

AMP-HDI BOARD-TO-BOARD CONNECTORS

TE Connectivity's (TE) AMP-HDI connectors encompass a two-piece high density pin count and Twin Beam Contact (TBC) board-to-board connector interface. The portfolio is designed for reliable electrical and mechanical performance in rugged applications, including aerospace, military, industrial, instrumentation, and data communications.

Benefits

- Broad connector portfolio for design flexibility ranging from 40 to 300 positions; 2, 3, 4 rows; Four or Twin Beam Contacts, and straight or right-angle assemblies
- Full selection of signal connectors, power pins, guidance, keying, mating and mounting hardware
- Durable high-temperature materials compatible with vapor phase and infrared reflow soldering
- Excellent mechanical and electrical performance in vibration and shock with gold plated square posts providing four areas of contact per connection
- Highly economical for reliability, quality, density, and low mating force
- Twin Beam Contacts allow for closed entry in MFBL (make first, break last) sequencing available with short and long pins

Target Markets

- Data Communication Systems
- Aerospace and Military Electronics
- Industrial Instrumentation

Applications

Aerospace Data Processing

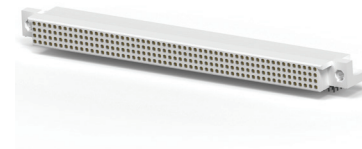
- Communications Hubs and Processing
- Two-Level Maintenance and ESD Sensitive Applications
- Mobile and Fixed Satellite Terminals and Ground Base Stations
- Power Supply and Distribution
- Sensory Array Hubs and Data Processing
- Vehicle Mission Computers and Navigation

Industrial Data Communication Systems

- Power Automation
- Test and Lab Equipment
- Energy Distribution
- Monitoring Equipment

Number of Positions by Row Count

	2 Row	3 Row	4 Row
Number of Positions	40 to 200	96 to 240	100 to 300



4 Row AMP-HDI Receptacle Assembly

Materials

- Contact: Gold plating options over nickel, tin; copper alloy
- Housing: Glass-filled thermoplastic, UL94 V-0

Mechanical

- Vibration: EIA 364-28D and IEC 60512-6-4
- Mating Force: 2.5 oz [14.1g] max average per contact
- Unmating Force: .4 oz [56.7g] min average per contact
- Contact retention: 3 pounds
- Durability: 250 mating cycles

Environmental

- Operating Temperature Range: -65 to 125 °C [-85 - 257 °F]
- Thermal Shock: EIA 364-32C and IEC 60512-11-4
- Humidity-temperature cycling 25 and 65°C at 95% RH

Electrical

- Current Rating: 3A max
- Contact Resistance: 15 mΩ
- Insulation Resistance: 1000 M

Standards & Specifications

- UL94 V-0
- UL-STD-498
- MIL-STD-2166
- MIL-C-55302/173 through 181
- EIA 364
- IEC 60512

AMP-HDI Connectors

Part Number Detail

Positions Loaded	Post Length (MM)	Post Length (Inch)	Product Type	Orientation	Board Locks	RoHs Compliant	Part Number
2 Row							
40	4.57	0.18	Receptacle	Vertical	Without	No	532428-3
40	4.83	0.19	Plug	Vertical	Without	No	532430-3
60	4.57	0.18	Receptacle	Vertical	Without	No	532428-5
60	4.83	0.19	Plug	Vertical	Without	Yes	5532430-5
60	6.35	0.25	Plug	Vertical	With	No	532446-5
100	4.57	0.18	Receptacle	Vertical	Without	No	532428-9
100	4.83	0.19	Plug	Vertical	Without	No	532430-9
100	6.35	0.25	Plug	Vertical	With	No	532446-9
110	4.57	0.18	Receptacle	Vertical	Without	No	1-532428-0
110	4.83	0.19	Plug	Vertical	With	No	1-533903-1
110	4.83	0.19	Plug	Vertical	Without	No	1-532430-0
150	3.05	0.12	Receptacle	Vertical	Without	No	1-532825-4
150	4.83	0.19	Plug	Vertical	Without	No	1-532430-4
150	6.35	0.25	Plug	Vertical	With	No	1-532446-4
200	4.57	0.18	Receptacle	Vertical	Without	No	1-532428-5
200	6.35	0.25	Plug	Vertical	With	No	1-532446-9
200	6.35	0.25	Plug	Vertical	Without	Yes	1-5532446-9
3 Row							
75	3.05	0.12	Receptacle	Right Angle	Without	Yes	533268-1
75	4.57	0.18	Receptacle	Right Angle	Without	No	532431-1
75	4.83	0.19	Plug	Vertical	Without	Yes	5532433-1
75	6.35	0.25	Plug	Vertical	With	Yes	5532447-1
96	3.05	0.12	Receptacle	Right Angle	Without	Yes	5533268-3
96	4.57	0.18	Plug	Right Angle	Without	No	533420-3
96	4.57	0.18	Receptacle	Right Angle	Without	No	532431-3
96	4.83	0.19	Plug	Vertical	Without	No	533911-2
96	6.35	0.25	Plug	Vertical	With	Yes	5532447-3
120	3.05	0.12	Receptacle	Right Angle	Without	Yes	5533268-5
120	4.57	0.18	Receptacle	Right Angle	Without	Yes	598213-5
120	4.83	0.19	Plug	Vertical	Without	No	532433-5
120	6.35	0.25	Plug	Vertical	With	Yes	5532447-5
150	3.05	0.12	Receptacle	Right Angle	Without	No	533268-7
150	4.57	0.18	Receptacle	Right Angle	Without	No	532431-7
150	4.83	0.19	Plug	Vertical	Without	No	532433-7
150	6.35	0.25	Plug	Vertical	With	No	532447-7
165	3.05	0.12	Receptacle	Right Angle	Without	No	533268-8
165	4.57	0.18	Receptacle	Right Angle	Without	No	532431-8
165	4.83	0.19	Plug	Vertical	Without	No	532433-8
165	6.35	0.25	Plug	Vertical	With	No	532447-7
210	4.57	0.18	Receptacle	Right Angle	Without	Yes	1-5532431-1
210	4.83	0.19	Plug	Vertical	Without	No	1-532433-1
210	6.35	0.25	Plug	Vertical	With	No	1-532447-1
240	3.05	0.12	Receptacle	Right Angle	Without	yes	5533514-1
240	4.57	0.18	Receptacle	Right Angle	Without	No	1-532431-3
240	6.35	0.25	Plug	Vertical	With	No	533294-1

AMP-HDI Connectors

Part Number Detail

Positions Loaded	Post Length (MM)	Post Length (Inch)	Product Type	Orientation	Board Locks	RoHs Compliant	Part Number
4 Row							
100	3.05	.12	Plug	Vertical	Without	N	533286-1
100	3.05	.12	Receptacle	Right Angle	Without	N	532903-2
100	3.05	.12	Receptacle	Right Angle	Without	Y	5532903-2
100	4.57	.18	Receptacle	Right Angle	Without	Y	5532434-1
100	4.57	.18	Receptacle	Right Angle	Without	N	532434-1
100	4.83	.19	Plug	Vertical	Without	Y	5532436-1
128	3.05	.12	Plug	Vertical	Without	Y	5533286-3
128	3.05	.12	Receptacle	Right Angle	Without	N	532903-3
128	4.83	.19	Plug	Vertical	Without	N	532436-3
128	6.35	.25	Plug	Vertical	With	N	532448-3
140	4.57	.18	Receptacle	Right Angle	Without	Y	5532434-4
140	4.57	.18	Receptacle	Right Angle	Without	N	532434-4
140	4.83	.19	Plug	Vertical	Without	N	532436-4
140	6.35	.25	Plug	Vertical	With	Y	5532448-4
160	3.05	.12	Plug	Vertical	Without	N	533286-5
160	3.05	.12	Receptacle	Right Angle	Without	N	532903-5
160	4.57	.18	Receptacle	Right Angle	Without	N	532434-5
160	4.57	.18	Receptacle	Right Angle	Without	Y	5532434-5
160	4.83	.19	Plug	Vertical	Without	Y	5532436-5
160	6.35	.25	Plug	Vertical	With	N	532448-5
180	3.05	.12	Receptacle	Right Angle	Without	Y	5532903-6
180	3.05	.12	Receptacle	Right Angle	Without	N	532903-6
180	4.57	.18	Receptacle	Right Angle	Without	Y	5532434-6
180	4.57	.18	Receptacle	Right Angle	Without	N	532434-6
180	4.83	.19	Plug	Vertical	Without	N	532436-6
180	6.35	.25	Plug	Vertical	With	Y	5532448-6
200	3.05	.12	Receptacle	Right Angle	Without	Y	5532903-7
200	4.57	.18	Receptacle	Right Angle	Without	N	532434-7
200	4.83	.19	Plug	Vertical	Without	N	532436-7
200	6.35	.25	Plug	Vertical	With	N	532448-7
220	3.05	.12	Receptacle	Right Angle	Without	Y	5532903-8
220	3.05	.12	Receptacle	Right Angle	Without	N	532903-8
220	4.57	.18	Receptacle	Right Angle	Without	N	532434-8
220	4.83	.19	Plug	Vertical	Without	N	532436-8
220	6.35	.25	Plug	Vertical	With	N	532448-8
240	3.05	.12	Plug	Vertical	Without	N	533286-9
240	4.57	.18	Receptacle	Right Angle	Without	N	532434-9
240	4.57	.18	Receptacle	Right Angle	Without	Y	5532434-9
240	4.83	.19	Plug	Vertical	Without	N	532436-9
240	6.35	.25	Plug	Vertical	With	N	532448-9
300	4.57	.18	Receptacle	Right Angle	Without	N	1-532434-2
300	4.83	.19	Plug	Vertical	Without	N	1-532436-2

TE Technical Support Center

USA:	1.800.522.6752
Canada:	1.905.475.6222
Mexico:	52.0.55.1106.0800
Latin/S. America:	54.0.11.4733.2200
Germany:	49.0.6251.133.1999
UK:	44.0.800.267666
France:	33.0.1.3420.8686
Netherlands:	31.0.73.6246.999
China:	86.0.400.820.6015

te.com

TE Connectivity, TE, TE connectivity (logo), AMP-HDI and EVERY CONNECTION COUNTS are trademarks of the TE Connectivity Ltd. family of companies.

All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

©2018 TE Connectivity Ltd. family of companies. All Rights Reserved.

1-1773957-5 06/18 DND