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INTRODUCTION

We hope you find the *Asian Technology Newsletter* informative.

BDA is a corporate finance and advisory firm, which assists multinational clients to identify, assess and execute cross-border transactions involving Asia, including acquisitions, divestments, JVs, restructuring and capital raising. We have offices and professional staff throughout Asia, Bahrain, and in the US and UK.

If you think that BDA's services may be useful to you, please contact us at any one of our offices or email me at ahuntley@bdallc.com. Contact details for our offices are at the back of this newsletter. We look forward to speaking with you in the future.

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CHINA

Aspocomp Group, the Finnish developer of interconnection solutions for the electronics industry, has acquired the remaining 49% stake not held in **ACP Electronics**, the Chinese manufacturer of printed circuit boards, for a total consideration of €37.8m (US\$51m). The seller was **Chin Poon Industrial**, the Taiwanese manufacturer of printed circuit boards. As a part of the agreement, Chin Poon made an equipment purchase worth €6.8m (US\$9m) from ACP Electronics. (March 16, 2007)

BOE Technology Group (BTG), the Chinese LCD maker, plans to sell a 62% stake in its LCD unit to its parent, **Beijing BOE Investment and Development (BBID)** for Rmb1.64bn (US\$210m), to facilitate a merger with rival Chinese LCD producer, **SVA Group**. The merged entity is expected to list on the Shanghai Stock Exchange. BTG will also divest a 12% stake in its LCD unit to **Beijing Industrial Development and Investment Management** for Rmb311m (US\$39m) to repay debt. Post-transaction, BTG will continue making smaller LCD modules used in mobile phones and car electronics. (March 28, 2007)

CDC Corp of China has agreed to acquire **Saratoga Systems**, the private California-based developer of CRM (customer relationship management) software, for an undisclosed amount. Saratoga, with revenues of US\$25m, specializes in enterprise software for chemical companies. (April 17, 2007)

Cree, the US-based manufacturer of semiconductor materials and devices, has agreed

to acquire **COTCO Luminant Device**, a Hong Kong LEDs manufacturer, from **COTCO Holdings**, a Hong Kong-based holding company, for US\$318m in cash and stock. The consideration includes an earn-out of US\$125m to be paid by Cree subject to COTCO Luminant achieving financial targets in FY08 and FY09. (March 12, 2007)

Disney China, the Chinese media and entertainment subsidiary of **The Walt Disney Co**, has acquired **Enorbus Technologies**, a Chinese mobile gaming company, from the PE firms **Carlyle Group** and **Qualcomm Ventures**, for US\$20m. Carlyle and Qualcomm bought Enorbus in 2004 for US\$3m. The transaction follows Disney's acquisition of **Mobile2win** last year, and is a part of an overall strategy to expand its entertainment offerings in the region. (March 19, 2007)

Electronic Arts (EA), the video game publisher, has agreed to acquire a 15% stake in **The9.com**, the China-based online game portal, for US\$167m. As a part of the agreement, EA agreed to give The9 exclusive licensing rights to the *FIFA Online* soccer game. (May 22, 2007)

Focus Media, the Chinese operator of an out-of-home advertising network, has acquired **Allyes Information Technology**, the Chinese internet advertising and marketing technology company, for US\$300m. The sellers were the US-based PE firm **Oak Investment Partners** and **IDG Ventures China (IDGVC)**, the Chinese investment arm of **International Data Group (IDG)**, a US technology media, research, and events company. The consideration will be US\$70m in cash, US\$155m in Focus Media shares and an additional earn-out of US\$75m conditional on Allyes meeting earnings targets in FY08. (March 29, 2007)

Hisoft Technology International, the Chinese IT solutions provider, has acquired **Envisage Solutions**, the US-based provider of ERP Solutions, for a consideration of US\$18m in cash and stock - a valuation of twice FY06 earnings of US\$9m. (March 2, 2007)

Microsoft Corp will acquire a 1% stake in state-owned **Sichuan Changhong Electric Co**, the Chinese television maker, for Rmb94m (US\$12.3m). The two companies also signed a

MoU for a project called Media Galaxy, through which they will cooperate on R&D and production of digital entertainment products linking televisions and personal computers with the Internet. (June 19, 2007)

Rexel, the French distributor of electrical equipment serving the construction, industrial and service sectors, has acquired 51% of **Huazhang Electric Automation**, the Chinese distributor of industrial automation products, for an undisclosed amount. Huazhang reported sales of €13.2m (US\$18m) in 2006. As a part of the transaction, Rexel has an option to increase its stake in Huazhang to 70% in 2009. (March 19, 2007)

Samsung Electronics, the Korean LCD maker, plans to double the output of its LCD module facility in Suzhou by December 2007 to meet growing demand for LCDs globally and to increase its market share in China. Samsung assembles one million LCD units per month, which are used in flat screen TVs and PC monitors. (May 22, 2007)

SVA Group will invest in a sixth-generation LCD panel facility in Xinzhuang, a newly approved state-level LCD industry park near Shanghai. A sixth-generation LCD panel line costs US\$2bn. SVA plans to launch an IPO overseas after a possible merger with two domestic players. China's top three LCD panel makers SVA, Beijing-based **BOE Technology Group** and Jiangsu Province-based **IVO** will set up a JV, which should be announced by the end of June, according to the companies. (June 19, 2007)

Symantec Corp has agreed to form a Chengdu-based 49:51 JV with **Huawei Technologies** to develop security and storage products for telecom companies. In addition to security storage licenses, working capital and management expertise, Symantec will provide up to US\$150m toward the JV's growth and expansion. Huawei will provide access to its intellectual property licenses, R&D, manufacturing and engineering expertise. The JV is expected to be completed by December 2007. (May 22, 2007)

TCL Communication, the Chinese manufacturer and distributor of mobile handsets and a subsidiary of **TCL Corp**, a China-based white goods manufacturer, has acquired a 62% stake in **JRD**

Communication (JRDC), a China-based mobile phone development company, for US\$39.3m in cash. The sellers were investment holding companies **Power Century**, **Bounty Reward Investments**, **Right Chance**; and **TCT Holdings**. (April 18, 2007)

INDIA

Blackstone Group, the US-based PE firm, has agreed to acquire **Intelenet Global**, an Indian BPO firm promoted jointly by **Barclays Bank**, and **HDFC**, the Indian financial services group, in an MBO for US\$200m. Intelenet had FY07 revenues of INR3.8bn (US\$92m) and operating profit of INR550m (US\$13m). Post transaction, Blackstone will hold 80% of shares in Intelenet while the existing management of Intelent will hold the remaining 20%. (June 18, 2007)

Deloitte Consulting LLP, the US-based provider of BPO services, and a subsidiary of **Deloitte & Touche USA**, has acquired the remaining 50% stake not held in **Mastek DC Offshore Development (MDCOD)**, the Indian company providing technology integration and related solutions, from **Mastek**, an India-based provider of software solutions and integration. The terms of the sale were not disclosed, though Deloitte is thought to have paid US\$12m. MDCOD was formed in 2001 as a 50:50 JV between Deloitte and Mastek. (March 9, 2007)

Electronic Data Systems (EDS), the US-based systems management and services firm, has agreed to acquire Indian software testing company **RelQ Software** for an undisclosed consideration. EDS is seeking strategy to accelerate its existing global software testing, validation and verification services for enterprise clients. (March 12, 2007)

Hindustan Semiconductor Manufacturing Corp (HSMC) will invest up to US\$4.5bn to build two chipmaking facilities in a licensing tie-up with leading German chipmaker **Infineon Technologies**. HSMC will use process technology under licence from Infineon Technologies AG in its products. The first facility will require an investment of US\$1bn and will produce chips on

eight-inch wafers. The second will produce 12-inch wafers requiring an investment of US\$3.2bn-US\$3.5bn. No decision was announced on where to locate the project. (March 28, 2007)

New Enterprise Associates (NEA), the US-based VC firm, has agreed to acquire a 40% stake in **HFCL Infotel**, the Indian telecommunication service provider and a 62% subsidiary of Indian telecom equipment maker **Himachal Futuristic Communications Ltd (HFCL)**, for INR3.8bn (US\$85m). (February 20, 2007)

Siemens Ltd, the Indian subsidiary of **Siemens AG**, plans to acquire a 77% stake in **iMetrex Technologies**, an Indian provider of security systems, for an undisclosed amount. Under the terms of the agreement, Siemens also has the option to acquire the remaining 23% stake in the next five years. Post-transaction, Siemens will merge its building technology division with iMetrex and rename the firm **Siemens Building Technologies**. iMetrex reported revenues of €28m (US\$38m) in FY07. (April 23, 2007)

Tata Consultancy Services (TCS), the Indian IT company, has acquired the remaining 49% stake not held in its Brazil-based JV, **TCS do Brasil**, from its JV partner **Grupo TBA**, for US\$33.4m. Formed in 2002, TCS do Brasil is an IT services firm with delivery centers in Brasilia and Sao Paulo, and recorded revenues of US\$67m in FY07. (May 26, 2007)

JAPAN

Asahi Glass and **Mitsubishi Electric** are divesting their money-losing LCD JV, **Optrex Corp**. Optrex makes small and medium-sized LCD panels for cars, mobile phones and notebook PCs, but the company has been struggling with industry-wide price falls and shrinking margins as it competes with bigger rivals. The sellers hope to raise ¥20bn-¥30bn (US\$160m-US\$240m) including debt. In 2006, Optrex had a 15% global market share for car-use displays, competing against **Stanley Electric**, and a 2.2% share in the global market for small-and medium-sized LCD panels. (June 15, 2007)

Denso, the Japanese auto component manufacturer, plans to establish a new company in Chitose, Hokkaido Prefecture, to manufacture automotive semiconductor products. The new company, **Denso Electronics**, will have an initial capital investment of ¥2bn (US\$17m), which is expected to increase to ¥24bn (US\$200m) by 2015. Denso also plans to add an application design function at the new company to strengthen its product development capabilities. The new facility is scheduled to begin production by April 2009 and is expected to generate sales of ¥100bn (US\$850m) by 2015. Denso Electronics will be Denso's third production base in Japan for automotive semiconductor products. (April 26, 2007)

Fujitsu's US\$560m bid for **GFI Informatique**, the French computer service provider, has been rejected. GFI declined the offer, saying it undervalued the company. Fujitsu, the sole bidder for GFI after the withdrawal of a proposed deal with Apax Partners, has not raised its offer. (May 2, 2007)

Goldman Sachs Group has agreed to acquire an 18% stake in **Usen Corporation**, the Japanese cable and communications satellite broadcasting company, for ¥25bn (US\$210m). The transaction is expected to enable Usen to repay its long-standing debt and help increase shareholder value through Goldman's ability to raise money. (April 19, 2007)

The private equity wing of **Goldman Sachs** has agreed to acquire a 9% stake in **Aruze Corporation**, the Japanese gaming company, from its Chairman Kazuo Okada, for ¥40bn (US\$340m). The transaction is expected to finance Aruze's outside Japan. (March, 29 2007)

Imation Corporation, a US manufacturer of removable data storage media, has agreed to acquire the **TDK** brand world wide recording media business, from **TDK Corp**, the Japanese electronics company, for US\$20m in cash and US\$280m in stock. Additionally, up to US\$70m will be payable based on the financial performance of the acquired business over the coming three years. Post acquisition, TDK will retain its R&D, manufacturing and OEM businesses and its ownership will not exceed 22% of Imation common

stock on a fully diluted basis. The transaction is expected to close in Q3 2007. (April 19, 2007)

Kenwood Corporation, the Japanese electronics maker, has acquired **Zetron**, a US wireless communication control system developer and retailer, for an undisclosed amount. Zetron posted sales of US\$44m in FY2006. (April 4, 2007)

Lintec Corp is increasing production of protective film used in liquid crystal panels at its facility in Tatsuno, Hyogo Prefecture amid expectations of a sharp upturn in orders from main customer, **Sumitomo Chemical**. The expansion will cost ¥3.2bn (US\$26m) and is expected to quadruple output to 4 million m² per month. Start-up will begin in Q3 2007, with the expansion fully operational in early 2008. The new facilities will be used almost exclusively in film production. The width of the film will be increased more than 30% to 2,000mm to accommodate larger panels. (June 1, 2007)

Matsushita Electric, better known as **Panasonic**, will boost capacity at its factory in western Japan to 1.26 million panels a month by H2 2009, from a current rate of 640,000 panels a month. Matsushita is also spending ¥280bn (US\$2bn) to build a factory in Amagasaki, which will initially produce 300,000 screens a month. (June 20, 2007)

NTT DATA Corp, a Japanese telecom company, has agreed to acquire 70% of **Getronics Japan**, a designer, builder and manager of flexible and innovative end-to-end solutions, from **Getronics NV**, the Dutch supplier of information and communication technology (ICT) solutions, for €33m (US\$44m). Getronics will retain a 30% share in the new partnership. Getronics Japan reported revenues of US\$139m for 2006. The sale of Getronics Japan is a part of strategic cooperation between NTT and Getronics NV and will help NTT's position in the Japanese financial services sector. The transaction is expected to be completed in Q2 2007. (February 26, 2007)

Rasa Industries Ltd will spend ¥3bn (US\$24m) in its wafer reclamation business to increase its capacity to process 300mm wafers. The firm plans to raise capacity by 25% to 150,000 a month by March 2008. At the same time, the firm has decided to not invest in new equipment for reclamation of wafers with diameters of 200mm and less. It has

the capacity to process 230,000 of these smaller wafers and does not foresee any growth in demand in this sector. (April 23, 2007)

TPO Displays of Taiwan has sold its 2.5-generation TFT LCD facility in Kobe, to China-based **Shenzhen Laibao High-technology (SLC)**. Sources say the value of the deal is more than NT\$1.2bn (US\$36m). SLC specializes in the production of high-end ITO (indium tin oxide), a key component for TFT LCD and color filter (CF) production, transparent conductive glass and CF. TPO merged with **Royal Philips Electronics' Mobile Display Systems (MDS)** in June 2006. Through the merger, TPO gained the LCD facility in Kobe, Japan, which has a monthly capacity of 25,000 units. (June 1, 2007)

KOREA

Daewoo Electronics creditors rejected **Videocon's** buyout proposal and will seek other takers. Talks between a consortium led by Videocon and **Ripplewood** Holdings subsidiary **RHJ International** and Daewoo creditor **Korea Asset Management Co (Kamco)** and **Woori Bank** collapsed for a third time after Videocon sought a 13% cut in the US\$750m purchase price and to stretch payments into 10 years of installments. The creditors are now looking for other potential buyers. Daewoo Electronics is struggling and the creditors want to stabilize the business in advance of a possible sale, a Daewoo US executive said. Daewoo has been run by creditors since 1999, since parent **Daewoo Group** collapsed under US\$80bn in debt. (May 21, 2007)

Hynix Semiconductor is considering selling its 8-inch wafer production lines. The company has not decided if the 8-inch line will be sold in entirety or broken into parts; or a completely different alternative will be opted for. **TSMC** may be a potential buyer of Hynix's 8-inch production line. (June 6, 2007)

Kuramoto Co, a Japanese maker of glass substrates for LCDs, has sold its 25% stake in its Korean JV, **Schott Kuramoto Processing Korea**

Co (SKPK), to German **Schott AG** for W10.5bn (US\$11m). Kuramoto will continue licensing technologies to SKPK. SKPK was founded in 2005 to process glass substrates used in thin-film transistors. As of March 2007, the company employed 209 and had registered capital of W7.8bn (US\$8m), 75% held by Schott. Schott is a specialty glass developer and producer headquartered in Mainz, SW Germany. (June 6, 2007)

NHN Corp, Korea's largest Internet company, may seek to acquire an Internet company with advanced search-engine technology or to be taken over by a rival if that helps it become a global player, its chief executive, Chae Hwi-Young, said. NHN, which operates **Naver**, Korea's dominant Web portal site, has made known its global ambitions and already has growing businesses in China, Japan and the US. Mr. Chae's statement stands out because Korean corporate executives rarely express an openness to selling their companies. (May 25, 2007)

Samsung Electronics has announced it will begin building a US\$52m digital television facility in Russia in July to help meet growing demand in Russia and the CIS (Commonwealth of Independent States) region. Samsung said construction of the factory in Kaluga, 85 km SW of Moscow, is expected to be completed by Q4 2008. The facility will produce up to 2.2 million sets by 2010. (June 10, 2007)

Samsung Electronics has opened its new US\$3.5bn, 1.6 million ft² semiconductor facility in Austin, Texas. The facility is the second fab in Austin for Samsung. The new facility will produce NAND flash memory chips, used in consumer products like MP3 players, cell phones and digital cameras. It is scheduled to produce 60,000 wafers per month by 2008. (June 14, 2007)

Silicon Motion Technology Corp, the US-based semiconductor fab that designs and develops universally compatible, high-performance, low-power semiconductor solutions, announced that it

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has completed its previously announced acquisition of **Future Communications IC (FCI)**, a Korea-based designer of radio frequency integrated circuits (RF ICs) for mobile television and wireless communications. The purchase price was US\$50m in cash and US\$40m in Silicon Motion ordinary shares and options. (April 30, 2007)

SK Telecom, Korea's largest mobile operator, has agreed to buy a 25% stake in KOSDAQ-listed semiconductor design company, **Advanced Digital Chips (ADChips)**. SK Telecom paid W35.7bn (US\$40m) for its stake, becoming the single largest shareholder. The mobile carrier also bought W25.7bn (US\$28m) worth of convertible bonds issued by the chip company. A conversion, which is possible after a year of holding the bonds, would bring its stake to 35%. ADChips specializes in designing non-memory chips for telecom, multimedia and consumer electronics applications. In 2006, ADChips posted W12.3bn (US\$14m) in revenue. (June 20, 2007)

Sony said its LCD JV with **Samsung Electronics, S-LCD Corp**, would start production this summer, a few months ahead of schedule. S-LCD, based in Asan, Korea, has helped Samsung leverage Sony's brand recognition to expand the market for larger television panels, while providing Sony with stable panel supply. (April 13, 2007)

PHILIPPINES

SPI Technologies, the Philippines-based BPO subsidiary of **Philippine Long Distance Telephone**, will acquire **Springfield Service Corp (SSC)**, the US provider of billing and accounts receivable management services to the healthcare sector, for US\$44m. The transaction will enable both SPI and SSC to reduce healthcare service processing costs while improving quality through streamlining of business processes and improving patient care. SSC is estimated to report revenues of US\$30m by FY08. (April 16, 2007)

Texas Instruments (TI), the world's largest manufacturer of mobile phone chips, will build a semiconductor fab at the **Clark Economic Zone** north of Manila, with an investment of US\$1bn

spread over ten years. The fab will employ 3,000 people and will double TI's existing capacity in the Philippines. Construction of the fab is scheduled to begin in July 2007, with production expected by December 2008. (May 3, 2007)

SINGAPORE

Avago Technologies, a US and Singapore-based manufacturer of semiconductor products, has agreed to acquire **Infineon's Polymer Optical Fiber (POF)** business from **Infineon Technologies**, the German developer and semiconductor maker. The terms of the transaction were undisclosed. The transaction is expected to close by June 2007. (April 2, 2007)

TAIWAN

E-Ton Solar Tech Co, Taiwanese maker of photovoltaic cells, will pay US\$154m for US-based **Adema Technologies**. Adema is a supplier of monocrystalline silicon ingots for the solar power industry. The transaction is expected to close in Q3 2007. (June 13, 2007)

Hon Hai Precision Industry, the Taiwanese electronics parts maker, is considering investing in medical equipment for the healthcare sector. Meanwhile, Hon Hai's cellphone making subsidiary, **Foxconn International Holdings**, plans to spend US\$1bn by 2008 to more than double its capacity. The company is also looking to make at least one acquisition this year. (June 9, 2007)

Intel Capital, the investment arm of **Intel Corporation**, will invest US\$65m in **Powertech Technology Inc (PTI)**, a division of Taiwan-based **Kingston Technologies**. PTI provides back-end assembly and test services for memory companies. PTI also announced it also expects to receive additional funds from other investors. The collective funds will be used as working capital to support the continued growth of operations. Intel, which is leading the round, is an active customer of PTI and its services. (March 1, 2007)

Powerchip Semiconductor Corp (PSC) has begun construction of its IC research and testing center in Hsinchu, Taiwan. The memory maker has budgeted NT\$2.5bn (US\$80m) for the first phase of the center. The center will have a wafer testing facility to support future backend production demand from PSC. PSC anticipates that capacity will be ready in Q2 2008. PSC will allocate a portion of the capacity to its subsidiary, **Rexchip Electronics**, a JV with **Elpida Memory**. (June 22, 2007)

Royal Philips Electronics, the Dutch electronics firm, has sold a 3.4% stake in **Taiwan Semiconductor (TSMC)** for US\$2.6bn. The stake

sale will increase Philips' cash reserves which it intends to use for acquisitions and buying back shares. Philips is believed to hold 13% of TSMC. (May 18, 2007)

Unitech Printed Circuit Board will set up a solar cell facility in Taiwan's NE county, Yilan. The company will invest NT\$945m (US\$30m) in the solar cell facility, which will have capacity of 30MW initially, with production likely to start in H2 2008. The company did not reveal further details of the solar cell production plan. (June 22, 2007)

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ABOUT BDA

Business Development Asia is a corporate finance advisory firm which assists multinational companies in expanding their businesses in Asia through JVs, acquisitions, divestments and capital raising. For further information on BDA's services or on any of the articles in this newsletter, please contact the offices below.

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