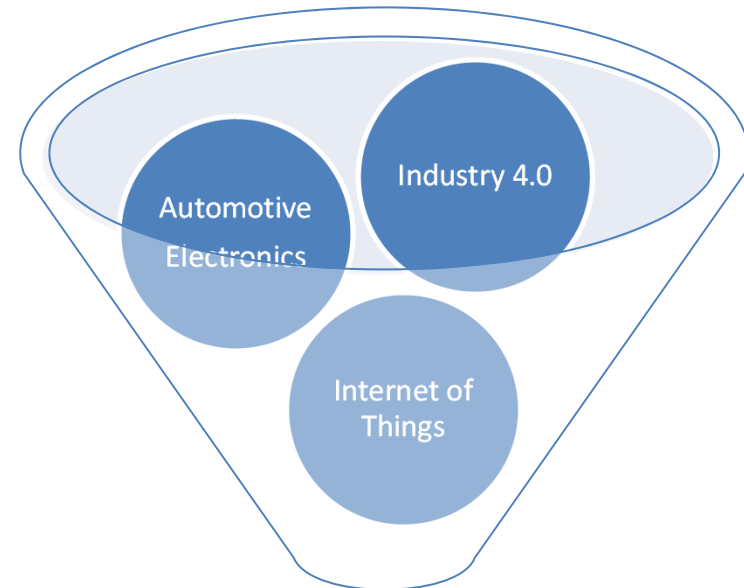
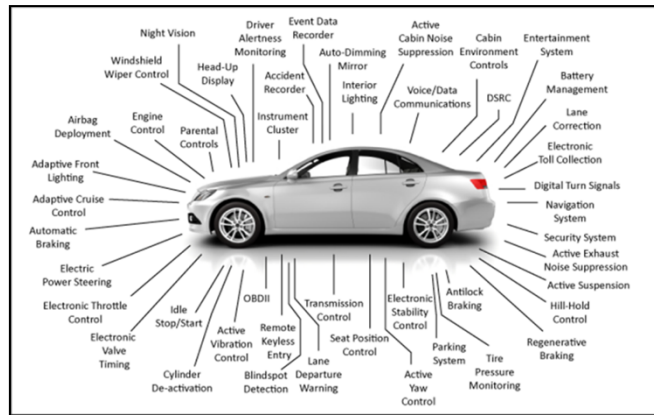


Source: ABI Research

The Long Term Opportunity

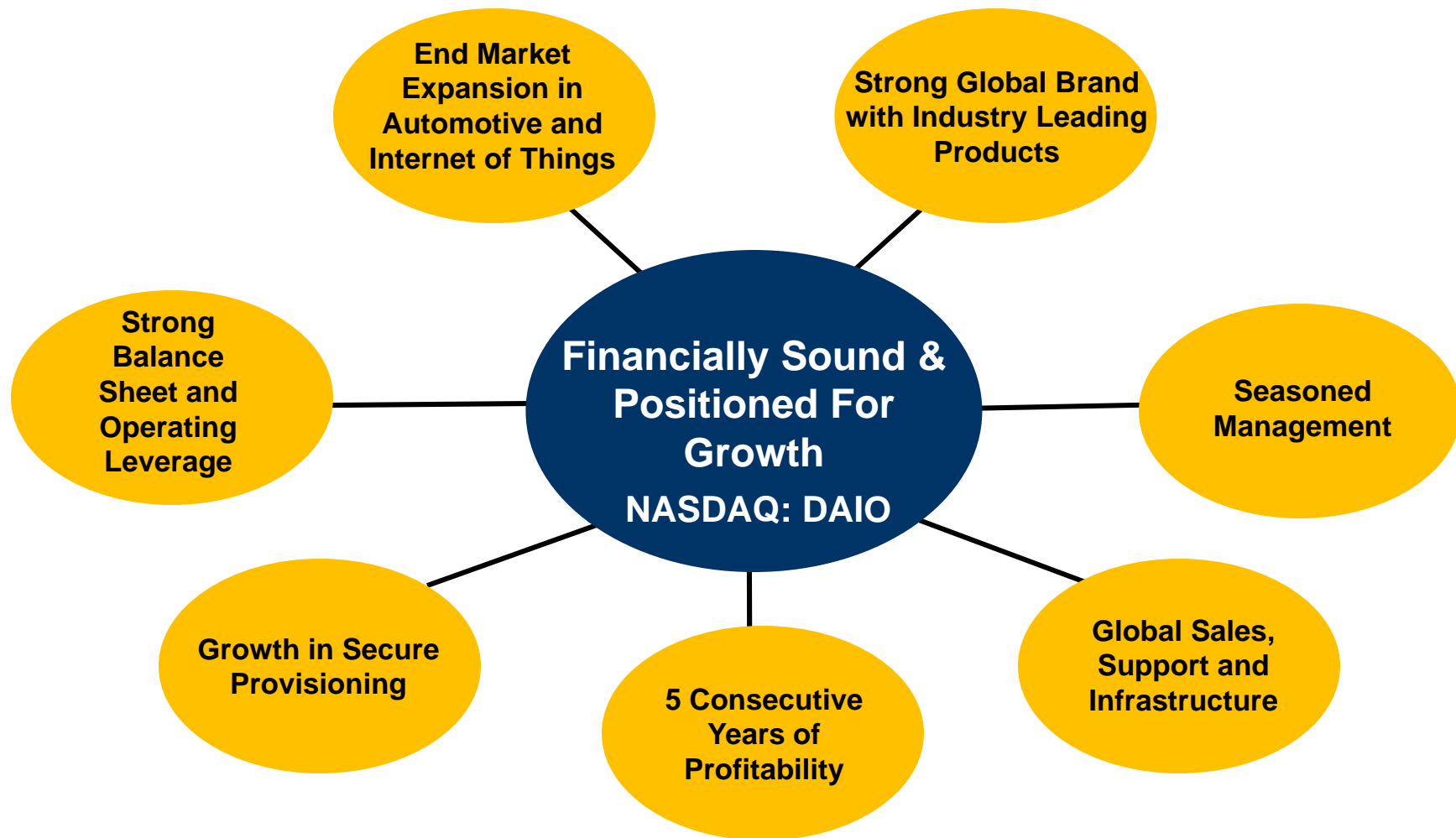


Convergence of Microcontroller Programming and Security Provisioning



Data IO
Technology Stack

Investment Merits: Positioned for Long-Term Growth



Thank You!

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

Appendix

Adjusted EBITDA Reconciliation – 2Q19



NON-GAAP FINANCIAL MEASURE RECONCILIATION

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
(in thousands)				
Net Income	\$127	\$486	\$153	\$616
Interest (income)	(10)	(9)	(22)	(16)
Taxes	27	42	(2)	87
Depreciation and amortization	220	277	424	506
EBITDA earnings	\$364	\$796	\$553	\$1,193
Equity compensation	364	473	650	650
Adjusted EBITDA earnings, excluding equity compensation	<u>\$728</u>	<u>\$1,269</u>	<u>\$1,203</u>	<u>\$1,843</u>

Income Statement – 2Q19



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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Net Sales	\$5,834	\$7,204	\$11,892	\$14,834
Cost of goods sold	2,250	2,955	4,623	6,169
Gross margin	3,584	4,249	7,269	8,665
Operating expenses:				
Research and development	1,680	1,845	3,361	3,724
Selling, general and administrative	1,829	2,158	3,803	4,351
Total operating expenses	3,509	4,003	7,164	8,075
Operating income	75	246	105	590
Non-operating income:				
Interest income	10	9	22	16
Gain on sale of assets	-	4	60	4
Foreign currency transaction gain (loss)	69	269	(36)	93
Total non-operating income	79	282	46	113
Income before income taxes	154	528	151	703
Income tax (expense) benefit	(27)	(42)	2	(87)
Net income	\$127	\$486	\$153	\$616
Basic earnings per share	\$0.02	\$0.06	\$0.02	\$0.07
Diluted earnings per share	\$0.02	\$0.06	\$0.02	\$0.07
Weighted-average basic shares	8,257	8,356	8,280	8,321
Weighted-average diluted shares	8,332	8,500	8,375	8,521

Balance Sheet – 2Q19



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

	June 30, 2019	December 31, 2018
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	\$15,165	\$18,343
Trade accounts receivable, net of allowance for doubtful accounts of \$72 and \$75, respectively	3,812	3,771
Inventories	5,218	5,185
Other current assets	618	621
TOTAL CURRENT ASSETS	24,813	27,920
Property, plant and equipment – net	1,953	1,985
Income tax receivable	640	598
Other assets	2,284	220
TOTAL ASSETS	\$29,690	\$30,723
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	\$1,006	\$1,755
Accrued compensation	1,415	2,872
Deferred revenue	1,365	1,392
Other accrued liabilities	1,451	789
Income taxes payable	35	47
TOTAL CURRENT LIABILITIES	5,272	6,855
Operating lease liabilities	1,532	-
Long-term other payables	157	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, 8,261,702 shares as of June 30, 2019 and 8,338,628 shares as of December 31, 2018	18,463	19,254
Accumulated earnings	3,848	3,695
Accumulated other comprehensive income	418	408
TOTAL STOCKHOLDERS' EQUITY	22,729	23,357
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$29,690	\$30,723

Adjusted EBITDA Reconciliation – 2018



NON-GAAP FINANCIAL MEASURE RECONCILIATION

	Three Months Ended December 31,		Twelve Months Ended December 31,	
	2018	2017	2018	2017
(in thousands)				
Net Income	\$648	\$1,536	\$1,606	\$5,449
Interest (income)	(11)	(10)	(37)	(29)
Taxes	24	(495)	291	(288)
Depreciation and amortization	220	188	956	822
EBITDA earnings	\$881	\$1,219	\$2,816	\$5,954
Equity compensation	297	174	1,230	714
Adjusted EBITDA earnings, excluding equity compensation	<u>\$1,178</u>	<u>\$1,393</u>	<u>\$4,046</u>	<u>\$6,668</u>

Income Statement – 2018



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

	Three Months Ended December 31,		Twelve Months Ended December 31,	
	2018	2017	2018	2017
Net Sales	\$7,857	\$8,096	\$29,224	\$34,051
Cost of goods sold	3,284	3,363	11,868	13,992
Gross margin	4,573	4,733	17,356	20,059
Operating expenses:				
Research and development	1,811	1,766	7,361	6,896
Selling, general and administrative	2,018	1,816	8,257	8,116
Total operating expenses	3,829	3,582	15,618	15,012
Operating income	744	1,151	1,738	5,047
Non-operating income (expense):				
Interest income	11	10	37	29
Gain on sale of assets	15	3	19	366
Foreign currency transaction gain (loss)	(98)	(123)	103	(281)
Total non-operating income	(72)	(110)	159	114
Income before income taxes	672	1,041	1,897	5,161
Income tax (expense) benefit	(24)	495	(291)	288
Net income	<u>\$648</u>	<u>\$1,536</u>	<u>\$1,606</u>	<u>\$5,449</u>
Basic earnings per share	\$0.08	\$0.19	\$0.19	\$0.67
Diluted earnings per share	\$0.08	\$0.18	\$0.19	\$0.65
Weighted-average basic shares	8,431	8,260	8,378	8,149
Weighted-average diluted shares	8,509	8,542	8,514	8,436

Balance Sheet – 2018



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

	December 31, 2018	December 31, 2017
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	\$18,343	\$18,541
Trade accounts receivable, net of allowance for doubtful accounts of \$75 and \$73, respectively	3,771	3,769
Inventories	5,185	4,168
Other current assets	621	708
TOTAL CURRENT ASSETS	27,920	27,186
Property, plant and equipment – net	1,985	2,458
Income tax receivable	598	598
Other assets	220	45
TOTAL ASSETS	<u>\$30,723</u>	<u>\$30,287</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	\$1,755	\$1,301
Accrued compensation	2,872	3,536
Deferred revenue	1,392	1,787
Other accrued liabilities	789	858
Income taxes payable	47	218
TOTAL CURRENT LIABILITIES	6,855	7,700
Long-term other payables	511	527
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, 8,338,628 shares as of December 31, 2018 and 8,276,813 shares as of December 31, 2017	19,254	18,989
Accumulated earnings	3,695	2,089
Accumulated other comprehensive income	408	982
TOTAL STOCKHOLDERS' EQUITY	23,357	22,060
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	<u>\$30,723</u>	<u>\$30,287</u>

Fourth Quarter and Full Year 2018 Highlights

- Net sales of \$7.9 million in 4Q and \$29.2 million for year
- Bookings of \$6.5 million in 4Q and \$27.0 million for year
- Gross margin of 58.2% for 4Q and 59.5% for year, above target of 57%
- Net income of \$648,000 or \$0.08 eps in 4Q and \$1.6 million or \$0.18 for year
- AEBITDA*, excl. equity comp., of \$1.2 million in 4Q and \$4.0 million for year
- Cash/securities of \$18.3 million at end of year; No debt
- Automotive electronics and advanced programming leadership
 - Automotive represented 60% of bookings for the year
 - Won 5 industry awards in year
 - Released TurboBoost for eMMC 5.0 and 5.1 devices on the Lumen®X to enable doubling of programming performance
 - Bosch Agreement extended by 2.5 years and UFS products were added
- Progress for SentiX® Security Provisioning Platform
 - 4 systems deployed at 12/31/18 (2 in US and 2 in Europe)
 - Partnership with Secure Thingz to Deliver Scripting Interface Upgrade
 - Partnership with DigiCert to enable PKI certificate management
 - Released Lumen®X version 1.6 to support doubling of programming speed and Dynamic Data Injection security
- \$536,000 used to purchase 102,000 shares during fourth quarter as part of \$2 million buyback program authorized in October 2018

* Adjusted EBITDA is a non-GAAP financial measure. A reconciliation is provided in the Appendix section of this presentation.