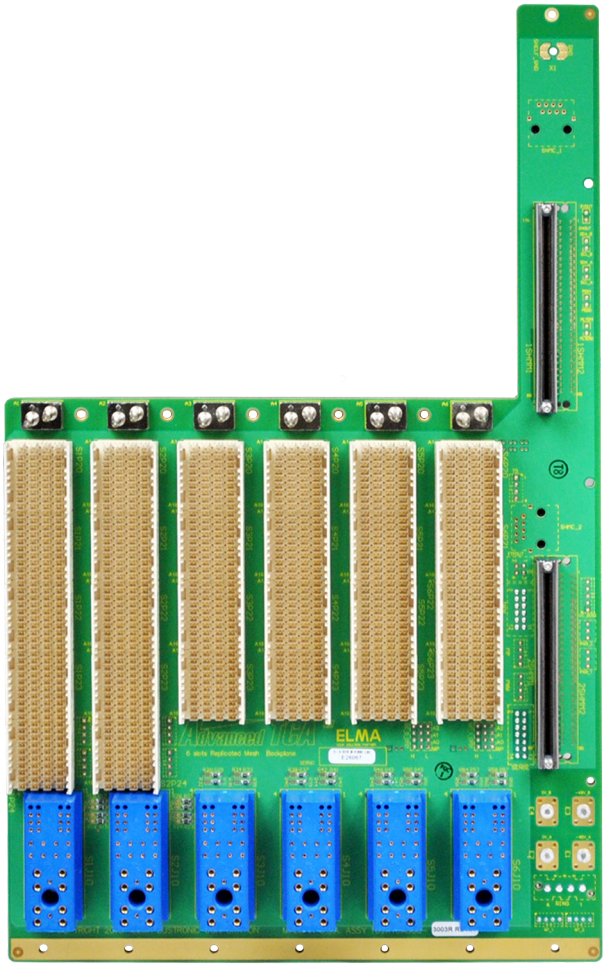
ELMA Backplanes

5U 6-Slot ATCA Backplanes
AdvancedTCA 40G Backplanes

bustronic Elma Bustronic



Description

The Elma Bustronic 6-slot 40G AdvancedTCA (ATCA) backplanes are designed to the requirements of PICMG 3.1R2 specification. The experts in high-speed differential pair routing, Elma Bustronic's ATCA backplanes have been simulated and characterized by our signal integrity lab to optimize performance.

Features

- Designed to the requirements of PICMG 3.1R2 specification
- Up to 400W/slot 48VDC distribution to each slot
- Designed to meet 40Gbps (4 x 10G ports) data rates
- Based on design principles of IEEE 802.3-2012 (Section 5 Annex 69B.4), 10GBASE-KR, and 40GBASE-KR4
- Triple replicated mesh topology
- Nelco 4000-13EP-SI high grade laminate material
- Extensive pre-layout and post-layout simulation studies
- Backdrilled to minimize stub reflections
- Very low insertion loss deviation (ILD)
- Dual shelf managers in slot 0, radial IPMB/I2C implementation

Board Specifications

- 0.201" +/-10% thick, PCB UL recognized 94V-0, Nelco 4000-13EPSI

Mechanical Specifications

- "Mirror L" shaped construction - 8.36"W, slots 1-6 area 8.01"H, max.13.59"H (in ShMM/IO area to the right of slot 6)

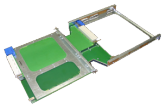
Related Products and Applications

Platforms to meet NEBS or (ETSI) requirements for carriers and telecom equipment broadband networks

- Application and media servers, IPTV video-on-demand delivery and billing platforms
- Wireless Communications such as 2G, 3G and 4G (LTE and WiMAX) radio access networks (RAN)
- Wireline Communications such as media gateways, service provider routers and switches, and signaling gateways
- Applications requiring a mix of I/O options, high compute density and enhanced graphics

Communications platforms and servers for deployment in mobile and harsh environments

- Field deployed critical commmunications
- Mobile command centers



- Rackmount, desktop, and custom chassis platforms
- Load boards convection or conduction cooled
- Rear Transition Modules for I/O
- Blade level networking boards (Ethernet, PCI Express)
- Ruggedization programs

ATCA

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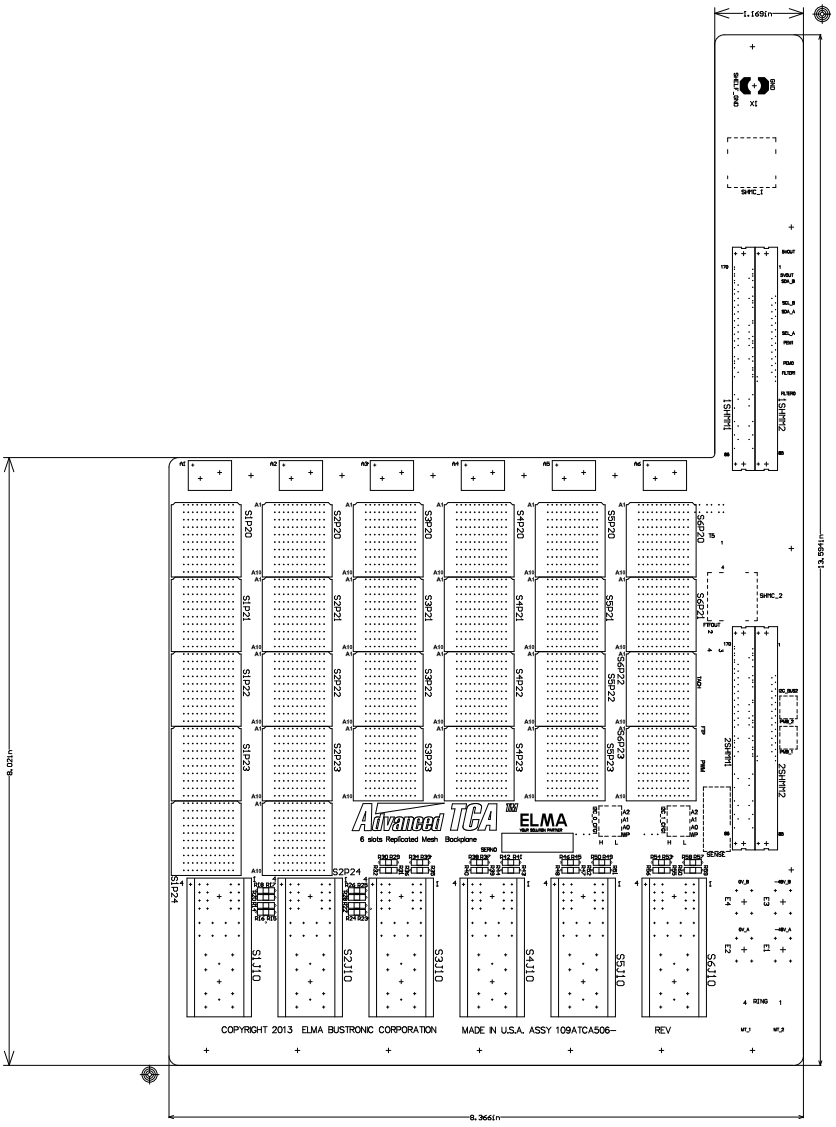
PICMG Backplanes

Line Drawing



Order Information

Height	Total Slots	Description	Part Number
5U	6	Dual Dual Star, 40G with bused IPMB	109ATCA506-1003R
5U	6	Replicated Mesh, 40G with bused IPMB	109ATCA506-3003R
5U	6	Replicated Mesh, 40G with Radial IPMB (2 x uTCA connectors)	109ATCA506-3013R