

The Global Specialty Foundry Leader

Company Overview

June 2015

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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.

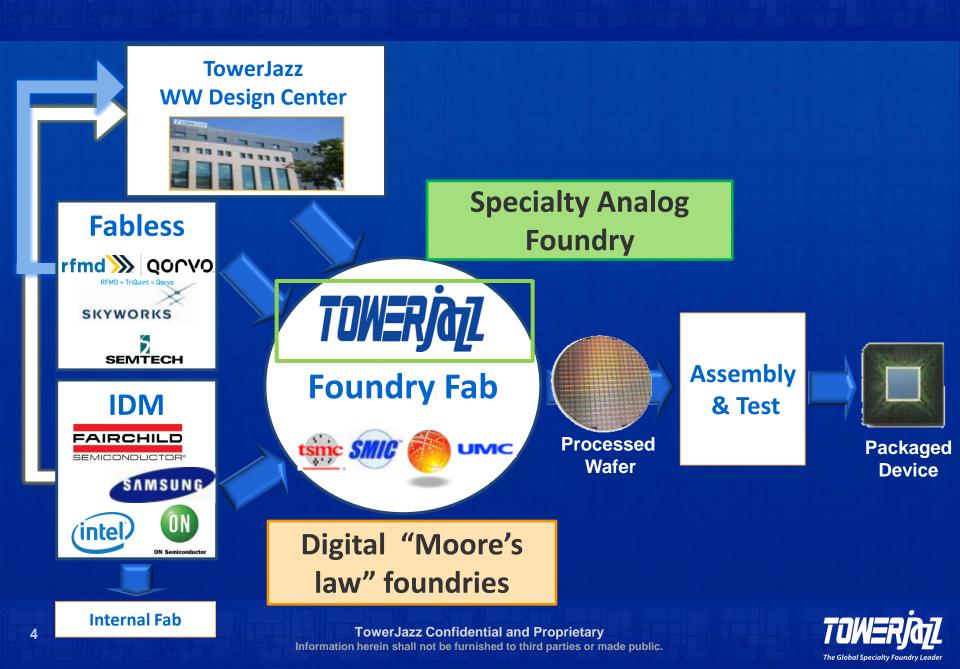
A more complete discussion of risks and uncertainties that may affect the accuracy of forward-looking statements included in this presentation or which may otherwise affect Tower or Jazz's business is included under the heading "Risk Factors" in Tower's most recent filings on Forms 20-F, F-4, F-3 and 6-K, as were filed with the SEC and the Israel Securities Authority and Jazz's most recent filings on Forms 10-K and 10-Q, as were filed with the SEC. Actual results may differ materially from those projected or implied by such forward-looking statements. Tower and Jazz do not intend to update, and expressly disclaim any obligation to update, the information contained in this release.



TOVERAL

WHAT DO WE DO

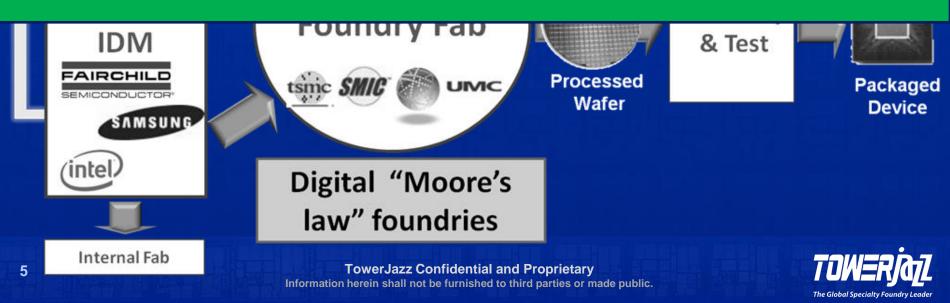
What Do We Do? Pure Play Foundry



What Do We Do? Pure Play Foundry



We do not compete with our customers



TOVERAL

GLOBAL FOOTPRINT

Global Footprint



> 2 million wafers per year (8" equivalent) and growing

All major flows are multi region qualified



Operations Overview

TOWERja_zi

TPSCo

Midgal HaEmek, Israel 6", 150mm, 16K w/m (8" equiv.)

CMOS, CIS, Power, Discrete 1µm to 0.35µm Planarized BEOL, W and Oxide CMP



Midgal HaEmek, Israel

8", 200mm, 43K w/m CMOS, CIS, Power, Discrete, MEMS 0.18μm to 0.13μm Cu and Al BEOL EPI, 193nm Scanner



Newport Beach, USA

8", 200mm, 24K w/m CMOS, CIS, MEMS, RF Analog 0.5 μm to 0.13μm AI BEOL SiGe, EPI



Arai, Japan

8", 200mm, 14K w/m Analog, CIS 0.13μm to 0.11μm Thick Cu RDL



Tonami, Japan

8", 200mm, 51K w/m Power Discrete, NVM, CCD 0.35µm to 0.15µm



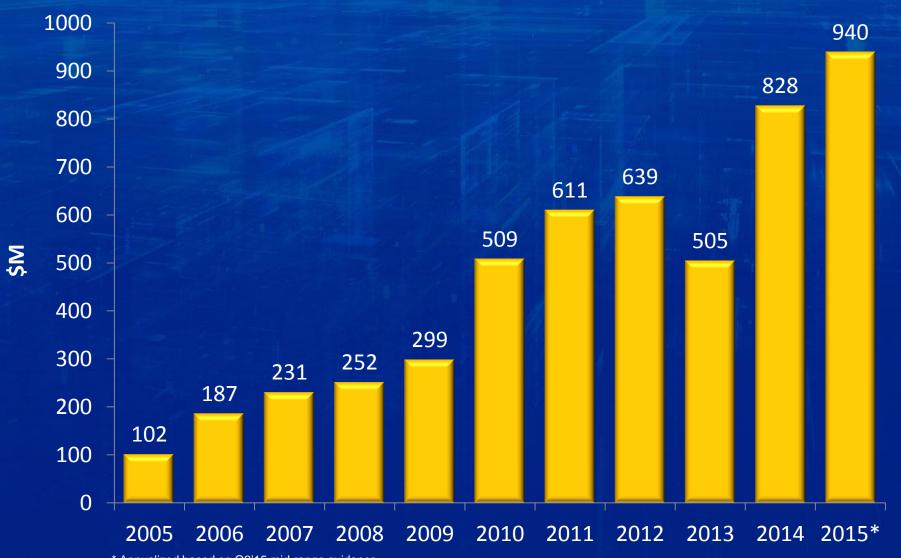
Uozu, Japan

12", 300mm, 20K w/m (8" equiv.) CMOS, CIS, RF 65nm to 45nm



FINANCIALS

Annual Revenues — 2005–2015*



^{*} Annualized based on Q2'15 mid-range guidance

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Competitive landscape – McClean Report (04.2015)

The fastest growing foundry in the world 2014/13

Leading Pure-Play Foundry Companies

2014 Rank	2013 Rank	Company (Headquarters)	2012 Sales (\$M)	12/11 % Change	2012 Share of Total	2013 Sales (\$M)	13/12 % Change	2013 Share of Total	2014 Sales (\$M)	14/13 % Change	2014 Share of Total
1	1	TSMC (Taiwan)	16,951	19%	55%	19,935	18%	56%	24,976	25%	59%
2	2	GlobalFoundries (U.S.)	4,013	26%	13%	4,122	3%	12%	4,355	6%	10%
3	3	UMC Group (Taiwan)	3,730	-1%	12%	3,959	6%	11%	4,350	10%	10%
4	4	SMIC (China)1	1,542	17%	5%	1,962	27%	5%	1,970	0%	5%
5	5	Powerchip (Taiwan)2	0	N/A	0%	1,182	N/A	3%	1,282	8%	3%
6	8	TowerJazz (Israel)	639	5%	2%	505	-21%	1%	828	64%	2%
7	6	Vanguard (Taiwan)	582	12%	2%	713	23%	2%	790	11%	2%
8	7	Hua Hong Semi (China)3	572	N/A	2%	585	2%	2%	685	17%	2%
9	9	Dongbu HiTek (S. Korea)4	526	5%	2%	452	-14%	1%	541	20%	1%
10	12	X-Fab (Europe)	259	-7%	<1%	290	12%	<1%	330	14%	<1%



2015 Forward Looking

In FY 2014 release we stated an expectation of:

- Quarter over quarter growth throughout 2015
- Annual revenue run rate of \$1 billion in Q4'15
- Non-GAAP gross margin target increase to 40% in Q4'15 (as compared to 27% post TPSCo creation)
- 2017 non-GAAP gross margin target hitting 50%



Financial Highlights | Q1 2015

Revenues

Strong revenue growth and margins

\$226 million

up 71% year over year

- Revenues of \$226 million, up 71% year over year, including 33% organic growth (non-Micron and non-Panasonic);
- Organic top 10 customers' revenue growth of approximately 31% year-over-year;
- Record design wins for the first quarter and masks entering the factories, with masks' growth of 37% year-over-year and 45% including TPSCo 3rd party business.

Q2 2015 Revenue Guidance

- Mid range guidance of \$235 million
 - Targeting quarter over quarter growth throughout the year



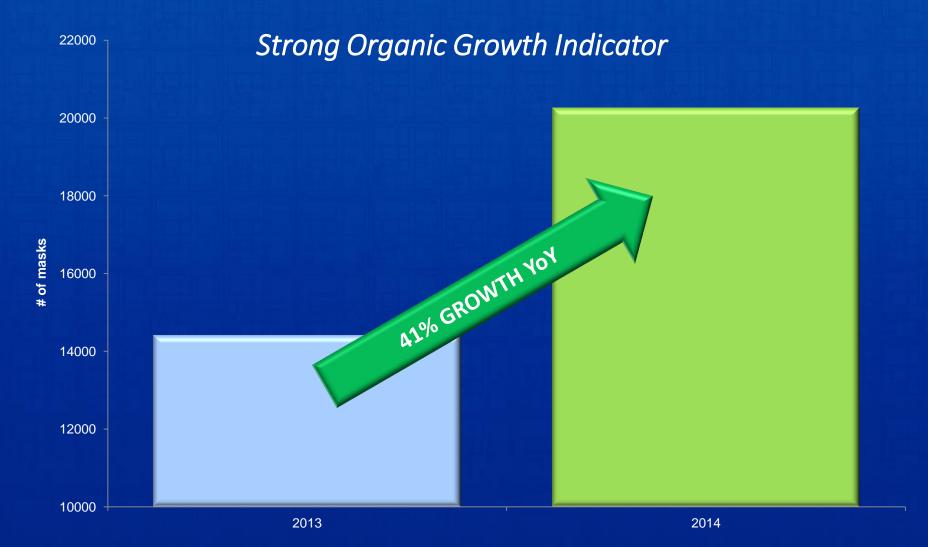
Financial Highlights | Q1 2015 (cont.)

- **EBITDA** of \$51 million, 86% higher than the first quarter of 2014
- Recorded \$81 million non-GAPP gross profit, reflecting 36% margins and an 81% year over year improvement . Targeting 40% by Q4'15.
- Non-GAAP net income of \$50 million, 2.5x times vs. Q1'14
- Strong balance sheet financial ratios and record shareholders' equity of \$292 million, with 49% increase quarter over quarter
- Net debt reduction to \$162 million vs. \$406M as of March 31, 2014 with present net debt to EBITDA ratio of 0.8X
- Cash on hand as of March 31, 2015 of \$134M



Customer Masks Entering Our Foundries

(new products entering the fabs)



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The Global Specialty Foundry

CORE TOWERJAZZ ANALOG SPECIALTY OFFERINGS

Specialty Technology Leader



RF and HPA

Power Management

CIS

Mixed-Signal CMOS Aerospace & Defense

TOPS



RF HPA Growth Driver: Our Solutions



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



Power Markets: Our Solutions



Flat Panel TV / Display / Audio

Driving the need for power components

- 0.35µm modular BCD
- Low Rdson for small die
- Design Enablement fast time-to-market



Automotive & Communication

Driving the need for more integrated PMICs

- Feature-rich 0.18µm 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 & Infrastructure

Growing the motor-driver market

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



Specialty CIS Growth Markets: Our Solutions



Professional Photography

- Best in class pixels
- Low dark current
- Accurate stitching
- Excellent flexible pixels
- Stitching for 1 DPW
- Very high yields
- Special fast pixels
- Unique features: Bathtub
- Network of leading customers
- Unique near IR sensitive pixels
- High QE
- Very fast pixels
- High DR









X-Ray

Automotive & 3D

Digital, Mixed-Signal and RFCMOS

reliability

CMOS Technology Digital, MS/CMOS and RFCMOS	 0.18um, 0.16/0.152, 0.13, 0.11, 65nm, 45nm nodes, GP, LP processes, multi-fab Timing controllers, RF transceivers, WiFi/WiMax and 110Ghz automotive radar Best in class EDA, large IP portfolio
Internet of Things Low-Power solutions	 Large device list, dedicated Low-leakage devices for max performance of high-precision analog/RF Large IP List, dedicated IPs for low dynamic power, low stdby currents
Display Driver IC HVCMOS Solutions for LCDs and Automotive	 Core of 1.8V or 3.3V, HV modules of 9~20V Scaled cost effective process Isolation modules, HV Analog modules Customization and flexibility
Automotive Best standards of Quality and	 Technologies of 0.6um ~ 45nm, Multi-fabs >10years, hundreds of products in the field

State-of-the-art Zero defect methodology





We are capable.

- Best in class technology transfer teams
- Focused, experienced professionals
- Know-how in diverse technologies

We are flexible.

Adapting business models and production flows to customer requirements

We secure your IP.

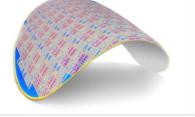
- TowerJazz is ISO27001 certified
- We foster a culture of trust and respect for customer IP

We use established methodologies.

Transfers typically achieve higher yields than the 'parent' fab.

- Copy smart to use existing toolset
- Use internal library of recipes
- Copy exact where necessary











TowerJazz Panasonic SEMICONDUCTOR Co., Ltd. Leading the New Analog Semiconductor Revolution in Japan

A Revolutionary Foundry Concept







- TowerJazz to hold 51% of the TowerJazz Panasonic Semiconductor Company (TPSCo)
- Provides TowerJazz with incremental annual revenues of approximately \$400 million, can vary quarterly from approximately \$90-105 million (Forex @100Yen/\$)
- Substantial capacity for additional foundry business growth -- added available capacity of about 1 million wafers per year (8 inch equivalent) in three manufacturing facilities in Japan
- Panasonic committed to acquire its products from TPSCo for a period of at least five years of volume production
- Complimentary capabilities creating excellent synergy: 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.





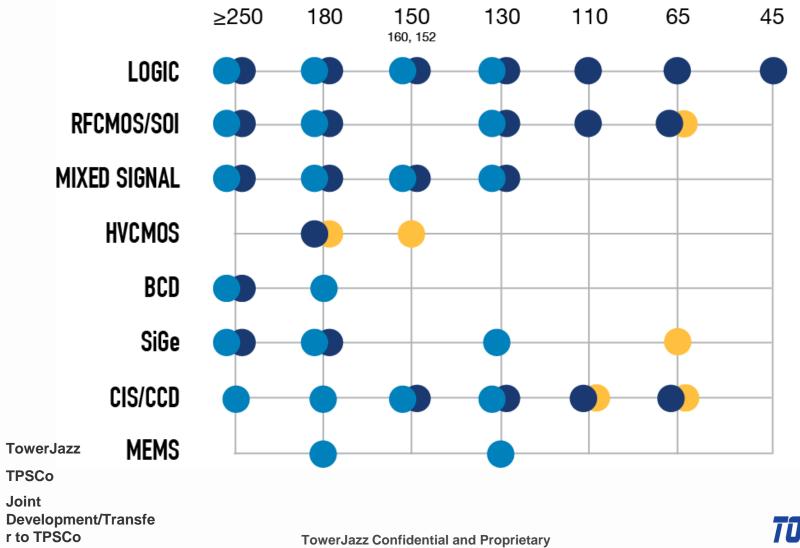
- Process technology focus includes: high dynamic range image sensors (CIS and CCD), integrated power devices (BCD, SOI, and LDMOS) and high frequency silicon RF CMOS
- Focus areas: automotive & high reliability processes, high-end image sensors and mobile communications for the Internet of Things (IoT)
- Enhancing 65nm RFCMOS process to be suitable to run 77GHz mm wave technology for collision avoidance systems and collaborating with TowerJazz on a 65nm RF SOI offering
- In less than a year, TPSCo has engaged in 21 third-party foundry projects with 13 different customers; active engagements with additional 12 customers on 15 projects
- Mass production started at Tonami, Japan fab for Fairchild Semiconductor; a process transfer of multiple high performance discrete devices for industrial and consumer markets



TowerJazz Panasonic Combined Portfolio

Node (nm)

The Global Specialty Foundry Leade



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TowerJazz Diversified Customer Base

AIROHA	SEMTECH	NASA	GENORAY
CROCUS Technology	CAVENDISH KINETICS		\$FLIR
ENTROPIC	DIGITAL MEDIA BRIDGE	e2v	ON Semiconductor®
FAIRCHILD	intel	CMOSIS image sensors	SAMSUNG
I⇔R	SKYWORKS'	Panasonic	
млсом		💐 Himax	VISHAY.



Recent Customer Announcements



 TowerJazz and FLIR Systems Partner to Deliver Next Generation Commercial Infrared Technology



 TowerJazz Begins Mass Production of IR Sensor used by Intel in one of its new 3D Sensing Solutions



 TowerJazz Announces Successful Transfer of Fairchild Semiconductor's Discrete Devices to TowerJazz Panasonic Semiconductor's Japan Fab



TOVERAL

BUSINESS AND MARKET OPPORTUNITIES

Market **MEGATRENDS**

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



through diversified leading edge RF-AMS technologies.



Internet of Things (IoT)

IoT related designs require high reliability, low power and low cost foundry technologies



SOI Technology Low power consuming CMOS transistors and IPs

RF front-end modules (SOI antenna switches) Ultra-low power, low cost nonvolatile memories (NVM)

Patented Y-Flash

and C-Flash

memories

IoT demands diverse silicon chips with integrated sensors, memories, processors, energy harvesting blocks, communication means, interfaces and security systems.

This will extend the markets of mobile applications, power management and data processing, opening new business opportunities for TowerJazz.



The Global Specialty Foundry

Embedded MRAM

modules

(joint project with

Crocus Technologies)

Working to introduce

ReRAM ultra-low

power flavors

Summary

Well Positioned in Growth Markets

- RF SOI and SiGe for wireless smartphone and data networks
- CMOS Image Sensor and 3D Gesturing
- Power management and conversion
- Strong available capacity and interesting new technology opportunities

Strong Financial Performance

- Q1 revenues of \$226 million, up 33% organically and 71% overall year over year
- Q1 EBITDA of \$51 million vs. \$27.5 million in Q1'2014
- Net debt reduced from ~\$406M in Q1'2014 to ~\$162M presently with net debt to EBITDA ratio of 0.8X
- Expecting continuous quarter over quarter growth during 2015



TOTELON www.towerjazz.com