

General Features

The AVC-2 is a single slot, double height (6U) VME64x, extended VMEbus module with two separate PMC slots. The AVC-2 uses an on board, industry standard, Tundra chip (Universe II) providing the bridge between the VMEbus and PCIbus. The AVC-2 fulfils the requirements of the VME64x extension plus the Interface for Rear I/O. Each PMC-slot is in conformance with the Draft Standard Physical and Environmental Layers for PCI Mezzanine Cards (P1386.1/Draft 2.4).

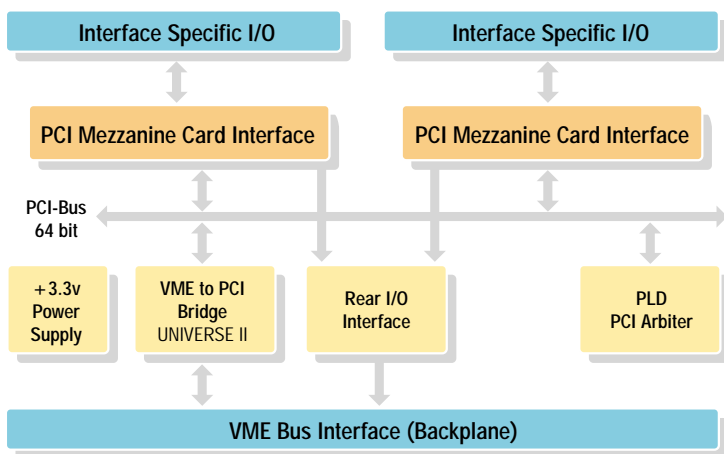
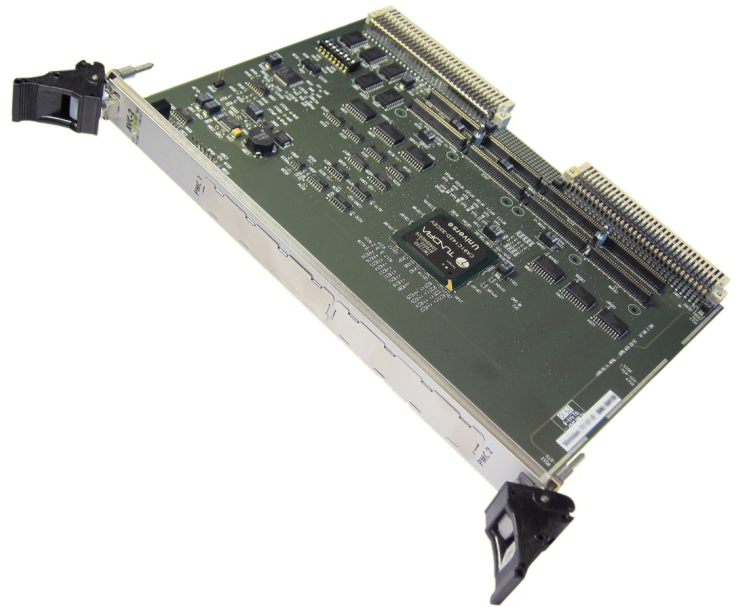
Key features of the AVC-2 module:

- Easily configured with any combination of PMC modules
- Combine different interface types and functions on one VME card
- User configurable base address
- Front panel LED's for VMEbus/PCIbus activity/failure display
- Fully compliant to VME64x – extended VMEbus
- Hosts PMC modules designed to PMC standard P1386.1/Draft 2.4
- Driver Software Library for VxWorks and LynxOS available

AVC-2



VME Generic Carrier Card for PMC (PCIbus Mezzanine Card) modules



PMC Module Interface

The AVC-2 is designed to plug all standard PMC modules with a maximum PCIbus width of 64bit operating at 33MHz.

The AVC-2 carrier board supports the + 5.0V PCIbus signalling, hence only + 5.0V tolerant devices may be used. The use of a voltage keying pin protects against false PMC assembly.

Avionics Databus Solutions



AVC-2

VME Generic Carrier
Card for PMC (PCIbus
Mezzanine Card)
modules

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Technical Data

VME to PCI Bridge: High performance 64bit VME interface

Fully compliant with PCI Standard (Revision 2.1)

VME master and slave capability

PCI master and slave capability

Integral FIFOs buffer multiple transactions in both directions

MBLT, BLT, ADOH, RMW and LOCK support

Programmable DMA controller with linked list support

Nine user programmable slave images on both busses

Four mailboxes and location monitor for message oriented systems

Eight semaphores

Full VMEbus system controller functionality

PCIbus burst size of 128 bytes

Supports coupled, posted and prefetched cycles on both busses

Provides clock speed of 33MHz with no wait states on PCIbus

Provides flexible mapping of hardware and software interrupts on both busses

Implemented using Industry leading VME to PCI Bridge device (TUNDRA UNIVERSE II).

PCIbus: Provides the connection between the PMC interfaces to the VMEbus Interface

Fully compliant to PCIbus Specification Rev 2.1

PCIbus width of 64 bit

PCIbus operation of 33MHz

Priority based PCIbus Arbiter

PMC Slot 1 + 2:

Each PMC slot provides 64bit, 33MHz PCIbus operation

Each PMC slot provides the capability for Rear-I/O (VME64x Mapping)

Front Panel: The Front panel provides two breakouts for using the standard PMC- front panel bezel

Front Panel LEDs: A System Indicator Array is located at the top end of the Front Panel for indicating assertion of the SYSFAIL line, the VMEbus activity, the PCIbus activity and PCIbus errors

Dimensions: Double Height (6U) Board (233 x 20mm x 160mm), Single-Width

Power Supply: +5VDC, 2 Watts typical without any PMC module installed

Weight: Approx. 230g without any PMC module installed

Temperature: 0 to +45°C Standard Operating
-15 to +60°C Extended Temperature
-40 to +85°C Storage

Humidity: 0 to 95% (non condensing)

Ordering Information

AVC-2

VME (6U) Carrier Module with two PMC slots

Note: Connector P0 will only be assembled upon request, please specify on the order.

Note: VME64x compliant IEEE 1001 Ejector Handles are assembled by default.

Original VME ScanBe Handles are available upon request, please specify on the order.

