

Parametron Computer

In 1954, Eiichi Goto at the Takahasi Hidetoshi research laboratory, the Faculty of Science, at Tokyo University discovered the theoretical device of a ferrite core applying the phenomenon of parameter excitation oscillation, named it a parametron and published it in July 1954. Because the parametron was low cost and operated stably compared to a vacuum tube, many computers using the parametron as a base device were developed and commercialized. In October 1956, the parametron computer PD 1516 was manufactured by joint development between Tokyo University and JEOL. In March 1957, MUSASHINO-1 was completed at NTT under the supervision by Zenichi Kiyasu and design by Saburo Muroga, et al. This was the first commercialized parametron computer. The successor machine SASHINO-1B with same theory composition of MUSASHINO-1 was commercialized as FACOM (Fujitsu Limited). In 1958, Eiichi Goto, et al. produced PC-1 experimentally at the Faculty of Science at Tokyo University. The large parametron PC-2, the successor machine to PC-1, was manufactured by Fujitsu Limited and was sold under the name of FACOM 202. Then, a series of successor machines were commercialized: HI-PAC MK-1, 101, 103 by Hitachi, Ltd., NEA-1101, 1102, 1103, 1201 by NEC Corporation, OPC-1 by Oki Electric Industry Co., Ltd., FACOM 200, 202 by Fujitsu Limited, MELCOM 3409 by Mitsubishi Electric Corporation, and KODIC-401, 402 by Kodan Electronics Co., Ltd.