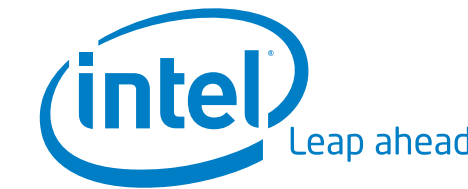


60 YEARS OF THE TRANSISTOR: 1947-2007



The Revolution Begins

Invented 60 years ago, the transistor is a key building block of today's digital world. Perhaps the most important invention of the 20th century, transistors are found in many devices and are the building blocks of computer chips. Intel, the largest manufacturer of computer chips, continues to innovate to help PCs and laptops become smaller, faster, sleeker and more energy-efficient. Many new applications and inventions powered by transistors have impacted all of our lives over the past 60 years.

1947

1947 - When it comes to helping jumpstart innovation and technology, no invention is more important than the transistor created 60 years ago at Bell Labs.

1951 - The first commercial device to make use of the transistor is put on the market - the Sonotone 1010 hearing aid.

1954 - The first transistor radio, the Regency TR-1, goes on the market for just \$49.99. The radio contains just four transistors.

1950

1960 - Sony introduces the first portable, transistorized TV, the TV-301. It has a modest 5-inch screen and uses 2.6 silicon and germanium transistors.

1965 - Moore's Law, which states that the number of transistors on a chip doubles about every two years, is born when Intel's Gordon Moore made a prediction about the semiconductor business that still holds true today.

1971 - Intel launches its first microprocessor, the 4004, containing just over 2,300 transistors.

1971 - Intel introduces the first single-chip pocket-size calculator, the LE-120A "HANDY", which uses a MOSFET M6610 integrated circuit.

1960

1976 - An operator in an early burrysuit shows how a 4-inch wafer is prepared for a positive acid spin.

1972 - Intel's first microprocessor, powered the Business calculator and paved the way for the personal computer.

1975 - The Altair 8800 microcomputer, based on the Intel 8080 microprocessor, was the first successful home or personal computer.

1970

1981 - The Intel 80386 microprocessor was selected to power the IBM PC.

1981 - IBM introduces the first personal computer with an Intel 80386 processor serving as the "brains" behind the computer.

1982 - Intel launches their new high performance, 16-bit 80286 microprocessor featuring 134,000 transistors.

1980

1983 - Mobile communication changes forever when Motorola introduces the first commercial mobile phone - the DynaTAC 8000X - powered by transistors and costing a mere \$3,995.

1993 - With the creation of the World Wide Web in 1990, the need for transistor speed becomes greater than ever.

1993 - The World Wide Web debuts and Intel responds with its Pentium® processor, boasting speeds of 66 and 80 MHz. 3.1 million transistors.

1990

2000 - The 42-million transistor debuts. If automobile speed increased similarly over that same period, you could drive from New York City to San Francisco in 13 seconds.

2000 - Silicon Valley based company develops TIVO - a device that records TV programs on an internal hard drive.

2003 - Intel® Centrino® mobile technology brought high performance, enhanced battery life, and integrated WLAN capability to thinner, lighter PCs.

2000

2005 - Dual-core technology was introduced.

2006 - The dual core Intel® Itanium® 2 processor launches with the world's most intricate product design to date, utilizing more than 1.72 billion transistors.

2007 - 45nm Intel debuts the Penryn chip - the biggest change to transistors in 40 years based on the company's 45 nanometer transistor technology. More than 200 million transistors fit across the width of a human hair.

2007 - In the second half of 2007, Intel began production of the next generation Intel® Core™ 2 and Intel processor families based on 65-nanometer Intel 65nm transistor technology.

2007

The Revolution Continues

Intel continues to deliver on the promise of Moore's Law with the introduction of powerful multi-core technologies, transforming the way we live, work and play once again.

Moore's Law

In 1965, Intel co-founder Gordon Moore predicted that the number of transistors on a chip would double about every two years. Since then, Moore's Law has fueled a technology revolution as Intel has exponentially increased the number of transistors integrated into its processors for greater performance and energy efficiency.

