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By: Ionut Ciocirlie, Hardware Editor



[G80 Is Actually a CPU](#)

Or at least it can be programmed as one

Nvidia has really developed a monster GPU. And I'm not just talking about the fact that it smashed all the 3D records at the time it appeared on the market. As I've stated earlier in one of my articles regarding the internal structure of the G80 chip, Nvidia took a different approach when they developed it. The G80 is similar to a CPU in more ways than you think, mainly because it uses unified shaders which can be programmed in every needed way. But there's a downside to that, since the shader units have to work at a higher speed than the GPU itself in order to deliver the expected performance. The downside refers to heat and power consumption because an 8800 GTX card consumes about 140W in full load. Recently, Nvidia unveiled a C compiler for its G80 line. The compiler was specifically written for this GPU, but it seems that the language and routines look somewhat similar to those needed for CPU programming. Translated into words, it looks like Nvidia's GPGPU (general purpose GPU) can be programmed to do almost everything a normal CPU can do and it has the horsepower to do it a lot faster. And I'm not just talking about Physics Processing here. Ati wanted to do the same and AMD even had a shot at developing a GPGPU board (the Stream Processor based upon an X1900 card) but the project didn't seem to turn many heads. Unofficially, some engineers from AMD took a closer look at Nvidia's monster and came up with the conclusion that it works almost similar to an x86 CPU. Need I say more? I think Nvidia succeeded in creating a possible Fusion architecture maybe 2 years earlier than expected. I wonder what will happen if they get an x86 license.