

### Colibri® for COM Express®

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

Both connectors, Plug and Receptacle, are available with 8 mm stacking height and either 220 or 440 pins. They are designed to meet 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.

Additional versions with flexible pin count as well as multiple stack heights will be available consecutively.

#### **Key Features**

- Meets the requirements of PICMG COM Express® and SFF-SIG CoreExpress®
- Intermatability with available connectors in the market
- Robust connector design
- Plug connector with ground shield
- Receptacle connector with ground pins
- Custom configurations in pin count
- Integrated Pick & Place area
- Packed in Tape & Reel

#### **Applications**

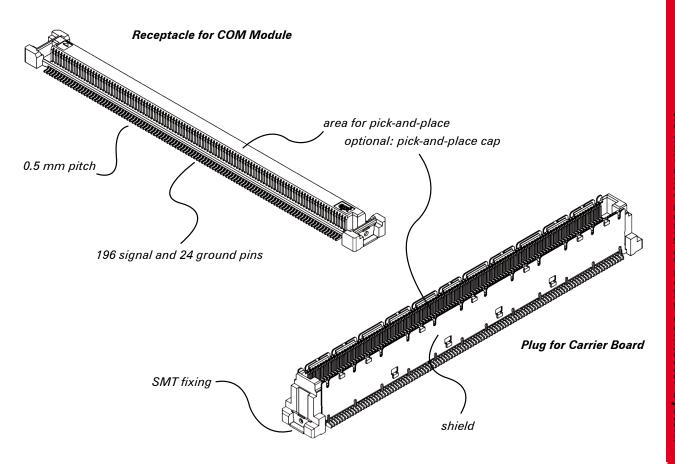
- COM Express<sup>®</sup>
- CoreExpress®
- Mezzanine Add-on Cards



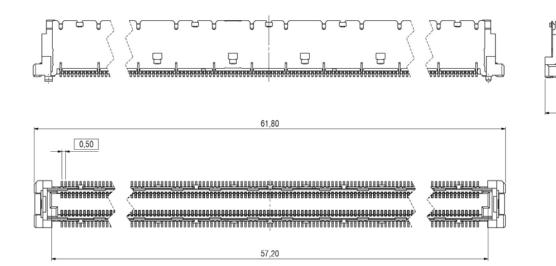
**COM Express**®

4

ept



Tooknigal Specifications	Colibri® for COM Express®	
Technical Specifications	0.5 mm SMT Board-to-Board Connector System	
Specification	PICMG® COM.0	
No. of contacts	220 / 440	
Termination technology	SMT	
Operating temperature range	$-40^{\circ}\text{C}$ to $+85^{\circ}\text{C}$	
Insulator material	LCP, UL 94 V-0	
Contact material	Copper alloy	
Plating	Au over Ni	
Grid	0.5 mm	
Mating force per pin	max. 0.9 N	
Seperating force per pin	min. 0.1 N	
Durability	30 mating cycles	
Coplanarity	max. 0.1 mm	
Operational current	max. 0.5 A	
Operating voltage	50 VAC	
Contact resistance	max. $75~\text{m}\Omega$	
Insulation resistance	> 100 MΩ	
Test voltage	200 VAC	
Data transfer rate	5 Gbit/s	
Soldering temperature	260 °C per J-STD-020	
Packaging	Tape and reel	
Assembly	Pick and place	
Flammability	UL 94 V-0	
Environment	RoHS compliant	



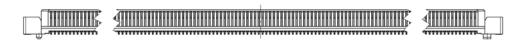


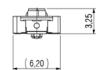
6,20

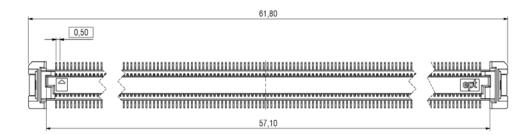
## Plug

	Colibri® Plug
No. of	7.45
contacts	Part number
220	401-55101-51
440	401-55501-51

Options	On request	Note
- Pick & place cap for 220 contacts version	Other contact numbers     Other stack heights     Different plating thickness	For detailed information see customer drawing







Dimensions in mm

# Receptacle

	Colibri® Receptacle		
No. of	325		
contacts	Part number		
220	402-51101-51		
440	402-51501-51		

Options	On request	Note
— Pick & place cap for 220 contacts version	Other contact numbers     Different plating thickness	For detailed information see customer drawing