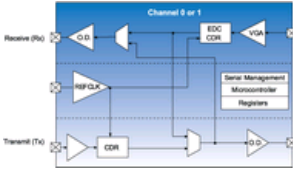


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1 Gbps and 10 Gbps Clock and Data Recovery IC with EDC



The VSC8240 is a single port clock and data recovery (CDR) device with on-chip adaptive electronic dispersion compensation (EDC). It has all the functionality of the VSC8242, but is targeted at single receive path applications, such as single mode fiber (SMF) long haul modules, as well as XFP and X2 modules. The VSC8240 compensates for dispersions in both SMF chromatic mode (up to 2400 ps/nm) and polarization mode (over 70 ps differential-group delay), and it enables the adoption of 120 Km, 160 Km, and longer applications. The VSC8240 has the capability of supporting three different serial interfaces on two ports (four pins). The MDIO and two-wire serial (TWS) slave interfaces can be used to load firmware, as well as to program and observe the internal registers of the part. The TWS master port is used for firmware downloads only. A 1.8 V and 1.2 V power supply is required for the two data paths, along with a 1.2 V to 3.3 V TTL I/O power supply.

Product Variants	Description
VSC8240IB-01	Latest generation 81-pin 8 x 8 mm FCBGA
VSC8240XB-01	Latest generation 81-pin 8 x 8 mm FCBGA lead-free second-level interconnect
VSC8240IB	[Discontinued] 81-pin 8 x 8 mm FCBGA
VSC8240XB	[Discontinued] 81-pin 8 x 8 mm FCBGA lead-free second-level interconnect

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Key Features

- Three serial interface configurations (MDIO, TWS slave, and TWS master)
- Embedded microcontroller with on-board RAM enables flexibility and reduction in system chip count
- VScope™ signal quality monitor for optimum eye opening and lower BER
- Power-on reset initializes default mode independent of serial interface

Applications

- Enables the adoption of 120 Km, 160 Km, and longer applications
- Compensates for dispersions in both SMF chromatic mode (up to 2400 ps/nm) and polarization mode
- Single mode fiber (SMF) long haul modules, as well as XFP and X2 modules

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IEEE 1588v2
Support in GE,
10GE and
OTN PHY Devices

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