3M's Revolutionary Cable Solution Recipient of 2011 R&D 100 Award

 $-3M^{\text{TM}}$ Twin Axial Ribbon Cable, SL8800 Series named one of the most technologically significant products introduced in the past year by R&D Magazine -

AUSTIN, Texas--(BUSINESS WIRE)--Today, 3M Twin Axial Ribbon Cable, SL8800 Series solution was announced as a recipient of *R&D Magazine's* 49th Annual R&D 100 Awards. The award recognizes 100 of the most technologically significant products and has long been a benchmark of excellence in a variety of industries – from academia to government to medical to manufacturing. 3M's newest innovation joins a distinguished group of past R&D 100 Award recipients, including the fax machine, liquid crystal display, HDTV, and company solutions 3M Aluminum Conductor Composite Reinforced (ACCR) and 3M Cubitron™ II abrasives.

With the proliferation of high-speed Internet traffic and wireless handheld devices, higher volumes of data are passing through a growing web of networking and communication systems. To connect the subsystems or cabinets that support these systems, differential pair cable – with two signal conductors and a ground shield – is the natural choice as a conduit for this data. However, these types of transmission lines can present challenges if their construction is not wisely chosen and controlled to provide optimal performance. 3M worked to solve these challenges by developing a unique flat cable construction that minimizes the overall thickness of the cable and enhances its bendability, without sacrificing electrical performance.

The 3M Twin Axial Cable solutions are the industry's first known flat, foldable and longitudinally shielded high-performance twin axial ribbon cables. These cable products are currently the only cable solutions known to be available on the market for high data-rate applications that can easily meet today's data rate requirements of 6 Gbps and up towards rapidly increasing requirements (i.e. 25 Gbps) all while making sharp turns and folds with little or no impact on the cable's electrical performance and overall signal integrity (insertion loss, impedance, skew, jitter, EMI).

The mechanical benefits enable 3M Twin Axial Cables to solve the spatial challenges caused by densely packaged systems. Compared to typical cable constructions, the 3M Twin Axial Cables outperform in bend radius and overall routability while maintaining signal integrity, which allows the cable to fit through narrow openings and free up valuable space. Additionally, the cable's built-in wire-to-board registration to the paddle card termination area enables easy termination with repeatable consistency and reliability, making it ideal for automation in the assembly process.

"The unique characteristics of 3M Twin Axial Cable solutions allow design engineers to rethink the possibilities of how the design of vital electronic components – from servers to embedded systems – are developed," said Voyl Divljakovic, vice president and general manager, 3M Electronic Solutions Division. "This cable, simply put, is a true game changer for the industry, and we are honored that the editors of R&D Magazine and industry experts agree."

3M Twin Axial Ribbon Cable, SL8800 Series is designed for use in various internal cabling applications for servers, switches and routers, PCI Express architectures, high-speed I/O, supercomputing and more. Anticipated future product developments scheduled to launch later in 2011 are expected to leverage many of the same unique mechanical and electrical benefits inherent in the SL8800 cable's core enabling technology, but applied to "outside-of-the-box" solutions, such as SFP+ and QSFP+.

Winners of the R&D 100 Awards are selected by an independent judging panel and the editors of *R&D Magazine*.

The publication and its online portal serve research scientists, engineers, and other technical staff members at high-tech industrial companies and public and private laboratories around the world.

About 3M Electronic Solutions 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.

3M, Textool and Cubitron are trademarks of 3M Company.

All other trademarks listed herein are owned by their respective companies.

3MJenni Balthrop, 512-984-2146jsbalthrop@mmm.comOn twitter @jennijewelFor all other inquiries:http://www.3m.com/MediaContact

https://news.3m.com/2011-06-22-3Ms-Revolutionary-Cable-Solution-Recipient-of-2011-R-D-100-Award