

PRODUCT BRIEF

Omni-Path Express cables are the optimal solutions for data center interconnect needs.



CORNELIS® OMNI-PATH EXPRESS® CABLES

CN-100CQQ QSFP-QSFP DIRECT ATTACH COPPER CABLES

CN-100FRR QSFP-QSFP ACTIVE OPTICAL CABLES

CN-100FEV QSFP DOUBLE DENSITY ACTIVE OPTICAL CABLES

Cornelis Networks provides the industry's leading high-performance cables.

Omni-Path Express cables are developed and qualified to deliver reliable, cost effective connectivity between Omni-Path Express devices in the data center.

Cornelis Omni-Path Express scale-out interconnect

Unprecedented demands on the scale-out interconnect are being driven by advances in artificial intelligence, high performance data analytics, and traditional modeling and simulation environments, coupled with extremely capable processing and storage infrastructures.

Cornelis Omni-Path Express is the next generation of high performance fabrics, based on a proven hardware foundation combined with the OpenFabrics Interfaces (OFI) software framework, that delivers the industry's lowest latency, highest message rate, and best collectives performance, all at the industry's lowest CPU utilization.

Simplify installation and optimize data center connectivity

Omni-Path Express cables provide an optimal solution for short-reach and long-reach intra- and inter-rack cable connections. These cables are designed to simplify cable routing, ensuring a more organized and

efficient setup within data centers and server racks. The cables are hot pluggable, making installation and replacement both quick and easy, reducing downtime for system maintenance.

Omni-Path Express cables offer multiple compelling benefits including:

- An array of cables to support short reach, intra-rack and long reach, inter-rack and inter-switch needs.
- Low power consumption to drive reduced operational costs.
- Industry-leading low bit error rates (BER) that drive consistently low latency.

By choosing Omni-Path Express QSFP cables, you are investing in a solution that delivers efficiency, reliability, and cost savings, making them the smart choice for modern data centers and network environments.



“Our long-standing partnership with Cornelis executives has allowed us to co-design and deploy systems optimized for the networking and I/O requirements of high performance computing, data analytic, and machine learning workflows.”

Bronis de Supinski
CTO of Livermore Computing
Lawrence Livermore National Laboratory

CORNELIS OMNI-PATH EXPRESS CABLES

CN-100CQQ, CN-100FEV, AND CN-100FRR

HIGHLIGHTS

Benefits

- 100G Omni-Path defined performance
- Low power active optical cables
- Hot pluggable

Key Features

Common

- Up to 100 Gbps data rate
- 4-channel full-duplex
- Up to 25.78 Gbps per channel
- QSFP28 compliant
- OFNP rated

Copper

- Up to 3 m length

Optical

- Up to 100 m length
- Single 3.3 V power supply

Double-Density Optical

- Two independent, 4-channel, full-duplex links
- Split at QSFP-DD end

CN-100CQQ QSFP-QSFP Direct Attach Copper Cables

Item Name	Item Number	Item Description
100CQQF3005	947013	Cornelis Omni-Path Cable Passive Copper Cable QSFP-QSFP F 30AWG 0.5M
100CQQF3010	947012	Cornelis Omni-Path Cable Passive Copper Cable QSFP-QSFP F 30AWG 1.0M
100CQQF3015	952162	Cornelis Omni-Path Cable Passive Copper Cable QSFP-QSFP F 30AWG 1.5M
100CQQF3020	952163	Cornelis Omni-Path Cable Passive Copper Cable QSFP-QSFP F 30AWG 2.0M
100CQQF2630	959843	Cornelis Omni-Path Cable Passive Copper Cable QSFP-QSFP F 26AWG 3.0M

CN-100FRR QSFP-QSFP Active Optical Cables

Item Name	Item Number	Item Description
100FRRL0030	958409	Cornelis Omni-Path Cable Active Optical Cable QSFP-QSFP L 3.0M
100FRRL0050	952419	Cornelis Omni-Path Cable Active Optical Cable QSFP-QSFP L 5.0M
100FRRL0100	952420	Cornelis Omni-Path Cable Active Optical Cable QSFP-QSFP L 10.0M
100FRRL0150	952421	Cornelis Omni-Path Cable Active Optical Cable QSFP-QSFP L 15.0M
100FRRL0200	952423	Cornelis Omni-Path Cable Active Optical Cable QSFP-QSFP L 20.0M
100FRRL0300	952424	Cornelis Omni-Path Cable Active Optical Cable QSFP-QSFP L 30.0M
100FRRL0500	952427	Cornelis Omni-Path Cable Active Optical Cable QSFP-QSFP L 50.0M *
100FRRL1000	952430	Cornelis Omni-Path Cable Active Optical Cable QSFP-QSFP L 100.0M *
100FRRP0030	99AFNL	Cornelis Omni-Path Cable Active Optical Cable QSFP-QSFP P 3.0M
100FRRP0050	99AFNN	Cornelis Omni-Path Cable Active Optical Cable QSFP-QSFP P 5.0M
100FRRP0100	99AFNP	Cornelis Omni-Path Cable Active Optical Cable QSFP-QSFP P 10.0M
100FRRP0150	99AFNR	Cornelis Omni-Path Cable Active Optical Cable QSFP-QSFP P 15.0M
100FRRP0200	99AFNT	Cornelis Omni-Path Cable Active Optical Cable QSFP-QSFP P 20.0M
100FRRP0300	99AFNV	Cornelis Omni-Path Cable Active Optical Cable QSFP-QSFP P 30.0M
100FRRP0500	99AFNW	Cornelis Omni-Path Cable Active Optical Cable QSFP-QSFP P 50.0M *
100FRRP1000	99AFNX	Cornelis Omni-Path Cable Active Optical Cable QSFP-QSFP P 100.0M *

* Special Order products, contact your sales representative.

CORNELIS OMNI-PATH EXPRESS CABLES

CN-100CQQ, CN-100FEV, AND CN-100FRR

CN-100FEV QSFP Double Density Active Optical Cables

Item Name	Item Number	Item Description
100FEVL0030	975660	Cornelis Omni-Path Cable Active Optical Cable DD-QSFP L 3.0M
100FEVL0050	975661	Cornelis Omni-Path Cable Active Optical Cable DD-QSFP L 5.0M
100FEVL0100	975662	Cornelis Omni-Path Cable Active Optical Cable DD-QSFP L 10.0M
100FEVL0150	975663	Cornelis Omni-Path Cable Active Optical Cable DD-QSFP L 15.0M
100FEVL0200	975664	Cornelis Omni-Path Cable Active Optical Cable DD-QSFP L 20.0M
100FEVL0300	975665	Cornelis Omni-Path Cable Active Optical Cable DD-QSFP L 30.0M
100FEVL0500	975667	Cornelis Omni-Path Cable Active Optical Cable DD-QSFP L 50.0M *
100FEVL1000	975669	Cornelis Omni-Path Cable Active Optical Cable DD-QSFP L 100.0M *

* Special Order products, contact your sales representative.

Operating Conditions

Temperature Operating: 0 °C to 70 °C
(case temperature)

Storage: -40 °C to 85 °C

Humidity Operating: 0% to 85%

Environmental

RoHS Compliant

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www.cornelisnetworks.com



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