

224G High-Speed Solutions

Building an ecosystem of 224Gb/s interconnect

For over nine decades, Amphenol has been at the forefront of research and development, manufacturing, and sales of the latest connectivity solutions. We're leading the industry in the advancement of next-generation 224Gb/s high-speed interconnects with a global team of 2,000+ engineers.

Paladin® HD 224Gb/s Backplane Interconnect System

INDUSTRY LEADING DENSITY AND PERFORMANCE – YOUR PATH TO 224Gb/s

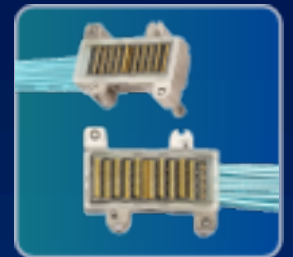
The Paladin® HD interconnect system provides world class bandwidth from 112Gb/s to 224Gb/s with industry leading density, supporting up to 144 differential pairs orthogonally within 1U spacing. Paladin® HD utilizes a balanced pair structure, built with individually assembled and discretely shielded differential pairs.



UltraPass™ OverPass™ Cable Assemblies

224G CONNECTION DIRECTLY FROM CHIP SITE TO EXTERNAL PORTS

UltraPass™ enables arrayed connector layouts for near-chip and on-package IO solutions, providing the highest differential pair count interconnect offering in the market. Full support of up to 224G signaling speeds that reduce overall system cost. These cables deliver superior signal integrity performance with lower loss interconnect from chip site to external port and from chip site to chip site.



ExtremePort™ QSFP-DD 224G Connectors

BUILT SPECIFICALLY FOR USE IN HIGH-SPEED SERIAL APPLICATIONS

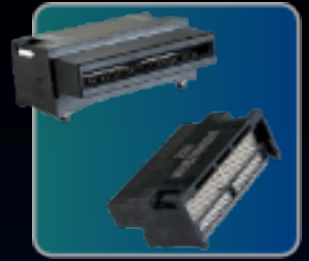
Amphenol's ExtremePort™ QSFP-DD 224G interconnect system features a 76-position, 0.8mm pitch connector. Each port supports up to 1.6Tb/s in aggregate over an 8 x 224Gb/s electrical interface. The cage and connector design provides backwards compatibility to QSFP modules which can be inserted into a QSFP-DD port and connected to 4 of the 8 electrical channels.



ExtremePort™ OSFP 224G Connectors

EXTREMEPORT™ OSFP 224G INTERCONNECT SYSTEM

Amphenol's ExtremePort™ OSFP 224G interconnect system is comprised of a 60 position, 0.6mm pitch connector built for use in high-speed serial applications. Each port supports up to 1.6Tb/s in aggregate over an 8x224Gb/s electrical interface. The OSFP footprint is optimized for signal integrity performance.



OverPass™ High Speed Bulk Cables

SUPPORT SPEEDS OF 10G, 28G, 56G, 112G, AND 224G PAM 4 PER LANE

The OverPass cable assembly portfolio is enhanced using Amphenol Spectra-Strip's high frequency SkewClear EXD cable technology and manufacturing expertise. Offerings include multi-pair cables: 2, 4 and 8 pair constructions in wire gages from 32 AWG to 26 AWG.



OSFP Cable Assemblies

200G / 400G / 800G / 1.6T SOLUTIONS

Amphenol's leading the industry in OSFP cable development. Our Electronics Products 'Product of the Year' award-winning OSFP (Octal Small Form Factor Pluggable) cable assemblies are compatible with 25G/lane channel NRZ up to 224G/lane channel PAM4 signaling protocols.



TR Multicoax Connector Series

INNOVATIVE FIELD REPLACEABLE INTERFACE

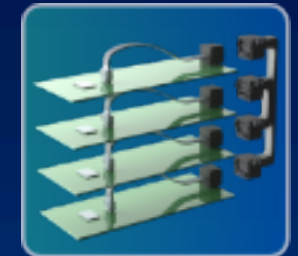
TR™ Multicoax delivers superior signal integrity from multiple high speed analog or digital channels. With a choice of 20 GHz, 40 GHz, 70 GHz, or 90 GHz configurations, users can upgrade their connectors as bandwidth requirements on their applications increases. TR is the highest density high speed multicoax connector on the market.



OverPass™ Cabled Backplane

NEAR ASIC TO SYSTEM BACKPLANE OR COPLANAR CARDS

Amphenol's Cable Backplane products extend the reach of passive copper for next generation system designs with performance beyond 224G PAM4. OverPass is complementary with traditional PCB routing and compatible with existing backplane connector systems. Optimize with our high speed, low loss twinax cable with PaladinHD2® and ExaMAX2® backplane connector families. The flexible connector architecture supports cable blind mating with a backplane cable, press fit headers, right angle and orthogonal configurations.



Learn more how Amphenol can help with every type of interconnect needed for 224G integration