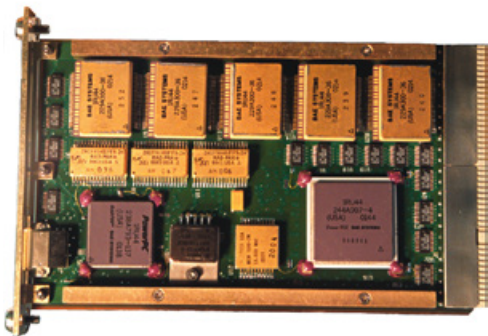


# RAD750<sup>®</sup> 3U CompactPCI single-board computer



The 3U CompactPCI standard single-board computer, available in flight and prototype versions, employs the PowerPC RAD750<sup>®</sup> microprocessor, the radiationhardened version of the IBM PowerPC 750. The companion PowerPC bridge ASIC provides access to the memory and the PCI version 2.2 backplane bus.

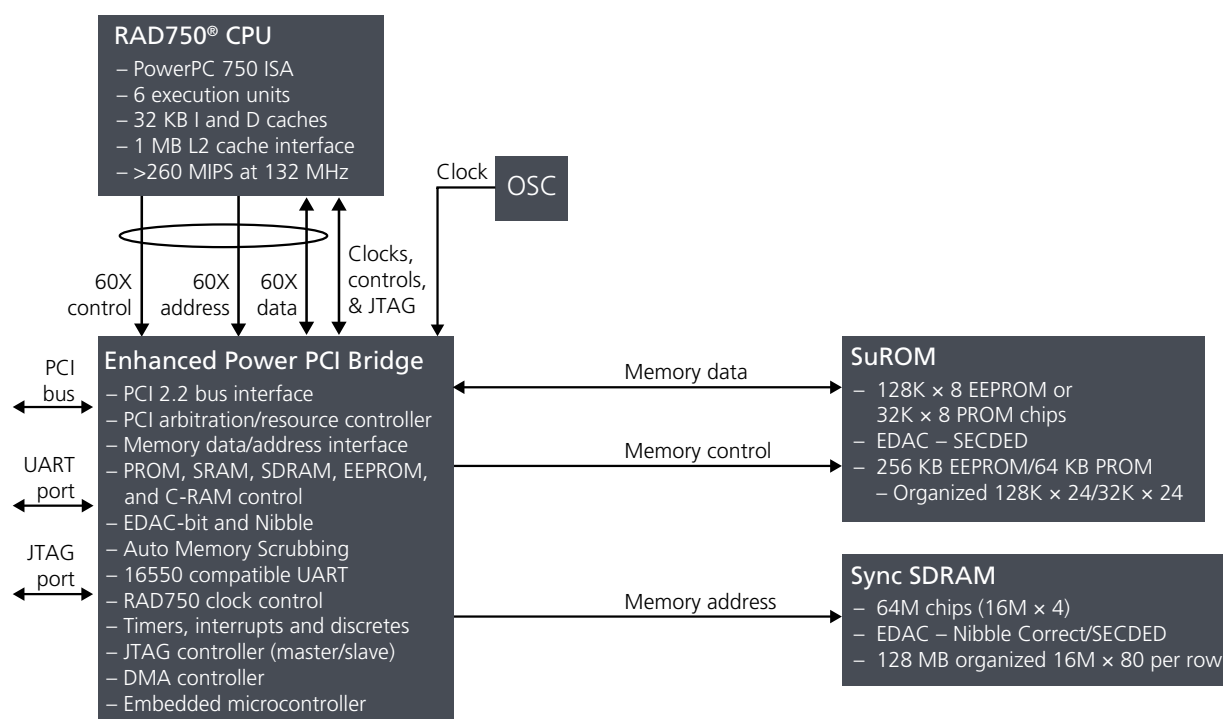
## Key features

- Example startup ROM and VxWorks board support package provided for all hardware configurations
- Green Hills Software's INTEGRITY real-time operating system can serve as an alternate board-support package
- Hardware reference manuals and software users guide provided
- Software developed for the RAD6000<sup>®</sup> processor is easily ported to the RAD750<sup>®</sup>
- All compilers currently available for the commercial PowerPC 750 are fully compatible with the RAD750<sup>®</sup> processor
- Operating systems for PowerPC 750-based computers are easily ported to RAD750<sup>®</sup> computers- VxWorks and INTEGRITY currently available
- Virtutech offers a RAD750<sup>®</sup> simulator

## Specifications

Form factor	CompactPCI 3U (100 mm x 160 mm) Weight: 549 grams
Memory	128 MB SDRAM, 256 kB SUROM
Radiation-hardness	Total dose: >100 Krad (Si) SEU: 1.9 E-4 errors/card-day (90% W. C. GEO) varies with orbit Latchup-immune
Performance	>260 Dhrystone 2.1 MIPS at 132 MHz 4.3 SPECint95 4.6 SPECfp95 at 132 MHz
Power supply	3.3V ± 10 percent (2.5 volts generated via on-board regulator)
Power dissipation	<10.8 watts
Rail temperature range	-55 degrees celcius to +70 degrees celcius

## RAD750® 3U flexible architecture



## RAD750® family of products

RAD750® radiation-hardened PowerPC microprocessor  
 RAD750® 6U CompactPCI single-board computer  
 RAD750® 6U CompactPCI extended single-board computer

RAD750® 3U CompactPCI single-board computer  
 RAD750® space computers Virtutech Simics virtual platform  
 RAD750® custom single-board computers

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