

ELECTRONICS INDUSTRY DIGEST

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

Edition 001 - APRIL 15, 2007

GENERAL

This is the first edition of the « Electronics Industry Digest », the successor of The Lennox Report. For a subscription contact eid@europartners.eu.com or by fax 44/1494 563503.

Reed Electronics Research predicts modest growth of the European electronics industry this year, a region which accounts for about 22% of the world market and 17% of production with the rate of decline of output particularly in France and the UK now slowing. China displaced the US last year as largest exporter to the EU with products becoming more sophisticated which should afford new opportunities for European products in China including in its growing automotive sector and eventually aeronautics. But the Euro looks as if it will continue in its strength as some countries such as Korea and Iran move toward diversification of currency reserves now widely dollar-nominated.

SEMICONDUCTORS

Excess semiconductor inventories in the global electronics supply chain declined to \$2.5 billion in the first quarter of 2007, down 10.7 percent from \$2.8 billion in the fourth quarter of 2006, according to iSuppli. This represents a 40.5 percent decrease from the recent high-point for excess semiconductor inventory in the third quarter of 2006. The cause of the decline in excess inventory was a major reduction in production among semiconductor suppliers at the end of the third quarter of 2006. iSuppli believes chip orders bottomed out in January and then began to recover in February. Most semiconductor suppliers expect demand to begin rising in the second and third quarters of 2007 and now are preparing for the expected surge in sales.

Worldwide sales of semiconductors of \$20.09 billion in February were 6.5 percent lower than January, according to the SIA. February sales increased by 4.2 percent from February 2006. European Semiconductor sales in February 2007 amounted to US\$ 3.332 billion according to the WSTS, down 4.4% versus the previous month (+7.2% growth compared to February 2006). This negative trend is observed across most of the product categories (microprocessors, flash memories, discretés, sensors and actuators, optoelectronics, DRAM and DSP) but microcontrollers and standard linear showed a moderate growth.

SITELESC reports 2006 semiconductor sales in France were up 1.7%, at €3.17 billion. ICs sales were down 3% at €2747 M, but discretés up 45% at €421 M.

SEMI reported that worldwide sales of semiconductor manufacturing equipment totaled \$40.47 billion in 2006, representing a year-over-year increase of 23 percent. The global wafer processing equipment market segment increased 26 percent; the assembly and packaging segment grew 14 percent, the total test equipment sales increased 21 percent. The equipment market in Europe increased 10% in 2006.

Intel will begin producing its next-generation Penryn family of processors in the second half of this year. These new processors benefit from enhancements to the Intel Core microarchitecture and also Intel's 45nm Hi-k process technology with its hafnium-based high-K + metal gate transistor design, which results in higher performance and more energy-efficient processors. Intel has more than 15 45nm Hi-k product designs in various stages of development, and will have two 45nm manufacturing fabs in production by the end of the year. After Penryn and the 45nm Hi-k silicon technology introduction will come Intel's next-generation microarchitecture (Nehalem) slated for initial production in 2008. Separately, Intel confirmed plans to build a 300 mm wafer fab in China. The \$2.5 billion investment for the factory designated Fab 68 will become Intel's first wafer fab in Asia. Construction on Fab 68 is scheduled to begin later this year with production projected to begin in the first half of 2010. Initial production will be dedicated to chipsets to support Intel's core microprocessor business.

Infineon goes to India: the German IC supplier has signed a MoU with the Hindustan Semiconductor Manufacturing Corporation (HSMC), a newly established semiconductor company, to license its leading-edge 130nm CMOS process technology. The HSMC group plans to set up two semiconductor manufacturing facilities in **India**. The first Fab will require an investment of approximately \$1 Billion and will produce chips on 8-inch wafers. The second Fab will be for more advanced 12-inch wafers requiring an investment of \$3.2 to \$3.5 Billion. First products from HSMC are expected within two years. The semiconductor market in India is expected to grow from \$3.25 Billion in 2006 to \$36 Billion in 2015, so Frost & Sullivan.

LSI Logic has completed its merger with **Agere Systems** and has renamed the newly merged company LSI Corporation to create a leader in silicon-to-systems solutions for storage, networking and consumer markets. The two companies had combined revenue of \$3.5 billion for the 12 months ended December 31, 2006. The new LSI has a workforce of approximately 9,100 employees, including nearly 4,300 engineers.

X-FAB (Erfurt) will take over ZFoundry, the wafer production facilities of **ZMD**, located in Dresden. A wafer delivery contract ensures that X-FAB will become the principal supplier of foundry services for ZMD which, in turn, becomes one of the Top 10 customers of the X-FAB Group. Financial details of the deal were not disclosed. By acquiring Zfoundry, X-FAB expands its total manufacturing capacity by 15%, bringing its 8-inch equivalent wafer starts to approximately 70,000 a month. In 2006, the foundry segment of Zfoundry recorded €44.5 M in revenue with approximately 350 employees. **ZMD** also announced a joint development agreement with **Renesas** enabling Renesas to incorporate ZMD's RF technology into its microcontrollers (MCU) to develop a 900-MHz band ZigBee chipset.

Vishay has completed the acquisition of the Power Control Systems business from International Rectifier for \$290 million in cash. During the December quarter 2006 the revenues for the acquired product lines were \$81 million for an annual run rate of about \$320 million. The acquired product lines consist of planar high-voltage MOSFETs, Schottky diodes, diode rectifiers, fast-recovery diodes, high-power diodes and thyristors, power modules and automotive modules and assemblies.

Avago will acquire **Infineon's** Polymer Optical Fiber (POF) business, based in Regensburg, Germany. All research and development, marketing, and manufacturing employees of Infineon's POF group are expected to become Avago employees and will continue to be located in the present Regensburg facility. Infineon's Polymer Optical Fiber (POF) business delivers products for automotive multimedia infotainment networks and transceivers for safety systems. This business unit also provides transmitters and receivers for transportation switching and home broadband services.

Engaged in a major restructuring plan, **OKI Electric** will redefine the businesses it focuses on and will accelerate the shifting of resources to those targeted businesses. OKI has already decided to shift 1700 personnel, and withdraw or partially withdraw approximately 20% of its business units (BU) by the end of the fiscal year ending March 2008. For the semiconductor business, OKI will

breakaway from a chip-only business and shift to an "Electronic Function Module" business. The Japanese group considers several options for its TFT driver business (spin-off, alliances, etc.) while reducing its involvement in the system LSI business (engine control, ASIC) and focusing on application specific standard LSIs and foundry services.

NXP Semiconductors achieved sales of €4.96 billion in 2006, up 9% on a comparable basis for continued businesses, and a net loss of € 611 M. The Company expects a sequential sales decline from -6 to -9% for the first quarter of 2007.

The Chinese Institute of Computing Technology (ICT) and **STMicroelectronics** announced their cooperation on the development and commercial exploitation of processors, based on Loongson-2E IP developed by ICT. ICT and ST will jointly promote the processors into the Chinese market. Under the present license agreement, ICT grants to ST the rights to manufacture and sell worldwide the processors developed within the cooperation for five years.

Hynix Semiconductor and **SanDisk** have reached an agreement for a patent cross license covering the Flash memory components of both companies and an agreement for product supply. The companies will create a joint venture which will manufacture memory components and sell NAND memory system solutions. Separately, Hynix and **Toshiba** Corporation have signed patent cross licensing and product supply agreements covering semiconductor technology. Under the agreements, Hynix and Toshiba will be cross licensed to use one another's semiconductor patents. The agreements settle all pending patent-related litigation between the companies in the U.S. and Japan.

A strong rise in sales to the mobile phone market propelled NOR flash supplier **Spansion** into the lead in the global market for flash memory used in wireless handsets, according to **iSuppli**. Spansion's market share increased to 29.9% in 2006, up from 25.8% in 2005. This allowed Spansion to displace Intel as the market leader.

Transmeta has exited the business of selling microprocessor products and has reduced its headcount by 130 workers. Now, the Company has approximately 65 employees but expects to reduce its headcount by a further 15 to 20 percent during the second quarter.

PMC-Sierra will close two R&D centers in USA. The total work force reduction under this restructuring is expected to be approximately 175 positions. PMC-Sierra currently has 1,183 employees worldwide.

Intersil announces the appointment of David Bell as President and Chief Operating Officer. **Conexant Systems** announced that Dwight W. Decker, 57, plans to retire as the company's chief executive officer in the fall of this year. **LSI Logic** has named Dr. Claudine Simson to the post of executive vice president and chief technology officer. She most recently served as chief technology officer at Freescale Semiconductor.

Applied Materials has completed its acquisition of Brooks Software, a division of Brooks Automation, for \$125 million in cash. Brooks Software provides factory management and control software to the semiconductor and flat panel display industries.

OPTOELECTRONICS

LG.Philips LCD began full-scale mass production at its back-end LCD module plant in Poland. The company plans to expand the annual production capacity of the plant from initial 3 million units to 11 million units by 2011. Many of LG.Philips LCD's customers and partner firms have already built or are building facilities in the region : LG Electronics and Toshiba in Poland, Philips in Hungary and Matsushita in the Czech Republic. According to DisplaySearch, Europe showed the largest demand for LCD TVs in 2006, accounting for a 39.3 percent share of the worldwide LCD TV market on a unit basis. The market is projected to grow to 35.8 million units by 2010.

LCD TV panel prices are beginning to stabilize and plasma TV panel prices are continuing to fall rapidly, according to **DisplaySearch**.

LG Electronics (LGE) may sell or spin off its PDP (plasma display panel) module business due to mounting losses, according to local media reports.

Konica Minolta and General Electric have signed an agreement to accelerate the development of **OLED** (Organic Light Emitting Diode) devices for lighting applications. The goal is to bring OLED lighting to market within the next 3 years.

US-based Optical subsystems specialist **Optium** is to acquire Israeli developer of 40Gbit/s transmission devices Kailight Photonics in a deal valued at up to \$40 million.

CyOptics, a US-based supplier in Indium Phosphide (InP) optical chip and component technologies, has acquired **Apogee Photonics**, a US supplier of laser sources for the fast growing 10Gb/s and emerging 40Gb/s markets. Terms of the transaction were not disclosed. ■

PASSIVE COMPONENTS

Technitrol (sales of \$ 954.1 M in 2006) has sent a letter to the Board of Directors of **Bel Fuse** (sales of \$ 254.9 M in 2006) offering to acquire the company for \$480 million, in cash. Technitrol claims that combining the two companies would create a world-leading electronic component producer for magnetics, modules and interconnect products. Bel's Board of Directors believes that Technitrol's proposal significantly undervalues Bel's stock. While the Board is discussing all of its options with its investment bankers in light of Technitrol's letter, Bel Fuse believes that a stock buyback program is in the best interests of Bel's shareholders.

Kyocera will invest 20 to 30 billion yen (\$170 to \$255 million) to build a new factory to meet strong demand for ceramic capacitors. The new plant is expected to double the company's output potential of capacitors by the summer of 2008. Rival **TDK** said earlier it would build a new capacitor plant in northern Japan, which would go online by spring of 2008. Separately, **Alps Electric** has reached a basic agreement to sell its operations in magnetic heads for hard-disk drives to TDK, including production facilities and patents.

France-based oscillator and filter SAW supplier **Temex** has adopted a "procedure de sauvegarde", a prior step before administration, due to its financial problems regarding its telecoms business. The Company is considering several options for its telecoms activities seeking partners or planning divestitures of some lines of products.

Worldwide sales in passive components (capacitors, resistors, magnetic components) grew 7.8% in 2006, at \$ 31 billion and could grow 6.6% this year, so **DECISION**. Last year, the European market reached \$ 3006 M in capacitors, \$ 847 M in resistors and \$ 1981 M in magnetic components. Contact 33/1/ 45 05 70 13.

The revenue of **German PCB manufacturers** for 2006 increased by 10.3 percent compared to the previous year, so **VdL/ZVEI**. Dr. Christoph Weiss has been named the new Managing Director of the Association of Circuit Board Industries and corporate member of **ZVEI**.

Following the integration of Reinhardt Microtech Group, PCB and EMS provider **Cicor Technologies** plans to buy **RHe Microsystems** (Germany). RHe manufactures client-specific microsystems and microelectronics modules. RHe employs about 60 people and in 2006 achieved sales of € 6.65 M.

CONNECTORS

By the end of 2006, connector prices were flat or only had increases up to 2 percent, according to **Bishop & Associates** which does not anticipate any further connector price increases in 2007. Demand will be less than 2006, lead times are again declining, raw material prices are down slightly, and OEMs are beginning to increase pressure for price reductions.

Belden, a US-based provider of signal transmission solutions, has entered into a definitive agreement to purchase **Lumberg** Automation Components, a German supplier of industrial connectivity products for factory automation machinery with 2006 revenues of approximately \$75 M. Earlier, Belden completed the acquisition of **LTK Wiring**, one of the largest manufacturers of electronic cable for the China market (2006 revenues of \$220 M) for \$195 M in cash, and **Hirschmann Automation and Control** (2006 revenues of \$250 M) for \$260 million in cash.

OTHER COMPONENTS

Parker Hannifin acquired **Acofab** and its common majority shareholder **Adecem**, a French supplier of electromagnetic interference (EMI) shielding and thermal management products. Revenues of the acquired business totaled approximately €10.2 M in 2005.

The **Schaffner** Group has signed an agreement for the sale of its Cable & ElectroEmulation business (net sales 2005/2006 approx. CHF 15 million) to the existing management. This completes the divestment of its Test Systems business and its concentration on EMC and power quality components.

Rofin-Sinar acquired **Corelase**, a specialist in semiconductor, optics and fiber technology based in Tampere, Finland, in a cash transaction. Terms of the acquisition have not been disclosed.

Omron Electronic Components Business Europe has appointed Mark Jones as Vice President of Sales and Marketing for Europe.

Synopsys and **Magma Design Automation** have agreed to settle all pending litigation between them. Magma agrees to make a payment to Synopsys of \$12.5 M toward the settlement of this dispute.

Vero Technologies has acquired the Plastic box range of products and the Moulding Division from APW UK Ltd, the Southampton based company that went into administration in January.

EMS PROVIDERS

Solectron is commencing the next phase of its restructuring plan: the EMS provider will reduce the workforce by approximately 1,300 to 1,500 employees and will close or consolidate approximately 400,000 square feet of facilities, primarily in North America, as well as Western Europe.

EMS provider **Elcoteq** has decided to close its Lohja manufacturing plant in Finland by the end of August this year ; 242 employees will lose their jobs.

Flextronics will axe 120 jobs at its French manufacturing plant, in Châteaudun, a former Nortel factory which employs 380 persons. ■

DISTRIBUTION

TTI, the world's leading passive and connector specialist, announced the closing of its acquisition by Berkshire Hathaway making TTI and its affiliate **Mouser Electronics** part of the Berkshire Hathaway Group, whose Chairman and CEO is Warren Buffett. TTI's and Mouser's management will remain in place. This ownership change should be invisible to customers and suppliers.

Arrow Electronics Europe is embarking on a major recruitment drive for technical specialists for PEMCO technologies (passives, electromechanical, connector, cable and wire management products and power supplies). The total recruitment is in excess of 60 people for Europe, of which 14 are in the UK. Arrow sales of PEMCO products in 2006 were approaching US \$2.5 billion globally - \$900 million in Europe - which makes it the largest distributor in this product category. Arrow Electronics has also completed its previously announced acquisition of Agilysys KeyLink Systems, an enterprise computing solutions distributor, for \$485 million in cash, and is to acquire the component distribution business of Adilam, an electronic component distributor in Australia and New Zealand.

Premier Farnell has formally launched a new business in Greater China. The launch of Premier Electronics included the opening of a new warehouse and distribution centre in WaiGaoQia, China. With over 18,000 RoHS compliant products in stock now, three offices (and two more planned), and two warehouses, Premier will employ over 100 people by the end of the year in China. For its last fiscal year, Premier Farnell achieved £ 823.1 M in sales (+8.1%) and increased full-year pretax profits by 73 percent to £ 61.5 M.