

AFCT-89WJDDZ

Low Voltage (3.3V) QSFP28 Pluggable,
Duplex LC Connector 40/100 Gigabit
Ethernet/CPRI Fiber Optics Transceiver



Product Brief

Jun 2018



Description

Foxconn Optical Interconnect Technologies' AFCT-89WJDDZ is a Four-Channel duplex, Pluggable, single mode Fiber-Optic QSFP28 CPRI Transceiver for 40/100 Gigabit Ethernet and CPRI Applications. This transceiver is a high performance module for short-range, single mode fiber interconnect applications. It integrates four electrical data lanes in each direction into transmission over a duplex LC single mode fiber optic cable. Each electrical lane operates at 24.33024/25.78125GBd and 9.8304/10.1376/10.3125GBd (CDR bypass) and conforms to the 40/100GE CAUI-4 electrical interface.

Per channel transmitter and receiver retimers, configured for 24.33024/25.78125GBd operation, can be bypassed to enable 40GE/CPRI data rate transmission.

Link distances up to 2Km using SMF optical fiber are supported. These modules are designed to operate over single mode fiber systems using four coarse WDM wavelengths nominally at 1271nm, 1291nm, 1311nm and 1331nm. The electrical interface uses a 38 contact QSFP28 edge type connector. The optical interface uses a conventional LC duplex optical connector. This module incorporates Foxconn Optical Interconnect Technologies proven integrated circuit and DFB technology to provide reliable long life, high performance, and consistent service.

Features

- Compliant to 100GbE IEEE 802.3bm electrical specifications Clause 83E (CAUI-4)
- Compliant to Industry Multi-Source Agreement "100G CWDM4 MSA Technical Specifications" and 40GbE specifications 802.3-2012 (40GBASE-LR4)
- SFF-8636 Rev2.9 Specification
- Power Level 5: Max Power 4.0W
- Class 1 Eye Safety
- Targeted at 2Km SMF links.
- -20 to 85°C case temperature operating range(Cold Start Capability at -40C)
- Proven High Reliability technology
- Hot pluggable QSFP transceiver for ease of installation and servicing

Applications

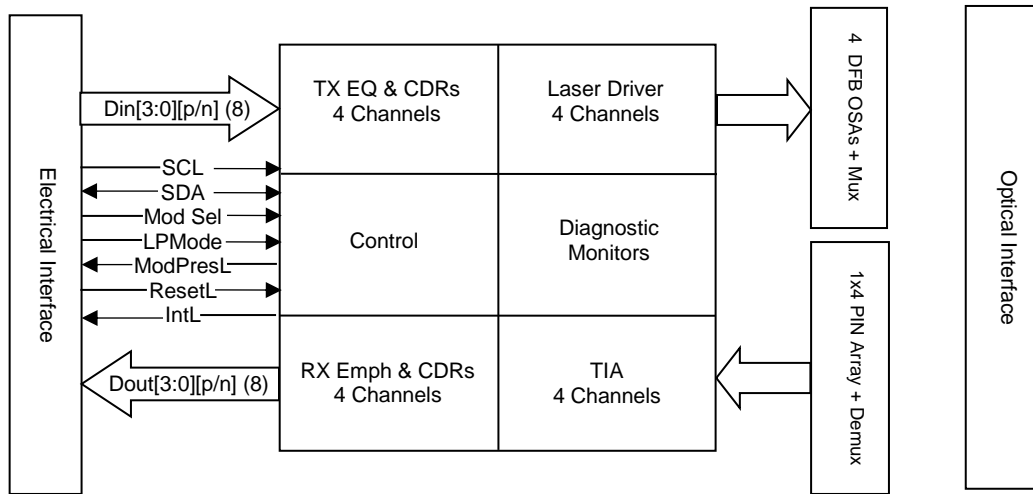
- 40/100 Gigabit Ethernet/CPRI interconnects
- Datacom/Telecom switch & router connections
- Data aggregation and backplane applications
- Proprietary protocol and density applications

Part Number Ordering Options

| | |
|--|--------------|
| 100 Gigabit Ethernet with full real-time digital diagnostic monitoring | AFCT-89WJDDZ |
| Evaluation Board | AFBR-89EVB* |
| Evaluation Kit | AFBR-89EVK** |

*Includes GUI and User Guide

**Includes GUI, User Guide, I2C controller and Power Supply



Transceiver Block Diagram

Key Product Parameters

| Parameter | Value | Units | Notes |
|------------------------------------|---|-------|-----------------------------------|
| Data rate per lane | 9.8304/10.1376/10.3125 24.33024/25.78125 | Gbps | |
| Link Length | 2 | Km | Single Mode Fiber |
| Case Operating Temperature | -20-85 | °C | |
| Power Supply Voltage | 3.3 | V | |
| Management Interface | Two-Wire Serial | | Per SFF-8636 QSFP28 Specification |
| Transceiver Eye Safety | Class 1 | | Per EN 60825-1:2014 |
| Transceiver Power Consumption, Max | 4.0W | | Power Level Class 5 |
| Electrical Connector | 38 contact connector | | Per SFF-8636 QSFP28 Specification |

For product information and a complete list of distributors, please go to our web site:
<http://www.foit-foxconn.com/>



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