

# **CHIPCONNECT CABLE ASSEMBLIES**

Internal Faceplate-to-Processor Cable Assemblies for Intel<sup>®</sup> Omni-Path Architecture 100 Series

TE Connectivity's (TE) ChipConnect internal faceplate-to-processor cable assemblies are designed for Intel Omni-Path Architecture (OPA), which can directly transmit signals from the processor to the faceplate. ChipConnect cable assemblies mate directly with LGA 3647 sockets at the processor and Intel Omni-Path Internal Faceplate Transition (IFT) connector at the faceplate for 25 Gbps speeds.

These cable assemblies reduce system design costs by eliminating the need to use costlier, lower-loss printed circuit board (PCB) materials. System design is made easier by reducing the complexity of PCB laminates and routing, as well as retimers.

## **APPLICATIONS**

- Data Center & Networking Equipment
  - Servers
  - Routers
  - High Performance Computing (HPC)

# **ChipConnect Cable Assemblies**

Our ChipConnect cable assembly solution is specifically designed to address the overall trend towards internal cabling to reduce PCB cost and optimize system performance. This internal cabling system is offered in multiple configurations that can support applications at 25 Gbps.

#### MEET LATEST INTEL CPU PROCESSOR DESIGN

• Enable Intel Omni-Path Architecture (OPA) by mating directly with LGA 3647 sockets at the processor and IFT connectors at the faceplate for 25 Gbps speeds

#### FULL SOLUTION PARTNER

- TE is one of two Intel-qualified suppliers offering these first-generation cable assemblies (100 Series) and is also a development partner for future-generation Intel designs
- In addition to these cable assemblies, we offer the compatible LGA 3647 sockets and hardware required for Intel OPA

#### **CHOOSE YOUR CONFIGURATION**

- ChipConnect cable assemblies are available in standard lengths and breakouts, but can be customized for specific applications
- Take advantage of our broad range of high speed solutions such as Sliver internal cabled interconnects and STRADA Whisper board-to-board connectors to create a custom connection on the board or faceplate



\*Products offered by TE



Intel Omni-Path Internal Faceplateto-Processor (IFP) Plug - mates to IFT connector



Linear Card Edge (LEC) Receptacle - mates to LGA 3647 socket

#### **Key Features**

- Cables provide 4x and 8x high speed data transmission lanes
- Straight and right-angle (left/right exit) Linear Edge Connector (LEC) cable plugs to accommodate cable routing
- LEC receptacle offered in A (mate to LGA 3647 socket P1) and B (mate to LGA 3647 socket P0) versions
- Bail latch with pull tab on LEC plug and spring latching on IFP plug provides secure connections
- Mid-board copper chip-to-I/O interconnect reduces host system board trace lengths and PCB cost
- Assemblies utilize TE bulk cable 30 AWG 85 Ohms TurboTwin 25 Gbps primary pair cable

#### **Specifications**

• Product spec: 108-130015

### PRODUCT OFFERING

IFP Style	Number of Ports	LEC Configuration	IFP Configuration	Assembly Length (mm)	Breakout Length (mm)	Part Number
A	2	Straight	Flat	142	75	2821719-3
				208	104.5	2821719-1
				405	104.5	2821719-2
				460	104.5	2821719-4
			Inverted	208	104.5	2821720-1
				405	104.5	2821720-2
В	1	Straight	Flat	150	N/A	2821721-1
			Inverted	160	N/A	2821722-1
				205	N/A	2821722-2
				242	N/A	2821722-3
				465	N/A	2821722-4
		Left Angle	Flat	142	N/A	2821723-4
				335	N/A	2821723-1
				371	N/A	2821723-2
				460	N/A	2821723-5
				515	N/A	2821723-3
			Inverted	178	N/A	2821724-1
				235	N/A	2821724-2
				318	N/A	2821724-3
				419	N/A	2821724-4
				439	N/A	2821724-5
				500	N/A	2821724-6
		Right Angle	Flat	142	N/A	2821778-1
				460	N/A	2821778-2
			Inverted	235	N/A	2821725-1
				370	N/A	2821725-2
				500	N/A	2821725-3

Cable lengths exceeding 439mm are not part of our standard offering and have not been qualified by Intel

#### **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

ChipConnect, TE Connectivity, TE, TE Connectivity (logo) and Every Connection Counts are trademarks. Intel is a trademark.

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.

©2017 TE Connectivity Ltd. family of companies. All Rights Reserved.

1-1773930-8 07/17 DND

