

New 3M Cable Assembly for PCI Express Extender Cards Enables Higher Density Designs

—Highly routable interconnect solution meets demanding system performance and packaging challenges of PCI Express 2.0 and 3.0 systems—

Designers of enterprise computing systems using PCI Express (PCIe) now have a more versatile interconnect solution. The new 3M™ Twin Axial Cable Assembly for PCI Express Extender Card Applications, now available from the 3M Electronic Solutions Division, is a high-performance interconnect capable of a variety of routing configurations, helping to increase system density and flexibility, while also designed to reduce cost. The cable assembly is the newest addition to the [3M line of highly routable cable assemblies](#), which includes solutions for MiniSAS, SATA, QSFP+ and SPF+.

Until now, interconnect extender choices for PCIe have been limited to short cable assemblies, rigid PCB assemblies or flexible circuit assemblies. Using the 3M cable assemblies, industry standard PCIe peripheral cards can be placed in virtually any orientation within a system chassis. Commonly used rigid riser cards are limited to a simple offset (up and over). 3M cable assemblies for PCIe can be configured to virtually any orientation within the cable length while maintaining excellent signal integrity.

The cable is based on the thin, ribbon-style 3M™ Twin Axial Cable, which is designed to have stable, predictable performance and exhibits a lack of resonance up to 40 GHz. The highly routable 3M cable assembly allows the designer greater flexibility in card placement, enabling higher density designs. The cables can be bent and folded to maximize space and reduce obstruction to airflow without significant signal degradation.

For PCIe over long printed circuit board (PCB) traces, re-timer chips are often required. The 3M cable assembly for PCIe may eliminate the need for these chips, providing a material cost savings benefit to the customer. Routing signals over the 3M cable assemblies, rather than in the board, may also allow designers to reduce layer count or avoid costly high-performance laminates, further reducing costs.

The 3M Twin Axial Cable Assembly for PCI Express Extender Card Applications is available in PCIe X4, X8 and X16 sizes. The cable assembly is EU RoHS compliant.*

About 3M Electronic Solution Division – Interconnect

3M Electronic Solutions Division's Interconnect business offers a variety of innovative connectors, cables and cable assemblies, embedded capacitance materials and Textool brand test and burn-in sockets for component engineers and designers in the electronics industry. For more information about 3M's interconnect solutions, visit: <http://www.3Mconnectors.com>. Information about 3M Company is available [online](#).

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