ZITHA TECH SPECIALTY CABLES (Pty) Ltd

Tariff Costs High-Speed Optical Connectivity QSFP28



Overview

The Memory Map for QSFP28 Module is used for serial ID, digital monitoring and certain control functions.

Key Takeaways

QSFP28 modules for 100G optical connectivity typically range from $35 to several thousand dollars per unit, with tariffs, supply chain constraints, and module type significantly affecting total costs.Market Pricing Overview

QSFP28 modules, which provide 100G connectivity, exhibit a wide price range depending on type, reach, and vendor. Short-reach (SR4) third-party modules can cost as little as $35, while long-reach or OEM-branded modules may reach several thousand dollars per unit . Mid-range modules such as CWDM4, LR4, FR1, and LR1 are more competitively priced, often around $280 per module, and are widely supported across platforms . Power consumption typically ranges from 3.5W to 4.5W per module, influencing operational costs .

Factors Affecting Costs
• Engineering and Production: Costs include design verification, reliability testing, and bill of materials (BOM), covering chipsets, optical components, and mechanical housing .

• Overhead and Profit Margins: Administrative, marketing, and support costs, along with company-specific profit targets, can significantly influence pricing .

© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved

• Tariffs and Supply Chain: Geopolitical tensions, export restrictions, and tariffs can increase costs, particularly for modules manufactured in China or imported into North America and Europe . Manufacturers are diversifying production to Southeast Asia to mitigate these risks .

• OEM vs Third-Party Modules: OEM modules often include firmware restrictions, warranty, and vendor support, while third-party modules may require careful validation to ensure compatibility with switch firmware and CMIS standards .

Procurement Strategies

• Frame Agreements: Multi-year contracts can stabilize costs and ensure supply during silicon shortages .

• Volume Discounts: Bulk purchases reduce per-unit costs but require careful inventory planning to avoid obsolescence .

• Compatibility Validation: Ensuring CMIS compliance and EEPROM coding prevents operational issues such as port errors or latency spikes .

Tariff Implications

Tariffs can add a significant premium to imported QSFP28 modules, particularly in North America and Europe. To mitigate this, many hyperscale operators and manufacturers are localizing production in Southeast Asia, reducing exposure to US or EU import duties . Additionally, strategic sourcing from multiple suppliers can help maintain cost predictability and avoid supply bottlenecks.

Key Takeaways

• QSFP28 pricing is highly variable: $35–$3,000+ per module, depending on reach, vendor, and type .

• Tariffs and supply chain constraints can materially increase costs, making localized production and frame agreements critical for budget planning .

• Third-party modules offer cost savings but require firmware and compatibility validation to avoid operational risks .

• Mid-range modules (CWDM4, LR4, FR1, LR1) provide the best balance of cost, performance, and vendor support . For enterprises and data centers, careful planning around tariffs, procurement contracts, and module selection is essential to optimize both CAPEX and OPEX while maintaining high-speed optical connectivity.

© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved

Article Content

QSFP28 Price Guide 2026: 100G Transceiver Costs & TCO

Real QSFP28 pricing for 2026: SR4, LR4, CWDM4, and single-lambda costs. Compare OEM vs third-party, volume

100G QSFP28 Module Cost: Pricing Guide & Factors | Vitex

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

QSFP28 Transceiver: Complete 100G Connectivity

QSFP28 transceiver guide covering module types, pricing, compatibility, and deployment.

QSFP Imports Under HS Code 85441990 | QSFP import price | Zauba

Information and reports on QSFP Imports Under HS Code 85441990 along with detailed shipment data, import price, export price,

100G QSFP28 SR4 Guide: Specs, Compatibility, Pricing

Learn 100G QSFP28 SR4 specs, compatibility, cabling, and cost factors. A practical guide for data center 100G SR4 deployment and

QSFP, QSFP+, zQSFP, QSFP28 and QSFP56, QSFP 112G | TE

In response to significant market demand to provide interconnect solutions that enable increased data rates while delivering both

Optical Transceivers Are “Parts” Under Tariff Item 8517 ...

The Customs Authority for Advance Rulings (CAAR), Delhi, in In re Hewlett-Packard Enterprise India Private Limited,

QSFP Connector: A Deep Dive into High-Speed Connectivity

Discover how the QSFP connector enables ultra-fast networks, connecting data centers and cloud infrastructure with exceptional

Optical Transceiver New Delivery for Optical Module Hs Code

The Memory Map for QSFP28 Module is used for serial ID, digital monitoring and certain control functions. The interface is

Trump Tariffs Impact on Optical Transceiver Market

© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved

This article delves into the complex and far-reaching effects of the Trump-era tariffs on the global optical transceiver

What Are the Types of 100G QSFP28 Cables?

From providing flawless, high-bandwidth media to real-time connectivity with customers around the world, today''s

Guide to QSFP28 Transceivers for 100G Data Center Connectivity

The QSFP28 interconnect offers four channels of high-speed differential signals with data rates ranging from 25 Gbps up to

SFP vs SFP+: A Complete Guide to Compatibility and SFP+ Modules

Explore the ultimate guide to SFP vs SFP+ compatibility, covering interoperability and backward compatibility of SFP+

SFP28 vs QSFP28: Key Differences, Specifications, and Use Cases

SFP28 and QSFP28 are two widely used optical transceiver form factors in modern Ethernet networks. Both support

100G QSFP28 Transceivers: Types, Specs and How to Choose

Among the various high-speed optical form factors available today, 100G QSFP28 Transceivers have emerged as the industry

Trump Tariffs Impact on Optical Transceiver Market

The far-reaching impact of Trump-era tariffs on the optical transceiver market, including supply chain disruptions,

QSFP28 Guide: Powerful 100G Optical Solution

Introduction to QSFP28 in High-Speed Networks In today''s digital era, data traffic is

QSFP28 Transceiver: The Ultimate 100G Optical Module Guide

How does it work? This comprehensive guide explores the technical details, advantages, types, and real-world

QSFP28: High-Speed Networking Transceiver Guide

Explore the powerful QSFP28 transceiver, ideal for high-speed networking. Learn how QSFP28 fiber enhances data

AOC Cable Interface Classification: Differences Between SFP+, QSFP28 ...

In data centers, high-performance computing clusters, and high-speed network cabling, AOC cables (Active Optical

© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved

US Tariffs Impact on Fiber Optic Components Market

Explore the impact of US tariffs on the fiber optic components market, highlighting increased production costs, supply chain

Everything You Need to Know About QSFP28 Ports:

Applications: High-speed Ethernet, InfiniBand, data center interconnect (DCI). Key Features

Understanding the Differences of SFP, SFP+, SFP28, QSFP+, and QSFP28 ...

In the world of high-speed networking, optical transceivers play a critical role in enabling data transmission across

QSFP28 Active Optical Cable | Optical Interconnect | Amphenol

Amphenol''s 100G QSFP28 to QSFP28 Active Optical Cable assemblies are a reliable, cost and power efficient,

How to Easily Connect QSFP28 to SFP28: A Quick Overview

Recently, 25G SFP28 and 100G QSFP28 technologies have gained significant attention for their ability to provide a streamlined

SFP+, SFP28, QSFP+, QSFP28, QSFP56, QSFP-DD, QSFP112 vs

Initial Published: February 19, 2022 The optical transceiver plays a crucial role in modern fiber networking. Various

Understanding Optical Transceiver Types: SFP, SFP+, QSFP28,

Understanding optical transceiver types doesn''t have to be complicated. Once you recognize how lane count and per

Comprehensive Tutorial of QSFP28 to SFP28 Interconnect Solution

QSFP28 optical modules are smaller in size than CFP and CFP2. When you want to implement a high-density high

QSFP28 vs QSFP+ Compatibility Guide | EDGE Optical Solutions

Is QSFP28 Compatible with QSFP+? In the evolving world of data centers and high-speed networking, compatibility

What Is QSFP Connector, QSFP+ Connector and QSFP28 Connector?

QSFP28 Connector With the same quad based interface as QSFP and QSFP+ connector, QSFP28 fiber optic transceiver can

What Are the Types of 100G QSFP28 Cables?

© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved

From providing flawless, high-bandwidth media to real-time connectivity with customers around the world, today''s

Guide to QSFP28 Transceivers for 100G Data Center Connectivity

The QSFP28 interconnect offers four channels of high-speed differential signals with data rates ranging from 25 Gbps up to

SFP vs SFP+: A Complete Guide to Compatibility and SFP+ Modules

Explore the ultimate guide to SFP vs SFP+ compatibility, covering interoperability and backward compatibility of SFP+

SFP28 vs QSFP28: Key Differences, Specifications, and Use Cases

SFP28 and QSFP28 are two widely used optical transceiver form factors in modern Ethernet networks. Both support

100G QSFP28 Transceivers: Types, Specs and How to Choose

Among the various high-speed optical form factors available today, 100G QSFP28 Transceivers have emerged as the industry

Trump Tariffs Impact on Optical Transceiver Market

The far-reaching impact of Trump-era tariffs on the optical transceiver market, including supply chain disruptions,

QSFP28 Price Guide 2026: 100G Transceiver Costs & TCO

Real QSFP28 pricing for 2026: SR4, LR4, CWDM4, and single-lambda costs. Compare OEM vs third-party, volume

100G QSFP28 Module Cost: Pricing Guide & Factors | Vitex

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

QSFP28 Transceiver: Complete 100G Connectivity

QSFP28 transceiver guide covering module types, pricing, compatibility, and deployment.

QSFP Imports Under HS Code 85441990 | QSFP import price | Zauba

Information and reports on QSFP Imports Under HS Code 85441990 along with detailed shipment data, import price, export price,

100G QSFP28 SR4 Guide: Specs, Compatibility, Pricing

© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved

Learn 100G QSFP28 SR4 specs, compatibility, cabling, and cost factors. A practical guide for data center 100G SR4 deployment and

QSFP, QSFP+, zQSFP, QSFP28 and QSFP56, QSFP 112G | TE

In response to significant market demand to provide interconnect solutions that enable increased data rates while delivering both

Optical Transceivers Are “Parts” Under Tariff Item 8517 ...

The Customs Authority for Advance Rulings (CAAR), Delhi, in In re Hewlett-Packard Enterprise India Private Limited,

QSFP Connector: A Deep Dive into High-Speed Connectivity

Discover how the QSFP connector enables ultra-fast networks, connecting data centers and cloud infrastructure with exceptional

Optical Transceiver New Delivery for Optical Module Hs Code

The Memory Map for QSFP28 Module is used for serial ID, digital monitoring and certain control functions. The interface is

Trump Tariffs Impact on Optical Transceiver Market

This article delves into the complex and far-reaching effects of the Trump-era tariffs on the global optical transceiver

QSFP28 Price Guide 2026: 100G Transceiver Costs & TCO

Real QSFP28 pricing for 2026: SR4, LR4, CWDM4, and single-lambda costs. Compare OEM vs third-party, volume

100G QSFP28 Module Cost: Pricing Guide & Factors | Vitex

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

QSFP28 Transceiver: Complete 100G Connectivity

QSFP28 transceiver guide covering module types, pricing, compatibility, and deployment.

QSFP Imports Under HS Code 85441990 | QSFP import price | Zauba

Information and reports on QSFP Imports Under HS Code 85441990 along with detailed shipment data, import price, export price,

100G QSFP28 SR4 Guide: Specs, Compatibility, Pricing

© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved

Learn 100G QSFP28 SR4 specs, compatibility, cabling, and cost factors. A practical guide for data center 100G SR4 deployment and

Related Video Reference

This video was associated with the source search result. Verify technical details against current product documentation and project requirements.

Contact Us

Continue your research online:

Website: https://zithatech.co.za
Technical inquiry: https://zithatech.co.za/contact.html

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

© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved