

## VITA 31.1 GIGABIT ETHERNET on VME64x BACKPLANES



### FEATURES

- 10/100/1000BASE-T Ethernet switched network on a VME64x backplane
- 2 redundant VITA 31.1 Fabric Slots, right side of backplane
- 6 VITA 31.1 Node Slots
- Increase bandwidth and reliability
- Switches 100% compatible to PICMG 2.16
- Standard VME64x / cPCI connectors
- Automatic active Daisy Chain
- Passive inboard termination (basic current consumption 1.5A)
- Power input: M3/M4 power bolts (M3/M4 cable lugs, washer and nuts enclosed)
- ANSI/VITA 1.1-1997 VME64x Standard compliant
- According to VITA 1.7 Increased Current Level For 96 Pin & 160 Pin DIN/IEC Connector

### BOARD SPECIFICATIONS

- 10-layer board
- PCB thickness 4.6mm
- PCB Height: 262.09mm

### MECHANICAL SPECIFICATIONS

- 6U height
- 8 slots

### DESCRIPTION

VITA 31.1 defines a pinout and interconnection methodology for implementing a 10/100/1000BASE-T Ethernet switched network on a VME64x backplane. The PICMG 2.16 Packet Switched backplane specification adds a switched network based on Gigabit Ethernet to cPCI backplanes. The cPCI P3 connector has two Gigabit Ethernet ports for improved performance and redundancy. The VME64x P0 connector is identical to the cPCI P3 connector and has the same placement on the backplane. VITA 31.1 adopts the PICMG 2.16 P3 connector pinout for use on VME64x boards. It also adopts the definition of the fabric card described in PICMG 2.16. PICMG 2.16 compliant systems and VITA 31.1 systems can use the same switched fabric boards.

The routing topology is a star one: each Node Slot is connected with Ethernet Links to the Fabric Slots. Each of these links is used to transmit packets only between one Fabric Slot and one Node Slot. There are no bussed lines used between the Node Slots and Fabric Slots, only point to point connections. Switches for a Packet Switching (PICMG 2.16) backplane are 100% compatible to a VITA 31.1 backplane. Node Slots are similar to PICMG 2.16, where the Ethernet ports were assigned to the P3-cPCI connectors, in a VITA 31.1 backplane the Ethernet ports are assigned to the P0 connectors that for a standard VME64x backplane were used only as I/O connectors. Each port consist of four differential pairs (two Tx and two Rx).

### ORDER INFORMATION

Slots	Height	Part Number
8	6U	021-980