

## OmniEdge™ ASM Connector

### 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 application. 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-release latching achieve the best mating reliability. Luxshare-TECH Omniedge-ASM provide diverse product types: vertical and right angle 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

- 0.6mm pin pitch, ultra small form factor
- 85ohm and 92ohm differential impedance for SAS4.0 PCIe4.0/5.0/6.0 and Ethernet both application for excellent SI performance
- 38, 50, 74, 124, 148 pins for PCIe multi-lanes design and 100 pin or other pins available upon request
- 32G NRZ & 56G PAM4 data rate with potential up to 64G PAM4 & 112G PAM4
- Proven anti skew-mate
- 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
- Provide Vertical/Right angle board connector and VT/RA cable plug options for all application

### PRODUCT APPLICATIONS

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

### INDUSTRY STANDARDS

PCIe 4.0 & 5.0  
SAS3.0/4.0  
OpenCAPI 25Gbps  
IEEE802.3 cd&ck

## 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: 50V AC MAX per contact  
Current: 1.1A MAX per contact

### ENVIRONMENTAL

Operating temperature : -40°C TO +85°C  
Storage temperature : -15°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: 0.575 N /pin MAX  
Unmating Force: 0.05 N /pin MIN

### PACKAGING

Tape & Reel

### SPECIFICATION

ES-11-00-0018

### Partial PN Table

Product Numbers	Product Description
PASB74-5300-000-1H	ASM VT shielded conn.Au:30u"
PASB74-6300-000-1H	ASM R/A shielded conn.Au:30u"