TOWERJAZZ

The Global Specialty Foundry Leader

Performance and Strategy

Mr. Russell C. Ellwanger, CEO

January 2014

Disclaimers

Forward Looking Statements

This presentation contains forward-looking statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. These statements are based on management's current expectations and beliefs and are subject to a number of risks, uncertainties and assumptions that could cause actual results to differ materially from those described in the forward-looking statements. All statements other than statements of historical fact are statements that could be deemed forward-looking statements. For example, statements of expected synergies from Tower's merger with Jazz, customer benefits, costs savings, financial guidance, industry ranking, execution of integration plans and management and organizational structure are all forward-looking statements. The potential risks and uncertainties include, among others, that expected customer benefits, synergies and costs savings will not be achieved or that the companies are unable to successfully execute their integration strategies, as well as other risks applicable to both Tower and Jazz's business described in the reports filed by Tower and Jazz with the Securities and Exchange Commission (the "SEC") and, in the case of Tower, the Israel Securities Authority. These filings identify and address other important factors that could cause Tower and Jazz's respective financial and operational results to differ materially from those contained in the forward-looking statements set forth in this document. Accordingly, no assurances can be given that any of the events anticipated by the forward-looking statements will transpire or occur, or if any of them do so, what impact they will have on the results of operations or financial condition of Tower or Jazz. Tower and Jazz are providing this information as of the date of this presentation and neither Tower nor Jazz undertakes any obligation to update any forward-looking statements contained in this document as a result of new information, future events or otherwise.

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Outline

- Corporate Introduction
- Pure-play Foundry Landscape & Our Position
- Technology Offering | Business Units
- Financial Highlights
- Strategies Behind M&As

Company Introduction

What Do We Do?

What Do We Do?
Pure Play Foundry

TowerJazz
WW Design Center

Fabless

QUALCOMM
SKYWORKS
MARVELL

IDM

intel
SAMSUNG
Texas Instruments

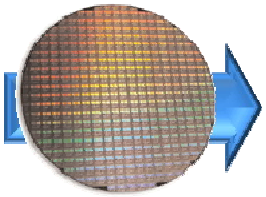
Internal Fab

Specialty Analog Foundry

TOWERJAZZ
Foundry Fab

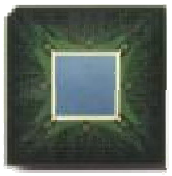
tsmc SMIC UMC

Digital "Moore's law" Foundries



Processed Wafer

Assembly & Test



Packaged Device

What Do We Do?
Pure Play Foundry

We never compete with our customers

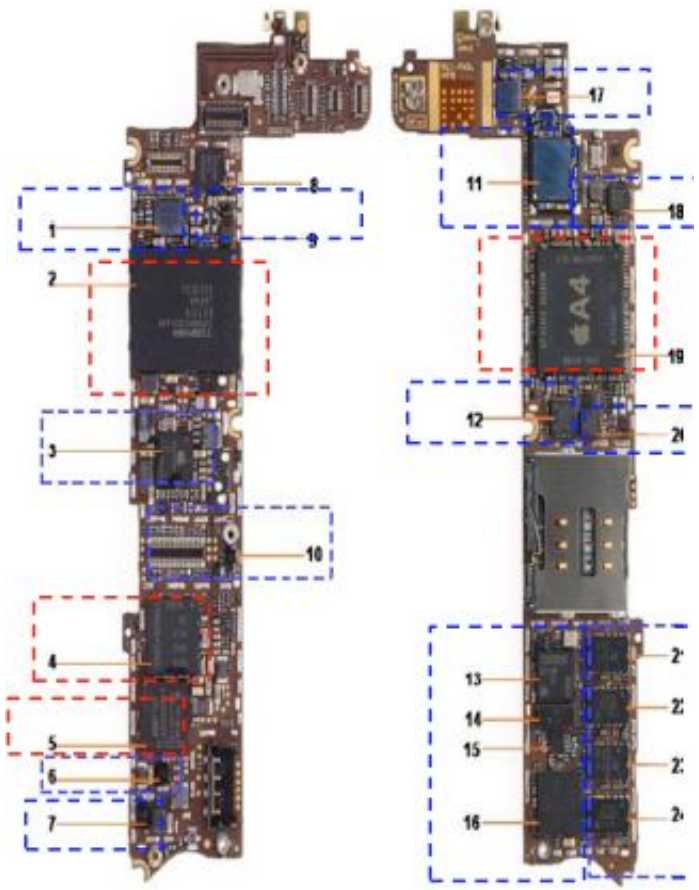
Two Types of Foundries

Specialty Foundry Enjoys Several Advantages

	Digital Moore's Law Foundries	*Specialty Analog Foundries*
Capacity Capex	**High**	**Low**
Technology Capex	**High**	**Low**
Product Lifetime	**Short**	**Long**
Customer Engagement	**Typically multi-source**	**Sole or limited source**
Technology Differentiation	**At leading edge only**	**Across process technologies**
Segment Sizes	**Large**	**Many niches through mid-size**
Process Technologies	**CMOS**	**SiGe, BiCMOS, MEMS, CIS**
Technology Nodes	**65nm-22nm**	**350nm-110nm**

Apple iPhone – a Closer Look

Analog	Logic/Memory
Power	Apps Processor + DRAM
Audio	NAND Flash
Display	NOR Flash
Touch	Quad Baseband
PA	
Switch	
Controller	
ESD	
Discretes	
Gyroscopes	
Compass	
Many Chips	***4 Chips***



Analog Market Segment is Expected Grow Rapidly in Coming Years

	Segment	2009 ($ Mil) (TowerJazz Born)	2015 ($Mil)	Y-to-Y Growth Rate
	Total Semiconductor	230,194	400,806	74%
Above average growth	Sensors/Actuators	3,970	9,832	148%
	Optical	17,463	35,988	106%
	Discretes	15,454	31,253	102%
	Analog	36,073	72,113	100%
Below average growth	Microcomponents	48,463	80,243	66%
	Memory	44,189	73,068	65%
	Logic	64,582	98,309	52%

Sources: Nikkei, iSuppli, PwC

TowerJazz end market TAM, SAM is large and fast growing

TOWERJAZZ

The Global Specialty Foundry Leader

Santa Clara, CA, USA
Sales and Support Office

Migdal HaEmek, ISRAEL
8" Fab and 6" Fab

Seoul, South Korea
Sales and Support Office

UK and France
Sales Reps

Germany
Sales Office

Virginia, USA
Sales Office

Shanghai, China
Sales and Support Office

Tokyo, Japan
Sales Office
and Sales Reps

Hsinchu, Taiwan
Sales Office

Austin, TX, USA
Sales Office

Newport Beach, CA, USA
8" Fab

Brazil
Sales Rep Office

Netanya, Israel
Worldwide Design Center

India
Sales and
Support Office

Nishiwaki, Japan
8" Fab

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Seoul, South Korea

Regional diversity;
All major flows are cross qualified

Austin, TX, USA
Sales Office

Brazil
Sales Rep Office

Newport Beach, CA, USA
8" Fab

Netanya, Israel
Worldwide Design Center

India
Sales and
Support Office

Nishiwaki, Japan
8" Fab

Strong Revenue Annual Growth 2005-2012

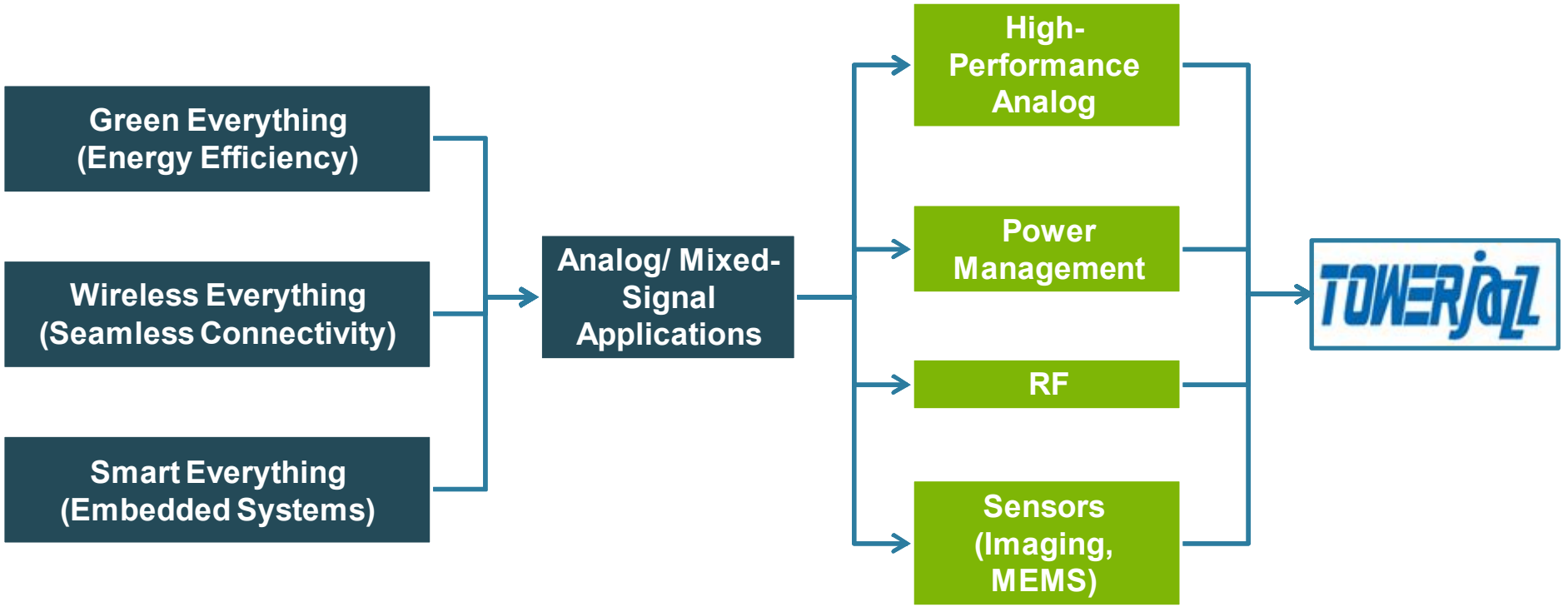
Diversified Customer Base

Our Specialty Technology Offering

Corporate Business Units - Specialty Markets

Technology, Flexibility, Experience, Commitment and supreme performances and design enablement (models, PDK, IP and Design Services) allows our customers to bring to the market best-in-class products

TowerJazz is Well Positioned To Benefit from Key Megatrends



Key megatrends driving rapid growth in Analog/Mixed-Signal applications

⇔

TowerJazz is well positioned to ride the megatrends through diversified leading edge RF-AMS technologies

RF/HPA Growth Driver: Our Solutions (~54% of specialty revenues)

Wireless Infrastructure

SiGe BiCMOS and RF CMOS

- Mature technologies for high reliability
- Wide range of options for integration
- Design Enablement fast time-to-market

Smartphones and Tablets

RF Front-End Technology: SOI / SiGe PA

- SOI for Antenna Switch
- SiGe Power Amplifier
- SOI/MEMS Antenna Tuning

High Speed Data Distribution

High Performance SiGe

- Strong market presence
- Best SiGe performance
- Strong roadmap for SiGe and Photonics

Internet-of-things

Sensor, WiFi, and Analog Technology

- WiFi Front-End Module
- C-BiCMOS for Analog
- MEMS for Sensors

Best-in-class SiGe, RF CMOS, RF models and Design Enablement

Power Markets: Our Solutions *(~15% of specialty revenues)*

Flat Panel TV / Display / Audio

Driving the need for power components

- 0.35um modular BCD
- Low Rdson for small die
- Design enablement fast time-to-market

Automotive and Communication

Driving the need for more integrated PMICs

- Feature-rich 0.18um modular BCD
- Embedded NVM (no mask adder)
- High digital density

LED Lighting

Replacing commercial lighting

- 700V Production Technology
- Low mask count for cost-sensitive market
- Extensions to 900V to cover all standards

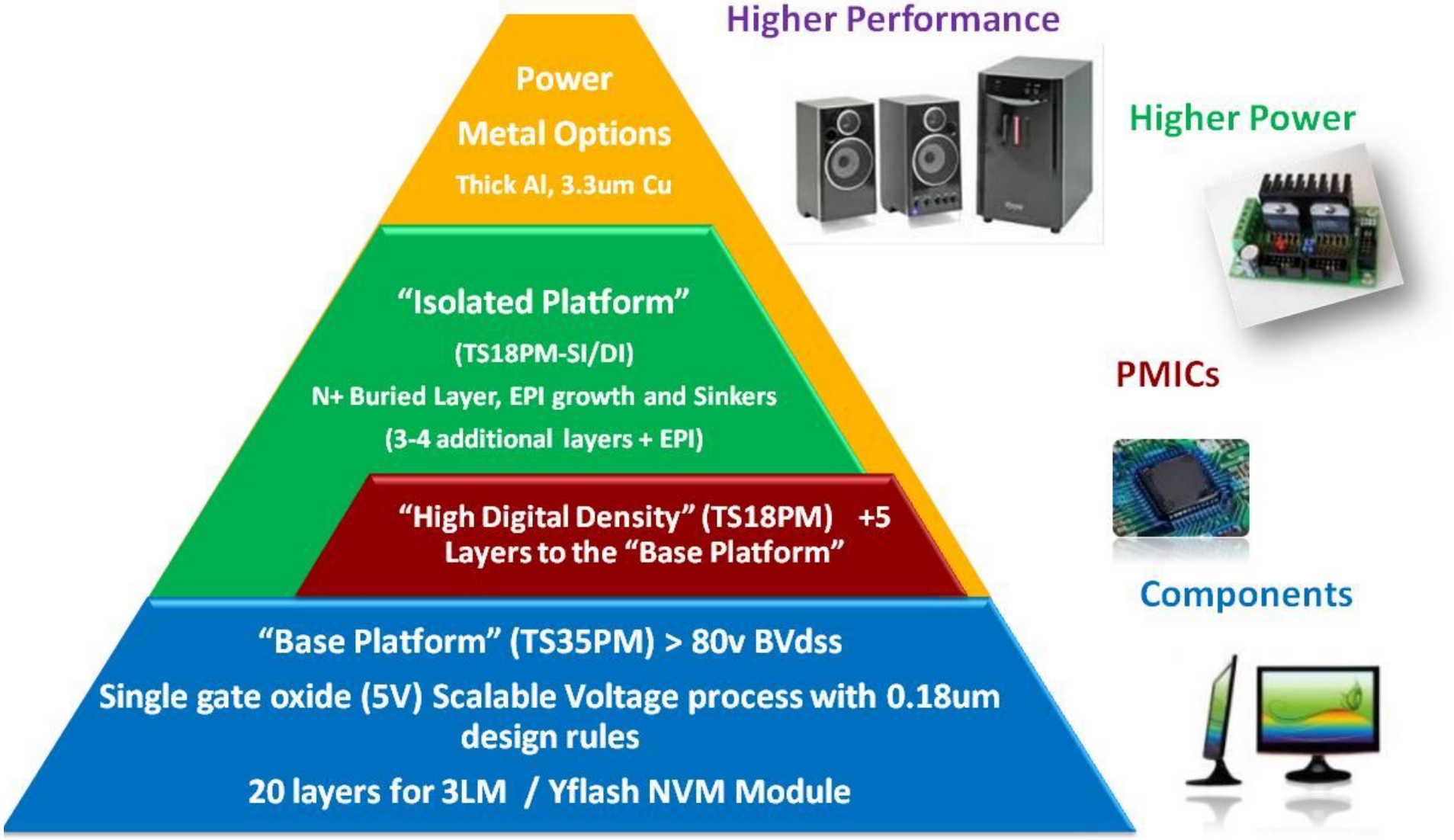
Industrial and Infrastructure

Growing the motor-driver market

- High-side 700V platform
- Gate driver for IGBT
- Will mirror growth of IGBT / Motor Drivers

Modular power management platform with best-in class performance and design enablement (scalable models, PDK, IP and Design Services)

Case Study: modular 0.18um Power Platform to efficiently serve a wide range of markets from Components to PMICs



Specialty CIS Growth Markets *(~20% of specialty revenues)*

Professional Photography

- Best in class pixels
- Low dark current
- Accurate stitching

X-Ray

- Excellent flexible pixels
- Stitching for 1 DPW
- Very high yields

Industrial

- Special fast pixels
- Unique features: Bathtub
- Network of leading customers

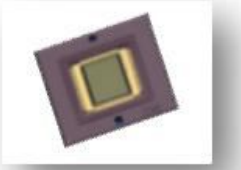
Automotive and 3D

- Unique near IR sensitive pixels
- High QE
- Very fast pixels
- High DR

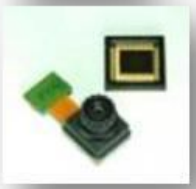
Technology, Flexibility, Experience and Commitment allows our customers to bring to the market the best in class products

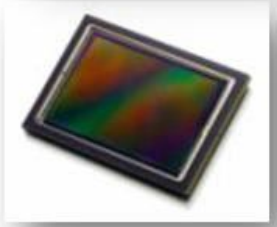
“Cameras” application range

Medical (X-ray)



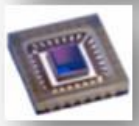
Industrial,
Machine Vision,
Bar-Code





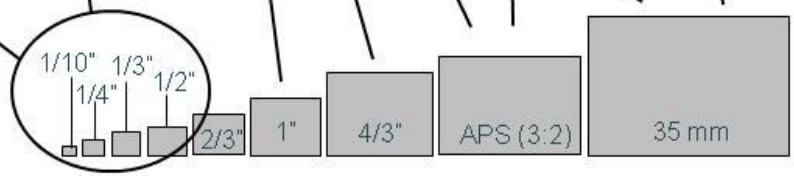
Professional
Photography

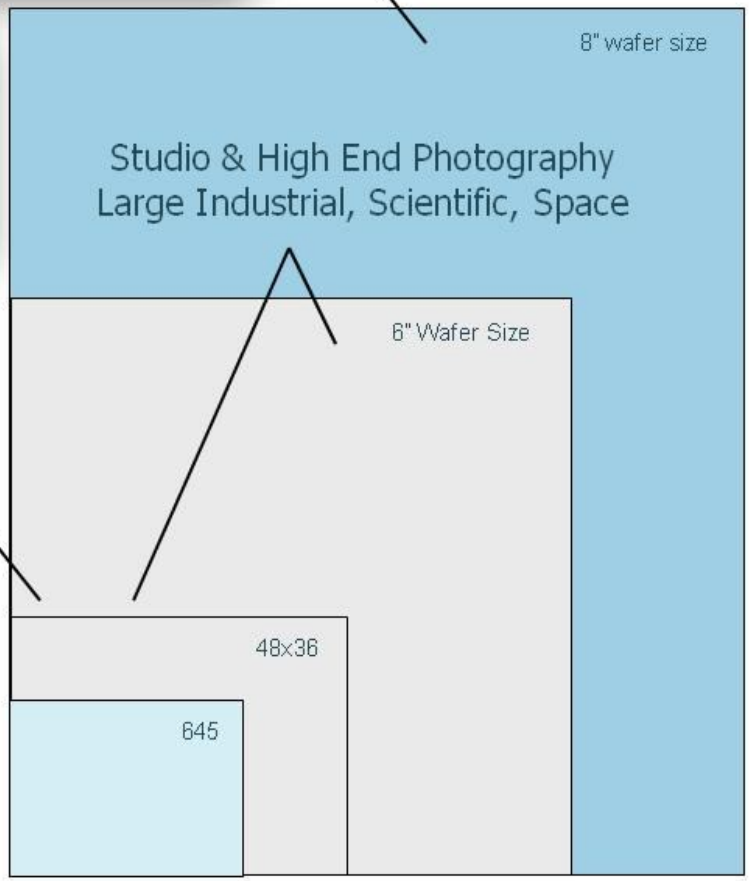
Consumer



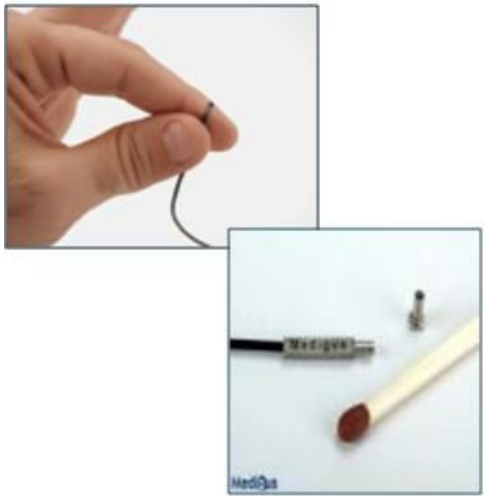
Prosumer
Photography

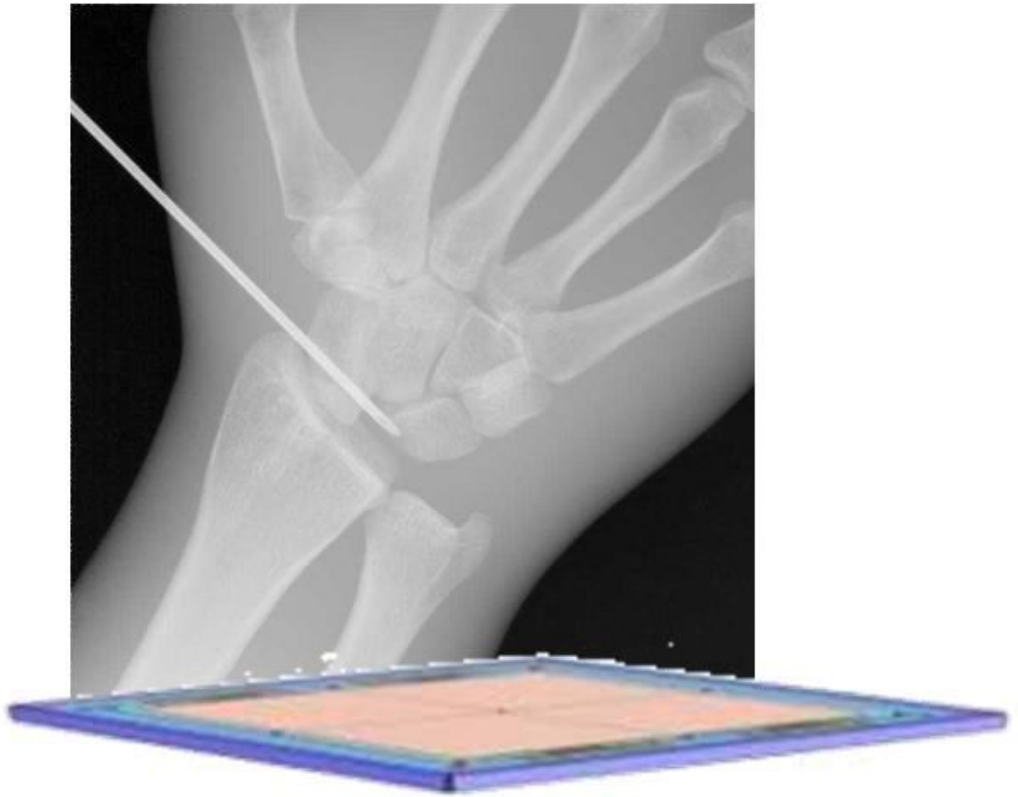
Small Medical





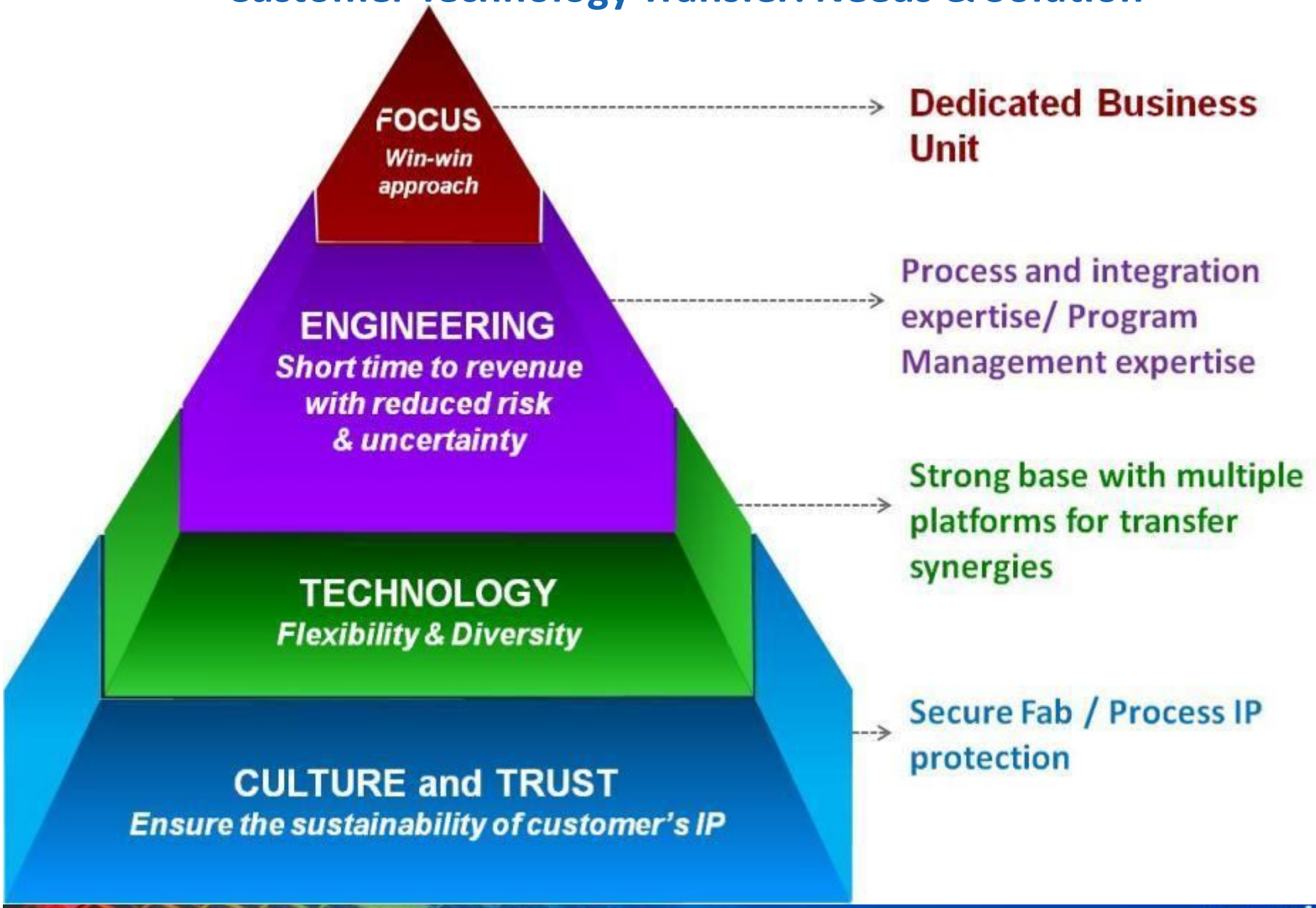
From the smallest Sensor in the World to the Largest





Enabling Customer Innovation

Customer Technology Transfer: Needs & Solution



Prevailing the cyclical industry we are playing at…

Two major sources of revenues:

- Specialty business units
  - Strong future growth
  - High exit barrier
  - Typically sole external source model
  - Better margins
  - Less ASP pressure
- TOPS business unit
  - Mainly take-or-pay long term agreements
  - Special business models

- **Enabling the company to prevail the seasonality and the cyclical nature of the semiconductor industry**.

Financial Highlights

Financial Highlights

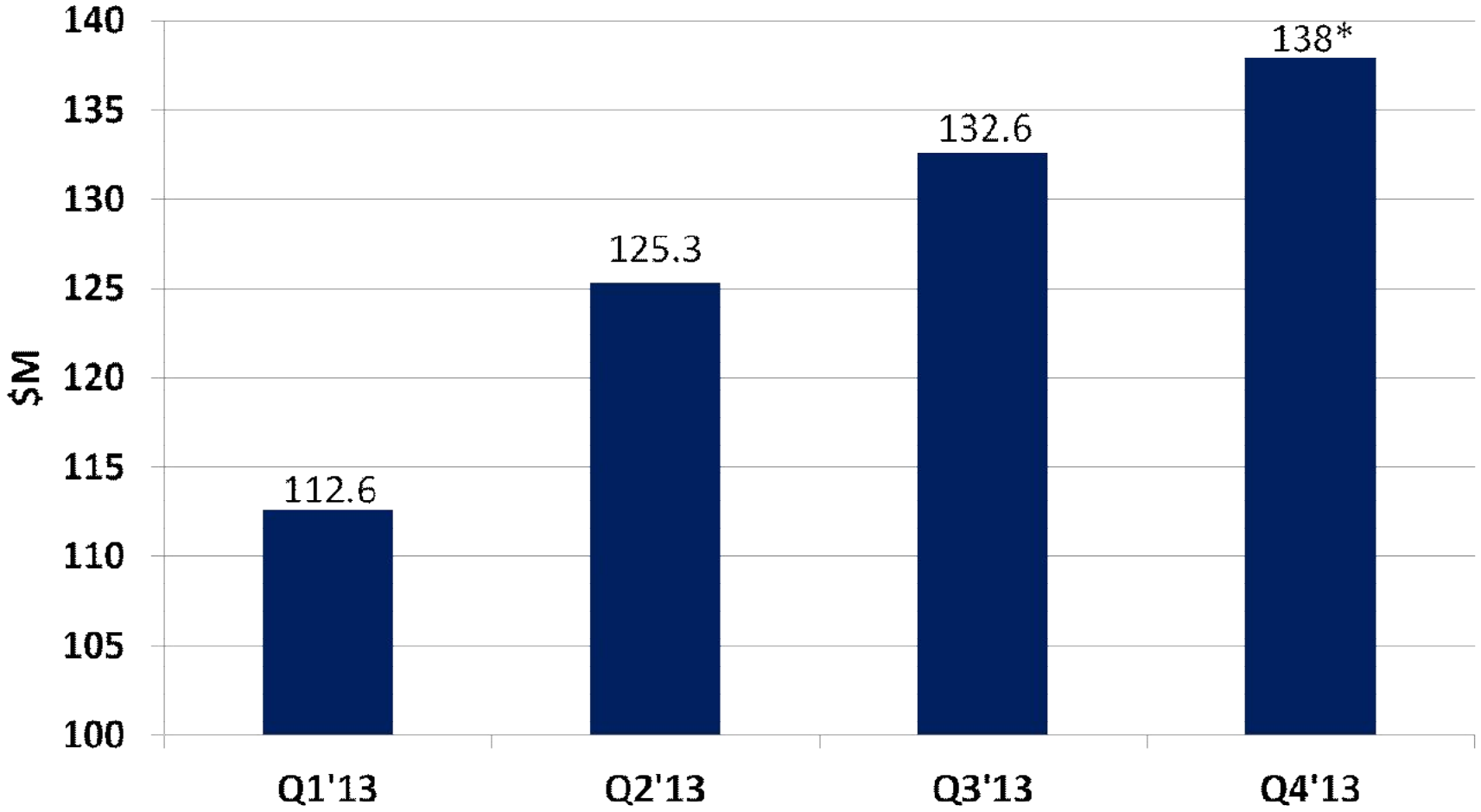
Revenue & P&L

- Continued revenue Q/Q growth with $132.6 million in Q3'13 Vs. $125.3M in Q2'13 and Vs. $112.6M in Q1'13
  - Up 6% and 18% against Q2'13 & Q1'13, respectively
- Fourth quarter guidance provided continuous growth with revenues of $133 to $143 million
- Positive EBITDA of $150-170M per annum in 2010, 2011 and 2012 with positive cash flow from operations at $90-120 M per annum.

Balance Sheet

- Strong balance sheet financial ratios and indicators:
  - Current ratio improved from 1.8X as of December 31, 2012 to 2.1X as of September 30, 2013.
  - Cash balance at September 30, 2013 at $141 million of cash and deposits, an increase from the $133 million as of December 31, 2012 and form $117 million as of June 30, 2013

2013 Quarterly Revenues



* Q4 2013 based on mid-range guidance

Strategies Behind M&A

Strategy Behind M&As

1. **Increase Served Market**
   - Acquire new technologies w/ established customer base
   - Acquire new technologies which serves existing base
2. **Increase Operational Capacity**
   - Acquiring capacity at substantial lower cost than organic growth
3. **Create Geographic Alignment**
   - Improved customer alignment through local manufacturing (e.g. JDP execution)
   - Operational optimization and reduced customer risk through flow cross qualification.

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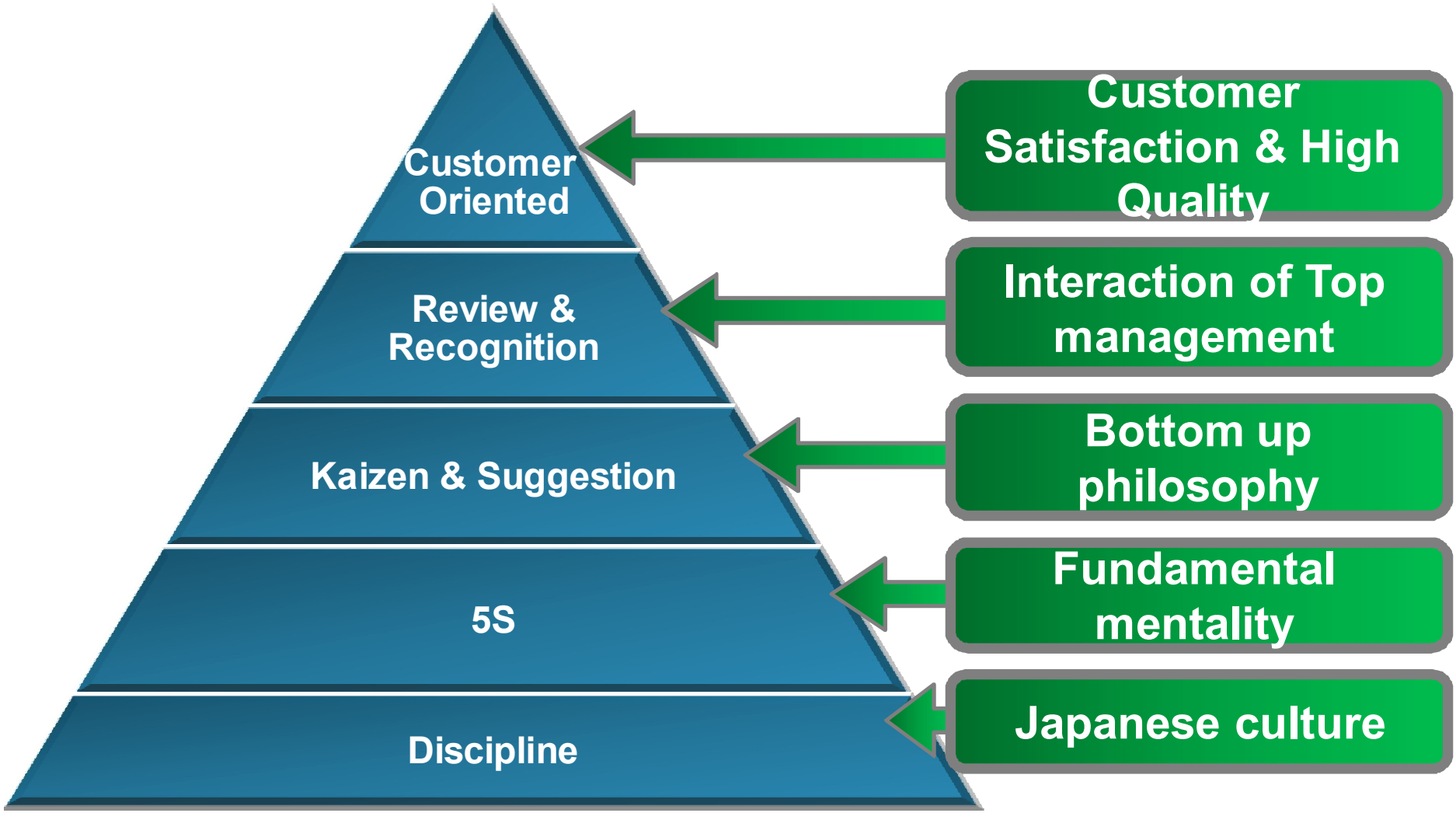
What we have learned through integrating Japanese foundry

Discipline and Quality

Quality framework of TowerJazz Japan



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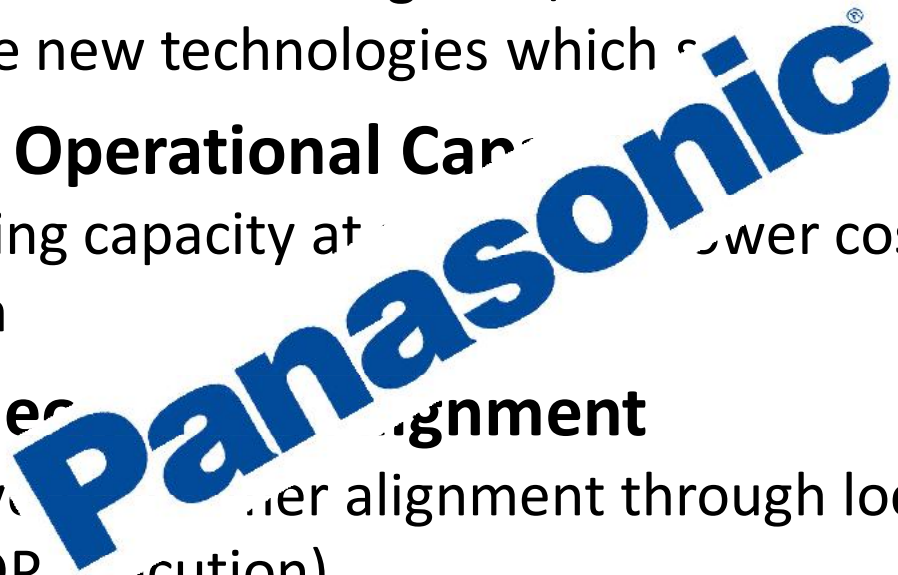


TowerJazz Signs Definitive Agreement Creating Joint Venture with Panasonic Corporation to Acquire its 3 Semiconductor Factories in Japan and to Manufacture Panasonic and Additional Products

TowerJazz revenue to increase by approximately $400 million a year, enabling a $900 million annual run rate opportunity starting Q2 2014 and improving profitability following the closing of this transaction

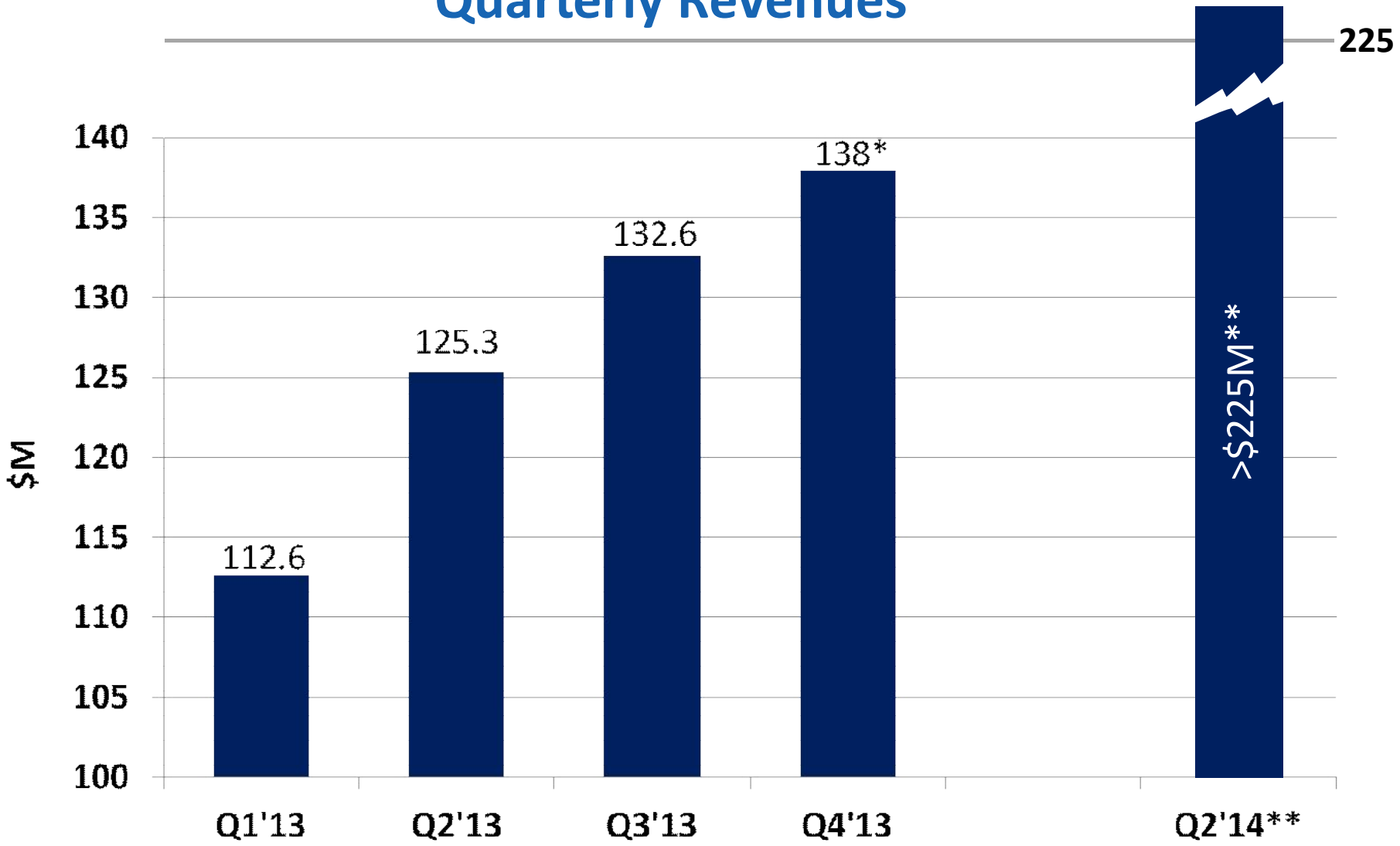
(December 20, 2013)

Enabling at least $1B of annual revenues in 2015

Highlights of the Deal

- TowerJazz to hold 51% of the joint venture (JV)
- Provides TowerJazz with incremental annual revenues of approximately $400 million and above that substantial capacity for additional foundry business growth
- Added available capacity of approximately 800,000 wafers per year (8 inch equivalent) in three manufacturing facilities in Japan
- Panasonic committed to acquire its products from the JV for a period of at least 5 years of volume production
- Expanding TowerJazz leadership to include a state of the art 300 mm analog technology fab including best of class 65nm CMOS image sensor dark current and quantum efficiency performance and additional 45 nm digital technology
- Closing of the transaction expected to be by April 2014.

Quarterly Revenues



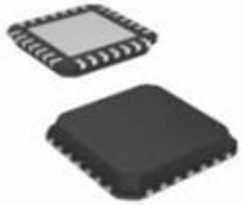
* Q4 2013 based on mid-range guidance
** Following Panasonic JV revenues

Emerging microelectronics : *Two Roads to Follow*

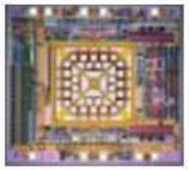
Specialty products : More than Moore

Specialized Image Sensors

Specialty IC for mobile applications:



Power Management Ics (drivers, converters,etc.)



MEMS

ICs for space applications

350nm-130nm (90nm as long term roadmap) technology nodes
Moderate (hundreds of millions US $) investments + lots of Innovation and Creative Thinking

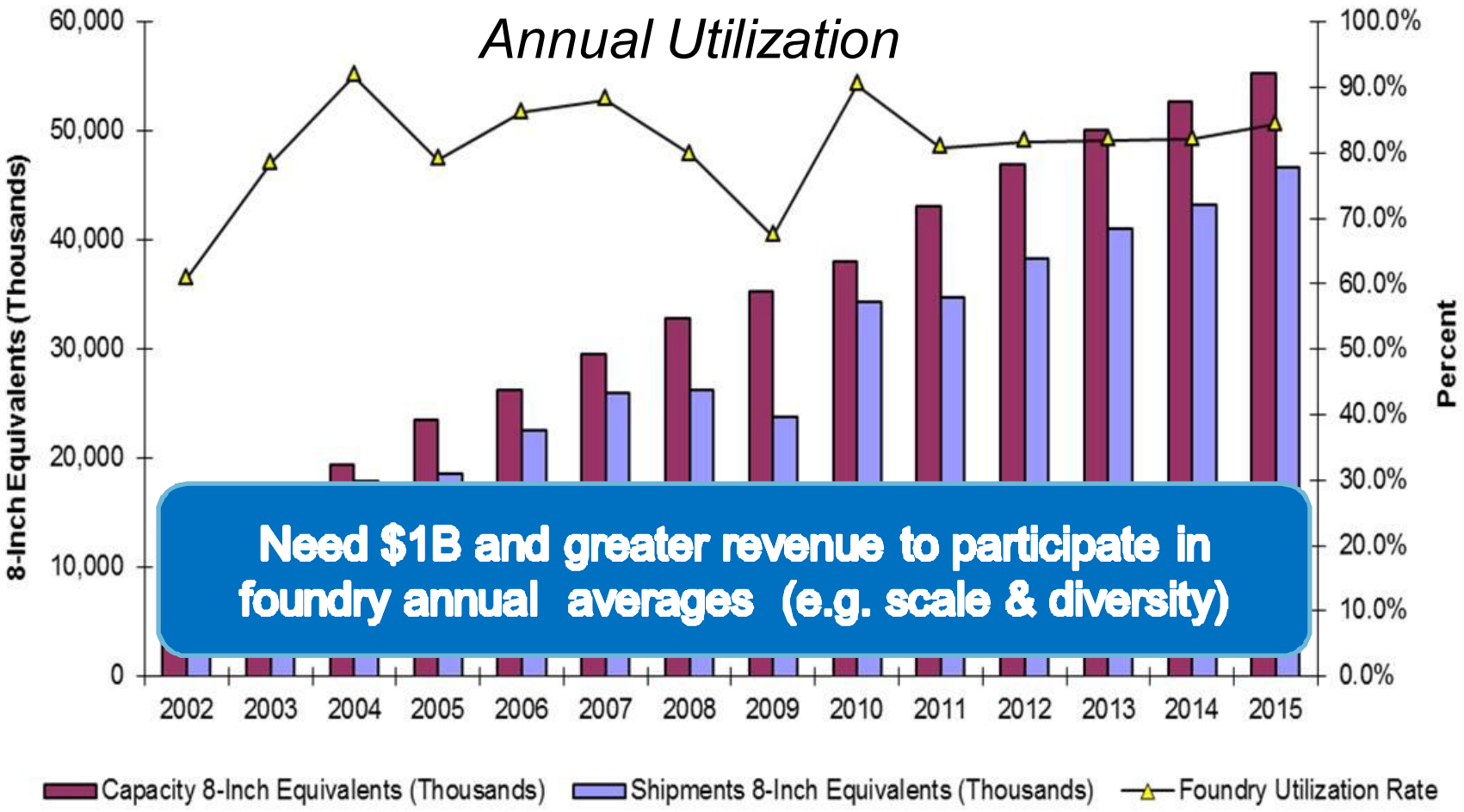
Plain vanilla CMOS; Moore's roadmap

Example: TSMC
High-performance microprocessors, CPUs, GPUs (graphic processing units), etc; High Volumes

45nm -22 nm technology nodes
Multibillion US $ investments
Only very large IDMs and huge foundries (TSMC , UMC, GF. SMIC) can follow this road

Source: *Global Foundries*

Foundry Annual Capacity, Shipments and Utilization Rate



Source: Gartner (September 2011)

Summary

- Core specialty business continues strong growth
  - FEM, Power Management, digital cameras – medical and commercial, MEMS, High end RF
- TOPS business also demonstrate strong growth with a business model enabling levels of guaranteed revenues
- India consortia (with Jaypee and IBM) received in principle approval; expecting final approval
- Panasonic JV provides:
  - Access to multiple new industry leading technologies
  - 300mm factory for specialty expansion
  - Multi-year committed revenues with strong bottom line performance.
- On target for $1B 2015 run rate.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