

ASIA IS A BUSINESS IMPERATIVE... NOW MORE THAN EVER

ASIAN TECHNOLOGY NEWSLETTER

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CHINA/HK

3Com Corp and **Huawei Technologies** finalized their previously announced JV, **Huawei-3Com Co., Ltd.** The new venture is based in Hong Kong with principal operations in Hangzhou, China and with approximately 1500 employees will deliver enterprise level networking solutions including routers and LAN switches. 3Com will have the rights to market and support the JV's products under the 3Com brand in all countries except for China and Japan. In China and Japan, Huawei-3Com will sell products sourced internally as well as from 3Com. 3Com is contributing US\$160m in cash, assets related to its operations in China and Japan, and licenses to certain intellectual property. In two years, 3Com will have the right to acquire a majority interest in the JV. (December 12, 2003)

The **Chinese government** is saying that it plans to throw its financial weight behind the development of the Linux operating system. Gou Zhongwen, a vice minister at the Ministry of Information Industry, was recently quoted on the Ministry's website as saying that Linux is an opportunity for China to make a breakthrough in software development, but that it could not happen without government support. In September Japan, China and South Korea agreed to collaborate on building a new computer operating system as an alternative to Microsoft's Windows. China's information technology market is growing at 20% per year, with software sales expected to reach US\$30.5 billion in 2005, according to the research firm, IDC. Currently, the Chinese market is dominated by Microsoft, Oracle, IBM, Sybase, UFSoft and Kingsoft. (November 5, 2003)

INTRODUCTION

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

BDA is a corporate finance advisory firm which helps multinational clients to identify and to execute acquisitions, divestments, JVs and other strategic alliances in Asia.

Please visit our website www.bdallc.com or contact me at ahuntley@bdallc.com to learn more about our services.

Andrew Huntley
Managing Director

Cisco Systems of the United States has made a minority investment in **Mobi Development Co. Ltd.** Mobi, based in Shenzhen, is a privately held developer of mobile communications radio components. Established in August 1999, Mobi in 2002 accepted a US\$5.4m investment by Softbank Asia Infrastructure Fund (SAIF). Mobi will continue to focus on antennas and passive RF components for PHS, CDMA and GSM basestations. Mobi is expected to initially focus on China and then expand into other international markets. (November 11, 2003)

FreeStar Technology Corporation of Finland and **Xinhua Financial Network** of China agreed to enter into a joint venture to distribute FreeStar's Internet credit card payment processing products to banks, financial institutions and Internet merchants throughout Asia, excluding Japan. Under the agreement, Xinhua will open offices for FreeStar in Shanghai, Beijing and Hong Kong to ensure market penetration. For Xinhua's efforts, FreeStar issued to Xinhua a four-year warrant to purchase up to 10,000,000 shares of FreeStar's common stock at an exercise price of US\$0.50 per share and a two-year option to purchase up to 10,000,000 shares of FreeStar's common stock at an exercise price of US\$0.325 per share. (December 22, 2003)

HP Services is planning to invest US\$200m into China over the next five years to increase its share of the Chinese IT services market. The investment will go towards building a financial services solutions center in Shanghai. Additionally, HP is reviewing the potential of setting up an offshore software development operation in northern China because of the concentration of Korean and Japanese speakers in this part of the country. According to IDC, China is the largest network consulting and integration market in the Asia-Pacific region, making up about 33% of the total market in 2003. China is expected to grow at a CAGR of 26% to US\$1.08b by 2007. (October 13, 2003)

Motorola Inc. announced that it is transferring one of its Chinese microchip fabrication plants in Tianjin to **Semiconductor Manufacturing International Corp. (SMIC)** in exchange for a stake in the Chinese

chip maker. Motorola said that the deal is part of its long-term strategic relationship with SMIC whereby it will be able to rely on SMIC for support for a full range of semiconductor technologies. Motorola and SMIC are also entering into a strategic intellectual property agreement in the areas of patents and advanced CMOS process technology. Through the deal, Motorola will gain a seat on the board of SMIC. The financial terms of the deal were not disclosed. (October 23, 2003)

NEC of Japan and **SVA Group Co., Ltd.** of China announced a TFT-LCD joint venture in Shanghai. The JV will be called **Shanghai SVA NEC Liquid Crystal Display Co., Ltd.** and will have a capitalization of ¥50bn (US\$461.1m), with SVA Group taking a 75% share and NEC taking a 25% share. Capital expenditures are forecast to be ¥85bn (US\$783.9) to build a state-of-the-art, fifth-generation production line. The line will manufacture a large-size glass substrate of 1,100mm x 1,300mm and have a base capacity of 45,000 sheets per month. The facility will employ an initial work force of 1,200 and is scheduled to be operational in October 2004. (November 11, 2003)

Panasonic Mobile Communications Co., Ltd. of Japan and **UTStarcom, Inc.** of the United States announced the creation of a joint venture called **Universal Communications Technology Hangzhou (UCTH)** to focus on the design, development and manufacturing of third-generation (3G) telecommunications system equipment. UCTH will first focus on the Chinese market and later expand into other international markets. The JV's main product line will initially support the WCDMA standard but will expand to support China's TD-SCDMA standard. Capitalized at US\$10m, Panasonic will own 51% of the JV, with UTStarcom taking the rest. (November 5, 2003)

Royal Philips Electronics and **Jilin Sino-Microelectronics Co. Ltd. (JSMC)** announced the establishment of a JV to develop, design and manufacture bipolar power products to be marketed and sold by the parent companies. The new company, **Philips Jilin Semiconductor Co. Ltd.**, located in Jilin City, China will serve both the domestic and

international markets providing products to the consumer electronics, white goods, lighting, power supplies and industrial markets. The terms of the deal were not disclosed. (November 25, 2003)

TCL International Holdings Ltd. of China is set to become one of the first Chinese companies to take control of a major international entity after agreeing to merge its TV and DVD manufacturing assets with those of France's **Thomson SA**. Under a memorandum of understanding, both companies will inject their assets into a Hong Kong-incorporated JV in which TCL will own 67% and Thompson will own 33%. The JV will have assets of US\$522m with the majority of assets coming from TCL. The JV will be the world's largest TV-set manufacturer with 18 million units annually. (November 3, 2003)

A subsidiary of the Chinese state-run **Xinhua, Xinhua Financial Network (XFN)** announced it was buying the New York-based financial information services provider, **Market New International**. The transaction, involving both cash and stock, is pending the approval of both companies and should close in early 2004. Market News International employs approximately 70 staff in bureaux in the United States and Europe. (December 16, 2003)

Yahoo Inc. announced that it was paying up to US\$120m in cash to buy **3721 Network Software Co.**, a Hong Kong based company that provides technology for the Chinese language search engine **3721.com**. Yahoo expects to complete the acquisition by the end of Q1 2004. 3721 NSC has developed a range of proprietary technologies that help Chinese language users navigate the Internet. Yahoo said that it will provide 3721 with a broad range of Yahoo technology, products and services to help small and medium-sized businesses in Asia reach more customers. (November 24, 2003)

INDIA

Communications chip vendor **Conexant Systems Inc.** announced that it will buy **GlobespanVirata**

Inc. in a deal valued at more than US\$800m in stock. Under the terms of the agreement, GlobespanVirata shareholders will receive 1.198 shares of Conexant common stock for each share of GlobespanVirata stock. The merger should close the first quarter of 2004. At closing Conexant shareholders will own 62.75% and GlobespanVirata shareholders will own the remaining 37.25%. Conexant sells microchips that are used in digital subscriber line and other broadband communications, while GlobespanVirata sells DSL and other networking chipsets and software. (November 4, 2003)

IT education company **New Horizons India** announced a partnership with Red Hat to become its certified training partner in India. New Horizons will train students on the Linux operating system and be authorized to provide Red Hat-Linux certified courses. All of the New Horizons centers in India will offer Red Hat certified courses. New Horizons India is a joint venture between Nasdaq-listed New Horizons Worldwide and India's Shriram Global Technologies. (October 30, 2003)

Texas-based **Perot Systems Corp.** acquired **HCL Technologies'** stake in **HCL Perot Systems**, a joint venture formed by the two companies in 1996 in Noida, India. Perot Systems paid approximately US\$105 million in cash for HCL Technologies' stake. The company which has 2,000 employees and customers in 11 countries provides onshore / offshore software development. (December 22, 2003)

JAPAN

Amkor Technology Inc. completed the acquisition of its semiconductor assembly and test JV with **Toshiba** by purchasing Toshiba's 40% interest in **Amkor Iwate Co. Ltd.** for approximately US\$14m. Amkor Iwate Co. Ltd. is located near Kitakami, Japan where it employs over 800 people and provides advanced packaging solutions used in cell phones and other high-end consumer electronics. (December 31, 2003)

NEC Electronics Corp. of Japan and **ARM Holdings PLC** of the United Kingdom are setting up a JV for the development and marketing of next-generation multiprocessor cores. These cores will be based on symmetric multiprocessor, or SMP, technology and target the automotive, multimedia, and mobile-phone markets. The JV will combine ARM's core architecture and NEC Electronics' multiprocessing technology. Additionally, the JV will also develop software for the next-generation central processor unit, CPU, core. NEC Electronics expects to market products at the end of 2004 and will aim for annual sales of ¥30bn (US\$277.6m). (October 20, 2003)

NTT DoCoMo and **Sony Corp.** announced plans to jointly develop smart cards that can be embedded in mobile phones to let users pay for train tickets, groceries and other goods. These smart cards will allow consumers to "charge" their mobile phones with funds and then later pay for products and services, much like a debit card linked to a bank account. This JV will develop, produce and market smart cards. Sony will take a 60-70% stake in the JV, which is expected to be capitalized at around ¥20bn (US\$185.1m), while DoCoMo will take the remainder. The smart cards will be installed in DoCoMo's second-generation mobile phones and begin marketing by the middle of next year. (October 22, 2003)

NTT DoCoMo also announced that it planned to pull out of its JV with **America Online Inc.** DoCoMo which owns a 43.2% stake in **DoCoMo AOL Inc.**, valued at approximately US\$157m, was aiming to complete its exit plan by the end of 2003. DoCoMo first acquired its 42.3% stake in 2001 and later increased its holding. The JV sought to boost the synergy between DoCoMo's popular i-mode mobile phone-based Internet service and AOL's Internet access service, however, the venture failed to generate the intended results due to strong competition in the market. AOL owns 41.2% in the venture with the remaining ownership held by Japanese trading firm, **Mitsui and Co.** and the Japanese media group, **Nihon Keizai Shimbun Inc.** (December 17, 2003)

Renesas Technology Corp., created in April of

this year through the merger of **Hitachi's** and **Mitsubishi Electric's** semiconductor operations, indicated that it was in talks with two fellow Japanese chipmakers on a joint investment in a new fab in Japan. Total investment in the 90nm, 300mm wafer fab would reach about US\$1.7bn. The company is aiming to have an agreement in place with the two Japanese companies, as well as with a fourth, undecided as yet, partner by the end of this year. The JV would like to begin production next year. (September 25, 2003)

KOREA

IBM has said that it plans to form a joint venture with the Korean government's **Institute of Information Technology Assessment (IITA)** to build an "Ubiquitous Computing Institute" in Seoul. IBM and the IITA will each contribute US\$16m over the next four years. The Institute will conduct research and development in areas like telematics, operating systems for mobile phones and Personal Digital Assistants and embedded software. The Institute will open with a staff of 70 researchers with plans to hire another 100 over the next four years. (October 24, 2003)

Orion Electric, a Korean firm undergoing court-receivership procedures, announced that it was in negotiations with three or four Chinese electronics firms to sell off a stake in its subsidiary, **Orion PDP**. Orion PDP manufactures plasma display panels and its sale would result in another of Korea's cutting-edge technology companies being sold-off; this after the sale of Hynix Semiconductor to Beijing Orient Electronics group earlier in 2003. Orion Electronic owns 90.9% of Orion PDP which is expected to fetch approximately W30bn (US\$25.3m). (December 11, 2003)

Samsung Electronics and **Sony Corp.** have forged a business alliance to strengthen their clout in the fast-growing flat panel market. The 50-50 JV will be established in the first quarter of next year

and require a capital investment of US\$2bn. The JV will produce large, seventh generation liquid crystal display panels. This alliance will provide Sony with a steady supply of flat screens, as it ramps up production. Sony will continue to buy flat screens from other manufacturers, including from LG Philips LCD. Samsung expects that as a result of this alliance it will become the world's leading producer of flat screens. (October 20, 2003)

SINGAPORE

Gemplus, the French smartcard developer, has announced that it is making a S\$100m (US\$59m) investment into a new research and development center. This will be its first R&D center outside of France and will concentrate on advancing the manufacturing capabilities the company carries out in Singapore. The R&D team will consist of 100 staff and focus on security technologies and application development to enhance its expertise in smartcard operating systems. The research carried out will be primarily on ID security as well as telecommunications security. (September 2003)

Infineon Technologies AG has announced it will make Singapore its global testbed for logic integrated circuits (ICs) and a key research and development hub for new product design and development. The company will add 120 engineers in R&D over the next five years to a new facility it is building to house its regional headquarters for Asia-Pacific. The company is also planning to move towards upstream design engineering and strengthen its product design and development competencies leveraging the already 1,900 staff it has in Singapore. (November 27, 2003)

To submit stories to future editions of this newsletter, please contact Alex Kelloff in New York on 212.265.5300 and akelloff@bdallc.com.

TAIWAN

GE Industrial Systems acquired the assets of **Kampro Technology, Inc.** Kampro is a developer and manufacturer of high-performance image sensing technologies. This acquisition will give GE access to advanced technologies that are able to display details in ultra-low and very bright light conditions. The terms of the transaction were not disclosed. (October 17, 2003)

Hon Hai Precision Industry Co., Taiwan's biggest electronic components maker announced plans to acquire cable modem maker **Ambit Microsystems** in a deal worth about US\$1bn. Under the terms of the transaction Hon Hai will swap 1 share of Ambit for 0.672 shares of its own stock. Hon Hai aims to boost its communications business and hopes to leverage Ambit's research and development capabilities. (November 6, 2003)

Infineon Technologies AG stated its intention to invest US\$600m in Taiwan over the next three years. Infineon plans to spend US\$550m on its Inotera Memories JV in which it owns 50% along with **Nanya Technology**. Infineon will invest the balance (US\$50m) in developing technologies such as WLAN and handset IC design with some of the investment going to **United Microelectronics Corp. (UMC)**. Infineon has also expressed interest in seeking new foundry partners in Taiwan, in addition to the current outsourcing arrangements it has with UMC and **Winbond Electronics**. (October 21, 2003)

Japan-based **Hoya** established a subsidiary in Taiwan, **Hoya Taiwan**, to produce TFT LCDs and color filter photomasks. Hoya moved into the Hsinchu Science-Based Industrial Park's (HSIP) Chunan, Miaoli County base in late November. Hoya invested NT\$200m (US\$5.9m) initially and expects its total investment to eventually grow to NT\$1.5bn (US\$44.4m) with operations starting in the second half of 2004. (December 29, 2003)

Thailand

HP (Thailand) and its JV partner, **Cal-Comp Electronics (Thailand) Plc**, are building capacity at their plants in Phetburi and Saraburi provinces after winning an eight-year tax exemption for a Bt3.08 (US\$) printer project from the **Thailand Board of Investment**. HP (Thailand) forecasts growth of 20% in Asia-Pacific as coporations invest to replace hardware and software. HP (Thailand) will provide technology and distribution services

while Cal-Comp will make printers at the Phetburi site. The annual production capacity of the site will be 15.20 million printers. (November 21, 2003)

Mitsui Co., the Japanese trading house, acquired a 30% stake in wireless content developer **Shineedotcom Co.** worth Bt90m (US\$2.3m). Mitsui will help Shinee develop messaging, information and music applications, and cartoon content. Mitsui and Shinee will jointly offer premium content and applications that Mitsui has acquired from Japan, South Korea and Europe for mobile phone users in Thailand. (November 29, 2003)

Andrew Huntley, Managing Director

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 London, Andrew Huntley in New York, Simon Wu in Shanghai or Paul DiGiacomo in Hong Kong.

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