

SFP–DD DAC Cable Assemblies

DOUBLE THE BANDWIDTH OF SFP— SAME COMPACT FORM FACTOR

Amphenol’s SFP-DD cable assemblies are designed to support applications for Ethernet. The Amphenol SFP-DD products offer an ultra-high-performance, cost-effective solution for 100G aggregate speed applications in switches, routers, data storage arrays, and high-performance computer (HPC) clusters. The Small Form Factor Pluggable (SFP) interface supports 100G Ethernet with 2 lanes operating at 56Gb/s per lane.

- Offers twice the aggregate data rate as usually found in other 56G SFP products
- Low cross-talk and pair-to-pair with SkewClear® Pair Wire
- Enjoy a reduced power budget and lower port cost compared to optical
- Supports several types of form factors for passive solutions
- Fully compatible with Amphenol’s 56G board connectors and cages as well as other competitive industry standard connector systems



TARGET MARKETS



FEATURES

- Custom pinout for 2 lanes high-speed
- Stamped EMI ground finger
- EEPROM in cable assembly
- Enables 56Gb/s per lane transmission
- 32AWG to 26AWG cable sizes
- Passive Direct Attachment Cables (DAC)

BENEFITS

- Exceeds 56Gb/s electrical performance requirement
- Assures 360° EMI shielding effectiveness
- Industry memory map compliance or customized
- Supports Gigabit Ethernet industry standards
- Supports cable length from 0.5 meter to 3.5 meter
- Supports 56G up to 3.5m

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 56Gb/s ethernet lanes
- 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 & CERTIFICATION

- Ethernet Alliance Interoperability Compliance
- RoHS 2 Compliant

SPECIFICATIONS

- Refer to the latest revision specification of the Small Form-Factor Pluggable (SFP) module

INDUSTRY STANDARDS

- Applicable IEEE specifications
 - SFF-8431
 - IEEE802.3cd

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	Part Numbers
SFP DD – QSFP Cable Assembly, Passive, 30AWG, 1M, 56G / Lane, Jacket	NJBAAF0001
SFP DD – QSFP Cable Assembly, Passive, 30AWG, 1.5M, 56G / Lane, Jacket	NJBAAF0006
SFP DD – QSFP Cable Assembly, Passive, 30AWG, 0.5M, 56G / Lane, Jacket	NJBAAF0007
SFP DD – QSFP Cable Assembly, Passive, 28AWG, 2M, 56G / Lane, Jacket	NJBAG0002
SFP DD – QSFP Cable Assembly, Passive, 28AWG, 2.5M, 56G / Lane, Jacket	NJBAG0007
SFP DD – QSFP Cable Assembly, Passive, 26AWG, 3M, 56G / Lane, Jacket	NJBAAJ0003
SFP DD Cable Assembly, Passive, 30AWG, 1M, 56G / Lane, Jacket	NJBBAF0001
SFP DD Cable Assembly, Passive, 30AWG, 0.5M, 56G / Lane, Jacket	NJBBAF0002
QSFP – 2x SFP DD Cable Assembly, Passive, 30AWG, 1M, 56G / Lane, Jacket	NJASAF-0001
QSFP – 2x SFP DD Cable Assembly, Passive, 30AWG, 2M, 56G / Lane, Jacket	NJASAF-0002
QSFP – 2x SFP DD Cable Assembly, Passive, 26AWG, 3M, 56G / Lane, Jacket	NJASAJ-0003
SFP DD – QSFP Cable Assembly, Passive, 30AWG, 2M, 56G / Lane, Jacket	NJBAAF-0002
SFP DD Cable Assembly, Passive, 32AWG, 1M, 56G / Lane, Jacket	NJBBAE-0001
SFP DD Cable Assembly, Passive, 30AWG, 1.5M, 56G / Lane, Jacket	NJBBAF-0003
SFP DD Cable Assembly, Passive, 30AWG, 2M, 56G / Lane, Jacket	NJBBAF-0004
SFP DD Cable Assembly, Passive, 28AWG, 1M, 56G / Lane, Jacket	NJBBAJ-0001
SFP DD Cable Assembly, Passive, 26AWG, 1M, 56G / Lane, Jacket	NJBBAJ-0001
SFP DD Cable Assembly, Passive, 26AWG, 1.5M, 56G / Lane, Jacket	NJBBAJ-0002
SFP DD Cable Assembly, Passive, 26AWG, 2M, 56G / Lane, Jacket	NJBBAJ-0003
SFP DD Cable Assembly, Passive, 26AWG, 2.5M, 56G / Lane, Jacket	NJBBAJ-0004
SFP DD Cable Assembly, Passive, 26AWG, 3M, 56G / Lane, Jacket	NJBBAJ-0005
SFP DD Cable Assembly, Passive, 26AWG, 3.5M, 56G / Lane, Jacket	NJBBAJ-0006

Find part number details using the search box on www.amphenol-cs.com