AFCT-8450Z

CFP4, 100GBASE-LR4, 10km SMF, 3.3V
Dual Rate Pluggable 100G Ethernet Optical Transceiver

Avago TECHNOLOGIES

Product Brief

Description

Avago Technologies' AFCT-8450Z CFP4 LR4 is a 4x 25.78G channel pluggable, fiber optic transceiver for 100Gbps Ethernet and OTN Applications. The transceiver supports high speed serial links over single mode fiber at signalling rates at 103.125Gb/s (a serial line rate of 25.78125Gb/s per channel) and 111.81Gb/s (serial line rate of 27.952493Gb/s per channel) for link distances up to 10km single mode fiber. The product is compliant with the CFP4 industry agreement for mechanical and low speed electrical specifications. High speed electrical and optical specifications are compliant with IEEE 802.3 Clause 88 for 100GBase-LR4 media, Clause 83E for CAUI-4 electrical interface and Clause 45 for MDIO.

The transceiver electrical interface uses a 56 contact edge type connector, as specified in the CFP4 industry agreement. The optical interface uses a standard single mode LC fiber optic connector. This transceiver incorporates Avago Technologies proven integrated circuit and laser technologies to provide reliable, high performance and consistent service.

Digital diagnostic monitoring information (DMI) is present in the AFCT-8450Z per the CFP4 industry agreement, providing real time monitoring information of transmitter, receiver and module operating conditions over the MDIO interface.

Part Number Ordering Options

100 Gigabit Ethernet and OTN/OTL4.4	AFCT-8450Z
Evaluation Kit*	AFCT-8450EVK

* Includes GUI, User Guide, MDIO controller and Power Supply Cable

Features

- Compliant to 100GbE IEEE 802.3 specifications (100GBASE-LR4, CAUI-4) up to 10km with SMF
- Supports OTN/OTL4.4 (27.952493 Gb/s) operation
- CFP4 Power Dissipation Class 4 (< 6.0 W)
- EML Laser Technology
- Class 1 eye safe per IEC60825-1 and CDRH
- Wide case temperature range (0°C to 70°C)
- LC Duplex optical connector (UPC, not angled)
- Diagnostic features per CFP4 using MDIO. Real time monitoring of:
    - Transmitter average optical power
    - Received average optical power
    - Laser bias current
    - Temperature
    - Supply Voltage
- CFP Management Interface Specification V2.4 r02a
- CFP4 Hardware Specification
- CFP4 4x25Gbit/s Default Pin Map for CAUI-4
- Proven High Reliability
- Integrated CDRs on each transmit and receive lane for CAUI-4 compliance.
- Compliant to RoHS directives

Applications

- 100 Gigabit Ethernet Interconnects
- OTN/OTL4.4 Interconnects
- Datacom/Telecom Switch and Router Connections
- Data Aggregation and Density Applications

For product information and a complete list of distributors, please go to our web site: **www.avagotech.com**

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