

▶ VME64 Extension Backplanes

OVERVIEW

AP Labs range of high performance backplanes are compliant to the latest VMEbus specification and are suitable for multiple environments from the laboratory to deployment.

Value engineering, combined with improved production methods, has resulted in a range of very rugged backplanes which are competitively positioned, but still employ the quality and performance advantages associated with the latest backplane technology from a technology leader.

- ▶ AP Labs VME64X backplanes incorporate a 12-layer construction, stripline design, decoupling at every slot, inboard termination, heavy power and ground planes, characteristic impedance tested via TDR, and years of experience designing, building and using backplanes in the most extreme environments.

FEATURES

- **Designed to meet ANSI/VITA 1.1—1997**
- **Slot counts—3, 5, 7, 10, 12, 13, 15, 18**
- **P0/J0 connectors (shrouded)**
- **Electronic Bus Grant (EBG)**
- **Active Termination for low quiescent current draw**
- **Optional conformal coating**

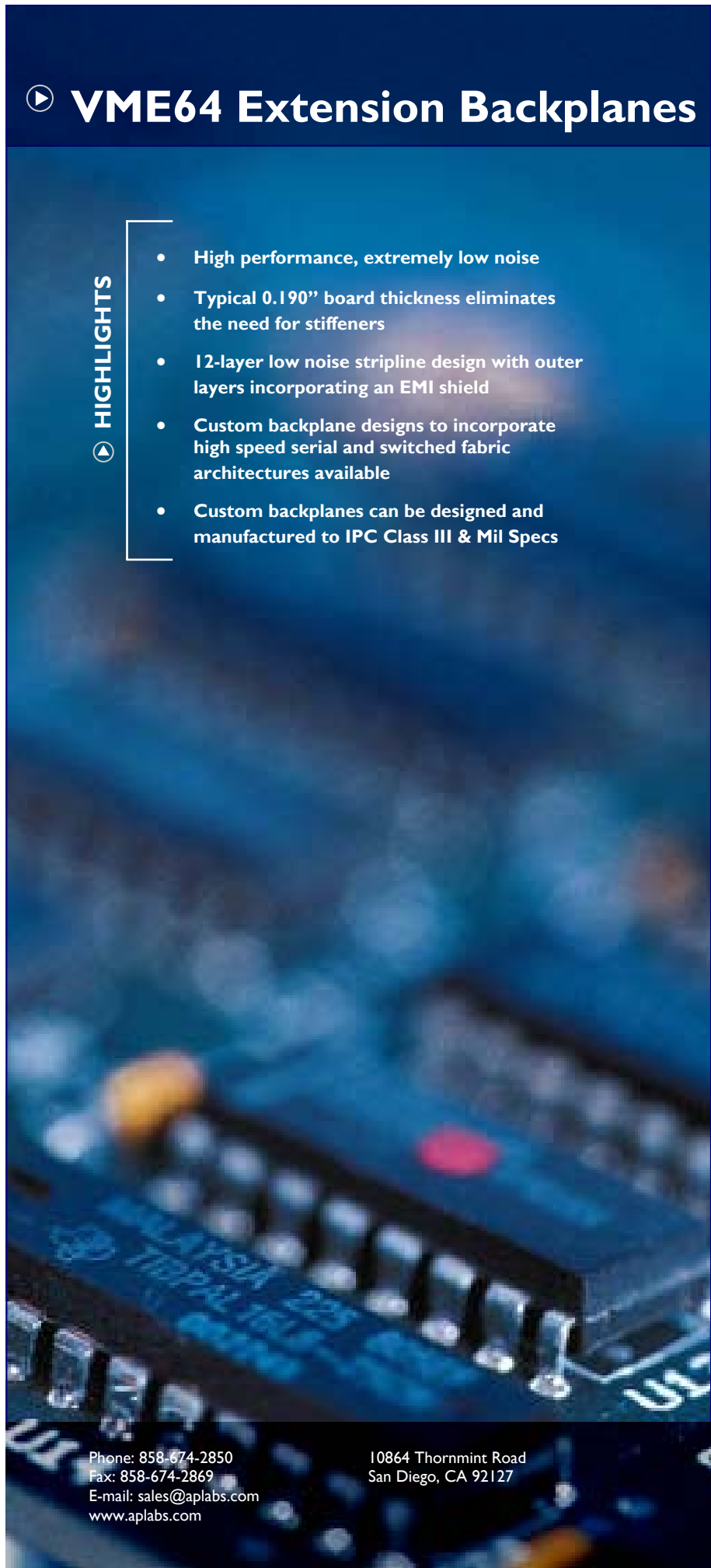
▶ HIGHLIGHTS

- **High performance, extremely low noise**
- **Typical 0.190" board thickness eliminates the need for stiffeners**
- **12-layer low noise stripline design with outer layers incorporating an EMI shield**
- **Custom backplane designs to incorporate high speed serial and switched fabric architectures available**
- **Custom backplanes can be designed and manufactured to IPC Class III & Mil Specs**

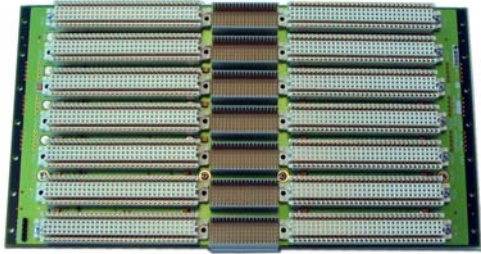
AP Labs

Phone: 858-674-2850
Fax: 858-674-2869
E-mail: sales@aplabs.com
www.aplabs.com

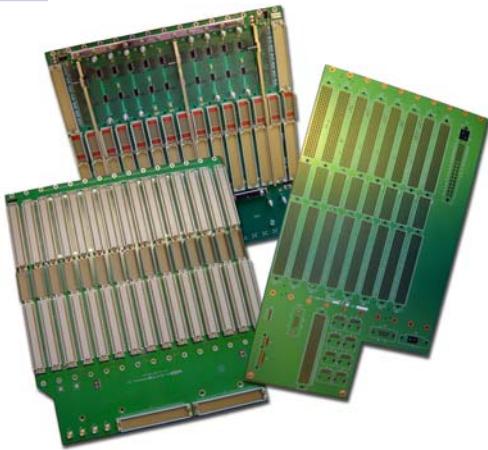
10864 Thornmint Road
San Diego, CA 92127



STANDARD VME BACKPLANE



CUSTOM BACKPLANES



CHASSIS ASSEMBLY



Specifications

PHYSICAL

- **Height:** 10.315" (262.00mm)
- **Length:** 3-slot: 1.984" +0/-0.012 (50.39mm+0/-0.1mm) - width complies to IEEE 1101.1 Each additional slot, add .8" (20.32mm)
- **Thickness:** 0.190" (4.83mm)
- **Backplane Material:** High Temperature FR4
- **Construction:** 12 layer stripline with outside layers incorporating an EMI shield

ENVIRONMENTAL

- **Temperature Ranges:**
 - Operation: -40°C to +85°C
 - Storage: -55°C to 125°C
- **Flammability rating:** UL94-V0
- **Regulatory:** Designed to meet UL, CSA, CE requirements

ELECTRICAL

- **Signal line characteristic impedance:** 60 ohms
- **Signal line resistance:** < 3 ohms

BACKPLANE SIGNAL CONNECTORS

- **5 Row DIN VME64x J1 and J2 backplane connectors:**
 - **Working current:**
 - 1.3 amps @ 40°C
 - 1.0 amps @ 70°C*Note: These values are based on the same current on adjacent contacts, fully loaded and 80% derating, Per IEC 60 512*
 - **Test voltage r.m.s:** 1kV
 - **Contact resistance:** <15m ohms
 - **Insulation resistance:** >10¹²ohms
 - **Temperature range:** -65°C to 125°C
 - **Molded housing:** Liquid cristal polymer
 - **Contacts:** Copper alloy
 - **Contact surface:**
 - **Contact Zone:** selectively gold-plated
 - **Termination zone:** Tin-plated
 - **Press-in zone:** Nickel-plated
- **2mm J0 backplane connectors:**
 - **Plating:** Gold flash over palladium nickel finish or equivalent
 - **Temperature Range:** -55°C to 125°C
 - **Mechanical durability:** >250 mating cycles
 - **Contact material (m/f):** Bronze

ORDERING GUIDE: VME64X EXTENSION BACKPLANES

(All backplanes fitted with J0 connectors)

PRODUCT	SLOT	PART NUMBER
VME64X	3-Slot	12615-03
VME64X	5-Slot	12615-05
VME64X	7-Slot	12615-07
VME64X	10-Slot	12615-10
VME64X	12-Slot	12615-12
VME64X	13-Slot	12615-13
VME64X	15-Slot	12615-15
VME64X	18-Slot	12615-18