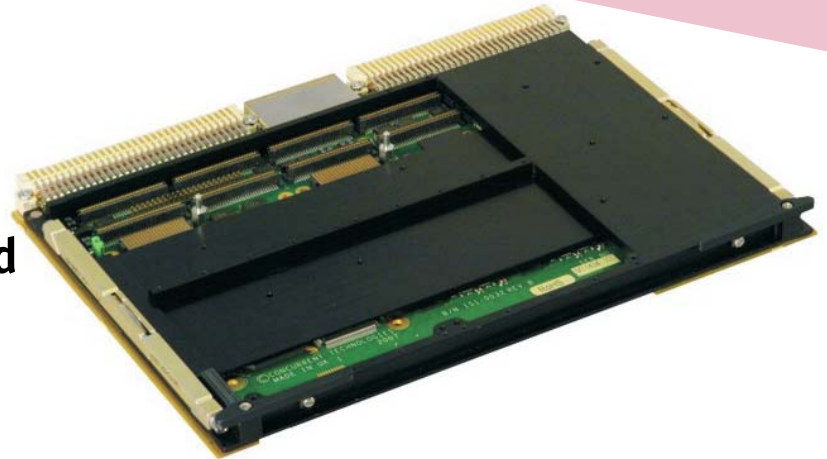


Intel® Core™ 2 Duo Processor Dual PMC Embedded Controller Rugged Conduction-Cooled



APPLICATIONS

The VP 417/031-RC is a PC-compatible high performance, high functionality, ruggedized conduction-cooled VME64x processor board supporting the 1.5 GHz Intel Core 2 Duo processor L7400. This single slot board features 2 PMC/XMC sites, up to 4 Gbytes of soldered DDR2 SDRAM and a variety of interfaces. The VP 417/031-RC is suitable for a range of demanding applications within the defense, industrial

control, telecomms, telemetry, scientific and aerospace markets. To simplify the board's integration many popular industry standard operating systems are supported. The board is rear I/O plug compatible with the popular VP 417/03x, VP 417/031-RA, VP 315/02x-RC, VP 315/02x and VP 317/02x families (5-row backplane variants).

HIGHLIGHTS

- Ruggedized 6U single board computer:
 - conduction-cooled to IEEE 1101.2
 - supports 2 conduction-cooled PMC modules conforming to ANSI/VITA 20
 - -40°C to +85°C operating temperature
 - conformally coated
- 1.5 GHz Intel® Core™ 2 Duo processor:
 - 667 MHz Front Side Bus
 - 4 Mbytes L2 cache
 - Intel® 64 Technology (64-bit computing support)
 - low power processor
- Up to 4 Gbytes of dual channel DDR2-400 ECC SDRAM
- High performance SATA and EIDE disk interfaces with optional ruggedized CompactFlash® carrier
- 2 x PMC/XMC module interfaces with rear I/O:
 - 32/64-bit, 33/66 MHz PCI/PCI-X™
 - 2 x XMC module interfaces (x8 PCI Express®)
 - Rear I/O
- 2 x 10/100/1000 Mbps Ethernet interfaces:
 - Gigabit Ethernet for VME64x backplane (VITA 31.1)
- 1 Mbyte of BIOS Flash EPROM
- 64 Mbytes of Application Flash EPROM
- Graphics interface
- Keyboard and mouse interfaces
- 2 x serial channels and 2 x USB 2.0 interfaces
- Watchdog timer; Long Duration Timer
- VME-64 Interface supporting A32/A24/A16/D64/D32/D16/D8(E0), MBLT64 and with support for fast hardware byte-swapping
- Single slot
- Ruggedized air-cooled version (RA-Series) available:
 - -40°C to +75°C, conformally coated
 - see separate VP 417/031-RA datasheet
- Non-ruggedized air-cooled versions available:
 - see VP 417/03x datasheet
 - rear plug compatible with the ruggedized versions
 - useful for bench development
 - use in commercial (non-rugged) applications
- Support for Linux®, Windows® 2000, Windows® XP, Windows® XP Embedded, Windows® Server 2003, VxWorks®, QNX®, Solaris™ and LynxOS®

