



Innovation as the Engine for Business Growth and Competitive Edge

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The Global Specialty Foundry Leader

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TowerJazz

- **#1 pure-play specialty foundry***
 - \$611M Revenue in 2011
 - Fastest growth foundry over the past 7 years
- **Growth fueled by innovation**

**Wireless
RF / HPA**

**CMOS Image
Sensor**

**Power
Management**

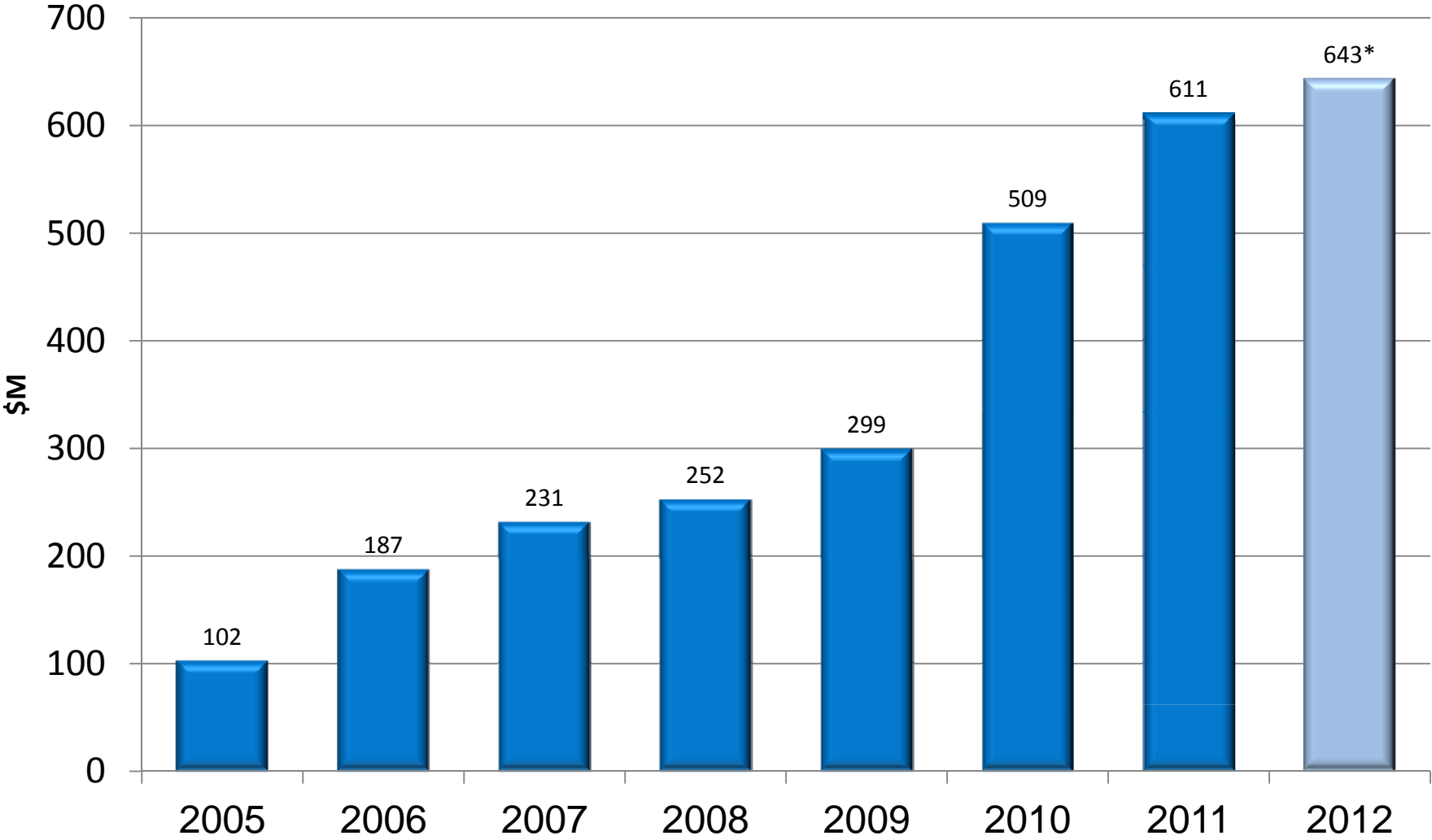
**TOPS
IDM Transfer
Service**

**TOPS
External
Service**

MEMS

* Source: IC Insights, EE Times

Delivered Strong Annual Growth 2005-2012



* 2012 based on Q1-Q3'12 actual and Q4'12 mid-range guidance

Where We Were (2005)

- Net debt to EBITDA ratio - negative
- \$102M annual revenue
- Less than \$20M cash
- Negative EBITDA
- Negative operating CF
- 1 site
- 1 customer in Fab2
which was unrelated party

Where We Are (Today)

- Net debt to EBITDA of ~2X
- \$640M of annual revenue
- \$160M cash balance
- Positive \$170M EBITDA
- Over \$100M operating CF
- 3 sites with 4 manufacturing facilities
- 120 customers in volume production, all are unrelated parties; 50 customers in Fab2

2005 -> Today -> Target Model

- **\$102M annual revenue**
 - \$640M of annual revenue
 - **Negative EBITDA**
 - \$170M of EBITDA
 - **Negative operating CF**
 - Over \$100M of operating CF
- **\$1 Billion**
 - **\$360 Million**
 - **\$300 Million**

TOWERJAZZ The Global Specialty Foundry Leader

Total 8" Equivalent Capacity of \approx 1.7M WPY



Operational Alignment



Israel: Migdal Ha'Emek

*PM and CIS
Center of Excellence
TOPS CORE Team*

720K Wafers per Year



US: Newport Beach

*RF and HPA
Center of Excellence*

290K Wafers per Year



Japan: Nishiwaki

*High Volume,
Max efficiency factory
(and to gain Japanese business)*

700K Wafers per Year

Total 8 inch Equivalent Capacity of ~ 1.7M Wafers per Year

Specialty Focus

RF / HPA

CIS

**Power
Management**

**TOPS
IDM Transfer**

**TOPS
External Activity**

MEMS

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RF and HPA Applications and Technology

RF and Tuners



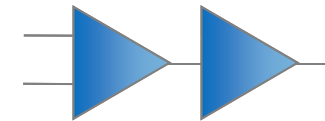
RF CMOS and SiGe BiCMOS

- Cell Phone, WiFi TxRx
- Basestation, Specialty Wireless
- TV, Satellite, STB Tuners

Front-End Modules

SOI Switch and SiGe Power Amplifiers

- Power Amplifiers
- Antenna Switch
- PA Controllers



mmWave

High Performance SiGe

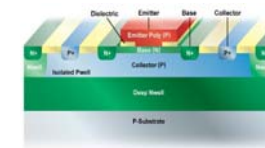
- Optical Fiber Networks
- Automotive Radar
- 60 GHz WiFi, Backhaul Microwave
- Light Peak and Thunderbolt



High Performance Analog

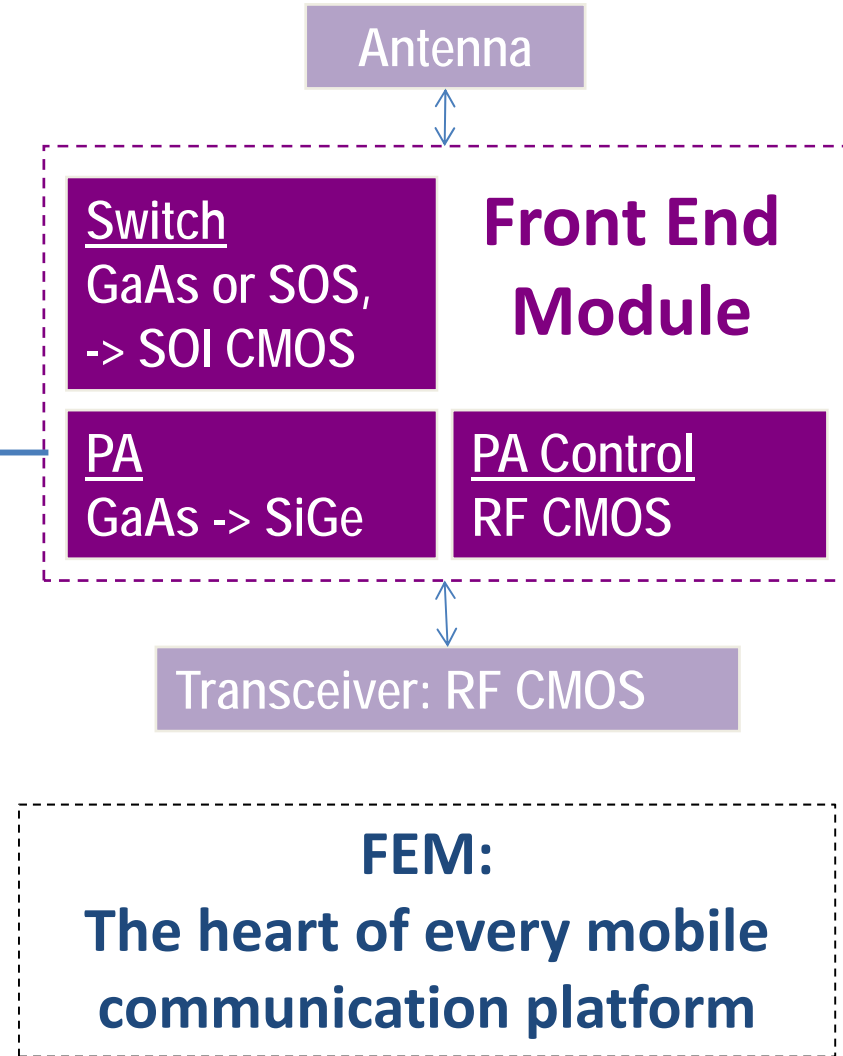
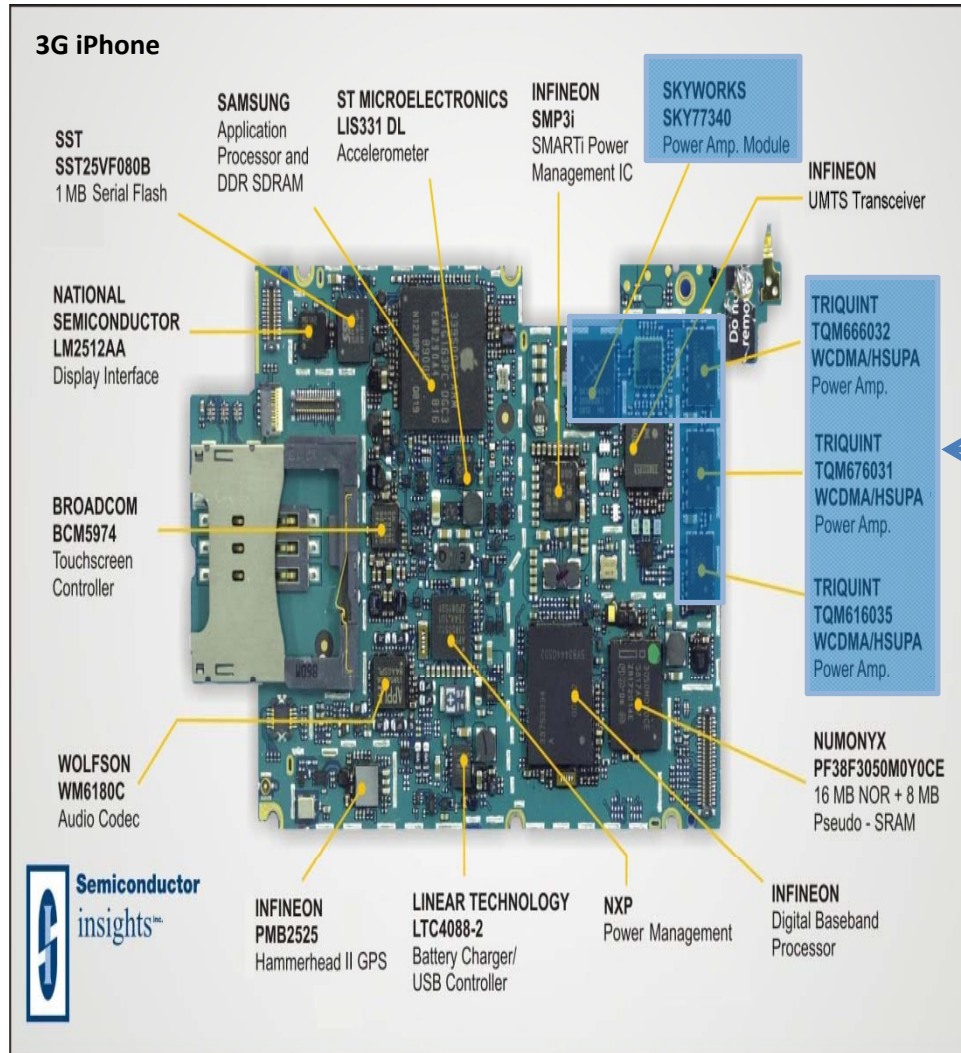
Complementary BiCMOS

- Line Drivers DSL, HomePlug, ATE
- HDD PreAmp
- OpAmps, DAC, ADC

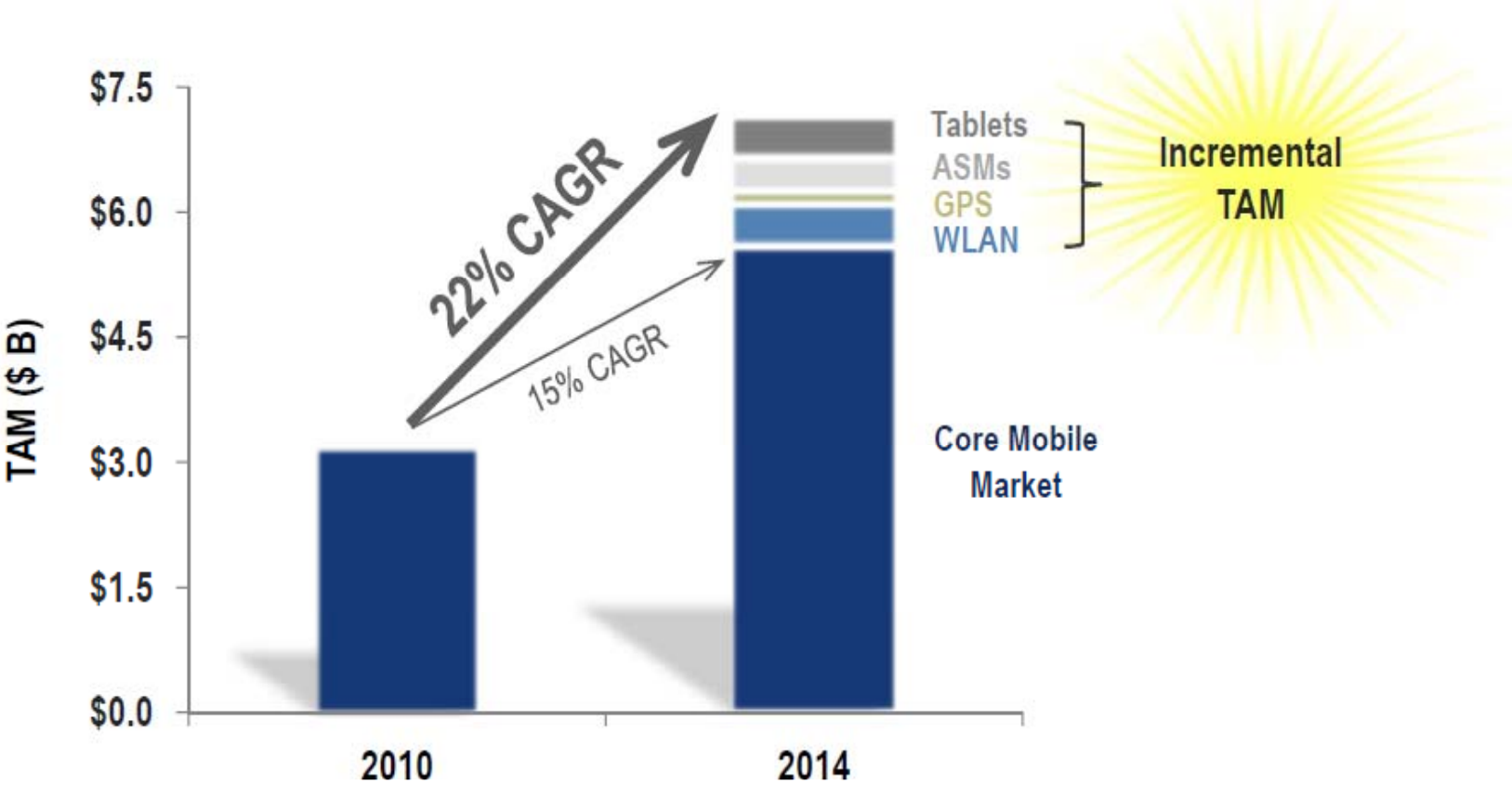


Best-in-class SiGe, RF CMOS, RF models and Design Enablement

Front-End-Module Business Growth

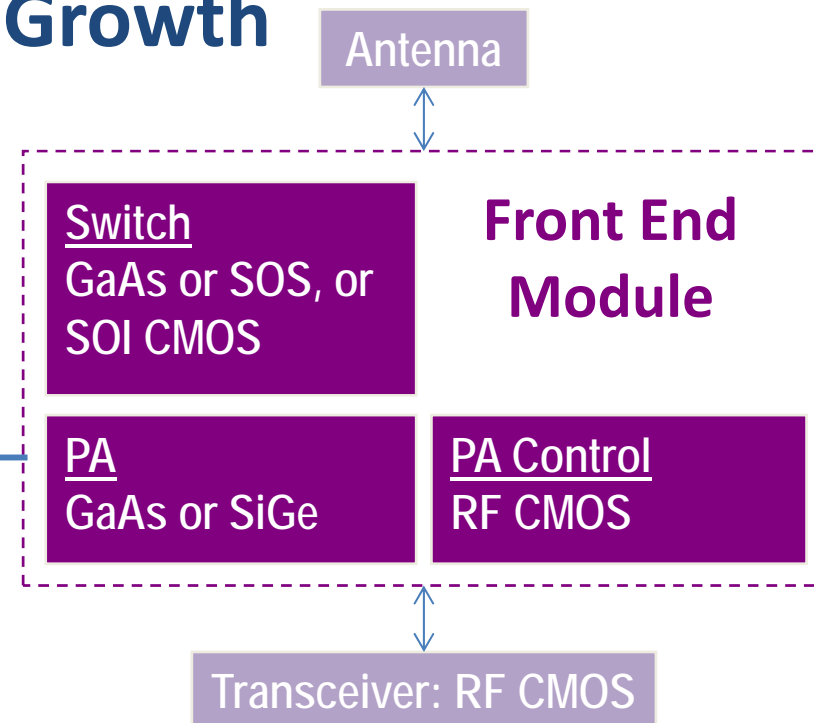
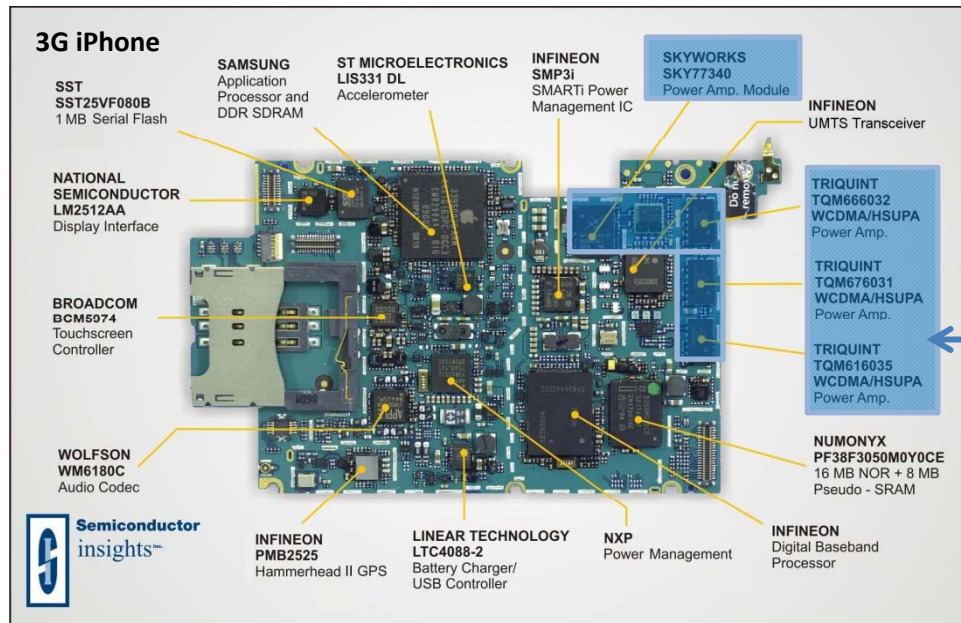


Front-End Module



Multiple Drivers of Strong Long Term TAM Growth

Front-End-Module Business Growth



Skyworks (FEM market leader)

- TowerJazz chosen as “Foundry Supplier of the Year” 2008, 2009, 2010, and 2011 Innovation Award

TowerJazz Receives Innovation Award from Skyworks Solutions

Recognized for innovations in technology – February 27, 2012

- Strong engagements with the top 4 FEM providers

Specialty Focus

RF / HPA

CIS

Power
Management

TOPS
IDM Transfer

TOPS
External Activity

MEMS

CIS Key Markets

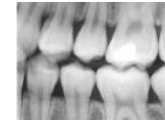
Professional Photography

Highest requirements for image quality
Large sensors, very high resolution,
demanding frame rate
Very low defect count
Very high sensitivity, dynamic
range & low noise



Medical & X-Ray

Market Leader for dental x-ray CMOS
Supplying all Tier-1 vendors
Smallest endoscopy solution



Industrial & High Speed

High speed and high accuracy
Global shutter technology
“Intelligent” pixels
2D and line sensors



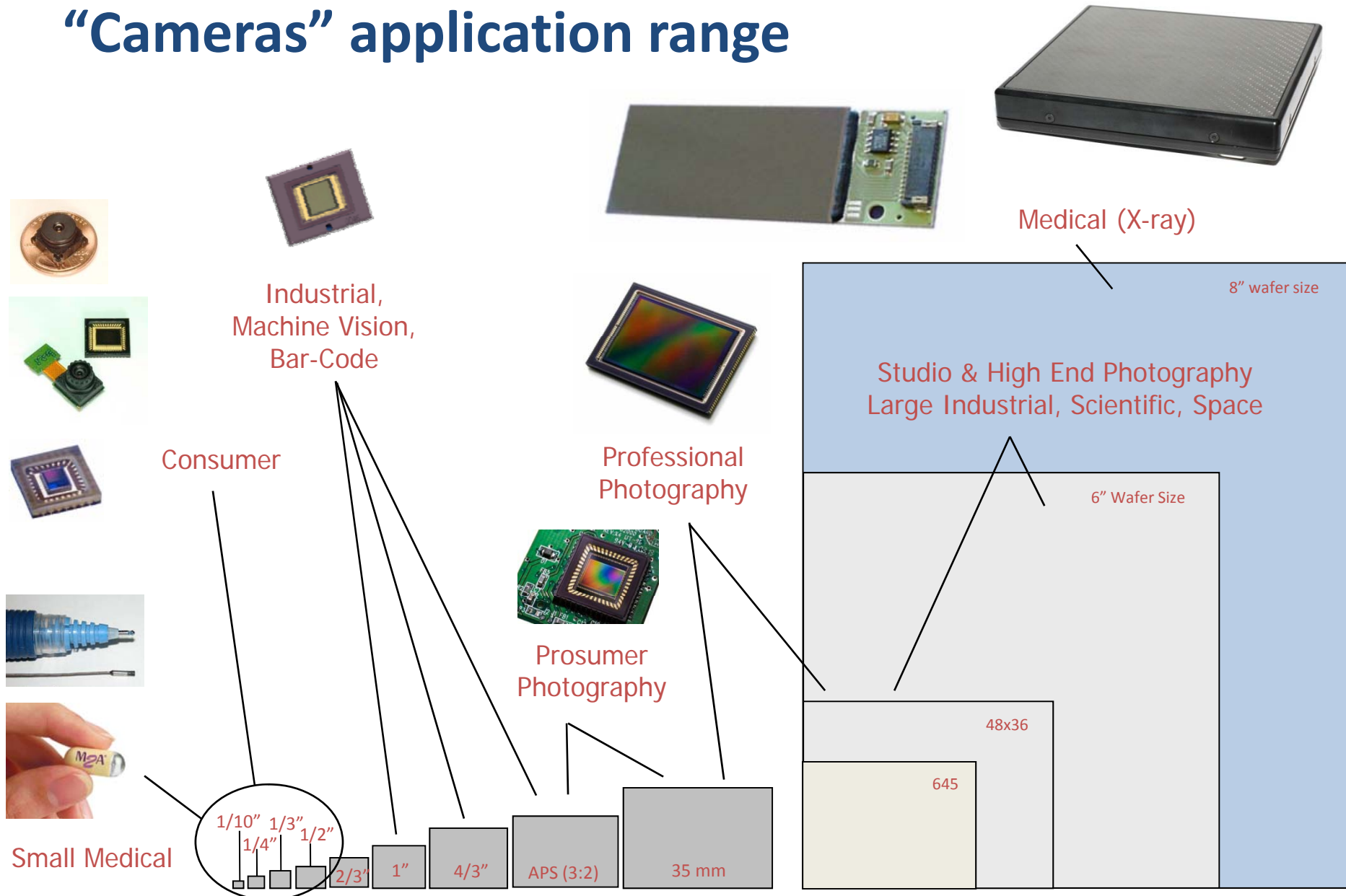
Automotive, Security & 3D

High sensitivity and high dynamic range
High NIR sensitivity
High frame rate
Linear HDR for color imagers



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

“Cameras” application range



Medical X-Ray CMOS Sensors

- Large flat panel detectors
- Replacing older technologies
 - Amorphous silicon plates
 - Image intensifier tubes
- 0.18um process / 8" wafers
- Volume production
- Excellent yields



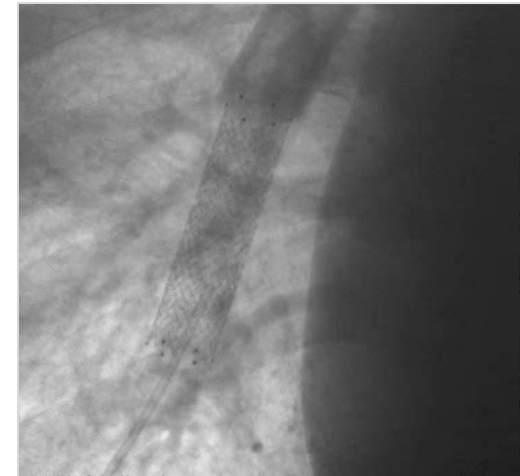
Radiography



Fluoroscopy (hand)



Fluoroscopy (chest)



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Power Markets and Technology Offering

Audio, DC/DC, LED Backlight

TS35PM (5V CMOS)

- Scalable 7 to 60V Vds with low Rsp
- Embedded no mask-adder NVM
- Thick Power Metal (Cu /Al)
- 60V Vgs, 80V Vds options



PMIC, Digital Controlled Power

TS18PM (1.8/5V CMOS)

- 1.8V CMOS for 125 K gates/mm²
- Same HV modules as TS35PM
- Multi-Fab sourcing



High Power/Motor Drive, POE

Isolated TS35/18PM

- Fully isolated devices with buried layers
- Up to 60V operation with low Rsp
- Noise isolation for >2 Amp applications
- Allows positive/negative bias



AC to DC up to 700V

TS100PM

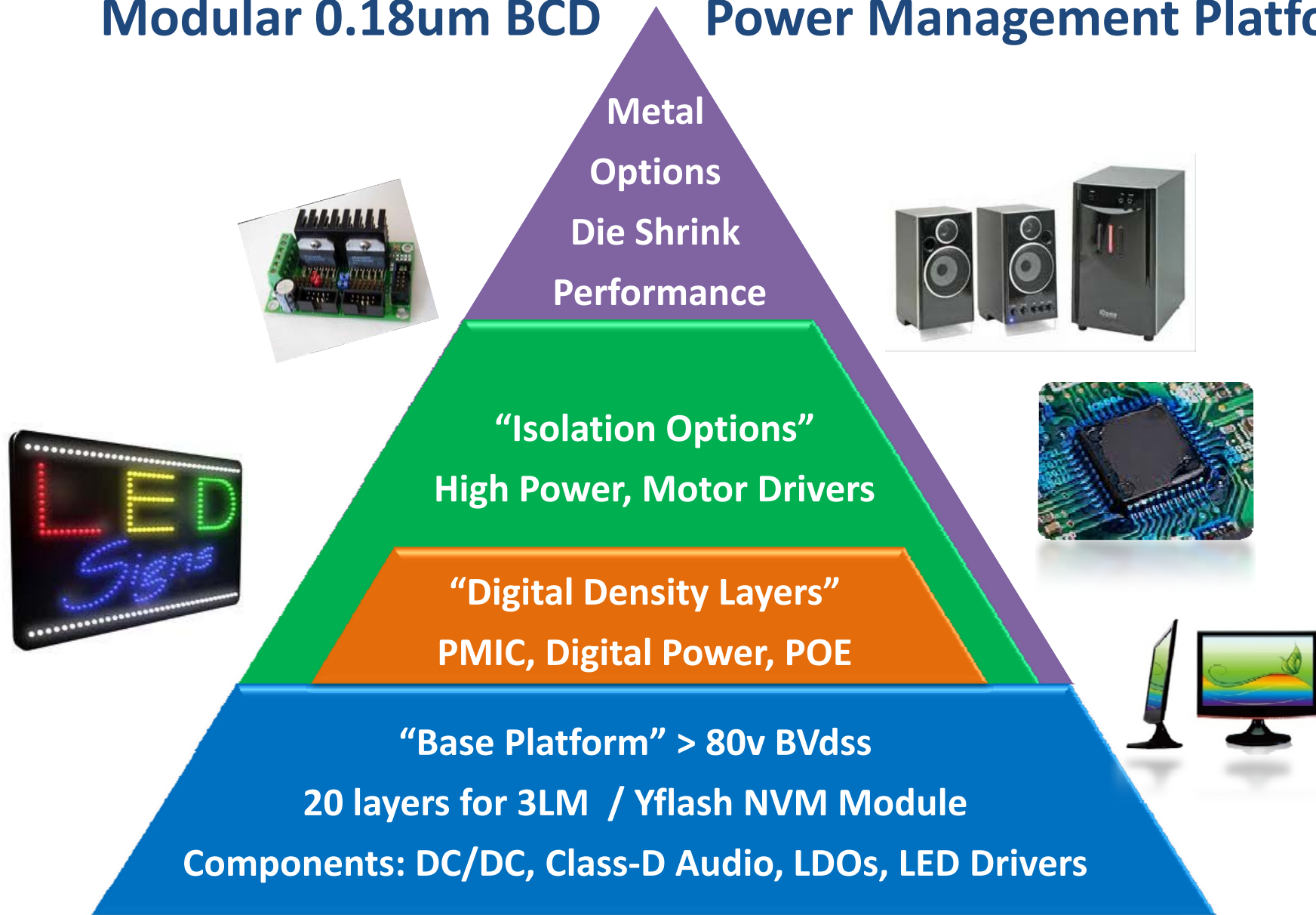
- AC to DC conversion
- Industrial LED lighting
- High side driver available



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

Modular 0.18um BCD

Power Management Platform





SAMSUNG
ELECTRO-MECHANICS



Samsung Selects TowerJazz's "unrivaled" 700V Power Technology Platform for its Next Generation High Voltage Products

Power Management IC Market Estimated at \$14.6B in 2013 according to iSuppli

MIGDAL HAEMEK, Israel and SEOUL, Korea, September 5, 2011 – TowerJazz, the global specialty foundry leader, and Samsung Electro-Mechanics, today announced they have signed a Memorandum of Understanding (MOU) to develop and volume produce a variety of product families based on TowerJazz's 700V (TS100PM) power management process.

"We chose to work with TowerJazz on our next-generation of high voltage products because of their **superior 700V technology** which is **unrivaled by other foundries**. We were looking for a **true partner** who would be committed to our success and provide excellent support and the required manufacturing capacity," **said Samsung Vice President Dr. Jae Shin Lee**. "TowerJazz is well-known in Korea, especially in the power management market, and we are looking forward to our collaboration on many high volume products."



Samsung Electro-Mechanics Vice President Dr. Jae Shin Lee and TowerJazz Chief Executive Officer, Mr. Russell Ellwanger

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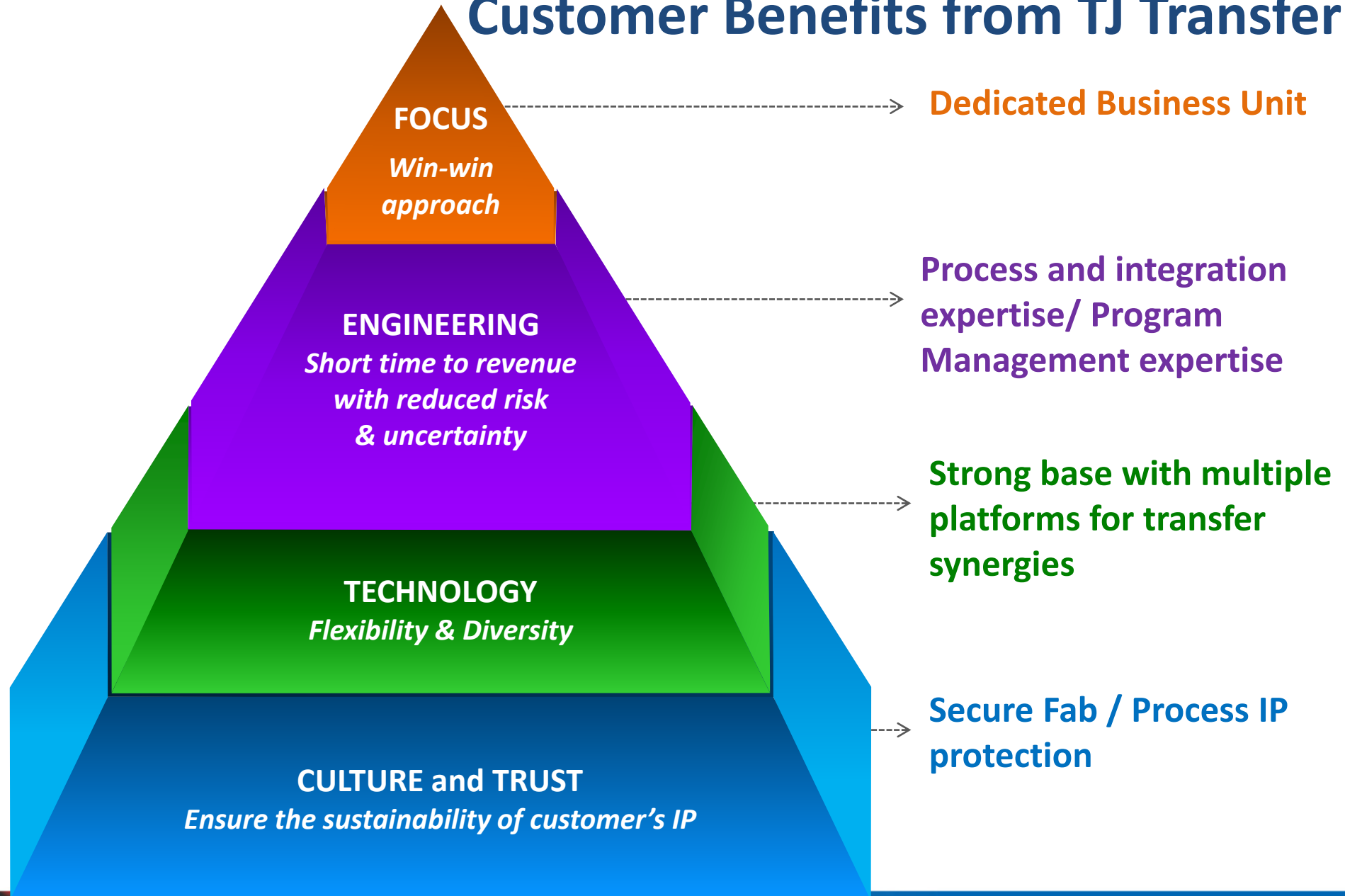
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Customer Benefits from TJ Transfer



TowerJazz Was Chosen by Vishay Intertechnology for High Volume Manufacturing Engagement Through 2018

The Agreement Includes:

- **Two Product Families to be Manufactured at TowerJazz's Japanese Factory;**
- **Additional New Product Families to be Manufactured at both TowerJazz Israeli Factories;**
- **Super Junction Families Utilizing a Large Jointly Built Epitaxial Growth Center in the MH Facility;**
- **Under the New Engagement, Vishay Will Commit to High Volume Production at Towerjazz's Fabs and TowerJazz Will Secure Capacity to Vishay-Siliconix**

MIGDAL HAEMEK, Israel – September 03, 2012 – TowerJazz, the global specialty foundry leader, announced today the expansion of its business relationship with Vishay-Siliconix with a five-year agreement under the terms of which TowerJazz will manufacture two Vishay Siliconix product families at TowerJazz's Japanese facility (Fab 4) as well as multiple Vishay Siliconix product families at TowerJazz's Fabs 1 and 2 in Migdal HaEmek, Israel.

The new collaboration in Japan will enable TowerJazz to have a steady baseline revenue with a long-term, strategic customer at the Japanese fab, in addition to multiple other IDM deals the company is currently engaged in.

TowerJazz Press Release, September 3, 2012

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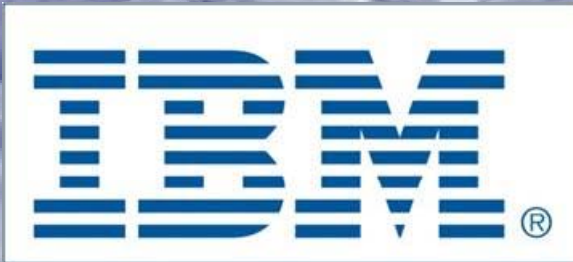
India Fab Project

- Advanced 0.18 Semi Lab
 - Transition a 150mm to a 200mm factory
 - Transfer 0.18um technology
 - Train and establish flow
- \$135M gross revenue



JAYPEE

GROUP



India Government Sponsored 300mm Factory

- Signed binding MOU with Jaypee Group, leading Indian infrastructure conglomerate, to build and operate a 300mm facility in India.
 - Roadmap to long term 300mm wafer size, 90nm analog technology
 - Enables companion chips in deep submicron technologies (90nm-20nm)
 - High \$\$ revenue stream
- Presented to empowered government committee as 3-way consortium with Jaypee, TowerJazz and IBM as digital platform technology provider.
- We believe our consortium is strong, but cannot predict outcome of government selection.

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Operational Alignment



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Center of Excellence*

TOPS CORE Team



Nishiwaki

*High Volume,
Max efficiency factory
(and to gain Japanese business)*



Newport Beach

*RF and HPA
Center of Excellence*



MEMS

Center of Excellence

Customer Vetting

TowerJazz

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 - \$611M Revenue in 2011 with 4 Fabs on 3 continents
 - Fastest growth foundry over the past 7 years
- **Growth fueled by innovation**

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* Source: IC Insights, EE Times

Thank You

www.TowerJazz.com