Rosenberger

No more limitations from PCB copper strip lines

PRIZM® LightTurn®

OPTICAL SOLUTIONS & INFRASTRUCTURE



PRIZM® LightTurn®:

High-speed fiber optic transmission - directly at the PCB

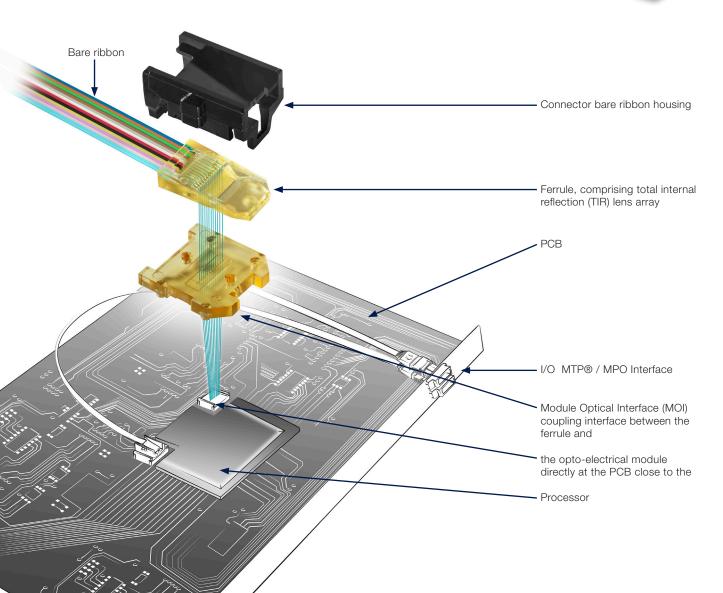
Constantly increasing bandwidth requirements in all areas of communication and computing are putting greater and greater demands on networking I/O equipment. Current edge-mount copper or fiber interfaces are at their limits. Embedded parallel optics have become the solution of choice to meet these demands.

High-performance routers, switches and computers have already utilized this technology for a decade. Parallel optics is used in a wide field of applications today: in links between nodes of super-computers or switches in international Internet gateways as well as data centers and central offices.

Embedded opto-electrical modules, optical engines, utilize parallel-optics transmitter and receiver arrays. For optimum signal integrity, thermal management, I/O consolidation and EMI/ESD, the opto-electrical modules are directly mounted close to the processors at the PCB. Parallel-optic links can complement electronic signaling in parallel lanes like XAUI and PCIe.

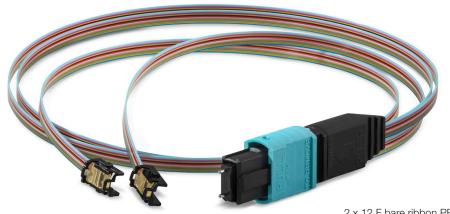
How PRIZM® LightTurn® works



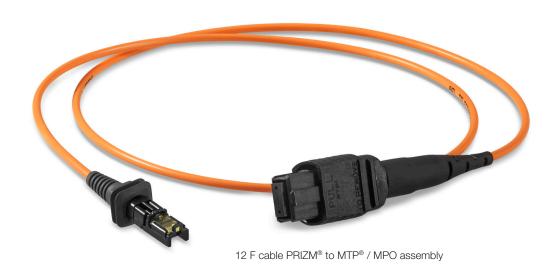


MTP® and PRIZM® LightTurn® are registered trademarks of US Conec Ltd.

PRIZM® LightTurn® assemblies:







Value of PRIZM ® LightTurn® technology

- Solution to overcome distance and bandwidth limitations of PCB copper strip lines
- Small form factor enables increased board component densities
- Facilitates increased card edge I/O densities
- Permits greater energy efficiency
- Supports improved thermal management of the equipment
- Provides better EMI immunity
- Decreases complexity of PCB design
- Increased system simplicity provides advantages from a latency, power and cost per gigabit perspective

Available designs

Bare Ribbon:

- Bare ribbon connector to bare ribbon connector
- Bare ribbon connector to bare MT ferrule
- 1 to 4 bare ribbon connectors to MTP[®] connectors 12, 24, 36, 48 fiber

Round Jacketed Cable:

Cable connector to cable connector

Rosenberger OSI Competence

- First manufacturer of MTP® cabling systems and one of the largest assemblers in Europe
- US Conec Ltd. PRIZM[®] LightTurn[®] assembly partner, IBM qualified MTP[®] cabling system manufacturer
- Highest level of availability, outstanding product and service quality

Rosenberger

Rosenberger-OSI GmbH & Co. OHG

Optical Solutions & Infrastructure Endorferstr. 6 | 86167 Augsburg P.O. Box 52 11 66 | 86094 Augsburg Germany Phone +49 821 24924-0 info-osi@rosenberger.com www.rosenberger.com/osi

Rosenberger $^{\!\!\!\circ}$ is a registered trademark by Rosenberger Hochfrequenztechnik GmbH & Co. KG. All rights reserved.