Intel introduces first batch of Ivy Bridge processors

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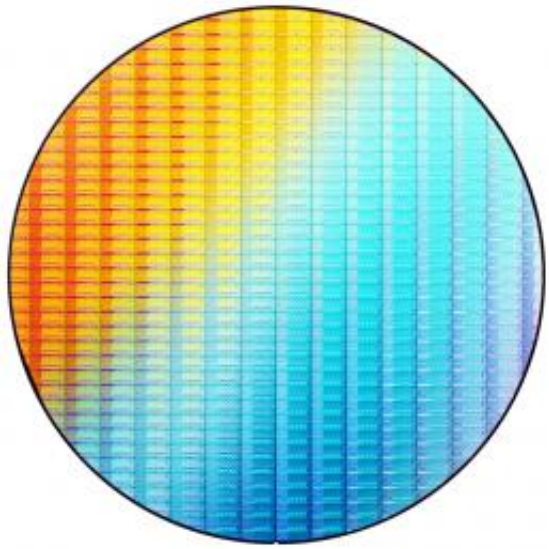

3nd Gen Intel Core Processor Wafer

(Phys.org) -- Intel officially launched its 22-nanometer Ivy Bridge family of processors on Monday -- well, sort of. A sea of news headlines using the words rollout and release can be measured with the fact that Intel has not yet issued the entire range of Ivy Bridge processors, but just the first wave.

What is officially off the assembly lines and available this month are its quad-core third-generation core processors destined for desktop and some other types of PCs. According to Intel's wording, they are available

now in "powerful, high-end desktop, laptop and sleek all-in-one (AIO) designs."

While the full range is not yet available, the Monday announcement by Intel about Ivy Bridge, which is the newest chip technology from Intel, is considered as important news. Intel's Ivy Bridge processors are the first to use its 22 nanometer (nm) tri-gate technology. With Ivy Bridge, Intel moves closer to the holy grail of "more muscles, less power," said a blogger on *seattlepi.com*. Intel said the third-generation core chips operate with 50 percent less energy than Sandy Bridge. "This is the world's first 22 nanometer product and we'll be delivering about 20 percent more processor performance using 20 percent less average power," Kirk Skaugen, an Intel vice president, told the BBC.

Intel watchers generally see Ivy Bridge as a notable development in silicon transistor design. Industry eyes, meantime, are also on the dual-core processors for ultrathin books and other designs that Intel will officially launch in months to come. While tablets like Apple's iPad are attractive to many consumers, there is a contingent of business and professional knowledge workers who still prefer maintaining laptops and PCs for documentation and file-sharing. The trend looks more like full-performance lightweight laptops along with tablets rather than one form replacing the other. Analysts expect Intel's Ivy Bridge to have an impact on a revived notebook market. Intel Capital created a $300 million fund to support the "ultrabook" concept. According to *EE Times*, Intel defined the ultrabook category including a range of systems specifications on startup time, thickness, security features and other requirements.

The principal talking point outside Intel on Monday was on Ivy Bridge graphics. Its integrated graphics processing unit is expected to make editing videos faster and game play sharper. Observers see Ivy Bridge as proof that Intel gets the importance of seeing to it that graphics becomes a key area of improvement for its line of processors.

3rd Generation Intel Core i7 Processor for Desktop

Ivy Bridge supports 4K resolution-and observers see the chips as a challenge to AMD's lead in graphics performance.

According to Intel, the time line for Sandy Bridge availability is as follows: Systems based on quad-core processor products will be available beginning this month from system makers and resellers. "Additional versions" for servers, Ultrabook devices and other designs will be available "later this year."

More information: Press release