Over 50 years of interconnect innovation

3M™ External 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 enable manufacturers to improve device performance, speed assembly and add more value to their products.

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3M Science.
Applied to Life.™

Speed meets agility.

3M™ External Twin Axial Cable Assemblies

Foldable, thin, and lightweight cabling solutions for data center, high performance computing and other high-speed applications.
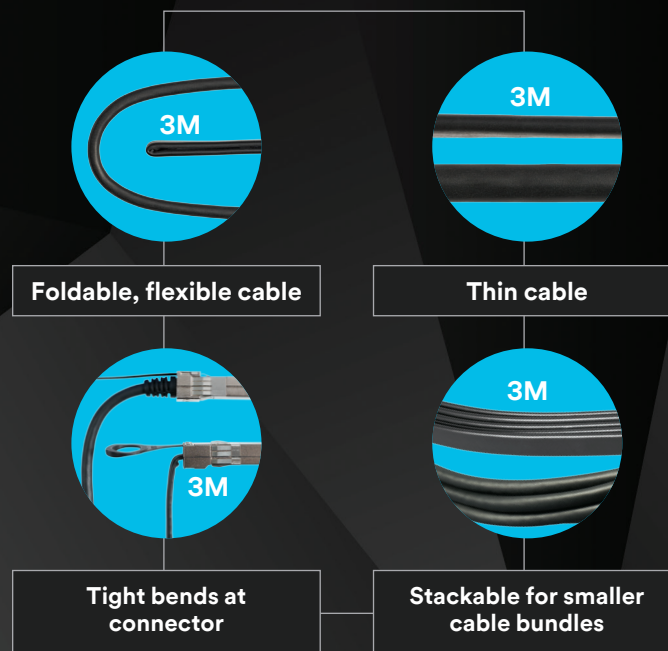
See cable management from a whole new angle.

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™ External Twin Axial Cable Assemblies help you keep servers, switches, storages 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™ External Twin Axial Cable, compared to competitive cable

3M — Foldable, flexible cable

3M — Thin cable

3M — Tight bends at connector

3M — Stackable for smaller cable bundles

Suitable for all these connection types:
▸ QSFP28
▸ QSFP+
▸ SFP+
▸ External miniSAS

Cable management made smarter and simpler

3M™ External 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 every connection need

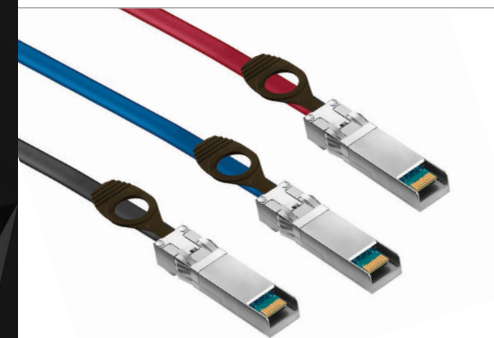## 3M™ 100G QSFP28 Direct Attach Copper Cable Assemblies, 9Q Series

▸ 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 802.3b
  – 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™ 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