



KANSAS LEGEND BIOGRAPHY

Jack St. Clair Kilby (1923-2005)

Jack St. Clair Kilby was born in Jefferson City, Mo., but grew up in Great Bend, Kan., attending Great Bend High School. In 1937 during an ice storm, Kilby joined his father, president of a small power company, to meet with ham radio operators in an effort to communicate with others. Kilby's fascination with electronics blossomed and would eventually change the world.



Despite Kilby's aptitude for electronics, he was denied entrance into MIT, scoring 497 and needing 500 to gain admission. Instead, Kilby graduated from the University of Illinois with a B.S. in electrical engineering in 1947 and earned his masters from the University of Wisconsin in 1950. He took a job in Milwaukee with Centralab, building circuits for consumer electronics. In 1958, Kilby began his career with Texas Instruments, which would lead to numerous electrical engineering accomplishments that changed the wave of the future.

Kilby spent his first months at Texas Instruments attempting to solve circuit design problems. While everyone was on summer vacation, Kilby developed the first integrated circuit, or microchip, in a single piece of semiconductor. He presented his ideas on Sept. 12, 1958, and the idea was patented the following February. Kilby's invention revolutionized electronics and led to the information technology revolution.



Kilby went on to use the microchip for creating numerous other inventions, including the first handheld calculator and the thermal printer used in portable data terminals. He utilized the microchip in military, industrial and commercial applications to create new technologies. Kilby served as Distinguished Professor of Electrical Engineering at Texas A&M University from 1978 to 1985. He also took a leave of absence from Texas Instruments and explored silicon technology for generating electrical power from sunlight.

The recipient of the National Medal of Science in 1970 and inducted into the National Inventors Hall of Fame in 1982, Kilby used his own success to promote other inventors and engineers. Kilby was awarded the Nobel Prize in Physics in 2000 for helping lay the foundation of information technology. He held more than 60 patents during his lifetime.

Without Kilby's insight and drive, the world might not know personal computers, probes in space, pace makers or other life-saving devices. The microchip has revolutionized education, entertainment, manufacturing, transportation and many more industries. Kilby's contributions may be best summed up in the words of Texas Instruments President and CEO: "Jack did more than invent the integrated circuit that day...he invented the future." Kilby passed away in 2005 after a brief battle with cancer.

