

Vol . 57 High-tech Sector

Feb. 2. 2003

Global Telecommunications Equipment Market to Grow through 2007

Mobile Phone Charges Exceed those for Fixed-line Phones

Charges for Calls from Fixed-line Phones to Mobile Phones Likely to Drop

Electric Power Utilities to Wholesale their IP Backbone **Networks**

Peaks

Broadband Subscriber Growth Continues – FTTH Registers the Largest Gain



According to a recent research report by a U.S. based high-tech research firm, demand for three principal equipment groups, DWDM, SONET/SDH multi-service and optical switches is expected to increase through 2007. Demand for DWDM metro is likely to increase at an average annual rate of 7%, that for SONET/SDH multi service at 11%. Optical switches are expected to see demand increase at an average annual 9%.

The average monthly bill for mobile phones in Japan's households was ¥6,159, a figure that has doubled in the last two years. On the other hand, the fixed-line monthly telephone bill averaged ¥4,653, a 23% decline from 2000.

With the government likely to shift the right to set rates for calls from fixed-line phones to mobile phones to fixed-line operators, rates of such calls are likely to fall sharply. Mobile phone operators are opposing the move since it will hurt their earnings.

Japan's electric power companies are planning to wholesale their IP backbone networks to telecommunications service providers. As a result telephone calls between members will be free and this is likely to have a significant impact on the fixed-line phone rate structure.

Subscriber Growth at ISP Providers Growth in subscribers has slowed to a trickle at ISP providers, although subscribers to the broadband service continue to grow.

> The number of subscribers to broadband services, including ADSL, FTTH and CATV, increased to 7.8 million as of the end of December, according to government statistics. Subscribers to ADSL services increased 3.7 times to 5.64 million. The number of CATV subscribers increased 3.1 times to 0.95 million. But the biggest growth was experienced by FTTH, where subscriber numbers increased from 51,000 to 206,000.



• High-tech Sector

Single-crystal Silicon Production to Rise in 2003	Production of single-crystal silicon is expected to increase 8% in 2003 to 4,650 tons after a 22% gain in 2001. Domestic demand is likely to be up 6%, with exports rising 10%.				
<i>Global Semiconductor Demand to Rise 19.8% in 2003</i>	Demand for semiconductors in 2003 is expected to rise 19.8% year-on-year., according to SIA. Demand increased only 1.3% in 2002.				
<i>Hitachi Plans Extensive Restructuring of Its Business Portfolio</i>	Hitachi released a three-year restructuring plan starting in fiscal 2003. The plan calls for pulling out of unprofitable areas, mostly consumer home appliances, and concentrating management resources into information and infrastructure-related businesses. As a result, the company will be pulling out of businesses that contribute about $\$1.6$ trillion to its annual sales of eight trillion yen. With the white goods markets at home largely saturated, Japan's other home electrical equipment manufacturers are also busy developing new strategies, that include strengthening their presence in this area in global markets while focusing on growth sectors at home.				
Taiwan's Assemblers Setting Up Plants In China	Taiwan's assembly manufacturers are expected to continue to set up plants aggressively in China in 2003 also. Among those with expansion plans are ASE, SPIL, Chipmos, WALTON, Chipbond and FUPO. This drive comes at a time when their finances are weakened by a recession.				
Earnings Roundup Better-than-Expected Profit at KDDI	KDDI is expected to report approximately ¥100 billion in consolidated ordinary income up, 27% from the previous fiscal year. The original forecast saw ordinary income rising only 14%. The better than expected results are due mainly to favorable performance at au, its mainline mobile phone service. The number of subscribers to its CDMA2000 service launched last April rose to 4.67 million by the end of 2001, a stellar performance compared to the FOMA service where the subscriber count is only 150,000.				
Profit Rebounds at Electrical Equipment Manufacturers	Profits in the last quarter of 2002 experienced a V-shaped recovery at Japan's major electrical equipment manufacturers. The rebound is due mainly to the benefits of restructuring and a weaker yen. All expect to report strong profit rebounds for the current fiscal year ending March 2003. The only major firms reporting year-on-year declines in their Oct-Dec performance were Fujitsu and NEC. Although 2002 fourth quarter results were a strong improvement, the				
ndustry	gains at home came mainly from restructuring and not market growth, which means that they must strengthen their overseas operations to stay on track. Not much in terms of earnings growth can now be expected from restructuring at home.				

2

3rd Quarter Profits Surge at Pioneer

Pioneer reported an 8.5% increase in consolidated net sales in the Oct.-Dec quarter to \$193.9 billion, driven by demand for PDPs, DVDs and car navigation systems. Operating income rose 92.7% to 12.6 billion. Net income was up 107.1% to \$12.6billion.

Corporate spending on advertisements in the April-September

period is expected to increase 3.6% year-on-year according to the Nikkei Advertising Research Institute. Corporations

General Economy Corporate Advertisement Spending to Increase 3.6%

> experiencing profit growth and are expected to step up advertising. The high-tech sector is also likely to be following suit in view of the increasing competition in this area. The decline in spending is expected to touch bottom in the Jan.-March 2003 quarter after falling steadily from the 2001 July-Sept quarter. Consumer home appliance manufacturers, and automobile manufacturers are expected to step up ad spending. Newspapers ads are likely to be up 3.4%, television 3.3%, magazines 1.9% and radio 1.3%. Normally advertisement spending grows when businesses feel that more advertising will bring in new sales. Ad spending drops when the economy is overheated and merchandise sells without much advertising and also when businesses are so pessimistic that they feel more advertising will not boost sales.

Prices have been declining in Japan for four years in a row. A closer analysis of price declines shows that the declines were most pronounced in consumer electronic items. The price of notebook PCs dropped 27.4% in 2002 and that of TV games was down 21.6% on the average. The price of video cameras was down 17.8%. On the contrary, the price of hamburgers rose 12.7% on the average and the cost of education went up 1.1% compared with 2001.

Consumer Spending Drops for the Fifth Straight Year

Deflation Led by Consumer

Electronics

Spending by salaried households in 2002 averaged \$330,651 per month, a 0.2% decline from 2001, According to government statistics. With consumer spending dropping for the fifth year in a row this is the longest losing streak since 1964.



3

Unemployment at Record High

Despite a gradual increase in job offerings, unemployment increased to a record 5.4% in December. The ratio of job applicants to job offers was also low at 0.54. The problem, it seems, is a mismatch between job openings and the type of skills available. Three out of four unemployed persons find that their skills and needs to not match the skills and requirements of prospective employers, which means that the job market has structural problems. Job offers in December increased 4.3% from November and job applicants were up 2.3%. Despite this, the number of completely unemployed persons increased 2.2% in December. Employers are looking for experienced persons, who are in short supply.

Housing Starts at 15-year Low

Japan's housing starts in 2002 totaled 1.15 million units, a record low in 15 years.

	Prod.	Ship.	Inv.	Capacity	H. Elec.	Cons.	Electronics	Cons.	Industrial	El.
				utilization.	machinery	appliances	Sector	electronics	electronics	devices
Oct	99.2	103.2	102.9	68.8	2,037	1,683	15,311	1,847	6,803	6,661
Nov	98.5	104.0	98.4	69.7	2,026	1,624	15,443	1,695	7,233	6,515
Dec.	101.6	105.6	95.8	66.3	2,010	1,601	15,310	1,411	7,488	6,411
Jan.	100.0	106.3	92.3	65.0	1,920	1,358	13,562	1,093	6,342	6,127
Feb.	101.4	106.9	90.8	77.0	2,123	1,736	14,969	1,365	7,184	6,421
Mar.	104.8	110.3	85.6	91.7	3,009	1,887	19,197	1,582	10,386	7,228
Apr.	108.7	114.4	84.2	77.2	1,849	1,797	14,411	1,470	5,760	7,182
May	117.2	123.2	87.9	80.9	1,818	1,872	15,451	1,649	6,324	7,478
June	115.4	121.2	85.8	86.2	1,875	2,078	16,176	1,691	6,881	7,604
July	113.7	118.0	90.8	86.3	2,015	2,060	16,056	1,775	6,285	7,997
Aug	117.1	123.5	89.9	72.6	1,841	1,297	14,736	1,482	5,937	7,318
Sept.	116.2	120.9	93.9	84.9	2,465	1,555	17,659	1,762	8,117	7,780
Oct.	117.3	125.6	93.5	80.6	1,942	1,577	16,161	2,030	6,169	7,962
Nov.	112.7	120.0	89.5	76.5			15,127	2,086	5,588	7,452
YoY	14.4	15.4	-9.0	9.0	-4.6	-6.4	1.7	22.6	-18.5	17.9

Basic Electronics Industry Statistics

Base year 1995 = 100; 100 million yen, YoY: Year-on-year percentage change

Source: Ministry of Economy, Trade and Industry, Japan Electronics Industry Association and other trade associations

