

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

## ASIAN TECHNOLOGY NEWSLETTER

Issue 24, April 2001

A bimonthly newsletter of developments in the computer, semiconductor and telecoms industries

### CONTENTS

INTRODUCTION .....	1
CHINA/HK .....	1
INDIA .....	3
JAPAN .....	4
KOREA .....	4
MALAYSIA .....	4
PHILIPPINES .....	4
SINGAPORE .....	5
TAIWAN .....	5
THAILAND .....	6
FOCUS: Taiwanese fiber optic cable industry .....	6

### CHINA/HK

**Alcatel** of France has signed a contract with **China Telecom**, China's largest telecommunication network operator and service provider, to jointly deploy DSL in China. The multiyear deal is valued at between US\$70m and US\$225m in the first year. Alcatel has also signed a RMB780m (US\$94m) contract with China's **Jiangsu Mobile Telecom Co Ltd** to expand mobile telecommunication capacity in the eastern province of Jiangsu. Alcatel will provide equipment, software and service in the fifth phase of the enlargement project for Jiangsu Mobile's GSM network, which will accommodate 2.9m mobile subscribers upon completion. (February 23, 2001)

**APW Ltd**, a US-based electronic communications equipment manufacturer, will set up an Asian manufacturing base and R&D center in Shanghai, China. APW has invested US\$10m to build a factory, which is expected to become operational by September 2001. In 2000, APW established its first manufacturing facility, **APW Shanghai Ltd**, in Shanghai. APW has five plants in Hong Kong, India, Japan and Singapore. (March 12, 2001)

**Bluepoint Linux Software** of has signed an agreement with **China Great Wall Computer Shenzhen Co** to provide a customized Bluepoint Embedded Operating System and related application software for Great Wall PDA products. Bluepoint will also provide Great Wall with the Bluepoint Embedded Development Kit, engineer training, technical support and consulting services. (March 13, 2001)

### INTRODUCTION

We hope that you find the *Asian Technology Newsletter* informative. BDA is a corporate finance advisory firm, which helps multinational clients to identify and to execute acquisitions and JVs in Asia. In this issue of our newsletter, we profile several leading fiber optic manufacturers in Taiwan.

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

**ChinaByte.com** and **Yesky.com**, two Chinese language information industry focused sites, will merge. ChinaByte.com is financed by **People's Daily** and **News Corp**, while Yesky.com is backed by **International Data Group**. (March 20, 2001)

**ChinaEB**, the Internet arm of China's **State Research Information Technology (SRIT) Co Ltd**, has launched its B2B e-marketplace in Beijing. It has also formed a strategic alliance with US-based **Commerce One**, a US-based e-marketplace solution provider, to develop B2B ecommerce solutions for Chinese enterprises. ChinaEB also has an MOU with **GTWeb Korea**. (March 29, 2001)

**China Telecom** has signed a cooperative agreement with **Nortel Networks Ltd** of the US to develop network services based on new network technology. China Telecom has 16.5 million Internet users and a 75% market share in China. (March 8, 2001)

**Com2B Corp**, an e-marketplace solution provider in Taiwan has partnered with an unnamed Hong Kong company to set up a B2B venture in Kunshan, Jiangsu province. The company also plans to set up similar B2B ventures in other major cities in China. (March 20, 2001)

**IBM China**, the Chinese subsidiary of **IBM**, has signed an MOU with **Beijing University** and **Tsinghua University**, two of the most prestigious universities in China, to jointly establish a research institute. Under the agreement, IBM will provide hardware, software, R&D equipment and working expenses, while the two universities will provide offices, laboratories and personnel. The institute will promote technology innovation and facilitate the marketing of laboratory achievement. (March 6, 2001)

**Korea Telecom (KT)** of Korea has signed an MOU with **Shanghai Telecom**, an affiliate of **China Telecom**, to jointly market a frame relay solution and to develop e-business in China. KT also formed

an alliance with **NTT** of Japan in 1999 and with **China Telecom** in 2000. (March 28, 2001)

**LG Electronics Inc** of Korea has established a telecom company with three local Chinese companies to manufacture CDMA-based phone terminals and systems in Shandong, China. It has also formed a company with a subsidiary of **China National Posts & Telecommunications Industry Corp** to conduct R&D for new CDMA handsets and telecom networks in China. (March 9, 2001)

**Lycos Asia**, a JV between **Terra Lycos** and **Singtel**, has acquired **Myrice.com**, one of China's most visited portals with 500,000 recorded users in January 2001. Terms of the acquisition have not been disclosed. However, analysts estimate the deal to be roughly US\$10m – US\$12m. Lycos Asia has engaged in the transaction to bolster its Chinese language offerings and to broaden its presence in China. The company has already entered a number of JV agreements with various companies in the region over the past year. (March 30, 2001)

**Matsunichi-International Holding Ltd** of Hong Kong has signed an agreement with **Dalian Development and Construction Group** of China to establish a digital video phone production base in Dalian Economic and Technological Development Zone. The facility will produce 500,000 digital video phones per year. Matsunichi will invest US\$25m in the JV. (March 19, 2001)

**Matsushita Electronic Components** of Japan will invest ¥2bn (US\$17.2m) in its Tianjin subsidiary, **Tianjin Matsushita Electronic Component Co**, to expand its production capacity. The facility manufactures electronic components used in mobile phones, pagers, computers, television sets, recorders, video recorders, programmed telephone switchboards and other electronic products. Tianjin Matsushita was set up by two Matsushita subsidiaries, **Matsushita Electronic** and **Tianjin Zhonghuan Electronics Co**, in 1995. In 2000 the 93.5:6.5 JV reported revenues of RMB108m (US\$13m), of which 75% stemmed from exports. (March 28, 2001)

To submit stories to future editions of this newsletter, please contact Christina Meyer in New York on 212.265.5300 or cmeyer@bdallc.com.

**MessageLabs** of the US has announced plans to open its Asian headquarters in Hong Kong in order to expand its presence in the region. The company offers a virus filtering service for corporate intranets and has more than 500,000 users. (March 23, 2001)

**ON Semiconductor** of the US has formed a JV with **Leshan-Phoenix Semiconductor Co Ltd** of China to build a six-inch wafer fabrication plant in Sichuan province, China. ON Semiconductor will invest US\$100m in the US\$280m JV. (March 7, 2001)

**Samsung Electro-Mechanics (SEM)** of Korea has established its third production base in Tianjin, China with China's **Tianjin Electronics and Instruments Industrial General Company**. The new plant, **Samsung High-Tech Electro-Mechanics (Tianjin) Co Ltd**, will begin production in May 2001. It will first produce deflection yokes and flyback transformers, monitors, chip components, chip resistors and Tantal condensers. The two companies together invested US\$12m in the JV. (March 22, 2001)

**Silicon Storage Technology Inc (SST)**, one of the world's leading flash memory makers of the US will establish a subsidiary, **SST China**, in Shanghai to develop and sell memory products such as flash memories, ROMs and RAMs in the Chinese market. The US\$10m subsidiary will become operational by the end of 2001. SST will also invest US\$50m in **Shanghai Grace Semiconductor Manufacturing Corporation Ltd (GSMC)**, China's new silicon foundry. The GSMC plant will come on-stream in H2 2002. (March 23, 2001)

---

## INDIA

**Cyberwave Internet Solution Ltd**, a Chennai-based ISP, has partnered with **Singapore Telecom (SingTel)** to enhance its bandwidth capacity and improve service. As a result of the transaction, the company will switch from using VSNL to Singtel's unshared bandwidth. Cyberwave offers Internet access through cable in parts of Chennai and plans to

cover the entire city. It also aims to offer service in Bangalore and Hyderabad in Q4 2001. (March 12, 2001)

**eSamsung Asia**, one of the e-business holding companies of the **Samsung Group** of Korea, has formed a 51:49 JV with **Usha Martin Information Technology Ltd (UMITL)** of India to develop software for WAP, GPRS, Internet groupware, security, messaging and business applications. The new JV, **eSamsung UMIT Infotech (eSUI)** will start operating in April 2001. The companies have made an initial investment of approximately US\$4m and expect the JV to generate revenues of US\$7m – US\$10m in the first year of operation. (February 23, 2001)

**Ericsson Communication Ltd**, a subsidiary of **Ericsson** of Sweden, plans to establish mobile Internet application (MIA) centers in India in Q3 2001. The centers will provide back-end infrastructure and support to develop wireless content and applications based on WAP, GPRS, Bluetooth and 3G. The first facility will be established in Delhi. (March 23, 2001)

**Microland Group**, a web service and Internet media service provider in India, has spun off its Internet networking software division, **Net Brahma Technologies**, into an independent company. Net Brahma will receive US\$2m in venture capital from **JP Morgan Partners**. This is the fourth independent company that Microland has spun off; the other three are **Planetasia**, **Indya.com** and **Itspace.com**. (March 21, 2001)

**Rediff.com**, a leading portal in India will acquire **Value Communications Corporation** and **India Abroad Publications**, two US-based companies. The company will also increase its equity stake in **ApnaLoan.com**, a privately held Indian financial portal, with an option to further increase its stake to 100%. The acquisitions will further strengthen Rediff.com's leading position in India and its dominant position in the US nonresident Indian market. The company expects to record revenues of US\$35m. (March 25, 2001)

---

## JAPAN

**Akamai Technologies** of the US has formed a JV with **Softbank Broadmedia** of Japan to provide Akamai's content delivery services in Japan. The JV, **Akamai Technologies Japan KK**, will bolster Akamai's market lead in Japan. (March 29, 2001)

**Microsoft Corp** has formed a strategic alliance with **NTT Communication Corp** of Japan to launch network services for **Xbox**, the video game console developed by Microsoft in 2002. NTT will begin field trials for the new online game service in August 2001. (April 2, 2001)

**SingTel Japan Co Ltd**, the Japanese subsidiary of **Singapore Telecommunications Ltd** of Singapore will launch Internet data centers in Japan. The first data center, located in Osaka, will have a floor space of 800m<sup>2</sup> and will open in April 2001. The second center, which has a floor space of 3,000m<sup>2</sup>, will open in July in Tokyo. Total investment for the two centers amounts to S\$20m (US\$11.2m). SingTel plans to invest approximately S\$500m (US\$279.3m) over the next 18 months to set up data centers in China, India, Indonesia, Japan, Korea, Malaysia, the Philippines, Thailand and Taiwan. (March 28, 2001)

**Toshiba Tec Corp** of Japan and **Microsoft Co Ltd**, the Japanese subsidiary of **Microsoft** have reached an agreement that the two companies will together develop application development tools based on Microsoft's NET series. According to the agreement, Microsoft will provide NET framework-related technologies to Toshiba Tec and support developing the components. (March 3, 2001)

## KOREA

**Samsung Electronics** of Korea, one of the world's largest information technology products suppliers, has signed a strategic, technology and R&D agreement with **Dell Computer Corporation** of the US. Under the US\$16bn agreement, Samsung will ensure supply

of memory components, liquid-crystal displays, monitors and optical disk drives to Dell for use in the manufacture of its line of computer system products. The companies will also collaborate on R&D. Samsung has also formed a strategic alliance with **Intel Corp** of the US to jointly expand production facilities for rambus DRAMs. Under the agreement, Intel will provide US\$35m for facility expansion, which will allow Samsung to manufacture 10m units per month. Samsung, in return, will supply the DRAMs at a discounted price to Intel. (March 24, 2001)

## MALAYSIA

**Microsoft Malaysia**, the Malaysian subsidiary of **Microsoft** has signed an MOU with **Tradenex.com Sdn Bhd**, a subsidiary of the **Federation of Malaysian Manufacturers (FMM)** to develop a supply chain hub, **Malaysian Retail Exchange**, for the retail sector in Malaysia. The two companies will build an ecommerce trading platform for the community of rubber product manufacturers, distributors and retailers in the next six months. (March 23, 2001)

**PeopleSoft Inc** of the US has announced plans to establish a new electronic center in Malaysia. The e-center will focus on application development for e-business, covering back and front office, financials, human resource management, business intelligence, and supply chain applications, which is expected to start operations in Q4 2001. PeopleSoft has an e-center facility located in Australia already. (March 16, 2001)

## PHILIPPINES

**Computer Associates (CA)**, an enterprise software provider of the US, plans to expand in the Philippines and make it its second regional hub after Singapore. The company will invest US\$5m initially in its local

subsidiary and form three JVs in the country in 2001 as it plans to position its Philippines operation as a solution hub for the entire Asia-Pacific region. CA has 26 JVs in the region. (April 2, 2001)

---

## SINGAPORE

**AirGateway** of Singapore, a provider of carrier-grade wireless products and value-added services, has formed a hosting agreement with **National Computer Systems (NCS)**, a subsidiary of SingTel to utilize **Digit@|Centrix**, NCS's Internet data center. AirGateway also has a three-year technology partnership agreement with **SingTel**. (March 19, 2001)

**Music.com** of the US has launched its Asia portal. The portal, [asia.music.com](http://asia.music.com), will provide music lovers in the region with localized and regional music-related information and services, including free music downloads, news, feature articles, event highlights and contests. Music.com Asia, a wholly owned subsidiary of Music.com, is headquartered in Singapore, with offices in Indonesia, Malaysia, the Philippines and Thailand. The company plans to launch localized sites in Hong Kong in May, Thailand in August and the Philippines in October 2001. (March 28, 2001)

**Toshiba Corporation** and **Matsushita Electric Industrial Co** of Japan will establish a JV in Singapore to manufacture low-temperature polycrystal Si-TFTs array base and liquid-crystal cells. The JV will use Toshiba's low-temperature polysilicone Si-TFT technology and Matsushita's fast-response LCD driving technology and is expected to become operational in July 2002. Total investment in the JV is ¥123bn (US\$1.06bn), of which 67% will be financed by Toshiba and 33% by Matsushita. (March 1, 2001)

**Zaobao.com**, a Chinese-language portal of **SPH AsiaOne Ltd** of Singapore, has launched an Internet platform for Singapore-listed companies and those

planning to list on SES to promote investor relations in the Chinese community in the Asia-Pacific region. The portal offers news from Lianhe Zaobao and other overseas Chinese newspapers. It also provides a range of web features and services aimed at Chinese audiences around the world. (March 2, 2001)

---

## TAIWAN

**Acer Display Technology Corporation** of Taiwan will merge with its rival, Taiwan's **Unipac Optoelectronics Corporation** and create **AU Optronics**, the world's second largest TFT-LCD manufacturer behind **Samsung Electronics** of Korea. The companies will hold a 12.5% share in the global TFT-LCD market after the merger, which is 1.7% less than Samsung. The merger will be completed through a share swap on a 1 for 1.17 basis, with one Acer share to be exchanged for 1.17 Unipac shares. (March 19, 2001)

**GlobiTech Inc** of the US, **Orient Semiconductor Electronics Ltd**, **Delta Electronics Inc** and **Industrial Bank** of Taiwan, have agreed to jointly establish a factory in Tainan to produce complementary metal-oxide semiconductor epitaxial wafers. The companies will invest a total of NT\$3.6bn (US\$110.3m) in the new entity, **GlobiTech Taiwan**. The factory is expected to generate revenues of NT\$5bn (US\$156m) per year once it comes on-stream in mid-2003. (March 26, 2001)

**Hewlett-Packard (HP)** of the US has expanded its partnership agreement with **Lite-On IT Corp** of Taiwan for the latter to supply CD-Rewritable drives (CD-RW) in addition to supplying CD-ROM drives. Lite-On plans to deliver 100,000 to 150,000 drives monthly to HP, a company that has a 35% market share in the CD-RW drives market. (March 6, 2001)

**Palm Inc** of the US plans to contract Taiwanese electronic manufacturers to produce personal digital assistants. The company inspected several Taiwanese

manufacturing facilities in mainland China including plants run by **Inventec Corp**, **Acer Inc**, **First International Computer Inc** and **Mitac International Corp** in February 2001. Palm has a 68% share in the global market for PDAs. (February 29, 2001)

**Texas Instruments Inc** announced plans to open an Information Appliance (IA) Design Center in Taiwan in order to spur the development of devices by local OEMs and applications by independent application developers. The company develops programmable digital signal processing (DSP) chips for the IA sector. The chips are used in wireless and other mobile applications as well as streaming video. (March 28, 2001)

---

## THAILAND

**Seagate Technology (Thailand)**, the Thai subsidiary of **Seagate Technology** of the US, will relocate its plant in Chachoengsao to Nakorn Ratchasima for the production of head gimbal assembly (HGA) and E-block. The company plans to implement three projects with a total investment of Bht5.5bn (US\$121.8m). Seagate Technology is one of the world's largest hard-disk drive (HDD) manufacturers. (March 19, 2001)

---

## FOCUS:

### Taiwanese fiber optic cable manufacturers

In the late 1980s, the prospects for Taiwan's wire-and-cable industry were dim. Domestic demand was down, and the soaring NT dollar made exports uncompetitive. Predicting an infrastructure-spending boom, which materialized in 1991 with the approval of the Taiwan Government's six-year economic plan, companies such as Hua Eng Wire & Cable and Walsin Lihwa invested heavily in the production of optical

fibre and high-strength power wire. Hua Eng Wire & Cable, Walsin Lihwa and Pacific Electric Wire & Cable were among the first few dominant players in the fibre optic cables industry in Taiwan in the early 1990s, when Taiwan's conventional manufacturing industry sensed the importance of transformation and reorganization into the hi-tech sector. The following paragraphs outline the Tier 1 companies in the industry.

**Hua Eng** - Founded in 1956 the company was originally in the copper wires production business. In 1987, the company changed its name to Hua Eng Wire & Cable Co Ltd, and it was listed the following year. Hua Eng has since diversified into other markets and has actively invested in the high technology industry and finance & service industry. In high technology, it invested heavily in the production of optical fiber and high-strength power wire, and manufactures various kinds of power cables, communication cables, optical fiber cables, optical fiber passive components, high quality oxygen-free copper wires and the like. It has also been ISO9001 certified, and is in technical cooperation with Showa Electric Wire & Cable Co Ltd of Japan. The company reported 1999 net sales of NT7.4bn (US\$230m), gross profit of NT815.7m (US\$25.4m) and net profit of NT573m (US\$17.8m).

**Pacific Electric & Wire** - Founded in 1950 the company is one of the leading manufacturers of wire and cable in Taiwan. The company's diversification into other businesses such as finance and property may have resulted in its losing out to other wire-and-cable makers in Taiwan in the late 1980s. Although it has a dominant 22% share of the NT\$ 50 billion annual Taiwan cable and wire market, Pacific lost valuable time by not competing sooner in the higher-margin end of the wire-and-cable business, such as optical fiber and high-strength power wire.

Pacific now manufactures optical-fibre ribbon cable and high-voltage power cable. These investments, which were backed by large R&D spending, reduced the company's dependence on sales of low-cost bare-copper wire. It has a majority stake in Sigma Cable, Singapore's largest cable company, and a significant portfolio investment in Charoong Thai Wire & Cable of Thailand.

**Tatung Company** - Established in 1966 as a manufacturer of wires and cables, Taoyuan Wire and Cable Plant of Tatung Company is now one of the leading players in the Taiwanese wire and cable industry. The company's products are widely used in telecommunication, power transmission and power distribution as well as in heavy electric apparatus, electronic consumer products, information products and electronic components. The company recorded profits of US\$147m on revenues of US\$4.4bn in 1999. Its market cap stands at US\$3.5 billion.

**Walsin Lihwa Corp** - Established in 1966 the company is a global wire and cable manufacturer, producing fiber optical cables, LAN cable, and passive components for the telecommunications, data communication and multimedia transmission. Walsin Lihwa is an ISO 9001 certified company.

The company is transforming itself from a manufacturing company to a manufacturing and

service company, comprising three sectors: cable and wire, specialty steel, and electronics. The market value of its diversified stocks is estimated at NT\$100bn (US\$3.1bn).

Walsin Lihwa has 14 factories in central and northern China, with capital investments amounting to NT\$110m (US\$3.4m). The performance of these factories was affected by sluggish domestic demand in 1999. The total revenue of its mainland factories is expected to exceed NT\$6bn (US\$186.7m) in 2000.

---

Andrew Huntley, Managing Director  
Christina Meyer, Associate

Paul DiGiacomo, Senior Associate  
Cynthia Ngai, Analyst

---

## ABOUT BDA

Business Development Asia is a corporate finance advisory firm which assists multinational companies in expanding their businesses in Asia through JVs and acquisitions. BDA helps clients to find local business and has senior advisors in Bangkok, Jakarta, Kuala Lumpur, Manila, Seoul, Shanghai, Taipei and Tokyo. For further information on BDA's services or on any of the articles in this newsletter, please contact Charles Maynard in New York, Euan Rellie in London, Andrew Huntley in Singapore, Simon Wu in Shanghai or Paul DiGiacomo in Hong Kong.

### **New York**

Business Development Asia LLC  
The Economist Building  
111 West 57th Street, Suite 1105  
New York, NY 10019  
Tel: (212) 265-5300  
Fax: (212) 265-4300

### **Singapore**

Business Development Asia Utd Pte Ltd  
20 Raffles Place  
#10-07 Ocean Towers  
Singapore 048620  
Tel: (65) 533-8500  
Fax: (65) 533-8500

### **London**

Business Development Asia Ltd  
10 Crown Place  
London EC2A 4FT  
United Kingdom  
Tel: (44) 20-7655-3660  
Fax: (44) 20-7655-8953

### **Shanghai**

Business Development Asia  
American International Centre  
at Shanghai Centre, Suite 506A  
1376 Nanjing Road West  
Shanghai, China, 200040  
Tel: (86) 21-6279-8390  
Fax: (86) 21-6279-8906

### **Tokyo**

Business Development Asia  
Otemachi First Square  
4/F East Tower, 1-5-1 Otemachi,  
Chiyoda-ku  
Tokyo, 100-0004 Japan  
Tel: (81) 3-5219-1504  
Fax: (81) 3-5219-1201

### **Hong Kong**

Business Development Asia  
(HK) Ltd  
1409 World Wide House  
19 Des Voeux Road Central  
Hong Kong  
Tel: (852) 2537-9565  
Fax: (852) 2537-4406

bda@bdallc.com    www.bdallc.com