# DATA I/O CORPORATION

December 2, 2011
Fred Hume, President and CEO

#### 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 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 as a result of developments occurring after this call."

### Key facts and figures

Core Focus Areas	Flash Memory and Microcontroller programming for electronics manufacturing
Key Markets	Wireless, Automotive, Consumer, and Industrial Electronics
Presence	Global, HQ in Redmond, WA with facilities in Germany and China
Personnel	101 employees with 17 in Germany and 26 in China, veteran management team averaging 21 years of relevant industry experience
Financial Overview	FY 2010 Revenue: \$26.4M; Gross Margin: 58.1%; EBITDA - \$4.4M; Recurring revenue - ~40%; Cash: \$18.4M, no debt
Structure	Founded in 1972; publicly traded NASDAQ: DAIO

DAIO – The leader in programming solutions for intelligent devices

 Provides advanced programming solutions, process control software and IP management technology used in the production of:

Smartphones

**Tablets** 

**eBooks** 

Wireless devices

Automotive electronics

- Considers every electronics manufacturer (OEM, ODM, EMS) a potential customer
- Sells solutions globally and used by manufacturers in 32 countries



#### DAIO's world-class customers

#### **Automotive Continental** DELPHI KOSTAL BOSCH THODE ELECTRONICS, INC. HARMAN/BECKER AUTOMOTIVE SYSTEMS /////LPINE **Johnson**







Controls





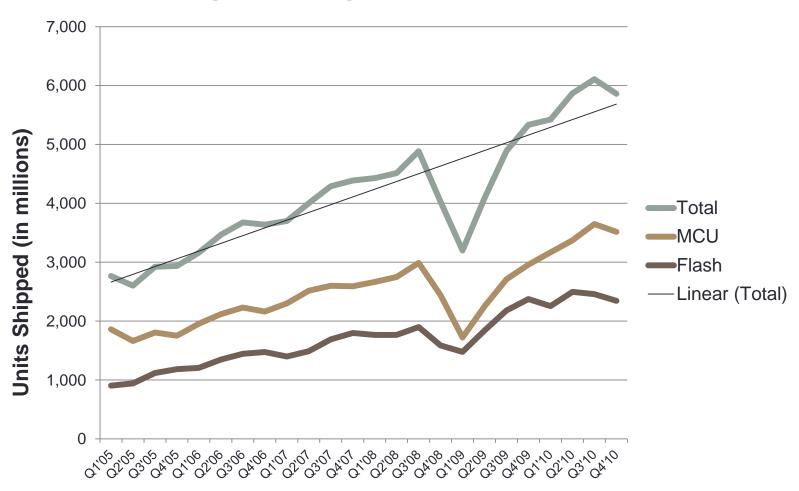








# Shipments of programmable devices have been growing at ~15% per year



Source: SIA Bluebook

### Key markets drive the growth

Markets	Growth Drivers
Wireless	Smartphone growth is accelerating driven by Apple and Android handsets
Consumer	Tablet computers and eReaders provided by Apple, HTC, RIM, Nokia, Toshiba, Huawei, Samsung, and Motorola consume large quantities of Flash
Automotive	Electronics is becoming the key element of differentiation. Semiconductor content in automobiles continues to grow at double-digit rates
Industrial	Competitive advantage has shifted from hardware to software programmed into silicon Software content driving the growth

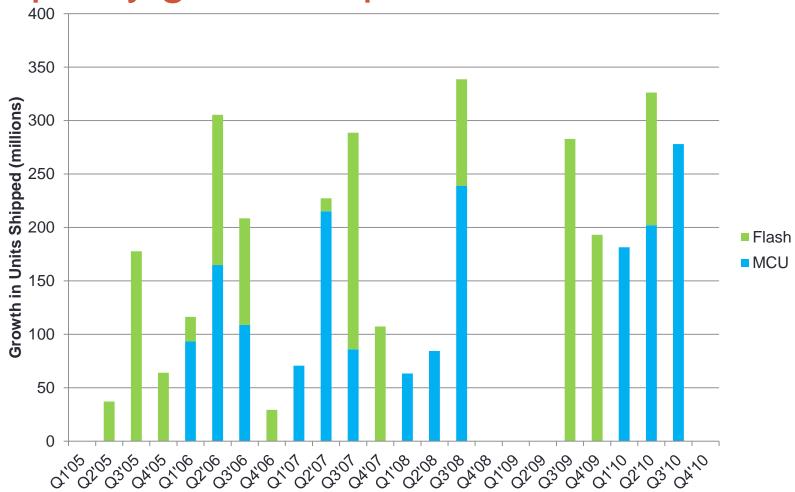
### Data I/O's Programming Solutions

Product			Key Features/Benefits	Price Range
ProLine RoadRur	ner		<ul> <li>Just-in-time, automated in-line programming of four devices</li> <li>Seamless integration from tape to the pick up point of the placement machine</li> <li>Integration with placement machines supporting Siplace, Fuji, Panasonic, Assembleon, Universal and MyData</li> </ul>	\$62,000 to \$119,000
	PS288		<ul> <li>Flexible small/medium batch, automated off-line programming system that addresses unpredictable demands</li> <li>Four FlashCORE programming stations, creating up to 16 programming sites for devices</li> <li>Awarded the 2005 SMT Vision Award</li> </ul>	\$132,000 to \$350,000
PS Series	PS388	F 312	<ul> <li>Automated, off-line programming solution for small/medium batch sizes</li> <li>Addresses high throughput demands for extremely large file sizes</li> </ul>	\$139,000 to \$350,000
	PS588	Plan Date to	<ul> <li>Automated off-line programming system with "pick and place", marking and media transfer sub-systems</li> <li>Ideal system for programming devices of any density in medium/large batches in high volume/high mix applications</li> </ul>	\$183,000 to \$616,000
FLX500			<ul> <li>Compact, automated off-line programming system for memory and microcontroller applications</li> <li>Simple, self-learning "plug-and-play" operation running on FlashCORE III programmer technology</li> <li>Lower overall cost for automation relative to manual gang programming solutions</li> </ul>	\$50,000 to \$119,000
FlashPAI	<b>C</b> III		<ul> <li>Networked manual programming systems that support the latest high-density flash memory, NAND flash, microcontroller and EEPROM devices at maximum programming speeds and highest quality</li> <li>Ideal for first article builds and NPI applications, easy transfer to automated programming systems when ready</li> </ul>	\$8,000 to \$11,000

# Two primary drivers of the demand for programming equipment

- Capacity
  - Capacity-driven demand is lumpy and difficult to predict
  - Data I/O's business with programming centers is mostly driven by capacity demands
- Quality and process improvement
  - Investments in quality and process improvement reduce scrap and rework, prevent costly product recalls, and improve customer satisfaction
  - Many companies invest in quality and process improvement independent of the business cycle
  - DAIO has increased its focus on providing solutions for quality and process improvement to lessen the effects of seasonality and cyclicality of end markets

# Demand for additional programming capacity grows in spurts



Source: SIA Bluebooks, 2005 – 2010; not yet available for 2011

# Data I/O's new products are solutions aimed at quality and process improvement

- RoadRunner3 In-Line Programming for lean production\*
  - Introduced on August 1<sup>st</sup>
  - Offers higher speed and greater flexibility than previous versions
  - Proprietary solution targeted at the needs of existing RoadRunner customers as well as new account
  - RoadRunner is a "sticky" solution customers that adopt it stick with it and expand its use
- Factory Integration Software
  - RoadRunner version introduced on August 1<sup>st</sup>, PS-388 & PS-588 version introduced on November 15<sup>th</sup>
  - Automates job selection and data file download from factory computers (Manufacturing Execution Software)
  - Controls the programming process
    - Ensures traceability
    - Automatically tracks yield

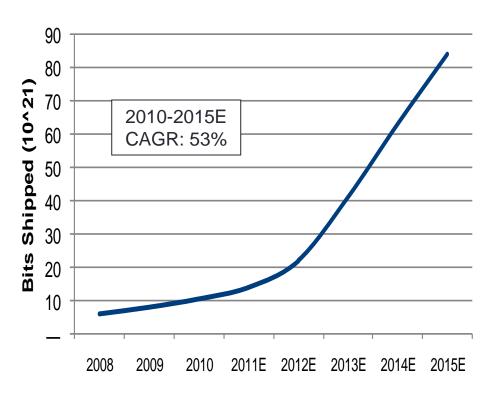
<sup>\*</sup> Supports just-in-time programming

### RoadRunner3 Ensures Quality Product Builds Through Factory Integration

	Multiple	Factory Integration IP Management					Quality
One RoadRunner3	One RoadRunner3 SMT's		DATA REMOTE	DATA TRACK	DATA PROCESS	DATA SAFE	Products
	FUJI						AUTOMOTIVE
ROADRUNNER3	SIPLACE			0 1		10	WIRELESS
	PANASONIC	-					CONSUMER
	MYDATA						INDUSTRIAL
	OTHER SMT		A STE				MEDICAL
	CITICAGN						EMS

# Programming demand (in bits) has reached an inflection in the curve

- File sizes are growing in all applications and driving programming demand
- Device density is going up and cost is coming down
- Software content of tablets, gaming systems, eBooks, and smart phones is increasing
- Data I/O pre-placement solutions are the best for high-density Flash memory

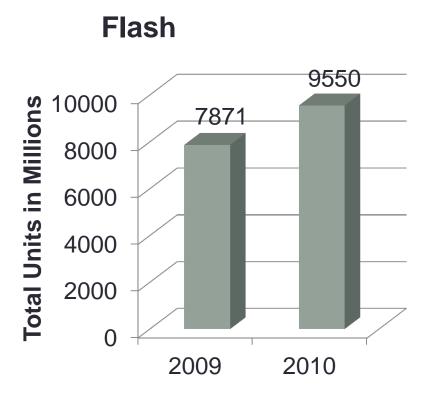


Source: Web Feet Research, Samsung Marketing

# High-density Flash is growing rapidly to support applications such as navigation

Devices up 21% in 2010

High-density Flash up 60%



Source: SIA (WSTS)

### The Competitive Landscape

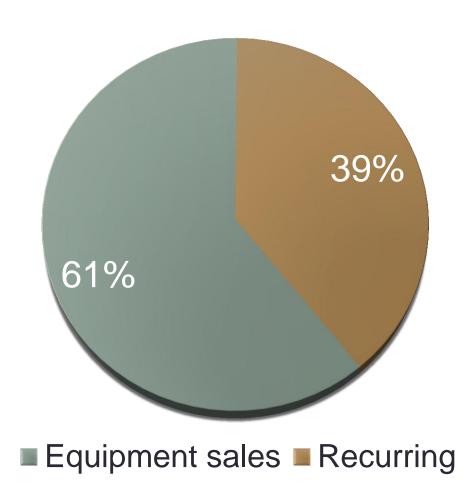
	Process Step	Technology Providers	Advantages/Disadvantages
	End of Line Solutions	Home Grown Solutions	Best for custom configuring of products just before they ship to customers
After Placement Programming	Programming at Functional Test	Agilent, Teradyne, LTX Credence, Aeroflex, Advantest, JOT Automation, JTAG, Corelis	<ul> <li>The most frequently used method for Microcontroller device programming, particularly in the automotive industry</li> <li>Best in low to mid-volume manufacturing</li> </ul>
	Programming at In-Circuit Test	Agilent, Teradyne, Yokogawa, Checksum, Qualectron, Circuit Check	<ul> <li>Increasing density poses significant challenges</li> <li>Sophisticated programming can create large through-put obstacles for manufacturers</li> </ul>
Pre-Placement	OEM, ODM, EMS	Data I/O	<ul> <li>Dedicated products sold to OEMs, EMSs and third party programming centers</li> <li>Automated pre-placement technology offers best solution for complex programming of Flash</li> </ul>
Programming	Merchant Programming Centers	>30 Competitors	<ul> <li>Data I/O is the largest competitor in this segment</li> <li>Data I/O is the only major provider to offer a best-in-class in-line product</li> </ul>

### Primary bases for competitive advantage

- Speed of the programming equipment
  - Translates directly into lower cost-per-device
- File download speed
  - Translates directly into shorter changeover times
- Device support availability and delivery time
  - Translates directly into shorter time to first article
- Device support cost
  - Impacts life-cycle costs
- Programming software
  - Capability, flexibility, and ease of use
- Global footprint with local sales, service, and support
- Cost of consumables
  - Impacts life-cycle costs
- Stability and long-term financial viability
- Reputation for quality, dependability, reliability, and integrity
- Price of the programming equipment
  - May trump all other factors, particularly with EMS firms and in Asia

#### DAIO's recurring revenue is ~40% of sales

- Adapters, ~25% of sales, are a source of competitive advantage
- Software & update contracts, ~15% of sales, are sold on an annual subscription basis
- New initiatives including the Factory Integration
   Software (FIS) and Azido software will increase software revenue and improve gross margins



# Electronics manufacturing is impacted by global economic stress

- Semiconductor shipments slowed markedly over the summer
- Electronics manufacturing activity plummeted in September – Asia led the decline
- Electronics manufacturing activity rebounded in October and then fell again in November
- The Purchasing Managers' Indices fell below 50 in November in almost all electronics manufacturing regions in the world including China, Germany, Japan, UK, Taiwan, etc.
- On Dec.1<sup>st</sup> JP Morgan (Chris Danely) reported that the semiconductor industry has stabilized and that order rates will improve in Q1'12

# Data I/O's third quarter orders remained strong despite global economic stress

By Category	Q2'11	Q3'11	
Automated equipment & services	\$3.7M	\$4.4M	Up sharply
Manual equipment & services	\$1.6M	\$0.9M	
Consumables (Adapters)	\$1.9M	\$1.8M	Stable
Total	\$7.2M	\$7.1M	

By Region		Q2'11	Q3'11	
Asia		\$2.8M	\$2.4M	
Americas		\$1.6M	\$2.2M	Recovering
Europe		\$2.8M	\$2.5M	
	Total	\$7.2M	\$7.1M	

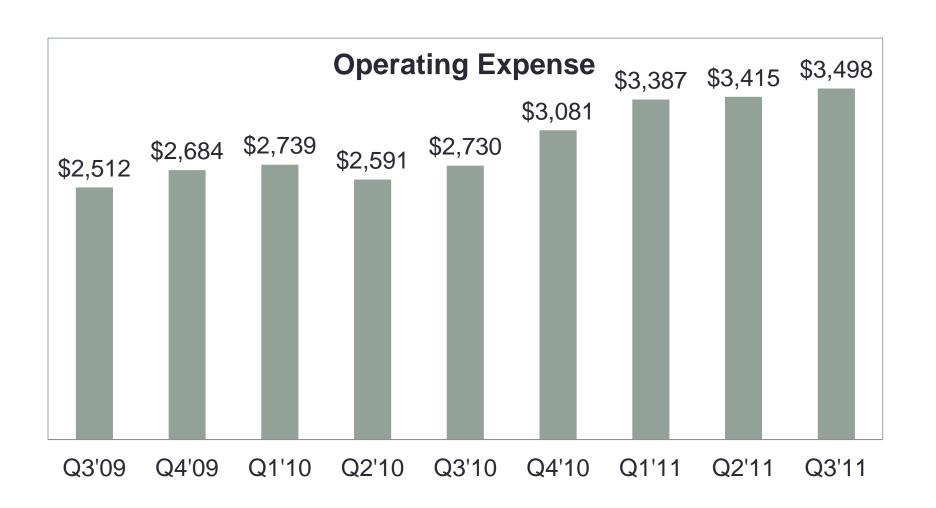
#### Data I/O improved its financial position

	Q4 2010	Q1 2011	Q2 2011	Q3 2011
Cash and equivalents	\$18,942	\$19,024	\$16,990	\$18,380
Accounts receivable	\$4,975	\$5,527	\$5,336	\$4,775
Inventories	\$3,570	\$3,541	\$3,926	\$3,798
Other current assets	\$528	\$400	\$475	\$456
Total current assets	\$28,015	\$28,492	\$26,727	\$27,409
Total assets	\$29,424	\$29,777	\$31,113	\$31,612
Current liabilities	\$5,412	\$4,765	\$4,395	\$4,755
Long-term payables	\$47	\$217	\$280	\$305
Total liabilities	\$5,459	\$4,982	\$4,675	\$5,060
Preferred & common stock	\$22,172	\$22,271	\$23,387	\$23,534
Retained earnings	\$1,793	\$2,524	\$3,051	\$3,018
<b>Total Shareholders Equity</b>	\$23,965	\$24,795	\$26,438	\$26,552

### Third quarter 2011 results

	Q2 2011	% of Sales	Q3 2011	% of Sales
Sales	\$6,849		\$7,051	
Gross Margin	\$4,008	59%	\$3,943	56%
R&D	\$1,275	19%	\$1,482	21%
OPEX	\$3,491	51%	\$3,583	51%
Operating Income	Operating Income \$517		\$360	5.1%
Net Income	\$398	5.8%	\$130	1.8%
Earnings per Share	4¢		1¢	

### Operating expenses peaked in the third quarter and will begin downward trend



#### Operating expense decline is driven by:

- Reduction in contract labor associated with the release of the RoadRunner3 and Factory Integration Software
- Completion of TM Capital engagement
- Completion of a development contract with an academic institution in China
- Completion of contract expenses associated with web site development
- Reduction in consulting expenses associated with other development initiatives

# In 2011 DAIO increased investment to strengthen its leadership position

	<u> </u>	<u> </u>	
Level	Representative Products	Leading Today	Innovating for Tomorrow
New Business		Providing customers with software for Intellectual property protection and security	Put Azido in the hands of leading academics to drive advances in design of systems with FPGAs
Expanded Business		Introduced RoadRunner3, In-line programming solution	Advancing DAIO's product line to expand addressable market
Existing Business	py sau Data ()	Introduced Factory Integration Software (FIS) to provide quality and process control	Acquired Azido technology to lower costs and improve competitive position

#### Field-programmable gate-arrays (FPGAs)

- FPGAs provide high speed functionality that is used in high-performance applications
  - Specialized computing
  - Graphics acceleration
  - Genomics & proteomics
  - Security & cryptography
  - Digital signal processing
  - Device programming, DAIO's application
- The logic is reconfigurable by software allows hardware to change to fit the need
- Are less expensive that applications-specific integrated circuits (ASICs) for most applications
- The market is dominated by two suppliers Xilinx & Altera
- FPGAs are the heart of all of DAIO's FlashCore programming technology

## Commercially available software for designing electronic systems with FPGAs is inadequate

- Current software cannot provide enough productivity to keep up with the rapidly growing complexity of FPGA designs
- Design tools provided by the traditional EDA suppliers don't appear to be much more effective than those provided by FPGA vendors
- FPGA design tools don't produce designs that are easily reused or retargeted to new FPGA families
- Typically use unique hardware design languages such as VHDL and Verilog and a 20-year old "batch-oriented" design process
- Must use the vendor's (Xilinx and Altera) tools for place and route of the FPGA
- The challenges that DAIO experiences designing with FPGAs are common throughout the industry

### Azido software addresses the challenges

- Technology for the design of electronic systems, particularly suited for those that contain field-programmable gate-arrays (FPGAs) and other parallel processing units
- Provides substantial benefits over alternative hardware design solutions – it is interactive and technology independent, enabling re-targetable and reusable designs that drive down the cost of designing with FPGAs and multi-core processors
- Reduces DAIO's development and on-going support costs for its next-generation FPGA-based programming equipment and improves competitive position through faster device support
- Provides a fundamental technology platform to build on for the future

### DAIO's share repurchase program

- The company will repurchase \$1M of company stock over the next four quarters
- The plan will result in share repurchases in each of the next four quarters
- Will be implemented through a 10b5-1 plan; purchases will be possible throughout the quarter – no blackout periods
- Plan can be expanded at any time
- Purchases have taken place since early November

#### Executing on our Long-Term Growth Strategy

TM Capital was engaged in Q1'11 to assist in evaluating and pursuing a range of strategic alternatives.

- We considered various opportunities including purchases of other companies and technologies, as well as a sale or merger of the company.
- We engaged in marketing and discussions with a number of strategic and financial parties regarding potential transactions.
- None of these transaction alternatives were ultimately viewed by our Board at the time as superior to those presented by our strategic business plan
- The decision was made to continue to pursue our long-term growth strategy
- The company ended its engagement with TM Capital during Q3'11

### Summary

- Data I/O's markets (Smartphones, Tablets, Consumer, and Automotive electronics) continue to drive new demand for programming capacity
- Data I/O serves the global electronics firms that are driving the growth
- The new RoadRunner3 and its Factory Integration Software are world-class solutions to satisfy this demand in electronics manufacturing
- The Factory Integration Software will be available for additional Data I/O products in the fourth quarter
- Data I/O's business initiatives in the existing, expanded and new markets position the firm to deliver sustained growth for several years