EIT Opto-Routing

Inference Chip Optical Module

Powered by EIT Opto-Routing

From invisibility cloaks to AI chips: Neurophos raises

By fitting thousands of these modulators on a chip, Neurophos claims, its "optical processing unit" is significantly faster than the silicon GPUs currently used en masse at AI data

Optically Connected Multi-Stack HBM Modules for Large Language

We introduce optically connected multi-stack HBM modules, a separate chip package with multiple HBM stacks and connected to the compute chip via co-packaged optics.

Optical Chips: Types, Applications, and Future Trends

This guide explores optical chips, their types, applications, their impact on optical module performance, and the exciting future trends in optical

Intelligent photonic computing: From free-space to on

Optical on-chip devices including on-chip metasurfaces, Mach-Zehnder interferometers (MZIs), and microring resonators (MRRs) have

NTT Unveils Low-Power AI Inference Chip for Real-Time

NTT Corporation has unveiled a new low-power large-scale integration (LSI) chip capable of real-time AI inference processing on ultra-high

The Application of Optical Modules in AI Technology

Optical modules convert electrical signals into light to move data quickly and reliably in AI systems, enabling fast and smooth data processing.

Photonic integrated circuit

A photonic integrated circuit (PIC) or integrated optical circuit is a microchip containing two or more photonic components that form a functioning circuit. This technology detects, generates, transports,

All-optical synthesis chip for large-scale intelligent

We produced an all-optical chip for large-scale intelligent vision generation, named LightGen. By integrating millions of photonic neurons on a

Deep neural network inference on an integrated, reconfigurable

Here, authors demonstrate a fully integrated silicon-photonic tensor processor for deep neural-network inference. They benchmark the processor on the MNIST and CIFAR-10 dataset.

Electronic Chip Package and Co-Packaged Optics

Optical modules are used in various networking applications, including data centers, telecommunications, and high-speed internet connections, where

Multimodal deep learning using on-chip diffractive optics with

Here, authors propose and demonstrate a trainable diffractive optical neural network chip based on on-chip diffractive optics with tunable elements to address these constraints.

Ayar Labs and Alchip Unveil Optical I/O Reference Design

Custom ASIC design house Alchip and optical I/O company Ayar Labs have unveiled a reference design platform for AI ASICs with multiple optical

Two chips for the agentic era

Google is launching its eighth-generation Tensor Processor Units, featuring two specialized chips: the TPU 8t for massive model training and the TPU 8i for high-speed inference. These chips are purpose

How AI Revolutionizes the Optical Module Industry

AI-driven demand fuels global optical module industry growth, with Chinese firms leading innovation and market share expansion.

Intel Demonstrates First Fully Integrated Optical I/O Chiplet

Intel Corporation's Integrated Photonics Solutions (IPS) Group has demonstrated the industry's first fully integrated bidirectional optical compute

Photonic chip integrates sensing and computing for

WASHINGTON -- Researchers have demonstrated a new intelligent photonic sensing-computing chip that can process, transmit and reconstruct

Photonic processor could enable ultrafast AI

Researchers developed a fully integrated photonic processor that can perform all the key computations of a deep neural network on a photonic chip,

Photonic edge intelligence chip for multi-modal sensing, inference and

Edge devices require real-time processing of high-throughput analog signals. Here,

authors present a photonic intelligence chip that fuses multiple analog signal types into optical

AI Inference Companies

Companies in the AI inference market are evaluated in consideration of elements like geographic reach, success of development projects, and industry

GTC 2026: With Groq 3 LPX, Nvidia adds dedicated

At GTC 2026, Nvidia expanded the Vera Rubin platform it introduced at CES with custom CPU racks, dedicated inference chips, a new storage

Analog optical computer for AI inference and combinatorial optimization

An analog optical computer that combines analog electronics, three-dimensional optics, and an iterative architecture accelerates artificial intelligence inference and combinatorial

Nanoprinted high-neuron-density optical linear perceptrons performing

In this work, we have presented high-neuron-density MLDs for optical decryption through all-optical inference in the NIR wavelength region. We realise compact and highly integrated

GTC 2026 - The Inference Kingdom Expands

This is our GTC 2026 recap, and we will address many of the key questions that have

been left unanswered by Nvidia. Specifically, we will go

Everything NVIDIA Announced at GTC 2026, Explained

NVIDIA went all-in on agentic AI at GTC 2026. The centerpiece: the Vera Rubin platform, a system of seven new chips and five rack types designed

Optical AI Servers Speed Large Language Model Inference

Lumai, an optical compute company, has developed an inference server that uses optical computing to successfully run billion-parameter large language models (LLMs) in real time. The

An optical neural chip for implementing complex-valued neural network

Most demonstrations of optical neural networks for computing have been so far limited to real-valued frameworks. Here, the authors implement complex-valued operations in an optical neural

Nanoprinted high-neuron-density optical linear perceptrons

Article Open access Published: 03 March 2021 Nanoprinted high-neuron-density optical linear perceptrons performing near-infrared inference on a CMOS chip Elena Goi, Xi Chen, Qiming

The Application of Optical Modules in AI Technology

Optical modules boost AI technology by enabling high-speed data transfer, reducing latency, and improving energy efficiency in modern AI systems.

Contact Us

For datasheets, pricing, or custom optical networking solutions, please visit: https://entrenamientointeligente.es