

## OmniEdge ASM Cable Assembly

### OVERVIEW

Luxshare-TECH design Omniedge-ASM as a new internal cable to board or board to board interconnection product family for next Gen SAS, PCIe, Ethernet etc applicaion. Omniedge-ASM is of very excellent SI performance so as to support SAS4.0, PCIeGen4/Gen5, even PCIeGen6 in future. The high speed per lane of ASM could support 32Gbps NRZ, 56G PAM4 data rate with potential up to 64G PAM4 & 112G PAM4.

Luxshare-TECH' s Omniedge-ASM is 0.6mm pin pitch, ultra small form factor to save the space on the PCB and minimize the mating height above board. The robust mechanical structure design and the stable pull-to-re lease latching achieve the best mating reliability.

Luxshare-TECH Omniedge-ASM provide diverse product types: vertical and right angel connector and straight, 45degree and right angle cable plug. And based on all-pin high speed signal capability, Omniedge-ASM could provide 38pin for 12 differential pair, 50pin for 16pair, 74pin for 24pair, 100pin for 32pair, 124pin for 40pair, 148pin for 48pair and the other customized size.



### FEATURES & BENEFITS

- Support cable to board application: 1.57mm PCB card thickness
- Multiple channels are optional: 4X/6X(38pos),8X/12X(74pos),16X/20X(124pos) 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 32Gbps, SAS 4.0 24Gbps and 56 Gbps PAM4 and 112 GT/s PAM4
- Compatible with many different industry standards and protocols including SAS, PCIe and Ethernet
- Straight, 45degree, right angle, cable plug are optional
- 85 ohm and 92ohm impedances are optional
- 30-34AWG cables are available for both discrete and ribbon cable
- RoHS compliant. Halogen free is available on request
- Proven anti skew-mate capability
- Simple structural keying/polarizing of very strong mechanical feature
- Robust and stable pull-to-release latching
- Board end connector accepts 1.57mm Add-In-Card as well for increased application flexibility
- Provide connector mated with customer paddle card and board connector mated with cable options

### 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 4 / Gen 5(32GT/s) / Gen 6(64GT/s)  
OpenCAPI 25Gbps  
56G&112G PAM4 Ethernet

## TECHNICAL INFORMATION

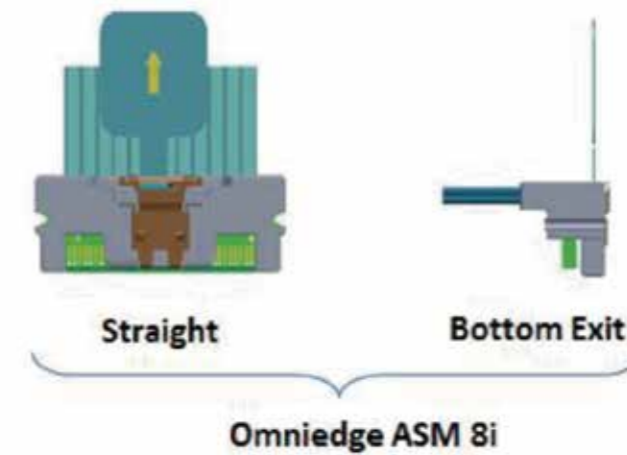
### MATERIAL

Contact gold plated 30u"  
Metal Latch, Plastic body

### ELECTRICAL PERFORMANCE

Differential impedance: 85 & 92ohm  
Current : 1.1 A/contact  
Voltage: 30 V AC/contact

### TYPES



### 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

### Partial PN Table

Product Numbers	Product Description
LA0XXXX-SD-R	Internal Omniedge-ASM Cable Assembly 1.0 m 30 AWG
LA0XXXX-SD-R	Internal Omniedge-ASM Cable Assembly 0.7 m 32 AWG
LA0XXXX-SD-R	Internal Omniedge-ASM Cable Assembly 0.5 m 34 AWG