

3U VPX LOAD BOARD

DESCRIPTION

The Elma VPX load board is designed to be compliant with ANSI/VITA mechanical and electrical connection standards. Developed to enhance testing of VPX systems, the load board aids the system designer in assuring adequate chassis cooling and verifying that the VPX chassis is capable of meeting the power requirements of the system (or VITA specs). The load board functions to test a system's cooling capabilities by first applying the load to the power supply for verification and creating the necessary heat to confirm chassis cooling. By locating hot spots in the chassis, a system designer can verify where to optimally redirect the airflow to prevent overheating. The load board increases productivity by quickly and accurately characterizing systems at low cost.

The 3U VPX load card features a microcontroller-based stepped load control. The rotary switch selects the voltage setting while pushing the ON switch will cycle between different power levels shown on the LED display. The set load power levels are saved in EEPROM. The design is RoHS compliant and has an operating temperature range of 0 degrees C to 70 degrees C.



Features

- Load board for VPX systems, meets ANSI/VITA 46 mechanical and electrical connection standards
- Convection and conduction-cooled versions available
- Verifies chassis can meet power requirement and specifications for VPX
- Assists in locating hot spots in the chassis
- Go/No-Go indicators for 12V, 3.3V, 5V, +12V_Aux, -12V_Aux & 3.3V_Aux.
- Two test point outputs and microcontroller-based rotary switch selector for voltage settings, markings for SIG and GND
- Power reset button (to minimum level), SYSRESET signal on the two test point outputs
- Power level LED (1, 2, and 3) and push button (Step UP) indications
- RoHS compliant
- 6U versions are also available

Board specifications

- 4-layer board
- 2 oz. copper power and ground
- PCB UL recognized 94V-0
- PCB FR-4 or equivalent

Mechanical specifications

- 3U height
- 160mm deep

APPLICATIONS

Open VPX backplanes in embedded computing systems enable high speed data communication in critical defense and industrial applications including but not limited to:

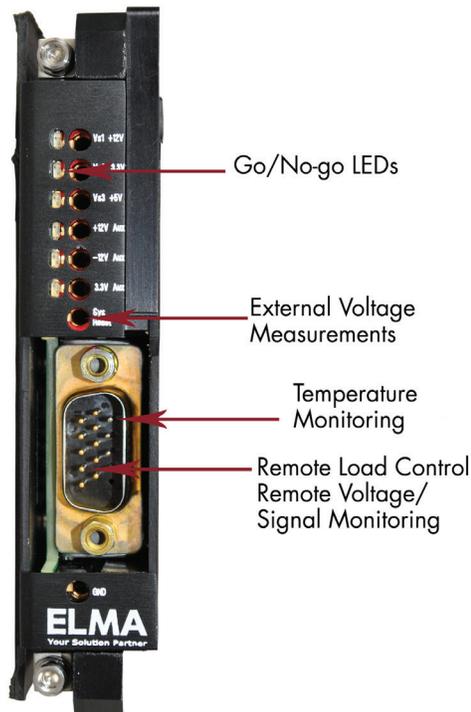
- > Mission control
- > Secure communications
- > Surveillance
- > Data and image processing
- > Weapons control
- > Target tracking and display
- > Navigational control
- > Threat detection
- > Process monitoring
- > Environmental monitoring

RELATED PRODUCTS

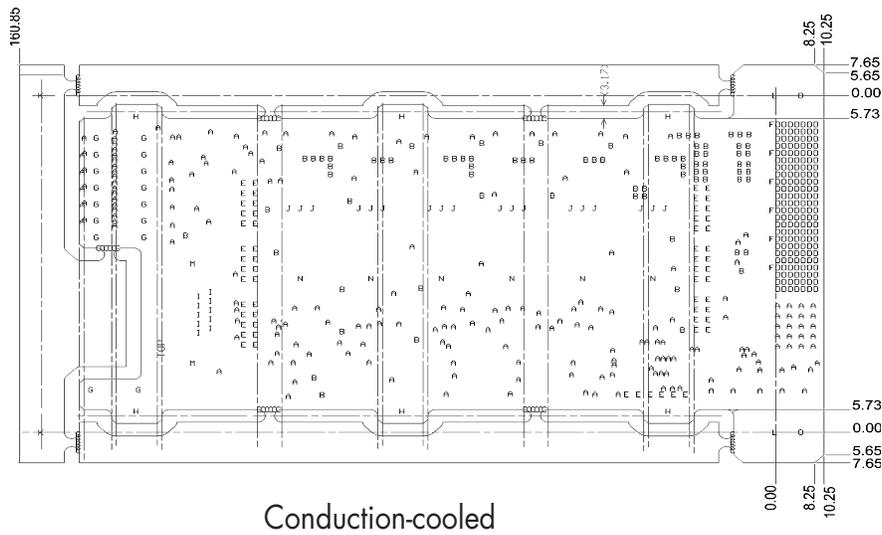
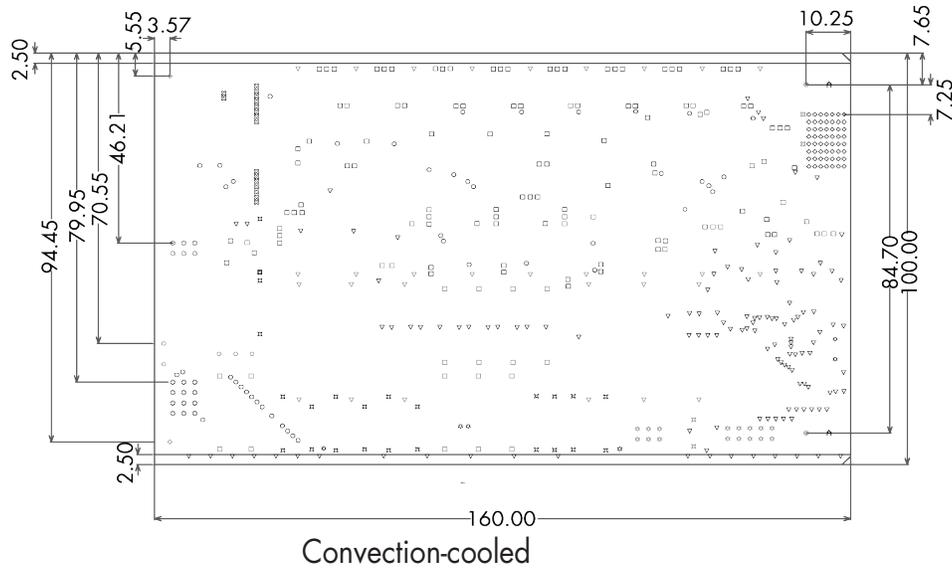


- > Development platforms
- > 19" System platforms
- > 19" Rugged systems, 12R1, 12R2
- > ATRs
- > OpenVPX backplanes
- > Embedded Boards

Conduction-cooled version front panel view



LINE DRAWING



ORDER INFORMATION

Height	Description	Part Number
3U	3U x 160mm, convection-cooled VPX load board	1940000345-0000R
3U	3U x 160mm, conduction-cooled VPX load board	1940000446-0000R

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