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High-tech Sector

Shipments of Ground Stations for Mobile Networks to Decline

Global shipments of ground stations for mobile telephone networks in 2003 are likely to decline 13% year-on-year to \$26.9 billion, according to Multimedia Research Institute, a think tank specializing in the high-tech sector. The number of ground stations installed is likely to increase 235,000 units in 2003 to 13.4 million units. Shipments of ground stations for TDMA, GSM and PDC systems have been declining after peaking in 2002 and the market for these types of ground stations in 2006 is expected to shrink to just one-seventh of the 2002 level. On the other hand, shipments of the W-CDMA ground stations are expected to increase, with cumulative total rising to 408,000 stations by 2006.

Global Mobile Phone Market Forecast

Demand for mobile phones worldwide will grow at rates topping 10% in 2004 and 2005, bringing the number of subscribers to 1.56 billion. The diffusion rate of mobile phones worldwide is expected to be 26.9% by the end of 2003 and will rise to 30% by the end of 2005. However, the diffusion rate in certain areas is already very high. The diffusion rate in Taiwan is expected to reach 100% by the end of 2003 and exceed 90% in European countries.

NEC (6701 TSE) Develops Smallest Transistor

The new transistor developed by NEC is just 1/18 the size of the conventional transistor in use today. This means that, theoretically, more than 150 times the number of transistors, compared to the present level, can be mounted on a semiconductor chip. A large super computer can now be downsized to the desktop-size PC.

Personal Computer Sales Accelerate

Personal computer sales started rising in autumn, with sales accelerating at double-digit figures. Driven by personal computers, sales of computer peripherals, including printers, are up.



Eleven New Semiconductor Facilities Planned in North America

According to a survey by a leading industrial daily, 11 new wafer-processing facilities are planned in North America after 2004. Despite these plans, the overall investment seems to be sluggish in comparison with the rest of the world. The sluggish investment trend is due mainly to the increasing use of Taiwanese foundries and aversion to risk.

Blade Server Market Sees Explosive Growth

There is rush of new blade server models on the market. Although the market is small, it is expected to increase 23-fold this year and should reach ¥450,00 million in 2007, when the blade server is likely to be accounting for about 20% of the domestic server market. While the market is still limited to scientific and technical applications, such as grid computing, they are expanding to the business sector.

Electronic Component Output Rises in Sept-Nov Period

Production of electronic components, including cutting-edge technology components used in camera-equipped mobile phones and digital cameras, rose sharply in the September – November period. Although production seems to have been rising since November, manufacturers are cautious about adding capacity as they are concerned over possible excessive ordering for inventory. If orders continue to rise, they plan to hike production overseas. Production of circuit parts, connectors and other components, such as front-end modules, is rising.

Mass Production Technology for 65-nm LSIs Developed

Toshiba and Sony have jointly developed the technology for mass production of the 65-nm LSI. The companies plan to start sample shipments of the new LSI, used for control operations in digital home appliances, in March 2004. This should give them a competitive advantage in the next-generation, 65-nm, system LSIs. The mass production of the 90-nm system has just started.

Toshiba (6502 TSE) Develops HDD the Size of a ¥500 Coin

Toshiba has developed a compact hard disk drive that is the size of a ¥500 coin (2.5cm). The new disk drive will allow mobile phones to store up to two hours of video data and open up the possibility of developing mobile terminals designed for receiving and recording television programs. Plans call for starting commercial production in 2005.

Showa Denko(4004 TSE) Develops a Brighter LED

Showa Denko has developed a white and an orange LED with brightness three times that of a conventional LED. The company plans to market the two new LEDs to LED lamp manufacturers and electronic component manufacturers.



Shortages of Parts for LCD Monitors

Severe shortages of LCD panels, particularly those for 15" LCD monitors for personal computers, have started to arise. The problem is due to cutbacks in production of the 15" LCD panel by South Korean suppliers as they shifted production to larger panels, which are more lucrative, for televisions. The 30" panel for televisions goes for about \$1,200 while the 15" panel for PCs is priced at about \$200.

Industrial Electronic Equipment Output to Rise in 2004

Production of industrial electronic equipment in fiscal 2004 is expected to rise 2.1% year-on-year to ¥12.3 trillion, according to JEITA, a trade body. This will be the first year-on-year gain in output in four years. Production is being driven by components used in devices for terrestrial digital broadcasting, third-generation mobile phones and other digital equipment.

Crystal Device Production Up Sharply

Production of crystal devices was up sharply, rising 14.1% year-on-year in October. The value of output was up 4.4% to ¥16,720 million. As a result, production in the first half of the current fiscal year was up 6% in volume and 1.4% in value. Production of crystal oscillators for industrial applications rose 57.4% in October. Manufacturers report that their facilities are operating at full capacity. However, they remain cautious about adding capacity as they feel that some of the orders may be for building up inventories and this could seriously affect orders in the case of a slowdown.

IT Service Sector Sales Up in October

According to government statistics, sales of the IT service sector rose 2.3% year-on-year in October. This was the first year-on-year gain in monthly sales. System management and operation-related sales rose 9.3% and those of software development were up 1.4%, reflecting strong demand from the logistics, manufacturing and financial sectors. However, the number of software service firms continues to decline, falling 0.4% and recording the 10th consecutive decline.



Basic Electronics Industry Statistics

	Prod	Ship.	Inv.	Capacity utilization	H. Elec. machinery	Cons. appliances	Electronics Sector	Cons. electronics	Industrial electronics	El. devices	Semicon (Production)	Consumer electronics (sales)
Jan.	90.9	95.2	83.9	72.0	1,953	1,255	14,010	1,302	5,837	6,871	3,140	336
Feb.	88.8	92.8	81.6	85.2	2,091	1,439	15,026	1,420	6,573	7,033	3,192	234
Mar.	88.6	88.7	84.4	107.7	3,155	1,691	19,029	1,748	9,561	7,720	3,456	266
Apr.	86.6	92.6	82.7	96.2	1,788	1,677	14,103	1,783	5,261	7,059	3,171	216
May	92.0	96.2	81.1	97.0	1,857	1,707	14,721	1,952	5,501	7,269	3,307	205
June	92.6	96.2	81.1	115.9	2,003	2,039	16,003	1,954	6,481	7,569	3,449	229
July	91.3	90.4	92.6	106.4	2,023	1,924	15,859	1,823	6,206	7,830	3,545	247
Aug.	91.2	95.8	87.0	60.5	1,771	1,165	14,332	1,577	5,593	7,362	3,388	230
Sept	94.1	96.4	82.7	74.3	2,495	1,313	18,078	2,314	7,335	8,430	3,761	209
Oct.	98.6	105.3	80.3									
YoY	8.7	10.6	-7.4	-10.3	0.8	-15.6	7.9	31.3	-1.0	11.2	7.1	-16.8

Base year 2000 = 100 (seasonally adjusted); 100 million yen, YoY: Year-on-year percentage change

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

