

CDR3200

3.2Gbps Optical & Electrical Clock/Data Recovery System



Key Features

- ▶ Broadband Clock & Data Recovery
- ▶ Electrical and Optical interfaces
- ▶ Preset / Variable Data rates
- ▶ Trigger output for oscilloscopes

Overview

The OPTELLENT CDR3200 is a cost-effective easy-to-use clock-and-data recovery system for testing components and systems in R&D and manufacturing environments. It incorporates a reference frequency source, electrical and optical input ports and clock recovery circuits in one compact module that operates at data rates up to 3.2Gb/s.

The CDR3200 is offered with either preset discrete data rates or with a continuously variable data rate (1kHz step size).

Applications

- ▶ Production testing of optical transceivers, diplexers/triplexers, and subsystems
- ▶ Production testing of Opto-electronic components and devices (P-I-N/APD, ROSA, etc...)
- ▶ Fibre optic testing (dispersion penalty, sensitivity)
- ▶ Testing of Gb/s ICs, electronic modules, subsystems, and systems

Protocol Applications

Telecom	
OC-3	155.52 Mb/s
OC-12	622.08 Mb/s
OC-48	2.48832 Gb/s
OC-48 with FEC	2.66606 Gb/s
Storage	
Fibre Channel	1.0625 Gb/s
Serial-ATA	1.5 Gb/s
2G Fibre Channel	2.125 Gb/s
Serial-ATA2	3 Gb/s
Networking & Computing	
Gigabit Ethernet	1.25 Gb/s
Serial-ATA	1.5 Gb/s
Serial-ATA2	3 Gb/s
RapidIO	1.25 – 3.125G
XAUI	3.125 Gb/s

Software (Optional)

The CDR3200 software runs on Windows 98/2000/NT and XP over RS-232 serial interface via an RJ-45 Connector provided on the front panel. A Serial-to-USB converter can be used if a serial port is not available.

Software drivers are available for incorporating the CDR3200 into test automation suites using programs like C++, LabVIEW, VisualBASIC, and HP VEE.

Specifications

Parameter	Min	Typ	Max	Units
Electrical interface	Single-ended or Differential (Optional)			
Data Rates	<ul style="list-style-type: none"> • Preset (Standard): OC-3, 12, 48; OC48+ FEC; GbE; FC; 2xFC; XAUI • Custom Preset: Any data rates requested by customers (Optional) • Continuously Variable Data Rate (1kHz Step size) (Optional) 			
Data Rate Range	100		3125	Mb/s
Electrical Output Amplitude		300		mV
Data Rise Time		70		ps
Data Fall Time		70		ps
Electrical Data Input	50		800	mV
Connector, Electrical	50 Ω SMA			
Optical interface	MSA Standard SFP Transceiver Housing			
Connector, Optical	LC (SFP)			
Trigger frequency	Clock frequency / 16			

System & General Specifications

PARAMETER	MIN	MAX	UNIT
Chassis Electrical Voltage	100	240	VAC
Current Drain at Normal Voltage		1.4	A
Operating Temperature Range	5	45	°C
Storage Temperature Range	-40	70	°C
RS 232 PC Interface (optional)	RJ-45 connector		
Standard Warranty	2 years		

Ordering Information

CDR3200-X-X-X-X

