

Gen-Z Series



OVERVIEW

Luxshare-TECH Gen-Z products family is high density, high speed performance, paddle card edge connector series for next Gen. PCIe Gen.4, Gen.5 application, evolved up to the further PCIe Gen.6. The 0.60mm Gen-Z connectors conform to SFF-TA-1002, OCP NIC 3.0 specification. Luxshare-TECH Gen-Z provides the full range of configuration: 1C, 2C, 4C, 4C+, 8C and HP (high power pin) options.

Luxshare-TECH Gen-Z provide the diverse type products for customers' application including vertical, right angle, straddle mount and orthogonal available. Gen-Z provide the excellent interconnection choice for SSD, NIC, AIC, ASIC module, BTB, coplanar application etc. Gen-Z could also be adopted in the other serdes protocols, which the data transmission speed is from 32Gbps, 56Gbps PAM4, up to 112Gbps PAM4.

FEATURES & BENEFITS

- Signal pin pitch at 0.60mm with current rating of 1.1A, up to 12 pins for power application
- Signal pins options from 56, 84, 140, 168, 280
- High power pin option provide additional power supply 55A @ 12/48VDC
- Customization of pin count upon request
- Small form factor
- Discrete pin design could support all high speed differential pairs application
- Supports 1.6mm thick mating board
- Provides power for module card
- Serves as a space-saving connector
- Supports single-ended, high speed differential pairs up to 32G NRZ, 56G PAM4, 112G PAM4
- For most standard BTB applications

PRODUCT APPLICATIONS

Data center & Networking Equipment
Servers/Storage Devices
High Performance Computing (HPC)
Commercial Systems
Switches/Routers
Networking
Radio Units
Baseband

INDUSTRY STANDARDS

SFF-TA-1002
Gen Z
EDSFF
OCP NIC 3.0
PCIe 4.0 & 5.0

TECHNICAL INFORMATION

MATERIAL

Contact Base Metal: Copper Alloy
Contact Area Finish: Gold over Nickel
Solder Area Finish: Tin over Nickel
Housing: High temperature thermoplastic(UL 94V-0)

ELECTRICAL PERFORMANCE

Voltage: 12 volts AC/DC MAX
Current: 1.1A maximum per contact

ENVIRONMENTAL

Operating temperature : -55°C TO +85°C
Storage temperature : -20°C TO +85°C
Relative humidity: 20% to 80%
Atmospheric pressure: 650mm to 800mm of Hg (86 ~106Kpa)

MECHANICAL PERFORMANCE

Rated Durability Cycles 200
Mating Force: 0.75N pin MAX
Unmating Force: 0.12N pin MIN

PACKAGING

Tape & Reel

SPECIFICATION

ES-11-00-0006
ES-11-00-0007

Partial PN Table

Product Numbers	Product Description
PGZB56-5300-000-1H	1C VERTICAL Gen-Z Conn. With shell
PGZB84-5300-000-1H	2C VERTICAL Gen-Z Conn. With shell
PGZBA4-5300-000-1H	4C VERTICAL Gen-Z Conn. With shell
PGZB56-5300-004-1H	1C VERTICAL Gen-Z Conn. Without shell
PGZB84-5300-004-1H	2C VERTICAL Gen-Z Conn. Without shell
PGZBA4-5300-004-1H	4C VERTICAL Gen-Z Conn. Without shell
PGZB56-6300-000-1H	1C rightangle Gen-Z Conn. With shell
PGZB84-6300-000-1H	2C rightangle Gen-Z Conn. With shell
PGZBA4-6300-000-1H	4C rightangle Gen-Z Conn. With shell
PGZB56-6300-004-1H	1C rightangle Gen-Z Conn. Without shell
PGZB84-6300-004-1H	2C rightangle Gen-Z Conn. Without shell
PGZBA4-6300-004-1H	4C rightangle Gen-Z Conn. Without shell
PGZBA4-9300-005-1H	4C straddle Mount. 2.36mm
PGZBA6-9300-005-1H	4C+ straddle Mount. 2.36mm
PGZB56-1301-000-0H	Gen-Z 1C orthogonal type, Au 30u"