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[ATI and NVIDIA to Launch 40nm Chips in Mid '09](#)

The two graphics processor manufacturers are rumored to skip the 45nm technology process



ATI and NVIDIA are rumored to launch 40nm GPU in June next year

The latest news on the Web points towards Advanced Micro Devices' graphics product group ATI and NVIDIA Corp. planning to release their next-generation graphics processing units (GPUs) sometime in mid-2009. The interesting side of these future releases is the fact that both graphics chip manufacturers are said to go directly to the 40-nanometer fabrication technology, and skip TSMC's 45nm manufacturing process.

The move towards a smaller die should help both companies reduce manufacturing costs. As many of you already know, there is a cut-throat price war between the two at the moment, while they also compete at delivering products meant to become the highest-performance discrete graphics processors on the market. If the fabrication process is shrunk, the manufacturers will be able to stack more transistors inside the chip, which is supposed to bring more functionality and performance. At the same time, the cost of the chip and its power consumption will drop.

It seems that, next year, AMD will bring to the market the 40nm design code-named ATI RV870, while NVIDIA is expected to launch the code-named GT216. The new designs are expected to be completed by the end of this year, according to China Economic News Service. If everything goes according to the plan, both ATI and NVIDIA will launch their new products in the second half of June 2009.

ATI has already presented some of its objectives for the next year. AMD's graphics unit outlined the GPU manufacturing transition to 40nm process technology, as well as the usage of GDDR5 memory standard and the launch of DirectX 11-compatible GPUs. According to the manufacturer, the GPGPU will rise largely benefiting from computing shaders of DirectX 11 and OpenCL. ATI also predicted the arrival of different consumer applications that would take advantage of GPGPU, emphasizing the importance of graphics processors.

It remains to see whether the two companies will come towards users with other products as well until the arrival of the next-generation flagship cards. AMD is expected to build a 300mm factory using 32nm process in the state of New York, but it will come on-line beyond 2010.