

## Erich Bloch

*Born January 9, 1925; headed the IBM development of the Solid Logic technology program, which provided IBM with the microelectronics technology for its System/360 computer*



*Education:* BS, electrical engineering, University of Buffalo, 1952.

*Professional Experience:* IBM Corp., 1952-1984; director, National Science Foundation, 1984-1990; distinguished fellow, Council on Competitiveness, 1990-present.

*Honors and Awards:* IBM Patent Award, 1961; National Medal of Technology, 1985; IEEE United States Activities Board Award for Distinguished Public Service, 1989; IEEE Founders Medal, 1990; member, National Academy of Engineering; fellow, American Association for the Advancement of Science; fellow, IEEE.

Bloch, a native of Germany, moved to Switzerland at the age of 14. There he obtained his pre-college education and studied electrical engineering for 2 years at the Swiss Federal Institute of Technology before emigrating to the US in 1948. Taking courses at night and working days as a research assistant in an industrial laboratory, Bloch obtained a bachelor's degree in electrical engineering from the University of Buffalo. He joined IBM in January 1952 and soon developed the first ferrite-core storage units used in commercial products. Later he initiated development of the company's first ferrite-core memory with over 1 million bits.

Subsequently, while serving as engineering manager for the high-performance Stretch computer, he became involved in the development of the SMS circuit and packaging technology. In 1962, he headed development of the Solid Logic Technology program, which provided IBM with the microelectronics technology for its System/360 computer. Subsequently, Bloch was appointed a vice president of the company's Data Systems Division and general manager of the East Fishkill facility, which was responsible for the development and manufacture of semi-conductor components used in IBM's product line. He was elected as IBM vice president in 1981. From 1981 to 1984, Bloch served as chairman of the Semiconductor Research Cooperative, a group of leading computer and electronics firms that funded advanced research in universities. He was also the IBM representative on the board of the Semiconductor Industry Association. In 1985, B.O. "Bo" Evans, Fred Brooks, and Eric Bloch received the National Medal of Technology at a White House ceremony for their work in developing the IBM System/360, described as "revolutionizing the industry." After leaving IBM in 1984 he served as director of the National Science Foundation until 1990. In 1989 Bloch was the recipient of the IEEE United States Activities Board Award for Distinguished Public Service and the 1990 IEEE Founders Medal.

He is a member of the National Academy of Engineering, a Fellow of the American Association for the Advancement of Science and of the Institute of Electrical and Electronics Engineers.<sup>1</sup>

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<sup>1</sup>From Pugh, Emerson W., Lyle R. Johnson and John H. Palmer, *IBMs 360 and Early 370, Systems*, MIT Press, Cambridge, Mass., 1991.

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## **UPDATES**

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