

# MoSys, Inc.

**Investor Overview** 

October 2015



## **Safe Harbor Statement**

This presentation may contain forward-looking statements about MoSys, Inc. including, without limitation, benefits and performance expected from use of its embedded memory and interface technologies and ICs, improving operational efficiencies, the timing of product development and shipments of Bandwidth Engine<sup>®</sup> ICs, LineSpeed™ ICs, and line cards, anticipated benefits and performance expected from the Bandwidth Engine and LineSpeed products, and line cards, growth in the size of the market addressed by the Company's business and the Company's future markets and future business prospects. Forward-looking statements are based on certain assumptions and expectations of future events that are subject to risks and uncertainties. Actual results and trends may differ materially from historical results or those projected in any such forward-looking statements depending on a variety of factors. These factors include, but are not limited to the following:

- achieving additional design wins for our ICs;
- the timing of customer orders and product shipments;
- commencing volume shipments of ICs;
- our ability to enhance our existing proprietary technologies and develop new technologies;
- achieving necessary acceptance of our IC architecture and interface protocols by potential customers and their suppliers;
- difficulties and delays in the development, production, testing and marketing of our ICs;
- reliance on our manufacturing partners to assist successfully with the fabrication of our ICs;
- availability of quantities of ICs supplied by our manufacturing partners at a competitive cost;
- our lack of recent experience as a fabless semiconductor company making and selling proprietary ICs;
- level of intellectual property protection provided by our patents, the expenses and other consequences of litigation, including intellectual property infringement litigation, to which we may be or may become a party from time to time;
- vigor and growth of markets served by our licensees and customers and our operations; and

other risks identified in MoSys' most recent reports on form 10-K and form 10-Q filed with the Securities and Exchange Commission, as well as other reports that MoSys files from time to time with the Securities and Exchange Commission. MoSys undertakes no obligation to update publicly any forward-looking statement for any reason, except as required by law, even as new information becomes available or other events occur in the future.



# **Overview**

Fabless semiconductor company enabling carrier, data center and enterprise OEMs to meet ever-increasing demand for intelligent bandwidth and faster data throughput



NASDAQ: MOSY ISO 9001:2008 Certified HQ: Santa Clara, CA 107 employees, 75% R&D

### **IC Product Families Enable Next-gen Equipment**

- ❖ Bandwidth Engine® BE 1, 2, 3\*: Highest memory access rate and intelligent offload for packet processing acceleration
- LineSpeed™ Gearbox, Retimer, CDR: High-performance PHYs for throughput and density

### **Target Market**

- Networking and Cloud Hardware OEMs
- Sweet Spot: Carrier Ethernet, Core, Edge and Data Center

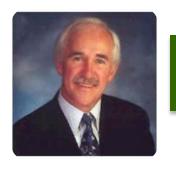
#### **Customers**

- ❖ 70+ BE and LineSpeed design wins with 15+ customers
- Wins in 40Gb to 1Tb line cards and systems in routers, metro Ethernet switches, wireless aggregation, optical systems, data center switches, security, load balancing, monitoring, broadcast Video

<sup>\*</sup> BE3 just out of fab, production in 2016



# Led by an Experienced Team



Len Perham CEO

### **40+ Yrs Experience**

- CEO of IDT, Incubated MoSys
- Former Chairman of NetLogic (acquired by Broadcom; exit >\$3B)
- Zilog, AMD, Western Digital

John Monson VP Sales & Marketing



25+ Yrs Experience

- VP Mktg Mellanox
- VP Inphi & Scintera Networks
- VP Mktg PMC-Sierra
- AT&T, Lucent

Michael Miller VP Sys. Applications



30+ Yrs Experience

- CTO IDT
- Over 25 Patents, including JTAG
- Architected QDR, ZBT, TCAMs

**Tom Riordan**COO, EVP Engineering



30+ Yrs Experience

- CEO Exclara
- VP PMC-Sierra
- Founder & CEO, QED
- MIPS, Intel

Jim Sullivan CFO

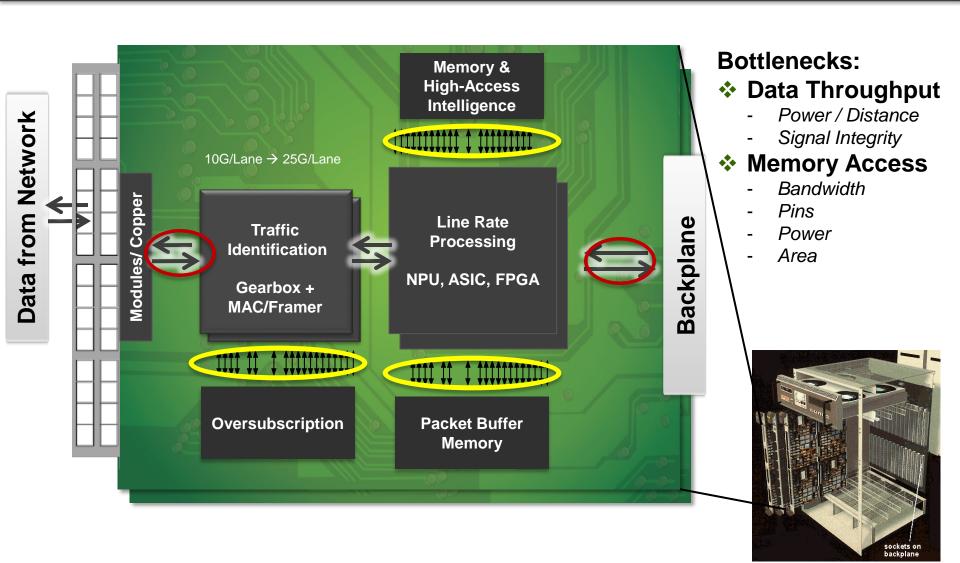


20+ Yrs Experience

- CFO Apptera
- CFO 8x8
- CFO Netergy
  Microelectronics

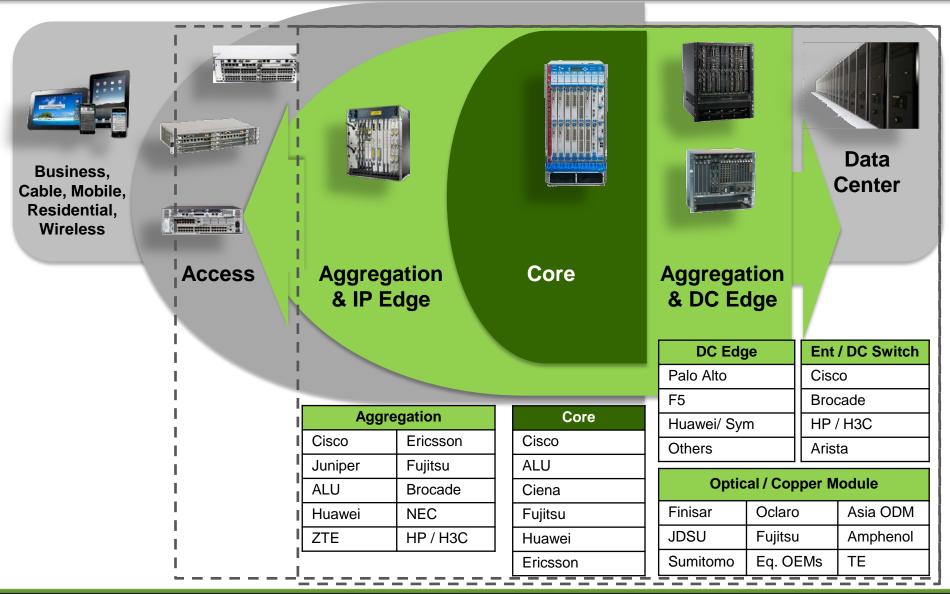


# **Legacy Solutions Can't Meet Requirements**





# Target Customers are Leading Networking System & Module OEMs





# **Products Address Industry Mega-trends**

### **Service Provider**

Core & Edge Routers, Metro Ethernet, Optical, Wireless Edge



- Intelligent Network Capacity
- Ethernet/Services
- Software Defined Networks
- Network Function Virtualization

### **Cloud**

Data Center and Edge



- Big Data/Applications
- Mega Data Centers
- Security/Load Balancing
- Network Optimization

### **Networking Market Requirements**

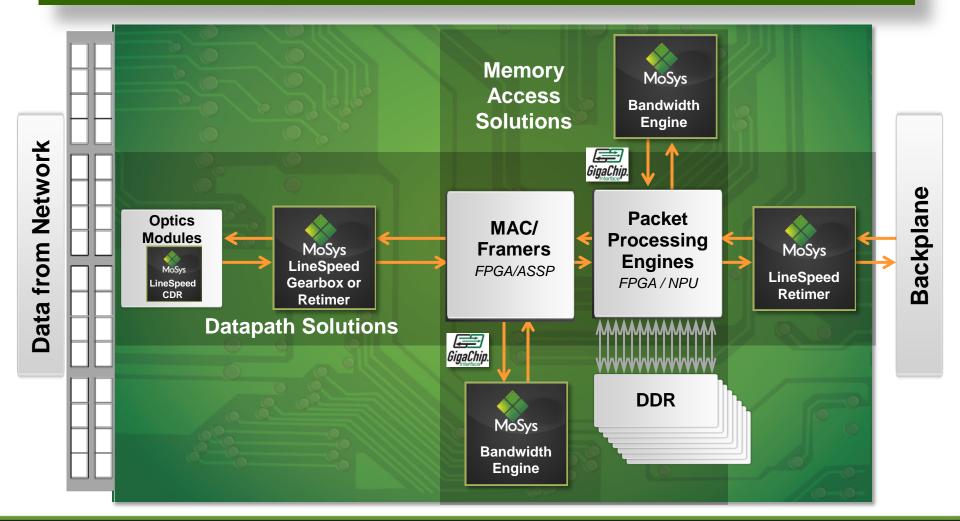
Density / Capacity	Up to Terabit Line Cards	25GE/100GE				
Data Processing	Intelligent Data Flow	Processor Offloads				
Network Features	SDN, Service Level, Metering	Load Balancing, Security				



# **Solving Customer Challenges**

New Requirements at 100G+

Serial Offers Higher Performance with Reduced Area, Pin Count, Power and Cost





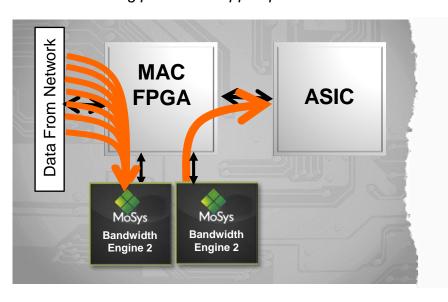
# **Broadening Application Examples**

Bandwidth Engine Wins on Performance, Size, Pins, Power, Cost

### **Edge Router**

### **400G Oversubscription**

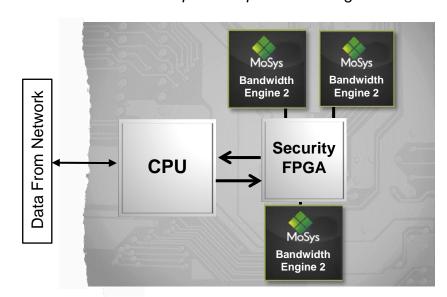
Traffic smoothing prevents dropped packets



### **Data Center Security**

### **Security Acceleration**

Threat Prevention – multiple lookup and buffering functions



### Advantages vs Alternatives

- Memory access performance
- Lower pin count, area, power, cost
- Memory access performance
- RLDRAM won't fit or route

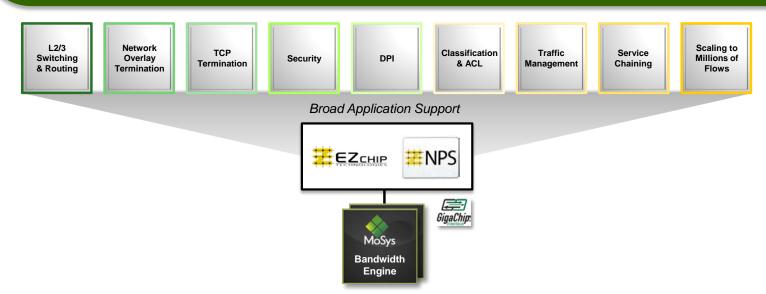


# **EZchip NPS to Leverage BE-Z30** for Performance and Features

Recently announced collaboration with industry-leading merchant NPU supplier EZchip

"The two companies have architected a solution which uniquely delivers flexibility and scalability for our mutual networking customers..."

- Eli Fruchter, CEO of EZchip, Jan 27, 2015



- Access to additional Tier 1 EZchip Carrier Ethernet customers
- Solution also applies to Data Center and Data Center Edge
- Broad application capability expands market opportunity

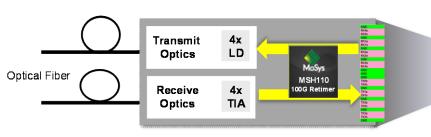


# LineSpeed PHYs: Signal Integrity/Power/Density for 100G+

### Signal Integrity for High Density 10, 25, 40 and 100G Interfaces

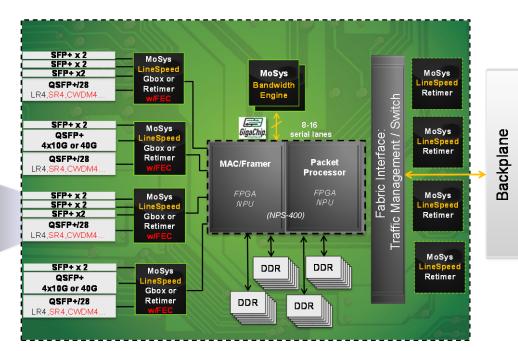
# 100G CFP and QSFP28 Module Applications





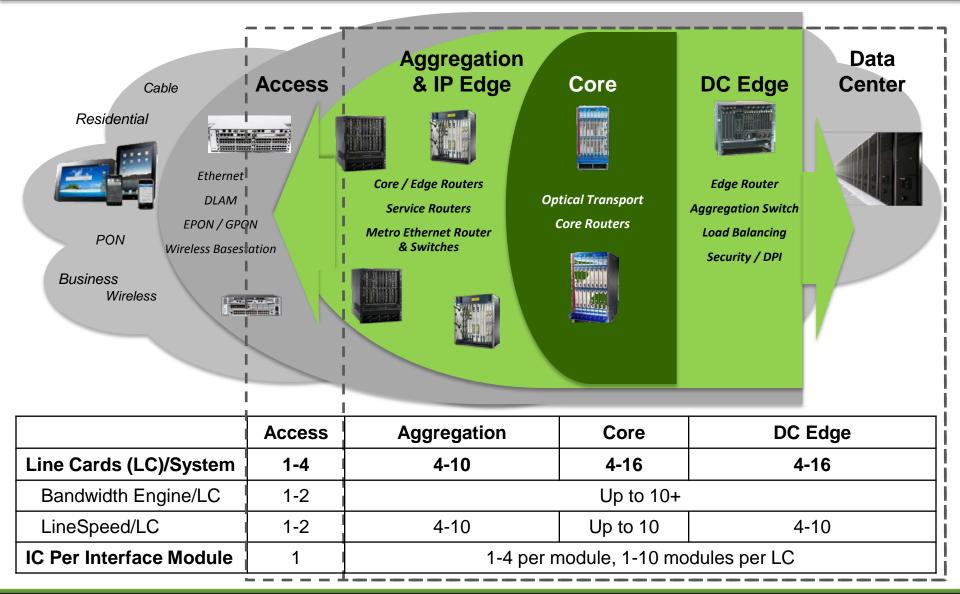
- Single Chip
- Small Size
- Performance
- Ease of Use

# 100G to 1Terabit Line Card Applications





# Valuing the High-Volume Line Card Market

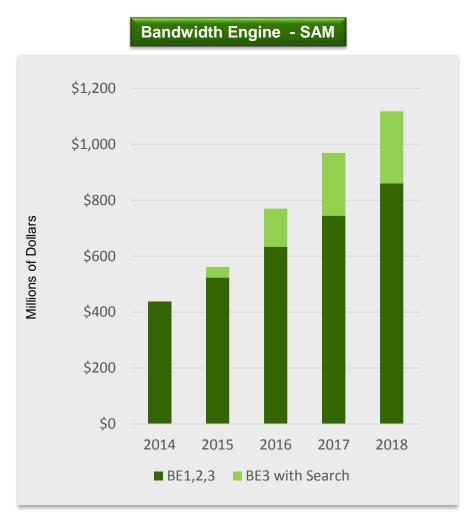


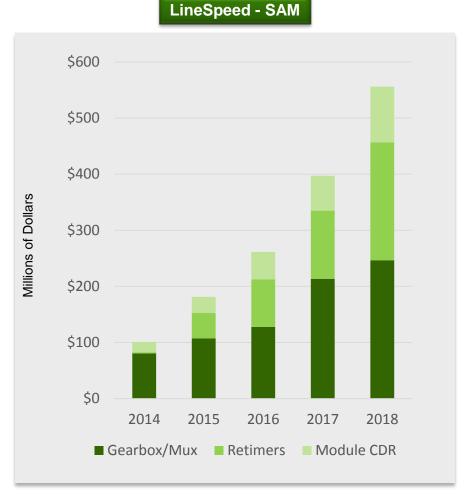


# **Opportunity Growth**

### Driven by Increased Network Capacity & New Applications

### >\$1.5B Market Opportunity





Source: Infonetics Research 2012 1G/10G/40G/100G Networking Ports Report. Market definition and other information is based on management opinion.



## **Product Trends Indicative of Future Growth**

# Barriers to Adoption Reduced

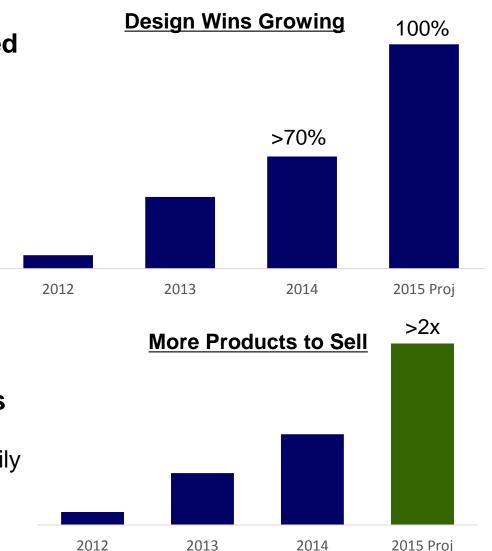
- Serial Technology Proven
- BE Dual Sourcing Relationship GSI Technology
- Industry-Leading Partners Xilinx, EZchip, Altera

### Design Win Momentum

- 70+ Wins (cumulative)
- 15+ Customers
- Repeat Footprints

# Adding Synergistic Products

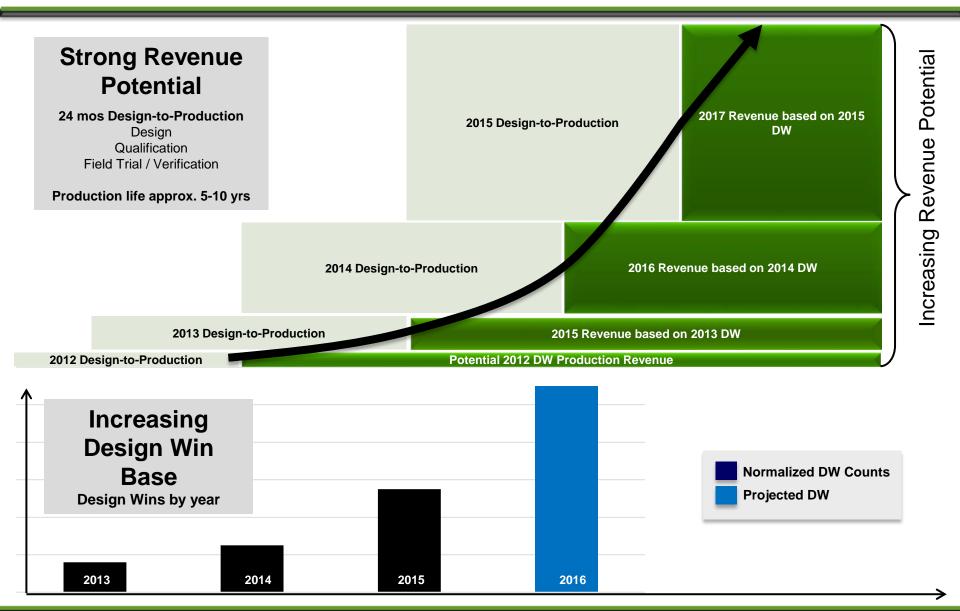
- Bandwidth Engine 3 family
- LineSpeed Flex 28nm PHY family





# **Increasing Revenue Potential**

# Based on Design Win Trends & New Products





# **Target Operating Model**

Targets	Medium Term	Long Term				
Revenue Growth (YoY)	100%+ YoY	40%+ YoY				
Gross Margin*	50%	60%+				
Operating Margin*	NA	20%+				
Cash Flow	Declining Cash Burn	Cash- Generating				

<sup>\*</sup>Non-GAAP measures that exclude stock-based compensation expenses and amortization of intangibles



# **Summary Income Statement (Non-GAAP\*)**

In Millions, except EPS

	C	Q3 15	C	2 15	C	Q1 15	2014		2013	
Total Revenues	\$	1.1	\$	1.0	\$	0.8	\$	5.4	\$	4.4
Product		0.6		0.5		0.2		2.3		0.4
Royalty and other		0.5		0.5		0.6		3.1		4.0
Gross Profit		0.2		0.4		0.5		3.1		3.9
Margin %		22%		43%		69%		57%		89%
R&D		8.2		5.2		5.7		24.8		19.8
SG&A		1.3		1.3		1.3		5.4		5.0
Gain on sale of assets										(0.6)
Total Op Ex		9.5		6.5		7.0		30.2		24.2
Net Loss	\$	(9.3)	\$	(6.1)	\$	(6.5)	\$	(27.1)	\$	(20.1)
EPS	\$	(0.14)	\$	(0.09)	\$	(0.12)	\$	(0.55)	\$	(0.44)

<sup>\*</sup>Non-GAAP: Excludes non-cash charges: stock-based compensation and amortization of intangibles



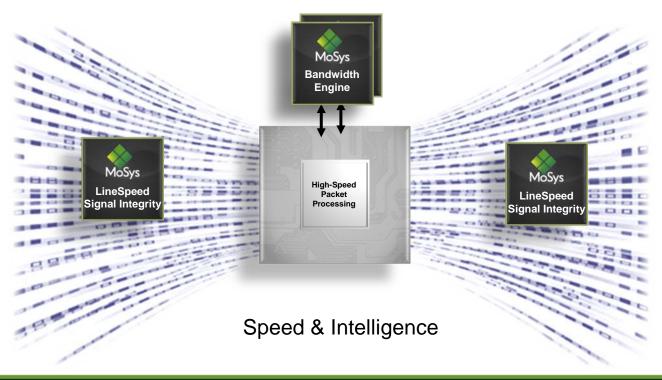
# **Balance Sheet**

(in millions)	Q3 - Sep 30 2015		
Cash & Investments	\$25.5		
Total Assets	\$53.3		
Debt	\$0.0		
Total Liabilities	\$2.7		
Stockholders' Equity	\$50.6		
Total Shares Outstanding	65.5		



# **Investment Highlights**

- IC Products Solve Key Networking & Cloud Challenges
- Differentiated Products with Long Lifetime
- Market Trends & Partnerships Pave Way for Future Success
- Dedicated Organization, Proven Veteran Leadership





# **Thank You**

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