

# ASIAN TECHNOLOGY NEWSLETTER

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## CHINA/HK

**Fairchild Semiconductor** opened a joint product development laboratory with **Sichuan Changhong Electric Co, Ltd**, a major manufacturer of consumer devices, in China. The lab enables the companies to collaborate on product development using Fairchild's power components. The power devices are designed into a broad range of Changhong products including color TVs, LCD TVs, PDP TVs, rear projection TVs, DVDs, set-top boxes and air conditioners. Fairchild and Changhong have had a close relationship for several years, and the new laboratory is an extension of the cooperation. Fairchild products designed into Changhong consumer devices include Green Mode power switches, advanced power MOSFETs, interface switches, diodes, logic devices and rectifiers. (July 22, 2004)

**Hitachi Global Storage Technologies (Hitachi GST) Ltd** announced strategy to create a disk drive "mega manufacturing center" in Shenzhen, China. The new facility will represent an investment of up to US\$500m when fully realized and align disk drive final assembly with existing Shenzhen-based component manufacturing and an extensive supplier network. Hitachi GST expects the manufacturing center to employ nearly 7,000 people in its first phase to meet the growing demand for hard disk drives. The project, which initially includes construction of a 35,000-square-meter manufacturing facility, is expected to begin in the fourth quarter of 2004. (July 6, 2004)

## 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.

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.

Please visit our website [www.bdallc.com](http://www.bdallc.com) or contact me at [ahuntley@bdallc.com](mailto:ahuntley@bdallc.com) to learn more about our services.

Andrew Huntley  
Managing Director

**Hynix Semiconductor Inc** signed a formal contract to jointly set up two chip plants in China together with European semiconductor giant **STMicroelectronics NV**. The contract was signed between Hynix and the municipal government of Wuxi, a city in eastern China. The plant will have production facilities of 8-inch and 12-inch wafers, which are due to be completed in the latter half of next year. Mass production is expected to begin in 2006. (August 20, 2004)

## INDIA

**Adea Solutions**, a US IT solutions and services company, signed an acquisition agreement with **Netkraft**, a Bangalore-based software company. The deal is worth US\$10m to \$15m according to industry sources. The acquisition is subject to regulatory and other approvals, and is expected to be completed by July 2004. Adea will be buying the holdings of JumpStartUp, Actis (formerly CDC Capital Partners) and Draper, who are investors in Netkraft, as well as those of other shareholders. The India-incorporated Netkraft will continue its focus unchanged under the Adea Solutions umbrella. (June 10, 2004)

**Helios & Matheson Information Technology Ltd**, based in Chennai, acquired **Maruthi Info Tech, USA** and **Jayamaruthi Software Services Pvt. Ltd**, also based Chennai, for US\$7.5m. The deal involves payment in cash as well as earn-out on achieving targeted financial milestones over a two-year period ending August 2006. The company aims to grow revenues to US\$10m through organic growth as well as acquisitions and plans to attain a critical mass of 2,000 employees by 2006. (August 31, 2004)

**Orient Networks** and **Network Solutions (Netsol)** announced the forming of an outsourcing relationship and a global strategic partnership to provide a platform for aggressive growth in India and the rest of Asia. The outsourcing deal is valued at US\$2m and transfers a portion of Orient Networks' operational capabilities to Netsol. Orient Networks and Netsol will offer traditional telecom capacity products as well as enterprise value added services, like network management, security and outsourced messaging. The joint initiative will be launched in September 2004 and the relationship is expected to generate US\$65m of revenues over the next 18 months. In July, the companies began collaborative product development activities to support their global partnership. (July 30, 2004)

**Tata Consultancy Services**, India's top software services company, plans to sell 55.45m shares through an IPO, which will be India's largest ever. TCS, which is a part of the Tata conglomerate, also announced that the offering will include a "greenshoe" option to sell another 8.3m shares if investor demand is high. Along with this option, the offer will constitute a little more than 13% of the paid-up capital of the company. Of the 55.45m shares on offer, nearly 54% will be reserved for qualified institutional buyers while 22% will be set aside for retail investors. TCS shares are likely to be priced at between Rs900 and Rs1000 (US\$21 and US\$23) per share, which means the company could be worth as much as US\$10bn. (June 14, 2004)

**Tata Consultancy Services (TCS)** will also acquire 20.67% in **WTI Advanced Technology** and has reached an agreement with the **International Finance Corporation**, private lending arm of the World Bank, for the purchase of an equivalent stake. The agreement for acquiring the equity in the JV was signed before TCS filed its recent draft prospectus to go public. (June 15, 2004)

**Tata Consultancy Services** also indicated that it will acquire **Phoenix Global Solutions**, the Indian subsidiary of the **Phoenix Companies Inc**, to tap its expertise in the insurance sector. Bangalore-based Phoenix Global Solutions, set up in 1996, provides IT, customer care support and business process outsourcing services to the insurance industry. (May 11, 2004)

**Veraz Networks**, a leading Israeli IT company will invest approximately US\$1m to expand its operations in India and provide hardware and software based switches for phone companies. The office to be opened next month will be located either in New Delhi or Mumbai and the company has already started working on recruiting a General Manager for its Indian operation. (June 30, 2004)

**WebEx Communications Inc.**, a US based web communication solutions provider is seeking opportunities to tie up with Indian companies to enhance its worldwide R&D capabilities for co-developing web-based video-conferencing solutions in areas like training, tech support and other collaborative applications. This move by the company comes at a time when it has just launched its MediaTone Network in India. The company is targeting the booming ITES and BPO sector for its product deployment in the Indian region. (August 10, 2004)

## JAPAN

**Fujitsu Ltd** and **Cadence Design Systems** announced a global partnership agreement, under which they will create advanced system-on-chip (SoC) design environments. Under this agreement, Fujitsu will deploy to all of its design centers the combination of a variety of licenses and a new design methodology known as physical prototyping (also referred to as silicon virtual prototyping) for SoC development for 0.13-micron technology and beyond. (August 5, 2004)

**Hitachi Ltd, Matsushita Electric Industrial Co** and **Toshiba Corp** are considering jointly manufacturing large LCD panels for flat-screen TVs. With a combined investment of Yen100bn - Yen200bn (US\$962m - US\$1.9bn), the three companies are considering setting up a JV and building a new LCD facility at the site of Hitachi Displays Ltd's factory in Mobarra, Chiba Prefecture. (August 7, 2004)

**KDDI Corp** will merge four telecom units serving corporate customers into a wholly owned subsidiary effective October 1 to improve efficiency and meet wider customer needs. The new company, **KDDI Network & Solutions** with Yen3.4bn (US\$32.7m) in initial capital will provide consulting and solutions related to computerized networks and other services, while developing and manufacturing telecom systems and equipment. (August 17, 2004)

**Microsoft Corp** has expressed interest in buying Japan's **Nintendo Co**. Microsoft's Chairman Bill Gates indicated that he would immediately make an offer if Nintendo is ready to sell itself. (August 5, 2004)

**NEC Electronics Corp** announced the establishment of a new wholly-owned subsidiary, **NEC Fabserve Ltd**. The new company, located in Sagamihara, Japan, will offer advanced services in the areas of prototyping, volume production, and equipment maintenance, assuming functions previously fulfilled by NEC Electronics' ULSI Manufacturing Engineering Division and Advanced SoC Line Operation Division. Annual sales are projected to reach approximately Yen22bn (US\$212m) for the fiscal year ending March 2005. Specifically, NEC Fabserve will provide prototyping services, including advanced process fabrication; volume production-related services such as dispatching employees to help launch new manufacturing lines; and equipment related services

such as development, sales, and maintenance of equipment and components. (July 5, 2004)

**Nitto Denko Corp** plans to add factories for processing and cutting polarizing film in both Korea and Taiwan to meet local demand increases for the key LCD component in those major LCD-producing countries. The establishment of the two new plants is expected to cost around Yen10bn (US\$96m). The company already has one plant in each country. The move is part of the company's plan to bolster its group production capacity for the LCD films by around 50% to about 64m sq. meters in fiscal 2005. Nitto Denko plans to allocate Yen31.5 bn (US\$303m) of its capital investment budget of Yen59bn (US\$567m) for the current fiscal year to achieve the goal. The new Korean factory is slated to begin operating in February 2005. The output is expected to be supplied to Samsung Electronics Co Ltd and LG.Philips LCD Co Ltd for their production of personal computers and television sets. The Taiwanese plant is scheduled to kick off production in January and sell its output to AU Optronics Corp and Chi Mei Optoelectronics Corp. Nitto Denko holds a global market share of around 60% for polarizing films. The company's sales of the LCD films are forecast to rise 42% on the year to Yen198bn (US\$1.9bn). (July 13, 2004)

State-run machinery manufacturer **Shanghai Electric (Group) Corp** of China plans to acquire **Ikegai Ltd**, a longtime Japanese machine tool maker. Ikegai, located in the Ibaraki Prefecture, plans to issue Yen30m (US\$288k) in shares through a private placement this autumn to increase capital to Yen40m (US\$400k). Shanghai Electric will buy all the new shares and will become Ikegai's top shareholder with a 75% stake. (August 4, 2004)

## KOREA

Japanese companies are boosting their investments

in LCD parts operations in South Korea, with the top three glass makers planning to spend a total of about Yen50bn yen (US\$481m). **Asahi Glass Co Ltd**, the leading Japanese glass producer, is expected to invest several hundred million dollars to establish an LCD glass plant in Gumi, North Gyeongsang Province, where LG.Philips LCD Co Ltd currently operates an LCD panel facility. **LG Philips** began constructing a factory in Paju this spring, in addition to strengthening the operations at a plant in Gumi. Together, Samsung Electronics' and LG Philips' capital investments in their LCD businesses are forecast to reach nearly Yen5tr (US\$48bn) over the next 10 years. According to Korean government officials, more than 10 Japanese LCD parts makers, in addition to those mentioned above, are considering expanding into the country. **NH Techno Glass Corp.**, a joint venture between **Nippon Sheet Glass Co Ltd** and **Hoya Corp**, intends to start building a facility on a 50,000-sq-meter site near Pyeongtaek, Gyeonggi Province. **Toray Industries Inc's** Korean joint venture plans to invest Yen45bn (US\$433m) by 2010 to begin producing LCD films and functional resins at a 200,000-sq-meter site in Gumi. **Samsung Electronics** has earmarked Won20tr (US\$17bn) for its LCD business over the next 10 years. This year alone, the company is expected to spend Won1.8tr (US\$1.6bn) on projects, including a joint venture with **Sony Corp**. **Sumitomo Chemical Co Ltd** plans to build a 50 billion yen plant in South Korea to supply LCD filters to Samsung Electronics Co Ltd. Sumitomo Chemical has already invested Yen70bn (US\$673m) to set up production of LCD filters and other LCD parts in the country. (May 22, 2004)

China's **BOE Group** is planning to construct a large display factory in Daegu City, Korea. The group set up **BOE Hydix Technology Co, Ltd** after it acquired an LCD unit from **Hynix Semiconductor Inc**. The plan is yet to be approved by the Chinese government. Industry sources expect that the Chinese firm's entry will likely inc-

-rease already heated competition among domestic LCD makers, including Samsung Electronics Co, Ltd and LG.Philips LCD Co, Ltd. (June 30, 2004)

Korea's **Daum Communications Corp** has agreed to purchase US Internet portal **Lycos Inc** from Spain's **Terra Networks SA** for US\$95m. Daum indicated that funds for the purchase will be secured from Won70bn (US\$61m) of cash reserves and Won90bn (US\$78m) from bond issues. The purchase will provide a platform for Daum to become a global company. According to Daum, Lycos' earnings are expected to turn profitable in 2005. (August 4, 2004)

**Hynix Semiconductor Inc** of South Korea has sold its non-memory division to Citigroup Venture Capital (CVC). Creditors of the financially-troubled semiconductor firm announced on June 1 that they accepted a Won954.3 bn (US\$830m) offer from CVC to purchase the non-memory business division. The handover of the division would help the company shed its debts and focus on obtaining a solid footing down the road. The sale is expect to be complete by the end of July. (June 3, 2004)

**LG.Philips LCD Co.**, the world's second-largest LCD maker, raised US\$1bn in an IPO to fund new flat-screen plants. The Seoul-based venture between LG Electronics Inc. and Royal Philips Electronics NV sold 8.64m shares to Korean investors at Won34,500 (US\$33) each, raising about \$259.2m. The company also sold 49.9m ADRs at US\$15, the low end of a US\$15 - US\$18 price range in a July 9 Securities and Exchange Commission filing. The proceed will be used for the building of new production plants to keep up with rivals such as Samsung Electronics Co. in the market for LCDs used in computers and televisions. LG.Philips earlier cut the share price for the sale, reducing potential proceeds, due to declining dem-

-and for LCD-related stocks. After the IPO, LG Electronics and Philips Electronics will each have a 42.2% stake in the company. LG.Philips shares are scheduled to start trading on July 23 on the Korea Stock Exchange. (July 15, 2004)

**Samsung Electronics Co, Ltd** said it would invest Won22tr (US\$19bn) in equipment enhancement and research and development for semiconductors, including memories and SOCs; Won10tr (US\$8.7bn) for those of LCDs; and Won1.7tr (US\$1.5bn) for PDPs in the three fiscal years ending 2006. The Samsung group unveiled these initiatives during a meeting between Korean President Roh Moo Hyun and Samsung Chairman Lee Kun Hee. If these commitments are met, the investment by Samsung will reach Won70tr (US\$61bn) won over three years. (June 4, 2004)

**Sewon Telecom Co Ltd**, which is under court protection, will reportedly sell off **Maxon Telecom Co Ltd** and **SSI**, its subsidiaries, to Chinese investors. There are growing concerns regarding Chinese moves toward Korea's IT industry. Industry experts believe that when Chinese companies gain state-of-the-art technology from the Korean IT sector through aggressive M&A activity, it will place additional pressure on Korean companies, which are already impacted by lower-priced products from China on the global scene. (May 14, 2004)

**Sony Corp** and **Samsung Electronics Co Ltd** are planning to start producing large LCD panels in South Korea following the establishment of their joint venture, **S-LCD Corp**. The key driver for the JV was large LCD panels. The alliance between Sony and Samsung Electronics combines the two companies abilities to develop large LCD panels into flat-panel TVs and to market these products. (July 16, 2004)

## TAIWAN

**Global UniChip Corp** of Taiwan announced a partnership with **Hong Kong Science and Technology Parks Corp** (HKSTP) to provide design services including front-end and back-end designs and IP licensing to startup companies in the HKSTP's Incu-Tech program and other local fabless companies located in the Hong Kong Science Park. Global UniChip is a full service system-on-chip (SoC) design company providing total design solutions from product concept to production services. (May 13, 2004)

**Infineon Technologies AG** and **Winbond Electronics Corp** of Taiwan announced an agree-

ment to expand their existing cooperation on the production of standard memory chips (DRAM). Under the terms of the additional agreement, Infineon will transfer its 0.09um DRAM trench technology and 300mm production know how to Winbond. In return, Winbond will manufacture DRAMs for computing applications in this technology exclusively for Infineon. The transfer of these technologies from Infineon is expected to enable Winbond to develop and sell respective proprietary specialty memories for which Infineon will receive license fees and royalties. Furthermore, Infineon and Winbond intend to jointly develop specialty memories which are targeted at mobile applications. This new move will enable Infineon considerably increase its capacity from Winbond through Winbond's 200mm and 300mm production plants. (August 11, 2004)

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Andrew Huntley, Managing Director

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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 London, Andrew Huntley in New York, Jeffery Wang in Shanghai or Paul DiGiacomo in Hong Kong.

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