

SFP+ Cable Assemblies

WIDELY USED ON 10G CONNECTION FOR SWITCH/SERVER/STORAGE

Amphenol ICC's SFP+ cable assemblies are designed to support applications for 10G Ethernet and Fibre Channel. The Amphenol SFP+ products offer an ultra-high performance, cost effective solution for 10G speed applications in switched fabric I/O, switches, routers, data storage arrays, and high performance computer (HPC) clusters. The Small Form Factor Pluggable Plus (SFP+) interface supports a variety of communications standards including Fibre Channel, 10G Ethernet (10-GbE), InfiniBand, and SONET.

- 10G Ethernet, Fibre Channel, InfiniBand & SONET multi-platform support
- Exceeds 10G Ethernet or Fibre Channel with optimized PCB and auto soldering
- Enjoy a reduced power budget and lower port cost compared to optical
- Supports a maximum 15 meter length for both passive and active solutions
- Fully compatible with Amphenol's 10G board connectors and cages as well as other competitive industry standard connector systems

FEATURES

- Fully compliant to the latest SFP+ MSA
- Optimized PCB with auto soldering process
- Stamped EMI Ground Finger
- EEPROM in cable assembly
- Enables 10Gb/s per channel transmission
- 30AWG – 24AWG cable sizes
- Active or micro-controller capability
- Active copper cables
- Cable unlatching options either push-to-release or pull-to-release
- RoHS2 compliant



TARGET MARKETS



BENEFITS

- Support to connect any security free SFP+ port
- Exceeds 10G electrical performance requirement
- Assure 360° EMI shielding effectiveness
- Industry memory map compliance or customized
- Supports industry standards like 10GbE, FC, etc.
- Supports cable length from 0.25 meter to 15 meter
- Lower loss or coded EPROM access supported
- Allows the use of copper cables (vs. optical) up to a 15 meter length or smaller wire gauge for the same length application
- Choose the cable release function that best fits the application (pull-to-release is better for high density applications and push-to-release provides a clean back)
- Environmentally friendly

TECHNICAL INFORMATION

MATERIAL

- Nickel plated zinc die cast shells & latching mechanism parts
- EM-888k laminated PCB with gold finger and solder pads
- Differential 2-pair cable with EMI shielding braid and LSZH or PVC jacketing
- Thermoplastic cable pull tab (pull-to-release only)
- Stainless steel EMI finger and other assembly hardware

ELECTRICAL PERFORMANCE

- Differential Impedance: $100\Omega \pm 10\Omega$
- SI performance per 10G Ethernet or Fibre Channel
- Dielectric Withstanding Voltage per EIA 364-20

MECHANICAL PERFORMANCE

- Durability: 50 cycles
- Mating Force: 18N max.
- Latch Strength Axial Load: 180N min.
- Cable Axial Strain Relief: 90N min.
- Cable Flex: 180° flex; 15 cycles per EIA 364-41

ENVIRONMENTAL

- Thermal Shock: EIA 364-32, Condition 1, 25 cycles, -55°C to $+85^\circ\text{C}$
- Temperature Life: EIA 364-17, Method A, Condition 2, Time Condition C, 500 hours, 70°C

APPROVALS AND CERTIFICATIONS

- Ethernet Alliance Interoperability Compliance
- FCIA Interoperability Compliance
- RoHS2 Compliant

SPECIFICATION

- Product Specification: 57154xxxx & 61723xxxx passive cable assemblies, 58672xxxx active cable assemblies

PACKAGING

- Individually packed in anti-static bags
- Cable ends packaged with dust covers

TARGET MARKETS/APPLICATIONS



Adapter Card
Wireless BBU



Data Center
High Performance Computing (HPC)
Router
Server
Storage
Switch

PART NUMBERS

Description	Type	Part Numbers
10G Ethernet Copper Cable	Push-to-Release, 30AWG, 0.5 meter	571540001
10G Ethernet Copper Cable	Push-to-Release, 30AWG, 1.0 meter	571540007
10G Ethernet Copper Cable	Push-to-Release, 30AWG, 1.5 meter	571540024
10G Ethernet Copper Cable	Push-to-Release, 30AWG, 2.0 meter	571540012
10G Ethernet Copper Cable	Push-to-Release, 30AWG, 2.5 meter	571540025
10G Ethernet Copper Cable	Push-to-Release, 30AWG, 3.0 meter	571540002
10G Ethernet Copper Cable	Push-to-Release, 28AWG, 4.0 meter	571540019
10G Ethernet Copper Cable	Push-to-Release, 26AWG, 5.0 meter	571540003
10G Ethernet Copper Cable	Push-to-Release, 24AWG, 6.0 meter	571540018
10G Ethernet Copper Cable	Push-to-Release, 24AWG, 7.0 meter	571540004
10G Ethernet Copper Cable	Pull-to-Release, 30AWG, 0.5 meter	617230001
10G Ethernet Copper Cable	Pull-to-Release, 30AWG, 1.0 meter	617230002
10G Ethernet Copper Cable	Pull-to-Release, 30AWG, 1.5 meter	617230003
10G Ethernet Copper Cable	Pull-to-Release, 30AWG, 2.0 meter	617230004
10G Ethernet Copper Cable	Pull-to-Release, 30AWG, 2.5 meter	617230005
10G Ethernet Copper Cable	Pull-to-Release, 30AWG, 3.0 meter	617230006
10G Ethernet Copper Cable	Pull-to-Release, 26AWG, 4.0 meter	617230008
10G Ethernet Copper Cable	Pull-to-Release, 26AWG, 5.0 meter	617230010
10G Ethernet Copper Cable	Pull-to-Release, 24AWG, 6.0 meter	617230011
10G Ethernet Copper Cable	Pull-to-Release, 24AWG, 7.0 meter	617230012
10G Ethernet Copper Cable	Pull-to-Release, 28AWG, 8.0 meter	586720009
10G Ethernet Copper Cable	Pull-to-Release, 28AWG, 9.0 meter	586720010
10G Ethernet Copper Cable	Pull-to-Release, 28AWG, 10.0 meter	586720011
10G Ethernet Copper Cable	Pull-to-Release, 24EXD, 12.0 meter	586720013