

0.50mm, 0.65mm, 0.75mm & Custom Pitches Board to Board Connectors

Board to Board Connectors from Advanced Interconnections Corp. are designed for long-life applications and robust handling. Screw-machined terminals with multi-finger contacts combine with value-added features including protective pick-and-place covers or heavy duty, shrouded insulators to provide positive polarization and superior durability. Standard connectors can be easily customized for application-specific requirements.

FEATURES

- Superior electrical performance - very low signal attenuation up to 1.9 GHz for 0.50mm pitch or 3.5 GHz for 0.65mm pitch
- Field-proven screw-machined terminals with multi-finger contacts, arranged in an interstitial male/female pin pattern are gold plated for gold/gold interconnect
- No external hold-downs required
- Standard eutectic Tin/Lead or lead-free Tin/Silver/Copper solder ball terminals for RoHS Compliant applications
- Shrouding feature protects pin field and aids in hand placement with optional stand-offs available
- Available in any 0.50mm, 0.65mm or 0.75mm pitch footprint
- Multi-pitch and custom pitch available

PERFORMANCE

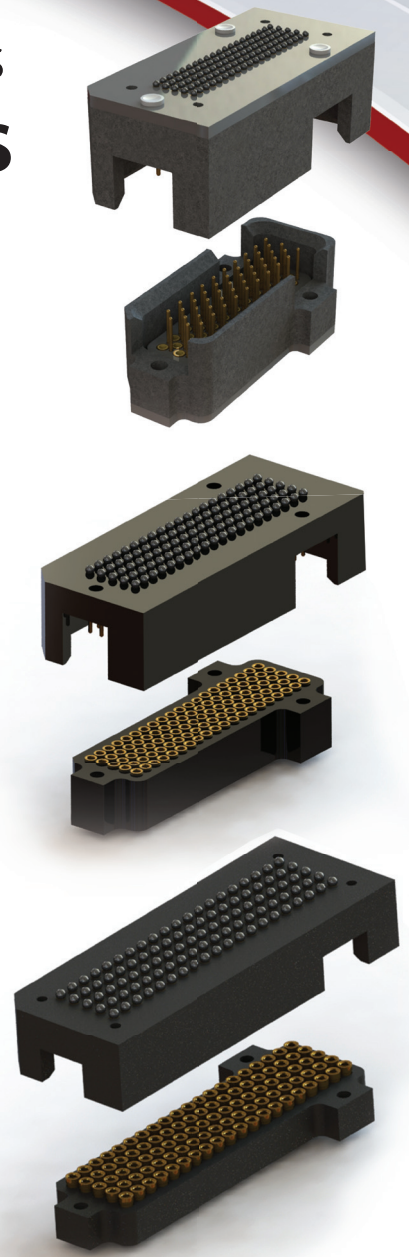
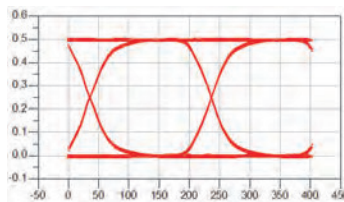
Even with adjacent aggressor excitation, our socket system provides a differential data path of +/- 175mV @ 100psec and a single-ended data path of +/- 125mV @ 140psec.

Innovative hybrid design ensures that adjacent terminal electromagnetic coupling is trivial; greatly reducing NeXT & FeXT, while creating a pseudo-matched impedance environment; stabilizing the insertion & return loss response rates.

DIFFERENTIAL

	INSERTION LOSS	RETURN LOSS
0.50mm	-0.40dB @ 1.0GHz -0.55dB @ 1.9GHz	-15.0dB @ 1.0GHz -10.0dB @ 1.9GHz
0.65mm	-0.25dB @ 3.5GHz	-14.0dB @ 3.5GHz

Additional electrical performance, signal integrity analysis data, and models available online.



STANDARD & SMT ADAPTERS



Type -833
Sn/Ag/Cu Solder Ball

Type -832
Sn/Pb Solder Ball

STANDARD SOCKET



Type -833
Sn/Ag/Cu Solder Ball

Type -832
Sn/Pb Solder Ball



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0.50mm, 0.65mm, 0.75mm & Custom Pitches Board to Board Connectors

Specifications

	Socket	Adapter
Min Row Count X	5	5
Min Row Count Y	7	7
Overall Size 'X' (mm)	(Row count - 1)* 0.5 + 5	(Row count - 1)* 0.5 + 5
Overall Size 'Y' (mm)	(Row count - 1)* 0.5 + 4	(Row count - 1)* 0.5 + 5
Insulator Thickness inches (mm)	4.60 (.180)	5.20 (.203)
Stack Height(s) inches (mm)	5.44 (.214)	

0.50mm Pitch

Part Numbers	Socket	Adapter
Leaded Tray Packed	BBMXXX-832GG	BAMXXX-832GG
Leaded Tape & Reel	BBMXXX-832GGTR	BAMXXX-832GGTR
Lead Free Tray Packed	BBMXXX-833GG	BAMXXX-833GG
Lead Free Tape & Reel	BBMXXX-833GGTR	BAMXXX-833GGTR

0.65mm Pitch

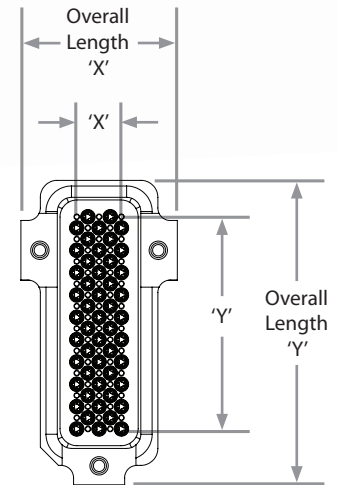
Part Numbers	Socket	Adapter
Leaded Tray Packed	BBLXXX-832GG	BALXXX-832GG
Leaded Tape & Reel	BBLXXX-832GGTR	BALXXX-832GGTR
Lead Free Tray Packed	BBLXXX-833GG	BALXXX-833GG
Lead Free Tape & Reel	BBLXXX-833GGTR	BALXXX-833GGTR

0.75mm Pitch

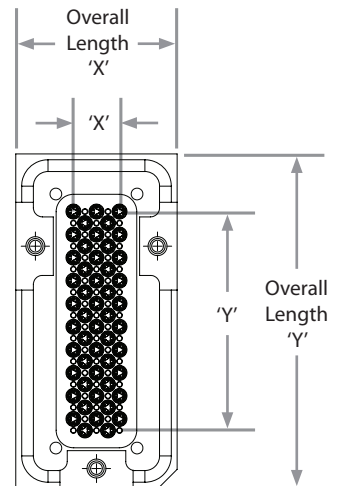
Part Numbers	Socket	Adapter
Leaded Tray Packed	BBKXXX-832GG	BAKXXX-833GGTR
Leaded Tape & Reel	BBKXXX-832GGTR	BAKXXX-832GGTR
Lead Free Tray Packed	BBKXXX-833GG	BAKXXX-833GG
Lead Free Tape & Reel	BBKXXX-833GGTR	BAKXXX-833GGTR

FOOTPRINT

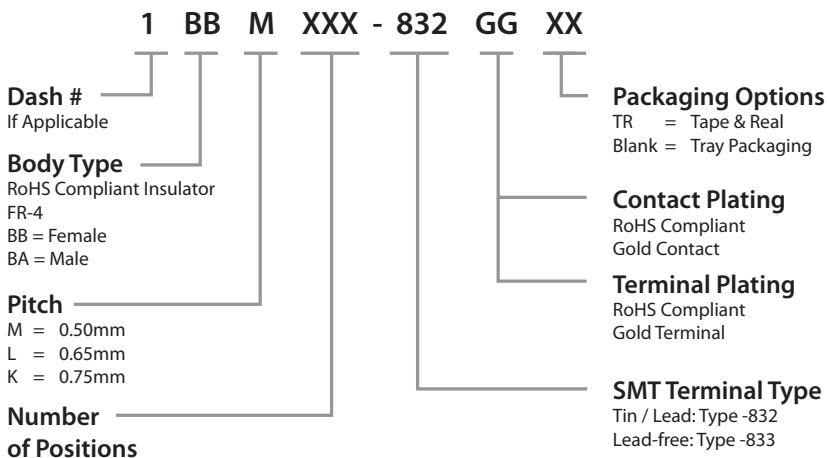
SOCKET



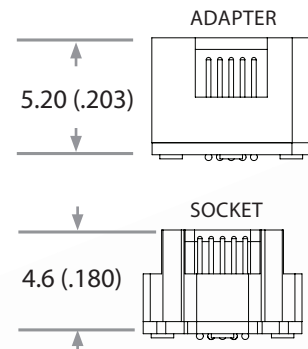
ADAPTER



HOW TO ORDER



INSULATOR THICKNESS inches (mm)



0.8mm, 1.0mm & Custom Pitches

Board to Board Connectors

Board to Board Connectors from Advanced Interconnections Corp. are designed for long-life applications and robust handling. Screw-machined terminals with multi-finger contacts combine with value-added features including protective pick-and-place covers or heavy duty, shrouded insulators to provide positive polarization and superior durability. Standard connectors can be easily customized for application-specific requirements.

FEATURES

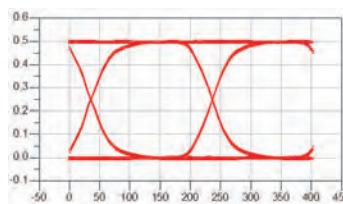
- Superior electrical performance – low signal attenuation up to 1.4 GHz for 0.8mm pitch or 1.05 GHz for 1.0mm pitch
- Field-proven screw-machined terminals with multi-finger contacts, arranged in an interstitial male/female pin pattern are gold plated for gold/gold interconnect
- No external hold-downs required
- Standard eutectic Tin/Lead or lead-free Tin/Silver/Copper solder ball terminals for RoHS Compliant applications
- Shrouding feature protects pin field and aids in hand placement with optional stand-offs available
- Available in any 0.8mm or 1mm pitch footprint
- Multi-pitch and custom pitch available

PERFORMANCE

Even with adjacent aggressor excitation, our socket system provides a differential data path of +/- 175mV @ 100psec and a single-ended data path of +/- 125mV @ 140psec.

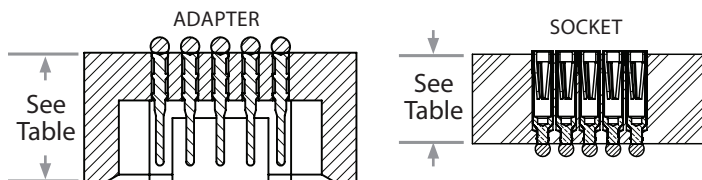
DIFFERENTIAL

	INSERTION LOSS	RETURN LOSS
0.8mm	-0.20dB @ 0.8GHz -0.40dB @ 1.4GHz	-15.0dB @ 0.8GHz -10.0dB @ 1.4GHz
1.0mm	-0.10dB @ 1.5GHz -0.20dB @ 3.1GHz	-15.0dB @ 1.5GHz -10.0dB @ 3.1GHz



Additional electrical performance, signal integrity analysis data, and models available online.

INSULATOR THICKNESS inches (mm)



STANDARD & SMT ADAPTERS



0.8mm
Type-736
Sn/Pb Solder Ball

Type-829
Sn/Ag/Cu Solder Ball

1.0mm
Type-737
Sn/Pb Solder Ball

Type-824
Sn/Ag/Cu Solder Ball

STANDARD SOCKET



0.8mm
Type-790
Sn/Pb Solder Ball

Type-788
Sn/Ag/Cu Solder Ball

1.0mm
Type-702
Sn/Pb Solder Ball

Type-828
Sn/Ag/Cu Solder Ball



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0.8mm, 1.0mm & Custom Pitches

Board to Board Connectors

Specifications

Specifications	0.8mm Pitch		1.0mm Pitch	
	Socket	Adapter	Socket	Adapter
Min Row Count X	5	5	5	5
Min Row Count Y	6	6	6	6
Overall Size 'X' (mm)	(Row count - 1)* 0.8 + 4.8	(Row count - 1)* 0.8 + 5	(Row count - 1)* 1.0 + 5	(Row count - 1)* 1.0 + 5
Overall Size 'Y' (mm)	(Row count - 1)* 0.8 + 3.4	(Row count - 1)* 0.8 + 5	(Row count - 1)* 1.0 + 3.5	(Row count - 1)* 1.0 + 5
Insulator Thickness inches (mm)	.120 (3.05)	1.87 (4.75)	.083 (2.11)	.170 (4.32) for 5.0mm .187 (4.75) for 5.5mm .227 (5.77) for 6.5mm
Stack Height(s) inches (mm)	0.217 (5.5)		0.197 (5.0) 0.217 (5.5) 0.256 (6.5)	

0.80mm Pitch

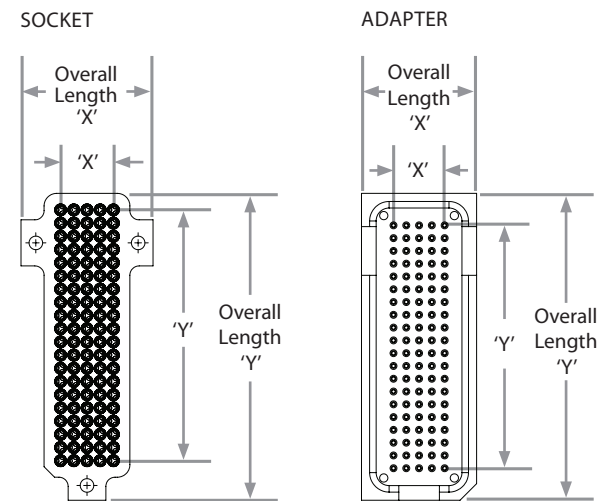
Part Numbers	Socket	Adapter
Leaded Tray Packed	BBJXXX-702GG	BAJXXX-736GG
Leaded Tape & Reel	BBJXXX-702GGTR	BAJXXX-736GGTR
Lead Free Tray Packed	BBJXXX-828GG	BAJXXX-829GG
Lead Free Tape & Reel	BBJXXX828GGTR	BAJXXX-829GGTR

1.0mm Pitch

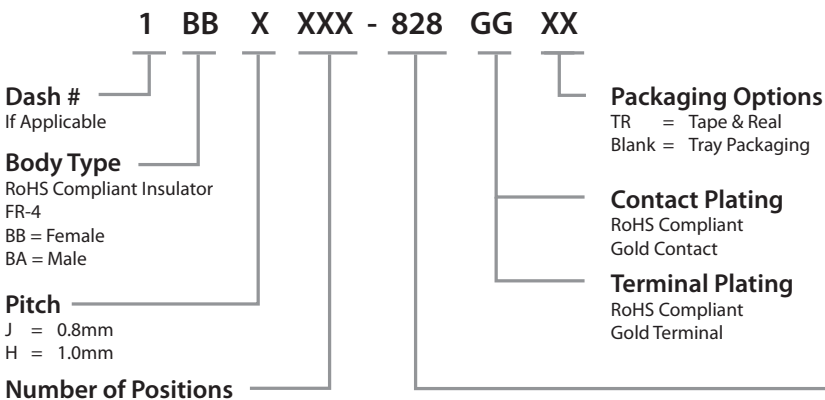
Part Numbers	Socket	5.0mm Stack Height
		Adapter
Leaded Tray Packed	BBHXXX-716GG	BAHXXX-882GG
Leaded Tape & Reel	BBHXXX-716GGTR	BAHXXX-882GGTR
Lead Free Tray Packed	BBHXXX-816GG	BAHXXX-880GG
Lead Free Tape & Reel	BBHXXX-816GGTR	BAHXXX-880GGTR

Part Numbers	5.5mm Stack Height	6.5mm Stack Height
	Adapter	Adapter
Leaded Tray Packed	BAHXXX-737GG	BAHXXX-883GG
Leaded Tape & Reel	BAHXXX-737GGTR	BAHXXX-883GGTR
Lead Free Tray Packed	BAHXXX-824GG	BAHXXX-881GG
Lead Free Tape & Reel	BAHXXX-824GGTR	BAHXXX-881GGTR

FOOTPRINT



HOW TO ORDER



SMT Terminal Type

- 0.8mm Socket**
Tin / Lead Type -702
Lead Free Type -828
- 0.8mm Adapter**
Tin / Lead Type -736
Lead Free Type -829
- 1.0mm Socket**
Tin / Lead Type -716
Lead Free Type -816
- 1.0mm Adapter, 5.0mm Mated Height**
Tin / Lead Type -882
Lead Free Type -880
- 1.0mm Adapter, 5.5mm Mated Height**
Tin / Lead Type -737
Lead Free Type -824
- 1.0mm Adapter, 6.5mm Mated Height**
Tin / Lead Type -883
Lead Free Type -881