

New Cable-to-Board Interconnects from 3M Enable High-Density Designs

— Highly compact .050" pitch sockets and headers save PCB real estate —

A new cable-to-board interconnect solution from 3M can help designers of high-performance electronic systems meet the ever-increasing demand for high-density equipment.

The 3M Electronics Solutions Division has launched the 3M™ Ribbon Cable Wiremount Socket Assembly, .050" x .050", 451 Series and the 3M™ Shrouded Boardmount Header, .050" x .050", 452 Series. The small, robust socket and header mate together connecting .025" pitch ribbon cables to printed circuit boards (PCBs). A variety of .025" pitch ribbon cables are also available from 3M, forming a complete, end-to-end system of header, socket and cable.

The compact header and socket help achieve high-performance electronic equipment designs in a small form factor as required by today's communications, military/aerospace, industrial production, data center and high-performance computing applications. The fine, .050" pitch saves space on the PCB, allowing for high connection density.

"The demand for more processing power in smaller spaces continues to drive the design of electronic hardware," says Duane Preiss, marketing manager, Systems and Components Business, 3M Electronic Solutions Division. "This latest interconnect solution from 3M continues our effort to help equipment manufacturers achieve higher-density designs to meet the needs of their customers."

The series 451 and 452 Series interconnect products from 3M also deliver on performance, reliability and cost savings. The ribbon cable wiremount socket assembly incorporates 3M insulation displacement contact (IDC) technology in the connector, helping maintain secure connections and high signal integrity. The IDC connector's mass termination capability allows the termination of 30 lines in a single cycle, reducing the need for expensive automated termination equipment and allowing manual cable assembly operations. Available friction-latch configurations and an optional strain-relief accessory can further increase connection reliability. An optional, unique header ejector latch mechanism provides positive latch and ejection capability with minimal size addition.

The shrouded boardmount header is available in a variety of configurations in order to maximize design flexibility while minimizing PCB footprint. Tape-and-reel packaging for the SMT version of the header is available for automated placement applications, and PCB standoffs help enable pin-in-paste processing capability.

[Click here](#) for photos.

About 3M Electronic Solution Division

ESD is a leading provider of advanced electronic thin substrates and sensors, components and comprehensive systems for enhancing and managing electronic signal properties. The products help customers in consumer electronics, touch panels, enterprise and networking, industrial and factory automation, semiconductor and component markets worldwide.

For more information about 3M's Interconnect Solutions, visit: <http://www.3Mconnectors.com>. Information about 3M Company is available [online](#).

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