

Amphenol Ruggedized VME64x, VITA 60, 66 Interconnects

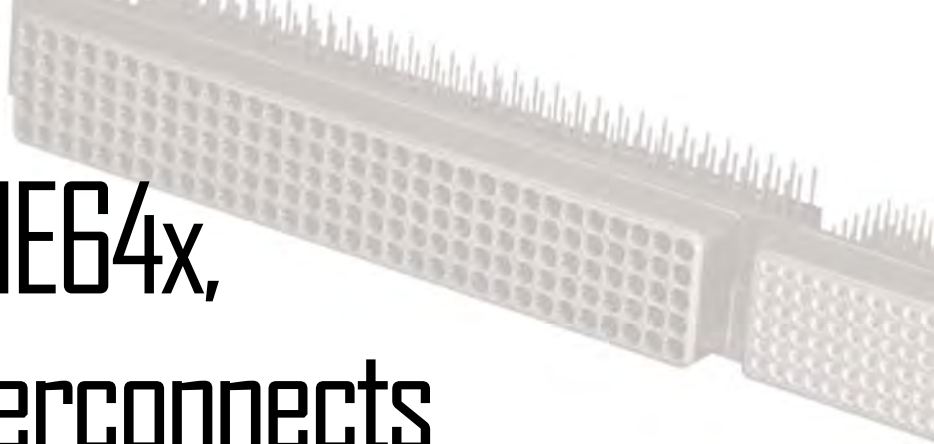


TABLE OF CONTENTS

Amphenol Ruggedized VME64x & VITA 60/ VITA 66 Interconnects

- Table of Contents 42
- Ruggedized VME64x Features & Benefits, Ruggedized VME64x Adapter 43
- VME P0/J0 Fiber Optic Interconnects VITA-66.1 Fiber Optic Interconnects 44
- VIPER® Interconnects (Compatible with VITA 46 & VITA 48 45, 46



VME & VITA Typical Markets:

- Military & Commercial Avionics
- Military Vehicles
- Missiles/Ordnance
- Missile Defense
- C4ISR
- Radar

Amphenol
Aerospace

FOR ATTACHMENT TO VME64X PRINTED CIRCUIT BOARDS

Amphenol Aerospace developed the Ruggedized VME64x in response to the military trend towards VME64x and the utilization of COTS Boards and Chassis.

Many different companies manufacture "Ruggedized VME cards", but they still use the standard VME

COTS (Commercial Off The Shelf) connector interface. In a harsh military environment the COTS VME connector interface can fail, negating the ruggedization of the cards.

The Amphenol Ruggedized VME64x interconnect has a more rugged interface than standard connectors for improved vibration durability. It meets the needs for a harsh environment connector requiring Level 2 maintenance. Military and commercial aviation, military vehicles and GPS systems are examples of markets that need the ruggedized VME64x connector solution from Amphenol.

The Amphenol Ruggedized VME64x connector mounts to standard VME64x cards and backplanes, but it does not mate to other types of VME commercial connectors.

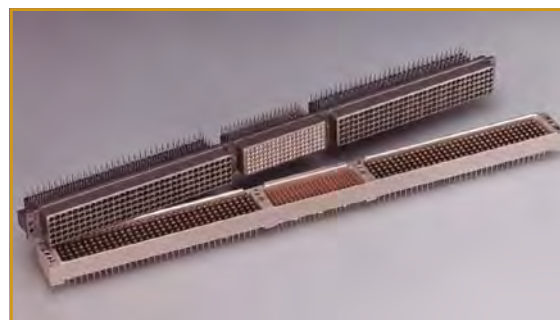
Features and benefits include:

- Metal shells - mount directly to the standard VME card mounting holes, providing support and protection to the inserts in the module and additional stiffness to the backplane
- The metal shells create a faraday cage around the contacts, preventing ESD (Electrostatic Discharge) into the contacts (module only)
- Robust contact system
- 3 module inserts in one unified shell; each can have different interconnect combinations:
 - P1, P2 and 2mm electrical P0
 - P1 and P2 combination
 - P1, P2 and fiber optic MT ferrules in the P0 position
- Inserts are designed to customer specifications
- Thru-hole solder tail or solderless termination is available on the backplane connector.

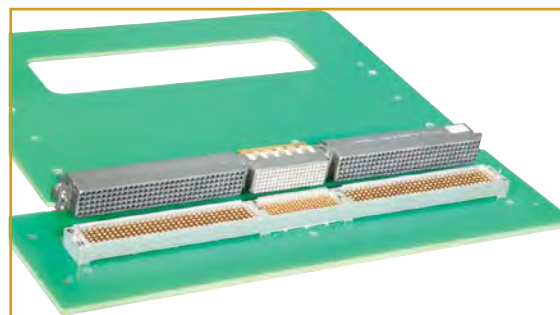
Ruggedized VME64x Adapter with Brush Contacts

"Cocooning" of COTS components has been successful in military applications. Amphenol supplies an adapter interconnect system for "cocooning" of COTS VME64x daughtercards.

The ruggedized VME64x adapter system provides the durable brush contact as the primary interface, and integrates the three connectors into a singular metal shell, providing passive ESD protection to the module connector. The back of the module connector mates to standard COTS VME64x daughtercards, isolating them from harsh environments.



Amphenol's ruggedized VME64x module and backplane connectors were developed to meet more rugged harsh environment applications.



Ruggedized VME64x module and backplane connectors on a circuit board.



Ruggedized VME64x backplane (left), and module adapter (center) and a typical COTS VME64x circuit board (right).

Introduction/
Pkg. Solutions/
Brush Contact

LRM (Line Replaceable Modules)
Staggered/
GEN-X

Hybrids - Fiber Optics/
Hi Speed/RF/Power

Options/
Accessories

Ruggedized
VME 64x/
VITA 60, 66

High Density
HDB3
HSP3
Hi Speed

Low Mating Force MIL-DTL-55302
Standard
Brush

Hybrids - Signal/Power/
Cook/Fiber Optics

Docking Conn./
Accessories/Install.

Rock & Panel
Brush
Ruggedized

UMD/LMS
Rectangular
Interconnects

Other
Rectangular
Interconnects