

International Rectifier Update

Annual Meeting of the Stockholders

November 4, 2013

International
IR Rectifier



This Investor Presentation contains “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. These statements relate to expectations concerning matters that (a) are not historical facts, (b) predict or forecast future events or results, or (c) embody assumptions that may prove to have been inaccurate. These forward-looking statements involve risks, uncertainties and assumptions. When we use words such as “believe,” “expect,” “anticipate” or similar expressions, we are making forward-looking statements. Although we believe that the expectations reflected in such forward-looking statements are reasonable, we cannot give readers any assurance that such expectations will prove correct. The actual results may differ materially from those anticipated in the forward-looking statements as a result of numerous factors, many of which are beyond our control. Important factors that could cause actual results to differ materially from our expectations include, but are not limited to, the factors discussed in the sections entitled “Risk Factors” and entitled “Critical Accounting Policies and Estimates” within “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in our filings with the Securities and Exchange Commission, including our most recent reports on Form 10-K and 10-Q. All forward-looking statements attributable to the Company are expressly qualified in their entirety by the factors that may cause actual results to differ materially from anticipated results. Readers are cautioned not to place undue reliance on these forward-looking statements, which reflect our opinion only as of the date hereof. We undertake no duty or obligation to revise these forward-looking statements. Readers should carefully review the risk factors described in this document as well as in other documents we file from time to time with the Securities and Exchange Commission.

1. Leadership in core Power Management technologies

- Benchmark LV- and MV-MOSFET and IGBT process technology
- Digital Power Management
 - CHiL controllers + benchmark LV MOSFETs
- Benchmark industrial IGBTs for Variable Speed Motion
- Automotive grade IGBTs for H(EV) drive train technology
- GaN-on-Si – disruptive power switching technology

2. Efficient and flexible manufacturing and supply chain

- Front-end model moving to 50% wafers sourced externally
- Back-end model moving to 70% sourced externally

3. Strategic alignment and partnership with Tier 1 OEMs, ODMs, and Distributors

Low and mid voltage MOSFETS

Industrial



Power Supplies



Consumer & Computing



HiRel



Revolutionary GaN Technology

Higher efficiency

- Smaller footprint
- Lower system cost
- Strong IP portfolio
- Engagements with tier one customers for early adoption

High Voltage IGBTs and ICs

Appliances



Industrial



Motion Control



Power Modules for Appliance and Industrial



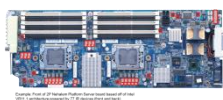
Digital Power Control

Digital Controllers



High Performance Computing

Servers

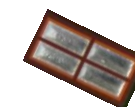


Automotive IGBTs

COOLiR²IGBT™



COOLiR²Bridge™



Industry Leading Low & Medium Voltage MOSFET Portfolio Serving Broad Range of Markets



Industrial applications
(AC/DC power supply, DC motors, solar inverter, UPS, ...)



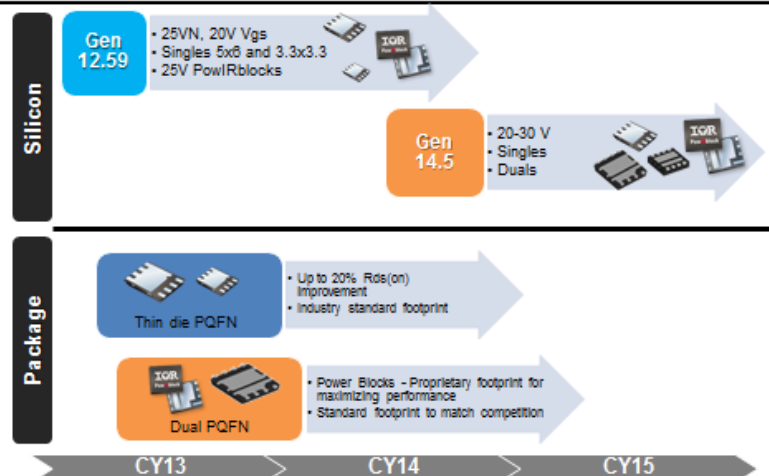
Consumer and mobile applications
(computer, battery pack, hand-held,...)



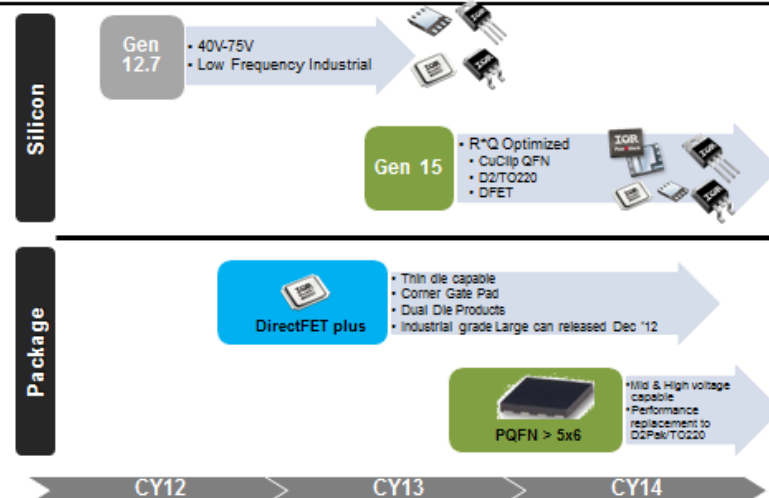
Industrial applications
(AC/DC power supply, lighting,...)



Low Voltage Technology Roadmap



Mid Voltage Technology Roadmap



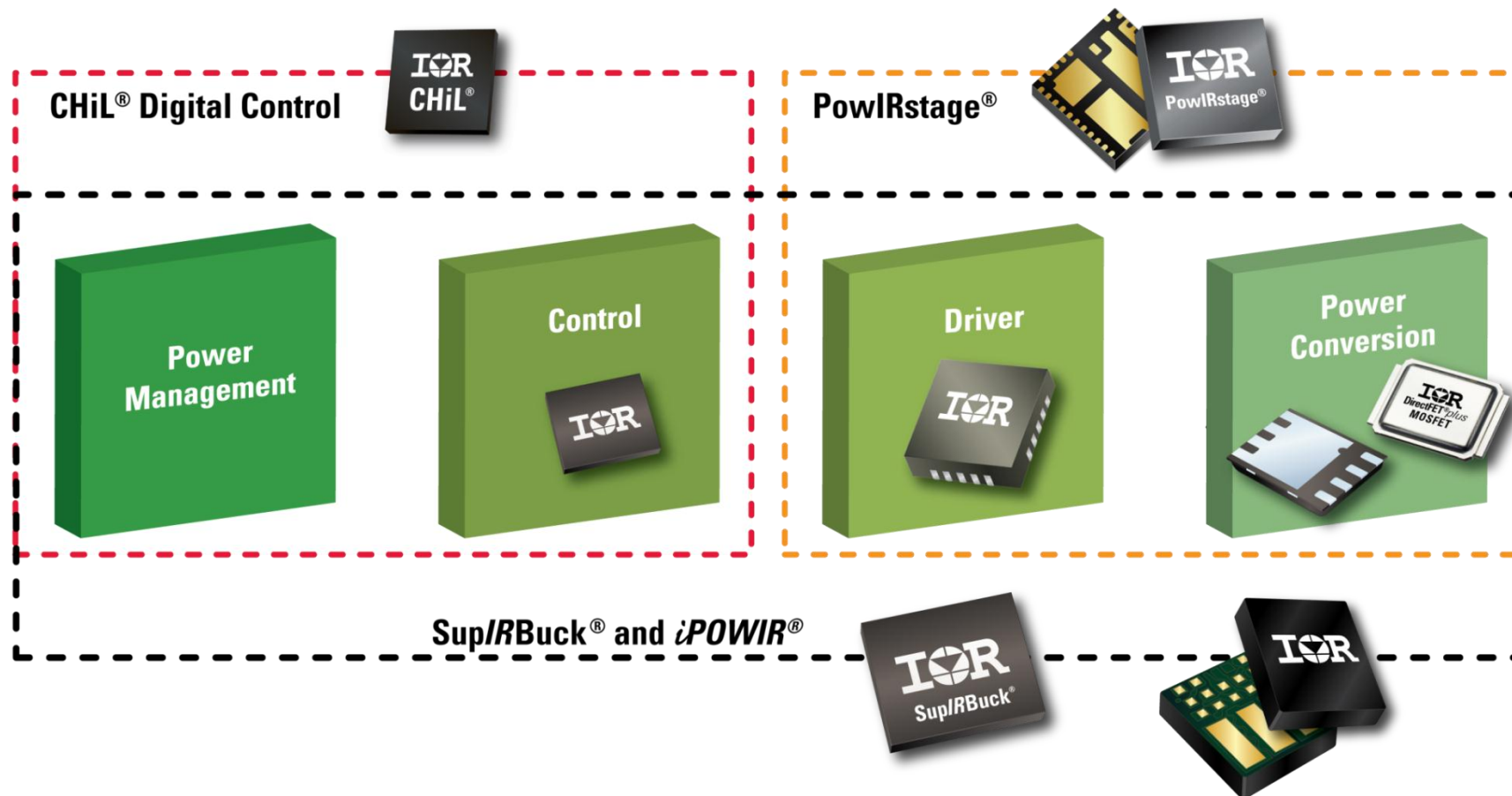
IR MOSFET Market Leadership



Top 10 Suppliers of Power MOSFETs - 2012		
Rank		Company
2012	2011	
1	1	International Rectifier
2	5	Renesas Electronics Corporation
3	2	Toshiba
4	3	Infineon Technologies
5	4	Fairchild Semiconductor
6	6	Vishay Intertechnology
7	7	STMicroelectronics
8	9	Alpha & Omega Semiconductor
9	8	ON Semiconductor
10	10	NXP
IHS iSuppli March 2013		

#1 supplier of power MOSFETs in 2012 with 11% of the **\$5.9B** market segment

Complete End-to-End DC-DC Solution



Leading Digital Power Management Revolution with a Complete End-to-End DC-DC Solution

Initial Target Segment – High Performance Computing

Significant Share Gain in Upcoming Grantley Server Platform

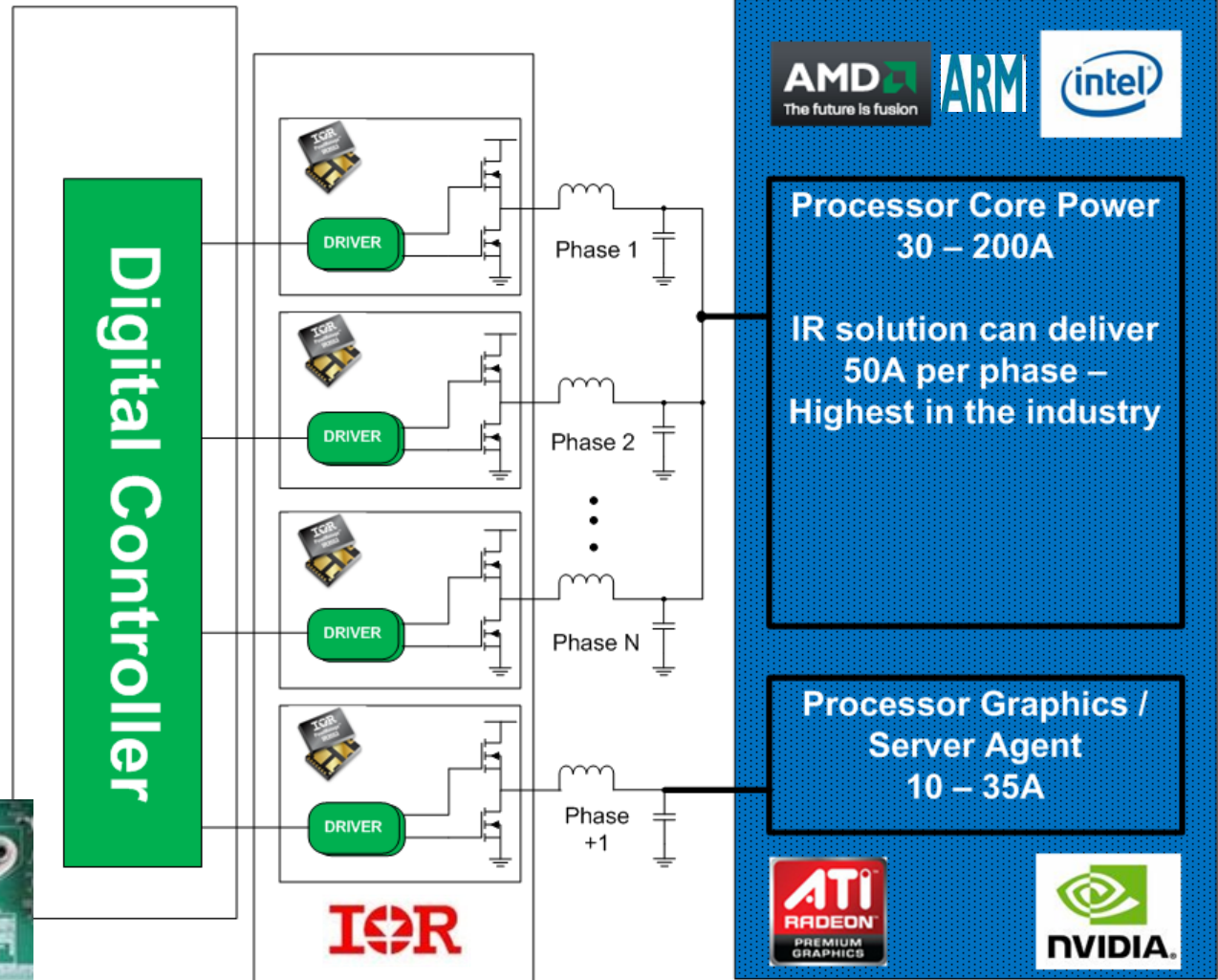


Digital Communication

- Real time monitoring of currents, voltages and faults
- Configuration of controllers to meet system requirements
- Communication between the system/CPU's and the power management chips

Digital Control

- Cost effective
- Easy to design and use
- IR has the lowest quiescent power on par with Analog Controllers



Solutions for leading Server and Desktop CPU's from Intel, AMD

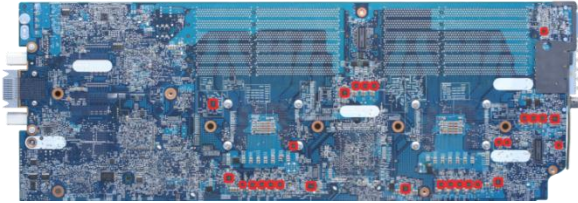
- Solutions for Graphics processors (GPU) from ATI (AMD) and Nvidia.

Longer Term – Extending Digital Power Management into Other IR Market Applications

Computing/Servers (2011-2013)

Appliance/Industrial (2014)

Automotive (2014/2015)



Server



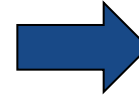
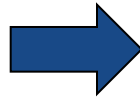
Appliance



Automotive



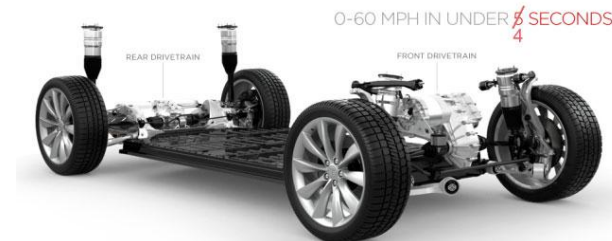
Desktop



Graphics



Industrial



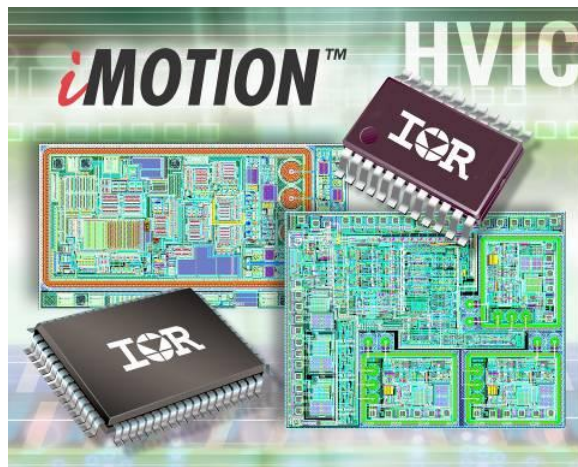
IGBTs



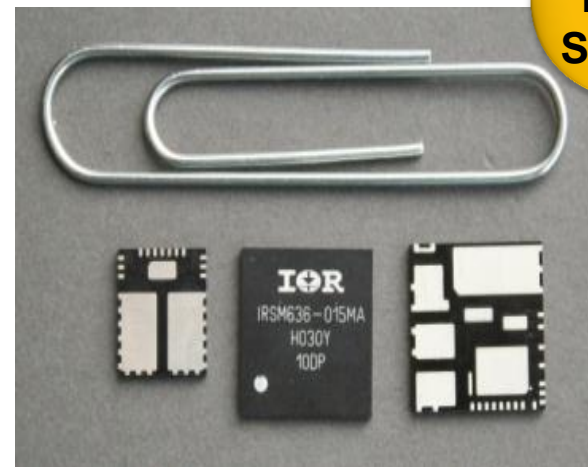
Intelligent Power Module (IRAM)



Digital controller & High-Voltage IC



uIPM



New
Market
Segment

IR's IGBT and HVIC Technology Enabling Market Adoption of Variable Speed Motors



Key factors

- 2015 market forecast for the variable speed motor control is 3x of 2010 volumes
- The inverterization of small appliances drives the demand for compact and economical power stage solutions.



World Market for Inverter-based Variable Speed Control MHAs by Type

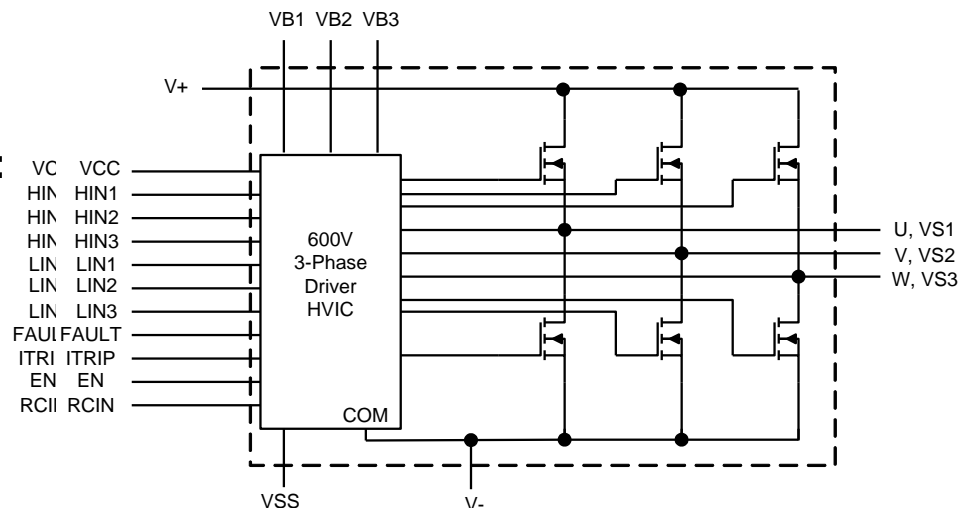
Unit Shipments ('000)

	2012	2017	'12-'17 CAGR
% with Inverter-based VSD			
Average VSD Penetration across MHA	23.30%	44.50%	13.80%
Inverter-based VSD MHA Shipments			
Washing Machines			21.90%
Fridges/Freezers			23.00%
Dishwashers			21.90%
Room Air Conditioners			16.70%
Microwave Ovens			20.60%
World Total VSD MHA Shipments (kU)			
	98,477	239,575	19.50%

Source: IHS

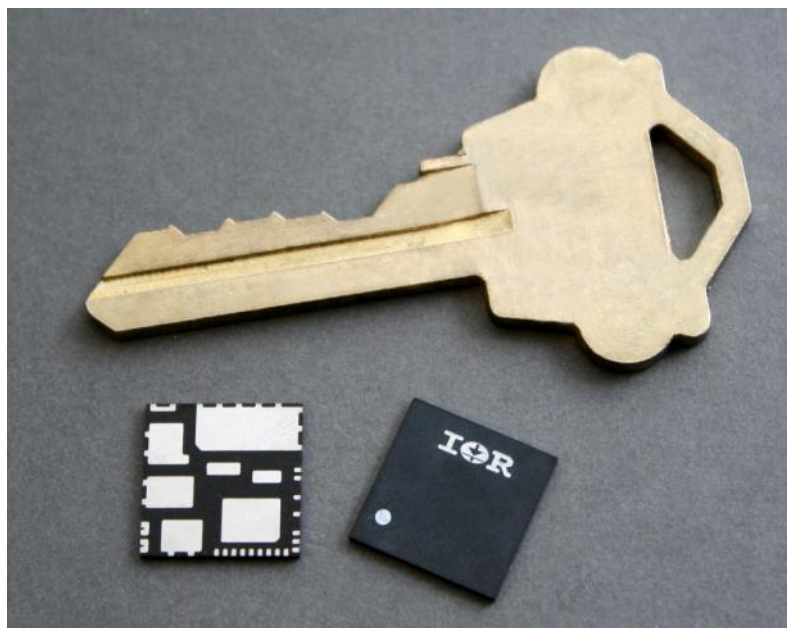
Oct-13

- Micro Inverter for Solar Conversion
- Motor Drive variable speed applications for light loads 20W-250W for example in:
- Pumps
- Compressors
- Fans

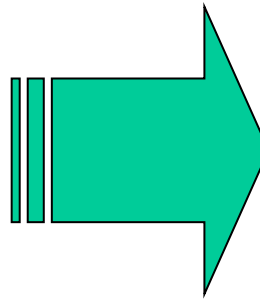
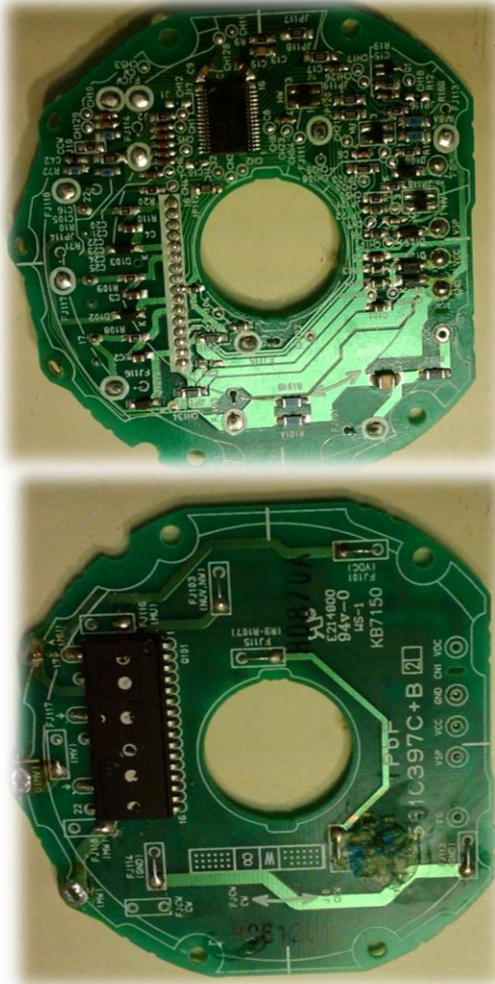


The Advantage

- **Simpler**
- **Smaller**
- **No Heat Sink**
- **Lower Cost**



Existing system:
91 component count



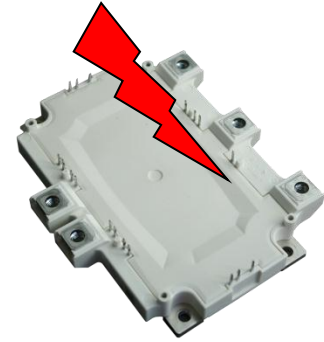
IR' s new system:
31 component count



Automotive Electrification Presents Significant Opportunity For IR



IGBTs play a large role in EV powertrains



Strong growth for EV and HEV vehicles

Sales projected to exceed 5 Million annual units by 2017*

(H)EV Powertrain Semi Content expected to grow 3X by 2015*

Additional Power Semiconductor (H)EV drive train content: ~300\$

First generations of industrial solutions being replaced by automotive suitable performance modules

Significant Growth Opportunity for IR's IGBT Technology

*Deutsche Bank Report on the EV/HEV Opportunity, 10/9/13

(H)EV Vehicles Significantly Expand TAM for Power Semiconductor Companies

Automobile Type	~Semiconductor Content Per Automobile			
	MOSFETs and IGBTs	Analog ICs	Other	Total
Economy (2013)	\$17	\$12	\$174	\$205
Midrange (2013)	\$18	\$15	\$231	\$264
Luxury Car (2013)	\$20	\$23	\$385	\$428
Midrange Hybrid (2013)	\$193	\$42	\$351	\$586

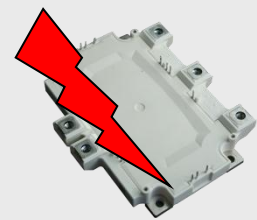
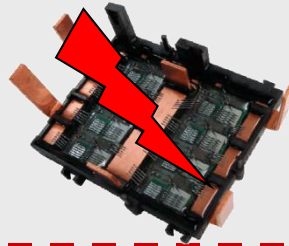
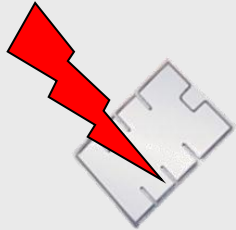
New hybrid and electric vehicle platforms open up a significantly greater percentage of the semiconductor content per car

Source: WSTS and summary from several Automotive System Suppliers and other sources

IR's Automotive IGBT Technology Meets Advanced Requirements of the Next Generation (H)EV Vehicles



Today



IGBT & Diode:

**increased Robustness
vs. current technology**

(Breakdown Voltage,
 T_{jmax} , $T_{shortcircuit}$,
temperature coefficients)

Package Technology :

**better Reliability &
Thermal performance
vs. state of the art**

(bond wireless,
dual-sided cooling)

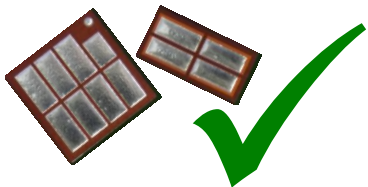
Power Modules:

**improved form-factors,
scalability, power
density and thermals
for system integration**

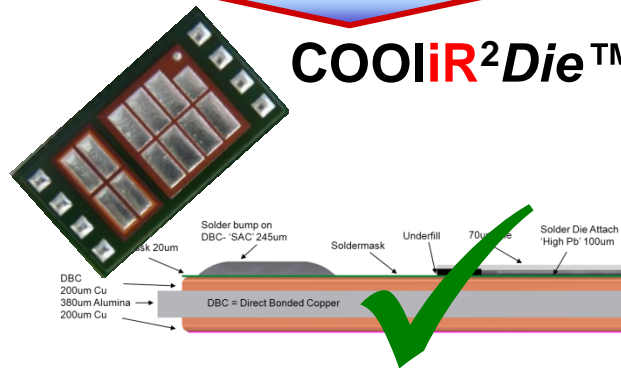
(dual-cooling, low parasitics)

COOLiR²IGBT™

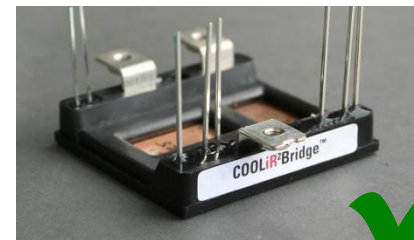
COOLiR²DIODE™



COOLiR²Die™



COOLiR²Bridge™



COOLiR⁽²⁾™ addresses (H)EV Requirements on all Integration Levels

233 Mile Road Test on Single Charge Using IR IGBTs



Model	Price	Power	Weight	0-60mph
BMW M5	\$92k	560hp	4384lb	3.7s
CLS63AMG	\$96k	550hp	4256lb	3.9s
Panamera Turbo	\$176k	550hp	4388lb	3.5s
Tesla S P85	\$105k	416hp	4766lb	3.9s

Tesla Model S P85

- **78.2kW-hours**
- **Equivalent to 2.3 gallons gas/100 mpg**
- **\$10.32 (electricity)**

BMW 528i

- **7.9 gallons gas**
- **30 mpg**
- **\$34.55 (gasoline)**

The Tesla S P85
uses IR Automotive
IGBTs in Main
Inverter and Battery
Charger



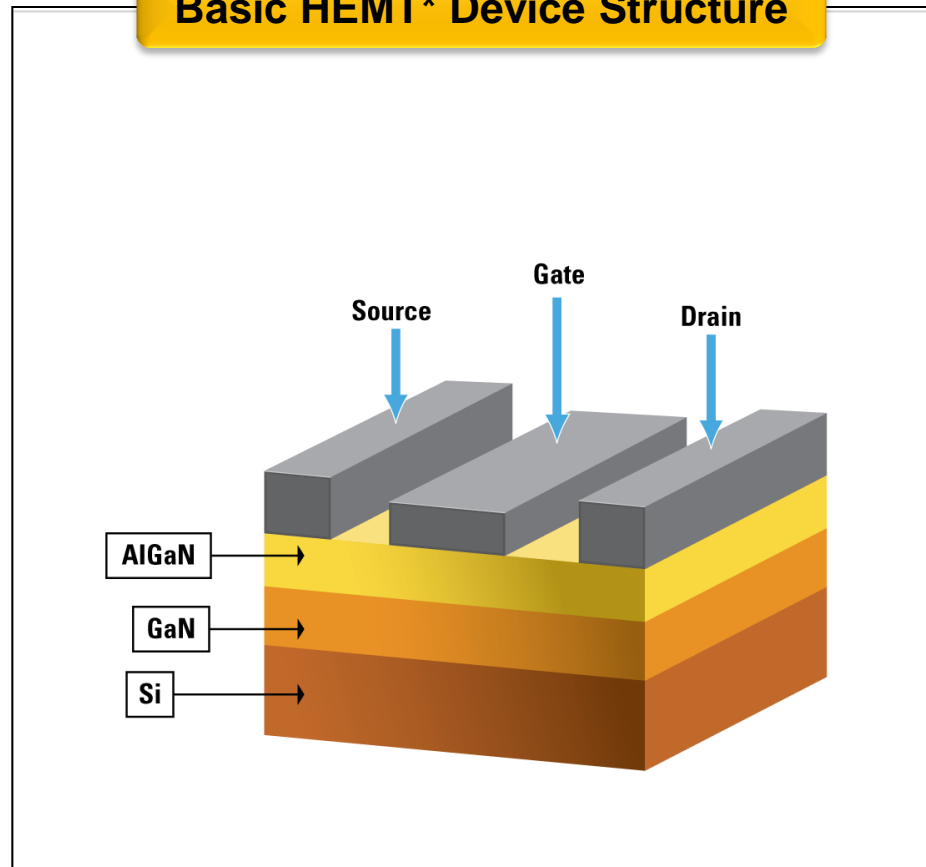
© Brian Vance / Motor Trend

IR Automotive IGBT Technology and Support Recently Recognized by the EV Market Segment Leader



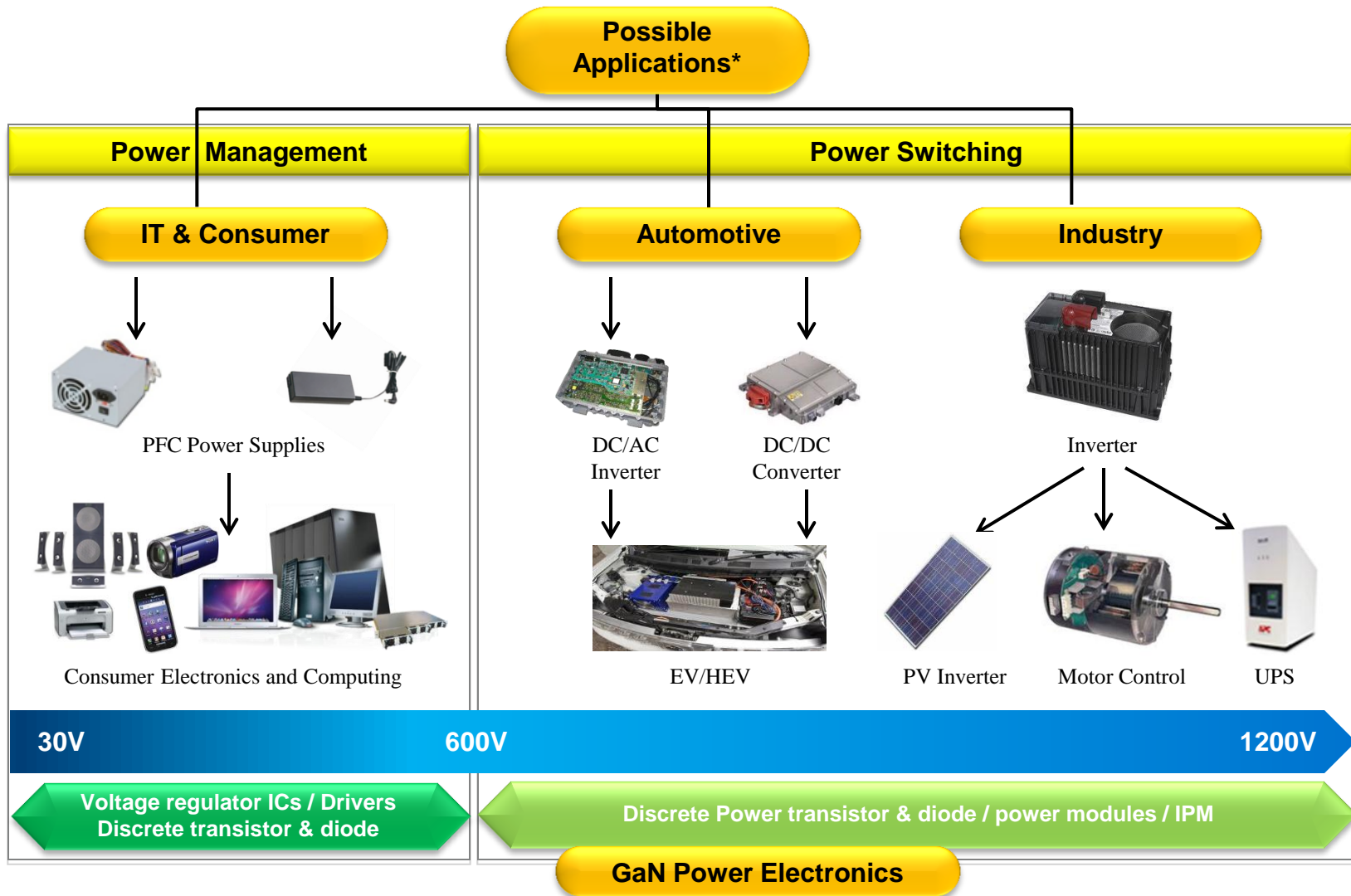
What is GaN?

Basic HEMT* Device Structure

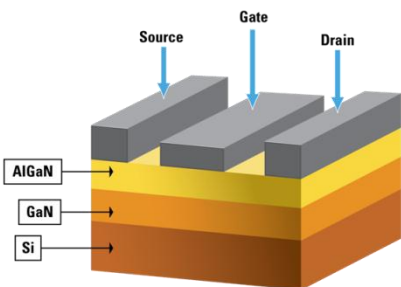


*High Electron Mobility Transistor

Disruptive GaN Technology to Revolutionize Power Management



*Source: Yole Power GaN Report: November 2010



Samsung 7.1 Channel Home Theater System

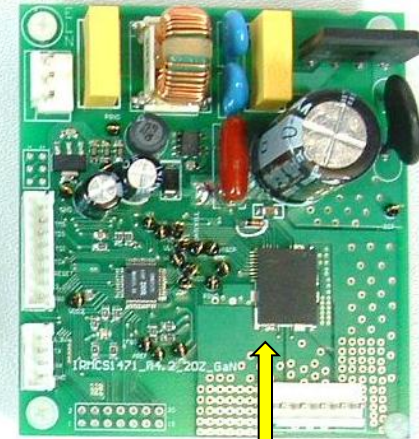
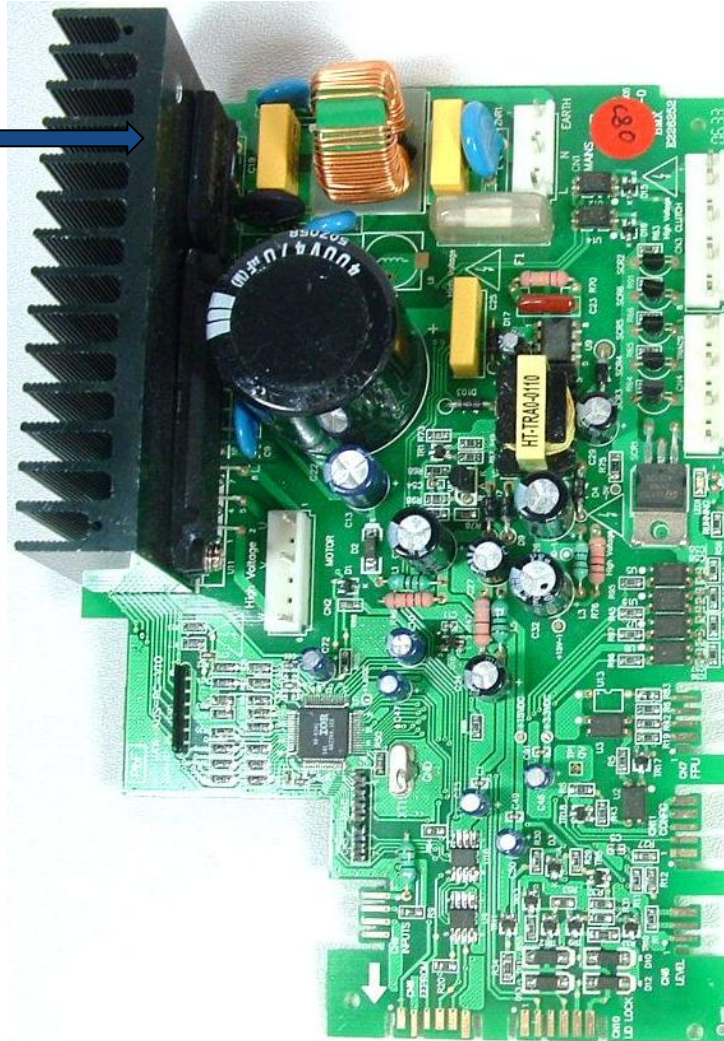


Model HT-F9750W features an IR Gallium Nitride powered amplifier that delivers pure sound

Current 400W
Inverter Board

μ IPM™ GaN Based Prototype

6A IRAM
with
Heatsink



500V/160mohm
GaN in MCM
without Heatsink

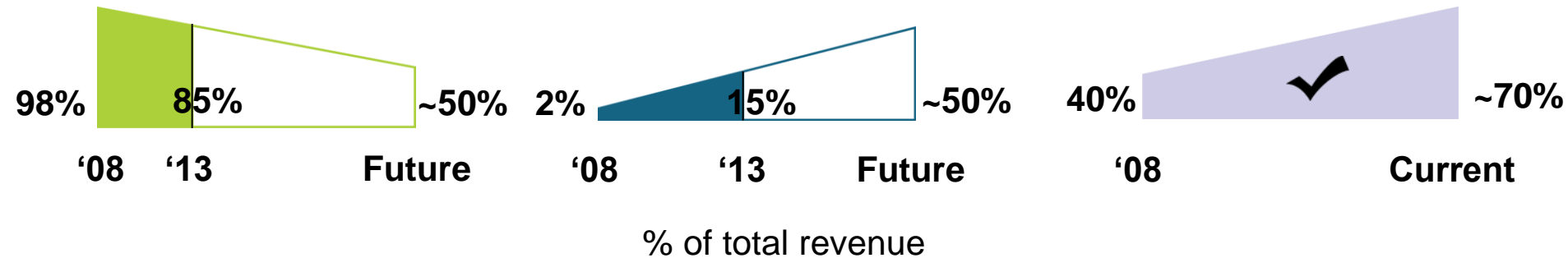
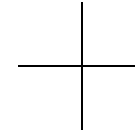
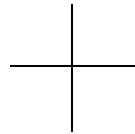
Internal Manufacturing (Front End)



Foundry Manufacturing Partners (Primary)



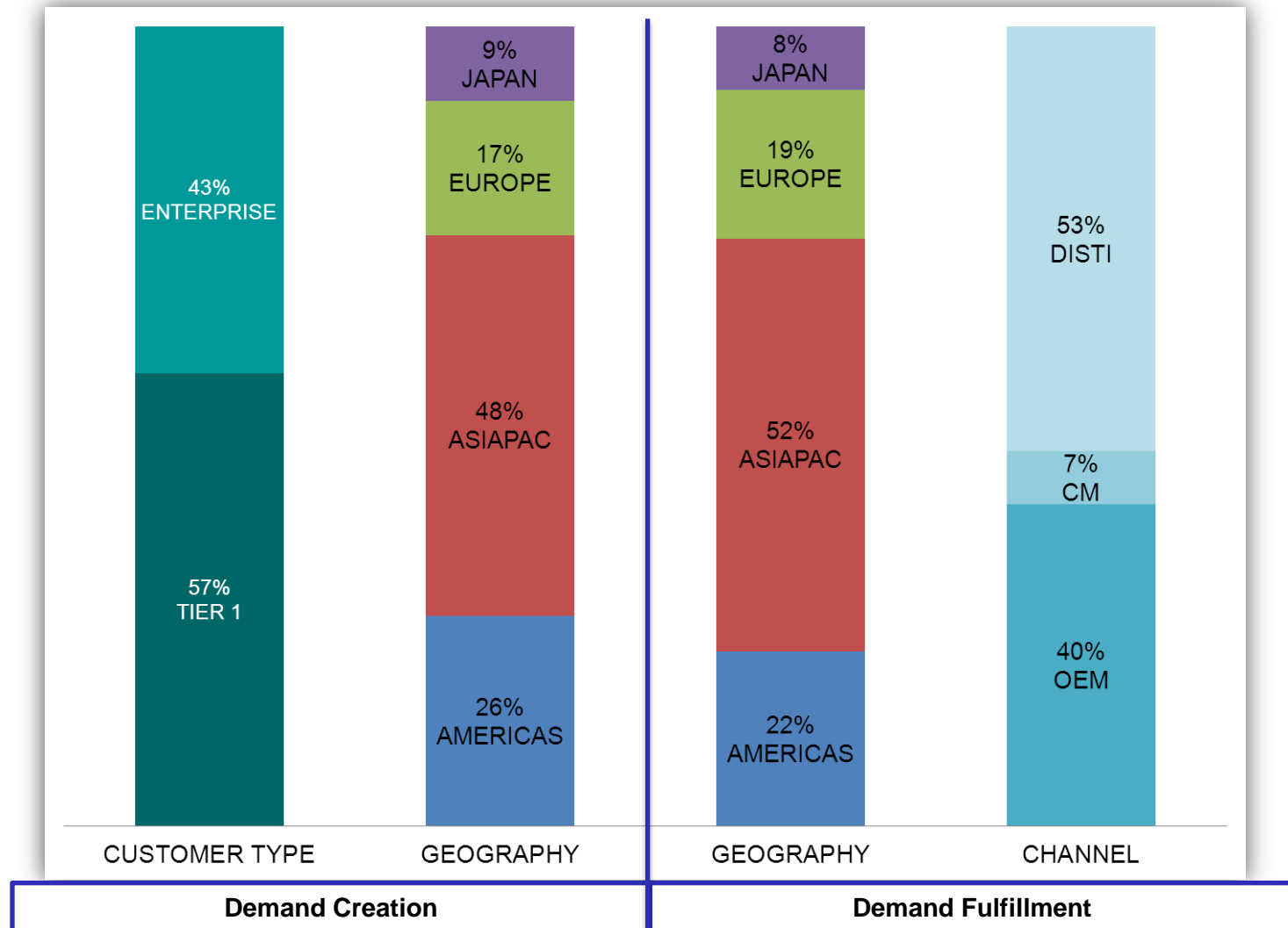
Assembly and Test Partners (Back End)



Internal Manufacturing Footprint



Global Sales and FAE Organization to Serve Complex Customer and Channel Requirements



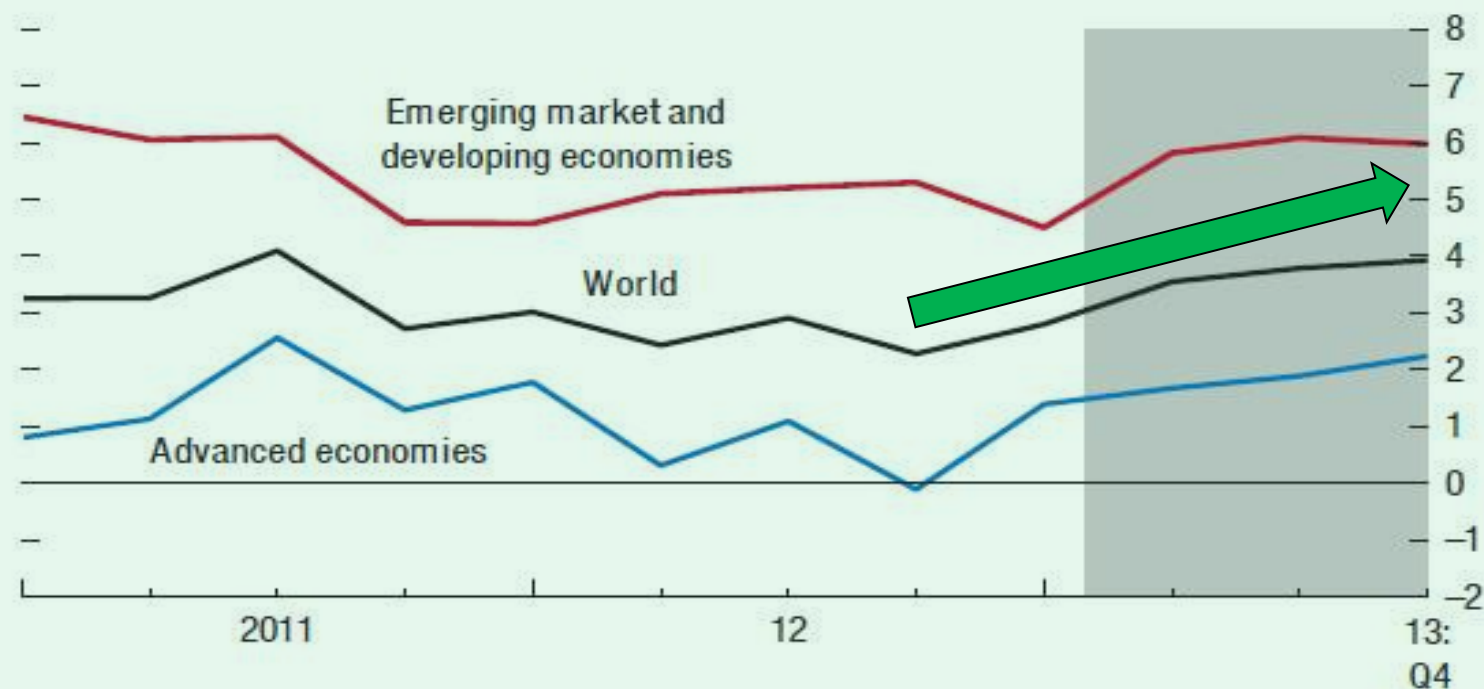
Source: LODP & SAP

Effective management of both sides is a “must” in meeting customers’ needs



Our Current Thoughts and Expectations for CY2014

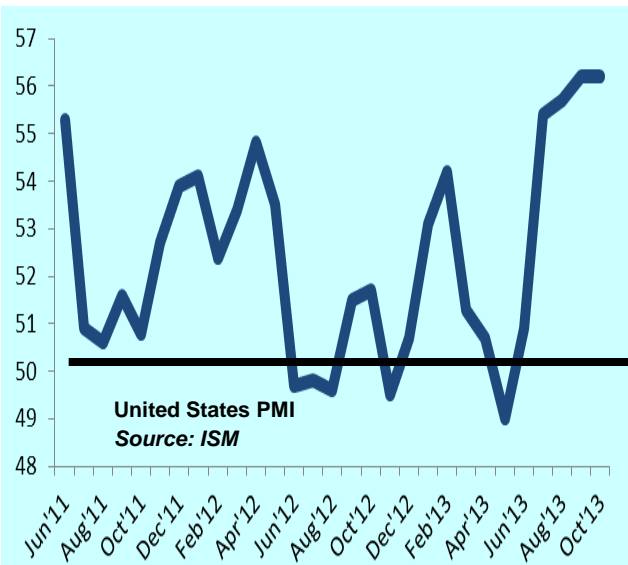
Figure 1. Global GDP Growth
(Percent; quarter over quarter, annualized)



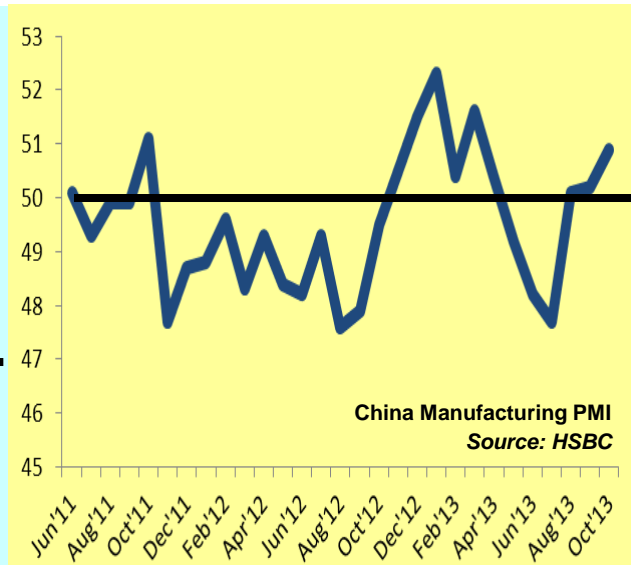
Source: IMF staff estimates.

Purchasing Manager Indices (PMI) Worldwide Pointing in the Right Direction

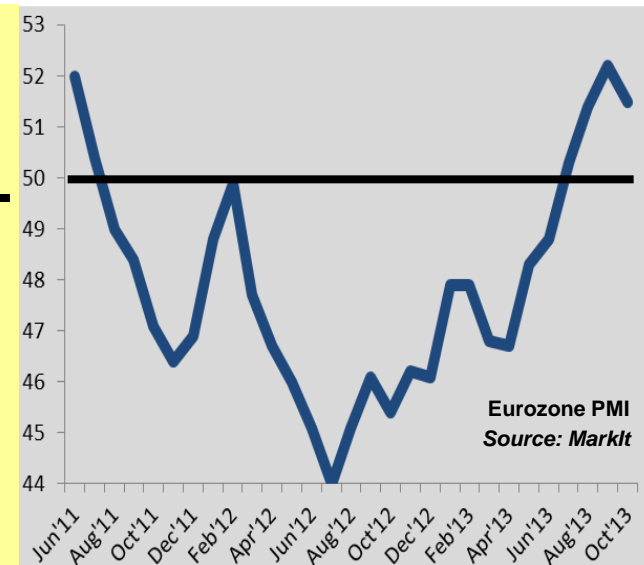
United States



China



Eurozone



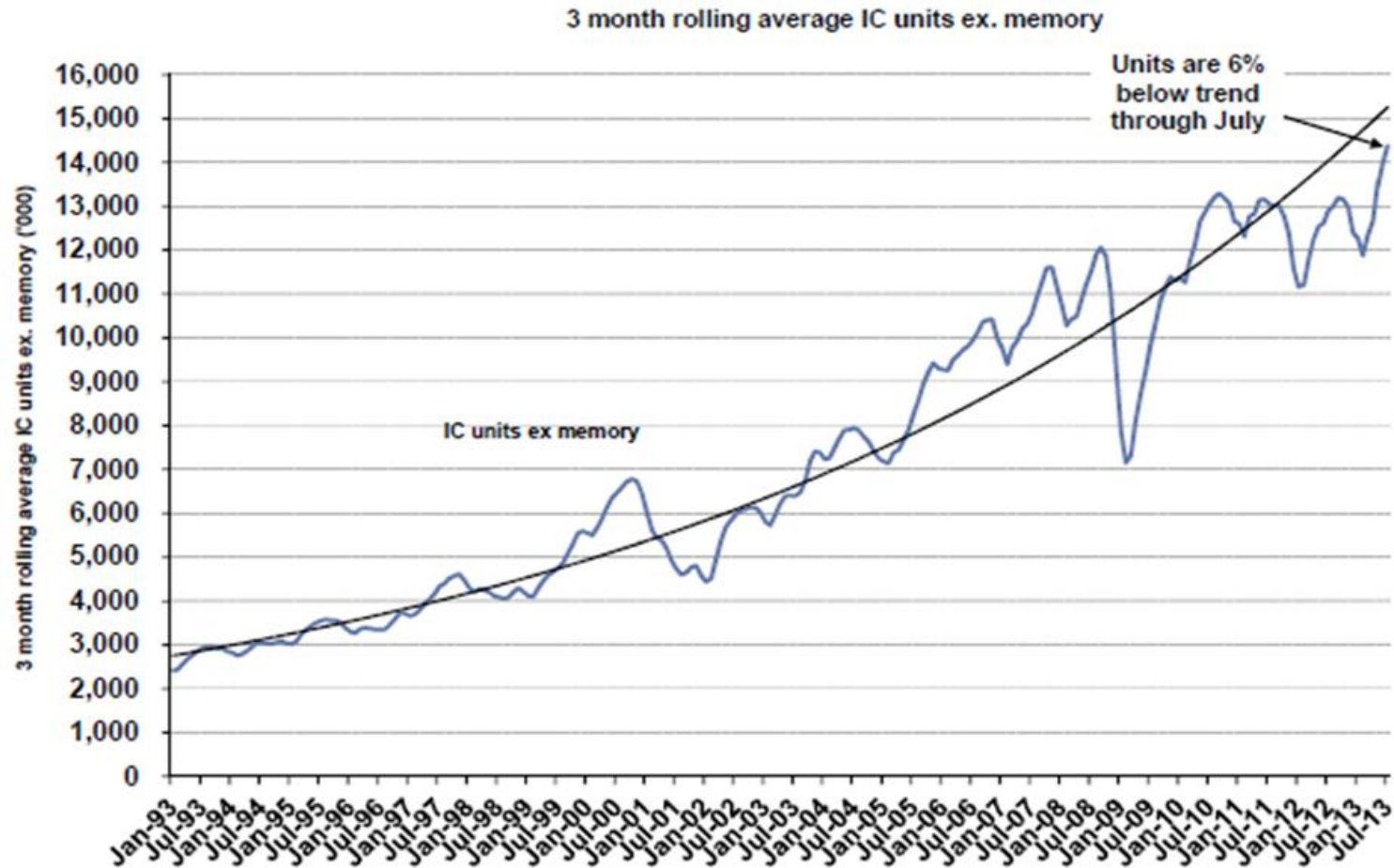
A reading above 50 signals expansion in activity and a reading below 50 signals a contraction in activity

4rd consecutive month of expansion
Overall US economy gaining traction
Growth at fastest pace in last 2 years

China showing recovery
PMI back above 50
HSBC expects upside surprises to growth in the next several months

Seeing signs of turnaround
PMI near 26 month high
Growth improves in Germany, Netherlands, Italy, Austria and Ireland

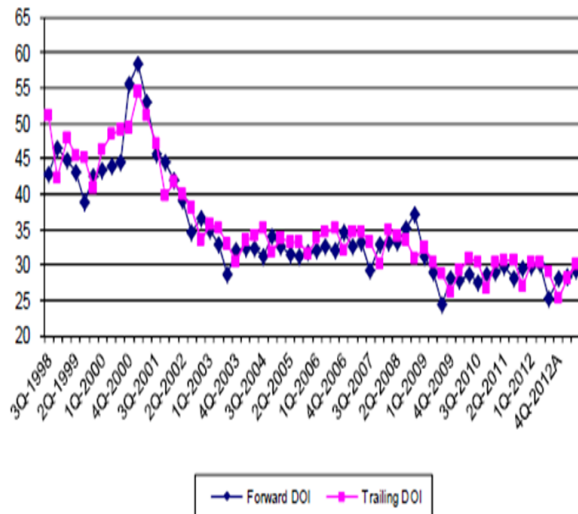
Semiconductor Units 6% Below Normalized End Demand



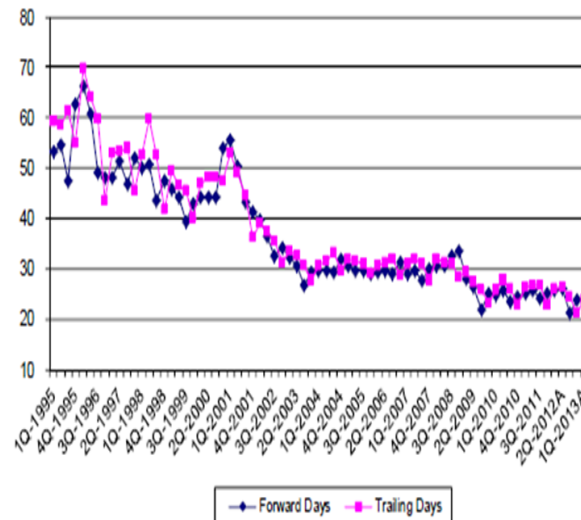
Source: SIA, Goldman Sachs Global Investment Research

Inventory Supply Chain Remains Lean

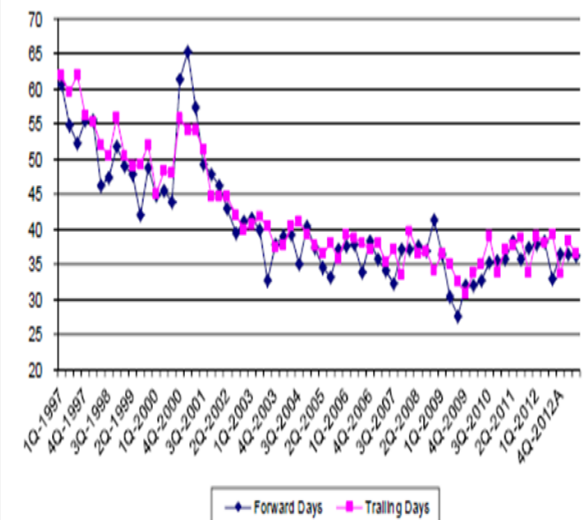
Inventory at Semiconductor Customers (ex. ODMs)



OEM Days of Inventory



Distributor Days of Inventory



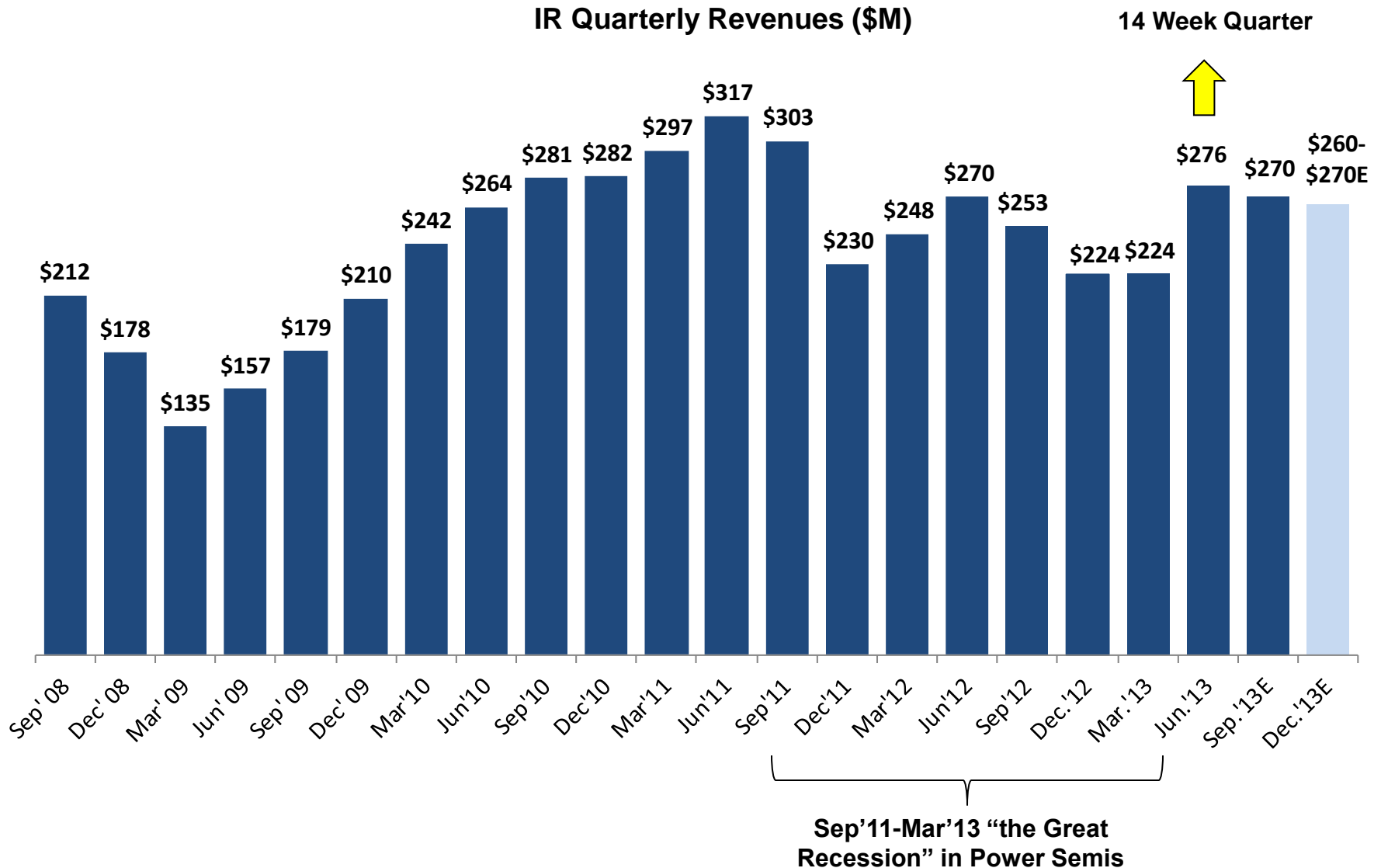
**Inventory at Semi Customers
(ex. ODMs)**

OEM Days of Inventory

Distributor Days of Inventory

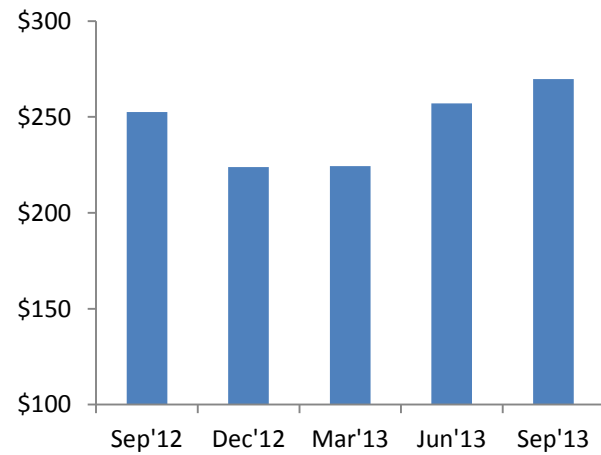
Source: Company Reports and Susquehanna Financial Group

We May be Seeing the Beginning of Recovery (1)

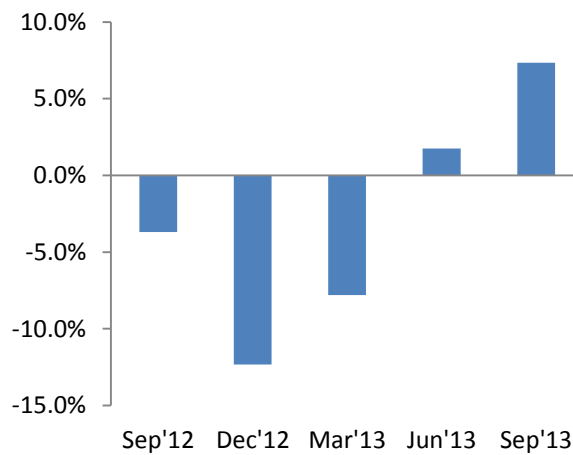


*Source: Company Filings

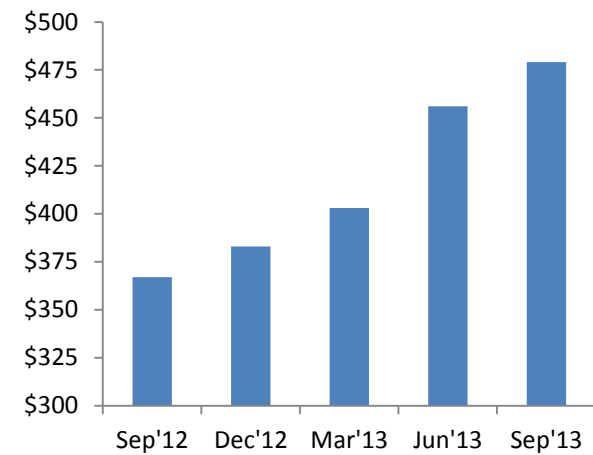
We May be Seeing the Beginning of Recovery (2)



Revenue (\$M)



Adjusted Operating Income %



Cash (\$M)

*Source: Company Filings, June 2013 revenue adjusted to 13 weeks

IR well positioned for future growth

- High Voltage Products:

- Benchmark IGBT Platform
- New μ MCM technologies



• COOLiR IGBT™



μ IPM™

- Digital Power Control



- Next Generation Low- and Mid-Voltage MOSFETs



- Gallium Nitride – Re-entry into High Voltage



Revamping manufacturing footprint and supply chain to increase flexibility and reliability of our supply chain

Strong balance sheet

- \$475M+ in cash, cash equivalents and investments
- No debt