

J@pan Inc. Company Profiles
Compiled by Yoko Shibata
Category: JAPAN'S BIG FIVE CHIP MAKERS

The big electronic (*denki*) manufacturers, focusing on semiconductor chip production, comprise one of Japan's more unfortunate industries. Players have been especially vulnerable to recent chip commodity price fluctuation and, due to extensive overseas manufacturing, FOREX movement.

The players profiled this month all claim that their semiconductor businesses will recover, thanks in part to a surge in demand for DRAM chips from this summer. This, however, depends on American and Korean maker's production efficiencies. Prices of DRAM chips collapsed from \$10 early this year to \$4, hurting the Japanese makers.

In September, currency markets went wild and the yen appreciated from ¥114 to ¥103 to the dollar. Analysts have stated that for every ¥1 in appreciation, 4.5% would be slashed from the big denki's pre-tax profits, indicating just how dependent they are on export-oriented production (or just how anemic Japanese domestic consumption has become). In the worst case, yen-dollar volatility could wipe out all the gains won through recent streamlining and restructuring efforts.

	Price date	Price (¥)	12-month % change	Market value (¥B)	6-month avg price (¥)	Fiscal year end	Daily Volume (M)	Revenue (¥B)	Revenue growth (%)	Operating profit (¥B)	Net profit (¥B)
NEC CORP.	9/20	2,180	143	3,547	1,551	March	3.3	4,579	2.9	3.14	-147.94

Exchanges **TYO, OSK, NGO, AMS, FRA, LON, SWZ**
 President **Koji Nishigaki**
 Founded **1899**
 Employees **38,791**

Tokyo, Japan
 +813-3454-1111
www.nec.co.jp

MARKET & TECHNOLOGY

One of Japan's representative high-tech enterprises and the nation's largest maker of semiconductors. Presently holds No. 1 spot (market share) in Japan's personal computer market. Hardest hit by the continuing global oversupply of DRAM chips and the collapse of prices. Presently shifting focus to high value-added products by expanding monthly output of 128 megabit synchronous DRAMS, to four million by March 2000 from one million in September 1998. To deal with growing global competition and save resources, NEC and Hitachi—the nation's No. 3 chip maker—recently agreed to form a broad alliance aimed at developing and producing next-generation 256 megabit DRAM chips using state of the art 0.15 micron line width technology. Has unveiled a new 64 megabit DRAM unit 10 times faster than conventional models. The new DRAM is directly applicable to SOC (System On a Chip) integrated chips requiring the ability to transfer huge amounts of data in a short time—an essential component for future multimedia devices.

FINANCE

For the year ending March 1999, NEC reported a consolidated net loss of ¥157.9 billion from the previous year's net profit of ¥4.13 billion, on sales of ¥4.759 trillion, down 2.9% year on year. Sluggish sales of Packard Bell computers in the U.S. were the biggest drag on NEC's turnover. Sales of electronic devices declined by 12% to ¥875 billion, contributing to an operating loss of ¥51.9 billion in the electronic device sector—a huge swing from the previous year's operating profit of ¥52.8 billion. Is now working on a restructuring program to cut group workforce by 15,000 over the next three years. Restructuring will require a ¥75 billion write down against consolidated earnings. In the current year, semiconductor business is expected to return to the black, helped by strong demand for logic devices and improved profitability from higher value-added products. In the current year to March 2000, consolidated net revenue is projected at ¥25 billion on sales of ¥5.05 trillion, up 6% from the previous year.

	Price date	Price (¥)	12-month % change	Market value (¥B)	6-month avg price (¥)	Fiscal year end	Daily Volume (M)	Revenue (¥B)	Revenue growth (%)	Operating profit (¥B)	Net profit (¥B)
TOSHIBA	9/20	857	85	2,758	848	March	9.9	5,309	-2.9	-30.48	13.89

Exchanges **TYO, OSA, NGO, LUX, FRA, AMS, DUS, LON, PAR, SWZ**
 President **Taizo Nishimuro**
 Founded **1904**
 Employees **63,328**

Tokyo, Japan
 +813-3457-4511
www.toshiba.co.jp

MARKET & TECHNOLOGY

Second-largest comprehensive electronic equipment manufacturer took a beating from semiconductor price erosion caused by excessive competition among global makers. Pushing ahead with improvement of corporate structure under slogan "business concentration and selection." Trying to reduce losses in its semiconductor business. Capital investment in semiconductors is being curtailed from initial projection of ¥110 billion to ¥95 billion for the current year. Firm is now shifting focus to production of more sophisticated memory chips and improving efficiency of its system LSI business. Formed tie-up with the Sony group to develop system LSI chips for the successor to the best-selling PlayStation game machine. Outsourcing of its semiconductor production will be bolstered from 10% of the total volume in the current year to 40% in the year starting April 2001. Mass production of the new 256 megabit DRAM chips will start from December and will ramp up to produce one million DRAM chips per month from March next year.

FINANCE

In the year to March 1999, Toshiba reported consolidated net loss of ¥13.89 billion on sales of ¥5.3 trillion, down 2.9% from the preceding year. Toshiba Group restructuring caused an extraordinary loss of ¥82 billion on the parent company's balance sheet. Semiconductor business is expected to bounce back to profitability in the second half of the year ending March 2000. Production of CPUs for Sony's next-generation PlayStation game machines is expected to contribute to the earnings recovery. Greater-than-expected erosion of its mainstay 128 megabit DRAM chip price, from \$23 to \$18, forced the company to revise its consolidated net profit projection downward from the earlier figure of ¥25 billion profit to a net loss of ¥15 billion for the current year to March 2000.

HITACHI

Price date	Price (¥)	12-month % change	Market value (¥B)	6-month avg price (¥)	Fiscal year end	Daily Volume (M)	Revenue (¥B)	Revenue growth (%)	Operating profit (¥B)	Net profit (¥B)
9/20	1,164	73	3,885	1,010	March	5.98	7,977	-6.4	-34	-338.8

Exchanges **TYO, OSA, NGO, LUX, FRA, AMS, PAR, NY**
 President **Etsuhiko Shoyama**
 Founded **1920**
 Employees **67,078**

Tokyo, Japan
 +813-3258-1111
www.hitachi.co.jp

MARKET & TECHNOLOGY Nation's largest electronic equipment maker. Mainstays: Semiconductors and computers. Now placing emphasis on production of sophisticated chips to avoid outright competition in 64 megabit DRAMs. Boosting the proportion of high value-added products, such as system LSI, to 80% from 50% of total chip production volume over the previous year. Trimming deficit in semiconductor division to ¥5 billion, from ¥100 billion in the previous fiscal year. Volume production of the new 256-megabit DRAM chips will start this year, targeting 700,000 chips per month. Developed ultra-fine etched system LSI chips for digital TVs.

FINANCE In the previous year to March 1999, consolidated net loss of ¥338.8 billion was reported, on sales of ¥7.977 trillion,

down 6.4% from previous year. Despite floundering sales projected for the current FY to March 2000, enjoyed favorable results from pulling out of semiconductor production in the U.S. Cost-cutting benefits from restructuring program should help the company to swing back to the black. Program includes cutting workforce by 6,500 and selling loss-making businesses. Consolidated operating profit is projected at ¥190 billion in the current year from the previous year's operating loss of ¥34 billion. In the current fiscal year to March 2000, consolidated net profit is expected to reach ¥70 billion, on a turnover of ¥8 trillion, up from ¥7.977 trillion in the preceding year. Firm's earning recovery hinges at the mercy of the currency markets, with the ¥/\$ exchange rate in the second half projected at ¥110 to the U.S. dollar (company projection).

FUJITSU

Price date	Price (¥)	12-month % change	Market value (¥B)	6-month avg price (¥)	Fiscal year end	Daily Volume (M)	Revenue (¥B)	Revenue growth (%)	Operating profit (¥B)	Net profit (¥B)
9/20	3,450	198	6,635	2,513	March	9.57	5,243	5.1	132	-13.6

Exchanges **TKO, OSK, NGO, FRA, LON, SWZ**
 President **Naoyuki Akikusa**
 Founded **1935**
 Employees **44,197**

Tokyo, Japan
 +813-3216-3211
www.fujitsu.co.jp

MARKET & TECHNOLOGY

Largest computer maker in Japan is trying to steer away from low-margin or unprofitable business such as DRAM chips. Concentrating on more sophisticated devices such as flash memory chips used in mobile phones and other portable electronic equipment. Placed Amdahl (U.S.) and ICL (U.K.) under full control, promoting international division of labor. Doubled production capacity of flash memory chips at its venture in Japan with Advanced Micro Devices of the U.S., with capital outlay of ¥90 billion, strengthening its dominant position in the market. Has recently acquired Japan's largest online service provider, Nifty Serve, which will be merged with InfoWeb (another popular Fujitsu-owned ISP) to form "@nifty," boasting some 3.5 million users. In partnership with Sakura Bank, the firm will create the nation's first online bank this fall, ofered, unsurprisingly, via @nifty. Online brokerage service will be launched this October

through a JV with Nikko Securities, again, via @nifty. Forming a tie-up with 10 of its cable TV affiliates to offer subscribers in Tokyo and Osaka low-cost Net access. Active Internet business was hailed by investors as the Japanese version of AOL, sending stock price to all time high of ¥3,780 on September 10th—up 63% from the beginning of this year.

FINANCE

In the FY to March 1999, Fujitsu reported a consolidated net loss of ¥13.6 billion, on sales of ¥5.242 trillion, up 8.5% from the preceding year. Fujitsu took a ¥56.5 billion extraordinary loss on the liquidation of its U.K. chip making subsidiary. In the current year to next March, consolidated net profit is projected at ¥80 billion, on sales of ¥5.65 trillion, up 7.7% from the previous year.

MITSUBISHI ELECTRIC

Price date	Price (¥)	12-month % change	Market value (¥B)	6-month avg price (¥)	Fiscal year end	Daily Volume (M)	Revenue (¥B)	Revenue growth (%)	Operating profit (¥B)	Net profit (¥B)
9/20	650	166	1,395	-----	March	3.1	3,794	-0.2	-12.46	-44.57

Exchanges **TYO, OSK, NGO, AMS, FRA, LUX, LON, PAR**
 President **Ichiro Taniguchi**
 Founded **1921**
 Employees **45,329**

Tokyo, Japan
 +813-3218-2111
www.melco.co.jp

MARKET & TECHNOLOGY

Ranks third among comprehensive electronic manufacturers, and top in defense electronics. Engaged in streamlining of its operation, as the company had spread wings too wide. It closed its unprofitable personal computer plant in Scotland in favor of boosting outsourcing of PC production to Taiwanese makers. Weak orders for heavy electric machinery and industrial electro-mechanical devices have hurt the company. Ongoing restructuring program calls for the elimination of 14,500 jobs. Placing emphasis on production of flash memories, the most promising product, by doubling output from 2.5 to 5 million a month. Placing greater emphasis on satellite business as well as on fiber-optic, information, and telecommunication business.

FINANCE

In the previous year to March 1999, net loss was trimmed to ¥44.58 billion from preceding year's net loss of ¥105.9 billion, on sales of ¥3.794 trillion, down 0.2% from ¥3.8 trillion in the preceding year. Restructuring burdened the group's parent company with a special loss of ¥245 billion. In the current year to March 2000, the company is expected to return to profitability, thanks to favorable results of streamlining its overseas operations. Consolidated net profit is projected at ¥5 billion, on turnover of ¥3.8 trillion.

JAPAN ISPs

Compiled by **Kyoko Fujimoto**

A quick look at Internet service providers

There are thousands of Internet service providers (ISPs) in Japan, and potential customers—corporate and home users alike—wonder which ISP is the best. Recommending one over another is difficult, since services, fee structures, and costs vary widely. Therefore, the new cyber-naut has to carefully consider his or her usage pattern before making a choice. And of course, where you live will greatly affect the options available.

What kind of surfer are you?

If you plan merely to access the Net for e-mailing, you may be better off with a pay-per-use service. If you travel a lot, you'll want to choose an ISP that has many access points (including overseas). If you're a Doom addict, go for flat-rate service, although this option remains the most difficult to find in this country.

Nikkei Net@vi 30 most popular ISPs

For those readers unfamiliar with the major ISPs in Japan, here is a list of 10 ISPs having more than 100 domestic dial-up access points. This list is not by any means complete, and there are many other ISPs that offer similar (or even better?) service. But it will give you an idea of what's out there. Our list also bears the distinction of including 10 of the 30 ISPs selected as the most popular in Japan by *Nikkei Net@vi* magazine (see <http://netnavi.nikkeibp.co.jp/top/announce/provrank9907.html>).

MAJOR ISPs IN JAPAN (alphabetical order)

Name of ISP	Fee structure	Sign-up fee	
Asahi Net	¥450/month (up to 3 hours) additional usage ¥7/min.	¥2,000	Website http://www.asahi-net.or.jp/en/index.html (E) http://www.asahi-net.or.jp/ (J) E-mail/phone # E: eap-net@asahi-net.or.jp 03-3569-3522 J: ap-net@asahi-net.or.jp 03-3569-3500 Roaming service in various countries (no extra charge for the service in the US mainland or in Thailand; otherwise ¥4/min. to ¥8/min.)
	¥900/month (up to 5 hours) additional usage ¥7/min.	¥2,000	
	¥1,700/month (up to 15 hours) additional usage ¥3/min.	¥2,000	
	¥2,900/month (up to 150 hours) additional usage ¥3/min.	¥2,000	
Biglobe	¥1,000/month (up to 5 hours: ¥10/min. for extra time)	No	Website http://www.biglobe.ne.jp/ E-mail/phone # info@bcs.biglobe.ne.jp 0120-86-0962 (toll-free) Roaming service in various countries (¥30/min.)
	¥2,000/month (up to 15 hours: ¥10/min. for extra time)	No	
	¥3,000/month (up to 150 hours: ¥10/min. for extra time)	No	
DTI (Dream Train Internet)	¥1,500/month (up to 5 hours: ¥10/min. for extra time, ¥3,500/month maximum)	¥2,000	Website http://www.dti.ad.jp/ E-mail/phone # sales@dti.ad.jp 0120-830-501 (toll-free) 03-5972-5250 Roaming service: in various countries (¥30/min.)
	¥34,000/year (unlimited usage)	¥2,000	
InfoWeb	¥950/month (up to 3 hours: ¥10/min. for extra time)	¥1,000	Website http://menu.infoweb.ne.jp/ E-mail/phone # info-staff@web.ad.jp 0120-5442-54 (toll-free) Roaming service in various countries (¥20/min.)
	¥2,000/month (up to 15 hours: ¥10/min. for extra time)	¥1,000	
	¥3,000/month (up to 150 hours: ¥10/min. for extra time)	¥1,000	
	¥5,000/month (unlimited)	¥1,000	
Neweb	¥800/month (up to 5 hours) additional usage ¥5/min	¥800	Website http://www.neweb.ne.jp/ E-mail/phone # info@neweb.ne.jp 0070-800-870-415 (toll-free) Roaming service in various countries (from ¥10/min.)
	¥1,200/month (unlimited but accessible only from 9AM to 9PM, otherwise ¥5/min.)	¥500	
	¥1,850/month (unlimited usage)	No	
OCN (Open Computer Network)	¥980/month (up to 4 hours: ¥10/min. for extra time)	¥3,800	Website: http://www.ocn.ne.jp/ E-mail/phone # info@ocn.ad.jp 0120-047-815 (toll-free) Roaming service: in various countries (¥30/min.)
	¥2,300/month (up to 15 hours: ¥9/min. for extra time)	¥3,800	

OCN Cont'd	¥4,800/month (up to 100 hours: ¥5/min. for extra time)	¥3,800	
ODN (Open Data Network)	¥1,950/month (unlimited usage) ¥1,300/month (unlimited, but accessible only from 5AM to 8PM)	No No	Website: http://www.odn.ne.jp/ (J) http://www.odn.ne.jp/english/index.html (E) E-mail/phone #: odn-support@odn.ad.jp 0088-86 (toll-free) Roaming service: in various countries (¥30/min.)
Panasonic Hi-Ho	¥500/month (up to 3 hours: ¥7/min. for extra time) ¥1,600/month (up to 15 hours: ¥7/min. for extra time) ¥3,000/month (up to 150 hours: ¥7/min. for extra time)	¥3,000 (No fee if sign up online) ¥3,000 (No fee if sign up online) ¥3,000 (No fee if sign up online)	Website: http://home.hi-ho.ne.jp/ E-mail/phone #: info@hi-ho.ne.jp 03-3432-8140 Roaming service: in the US (¥30/min.)
Plala	¥1,800/month (15-hour limit/month during peak hours – 11PM to 2AM: ¥7/min. for extra time, unlimited usage in off-peak hours) ¥3,500/month (unlimited usage, 10 people/1 line) ¥7/min. (pay-per-use service)	No No No	Website: http://www.plala.or.jp/ E-mail/phone #: 03-5954-5330 Roaming service: in various countries (US\$0.027/min. to US\$0.16/min.)
So-net	¥1,000/month (up to 3 hours: ¥10/3min. for extra time) ¥2,000/month (up to 15 hours: ¥10/3min. for extra time) ¥3,000/month (up to 150 hours: ¥10/3min. for extra time)	¥2,000 ¥2,000 ¥2,000	Website: http://www.so-net.ne.jp/ (J) http://www.so-net.ne.jp/guide/english/ (E) E-mail/phone #: info@so-net.ne.jp 0570-00-1414 (toll-free) 03-5469-7200 Roaming service: in various countries (from ¥30/min.)

Other options

In addition to the ISPs listed here, there are several unique operators that do not require you to commit to a single service plan for a full month. One such plan that may benefit business travelers is offered by InterQ. Simply dial their Q2 service, a totally pay-per-use offering where users dial up a (premium rate) number and the ISP fee is added onto the phone bill. There is no need to sign up for this service, but you do have to provide your name, address, and credit card information.

InterQ Q2 Service

phone: 03-5456-2555, <http://www.interq.ad.jp>
(See this month's VentureWatch column on page 48. InterQ was the first ISP to offer this type of service for ¥20/min., and provides over 100 dial-up access numbers nationwide. YYY net also offers dial Q2 service for just ¥10/min.)

English support

Since many readers are native-English speakers, you may be wondering if any Japanese ISPs offer English-language assistance. One quick way to check is via the Web: If the provider has an English website, they likely offer English support. Although these ISPs do not have quite so many dial-up access numbers as ISPs in our list above, companies like GOL, TWICS, PSIN et, AT&T WorldNet, and others generally provide good English service. AT&T WorldNet (<http://www.att.ne.jp/> for Japanese, <http://www.att.ne.jp/indexe.html> for English) offers very affordable ¥2,000/month unlimited access with a ¥3,000 sign-up fee. AT&T WorldNet also offers a roaming service that is especially for U.S. travelers (you can use their 1-800 numbers in the U.S., and there is no extra charge for roaming access in the U.S. mainland and Hawaii).
–Kyoko Fujimoto

Early this year, MultiMedia Research Institute announced the results of a survey on Internet use by corporations. Of the 1,232 companies who responded, 89% said they used Internet services, and of those, 578 accessed the Net via dial-up connection, while 468 did their surfing on a leased line. The chart below shows market share for the major ISPs broken down by service:

