

# 0.80mm Pitch Floating Board-to-Board – B406/B407/B410 Series

## HIGH SPEED BOARD-TO-BOARD WITH FLOATING MECHANISM

Amphenol ICC's B406/B407/B410 series are 0.80mm pitch floating board-to-board connectors which support stack height up to 23mm and positions from 30 to 120. Its unique connector design has a floating range of  $\pm 0.50\text{mm}$  in the X, Y and Z directions which makes it resistant to vibration. It also supports speed performance up to 2.5Gb/s to meet high transmission requirements.

- Floating range of  $\pm 0.50\text{mm}$  in the X, Y and Z directions
- Double contact points
- B406 (vertical header) mated with B407 (right angle receptacle): 11.9mm
- B406 (vertical header) mated with B410 (vertical receptacle): 23mm



### TARGET MARKETS



### FEATURES

- Floating range of  $\pm 0.50\text{mm}$  in the X, Y and Z directions
- Double contact points
- Up to 2.5Gb/s data rates
- High-temperature thermoplastic housing

### BENEFITS

- Tolerates misalignments during surface mounting process or mating, and also improves overall contact reliability during vibration
- Ensures enhanced contact stability
- Meets high speed data transmission requirements
- Wide operating temperature range from  $-40^{\circ}\text{C}$  to  $+105^{\circ}\text{C}$

## TECHNICAL INFORMATION

### MATERIAL

- Housing: LCP, black color (UL94V-0)
- Cap: LCP, natural color (UL94V-0)
- Contact: Phosphor bronze, T=0.15mm
- Plating: 15µin gold plated on contact
- Anchor-plate: Brass, T=0.20mm (vertical header and right angle receptacle), T=0.30mm (vertical receptacle)

### MECHANICAL PERFORMANCE

- Insertion Force: 0.39N/pin max.
- Withdrawal Force: 0.05N/pin min.
- Terminal Retention Force: 2.9N/terminal min.
- Anchor-plate Retention Force: 2.9N/terminal min.
- Durability: 30 mating cycles

### ELECTRICAL PERFORMANCE

- Voltage Rating: 50V AC/DC
- Current Rating: 0.5A
- Contact Resistance: 80MΩ max.
- Insulation Resistance: 500MΩ max. (initial); 100MΩ max. (after each test)
- Dielectric Withstanding Voltage: No short or breakdown after 250V AC, 2mA, 1min.

### PACKAGING

- Tape & Reel

### APPROVALS AND CERTIFICATIONS

- UL file number E478701
- RoHS compliant

### SPECIFICATION

- Aorora Product Specification: IS.EQC.134

### ENVIRONMENTAL

- Operating Temperature Range: -40°C to +105°C

### TARGET MARKETS/APPLICATIONS



Car Multimedia  
Car Navigation  
Dashboard  
PND



Base Station  
Power  
Switches



Notebook  
Tablets  
Wearables  
Gaming  
DSC  
LCD&PDP TV



Router  
Server  
ODD  
HDD

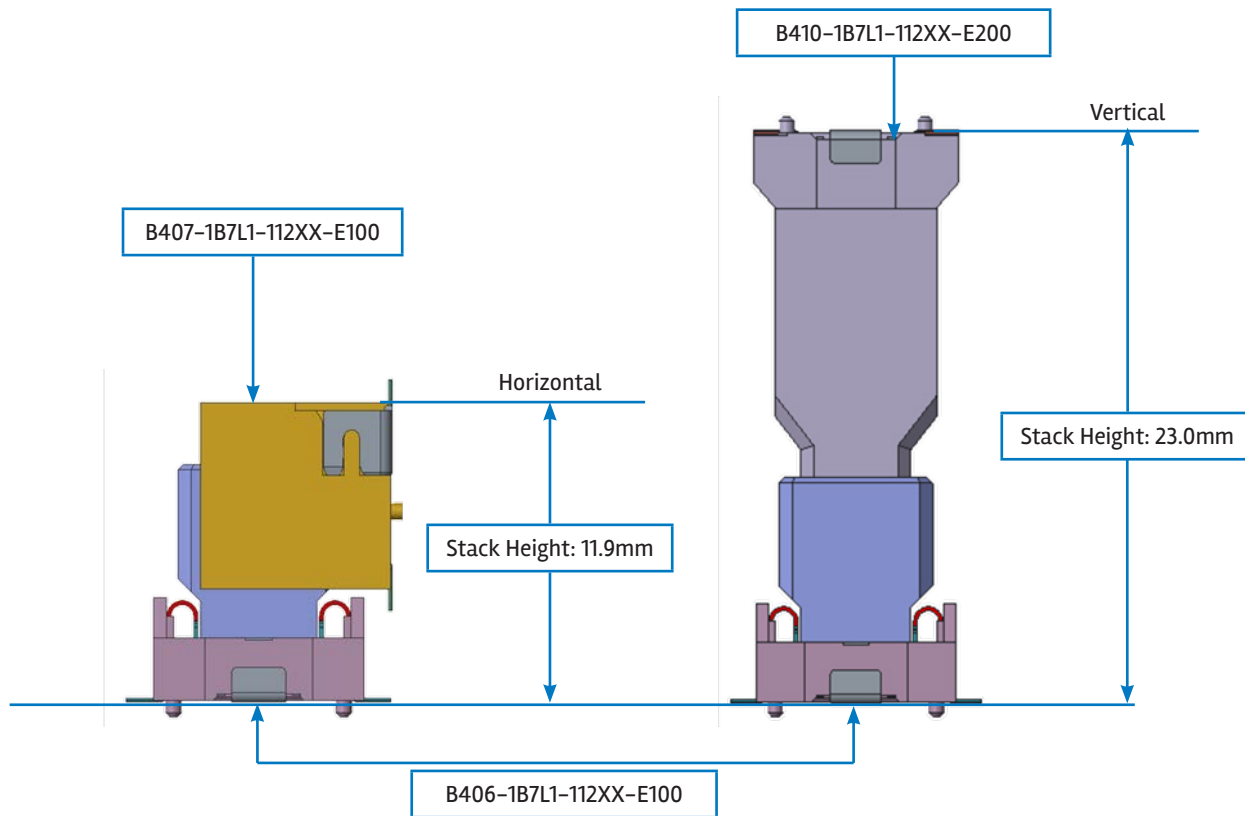


Sensing element  
Monitoring camera  
Human Machine Interface  
Industrial PC  
Robotics



Ultrasonic  
Patient Monitor  
MRI  
CT  
Infusion Pump

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## PART NUMBERS

Description	Part Numbers
0.80mm Floating BTB Vertical Header, 8.80mm height, 60 positions, with Mylar	B406-1B7L1-11260-E100
0.80mm Floating BTB Vertical Header, 8.80mm height, 80 positions, with Mylar	B406-1B7L1-11280-E100
0.80mm Floating BTB Vertical Header, 8.80mm height, 90 positions, with Mylar	B406-1B7L1-11290-E100
0.80mm Floating BTB Right Angle Receptacle, 60 positions, 7.05mm height, with Mylar	B407-1B7L1-11260-E100
0.80mm Floating BTB Right Angle Receptacle, 90 positions, 7.05mm height, with Mylar	B407-1B7L1-11290-E100
0.80mm Floating BTB Vertical Receptacle, 80 positions, 18.20mm height, with Mylar	B410-1B7L1-11280-E100

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