

By: October 2007, Hardware Editor

Intel to Develop a New CPU Architecture

OLPC will be its first client

Ultra low cost mobile computing systems are now very much advertised thanks to a number of competing projects like the OLPC, Asus Eee PC and the Intel Classmate PC that are all aimed at the low cost computer market while providing a minimum of processing power and a basic computing functionality that cannot rival with more expensive and better equipped solutions. The OLPC project announced some time ago its first mass production laptop, the XO machine and this ultra minimal mobile computer system comes powered by an Advanced Micro devices central processing unit that trades computing power for low energy consumption. The XO laptops from OLPC are now using the AMD Geode LX-700 central processing unit that runs at 433MHz but in the near future things may look different as Intel has reported to have begun designing a new processor architecture that is aimed specifically at the OLPC market. Right now Intel already has a number of processors that are offering quite a performance punch at a low energy footprint and which are integrated into other low cost mobile computing solutions like the Asus Eee or the Intel made Classmate PC, but the OLPC has even lower energy requirements and only some modified versions of Celeron M or the upcoming Silverthorne processors are now able to compete against the AMD Geode offering. Even so, the current Intel processors aimed at the low power and mobile computer market were ruled out as the hardware manufacturing company says that the new features required a whole new x86 compatible processor architecture in order to achieve the best possible results. For now Intel is content enough to let AMD power the OLPC mobile computing device while concentrating on the design and manufacture of a series of processing units that can dethrone the Geode LX-700 while at the same time Intel is also supplying the Asus Eee PC with Celeron M processors until the Silverthorne comes out. On the financial side, the implication of Intel in the OLPC project may raise significantly the end price of the XO machine as the big company is not really known for its low cost solutions but rather for overpriced hardware components even when said components are quite a few generations old and obsolete.