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Business Development Asia

ASIA IS A BUSINESS IMPERATIVE… NOW MORE THAN EVER

ASIAN TECHNOLOGY NEWSLETTER

Issue 42, March 2005

A quarterly newsletter of developments in the IT, semiconductor and electronics industries

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INTRODUCTION

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

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

BDA has focused on the Technology sector since our founding in 1996 and is well placed to assist clients from our offices in New York, London, Tokyo, Seoul, Shanghai and Hong Kong.

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Andrew Huntley
Managing Director

CHINA/HK

AMD, the manufacturer of integrated circuits, opened a new microprocessor test, mark and pack (TMP) facility in Suzhou Industrial Park, China. AMD plans to hire approximately 300 new employees to staff the facility during the next few years. The new TMP facility is currently handling seventh-generation products, including AMD Sempron processors. The company plans to begin moving its eighth-generation microprocessors through the facility in the second half of 2005. (March 4, 2005)

China Netcom Group acquired a 20% stake in **PCCW Limited** for US$1bn in cash by subscribing to 1.4m new shares. As part of the agreed transaction, China Netcom will nominate directors to three new seats on the board of PCCW. One of the three will become a Deputy Chairman of PCCW. PCCW will also earmark up to HK$5bn (US$640m) to pursue opportunities in China in the telecommunications area and set up a PRC Business Development Committee, which will comprise two nominees each from PCCW and from China Netcom. (January 20, 2005)

China Putian and **Nortel Networks** signed a framework agreement to establish a JV for R&D, manufacture and sale of 3G mobile telecommunications equipment and products in China. Under the agreement, China Putian and Nortel will prepare and negotiate a definitive JV agreement by June 30, 2005. The new JV, named Putian-Nortel Networks Telecommunications Equipment Co., Ltd. will be headquartered in Wuhan, capital of Hubei Province and focus on

TD-SCDMA (Time Division-Synchronous Code Division Multiple Access) and WCDMA (Wideband CDMA) products and solutions, as well as related network engineering and optimization services. China Putian will own 51% of the JV with the the remaining portion held by Nortel. (January 21, 2005)

CITIC 21CN Telecom entered into a JV with **AQSIQ** and **China Huaxin Telecom** to engage in authentication service for products manufactured in China. AQSIQ is a Chinese state-owned enterprise and is wholly owned by the General Administration of Quality Supervision, Inspection and Quarantine. The new JV company will be owned 50% by CITIC 21CN Telecom, 30% by AQSIQ and the remaining 20% by China Huaxin Telecom. The registered capital of the JV will be RMB60m (US$ 7.3m) with total investment of RMB150m (US$18.3m). (January 24, 2005)

Huawei Technologies, China's biggest telecommunications equipment maker, is considering selling significant parts of its business to foreign buyers as part of a broader strategic review. However, so far the initiatives have not been successful, in part because other telecoms equipment makers are also trying to divest similar businesses to boost profitability as prices have been falling across the telecoms market. (January 31, 2005)

Intel and Chinese telecom equipment maker **ZTE** will work together to build wireless broadband networks using WiMax technology. ZTE will use Intel's WiMax-capable chips, code-named *Rosedale*, in its telecom equipment and infrastructure. ZTE plans to build wireless broadband networks throughout China, Eastern Europe and Southeast Asia, with field trials to begin in mid-2006. (January 13, 2005)

JAMDAT Mobile is investing in Chinese wireless entertainment distributor, **C-Valley**. Based in Beijing, C-Valley has strong relationships with the two major Chinese wireless carriers, China Mobile and China Unicom, and has also developed comprehensive distribution services in China. Other C-Valley investors include **ACCESS Co., Ltd**, a global provider of mobile content delivery and Internet access technologies, and **TOSE Co., Ltd**, Japan's largest outsourced software developer of video game software for home use and entertainment applications for mobile phones. (January 13, 2005)

Linktone, a Shanghai-based provider of wireless value-added services to mobile-phone operators, signed an agreement to acquire **Beijing Cosmos Digital Technology Company Ltd**, a privately-held provider of WAP services to China Unicom. Linktone expects the acquisition to strengthen its overall WAP service portfolio and development capabilities, increase its share of the rapidly growing 2.5G WVAS market, and enhance its relationship with China Unicom. Linktone's business with China Unicom accounted for 13% of its gross revenues for the third quarter ended September 30, 2004. Under the agreement, Linktone will acquire 100% of the outstanding shares of Cosmos Digital in cash, which will be paid from the Linktone's existing cash reserves. The financial terms of the acquisition has not been disclosed. (January 13, 2005)

Japan's **NTT DoCoMo** invested US$4m in newly issued stock for an equity stake in a wholly owned subsidiary of **Emcore Technology Inc**, **Beijing Lingtu Spacecom Technology Co, Ltd**, a provider of location-based telecommunications services. Through the investment, NTT DoCoMo will provide its telecom services in markets that Beijing Lingtu Spacecom Technology occupies and expand NTT's presence in the Chinese mobile telecommunications industry. (December 28, 2004)

Philips Mobile Display Systems, a business unit within Philips Semiconductors, plans to expand its manufacturing facilities and R&D center in Shanghai to supply emerging technologies in advanced mobile displays. The Shanghai manufacturing facility is in the ramp-up phase for active matrix TFT technology production and is moving towards completely lead-free technologies. The R&D center

employs over 100 engineers developing TFT and emerging technologies and focusing on manufacturing processes innovations and product development for customers based in China. (February 1, 2005)

PalmSource completed its acquisition of **China MobileSoft** (CMS), a Chinese mobile phone software company. CMS provides mobile device manufacturers and original design manufacturers (ODM) with software platforms and applications for the Chinese market. PalmSource acquired CMS as part of its strategy to further extend the Company's presence as a global software provider for phones and mobile devices. The combination of Palm OS and CMS's software products is expected to increase PalmSource's mobile software offerings and leverage the work CMS has done with Linux to provide a new version of Palm OS based on Linux. PalmSource will continue to support the Palm OS Garnet and Palm OS Cobalt operating system software lines. (February 4, 2005)

Shanda Interactive Entertainment, China's largest online game operator**,** together with its controlling shareholder Skyline Media Limited, acquired approximately 19.5% of the outstanding ordinary shares of **Sina Corporation** for US$261.9m through open market purchases. Shanda is now the largest shareholder in Sina Corp and a full acquisition could follow. This is Shanda's second major buy over the last three months. In November 2004, Shanda purchased a controlling stake in South Korean rival **Actoz Soft**, a supplier of online games in China, for US$91.7m. (February 19, 2005)

SmartPay Jieyin Ltd signed an agreement to acquire **DT Intrinsic Technology Ltd**, a company that provides billing and service management software platforms to Chinese mobile carriers. Both SmartPay and DT are involved in Internet payment transactions in China. The combined entity will be headquartered in Shanghai with over 150 staff, with regional offices in Beijing, Guangdong, Jiangsu, Zhejiang, Anhui, Shandong, Liaoning, Hebei and Chongqing. (January 6, 2005)

TCL Corp, a Chinese consumer electronics and mobile-phone maker, and **BHflex**, a South Korea based PCB maker, formed a JV, **TCL-BH Precision Circuit Co**, in Huizhou, Guangdong. The new company will have an initial investment of Rmb45m (US$5.4m). TCL will own 51% of the JV with the remaining portion held by BHflex. The JV company will be engaged in the manufacture of high-precision and high-density single-sided/double-sided flexible PCBs, multi-layer flexible PCBs and rigid-flexible PCBs. (January 19, 2005)

There are rumors indicating that **Tom Online** will acquire **Alibaba.com**, a B2B service provider. Neither company has publicly confirmed or denied these rumors. (March 1, 2005)

INDIA

EMC Corp, the information storage company, plans to invest an additional US$150m in India over the next two year to strengthen partnerships, customer support and R&D. The investment comes on top of the US$100m EMC pledged in 2003. In the past few years, EMC has been ramping up its presence in India, one of its fast-growing markets worldwide. EMC also officially also opened its first regional software development and support center in Bangalore, India. The center will provide development and maintenance support for EMC's full range of storage offerings. EMC also plans to increase its workforce in India from 400 currently to 1,000 by year-end. (February 28, 2005)

Google, the internet search engine company, has begun to recruit software engineers, as well as system administrators, for its newly established

R&D center in Bangalore, India. Google's center in Hyderabad is also hunting for quality-assurance software personnel for an engineering testing team and sales and operations personnel. Google has not disclosed how many people it is planning to recruit at its two Indian centers. (January 14, 2005)

MobiApps, the Singapore-based communication technology vendor, formed a new JV with India's **Tata AutoComp Systems** to provide fleet management and tracking solutions to vehicles in India. The JV, named Taco MobiApps Telematics (TMT), will market vehicle tracking systems to logistics and transportation providers. Under the agreement, MobiApps and Tata AutoComp, an automotive component maker, will initially inject a combined US$2m. The JV is expected to break even within the first year and generate over US$8m in revenues. TMT's solution is based on MobiApps' technology, which uses cellular and satellite communications to monitor the speed and location of vehicles en route to assigned destinations. (March 8, 2005)

Tom Online Games, a wholly-owned subsidiary of **Tom Online Inc**, acquired 76.3% of the issued and paid-up share capital of **Indiagames**. The closing of the transaction took longer than expected due to the extra time that was necessary for completing the process of the subscription, issue and allotment of the subscription shares in India. Tom Online indicated that the companies have agreed that the subscription completion will be deferred and will take place on or before March 31, 2005. (February 25, 2005)

Toshiba Group acquired **SoCrates Software India Pvt. Ltd**, a Bangalore-based software technology development company. SoCrates is engaged in the R&D of Toshiba's software for system-on-chip (SoC) business. Financial terms of the acquisition were not disclosed. (March 8, 2005)

JAPAN

Aozora Bank and **Yahoo Japan Corp** reached an agreement to jointly offer Internet-based banking services using Aozora Trust Bank as the core of the new business. Yahoo Japan will acquire a controlling stake in Aozora Trust Bank, currently a wholly owned Aozora Bank subsidiary. Operation of the venture is expected to be in the first half of 2006. (January 21, 2005)

Fuji Photo Film Co will acquire British ink manufacturer **Sericol Group Ltd** for GBP123m (US$221m) to strengthen its printing business. Sericol Group, a producer of inks for screen printing and for wide format digital industrial inkjets, will become a wholly owned subsidiary of Fuji Photo Film under the new name of **Fujifilm Sericol Ltd**. (January 20, 2005)

Fujitsu Ltd agreed to sell its wholly owned subsidiary **Fujitsu VLSI's** semiconductor and liquid crystal display production equipment business to **ULVAC Inc**, a maker of vacuum equipment and other industrial devices. Approximately 80 manufacturing workers at Fujitsu VLSI's plant in Minokamo, Gifu Prefecture, are expected to be transferred to ULVAC. Fujitsu is also exiting the LCD panel manufacturing business by selling its subsidiary, **Fujitsu Display Technologies Corp**, to **Sharp Corp**, as the unit is suffering from worsening business conditions amid sharp price declines for LCD panels. LCD prices have fallen due to increased output by major manufacturers. (February 6, 2005)

Gentosha Inc subsidiary **Gentosha Renaissance** will set up a JV with **Livedoor Co,** a Japanese computer network consulting and management provider, to gain entry into the publishing business.

The move comes subsequently to Livedoor's acquisition of a 35% stake in **Nippon Broadcasting System Inc** (NBS) in the bid to seek a business alliance with the **Fujisankei Communications Group**. NBS and Fuji Television Network Inc are among Fujisankei's core units. Livedoor Co recently increased its stake in NBS to 42.5%. (February 11, 2005)

South Korea's **MagnaChip Semiconductor Ltd** acquired **International System and Electronics Corp** (ISRON), a maker of display driver ICs, for an undisclosed amount. ISRON designs, develops, and markets mixed-signal semiconductors and is a subsidiary unit of Siix Corp, based in Osaka, Japan. ISRON has 32 employees, all based in Osaka and achieved 2004 revenues of US$21m. The acquisition strengthens MagnaChip's product and technology portfolios, R&D capabilities and adds key personnel, including ISRON's senior management team. (February 18, 2005)

Matsushita Electric Industrial Co and **Olympus Corp** will jointly develop digital single-lens reflex cameras to respond to fierce global competition. Matsushita, known for its Panasonic brand of consumer electronics, will be the first Japanese consumer electronics maker to enter the market for digital SLR cameras. Matsushita Electric also agreed with **Hitachi Ltd** to jointly develop plasma-display panel technology to counter competition from South Korean rivals. The two companies, Japan's No. 1 and No. 2 ranked in plasma-display panels, will establish a joint patent management firm while promoting cooperation in the development of electronic parts and in the procurement of raw materials. (February 6, 2005)

Oki Electric Industry Co signed an agreement to acquire **Texas Instruments Japan Ltd's** operations in driver chips for TFT-LCDs. The acquisition is intended to enhance Oki's competitiveness in TFT-LCD driver chips for personal computers and large-screen television sets. (February 19, 2005)

Sharp Corp will invest Yen150bn (US$1.4bn) in a second factory in Kameyama, Mie Prefecture, for the production of large-scale liquid crystal displays for LCD televisions starting in October 2006. The plant will be built next to the existing Kameyama plant, which specializes in large-scale LCD TVs and LC panels, with construction scheduled to begin in July. The new factory will use the largest glass substrates in the world, measuring 2.16 meters by 2.4 meters, for the production of 40-inch and 50-inch class models. (January 13, 2005)

Softbank Corp, the internet investor, offered to acquire three **Tu-Ka** mobile service firms from **KDDI Corp** for Yen200bn (US$1.9bn). The three mobile service firms are Tu-Ka Cellular Tokyo Inc, Tu-Ka Cellular Tokai Inc and Tu-Ka Phone Kansai Inc. (January 15, 2005)

Sony Corp agreed in principle with major Taiwanese LCD maker **Chi Mei Optoelectronics Corp** to buy a Japanese factory belonging to one of Chi Mei's subsidiaries to boost capacity of LCDs for use in mobile phones, digital cameras and other mobile gadgets. Sony will buy the Yasu, Shiga Prefecture-based factory of Chi Mei's wholly owned arm, **International Display Technology Co**. The factory currently makes color TFT-LCD panels. (January 8, 2005)

Sumitomo Chemical Co will invest Yen10bn (US$90.9m) to strengthen its LCD-related operations in Japan, Taiwan and South Korea in anticipation of an increase in LCD demand in the long run. Sumitomo will spend Yen4.5bn to add facilities at an LCD materials plant in Ehime Prefecture, establish a research center handling polarizing films for advanced LCDs and build a coating plant for polarizing films along with a quality control center. (January 20, 2005)

KOREA

Agilent Technologies announced an agreement to acquire **Wavics**, a Korea-based designer and manufacturer of power amplifier modules for mobile phones. Financial details of the agreement were not disclosed. Wavics is a fabless IC company based in Seoul, Korea. The company operates two manufacturing locations in Korea, one in Seoul and one in Ansan and employs 55 people. Wavics' customers includes handset manufacturers in Korea, Japan, China, Germany and the US. (January 20, 2005)

LG Electronics and **Nortel Networks** signed a memorandum of understanding (MoU) to establish a JV to provide telecommunications equipment and networking solutions to Korea and other global markets. The proposed JV is subject to execution of a definitive agreement. The two companies expect to complete this transaction in the second quarter of 2005. (January 26, 2005)

Microsoft Corp opened an engineering laboratory in Seoul to build mobile Internet solutions based on its Windows operating system. The R&D facility, named Mobile Innovation Lab, is expected to employ 30 engineers. Microsoft will invest US$30m in the next three years to support the R&D activities. The new laboratory will share the source code of the developed technologies with its local partners. Microsoft will dispatch 15 engineers from the mobile technology research center at its Seattle headquarters to lead the activities at Seoul's Mobile Innovation Lab. MIcrosoft will also recruit and employ local research staff from Korean software developers and electronic manufacturers on a project-by-project basis. (March 8, 2005)

Photronics, a manufacturer of imaging technology solutions for the global electronics industry, acquired an additional 3% stake in **PKL Co**, Korea's leading independent photomask manufacturer, for US$8.5m in cash. As a result of this transaction, Photronics now owns 90% of PKL. (January 26, 2005)

MALAYSIA

Matsushita Electric Co (M) Bhd. **(Melcom)** will shut down production of its washing machine and refrigerator plant in Malaysia due tough market conditions and severe price competition in the electrical home appliances business. (February 24, 2005)

SINGAPORE

Microsoft announced a partnership with Singapore-based EMS company, **Flextronics,** to market a new cell phone platform, Peabody, running Windows Mobile to phone makers and service providers. The platform, jointly developed by the two companies, provides a blueprint that cell providers can customize, which would help to cut production costs. Peabody runs on GSM (Global System for Mobile Communications) networks and GPRS (General Packet Radio Service), the data delivery arm of GSM networks. (February 14, 2005)

National Semiconductor Corporation (NSC) is seeking a buyer for its assembly and test plant in Toa Payoh, Singapore. The company is selling the plant in order to better streamline its operations with product focus on lower pin-count packages. Manufacturing activities at the Singapore plant are expected to continue during the sale process. The Singapore facility employs approximately 1,000 people, including 320 professional staff and 680 technicians and operators. (March 10, 2005)

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TAIWAN

NEC Corp will set up its first center outside Japan to develop and market its RFID solutions in Southeast Asia for stock control. The center will be set up in Singapore by NEC's Singapore-based subsidiary **NEC Solutions Asia Pacific Pte Ltd** with an investment of S$5m (US$3.1m) over the next two years and is expected to be operational in May 2005. (February 26, 2005)

Integrated Silicon Solution, Inc. (ISSI) reached an agreement to acquire **Integrated Circuit Solution, Inc.**(ICSI) in Taiwan for US$69m in cash. Currently, ISSI owns 29% of ICSI and ISSI's CEO serves on the ICSI board of directors. ICSI is headquartered in the Science Park in Hsinchu, Taiwan and has 210 employees. ICSI generated revenues of US$150m in 2004. The transaction is expected to close in the mid to late June quarter of 2005. (January 25, 2005)

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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 and divestments. For further information on BDA's services or on any of the articles in this newsletter, please contact Charles Maynard in Tokyo, Euan Rellie in New York, Andrew Huntley in London, Jeffery Wang in Shanghai or Paul DiGiacomo in Hong Kong.

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