LUXSHARE TECH
立讯技术

OmniEdge ULP Cable Assembly

OVERVIEW

In order to meet higher density demand in networking equipment and server, Luxshare-TECH develops Omniedge ULP as a new interconnection system includ ing 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 Omniedge (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.

Omniedge 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
- 30-34AWG 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
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 gold plated 30u''
Metal Latch，Plastic body

ELECTRICAL PERFORMANCE

Differential impedance: 85 & 100 ohm
Current : 0.5 A/contact
Voltage: 30 V AC/contact

SPECIFICATION

ES-10-00-0021

MECHANICAL PERFORMANCE

Rated Durability Cycles 250
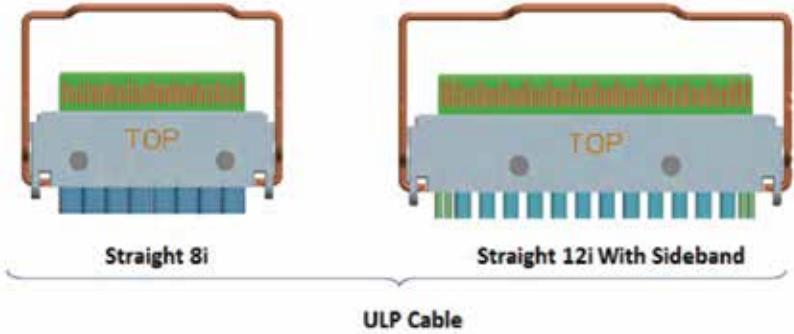Latched Plug Retention Force 50 N minimum

ENVIRONMENTAL

Storage Temperature Range: -20℃ to +80℃
Operating Temperature: 0℃ to +80℃
RoHS compliant

TYPES

Straight 8i   Straight 12i With Sideband

ULP Cable

Partial PN Table

Product Numbers	Product Description
LA0XXXXX-SD-R	Internal Omniedge ULP 8i Cable Assembly 1.0 m 30 AWG
LA0XXXXX-SD-R	Internal Omniedge ULP 12i Cable Assembly 1.0 m 30 AWG
LA0XXXXX-SD-R	Internal Omniedge ULP 8i Cable Assembly 0.7 m 32 AWG
LA0XXXXX-SD-R	Internal Omniedge ULP 12i Cable Assembly 0.7 m 32 AWG
LA0XXXXX-SD-R	Internal Omniedge ULP 8i Cable Assembly 0.5 m 34 AWG
LA0XXXXX-SD-R	Internal Omniedge ULP 12i Cable Assembly 0.5 m 34 AWG