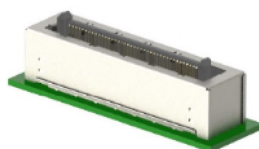


Board to Board Stack-Shield

Overview



Plug side 51080 / 51082



Receptacle side 51079 / 51081

As 5G technology expands, the demands for Stack-Shield data transmission rate keep rising. The issue of antenna and EMI interference is getting more and more. ACES Stack-Shield Series is a board-to-board solution for applications that need high-speed data transmission rates and EMI mitigation.

Stack-Shield Series has a high data transmission rate up to PCI-E Gen3/Gen4 and has complete shielding with multiple grounds for mitigating EMI issues. Ideal for the router, server, desktop, edge computing, and other relevant telecom applications.

P/N	Description	Circuits
51079/51081	BTB 0.8 Pitch Stack-Shield Receptacle	40, 80
51080/51082	BTB 0.8 Pitch Stack-Shield Plug	40, 80

Applications



Router



Switch



Gateway



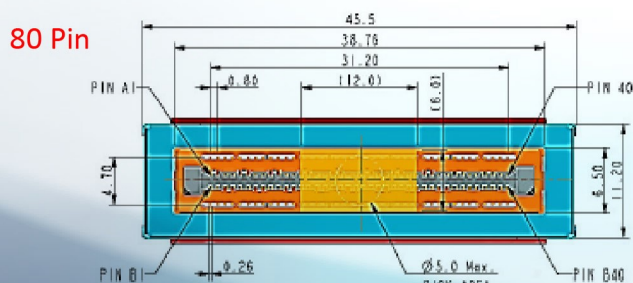
Set Top Box



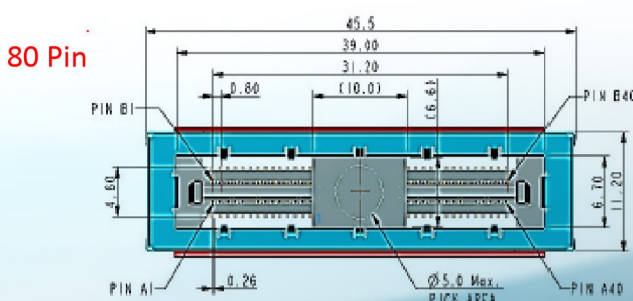
Modem

Dimension

Receptacle

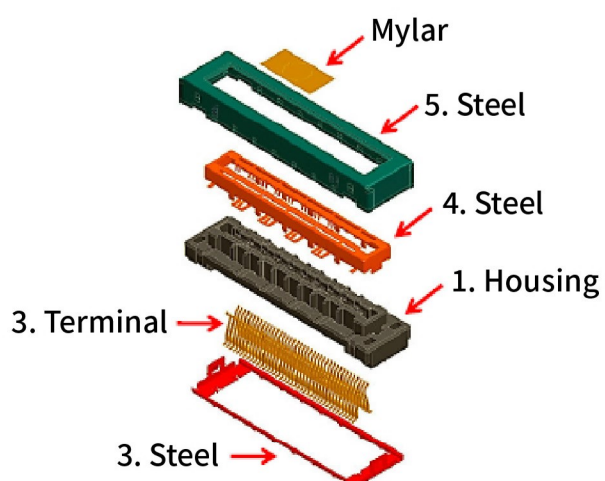


Plug

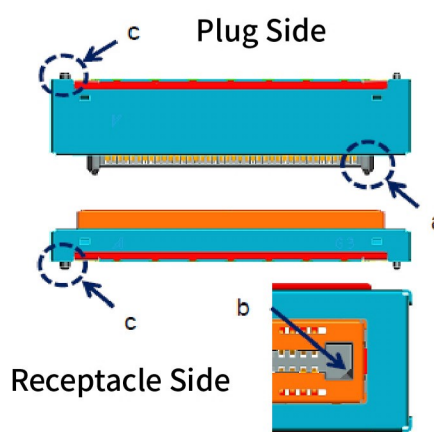


Features

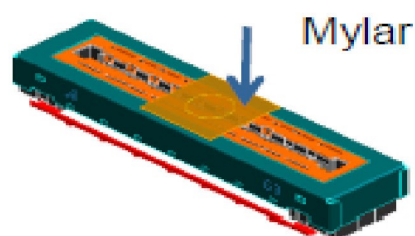
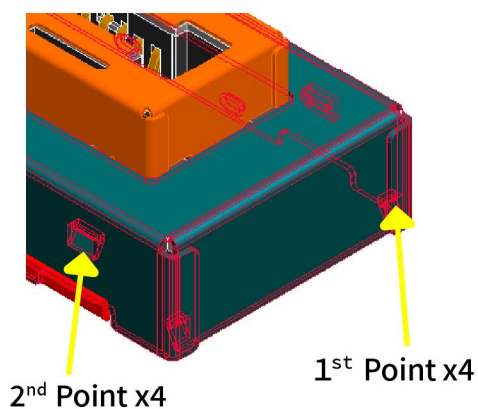
Exploded View



Boss Pole



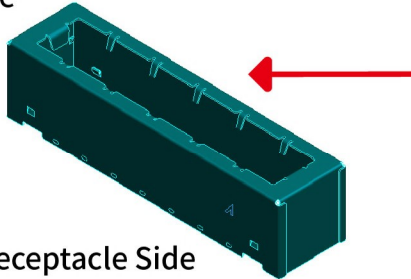
Stack-Shield Design-Two-step Assembly (Plug/Receptacle Side)



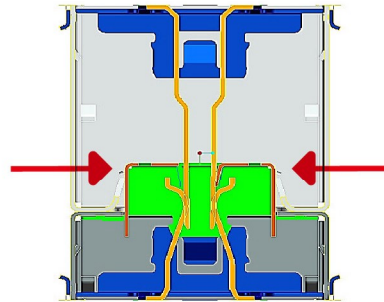
- A. Factory Assembly - 1st Point
(The appearance is sticky Mylar, the iron shell will not fall off.)
- B. Customer Assembly - 2nd Point

Ground Design-Plug/Receptacle Side

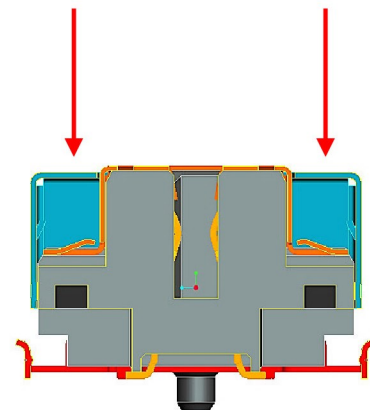
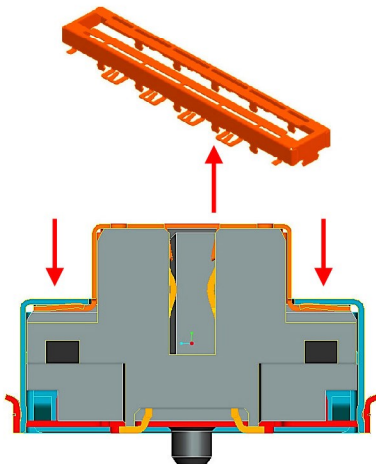
Plug Side



Receptacle Side

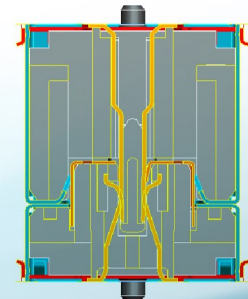
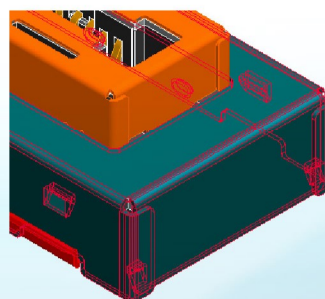


The inner stack shield shrapnel are in contact with the outer stack shield.



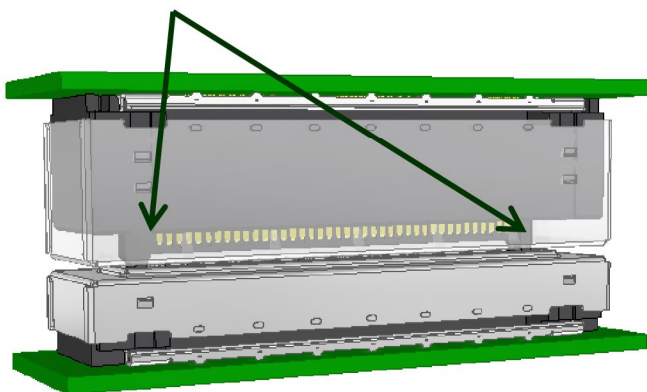
EMI Shade

- Over-connection design of stack shield appearance.
- The buckle point of the stacking shield is a tearing bump.
- When the connector is inclined. When there is a gap, the inner Stack Shield can be shielded.



Movable Shield Design

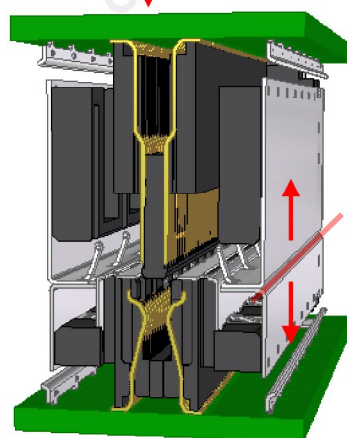
Guide pin



The guide pins of the plug connector lead it into the receptacle slot.

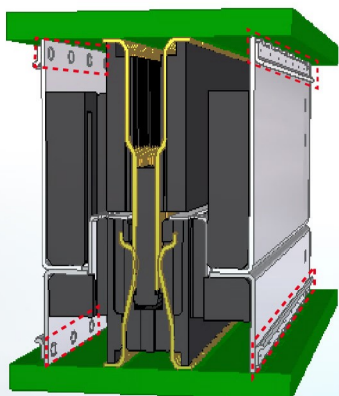


Connector assembly direction.



Shield moving direction

When the connector is assembled, the shields can push each other along the assembly direction.



After being assembled, the shields can fully cover the connector (including SMT solder area).