

### **Why has Hercules used SDR memory rather than DDR memory for their 3D Prophet II MX card?**

DDR RAM operates 2 data transfers per cycle in answer to most of the instructions from the 3D chipset, while SDR RAM operates 1 transfer per cycle in answer to all the instructions from the 3D chipset.

3D Prophet II MX is based on the NVIDIA® Geforce2 MX chipset, which can be interfaced with either 128-bit SDR RAM or 64-bit DDR RAM. 2 cycles of DDR RAM can transfer up to 2x64-bit or 128 bit, which reaches the same data transfer per cycle as the SDR RAM, but does not go any faster.

Hercules 3D Prophet II MX uses 183MHz RAM, so that its cycles are faster than other Geforce2 MX based boards with 166 or 150MHz RAM, or even those with DDR RAM.