

Industrial Electronics Dependent on Domestic Demand

The growth of Japan's industrial electronics production fell to the single-digit range in 1986 following the double-digit growth recorded in previous years. The slowdown was due chiefly to a decline in exports brought on by the yen's precipitous ascent against the U.S. dollar. Despite the slower growth, however, production of industrial electronic machinery and components remained relatively high compared with generally sluggish trends in other electric machinery-related fields. The credit for the strong performance goes to domestic demand.

Taking advantage of increased demand for large computers as major commercial banks push ahead with their third generation of on-line, real-time data processing systems, Japanese computer manufacturers have actively promoted their products in direct competition with IBM's new mainframe, the Sierra. Related peripherals have also enjoyed extremely good sales.

In the communications equipment field there has been strong demand for push-button telephones, while word processors and personal facsimile machines are the most popular office automation (OA) equipment. These favorable trends are expected to continue for some time to come.

Despite the strong yen, exports of personal computers, supercomputers and other computers in 1986 were nearly on a par with previous-year levels in value terms. Exports of communications equipment, however, began to slow in midyear due to intensified competition in wire telephone sales from South

Korea's low-priced products. Domestic demand for electronic components was relatively firm at home. Exports slowed, however, reflecting the yen's steep appreciation and growing trade friction.

The prolonged semiconductor slump sent unit prices of integrated circuits into a tailspin, but output recovered gradually from early spring on to hit an all-time high in June 1986. The following month, production value also climbed past year-before levels. However, this was believed to owe more to a rush of orders prior to the settlement of the Japan-U.S. semiconductor trade dispute in late July than to a fundamental recovery in the market.

The United States' "B/B Ratio" (book-to-bill ratio) for semiconductors, a leading indicator of that country's semiconductor business activity, was somewhat above 1.0 in early 1986. It peaked at 1.17 in April, but remained in the 0.9 range through the rest of the year after July. Apparently the semiconductor business is still far from a full-scale recovery.

Under the "fair market value system" agreed upon by the Japanese and U.S. governments in late July, Japanese semiconductor manufacturers are obligated to report their production cost data to the U.S. Department of Commerce every quarter. When exporting semiconductors to the U.S., Japanese makers are required to observe the prices set on the basis of the cost data submitted under a form of "administered trade." The system puts medium and small makers with relatively restricted production scales at a severe disadvantage in cost competitiveness.

Big Japanese electronic machinery and components manufacturers face another

heavy setback in profits in fiscal 1986 after last year's debacle. This is all the more true of smaller component makers. Increasing numbers of them have gone bankrupt since mid-1986, due chiefly to the appreciation of the yen. Many others will finish fiscal 1986 in the red.

How Japanese manufacturers of industrial electronic products fare in 1987 will depend in large measure on the recovery of the U.S. computer business from its current slump. Even given the strong yen, the high quality of Japanese electronic products makes them fully competitive in international markets. If U.S. demand recovers significantly, Japanese makers could achieve high growth. As it is, however, the pace of recovery in the U.S. computer market has been unexpectedly slow. No real recovery is now anticipated before mid-1987.

In this connection, the sales outlook for 32-bit personal computers bears close watching. The new 32-bit PCs have been marketed by several U.S. makers since the fall of 1986. It is believed that IBM will put a 32-bit PC equipped with Intel's MPU 80386 microprocessor on the market in the spring of 1987. Industry attention will be focused on how well the new upgraded PC will sell.

As has already been seen in the joint venture agreement concluded last fall by NEC Corp. and Honeywell, Japanese and U.S. mainframe computer manufacturers are increasingly likely to join forces to compete with the IBM juggernaut.

Japan's electronic components business will remain in the doldrums through mid-1987. But as the recovery materializes in the U.S. computer market, Japan's own components business will strengthen. Demand for 1-megabit dynamic random access memories (1M DRAM), which so far have been rather slow to replace 256K DRAM, will develop in earnest in 1987. However, an increasing amount of popular low-grade chips will be purchased from Southeast Asian countries, leaving Japanese electronic component makers with no choice but to specialize in the high-tech end of the field.

Output and Exports of Industrial Electronics

(¥ billion)

	FY 1986 (estimate)			FY 1987 (forecast)		
	1st half	2nd half	Total	1st half	2nd half	Total
Industrial electronic machinery						
Output	3,647.0 (4.8)	3,708.1 (0.9)	7,355.1 (2.8)	3,840.3 (5.3)	3,960.2 (6.8)	7,800.5 (6.1)
Exports	1,279.4 (-3.9)	1,356.2 (-2.6)	2,635.6 (-3.2)	1,297.3 (1.2)	1,392.8 (2.7)	2,690.1 (2.1)
Industrial electronic components						
Output	2,916.5 (-4.2)	2,786.5 (-0.7)	5,703.0 (-2.5)	2,936.8 (0.7)	3,080.6 (10.5)	6,017.2 (5.5)
Exports	1,394.9 (-5.8)	1,320.8 (-2.8)	2,715.7 (-4.4)	1,458.2 (4.5)	1,489.9 (12.8)	2,948.1 (8.6)

Note: Figures in parentheses represent growth rate over previous year.

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