

RIVO MULTITRADE OPTICAL SYSTEMS

Manufacturer of Miniature Multi-Channel Parallel Optical Modules



Overview

Optical Components and Modules Molex specializes in miniaturized components for high-density applications. Highly reliable, MEMS-based VOA and wide-band hi.

Key Takeaways

Leading suppliers of miniature multi-channel parallel optical modules include CablesTEC, Glenair, Gigac Technology, and MaxLinear, offering solutions for data centers, industrial, and military applications. Key Suppliers and Offerings



CablesTEC provides a wide range of parallel optical transceivers and active optical cables (AOC) for high-speed interconnects from 40G to 800G. Their modules include multi-mode and single-mode parallel series, suitable for distances from 100m to 10km, ensuring low bit error rates and high signal integrity for HPC and data center networks . They support various speeds, modulation modes, packaging, and operating temperature ranges, making them suitable for large, medium, and small data centers. Glenair, Inc. specializes in ruggedized, space- and military-grade parallel optical transceivers, offering four to twelve channel parallel optic modules that are radiation-tested and designed for harsh environments . These modules are ideal for aerospace, defense, and industrial applications requiring high reliability. Gigac Technology manufactures a broad portfolio of optical transceivers, including SFP, SFF, Mini-SFF, LCC, and Parallel Optical Modules, along with GPON OLT and ONU solutions. Their modules are designed for high-density, space-saving applications, with optimized internal processes to reduce fiber interconnection losses and improve transmission reliability. Gigac emphasizes quality management and compliance with ISO9001, ISO14001, ISO45001, FCC, CE, and ROHS 2.0 standards . MaxLinear offers optical modules and DSP/TIA solutions for high-speed applications ranging from 100G to 1.6T, supporting 100G and 200G per lane electrical and optical I/O. Their modules are suitable for AI infrastructure, data centers, and high-performance computing environments, providing advanced PAM4 signaling and active electrical cable (AEC) support .

Considerations for Selection

- **Channel Count and Type:** Choose multi-channel modules based on required parallelism (e.g., 4, 8, 12 channels) and whether single-mode or multi-mode fibers are needed.
- **Distance and Data Rate:** Ensure the module supports the required transmission distance and speed (40G–800G or higher).
- **Environmental Requirements:** For industrial or military applications, ruggedized and radiation-tested modules may be necessary.
- **Form Factor:** Miniature modules like Mini-SFF or LCC are suitable for high-density deployments.
- **Compliance and Certification:** Verify ISO, FCC, CE, and ROHS compliance for quality and regulatory standards. These suppliers provide comprehensive options for high-speed, multi-channel optical interconnects, making them suitable for data centers, industrial networks, and specialized applications.

Article Content

Optical Components and Modules

Molex specializes in miniaturized components for high-density applications. Highly reliable, MEMS-based VOA and wide-band high

Top 10 Optical Module Brand & Manufacturers

Operating and using optical modules correctly may require some technical knowledge, and the manufacturer should offer resources

Ruggedized Parallel Optical Transceivers, DWDM Transceivers, and

Glenair, Inc: Space and Military-Grade Board-Mount Optical Transceiver Technologies — Including Four to Twelve Channel Parallel

1060-nm VCSEL-based parallel-optical modules for optical

The optical link demonstrator consists of 4-channel BGA-mounted transmitter and receiver modules as well as of four

US10171170B2

The present disclosure provides a multi-channel parallel optical transceiver module. The disclosed optical transceiver module/device

China Nationally-made special optical modules Manufacturer, Optical ...

The POB24 series parallel optical transceiver module is designed for defense communication command systems and subsystems,

POB48 Series Parallel Optical Transceiver Module manufacturer ...

The POB48 series parallel optical transceiver module is designed for defense communication command systems and subsystems,

High-speed transceiver parallel optics MT subassembly

The small size and multi-channel of the MT ferrule makes it easy to use as an external optical interface in the parallel

Miniature Detachable Photonic Turn Connector for Optical

The design solution presented herein is a low cost, low profile connector system that provides a reliable, consistent,

POB Series Single-Mode 4-Channel Parallel Optical Transceiver Module

The POB series single-mode parallel optical transceiver module is designed for long-distance high-speed data communication and

Custom Parallel Optical Transceiver Module manufacturer, Parallel ...

The POB24 series parallel optical transceiver module is designed for defense communication command systems and subsystems,

Parallel Optical Transceivers & AOC - CablesTEC

Note: Parallel high-speed optical modules are transmitted through multiple parallel optical fibers, each optical fiber independently

Multi-channel optical module based on PLCC packaging

This paper studies the multi-channel digital Optical module based on PLCC packaging, and designs and manufactures a small 4

Parallel Optic Modules

As the leading worldwide supplier of parallel optic products, Avago Technologies'' pluggable Parallel Fiber-Optic Modules allow for

LCC Series Parallel Optical Transceiver Module manufacturer

The LCC series parallel optical transceiver module is designed for short-distance high-speed data communication and parallel optical

10 companies in the optical transceiver industry chain 2024

To help you choose the best partner, this article will analyze and introduce 10 companies in the optical transceiver

LCC Optical Transceiver-Optical Transceiver-Gigac Technology

We specialize in producing a wide range of optical transceivers, including SFP, SFF, Mini-SFF, LCC, and Parallel Optical Modules,

Optical Transceivers

The proprietary MicroClip™ is a low-profile, low-mass spring loaded mechanical assembly that offers a rugged optical connection

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This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

