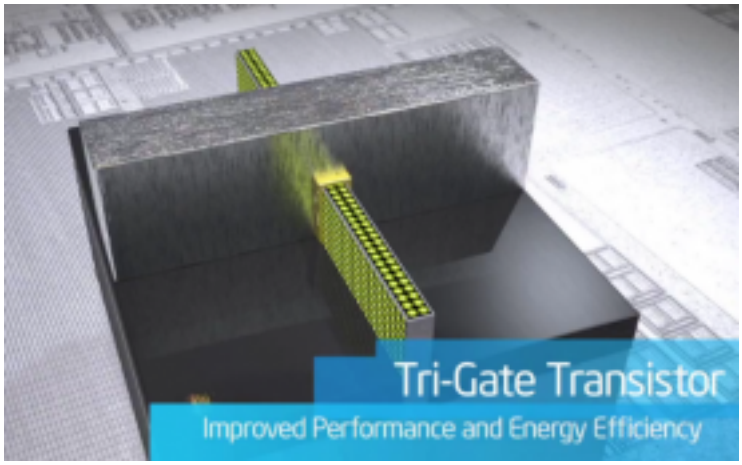
Intel Launching Next-Generation ‘Ivy Bridge’ Chips Today



Intel [1] is officially launching on Monday its next-generation chip technology, codenamed Ivy Bridge. The new chips will be available for regular laptops and desktops immediately, although versions for the thinner Ultrabook designs will take a few more weeks.

For Intel, Ivy Bridge [2] represents more than just the regular generational shrinking of transistors to increase chip performance. Besides taking the company’s chip design to the 22-nanometer level (the distance between individual transistors), the new processors are the first to use a technology called Tri-Gate.

Tri-Gate changes the game somewhat for chip design. While the silicon in computer chips has thus far been designed to be flat, Tri-Gate is the first design to use depth, which is why the design is often referred to as “3D.” The design lets the transistor run at lower voltages, which both saves power and improves performance. The video below explains further.

Although Intel has been talking about the tech for about a year, those improvements are finally about to be realized in machines people can actually buy. The initial release of the new designs will revamp Intel’s Core i5 and i7 processors, the *BBC* reports [3], and it includes 13 separate quad-core processors.

“This is Intel’s fastest ramp ever,” Intel PC business chief Kirk Skaugen told the *BBC*. “This is the world’s first 22 nanometre product and we’ll be delivering about 20% more processor performance using 20% less average power.”

Skaugen says Intel’s various partners have more than 300 mobile products and 270 desktop designs in the works for Ivy Bridge.

Besides simple raw processing power, the Ivy Bridge chips also have the benefit of an integrated GPU (graphics processing unit). That makes Ivy Bridge machines ideally suited to take on pro-video tasks like editing the new ultra-high-resolution 4K [4] format. For everyday consumers, tasks like compressing videos for email should happen much faster.

Are you planning to buy an Ivy Bridge machine this year? Why or why not? Share your thoughts in the comments.

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Posted by Janine E. Mooney, Editor

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