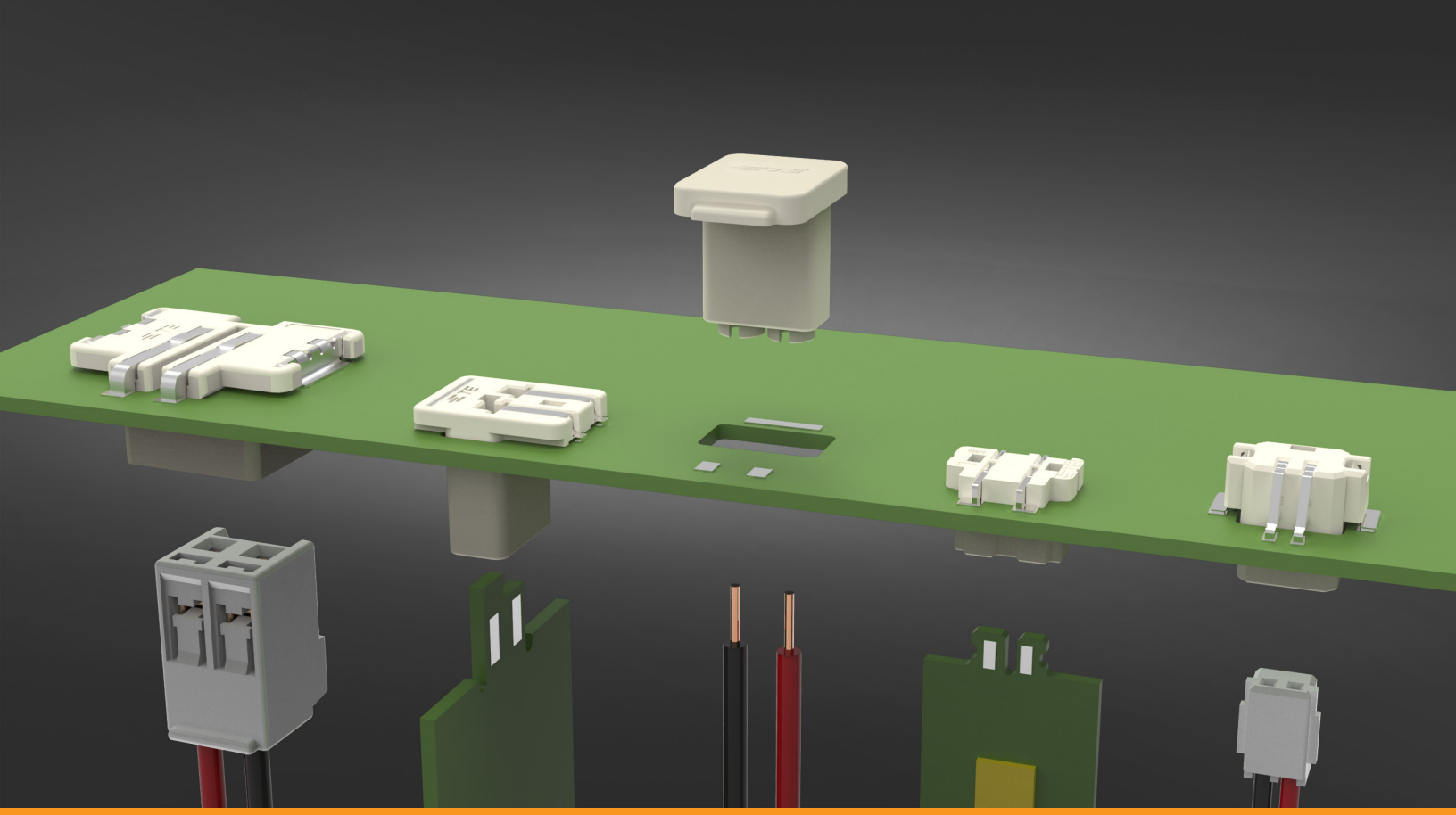
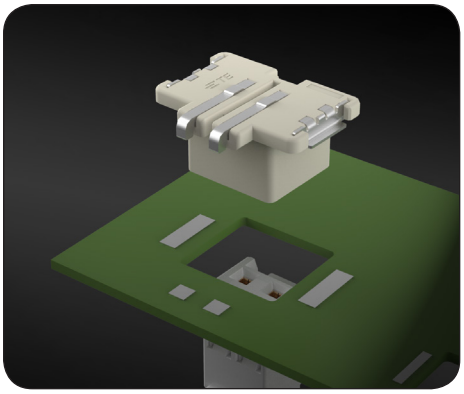


Inverted Thru Board Interconnects

TE Connectivity offers inverted thru board connectors that can turn your power delivery upside down. Our unique headers enable power delivery from the underside of your PC Boards and LED arrays eliminating top-surface wire management issues. Leveraging existing TE connector product families, our inverted headers take advantage of proven TE connector systems. TE inverted thru board connectors are the idea solution for low profile applications commonly required in various solid state lighting LED modules and non-lighting related printed circuit boards.

TE connectivity



HIGH POWER INVERTED THRU BOARD SMT CONNECTOR

The High Power Inverted Thru Board SMT Connector is a 7 A, 600 VAC rated inverted header that is ideal for bringing power to today's high-output FR4, and aluminum clad circuit board LED assemblies. The mating Economy Power II (EPII) Connector works with 22-18 AWG (0.34 mm^2 - 0.75 mm^2) stranded wire sizes leveraging the proven EP II Connector System.

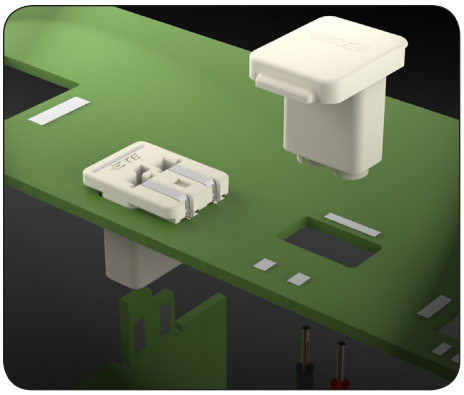
Product Benefits:

- Low profile top surface height of 2 mm above the LED printed circuit board minimizes interference with LED light emission
- EP II Connector provides positive latching to ensure a fully mated connection

PRODUCT OFFERING

Part Number	Description
2154829-1	2 position connector
2154829-2	3 position connector
2154829-3	4 position connector
2154828-1	2 position cable assembly
2154828-2	3 position cable assembly
2154828-3	4 position cable assembly

Product Brochure: **5-17737700-9**



INVERTED THRU BOARD CARD EDGE AND POKE-IN CONNECTOR

The Inverted Thru Board Card Edge and Poke-In Connectors are two-position, one piece connectors that share the same PC Board footprint while offering flexibility in providing either a direct card edge mating solution or a poke-in wire connection to the underside of the LED array boards. Both provide 3.0 mm creep and clearance from all other conductive components on FR4 and metal clad printed circuit boards making them suitable for higher voltage designs.

Product Benefits:

Inverted Thru Board Card Edge Connectors

- Offered in two versions to accept 1.0 mm to 1.6 mm thick mating PCBs
- Polarizing keying retention feature option available to provide additional extraction force
- Accepts mating driver PCB geometry variations to provide flexibility in the end application design

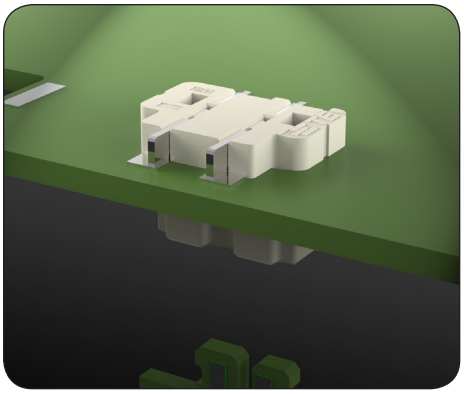
Inverted Thru Board Poke-In Connectors

- Accommodates a broad range of wires from 18 to 22 AWG or 24 to 26 AWG.
- The connectors have an additional 1 mm in depth to accommodate the wire insulation guide barrels on the bottom.

PRODUCT OFFERING

Part Number	Description
2213188-1	For 1.0 mm pcb
2213188-2	For 1.6 mm pcb
2213188-3	For 1.0 mm pcb, with cover
2213188-4	For 1.6 mm pcb, with cover
2213189-1	For 22-18 AWG wire
2213189-2	For 26-24 AWG wire
2213189-3	For 22-18 AWG wire, with cover
2213189-4	For 26-24 AWG wire, with cover

Product Brochure: **1-1773721-1**



ITB CARD EDGE CONNECTOR

The ITB (Inverted Thru-Board) Card Edge Connector is designed to provide direct power connection between driver boards to the underside of LED array boards. This 2 position, SMT card edge connector provides a perpendicular mating, cable-less, space saving power connection that is ideal for compact LED assembly designs such as those found in today's retrofit lamps & bulbs

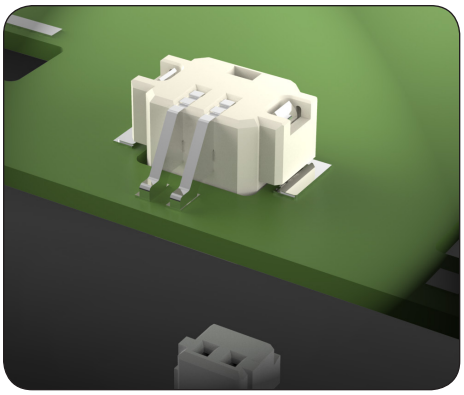
Product Benefits:

- One piece mating solution for faster and easier assembly operation
- Low profile space saving design.
- The 1.5 mm height above the PCB minimizes LED light obstruction
- The product accepts printed circuit board in 1.0 mm and 1.2 mm thicknesses to meet your PCB design requirements

PRODUCT OFFERING

Part Number	Description
1-1971748-1	For 1.0 mm thick circuit boards
1971748-2	For 1.2 mm thick circuit boards

Product Brochure: **4-1773464-9**



INVERTED THRU BOARD SMT CONNECTOR

The Inverted Thru Board SMT Connector provides a small form factor solution to bring power into a conventional or aluminum-clad printed circuit board from the underside of the board. This eliminates the challenges of dressing wires on the top side of LED boards resulting in resulting in low profile, less obstructed p.c. board layout designs. The header mates with the 1.5 mm centerline AMP Mini CT cable assembly and facilitates a simpler assembly of solid state LED lighting for architectural, residential and commercial applications.

Product Benefits:

- Eliminates wire dress management issues on the top surface of the LED pc board minimizing light obstruction
- Available in 2 thru 6 positions to address lighting power and control applications
- Accepts 2 thru 6 AMP Mini CT cable assemblies allowing design flexibility

PRODUCT OFFERING

Part Number	Description
2106091-1	2 position connector
2106091-2	3 position connector
2106091-3	4 position connector
2106091-4	5 position connector
2106091-5	6 position connector
2058943-1	2 position Mini CT cable assembly
2058943-2	3 position Mini CT cable assembly
2058943-3	4 position Mini CT cable assembly
2058943-4	5 position Mini CT cable assembly
2058943-5	6 position Mini CT cable assembly

Product Brochure: **7-1773453-0**

FOR MORE INFORMATION
te.com/ib

TE Technical Support Center

Internet:	te.com/help
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

Part numbers in this brochure are RoHS Compliant*, unless marked otherwise.
*as defined www.te.com/leadfree

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