Molex's low-profile PRIZM LightTurn* cable assemblies, with unique perpendicular mating to Avago's new MicroPOD parallel optical modules, provide improved airflow on PCBs for next-generation applications in emerging high-speed data and computer markets

Molex's PRIZM LightTurn cable assemblies mate to Avago's new MicroPOD[†] 120 Gbps parallel optic modules. Molex provides the multi-fiber cable assembly design and termination expertise for next-generation modules.

The unique design of the perpendicular-mating PRIZM LightTurn connector allows the parallel optical modules to be aligned in rows or tiled in a grid pattern offering increased densities over traditional parallel optical modules. The multi-fiber ribbon cable assemblies connect from the top of the modules, providing improved assembly and airflow on the PCB. Multiple 12 fiber PRIZM LightTurn connectors can be consolidated to a single I/O connector on the front or back panel by using either 12-, 24-, 48-, and 72-fiber MT ferrules in Molex's high-density interconnects including HBMT[™], Array and Circular MT connectors.

PRIZM LightTurn cable assemblies manufactured by Molex have been validated by US Conec to meet the functional requirements of the Avago module.

Molex is able to support pre-qualification builds for PRIZM LightTurn Cable Assemblies. Please contact your local Sales Engineer with application and cable assembly configuration.

For additional information, visit: www.molex.com/product/prizmlightturncables.html.

FEATURES AND BENEFITS

- Unique perpendicular mating to parallel optical modules with ribbon cable management above the modules provides improved airflow on the PCB
- Low-profile connection to Avago, next generation, board-mounted parallel optic modules capable of multiple re-matings perpendicular to the PCB
- Photonic turn Total Internal Reflection (TIR) lens array redirects the module signal from vertical to horizontal across the PCB for improved fiber management over traditional transceivers
- Terminated to ribbon cable that routes to 12-, 24-, 48- and 72-fiber MT ferrules in Molex I/O Interconnects High density connections achieved with Molex HBMT, Array and Circular MT connectors
- Integrated alignment pins mate to Avago parallel optic module keyed for proper mating orientation





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PRIZM LightTurn* Cable Assemblies



Molex High Density Front Panel I/O's: Circular MT, 1x6 Array, 1x3 Circular MT and MTP

SPECIFICATIONS

Reference Information

Mates to: Avago MicroPOD Parallel Optics Module Interface to Module: Total Internal Reflection (TIR) Lens

Physical

Connector Dimensions: 7.40 by 5.70mm (.291 by .224") Number of Fibers Per Connector: 12 Fiber Type: 50/125µm

MARKETS, APPLICATIONS AND DESCRIPTIONS OF TYPICAL CUSTOMERS

- Telecommunication equipment
- Hubs
- Servers
- Datacenter
- Emerging high-speed computer applications

PRIZM LightTurn* Cable Assemblies



Design of PRIZM LightTurn connector allows for the tight spacing of modules and improved cable management as ribbon can route over existing modules



12 Fiber Ribbon

Avago MicroPOD 120 Gbs Parallel Optical Module (*simplistic view of module*)

3 x 12 Fiber PRIZM LightTurn Connectors

6 x 12 Fiber PRIZM LightTurn Connectors



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