



SPEEDMEZZ CONNECTOR FAMILY

Routing Equipment Leader Utilizes Molex Custom Engineering Expertise to Fill Critical Product Gap

BUSINESS CHALLENGE

A leading designer and manufacturer of routing equipment was seeking a low-profile, high-speed right-angle connector for use in servers, routers and switches.

Low-profile, high-speed edge card solutions are in growing demand for limited space network environments. For this particular high-end router application, the manufacturer needed a robust connector that could mate at a right angle. However, no products currently available on the market met all the necessary specifications.

As an existing Molex customer, the manufacturer was already familiar with Molex's deep engineering expertise and leadership in meeting industry standards. The manufacturer felt confident partnering with the Molex design and engineering team to develop a new addition to the Molex SpeedMezz connector family that met its specific requirements for a small form factor with robust mechanical features.

SOLUTION

Molex Right-Angle SpeedEdge Connector Delivers Robust, Scalable Solution

Molex worked closely with the manufacturer to develop a versatile right-angle connector that fit the space limitations of the application as well as met expanding market demand for modular and flexible connector systems for multi-tiered or multi-generation solutions. The result is the right-angle SpeedEdge connector, a new addition to the Molex SpeedMezz connector family which delivers versatile solutions for high-speed mezzanine, rugged edge card and high-speed edge card applications.

The right-angle SpeedEdge design is scalable from one to three 60 circuit bays. Its intelligent assembly process provides the flexibility to manufacture multiple bays to meet high differential pair requirements, and its compatibility with conventional pick-and-place equipment offers ease of automation.

The SpeedEdge connector delivers high reliability and a robust housing, with crush ribs added to the guide pin for additional PCB retention prior to guide

screw and guide housing assembly. Flexibility is also built into the design. It currently mates to a .093" edge card, and a version that mates to a .062" edge card is in development. Similar to the vertical SpeedEdge product, the right-angle design provides differential and single-ended plug options.

The SpeedEdge connector delivers superior 28 Gbps data rates with a roadmap to 56 Gbps NRZ, meeting the manufacturer's critical need for speed without compromising signal integrity performance. Molex engineering experts continue to refine the design to further optimize performance within IPC guidelines.

KEY BENEFITS

Compact right-angle design optimizes versatility and performance

- Robust edge card solution fills the gap from 28 Gbps with roadmap to 56 Gbps NRZ
- Differential and single-ended plug options can be tooled for conventional right angle to vertical solutions
- Better supports low-profile, high-speed connector solutions by delivering additional capability to the Molex SpeedMezz product line
- Speed, flexibility and scalability meet customer assembly and performance expectations for high-end routing applications

To learn more www.molex.com/link/speedmezz.html

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