

SCP/DCP-122 cPCI Single Board Computer

The SCP/DCP-122 is a highly

capable, feature-rich, 3U CompactPCI

Single Board Computer (SBC) and a

member of our CompactCore cPCI

product family.

Designed for space and power constrained applications, the 122 offers the greatest processing/lowest power consumption of any ruggedized 3U cPCI single board computer. Based on the IBM 750FX processor, it runs at a clock speed of 800 MHz while executing an impressive 1856 Dhrystone Millions of Instructions per Second (DMIPS).

The challenge of high density computing is to pack the greatest functionality into the smallest standard form factor, while retaining as much flexibility as possible.

In conjunction with its processing power, the SCP/DCP-122 meets this challenge by offering a full-speed PMC site that allows developers to integrate PMCs directly onto the board.

A rich complement of I/O is available on the SCP/DCP-122 including Ethernet/Fast Ethernet, up to 4 serial channels (RS-232/422), up to 16-bits of discrete digital I/O and a Universal Serial Bus (USB) port.

For more information on our broad range of high-integrity computing solutions, please visit our website at www.cwcembedded.com.





SCP/DCP-122

cPCI Single Board Computer

Features

- Based on the IBM PowerPC 750FX processor
 - 800 MHz
 - 1856 DMIPS
 - 100 MHz CPU bus speed
 - 512 Kbyte of internal ECC L2 Cache running at core processor speed
- cPCI Bus
 - System slot board and Peripheral slot board capable (auto-sensing)
 - 3.3V or 5V signaling supported
 - 33MHz or 66MHz operation
- PMC Expansion Site
 - 64-bit, 33/66 MHz
 - Support for 3.3V or 5V PMCs
 - Full 64 PMC I/O variant available
- Memory
 - 128 Mbytes or 256 Mbytes of SDRAM with ECC
 - 64 Mbytes non-volatile Flash write protectable
 - 8 Mbytes Flash for Permanent Alternate Boot Site (PABS)
 - 32 Kbytes non-volatile RAM
 - 512 bytes of serial EEPROM
- I/0
 - 1 x 10/100BaseT Ethernet port
 - 2 x RS-232 serial port
 - 1 x USB
 - 8 x general purpose DMA controllers
 - Up to 16 bits of Discrete I/O
 - Onboard temperature sensor
 - Two EIA-422 async channels or One EIA-422 synchronous channel or Four pairs of differential I/O

Timers

- Eight 32-bit timers
- Three cascadable 24-bit general purpose timers
- Avionics watchdog timer with programmable time-out period
- Real-time clock with standby power connection
- Comprehensive Foundation Firmware with:
 - Debug monitor and non-volatile memory programmer
 - Suite of card support service routines
 - BIT firmware with 95% fault coverage
 - Ethernet connection option
- BSP Support
 - VxWorks Tornado 2.2.1 for PowerPC
 - INTEGRITY 4.09b
 - Linux & other RTOS (call for availability)
- Available in a range of ruggedization levels, both air and conduction-cooled

