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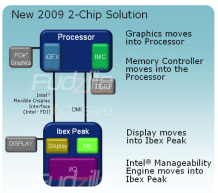

Havendale diagram
Fudzilla

Intel's Havendale, the CPU Featuring Integrated Graphics

Intel plans to simplify the chipset architecture, integrating more functions into less chips

Intel's roadmap for the Nehalem processors has already showed us that the second half of 2009 would bring to the field two microprocessors the company designed for the mainstream market area. Havendale is one of these CPUs, the first one announced by Intel to feature integrated graphics. While for now everybody would need a CPU, a Northbridge and a Southbridge, in order to make any Intel platform work, Havendale promises to change that. According to Intel, three chips are no longer required, as the company's Ibex peak chipset is expected to become the single chip solution of the industry.The graphics processing unit the Havendale CPU features is called iGFX. Intel says that the microprocessor will also support external PCIe graphics at the same time. Although the chip will certainly have some limitations, it should rise pretty high on any performance list, if we were to take Intel's words for granted. The Havendale will come as a Nehalem derived 45nm dual core processor. The CPU side of the chip will also feature an integrated memory controller. Intel's chip will have DDR3 support. The interaction between the microprocessor and the Ibex peak will be sustained by a direct memory interface (DMI).Intel's Flexible Display Interface (FDI) will allow interconnectivity between the Ibex peak Southbridge and the GPU. At the same time, the display connectivity will be featured by the chipset. An input/output part will also be included in the chipset, along with the Manageability engine. It is not a new one, as Intel's 4-series Northbridge already feature it. According to Intel, having a smaller number of chips means higher integration and lower power consumption. At the same time, the overall performance is expected to be greatly enhanced. As the diagram published by the guys from Fudzilla shows, it does simplify things a bit, yet its capabilities remain to be seen when the product is ready.