

3M Science.
Applied to Life.™

3M™ High-Speed Cable Assembly solutions

High-speed cable assemblies are essential for the efficient operation of systems that process large volumes of data. For high-performance computing, routers, storage and switches, 3M has the cabling solutions you need to connect devices with the latest industry standard physical interfaces.



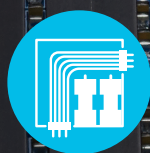
Highly foldable, flexible and routable

Utilizing 3M™ Twin Axial
Cable technology



Thin, low-profile ribbon cable

Allows more routing
options within a case, and
enables many packaging
configurations



Extremely tight bend radii

Foldable ribbon
construction allows for tight
bend radii with minimal
performance impact

Flexible solutions for today and tomorrow's requirements.

Ask us about the future of Twinax.



3M™ 400G QSFP-DD Direct Attach Copper Cable Assemblies, Series 9V

- Up to 400G Ethernet applications
- IEEE 802.3cd
- QSFP-DD MSA
- Signal wire size 30AWG and 26AWG
- Standard lengths available up to 3 m
- Custom EEPROM mapping available
- QSFP-DD to 2xQSFP56 Y-Cable assemblies available
- QSFP-DD to 4xQSFP28/4xQSFP56 and 8xSFP56 breakout assemblies available

Typical Applications: Network Interface Card (NIC) to switch



3M™ External QSFP28 Cable Assembly, Series 9Q

- 100G Ethernet applications
- IEEE 802.3bj
- SFF-8665, -8661, -8662
- Signal wire size 30AWG and 26AWG
- Standard lengths available up to 4 m
- Custom EEPROM mapping available
- QSFP28 (100G) to 4xSFP28 (25G) break out assemblies available
- QSFP28 (100G) to 2xQSFP28 (50G) Y-cable assemblies available

Typical Applications: Network Interface Card (NIC) to switch



3M™ External QSFP+ Cable Assembly, Series 9Q

- 40G Ethernet applications
- IEEE 802.bd
- SFF-8436
- Signal wire size 30AWG
- Standard lengths available up to 3 m
- Custom EEPROM mapping available
- InfiniBand DDR (4×5Gbps), QDR (4×10Gbps) and FDR (4×14Gbps) applications
- Tested at Open Network Systems Interoperability PlugFest (UNH IOL)

Typical Applications: Network Interface Card (NIC) to switch



3M™ External SFP28 Cable Assembly, Series 1422

- 25G Ethernet applications
- IEEE 802.3by
- SFF-8431
- Signal wire size 30AWG and 26AWG
- Standard lengths available up to 4 m
- Custom EEPROM mapping available
- Available in black (red or blue PVC jacket options available)
- Tested at Open Network Systems Interoperability PlugFest (UNH IOL)

Typical Applications: Network Interface Card (NIC) to switch



3M™ External SFP+ Cable Assembly, Series 1410 / 1412

- 10G Ethernet applications
- IEEE 802.3ae
- SFF-8431 and SFF-8432
- Signal wire size 30AWG and 26AWG
- Standard lengths available up to 7 m
- Custom EEPROM mapping available
- Available in black, red or blue PVC jacket options

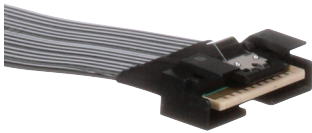
Typical Applications: Network Interface Card (NIC) to switch



3M™ External miniSAS Cable Assembly, Series 8G26

- x4 configuration
- SAS 2.0 and 2.1 (100 ohm) applications
- SFF-8086, 8088
- Signal wire size 30AWG and 28AWG
- Standard lengths available up to 6 m
- Various keying options and custom cable lengths available

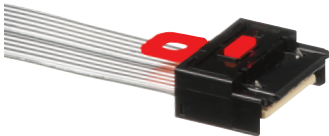
Typical Applications: Network Interface Card (NIC) to switch



3M™ Multi-Channel I/O Twin Axial Cable Assemblies, Series 8MS8

- x4 and x8 configurations
- SFF-TA-1016 straight and right angle
- Signal wire size 30AWG and 31AWG
- Standard lengths 0.5 m, 0.75 m, and 1 m
- PCIe (85 ohm) applications
- Custom folded assemblies available

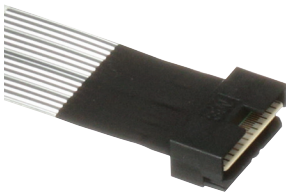
Typical Applications: Motherboard or controller to drive backplane, midboard



3M™ Scalable High Speed I/O Assemblies

- 1C, 2C, 4C configurations
- SFF-TA-1020 straight
- Signal wire size 30AWG and 31AWG
- Standard lengths 0.5 m, 0.75 m, and 1 m
- PCIe (85 ohm) applications
- Custom folded assemblies available

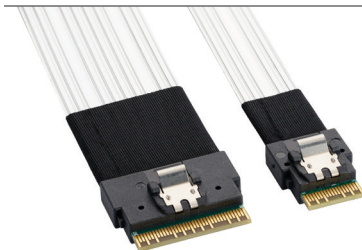
Typical Applications: Motherboard or controller to drive backplane, midboard



3M™ Low Profile I/O Twin Axial Cable Assemblies, Series 8CS8

- x4 and x8 configurations
- Straight and right angle
- Signal wire size 30AWG and 31AWG
- Standard lengths 0.5 m, 0.75 m, and 1 m
- PCIe (85 ohm) applications
- Custom folded assemblies available

Typical Applications: Motherboard or controller to drive backplane, midboard



3M™ SlimLine Twin Axial Cable Assemblies, Series 8ES8

- x4 and x8 configurations
- SFF-8654 straight and right angle
- Signal wire size 30AWG and 31AWG
- Standard lengths 0.5 m, 0.75 m, and 1 m
- PCIe (85 ohm) and SAS (100 ohm) applications
- Custom folded assemblies available

Typical Applications: Motherboard or controller to drive backplane, midboard

3M™ Mini SlimLine Twin Axial Cable Assemblies, Series 8EL8

- x8 configurations
- SFF-8654 straight
- Signal wire size 31AWG
- Standard lengths 0.5 m, 0.75 m, and 1 m
- PCIe (85 ohm) applications
- Custom folded assemblies available
- Assembly plug depth reduced 25% compared to standard SlimLine

Typical Applications: Motherboard or controller to drive backplane, midboard

3M™ Compact SlimLine Twin Axial Cable Assemblies, Series 8EC8

- x8 configurations
- SFF-8654 straight
- Signal wire size 30AWG and 31AWG
- Standard lengths 0.5 m, 0.75 m, and 1 m
- PCIe (85 ohm) applications
- Custom folded assemblies available
- Assembly plug width reduced by 8% and depth reduced by 25% compared to standard SlimLine

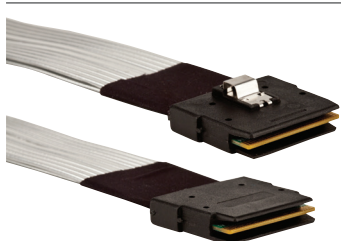
Typical Applications: Motherboard or controller to drive backplane, midboard



3M™ Internal PCI Express Extender and Jumper Cable Assemblies

- x4, x8 and x16 configurations
- Straddle-mount and SMT connector types
- Signal wire size 30AWG
- Standard lengths 0.25 m and 0.5 m
- PCIe (85 ohm) applications
- Includes aux signals

Typical Applications: Flexible riser (extender) motherboard to motherboard (jumper)



3M™ Internal miniSAS Cable Assemblies, Series 8F36 / 8F68 / 8S36

- x4 (36-position) and x8 (68-position) configurations
- SFF-8087 straight and right angle
- SFF-8087 to 7-position SATA fan-out assemblies
- Signal wire size 30AWG, available in either silver or tin
- Available with and without sidebands
- SAS (100 ohm) applications
- SFF-8087 hybrid to SATA
- Standard lengths available up to 1 m
- Custom folded assemblies available

Typical Applications: Motherboard or controller to drive backplane, midboard



3M™ Internal miniSAS HD Cable Assemblies, Series 8U54 / 8UH4

- x4 configuration
- SFF-8643 straight short body, straight, and right angle
- SFF-8643 hybrid to SFF-8087
- Signal wire size 30AWG
- Available with or without sidebands
- Available with mesh sleeve
- SAS (100 ohm) applications (contact 3M regarding PCIe 85 ohm applications)
- Standard lengths available up to 1 m
- Custom lengths available

Typical Applications: Motherboard or controller to drive backplane, midboard



3M™ Internal SATA Cable Assemblies, Series 5602

- 7-position configuration
- Straight and right angle with either passive or active latch
- Signal wire size 30AWG
- SATA (100 ohm) applications
- Standard lengths available up to 1 m

Typical Applications: Motherboard or controller to drive backplane, midboard



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