SFP Cable Assemblies

10G/25G/50G/100G

Amphenol's SFP cable assemblies are designed to support applications for Ethernet and Fibre Channel. The Amphenol SFP products offer an ultra-high-performance, cost-effective solution for 10G/25G/50G/100G speed applications in switched fabric I/O, switches, routers, data storage arrays, and high-performance computer (HPC) clusters. The Small Form Factor Pluggable (SFP) interface supports a variety of communications standards including Fibre Channel, 10G/25G/50G/100G Ethernet, InfiniBand, and SONET.

- 10G/25G/50G/100G Ethernet, Fibre Channel, InfiniBand & SONET multi- platform support
- Low cross-talk and pair to pair skew with Amphenol SkewClear® Twinax Wire
- Enjoy a reduced power budget and lower port cost compared to optical.
- Supports several lengths for both passive and active solutions.
- Fully compatible with Amphenol's SFP+/28/56/112 board connectors and cages as well as other competitive industry standard connector systems

TARGET MARKETS

FEATURES	BENEFITS
Fully compliant to the latest SFP MSA	Support to connect any security free SFP port
Optimized PCB with auto soldering process	Exceeds 10G/25G/50G/100G electrical performance requirement
Stamped EMI Ground Finger	Assure 360° EMI shielding effectiveness
EEPROM in cable assembly	Industry memory map compliance or customized
Enables 10/25/50/100Gb/s per channel transmission	Supports industry standards like GbE, FC, etc.
30AWG – 26AWG cable sizes	Supports cable length from 0.25 meter to 15 meter
Passive Direct Attachment Cables (DAC) and Active Linear Copper Cables (ACC)	Lower loss or coded EPROM access supported
Active Electrical or micro-controller capability (AEC)	Supports 112G up to 5m
Cable unlatching options either push-to-release or pull-to-release	Choose the cable release function that best fits the application (pull-to-release is better for high density applications than push-to-release)
RoHS2 compliant	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/25G/50G/100G Ethernet
- 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°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

- Refer to the latest revision specification of the SFP small form factor pluggable module.
- Applicable IEEE specifications
- SFF–8431
- IEEE802.3by
- IEEE802.3cd
- IEEE802.3ck

SPECIFICATION

- 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

▶ SFP Cable Assemblies

PART NUMBERS

Description	Type	Part Numbers	Type
10G Ethernet Copper Cable	Pull-to-Release, 30AWG, 0.5 meter	NDCCDA-0006	Passive
10G Ethernet Copper Cable	Pull-to-Release, 30AWG, 1.0 meter	NDCCDA-0001	Passive
10G Ethernet Copper Cable	Pull-to-Release, 30AWG, 1.5 meter	NDCCDA-0002	Passive
10G Ethernet Copper Cable	Pull-to-Release, 30AWG, 2.0 meter	NDCCDA-0003	Passive
10G Ethernet Copper Cable	Pull-to-Release, 30AWG, 2.5 meter	NDCCDA-0004	Passive
10G Ethernet Copper Cable	Pull-to-Release, 30AWG, 3.0 meter	NDCCDA-0005	Passive
10G Ethernet Copper Cable	Pull-to-Release, 28AWG, 4.0 meter	NDCCDB-0004	Passive
10G Ethernet Copper Cable	Pull-to-Release, 26AWG, 5.0 meter	NDCCDD-0005	Passive
10G Ethernet Copper Cable	Pull-to-Release, 24AWG, 7.0 meter	NDCCDE-0007	Passive
25G Ethernet Copper Cable	Pull-to-Release, 30AWG, 0.5 meter	NDCCGF-0006	Passive
25G Ethernet Copper Cable	Pull-to-Release, 30AWG, 1.0 meter	NDCCGF-0001	Passive
25G Ethernet Copper Cable	Pull-to-Release, 30AWG, 1.5 meter	NDCCGF-0002	Passive
25G Ethernet Copper Cable	Pull-to-Release, 30AWG, 2.0 meter	NDCCGF-0003	Passive
25G Ethernet Copper Cable	Pull-to-Release, 30AWG, 2.5 meter	NDCCGF-0004	Passive
25G Ethernet Copper Cable	Pull-to-Release, 30AWG, 3.0 meter	NDCCGF-0005	Passive
25G Ethernet Copper Cable	Pull-to-Release, 26AWG, 3.5 meter	NDCCGJ-0009	Passive
25G Ethernet Copper Cable	Pull-to-Release, 26AWG, 4.0 meter	NDCCGJ-0004	Passive
25G Ethernet Copper Cable	Pull-to-Release, 26AWG, 4.5 meter	NDCCGJ-0010	Passive
25G Ethernet Copper Cable	Pull-to-Release, 26AWG, 5.0 meter	NDCCGJ-0005	Passive
25G Ethernet Copper Cable	Pull-to-Release, 26AWG, 5.5 meter	NDCCGJ-0011	Passive
50G Ethernet Copper Cable	Pull-to-Release, 30AWG, 0.5 meter	NDCCMF-0004	Passive
50G Ethernet Copper Cable	Pull-to-Release, 30AWG, 1.0 meter	NDCCMF-0001	Passive
50G Ethernet Copper Cable	Pull-to-Release, 30AWG, 1.5 meter	NDCCMF-0002	Passive
50G Ethernet Copper Cable	Pull-to-Release, 30AWG, 2.0 meter	NDCCMF-0003	Passive
50G Ethernet Copper Cable	Pull-to-Release, 26AWG, 3.5 meter	NDCCMJ-0005	Active
50G Ethernet Copper Cable	Pull-to-Release, 30AWG, 5.0 meter	NJDDFF-0005	Active
50G Ethernet Copper Cable	Pull-to-Release, 28AWG, 7.0 meter	NJDDFG-0007	Active
100G Ethernet Copper Cable	Pull-to-Release, 25AWG, 1.0 meter	NJDDGN-0001	Passive
100G Ethernet Copper Cable	Pull-to-Release, 25AWG, 2.0 meter	NJDDGN-0002	Passive
100G Ethernet Copper Cable	Pull-to-Release, 25AWG, 3.0 meter	NJDDGN-0003	Passive