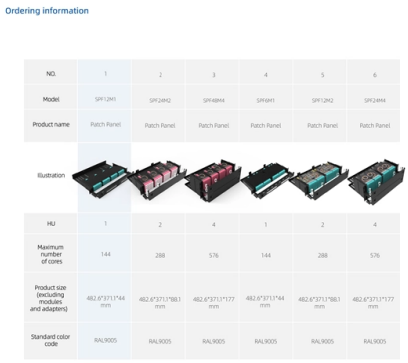
PVProjekt Digital Infrastructure

NPO optical module


Ordering information

NO.	1	2	3	4	5	6
Model	SPF12M1	SPF24M2	SPF48M4	SPF6M1	SPF12M2	SPF24M4
Product name	Patch Panel	Patch Panel	Patch Panel	Patch Panel	Patch Panel	Patch Panel
Illustration						
HU	1	2	4	1	2	4
Maximum number of cores	144	288	576	144	288	576
Product size (excluding modules and adapters)	482.6*3711*44 mm	482.6*3711*88.1 mm	482.6*3711*177 mm	482.6*3711*44 mm	482.6*3711*88.1 mm	482.6*3711*177 mm
Standard color code	RAL9005	RAL9005	RAL9005	RAL9005	RAL9005	RAL9005

Overview

Near-Packaged Optics (NPO), sometimes referred to as NPO (Near Package Optics), is an architectural innovation where the optical engine is moved off the switch's main ASIC but is placed extremely close to it on the same board, typically within a few centimeters. Near-packaged optics (NPO) helps send data faster. It puts the optical engine close to the switching chip. You do not have to redesign your whole system. This technology uses less power. 4 Tbps aggregate throughput across 32 lanes operating at 200 Gbps each, leveraging advanced Silicon Photonics. LPO (Linear-drive Pluggable Optics), NPO (Near Package Optics), and CPO (Co-Packaged Optics) architectures are becoming core areas of industry focus. LPO Solution without DSP Traditional high-speed optical modules rely heavily on Digital. CHENGDU, China, April 14, 2026 — Eoptolink Technology's high-density 6. While DSPs excel at improving signal quality, their operational power consumption and latency have.

Article Content

SemiVision Panel

CPO integrates the optical engine directly with the switching ASIC within the same package. NPO uses pluggable optical modules, allowing failed optical engines to be replaced

Beyond Pluggables: What is NPO (Near-Packaged

Near-Packaged Optics (NPO), sometimes referred to as NPO (Near Package Optics), is an architectural innovation where the optical engine is moved

New Paradigm of Optical Interconnection Under the Computing

The sustained demand for AI computing power drives optical interconnection technology to evolve from traditional pluggable modules into three new technical routes: NPO, CPO and XPO,

Near-Package Optics: Evolution of Optical Connectivity

Near-package optics (NPO) is shaping the future of AI and data center connectivity with higher bandwidth and improved power efficiency.

Where co-packaged optics (CPO) technology stands in

Co-packaged optics (CPO) technology, a key enabler for next-generation data center architectures, promises unprecedented bandwidth density

NewPhotonics optical IC chips for the AI scale data center

All-Optical Photonic ICs Designed for Scale Highly integrated photonic integrated circuit chips designed for transceiver pluggable and co-packaged optics. Built for

Near Packaged Optics (NPO)

Near Packaged Optics (NPO) is a key innovation for next-generation data center architectures, where optical components are placed close to switching ASICs, significantly increasing data bandwidth and

Kyocera Develops Pluggable Optoelectronic Module

Kyocera Corporation (President: Hideo Tanimoto, hereinafter "Kyocera") is pleased to announce the development of a pluggable optoelectronic

Co Packaged Optics (CPO) – Scaling with Light for the

Co-Packaged Optics (CPO) has long promised to transform datacenter connectivity, but it has taken a long time for the technology to come to market,

OFC 2026 Special: Arista Leads XPO Launch as Three

Discover the major industry shift at OFC 2026 as Arista Networks and global leaders unveil the XPO MSA, Open CPX, and OCI MSA to solve AI data

LPO vs NPO vs CPO: The Evolution of Optical Interconnects in AI

As AI clusters continue to scale, the industry is moving toward 1.6T optical modules and future 3.2T interconnect technologies, which will require more advanced optical integration methods

Co-packaged Optics: all eyes on high-performance

Since it is challenging with today''s technology to surround the 50T switch chip with 16 3.2Tbps optical modules, NPO tackles this by using a high-performance PCB

POET Technologies seals $50M AI optical engine deal | POET Stock

POET Technologies (NASDAQ: POET) and Lumilens announced a strategic supply and joint development agreement to advance wafer-level photonic integration for next-generation AI optical

Optical Interconnect Technology Analysis: LPO, NPO, CPO

Exploring optical interconnects for AI data centers: LPO for low-power, short-distance links, NPO for high-density, near-package connections,

NPO Optical Module | Eoptolink Technology USA Inc. | Apr 2026 ...

The module uses advanced silicon photonics technology to deliver 6.4 Tbps aggregate throughput across 32 lanes operating at 200 Gbps each. It features performance, density, and

XPO: Redefining Pluggable Optics for AI Networking

The Arista XPO (eXtra-dense Pluggable Optics) module is a purpose-built solution designed from the ground up to address the unique challenges of hyperscale AI data centers.

AI data centers hit interconnect limits, boosting optical module demand

The surge in optical module stocks reflects a deeper shift in AI infrastructure: the bottleneck is no longer computing power alone, but how that power is connected.

AI Data Center Optical Transceiver Module Market 2025–2030

AI Data Center Optical Transceiver Module Market 2025–2030 Posted on Apr-03-2026 The AI data center optical transceiver market has entered a historic growth phase, driven by the exponential

Eoptolink Unveils High-Density 6.4T NPO Solution at OFC 2026

Eoptolink''s 6.4T NPO is a high-density near-packaged optical transceiver module designed to address performance and density challenges in AI data center interconnects.

Optical module common faults and solutions

Customers in the use of optical modules will more or less encounter a variety of failure problems, such as optical module model selection is correct, the use of jumper is correct and some

On The Road to CPO: NPO for High-Demand Bandwidth

Near-packaged optics (NPO) represents a tactical evolution. By placing a pluggable optical engine with a socketed, near-packaged configuration,

Optical Transceivers

Explore AOI''s portfolio of optical transceivers from 40G to 1.6T, including 800G, 400G, and CPO/NPO solutions for AI infrastructure and hyperscale data centers.

Optical module design resources | TI

View the TI Optical module block diagram, product recommendations, reference designs and start designing.

Investor Presentation

FORWARD-LOOKING STATEMENTS This presentation contains forward-looking statements relating to future events and expectations, including our expectations regarding our estimates and projections

Embedded Optical Modules Expected to Grow 50% CAGR by 2033

The embedded optical module market is about to explode. Recent forecasts point to a 50% compound annual growth rate (CAGR) through 2033—one of the fastest in the tech world right

LPO vs. NPO vs. CPO: Next-Gen 1.6T Optical Interconnect Guide ...

NPO (Near-Packaged Optics) is a transitional technology bridging traditional pluggable modules and CPO. It integrates the optical engine and GPU chip side-by-side on the same high-performance PCB

Optical Module Supply Chain Financial Data Tracking · Issue 1, May

Optical Module Supply Chain Financial Data Tracking · Issue 1, May 2026 This week covers the disclosure window from late April to early May. Core signals indicate that leading

Optical Modules and PCBs: Driving High-Speed Data Transmission in

Optical module PCBs incorporate specialized regions to optimize performance: Dense Design: Due to size constraints and the need for high-speed data transmission, optical module PCBs

GlobalFoundries'' Unveils Optical Module Solution Targeting CPO

GlobalFoundries (GF) has introduced an optical module solution for co-packaged optics (CPO). According to the company, the Silicon photonics Co-packag

Contact Us

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