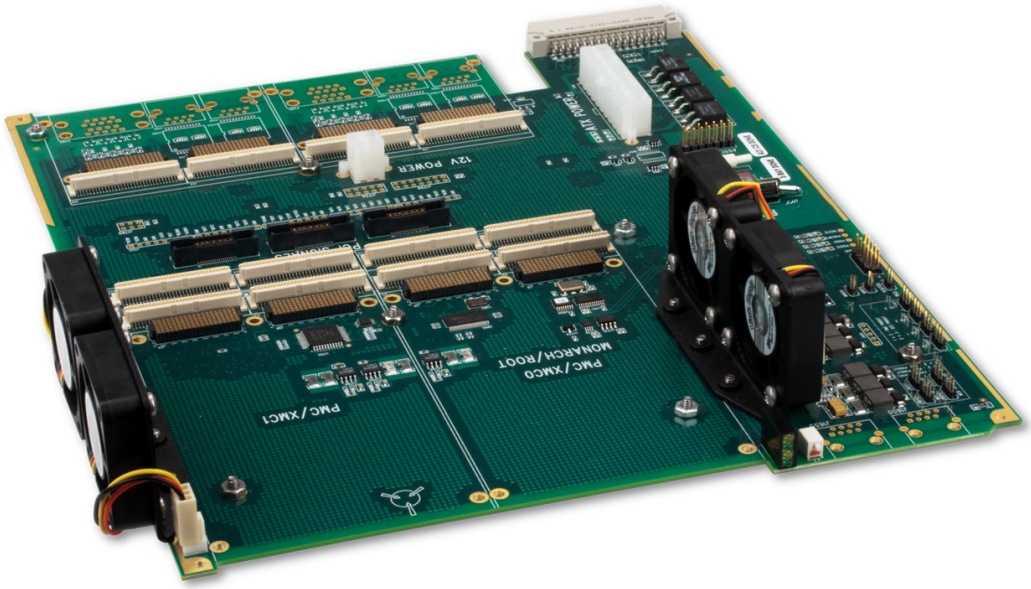
XTend3100

Dual XMC/PrPMC Carrier for Development and Testing

- Dual PCI/PCI-X PrPMC sites up to 133 MHz
- One monarch and one non-monarch PrPMC site
- Dual PIM sites for PMC P14 rear I/O
- XMC support
- ATX power supply connector
- Onboard +5 V, +3.3 V, and -12 V power supplies
- ASP JTAG support
- Backplane test support



XTend3100

The XTend3100 is a dual PMC carrier card designed to provide a low-cost and compact platform for PMC modules. The XTend3100, in conjunction with a standard off-the-shelf ATX power supply, provides a complete desktop or benchtop PCI/PCI-X PrPMC and XMC platform for development, evaluation, and testing, without the need for an expensive and bulky CompactPCI/VME PMC carrier card and chassis.

The XTend3100 features four, integrated, 40 mm fans arranged in a push-pull configuration to provide ample airflow for even the most power-hungry PrPMCs (up to 45 W each). The XTend3100 also provides onboard +5 V, +3.3 V, and -12 V power supplies, sourcing only +12 V from the ATX power supply. This arrangement avoids the voltage drop and ampacity problems commonly associated with powering high-performance PrPMCs using ATX supplies.

Another common problem with PrPMC development is lack of early access to P14 rear I/O ports. This is especially troublesome with conduction-cooled PrPMCs, which by design do not have Ethernet or serial access via front panel connectors. The XTend3100 solves this problem by providing a PIM (PMC I/O Module) site for each PrPMC. These sites, when used in conjunction with the appropriate PIM (e.g., XIt2020 or XIt2040), can provide the necessary I/O during the early development stage, when custom backplanes/wiring harnesses are often not available.

The XTend3100 also features JTAG test support through two addressable scan port JTAG devices, which isolate each PMC onto its own JTAG chain to provide maximum JTAG test speed and isolation. A 7x2 header is provided for use with boundary scan test equipment.

X-ES
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PCI-X

- Dual 32/64-bit PCI/PCI-X sites up to 133 MHz
- Conventional PCI 33/66 MHz or PCI-X 66/100/133 MHz
- Auto PCI speed and mode detection

XMC

- Point-to-point connectivity between XMC 0 and XMC 1
- 100 MHz reference clock provided to each XMC site

Cooling

- Four integrated 40 mm fans
- Push-pull airflow

Power Supplies

- Onboard +5 V, +3.3 V, and -12 V supplies
- Supplies up to 90 W combined to PrPMC sites
- Only +12 V is sourced from ATX supply

PMC Rear I/O

- Two PIM sites for PMC Rear I/O
- Hardwired RJ-45 Ethernet and DB-9 serial (optional)

Environmental Requirements

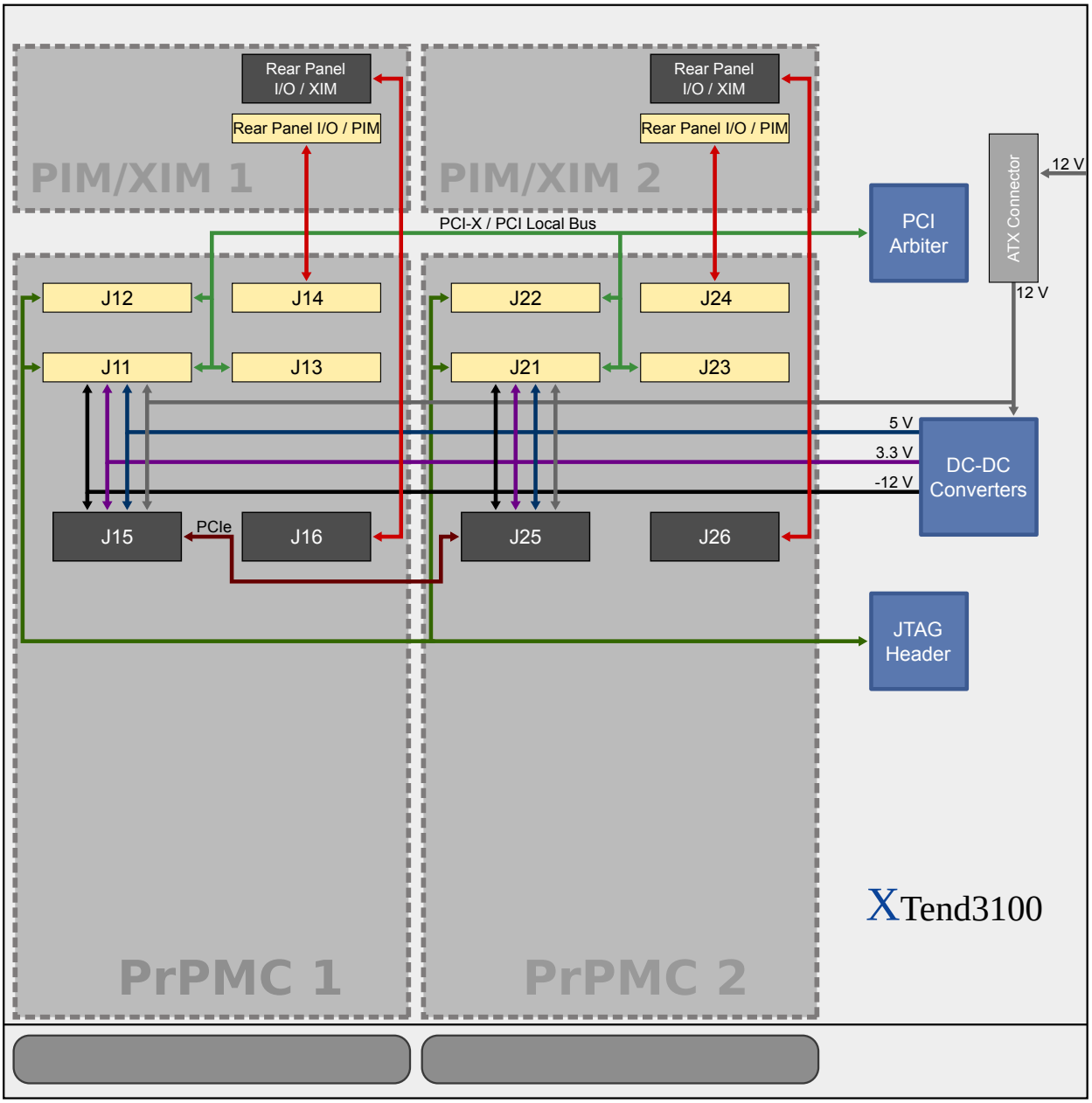
Contact factory for appropriate board configuration based on environmental requirements.

- Supported ruggedization levels (see chart below): 1
- Conformal coating available as an ordering option

Power Requirements (from ATX supply)

- 12 V, 7.56 A, 90.72 W

Ruggedization Level	Level 1	Level 3	Level 5
Cooling Method	Standard Air-Cooled	Rugged Air-Cooled	Conduction-Cooled
Operating Temperature	0 to +55°C ambient (300 LFM)	-40 to +70°C (600 LFM)	-40 to +85°C (board rail surface)
Storage Temperature	-40 to +85°C ambient	-55 to +105°C ambient	-55 to +105°C (maximum)
Vibration	0.002 g²/Hz (maximum), 5 to 2000 Hz	0.04 g²/Hz (maximum), 5 to 2000 Hz	0.1 g²/Hz (maximum), 5 to 2000 Hz
Shock	20 g, 11 ms sawtooth	30 g, 11 ms sawtooth	40 g, 11 ms sawtooth
Humidity	0% to 95% non-condensing	0% to 95% non-condensing	0% to 95% non-condensing



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