## Moore's Law



In 1965, Gordon Moore sketched out his prediction of the pace of silicon technology. Decades later, Moore's Law remains true, driven largely by Intel's unparalleled silicon expertise.

According to Moore's Law, the number of transistors on a chip roughly doubles every two years. As a result the scale gets smaller and smaller. For decades, Intel has met this formidable challenge through investments in technology and manufacturing resulting in the unparalleled silicon expertise that has made Moore's Law a reality.

In a universe where smaller is better, Intel's current process technology the most advanced silicon process in volume production anywhere in the world - prints individual lines smaller than a virus and 1,000 times thinner than a human hair and manufactures microprocessors with some features as thin as five atomic layers.

As transistor counts climb so does the ability to increase device complexity and integrate many capabilities onto a chip. The cumulative impact of these spiraling increases in capability power the economy and the Internet, running everything from digital phones and PCs to stock markets and spacecraft, and enable today's information-rich, converged digital world. Intel expects to continue driving the leading edge of Moore's prediction well into the foreseeable future.

## Raising the Bar

Nearly 40 years ago, Intel co-founder Gordon Moore forecasted the rapid pace of technology innovation. His prediction, popularly known as "Moore's Law," states that transistor density on integrated circuits doubles about every two years. Today, Intel continues to lead the industry, driving Moore's Law to increase functionality and performance and decrease costs, bringing growth to industries worldwide.

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## The price per transistor

on a chip has dropped dramatically since Intel was founded in 1968. Some people estimate that the price of a transistor is now about the same as that of one printed newspaper character.

## "Another decade is probably straightforward...There is certainly no end to creativity."

Gordon Moore, Intel Chairman Emeritus of the Board Speaking of extending Moore's Law at the International Solid-State Circuits Conference (ISSCC), February 2003.

