

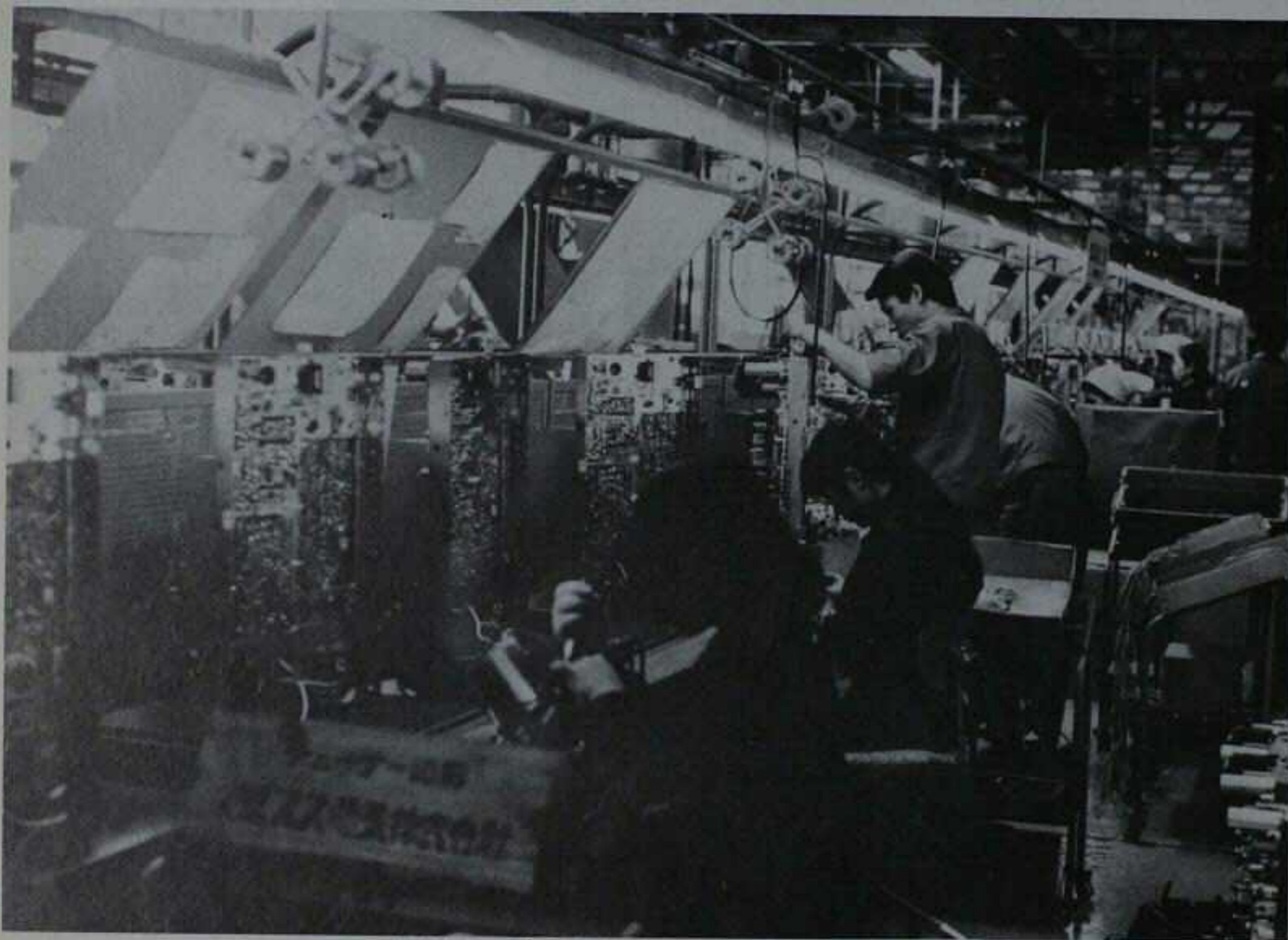
THE INTEGRATED CIRCUIT CHIP

The race is on to develop it

Why? Because it reduces the size of the quadrasonic disk demodulator.



Japanese record buyers look over 4-channel releases in a Ginza shop.



Building quadrasonic hardware: an expanding scene.



Checking out 4-channel reproduction: a popular pastime.

World War III of the phonograph record manufacturing industry is a brewin', veterans say, and it could break out in Japan this year with the production of a "secret weapon" already known to the electronics industry as an "IC chip."

The Victor Company of Japan, assisted by its parent concern, Matsushita Electric, is known to be working on development of an IC chip that would reduce size and cost of the CD-4 disk system demodulator that is essential for discrete quadrasonic reproduction. Their ally, RCA Corp. is assumed to be undertaking the same project.

On the other hand, Sony Corporation is currently developing an IC chip that would not only reduce size and cost of the SQ matrix logic decoder but also provide "discrete" separation in playing back quadrasonic records. And, likewise, it may be assumed that CBS Laboratories, which developed the SQ system, is working on the same project.

Japanese veterans of the two "world wars" in the phonograph record industry predict that both sides will brandish their respective "secret weapons" at about the same time this year, but according to the Electronic Industries Assn. of Japan (EIA-J) and the Japan Phonograph Record Assn., both the CD-4 and SQ systems will continue to co-exist.

However, the veterans say that the first shots were fired in New York Nov. 10, 1971 when RCA Records announced its support of the CD-4 system developed by the Victor Co. of Japan in the presence of the latter's parent company, Matsushita Electric, after shooting down rumors it had adopted the SQ system.

Adoption of the SQ system developed by CBS was announced in Tokyo by Sony Corp. and CBS/Sony Records Inc. June 10, 1971,

simultaneously with the joint announcement made by Columbia Records and Sony, at Billboard's International Music Industry Convention (IMIC) in Montreux, Switzerland.

The war clouds started spreading across Europe and the United States to Japan early in January 1972, the veterans say, when EMI announced its adoption of the SQ system. And, they assumed, Toshiba Musical Industries (Toshiba-EMI/Capitol joint venture) would immediately follow suit.

To date, however, Toshiba has not adopted the SQ system and is planning to release CD-4 Quadradiscs this year.

In the meantime, Toshiba has renamed its so-called QM system RM in compliance with the "regular matrix" standard adopted in March 1971 by the Japan Phonograph Record Assn. And the Toshiba electrical concern has marketed a CD-4 system disk demodulator but not an SQ matrix decoder for its line of "compatible" quadrasonic stereo ensembles.

Besides Toshiba (Tokyo Shibaura Electric Co., Ltd.), Hitachi, Ltd., Onkyo (now a Toshiba subsidiary), Sanyo (a company "friendly" to Matsushita), and Trio have marketed CD-4 demodulators. To date, however, Nippon Columbia, a member of the Hitachi group, has not marketed either a CD-4 demodulator or SQ decoder. Hitachi and Toshiba also are offering the CD-4 pickup cartridge under their respective brand names and the required Shibata stylus.

And, of course, Matsushita has marketed a CD-4 disk system demodulator along with the Victor Co. of Japan (JVC/Nivico). As a matter of fact, Matsushita is outdoing JVC in the way of CD-4 promotion all over Japan, following a joint advertising campaign last year that was considered by separate name brand proponents to be unique.

To recapitulate, the CD-4 camp in Japan presently includes Hitachi, Matsushita, Onkyo, Nippon Phonogram (Philips-Matsu-

shita/JVC joint recording venture), Sanyo, Teichiku Records (a member of the Matsushita group), Toshiba, Trio, and of course the Victor Co. of Japan and Victor Musical Industries. Inactive members of the CD-4 camp include Nippon Columbia, Pioneer, Sharp, Toshiba Musical Industries, and Warner-Pioneer.

On the other hand, Akai joined the SQ camp in Japan in December 1972. Besides Sony, and CBS/Sony Records, the SQ proponents include Aiwa, Trio, Cybernet, Pioneer, Standard, Nippon Columbia, Sanyo, Roland, Toshiba, Onkyo, Hitachi, Nikko, Warner-Pioneer and Canyon. Last year, Polydor suspended its production of CD-4 Quadradiscs.

Total sales of home stereo units, 80 percent of them quadrasonic, and components in Japan are estimated to have reached anywhere between 120 billion and 150 billion yen (\$400 million-\$500 million) last year with the inauguration of easy payment plans by the major manufacturers, but showed little increase in volume over 1971 according to disappointed retailers.

And, with the return of Okinawa to Japan in mid-August 1972, the 43.6 percent diffusion of stereos among the nation's near 110 million population, as announced by Japan's Economic Planning Agency, was not expected to show any appreciable increase by the end of last year, in stark contrast to the near 80 percent diffusion of color TVs from the 69.5 percent as of Aug. 31 1972.

In turn, despite the opening of Okinawa's market to Japanese manufacturers of phonograph records and tapes, total nationwide sales in 1972 are estimated to be somewhere between 112.5 billion and 120 billion yen (\$375 million-\$400 million), assuming there are no carry-overs or returns. These figures show, at best, a 7 percent increase over 1971, or hardly any difference at all if imported product is excluded.