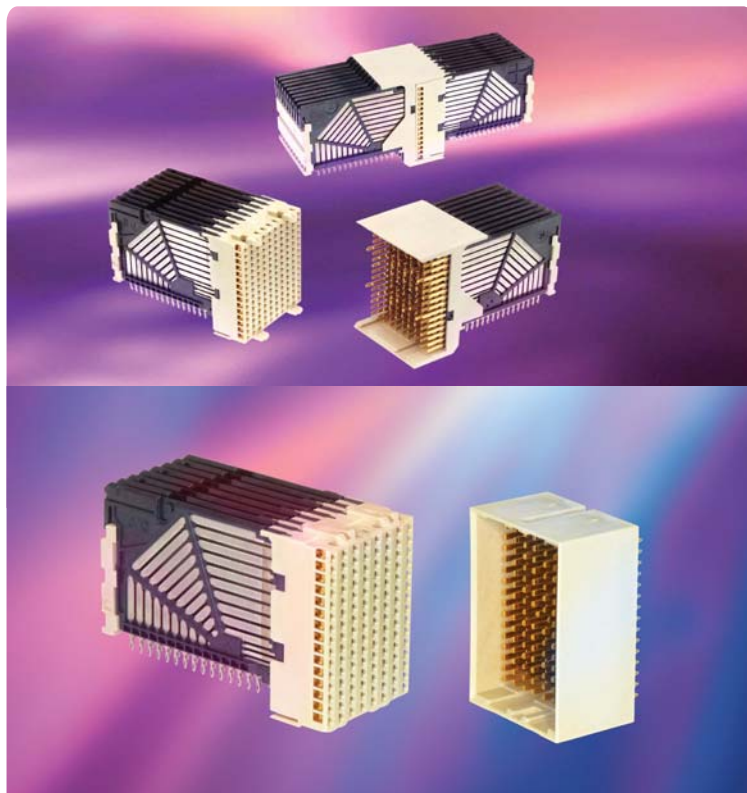


AIRMAX VS CONNECTOR SYSTEM for TELCOS

Backplane connector of choice to meet design requirements to speeds greater than 12.5Gb/s.

DESCRIPTION

AirMax VS[®] connector is a revolutionary concept in connector backplane technology that meets the stringent requirements of the Telco industry. This connector employs edge coupling together with an air dielectric to “virtually” eliminate the shields often associated with high speed connectors. This unique design provides the benefits of low cross talk, insertion loss together with superior impedance control meets or exceed similar designs using traditional shielded methods. This elimination of shields results in lower cost and weight for the customer design. The end result for customers is that they can design their present systems for 2.5Gb/s to 6.25Gb/s and have the system grow to over 12Gb/s without having to perform a costly redesign to their basic platform. The Airmax VS[®] is designed for standard backplane, coplanar as well as orthogonal structures.



FEATURES & BENEFITS

- HM Equipment Practice
- Vertical Header on backplane
- R/A Receptacle on Daughter Card
- R/a header on R/A Receptacle (Coplanar)
- Compliant press-fit 0.6 drill PTH
- No Shields
 - Impedance control
 - Low cost
 - Reduced weight
 - Versatility – IMLA spacing can be varied without impact to impedance
 - Flexible PCB Routing
- High Density – 150 Position Connector
 - 63 pairs per inch, 25mm on 100" slot centers
 - 57 pairs per inch with side walls
- Column based Differential Pairs
- Pin Assignments for Differential Pairs, Single Ended or Power may mixed within IMLA
- Multiple Centerline Spacing Possible
 - 2mm and 3mm available
 - Future – as required
- Full Product Family Support
 - Power, Guide, Co-Planar, Orthogonal, BGA Header for Backplane in development
 - Lead-free & ROHS compatible

TARGET MARKETS & APPLICATIONS

- Communications
 - Transmission
 - Access
 - IP Switches & Gateways
 - IP Routers & PBX'd5s
 - Internet Equipment
 - ATM switches
 - Multi platform service & cellular infrastructures
 - Central Office
 - ATCA™ Zone 3
 - 3G Base stations



MATERIALS

- ▀ Contacts: Copper Alloy
- ▀ Plating: Performance based plating
- ▀ Housing: High temperature thermoplastic, UL 94V-0 compliant

ELECTRICAL PERFORMANCE

- ▀ Differential Impedance*: 100+/- 5 ohms
- ▀ Insertion Loss: <0.5dB through 6.25Gbps
<2.0dB through 20.0Gbps
- ▀ Worst-case Multi-active Near-end Crosstalk*: <2.5%
- ▀ Worst-case Multi-active Far-end Crosstalk*: <3.0%
- ▀ *Risetime = 55ps (20-80%)

RELATED PRODUCTS

- ▀ Orthogonal
- ▀ BGA
- ▀ ZipLine

ENVIRONMENTAL

- ▀ Per Telcordia Central Office requirements

MECHANICAL PERFORMANCE

- ▀ Mating force: 0.45N max per contact
- ▀ Unmating force: 0.15N min per contact
- ▀ Press-fit insertion force: 40N max per compliant pin

SPECIFICATIONS

- ▀ Product Specification: GS-12-239
- ▀ Application Specification: GS-12-035

APPROVALS AND CERTIFICATIONS

- ▀ Qualified per Telcordia GR-1217-Core, Central Office Requirement
- ▀ Recognised per UL/CSA

PACKAGING

- ▀ Tubes

**AirMax VS® Connector System:
Available configurations**

Connector configuration	Pitch = 2 mm									Pitch = 3 mm					
	Rows (pairs X 3)									Rows (pairs X 3)					
	9			12			15			12			15		
	Columns (IMLA)			Columns (IMLA)			Columns (IMLA)			Columns (IMLA)			Columns (IMLA)		
	6	8	10	6	8	10	6	8	10	6	8	10	6	8	10
4 walls R/A Header	10039851	10045267	10034249	10052825	10052838	10028436		10041460	10025613			10035515		10064489	10037324
2 walls	10040862	10045266	10034264	10052824	10052837	10028391		10041746	10016527			10035514		10064488	10037323
R/A Receptacle	10053656		10056335		10060905	10035754		10045548	10034475		10076645	10045722			10057041
V. Header (backplane or mezzanine)	10056101		10056103			10056100		10055140	10056098		10056429	10056430			10056427