

ELECTRONICS INDUSTRY DIGEST

A BI-MONTHLY NEWSLETTER ON THE ELECTRONIC COMPONENTS INDUSTRY
(FORMERLY – THE LENNOX REPORT)

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GENERAL

Competition inside the European Union is heating up as larger countries once opposed to tax reductions on business practiced by smaller neighbours are joining the fray with Germany to reduce its present tax rate of 36.1%, the EU's highest, to 29.8% by 2008. The EU's average tax rate was 26% at end of last year. Trade unions in Sweden recently won a European Court of Justice case allowing local unions to pressure firms from other countries to pay their employees the same as Swedish staff. But the European Central Bank cautioned unions, emboldened by an economic recovery, to exercise responsibility in keeping pay claims reasonable to help control inflation and boost competitiveness. On the other hand lack of skilled labor is forcing countries like Germany to facilitate immigration while some Eastern countries face skill shortages due to emigration.

Other issues facing the EU include a new slimmer Constitution, the pursuit of Google for possible violation of privacy laws, a proposal for a single EU telecom regulator, adjustments to the emission-trading system and increased use of cargo trains to reduce pollution by ever increasing shipments via trucks.

Robert Lennox the founder of the Lennox Report, the forerunner of Electronics Industry Digest, celebrated his 80th birthday in Paris this week. We send him our congratulations and best wishes.

SEMICONDUCTORS

Sharp declines in average selling prices (ASPs) for microchips in several key market segments – microprocessors, DRAMs, and NAND flash – will contribute to slower growth in worldwide sales of **semiconductors** in 2007, the Semiconductor Industry Association (SIA) said. **SIA** lowered its forecast for 2007 global microchip sales growth from 10 percent to 1.8 percent despite solid fundamentals and continued strong unit growth in major end markets. The new SIA forecast projects total sales of \$252 billion in 2007, rising to \$306 billion in 2010.

Pacific Crest Securities has raised its **capital spending** forecast in semiconductor to \$55.97 billion in 2007, up 3 percent over 2006, but has also lowered its forecast to minus 5-to-10 percent for 2008.

STMicroelectronics unveiled details of its 45 nm CMOS design platform for next-generation System-on-Chip

(SoC) product development for low-power, wireless and portable consumer applications. The new low-power design platform was developed at the STMicroelectronics site in Crolles, near Grenoble, France, and verified at the 300mm wafer facility operated by the Crolles2 Alliance.

TI unveiled details of its 45-nm process that will double output per wafer through use of 193-nm immersion lithography. Through a number of techniques TI will also achieve a 30 percent increase in performance of its SoC processors, while reducing power consumption 40 percent. TI expects to sample a 45-nm wireless product in 2007, with qualified production starting by the middle of 2008. High-k dielectrics will be added in later versions of the 45-nm process for TI's highest performance products.

Matsushita started mass producing system LSIs at its semiconductor factory in Uozu in Central Japan this month using a world-first (45-nm) process. When compared to the best conventional 65-nm process system LSIs, the new 45-nm process can reduce power consumption and required surface area by approximately two thirds or a half.

Samsung Electronics announced the opening of the largest 300mm NAND flash memory wafer plant in Austin, Texas. The first product of the new plant will be 16Gb NAND flash chips using 50-nanometer level process technology. The \$3.5 billion facility will initiate operation in the second half of 2007 and ramp up to produce 60,000 wafers per month by 2008.

Broadcom has signed a definitive agreement to acquire Global Locate, a privately-held, fabless provider of GPS semiconductor products and software. Growing consumer interest in these applications is driving the GPS chip market, which is expected to grow to \$1.07 billion annually by 2012 according to market research firm Forward Concepts. Broadcom expects to pay \$146 million for this acquisition.

Freescale Semiconductor announced Dr. Lisa Su as its new senior vice president and chief technology officer (CTO). Lisa Su, former vice president of semiconductor R&D at IBM, will oversee Freescale's global technical research and development activities.

Coming from Cypress and based in Munich, Gerd Wummel has been named **Analog Devices** regional sales manager, covering Germany and Switzerland.

National Semiconductor reported annual sales of \$1.93 billion compared to \$2.16 billion in fiscal 2006. For fiscal 2007, NS reported net income of \$375.3 million, compared to net income of \$449.2 million in fiscal 2006. Q4 sales grew to \$455.9 million, up 5.8% from Q3 of fiscal 2007. Sales outlook for Q1 of fiscal 2008 are expected to be up 1% to 4% sequentially.

Since the IC market meltdown of 2001, the cellular phone IC market has registered an excellent five-year CAGR of 22%, so **IC Insights**. Cellular phone handset unit shipments, revenue, and ASP for 2007 are forecast to be +10%, +3%, and -6%, respectively. For the first time ever, cellular handset unit volume shipments are forecast to total more than 1.0 billion this year.

So far this year, worldwide revenue for semiconductors has been impacted by an inventory glut that started last fall. Because of this market condition, **Databeans** forecasts a 7% growth for the semiconductor market in 2007, instead of its original January 2007 forecast of 12 percent growth. Regarding the inventory situation, there are several key markets that Databeans tracks that indicate channel health. Some of these markets include ASSPs used in wireless and consumer products.

Based in Israel, Altair Semiconductor, a fabless chip company developing a mobile **WiMAX** processor, has closed an US\$18M Series B funding round led by Bessemer Venture Partners (BVP).

ARC International has acquired Tenison Technology EDA (15 persons), a British provider of software tools used to help develop system-on-chip (SoC) designs. The acquired products will allow customers to simulate virtually all logic on any ARC-Based chip.

Nanoradio, a Swedish semiconductor supplier in low power Wi-Fi solutions, has secured a new financing deal worth \$27 million. ■

OPTOELECTRONICS

DisplaySearch reports Q1'07 mobile phone display shipments of 268.8 million main displays and 58.6 million sub-displays for a combined decline of 10% Q/Q and 2% Y/Y. Display revenues dropped by 13% Q/Q and 19% Y/Y to \$2.475 billion. ASP reductions are continuing at a moderate pace, dropping by 4% Q/Q and 15% Y/Y. Revenue for mobile phone displays is forecast to be flat in Q2'07 as shipments should climb by 2% due to seasonality and ASPs continue their modest declines.

AU Optronics said the tight supply for LCD panels will persist through 2008, as demand for LCD displays will grow more than 30% next year while overall capacity from LCD panel makers will only see a 20% growth in 2008, so *DigiTimes*. ■

PASSIVE COMPONENTS

AVX has signed a definitive agreement to acquire American Technical Ceramics for approximately \$ 231 M in cash. ATC designs electronic components, including ceramic multilayer capacitors and custom thin film circuits. The Company's products are utilized in a broad range of commercial and military applications.

Due to lower than expected demand in the mobile phone, consumer and data business, including lingering inventory corrections at some larger customers, **Molex** announced a revised outlook for the fiscal fourth quarter ending June 30, 2007, and restructuring charges in connection with the introduction of the new global reorganization. Revenue for the quarter is now estimated to be in a range of \$780 to \$810 million. The previous outlook for the quarter was for revenue in a range of \$810 to \$850 million. Molex estimates that the total pretax charge related to head-count reductions, realignment of manufacturing capacity and certain plant closures will be \$100 to \$125 million.

French connector supplier **FCI** acquired Smartag, a specialized player in RFID tags manufacturing located in Singapore. FCI is already a reference supplier of RFID antennas.

Tyco International authorized the divestiture of the Power Systems business of the **Tyco Electronics** Segment and delegated to the CEO of Tyco Electronics the authority to determine whether or not to proceed with the divestiture of Power Systems. The Board of Directors of Tyco International has formally approved the spin-offs of its healthcare and electronics businesses through a tax-free dividend distribution to Tyco International shareholders. The distributions will be made on June 29, 2007.

While the U.S. market slowed down, the worldwide connector industry recorded an 8.6 percent increase in billings for the first quarter of 2007, so **Bishop & Associates**. Bookings increased worldwide by 3.5 percent in the first quarter compared to last year, which indicates a slowdown. Bishop estimates that the global connector market will reach \$43,11 billion in 2007, a 7.9 percent increase over 2006. For Europe, Bishop forecast earlier this year a connector market growth of 2.7 percent, and that the market would reach \$10,21 billion, after +9.8% in 2006.

Passive component maker **Yageo** will consider raising the prices for chip resistors if material costs continue rising, so *DigiTimes*. For example, the price of ruthenium, one of the materials for chip resistors, has more than tripled since January 2006. Private equity firm Kohlberg Kravis Roberts & Co. ("KKR") has invested US\$230 million in the Taiwanese company and now hold an equity stake equivalent to 16.1% of Yageo's issued share capital, becoming the largest foreign shareholder of the company.

UK-based electronic components manufacturer, TT Electronics **Welwyn Components** has invested GBP 700,000 in thin film technology and equipment as part of its growth strategy. The new machinery will allow Welwyn to mass produce chip resistors in line with the latest modern methods.

PRINTED CIRCUIT BOARDS

The **German PCB market** grew 14% sequentially in March 2007, so VdL/ZVEI. Meanwhile, the PCB market for the first quarter of the year is at the same level as last year. The demand remains flat ; however VdL and ZVEI are optimistic of the German PCB market this year due to the new lead-free requirements. Book-to-bill ratio was 0.85 in March and 1.0 for the first quarter of the year.

PCB supplier **Aspocomp** will close a plant in Salo, Finland, axing 215 jobs. After the personnel reductions, headcount in Finland will total 219 employees. The group is presently negotiating a potential cooperation with strategic partners in order to accelerate its growth in Asia and to finance its planned investment programme. The possible choice for strategic partnership will affect the timing for the start-up of its incoming plant in India.

OTHER COMPONENTS

IBM announced a cash tender offer for all outstanding shares of **Telelogic AB**, for an aggregate purchase price of approximately \$745 million. Telelogic is a Swedish provider of software development solutions, primarily in the aerospace and defence, telecommunications and automotive industries. Telelogic has more than 1,100 employees and operations in 22 countries worldwide. In 2006, Telelogic reported revenues of approximately \$ 208 million.

Varioptic has signed a licensing agreement with STMicroelectronics. ST will use Varioptic's liquid lens technology to add auto-focus capability to a family of camera modules targeting the booming camera phone market. Additionally, ST will also be able to manufacture liquid lenses in its own facilities.

Philips will acquire Color Kinetics for approximately € 592 million to be paid in cash upon completion. Color Kinetics had 2006 sales of approximately \$ 65 million. Based in Boston, USA, the company designs innovative lighting systems based on Light Emitting Diode (LED) technology.

To answer industry need for design-to-fab flow for 65 and 45 nm, **Mentor Graphics** has acquired Sierra Design Automation, a US provider of place and route solutions. The company was purchased for \$ 90 million.

Synopsys has acquired ArchPro Design Automation. ArchPro's technologies allow verification of power management techniques and extend Synopsys' leadership in low power design and verification.

German supplier **Wacker** plans to expand its annual polysilicon production capacity at its Burghausen site by an additional 7,000 metric tons to a total of 21,500 metric tons per year. The new plant is scheduled to reach full capacity by 2010. Wacker has earmarked capital expenditures of around €400 million for this project.

Solvay and **Thin Film Electronics ASA** of Oslo, Norway, have entered into an agreement to develop materials for the production of printed electronic devices. The aim of the joint development program is to optimize ferroelectric polymer materials to enhance the manufacture and performance of Thin Film's memory technology and to develop appropriate ink formulations for printed electronics.

Elektrobit has signed an agreement to acquire Decomsys, a software solutions provider for automotive electronics (FlexRay, Autosar). Headquartered in Vienna, Austria, Decomsys employs 48 people. Previously, Elektrobit agreed to sell its Production Solutions business to **Rohwedder**. The Production Solutions Business Unit, which employs 112 people in Finland and 280 people abroad, mainly in Europe, provides production testing and automation technology. ■

EMS PROVIDERS

New analysis from **Frost & Sullivan** shows that the European contract electronics manufacturing market earned revenues of \$37.7 billion in 2006 and estimates this to reach \$67.2 billion in 2013. Eastern Europe is emerging as a new global hub for the electronics manufacturing industry. Frost & Sullivan finds that that the electronics manufacturing services market in eastern Europe earned revenues of \$9.0 billion in 2006 and estimates this to reach \$23.7 billion in 2013.

Consisting of both **EMS providers** and ODMs (original design manufacturers), the Top 25 outsourcing providers generated total revenue of \$205.3 billion in 2006, up 21.6% from 2005, so Manufacturing Market Insider. In order, the top ten EMS or ODM providers in 2009 were Hon Hai, Flextronics, Asustek Computer, Quanta Computer, Compal Electronics, Solectron, Jabil Circuit, Sanmina-SCI, Celestica and Inventec. ■

DISTRIBUTION

Nu Horizons Electronics, a global distributor of advanced technology semiconductor, display, illumination and system solutions, announced its acquisition of Dacom-Süd Electronic Vertriebs, a franchised electronic component distributor, based in Munich, Germany. Nu Horizons paid approximately \$2.7 million in cash for this acquisition. Dacom-Süd had approximately \$6.2 million in sales in 2006. This acquisition follows by less than forty-five days Nu Horizons' announcement of the formation of its German subsidiary, as its initial entry in the German market. Nu Horizons initially entered the European market through its acquisition of DT Electronics in the UK, completed in August of 2006.

American Semiconductor, a distributor of semiconductors and other electronic components, completed on June 6, 2007 the sale of substantially all of its assets to Rock River Capital LLC and the Company's senior secured lenders. The aggregate purchase price was \$15.2 million, which will be paid to the senior secured lenders in the form of a reduction in their secured claim. Rock River Capital is expected to continue to operate the acquired assets as a going concern business utilizing All American's 42 years of experience and service to the industry. In April, All American Semi announced that it had filed for bankruptcy relief from the United States government and initiated steps to sell its assets through a Chapter 11 sale process.

TTI, Inc. the largest distributor specialist of passive, interconnect and electromechanical components has promoted Tony Miller to the new position of Senior Vice President Mergers and Acquisitions. TTI became a wholly owned subsidiary of Berkshire Hathaway in March 2007. Berkshire Hathaway is committed to accelerating the growth at TTI and this new position will begin to explore strategic opportunities and value-added acquisitions as the company moves forward.

Eric Schuck, who, since January 2005, has held the position vice president sales at distributor Spoerle, has been named general manager of **Arrow** Central Europe. Thierry Lenormand, formerly National Semiconductor France sales manager, has been named general manager of

Arrow France. Arrow Electronics has signed an agreement with Wamtechnik to distribute its battery packs throughout Denmark, Finland, Norway, Sweden and the Baltic states. Established in 1991 in Poland as a German-Polish joint venture, Wamtechnik specialises in the assembly of professional portable battery systems.

UK-based distributor **Acal** sales of ongoing activities went up 1.5% at £260.9 million in the year to March 31, 2007. EBIT for the year grew by 6.1% to £10.5m reflecting significant improvement in the performance of both Electronics and IT Solutions offsetting the reduced profit in Parts Services. Sales of electronic components by the group were up 3.5% from £ 104.0 to £ 107.6 M.

Anglia has signed a distribution agreement with Cree to sell and support the company's XLamp power LEDs in the UK and Ireland. Anglia also opened a new technology centre in Wisbech, Cambridgeshire, which includes a fully equipped laboratory, an environmental chamber and a custom-built EMC test chamber.

3M has signed a new distribution agreement with **Elatec** to reach new customers in selected East Central Europe markets. Elatec will market 3M's comprehensive range of touch products to customers in Poland, Hungary and Bulgaria.

Chi Mei Group from Taiwan has chosen **Glyn** as its distribution and support partner for OLED-Displays (Organic Light-Emitting Diode) in Europe, Switzerland, Australia and New Zealand.

SynQor, a power solutions company for DC/DC and AC/DC products within the Telecom, Medical and Industrial marketplaces, has signed a non-exclusive distribution contract with **Trium Power** of Dourdan France.

Lambda Research, a supplier of optical design software, announces a new distribution partnership with **LINOS Photonics** for its TracePro products. LINOS Photonics is the new exclusive distributor of TracePro products in Europe and Israel.

Digi-Key announced the signing of a global distribution agreement with Free2move AB (Bluetooth modules) and with Integrated Silicon Solution (ISSI), a US supplier in high speed and low power SRAM and low and medium density DRAM.

Tecate Group have appointed **YEG Components** as the UK Distributor for their Powerburst range of Ultracapacitor Cells. ■