

Keener Competition

Output of industrial electronic products in fiscal 1991 will probably show relatively low growth of 4% to 5% over the previous year. While the output of communications equipment is likely to maintain solid growth, that of computer-related equipment is likely to show very low growth, reflecting a slowdown in the growth of demand for large, general-purpose computers and personal computers (PCs).

Output in fiscal 1992 is also forecast to increase only about 5%, since domestic demand will show about the same rate of growth as in the current year, despite an expected increase in shipments to the United States.

It had been expected that in the wake of increased shipments of a new generation of mainframes considerable replacement demand would surface. As it is, however, replacement demand has not turned out to be as large as expected, since financial institutions, the top users of mainframes, have cut down on capital spending. Sluggish shipments have resulted in much keener sales competition among mainframe makers, sending their prices lower. The result may be narrower profit margins on mainframes, which have been a main income source for Japanese computer makers in general.

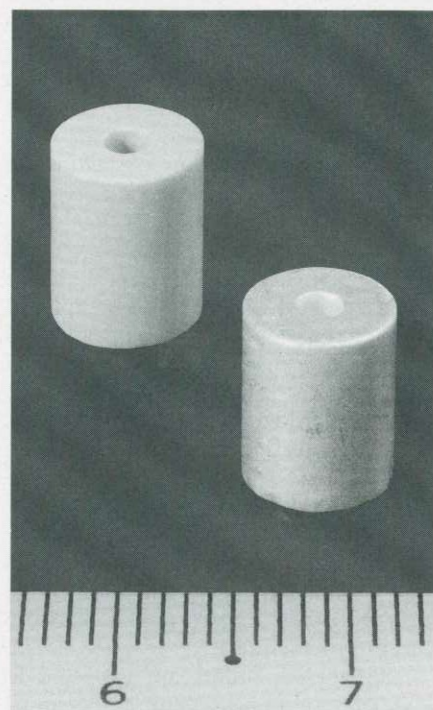
Initial strong demand for notebook-type PCs, which was a key factor in pushing domestic PC demand higher, has now slowed, reflecting a rise in the diffusion rate. In anticipation of a further expansion of the market, more than a dozen domestic PC makers entered the notebook PC market, and intensified competition

among such manufacturers has accelerated a decline in notebook PC prices. Exports of PCs are also being affected by expanding PC production overseas by Japanese makers.

Fiscal 1991 output of communications equipment is expected to grow more than 5% over the previous year, thanks to a solid growth in domestic demand. Reflecting stepped-up capital spending by Nippon Telegraph and Telephone Corp. (NTT) and the new common carriers, shipments of telephone switching systems have increased steadily. Shipments of mobile communications equipment like car phones have also shown high growth. Shipments of cordless phones, which achieved spectacular growth up to fiscal 1990, have now slowed. However, a new generation of digital cordless phones is expected to debut in fiscal 1993 or beyond, so that the mobile communications equipment market promises to show steady expansion in the years ahead.

The output of electronic components in fiscal 1991 is likely to grow only about 4%, due to slower growth in the output of semiconductor devices, resulting from a decline in the price of 4M DRAM chips. In fiscal 1992, when the present silicon cycle is due to enter its expansionary phase, output of semiconductor devices is likely to show much smaller growth than in previous cycles. Thus, annual output of electronic components will probably grow only 4% to 5%, despite some recovery in exports to the U.S.

Production of the 4M DRAM has increased fast as a result of active capital



Ceramic materials are being increasingly incorporated into mobile phones and other mobile communications equipment.

investments by the five major Japanese semiconductor device makers. In contrast, demand has expanded slowly, mirroring a sluggish trend in the domestic and U.S. computer markets, and a delay in the use of the 4M DRAM in PCs. Moreover, the price of the 1M DRAM has declined steadily, sending the price of the 4M DRAM also lower. As a result, output of ICs will grow only about 6% in fiscal 1991.

In the latter half of fiscal 1992, however, exports of the 4M DRAM are likely to recover, thanks to the recovery of the U.S. computer market, which accounts for about 70% of consumption of the 4M DRAM.

Domestic 4M DRAM supply and demand will also be balanced in fiscal 1992, thanks to a decline in fiscal 1991 in the price of the 4M DRAM, which is then expected to stabilize. Domestic production of ICs, centered on the 4M DRAM, will show about 10% growth, reaching the peak of the present silicon cycle.

(Yasuhiro Nishi, senior economist)

Industrial Electronics Supply and Demand

(¥ billion)

	FY 1991 (estimate)	FY 1992 (forecast)
Industrial electronic machinery		
Output	11,040 (4.6)	11,590 (5.0)
Exports	2,940 (-1.3)	3,070 (4.4)
Imports	710 (5.6)	770 (8.5)
Domestic demand	8,810 (6.8)	9,290 (5.4)
Industrial electronic components		
Output	8,710 (3.8)	9,085 (4.3)
Exports	5,000 (1.3)	5,200 (4.0)
Imports	1,310 (6.0)	1,440 (9.9)
Domestic demand	5,020 (6.9)	5,325 (6.1)

Note: Figures in parentheses denote growth rate over the previous year.