FutureHorizons

The Global Semiconductor Industry Analysts

Future Horizons Newsletter

April & May

2014

Contents Page

Dialog Semiconductor 45W LED Driver Addresses Dimming, Heat And Cost In High Power SSL Bulbs

London, UK, 31 March 2014 – Dialog Semiconductor plc (FWB:DLG), a provider of highly integrated power management, AC/DC, solid state lighting and short-range wireless technologies, today introduced its latest single-stage LED driver to address dimming performance, heat and cost in high power, dimmable solid state lighting (SSL) applications. The new 45W output iW3600 seamlessly dims from 100% down to 1% of measured light with virtually no dead travel and offers low pop-on current to turn light on at very low dimmer levels (< 5% of light output). It also uses Dialog's patented, configurable over-temperature protection (OTP) derating to tackle LED bulb lifetime issues caused by excessive heat, while its single-stage, digital design lowers Bill Of Material (BOM) costs for lighting OEMs.

Designed for retrofit bulbs including external, dimmable lighting ballast drivers and A19, PAR and T8 bulb replacements used in existing phase-cut dimmer installations, the iW3600 incorporates Dialog's patented intelligent dimming control to provide compatibility with a wider range of dimmers, including TRIAC, digital and universal dimmers. This technology uses digital analytics to query the dimmer and applies algorithms that automatically adapt to the dimmer type.

Fairchild Acquires Body Motion Capture Firm Xsens: Report

Fairchild Semiconductor International Inc. (San Jose, Calif.) has acquired Xsens Technologies BV (Eschede, the Netherlands), a private company that has specialized in 3D motion tracking products based on MEMS inertial sensors.

According to a report, Xsens executives were giving out Fairchild branded business cards at the Mobile World Congress. No details have been provided of the purchase price for Xsens.

Both Xsens and Fairchild spokespeople declined to confirm or deny the deal or provide more information.

Infineon's New Security Chip Solution Protects Connected Electronics

Neubiberg, Germany – March 31st, 2014 – Infineon Technologies AG (FSE: IFX / OTCQX: IFNNY) today announced its OPTIGA™ Trust P, a programmable hardware-based solution for improved security of electronic devices in connected systems. The addition to the OPTIGA Trust family provides robust device authentication, protects computing systems from both intentional attacks and accidental damage from user error, and enhances security and privacy of stored data.

Allowing the connection to only known, legitimate devices is a key element to any system security, and it becomes crucial when there are more and more connected devices used by enterprises and consumers. By integrating the OPTIGA Trust P into their designs, electronics manufacturers add a security safe to their embedded system.

Intel To Buy Smartwatch Startup

Intel is set to acquire a smartwatch startup as part of the company's new focus on wearables and the Internet of Things. TechCrunch revealed that San Francisco-based Basis sold for between $100 million and $150 million.

Basis designs a wrist-based health tracker and online personal dashboard to measure sleep cycle and activity. The Basis Sleep Tracker tracks and analyzes REM, light, and toss-and-turn sleep patterns using four different sensors: a three-axis accelerometer to measure body activity and sleep quality, a perspiration monitor, skin temperature sensor and heart rate monitor for pattern accuracy.

Nordic Semiconductor Launches Reference Design For Bluetooth Smart Beacons

OSLO, NORWAY: Ultra low power (ULP) RF specialist Nordic Semiconductor ASA announced the release of a reference design for Bluetooth® Smart beacons based on Nordic's multiple award-winning and class-leading nRF51822 multiprotocol Bluetooth Smart and proprietary 2.4GHz System-on-Chip (SoC). Bluetooth Smart beacons are low-cost, low-power Bluetooth low energy wireless transmitters that can advertise their location to Bluetooth Smart Ready smartphones in close proximity.

The nRF51822 Beacon Kit allows developers and engineers to develop their own beacon applications using Apple's iBeacon standards, or create their own beacons based on their own specifications using Bluetooth Smart. This kit is an ideal starting point for OEMs and ODMs to begin development of beacon hardware to be used together with associated back-end services that they will typically offer as complete beacon solutions to their customers.

ON Semi Eyes Industrial Sector With Truesense Acquisition

ON Semiconductor struck a deal with Platinum Equity to buy image sensor device maker Truesense Imaging for $92 million in cash. The merger is said to complement ON Semiconductor's custom and standard CMOS image sensor product portfolio, which also includes contact image sensor modules, ambient light sensors, proximity sensors, and touch sensors.

Truesense produces interline transfer charge-coupled device (CCD), full Frame CCD, linear CCD, and CMOS image sensors that target several industrial end-markets.

"The pending acquisition of Truesense Imaging is a step towards our stated strategic goal of expanding our presence in select segments of the industrial end-market," said ON Semiconductor president and CEO Keith Jackson in a press release. "With the acquisition of Truesense, we will augment our abilities to deliver a broad range of high-performance image sensors to the industrial end-market and at the same time significantly expand our customer footprint."

Joint Venture Boosts Photronics In Supplying Taiwan Semiconductor Market

Photronics, a Brookfield-based supplier of imaging technology for the global electronics industry, has entered a joint venture with a Japanese company to create the largest domestic supplier of photomasks in Taiwan serving the semiconductor industry.

Photomasks are high precision quartz plates that contain microscopic images of electronic circuits and are a key element in the manufacture of semiconductor chips and flat panel displays.

The partnership between Photronics and Dai Nippon Printing forms a joint venture, Photronics DNP Mask Corp., which will focus on serving semiconductor manufacturers in Taiwan.

Samsung Now Mass Producing Industry's Most Advanced 4Gb DDR3, Using 20 Nanometer Process Technology

SEOUL, South Korea, Mar 10, 2014 (BUSINESS WIRE) -- Samsung Electronics Co., Ltd., the world leader in memory technology, today announced that it is mass producing the most advanced DDR3 memory, based on a new 20 nanometer process technology, for use in a wide range of computing applications.

Samsung has pushed the envelope of DRAM scaling, while utilizing currently available immersion ArF lithography, in its roll-out of the industry's most advanced 20-nanometer (nm) 4-gigabit (Gb) DDR3 DRAM.

With DRAM memory, where each cell consists of a capacitor and a transistor linked to one another, scaling is more difficult than with NAND Flash memory in which a cell only needs a transistor. To continue scaling for more advanced DRAM, Samsung refined its design and manufacturing.

Samsung And GLOBALFOUNDRIES Forge Strategic Collaboration To Deliver Multi-Sourced Offering Of 14nm FinFET Semiconductor Technology

Samsung Electronics Co., Ltd. and GLOBALFOUNDRIES today announced a new strategic collaboration to deliver global capacity for 14 nanometer (nm) FinFET process technology. For the first time, the industry's most advanced 14nm FinFET technology will be available at both Samsung and GLOBALFOUNDRIES, giving customers the assurance of supply that can only come from true design compatibility at multiple sources across the globe. The new collaboration will leverage the companies' worldwide leading-edge semiconductor manufacturing capabilities, with volume production at Samsung's fabs in Hwaseong, Korea and Austin, Texas, as well as GLOBALFOUNDRIES' fab in Saratoga, New York.

Developed by Samsung and licensed to GLOBALFOUNDRIES, the 14nm FinFET process is based on a technology platform that has already gained traction as the leading choice for high-volume, power-efficient system-on-chip (SoC) designs. The platform taps the benefits of three-dimensional, fully depleted FinFET transistors to overcome the limitations of planar transistor technology, enabling up to 20 percent higher speed, 35 percent less power and 15 percent area scaling over industry 20nm planar technology.

Wearable-Solutions Designer Maxwell Guider Technology Selects STMicroelectronics MEMS Sensors for Advanced Activity Trackers

STMicroelectronics (NYSE: STM), a global semiconductor leader serving customers across the spectrum of electronics applications, the world's top MEMS (Micro-Electro-Mechanical Systems) manufacturer and the leading supplier of MEMS for consumer and mobile applications1, announces that Maxwell Guider Technology, an innovative wearable-solutions company in Taiwan, selected ST's LSM330 6-axis inertial module and LIS3DSH 3-axis accelerometer as the foundation for its low-power motion-sensing activity trackers suited for all generations and lifestyles.

"Simple activity-tracking capability is no longer enough for consumers adopting the Smart Mobile Lifestyle; bulky, dull, and dumb wearable devices are not welcomed in the market," said Morgan Yang, CEO of Maxwell Guider Technology. "Consumers want wearable devices that are smart enough to automatically distinguish whether they are swimming, playing soccer, dancing or practicing yoga, and ST is the only supplier whose sensors keep that concept in mind—and meet our demands for dynamic and selectable acceleration range, stability,

TI Intros Wireless Network Range Extender

Texas Instruments (TI) has debuted the SimpleLink CC2592 range extender that claims to deliver up to seven times improvement in range when paired with TI's 2.4GHz low power RF solutions for ZigBee, 802.15.4, 6LoWPAN and Bluetooth low energy networks.

The first launched pairing is the CC2592 with the SimpleLink ZigBee CC2538 wireless MCU to speed time to market of ZigBee-enabled equipment. The combined solution benefits from -101dBm sensitivity and 20dBm output power, which raises the link budget by 17dB.

According to TI, as a low cost, industrial temperature solution, the CC2592 offers extended range for a variety of applications including gateways, electric and gas meters, home and building automation, lighting, safety and security systems. Also, the range extender is a highly integrated solution with small external BOM, which reduces cost, simplifies layout and allows for smaller end-equipment form factors, added the company.

TowerJazz and Panasonic Enter JV for Semiconductor Manufacturing Processes

TowerJazz, the global specialty foundry leader, today announced the successful completion and kick-off of the joint venture (JV) with Panasonic Corporation (First Section of TSE and NSE ticker: 6752).

Within the scope of the JV, Panasonic transferred its semiconductor manufacturing process and capacity tools of 8 inch and 12 inch wafers at its Hokuriku factories (Uozu, Tonami and Arai) to the JV, committing to acquire its products from the JV for a long-term period of at least five years of volume production. TowerJazz is holding 51% of the shares of the JV, and its revenues are increased by approximately $400 million per annum. Panasonic Corporation will be a 49% shareholder of the JV.

The JV will enable TowerJazz to offer its customers capacity of a state of the art 300mm technology fab including best of class 65nm CMOS image sensor dark current and quantum efficiency performance and additional 45nm digital technology, and added available capacity of approximately 800,000 wafers per year (8 inch equivalent) in three manufacturing facilities in Japan. The JV will continue the production of Panasonic's semiconductor processes as Panasonic's subcontractor as well as seek to expand operations by leveraging TowerJazz's customers and businesses to capture out-of-group sales.

TSMC Extends Chip Stack Tech With 2.5D/3D ICs

TSMC has recently expanded its line-up with the introduction of 2.5D and 3D ICs. The company presented its work on chip stacks as one part of a broad overview of its technology portfolio for a North American market that comprises 74 per cent of its foundry business.

The company presently offers four versions of its 28nm process, a 20nm planar technology, and is ramping up a 16nm FinFET process, said Jack Sun, TSMC's CTO. It will offer a 16FF+ process before July that is GDS compatible with the current 16FF and sports 16-18 per cent faster data rates and lower leakage, he said

S. Korea World's 2nd-Largest Semiconductor Supplier In 2013

SEJONG, March 24 (Yonhap) -- South Korea's global market share for semiconductors grew to be the world's second largest last year, surpassing that of Japan for the first time in history, the government said Monday.

In 2013, South Korea sold about US$51.51 billion worth of semiconductors, supplying 16.2 percent of global consumption, according to the Ministry of Trade, Industry and Energy.

The country's global market share gained 1.5 percentage points from 14.7 percent in the previous year. As a global leader, the U.S. also continued to expand its market share from 50.7 percent in 2012 to 52.4 percent.

Graphene Nanoflakes Boost Solar Panel Efficiency

A team of researchers at the University of Cincinnati has found a way of using graphene nanoflakes to make solar-powered panels in lights, calculators and roofs lighter, cheaper, more flexible and more efficient. The study found that efficiency increased threefold by adding graphene, because the material was helping to rapidly transport charges to achieve higher photocurrent.

Fei Yu, a University of Cincinnati doctoral student in materials engineering, has experimented with adding a small fraction of graphene nanoflakes to polymer-blend bulk-heterojunction (BHJ) solar cells to improve performance and lower costs of solar energy.

German Researchers Make Induction Stove More Affordable and More Energy Efficient

Neubiberg, Germany – March 19, 2014 – Induction stoves are getting more affordable and more energy efficient. This is the result of the three-year research project ”InduKOCH”. The research team consisted of E.G.O. Group, a worldwide supplier for manufacturers of household appliances, the University of Bremen's Institute for Electrical Drives, Power Electronics and Devices (IALB) and semiconductor manufacturer Infineon Technologies, who headed the project.

The team succeeded in reducing the number of components that induction stoves require. The benefits for consumers: in the future a standard induction stove will not be much more expensive than a conventional stove. Moreover, there will be less power dissipation so that today's already very energy-efficient induction methods will use even less electricity in the future. Induction heaters and stoves based on InduKOCH technology consume between 20 and 100 kilowatt-hours (kWh) less power per year than conventional electric stoves, making an active contribution to climate protection.

Ray Tracing Makes Its Way Into Mobile Devices

Ray tracing is a hybrid rendering technique that can provide high-quality dynamic lighting and shadow effects and can enhance other elements of the game engine as well. One example is improving game AI. Characters in a first-person shooter that can start to

see and understand the 3D environment around them, using the ray tracing to process spatial understanding, opens up a world for realistic behaviour when in-game agents can make decisions based on direct line-of-sight calculations that model what they are able to see.

Three years and a few months ago, Imagination Technologies surprised the Technorati by buying struggling but clever Caustic Graphics. The value of ray tracing has been well established, as has the painfully slow process of rendering such physically perfect images. The idea of using ray tracing on a mobile device, the arena Imagination plays in, seemed farfetched. Equally questionable was the idea that IP provider Imagination would enter into the chip or AIB PC business: it had been in that business, and that was why it went into IP.

Discovery Of New Semiconductor Holds Promise For 2D Physics And Electronics

From super-lubricants, to solar cells, to the fledgling technology of valleytronics, there is much to be excited about with the discovery of a unique new two-dimensional semiconductor, rhenium disulfide, by researchers at Berkeley Lab's Molecular Foundry. Rhenium disulfide, unlike molybdenum disulfide and other dichalcogenides, behaves electronically as if it were a 2D monolayer even as a 3D bulk material. This not only opens the door to 2D electronic applications with a 3D material, it also makes it possible to study 2D physics with easy-to-make 3D crystals.

Ultra-Thin Light Detectors The Possibility Of Integrating A Light Detector For Terahertz Radiation Into A Chip

A new, extremely thin kind of light detector was created at Vienna University of Technology. Two very different technologies were combined for the first time: metamaterials and quantum cascade structures.

The quantum-cascade detector is based on a conventional THz-QCL. It consists of a GaAs/Al0.15Ga0.85As heterostructure grown by MBE with the exact growth sequence: 8.0/2.7/6.6/4.1/15.5/3.0/9.2/5.5 nm, where the bold letters represent the Al0.15Ga0.85As barriers and the normal letters the GaAs wells.

Subtle interactions of electrons and light make them very valuable for technology; ultra-thin systems of semiconductor layers can turn electrical voltage into light. But they can also be used the other way around and serve as light detectors.

Local Start-Up Promises Month-Long Battery Life For Wearables

Ineda Systems has announced its line of 'Dhanush' SoCs, designed to meet the extremely low-power and long battery-life requirements of wearable electronic devices. The start-up, which is dubbing these CPUs as Wearable Processing Units (WPUs), has some very high goals for the chips. Ineda claims it can enable 30 days of always-on battery life, with always-on speech recognition, sensor analysis, and contextual computing, and also Bluetooth Low Energy (BLE) connectivity.

Dhanush SoCs include the Nano, Micro, Optima, and Advanced, which are geared towards meeting the demanded system prices of wearables that start at $299 on the high-end and extend to below $99 on the low-end.

TI Aims For Lighter Cars, Less Cables Via Bluetooth LE

There's no stopping Bluetooth Low Energy from making its way and (potentially) staying as a regular technology in automobiles. Bluetooth is being used to allow hands-free phone calls inside the car, along with infotainment control, and is on track to deliver more. Soon enough, we could be seeing Bluetooth Low Energy technology exploited for opening and closing doors and windows, or adjusting seats, mirrors and lighting, all wirelessly, by touching a smartphone or punching a wirelessly controlled in-vehicle button.

Texas Instruments, armed with its automotive-qualified Bluetooth Low Energy device, hopes to be in the forefront of the emerging automotive revolution in which car OEMs advocate to replace in-car cables with wireless technologies, and promote smartphone-controlled applications for their vehicles.

Land Rover Lets Drivers See Through Bonnet, Engine Bay

Jaguar Land Rover has developed a technology that makes the front part of the vehicle invisible. By combining augmented reality and driver assistance system, the carmaker's Transparent Bonnet technology is geared to help drivers manoeuvring in confined spaces or difficult environments.

The carmaker feeds the video signal from cameras located in the vehicle's grille to a semi-transparent head-up display almost as wide as the windscreen. This effectively enables a see-through view of the terrain next to the vehicle's front wheels. To some extent, it looks like the bonnet and the engine bay were transparent.

Wearable Technology Engineering Time Machine Introduced By Triad Semiconductor

Triad Semiconductor announces rASIC™ solutions for rapid wearable technology IC development. An rASIC is a reconfigurable full custom mixed signal ASIC that radically reduces development times by one full year. Wearable tech applications are demanding high levels of integration to achieve the cost, size, weight, power and performance goals demanded in this rapidly evolving market segment. Design engineers are learning that they cannot simply rely on a bag full of discrete standard products to achieve their SWaP and cost goals for products to be worn on the body.

Triad's rASICs give design teams the ability to rapidly and inexpensively integrate functions such as:

Yandex Moves Into Mobile

Russian Internet giant Yandex has introduced software for mobile phones. This new software package is the latest sortie by Yandex in its war on Google in the Russian market. Yandex.kit is nearly identical to the Android system, on which is it based, with one major caveat – all Google services are replaced by similar Yandex brand services.

The Explay Flame is equipped with a 4.5-inch display with a resolution of 960 x 540 pixels, 4-core MediaTek MTK 6582M 1.3 GHz processor, 1 GB of RAM, 4 GB of internal memory (microSD cards are supported), support for standard wireless interfaces, an 8 megapixel camera and a 1700 mAh battery.

These services include the phone's default search engine, e-mail, maps, cloud storage, browser and app store. The Yandex app store has more than 100,000 applications.

The new Flame phone from Explay, a Russian manufacturer of digital multimedia technology, will operate with Yandex.Kit software. The Flame will be available for purchase in April for $175.

Russo-Finnish Consortium Halts Siberian LTE Equipment Manufacturing

Rusnano, Russia's nanotech giant, Tomsk-based Micran, a major electronics manufacturer, and Finland's Nokia Solutions and Networks (NSN) are shutting down Wireless Technology Center (WTC), their joint LTE base station facility in Tomsk, East-West Digital News, the first all English-language online resource dedicated to Russian digital industries, reported earlier this week.

Russian media have offered the lack of legal endorsement by national regulators as an explanation for the move. A year ago WTC equipment was indeed formally denied the status of a "Russian-made product" under Russian law. With NSN then owning 75%, the Siberian production capacity was considered "foreign."

CNews.ru, for one, reported earlier this month that despite the high hopes of the partners last July when Rusnano bought into the JV – thus bringing NSN's shareholding down to 50%, on a par with Rusnano and Micran's combined – the consortium has nonetheless failed to get their product the coveted green light.

New Polymer-LC-Based Material For Optoelectronics Developed In Krasnoyarsk

Researchers at the Krasnoyarsk-based Kirensky Institute of Physics in Siberia have developed a new composite material for optoelectronics, based on polymers, liquid crystals, and ionic surfactants, Globalsib.com reported.

Ionic surfactants, also known as surface-active substances, are compounds that lower the surface tension between two liquids or between a liquid and a solid, and with their degreasing and wash active abilities have an array of cleaning applications.

According to Oksana Prishchepa, the project manager, the scientists have come up with a "brand new concept of controlling the optical properties of liquid crystal (LC) materials." The approach is believed to considerably broaden the area of LC applications.

From the Soviet Union to Silicon Valley

Born in Vladivostok, a city closer to Tokyo than Moscow, investment specialist Alexandra Johnson has always had an international outlook. Soon after the fall of the Soviet Union, she left for the U.S., where she added a M.B.A from the University of California, Berkeley to her Ph.D. from St. Petersburg State University. Once in California, she found her niche as a venture capitalist helping entrepreneurs from her homeland translate their ideas into profits.

The first generation of post-Soviet businessmen were "People who had spent their whole career working for a big state enterprise," Johnson said. Consequently, entrepreneurs were enthusiastic, but didn't always know how to turn their concept into a profitable business. Still, these first time entrepreneurs were creative and eager to explore the world of capitalism. One businessman, an owner of a small grocery store, spontaneously pitched Johnson the development of noiseless coffee grinder. "When I'm talking to Russian entrepreneurs the sky is the limit," Johnson said.

Roselectronica Invests $35m In Innovation Development

Russia's Roselectronica, the umbrella company for national electronics makers, is expected to invest more than $35m in its companies' innovation development between now and 2016, Nanonewsnet.ru reported.

The investment will reportedly be funneled into the setup and development of high-tech production facilities that would use Russian-made components, a measure expected to reduce the end cost of products by an estimated 20-27%.

The current investment program will consist of two major parts. One will include the introduction of advanced technologies and the setup of production of civilian products based on the technologies. The other will call for the launch of the commercial-scale manufacture of innovative products.

Russian TV Gear Maker Acquires Portuguese IT Assets, Eyes New Markets

GS Group, a St. Petersburg-based industrial holding with vested interests in telecommunications, has bought into Novabase, the leading IT player in Portugal, and is paving the way for a major expansion in Western Europe and Africa.

The sizable Russian manufacturer of TV receivers and software for TV operators last week completely took over Novabase Digital TV EURL and DTV Research and also acquired 49% of Novabase Digital TV in a 5 million euro deal, reported East-West Digital News, the first all English-language online resource dedicated to Russian digital industries.

GS hopes the move will open the Novabase markets for Russian chips manufactured at the holding's flagship asset, GS Nanotech, in Russia's westernmost enclave of

Kaliningrad. The Russian company underscored that its chips are based on its proprietary SiP (system-in-package) technology.

Developer From Outside Moscow Offers Diamond-Based Innovation

CVD.Spark, the technology company from Troitsk just outside Moscow developing an artificial diamond based product line, has received a $556,000 grant from the Skolkovo Foundation which is expected to facilitate the commercialization of its proprietary CVD diamond wafer production technology, the Skolkovo Foundation website announced.

Based on this technology, the company manufactures diamond optics, ionizing radiation detectors, special cutters for well-boring machines, and other products.

Russia Has The Cheapest iPhone In Europe

The cost of the iPhone in Russian retail networks is now the lowest in Europe, says the head of Russian cellphone retailer Svyaznoy Michael Touch in the company's upcoming analytical report. According to Touch, this was due to the depreciation of the ruble against the euro. Since the beginning of 2014, it has fallen by 9 percent.

Apple has not changed the ruble selling prices on the iPhone since the beginning of 2014, staff from several of its Russian partner companies told Vedomosti.

Russia Expects Its Own Chip For Bank Cards As Early As 2015

Pursuing the goal of setting up its own payment operation and clearing centers to circumvent US-based Visa and MasterCard, Russia may have its own homemade chip for banking cards as early as next year.

According to East-West Digital News, the first all English-language online resource dedicated to Russian digital industries, citing the Russian business daily Vedomosti, microelectronics developer and manufacturer Mikron Group has high hopes of getting a new chip certified with MasterCard and Visa no later than in 2015, then starting production of up to 10 million such chips a month. The price will be "competitive enough to rival foreign chipmakers' products," Mikron spokesman Alexei Dianov said.

The banking chip, which Mikron claims has been made to 90-nanometer design rule to ensure enhanced kernel crypto-protection, will feature the PayPass and PayWave contact and contactless technologies that enable easy payments at stores equipped with reader devices.

Russia Ready To Launch Its Most Powerful Chip To Date

MCST, a Russian electronics maker, has announced the completion of a series of tests for its new Elbrus-4C chip. The developer is gearing up for the serial production of the chip.

Elbrus-4C is a four-kernel microprocessor developed to fit 65-nanometer design rule and supporting three DDR3-1600 memory channels. Each kernel operates at a clock frequency of 800MHz. The chip, which is considered to be a next gen product, also has cache memory increased.

The chip is powered by MCST's proprietary Elbrus operating system developed on Linux 2.6.33 kernel architecture. The Elbrus-4C is believed to be Russia's most powerful processor comparable in its key characteristics with the Intel i3 and Intel i5 chips (in the latter, 22-nanometer design rule is used, though).

World Economic Round Up

Over the past year, Brazil's central bank has increased its benchmark bank borrowing rate from 7.25 percent to 11 percent, among the more aggressive emerging market campaigns to keep inflation within the 2.5 percent to 6.5 percent band it is required to achieve annually. Those rate increases are still working through Brazil's economy, and the effort to hold down inflation has been helped recently by new government assurances that it will hit a budget surplus target, in addition to the recent appreciation of Brazil's currency. Inflation has been pushed up by a spike in food prices in March caused by drought at the beginning of the year.

The latest economic news by country to include USA, Europe, UK, Japan, China, Asia Pacific and India can be found each month in our Semiconductor Monthly Report.

Industry Events 2014

Future Horizons Events

- Silicon Chip Industry Training Seminar – London – 16th June 2014
- Industry Forecast Briefing, London – 9th September 2014
- International Electronics Forum – 8-10th October

To book your place on any of our events please contact us on:

Telephone: +44 1732 740440
Email: mail@futurehorizons.com

Download Future Horizons Full Events Calendar Here

Industry Events

-

MARK YOUR CALENDER FOR THE NEXT

SILICON CHIP INDUSTRY WORKSHOP
MONDAY 17th March 2014
AND
INDUSTRY FORECAST BRIEFING
TUESDAY 9th September 2014

BOTH BEING HELD AT

NH HARRINGTON HALL HOTEL, LONDON
AND
INTERNATIONAL ELECTRONICS FORUM
8-10th OCTOBER
Venue TBA

Follow Us On Twitter

For weekly semiconductor news and updates follow us on Twitter.