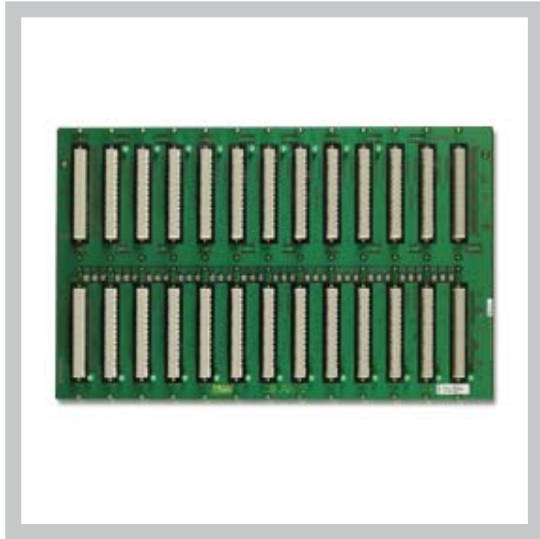


## VXI BACKPLANES



### FEATURES

- Compliant with VXIbus spec. Rev. 1.4, VMEbus C.1
- 10- layers, 6U controlled impedance stripline design
- Electronic BUSGRANT, IACK daisy chain
- Superior power distribution
- Matched propagation delays
- Virtually zero crosstalk

### BOARD SPECIFICATIONS

- 10-layer board
- 2 oz. copper and ground
- PCB UL recognized 94V-0
- PCB FR-4 or equivalent
- PCB .062" thick

### MECHANICAL SPECIFICATIONS

- C size: 5, 6, 8, 9, 11, and 13 slots
- D size: 5, 8, and 13 slots
- Height: 6U, 9U

### DESCRIPTION

The Elma Bustronic VXIbus backplane series are designed to fully comply with the VXIbus specifications, Rev. 1.4-5/92.

Elma Bustronic has incorporated a feature set that is unique in the industry: a custom, laminated busbar, active or passive terminations, automatic active BUSGRANT and IACK jumpering, and optional AMP enhanced Eurocard connectors are offered, along with a 4-point chassis ground that can be modified by the user to isolate the chassis ground from the digital ground. Ten-layer stripline construction provides superior performance, minimizes crosstalk, and provides for excellent RFI/EMI resistance. The use of computer simulation results in an optimized design with low DC resistance, low AC noise, and outstanding power distribution. The use of four signal layers (three for TTL and one for ECL) yields state-of-the-art performance. A panel connector for SYS Reset, and a power monitor connector are optional.

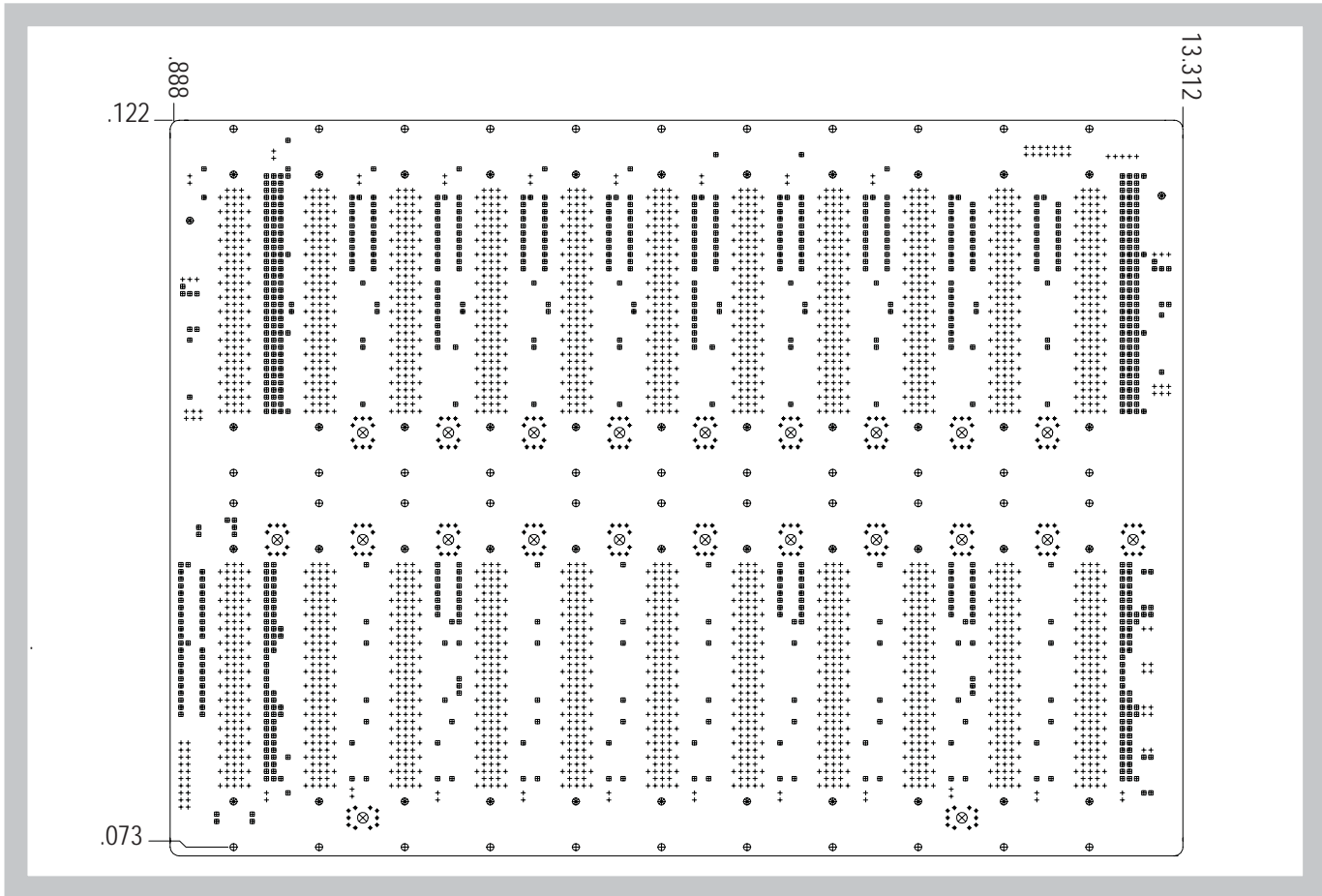
Options: custom, laminated busbar front panel connector. Elma Bustronic utilizes a custom, laminated busbar to distribute  $\pm 24V$ ,  $\pm 12V$ ,  $-5.2V$ , and  $2V$  throughout the backplane, rather than the more common approach of bringing these voltages to the backplane at only one or two points.

As a result of this proprietary busbar, the Elma Bustronic VXIbus backplane has one of the lowest voltage drops in the industry. The use of this custom busbar allows for simplified cabling requirements since the power cables need only be connected to one point (for each voltage) on the busbar. Ground and +5V are distributed by standard, solid busbars.

The use of 2 oz. copper power planes, four solid ground and two VCC planes, and distributed decoupling capacitors on all voltages provides the finest, most complete power distribution available.

# VXI BACKPLANES

## LINE DRAWING



## ORDER INFORMATION

Slots	Height (in.)	Height (mm)	Width (in.)	Width (mm)	Part Number
C/05	10.317	262.100	7.000	177.800	101VXIM105
C/06	10.317	262.100	8.200	208.300	101VXIM106
C/08	10.317	262.100	10.600	269.300	101VXIM108
C/09	10.317	262.100	11.800	299.700	101VXIM109
C/11	10.317	262.100	14.200	360.680	101VXIM111
C/13	10.317	262.100	16.600	421.600	101VXIM113
D/05	15.567	395.400	7.000	177.800	101VXIM205
D/08	15.567	395.400	10.600	269.200	101VXIM208
D/13	15.567	395.400	16.600	421.600	101VXIM213

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## J1 + J2 VME MONOLITHIC BACKPLANE

### DESIGN ELEMENTS



Power Bugs



Busbar

### Power Distribution

The versatile power distribution consists of power bugs and a laminated busbar. The busbar is a proprietary model that distributes  $\pm 24V$ ,  $\pm 12V$ ,  $-5.2V$  and  $-2V$  throughout the backplane rather than the more common approach of bringing these voltages to the backplane at only one or two points. As a result, the Elma Bustronic backplane has one of the lowest voltage drops in the industry. The busbar also provides for simplified cabling requirements as the power cables need to be connected only to one point (for each voltage). Ground and  $+5V$  are distributed by standard, solid busbars.

### Mechanical Design

All mounting holes have adequate clearances for installation with metal hardware. All corners are rounded to allow installation in tight enclosures and prevent cables and wiring from snagging on the sharp corners. Power bugs and connectors are positioned to allow shrouds at each connector location for both J1 and J2 (or J3, where applicable). All slots and components are identified with easy to read yellow silkscreen. A high quality soldermask is used to prevent chipping or scratches.

### OTHER OPTIONS



Ejector shroud