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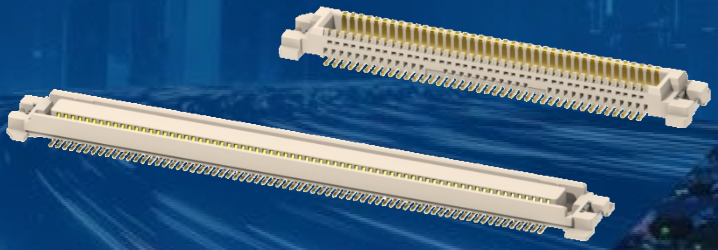
COMMUNICATIONS SOLUTIONS

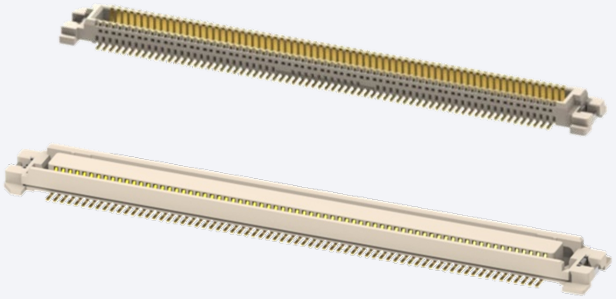
BergStak® 0.635mm Product Presentation



FCi Basics

Agenda: BergStak® 0.635mm Board to Board Connector

- Value Proposition
- Product Overview
- Product Specifications
- Features & Benefits
- Part Numbers
- Markets & Application



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Value Proposition

- Amphenol’s BergStak® 0.635mm is kind of board to board connector with MICRO PITCH/LOW PROFILE/ HIGH PINCOUNT, and it also supports HIGH SPEED data transmission.
- It has golden pitch of 0.635mm, balances requirements for space-saving and robustness, especially suitable for Industrial applications.
- Now the family available in 80 and 140 positions, suitable for applications which require high pin counts and low profile connection.
- Polarization and mis-alignment features to support correct and easier mating.
- The family can reach data rate of 8Gb/s, its open-pin-field design provides design flexibility to customer.
- Vacuum tape to support auto pick/place process.

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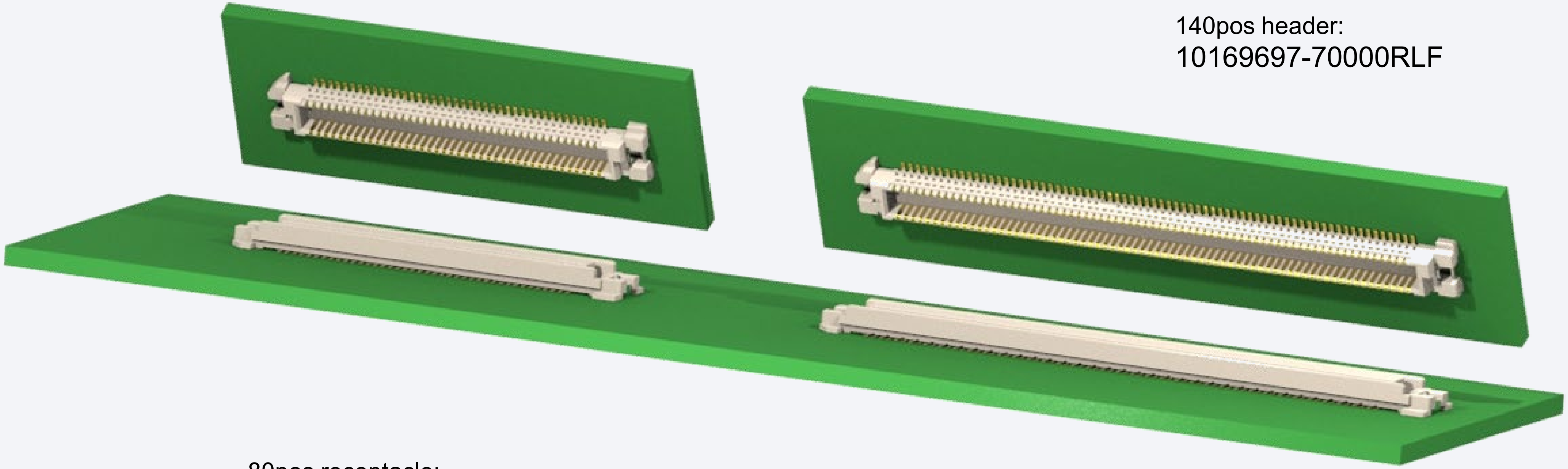
Solution Overview



80pos header:
10169697-40000RLF

140pos header:
10169697-70000RLF

80pos receptacle:
10169698-40000RLF

140pos receptacle:
10169698-70000RLF

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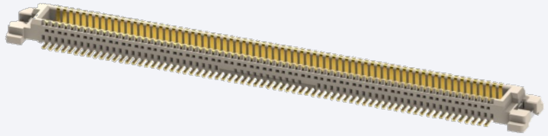
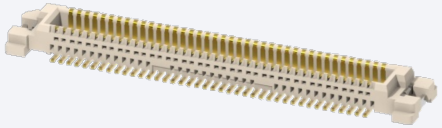
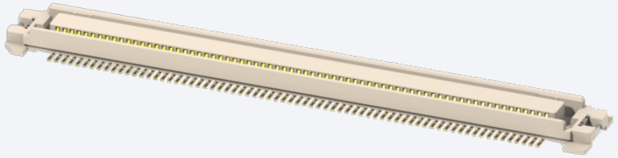
Solution Overview



140pos header:
10169697-70000RLF



80pos header:
10169697-40000RLF



140pos receptacle:
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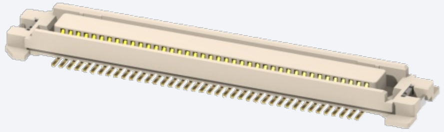

80pos receptacle:
10169698-40000RLF

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Product Specifications

Product Facts

- Pitch of 0.635mm,double row contacts
- 3mm stack height
- Position of 80 and 140
- Data rate of 8Gb/s

Basic Specifications

Pitch	0.635 mm
Pin Count	80 and 140
PCB Termination	SMT
Conn Direction	Vertical header and receptacle
Plating	Gold flash on contact area

Technical Documents

- Product Spec.: GS-12-1709

Performance Characteristics

- Durability: 50 cycles
- Mating and Un-mating Force: 0.7N max. & 0.12N min./Contact
- Operating Temperature Range: -55° C to +85° C
- Current Rating: 0.5A per contact (all contacts powered)
- Insulation Resistance: 1000MΩ min.
- LLCR: 20mΩ max.
- Mechanical Shock: EIA 364-27
- Vibration: MIL-STD-202, Method 201
- Signal Integrity
  - Data rate: 8Gbps

Materials

- Housing: High temperature thermoplastic LCP
- Contact Base Metal
  - Receptacle: Copper Alloy
  - Header: Copper Alloy

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Features and Benefits

Features	Benefits
> Micro Pitch of 0.635mm Low profile design to support 3mm stack height	> High performance, space saving solution.
>High pincounts of 80 and 140	> Applicable for different applications require high pincounts.
> Polarization and mis-alignment features to support correct and easier mating	> Prevents mis-mating and ensures proper mating.
> Side walls to protect contacts	> Avoid deforming risk of contacts while operation.
> High Speed performance of 8 Gb/s with open pin field	> Offers design flexibility for high speed applications.
> Optional vacuum tape	> To support auto-pick/place process.

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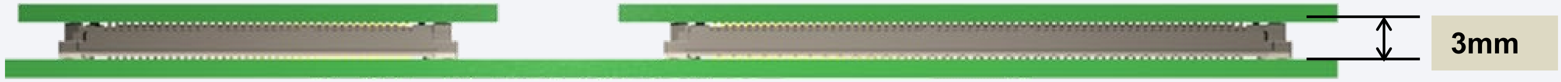
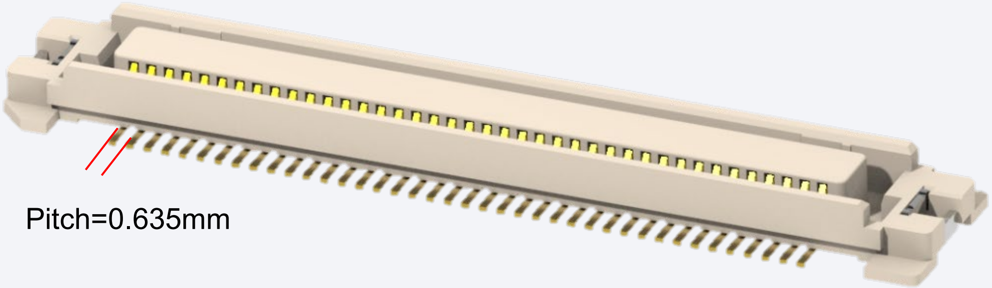
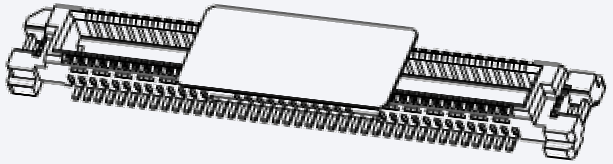
Advanced Features



Low profile design to support 3mm stack height.
High pin counts of 80 and 140 position available.



Side wall on housing to protect contacts.



Optional vacuum tape to support auto-pick/place process.

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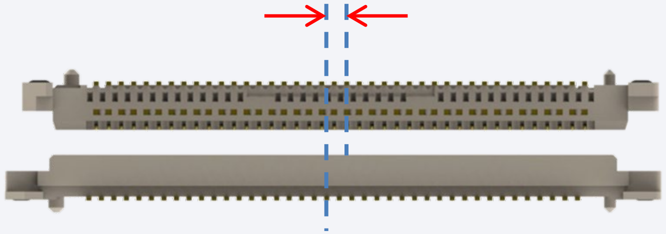
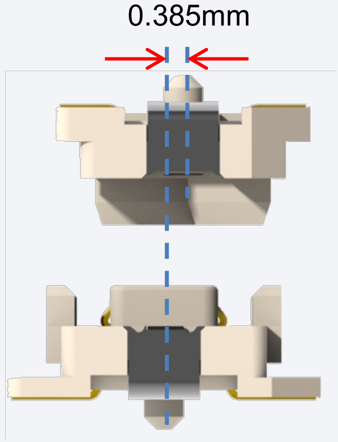
Advanced Features
-Mis-alignment and Polarization feature

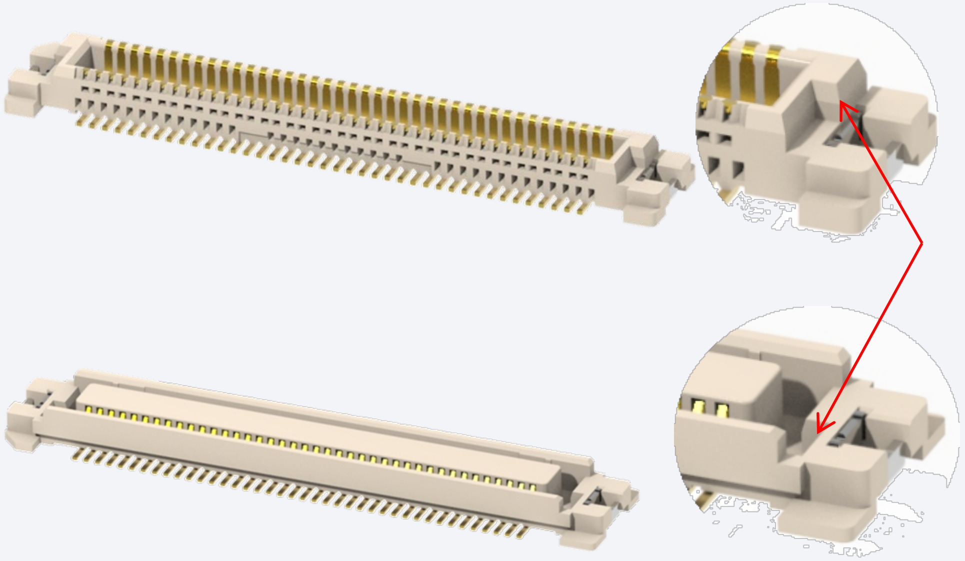


X direction



Y direction

Misalignment tolerance benefit for mating process:
+/-0.370 mm for X direction
+/-0.385 mm for Y direction



Polarization feature to ensure proper mating.

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Part Numbers
-Header and receptacle

Base Number	-	AA	B	C	D	E	LF
							Lead Free

Description	Base Number
Vertical Receptacle	10169698
Vertical Header	10169697

AA	Position
40	80
70	140

B	Height option
0	3mm stack height

C	Plating option
0	Gold Flash

D	Pick/Place Option
0	VACUUM TAPE

E	Pack
R	Tape&Reel

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Markets and Applications

Industrial

Automation Machines

Automotive

Advanced Driver Assistance Systems (ADAS)

IT Datacom

Server/Storage

Thank You

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FCi Basics