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[Intel's Low Cost Alternative Will Be Based on Silverthorne](#)

Diamondville is due to appear next year and will power low-cost notebooks

Intel has announced their new chip, Diamondville, targeted at ultra-low cost and low-power notebooks. Built on the core of the low-power Silverthorne processor, the new CPU will enter mass manufacturing next year. According to Intel officials, Diamondville will be the core of low-cost low-performance computers, similar to OLPC's XO laptop, Intel's Classmate or Asustek's Eee PC. Silverthorne is a low-power processor based on the 45-nanometer technology that preserved its instruction set compatibility with older Merom architecture (the current Core 2 Duo line of CPUs for notebooks). This feature is extremely important in terms of software compatibility, as the applications that are running on Merom would run on Silverthorne without the need to recompile the code. "What we have done is changed the microarchitecture dramatically, effectively tore it up and re-did it, to get to lower power", Chandrasekher said. Menlow, a chipset for mobile Internet devices (MIDs) and UMPCs (ultra-mobile PCs), that is scheduled to ship in the first half of next year, achieves Intel's low-power target of 0.5 watts for chips for Internet devices, said Anand Chandrasekher, Intel senior vice president and general manager of the company's Ultra Mobility Group. The processor's utility will extend beyond notebook integration, as Intel plans to embed Silverthorne both in consumer electronics applications (set-top boxes and DVD players) and in the automotive sector. There are little chances that Intel would integrate extended functionality into the Silverthorne applications processor, such as communication capabilities, because the equipment manufacturers like to have the final word upon the modem brand selected for inclusion. Intel are set to make a strong presence on the consumer market and have promised that they would be introducing new products and technology at a more accelerated pace than by now. "We believe that this is a critical piece for winning in these markets," continued Chandrasekher. 2009 will bring another novelty from Intel, the Moorestown chip.