FutureHorizons

The Global Semiconductor Industry Analysts

Future Horizons Newsletter

May 2013

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Industry News By Company

Apple And Samsung Locked In Price War In India

Samsung Electronics Co. and Apple Inc. are battling it out globally for smartphone dominance. In India, they are trying to outdo one another by offering various discounts to convince consumers to switch smartphones.

Apple launched a scheme in early April that allows consumers to exchange any of their older smartphones—whether it be an iPhone, an Android-based phone or a Blackberry–for a cash discount of at least 7,000 rupees ($128) on the purchase of an iPhone 4, the basic model available in India.

Shortly after on April 10, South Korean rival Samsung said it would offer a 15% cash back to consumers who purchase its smartphones including the Galaxy Note II, Galaxy S III, Galaxy Grand, and the Galaxy tablet. Most of these devices fall in the high end of Samsung's portfolio of products sold in India. Samsung's promotion is on top of a previous offer that allows customers to buy any of these devices through a 12-month interest-free payment plan.

ARM Aims Big In Server Market .

LONDON—ARM Holdings ARM.LN -0.10%PLC chief Warren East has presided over dramatic growth since he joined the firm 12 years ago, but as he presents his final set of earnings the chip designer is pushing into segments such as the server market that present new challenges for incoming CEO Simon Segars.

Together with its chip-maker partners, ARM has been developing ever more powerful chip cores. New 64-bit processors unveiled last year—but yet to ship—aim to compete head-on with companies such as Intel Corp. INTC +0.09%and International Business Machines Corp. IBM +0.19%in markets such as the server segment, where processing power is king.

Avago Technologies Acquires Javelin Semiconductor To Develop Technology For Next Generation Hybrid Gaas/CMOS RF Front-End Modules

SAN JOSE, Calif. and SINGAPORE, April 30, 2013 (GLOBE NEWSWIRE) -- Avago Technologies Limited (Nasdaq:AVGO), a leading supplier of analog interface components for communications, industrial and consumer applications, today announced that it has acquired Javelin Semiconductor, Inc., an innovator of high performance radio frequency (RF) and mixed signal CMOS integrated circuits for wireless communications. Based in Austin, Texas, Javelin is a leading developer of high performance 3G CMOS power amplifiers (PAs). The acquisition of Javelin will form the foundation of Avago's RF CMOS design and development for its wireless semiconductor division.

Daintree Networks Partners With Marvell Semiconductor

Daintree Networks, Inc., a provider of networked wireless control solutions for smart buildings, and Marvell Semiconductor, Inc., a subsidiary of Marvell Technology Group, Ltd., have partnered to provide open-standard ZigBee(R) wireless capability integrated into smart lighting products. All the companies are based in the US.

Marvell Technology is engaged in the production of high performance analog, mixed, and digital signal processing and embedded microprocessor integrated circuits.

The joint effort is focused initially on using Marvell semiconductor products to enable integrated wireless LED drivers that allow LED fixtures to interoperate with Daintree's award-winning open-standard ControlScope(TM) solution.

By implementing integrated wireless LED drivers, fixture manufacturers eliminate the need for a separate wireless adapter commonly used in today's deployments of commercial wireless lighting control. Installation is also easier with integrated wireless drivers.

Fujitsu Sells Off Microcontroller And Analog Chip Biz To Spansion

It's been a busy day at Japanese IT giant Fujitsu, with the company reporting its financial results for its fiscal 2012 year ending in March (that's not a typo) and also announcing that it has spun off its microcontroller and analog device business to the flash-memory maker Spansion.

Back in February, Fujitsu announced a massive restructuring of its chip, information technology, and communications equipment businesses, and spun off its Fujitsu Semiconductor wafer baker, which makes chips for Fujitsu's own gear as well as on contract for third parties. Conglomerate Panasonic and former rival Taiwan Semiconductor Manufacturing Corp are taking bits and pieces of the Fujitsu chip-making biz.

And as of Tuesday, Spansion is paying Fujitsu ¥10.9bn ($110m) to take over anther chunk of the Fujitsu chip biz, plus another ¥6.4bn ($65m) to cover chip inventories. Oddly enough, this is a profitable microcontroller and analog chip business.

Global Edge Acquires Dearborn Electronics

Bangalore-based Global Edge Software, an embedded software solutions and services company focused on wireless, telecom and IP networking technologies, has signed an agreement to acquire 100 per cent stake in Dearborn Electronics (India) Pvt Ltd, for an undisclosed sum.

Dearborn Electronics specialises in automotive and automation control, communication and information solutions space

Successful Market Launch Of Heat Conducting Paste TIM – Rapid Expansion Of Range To Other Product Groups

Neubiberg, April 30, 2013 – The Thermal Interface Material (TIM) developed by Infineon Technologies AG for the reduction of contact resistance between the metal surface of power semiconductors and the heat sink has been launched successfully. Using the EconoPACK™ + of the new D Series, customers were able to see for themselves that conductivity was substantially improved with the heat conducting paste. As a result of strong customer demand, Infineon is now planning to expand the range. In the first quarter of 2014 the product groups 62mm, EconoDUAL™ 3 and PrimePACK™ 2 are going to be available with TIM pre-applied. Toward the end of the first half of 2014 the modules EconoPACK™ 4 and PrimePACK™ 3 as well as the modules Econo 2 and 3 are to be available with the material. The launch of the TIM-applied production series Easy 1B and 2B, Smart 2 and 3, and IHM / IHV is planned for 2015.

In order to be able to meet the greatly increasing demand, Infineon has set up a production line for applying TIM to the modules at the Hungarian Backend site for power electronics in Cegléd. The thermally conductive paste is applied to the modules using a stencil-printing process. An elaborate quality assurance procedure integrated into the fabrication process guarantees that no air is trapped when joining the module and the heat sink. Special technical processes and machines were developed just for the fabrication process.

Infineon, Globalfoundries Announce Joint Technology Development, Production Deal

German semiconductor maker Infineon Technologies (IFNNY.PK,IFX: Quote) and Globalfoundries Inc. announced a joint technology development and production agreement for 40 nanometer or nm embedded flash or eFlash process technology. The cooperation would focus on technology development based on Infineon's eFlash cell design and manufacturing of automotive and security microcontrollers with 40nm process structures. Production of the next generation 40nm eFlash MCUs would occur at different Globalfoundries sites, initially in Singapore with subsequent transfer to its site in Dresden, Germany.

According to Arunjai Mittal, Member of the Management Board of Infineon Technologies, "Next generation embedded Flash microcontrollers with 40nm process structures will further enhance our competitive strength in the automotive, industrial as well as chip card and security markets."

Intel Margin Falls Ahead Of Chip Launch

Intel’s gross profit margin fell harder than expected in the opening months of this year as it geared up for a new generation of microprocessors that are seen as vital to the struggling PC industry’s hopes for a rebound.

The new chips, codenamed Haswell, are set to bring down prices and boost battery life in laptops and other mobile devices when they are shipped later this year, narrowing the lead that rival ARM-based chips hold.

Landshut Silicon Acquires Micron Technology Italia

Landshut Silicon Foundry GmbH (LFoundry), a Germany-based analog and mixed signal and technologies foundry, has acquired Micron Technology Italia, Srl., an Italy-based subsidiary of Micron Technology, Inc. (MT), and all of its semiconductor fabrication facility assets in Avezzano, Italy.

MT is a US-based manufacturer and marketer of semiconductor devices.

Landshut Silicon has entered into an agreement to acquire Micron Technology and all of its semiconductor fabrication facility assets in Avezzano, Italy.

Under the agreements, MT will assign to LFoundry its four-year supply agreement with Aptina to manufacture image sensors at the 200 millimeter Avezzano facility. MT will also grant LFoundry a restricted technology license.

Panasonic Boosts India Manufacturing By Adding Flat Televisions

Panasonic Corp. (6752), the Japanese manufacturer struggling to make its television business profitable, plans to start producing flat-panel TVs in India to fuel sales growth and meet local regulatory demands.

Japan's No. 2 TV maker is building a factory in the northern state of Haryana where it will make flat-screens using semiconductors imported from Japan to meet a target of tripling Indian sales by 2016, Panasonic President Kazuhiro Tsuga told reporters in Mumbai. The company plans to start making chips in India after 2015 to help feed a market that consumed $8 billion in semiconductors in 2012, a 7.4 percent increase over 2011 even as global chip-based revenue declined.

Qualcomm: Victim Of Its Own Success

Much is made of Apple's valuation: a forward price-earnings multiple of 10 times for the recognised leader in mobile computing. But the most puzzling multiple in mobile is not Apple's. It is Qualcomm's, at 14 times. Qualcomm's patents mean that every handset maker that uses the fastest wireless standard – "long-term evolution" – must pay it a royalty. Its modem chips, or its modem/processor chipsets, are in phones made by Apple, Samsung and many others. Qualcomm is increasing revenues at over 20 per cent (double Apple's rate). Its margins are wide. Its balance sheet is heaped with cash. It pays a dividend and buys back shares. It looks too cheap.

RDA Microelectronics Announces Bluetooth Design Win With Sunplus for Automotive DVD Systems .

SHANGHAI, China, April 23, 2013 (GLOBE NEWSWIRE) -- RDA Microelectronics, Inc. (Nasdaq:RDA) (the "Company"), a fabless semiconductor company that designs, develops and markets wireless systems-on-chip and radio-frequency semiconductors for cellular, connectivity and broadcast applications, today announced that Sunplus Technology Co., Ltd. (TWSE: 2401; LSE:SUPD) has selected the RDA5876A integrated Bluetooth solution to include on its reference design for their latest products for in-car DVD systems.

Based in Taiwan, Sunplus is a leading provider of multimedia IC solutions for DVD players, portable DVD players, car DVD/CD players and HD set-top-boxes. The SPHE8202G-B and SPHE8202VGQ-B in-car DVD products integrate DSP for echo cancellation and noise reduction with Bluetooth function, which were released to customers at the Hong Kong Electronics Fair, Asia's largest electronics fair, held from April 13-16, 2013.

Teledyne Dalsa Acquires Dutch Semiconductor Firm

WATERLOO – Teledyne Dalsa, the Waterloo-based subsidiary of Teledyne Technologies, has purchased a semiconductor manufacturer in the Netherlands.

Axiom IC B.V. of Enschede, the Netherlands, is a fabless manufacturer of high-performance CMOS mixed-signal integrated circuits.

Fabless means the company designs semiconductors and outsources the fabrication. CMOS (complementary metal-oxide-semiconductor) integrated circuits are used in various applications including image sensors.

Teledyne Dalsa produces digital imaging products as well as semiconductors. The company, formerly known as Dalsa Corp., was acquired by California-based Teledyne Technologies for $341 million in 2011.

XMOS Launches Xcore-Analog Industrial Multicore Microcontrollers

xCORE-Analog™ is a range of multicore microcontrollers optimized specifically for designers of industrial products, including smart interfaces, high-level sensors and actuators, PLCs, communications devices and motor controllers. Developers can use the new multicore microcontrollers to quickly develop their products, with a level of multicore compute scaled to their exact requirements.

The xCORE A-Series devices include up to eight channels of 12-bit, 1 MSPS analog-to-digital conversion; power-on reset, brown-out protection and watchdog facilities; integrated oscillator; deep sleep memory; and integrated DC/DC converter. These features combine to reduce the number of external components required and to allow designs to be implemented using simple two-layer printed circuit boards. The devices' power management features enable low sleep-mode power consumption of 100 µA.

UK Speeds Up Signals On 5G Introduction

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Ofcom, the communications regulator, will this week launch an industry consultation about freeing radio frequencies for 5G internet services many times the speed and capacity of today's best 4G networks.

New Semiconductor Based On 2D Nanocrystals

Researchers at Purdue University are developing a new type of semiconductor technology for future computers and electronics based on "two-dimensional nanocrystals."

The material is layered in sheets less than a nanometer thick that could replace today's silicon transistors, according to the researchers.

The layered structure is made of a material called molybdenum disulfide, which belongs to a new class of semiconductors -- metal di-chalogenides -- emerging as "potential candidates to replace today's technology, complementary metal oxide semiconductors, or CMOS."

Microbatteries That Charge 1,000 Times Faster

Scientists at the University of Illinois at Urbana-Champaign have developed what they claim as "the most powerful batteries on the planet." The rechargeable batteries can charge 1,000 times faster than competing technologies.

"These batteries are small in size yet powerful enough to jump-start a dead car battery by using a cellphone powered by these batteries, and then the phone can be recharged in the blink of an eye," claimed the researchers.

The new microbatteries "out-power even the best supercapacitors and could drive new applications in radio communications and compact electronics."

'Gapsense' To Control Wireless Traffic

The growing use of wireless devices is increasingly clogging the airwaves, resulting in dropped calls, wasted bandwidth, and botched connections. Researchers at the University of Michigan have developed a collision avoidance software, called 'GapSense'. The new software works like a stoplight to control the traffic and "dramatically reduce interference."

The new software, called 'GapSense', lets wireless devices such that can't normally talk to one another exchange simple stop and warning messages so their communications collide less often. GapSense creates a common language of energy pulses and gaps. The length of the gaps conveys the stop or warning message. Devices could send them at the start of a communication, or in between information packets to let other gadgets in the vicinity know about their plans.

Samsung Working On Brain-Controlled Tablet

Samsung researchers, in collaboration with University of Texas, are working to develop a tablet that can be controlled by our brains.

Samsung and Roozbeh Jafari, an assistant professor of electrical engineering at the University of Texas, Dallas are testing how people can use their thoughts to launch an application, select a contact, select a song from a playlist, or power up or down a Samsung Galaxy Note 10.1.

However, Samsung said they are still into an early-stage research, and have no immediate plans to offer a brain-controlled phone. The process involves a cap studded with EEG-monitoring electrodes and it shows how a brain-computer interface could help people with mobility issues complete tasks.

Wave Hand To Turn Any Surface Into Touchscreen

The Kinect was proof that combining a depth camera with a projector will transform any surface into a touchscreen. Now researchers are taking this technology one step ahead.

A team from Carnegie Mellon University (CMU) has demonstrated how touch-based devices can be created almost at will, with the just the wave a hand. The researchers from Carnegie Mellon's Human-Computer Interaction Institute (HCII) used a ceiling-mounted camera and projector to record room geometries, sense hand gestures and project images on desired surfaces.

CMU's WorldKit system enables someone to create or "paint" a remote control for their TV by rubbing the arm of a sofa. By just swiping your hand across an office door you can post your calendar. These ad hoc interfaces can be moved, modified or deleted with similar gestures, making them highly personalized.

Russians And Belgians To Push Next Gen Electronics In Moscow

Moscow's TechnoSpark nanotech center and Belgium's IMEC Microelectronics Centre have agreed to jointly develop a concept of the future Troitsk Center for Electronics R&D and Application in Moscow, reports Rusnano, Russia's largest nanotech company.

Under the terms of their agreement, the partners will deliver such a concept by August 2013 already. The concept will cover an inception stage of 2013 through 2015. In addition to developing a business plan and determining investment amounts, TechnoSpark also wants to package a starting batch of pilot projects in collaboration with IMEC and its international partners.

"This cooperation with the Belgians is a momentous step into international collaboration that Russian scientists and developers make to join, on equal terms with Western scientists, the problem-solving process for the leading global R&D market players, such as Intel, Samsung, Philips and others," said Denis Kovalevich, one of the Center project managers from the Russian side.

Siemens Unveils 60 Million Euro Investment Strategy For Russia

23 Apr '13 Peter Löscher, Siemens' CEO and president, said at a press briefing earlier this month that his company is investing 40 million euros in Russia with plans to set up as many as 90 different R&D centers in tight cooperation with Skolkovo.

East-West Digital News, the international resource on Russian digital industries, reported yesterday, citing Elec.ru, that Siemens is the first German company to put up a sizable amount of funds to participate in the development of the state-sponsored innovation hub under construction outside Moscow.

Acer Seeks To Overtake Samsung, Apple In Russian Tablet Market

The Taiwan-based computer manufacturer Acer is planning to capture 25 percent of the Russian market for tablet computers.

In the first quarter of 2013 Samsung accounted for 25 percent of market share, Apple for 19 percent and Acer for only 3 percent according to data compiled by the Russian retailer Euroset.

Acer's president, Jim Wong, told Kommersant that this year the company plans to substantially increase its sales of tablets in Russia.

Russian-Made Smartphones Prepare To Enter Global Market

Yota Devices CEO, Vladislav Martynov, discusses the first Russian smartphone, the company's priority markets and consumers' attitude towards a Russian-made product.

Russia Beyond The Headlines: How did the idea of making a dual-screen smartphone come into being?

Vladislav Martynov: We understood that if we wanted to be successful in a market dominated by Korean and American developers, our phone had to offer unique advantages. We started researching problems that smartphone users complained about. High power consumption turned out to be their biggest problem

Samsung Galaxy S4 Enjoys Record Sales In Russia

Since its official release on April 26, Samsung's new smartphone, Galaxy S4, has been enjoying record-breaking sales in Russia. According to Mobile Research Group, in the first three days, over 15,000 handsets have been sold.

Last year, the list of the world's leading smartphone manufacturers expanded to include China's Huawei and ZTE. Their Android smartphones, together with Coolpad and Lenovo models, managed to attract new users in the relevant target group, says Ramon Llamas, a research manager with IDC. In the first quarter of 2013, they joined the top five smartphone vendors, jointly accounting for 8.8 percent of the market. The top seller, Samsung, makes up 32.7 percent, and Apple takes 17.3 percent.

Chinese manufacturers are interested in the Russian market too, but it would be wrong to compare their success to that of Samsung. "The well-known Taiwanese company HTC, which belongs in the same segment of the market as Samsung, during the release of its latest model, sold only 1,500–2,000 handsets," said Mobile Research Group's Eldar Murtazin.

Sizable Electronics Cluster Announced In Northwest Russia

GS Group, an international holding, is expected to establish by 2017 outside Kaliningrad in Northwest Russia its Technopolis GS electronics cluster, NanoNewsNet.ru reports.

The Technopolis GS project is said to be based on a number of multi-sector GS Group owned production premises in microelectronics and nanotechnology that have been operating since 2008 in the town of Gusev, in the eastern part of Russia’s westernmost enclave region of Kaliningrad.

The cluster will reportedly include an industrial area, a few R&D and training centers, a business incubator, and a venture fund. The investor is expected to create as many as 5,000 new local jobs and bring European IT experts to train regional specialists.

World Economic Round Up

Economic growth in the world's largest economies is set to pick up in the coming months, while slower growth in India will likely continue, according to the Organization for Economic Cooperation and Development's composite leading indicators. The World Trade Organization said it expects trade volumes to pick up only slightly this year from very low levels in 2012, and warned that a long period of weak economic growth may lead to increased protectionism. The OECD's composite leading indicators for January continued to point to acceleration in the U.S., Japan, Germany and China, as well as the euro zone as a whole but the leading indicators point to sustained weaker growth in India. Brazil's economy expanded by a mere 0.9 percent in 2012 while the government struggled to roll over debts under the burden of a base interest rate that averaged 8.5 percent.

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 2013

Future Horizons Events

- Silicon Chip Industry Training Seminar – London – 17th June 2013
- Industry Forecast Briefing, London – 23rd July 2013
- International Electronics Forum – 2- 4th October

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

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Industry Events

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MARK YOUR CALENDER FOR THE NEXT
INDUSTRY FORECAST BRIEFING
TUESDAY 23rd JULY 2013
AND
SILICON CHIP INDUSTRY WORKSHOP
MONDAY 17th JUNE 2013
BOTH BEING HELD AT
NH HARRINGTON HALL HOTEL, LONDON
AND
INTERNATIONAL ELECTRONICS FORUM
2-4 OCTOBER
Crowne Plaza
Dublin, Blanchardstown, Ireland

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