

400G Duplex Single Mode 10km Optical Data Center Connectivity



Bringing together the power of optics and the scalability of silicon for a high speed, integrated optical connectivity solution

Description

The Intel® Silicon Photonics 400G LR4 QSFP-DD Optical Transceiver 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 supports 400GbE optical links over duplex single-mode fiber to up to 10 kilometers.

Applications

- Connectivity for large scale cloud and enterprise data centers
- · Optical interfaces for Ethernet switch, router, and transport networking equipment

Features

- Compliant with IEEE 400GBASE-LR4-10 optical interface standard and 100G Lambda MSA 400G LR4 optical interface specification for use in 400GbE applications up to 10 km. Also meets 400GBASE-LR4-6 for 6 km applications.
- Electrical interface compliant with IEEE 802.3bs 400GAUI-8 standard
- Compact Type 2 QSFP-DD form factor for high faceplate density in networking equipment and cage backward compatibility with QSFP28
- · Compatibility with single-mode fiber connectors and cable infrastructures
- Operating case temperature range of 0 to 70°C
- CMIS-compliant management interface with full module diagnostics and control through I2C
- Class 1 Laser

Ordering Information

Part Number	Description
SPTSHP4CLCDF	400G LR4 QSFP-DD Optical Transceiver with LC Optical Connector, 10 km Reach



Contact us

For more information on this or other $Intel^{(R)}$ Silicon Photonics products visit us at www.intel.com/siliconphotonics

This product brief, including picture and drawings, contains information about a new product. The information contained herein is given to describe certain components and shall not be considered as a guarantee of characteristics. Intel reserves the right to change the design of the products or specifications at any time without notice. The material is provided as is and without any warranties, including but not limited to warranties of non-infringement, description, and fitness for a particular purpose.

For use only by product developers, software developers and system integrators. For evaluation only; not FCC approved for resale.

2022 Intel Corporation Printed in USA Please Recycle 10/2022 353508-0