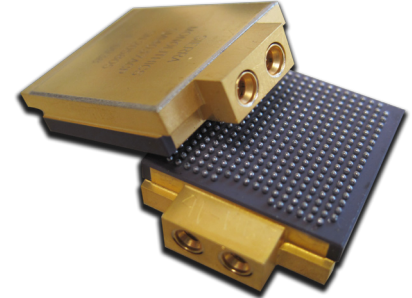


Product Brief



OPTICAL TRANSPORT & DATACOM PRODUCTS



SMI4037

39.8 to 44.6 Gbps 1:16 CDR/Demultiplexer

Product Description

SMI4037 accepts single-ended or differential 39.8 to 44.6 Gbps NRZ serial data streams and demultiplexes the data into sixteen parallel output channels consistent with the SFI-5 standard.

Product Highlights

- ▶ 1:16 CDR/Demultiplexer Supports from 39.8 to 44.6 Gbps Data Rates
- ▶ User Enabled Differential Decoder Function
- ▶ SFI-5 Compliant Client Side Interface
- ▶ Ground Referenced High Speed Differential Input Ports
 - Input Eye Opening Sensitivity: 100 mVp-p (at 40Gbps)
 - SONET Compliant Clock Jitter Tolerance
- ▶ Half Rate User Enabled Recovered Clock (19.9 to 22.3 GHz)
 - Ground Referenced CML
 - 0.4 to 0.8 Volt pp Differential Output Level
- ▶ Reference Clock Input Port at 1/64th the Line-Side Baud-Rate

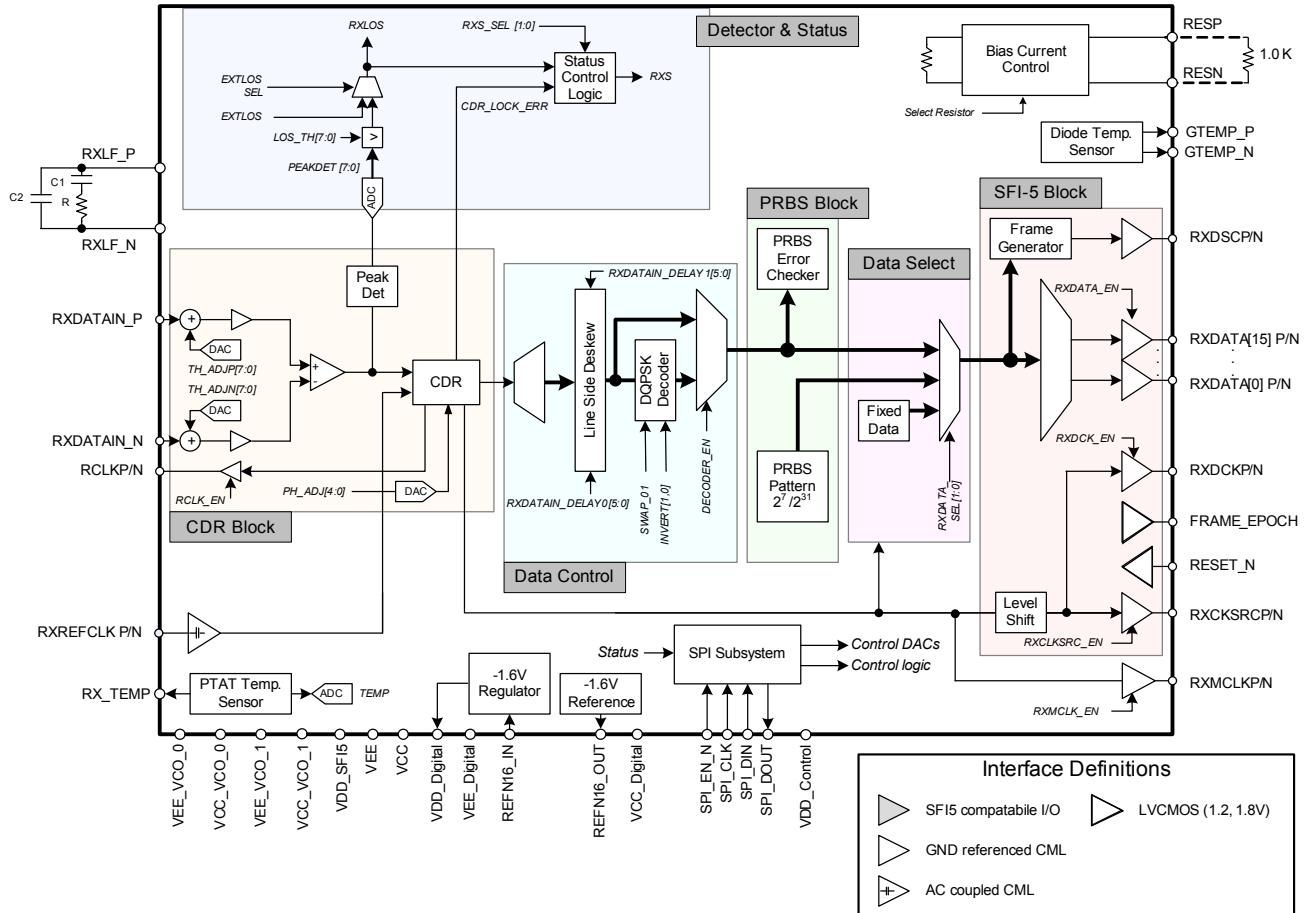
- ▶ PRWS Error Checker and Pattern Generator: 2^7-1 or $2^{31}-1$ patterns
 - On Chip Error Counter for Measuring BER
 - Lane by Lane Error Checking
- ▶ 512 Bit Arbitrary Pattern Generator
- ▶ SPI Control Interface Supports 1.2V or 1.8V LVCMOS
- ▶ Temperature Sense Output Voltage
- ▶ Dual Power Supply Voltages: +1.2 or +1.8V and -2.8V
- ▶ Low Power Consumption: 2.8 Watts (typical)

Applications

- ▶ OC768/OTU3 Modules and Transponders
- ▶ MSPP, ADM and Cross-connects
- ▶ IP Routers and Switches

Product Brief

SMI4037 Block Diagram — 1:16 CDR/Demultiplexer with Differential Decoder



Sierra Monolithics Inc. is now part of Semtech Incorporated. To view the most current product specifications and datasheets, contact your local Semtech Field Applications Engineer.