



## Message from CEO

Russell Ellwanger



2011 to date has been an exciting year for TowerJazz and really is a culmination of the strong efforts we have put into building our leadership position over the past few years. Our Q3 release, of \$176 million, puts us at a \$700 million annualized revenue run-rate. We sincerely thank you all for enabling it.

Q3 was the first full quarter since acquiring the Nishiwaki, Japan factory in June and hence shipping qualified products to a new customer, namely Micron. The factory has a 60,000 wafers per month, DRAM based capacity, which we believe will be notably higher as we convert the capacity from DRAM to our logic flows over the next three years. The integration, with the involvement of all sites, has been seamless. We are very fortunate that with the asset acquisition, an experienced and highly capable executive team and work force became part of the TowerJazz employee family.

With the addition of Nishiwaki, at year's end, we will have a capacity to produce 1.7 million wafers per year; double that of our end 2010 capacity level and we are examining ways to increase the Nishiwaki capability by another 200,000 wafers-per-year, bringing the total potential to 1.9 million wafers per year.

During the month of October, I enjoyed many multi-level customer meetings across multiple business units: RF/HPA, Power



**Russell Ellwanger presenting at TowerJazz Global Symposium in Newport Beach.**

Management, TOPS (Transfer Optimization Process Services), and CMOS/mixed-signal processes. These meetings culminated in our annual TowerJazz Global Symposium in our Newport Beach facility, which we held on November 2nd and 3rd with a record attendance of 200 customers. There was a general atmosphere of partnership and friendship at a level to which I have never before experienced in such a large forum. I gave the opening presentation of the commercial day, a talk I entitled "Formulas for Growth." It outlined the basic management philosophy of the company, how this has led us to becoming the #1 foundry in growth and how we intend to maintain these principles and growth for the years to come.

We were pleased to host such a high level of speakers and customers at our technology conference and look forward to further addressing our customers' important needs in the future. The evaluation of our event was very positive and we consider this a

statement from our customers and partners that our commitment and dedication to them is clear and exactly what they wish as we continue to achieve our goal as their trusted foundry partner.

## TowerJazz Selected as Winner of Raytheon Supplier Excellence Award

In October, TowerJazz's USA Aerospace and Defense Division was recognized as a winner of a Raytheon Network Centric Systems (NCS) Supplier 3 Star Excellence Award for exemplary performance. Raytheon utilizes TowerJazz's advanced CMOS process in its Newport Beach fab for the manufacture of their ROIC designs in support of their overall infrared detector products and systems. In addition, Raytheon takes advantage of TowerJazz's specialized Aerospace and Defense process variants which help facilitate ease of manufacturing, improved yields and quality for downstream detector manufacturing steps.

[See Raytheon Award »](#) Page 2

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## Upcoming Events



### APEC

February 5–9, 2012  
Orlando, Florida



### GOMAC

March 19–22, 2012  
Las Vegas, Nevada



### SPIE

April 23–27, 2012  
Baltimore, Maryland



### Design Automation Conference

June 4 – 6, 2012  
San Francisco, California



### International Microwave Symposium

June 19 – 21, 2012  
Montreal, Canada



## TGS Newport Beach

November 2 and 3, 2011 – Newport Beach, Calif., USA

On November 2 and 3, we hosted our 6th annual TowerJazz Global Symposium (TGS) at our US facility in Newport Beach, CA. This year, besides highlighting our commercial process offerings, we provided an Aerospace & Defense focused day to bring further awareness to this community and provide examples of our customers' applications using TowerJazz specialty technologies. At this two-day event, it was a great honor for us to host so many of our important customers and we were pleased to have our partners, all of the major EDA and IP companies, as our sponsors. Many of the participants from the Aerospace & Defense day also attended the commercial technology presentations. To date, we had the highest attendance ever (60% increase over past years!) and we received very good feedback about the level of speakers as well as about the entire event.

Besides presentations on our advanced process technologies and design enablement capabilities, several customers provided case studies on how our offerings have enabled many critical business applications. In addition, we had professors from two universities present important research studies using our SiGe technology. We were pleased to have Dr. Phil Perconti from the US Army Night Vision and Electronic Sensors Directorate as the keynote for the Aerospace and Defense day. We are working on two

phases of development with this division of the US Army for CMOS low light image sensors for Army portable systems. As part of this effort, we expanded our aerospace and defense on-shore capability by transferring our world-class CMOS image sensor (CIS) foundry processes to our Newport Beach facility.

On the commercial day, our CEO, Russell Ellwanger provided a talk on "Formulas for Growth," which was extremely well-received with a majority rating as "excellent." Russell pointed out some of the strategies utilized to achieve our position as the #1 growth foundry over the past six years, the #1 specialty foundry by revenue in 2010 and probably in 2011 as well, while increasing the gap from 2nd place.

Russell highlighted our 2012 mantra, "Pursuit of Excellence" which will be the focus for all TowerJazz employees around the world in this upcoming year. He emphasized the great place we have in our company for community service, under the basic idea that, "You need to give to get" and discussed our community service charter with some examples of current activities. You can read more about those on our website at [www.towerjazz.com/community.html](http://www.towerjazz.com/community.html).

Overall, based on the surveys and feedback we received, we believe that this year's TGS was the best ever!

The symposium was a very informative and interactive experience for both our company and our customers. We look forward to increasing our momentum for next year's event!



## EDSFair

November 16–18, 2011



Yokohama, Japan

On November 16-18, we attended the EDS-Fair (Electronic Design Solution Fair) held in Yokohama, Japan. This was the first time for TowerJazz to participate at this event since acquiring our Nishiawaki fab from Micron. It was a good opportunity to increase awareness of our presence as a pure play foundry in Japan.

In addition, during the event, we hosted several joint seminars with EDA partners to introduce our unique design enablement capabilities. We also provided demonstrations at our booth to give customers hands-on experience with our tools.

Since we are a new foundry in Japan, we attracted a lot of attention. We had over 100 attendees in total and about 50 in the seminar dedicated to TowerJazz. During the seminars, we presented our wide range of technologies, our design solutions and customer support services. We received a great deal of traction and interest in TowerJazz; we found that a large number of analog designers and EDA vendors were also interested in what TowerJazz has to offer. Moreover, Japanese customers were excited to learn about the availability of a local pure play foundry, and especially TowerJazz's innovation in the 0.18/0.13 process nodes. We look forward to exhibiting next year at EDSF 2012.

**Raytheon Award** « from Page 1



TowerJazz was recognized by Raytheon for accomplishments both in its ability to supply key programs with on-time delivery and high quality wafers as well as for many of the systems that make interfacing with TowerJazz efficient for Raytheon's engineering and operations teams. Examples include the TowerJazz eBizz site and help-ticket system used by anyone at Raytheon to easily find answers to customer questions and the TowerJazz quality design kits that make designs more predictable.

## TGS Taiwan

August 26, 2011 – Hsinchu, Taiwan

This year's TowerJazz Global Symposium (TGS) in Hsinchu, Taiwan was held on August 26th. More than 50 people attended including new potential customers. Attendees gave very positive feedback and some indicated their interest in adopting TowerJazz technologies for business opportunities.

The successful one-day event began with a keynote presentation from TowerJazz CEO Russell Ellwanger followed by four specialty technology offerings information sessions presented by TowerJazz executives.



# Roundtable

## Message from our Executives

In this issue, we feature a message from Dr. Avi Strum, Vice President and General Manager of the Specialty Business Unit. He has served with TowerJazz since 2004 and currently oversees the CMOS Image Sensor and Power Management Product Lines.



In the past few years since the merger of Tower and Jazz, our power management process offerings have grown immensely. We have put a great deal of effort into creating a unified, best of breed modular platform that combines the excellent devices developed in Migdal Haemek with the state-of-the-art models of Newport Beach. The outcome is a very strong modular and scalable 0.18um Power platform.

One of our unique technologies is our groundbreaking 700V power management platform which addresses the rapidly emerging, energy saving LED lighting market. With our 700V process, we are able to achieve the desired small die size for LED lighting in an advanced and cost-effective power platform. Our focus on enabling next-generation LED lighting is a green energy initiative that provides value to our customers and shareholders, but also to our planet.

We are partnering with leading customers to currently produce low side 700V products and to produce a high side 700V platform for next generation products. In Q3, we announced a Memorandum of Understanding with Samsung Electro-Mechanics to develop and volume produce a variety of product families based on our 700V (TS100PM) 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.

In addition to the 700V platforms, our other leading power management platforms, in mass production, are our 5-60V cost effective platform, optimized for the fast growing LED driver market, our 5-60V isolated platform (shallow NBL), optimized for the fast growing DC-DC and motor driver markets, and our 5-60V highly isolated platform (Deep NBL), optimized for the very fast growing AMOLED screen driver market (the new cell phone screens). All are 0.18um based and have two versions: 5V gate (TS35PM) and dual 1.8V/5V gates (TS18PM).

Another differentiator of our power management offerings includes our proprietary Y-Flash technology which is a unique "CMOS" non-volatile memory (NVM) solution we developed specifically for the 5V platform. We have now in production 64b very small modules used for trimming, replacing the metal and poly fuses, and larger, 4Kb and 16Kb modules for code storage for digital power management. The Y-Flash solution offers the advantage of adding only one photo layer and it is easy to implement. TowerJazz has a very long history in NVM, and we now have the expertise and capabilities to develop a variety of NVM solutions optimized for specific applications. We have already developed a C-Flash cell for RFID applications, Y-Flash for trimming and small codes for CMOS and PM applications, and an S-Flash cell for very low mask count (2 mask adder) large code embedded memory.

Moving into 2012, we will continue to grow our serviceable markets for our customers including the emerging Korean segment,

which we realized a few years ago leads in the area of consumption of silicon ICs in the power management area. We are working with many Korean companies and expect a major growth for TowerJazz in this area, especially in the next coming years.

## Q3 Financial Results

### Revenue

- Q3 2011** » \$176M, up 26% Q/Q, 31% Y/Y
- Q4 2011** » \$170–180M company's guidance, mid-range up 30% Y/Y
- FY 2011** » \$606–616M, up 20% Y/Y

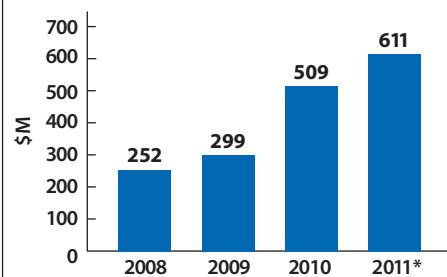
### Profitability

- Non-GAAP Net Profit of \$46M, a 26% net profit margins
- GAAP Net Profit of \$1.8M
- Positive cash from operations of \$42M in Q3'2011

### Balance Sheet

- \$178M cash balance** as of September 30, 2011
- 2.1X Net debt/EBITDA ratio, based on 2010 EBITDA
- \$190M positive shareholders' equity Vs \$118M on Dec' 2010
- Strong & solid financial ratios

### TowerJazz Annual Revenues



\* 2011 revenue based on Q4'11 mid-range guidance

## Getting to Know Us



**Jerry Kelley**

Facilities Director  
Newport Beach, CA

Jerry joined Jazz Semiconductor in 1996. He has served in his current position since February 2011; his previous positions included Facilities Manager and Facilities Engineer Specialist.

Q: Please tell us about facilities management in Newport Beach... your green initiatives for the environment as well as some of your cost saving measures.

A: Facilities management continues to strive for cost saving measures when it comes to the environment. For example, over the last few years we have reduced our electrical usage by greater than 9 million kilowatt hours. This is the carbon footprint equivalent of over 1000 cars. This year we are targeting another half a million kilowatt hours.

Q: What do you enjoy about your position?

A: Working with the people at this facility. The teamwork here is amazing; everyone pitches in to help when there is an issue to be resolved.

Q: Are you married? Do you have kids?

A: Yes, I have been married for 30 years. I have three children and three grandchildren.

Q: What are some of your hobbies?

A: I like to ride my bicycle to work at least 2 – 3 times a week. The distance of 17 miles each way is great exercise and gives me time to wind down after a long day at work. I also like to golf even though I will never make the pro tour.

Q: What is your favorite travel destination?

A: Back home to the country side in southwestern Pennsylvania where my mother lives. Life seems to slow down when I am back there. Also, I would love to take my family to Israel to tour all the biblical sites. My travel there was one of the best trips I have ever had.

## Press Releases

August 9, 2011 – November 29, 2011



[TowerJazz Signs MOU for Process Transfers and Projects in India and Brazil, Targeting India's Emerging Semiconductor Market](#)  
 November 17 » [read more](#)



[TowerJazz Selected as Winner of Raytheon Network Centric Systems Supplier Excellence Award](#)  
 November 15 » [read more](#)



[TowerJazz Voluntarily Early Redeems Its US Convertible Notes Originally Due December 2011](#)  
 October 10 » [read more](#)



[TowerJazz Expands its High Speed SiGe, SOI and RF CMOS Design Kits for use with Agilent Technologies' Advanced Design System](#)  
 October 6 » [read more](#)



[TowerJazz and Presto Engineering Announce Strategic Collaboration for SiGe Foundry Customers](#)  
 September 26 » [read more](#)



[TowerJazz Earns a Spot on 2011 Information Week 500 List of Top Technology Innovators Across America](#)  
 September 21 » [read more](#)



[SaberTek Joins TowerJazz Design Star Awards Program](#)  
 September 7 » [read more](#)



[Samsung Selects TowerJazz's 'unrivaled' 700V Power Technology Platform for its Next Generation High Voltage Products](#)  
 September 4 » [read more](#)

## Featured TowerJazz News

### Tower targets India, Brazil semiconductor markets



The company will collaborate with its longstanding European nanoelectronics research partner on technology transfer opportunities. TowerJazz predicts that the Indian and the Brazilian semiconductor markets will be among the fastest growing markets in the world, and it quotes estimates that the Indian market will reach hundreds of billions of dollars by 2020. <http://www.globes.co.il/serveen/globes/docview.asp?did=1000698847&fid=1725>

### TowerJazz Selected as Winner of Raytheon Network Centric Systems Supplier Excellence Award



TowerJazz's USA Aerospace and Defense Division has been selected as a winner of a Raytheon Network Centric Systems (NCS) Supplier 3 Star Excellence Award. The NCS Supplier Excellence Program is designed to formally recognize its suppliers for exemplary performance in working with their company. <http://www.thestreet.com/story/11294072/1/towerjazz-selected-as-winner-of-raytheon-network-centric-systems-supplier-excellence-award.html>

ORANGE COUNTY BUSINESS JOURNAL

### The Man Behind TowerJazz's Drive to \$1B in Revenue

#### TECHNOLOGY: Ellwanger talks leadership, growth plans

Customers, suppliers and employees recently learned a lot more about the principles that guide TowerJazz CEO Russell Ellwanger. Ellwanger provided some unique insight into his leadership style and outlined his vision on growing the chipmaker's revenue to \$1 billion a year by 2014 during a keynote at the company's annual global symposium Nov. 2 and 3.

TowerJazz is Orange County's second-largest chipmaker based on annual sales, behind Irvine-based Broadcom Corp. TowerJazz currently makes some 840,000 wafers annually. With the additional capacity in the Japan plant and continuing demand, TowerJazz expects to cross the million-wafer mark next year.

### TowerJazz Long-Term Story Remains Intact



TowerJazz (TSEM) manufactures SiGe, MEMS, RF, embedded flash-based memory, analog/mixed-signal, and CMOS image-sensor devices. TSEM has solidified itself in the specialty semiconductor area. Tower's designs are typically more complex than the manufacture of standard technology. This has the effect of drawing industry leading customers to the firm. <http://finance.yahoo.com/news/TowerJazz-Long-Term-Story-zacks-1343920900.html>