

TOWERjazz

The Global Specialty Foundry Leader



*Strategy/ Performance:
Stable Growth*

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 regarding expected (i) customer demand, (ii) utilization and cross utilization of our Fabs, (iii) growth in our end markets, (iv) market and technology trends, and (v) growth in revenues, cash flow, margins and net profits are all forward-looking statements. Actual results may differ materially from those projected or implied by such forward-looking statements due to various risks and uncertainties risks applicable to TowerJazz’s business as described in the reports filed by Tower Semiconductor Ltd. (“Tower”) the Securities and Exchange Commission (the “SEC”) and the Israel Securities Authority (“ISA”), including the risks identified under the heading "Risk Factors" in Tower’s most recent filing on Forms 20-F as filed with the SEC and in Section 3.7 of Tower’s Shelf Prospectus filed as an Other Report or Announcement with the ISA on May 10, 2016. These filings identify and address important factors that could cause TowerJazz's future 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, what impact they will have on the results of operations or financial condition of TowerJazz.

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The Global Specialty Analog Foundry



WE NEVER COMPETE WITH OUR CUSTOMERS

Specialty Foundry Advantages

	Digital Moore's Law Foundries	<i>Specialty Analog Foundries</i>
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-65nm – SPECIALTY
	High speed data crunching and storage	Real world interfacing to digital world

Foundry Landscape

(\$M)	2005		2010		2015		Accumulated Growth
A	TSMC	8,217	TSMC	13,307	TSMC	26,439	222%
B	UMC	3,259	UMC	3,965	GlobalFoundries	4,990	341%
C	SMIC	1,171	GlobalFoundries	3,510	UMC	4,464	37%
D	PowerChip	1,587	PowerChip	2,424	SMIC	2,222	90%
E	Chartered	1,132	SMIC	1,555	PowerChip	1,268	-20%
1	Vanguard	353	TowerJazz	509	TowerJazz	961	842%
2	Dongbu	347	Vanguard	505	Vanguard	736	108%
3	HHNEC	313	Dongbu	495	Hua Hong Semi	650	108%
4	SSMC	280	SSMC	330	Dongbu HiTek	585	69%
5	He Jian	250	X-Fab	320	SSMC	460	64%
11	Tower	102					

Digital Deep Sub Micron

Specialty Analog

The fastest growing foundry in the world

Source: IC Insights, EE Times, Company Reports

10 Years Turnaround

Financials	2005	Present Run Rate
Revenues \$M	100	1,200
Net Debt \$M	550	65

Operations	2005	Present Run Rate
# of Fabs	2	7
Locations	1	3 continents/ 6 locations
Capacity KWPY	290	2,350
Employees	900	4,500
Customers	~30	>300

TowerJazz & TPSCo Worldwide Manufacturing Facilities

Over 2.3 million wafers per year!



Midgal HaEmek, Israel

- 6", 150mm
- CMOS, CIS, Power, Discrete
- 1 μ m to 0.35 μ m



Midgal HaEmek, Israel

- 8", 200mm
- CMOS, CIS, Power, Discrete, MEMS
- 0.18 μ m to 0.13 μ m Cu



Newport Beach, USA

- 8", 200mm
- CMOS, CIS, MEMS, RF Analog
- 0.5 μ m to 0.13 μ m



San Antonio, USA

- 8" (200mm)
- Power, RF Analog
- 0.18 μ m
- AI BEOL



Arai, Japan

- 8", 200mm
- Analog, CIS
- 0.13 μ m to 0.11 μ m
- Thick Cu RDL



Tonami, Japan

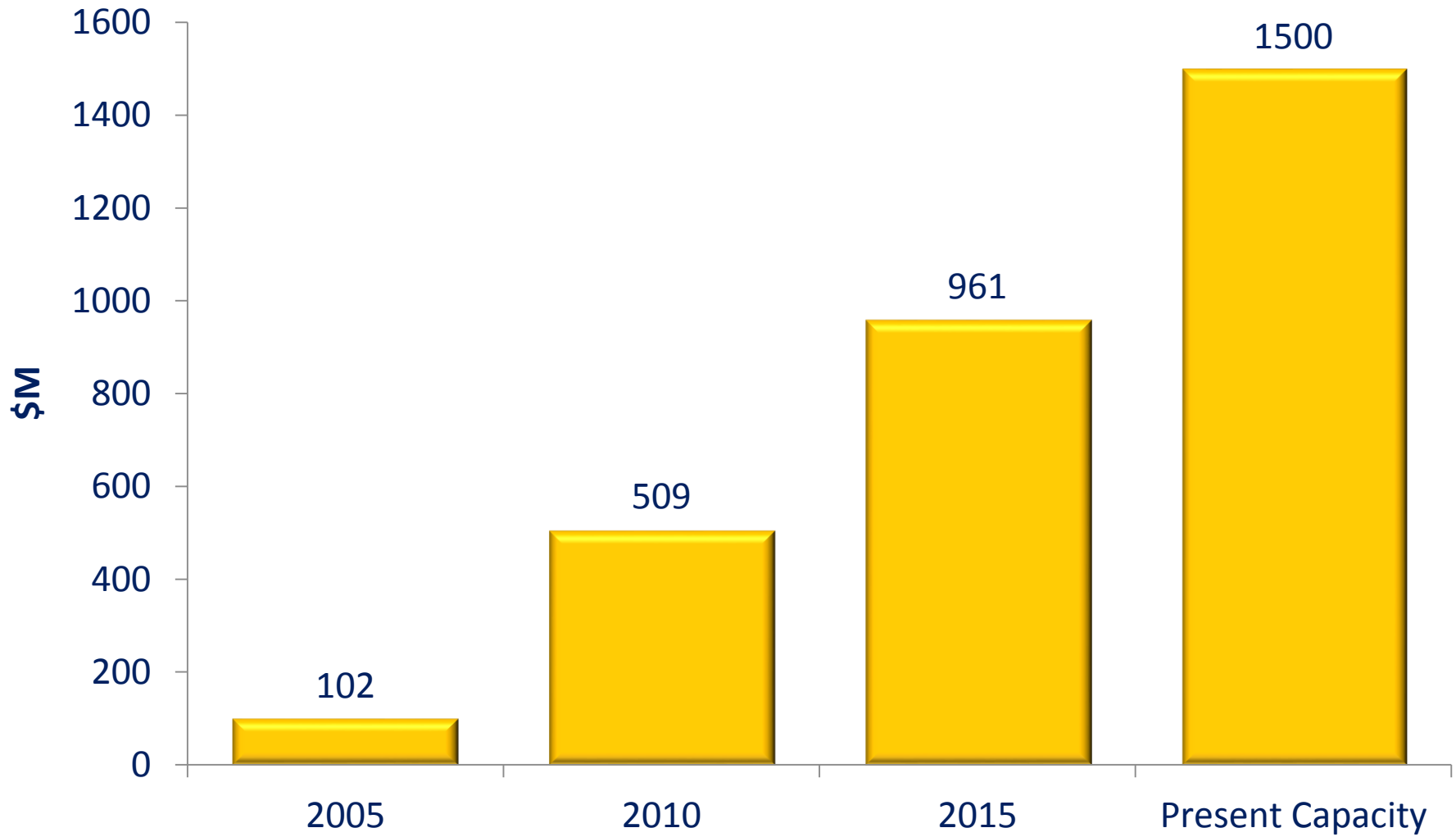
- 8", 200mm
- Power Discrete, NVM, CCD
- 0.35 μ m to 0.15 μ m



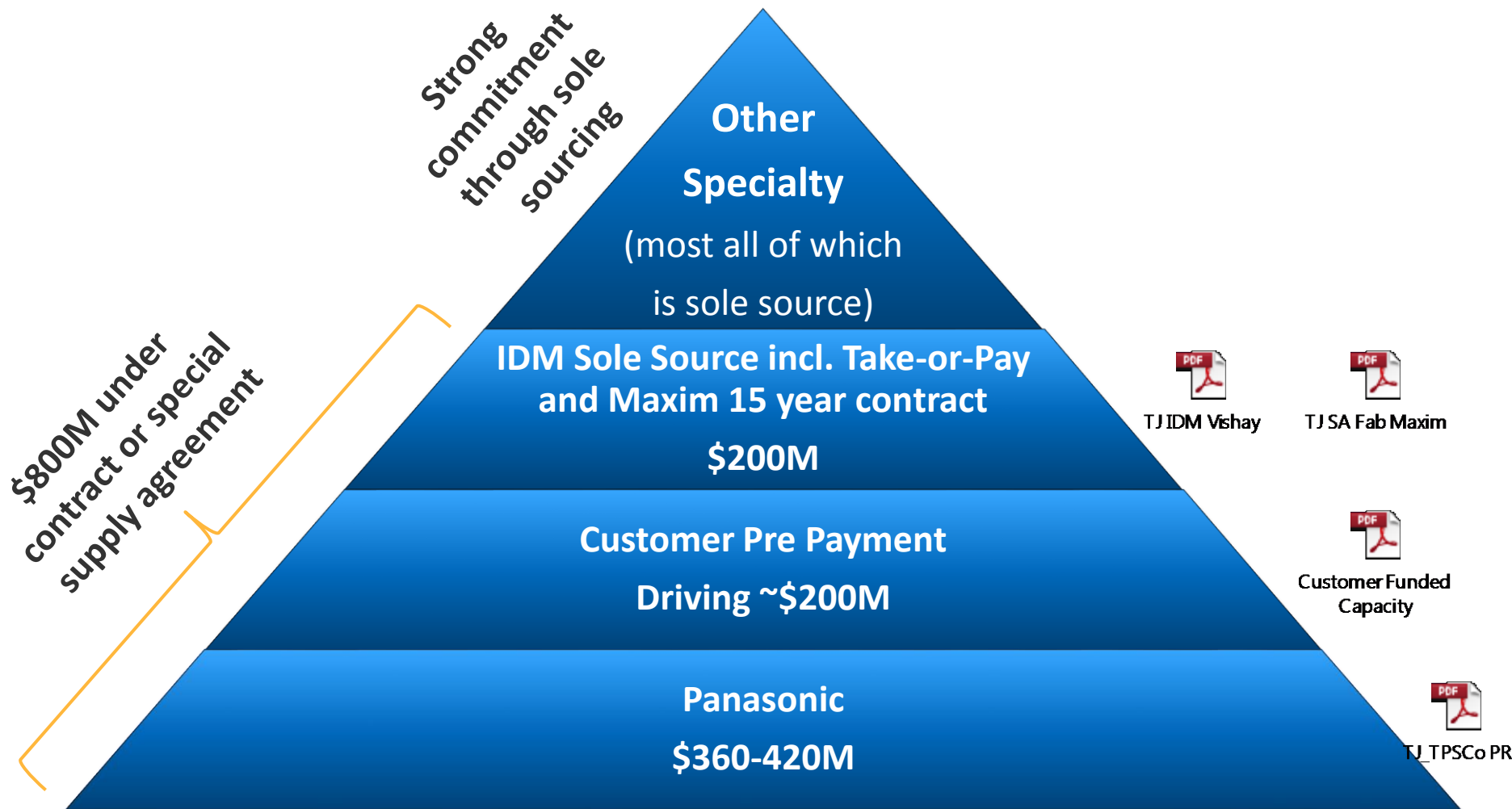
Uozu, Japan

- 12", 300mm
- CMOS, CIS, RF
- 65nm to 45nm

Annual Revenues



How we have built revenue stability



First Quarter 2016 Financial Highlights

Q1 Revenues

\$278 million

RECORD REVENUES

■ Strong and continuous revenue growth

- **Record** revenues of \$278 million (23% YoY growth, 9% QoQ)
- Strong Q2 2016 mid range revenue guidance of \$300 million (27% YoY growth; 8% QoQ)

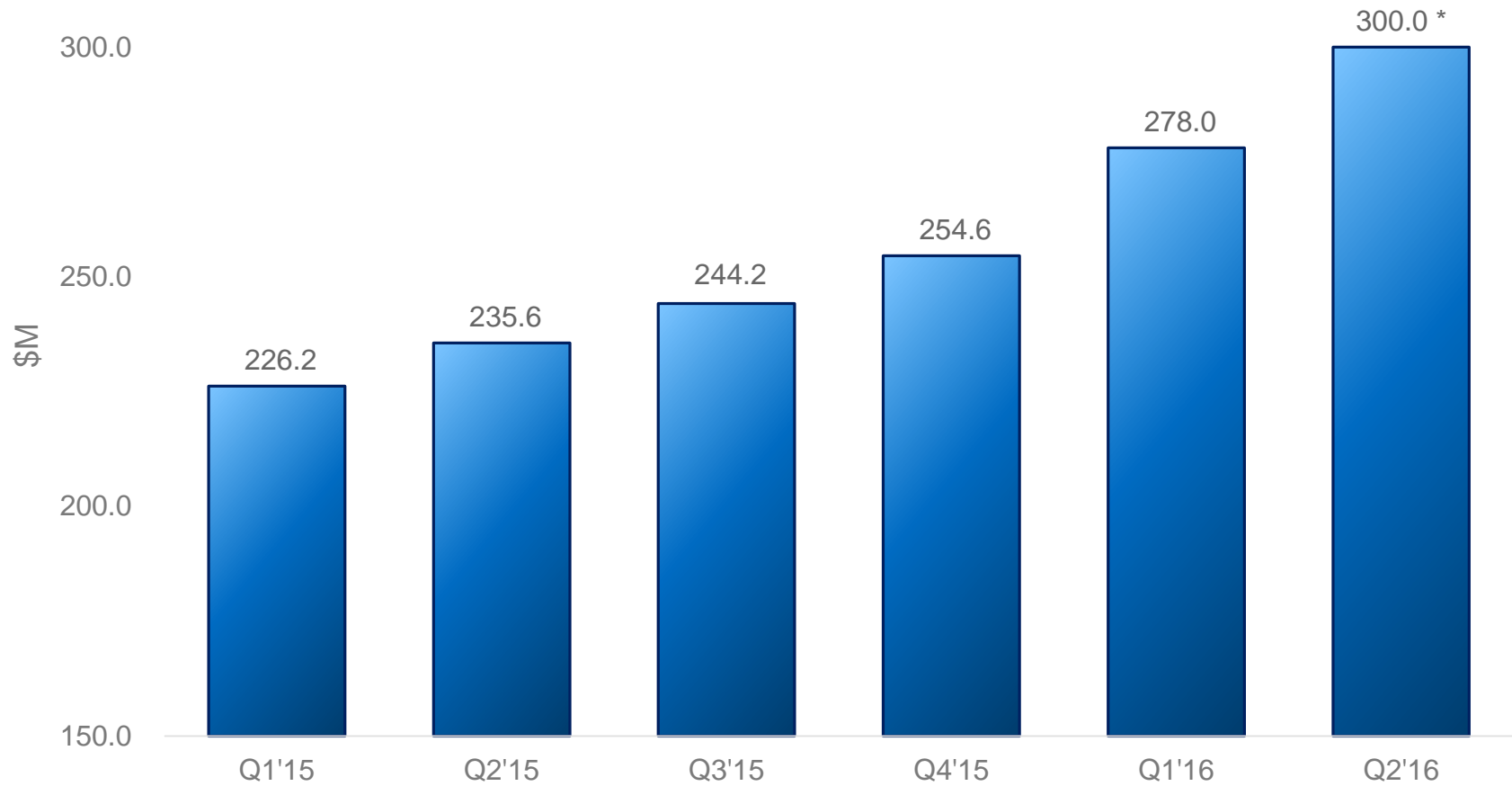
■ Substantial net profit and margins increase

- **Net profit** of \$66 million, including \$41 million San Antonio Fab acquisition net gain
- **Record EBITDA** of \$78 million (51% YoY increase)
- Gross profits of \$61 million (up from \$33 million in Q1'15)

■ Strong Balance Sheet and Financial Ratios

- Generated **Record** cash from operations of \$77 million, with free cash flow of \$20 million
- Received an A rating from S&P Maalot (Israel), an S&P Global Ratings fully owned company
- Reduced net debt to \$65 million, reflecting < 0.3X annual net debt to EBITDA ratio
- Increased cash and short-term deposits to \$245 million
- **Record** shareholders equity of \$504 million, as compared to \$386 million as of Dec'31, 2015

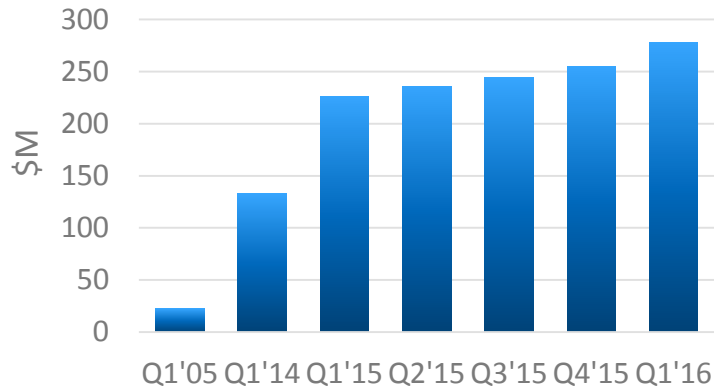
Continuous Quarterly Revenue Growth



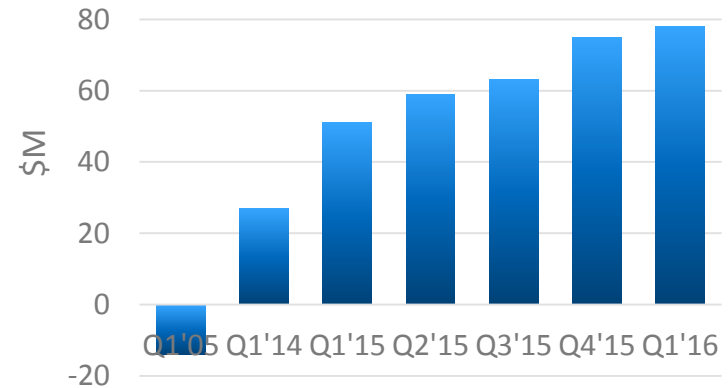
* mid-range guidance

Key Financial Metrics

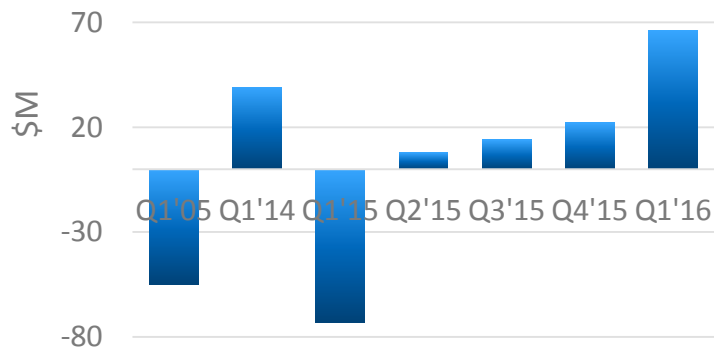
Revenue



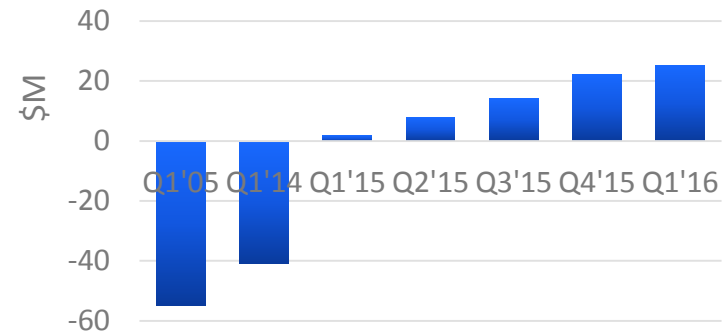
EBITDA



Net Profit

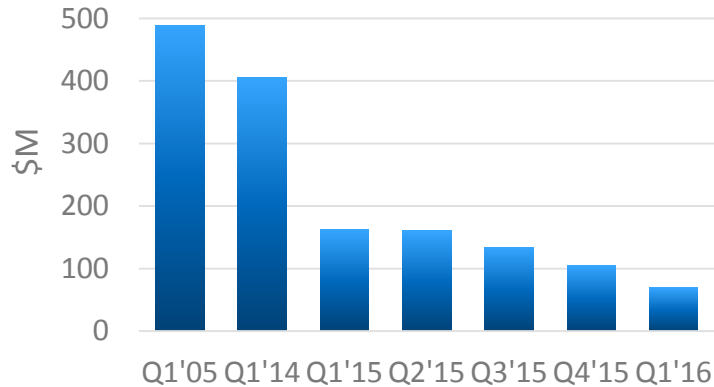


Net Profit (excluding one-time items)

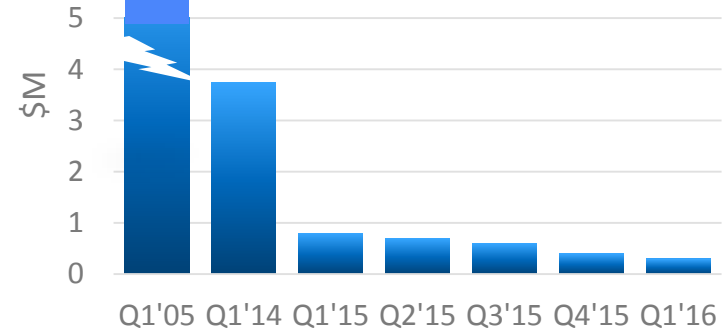


Key Financial Metrics

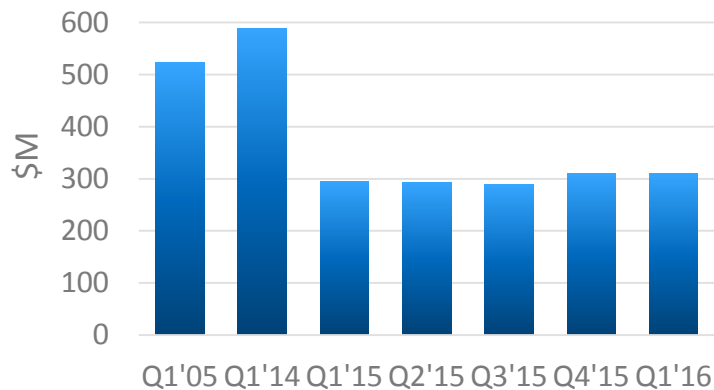
Net Debt



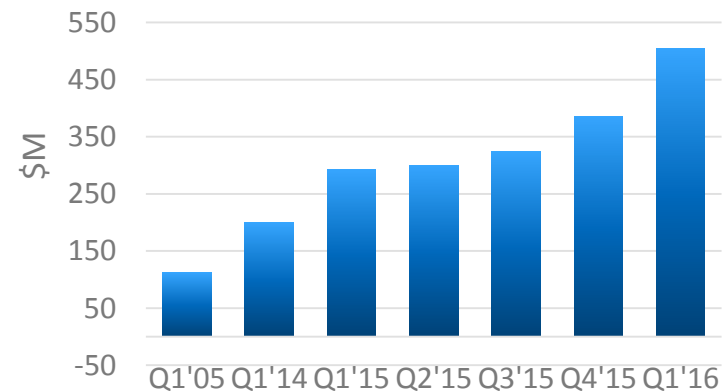
Net Debt/ annual EBITDA Ratio*



Gross Debt



Shareholders Equity



Financial Performance (\$ in millions)

	Q1'05	Q1'14	Q1'15	Q2'15	Q3'15	Q4'15	Q1'16
Revenue	23	133	226	236	244	255	278
EBITDA	(14)	27	51	59	63	75	78
Non-GAAP Net profit	(21)	19	50	54	58	70	75
Net Profit	(55)	39	(73)	8	14	22	66
Net Profit excl. one-time items *	(55)	(41)	2	8	14	22	25
Shareholders' Equity	113	200	292	300	325	386	504
Cash On Hand	35	183	134	143	155	206	245
Gross Debt	524	588	296	293	289	311	310
Net Debt	489	405	162	160	134	105	65
Net Debt/ Annual Ebitda Run-Rate **	infinite	3.75X	<0.8X	<0.7X	<0.6X	<0.4X	<0.3X

* One time items included (i) for Q1'15, \$85 million non-cash bonds F conversion effect and \$10 million tax non-cash income; (ii) for Q1'14, \$151 million TPSCo net acquisition gain and \$71 million Nishiwaki cessation relates costs, net; (iii) for Q1'16, \$41 million San Antonio Fab net acquisition gain

** "Annual EBITDA" for each quarter is each quarter's EBITDA times 4

Q1'16 Results – Balance Sheet (\$ in thousands)

	<u>March 31,</u> <u>2016</u>	<u>December 31,</u> <u>2015</u>	<u>March 31,</u> <u>2015</u>
A S S E T S			
CURRENT ASSETS			
Cash and short term deposits	\$ 244,577	\$ 205,575	\$ 134,216
Trade accounts receivable	122,918	110,065	105,491
Other receivables	9,363	7,376	7,408
Inventories	128,031	105,681	86,153
Other current assets	16,666	18,030	20,314
Total current assets	<u>521,555</u>	<u>446,727</u>	<u>353,582</u>
LONG-TERM INVESTMENTS	11,816	11,737	11,785
PROPERTY AND EQUIPMENT, NET	582,250	459,533	408,513
INTANGIBLE ASSETS, NET	35,601	34,468	41,225
GOODWILL	7,000	7,000	7,000
OTHER ASSETS, NET	5,688	6,759	6,391
TOTAL ASSETS	<u>\$ 1,163,910</u>	<u>\$ 966,224</u>	<u>\$ 828,496</u>
LIABILITIES AND SHAREHOLDERS' EQUITY			
CURRENT LIABILITIES			
Short term debt and current maturities of loans and debentures	\$ 49,150	\$ 33,259	\$ 26,721
Trade accounts payable	104,617	91,773	108,616
Deferred revenue and customers' advances	31,061	23,373	8,112
Other current liabilities	73,929	62,714	59,102
Total current liabilities	<u>258,757</u>	<u>211,119</u>	<u>202,551</u>
LONG-TERM DEBT	260,201	256,875	225,841
LONG-TERM CUSTOMERS' ADVANCES	28,444	21,102	6,181
EMPLOYEE RELATED LIABILITIES	14,387	14,189	15,973
DEFERRED TAX LIABILITY	95,638	69,744	75,854
OTHER LONG-TERM LIABILITIES	2,116	7,609	10,057
Total liabilities	<u>659,543</u>	<u>580,638</u>	<u>536,457</u>
TOTAL SHAREHOLDERS' EQUITY	504,367	385,586	292,039
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	<u>\$ 1,163,910</u>	<u>\$ 966,224</u>	<u>\$ 828,496</u>

Q1'16 Results – P&L Report (\$ in thousands)

	Three months ended		
	March 31, 2016	December 31, 2015	March 31, 2015
REVENUES	\$ 278,043	\$ 254,602	\$ 226,217
COST OF REVENUES	216,696	190,072	193,225
GROSS PROFIT	61,347	64,530	32,992
OPERATING COSTS AND EXPENSES			
Research and development	15,237	15,704	14,837
Marketing, general and administrative	15,923	15,478	16,161
Nishiwaki Fab restructuring costs and impairment, net	(627)	(991)	--
	30,533	30,191	30,998
OPERATING PROFIT (LOSS)	30,814	34,339	1,994
INTEREST EXPENSE, NET	(3,358)	(2,366)	(3,633)
OTHER NON CASH FINANCING EXPENSE, NET	(3,969)	(12,751)	(84,596)
GAIN FROM ACQUISITION, NET	41,140	--	--
OTHER INCOME (EXPENSE), NET	--	70	(9)
PROFIT (LOSS) BEFORE INCOME TAX	64,627	19,292	(86,244)
INCOME TAX BENEFIT (EXPENSE)	(79)	4,779	10,894
PROFIT (LOSS) BEFORE NON CONTROLLING INTEREST	64,548	24,071	(75,350)
NON CONTROLLING INTEREST	1,396	(1,992)	2,286
NET PROFIT (LOSS)	\$ 65,944	\$ 22,079	\$ (73,064)
BASIC EARNINGS (LOSS) PER ORDINARY SHARE	\$ 0.78	\$ 0.28	\$ (1.15)
DILUTED EARNINGS PER ORDINARY SHARE	\$ 0.69	\$ 0.25	

Q1'16 Results – Adjusted Net Profit and EBITDA (\$ in thousands)

	Three months ended		
	March 31, 2016	December 31, 2015	March 31, 2015
RECONCILIATION FROM GAAP NET PROFIT TO ADJUSTED NET PROFIT			
GAAP NET PROFIT (LOSS)	\$ 65,944	\$ 22,079	\$ (73,064)
Stock based compensation	2,156	1,975	1,310
Amortization of acquired intangible assets	2,241	2,374	2,082
Other non-cash financing expense, net associated with Bonds			
Series F accelerated conversion	--	6,998	73,121
Gain from acquisition, net	(41,140)	--	--
Other non-recurring items	2,378	(7,380)	(11,000)
ADJUSTED NET PROFIT	\$ 31,579	\$ 26,046	\$ (7,551)
ADJUSTED NET PROFIT PER SHARE			
Basic	\$ 0.37	\$ 0.33	\$ (0.12)
Diluted	\$ 0.34	\$ 0.29	\$ (0.03)
Fully diluted	\$ 0.32	\$ 0.28	\$ (0.03)
Number of shares and other securities used for the above calculation:			
Basic	84,521	79,607	63,581
Diluted	92,902	91,086	96,173
Fully diluted	105,794	102,420	101,945
EBITDA CALCULATION:			
GAAP OPERATING PROFIT	\$ 30,814	\$ 34,339	\$ 1,994
Depreciation of fixed assets	40,064	37,841	45,950
Stock based compensation	2,156	1,975	1,310
Amortization of acquired intangible assets	2,241	2,374	2,082
Other non-recurring items	2,378	(991)	--
EBITDA	\$ 77,653	\$ 75,538	\$ 51,336

Q1'16 Results – Cash Flow (Sources & Uses) Report (\$ in thousands)

	Three months ended		
	March 31, 2016	December 31, 2015	March 31, 2015
Cash and short term deposits at beginning of period	\$ 205,575	\$ 155,348	\$ 187,167
Cash from operations	77,442	53,180	40,290
Investments in property and equipment, net	(57,533)	(58,291)	(27,944)
Exercise of warrants and options, net	5,881	4,168	6,471
Loans received	17,000	70,592	--
Debt repayment - principal	(10,254)	(18,006)	(46,683)
Nishiwaki's employees retirement related payments	--	--	(24,907)
Effect of foreign exchange rate change	9,029	154	(178)
TPSCo dividend to Panasonic	(2,563)	(1,570)	--
Cash and short term deposits at end of period	\$ 244,577	\$ 205,575	\$ 134,216

Debt Summary

As of March 31, 2016 (as of December 31, 2014)

Bonds Debt Summary

Security Type	Linked to	Outstanding principal (\$M)	Key Terms
Bonds Series D	Israeli price index	6 (12)	Principal is due in December 2016; Straight bond, i.e not-convertible; Annual coupon of 8% payable once/year in December
Bonds Series F	\$	1 (197)	7.8% coupon payable twice / year; convertible at \$10 into ordinary shares; principal is due in 2 installments on Dec' 2015 and Dec' 2016
Jazz Bonds due 2015	\$	0 (45)	Annual coupon of 8% payable twice a year; Straight bond, i.e not-convertible; Principal was scheduled for June 2015; buy back done in January 2015
Jazz Bonds due 2018	\$	58	Annual coupon of 8% payable twice a year; convertible at \$10.07 into ordinary shares of Tower ; Principal is due on December 2018

Banks Debt Summary

Security Type	Linked to	Outstanding principal (\$M)	Key Terms
IL Bank Loans	\$	78 (101)	Leumi & Po'alim Banks 50%:50%; \$1M payable Q2'16, \$56M 2017, \$21M 2018; Annual interest rate of Libor+ 3.9%
Jazz Wells Fargo Bank Credit Line	\$	19	\$19M actual drawdown under up to \$70M credit line; Annual interest rate of Libor + 1.5%; principal is due Dec'2018
Japanese Loan to TPSCo (TowerJazz Panasonic entity)	JPY	148 (74)	Tibor + 1.65% - 2.00% term loans from JA Mitsui, Sumitomo Mitsui Trust bank, Showa & Bank Of Tokyo; payable from 2016 through 2020

• Total Debt as of March 31, 2016 is **\$310M** vs. **\$505M** as of December 31, 2014:

• Net debt is **\$65M**

• Reflecting **< 0.3X** Net Debt to EBITDA ratio

2016 Focuses

- Continued revenue growth
 - Special focus on SA new fab and TPSCo 3rd party business
- Maximized free cash flow
- Increasing net profit
- Margins growth
- Cap-Ex investments for growth to meet excess customer demand:
 - Customer funded programs for capacity reservation
 - Assured mid to short term ROI
 - Full utilization of potential cross qualification between our fabs

TowerJazz Business Units – Specialty Technology Leader



**RF
& HPA**



Power



CIS



**MS
CMOS**



**Aerospace
& Defense**



TOPS

RF HPA Markets and Solutions



Wireless Front-Ends
RF SOI and SiGe LNA/PA

High Growth driven by
Smartphones and IoT



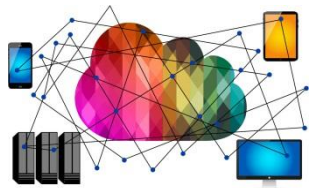
Wireline Front-Ends
High Performance SiGe

High Growth driven by video,
data internet traffic



mmWave
High Performance SiGe

Emerging Value driven by
radar and other high-
frequency applications



High Performance
Analog
Complementary BiCMOS

Steady Volume driven by
cloud-based HDD and
analog component market

Power Markets and Solutions



Display, Audio, Touch, Power Management

0.18um BCD Technology

High Volume driven by consumer device growth



Automotive & Communication

0.18um BCD + NVM and digital

High Value driven by more integrated power



LED Lighting

700V Power Technology

Emerging Market in low energy lighting for power semiconductors



Industrial & Infrastructure

High Power Modules

High Power motor drivers

Specialty CIS Key Markets and Solutions

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

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

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



3D Gesture Control

Design wins with market leaders
High volume and yet good margin market
High NIR sensitivity
ToF and structured light solutions



Market MEGATRENDS driven by Internet of Things

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



GREEN EVERYTHING
Energy Efficiency

28% of
Revenues



WIRELESS EVERYTHING
Seamless Connectivity

31% of
Revenues



SMART EVERYTHING
Embedded Systems

17% of
Revenues

Analog/Mixed-Signal Applications

High-Performance
Analog

Power
Management

RF

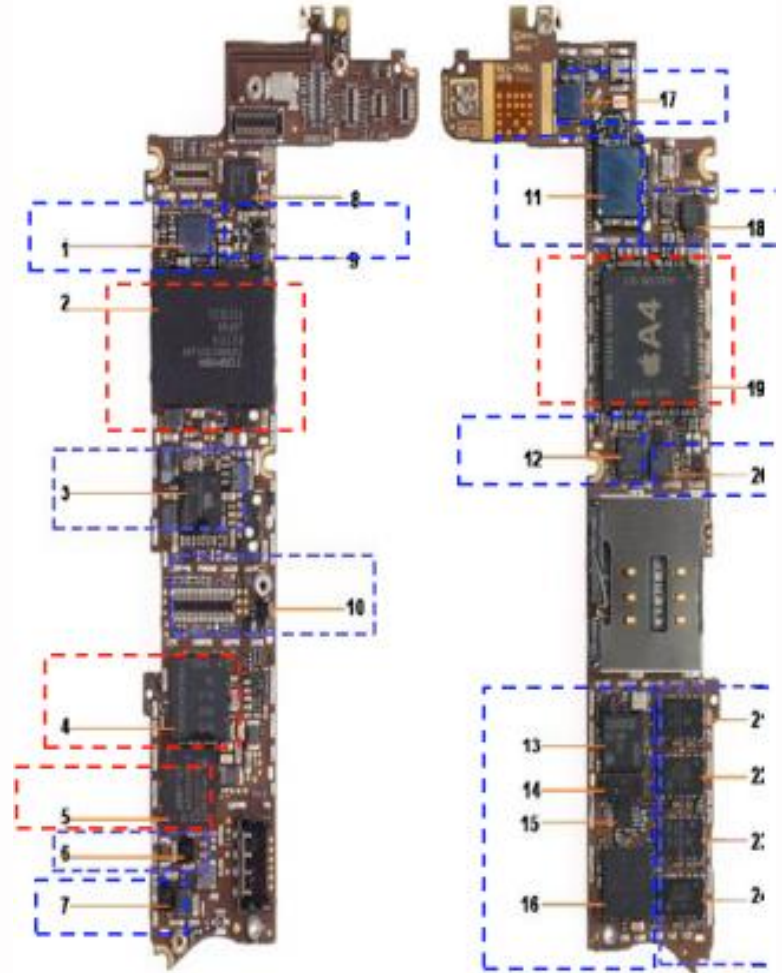
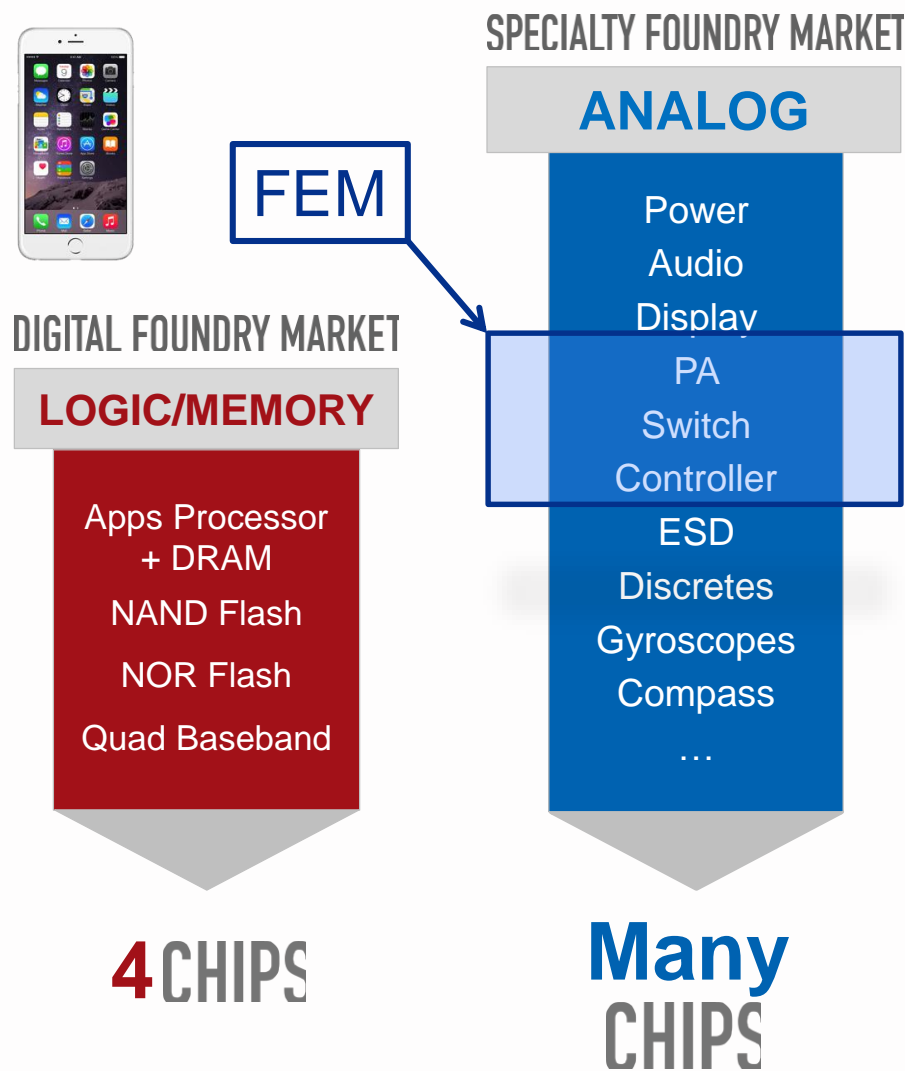
Sensors
(Imaging, MEMS)

***"Leadership and learning are
indispensable to each other"***

- John F. Kennedy

To maintain number one analog foundry –
we learn best from our customers.
By edict, all business units roadmaps
are to be aligned with 1st tier customer.

Analog Market Opportunity

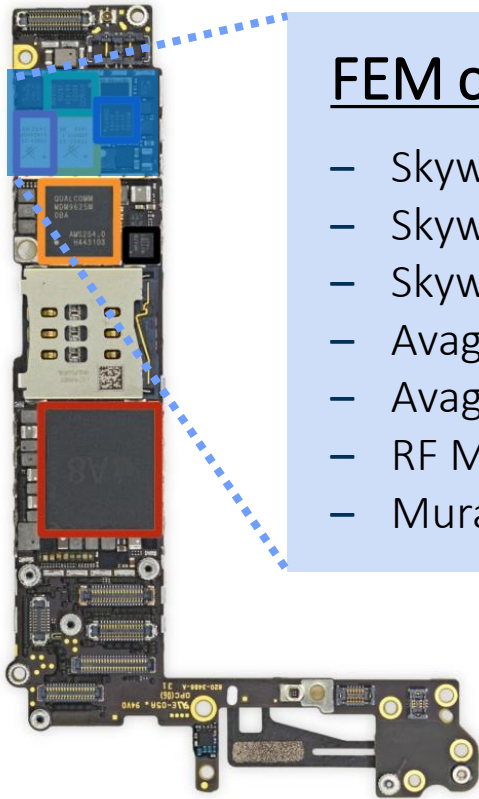


FEM content from ifixit teardown:

- Skyworks 77802-23 Low Band LTE PAD
- Skyworks 77803-20 Mid Band LTE PAD
- Skyworks 77356-8 Mid Band PAD
- Avago A8020 High Band PAD
- Avago A8010 Ultra High Band PA + FBARs
- RF Micro Devices RF5159 Antenna Switch Module
- Murata 339S0228 Wi-Fi Module

TowerJazz FEM Solutions:

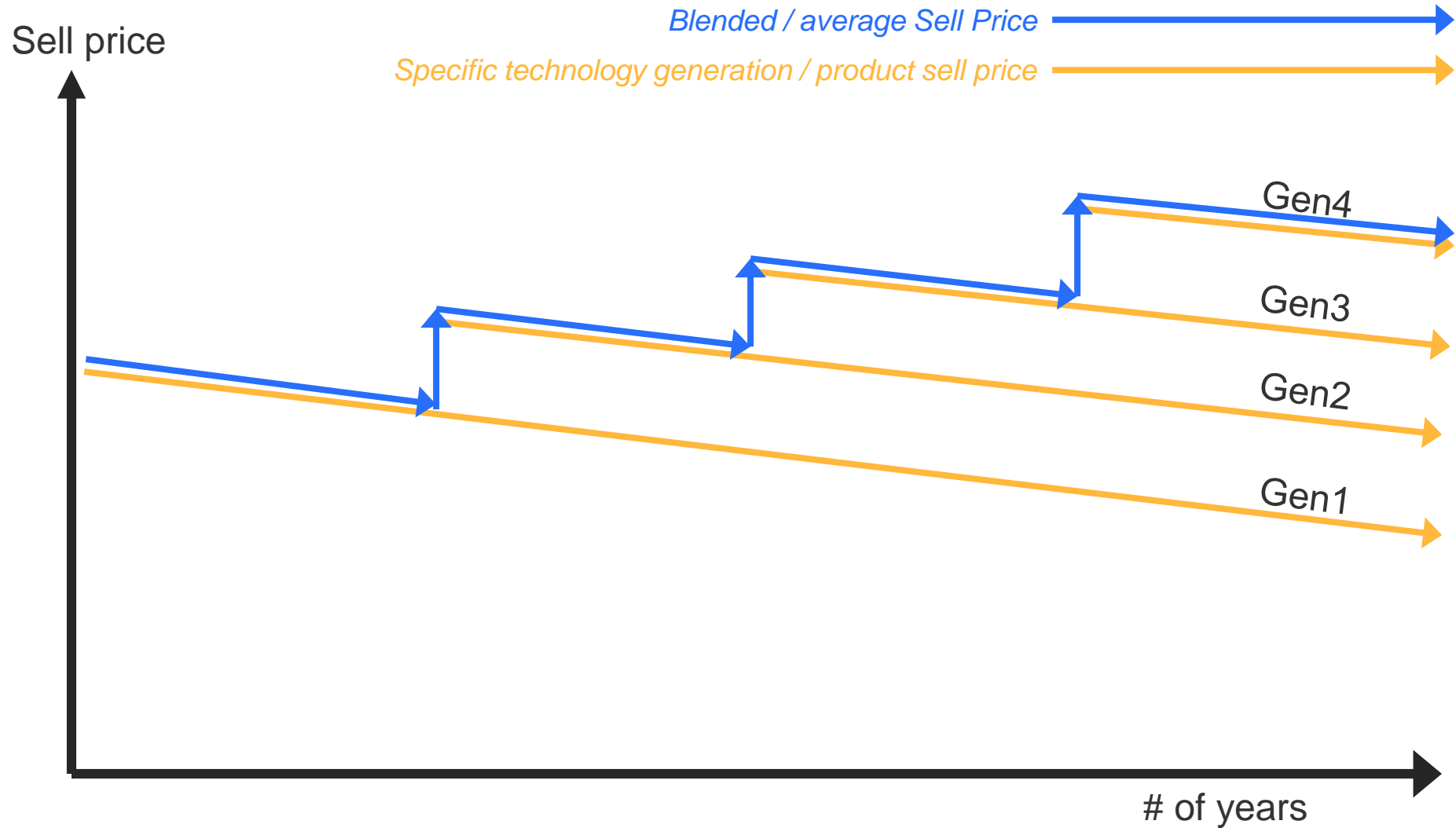
RF SOI (Switches), SiGe (LNA/PA), RF CMOS (control)



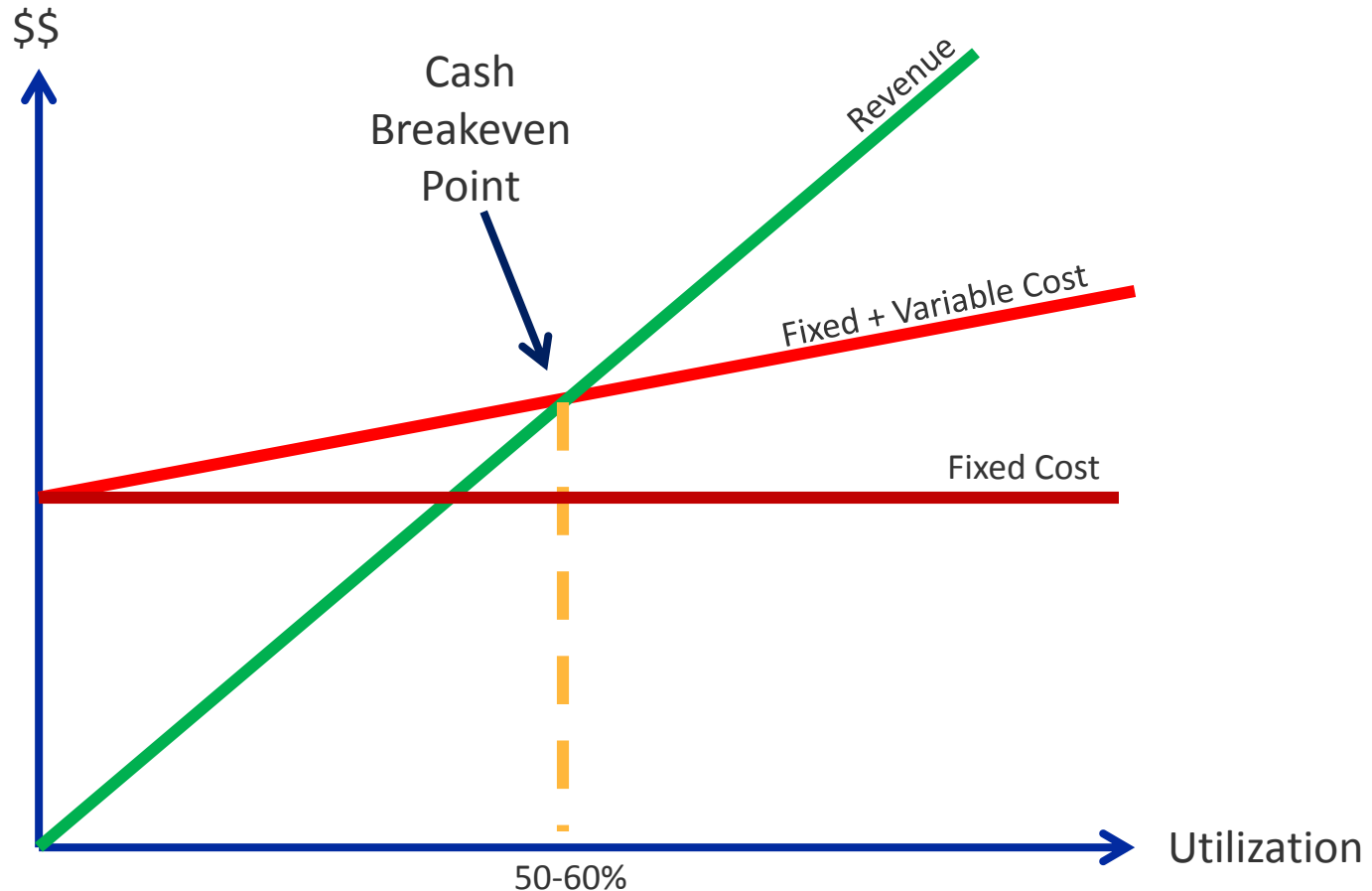
TowerJazz Begins Mass Production of a New Integrated SiGe Based “*Front-End Module on a Chip*” RF Platform Tailored to Meet the Challenges of the Internet of Things

TowerJazz has partnered with industry leader, Skyworks Solutions, Inc., an innovator of high performance analog semiconductors connecting people, places and things, to deliver a first of its kind integrated wireless FEM using this technology. “We are pleased that our long partnership with TowerJazz on SiGe BiCMOS for PA based products is now in volume production for key customers of Skyworks Solutions,” said Bill Vaillancourt, GM/VP Skyworks Connectivity Solutions.

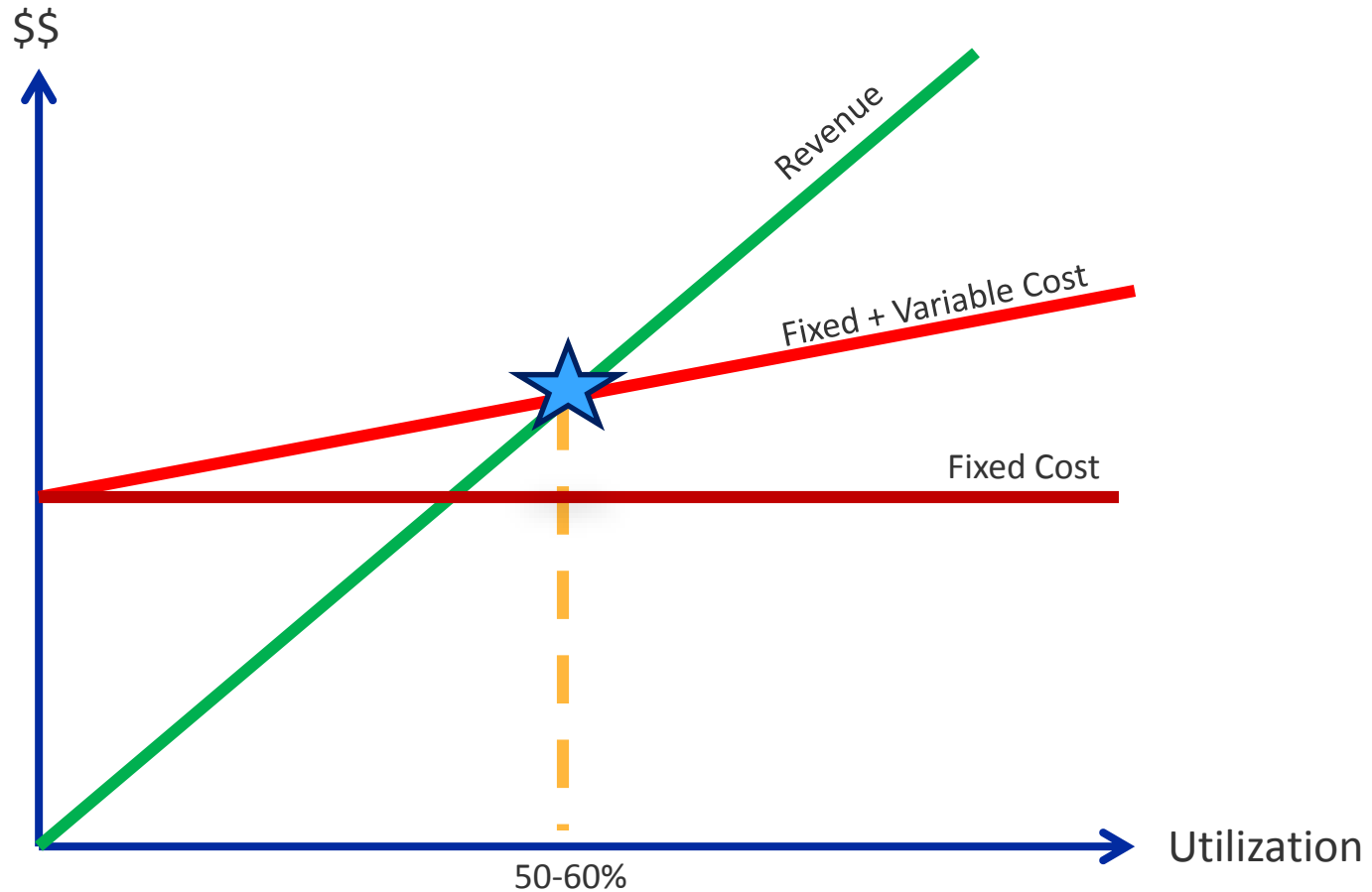
Sell Price Increase From New Products/ Gen's/ Technologies



Low cost, low risk, WIN WIN capacity acquisition



Low cost, low risk, WIN WIN capacity acquisition



Company Highlights

- Manufacture analog IC in growing markets such as consumer, automotive, medical, industrial, and aerospace & defense
- Offer advanced specialty process technologies including RF/HPA, PM, CIS, MS/CMOS, and MEMS capabilities



Strong performance & financials

- Q2'16 annualized mid-range guidance of \$1.2B as compared to \$961M in 2015
- Substantial margins increase with sustainable model for growing net profit
- Strong balance sheet and financial ratios

Summary

Well Positioned in Growth Markets

- RF SOI and SiGe for wireless smartphone, IoT, and data networks
- CMOS Image Sensor and 3D Gesturing
- Power management and conversion
- Strong available capacity in TPSCo and San Antonio and investing in additional capacity

Driving Strong Financial Performance

- Strong revenue growth throughout 2015 with expected growth in 2016
- Sustainable business and financial model for margins and net profit growth
- Strong balance sheet and financial ratios
- Free cash flow “state of mind”

TOWERjazz

www.towerjazz.com