

Welcome to **Microsemi's Analyst Day**

New York, NY
March 18, 2015



Disclaimer

- This presentation contains projections or other forward-looking statements regarding future events or the future financial performance of Microsemi Corporation.
- We wish to caution you that these statements are only predictions and that actual events or results may differ materially. We refer you to all of the documents that the company filed with the Securities and Exchange Commission. Please pay special attention to the Company's most recent Form 10-K and subsequent Form 10-Qs.
- These documents contain and identify important factors that could cause the actual results to differ materially from those contained in our projections or forward-looking statements.

Introduction



Rob Adams

VP Corporate Development

Today's Agenda

9:05-9:15

Analyst Highlights

Jim Peterson, Chairman & CEO

9:15-9:35

60/30: How do we get there?

John Hohener, EVP & CFO

9:35-9:55

FPGA Growth and Opportunity

Esam Elashmawi, Corporate VP & GM, SoC Product Group

9:55-10:15

Timing Growth and Opportunity

Roger Holliday, Senior VP & General Manager,
Communications Product Group

Maamoun Seido, VP & Business Unit Manager, Timing and
Optical Products

10:15-10:25

Small Cell/Backhaul

Maamoun Seido, VP & Business Unit Manager, Timing and
Optical Products

10:25-10:35

Residential Gateway

Roger Holliday, Senior VP & General Manager,
Communications Product Group

Today's Agenda

- | | |
|--------------------|--|
| 10:35-10:45 | Aerospace
Siobhan Dolan Clancy, VP, Worldwide Business Development,
Aerospace |
| 10:45-10:55 | Space/Satellite
Siobhan Dolan Clancy, VP, Worldwide Business Development,
Aerospace |
| 10:55-11:00 | Acquisition Overview
Steve Litchfield, EVP & Chief Strategy Officer |
| 11:00-11:15 | Executive Summary
Paul Pickle, President & COO |
| 11:15-11:30 | Q&A |
| 11:30-1:00 | Management Luncheon |

Investor Highlights



James J. Peterson

Chairman & CEO

Microsemi Shareholder Value Proposition



Maximizing Profitability



Focus Products Driving SAM Expansion



Increasing Strategic Customer Importance



End Markets Built for Growth, Stability, Cash Flow



Commitment to Deliver Shareholder Value

60/30: How do we get there?



John Hohener

EVP & CFO

Maximizing Profitability

Historical P&L, Q2 Guidance



	FY14				FY15	Q2 Guidance	
	Q1	Q2	Q3	Q4	Q1		
Net Sales	255.6	287.0	292.3	303.3	303.6	Revenue	\$289.9 - 303.6
Gross Profit	143.1	158.3	163.7	171.0	170.5	Gross Margin	56.5% - 56.7%
Gross Margin	56.0%	55.2%	56.0%	56.4%	56.2%	EPS	0.64 - 0.68
Operating Income	54.1	59.3	66.2	72.8	74.2		
Operating Margin	21.2%	20.7%	22.6%	24.0%	24.4%		
EBITDA	61.1	67.3	73.6	81.0	82.5		
Net Income	42.9	47.7	54.8	61.4	61.9		
Diluted EPS	0.46	0.51	0.58	0.64	0.65		

Maximizing Profitability

The 60/30 Model

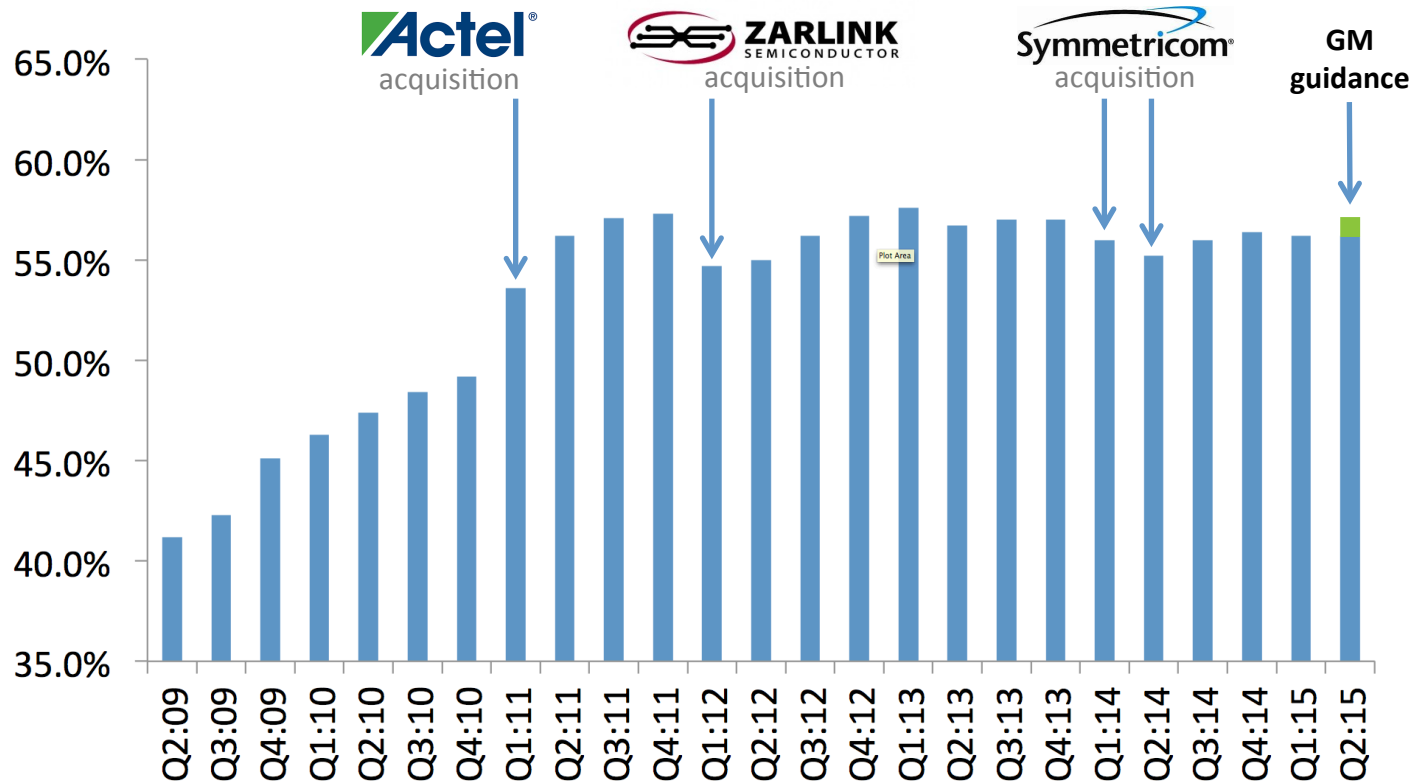


	FY15	FY15	2016
	Q1	Q2*	60/30
Net Sales	303.3	297	325
Gross Profit	170.5	168	195
Gross Margin	56.2%	56.6%	60%
Operating Expense	96.3	92.5	97.5
Operating Income	74.2	75.5	97.5
Operating Margin	24.4%	25.4%	30%

* FQ2:15 guidance numbers reflect midpoint of guided range, rounded

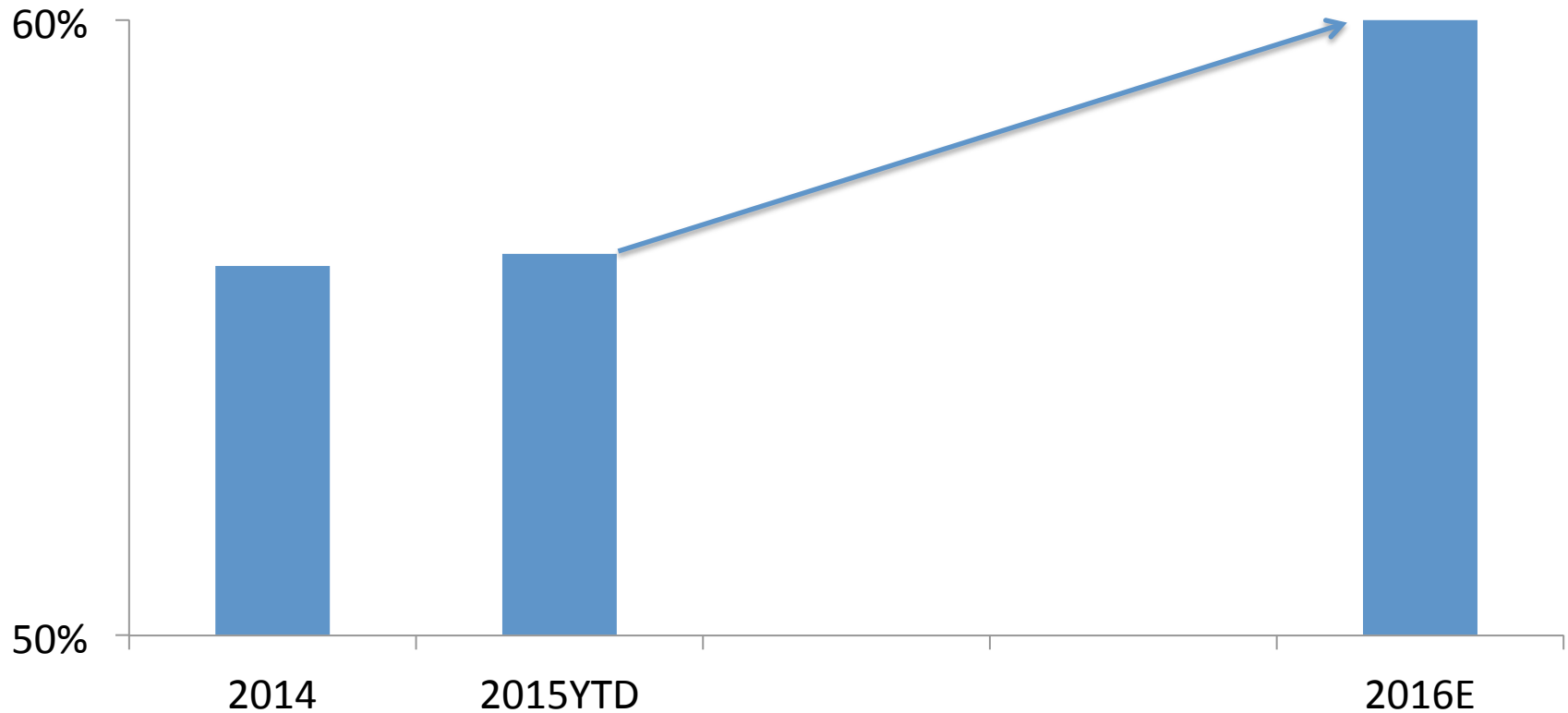
Gross Margins

A History of Improving Acquired Margins



Maximizing Profitability

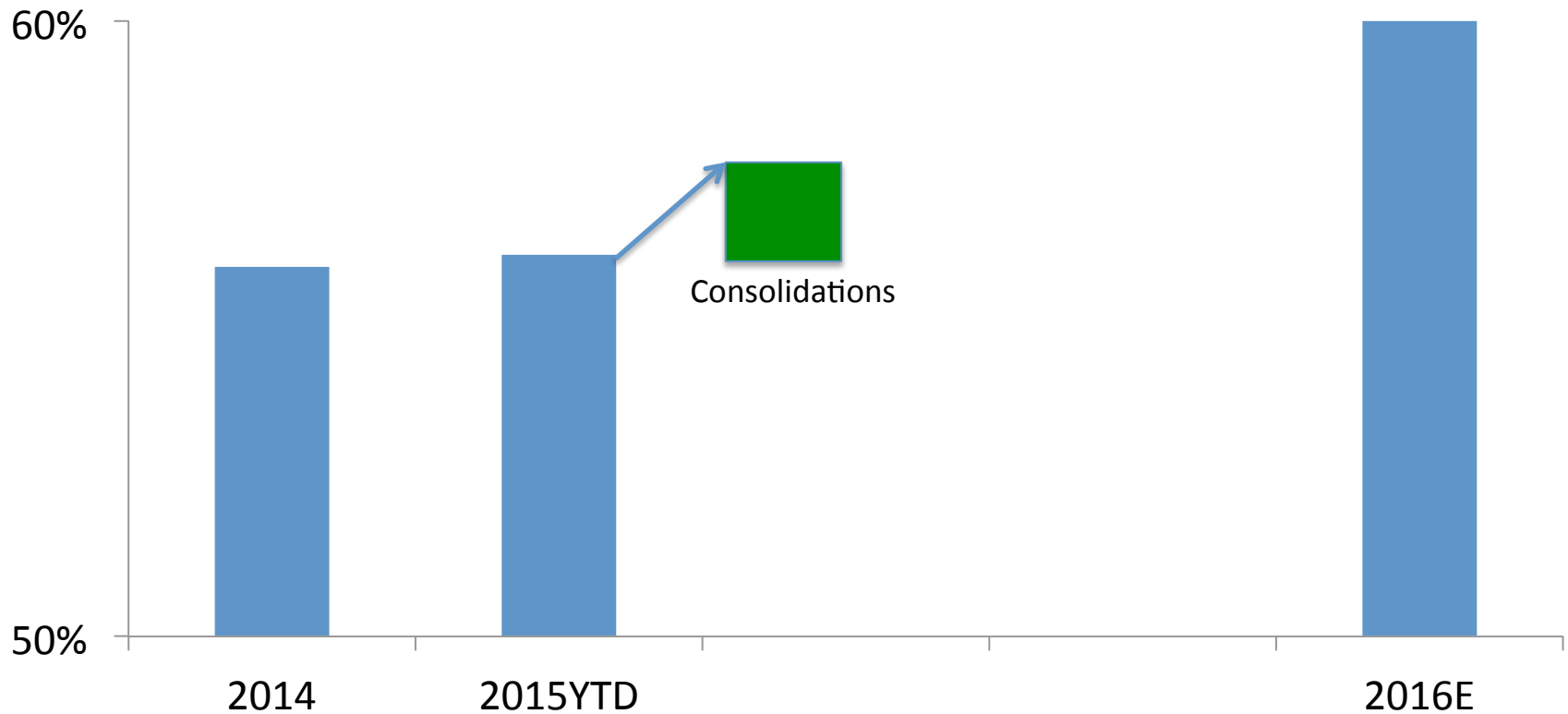
Gross Margins, Getting There



Consolidations

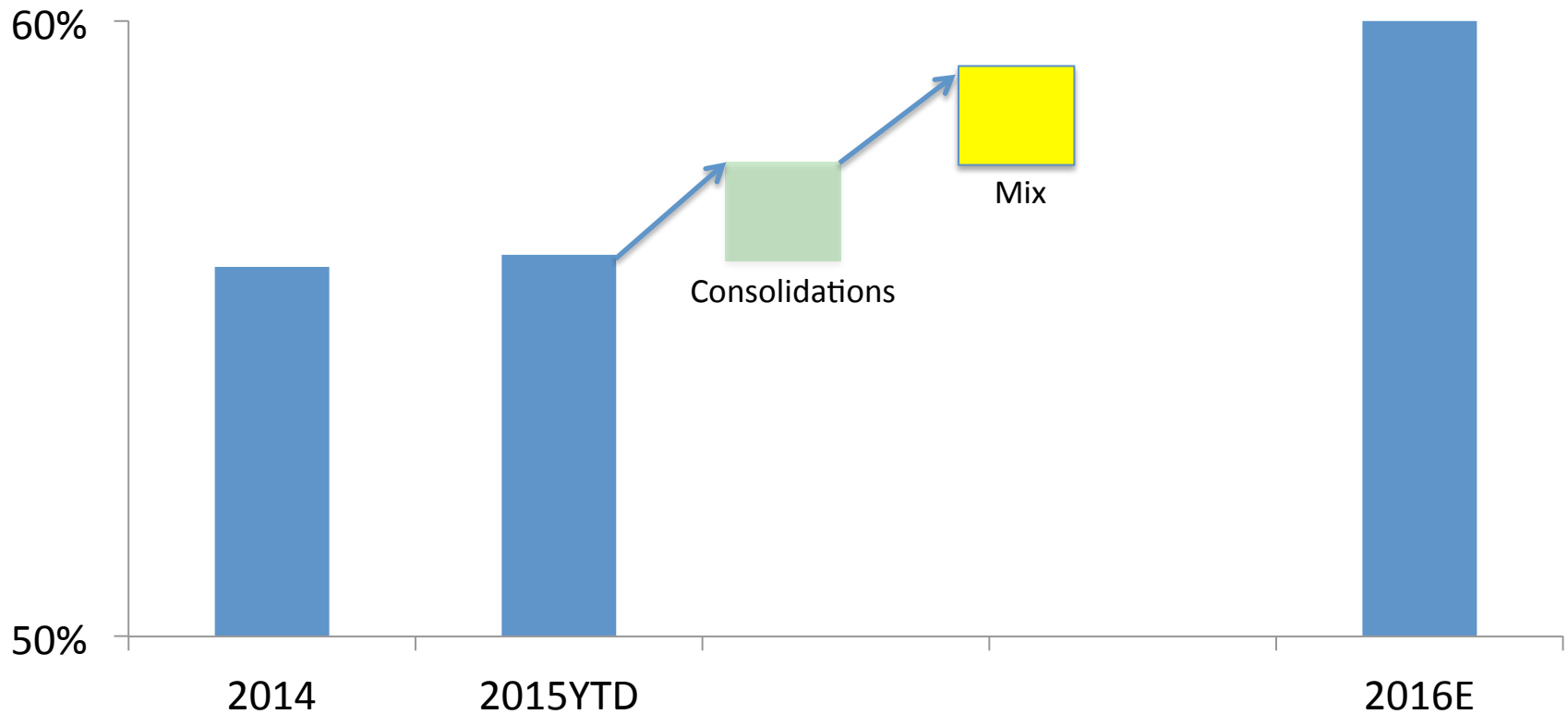
Maximizing Profitability

Gross Margins, Getting There



Maximizing Profitability

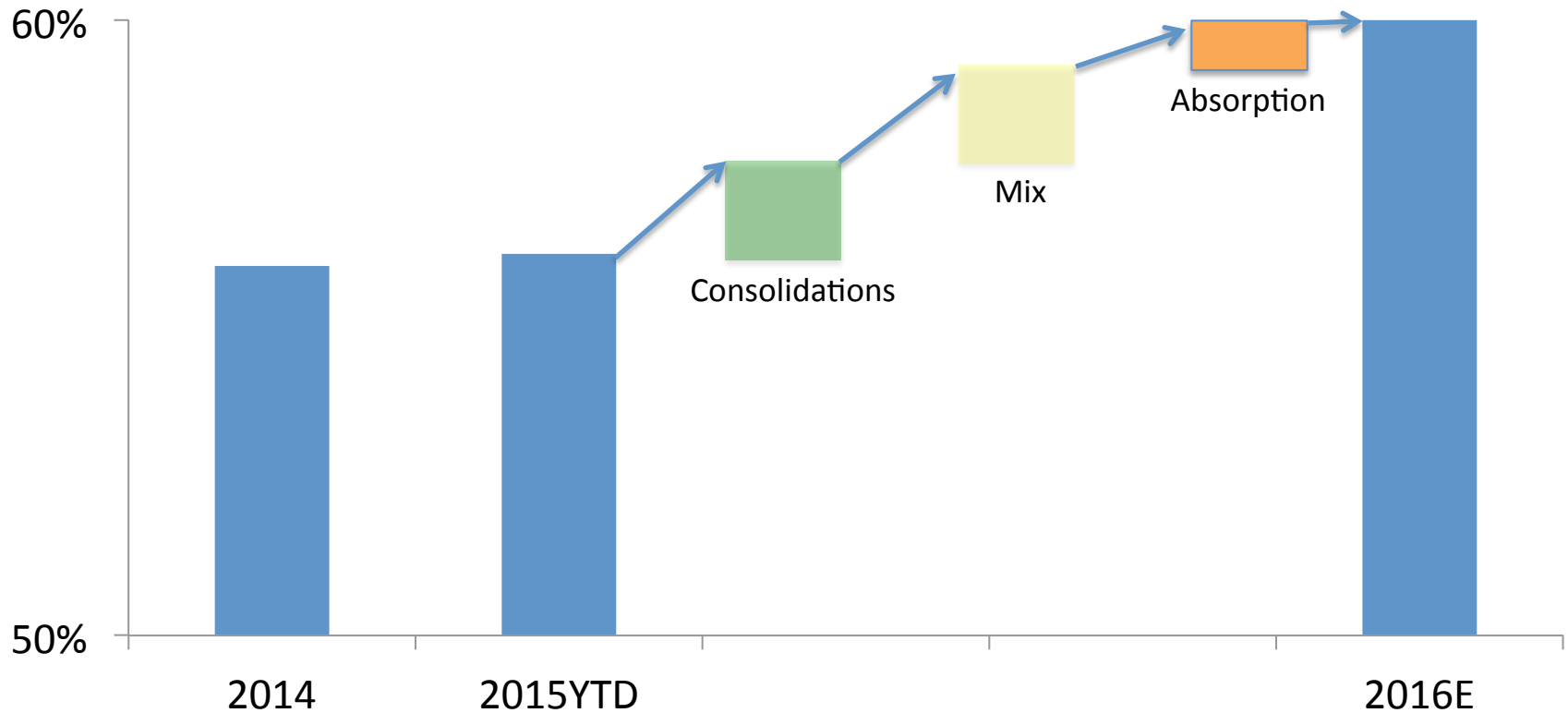
Gross Margins, Getting There



Consolidations, mix

Maximizing Profitability

Gross Margins, Getting There



Consolidations, mix, absorption

Maximizing Profitability

Operating Margins



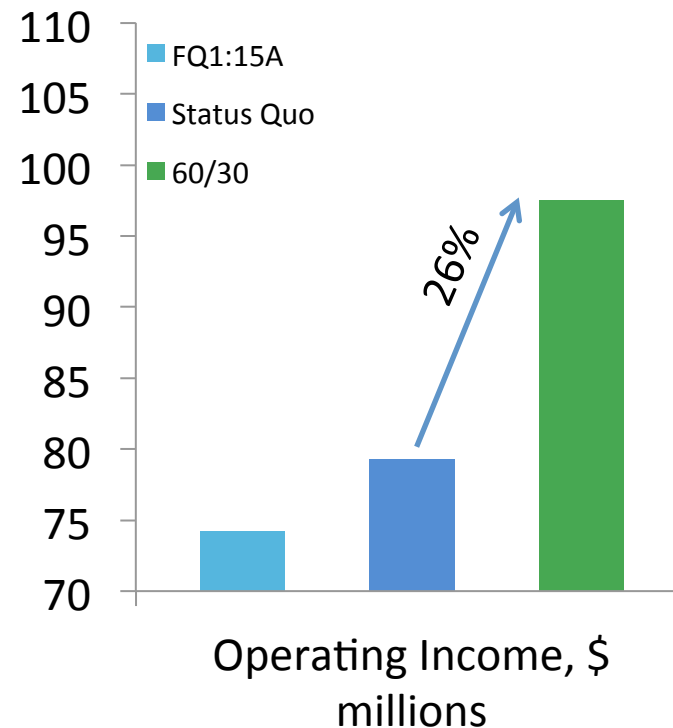
- **Majority GM fall through**
 - Infrastructure already in place
- **Targeted R&D reductions, redeployment**
 - Focus groups: FPGA, timing, MS/RF
- **Ongoing back end transfer offshore**
- **Real estate consolidations**
- **Strategic customer focus**

Maximizing Profitability

60/30 Drives 25% Increase in Profitability



	FY15	2016	2016
	Q1	Status Quo	60/30
Net Sales	303.6	325	325
Gross Profit	170.5	182.7	195
Gross Margin	56.2%	56.2%	60%
Operating Income	74.2	79.3	97.5
Operating Margin	24.4%	24.4%	30%



How do we manage capital allocation?

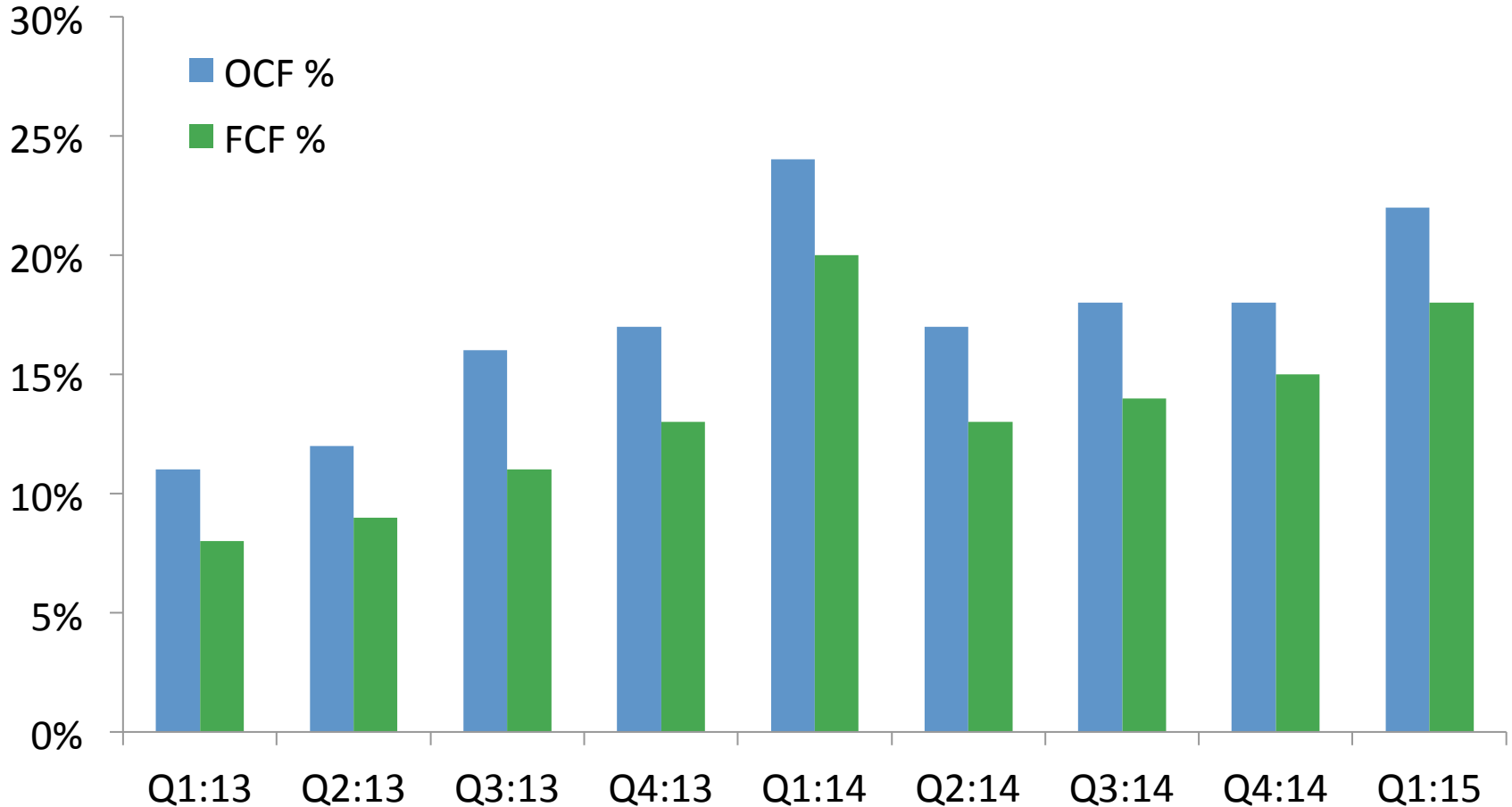


John Hohener

EVP & CFO

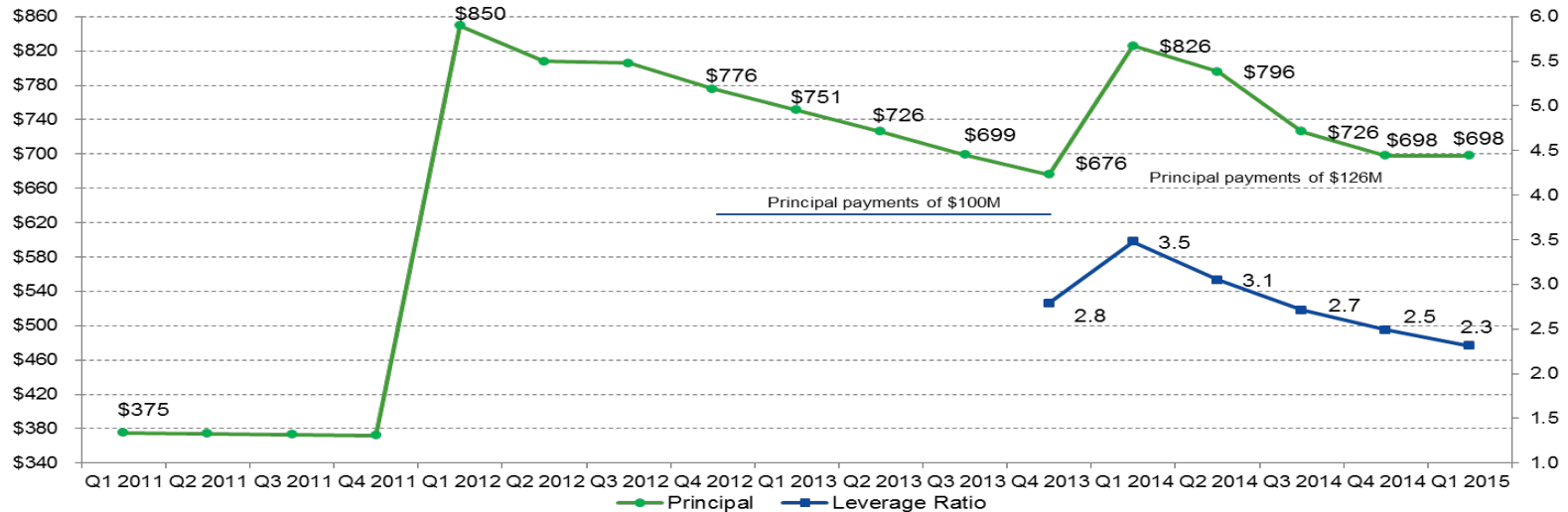
Strong Cash Flows

Growing Cash Flow Trends, % of Revenue



* As percent of revenue on fiscal quarter year to date basis

Credit Facility Metrics



TLB-1	5.00%	3.75%	5.75%	4.00%	3.75%	3.25%
TLB-2						3.50%

- Credit facility balance was \$849.6 million at the acquisition of Zarlink in Q1 2012.
- Credit facility balance was \$698.0 million at Q1 2015 – TLB-1 \$646.4M and TLB-2 of 51.6M.
- Term loan matures in February 2020 and moved to “covenant-lite” in Q2 2013 with no periodic reporting of financial covenants unless revolver or swingline borrowings are outstanding at the end of a fiscal quarter.
- Acquisition basket of \$300M + unlimited at 3.0x
- Stock repurchase / dividends of \$50M per annum + unlimited at 3.0x



Uses of Cash

Shares Repurchased & Withheld

Activity	Cash Amount	Shares	Benefit to Diluted Share Count	Notes
Shares Repurchased	\$25.0M	1.0M	0.7M	Shares repurchased in October and November at an average price of \$24.08
Shares Withheld for Taxes	\$16.4M	0.7M	0.5M	
Q1 Total	\$41.4M	1.7M	1.2M	
Q2 Shares Repurchased	\$25.0M	0.8M	0.6M	Shares repurchased in January and February at an average price of \$28.51

Microsemi's board of directors approved a \$100 million share repurchase program and we remain active in this program.

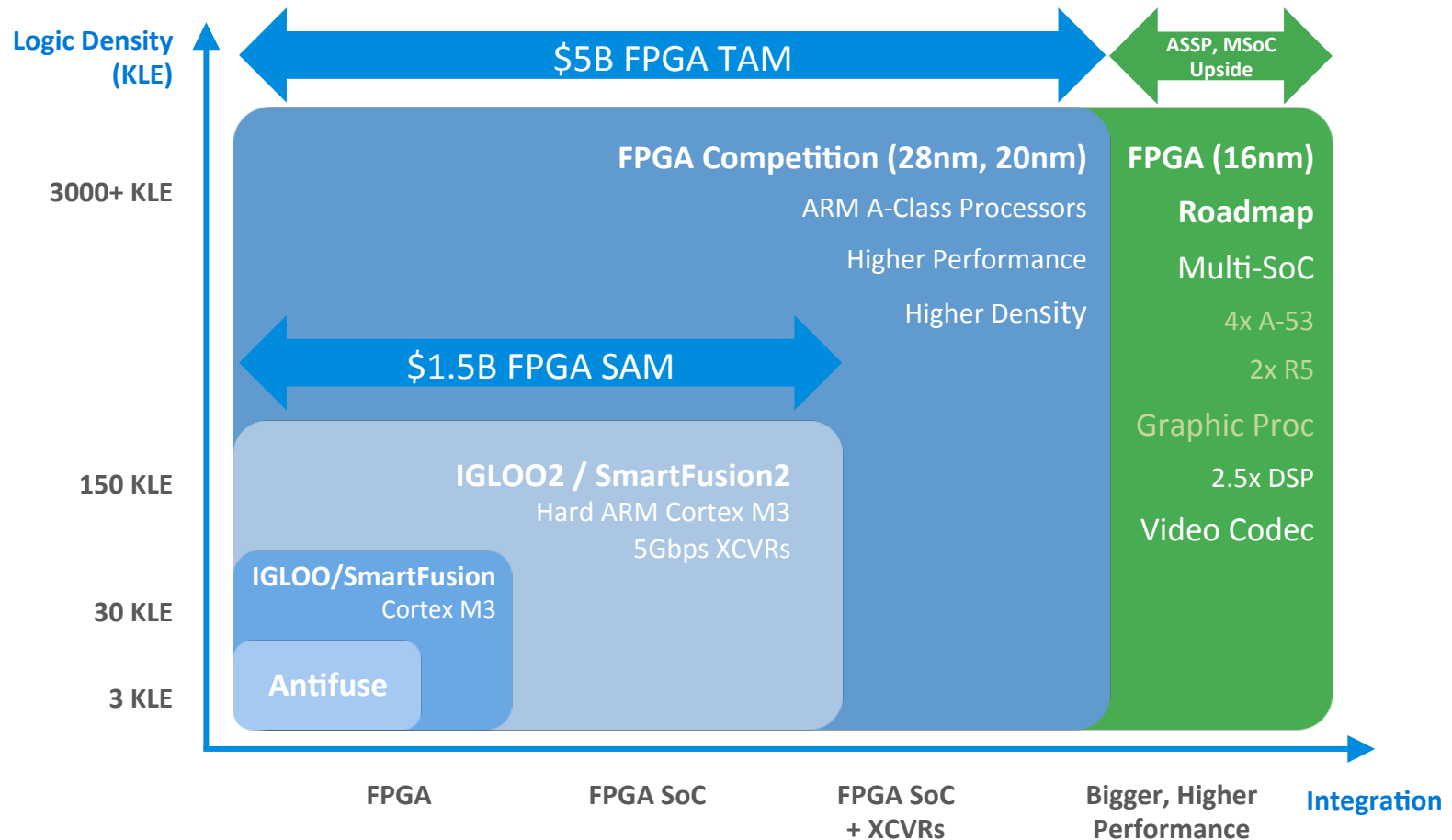
FPGA Growth and Opportunity



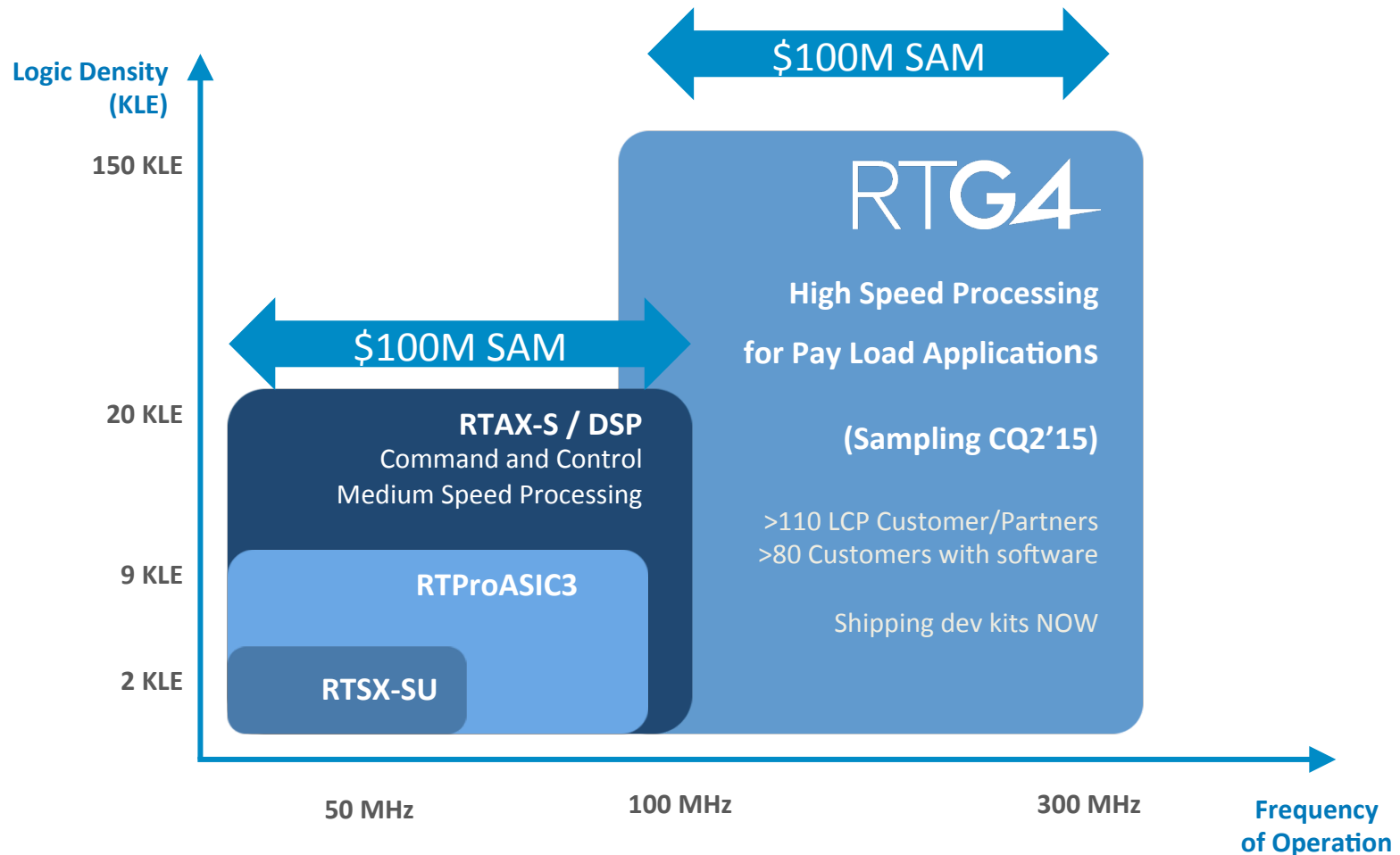
Esam Elashmawi

Corporate VP & General Manager

FPGA SAM Growth: Density + Systems Integration



Rad Tolerant FPGAs: Extending our SAM to High-Speed Processing Applications



Customers Engaged on Roadmap

Communications



Aerospace & Defense

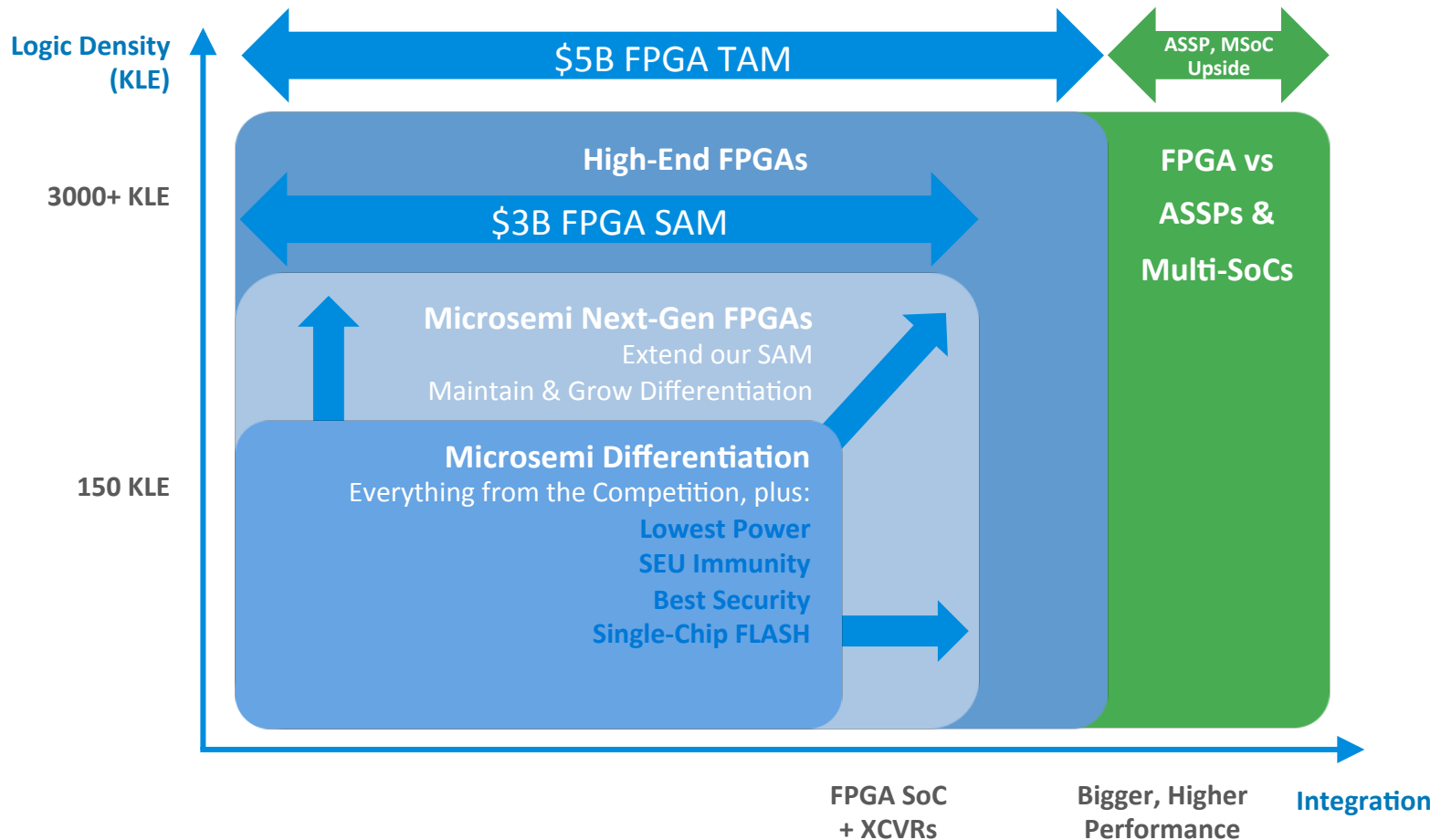


Industrial

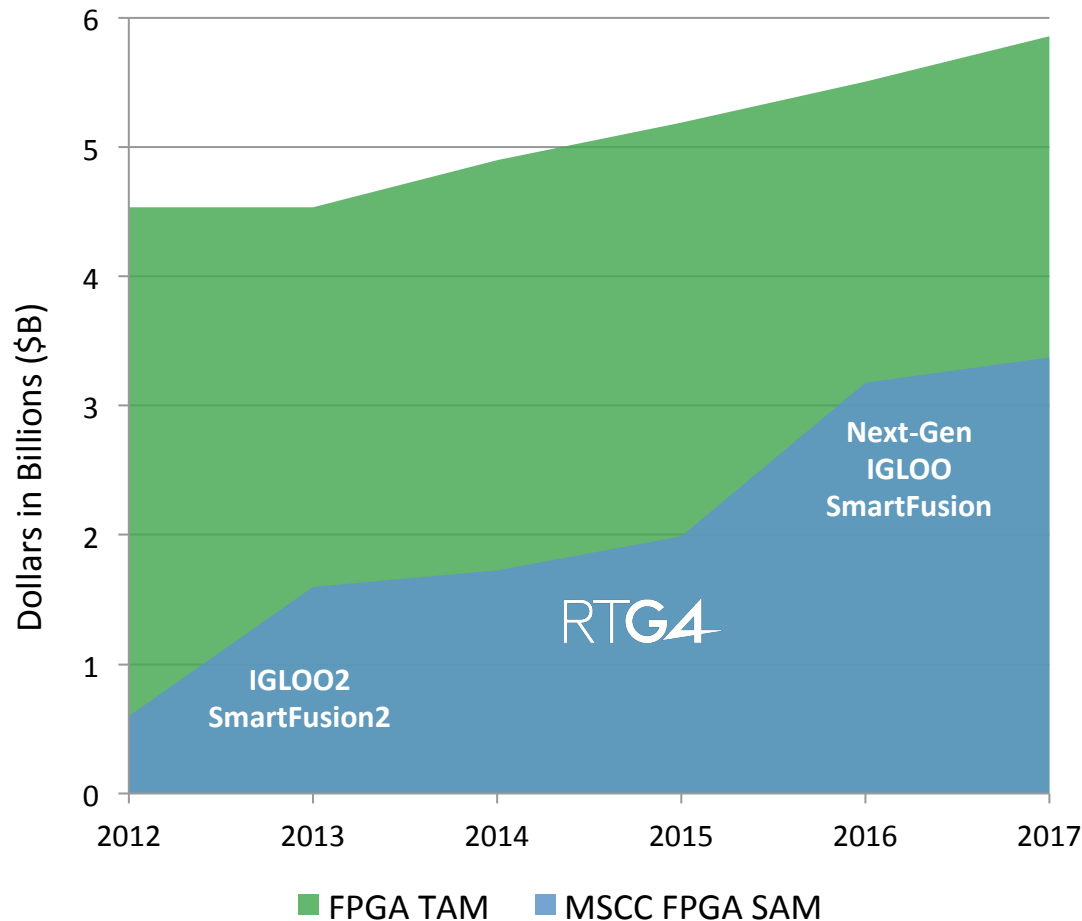
SIEMENS



FPGA SAM Growth: Density + Systems Integration



MSCC's Growing FPGA SAM (>\$3B)



- **FPGA SAM Growth Through Differentiation**
 - Lowest power
 - Security integration
 - Reliability/SEU
 - Single-chip FLASH
- **Expanding Density and Performance Footprint**
 - Further reach into mainstream FPGA designs
- **Entering New Markets**
 - Strong expansion into communications market
 - Entry into space payload applications

Differentiated Mainstream FPGAs



Low Power

- 1/10th static power
- Reduce total power by ~30-50%

Security & Reliability

- SEU immune FPGA configuration
- Highly secure: suitable for anti-cloning and authentication applications
- Extended temperature support (125C Junction)

Lowest Total Cost of Ownership

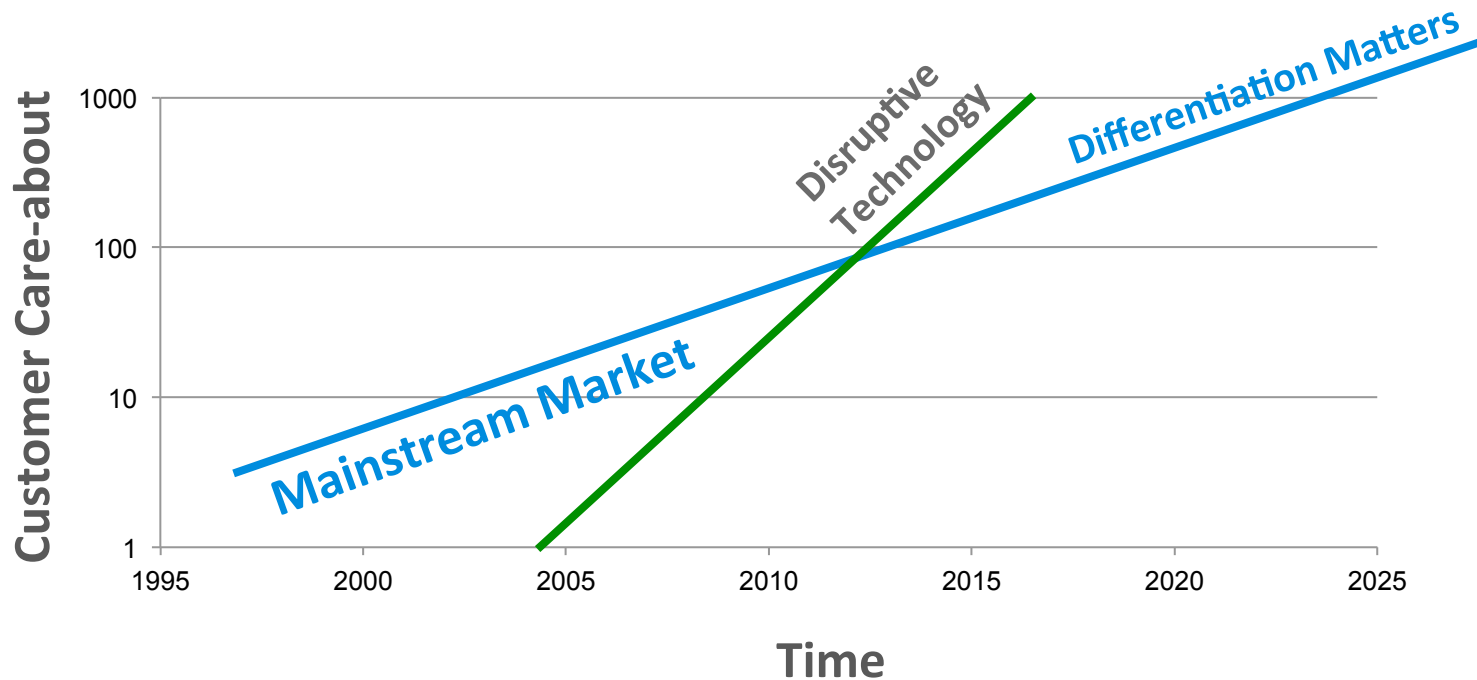
- System integration: 150K logic elements, transceivers, DSP and ARM
- More resources on smaller devices
- Smallest form factors

System Solutions

- Communications: Secure boot, Ethernet, JESD204B
- Industrial: Motor control, industrial networking, IP surveillance
- Aero & Defense: MIL-STD1553, information assurance, secure boot

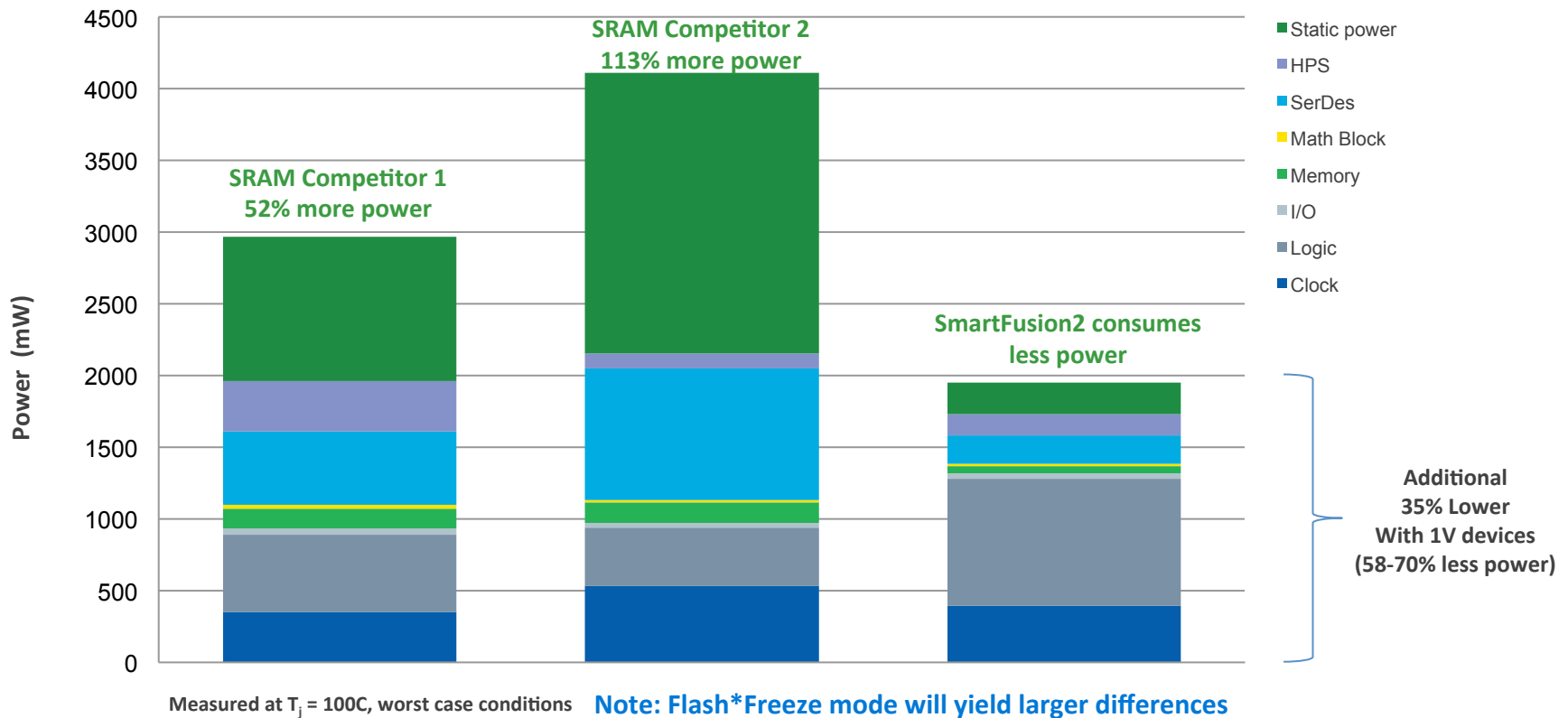
Why are we displacing SRAM FPGAs

You get everything you need in a mainstream FPGA application with significantly lower power, unmatched security and reliability for the same or lower total cost of ownership



SmartFusion2 Consumes 34-53% Less Power

Total Power Consumption



Wireless Connectivity – Are You SECURE?



Smart/Connected Car



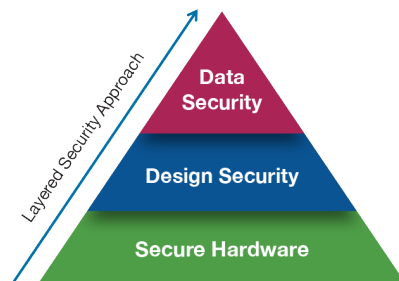
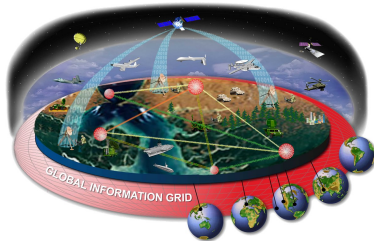
Financial Investments



Connected Home & Office

- You must be secure from:
 - Trojan Horses (*Stuxnet Worm*)
 - Safety risk
 - Tampering/Phishing
 - Stolen passwords/keys
 - Hacking (*Blackhat 2011*)
 - Insulin pumps
 - Point-of-sale terminals
 - Industrial Espionage (*Energetic Bear*)
 - IP theft/code-lifting
 - Cloning
 - Persistent Access (*Target Breach*)
 - Routers and hubs
 - Automobiles

Scalable Security Solutions and Services



Scalable Military-Grade Security

- NIST-certified, root-of-trust secure hardware
- Hard IP for design and data security – DPA, PUF, SHA, ...
- Single-chip FLASH FPGAs – most secure key verification
- Tunable for evolving threats in all markets & applications

Ecosystem and Design Services

- In-house design expertise
 - Systems security solutions (services, firmware & software)
 - Secure computing and storage (services & IP)
- 3rd party soft IP
- Cloud-based Public Key Infrastructure (PKI)

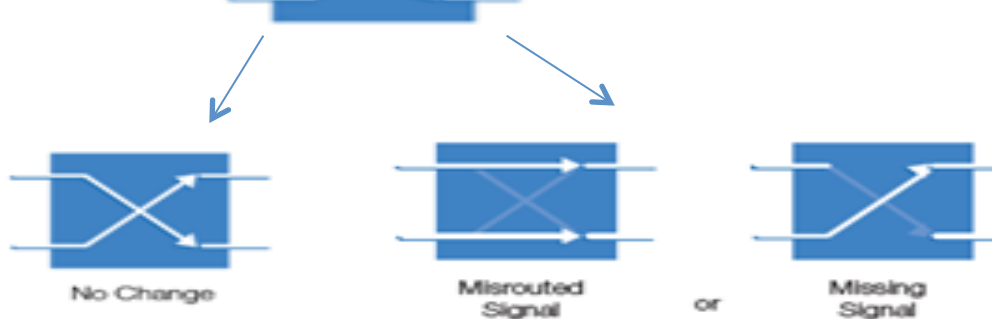
Comprehensive Solutions

- Anti-tamper and cryptography
- Information assurance
- Secure boot – uP, uC, DSP, FPGA at system power-on
- Machine-to-machine communications
- IP theft prevention
- Secure supply chain

The Most Reliable FPGAs in the Industry



**Alpha /
Neutron**
particles
strike
routing
matrix



Flash FPGA
No Error

SRAM FPGA
Functional Failure

- **Flash FPGA Fabric**
 - SEU immune zero FIT rate configuration
- **Error Corrected Memories**
 - Embedded 32 Kbyte SRAM (eSRAM)
 - Built-in DDR controllers
 - MSS
 - CAN, USB, TSE
- **HPMS/MSS memories constructed from standard cell components, not SRAM**

Reliability for Safety Critical or Mission Critical Systems

Most Reliable Solution: No Configuration Failures

		Equivalent Functional Failure Rate - FIT Rates Per Device			
		Ground Level Applications		Aviation (Typical)	Aviation (Worst Case)
FPGA	Technology	Sea Level, NYC	5,000', NYC	40,000', NYC	50,000' 80°N
Microsemi SmartFusion2 M2S050, M2S090, M2S150	65nm Flash	No Failures Detected			
Microsemi Fusion AFS1500	130nm Flash	No Failures Detected			
Microsemi ProASIC3 A3PE600	130nm Flash	No Failures Detected			
Microsemi ProASIC Plus APA1000	220nm Flash	No Failures Detected			
Microsemi Axcelerator AX1000	150nm Antifuse	No Failures Detected			
SRAM Vendor A 3M Gate FPGA	150nm SRAM	1,150	4,200	592,000	1,145,000
SRAM Vendor A 1M Gate FPGA	90nm SRAM	320	1,200	165,000	319,000
SRAM Vendor A 24K Logic Cell FPGA	45nm SRAM	1,180	4,300	608,000	1,175,000
SRAM Vendor A 44K Logic Cell FPGA	45nm SRAM	2,170	7,900	1,118,000	2,161,000
SRAM Vendor A 75K Logic Cell FPGA	40nm SRAM	2,527	9,200	1,302,000	2,517,000
SRAM Vendor A 75K Logic Cell FPGA	28nm SRAM	2,481	9,100	1,278,000	2,471,000
SRAM Vendor B 1M Gate FPGA	130nm SRAM	460	1,700	237,000	458,000
SRAM Vendor B 1M Gate FPGA	90nm SRAM	730	2,700	376,000	727,000
SRAM Vendor B 2M Gate FPGA	90nm SRAM	1,600	5,800	824,000	1,594,000
SRAM Vendor B 25K Logic Cell FPGA	65nm SRAM	580	2,100	299,000	578,000
SRAM Vendor B 55K Logic Cell FPGA	65nm SRAM	1,500	5,500	773,000	1,494,000
SRAM Vendor B 120K Logic Cell FPGA	65nm SRAM	2,900	10,600	1,494,000	2,888,000
SRAM Vendor B 50K Logic Cell FPGA	60nm SRAM	2,200	8,000	1,133,000	2,191,000

FIT = number of errors in 10⁹ hours – Acceptable FIT rates for high-reliability applications are < 20

Testing of Microsemi FPGAs, Xilinx and Altera 90nm, 130nm, and 150nm performed by IROC Technologies

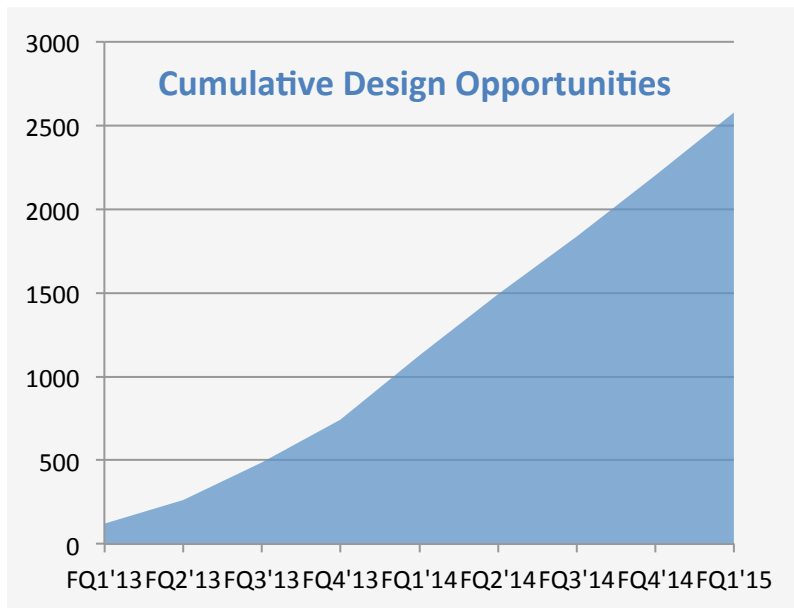
Xilinx 45nm, 40nm, and 28nm based on Xilinx reliability data, Altera 65nm and 60nm estimated at 100 Fit / Mbit

Many Reasons Why Customers Engage, Many Reasons Why We Win

Geography	Market Segment	Primary Reason for Engagement	Secondary Reasons for Win
Americas	Communications (Router)	SEU	More PCIe More I/O
Americas	Communications (Secure Router)	Security	Small parts with mainstream features Small footprint
China	Communications (SFP)	SEU	Low power Small footprint
China	Communications	Low power	1588
Americas	Automotive (ECM)	Reliability	SEU
China	Automotive (Cloud based control)	Security	Small parts with mainstream features
Americas	Defense (Secure Communications)	Low power	Small footprint Multi PCIe end points (090)
Europe	Defense (Secure Communications)	Low power	Security
China	Industrial	Security	Small parts with MCU and PCIe
Japan	Industrial (POS)	PCIe @ 10K LE	Lower cost than ASIC
Europe	Industrial (Networking)	Single chip ASIC replacement	Security
Americas	Consumer (Mobile Platform)	Security	Security
Europe	Consumer (Gaming)	Small chip with transceiver	Security Small parts with MCU and XCVR VQ package

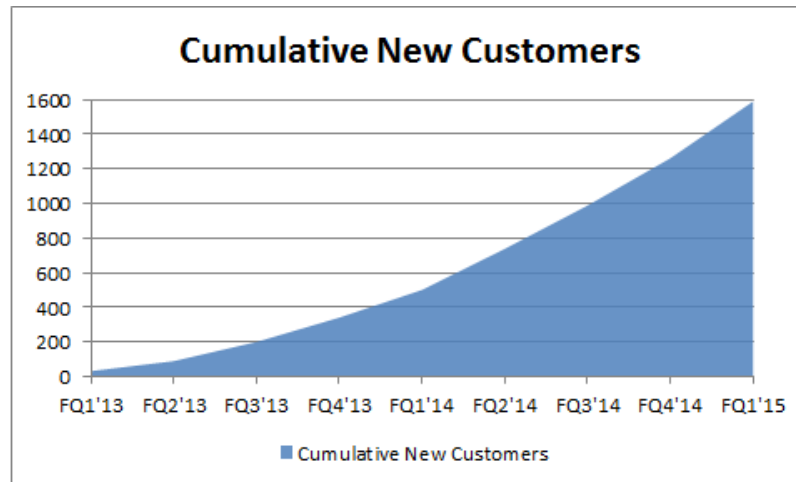
SmartFusion2 / IGLOO2 Design Win Rate

FY13-FY15 (\$)	Opportunities	Design Ins	Design Wins
Grand Total	\$337,001,918	\$92,682,687	\$40,626,274



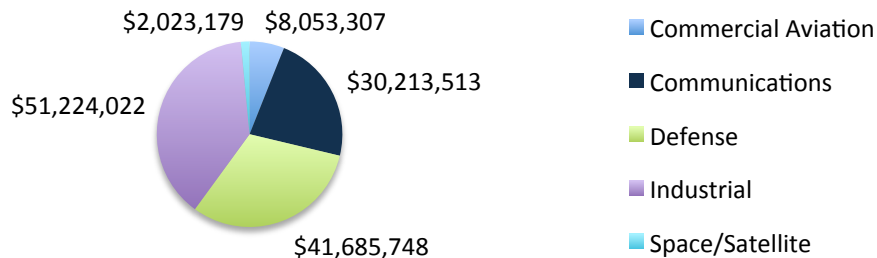
- **Growing Opportunities**
 - >2500 count
 - \$337M in value
- **>\$90M of Design Ins**
 - Customers have chosen MSCC over competitors
- **>\$40M of Design Wins**
 - Customers have purchased >\$1K silicon

High Win Rate at New Customer Base for SmartFusion2 / IGLOO2



- **42% of opportunities are with new customers**
 - 3,785 total opportunities
 - 1,589 with new customers
- **58% of customer designs choose MSCC**
 - 808 Design in/design wins
 - 569 Design losses

Design In + Design Win Values by Market



- **24% of design win values now in communications market**

Communications Design Win Examples

Application

Why We Win

Secure Boot CPU of Networking Equipment



- Highly secure FPGA with built-in clone resistance and tamper resistance
- Lower TCO

SFP Modules for Network Monitoring



- Only FPGA that can enable 1.5W module
- Most logic (90KLE) in 11mm package

Small Cell / Backhaul Equipment



- Lowest power FPGA
- Highly secure FPGA with built-in clone resistance and tamper resistance

Defense & Security Design Win Examples

Application

Why We Win

Secure Boot SRAM FPGA of RADAR/EW Systems



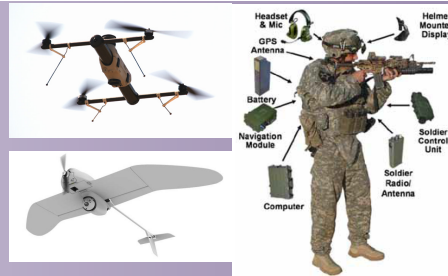
- Highly secure FPGA with Root-of-Trust capabilities
- Customized Security at a Lower Cost

Secure Communications



- Lowest Power baseband processing solutions
- Lowest Power & Most Secure Cryptographic solutions

Secure Embedded Systems



- Highly Integrated Secure System-on-Chip FPGA
- The Most Advanced Anti-Tamper FPGA available

Timing Growth and Opportunity



Roger Holliday & Maamoun Seido

Senior VP & General
Manager, Communications
Product Group

VP & Business Unit Manager,
Timing and Optical Products

Bandwidth Demand Driving Infrastructure Upgrade



Wireless Backhaul

\$8.8B

Backhaul Equipment Market 2015

23%

LTE cellsite deployment CAGR

Data Center Interconnect

\$600M

DCI Market 2015

40%

DCI CAGR

Carrier Ethernet and Routing

\$14B

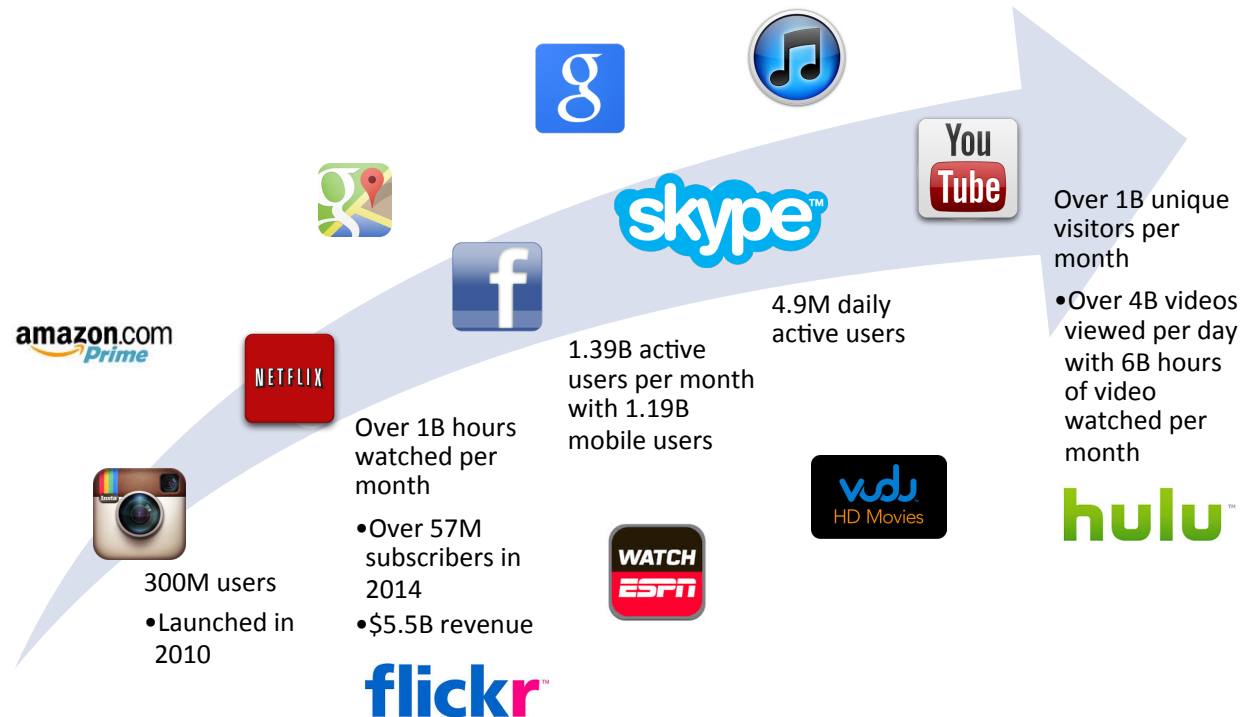
Carrier Ethernet and Routing Equipment 2015

22%

10/40/100G ports CAGR

Infonetics - Macrocell Mobile Backhaul Equipment Market Size, Share, and Forecasts; 2nd Edition 2014
The Rise of Optical Data Center Networks An Infonetics Research / IHS Webinar Co-produced with Infinera
Infonetics - Carrier Ethernet Equipment Annual Market Size and Forecasts; 2014 Edition
1G/10G/40G/100G Networking Ports Biannual Market Size and Forecasts; 2nd Edition 2014

Applications Driving the Demand for Bandwidth



Number of monthly active Instagram users from January 2013 to December 2014 (in millions)
<http://blog.netflix.com/2014/01/new-is-performance-data-for-december.html>
<http://venturebeat.com/2014/10/15/netflix-beats-expectations-with-3m-new-subscribers-q3-0-96-earnings-per-share/>
<http://26.netflix.com/gv-uts.cfm>
<http://venturebeat.com/2015/01/28/facebook-passes-1-39b-monthly-active-users-and-890m-daily-active-users/>
<http://www.adweek.com/socialtimes/datapoint-microsofts-skype-dau-gains-82-from-a-year-ago-mau-gains-just-1-25/297800?red=if>
<http://www.youtube.com/yt/press/statistics.html>

Microsemi's End-to-End Precise Time Solutions



GrandMaster Systems

Uses GPS to distribute "Precise Time" using the IEEE 1588 protocol



Network Supervision & Management

Timing problem notification, analysis and SLA compliance



Packet Timing ICs

Field proven high performance Time and Frequency Synchronization solutions for Packet Networks



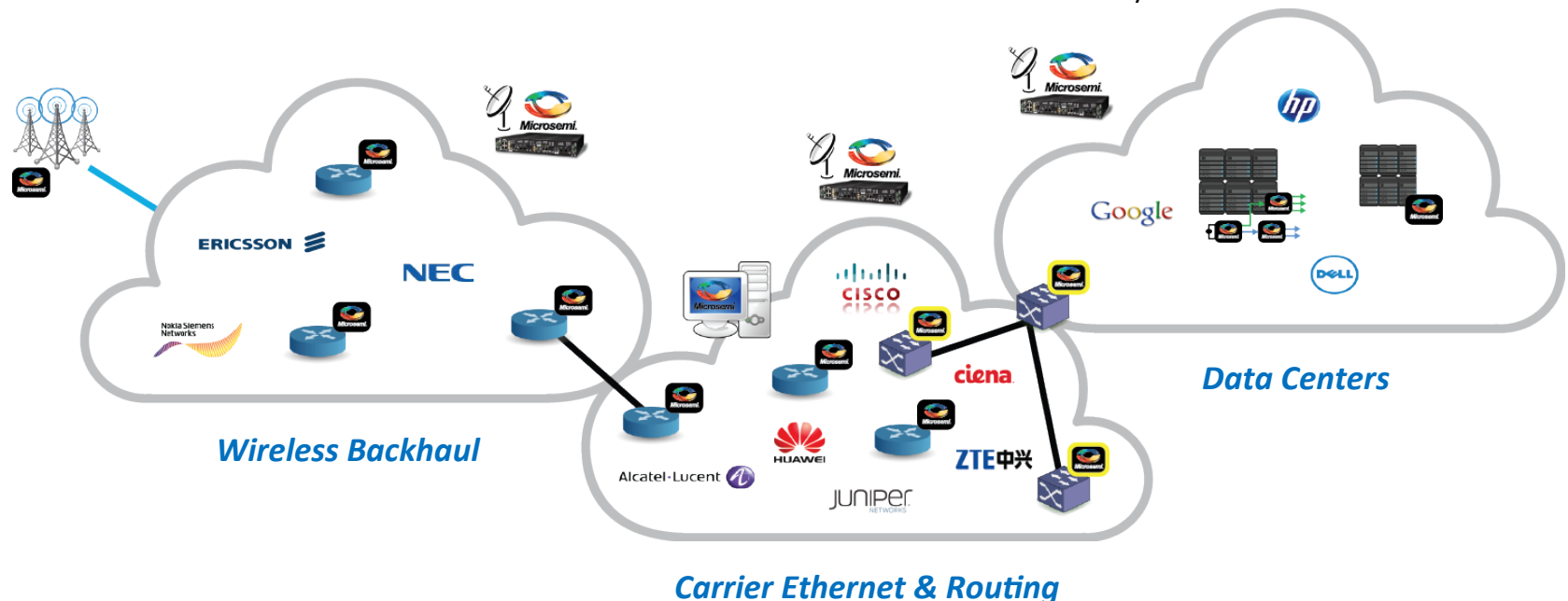
Optical Transport Network (OTN) Timing ICs

Most flexible and highest monolithic density OTN timing solutions



Clock Management Timing ICs

Clock synthesis, rate conversion, jitter attenuation and fan-out buffer timing solutions to ease design and increase reliability



Microsemi Timing & Synchronization Leadership

Market Leaders in Timing

- Trusted long-term supplier
- 25M+ PLLs sold, with double digit year on year growth
- Leading ITU-T, Telcordia, IEEE timing standards
- > **60% share of world-time, NTP** & classified systems

Broadest Product Portfolio

- 150+ products in production
- OTN, IEEE-1588, SyncE, SONET, SDH, PDH and synthesis, clock distribution solutions

Thoroughly Field Proven

- Shipping to **all major carriers** world wide
- Proven long term commitment with products still shipping after 10 years

Industry 1st SyncE/IEEE 1588

- Industry-leading: over 5.5M devices shipped
- First to market with dedicated SyncE devices
- **Industries most complete and proven IEEE 1588 devices**

Industry 1st Optimized OTN

- Quad-channel PLLs support any rate on any port
- **Market leader in number of OTN PLLs shipped**
- Driving standards for synchronous OTN

Clock Management

- Ultra-low jitter (160fs) synthesizers and jitter attenuators
- Application specific with custom configuration
- Ultra-low additive jitter cost efficient buffers

Bandwidth Demand Driving Infrastructure Upgrade



Wireless Backhaul

- “Precise Time” in basestations avoid dropped calls
- Bandwidth shared using multiple frequency bands and cannot collide
- LTE employs TDMA requiring accurate time



Data Center Interconnect

- Frequency precision enables WDM interconnections (using OTN)
- “Precise Time” used for data analytics that optimize network efficiency



Carrier Ethernet and Routing

- “Precise Time” used to enable various end user services such as:
 - mobile traffic
 - power smartgrid substations
 - cable service (modular CMTS with edge QAM)

Developing Leading Products and Solutions

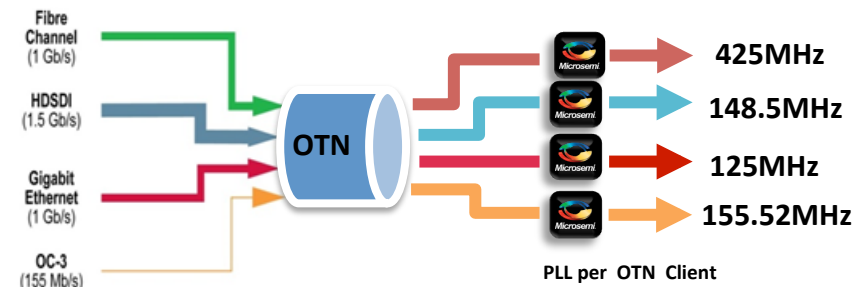
Packet Timing Solutions:

- Delivers Time and Frequency Synchronization through Packet Networks for use by the Wireless Infrastructure



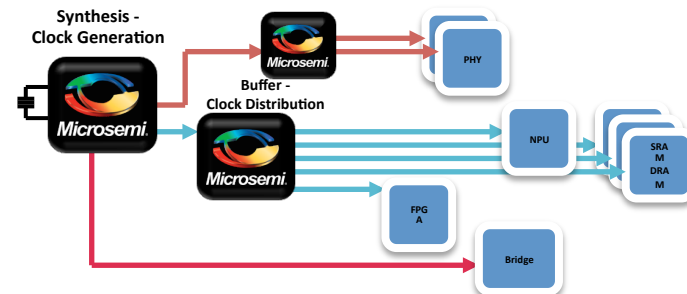
OTN Timing Solutions:

- Highly integrated clock synchronizer that accept, filter & generate any client frequency rate for different services





















Clock Management Products:

- Ease design and increase reliability of timing solutions, create multiple copies of ultra low-jitter clock signals at different frequencies

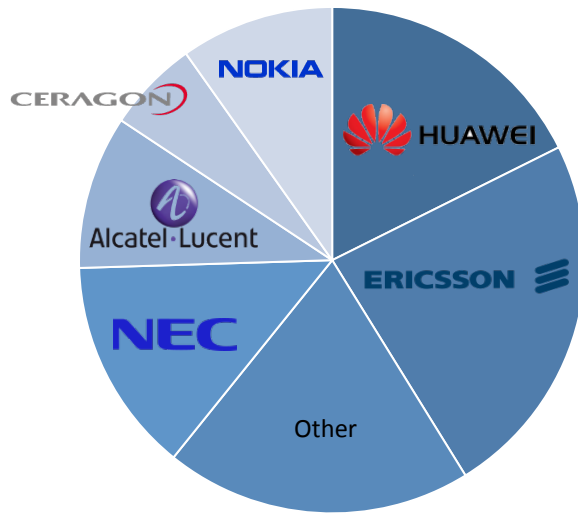


Competitive Landscape

	 Microsemi.		 SILICON LABS
"Precise Time" Solution (IEEE 1588 & SyncE)			
Jitter Performance – Clocks Driving 100G links			
Flexibility & Programmability			
End-to-End Timing Solutions			
Clock Management Solutions			

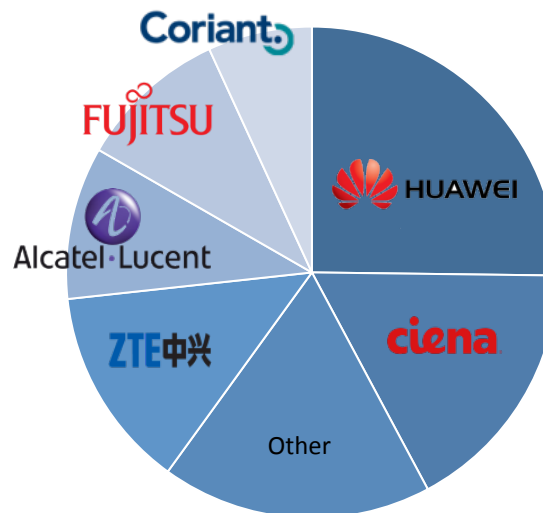
Microsemi's Success in Delivering Precise Time Solutions to Market Makers

Wireless Backhaul



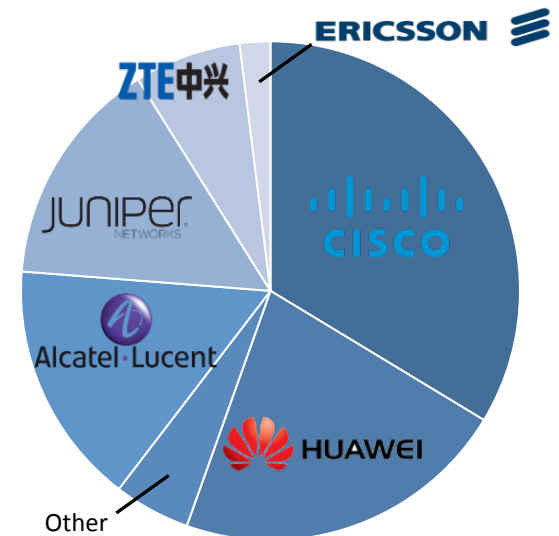
Macrocell Mobile Backhaul Market Share¹²

Data Center Interconnect







OTN Hardware Market Share¹³

Carrier Ethernet and Routing






Worldwide SP Edge+Core+ CES Market Share¹⁴

“Precise Time” Emerging Market Opportunities

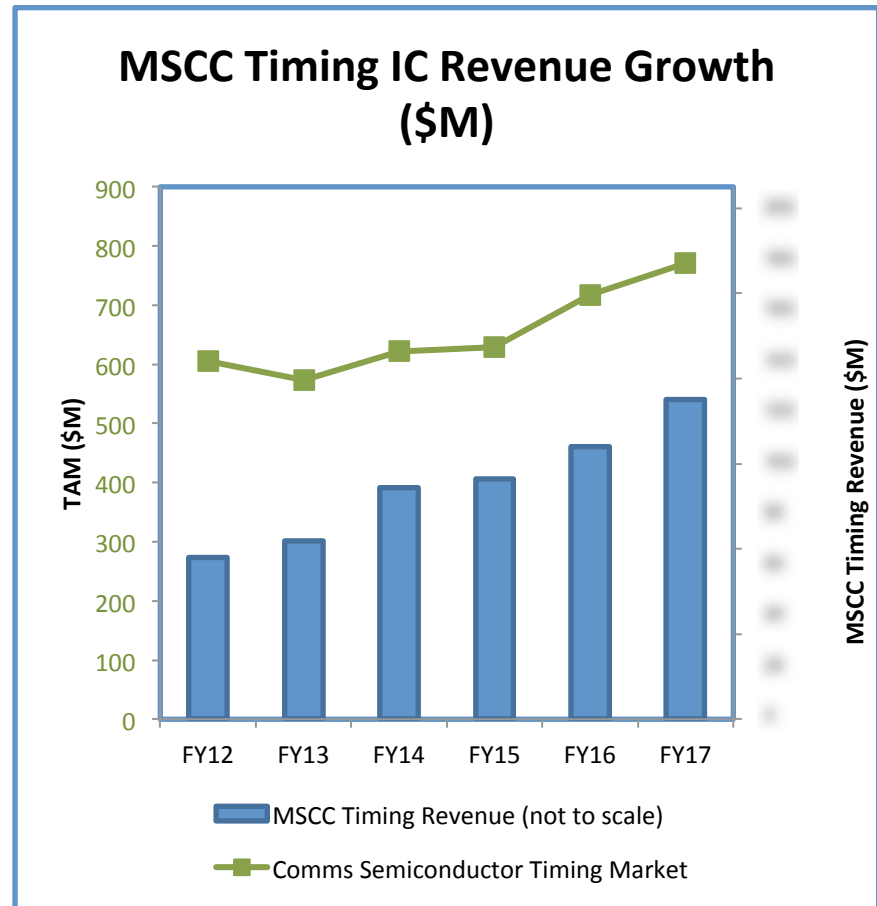
Industry	Market Shift	“Precise Time” Impact
Mobile and IP Phones 	Wide adoption of mobile phones and IP-based landline phones lead to: <ul style="list-style-type: none">- degrading 911 service- limiting location based services	IEEE 1588 timing is critical to assist GPS for accurate location of users
Cable 	Deployment of de-centralized modular CMTS and remote PHY systems	Align remote nodes for users to send upstream data at proper timeslots
Automotive 	Addition of non-critical infotainment within cars using Ethernet/IP communications	Align sensors and audio systems for Quality of Service
Financial 	Necessity for accurate record keeping, with impact from high frequency trading, based on new regulations	Accurately record stock transaction records

“Precise Time” Emerging Market Opportunities

Industry	Market Transition	“Precise Time” Impact
Power 	Transition to Ethernet/IP-based communications (SmartGrid) in substations and across wide area network	Replacement of legacy time busses (e.g. IRIG-B) for accurate network monitoring & measurements
Industrial Automation 	Transition to Ethernet/IP-based communications, replacing legacy process buses on factory floor	Synchronize robotics in an assembly line
Broadcast Video 	Transition to Ethernet/IP-based communications, from legacy wired infrastructure in broadcast studios	Video frame alignment

Microsemi Timing

- Timing expertise and execution has provided growth
- Established leader and footprint in the market continues to expand vs. limited competition
- End-to-End engagement offering “Precise Time” solutions drives innovation
- Continued emergent markets requiring “Precise Time” will fuel quality growth opportunities



TAM source: Databeans- Q2-2014 Timing Devices Market Tracker Analog Service

Driving Growth in Key Applications: Small Cell/Backhaul



Maamoun Seido

VP & Business Unit Manager, Timing and Optical Products

Small Cells – Integral to Future Deployments

- The existing macrocell infrastructure is not easily scalable for future 4G/LTE deployments
- Small Cells offer a way to complement the macrocell architectures providing cost effective, heterogeneous solutions for high user locations
- Small cells are defined (by the SmallCellForum): number of users and location



Urban



Enterprise



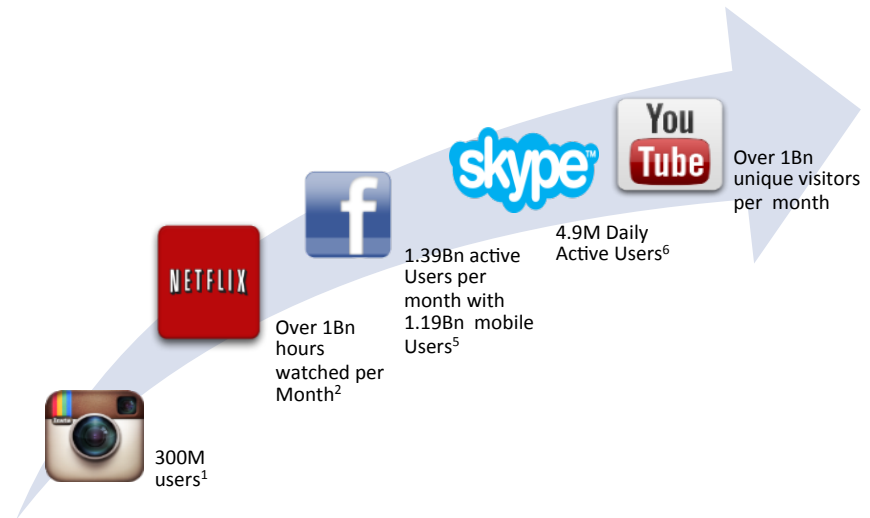
Home



Rural

Why Small Cells?

- Data hungry applications are driving the bandwidth growth
- Mobile users of these applications are driving the need for densification of the wireless infrastructure



- Small cells are cost effective, easy and fast to deploy solutions to increase coverage and bandwidth in dense user locations
 - Examples are stadiums and new office buildings
- User experience is key to customer retention; this experience is now driven more by data services than voice

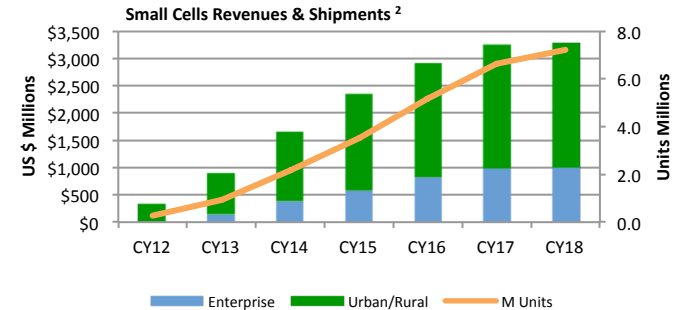
Growth of Small Cells & Backhaul

Small Cells Outdoor
(rural/urban)



Small Cells Indoor
(enterprise)

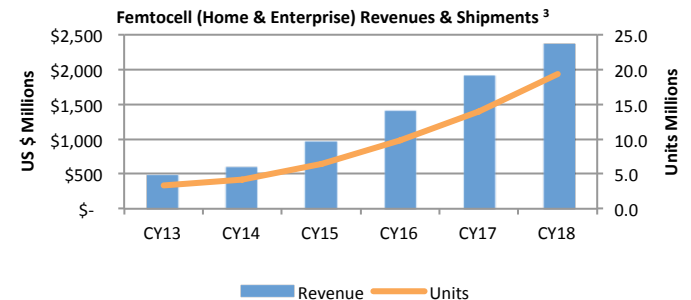
46%
CAGR



Femtocell
(home and enterprise)



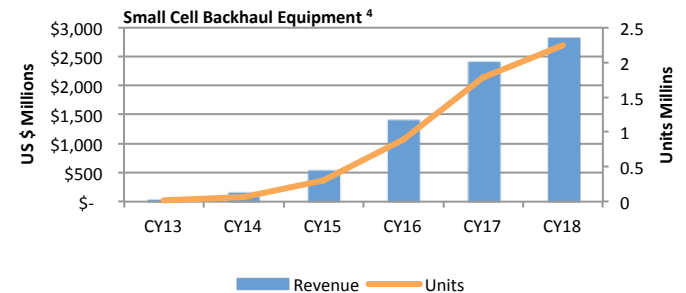
37%
CAGR



Small Cell Backhaul
Equipment








125%
CAGR



References: 2014 Infonetics Research: Small Cell Equipment Market Share and Forecast, 2nd Edition; September 2014
2014 Infonetics Research: Residential and Enterprise Femtocell Equipment Market Share and Forecast, 2nd Edition; December 2014
2014 Infonetics Research: Outdoor Small Cell Mobile Backhaul Equipment Market Size and Forecast, 2nd Edition; December 2014

Small Cells Design & Deployment Challenges

Issue		Challenge
Locations 	Unusual and inaccessible locations	<ul style="list-style-type: none">• Complete lack of normal facilities for equipment installations• Alternatives required for power and synchronization
Power 	Limited or no conventional power outlets	<ul style="list-style-type: none">• Power efficient designs for fanless operation• Use of Power-over-Ethernet is essential
Footprint 	Limited space for new equipment installations	<ul style="list-style-type: none">• Small design footprint to enable wide range of deployments
Cost 	Low cost to facilitate large volumes	<ul style="list-style-type: none">• System solution needs to be low cost of manufacture and operation
Security 	Limited security locations with untrusted network connections	<ul style="list-style-type: none">• System solution require low cost high security mechanisms

Microsemi Product Solutions



- Network Synchronization Equipment, ICs and SW



- Power-over-Ethernet Equipment and ICs



- Secure FPGA ICs



Focused on specific small cell applications

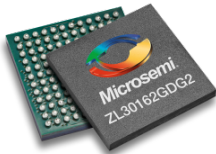
Home, enterprise, urban and rural

Microsemi Value Proposition



Integrated Grandmaster (IGM)

- Indoor GPS with low cost of deployment
- Local 1588 GM



IEEE 1588 SW & PLL

- Well-established solutions with +5M devices shipped

Synchronization

End-to-end

Power over Ethernet

Simple, low cost and efficient

Security

Secure solutions at the network edge



Flash-based FPGA

- Providing low power, highly secure solution



PoE Midspans

- Broadest portfolio for all small cell deployments



PoE ICs

- Highest power efficiency

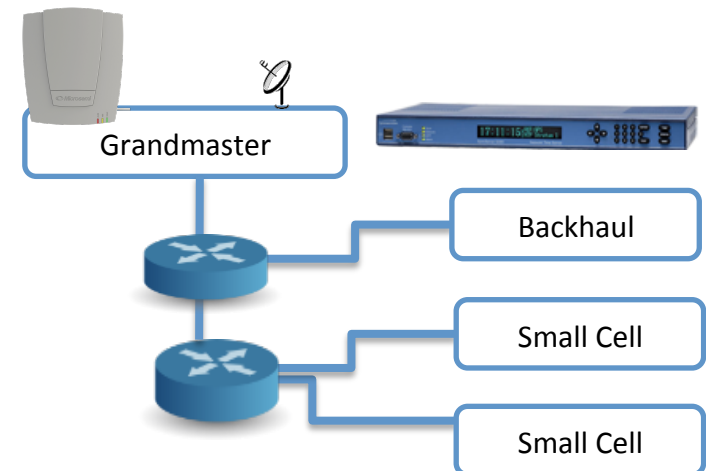
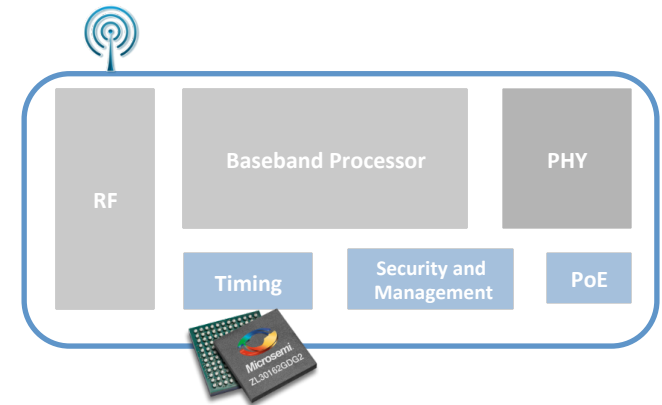
Timing Solutions Synchronize Small Cells

Integrated Circuits

- Industry's broadest range of synchronization technologies for small cells, including GPS, SyncE, 1588, NTP
- Leader in SyncE and 1588 deployments with established solutions
- Highest density, lowest jitter PLL IC solutions with RF phase noise capabilities for cost efficient

Systems

- Integrated GrandMaster for indoor deployments providing for cost effective deployments
- Market leader in GrandMaster deployments

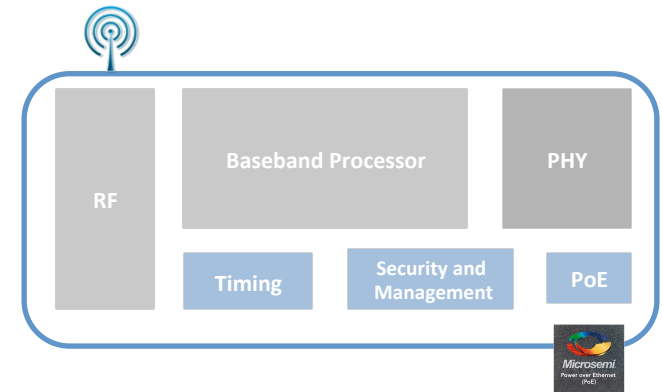


Industry's ONLY end-to-end synchronization solutions

PoE Solutions Power Small Cells

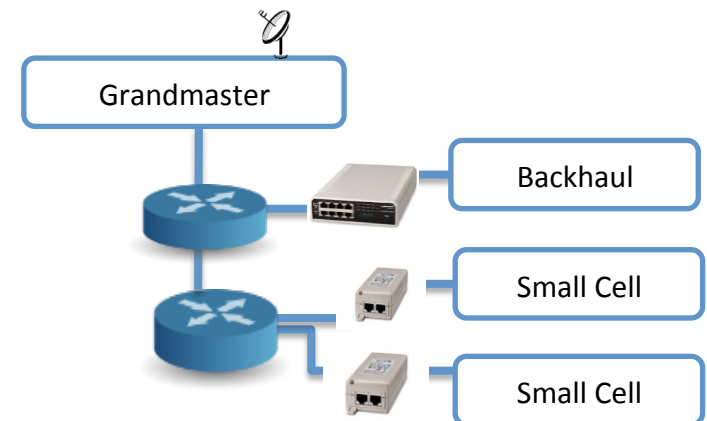
Integrated Circuits

- Most efficient
 - Ideal diode bridge saves up to 2.5W per small cell
 - PD devices save up to 300mW
 - Single port PSE to power backhaul systems
- End-to-end support up to 95W per port

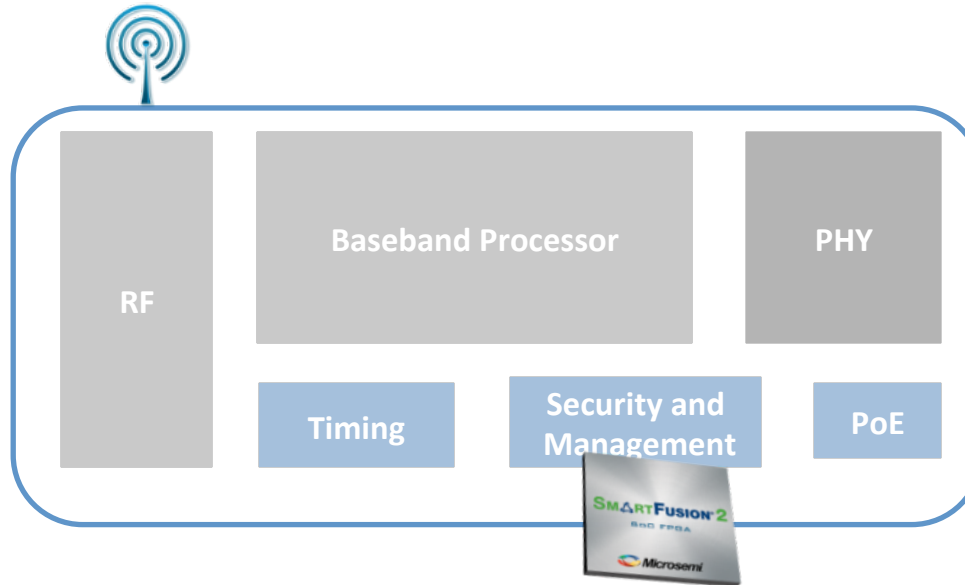


Systems

- Complete portfolio for indoor and outdoor products
 - 1, 2 & 4 port outdoor PoE systems
 - Unique UL-compliant surge protection for outdoor applications
 - 6, 12 & 24 port managed indoor midspan
 - Avoids the need to upgrade Ethernet switches
- Up to 95W per port



FPGAs Provide Security for Small Cells



- **Most secure, clone and tamper resistant**
 - Provides the ability to verify the authenticity of remotely located small cells
 - Provides the ability to defend against attempts at network intrusions
- **Lowest power with up to 50% power savings compared to SRAM FPGAs**
 - Critical for Small Cell applications
- **Extended temperature range (up to 85°C ambient) with no performance degradation**
 - For outdoor deployments

Driving Growth in Key Applications: Residential Gateway



Roger Holliday

Senior VP & General Manager, Communications Product Group

Broadband Gateway 101

- **The Broadband Gateway**
 - Deployed by operators to terminate a packet-based access network
 - Twisted pair (VDSL and G.Fast)
 - Cable (DOCSIS)
 - Fiber (PON)
 - Wireless (LTE)
- **Operators use the gateway to offer and bundle services**
 - Voice over IP
 - High speed internet access
 - OTT (Over The Top) video
 - Home security and automation
- **Gateways are integral to operators revenue worldwide**
 - Strong new engagements for MSCC



Asia Pacific



EMEA



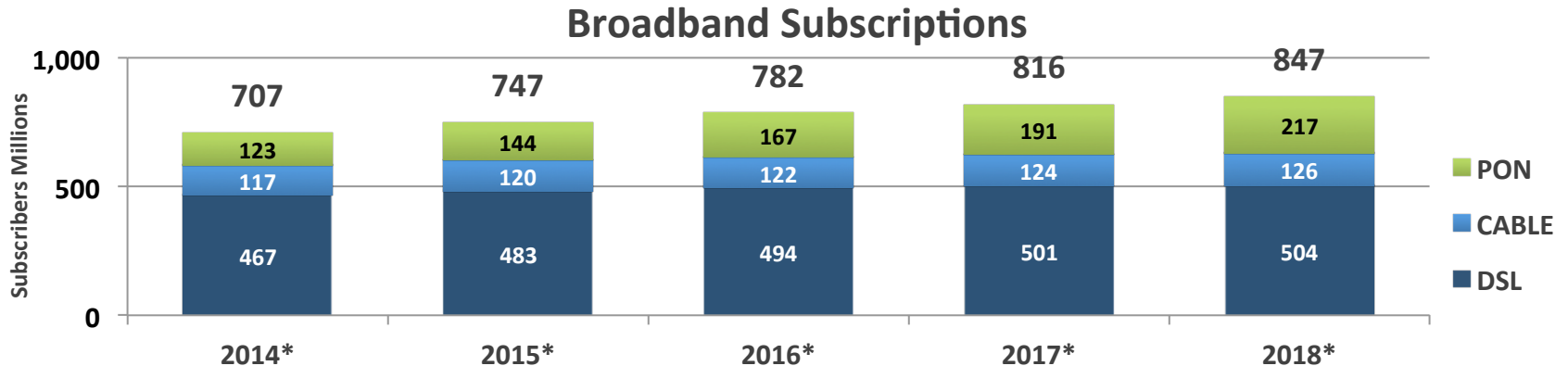
North America



Central & Latin America



Why Gateways?



- **Operators transitioning from TDM to packet-based infrastructure**
- **New features to drive new services**
 - Home security, home automation
- **In addition, massive new upgrade cycles started in CY14 and will continue over the next few years**
 - DSL → G.FAST or GPON
 - Cable → DOCSIS 3.0 to DOCSIS 3.1
 - Fiber → EPON to GPON
- **Replacement boxes to existing subscribers**
 - Connectivity targets from megabits to gigabits and demand for enhanced wireless

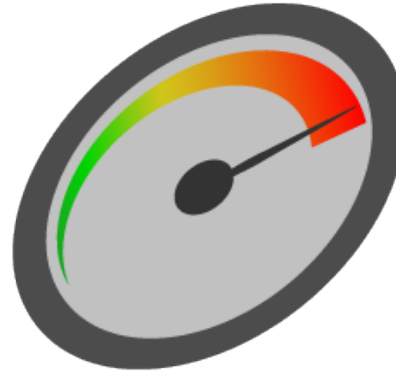
The Race to One Gigabit Continues



DSL - 40Mbps



Cable – 300Mbps



Fiber – 1Gbps



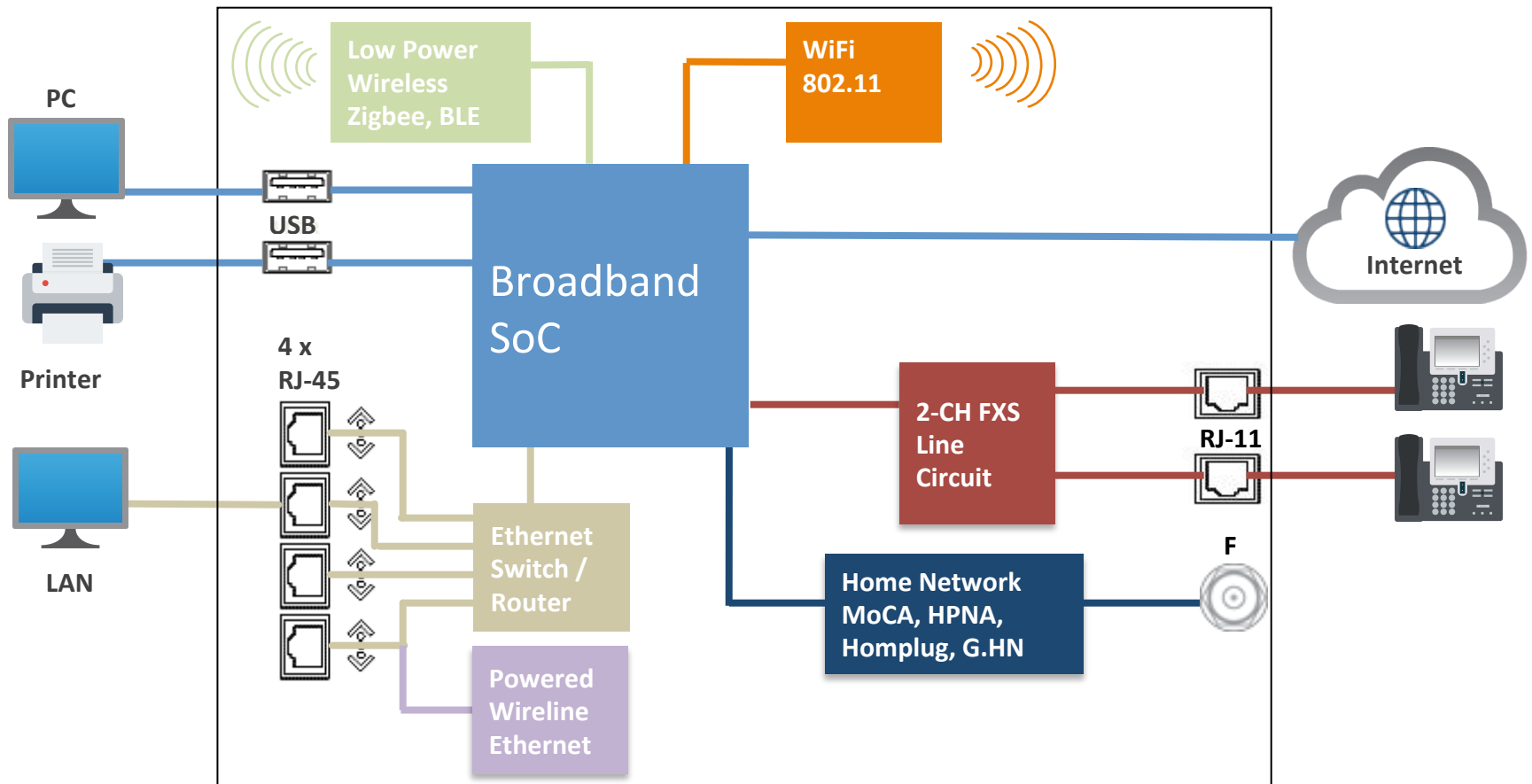
- **Healthy competition between**

- Triple play deployments
- Connected home
- Multi-screen services
- Cloud-based services

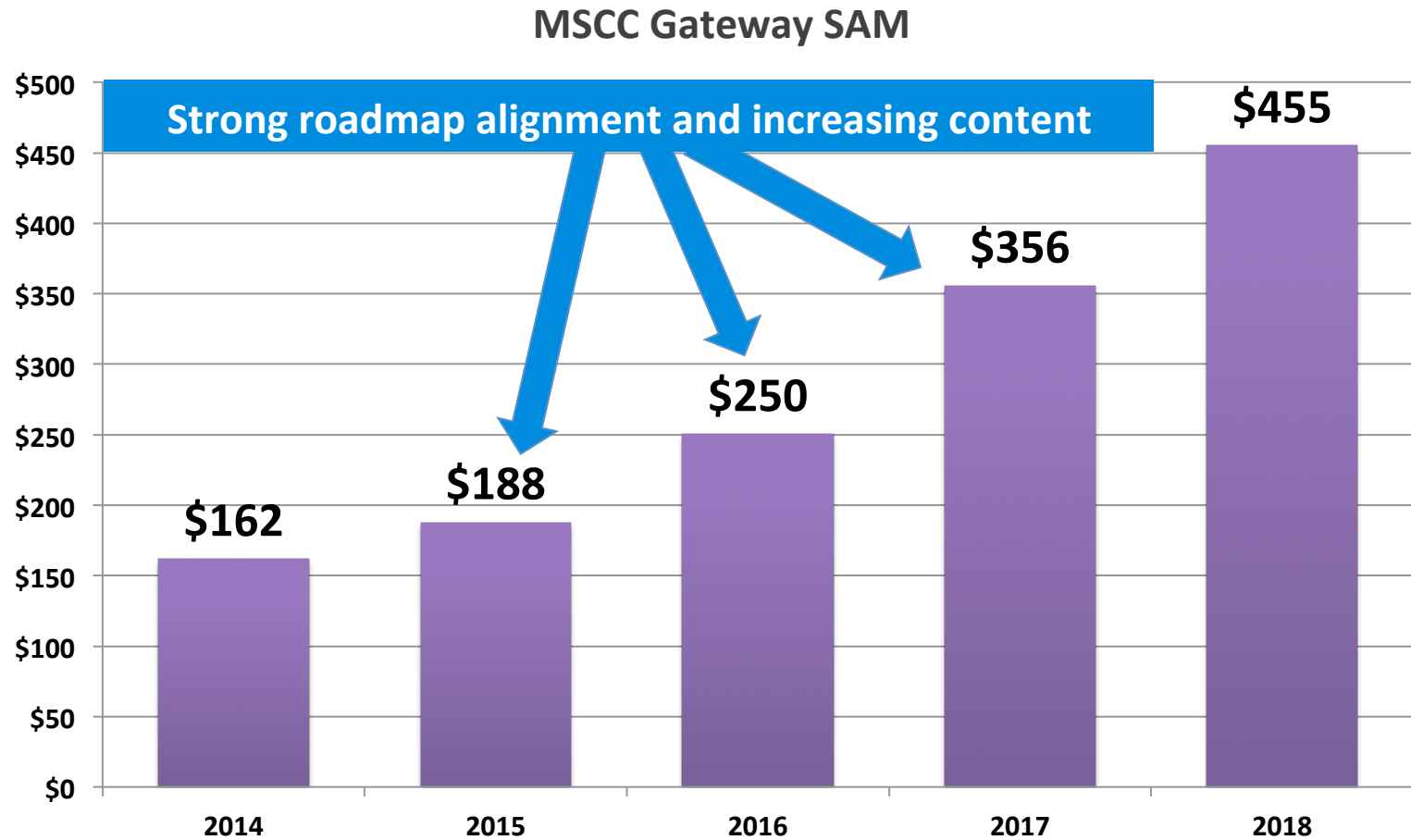
- **Operators driven by...**

Video, data, voice
MoCA, HPNA, G.hn, Wi-Fi, BLE, Zigbee...
Video capable gateways
DVR, backups...

Broadband Gateway Technology Evolution



MSCC SAM in Broadband Gateways



MSCC Solutions for Broadband Gateways

- **Voice:**
 - Dominant market share leader
 - Demand upside across all geographies
- **WiFi PA/LNA:**
 - Strong offering in high power, high efficiency, high integration
- **Line Drivers:**
 - VDSL and G.Fast
 - PLC – HomePlug® AV2, G.HN
- **Powered Wireline Ethernet (PoE):**
 - Pioneer and market leader for PoE
- **Reverse Power Feed (RPF):**
 - Leader in innovative powering mechanism enabling FTThp



The Connected Home

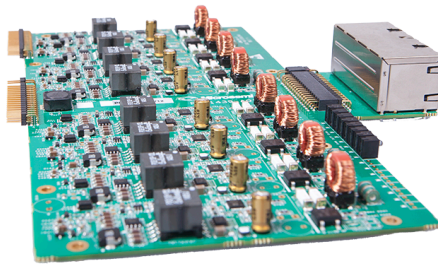
Solidifying Microsemi's Market Leadership



Microsemi provides world class broadband gateway solutions

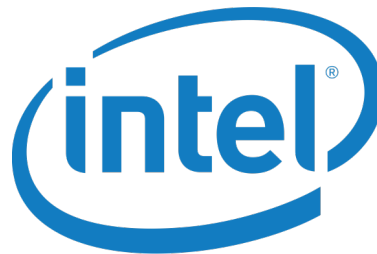
- Strong engagement with leading gateway suppliers
- Delivering voice solutions today
 - Over 1 billion lines shipped
- High performance Wi-Fi and 802.11AC
- Providing line driver and power solutions for tomorrows enhanced DSL services
- PoE for "2-Box" gateway architectures

Microsemi RPF Reference Design Activities



- **Broadcom VDSL2 DPU**
 - DPU - 8 ports power aggregation – PD70101
 - Power share
- **Broadcom G.FAST DPU**
 - DPU – 16 ports power aggregation – PD70101
 - Power share
- **Broadcom G.FAST CPE – RPF Daughter Card**
 - 1 line RPF PSE IC – PD81001
 - 12V to 55V isolated boost – LX7309
- **Marvell G.HN**
 - Distribution Point Unit (DPU) – 6-port power aggregation – PD70101
 - Power share
 - RPF injector
- **Sckipio G.FAST:**
 - G.Fast 16-ports MDU – PD70101
 - RPF injector

Strong Partnership Program and Go To Market



Microsemi Gateway Leadership



- **Growing market**
 - New subscribers
 - Existing subscriber hardware replacement needs
 - Increasing silicon content
- **Systems engineering brings substantial value to operators.**
- **Roadmap and trends provide strong growth for the second half of the year and beyond**

Driving Growth in Key Applications: Aerospace



Siobhan Dolan Clancy

VP, Worldwide Business Development, Aerospace

Commercial Aviation Market Dynamics

Market Demand

- World traffic annual growth predicted at 4.7% (Airbus GMF 2014-2033)
- Demand for 30K + new aircraft by 2033
- Single-aisle aircraft represents 70% demand in units
- Fuel efficiency will continue to drive profitability

Technology Drivers for “More Electric” Aircraft

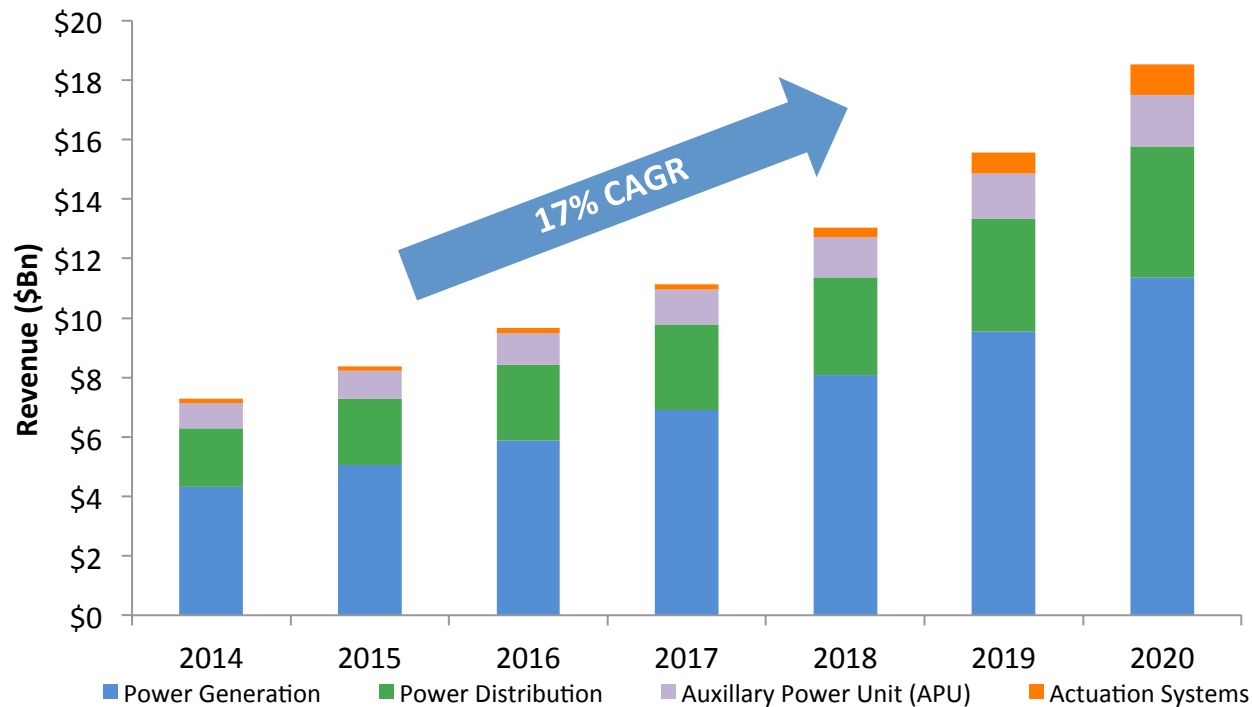
- Environmental impact
- Weight
- Reliability, safety, cost
- Operational efficiencies

Supply Chain Efficiency

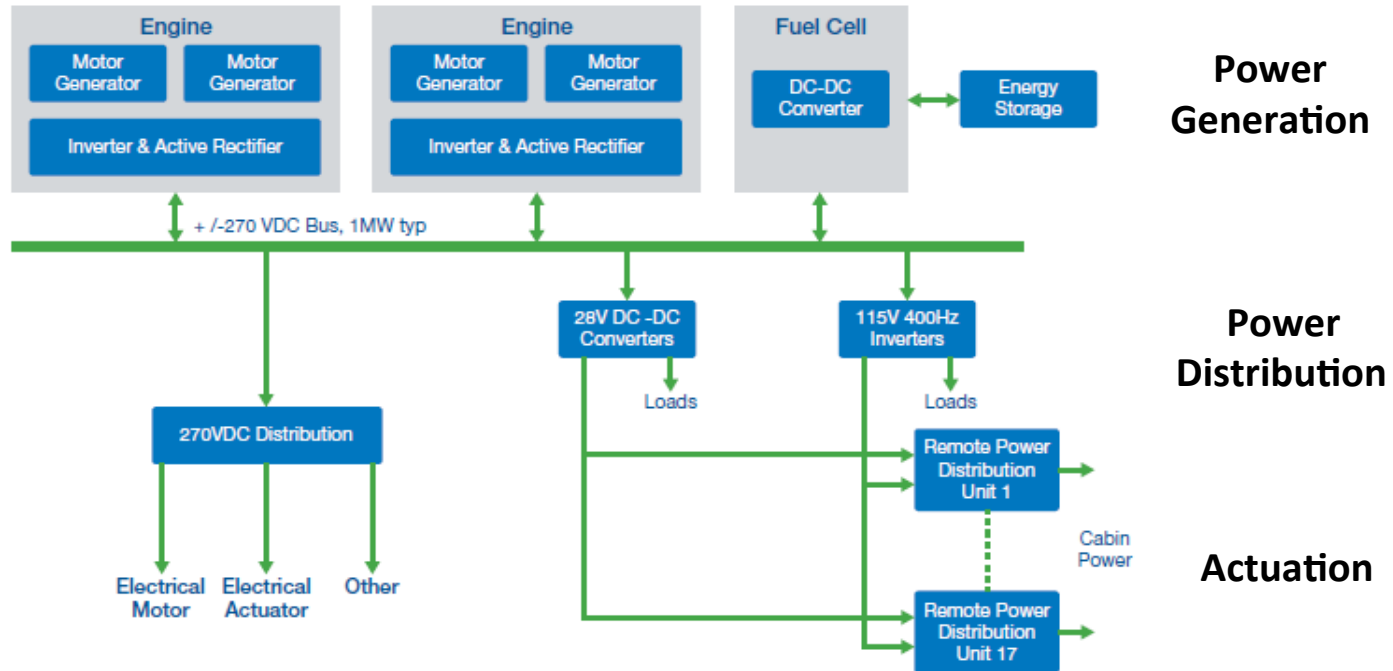
- Manufacturability – 10 year OEM backlog
- Traceability

More Electric Aircraft Driving Content

Aircraft Electrical Power Conversion Systems



Electrical Power Conversion System Drivers



Technology Drivers

- Power optimisation
- Reliability, safety, cost
- Power quality and thermal control
- Eco friendly, zero emissions

Challenges Facing More Electric Actuation

Economic

- Cost effectiveness
- Design to cost
- Standardisation

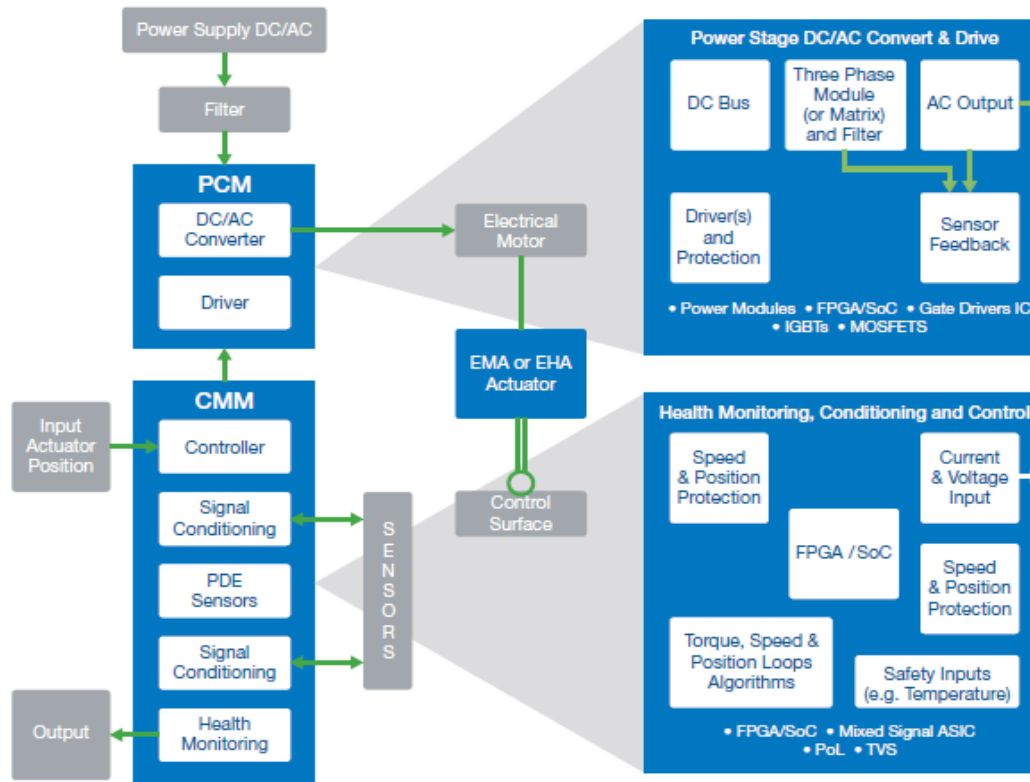
Reliability

- Heritage
- Maturity

Technology

- Optimized for weight
- State of the art technology

Actuation Power Drive Electronics System



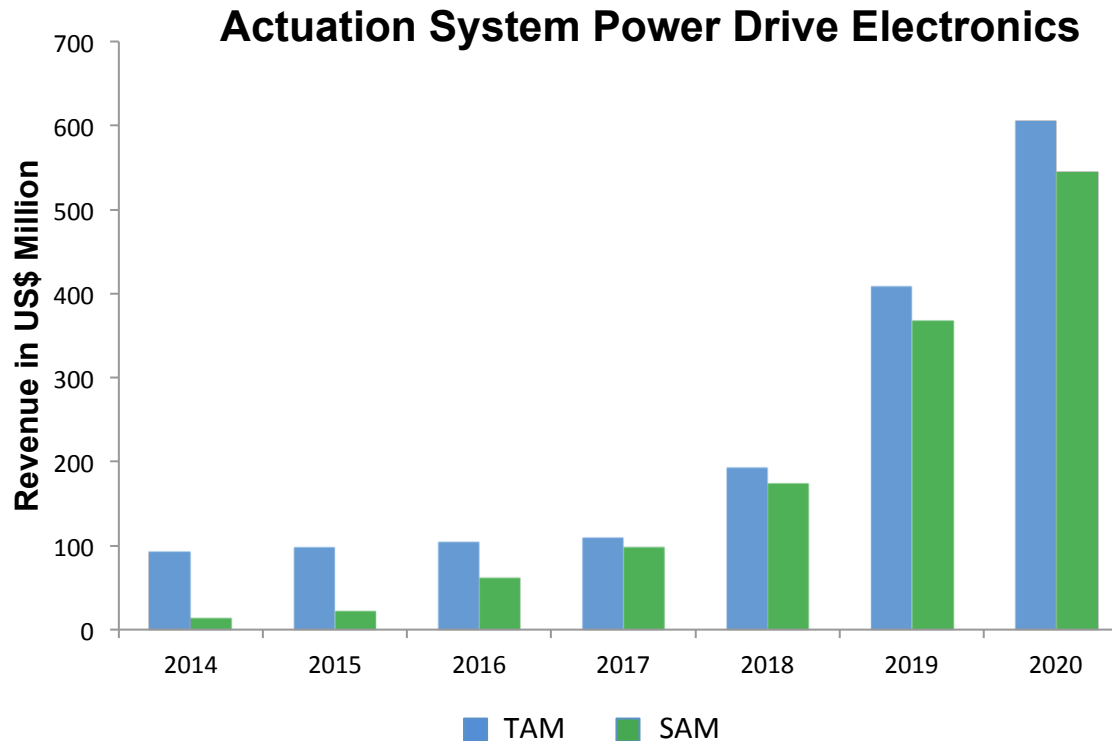
Single Aisle Content by 2020

■ PCM
SAM \$100M

■ CMM +
SAM \$100M

Increasing SAM from 15% of the PDE today to 90% by 2020

Capturing a Growing Percentage of Value



- Single aisle adoption of electrical actuators driving TAM
- Microsemi growth initiatives driving SAM

Technology Leadership Driving Content

FPGA

- Integration, power, reliability and security
- SEU immune
- Motor control IP and development platform

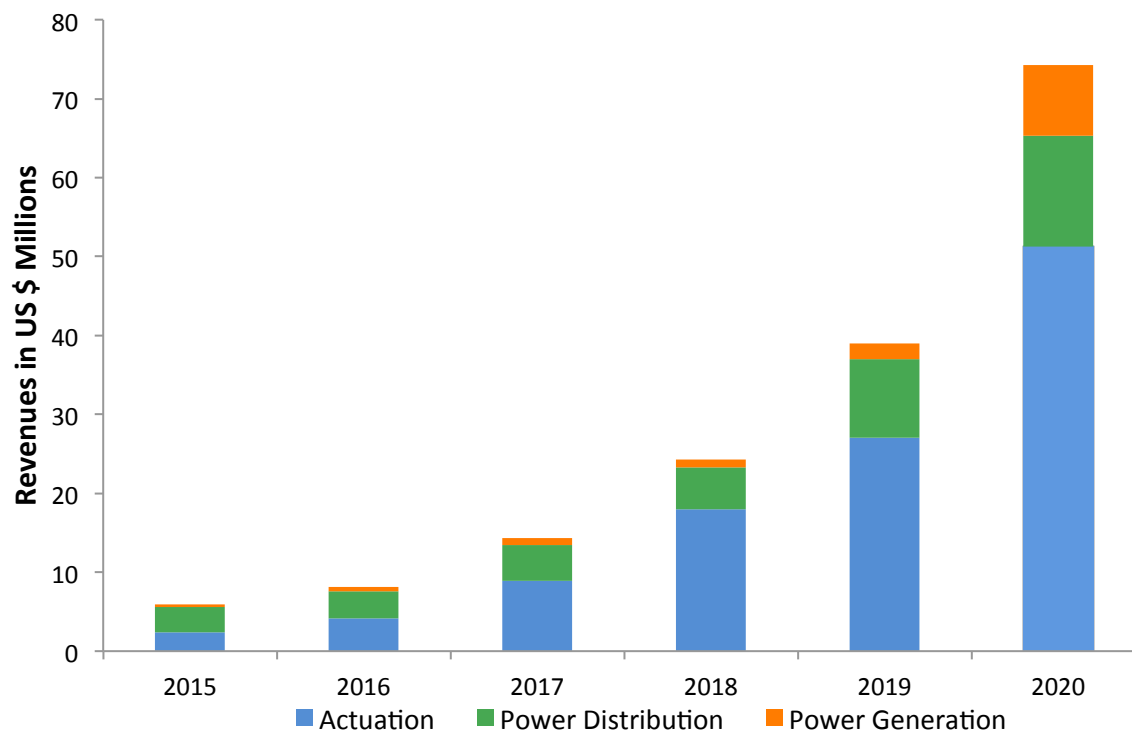
Power Discretes

- SiC technology, extended temperature range
- Broadest portfolio of TVS technology

Higher Level Integration

- ASIC/SoC
- Power core modules (PCM) & sub-systems
- Potential to offer full PDE

Microsemi Aircraft Electrical Power Conversion System Revenue Projections



Solid Engagements with Market Leaders

Airframers



BOMBARDIER



Electrical Power



Honeywell



THALES

Actuation

MOOG



LIEBHERR



BAE SYSTEMS



Competitive Landscape

Industry Competitors	
FPGA	Xilinx, Altera
ASICs	BAE, Raytheon, Aeroflex
TVS	Vishay, Sensitron
Power devices, MOSFETs, IGBTs	Infineon, IXYS, Rohm
Modules	Semelab, Powerex, Fuji
Customers	
Make or Buy Decision	

Microsemi Differentiation

- Building “solutions” capability based on core competencies (PCM/PDE)
- Scale and breadth of product line
- Significant footprint with market leaders
- Reliability
- Technology leadership
- Aviation heritage

Summary

- Microsemi is well positioned to be a key partner for aircraft electric power conversion systems
- Key growth initiatives based on double digit growth applications
- Microsemi a “solutions partner”
- Impressive technology and capabilities roadmap from semiconductor material to packaging, integration and test
- Scale and breadth to drive the best “cost of ownership”

Driving Growth in Key Applications: Space/Satellite



Siobhan Dolan Clancy

VP, Worldwide Business Development, Aerospace

Continued Growth in Satellite Demand

Two Decades of World Demand For Satellite Manufacturing & Launch Services

# of Satellites	2004-2013 (Completed)	2014-2023 (Most Likely)	Growth Rate
Satellites launched and to be launched*	817 satellites	1,155 satellites	+41%
Total mass launched and to be launched	1,923 tons	2,485 tons	+29%
Space industry market for the decade ⁺	\$198 billion	\$248 billion	+25%
Satellite market value for the decade ⁺	\$151 billion	\$188 billion	+25%
Launch market value for the decade ⁺	\$47 billion	\$60 billion	+28%

* Satellites with unit launch mass over 50 kg at launch date

+ Current \$ value (see Parts 3 and 4 for assumptions on specific prices)

Strongest Growth Markets

56% growth in civilian government satellites

- Earth observation, satcom, space science

59% growth in commercial satellites

- Non-GEO comsat
- Earth observation

Capitalizing on Growth Drivers in Space

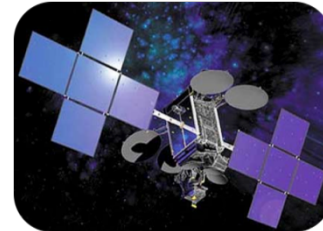
Remote Sensing

- Growing requirements for imaging for commercial and government purposes
- Increasingly complex sensor data processing on board the spacecraft



Commercial Satellites

- Redesigns of GEO communications platforms to support larger payloads and greater versatility



Digital Communications

- Flexible reconfigurable repeaters
- LEO constellations and GEO platforms



Microsemi Technology Leader in Space



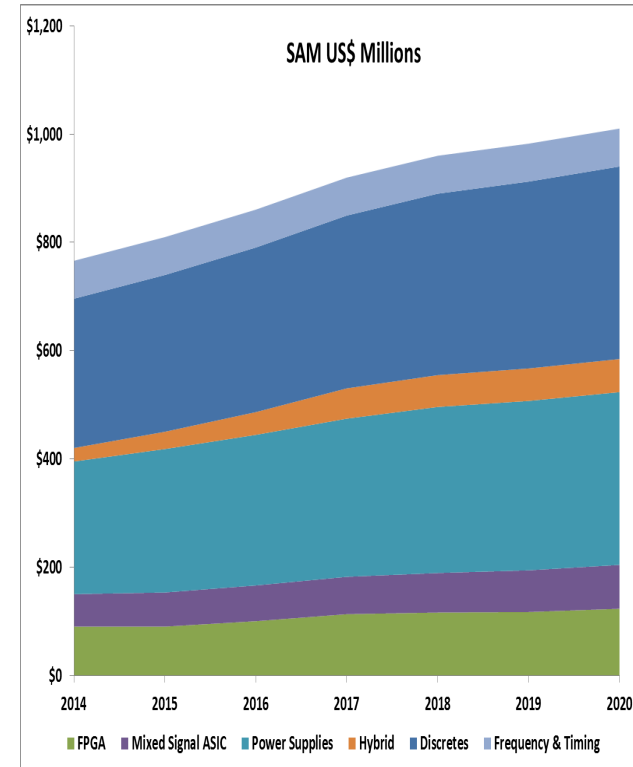
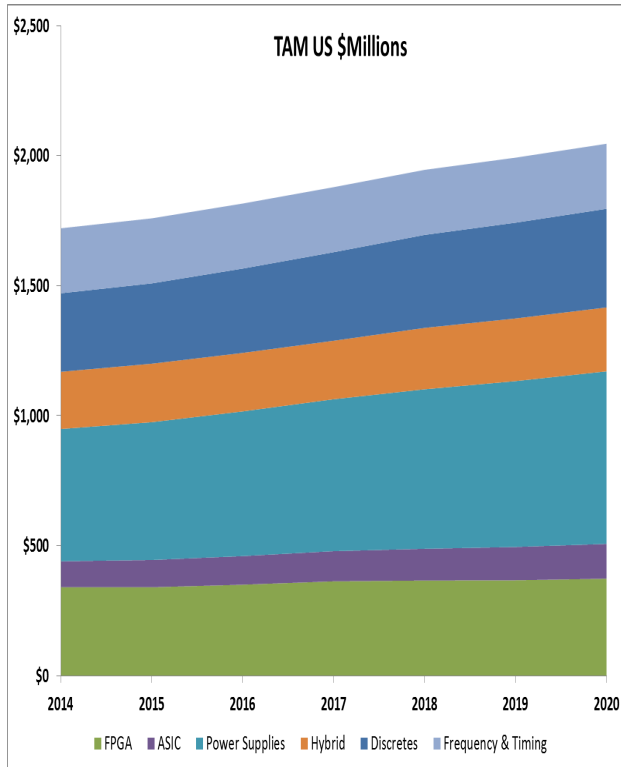
Microsemi
Power Matters.™

LEADING SPACE INNOVATION

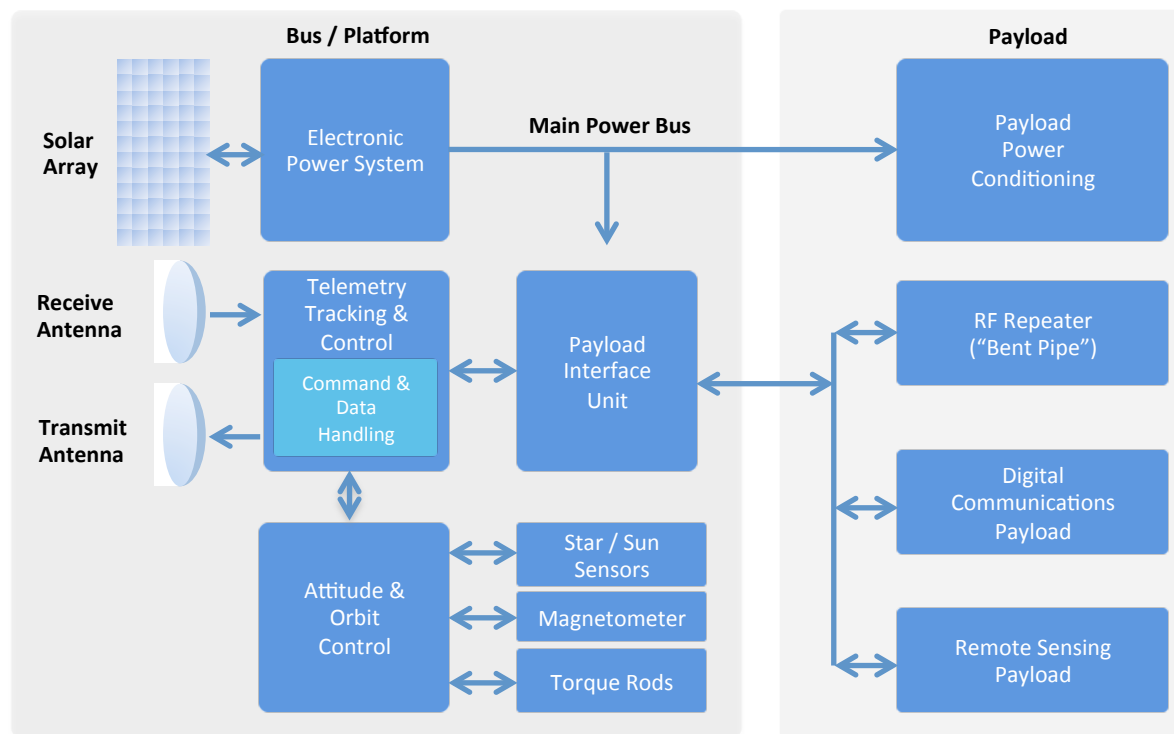
More Than a Half Century

- Radiation-Tolerant FPGAs
- Rad-Hard DC-DC Converters
- Rad-Hard Discretes & Hybrids
- Rad-Hard Mixed-Signal ICs
- Time & Frequency Solutions
- Custom Solutions Capability

Growing Space Market



Microsemi Increasing our Content



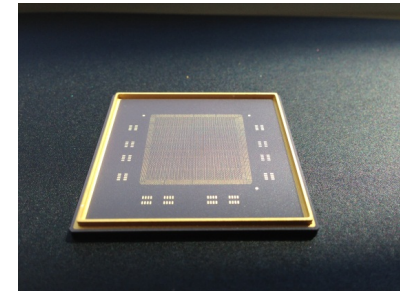
Growth Initiatives Driving Content

Introducing High Speed Processing Radiation Tolerant FPGA

Best-in-Class FPGA for Space

- Size, performance, power
- Radiation effects
- Microsemi heritage in space

RTG4™

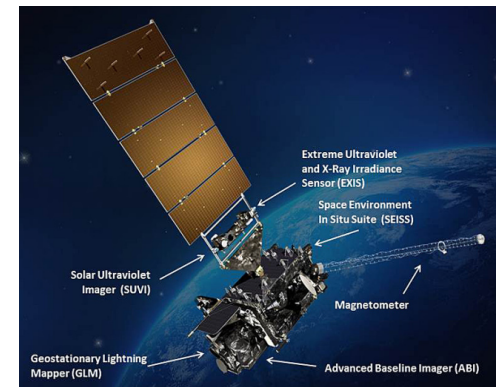


Targeting Remote Sensing Payload Applications

- Sensor resolution increasing, downlink bandwidth not keeping pace
- Operators require on-board processing, satellites send information not raw data

Market Opportunity

- Potential up to \$100M revenue per annum



GOES-R Program:
4 satellites, each with 6 instruments

Growth Initiatives Driving Content

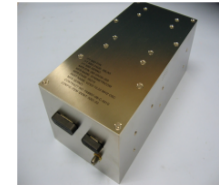
Radiation Tolerant Telemetry Controller IC

- Provides key functions for sensor monitoring, attitude and payload control
- Weight reduction, board space savings, reliability
- Interfaces with a radiation tolerant FPGA



Precise Timing and Frequency Solutions

- Crystal oscillators provide accurate frequency and time required for timing, radar and communication functions

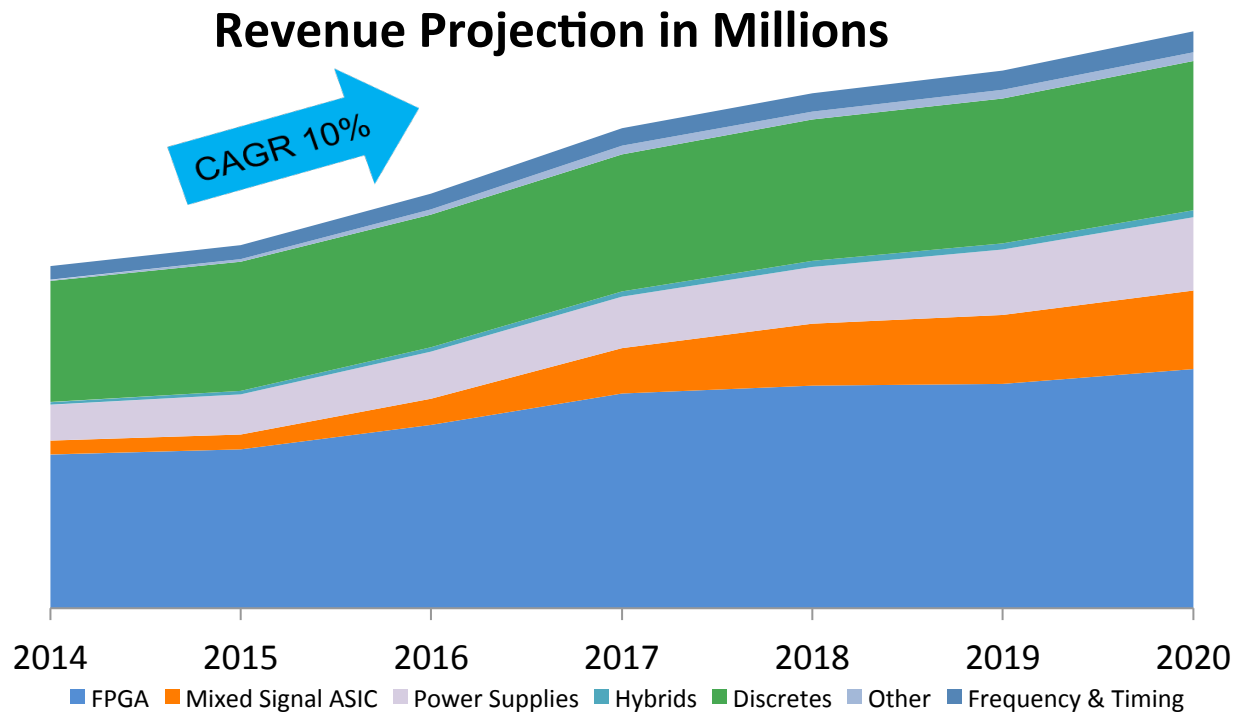


Power Solutions Provider

- Extending our range of complementary power solutions including DC-DC converters, relays, hybrid and discrete technology

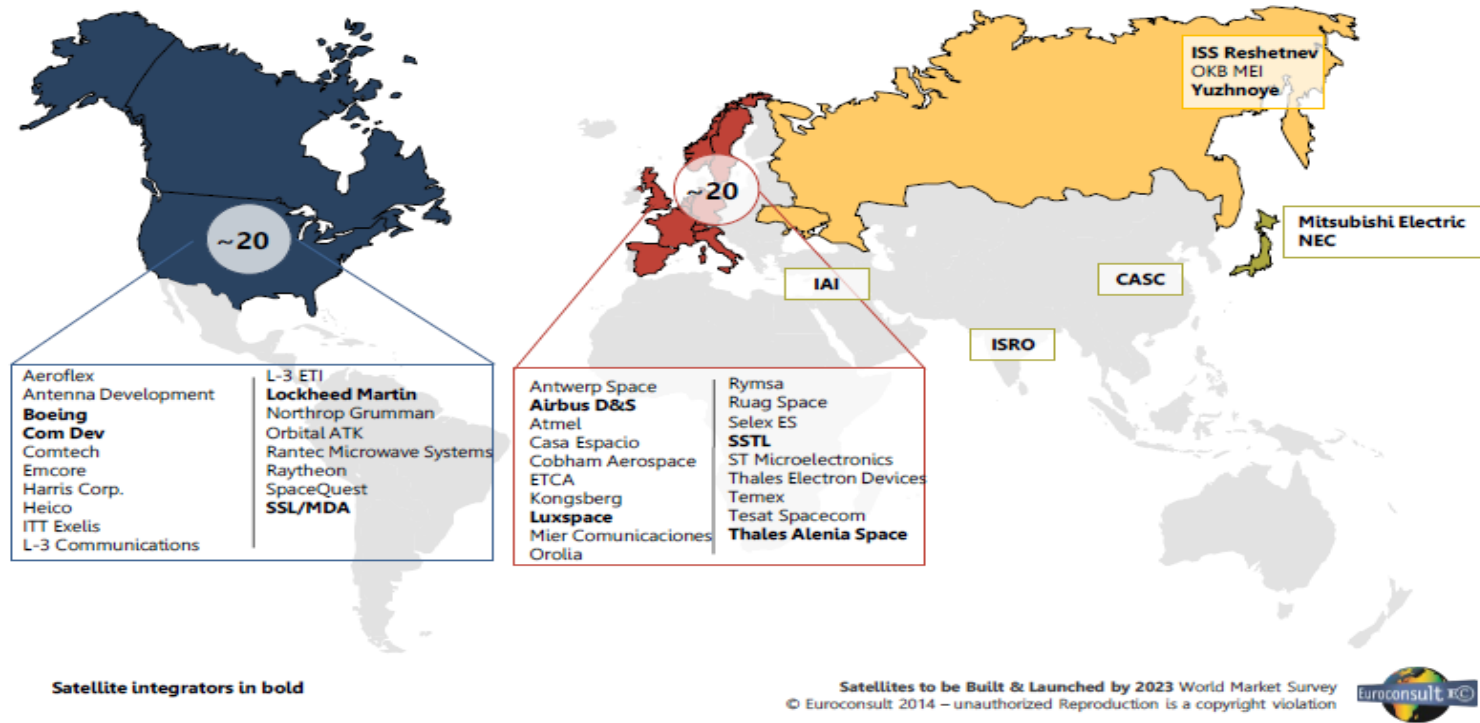


Microsemi Growing Revenue



Established Global Customer Base

World Map of Main Communication Payload Suppliers



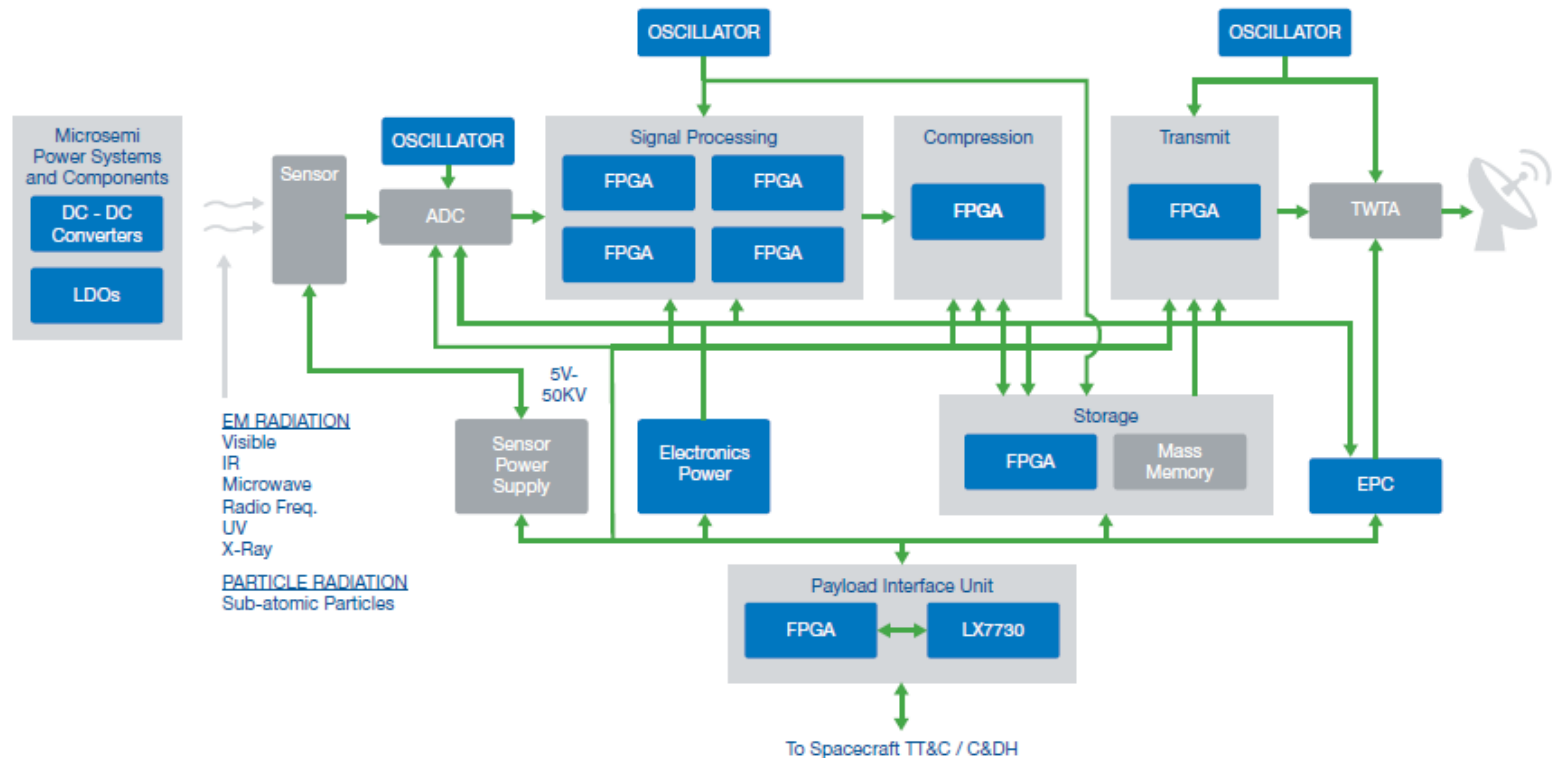
- Long-standing industry relationships
- Leveraging the breadth of our product technology
- Heritage built over half a decade

Competitive Environment

- Microsemi positioning to capture an increasing share of payload signal processing applications
 - Replacing ASICs, SRAM FPGAs
- Higher levels of integration for telemetry applications
 - Replacing inefficient and expensive discrete and hybrid solutions
- Positioning as a credible “solutions” provider replacing in-house solutions at a higher level in the system
 - Oscillators, DC-DC converters, space system managers

Providing Solutions for Growth Applications

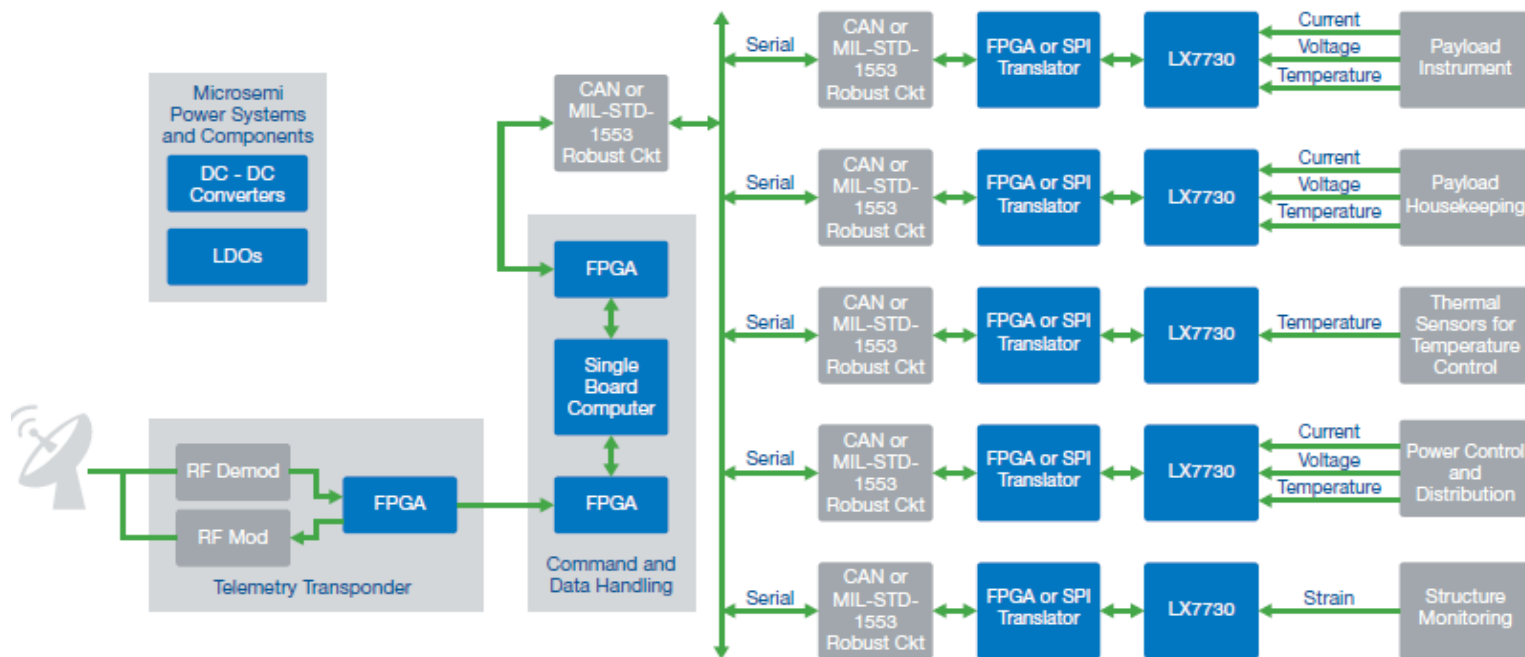
Remote Sensing Payload



Increasing SAM by \$120M from 2016

Providing Solutions for Growth Applications

Satellite Telemetry Tracking & Control System



Increasing SAM by \$50M from 2016

Space Satellite Summary

- Leadership in space
- Leveraging our product breadth
- Innovative new product introductions
- Focused on growth applications

Acquisition Overview



Steve Litchfield

EVP & Chief Strategy Officer

Strategic Rationale: Microsemi + Vitesse



Extends Portfolio



Accelerate IoT



Increase Market Shares

- **Addition of Vitesse:**

- Furthers strategy of growing silicon content in existing applications
- Further penetration at strategic customers
- Adds unique differentiated technology with large barriers to entry
- Broadens communication portfolio
- Leadership in carrier Ethernet market
- Leverage Microsemi scale to accelerate Industrial IoT effort
- Reinforces Microsemi value proposition

Transaction Overview



Total consideration per share: \$5.28, all cash transaction



Commence cash tender offer. Microsemi shareholder approval is not needed.



3.2x debt/TTM adj. EBITDA at close; reduce to <2.5x ending FY16



Anticipate closing mid Q3FY2015

Strategic and Financial Compelling Transaction



- Accelerates carrier Ethernet penetration and industrial IoT expansion
 - Extends communication portfolio into existing strategic customers
 - Complementary with timing portfolio further extends leadership
-



- Unique technology portfolio with significant barriers
 - Adds world class design team to continue solving customer problems
-



- Anticipates \$20 million of cost savings in first full year of transaction
-



- Adds approximately \$0.16-0.20 of accretion in first fiscal year
 - Accretive to non GAAP EPS in first full quarter
-



- Drives additional cash flow
- Supports 60/30 profitability targets

Executive Summary



Paul Pickle

President & COO

Microsemi Shareholder Value Proposition



Maximizing Profitability



Focus Products Driving SAM Expansion



Increasing Strategic Customer Importance

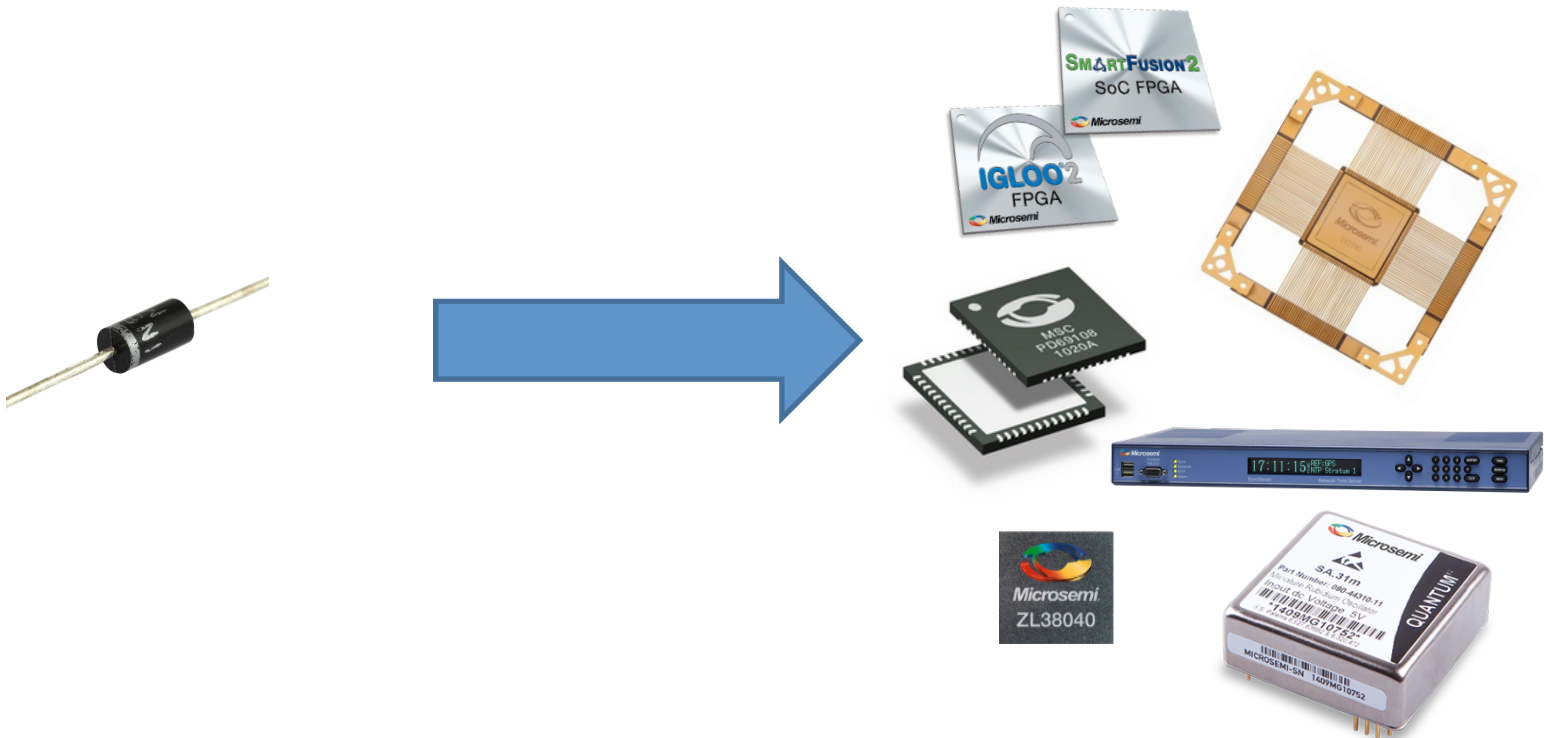


End Markets Built for Growth, Stability, Cash Flow



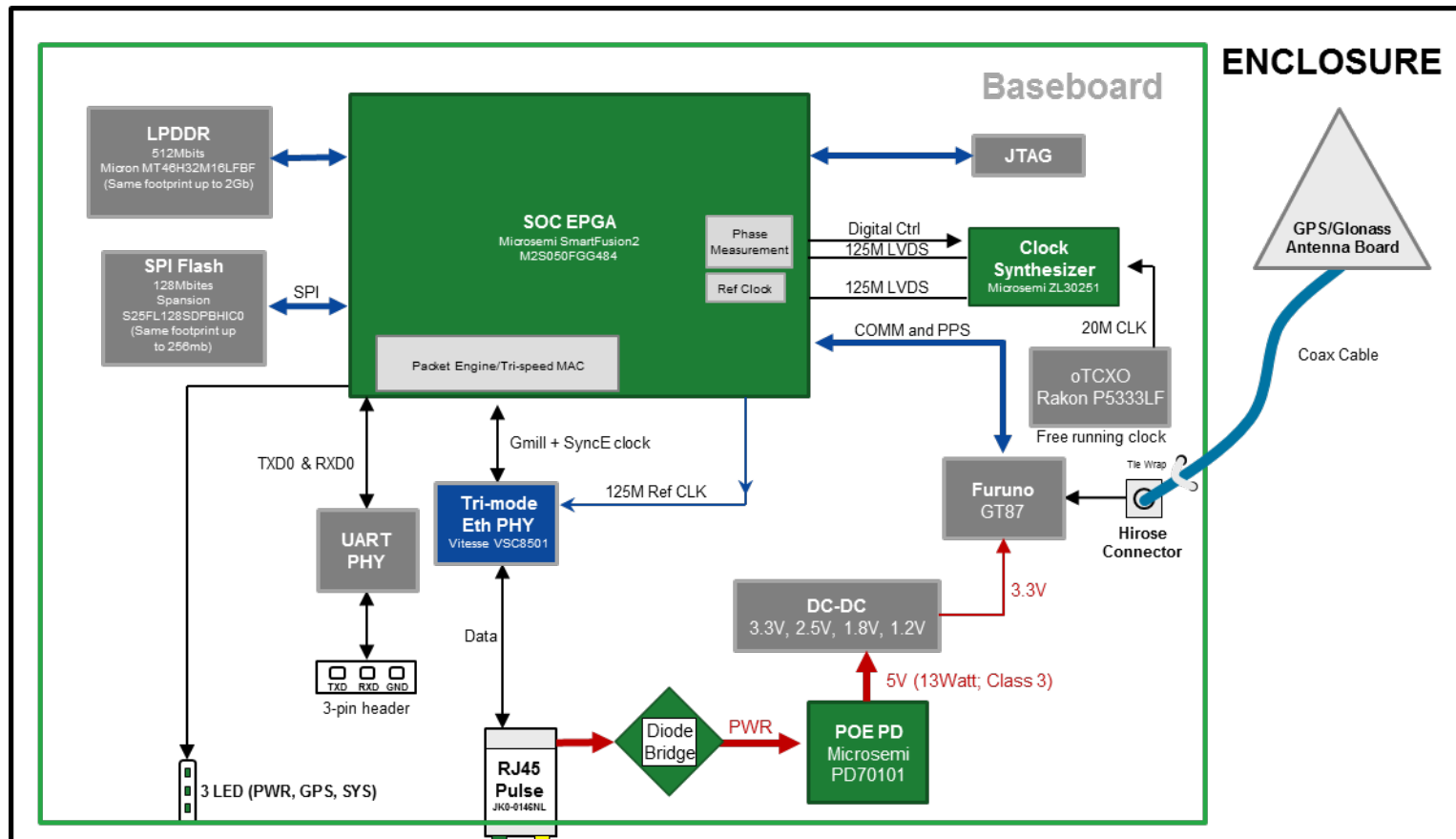
Commitment to Deliver Shareholder Value

Focus Products Driving SAM Expansion



Microsemi offers tailored feature sets for targeted applications

Increasing Strategic Customer Import



Microsemi Shareholder Value Proposition



Maximizing Profitability



Focus Products Driving SAM Expansion



Increasing Strategic Customer Importance



End Markets Built for Growth, Stability, Cash Flow



Commitment to Deliver Shareholder Value

Q&A

Management Luncheon

