

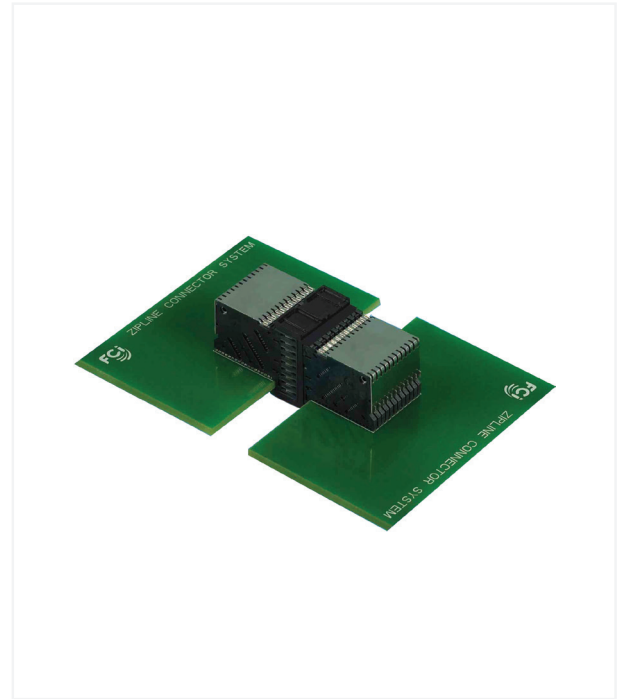
ZIPLINE® COPLANAR CONNECTORS

OVERVIEW

FCI's AirMax VS® and ZipLine® high-performance connector systems also provide support for high-speed connections between coplanar boards. Right-angle receptacle and header connectors enable coplanar card extender applications or Zone 3 connections between a front board and rear transition module in ATCA® systems.

The offering provides flexibility in the number of differential pairs per column to address signal density, connector profile or airflow requirements. AirMax VS connectors configured with 15 contacts (5 differential pairs) per column and 2mm column spacing provide 63.5 differential pairs per inch within 25mm card slot pitch. Lower-profile options provide 12 contacts (4 pairs) or 9 contacts (3 pairs) per column and allow the designer to achieve card slot pitch of 20mm, or less.

ZipLine® signal modules with 18 contacts (6 differential pairs) per column provide even more signal density with 84.6 differential pairs per linear inch (33 pairs/cm) in 27mm card slot spacing.



FEATURES & BENEFITS

- Modules with 6 differential pairs/column provide maximum linear signal density along card edge: 84.6 differential pairs per inch
- Uses the same right-angle receptacle signal modules as backplane or midplane applications
- Stainless steel organizer allows use of flat-rock tooling for connector installation
- Halogen-free signal modules aid efforts to minimize the use of environmentally sensitive materials
- Available power and guide modules complement signal connector offering

TARGET MARKETS / APPLICATIONS

- Data
 - Rack mount server
 - Blade server
 - Storage system
 - Storage drives
 - Printer
- Communications
 - Switching
 - Routing
 - Access
 - Transmission
 - Wireless base station
 - Wireless technology premises equipment





TECHNICAL INFORMATION

MATERIALS

- Contacts: Copper alloy
- Contact finish:
 - Performance-based plating over nickel at separable interface
 - Tin over nickel on press-fit tails on standard lead-free products. Tin-lead option available upon request.
- Housings: High-temperature thermoplastic, UL94V-0
- Organizer: Stainless steel

ELECTRICAL PERFORMANCE

- Contact resistance: $\leq 130\text{m}\Omega$ initial, $\leq 10\text{m}\Omega$ increase after environmental test
- Current rating ($\leq 30^\circ\text{C}$ rise above ambient in still air): 0.25A/contact with all contacts powered
- Differential impedance: $100 \pm 11\Omega$ @ 50 ps (20-80%) rise time
- Differential insertion loss: < 0.9 dB through 6.25Gb/s; < 1.5 dB through 12.5Gb/s
- Near-end crosstalk (multi-active): < -24 dB through 6.25Gb/s; < -22 dB through 12.5Gb/s
- Far-end crosstalk (multi-active): < -24 dB through 6.25Gb/s; < -23 dB through 12.5Gb/s

MECHANICAL PERFORMANCE

- Durability: 200 cycles
- Mating force: 0.40 N max./contact
- Unmating force: 0.10 N min./contact
- Compliant pin insertion force: 25 N max.

SPECIFICATIONS

- Product specification: GS-12-452
- Application specification: GS-20-094

APPROVALS AND CERTIFICATIONS

- Telcordia GR-1217-CORE Central Office

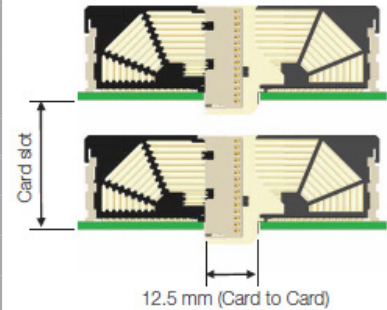
PACKAGING

- Tubes

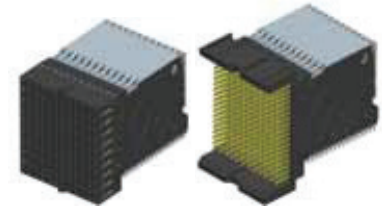
AIRMAX VS® & ZIPLINE® COPLANAR SIGNAL MODULES

TYPICAL APPLICATIONS & SIGNAL DENSITY

Minimum Card Slot Spacing (mm)	Column pitch (mm)	Differential Pairs			Contacts			Product Family
		per column	Linear Density		per column	Linear Density		
			per inch	per cm		per inch	per cm	
27	1.8	6	84.6	33.3	18	254.0	100	ZipLine
25	2.0	5	63.5	25.0	15	190.5	75	AirMax VS
25	3.0	5	42.3	16.7	15	127.0	50	AirMax VS
20	2.0	4	50.8	20.0	12	152.4	60	AirMax VS
20	3.0	4	33.9	13.3	12	101.6	40	AirMax VS
17	2.0	3	38.1	15.0	9	114.3	45	AirMax VS



ZIPLINE® SIGNAL MODULES



Differential Impedance (ohms)	Minimum Card Slot Spacing (mm)	Differential Pairs		Total Contacts	Number Of Columns	Column Pitch (mm)	Header Type	Module Width Along Card Edge (mm)	Signal Module Part Numbers	
		Total	Per Column						Vertical Receptacle	Right-Angle Header
100	27	72	6	216	12	1.8	2-wall	21.6	10076209-101LF	10077555-101LF