How much does a QSFP28 silicon photonics chip cost for FTTH

AI Overview

A QSFP28 silicon photonics module for FTTH typically costs between $280 and $500 per unit, depending on distance, vendor, and module type.Market Pricing OverviewFor 100G QSFP28 modules, third-party compatible modules can cost as low as $280 for LR4 or CWDM4 types, which are suitable for long-reach FTTH deployments, while OEM-branded modules may exceed $780 per unit . Silicon photonics modules, leveraging CMOS-compatible manufacturing and hybrid integration of InP lasers, can reduce the bill of materials (BOM) by up to 70% for short-reach 100G-PSM4 modules, capturing significant cost savings compared to traditional laser-based modules .Factors Affecting CostModule Type and Reach: Short-reach (SR4) modules are cheaper, often under $100, while long-reach (LR1/LR4) modules for FTTH can range from $280 to $500 due to higher optical component costs .Silicon Photonics Technology: Silicon photonics reduces packaging complexity and improves thermal stability, which lowers production costs compared to conventional DFB or EML laser modules .Vendor and Volume: OEM modules are more expensive due to branding, warranty, and platform-specific testing, whereas third-party suppliers offer competitive pricing for bulk purchases .Engineering and Production Costs: Chipsets, optical mux/demux, and assembly contribute to the final price. Silicon photonics modules benefit from wafer-scale integration, reducing per-unit costs .Practical Considerations for FTTHDistance Requirements: For typical FTTH deployments (up to 10 km), LR1 or LR4 silicon photonics QSFP28 modules are suitable.Total Cost of Ownership: Beyond module price, consider shipping, installation, and spares. Silicon photonics modules often offer lower power consumption, which can reduce operational costs.Availability: Some silicon photonics modules may have lead times...

Article Content

QSFP28 Price Guide 2026: 100G Transceiver Costs

How much does a QSFP28 module cost? The price of a QSFP28 module depends on the module type, reach, coding, temperature grade,

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We build silicon-based components that transmit and receive optical signals, moving vast amounts of information at 100 to 1600 Gigabits per second over long distances of up to several kilometers of

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Intel® Silicon Photonics 100G PSM4 QSFP28 optischer Transceiver

Intel® Silicon Photonics 100G PSM4 QSFP28 optischer Transceiver Kurzübersicht mit Spezifikationen, Funktionen und Technologien.

Intel SPTSBP4CLCCO Silicon Photonics 100G CWDM4 QSFP28

It''s brand new, well-made, and clearly high quality, with a really flattering and stylish look. It was neatly packaged and a great value for the price. Shipping was quick, and the seller was

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Silicon Photonics in 100G QSFP28: Laser Tech, Market Trends

Discover how silicon photonics and laser advancements redefine 100G QSFP28 performance. Compare VCSEL/EML/DML lasers, vendor strategies, and future-proof deployment

Intel Silicon Photonics Transceiver 100G CWDM4

Executive Summary This full reverse costing study has been conducted to provide insight on technology data, manufacturing cost and selling price of the Intel''s Silicon Photonic 100G CWDM4 QFSP28

100G QSFP28 Module Cost: Pricing Guide & Factors

Discover 100G QSFP28 module pricing. Learn key cost factors, considerations, and real examples to make informed purchasing decisions for

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Explore the differences between silicon photonics and traditional laser technologies in 100G QSFP28 transceivers. Compare performance, cost, and scalability to optimize high-density

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Optical transceivers are available in many form factors and flavors. The ones shown here are the most in demand by our customers. If you cannot find the exact one that you are looking for or if you have any

QSFP-DD Price Guide 2026: 400G/800G Costs & TCO Analysis

QSFP-DD price guide with 400G/800G module costs, OEM vs third-party comparison, volume discounts, and 3-year TCO analysis for data center buyers.

Roadmapping the next generation of silicon photonics

Silicon photonics is now embarking on the next era of large-scale integration (LSI)—towards 500-to-10,000 components on the same chip.

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Intel® Silicon Photonics 100G DR/FR/LR QSFP28 Optical Transceiver

Intel® Silicon Photonics 100G DR/FR/LR QSFP28 Optical Transceiver quick reference with specifications, features, and technologies.

Intel Silicon Photonics 100G DR, FR and LR QSFP28 Optical

Description The Intel® Silicon Photonics 100G DR, FR and LR (100G DR1, FR1/DR1+ and LR1) QSFP28 Optical Transceivers are small form-factor, high-speed, and low-power consumption

Silicon Photonics in 100G QSFP28: Laser Tech, Market Trends

Silicon Photonics Disruption: Intel''s hybrid integration of InP lasers with silicon wafers via die-to-wafer bonding has enabled 70% lower BOM costs for 100G-PSM4 modules—capturing 80% of

Transource. Intel Silicon Photonics QSFP28 Module

We build silicon-based components that transmit and receive optical signals, moving vast amounts of information at 100 to 1600 Gigabits per second over long distances of up to several kilometers of

Intel® Silicon Photonics 100G PSM4 Brief

Description The Intel® Silicon Photonics 100G PSM4 (Parallel Single Mode fiber 4-lane) QSFP28 Optical Transceiver is a small form-factor, high speed, and low power consumption product, targeted

Intel SPTSBP4CLCCO Silicon Photonics 100G CWDM4 QSFP28

It is a small form-factor | high speed | and low power consumption product | targeted for use in optical interconnects for data communications applications. The high bandwidth module

Silicon Photonics: Introduction

The silicon photonics market is experiencing rapid growth. As demand for data increases, so does the need for efficient communication systems. Integrated

Intel® Silicon Photonics 100G PSM4 QSFP28 Optical Transceiver

Intel® Silicon Photonics 100G PSM4 QSFP28 Optical Transceiver - Support product information, featured content and more.

Silicon Photonics – Trends, Highlights and Challenges

Silicon Photonics – Trends, Highlights and Challenges Overview Gnyan Ramakrishna, Technical Committee Photonics, EPS and Technical Leader,

Contact Us

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