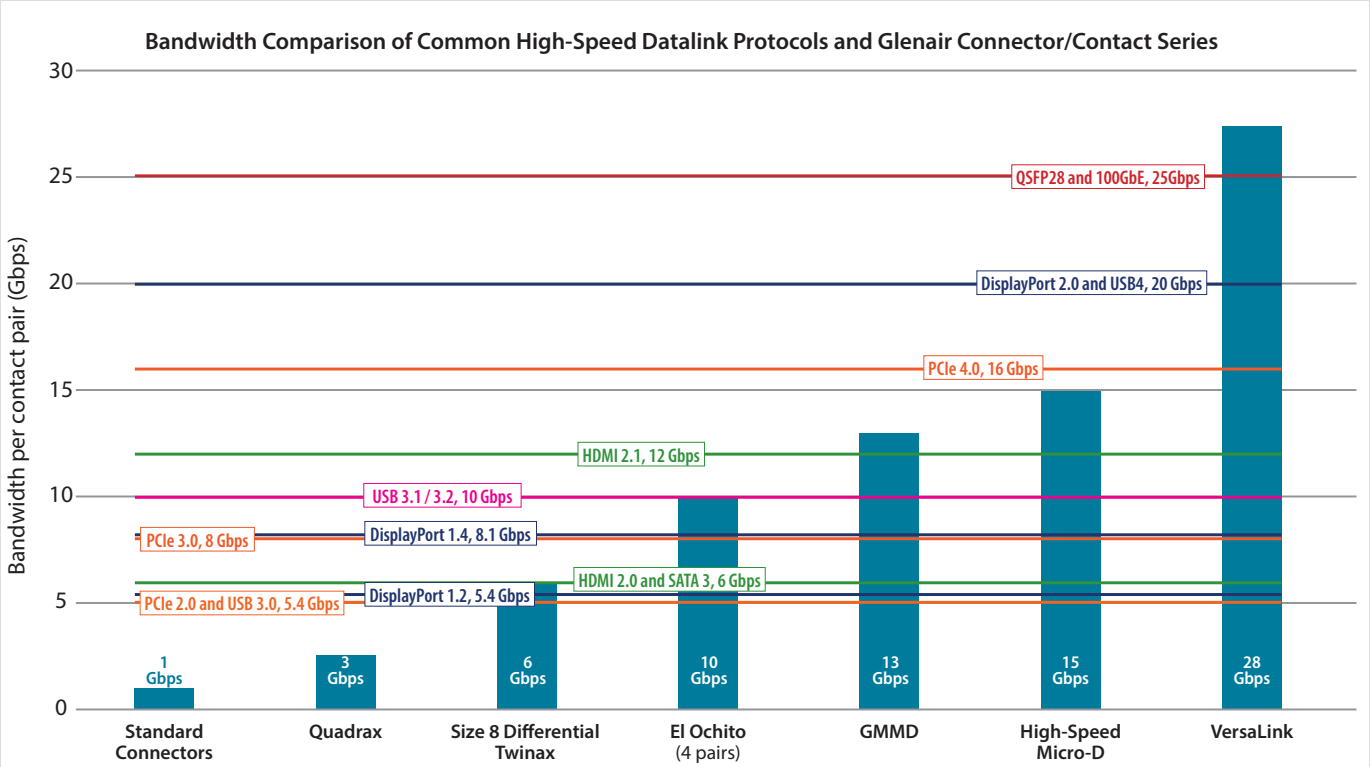
Comparative Bandwidth Performance



BANDWIDTH COMPARISON OF COMMON HIGH-SPEED DATALINK PROTOCOLS AND GLENAIR CONNECTOR / CONTACT SERIES

The term "high-speed" refers to when the protocol requires specially designed contacts and cable in order to work properly. High-speed interconnect systems are geared to particular protocols such as Ethernet and USB, with unique cables, contacts, and connector housings for each protocol type.

The various high-speed protocols are principally characterized by their maximum bandwidth per contact pair, such as USB 3.0 at 5Gbps, SATA 3 at 6 Gbps per second, and DisplayPort 1.4 at 8.1 Gbps per second.

Glenair manufactures a host of high-speed ecosystems—contact, cable, and connector families—optimized for different protocol bandwidth requirements and different application environments. Each contact and connector family—from SpeedMaster to El Ochito to GMMD to GHSM and VersaLink, are supported by one or more qualified SpeedLine cables, manufactured directly by Glenair with optimal noise immunity, high-frequency performance, temperature rating, jacketing, and shielding.

Each cable and contact assembly is geared for use with a specific circular or rectangular connector series, again in accordance with protocol requirements. The table above demonstrates the relative bandwidth of these high-speed systems per contact pair. As shown, VersaLink delivers the highest rated bandwidth for a crimp contact, 28 Gbps per contact pair, making the system the best choice for 100 Gigabit Ethernet, DisplayPort 2.0, USB4, and other ultra-high-bandwidth protocols.

VersaLink is a revolutionary high-speed shielded twinax contact system capable of supporting the complete range of high data-rate, high bandwidth transmission protocols.

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Dimensions in Inch (millimeter) are subject to change without notice.