

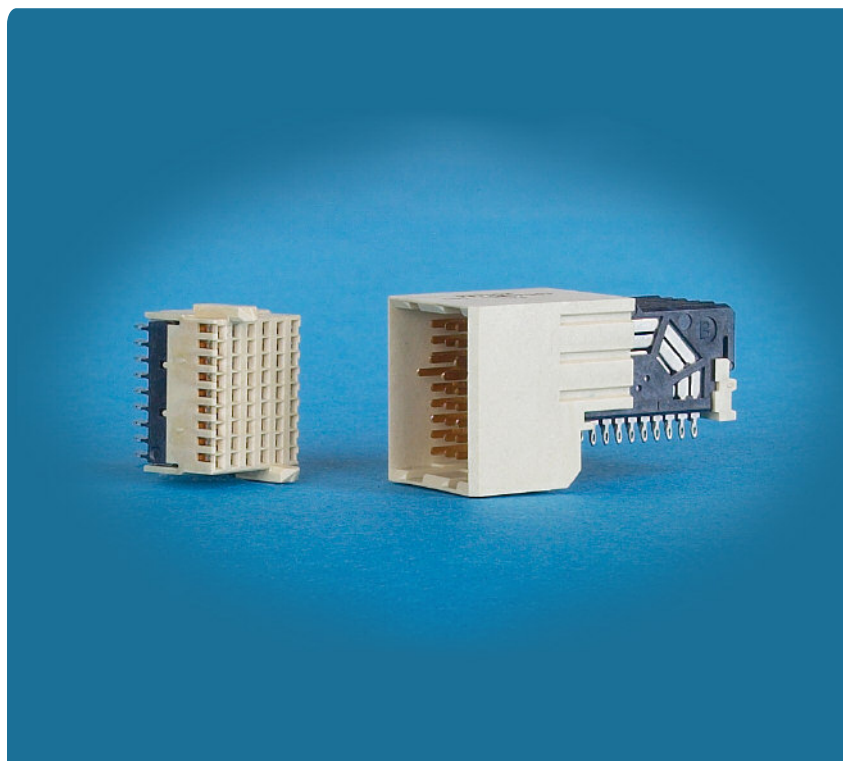
# AIRMAX VS<sup>®</sup> HIGH-SPEED CONNECTORS

For Storage Bridge Bay Midplane Interface

## DESCRIPTION

The Storage Bridge Bay (SBB) Specification, targeted at low and midrange storage, provides requirements, guidelines and reference information to ensure compatibility between a storage enclosure controller slot and storage controllers from a variety of independent vendors. The specification defines the mechanical and electrical interfaces between a storage controller and the midplane within a storage enclosure. Any bridge/controller card supplied in accordance with this specification will be compatible and accommodated within any storage enclosure slot designed in conformance to the SBB specification. Examples include JBOD interface bridges and RAID, iSCSI SAN, Fibre Channel SAN or NAS controllers.

AirMax VS<sup>®</sup> high-speed signal connectors, guide modules, and power connectors meet the dimensional and electrical requirements for the Storage Bridge Bay Midplane Interface (SBBMI) to connect bridge/controller cards to the midplane in a drive enclosure.



## FEATURES & BENEFITS

- Innovative edge-coupling technology and air dielectric between adjacent conductors deliver lowest insertion loss and crosstalk
- High-speed serial data rates can scale from 2.5 Gb/s to 12.5 Gb/s without requiring redesign of a basic platform
- Opposed dual-beam receptacle contact structure provides high reliability
- Contains no interleaving shields reducing connector weight, cost, and PCB routing complexity
- Compact 2x2 power connectors provide capacity for up to 20A/contact
- Rugged guide modules offer ESD grounding option
- Keyed guide modules differentiate between 2 Gb/s and 4 Gb/s Fibre Channel and 3 Gb/s SAS signal profiles
- Low-profile designs helps facilitate airflow through canister for cooling
- Compatible with Hard Metric design practice

## TARGET MARKETS / APPLICATIONS

- Data Storage
  - Low and midrange storage systems conforming to the Storage Bridge Bay (SBB) Specification, Version 1.0 or 2.0
    - Storage enclosures with up to 48 drives
    - 2 Gb/s and 4 Gb/s Fibre Channel or 3 Gb/s SAS signal profiles
  - Controllers conforming to the SBB Specification, Version 1.0 or 2.0
    - JBOD, RAID, iSCSI SAN, FC SAN, NAS, IB, VTL
    - Canister power profiles up to 200W



**TECHNICAL INFORMATION**

**PRODUCT SPECIFICATIONS**

- GS-12-239 Press-fit signal connectors
- GS-12-220 Press-fit, high-power connectors

**APPLICATION SPECIFICATIONS**

- GS-20-035 Press-fit signal connectors
- GS-20-023 Press-fit, high-power connectors
- GS-20-045 Hard-metric guide connectors

**INDUSTRY SPECIFICATIONS**

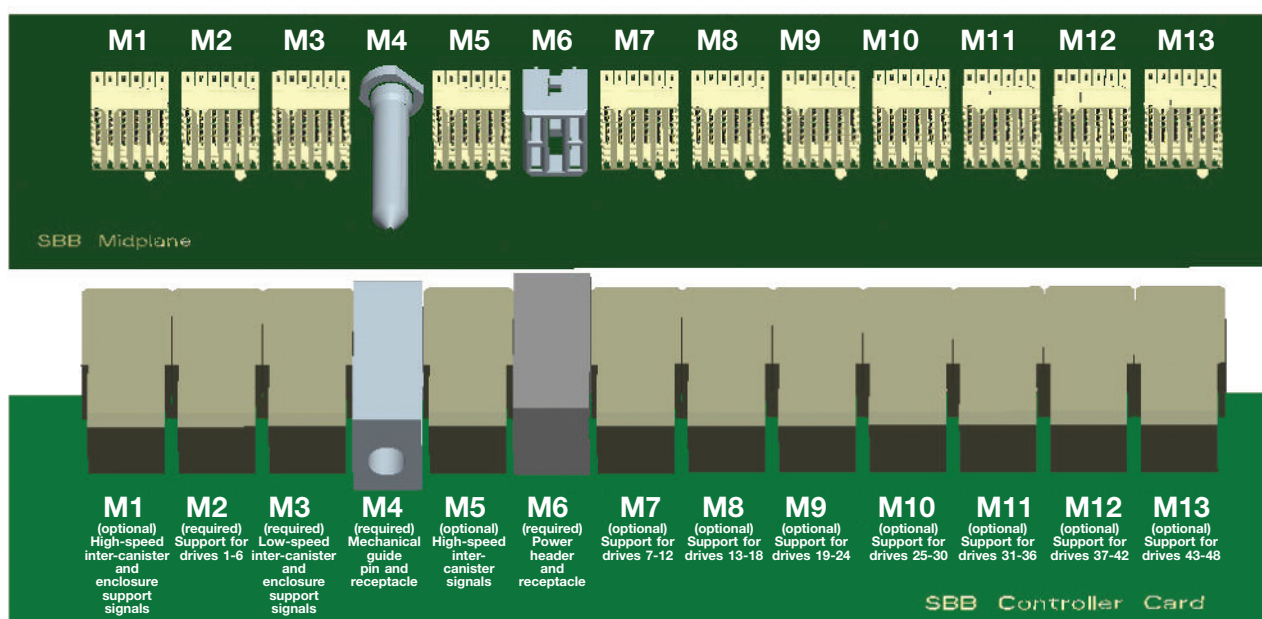
- Storage Bridge Bay Specification (reference [www.sbbwg.org](http://www.sbbwg.org))
- Telcordia GR-1217-CORE, Central Office

**ADDITIONAL INFORMATION**

- AirMax VS High-Speed Connector System: Signal Integrity Test Procedures and Performance
- Use web link [www.fci.com/airmax](http://www.fci.com/airmax) to obtain specifications, product drawings and additional technical information.

**APPLICATION EXAMPLE**

- A Storage Bridge Bay Midplane Interface (SBBMI) in accordance with the Version 2.0 Specification is comprised of up to 13 AirMax VS modules, designated M1 through M13, as shown below.



**PART NUMBERS**

3 Gb/s SAS Signal Profile	Module Description	SBB Midplane	SBB Canister / Controller Card
AirMax VS 3-pair, 6 IMLA signal modules	M1-M3, M5, M7-M13	10043546-101LF	10039851-101LF
AirMax VS guide module	M4	10037911-102LF	10037912-104LF (with ESD contact) or 10037912-114LF (without ESD contact)
AirMax VS power module	M6	10028916-4555P00LF	10028917-001LF (14.7mm above PCB) or 10073379-001LF (11.5mm above PCB)

2 Gb/s or 4 Gb/s Fibre Channel Signal Profile	Module Description	SBB Midplane	SBB Canister / Controller Card
AirMax VS 3-pair, 6 IMLA signal modules	M1-M3, M5, M7-M13	10043546-101LF	10039851-101LF
AirMax VS guide module	M4	10037911-102LF	10037912-102LF (with ESD contact) or 10037912-112LF (without ESD contact)
AirMax VS power module	M6	10028916-4555P00LF	10028917-001LF (14.7mm above PCB) or 10073379-001LF (11.5mm above PCB)