

3M™ High-Speed Card-Edge Connector, SPD08

The High-Speed Card-Edge Connector SPD08 is the latest board-to-board offering from 3M. It is suitable for a wide variety of applications in these markets: datacom systems, enterprise servers, telecommunications equipment, defense and test applications.

The SPD08 connector can also be used in several different design applications. These include:

- Mezzanine board stacking designs requiring transmission of high-speed (up to 15 Gbps), high density, controlled impedance signals
- Wire-to-board designs requiring transmission of high speed signals (up to 20 Gbps)



3M™ High-Speed Card-Edge Connectors, with and without latch

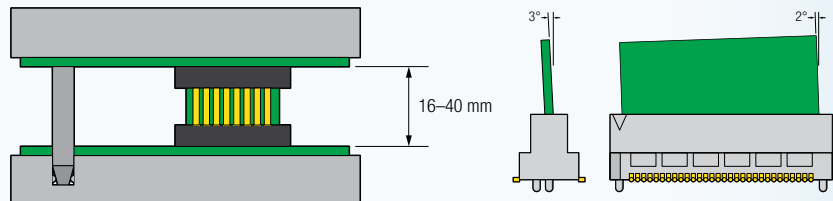
Key Features and Benefits

Supports High-speed Board-to-board Connections

- Controlled impedance, crosstalk limiting contact design supports speeds up to 15 Gbps (at 30 mm stack height)
- Embedded ground plane within riser card limits row-to-row crosstalk and enhances signal integrity
- Supports XAUI, PCI Express (Gen 1/2/3), SATA and other application speeds

Flexible Stacking Height and Robust Connection

- Supports flexible stacking height (16-40 mm) with the use of a PCB intermediate riser card
- Robust contact design is tolerant of misalignment, provides a reliable connection and supports blind mate



High Density Board Footprint

- High density (0.8 mm pitch), two-row design conserves board space and simplifies trace routing

Flexible Design Options

- 20-200 contact positions (see availability and standard configuration details in customer drawing 78-5100-2420-7)
- Available with optional latches for robust mechanical stability
- 0.5A current rating per contact for mixed signal and power applications

Widespread Applicability

- Supports up to 25 Gbps wire-to-board applications using 3M™ Twin Axial Cable terminated to the edge



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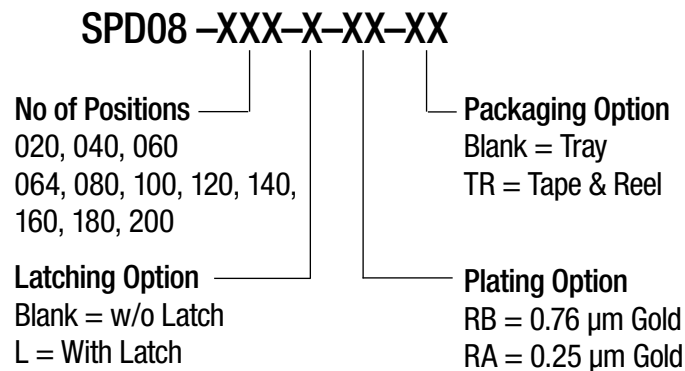
Specifications and Parameters

Contacts and Solder Tabs	Copper alloy
Finish	3~5 µm matte tin on solder tail; 1.27 µm nickel under plate all over
Housing	Connector: LCP, black, UL 94V-0; Latch: LCP, beige, UL 94V-0
Current Rating	3.0A @ 30°C (single contact); 0.5A per contact
Contact Resistance	50mΩ max
Voltage	50V AC
Characteristic Impedance	For 85 Ohm and 100 Ohm systems
Transmission Rate	7.5 GHz (rated at -2dB insertion loss for 30 mm stack height board-to-board applications)
Temperature	-55°C ~ +125°C

Please contact a 3M Electronic Solutions Division (ESD) Sales Representative for more product information and technical support. Signal Integrity and Environmental Qualification data available upon request.

Ordering Information

The following parts configurations are available on customer drawing 78-5100-2420-7. Please reference this drawing for additional details and availability.



Note: All positions are not tooled. Please refer to the drawing for more information on currently tooled positions.

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