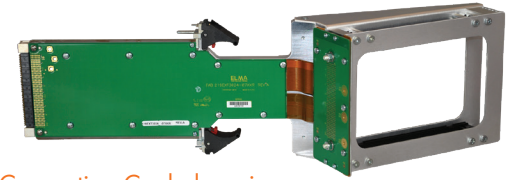


## DESCRIPTION

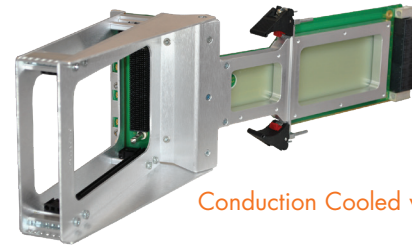
Elma Electronic used creative engineering to solve a major problem in developing the VPX Extender Board - the lack of a right angle receptacle for VPX in the marketplace. So, the company produced a rigid-flex-rigid PCB design to get around the problem. The solution entails a right angle pin connector that plugs into the backplane, connected to a flex circuit that wires to the straight receptacle to receive the plug-in board.

The VPX extender boards are designed to bring a circuit card completely out of a card cage or enclosure so that it can be tested or debugged. This provides access to both sides of the test board. There are test points for all of the differential pairs on the MultiGig fabric connector for the hub slots.

The VPX extender boards come in a 10-layer stripline design for the rigid PCB and microstrip design for the flex circuit portion.



Convection Cooled version



Conduction Cooled version

## Features

- Conforms to VITA 46 VPX specifications
- Controlled impedance rigid-flex-rigid design
- Alignment keying headers provided for extender and plug-in card
- 100 Ohm differential pair routing
- Mechanical frame supports 3U, 160mm plug-in card
- Signal rate: 3.125 Gb/sec
- Frame has injector/ejector latches to hold extender securely to chassis

## APPLICATIONS

- > Highly integrated applications such as:
- > Integrated display processing, mission management and navigational control for avionics systems
- > Industrial monitoring, medical equipment, and night-vision systems requiring enhanced graphics capabilities
- > Shipboard systems for target tracking and high definition displays
- > Applications requiring a mix of I/O options, high compute density and enhanced graphics

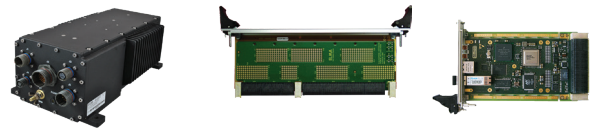
## Board Specifications

- 10-layer stripline design
- PCB UL listed 94-VO
- PCB .080" thick
- PCB Material: L24 Type GFN

## Mechanical Specifications

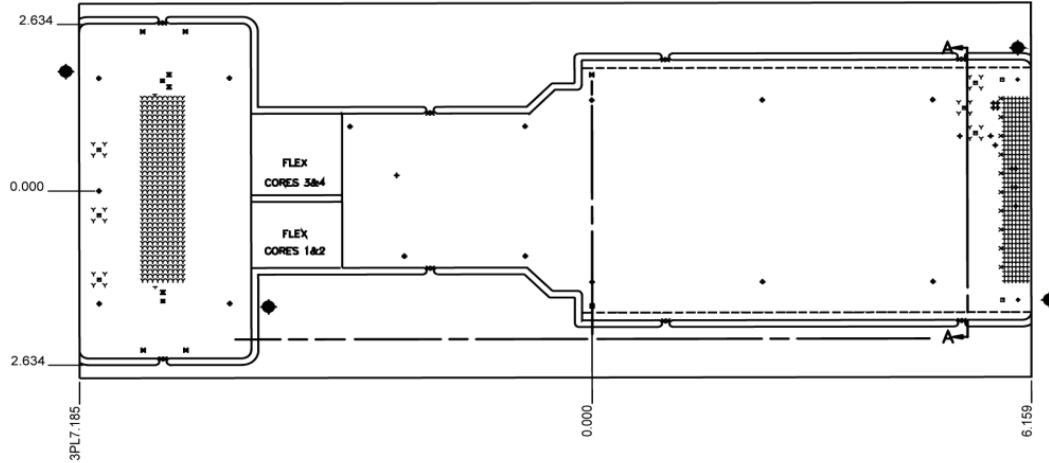
- 3U height
- 240mm deep
- MultiGig RT-2 connectors

## RELATED PRODUCTS



- > Backplanes, standard profiles or custom designs
- > Signal integrity simulation, characterization, customization
- > Load boards convection or conduction cooled
- > Rear Transitional Module for I/O
- > Intel & Freescale Single Board Computers
- > Blade level networking boards (Ethernet, PCI Express)
- > Rackmount, desktop, and ATR chassis platforms
- > Ruggedization programs

**LINE DRAWING**



**ORDER INFORMATION**

Height	Length	Description	Part Number
3U	240mm	For convection cooled boards	119EXT3024-07XXR
3U	240mm	For conduction cooled boards in conduction cooled chassis	119EXT3024-27XXR
3U	240mm	For conduction cooled boards in convection chassis	119EXT3024-37XXR

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