

Gen-Z Cable Assembly

OVERVIEW

In an effort to keep up with the demands of higher performance and increasing amounts of memory bus bandwidth, Luxshare-TECH designers are working to revise, extend and update the interconnection solution.

The Gen-Z Scalable Connector is a high density and modular interconnect that offers flexibility and signal integrity for high speed signaling. It uses the 1C, 2C, and 4C variations of the SFF-TA-1002 connector system published by SNIA.

Luxshare-TECH Gen-Z internal cable could be adopted in the interconnector based on the other protocol very flexibly. All pins could be configured to the interconnection based on 56G PAM4 serdes protocol, and evolved to 112G PAM4 in future.

FEATURES & BENEFITS

- Support cable to board application: 1.57mm PCB card thickness
- Multiple channels are optional: 1C(56pos),2C(84pos),4C (140pos)more customized requirement available
- Small size design with great robustness : Pitch 0.6mm connector and max 25N wrenching test
- Excellent SI performance: Signal rates up to PCIe5 32GT/s, SAS 4.0 24Gbps and 56 GT/s PAM4 and 112 GT/s PAM4 (in future)
- Compatible with many different industry standards and protocols including SAS, PCIe and 25G Ethernet
- Straight, right angle cable plug are optional
- 85 ohm and 100 ohm impedances are optional
- 29-34AWG cables are available for both discrete and ribbon cable
- RoHS compliant. Halogen free is available on request

PRODUCT APPLICATIONS

DATA

- Servers
- RAID System
- Storage Racks
- HBA Interfaces
- Edge computing
- AI computing

COMMUNICATIONS

- Switches

INDUSTRY STANDARDS

- SAS 3.0 / 4.0(24Gbps)
- PCIe Gen 4 / Gen 5(32GT/s)
- OpenCAPI 25Gbps
- 25G Ethernet
- TA--SFF-1002

TECHNICAL INFORMATION

MATERIAL

- Contact gold plated 30u"
- Metal Latch, Plastic body

ELECTRICAL PERFORMANCE

- Differential impedance: 85 & 100 ohm
- Current : 1.1 A/contact
- Voltage: 30 V AC/contact

SPECIFICATION

ES-10-00-0016

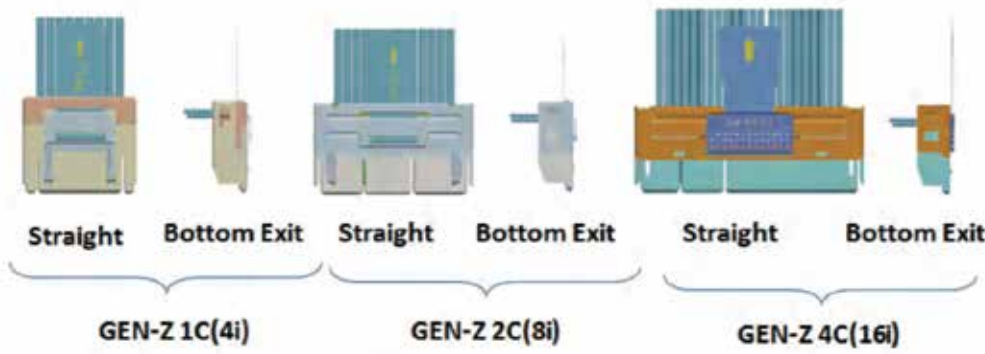
MECHANICAL PERFORMANCE

- Rated Durability Cycles 250
- Latched Plug Retention Force 50 N minimum

ENVIRONMENTAL

- Storage temperature range: -20°C to +80°C
- Operating temperature: 0°C to +80°C
- RoHS compliant

TYPES



Partial PN Table

Product Numbers	Product Description
LA0GZXXX-SD-R	Internal GenZ 1C Cable Assembly 1.0 m 30 AWG
LA0GZXXX-SD-R	Internal GenZ 2C Cable Assembly 1.0 m 30 AWG
LA1GZXXX-SD-R	Internal GenZ 4C Cable Assembly 1.0 m 30 AWG
LA0GZXXX-SD-R	Internal GenZ 1C Cable Assembly 0.7 m 32 AWG
LA0GZXXX-SD-R	Internal GenZ 2C Cable Assembly 0.7 m 32 AWG
LA1GZXXX-SD-R	Internal GenZ 4C Cable Assembly 0.7 m 32 AWG
LA0GZXXX-SD-R	Internal GenZ 1C Cable Assembly 0.5 m 34 AWG
LA0GZXXX-SD-R	Internal GenZ 2C Cable Assembly 0.5 m 34 AWG
LA1GZXXX-SD-R	Internal GenZ 4C Cable Assembly 0.5 m 34 AWG