

40G Clock and Data Demultiplexer



Features

- Clock and data demultiplexer for lower-rate BER measurements
- 3.5 - 44Gb/s operation
- Demux-by-2 or demux-by-4
- Integrated phase shifter for high-speed clock and data alignment
- Differential or single-ended input
- Adjustable sub-rate clock output

Description

The Centellax TR1D4A is a small high-performance 3.5-44Gb/s clock and data demultiplexer, designed to simplify the process of making high-bitrate BER measurements at half- or quarter-rate speeds. The TR1D4A is capable of operating in demux-by-2 (17Gb/s to 8.5Gb/s) or demux-by-4 (38Gb/s to 9.5Gb/s) modes, with an adjustable sub-rate clock output for triggering BER testers, oscilloscopes, logic analyzers, or other instruments.

Key Specifications

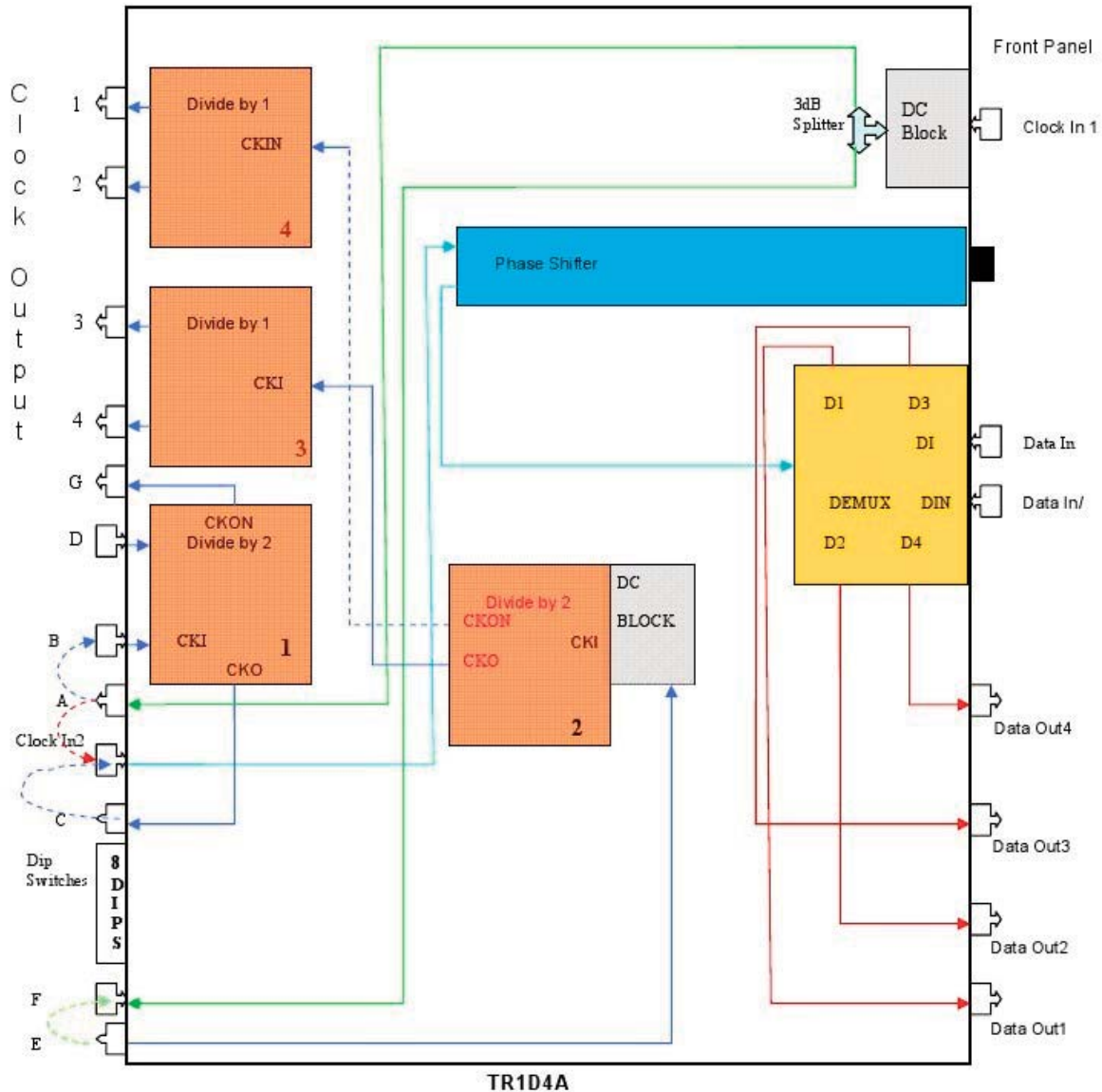
Description	Units	Min	Typ	Max
Input Bit Rate**	Gb/s	3.5	-	44
Output Bit Rate	Gb/s	0.875	-	11
Data Input Amplitude**	mVpp-se	150	600	1000
Data Output Amplitude	mVpp	210	240	270
Clock Input Amplitude	mVpp	470	600	1200
Clock Output Amplitude**	mVpp-se	-	500	-
Demux-by-4 Clock Input Frequency	GHz	1.75	-	22
Demux-by-2 Clock Input Frequency	GHz	3.5	-	22***

*Data input uses a V (f) connector. Data output and clock input use K (f) connectors. Clock output uses an SMA(f) connector.

**Differential input/output, can be used single-ended with proper 50ohm termination.

***Maximum input bit rate is 22Gb/s.

Block Diagram



14G Operation:

1. Split the clock output of the clock source.
2. One output of the splitter to the TG2P1A clock input.
3. The other output to the TR1D4A Clk1.

20G Operation:

1. Connect the TG1P2A Clk output to the directional coupler input.
2. Connect the directional coupler output to the TG1P2A Clk input.
3. Connect the -10dB coupled output of the directional coupler to the Clk1 of the TR1D4A.
4. Loop A to B.
5. Loop C to Clk2.
6. Loop E to F.
7. UXD20PEs 1 and 2's ratios = $\frac{1}{2}$ and 3 and 4's ratio = 1.

40G Operation:

1. Connect the TG1P4A Clk output to the directional coupler input.
2. Connect the directional coupler output to the TG1P4A Clk input.
3. Connect the -10dB coupled output of the directional coupler to the Clk1 of the TR1D4A.
4. Loop A to Clk2
5. Loop E to F.
6. UXD20PEs 3 and 4's ratios=1, 2's ratio =1/2 and 1's ratio is N/A.

ORDERING INFORMATION

TR1D4A

40G Clock and Data Demultiplexer (3.5-44Gb/s)

3.5 to 44Gb/s PRBS clock and data demultiplexer; includes standard 1-year warranty.

OPTIONS

-OPT101	European Power Cord
-OPT102	UK Power Cord
-OPT103	Domestic Power Cord
-OPT300 TR1D4A	1 Year Warranty Extended to 3 Years
-OPT301 TR1D4A	1 Year Warranty Extended to 5 Years

ORDERING CONTACT

For additional information or to place an order

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