

XMC Carrier/Adapter

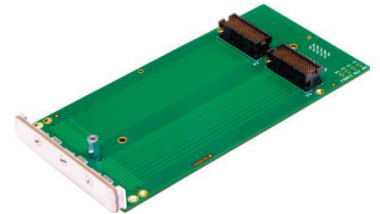
Basic XMC to XMC Extender

This device is designed to allow the extension of a VITA42-style XMC module for test access. In addition to providing extension, the unit also elevates the mounted XMC by approximately 11 mm. Both P15 and P16 are supported. The installed extraction tool simplifies removal of the mezzanine which can be lifted using even force, eliminating wiggling or tugging that could irreparably damage the mezzanine or the host/carrier site connectors.

The P15 to J15 traces are routed for PCI express signaling. P16 signals, however, are routed in a 1:1 fashion with the differential signals being routed with 100 ohms. Differential pairs are impedance controlled. To further assure

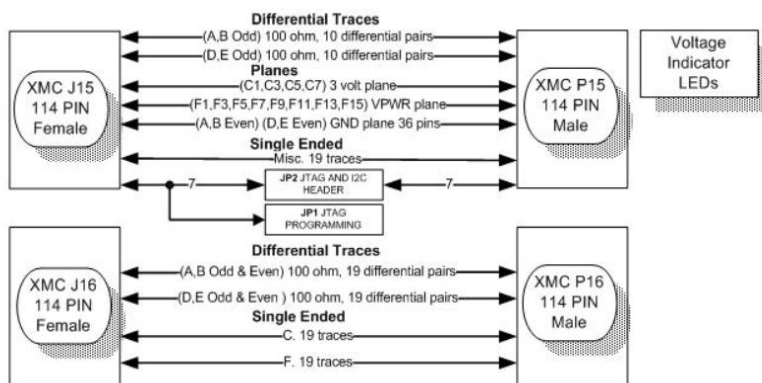
signal integrity, the extender's voltage and ground planes have been carefully designed. The extender features a pair of JTAG headers - JP1 and JP2. The first is intended to accept connection of an Altera programmer. JP2 allows a user to access the JTAG and I2C signals for the carrier and mounted XMC. Shorting jumpers are provided to configure JP2 as necessary.

If the JTAG signals need to be pulled up or down, resistors can be installed to pull up +3.3 volts or pull down ground. (The resistors are not installed by Technobox.) On-board LEDs provide status of key voltage levels. Adjacent test pads can be used to check voltages.

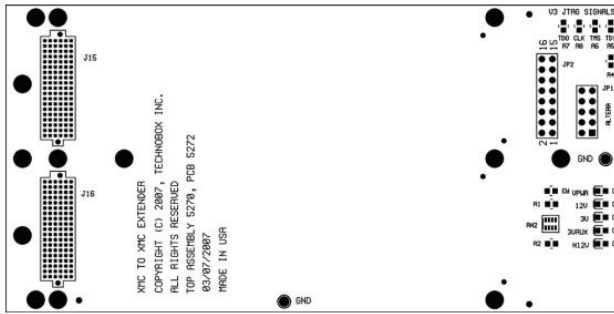


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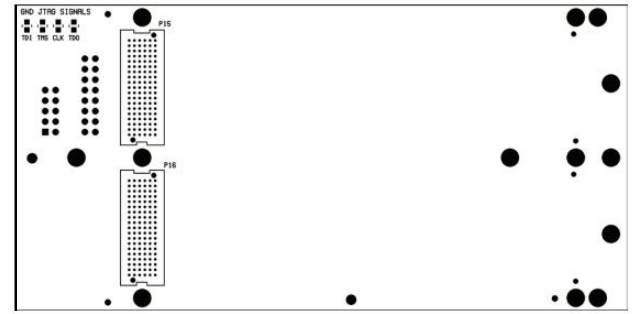
- Extends an XMC for Testing/ Debugging
- Supports both P15 and P16 XMC Connectors
- Carefully Designed to Preserve Signal Integrity
- Impedance-controlled Differential Pairs
- JTAG Support for Altera Programmer
- User-defined Levels for JTAG
- RoHS Compliant



Block Diagram



Component Placement View - Side One



Component Placement View - Side One

SPECIFICATIONS

Temperature (Operating): -40 to +85 degrees C

Temperature (Storage): -55 to +100 degrees C

Altitude: Not specified or characterized (Typical similar equipment is at 15,000 ft.)

Humidity: 5% to 90% non-condensing

Vibration: Not specified or characterized

MTBF: Available upon request

Typical Power Dissipation: Per XMC under test; minimal demand for LEDs

Voltages Required: +3.3V, VPWR, +12V, -12V, +3.3V AUX

ORDERING INFORMATION

5270: XMC to XMC Extender - 4X

