



## Message from CEO

Russell Ellwanger

*“Cynics do not contribute.  
Skeptics do not create.  
Doubters do not achieve.”* [1]

I often sit in gasping wonder at the universal application of correct principles. One such principle being the impact of attitude. A cheerful disposition and countenance most often evokes a cheerful and friendly response. If one hungers after and is directed toward pursuing excellence, he or she most often finds, acknowledges and is inspired by excellence in others. The negative aspects of attitude and outlook have, as well, a prescribed set of responses. In every aspect of life, those of a cynical nature mainly detract, steal from, and at times render a premature death to life-giving fresh winds of new ideas. Skeptics are so busy playing ‘devil’s advocate’ that they most often forget the virtuous role of being an advocate for discovery and proliferation of truth. Self-doubt itself is an epidural to the inspiration that enables achievement. Doubters are the exact people that one does NOT seek when needing that last bit of encouragement prior to exerting the final and great devotion that brings with it the first lights of dawn. And indeed, the saying is true -- ‘it is darkest just before the dawn’ - but how glorious it is when amidst great struggle, the light first begins to break through until piece by piece all is illuminated as if under the noon-day sun. Such is the reward of great devotion!

Throughout my career, I have had opportunities to work with brilliant minds and have been fortunate to be able to surround myself with people that inspire. In the past years as CEO, it has been my pleasure to be involved in and watch the development of a strong, impassioned technical community; one that has not fallen into the thought and attitudinal quicksand of ‘cynicism, skepticism and doubt.’ Of all the activities that I am involved in, the development of talent and imbueing of confidence is indeed the most rewarding. In reality, it is a small touch of Godliness. There is so much greatness

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within us and also pounding at our doors—truly pounding there, waiting for us to open and let it in: next generation lowest figure of merit RonCoff switch technology, fully integrated IR sensors, MEMS tunable antennas, lowest RDSon HV flows, GaN technologies immediately going to the market, etc., etc. We have developed a strong brand in the market. Our task now, is to make it an indelible great brand!

As a testament to our innovation, quality, and the trust our customers have placed in us, we have won four awards this year thus far. TowerJazz has been recognized by Skyworks and International Rectifier as Foundry Supplier of the Year and won Skyworks’ Quality Iron Man Partner award. In addition, Frost & Sullivan selected TowerJazz for a Manufacturing Leadership 100 Award for our RFID implementation in our production line to improve operational efficiency. We are honored to be recognized by these prestigious companies and I commend all of our dedicated teams at TowerJazz.

As part of our overall effort to communicate our strategies, roadmap and offerings to our customers worldwide, we are soon hosting our series of Technical Global Symposium (TGS) events. We have expanded the locations this year to offer TGS “Around the Globe” in Japan, China and Israel, in addition to the US. It is during these technical symposiums where we will celebrate our customers, their success and the role in which we play. We will provide updates on our technology advancements, our future roadmaps, customer and partner case studies, and our overall strategy with regard to capacity and expansion.

I am pleased to mention that we have strengthened our sales leadership in the US by appointing Todd Mahlen as Vice President of North American Sales. Todd has previously served as Vice President of APAC Sales and Power Business Development.

We look forward to sharing further updates with you at one of our upcoming TGS events. We hope to see you there!

Sincerely,

[1] Bryant Stringham Hinckley



## TGS “Around the Globe”

Don’t miss our Technical Global Symposium (TGS) 2013 as we host the event in several locations worldwide!

*TGS expands to include Israel, Japan, and China in addition to the US.*

This year, TGS will take place at the following locations: Tokyo, Japan on July 24, China on September 24, Tel Aviv, Israel on October 9, and Irvine, CA, USA on November 12–13.

The theme for TGS 2013 is “From Innovation to Manufacturing for a Smart World.” Presentations will highlight new technologies, their inceptions, their potential, and how we have enabled efficient multi-sourcing and quick ramp to volume production for our customers. Company executives will present our latest technology advancements including: a next-generation RF SOI platform for handset RF switches and antenna tuners, PA SiGe technology with advanced features such as thick-Cu interconnects, high-resistivity substrates and TSV, RF MEMS, 0.18µm BCD with very-low RdsOn devices for power management ICs, and 700V technology for LED lighting and AC/DC conversion, among others.

To commence each event, TowerJazz CEO, Russell Ellwanger will provide a keynote to discuss how the company’s process offerings and design enablement address the trends in the semiconductor industry, along with the implications to fabless companies, integrated device manufacturers and foundries.

As our worldwide presence continues to grow, TGS “Around the Globe” will further strengthen our visibility among our valued customers in multiple regions, build awareness for our broad range of offerings and provide highlights from each business unit: SiGe/RF/HPA, power management, CMOS image sensors (CIS), mixed-signal CMOS, MEMS, Transfer Optimization and development Process Services (TOPS), and Aerospace & Defense.

We will also present our latest set of sophisticated design kits and models as well as our comprehensive analog IP portfolio. In addition, our esteemed foundry partners, the leading EDA vendors and tool providers, will be on hand to exhibit and demo their solutions to address the design needs of our mutual customers.

For more information on TGS events, please contact: lauri.julian@towerjazz.com.



**TowerJazz Technical Global Symposium (TGS) Japan**  
July 24  
Tokyo, Japan

**Events**



### ISPSD 2013 ISPSD 2013

ISPSD 2013 (International Symposium on Power Semiconductor Devices and ICs) was held in Kanazawa, Japan from May 26–29. ISPSD is one of the biggest world academic conferences on power management and approx 440 participants from semiconductor companies, R&D institutions and universities engaged in advanced power management came to the event from around the world.

TowerJazz exhibited at ISPSD for the first time; we presented our entire power management platform and we introduced our new 700V technology; a 17 ohm mm<sup>2</sup> 750V device which will help customers reduce die size by half for drivers in the fast LED lighting market.

Many attendees to our booth expressed interest in the new 700V technology and were pleased to learn that our Nishiwaki fab will be a center for power IC manufacturing in the future.

### ChipEx2013 ChipEx2013 – Israel

On April 30–May 1, TowerJazz participated at the ChipEx2013 annual conference of the Israeli Microelectronics industry held in Tel-Aviv. The honored guest who opened the conference was Yaakov Peri, Israel Minister of Science, Technology and Space.

TowerJazz has participated in this conference for several years. By having a dedicated booth, we solidified our presence at the show. We had over 250 people from the Israeli semiconductor industry visit our booth and around 50 people attend a lecture on high performance integrated power management platforms for LED lighting control and other applications, presented by TowerJazz's Director of Power and R&D, Dr. Shye Shapira.

This proved to be a good opportunity for TowerJazz to maintain awareness of our specialty pure play foundry offerings. We received positive feedback and a great deal of interest from attendees.

### IEEE International Microwave Symposium (IMS)

On June 1–6, TowerJazz attended the IEEE International Microwave Symposium (IMS) in Seattle, WA. With hundreds of exhibitors and thousands of visitors, IMS is the premier annual international meeting for technologists involved in all aspects of microwave theory and practice.

TowerJazz's booth was located in "Agilent Alley" to showcase our partnership which provides IC design and manufacturing solutions for our mutual customers. We also showcased the availability of our H3 technology, a third generation, 280 GHz SiGe BiCMOS process. Many customers were interested in this offering as well as our next generation H4 process currently in development which will push SiGe performance even higher. In addition, we are focused on RF MEMS and announced a collaboration with our customer, Cavendish Kinetics to deliver high volume tunable RF MEMS products for the fast growing 4G mobile market.



### Roundtable Message from our Executives

*In this issue, we feature a message from Yossi Netzer, Senior Vice President of Corporate Planning. Prior to this, he served as General Manager of Mixed-Signal, RF and Power Management Product Lines since 2005 and as Director, Fab2 Yield and Device Engineering Manager since 2000. From 1995 to 2000, Yossi served in various engineering management positions within the R&D division dealing with CMOS, Mixed-Signal, RF, and NVM Technologies and has been with TowerJazz for 18 years.*

As a global company, TowerJazz's Corporate Planning Mission is to support the senior management team in timely and accurate decision making to achieve the company's short term goals and fulfill its long term strategic plan. In order to do this, we have to maintain an integrated, complete and clear business picture. We monitor our business performance against pre-defined targets to enable effective risk management and a proactive approach in driving our increased business. We also facilitate on-going strategic learning processes.

The scope of TowerJazz's Corporate Planning Mission includes: rolling forecast, fabs loading and revenue tracking, funnel management including New Product Introduction (NPI) and Project Management Office (PMO) as well as strategic multi-year plan preparation.

Corporate Planning is a global team with local presence and execution at the company sites:

Migdal Haemek in Israel, Newport Beach in the US and Nishiwaki in Japan. Although our team does not interact directly with customers, our impact is delivered through our intensive interaction with each business unit, our sales divisions, Customer Support and Operations.

Corporate Planning facilitates the business processes in the company in its various stages. The team works tightly with the business groups (BUs, Sales) on business plans, forecasts and project management as part of each BU's roadmap execution. We manage the opportunities pipeline (funnel) and drive to improve the funnel yield and flow. When it comes to forecast execution (fabs loading, revenue tracking), Corporate Planning works to synchronize Operations, Sales, Finance, and Customer Support with forecasts and plans in order to ensure smooth execution, compliance with financial targets and customers' needs and satisfaction.

On June 6, Paul Hurwitz, Device Technology Manager, TowerJazz participated on an IMS panel, "The Death of GaAs" which addressed some of the competitive technologies (GaN, SiGe, RF CMOS, SOI) that are drawing a lot of attention and pose a threat to GaAs. Panelists discussed the advantages/disadvantages, roadmap, competitive strengths, etc. for these particular technologies. The panel organizer, Eric Higham from Strategy Analytics indicated that he received a number of very positive inputs and thinks the session was very well-received.

I am very pleased with the expertise of our team which encompasses planning and project management (PMOs). People in Corporate Planning need to have methodical and critical thinking, ownership and a proactive attitude. They have to be curious people, with the ability to learn the business and own their related part. Data analysis capabilities and good orientation with systems are important for corporate planning roles. The matrix work environment requires team work capabilities and excellent communication.

Essentially, the role of Corporate Planning is to build the success of the company from the inside out and I appreciate our strong team as we continue on our path as the #1 specialty foundry!

## Awards



**TowerJazz Recognized by International Rectifier as 2012 Foundry Supplier of the Year (05/23/13)**

IR's Supplier of the Year 2012 for Foundry Manufacturing was awarded to TowerJazz based on criteria including cost/spend goals, manufacturing flexibility and responsiveness.

[download press release](#)

FROST & SULLIVAN

**TowerJazz Receives 2013 Manufacturing Leadership 100 Award for Operational Excellence (05/21/13)**

TowerJazz was one of the winners of Frost & Sullivan's Manufacturing Leadership 100 (ML100) Award for its Radio Frequency Identification (RFID) implementation in its production line to improve operational efficiency.

[download press release](#)

**SKYWORKS TowerJazz Receives Skyworks Solutions 2012 Foundry Supplier of the Year Award, Receives Quality Iron Man Partner Award (03/11/13)**

TowerJazz was recognized as "Foundry Supplier of the Year" for the fourth time, providing excellent service, performance and solid alignment with Skyworks' supply chain requirements. For the first time, TowerJazz received Skyworks' coveted award for quality excellence.

[download press release](#)

## Q1 2013 Financial Results Highlights

### Revenue

- First Quarter revenues of \$113 million, with 13% Q/Q increase based on mid range guidance of \$122-\$132 million for Q2'13

### Balance Sheet

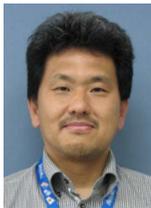
- \$120 million cash on hand
- \$190 million shareholders' equity
- Strong balance sheet indicators
- Short-term debt reduced from \$50 million on December 31, 2012 to \$30 million as of March 31, 2013
- No significant bank or bond debt principal payments in 2013 and 2014
- Current ratio improved from 1.61 times as of March 31, 2012, to 1.76 times as of December 31, 2012 and further improved to 1.98 as of March 31, 2013



## Social Responsibility at TowerJazz

### GAIA Girls Love Science

As part of TowerJazz's community outreach program in Israel, we donate funds to the Global Awareness Investigation and Action (GAIA) project, an international environmental research project involving middle and high school students as "scientific researchers and policy developers" working on environmental projects. On May 19, female students in GAIAjr from the US, China, South Korea, India, Germany, Israel, and Nigeria that currently attend the American International School in Israel traveled to Migdal Haemek to visit our facility. Our CEO, Russell Ellwanger and a number of leading female scientists at TowerJazz met with the students to share their stories and passion for science. TowerJazz's engineering staff is made up of 45% women and this is not by accident. Over the course of the day, it became evident that this trip was as much about fulfilling dreams as it was about science. According to GAIA, the girls walked away with an appreciation for being curious, learning every day, and recognizing that success is often the result of helping others succeed.



## Getting to Know Us

### Shinichi Murakami

Director of Business Development, TowerJazz Japan, Ltd. (TJP)

Shinichi has served in his current position since November 2012. Since he joined the Nishiwaki site (formerly KTI Semiconductor) in 1992, he has held various positions at KTI Semiconductor, KMT Semiconductor and Micron Japan, Ltd.

**Q: Please tell us about your position, focus areas, etc.**

A: My current position and team focus on supporting and increasing the satisfaction of our customers located in Japan as well as loading Fab 4 and managing any issues, requests and questions on logistics, quality, yield and technical matters.

**Q: What do you enjoy about your position and what challenges you?**

A: Since TJP is transitioning from an IDM DRAM facility to a pure play specialty foundry, we are establishing a customer

support function and a customer oriented culture. Making this part of our core function and culture in TJP is our main focus and challenge. The end result is further improving our customers' satisfaction.

**Q: What is your focus this year from a business standpoint?**

A: We have to be ready for production for our new customers. We are focused on deploying business processes and the necessary infrastructure for interface between our customers and the fab as well as training our team members.

**Q: What are some of your hobbies?**

A: I love cooking, listening to and playing music. Come and join our show with good music and food when you are in Japan!

**Q: What is your favorite travel destination?**

A: When I lived in the USA with my family, we traveled to various national parks and enjoyed great nature. We are hoping to have a chance to visit historical places in Europe and the Middle East.

## Press Releases

March 12, 2013–July 15, 2013

-  07/15 — International Rectifier and TowerJazz Enter into a Multi-Year Production Agreement through 2020, [download](#)
-  07/09 — Nujira Extends Foundry Partnership with TowerJazz; Prepares for Volume Production of New Envelope Tracking IC for 4G Smartphones, [download](#)
-  06/19 — TowerJazz to Service High Volume, Commercial Infrared Markets, [download](#)
-  06/13 — TowerJazz Announces its Second Half 2013 Global Conference Roadmap; Plenary and Breakout Sessions to Meet Geographic Customer Needs, [download](#)
-  06/11 — TowerJazz and CMOSIS Announce Ramp to Volume Production for CMOSIS' 12-megapixel CMV12000, [download](#)
-  06/6 — TowerJazz and Cavendish Kinetics Collaborate to Deliver High Volume Tunable RF MEMS Products for Fast Growing 4G Mobile Market, [download](#)
-  05/30 — TowerJazz Announces Proposed Equity Rights Distribution, [download](#)
-  05/28 — TowerJazz Announces New 700V Technology, Cuts Die Size in Half for Drivers in Fast Growth LED Lighting Market, [download](#)
-  05/27 — TowerJazz Participates at DAC with Major EDA Vendors to Showcase Latest Tools Combined with its Superior Technology, [download](#)
-  05/23 — TowerJazz Recognized by International Rectifier as 2012 Foundry Supplier of the Year, [download](#)
-  05/22 — Crocus Licenses its Magnetic Logic Unit™ Technology to TowerJazz, [download](#)
-  05/21 — TowerJazz Receives 2013 Manufacturing Leadership 100 Award for Operational Excellence, [download](#)
-  05/13 — TowerJazz and TLi Korea Collaborate on Sensor ICs Targeting 1.7B Worldwide Mobile Phone Market, [download](#)
-  03/25 — Israel Corporation Has Elected to Convert All of Its TowerJazz Capital Notes into Ordinary Shares, [download](#)
-  03/21 — TowerJazz and Avago Expand Strategic Collaboration, [download](#)
-  03/20 — TowerJazz Showcasing Advanced Solutions at Image Sensors Conference in London on March 19-21, 2013, [download](#)
-  03/14 — TowerJazz's Israeli Lender Banks Extend its Loan's Maturity Dates, [download](#)
-  03/12 — TowerJazz Gaining Sizeable Share of Multi-Billion Dollar Front-End Module (FEM) Market; Silicon Radio Platform Replacing GaAs, [download](#)
-  03/12 — TowerJazz Recognized by Skyworks Solutions as 2012 Foundry Supplier of the Year, Receives Quality Iron Man Partner Award, [download](#)

## Featured TowerJazz News



### **TowerJazz to Service High Volume, Commercial Infrared Markets**

TowerJazz announced it will be the wafer manufacturer for infrared sensing and camera devices using its proven specialty process technologies. In addition to traditional infrared applications, TowerJazz will facilitate expansion into other consumer markets such as gaming, personal security, and application driven platforms, market segments which are already well served by the company.



### **TowerJazz and CMOSIS ramp up 12Mpixel CMOS image sensor production**

CMOSIS and TowerJazz have announced the ramp to volume production for CMOSIS' 12-megapixel CMV12000. The off-the-shelf CMV12000 is manufactured in TowerJazz's Fab-2 in Migdal Haemek, Israel using its advanced 0.18µm specialty CIS process (TS18IS).



### **TowerJazz, Cavendish Kinetics to Bring MEMS Tunable RF Solutions to Mobile Wireless Market**

TowerJazz and Cavendish Kinetics today announced their collaboration to bring MEMS tunable RF solutions to the consumer mobile wireless market. The process technology combines the Cavendish NanoMech™ MEMS technology with the TowerJazz power CMOS process and custom RF interconnect in a single chip solution.



### **TowerJazz rolls 700V process for LEDs**

A device with on-resistance of 17 ohm-mm<sup>2</sup> at 750V is claimed by TowerJazz to cut die size in half over the company's previous technology for drivers in the LED lighting segment.



### **Crocus Licenses its Magnetic Logic Unit™ Technology to TowerJazz**

License agreement to TowerJazz will help speed adoption of Crocus' non-volatile memory (NVM) and magnetic sensors technologies in the fast growing magnetic markets



### **TowerJazz Ties With Avago**

Newport Beach-based TowerJazz, the semiconductor foundry operator, has tied with analog component maker Avago, the two said this morning. According to the two companies, they are in an expanded, strategic collaboration where Avago's next generation products will use TowerJazz's SiGe BiCMOS technology platform.