# BergStak® 0.50mm Self-Alignment Board-to-Board Connector

# FINE PITCH SOLUTION WITH SELF-ALIGNMENT FEATURE

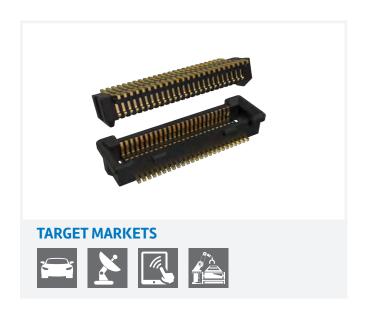
The BergStak® 0.50mm self-alignment connectors come with a unique self-alignment feature that allows customers to use in the applications which needs blind mating. It can support ±0.85mm in pitch direction and ±1.29mm in width direction.

The 0.50mm fine pitch design supports high signal density applications where space is a constraint.

Scoop-proof housings ensure terminals are not damaged during mating and thus can minimize the contact damage with improving the manufacturing quality.

BergStak® 0.50mm self-alignment connector currently has a stack height of 3mm on 50 positions, and positions are extendable from 20 to 60 upon request.

- 0.50mm fine pitch
- Self- alligment feature supporting blind mating
- Suitable for parallel board stacker applications
- Scoop-proof feature



#### **FEATURES**

- Self-alignment feature
- 50 positions available, extendable from 20 to 60 positions in increments of 10
- Scoop-proof housings
- 0.50mm double row contacts
- Vertical mating configuration
- UL94V-0 high temperature LCP material
- RoHS compliant, halogen and lead free

#### **BENEFITS**

- Supports blind mating and automatic assembly cost effectively
- Application flexibility
- Prevents terminal mating damage
- High density connector, suitable for applications with space constraints
- Suitable for parallel board stacker applications
- High flammability rating
- Meets health, safety and environment requirements

## **▶** BergStak® 0.50mm Self-Alignment Board-to-Board Connector

### TECHNICAL INFORMATION

#### **MATERIAL**

 Housing: High temperature thermoplastic LCP, black (UL94V-0)

• Terminal base material

• Receptacles: Copper alloy

• Headers: Copper alloy

#### **ELECTRICAL PERFORMANCE**

• Current Rating: 0.5A per contact

Voltage Rating: 100V AC

• LLCR:

• Initial:  $30m\Omega$  max.

• After test:  $50m\Omega$  max.

 ${\color{red}\bullet}$  Insulation Resistance: 1000M $\Omega$  min.

Support speed PCIe Gen1 with 2.5Gb/s

#### **MECHANICAL PERFORMANCE**

■ Durability: 50 cycles.

• Mating Force: 0.8N max. per contact

• Un-mating Force: 0.15N min. per contact

Contact Retention Force: 1N min. per contact

#### - ENVIRONMENTAL

■ Operating temperature Range: -40°C ~ 125°C

■ Salt Spray Test: 5±1% salt concentration 48±4 hours 35±2°C

#### **SPECIFICATIONS**

■ Product Specification: GS-12-1298

#### **PACKAGING**

■ Tape & Reel

#### **TARGET MARKETS/APPLICATIONS**



Automotive Camera



5G AAU



Home Automation IoT Devices



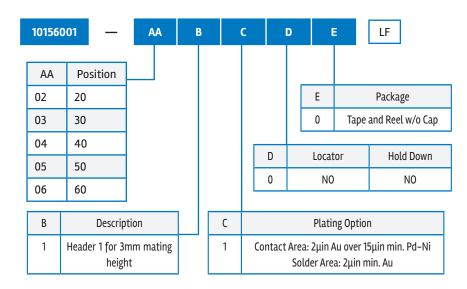
Factory Automation Camera Embedded Computer

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# PART NUMBER SELECTOR - RECEPTACLE

10156000		_	AA	В		C		D		ŀ	≣	LF	
AA	Po	sition											
02	20									Е	Package		
03	30									0	Таре	and Reel w/o	о Сар
04	40							ь.					
05	50							D		Locator		Hold Do	own
06	60							0		N0		N0	
				.									
В	Description		tion			С	Plating Option						
1	Receptacle 1 for 3mm mating height					1	Contact Area: 2µin Au over 15µin min. Pd-Ni Solder Area: 2µin min. Au						

## PART NUMBER SELECTOR - HEADER



# **PART NUMBERS**

Description	Part Numbers
BergStak® 0.50mm Self-Alignment BTB Conn, Vertical Receptacle, 50 Positions	10156000-051100LF
BergStak® 0.50mm Self-Alignment BTB Conn, Vertical Header, 50 Positions	10156001-051100LF

Remark: More options can be extended according to the market needs