Robert A. Henle

Born 1923; died January 27, 1989, New York City; the chief IBM designer of the complimentary npn-pnp circuits used in the experimental, transistorized 604 calculator in 1964 known as the 608. He was also a major contributor to the circuits used in STRETCH and the 7000 series of computers in the 1960s; appointed as an IBM fellow in 1964 and spearheaded the IBM entry into monolithic memory technology.[1]

Education: University of Minnesota, 1951.

Professional Experience: IBM, 1951-1988.

Honors and Awards: Department of Defense Citation, 1974; member, National Academy of Engineering, 1982; fellow, IEEE; IEEE Edison Medal, 1987.

Following his graduation from the University of Minnesota in 1951, Henle joined an IBM group studying the application of transistor technology to computers. This work resulted in the development of the IBM-608, the company's first transistorized system. He then worked on the high-speed circuits for the IBM-7030 (STRETCH) computer and eventually the 7090. In the mid-1960s he began to concentrate on the development of monolithic memory technology, the first application of which was a storage-protect memory in System/370 Models 91 and 95. His work led in 1970 to the first 128-bit chip memory, which was used in the Model 145. He was appointed manager of Advanced Technology for the IBM Components Laboratory in 1975 and director of the Advanced Silicon Technology Laboratory in 1981. In April 1988, a symposium was held at the T.J. Watson Research Laboratory in honor of his 35th year of service to the corporation. He held 48 patents in computer technology.

BIBLIOGRAPHY

Biographical

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UPDATES

[1] This biography is based on Pugh, Emerson W, Lyle R. Johnson, and John H. Palmer, IBM's 360 and Early 370 Systems, MIT Press, Cambridge, Mass., 1991.