



Formulas for Growth

Mr. Russell Ellwanger, CEO

September 2011

The Global Specialty Foundry Leader

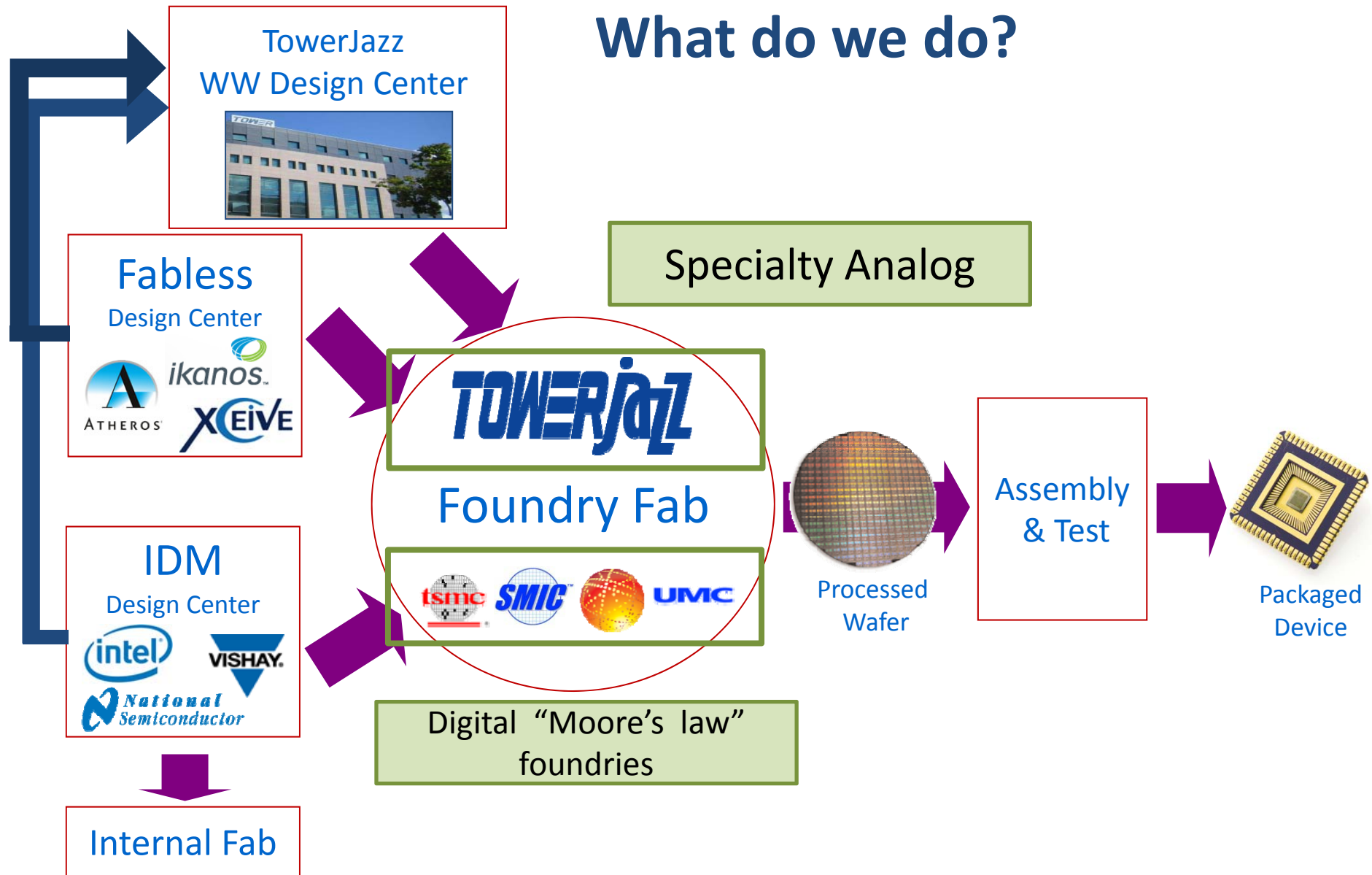
Disclaimers

Forward Looking Statements

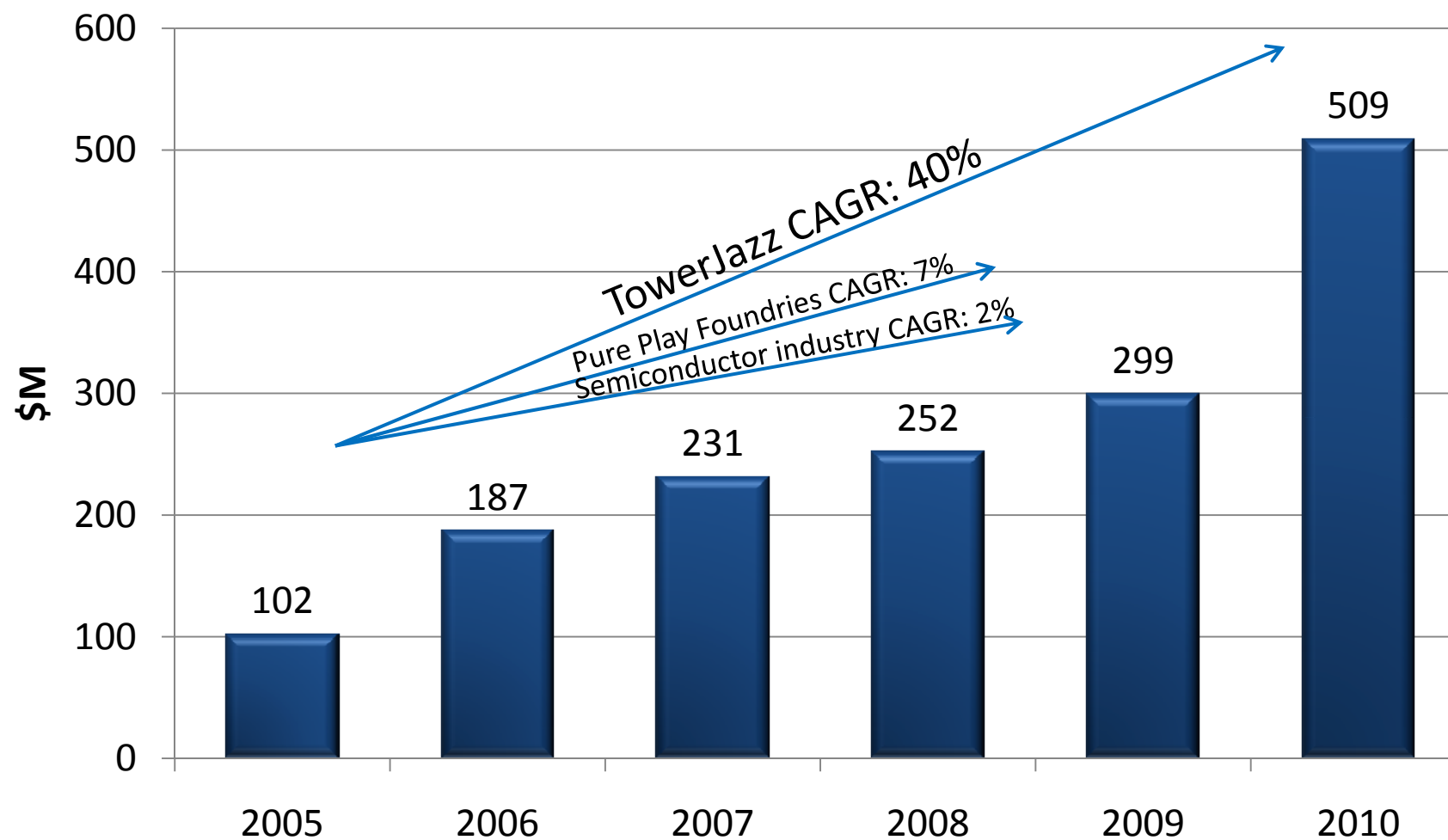
This presentation contains forward-looking statements within the meaning of the “safe harbor” provisions of the Private Securities Litigation Reform Act of 1995. These statements are based on management’s current expectations and beliefs and are subject to a number of risks, uncertainties and assumptions 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.

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.

What do we do?



Annual Revenues 2005-2010



2005 Status

(in \$M)	2005			05vs04	
A	TSMC	8217	1	Dongbu	52%
B	UMC	3259	2	Others	38%
C	SMIC	1171	3	SMIC	20%
D	Chartered	1132	4	X-Fab	14%
1	Vanguard	353	5	He Jian	9%
2	Dongbu	347	6	SSMC	8%
3	HHNEC	313	7	TSMC	7%
4	SSMC	280	8	Chartered	3%
5	He Jian	250	9	Polar Semi.	-2%
6	X-Fab	202	10	CSMC Tech.	-3%
7	Jazz	199	11	HHNEC	-3%
8	Mosel-Vitelic	140	12	ASMC	-9%
9	Silterra	130	13	Jazz	-10%
10	ASMC	114	14	Silterra	-13%
11	Grace	110	15	1st Silicon	-15%
12	Tower	102	16	UMC	-16%
13	Polar Semi.	90	17	Tower	-24%
14	CSMC Tech.	78	18	Vanguard	-26%
15	1st Silicon	71	19	Grace	-31%
16+	Others	105	20	Mosel-Vitelic	NA

- \$204 Million net-GAAP Loss
- Negative \$61 Million Cash From Operations
- Q1-Q3 Negative EBITDA

2006 Change

(in \$M)	2005		2006	
A	TSMC	8217	TSMC	9748
B	UMC	3259	UMC	3670
C	SMIC	1171	Chartered	1528
D	Chartered	1132	SMIC	1465
1	Vanguard	353	Dongbu	456
2	Dongbu	347	Vanguard	398
3	HHNEC	313	SSMC	325
4	SSMC	280	HHNEC	315
5	He Jian	250	X-Fab	290
6	X-Fab	202	He Jian	290
7	Jazz	199	Jazz	213
8	Mosel-Vitellic	140	Grace	191
9	Silterra	130	Tower	187
10	ASMC	114	ASMC	170
11	Grace	110	Silterra	155
12	Tower	102	Mosel-Vitellic	155
13	Polar Semi.	90	CSMC Tech.	114
14	CSMC Tech.	78	Polar Semi.	95
15	1st Silicon	71	1st Silicon	0
16+	Others	105	Others	139

	05vs04		06vs05	
1	Dongbu	52%	Tower	84%
2	Others	38%	Grace	74%
3	SMIC	20%	ASMC	49%
4	X-Fab	14%	CSMC Tech.	46%
5	He Jian	9%	X-Fab	44%
6	SSMC	8%	Chartered	35%
7	TSMC	7%	Others	32%
8	Chartered	3%	Dongbu	31%
9	Polar Semi.	-2%	SMIC	25%
10	CSMC Tech.	-3%	Silterra	19%
11	HHNEC	-3%	TSMC	19%
12	ASMC	-9%	SSMC	16%
13	Jazz	-10%	He Jian	16%
14	Silterra	-13%	Vanguard	13%
15	1st Silicon	-15%	UMC	13%
16	UMC	-16%	Jazz	7%
17	Tower	-24%	Polar Semi.	6%
18	Vanguard	-26%	HHNEC	1%
19	Grace	-31%	1st Silicon	NA
20	Mosel-Vitellic	NA	Mosel-Vitellic	NA

Foundry Revenue 2005-6-7-8-9

Source: The McLean Report; iSupply; IC Insight; Company Reports

(in \$M)	2005		2006		2007		2008		2009	
A	TSMC	8217	TSMC	9748	TSMC	9813	TSMC	10253	TSMC	9026
B	UMC	3259	UMC	3670	UMC	3755	UMC	2939	UMC	2755
C	SMIC	1171	Chartered	1528	SMIC	1560	Chartered	1778	Chartered	1448
D	Chartered	1132	SMIC	1465	Chartered	1445	SMIC	1148	SMIC	1068
1	Vanguard	353	Dongbu	456	Vanguard	485	Vanguard	515	Dongbu	395
2	Dongbu	347	Vanguard	398	X-Fab	410	Dongbu	433	Vanguard	382
3	HHNEC	313	SSMC	325	Dongbu	405	X-Fab	370	TowerJazz	299
4	SSMC	280	HHNEC	315	SSMC	350	HHNEC	290	X-Fab	223
5	He Jian	250	X-Fab	290	HHNEC	345	TowerJazz	252	HHNEC	220
6	X-Fab	202	He Jian	290	He Jian	330	He Jian	222	Grace	203
7	Jazz	199	Jazz	213	Tower	231	Grace	219	He Jian	195
8	Mosel-Vitelic	140	Grace	191	Grace	214	Silterra	192	Silterra	160
9	Silterra	130	Tower	187	Jazz	207	SSMC	176	SSMC	144
10	ASMC	114	ASMC	170	Silterra	185	CSMC	139	CSMC	NA
11	Grace	110	Silterra	155	ASMC	170	ASMC	137	ASMC	NA
12	Tower	102	Mosel-Vitelic	155	Mosel-Vitelic	157	Episil	103	Episil	NA
13	Polar Semi.	90	CSMC Tech.	114	CSMC Tech.	155	1st Silicon	0	1st Silicon	0
14	CSMC Tech.	78	Polar Semi.	95	Polar Semi.	105	Mosel-Vitelic	0	Mosel-Vitelic	0
15	1st Silicon	71	1st Silicon	0	1st Silicon	0	-	-	-	-
16+	Others	105	Others	139	Others	163	Others	NA	Others	NA

Foundry Landscape 2008-2010

(\$M)	2008		2009		2010		Digital Deep Sub Micron
1	TSMC	10,556	TSMC	,8989	TSMC	13,307	
2	UMC	3,070	UMC	2,815	UMC	3,965	
3	Chartered	1,743	GlobalFoundries *	2,641	GlobalFoundries	3,510	
4	SMIC	1,353	SMIC	1,070	SMIC	1,555	
5	Vanguard	511	Dongbu	395	TowerJazz	509	
6	Dongbu	490	Vanguard	382	Vanguard	505	
7	X-Fab	368	TowerJazz	299	Dongbu	495	
8	SSMC	340	SSMC	280	SSMC	330	
9	HHNEC	290	HHNEC	240	X-Fab	320	
10	TowerJazz	252	X-Fab	212	HHNEC	295	
11	Grace	230	He Jian	180	Grace	260	Specialty Analog
12	He Jian	195	Silterra	170	WIN	221	
13	Silterra	175	WIN	145	Altis	215	
14	ASMC	134	Grace	100	He Jian	205	
15	WIN	117	ASMC	94	Silterra	200	
16	Mosel-Vitelic	98	XinXin	55	ASMC	150	
17	XinXin	20	Mosel-Vitelic	51	Mosel-Vitelic	80	
18	Altis	0	Altis	0	XinXin	75	
19	-	-	-	-	-	-	
20+	Others	148	Others	171	Others	204	

* Includes Chartered revenues

Source: IC Insights, EE Times, Company Reports

Foundry Revenue Growth Y/Y

	05 vs 04		06 vs 05		07 vs 06		08 vs 07		09 vs 08		09 vs 05	
1	Dongbu	52%	Tower	99%	X-Fab	41%	Chartered	22%	TowerJazz	19%	TowerJazz	218%
2	Others	38%	Grace	91%	CSMC Tech.	36%	Silterra	14%	UMC	-6%	Grace	103%
3	SMIC	20%	ASMC	49%	Tower	24%	TowerJazz	9%	SMIC	-7%	Chartered	28%
4	X-Fab	14%	CSMC Tech.	46%	Vanguard	22%	Dongbu	7%	Grace	-7%	Dongbu	14%
5	He Jian	9%	X-Fab	44%	Silterra	19%	Vanguard	6%	Dongbu	-9%	X-Fab	10%
6	SSMC	8%	Chartered	35%	Others	17%	TSMC	5%	TSMC	-12%	TSMC	10%
7	TSMC	7%	Others	32%	He Jian	14%	Grace	-5%	Silterra	-17%	Vanguard	8%
8	Chartered	3%	Dongbu	31%	Grace	12%	X-Fab	-10%	SSMC	-18%	SMIC	-9%
9	Polar Semi.	-2%	SMIC	25%	Polar Semi.	11%	CSMC	-10%	Chartered	-19%	UMC	-15%
10	CSMC Tech.	-3%	Silterra	19%	SSMC	8%	UMC	-10%	HHNEC	-24%	He Jian	-22%
11	HHNEC	-3%	TSMC	19%	Jazz	8%	ASMC	-12%	He Jian	-24%	HHNEC	-30%
12	ASMC	-9%	SSMC	16%	SMIC	6%	SSMC	-14%	Vanguard	-26%		
13	Jazz	-10%	He Jian	16%	HHNEC	6%	HHNEC	-16%	X-Fab	-40%		
14	Silterra	-13%	Vanguard	13%	UMC	2%	He Jian	-20%				
15	1st Silicon	-15%	UMC	13%	TSMC	1%	SMIC	-26%				
16	UMC	-16%	Jazz	7%	MoselVitelic	1%						
17	Tower	-24%	Polar Semi.	6%	ASMC	0%						
18	Vanguard	-26%	HHNEC	1%	Chartered	-5%						
19	Grace	-31%	1st Silicon	NA	Dongbu	-11%						

Source: The McLean Report, 2008 Edition; iSupply 2009; Companies Report

From The McClean Report 2011

2010 Major IC Foundries

2010 Rank	2009 Rank	Company	Foundry Type	Location	2008 Sales (\$M)	2009 Sales (\$M)	09/08 Sales (%)	2010 Sales (\$M)	10/09 Sales (%)
1	1	TSMC	Pure-Play	Taiwan	10,556	8,989	-15%	13,307	48%
2	2	UMC	Pure-Play	Taiwan	3,070	2,815	-8%	3,965	41%
3	4	GlobalFoundries	Pure-Play	U.S.	0	1,101	N/A	3,510	33%
4	5	SMIC	Pure-Play	China	1,353	1,070	-21%	1,555	45%
5	9	TowerJazz	Pure-Play	Europe	252	300	19%	510	70%
6	7	Vanguard	Pure-Play	Taiwan	511	382	-25%	508	33%
7	6	Dongbu	Pure-Play	South Korea	490	395	-19%	495	25%
8	8	IBM	IDM	U.S.	400	335	-16%	430	28%
9	12	MagnaChip	IDM	South Korea	346	262	-24%	420	60%
10	10	Samsung	IDM	South Korea	340	290	-15%	400	38%
11	11	SSMC	Pure-Play	Singapore	340	280	-18%	330	18%
12	15	X-Fab	Pure-Play	Europe	368	212	-42%	320	51%
13	14	Hua Hong NEC	Pure-Play	China	280	240	-14%	295	23%
14	13	TI	IDM	U.S.	315	250	-21%	285	14%
15	16	Grace	Pure-Play	China	230	180	-22%	260	44%
—	3	Chartered*	Pure-Play	U.S.	1,743	1,540	-12%	0	N/A

*Purchased by GlobalFoundries in 4Q09.

Source: IC Insights, company reports

Q2 2011 Financial Results

Revenue

- **Q2 2011:** \$140 Million, up 16% Q/Q, 11% Y/Y
- **Q3 2011:** \$173-183M company's guidance, up 27% Q/Q, 32% Y/Y

Profitability

- **EBITDA** of \$54M; up 30% Y/Y; 39% EBITDA margins
- **GAAP Net Profit** of \$1.7 Million; Non-GAAP at \$46M - up 40% Y/Y and representing a NET margin of 33%

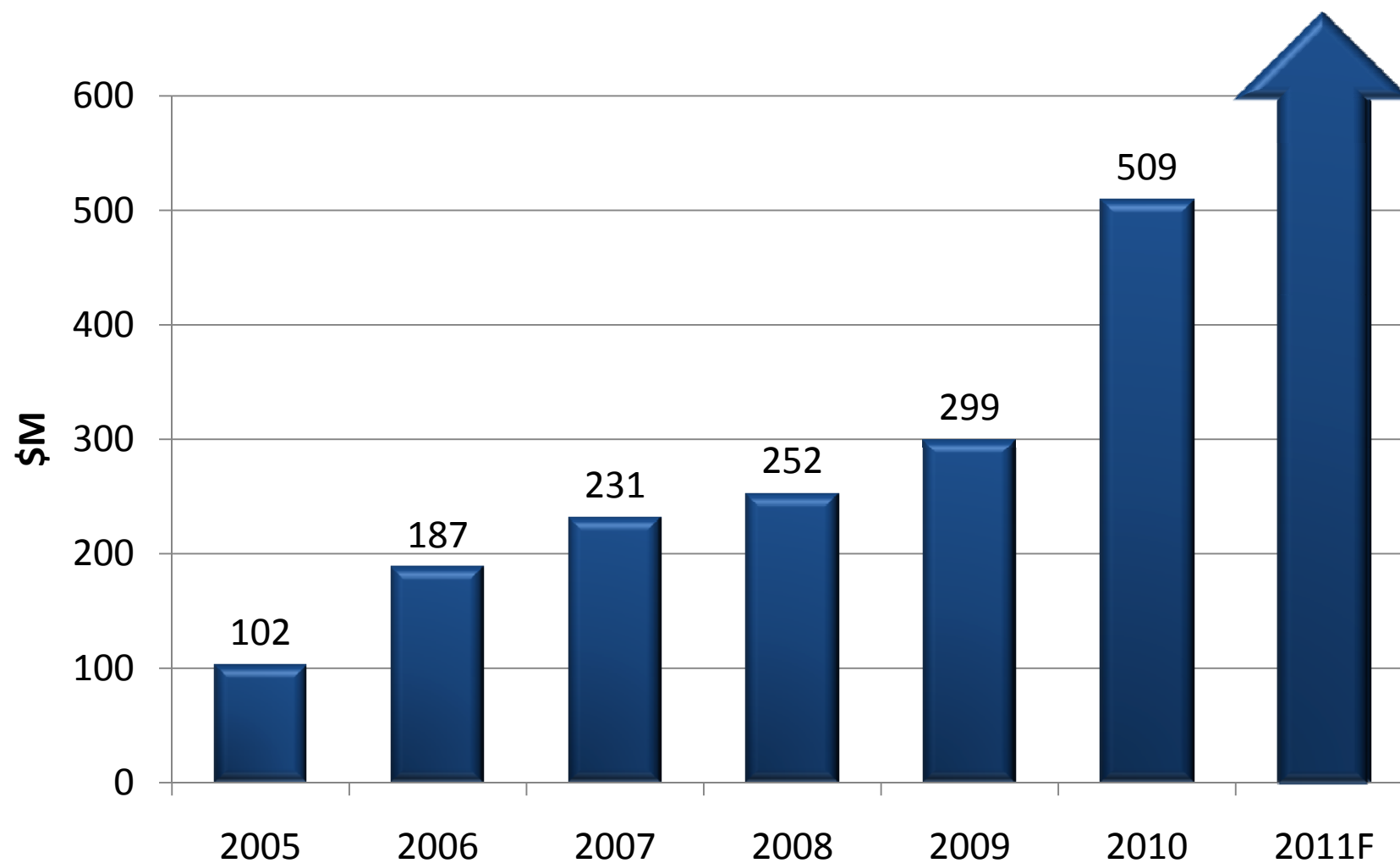
Cash

- \$139M **cash balance** as of June 30, 2011
- Paid \$40M in cash for Micron Nishiwaki Factory
- Expecting to received up to 150M NIS (~\$42M) from the Israeli Investment Centre.

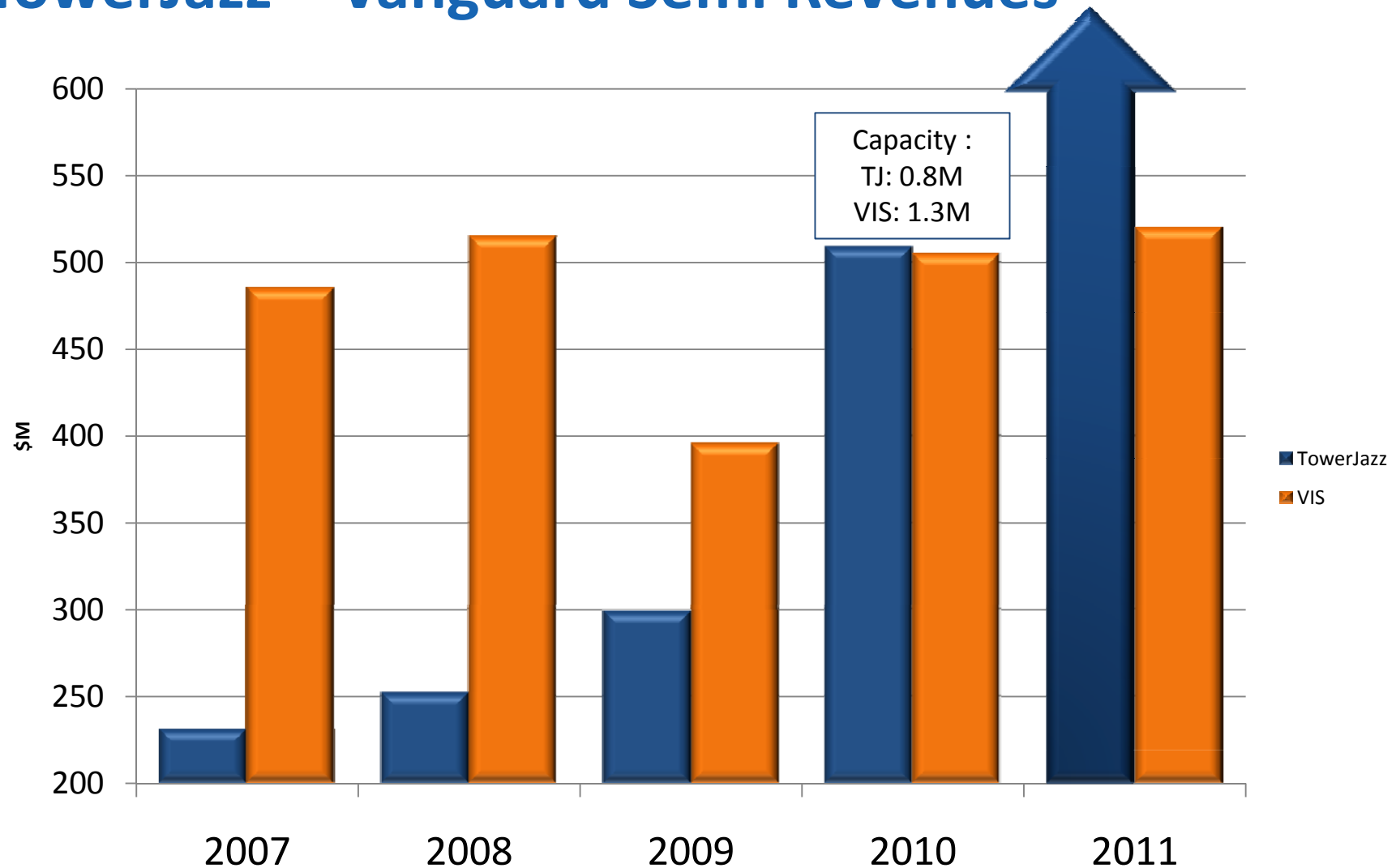
Balance Sheet

- 2.4X Net debt/EBITDA ratio
- \$180M positive shareholders' equity with strong financial ratios
- \$17M B.V of investment in HHNEC being sold for \$32M cash gross

Annual Revenues 2005-2011



TowerJazz – Vanguard Semi Revenues



* 2011 revenues based on companies forecast and analysts expectations; for VIS assuming Q4 flat vs. Q3

What did we do? (1) STRUCTURE

- We reinvented ourselves to be a customer centric company
- Decentralized “core” capabilities to viable profit centers
 - Eliminated central R&D
 - Created Product-Lines with business owners controlling R&D, customer support and marketing

**Restructured organization to give “local” empowerment;
Learned to fight the tendency of efficiency through
centralization**

What did we do? (2) TARGETS

- Set, communicated and celebrated aggressive but achievable targets :
 - Q4'05 positive EBITDA *Achieved ✓*
 - Q4'06 positive CF *Achieved ✓*
 - 2010 \$500M and GAAP net profit *Achieved ✓*

“Clear, simple messages energize people and inspire them to action, thus simplicity leads to speed, one of the key drivers of business success” *(J.Welch, GE 2000 Annual report)*

What did we do? (3) PEOPLE

- “Do not spend your time on your poor performers
 - If they hurt you – fire them; if not – wait for the next layoffs
- Do not spend your time on average performers
 - If you do – you will only have an average group
- Do not spend personal time even on your good performers
 - If you do – you will only have a good group
- Identify your STARS:
 - Spend all your time on them, give them big opportunities and high visibility

You will then have a group of stars.”

Jim Morgan, AMAT

Big Picture - What Drives Success?

- 2 things:

- **Vision**

- The vision dictates what skills are required in the staff

- **Staffing**

- The proper staff enables vision to be fulfilled and to evolve

TOWERJAZZ : Vision & Mission

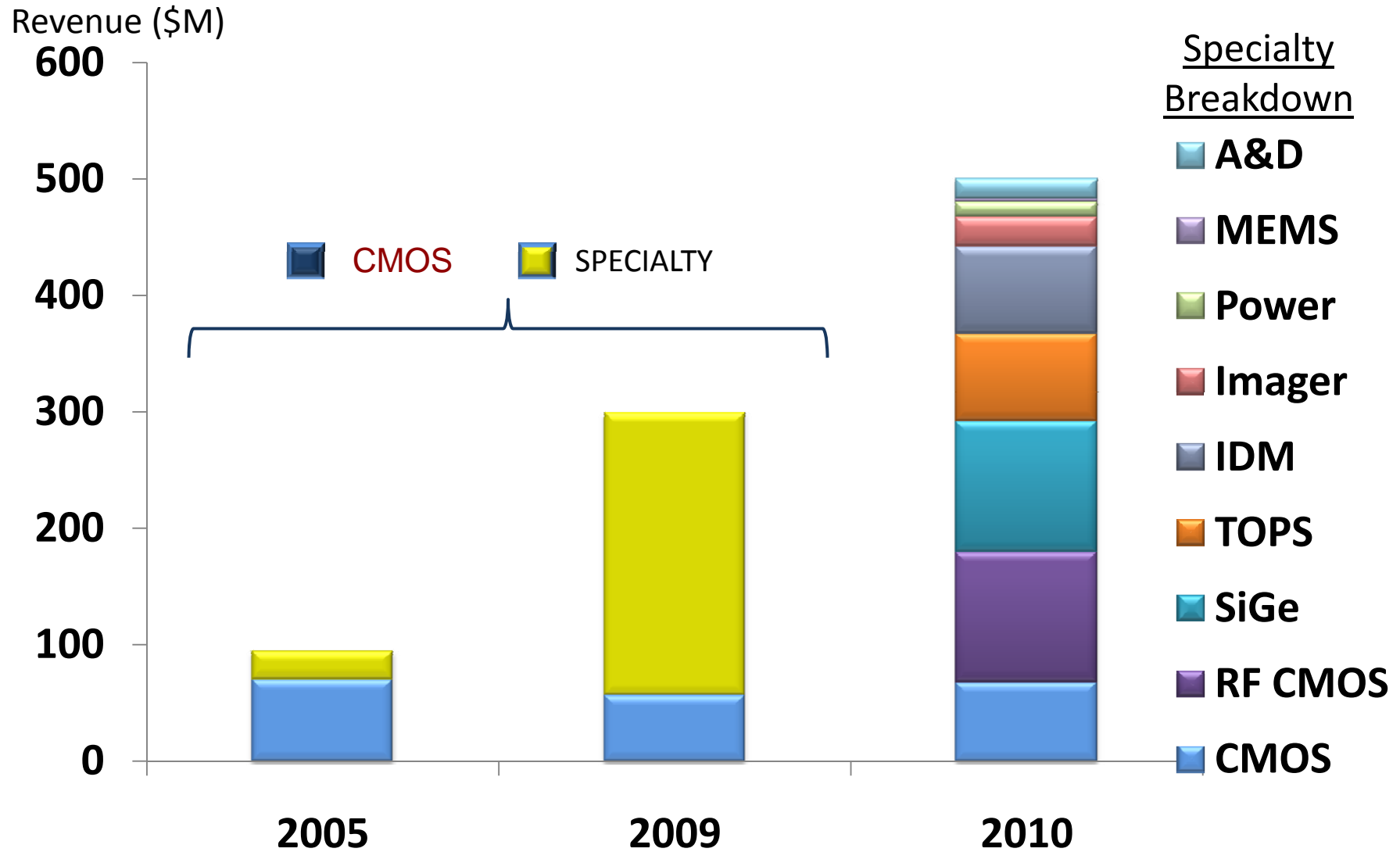
Vision

To be the **world leader in specialty foundry solutions** as measured by our customers, employees and investors.

Mission

To bring to market specialty foundry solutions that provide unique value to our customers by attentively listening to and proactively providing for their needs, through attracting and retaining the best global talent to serve them.

Specialty Technology



CIS Key Markets

Professional Photography

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



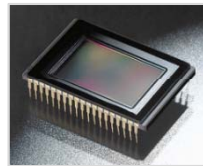
Medical & X-Ray

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



Industrial Cameras

2D and line sensors
High speed and high accuracy
“intelligent” pixels



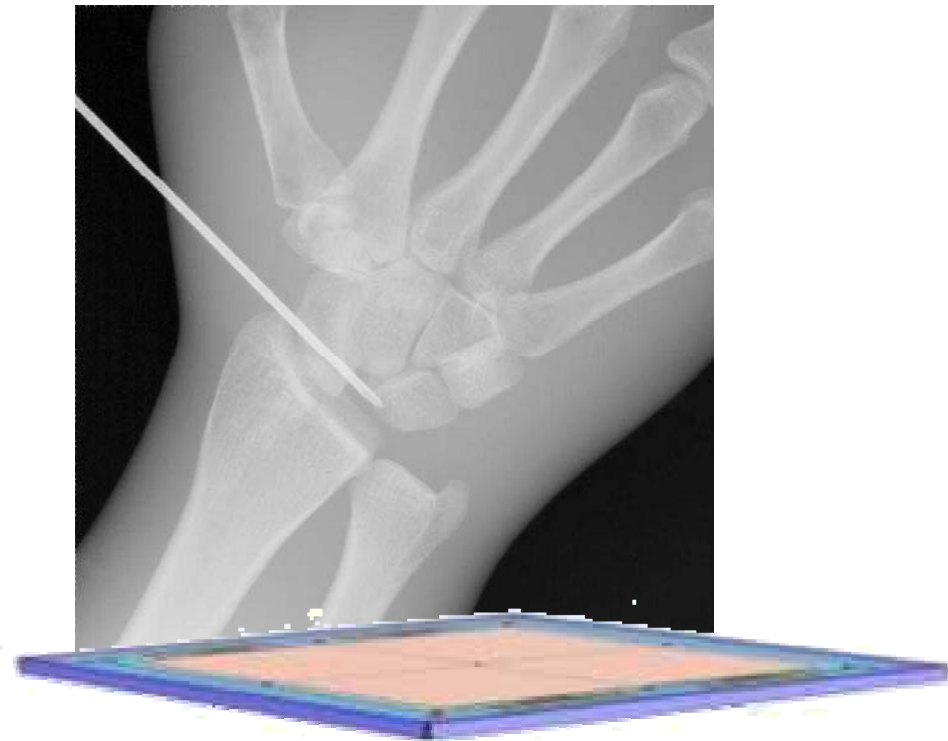
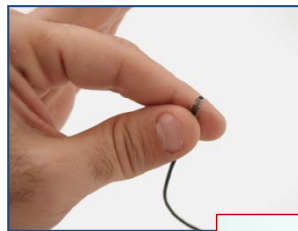
Automotive & Security

High sensitivity and high dynamic range
Linear HDR for color imagers
Reverse & parking assist
Airbag inflation control
Dimming mirrors
Night vision / Obstacle Detection



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

From the smallest Sensor in the World to the Largest



Enabling new business models

Leveraging SiGe in New Markets

Digital TV Tuners



Displacing discrete CAN Tuners

- PCTV, STB, Satellite, TV



mmWave

Displacing discrete GaAs
High Frequency Components

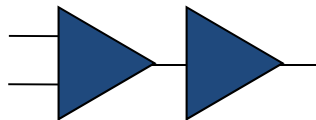
- Automotive Collision Avoidance
- HDTV WLAN (60GHz)



High Performance Analog

Displacing discrete analog bipolar

- Line Drivers
- DAC / ADCs / Amplifiers



Front-End Module

Displacing discrete GaAs
Power Components

- Power Amplifier
- Antenna Switch
- Cell phone / WLAN



Displacing Discrete Solutions with Integrated SiGe-Based Products

Power: Key Growth Markets

FPD DC/DC, LED Backlighting

Voltage requirements vary by make and Model: Scalable 20 to 80V and low layer count are the primary advantage



Digital Controlled Power – PMIC

1.8V CMOS combined with the High voltage module provides the correct balance of performance and cost for medium currents



High Power/Motor Driver

High Power with isolated buried layer
Provides the noise Immunity
required for >2 Amp applications

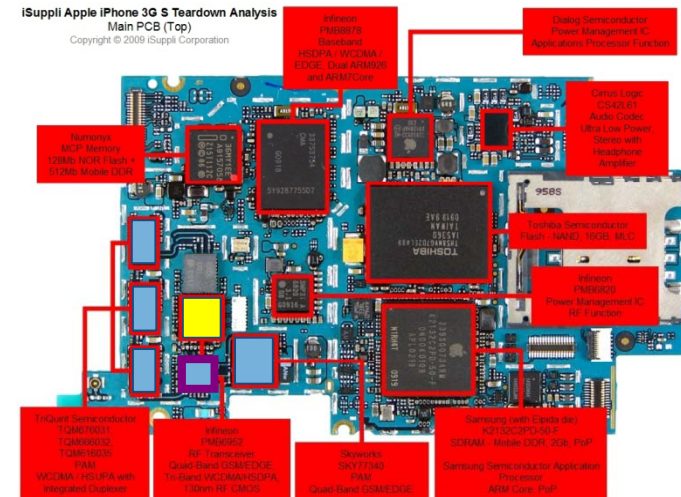


AC to DC 700V

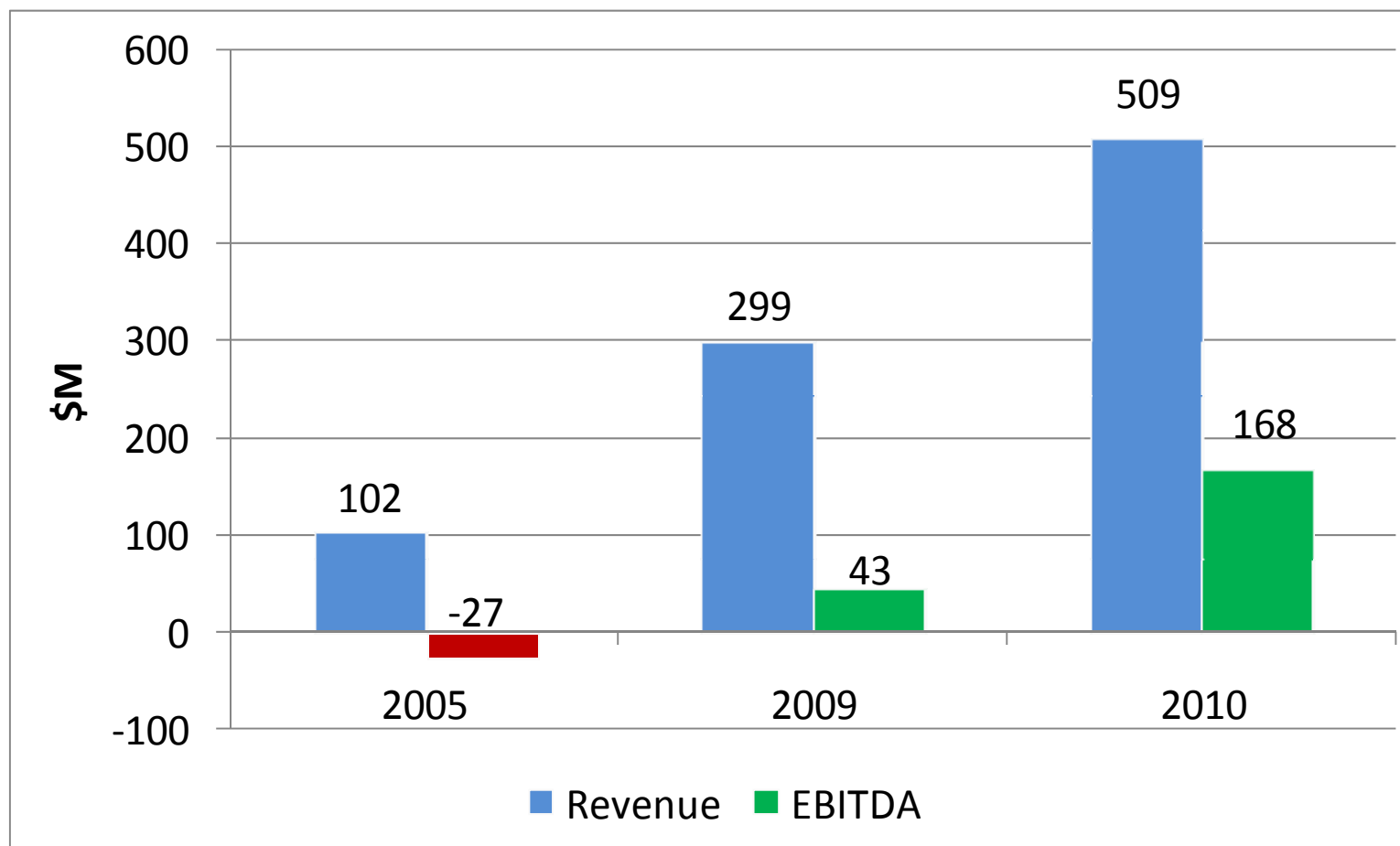
- AC to DC conversion
- Industrial LED lighting
- High side driver for FETs



Enabling our customer base to compete with incumbent solutions
with a **Modular Platform** optimized to cover large voltage range
and power requirements



Revenue and EBITDA 2005, 2009, 2010



Strategy 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.

TowerJazz Global Footprint

Total 8" Equivalent Capacity of
~840K WPY expanding to
~1M WPY





Acquisition Completed:

TowerJazz Nearly Doubles its 2010 Production Capacity with Micron's Fabrication Facility in Nishiwaki, Japan

8-inch Fab to Support TowerJazz's Target to Achieve \$1 Billion Yearly Revenue

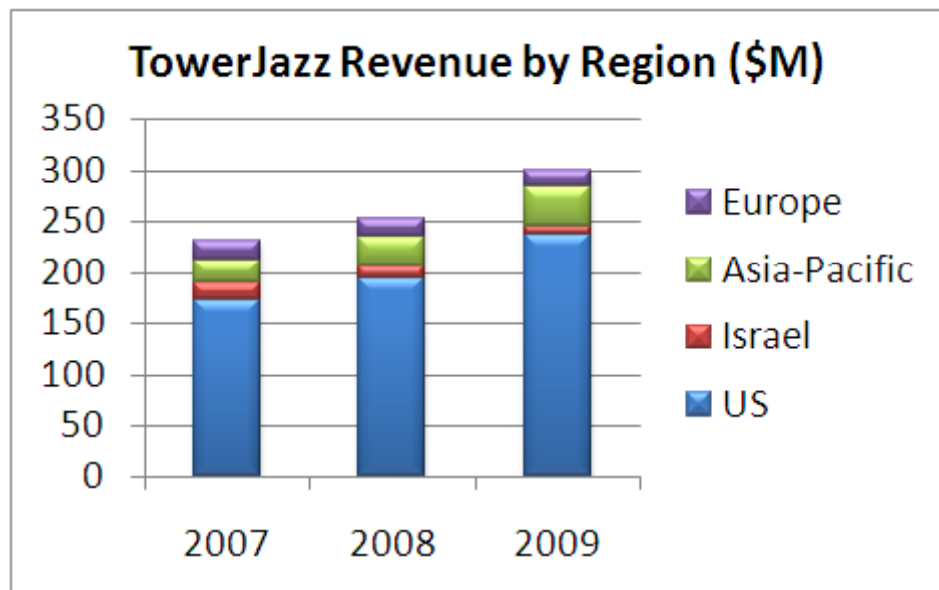
MIGDAL HAEMEK, Israel, June 05, 2011 – TowerJazz, the global specialty foundry leader, announced today that it completed its previously announced acquisition of Micron Technology's fabrication facility in Nishiwaki City, Hyogo, Japan. The acquisition nearly doubles TowerJazz's current internal manufacturing capacity, cost-effectively increasing production by 60,000 wafers per month. The added capacity to serve the growing needs of its expanding blue chip customer base, combined with the additional business potential in Japan, is expected to help position TowerJazz to achieve its expressed \$1 billion annual revenue run rate target by 2014.

TowerJazz Global Footprint

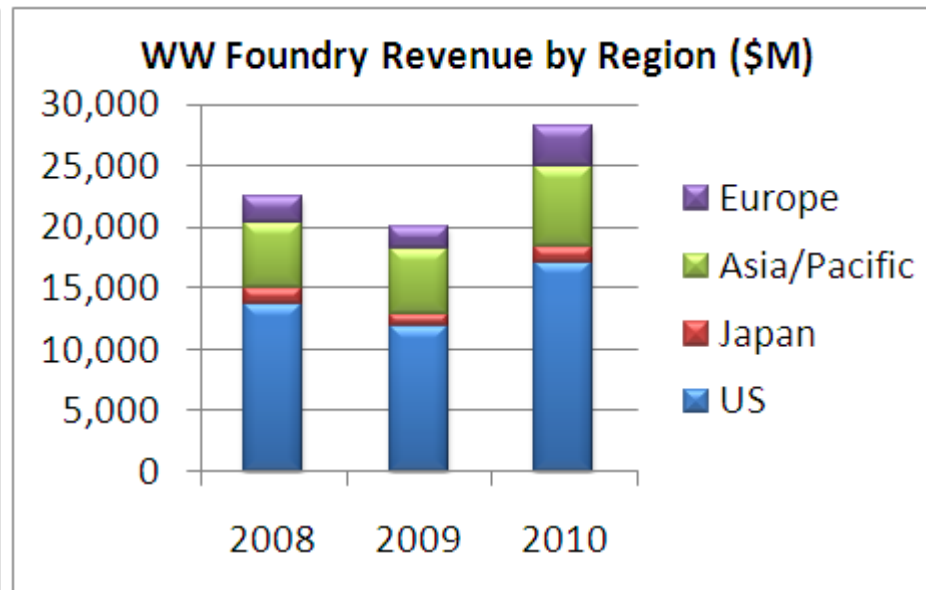
Total 8" Equivalent Capacity of
~1M WPY expanding to
~1.7M WPY



Potential to Extend TJ Share%



Source: TowerJazz SEC Filing 20-F



Source: Gartner. March 2011

2010 Revenue%	TowerJazz
US	80%
Japan	0.5%
Asia/Pacific	9%
Europe/Israel	8%/3%

2010 Revenue%	WW
US	59%
Japan	5%
Asia/Pacific	27%
Europe	9%



**SAMSUNG
ELECTRO-MECHANICS**



Samsung Selects TowerJazz's “unrivalled” 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.

Per the agreement, Samsung Electro-Mechanics will collaborate with TowerJazz as its preferred supplier for all of its products that use the 700V power platform, starting with its AC to DC adapters. In turn, TowerJazz will modify its process and develop a true high side 700V platform to meet the specific requirements of Samsung Electro-Mechanics and provide a capacity guarantee. The first products are expected to be in the market in the second half of 2012.



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



“You Need to Give to Get”

Community Service Charter

***Educational and vocational development
with a focus on gender equality and
minority integration.***

*“Changing the world is good for those who want their names in books,
but being happy – that is for those who write their names in the lives
of others and hold the hearts of others as the treasure most dear.”*

Orson Scott Card

Self Confidence

- **“Self confidence is an indispensable leadership characteristic.**
- **It is the obligation of every leader to give everyone the challenges that provide opportunities to develop personal self confidence.**
- **We see day after day people’s lives – and not just their business lives – utterly transformed by the self confidence of meeting big challenges.”**

Jack Welch

Summary

- We have been the #1 growth foundry over the past 5 years AND became the #1 specialty foundry by revenue in 2010.
- We expect 2011 to see #1 growth against foundry peers and to extend our lead as #1 specialty foundry.
- The recent acquisition of the Nishiwaki Japan factory adds:
 - (1) Additional base-line revenue stability through 3 year Micron “take-or-pay” agreement;
 - (2) Additional regional opportunities to an already rich sales opportunity funnel;
 - (3) Needed capacity to support \$1B+ revenue.

Thank you!