



NVIDIA Snaps up Icera...

The acquisition of Icera by NVIDIA will release funds for other startups and give NVIDIA an opportunity to catch up with market leader Qualcomm as the engineering is set to stay in the UK.

"We do not currently anticipate significant consolidation or closings," said a spokesman for NVIDIA after the \$367m deal. "The intention is to retain Icera's talent."

The deal will see a profit of around \$100m to the venture capital backers who include Accel Partners, Amadeus Capital Partners, Atlas Venture, Balderton Capital and DFJ Esprit.

"With the news of Icera being acquired, we are sure to be hearing the biggest sigh of relief for a long time from the European venture capital industry," said Rick Clucas, semiconductor entrepreneur and founder of ARC International (now part of Syposys) and Ignios. "I hope with the Icera chapter closing that we have now reached a new era that will see money flowing again into U.K. semiconductor innovation and startups. I don't expect an instant round of investments in semis but I think people will start looking, and will look for things with a lower entry point. Other

companies that have done well are ones who are doing non digital devices where the IP model does not work well and the integration with Digital in an SOC often does not make sense," he said. "I am far more optimistic about the UK Semi Industry than I was 2 weeks ago."

"We see this as being extremely positive for the semiconductor industry, for the high tech sector in general, for the South West and indeed for the UK as a whole," said Rupert Baines, vice president of marketing at Picochip in Bath. "By implication it's also very positive news for Picochip. From what I've read it's a good valuation and will produce a powerful business that will throw down the gauntlet to other players in the wireless space, particularly Qualcomm, and from the Picochip point of view, it's obviously good to see continued positive M&A activity, with healthy returns for innovation and entrepreneurship." ■

www.nvidia.com

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"I hope with the Icera chapter closing that we have now reached a new era that will see money flowing again into U.K. semiconductor innovation and startups."

...to slay Qualcomm dragon

The potential for Icera to be the key technology for NVIDIA to take on the largest fabless chip maker Qualcomm has not been missed.

Icera is one of the prominent players in the mobile broadband market, in particular

the US market," said Sravan Kundujala & Christopher Taylor, both Analysts at Strategy Analytics. "Icera's soft modem basebands gained good traction among European and North American wireless operators in 2010 and the company is one of only a few that has market-ready

HSPA+ / LTE basebands. The company currently has no share in handsets but is on track to ship its first voice-supported baseband modem by Q4 2011."

"In the near-to-medium term, we don't expect any impact on Qualcomm's market share from this acquisition but given Icera's strong modem capabilities, the NVIDIA-Icera combination could be a potential long-term threat to Qualcomm," they said. ■

www.icerasemi.com

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What a deal!

Well, rarely has a deal divided opinion in such a way. Is the Icera deal a good thing or not? We regularly cover the issue of whether the venture capital model is broken, and this is a prime example. Could Icera have made a \$1bn IPO? Possibly, but it hadn't got the traction it needed for that, and the funding wasn't enough to take it there. So is it a good deal? As Rupert Baines of picoChip has pointed out it's a good return that's better than the stock market over the last ten years, but it's not the stellar result that perhaps Icera's backers were expecting. What it does do is release the investment, as Rick Clucas points out, but whether that will be re-invested in chip startups, and how much return is seen by the staff at Icera for their next projects, remains to be seen. What we do know is we can now welcome NVIDIA to the roll call of world leading chip companies in the SouthWest along with Gennum too, (See p. 4)

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On the web:

For comment, analysis and the latest videos on what is happening across the electronics industry go to the new blog by SiliconSouthWest editor Nick Flaherty at www.flaherty.co.uk

Moortec ships 28nm crystal oscillator IP

Design house Moortec Semiconductor in Plymouth is pushing the envelope of analogue design shipping versions of its temperature sensor and crystal oscillator designs for TSMC's 40nm and 28nm process technology. Silicon using the designs is expected by the end of the year.

"This is an important step to Moortec becoming a serious player in the provision of high performance analogue IP," said Steve Crosher, MD of Moortec. "Furthermore it provides us with an opportunity to demonstrate our design capability. We are delighted to be delivering designs to customers at such challenging and advanced nodes."

Moortec sees many applications for the on-chip temperature sensor at low geometries, from thermal management, device reliability, performance optimization, temperature sensing during device qualification (or burn-in) and device security. The design group intend to capitalise on their design capabilities,

continuing to provide design services, while also building their IP portfolio. As well as embedded temperature sensor solutions, Moortec has also delivered a crystal oscillator IP at 28nm.

"The big challenges at these nodes are back-end verification," said Crosher. "Just going from 40nm to 28nm the complexity of Design Rule Checks (DRC) increases dramatically and is a big challenge for high-end analogue blocks using different devices such as transistors, MOM caps and resistors, and structures."

Moortec – based alongside Plessey Semiconductors - was set up in 2005 and provides high quality analogue and mixed-signal IP blocks as well as Custom Chip solutions world-wide for a variety of applications. It also provides platforms for IC test and evaluation. Having a excellent track record, Moortec provide a quick and efficient path to market for customer products and innovations. ■

www.moortec.com

Edinburgh smart antenna startup joins Innovation Centre

A startup developing smart antennas has joined the Bath Innovation Centre. Headed up by new chief executive and SouthWest entrepreneur Prof Rick Hillum, Sofant Technologies is spinnong out of the University of Edinburgh with products already designed, developed and manufactured.

"The company specilises in highly compact and patented antenna technologies, embedded software and low power, low cost, integrated reliable MEMS devices," said Hillum. SOFANT's Proprietary Technology

is a set of patented innovations and application know-how which solve the problems of reliable MEMS switch design, low power highly directional MIMO antenna, and software mechanism for increasing efficiency, maximizing battery life together with signal strength.

The markets typically include wireless and handheld devices, femtocells and military, while the customer are typically the PC and handset manufacturers along with MEMS users and manufacturers for the devices. ■

www.sofant.com

"The company specilises in highly compact and patented antenna technologies, embedded software and low power, low cost, integrated reliable MEMS devices."

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Gennum buys Nanotech Semi for \$34m

Canadian analogue chip maker Gennum has bought Nanotech Semiconductor of Bristol for \$34m, with staff sharing a \$6m earnout over the next year.

"We are excited to join Gennum and create one of the industry's most compelling optical IC transceiver portfolios," said Gary Steele, Founder, CEO and Chairman of the Board of Nanotech. "By integrating our recognized expertise in low cost, high performance CMOS based optical products and technologies and talented employees with Gennum's high speed optical products and global organization, customers will gain access to a uniquely

comprehensive portfolio and product roadmap."

Nanotech had revenue of \$7.4m last year, with a run rate of \$12m for this year and if it maintains this run rate this year, there is an additional \$6m in the deal for staff.

This is Steele's third exit, following on from Microcosm Communications, sold to Conexant, and a founding investment in Phyworks, sold to Maxim. Nanotech was backed by Pond Ventures and Atlantic Bridge Ventures.

"Through this acquisition, Gennum has significantly strengthened our mixed-

signal and optical product portfolio and added critical CMOS technology capability enabling our company to address a broader range of high growth networking markets such as Fibre to the Home, Ethernet and consumer optics," said Dr Franz Fink, President and Chief Executive Officer of Gennum. "We have listened to our customers' needs to simplify the supply chain and can now provide them with one of the most complete optical transceiver ICs portfolios spanning all data rates. Indeed, we believe the Nanotech portfolio coupled with Gennum's high speed mixed signal and optical portfolio will increase our ability to provide more, high value products resulting in increased growth opportunities for Gennum."

Gennum's optical IC portfolio runs from 10Gbit/s-100Gbit/s and the acquisition of Nanotech enables it to offer 100Mb/s to 100Gb/s optical IC solutions to fast growing markets such as Fibre to the home (PON) and Ethernet. ■

www.gennum.com

"We believe the Nanotech portfolio coupled with Gennum's high speed mixed signal and optical portfolio will increase our ability to provide more, high value products."

Lime Micro sees software radio design win

A Canadian company is using technology from Lime Microsystems in Fleet for an innovative FPGA-based software defined radio card.

Lyttech believes its new FPGA mezzanine card (FMC), the Radio420X, will be very successful in the wireless telecommunications field in such applications as femto and pico base stations, micro access points, software-defined radio, TV white space and next-generation Wi-Fi applications, WiMAX, and LTE. Discussions are already underway with a number of customers worldwide who plan to use the platform.

The Radio420X is a multimode SDRRF transceiver module that can be used with any FMC carrier on the market, such as the Xilinx ML605 EVM. It is designed around Lime's the state-of-the-art, multistandard, multiband LMS6002D integrated RF transceiver. The LMS6002D replaces several individual

transceiver ICs and allows quick and simple reconfiguration, resulting in considerable reductions in size, time to market, bill of materials and inventory for OEMs.

"Lyttech's multimode SDR FMC is an excellent example of how the unique frequency agility of the LMS6002D IC enables a truly flexible platform for wireless design engineers, allowing them to focus on the elements that add value in their designs," said Philippe Roux, vice president of business development at Lime Microsystems. "We are proud that Lime is powering such an innovative product."

"This configurable radio head FMC is set to revolutionize wireless telecom

development, because of the Lime Microsystems RF IC, the versatility of VITA 57 FMCs (a widely adopted standard in the wireless industry), its 0.3–3.0 GHz tunable frequency and its 1.5–28.0 MHz bandwidth coverage," said Martin Turgeon, product line manager at Lyttech. "The way the card is integrated to our Perseus AMC is also a great plus for developers, who don't have to spend much time integrating and developing drivers, leaving them free to concentrate on product and application development."

The Radio420M offers two transceivers on the same FMC site, making 2x2 MIMO and dual-band applications possible. ■

www.limemicro.com

"The way the card is integrated to our Perseus AMC is also a great plus for developers, who don't have to spend much time integrating and developing drivers."

Genasic aims for system on chip with LTE transceiver

Design house Genasic is taking a flexible approach to providing a dual channel transceiver for next generation LTE systems that is aimed at eventually integrating into System-on-chip (SoC) devices.

The company, which has a design centre in Bath, is sampling a multiband 2x2 transmit and receive chip for LTE, and is specifically not looking at the baseband to avoid competing with potential customers. "Even people that have LTE transmitters have limitations, they are either power hungry or not 2x2 MIMO," said Ashok Dhuna, CEO at Genasic.

The flexible design of the chip means it can also be used in LTE femtocells and picocells where similar cost pressures apply.

"The main thing that's happened in LTE that's different from 3G or HSPA is the numerous frequency bands and this is a major shift, up from 4 or 5 bands to 42 from 698MHz to 2.7GHz," he said. "With LTE Advance you have to add a 3.5GHz band and being able to support all of this is a great challenge for people."

"What we are doing that is different from the traditional RF model is we have said we are not going to do the baseband and just concentrate on the RF, and even people that are doing their own RF have a heritage of 3G while LTE is a considerable challenge," said Dhuna. "We come from the WiFi and WiMax background and that's a natural progression for us."

The company will provide the chip for

stacking on a baseband die for a single package device, and will also supply the IP and the support to make it so that it can eventually be integrated into a single chip. "We will work with a handful of people and we want to ensure they get there and are very successful," he said.

The chip, with full 2x2 MIMO in receive and transmit, is sampling this quarter. ■

www.genasic.com

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Gnodal launches first products at 1.5Tbit/s and sets up US office

Bristol startup Gnodal has launched its first products for high performance and low power in data centres that start shipping in the next few months.

It is also opening a wholly-owned US Subsidiary, Gnodal Inc., with offices in Palo Alto, California to focus on the North American market.

The GS-Series of 1RU, top-of-rack (ToR) switches use Gnodal's own PETA ASIC, each providing 1.5 Terabits of non-blocking, ultra-low latency switching. The chips use a new architectural design that minimizes network congestion and delivers optimum performance with minimal cost and power consumption.

"The GS-Series creates a truly scalable family of Ethernet building blocks, enabling network expansion to occur without the traditional latency penalties associated with adding another switch

to the fabric," said Fred Homewood, CEO and founder of Gnodal. "We looked to address some of the historic challenges of Ethernet in congestion, scalability, power, and latency and have built the GS-Series to target these high performance data center requirements with our revolutionary technology. Our products finally enable large, low latency, flat fabrics to be built by allowing Gnodal Ethernet to extend the capabilities of the Ethernet standard with minimal complexity, offering an overall more efficient use of capital equipment in the data center."

The GS-Series consists of three products ranging from 72 ports of 10G ethernet, 40 ports of 10G and 8 ports of 40G Ethernet and 18 ports of 40G. The switches can be both edge and fabric devices and in multi-chassis networks, a link or entire switch can be removed from the fabric without disrupting the rest of the network and the fabric will automatically and dynamically adjust

to the changing environment without management intervention.

The switches scale from 72 ports to a massive network of up to 64,000 ports by combining other members of the family to create cost-effective, ultra-low latency, highly utilized fabrics. With an initial port-to-port latency as low as 150ns and additional hops at 66ns, multi-stage networks containing thousands of ports can be assembled with an overall system latency as low as 414ns. Highly efficient arbitration techniques enable the Gnodal fabric to dynamically load-balance traffic seamlessly, thereby allowing for near 100% bandwidth utilization, even in the event of end-point congestion. These techniques also prevent Head-of-Line (HOL) blocking typically found in traditional networks when building larger fabrics comprised of multiple chassis. In addition to unprecedented levels of performance, the products are also extremely power efficient, exhibiting typical power consumption under 1.6 Watts per twinax copper port and under 2.5 Watts per optical port. ■

www.gnodal.com

"The GS-Series creates a truly scalable family of Ethernet building blocks."

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ZiiLabs launches 48 core chip for tablets

ZiiLABS, the chip subsidiary of Creative Technology with a key design centre in Bristol, has launched two massively multicore processors aimed at tablets running the Android3.0 operating system.

The ZMS-20 has two 1.5GHz ARM Cortex-A9 processors and ZMS-40 has four, but also have 48 and 96 media processing cores designed in Bristol. This gives 1080p high profile video playback, immersive OpenGL ES 2.0 3D graphics, HD video calling and voice recognition.

"The ZMS-20 was specifically engineered to meet the performance and power efficiency requirements of high-resolution Android tablets more

effectively than any other processor on the market," said Hock Leow, President of ZiiLABS. "The ZMS-08 established our leadership position for High Profile H.264 playback and the ZMS-20 takes that to the next level by adding dual ARM Cortex-A9 cores plus a host of new features such as DDR3 and LPDDR2 support, HDMI 1.4 and OpenCL."

"We are targeting this family of ZMS-20 and the ZMS-40 Zii Stemcell media processors dead-on the explosive tablet computing market. The competitively priced ZMS-20, and the ZMS-40 with its quad Cortex-A9 cores will herald a new generation of low-cost, low-power yet high-performance tablets, mobile thin clients for cloud computing and other

"The design and development of ZMS-40 is done, we will unleash it to ride on the up and coming new wave of tablet computing revolution."

embedded appliances for the post-PC era," said Sim Wong Hoo, Chairman and CEO of Creative Technology.

"The design and development of ZMS-40 is done, we will unleash it to ride on the up and coming new wave of tablet computing revolution. The scalable ZMS-40 will lead the way to show the world that tablet computing can be truly effective and without any compromise. With the ZMS-40, we will be able to bring the performances of tablets or other handheld devices to rival notebooks and even desktop PCs," said Sim.

Android 3.0 (Honeycomb) tablets and associated design-kits based on the ZMS-20 will be shown in Taipei, Taiwan between 31 May and 4 June at the Computex 2011 tradeshow and the ZMS-20 is sampling now to select customers and is scheduled for volume shipment to customers in the 3rd quarter of 2011. Detailed specifications of the ZMS-40 will be announced later. ■ www.ziilabs.com



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The jewel in the crown

Nick Flaherty talks to Shaun Davey, chief executive of Bath engineering consultancy IPL

Deep in the heart of Bath is an engineering jewel. Hidden by the river behind Pulteney Bridge is a complex of 270 engineering staff who have been responsible for a wide range of projects, from the encryption key management used by all the Armed Forces to the information systems that keep the traffic flowing on the motorways, as well as spinning out several startups in the city. If you bank with the Nationwide, their technology handles your mortgage and the online banking services.

IPL has had a chequered history though. It saw a management buyout in 2008, just before the global financial crisis. While it has a large proportion of its business with the UK government, it is actually seeing more opportunities rather than cutbacks, even with organisations such as the Audit Commission and the National Police Improvement Agency (NPIA) that are meant to be closing down.

Under chief executive Shaun Davey,

“We see three areas of expansion: in services, existing business and vertical markets, as well as expanding across the UK.”

the company is looking to expand again and break out of its niche of technical consultancy into the wider business market in the UK.

“We are growing again now but we have never really burst through the 300 employee mark and we need to get back there,” he said. “We see three areas of expansion: in services, existing business and vertical markets, as well as expanding across the UK.”

“The common thread is high reliability, mission critical business and IT consultancy whether these are systems or software,” he said. While this means taking on the big consultancies such as HP’s EDS division or Accenture, the company also works as a subcontractor to companies like IBM. “The problem is that way procurements are run will never favour the right result it give the job to the guy that can tick all the right boxes, not the guy that can deliver the best value,” he said. “It’s frustrating to know we can deliver complex systems that work, but

we think we can win against the big guys in the government sector because it is becoming more enlightened in the way it procures IP and the signs are good.”

IPL has a business consulting group of 30 people that will expand on the back of the new ventures. “Information management at the enterprise level is particularly hot at the moment,” he said. He is also looking at the pharmaceutical industry, managing large amounts of data such as clinical trial databases.

“We are in Bath because of the universities of Bath and Bristol where we have the best people in the country if not the world in information management and these guys are in real demand,” said Davey.

IPL has also been the source of highly skilled people for new ventures in the city such as Amdocs, Sidonis and Mirifice. “It all comes back to IPL,” said Davey.

The aim is to double in size over the next three to four years to create more value within the company, looking at a trade sale or another management buyout. ■

www.ipl.com

FreeRTOS launches Version 7

The latest version of the industry’s favourite real time microcontroller kernel - developed in Bristol - has been launched. FreeRTOS7 adds new software timer implementation, kernel enhancements for improved performance and additional ports and is completely backward compatibility with V6.x for easy upgrade.

“The main new feature is a software timer and that’s a major feature, hence the new release,” said developer Richard Barry who also works for Wittenstein High Reliability Systems in Bristol. “Writing a software timer is actually easy but writing one that’s efficient is making it harder for yourself.”

The software timer implementation in Version 7.0 allows timer callbacks to be executed in a task context, rather than an interrupt context, and so does not consume any processing time or generate any run time overhead unless a timer has actually expired.

FreeRTOS Seven also benefits from improved performance and two new demonstration projects. The kernel is fully backward compatible with the previous generation, and users who upgrade will not need to change any of their own code. The OS is a portable, open source, royalty free, mini real time kernel, which is free to both download and deploy. It can be used in commercial applications and does not require proprietary source code to be exposed.

A commercial license and support upgrade path is also provided by High Integrity Systems, the global engineering partner company behind OpenRTOS licensing and support, and the safety critical MCU operating system SafeRTOS.

Downloaded more than 150,000 times during 2009/2010, FreeRTOS is amongst the most widely downloaded and used real time operating systems. In March 2010 it topped a list of the industry’s favourite RTOS kernels (pblt.tk/RTOSsurvey); compiled from an independent survey of embedded engineers asked to select the operating systems being considered for use. ■

www.freertos.org

SouthWest celebrates 50 years of the microchip

The SouthWest figures heavily in the recent 50th anniversary of the silicon integrated circuit. Plessey Semiconductor in Swindon was developing a chip at the same time Fairchild Semiconductor's Robert Noyce patented the silicon IC on the 25th of April 1961.

To celebrae, the National Microelectronics Institute (NMI) highlighted the current state of the art for microchip technology with SouthWest activity from the University of Southampton, Toumaz in Oxford, Imagination Technology in Chepstow, Dialog Semiconductor in Swindon and Plessey Semiconductors in Plymouth and Swindon.

"The UK's microelectronics sector continues to be at the forefront of this innovation," said Dr. Derek Boyd, CEO of NMI. "UK based researchers, technologists and manufacturers are creating chips and systems capable of genetic disease detection, determining

the build up of pollutants in the oceans, emitting light that sterilises drinking water or medical instruments, analysing the structural integrity of high-speed rail lines, and the early identification of injuries in racehorses."

As examples he points to:

- Plessey Semiconductor, in collaboration with Cambridge University, is developing an LED (light emitting diode) that uses Gallium Nitride to release light at wavelengths lethal to bacteria – 265nm. The low cost technology will be made available during this decade and be powered by solar cells. Plessey believes it will be adopted in developing economies or disaster zones to create clean drinking water, and in the developed world to replace chlorine sterilisation methods. Additional uses include the sterilisation of medical instruments.
- A chip capable of detecting single nucleotide polymorphisms (SNPs) in DNA has been developed which

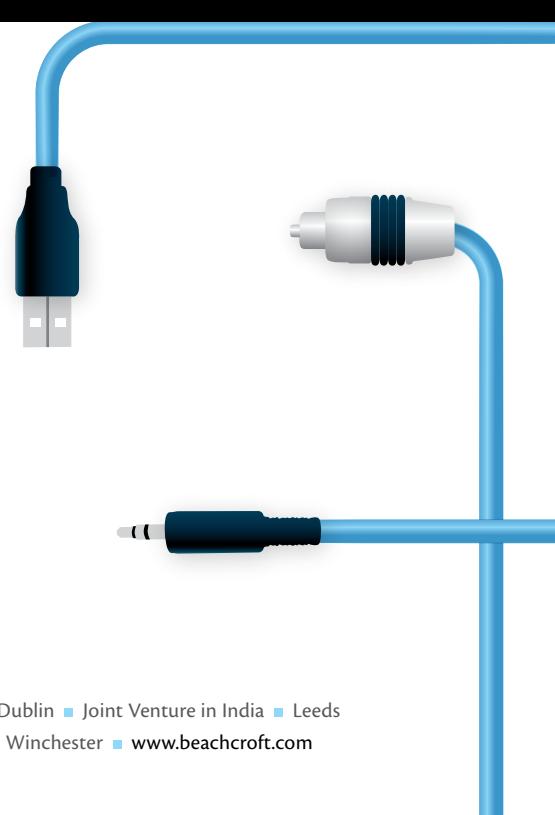
gives results in minutes, developed by Professor Chris Toumazou, founder and CEO of Toumaz Technologies and DNA Electronics.

- Accelerometer chips are being developed at the University of Southampton that, among other applications, are capable of detecting weaknesses in high-speed rail networks. The highly sensitive chips monitor how a section of track behaves whilst a train is on it.
- Other researchers at Southampton University have created a chip to detect nutrients and pollutants at the ultra low concentrations found in the ocean.

The UK is home to over 40 per cent of Europe's independent electronic design community and its 11,500 companies and 250,000 people form an ecosystem worth £23 billion per year to the British economy, with the SouthWest as a key centre. The NMI has also highlighted transport, digital media, communications, healthcare and smart energy grids as key growth areas for the electronics industry. ■ www.siliconsouthwest.co.uk

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Industry forecasts remain strong

Malcolm Penn of Future Horizons looks at the latest numbers and industry activity

The latest market statistics confirm our January IFS forecast that 2011 was going to be a very strong industry year, despite the boom to bust illusion that 'only 9 percent' growth portrays. February's sales were up 12.6 percent versus the same time last year, 5.0 percent in units and an impressive 7.2 percent in average selling price, despite the 28-day month and Chinese New Year. Overall Jan plus Feb sales totalled US\$49.0 billion, meaning March only has to turn in at US\$ 26.4 billion to hit our forecasts and so our plus 2 percent upside forecast for the first quarter is now looking incredible average. Q1 is going to be strong ... very strong; so too will be 2011.

There are several interesting trends out in the market, from robotics to flip chip and flexible devices:

- The outlook for the global robotics industry is rosy, with a great year in 2010 and promising prospects for 2011 and beyond, according to statistics for Industrial released by the International

Federation of Robotics (IFR) Statistical Department in the US

- Flip-chip packages accounted for 13 percent of all IC packages by the end of 2010, accounting for more than 29 percent of the global IC assembly, packaging and test market, or roughly US\$16 billion, says a new report by French market research firm Yole Développement. Its analysts believe that the flip-chip market is still in a growth phase, despite the fact that it looks like a mature market at first glance.

- Jan Genoe and his colleagues at IMEC, a semiconductor research centre in Leuven, Belgium, have developed flexible chips. The result would not exactly power a modern PC and is more like something from a 1970s pocket calculator, but it is a step on the road to the much-discussed idea of plastic electronics, and probably an important one.
- Driven by increasing sales of electronics and telecom sector, the

Future Horizons Announces New Date for the International Electronics Forum

Future Horizons has rescheduled its 2011 International Electronics Forum for the Ayre Hotel, Seville, Spain from the 5th to the 7th of October.

The 21st IEF - on the theme of Achieving Success In The Age Of Nano Tech - was postponed following the earthquakes in Japan. ☎

Early Bird booking fee now available
[International Electronics Forum 2011 Brochure](#)

Email jhumphries@futurehorizons.com

Indian semiconductor design industry is expected to reach US\$10.2 billion by 2012. According to the India Semiconductor Association, the Indian chip design industry, which comprises VLSI design, embedded software development and board design, is estimated to grow 17.3% year-on-year from US\$7.5 billion in 2010. ☎

www.futurehorizons.com



Business Networking Event From Health Service to Self-Service

The promise of technology mediated health behaviour change

Thursday 7th July 2011 5.30-7.30pm

Bath Ventures Innovation Centre, Broad Quay, Bath, BA1 1UD

Confirmed Speakers:

- Professor Chris Eccleston - Centre for Pain Research, **University of Bath**
- Prof Leela Damodaran - Department of Information Science, **Loughborough University**

Register Here www.assistedlivingaction.net

Delegate Places £10 (inc. refreshments)

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Nujira wins £10m for push into smartphones

Nujira, which has a design centre in Bath, has secured £10m funding to push its Coolteq wideband Envelope Tracking technology into 800 million 3G and 4G devices by 2016 to reduce power consumption.

The investment round was led by a new investor, Climate Change Capital Private Equity (CPE), alongside the existing VC and angel investors.

“The funding will allow the expansion of Nujira’s handset engineering team to support product development and

engagements with leading vendors in the global handset market,” said Tim Haynes, Nujira’s CEO. “Nujira has established itself as the market leader in Envelope Tracking and is shipping silicon. We have protected our IP position by building the world’s most extensive and complete portfolio of patents filed or granted covering Envelope Tracking and the implementation of efficient wideband Power Amplifier (PA) transmission systems.”

Nujira announced a second generation handset test chip at Mobile World

Congress in February as well as the completion of an Envelope Tracking Processor IC for cellular network infrastructure and recently announced the filing of its 100th patent application on the technology. ■

www.nujira.com

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Smarter networks in Bristol

Networks are having to include more intelligence, and this is increasingly important for the emerging area of the Smart Grid for power distribution and home automation.

SiliconSouthWest is holding a networking seminar looks at the markets, technologies and reality of smarter wireless networks in Bristol on 24th June, with a dinner the previous evening. The seminar will include details of the rollout of the smart grid in Wales.

Confirmed Speakers include Guillaume d’Eysautier, CEO of Add Semiconductor, Clive Tomlinson, Solution Architect at IPL, Prof. Chris Harris, Head of Retail Regulation at npower, Anthony Price, MD at Swanbarton and Dan Ilett, CEO of analyst Greenbang. ■

www.siliconsouthwest.co.uk



Who we are?

The Microelectronics iNet is a £2.3 million European funded project aimed at supporting innovation in the South West. This consortium of Universities, networking organisations and commercial partners will achieve this by supporting businesses to transform exciting ideas into new products and services that will drive business and economic growth.

How can we help?

The Microelectronics iNet offers two key products to businesses;

Business Assists – we provide tailored business support, equal to £1000 or 2 days of specialist consultancy, such as business development plans, legal audit, market assessment and advice on intellectual property.

Projects – our supported projects, which are typically in the region of £5,000 - £10,000, offer a form of more extensive assistance. Examples of such could include taking a new product from concept to first prototype or helping a business to enter a new market.

All of the services offered by the Microelectronics iNet are free of charge and offer businesses a lightweight and rapid process to access support.

What to do next?

Get in touch and find out more...

w: www.inets-sw.co.uk

e: microelectronics@inets-sw.co.uk

t: 0117 32 86690



Dialog ships PMOLED chips for mobile phones

Dialog Semiconductor in Swindon has started making its SmartXtend passive matrix OLED (PMOLED) driver chip in volume for Lenovo's recently launched colour feature phone, the S800.

The S800 is the first commercial mobile phone to offer a transparent colour display using Dialog's SmartXtend driver technology. SmartXtend allows the main display of mobile devices - particularly those with QVGResolution - to use the lower power passive matrix PMOLED, rather than LCD or active matrix OLED (AMOLED) displays. These also have a transmittance effect greater than 50 percent, thus ideal for see-through or transparent displays applications.

"I am delighted to announce Lenovo as the first commercial adopter of our SmartXtend OLED driver IC. Lenovo

has a well founded reputation for implementing cutting edge technologies, and I have no doubt the S800 handset will exceed consumer expectations while providing a new user experience with its transparency effect," said Dr Jalal Bagherli, CEO at Dialog Semiconductor. "Together with our module partners we have perfected this technology over recent years to now offer portable device manufacturers a display technology that provides superior performance and enables unique features, such as transparency and flexibility. The Lenovo S800 early adopter design win will stimulate the PMOLED mobile market and represents our next milestone on route to mass production," he said.

The chip is shipped in bare die form with gold bumps suitable for mounting as chip-on-flex or chip-on-glass. ■ www.dialog-semiconductor.com

Ubiquisys collaborates with TI on intelligent small cells

Ubiquisys in Swindon is working with Texas Instruments to develop a new generation of small cells designed to meet the strong growth in mobile data consumption. These cells will combine TI's chips with Ubiquisys' adaptive and self-organizing capabilities to produce an adaptive small cell that provides maximum performance and capacity with minimum cost of ownership.

"Today we mark the true start of the small cell era," said Chris Gilbert,

CEO Ubiquisys. "The combination of macro-class performance with small cell intelligence changes the economics of mobile data, and creates the building blocks for future mobile networks."

The dual-mode WCDMA/LTE small cells have a number of advantages. They provide a smooth migration to LTE, whilst providing the near-term need for WCDMA capacity and maintaining support for voice services. They are aimed at public space and metro environments such as base stations designed for mounting on walls or street furniture, with performance up to 150Mbps on an LTE network plus 64 calls/84Mbps on a WCDMA

SW Events

An Audience with Philips Innovation Services

8 June
Philips Research Laboratories, Cambridge
www.cambridgewireless.co.uk/events

European funding for Environmental projects

14 June
Exeter Innovation Centre
www.enterpriseeuropesw.org.uk/swr/

Smart Grid - German Mission Preview

21 June
Silicon South West pre-mission briefing, Bath
E: s.a.bond@bath.ac.uk

Smarter Networks

Dinner 23 June
& Networking Seminar 24 June
Beachcroft LLP, Bristol
www.siliconsouthwest.co.uk

Integrated Transport... what the future holds

29 June
SW microelectronics iNet, Bristol
www.inets-sw.co.uk

From Health Service to Self Service

7 July
Innovation Centre, Bath
www.assistedlivingaction.net

Bath OpenMIC

8 July
Innovation Centre, Bath
www.open-mic.org.uk

'How to Stay Afloat' - A Discovering Start-Ups Master Class

12 July
NESTA, London
www.cambridgewireless.co.uk/events

21st International Electronics Forum

5-7 October
Ayre Hotel, Seville, Spain
www.futurehorizons.com

3G network. The first products will be available in the first half of next year.

Ubiquisys also works with chip suppliers picoChip and Percello (now part of Broadcom). ■ www.ubiquisys.com

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Silicon South West has been established to promote the region's electronics sector in the South West, across the UK and in key markets around the world.

Silicon South West is free of charge – to ensure you receive future issues

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