Dual Gigabit Ethernet Mezzanine Card
» General Purpose Long Life Ethernet Mezzanine
» x4 PCI Express™ XMC and PCI PMC interface to Host
» Standard Air- and Rugged Conduction-Cooled Versions
» Operating from -40° to +85°C
XMC-ETH2 Ethernet Mezzanine is designed to fit any VME, VPX or CompactPCI Single-Board Computer in the market.

XMC-ETH2 provides two gigabit copper links selectable in front or rear. When power on the P5 connector is detected, the bus interface is selected to be a PCI Express interface with four lines. Otherwise, it switches to PCI 33 MHz or 66 MHz, 32 bit on PMC connectors. The PMC PCI interface is compatible with 5V and 3.3V V(I/O) voltages. Rugged conduction-cooled builds feature a PMC version with PCI connection and an XMC version with PCI Express.

### Technical Information

**Controller**
- Dual Channel (Intel® 82571) Gigabit Ethernet Controller
- Automatic or manual selection between PCI 32 bit/33MHz (up to PCI 32 bit/66MHz) on P1/P2 and PCIe® link with 4 lanes on P5

**Copper Interface**
- Two 10/100/1000 BaseT Ethernet links either configurable on front R245 (with LED signaling) or to the rear P4

**Software Support**
- Linux

**Dimensions**
- 74mmx149mm (conforming to IEEE 1386/air-cooled and VITA 20/conduction-cooled)

### Environmental Specifications

**Conformal Coating**
- Optional

**Airflow**
- 1.5 m/s

**Temperature**
- **VITA 47-Class AC1**
  - Operating: 0° to +55°C
  - Storage: -45° to +85°C

**Cooling Method**
- Convection

**Vibration Sine (Operating)**
- 20/500 Hz: 2g

**Random**
- VITA 47-Class V1

**Shock (Operating)**
- 20g/11 ms Half Sine

**Altitude (Operating)**
- -1,640 to 15,000 ft

**Relative Humidity**
- 90% without condensation

### Ordering Information

**Article**

<table>
<thead>
<tr>
<th>Description</th>
<th>Part-No.</th>
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</thead>
<tbody>
<tr>
<td>XMC-ETH2 Air-Cooled Commercial Build, front and rear Ethernet ports, PCI PMC and PCIe XMC interface</td>
<td>XMC-ETH2-SA-000</td>
</tr>
<tr>
<td>XMC-ETH2 Air-Cooled Commercial Build, front and rear Ethernet ports, PCI PMC and PCIe XMC interface, conformal coating</td>
<td>XMC-ETH2-SA-000V</td>
</tr>
<tr>
<td>XMC-ETH2 Air-Cooled Commercial Build, front and rear Ethernet ports, PCI PMC only interface, no P5 XMC connector</td>
<td>PMC-ETH2-SA-000</td>
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<tr>
<td>XMC-ETH2 Rugged Conduction-Cooled Build, front and rear Ethernet ports, PCI PMC only interface, no P5 XMC connector</td>
<td>PMC-ETH2-RA-000</td>
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<tr>
<td>XMC-ETH2 Rugged Conduction-Cooled Build, rear Ethernet ports only, PMC configuration, no P5 PMC connector</td>
<td>PMC-ETH2-RC-000</td>
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<tr>
<td>XMC-ETH2 Rugged Conduction-Cooled Build, rear Ethernet ports only, XMC configuration, no P1/P2 PMC connector</td>
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**Controller**
- Dual Channel (Intel® 82571) Gigabit Ethernet Controller
- Automatic or manual selection between PCI 32 bit/33MHz (up to PCI 32 bit/66MHz) on P1/P2 and PCIe® link with 4 lanes on P5

Two build options for rugged versions:
- PMC with PCI connection from PCI 32 bit/33MHz or 66MHz on P1/P2
- XMC with connection speed from one PCIe® link with 4 lanes on P5

**Copper Interface**
- Two 10/100/1000 BaseT Ethernet links either configurable on front R245 (with LED signaling) or to the rear P4

**Software Support**
- Linux

**Dimensions**
- 74mmx149mm (conforming to IEEE 1386/air-cooled and VITA 20/conduction-cooled)