

# BergStak<sup>®</sup> 0.40mm Self-Alignment Board-to-Board Connector

*Product Presentation*

Amphenol Information Communications  
and Commercial Products

 **FCi Basics**

**Amphenol ICC**

- Value Proposition
- Product Overview
- Product specifications
- Features & Benefits
- Part Numbers
- Market Applications
- Collaterals

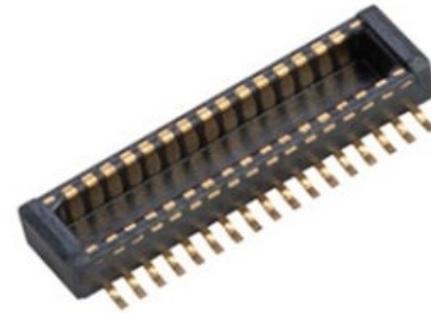
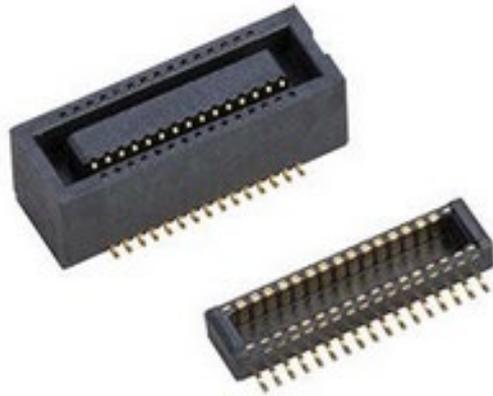
# BergStak® 0.40mm Self-Alignment Value Proposition

**FCi Basics**

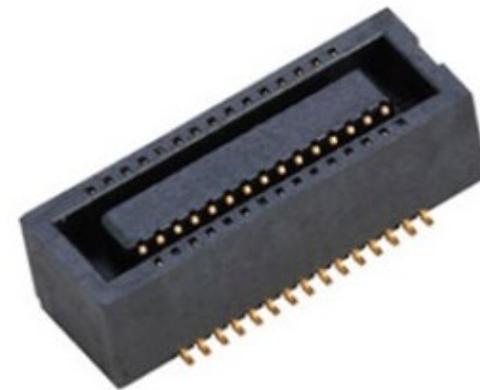
- BergStak® 0.40mm Self-Alignment connector is USCAR-2 compliant, also an ideal solution for the automotive market.
- Fine pitch design at 0.40mm which are suitable for applications with space constraints.
- Has the ability to meet PCIe 3.0 industry standards.
- BergStak® 0.40mm Self-Alignment presently has a stack height of 3.5mm on 30 positions, and position is extendable from 10 to 60 positions with 10 positions incremental.
- BergStak® 0.40mm Self-Alignment has a unique self-alignment feature that supports blind mating, ensuring a reliable connection.

# BergStak<sup>®</sup> 0.40mm Self-Alignment Product Overview

**FCi Basics**



Plug Overview



Receptacle Overview

# BergStak<sup>®</sup> 0.40mm Self-Alignment Product Specifications

**FCi Basics**

## Product Facts

- 30 positions and extendable up to 10 to 60 with 10 positions incremental
- 3.5mm stack height
- Vertical mating configuration
- 0.40mm double-row contact pitch
- Self-Alignment feature
- RoHS compliant and lead-free
- PCB Termination: SMT

## Performance Characteristics

- Speed up to 8Gb/s
- Durability: 30 mating cycles
- Operating Temperature Range: -40°C to +125°C
- Humidity: 90-95% relative Humidity for 96hours
- Insulation Resistance: 50 MΩ min.
- Current Rating: 0.3A/contact
- Voltage Rating: 30VAC
- Low-level Contact Resistance: 90 mΩ max.

## Specifications

Product Specifications: GS-12-1404

## Performance Characteristics

- Housing: High temperature thermoplastic LCP UL94V-0
- Terminal: Copper Alloy
- Hold Down: Copper Alloy

# BergStak<sup>®</sup> 0.40mm Self-Alignment Features & Benefits



- Fine pitch design at 0.40mm
- Self-alignment feature
- 3.50mm stack height and 30 positions extendable up to 10 to 60 positions
- Supports speed performance up to 8Gb/s
- Meets USCAR-2 vibration and shock limits
- RoHS compliant, halogen and lead free
- Suitable for applications with space constraints
- Supports blind mating
- Support different applications
- Meets PCIe<sup>®</sup> Gen 3 standards
- Suitable for automotive application
- Meets health, safety and environment requirements

# BergStak® 0.40mm Self-Alignment Part Numbers

10142886-AAA B C D HLF

- HLF : HALOGEN AND LEAD FREE
- PACKAGING OPTION  
E : EMBOSS 8mm PITCH, REEL DIA.  $\phi$ 330, 4500pcs/Reel
- CONTACT OPTION  
2 : GENERAL TYPE
- CONTACT PLATING OPTION  
A : AU FLASH
- NUMBER OF CONTACTS  
030 : 30POS

10142890-AAA B C D HLF

- HLF : HALOGEN AND LEAD FREE
- PACKAGING OPTION  
E : EMBOSS 8mm PITCH, REEL DIA.  $\phi$ 330, 2250pcs/Reel
- STACK HEIGHT  
3 : 3.5mm
- CONTACT PLATING OPTION  
A : AU FLASH
- NUMBER OF CONTACTS  
030 : 30POS

Description	Part Numbers
BergStak® 0.40mm self-alignment header, 30 positions, 3.50mm stack height	10142886-030A2EHLF
BergStak® 0.40mm self-alignment receptacle, 30 positions, 3.50mm stack height	10142890-030A3EHLF

# BergStak® 0.40mm Self-Alignment Main Markets & Applications

**FCi Basics**

- Automotive



- 360° Panoramic Camera
- Compact Radar
- High Definition Camera

- Industrial

- High Definition Camera
- Factory automation camera

- Medical Devices

- Patient monitor



360° Panoramic Camera



- Available on Amphenol FCI website:  
Technical Datasheet

**FCi Basics**
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### BergStak® 0.40mm Self-Alignment Board-to-Board Connector

**USCAR-2 COMPLIANT CONNECTORS WITH SELF-ALIGNING FEATURE**

The BergStak® 0.40mm self-alignment connectors come with a stack height of 3.50mm, also available in 2.00mm and 3.00mm, and 30 positions extendable up to 20 to 50 positions with 10 positions incremental. It has a unique self-alignment feature that supports blind mating, ensuring a reliable connection. The USCAR-2 compliant connector is also ideal for the automotive market.

- 0.40mm fine pitch design
- Self-alignment feature
- Supports speed performance up to 3Gb/s
- Meets USCAR-2 vibration and shock limits

**FEATURES**

- Fine pitch design at 0.40mm
- Self-alignment feature
- 3.50mm stack height, also with 2.00mm and 3.00mm options, and 30 positions extendable up to 20 to 50 positions
- Supports speed performance up to 3Gb/s
- Meets USCAR-2 vibration and shock limits
- RoHS compliant, halogen and lead free



**TARGET MARKETS**



**BENEFITS**

- Suitable for applications with space constraints
- Supports blind mating
- Support different applications
- Meets V-by-One HS standards
- Suitable for automotive application
- Meets health, safety and environment requirements

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Thank You!