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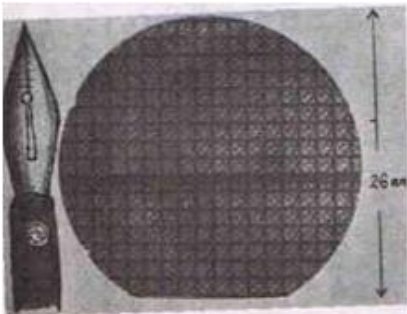
1966

Completion of Hitachi's first IC

~ Packaging ~

Hitachi started manufacturing the IC (Integrated Circuit) HD100 series by introducing the design and manufacturing technology of televisions and computers from RCA in the U.S., and it delivered the first IC to its Kanagawa Works (Computer Division) in January 1966, and the new IC era started. In addition to large-scale computers, ICs were adopted also in the electronic exchangers and desk-top calculators, and the cumulative production of IC reached 18 million units in August.

The wafer diameter was 1 inch, and the device was ECL with the die size of 1.2 mm square (1.2x1.2), and it was mounted on TO type 8 to 10 pins. For cutting out chips (elements) from a wafer, a scribe method was used, in which chips were separated by 90-degree bending rupture along the scribe lines made by diamond cutter. Circuits such as AND/NOR/NOT were formed in the IC, and the circuit interconnect line width was as large as 15μm. There was no passivation film, and Al interconnects were exposed.



200 IC chips are on a 26mmφ wafer.
Chip size: 1.2mmx1.2mm.

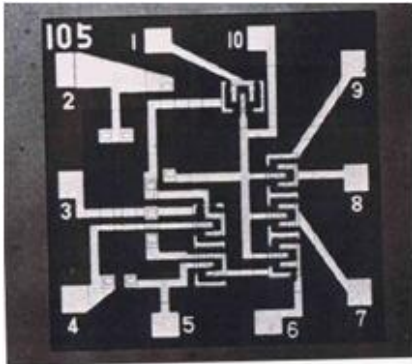


図1 9-C220A



The 1st IC

HD101 – HD106

