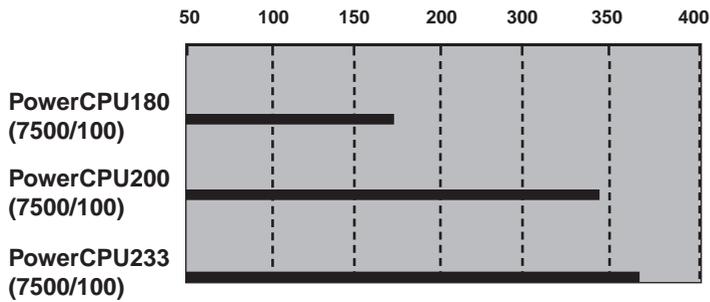
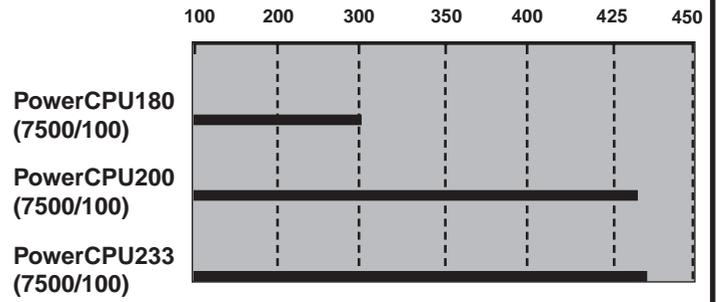


# Benchmarks

## CPU Performance



## Graphics Performance



Tests were conducted using MacBench®. Individual results may vary due to BIOS settings.

### What is BSO?

Bus Speed Optimizer is very important to the performance of the PowerCPU™ processor cards. It allows the card to be "fine tuned" for optimum performance in a particular machine.

The bus speed and bus ratio are individually tuned to get the most performance from the processor. The bus speed is the speed at which all other components talk to each other within the computer. The bus ratio is the ratio in which the processor talks with the bus.

The particular speed of a computer, measured in MHz (megahertz), can be calculated as follows:

Bus Speed x Bus Ratio = Processor Speed.

The main idea behind this approach of fine tuning the bus speed and bus ratio is to maximize the computer's performance. For example: To achieve a bus speed of 180 MHz the bus speed could be set to 36 MHz and the bus ratio set to 5 to 1. It could also be set to 45 MHz and a ratio of 4 to 1 to get to 180 MHz. However, the bus is now operating 25% faster, meaning the computer is communicating with increased efficiency.

Is BSO necessary to run the card?

Nb. The card can simply be plugged in and operated at the default speed with no adjustments at all.

Are there any software compatibility issues?

Nb. Apple does recommend however, that any user running a processor card over 200 MHz use the PowerPC interrupt extension. It is available directly from Apple at [www.info.apple.com](http://www.info.apple.com).

Will my level 2 cache card work?

An accelerated cache that operates at 6ns or faster will work. Most cache modules run at 12ns, Apple's specification, and will cause a bottleneck and sometimes a problem with the computer. Just remove the old cache for optimum performance.

**TechWorks Corporate**  
4030 W. Braker Ln.  
Austin, Texas 78759-5319  
1-800-688-7466  
Voice 512.794.8533  
Fax 512.794.8520

**TechWorks U.K: Ltd.**  
811-82 Plymouth Rd.  
Trading Estate,  
Slough SL1 4LP, U.K.  
Voice +44 01753 898 500  
Fax +44 01753 898 501

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