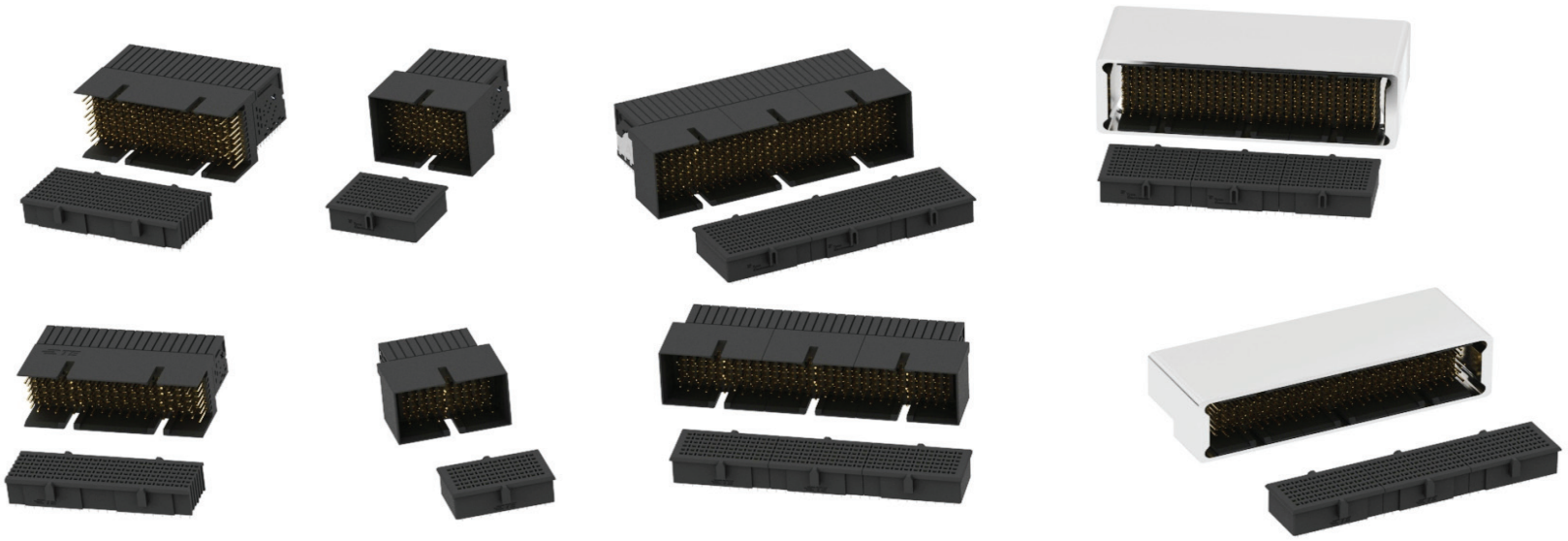


Introducing

Fortis Zd Connector

Downloaded from Arrow.com.

Fortis Zd Connector

KEY FEATURES

Allows 10 Gb/s+ data rates

Extreme mechanical and electrical performance for the most demanding applications

Modular design allows for user configurability and modular evolution

M55302 heritage Mini-Box separable interface provides 4 points of contact on all sides of the pin

Three shell varieties for application versatility, including plastic, shielded and machined metal shell

3-Pair and 2-Pair versions available to accommodate multiple slot pitches

Space compatible materials

Proven compliant pin board attach facilitates manufacturing efficiency, repairability, and superior electrical performance

Staggered daughtercard pin field supports Level 2 maintenance

Protected pin field on backplane for reliability and durability

DESCRIPTION

Modular backplane connector system combining the highest performance mil/aero and commercial technologies in a user configurable platform.

Built to be the most robust and highest performance backplane connector.

APPLICATIONS

Commercial Aerospace

Ground Defense

Unmanned Aerial Vehicles

Fighter Jets







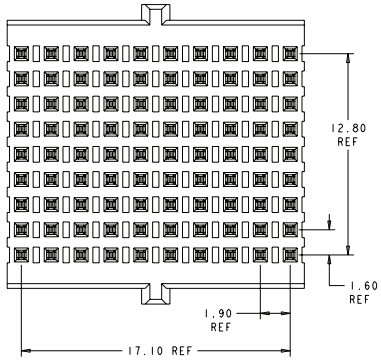


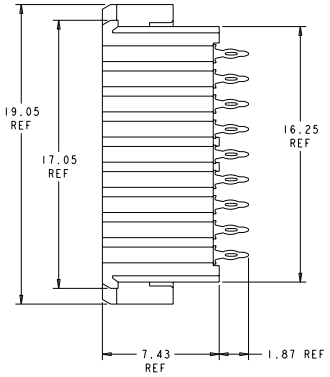
Severe mechanical environment applications, including terrestrial and outer space.

Motherboard/daughtercard applications in avionics, LRU/LRM and card cages.

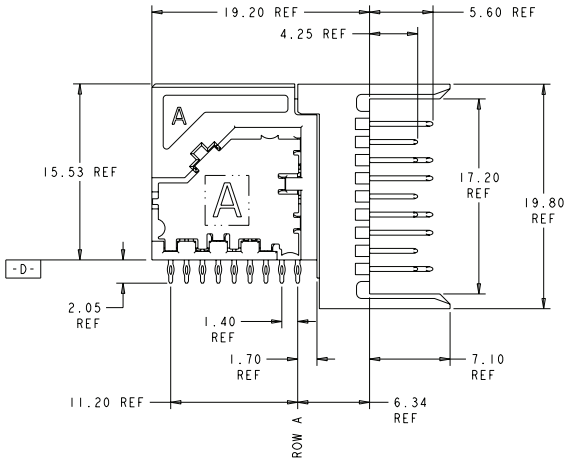
PRODUCT DIMENSIONS

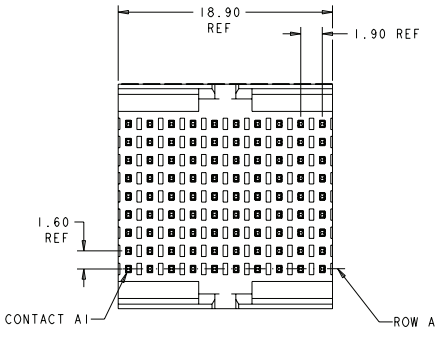
2000896-1 (3-pair, Vertical Center Module)



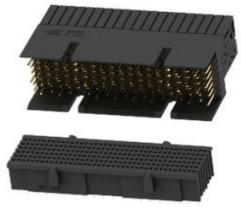


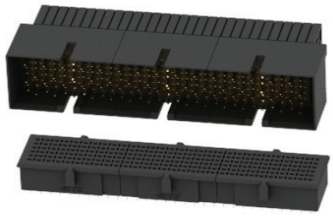
2000891-1 (3-pair, Right-Angle Center Module)





Downloaded from Arrow.com.

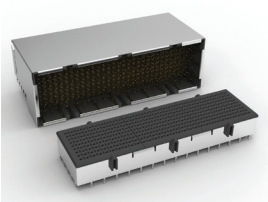




Fortis Zd Connector

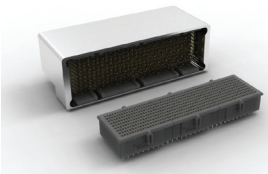
MECHANICAL

Durability:	500 mating cycles
Operating Temperature:	-55 to +125˚C
Contact Engaging & Separating Force:	4.0 oz. max


3-Bay Shielded

PHYSICAL OR OTHER PROPERTIES

10 and 20 column modules	3-pair (9-row) and 2-pair (6-row) modules
6U configuration offers 300 differential pairs	Multi-bay shielded and metal shell options
6 row module enables 0.6” reduced form factor card pitch	
Modularity enables scalability for various card sizes	


3-Bay Metal Shell

MATERIALS

Contacts:	High performance copper alloy Plated 50µin Au over 50µin Ni in mated contact area Tin/lead on compliant tails (gold or pure tin available)
Housings:	High temperature thermoplastic
Shell:	Shield: Copper alloy Machined: 6061 Aluminum with trivalent chromate conversion coating

ORDERING INFORMATION

		Plastic Shell Right Angle Connector Modules[1]						Plastic Shell Vertical Connector Modules[1]				
Size	Description	10-col. left	10-col. enter	20-col center	10-col. right	10-col. full shroud	20-col. full shroud	10-col. end	10-col. center	20-col. center	10-co. full shroud	20-col. full shroud
2-pair	Differential	2102086	2102087	2102096	2102088	2102081	2102232	2102092	2102093	2102098	2102094	2102234
3-pair	Differential	2000890	2000891	2000903	2000892	2102155	2102159	2000895	2000896	2000905	2102157	2102161
3-pair[2]	Single-Ended	2102314	2102315	2102316	2102317	2102318	2102319					

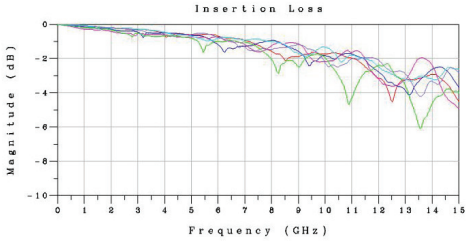
		Shielded Shell Right Angle Connector Modules						Shielded Shell Vertical Connector Modules					
Size	Description	10-column	20-column	30-column	40-column	50-column	60-column	10 column	20-column	30-column	40-column	50-column	60-column
2-pair	Differential	2102515-1	2102515-2	2102515-3	2102515-4	2102515-5	2102515-6	2102516-1	2102516-2	2102516-3	2102516-4	2102516-5	2102516-6
3-pair	Differential	2102247-1	2102247-2	2102247-3	2102247-4	2102247-5	2102247-6	2102248-1	2102248-2	2102248-3	2102248-4	2102248-5	2102248-6
3-pair[2]	Single-Ended	2102320-1	2102320-3	2102320-4	2102320-4	2102320-5	2102320-6						

		Metal Shell Right Angle Connector Modules					
Size	Description	10-column	20-column	30-column	40-column	50-column	60-column
2-pair	Differential	2102114-1	2102114-2	2102114-3	2102114-4	2102114-5	2102114-6
3-pair	Differential	2102077-1	2102077-2	2102077-3	2102077-4	2102077-5	2102077-6

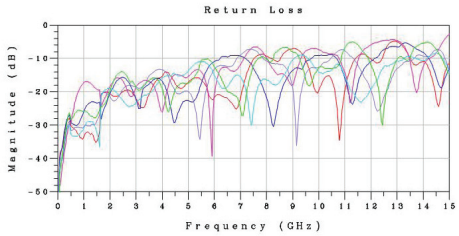
	Universal Guide Hardware	VITA 46	VITA 46 Style Machined
Guide Pin	223969	1469491	2000676
Guide Module	223979	1469492	2000677 or 2000713

1. -1 SnPb Tails, -2 Sn Tails, -3 Au Tails
2. Single-Ended 3-pair uses the same vertical connector as differential 3-pair

Differential Insertion Loss



Differential Return Loss



Downloaded from Arrow.com.

FOR MORE INFORMATION

Technical Support

Internet:	www.te.com/ADM
USA:	+1 (800) 522-6752
Canada:	+1 (905) 470-4425
Mexico:	+52 (0) 55-1106-0814
C. America:	+52 (0) 55-1106-0814
South America:	+55 (0) 11-2103-6000
Germany:	+49 (0) 6251-133-1999
Great Britain:	+44 (0) 8706-080208
France:	+33 (0) 1-3420-8686
Netherlands:	+31 (0) 73-6246-999
China:	+86 (0) 400-820-6015

Follow us on Twitter for all the latest product news @TEConnectivity, and on Facebook, TEConnectivity.

www.te.com/ADM

© 2012 Tyco Electronics Corporation. All Rights Reserved.

1-1773458-7 ADM/RRD 2.5M 03/2012

Fortis Zd, TE Connectivity and the TE connectivity (logo) are trademarks of the TE Connectivity Ltd. family of companies.

Other products, logos, and company names mentioned herein may be trademarks of their respective owners.

While TE has made every reasonable effort to ensure the accuracy of the information herein, nothing herein constitutes any guarantee that such information is error-free, or any other representation, warranty or guarantee that the information is accurate, correct, reliable current. The TE entity issuing this publication reserves the right to make any adjustments to the information contained herein at any time without notice. All implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose are expressly disclaimed. The dimensions herein are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.

Downloaded from Arrow.com.