

zCD Interconnect System and Copper Cable Assemblies



Offering the highest port and bandwidth density of any pluggable form factor available, the zCD Interconnect System delivers 400 Gbps per port with superior signal integrity performance

Features and Benefits

Data rates scalable up to 400 Gbps (25 Gbps over 16 lanes)
Supports high-bandwidth (fat pipe) next-generation applications. Enables 4.4 Tbps with 11 modules on a line card. Supports next-generation 400 GbE

0.75mm pitch, 16 lanes of 25 Gbps per port
Provides compact footprint. Delivers high-density connection

Press-fit connector
Ensures a robust and simple board termination

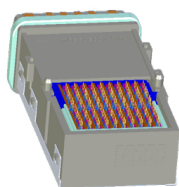
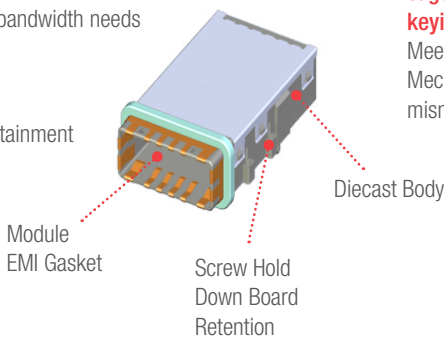
Designed to accept a broad range of customer-specified thermal modules
Provides excellent thermal management

Densest, fastest I/O connector in the market
Enables network and data center OEMs to meet ever-increasing bandwidth needs

Three different diecast cage styles with mechanical keying available
Meets varying design needs. Mechanical keying prevents mismatching

Cable assemblies available with 30 AWG discrete twinax cable
Allows for cable flexibility. Reduces cable bundle size

Elastomeric gasket
Provides superior EMI containment and suppression

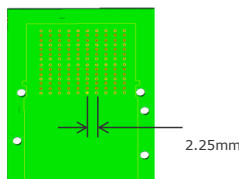


Unique footprint optimizes signal integrity performance while also supporting straight-back routing
Simplifies routing task. Optimizes board edge density – no need to side route to access inner PTH rows

EEPROM (electrically erasable programmable read-only memory) compatible
Allows customer to enter customized information

Cables consist of Expando (expandable braided sleeving)
Keeps cables dressed for system routing bundle size

Latch-to-pull release
Easy to extract cable from connector



Footprint includes tails arranged in straight rows with 2.25mm pitch
Allows routing for signals from rear only. Actual port density along board is fully optimized no side routing.

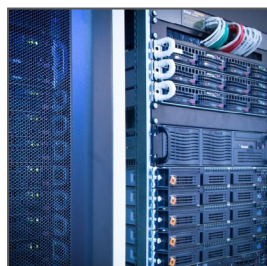
Applications

Telecommunications/Networking

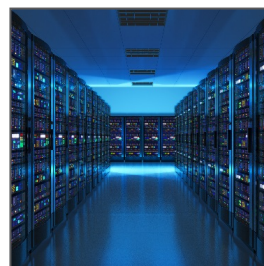
- Core switches
- Routers

Data Centers

- Enterprise computing
- Top-of-rack switches



Switches



Data Center

zCD Interconnect System and Copper Cable Assemblies



Specifications

REFERENCE INFORMATION

Packaging: Stackable Trays
UL File No.: TBD
CSA File No.: TBD
Mates With: zCD Connector, Style 1
Designed In: Millimeters
RoHS: Yes
Halogen Free: Yes

ELECTRICAL

Voltage (max.): 30V (RMS)/DC
Current (max.): 1.0A
Contact Resistance: 10 milliohms
Dielectric Withstanding Voltage: 300V DC

MECHANICAL

Compliant Pin Insertion into PCB: 17.8N per Pin
Compliant Pin Retention to PCB: 3.56N per Pin
Mating Force: 150N
Unmating Force: 170N
Durability (min.): 250 Cycles

PHYSICAL

Wafer Housing: High-Temperature Thermoplastic,
Glass Filled UL 94V-0
Diecast Housing: Nickel-Plated Diecast Alloy
Cover: Stainless Steel Alloy
EMI Gasket: Conductive Polymer
EMI Fingers: Nickel-Plated Copper Alloy
Contact Plating:
 Contact Area — Gold
 Compliant Tail Area — Tin
Underplating — Nickel
PCB Thickness: 1.35mm
Operating Temperature: -40 to +85°C

Ordering Information

Series No.	Component	Product Attribute
173359	90-Ohm Connector	With Gasket
		Without Gasket

Custom Product	Description
Contact Molex	zCD Style 1 Cable Assemblies

www.molex.com/link/zcd.html

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