

OmniEdge™ ULP Connector

OVERVIEW

In order to meet higher density demand in networking equipment and server, Luxshare-TECH develops Omniedge ULP as a new interconnection system including connector and cable assemblies to support higher signal transmission, which can be used in application of 24Gbps SAS signal or 16GT/s PCIe signal. Besides, it also can support the 56GT/s PAM4. Ultra Low Profile OminiEdge (ULP) solutions with 0.6mm contact pitch is one of the smallest connectors for high speed Interconnected technology in current market, which is designed and developed independently by Luxshare-TECH. It can save much space in end device and even can be placed under the heat sink on ASIC, because the height of the mated connector is less than 4mm. OminiEdge ULP uses double drain raw cable that has smaller size and good bend performance. Luxshare-TECH can supply 8i, connector and cable assembly, and also can provide customized type, as 4i, 12i with sideband and so on.



FEATURES & BENEFITS

- Support cable to board application:0.8mm PCB card thickness
- Multiple channels are optional: 8i and 12i are available for different application
- Small size design with great robustness : Pitch 0.6mm connector and max 25N wrenching test
- Excellent SI performance: Signal rates up to PCIe4 16GT/s, SAS 4.0 24Gbps and 56GT/s PAM4
- Compatible with diverse industry standards and protocols including SAS, PCIe
- Straight and customization cable plug are optional
- 85 ohm and 92 ohm impedances are optional
- RoHS compliant. Halogen free is available on request

PRODUCT APPLICATIONS

DATA

Servers
RAID System
Storage Racks
HBA Interfaces

COMMUNICATIONS

Switches

INDUSTRY STANDARDS

Independent research and development of Luxshare-TECH
SAS 3.0 / 4.0(24Gbps)
PCIe Gen 3 / Gen 4(16GT/s)
56GT/s PAM4

TECHNICAL INFORMATION

MATERIAL

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

ELECTRICAL PERFORMANCE

Voltage: 30V AC/DC max
Current: 0.5A MAX per contact

ENVIRONMENTAL

Operating temperature : 0°C TO +80°C

MECHANICAL PERFORMANCE

Rated Durability Cycles: 50
Mating Force: 0.8N/pin MAX
Unmating Force: 0.6N/pin MIN

PACKAGING

Tape & Reel

SPECIFICATION

ES-11-00-0019

Partial PN Table

Product Numbers	Product Description
PCEB82-6300-000-1H	CHIP END 12X Connector,82Pin,SMT,Au 30u"
PCEB50-6300-000-1H	CHIP END 8X Connector,50Pin,SMT,Au 30u"