G80 Programming Model

Shader Program Source (Cg/HLSL) → **Compiler** → **Intermediate Language (Dedicated for Graphics)** → **Graphics Driver** (thick layer) → **Program Object (Native ISA)** → **GPU Hardware**

C → **NVIDIA C Compiler** → **NVIDIA Assembly for Computing** → **CUDA Runtime & Driver** (very thin layer) → **Program Object (Native ISA)** → **GPU Hardware**

Program Object (x86 etc) → **Instruction Decoder** → **uOPs (Internal ISA)** → **CPU Execution Core**

CPU Hardware