

3M Science. Applied to Life.™

Speed meets agility.

3M™ Direct Attach Copper Twin Axial Cable Assemblies

Foldable, thin, and lightweight cabling solutions for data center, high-performance computing and other high-speed applications.

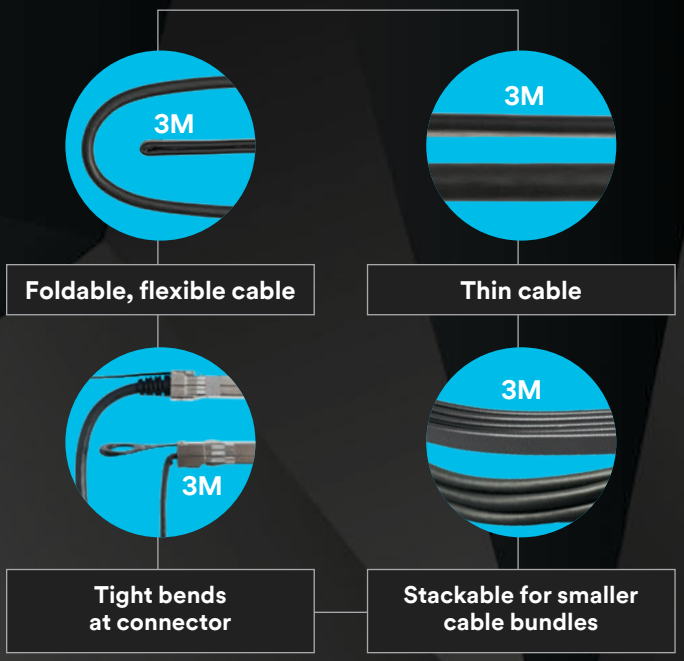
See cable management from a whole new angle.

Flexible, foldable high-performance external twin axial cable solutions from 3M.

From delivering streaming media in flawless high definition to connecting businesses with global customers in real time, today's data centers have a need for speed. 3M™ Direct Attach Copper Twin Axial Cable Assemblies help you keep servers, switches, storage and other high-speed equipment performing at the levels your customers demand.

Made with high-performance 3M™ Twin Axial Cable technology, these direct attach copper cable assemblies are thin, flexible and lightweight with the ability to make tight bends with minimal to no impact on performance. Using the latest industry standard physical interfaces, they give you the ability to reach speeds up to 100 Gbps across a wide range of data center, high-performance computing and telecommunications applications.

3M™ Direct Attach Copper Twin Axial Cable Assemblies, compared to competitive cable



Available form factors:

- QSFP-DD
- QSFP28
- SFP28
- QSFP+
- SFP+
- External miniSAS



Cable management made smarter and simpler

3M™ Direct Attach Copper Twin Axial Cable Assemblies are specially designed to be highly foldable and bendable with minimal to no impact on signal integrity and performance.

- Excellent rack cable management
- Stackability to create tighter cable bundles, helping to minimize obstructions to airflow
- Efficient routing of cable with tight bends and folds
- Less space required in front of the port, allowing rack doors to close
- Simplified serviceability with light, flexible cables

A cabling solution for many connection needs

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



- Delivers aggregate data bandwidth up to 400 Gbps (8x 50Gbps) with passive copper assemblies:
  - Up to 2 meters with 30 AWG
  - 2 to 3.5* meters with 26 AWG
- Desgned to meet the following industry-standard protocols:
  - QSFP-DD MSA; IEEE 802.3cd
  - 400G Ethernet applications
- Custom EEPROM mapping available
- RoHS 2011/65/EU compliant**
- Product specifications: PD-0352/78-5102-0352-9
- Data sheet / Customer drawing: TS-2701/78-5100-2701-0
- QSFP-DD to 2xQSFP56 Y-Cable assemblies available
- QSFP-DD to 4xQSFP28 / 4xQSFP56 and 8xSFP56 breakout assemblies available

3M™ 100G QSFP28 Direct Attach Copper Cable Assemblies, 9Q Series



- Delivers aggregate data bandwidth up to 100 Gbps (4x 25 Gbps) with passive copper assemblies:
  - Up to 2 meters with 30 AWG
  - 2 to 4 meters with 26 AWG
- Designed to meet the following industry-standard protocols:
  - SFF-8665, 8661, 8662; IEEE 802.3bj
  - 100G Ethernet applications
- Tested at Open Networking Interoperability PlugFest (UNH-IOL)
- Custom EEPROM mapping available
- RoHS 2011/65/EU compliant**
- Product specifications: PD-0262/78-5102-0262-1
- Data sheet/Customer drawing: TS-2672/78-5100-2672-3

3M™ 25G SFP28 Direct Attach Copper Cable Assemblies, 1422 Series



- Delivers data rates up to 25 Gbps per channel with passive copper assemblies:
  - Up to 2 meters with 30 AWG
  - 2 to 5 meters with 26 AWG
- Designed to meet the following industry-standard protocols:
  - SFF-8402; IEEE 802.3by
  - 25G Ethernet applications
- Tested at Open Networking Interoperability PlugFest (UNH-IOL)
- Custom EEPROM mapping available
- RoHS 2011/65/EU compliant**
- Product specifications: PD-0264/78-5102-0264-7
- Data sheet/Customer drawing: TS-2664/78-5100-2664-0

3M™ Twin Axial Cable Assemblies for QSFP+ Applications, 9Q Series



- Delivers aggregate data bandwidth of 40 and 56 Gbps with passive copper assemblies:
  - Up to 3 meters with 30 AWG
- Designed to meet the following industry-standard protocols:
  - SFF-8436 and IEEE 802.3ba
  - 40G Ethernet applications
  - Can support DDR (4x 5 Gbps), QDR (4x 10 Gbps), and FDR (4x 14 Gbps) applications
- Tested at Open Networking Interoperability PlugFest (UNH-IOL)
- Custom EEPROM mapping available
- RoHS 2011/65/EU compliant**
- Product specification: PD-0198/78-5102-0198-7
- Data sheet/Customer drawing: TS-2439/78-5100-2439-7

3M™ Cable Assemblies for SFP+ Applications, 1410/1412 Series



- Delivers data rates up to 10 Gbps per channel with passive copper assemblies:
  - Up to 5 meters with 30 AWG
  - 4 to 7 meters with 26 AWG
- Designed to meet the following industry-standard protocols:
  - SFF-8431 and SFF-8432; IEEE 802.3ae
  - 10G Ethernet applications
- Tested at Open Networking Interoperability PlugFest (UNH-IOL)
- Available in black, red or blue PVC jacket options designed for port traceability and/or management of redundant network equipment
- Custom EEPROM mapping available
- RoHS 2011/65/EU compliant**
- Product specification: PD-0114/78-5102-0114-4
- Data sheet/Customer drawing: TS-2418/78-5100-2418-1 (black jacket) TS-2649/78-5100-2649-1 (red/blue jacket)

3M™ High-Routability External miniSAS Cable Assembly, 8G26 Series



- Delivers up to 6 Gbps per channel transmission with passive copper assemblies:
  - Up to 3 meters with 30 AWG
  - 3 to 6 meters with 28 AWG
- x4 configuration
- SFF-8086/8088 compliant
- Meets SAS 2.1 requirements (6 Gbps)
- Various keying options and custom cable lengths available
- Custom EEPROM mapping available
- RoHS 2011/65/EU compliant**
- Product specification: PD-0099/78-5102-0099-7
- Data sheet/Customer drawing: TS-4815/78-5100-4815-0

* 3.25 meter cable assembly meets IEEE802.3cd and 3.5 meter assembly meets IEEE802.3cd Channel Operating Margin (COM).

**RoHS 2011/65/EU Compliant: "RoHS 2015/863" means that the product or part does not contain any of the substances in excess of the maximum concentration values ("MCVs") in EU RoHS Directive 2011/65/EU, as amended by EU 2015/863. The MCVs are by weight in homogeneous materials. This information represents 3M's knowledge and belief, which may be based in whole or in part on information provided by third party suppliers to 3M.

Over 50 years of interconnect innovation

3M™ Direct Attach Copper Twin Axial Cable Assemblies are part of a long line of 3M firsts in electronics cabling technology, including the first mass-termination interconnect system; the first 64 wire termination; color-coded flat cabling; the first IDC solution for I/O applications; foldable twin-ax cable and more – all designed to help manufacturers to improve device performance, speed assembly and add more value to their products.

Regulatory: For regulatory information about this product, visit 3M.com/regs or contact your 3M representative.

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