

Colibri® for COM Express®

ept's **Colibri**[®] connector is a shielded, 2-row, SMT interconnect system in 0.5 mm pitch.

It is designed to meet the requirements according to specifications not only of PICMG COM Express[®], but also of SFF-SIG Core Express[®]. Furthermore **Colibri**[®] products are compatible with all common connectors available on the market and extensively tested.

The connector system is available with 8 mm and 5 mm stacking height plus 220 and 440 pins.

Additional versions with flexible pin count as well as multiple stacking heights are available on request.

Key Features

- Meets the requirements of PICMG COM Express[®] and SFF-SIG CoreExpress[®]
- Intermatability with available connectors in the market
- Tested up to 5 Gbit/s; applications up to 8 Gbit/s possible
- Robust connector design
- Custom configurations in pin
 count
- Integrated Pick & Place area
- Packed in Tape & Reel

Applications

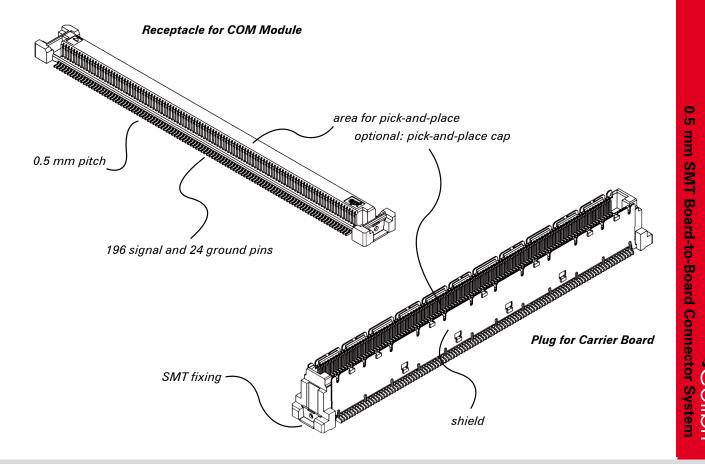
- COM Express®
- CoreExpress[®]
- Mezzanine Add-on Cards







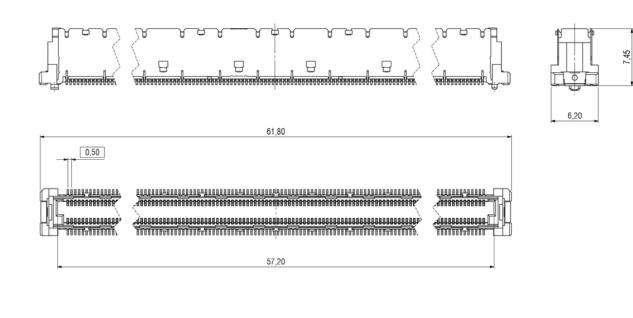




Technical Creations	Colibri® for COM Express®	
Technical Specifications	0.5 mm SMT Board-to-Board Connector System	
BASICS Specification	PICMG [®] COM.0	
No. of contacts	220 / 440	
Termination technology	SMT	
Operating temperature range	- 40 °C to + 85 °C	
MATERIAL Insulator material	LCP, UL 94 V-0	
Contact material	Copper alloy	
Plating	Au over Ni	
MECHANICAL Grid	0.5 mm	
Mating force per pin	max. 0.9 N	
Separating force per pin	min. 0.1 N	
Durability	30 mating cycles	
Coplanarity	max. 0.1 mm	
ELECTRICAL Operational current	max. 0.5 A	
Operating voltage	50 VAC	
Contact resistance	max. 75 m Ω	
Insulation resistance	> 100 MΩ	
Test voltage	200 VAC	
Data transfer rate	5 Gbit/s (8 Gbit/s)	
PROCESSING Soldering temperature	260 °C per J-STD-020	
MSL	1	
Packaging	Tape and reel	
Assembly	Pick and place	
APPROVAL Flammability	UL pending	
Environment	RoHS compliant	







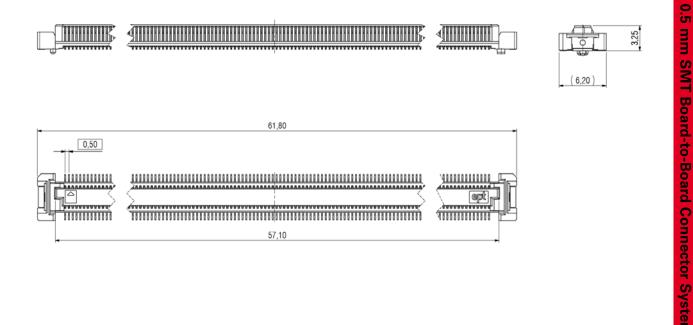
Drawing shows version with 8 mm stacking height, dimensions in mm

Plug (Base Board)

	Colibri® Plug	
No. of contacts	Part number 8 mm stacking height	Part number 5 mm stacking height
220	401-55101-51	401-51101-51
220 with pick & place cap	401-55151-51	401-51151-51
440 with pick & place cap	401-55501-51	401-51501-51

Options	On request	Note
 Tray packaging (please add VP1 to the part number!) 	 Other contact numbers Other stack heights Different plating thickness 	 For detailed information see customer drawing





Dimensions in mm

Receptacle (COM Module)

	Colibri® Receptacle
No. of	3.25
contacts	Part number
220	402-51101-51
440	402-51501-51



