60 YEARS OF THE TRANSISTOR: 1947 – 2007

The Revolution Begins
Invented 60 years ago, the transistor is a key building block of today’s digitally connected world, and invention that has transformed the way we think, work, and live. It is simply incredible to think that by using the same manufacturing processes that we use today, we can make a transistor that is 1,000 times smaller than the initial one we first introduced in 1947.

Moore’s Law, which states that the number of transistors integrated into its processors every two years, has fueled incredible advancements in computing over the past 60 years. Since then, Moore’s Law has helped PCs and laptops become smaller, thinner, and more powerful, making modern technology possible.

In 1954, Intel® introduced the 4004 processor, containing 2,300 transistors. This was the first microprocessor. In 1965, Intel® introduced the 8008 processor, which featured 500-800 KHz of initial clock speed. In 1968, Intel® introduced the 8080 processor, which featured 6 MHz of initial clock speed. In 1971, Intel® introduced the 8088 processor, which featured 1.5 MHz of initial clock speed. In 1972, Intel® introduced the 8080 microprocessor, which was the first home or personal computer.

In 1975, Intel® introduced the 8086 processor, which featured 6/uni03BC MHz of initial clock speed. In 1979, Intel® introduced the 8088 processor, which featured 5 MHz of initial clock speed. In 1981, Intel® introduced the 80286 processor, which featured 6 MHz of initial clock speed. In 1982, Intel® introduced the 80386 processor, which featured 16 MHz of initial clock speed. In 1985, Intel® introduced the 80486 processor, which featured 220,000,000 transistors. In 1987, Intel® introduced the 80586 processor, which featured 8088 processor the brains of IBM's personal computer.

In 1989, Intel® introduced the 486 processor, which featured 1,500,000 transistors. In 1990, Intel® introduced the Pentium processor, which featured 32,000,000 transistors. In 1991, Intel® introduced the Pentium processor, which featured 3,100,000 transistors. In 1992, Intel® introduced the Pentium processor, which featured 6,300,000 transistors. In 1993, Intel® introduced the Pentium processor, which featured 112 million commands per second. In 1994, Intel® introduced the Pentium processor, which featured 1,223,000,000 transistors. In 1995, Intel® introduced the Pentium processor, which featured 5,600,000 transistors. In 1996, Intel® introduced the Pentium processor, which featured 8,100,000 transistors. In 1997, Intel® introduced the Pentium processor, which featured 8088 processor serving as the first personal computer with an Intel processor.

In 1998, Intel® introduced the Pentium processor, which featured 2,125,000,000 transistors. In 1999, Intel® introduced the Pentium processor, which featured 2,300,000,000 transistors. In 2000, Intel® introduced the Pentium processor, which featured 3,125,000,000 transistors. In 2001, Intel® introduced the Pentium processor, which featured 4,000,000,000 transistors. In 2002, Intel® introduced the Pentium processor, which featured 5,120,000,000 transistors. In 2003, Intel® introduced the Pentium processor, which featured 6,300,000,000 transistors. In 2004, Intel® introduced the Pentium processor, which featured 11,500,000,000 transistors. In 2005, Intel® introduced the Pentium processor, which featured 1,720,000,000 transistors. In 2006, Intel® introduced the Pentium processor, which featured 1,920,000,000 transistors. In 2007, Intel® introduced the Pentium processor, which featured 2,200,000,000 transistors.

The Revolution Continues
Intel continues to deliver on the promise of Moore’s law and invented powerful multi-core technologies. Building the future is not a one and only step, but a journey.