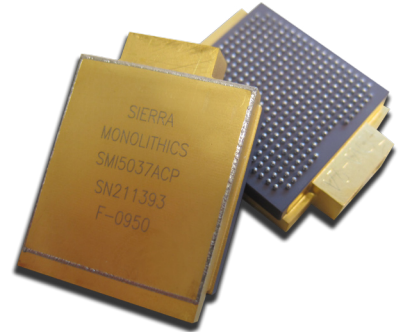


# Product Brief



OPTICAL TRANSPORT & DATACOM PRODUCTS



## SMI5037

### 56 Gbps 2:16 DQPSK CDR/Demultiplexer

#### Product Description

SMI5037 is 2:16 demultiplexer with integrated DQPSK decoder function that supports the data rate up to 56Gbps consistent with the SFI-5 standards.

#### Product Highlights

- ▶ 2:16 CDR/Demultiplexer with Integrated DQPSK Decoder Function
- ▶ Dual Ground-Referenced Serial Input Ports operating at rates from 27.6 to 28.3 Gbaud
- ▶ Ground-Referenced Serial Input Ports
- ▶ SFI-5+ Compatible Data and Clock Interfaces
- ▶ Dual On-Chip (CDR's)
- ▶ CDR Lock Status Indicators
- ▶ On-Chip PRBS Error Checker and Pattern Generator:  $2^7-1$  or  $2^{31}-1$  industry-standard patterns
- ▶ 100 mVp-p Input Sensitivity
- ▶ Adjustable Input Threshold and Sample Clock Phase for each input channel
- ▶ User-Selectable Reference Clock Input:

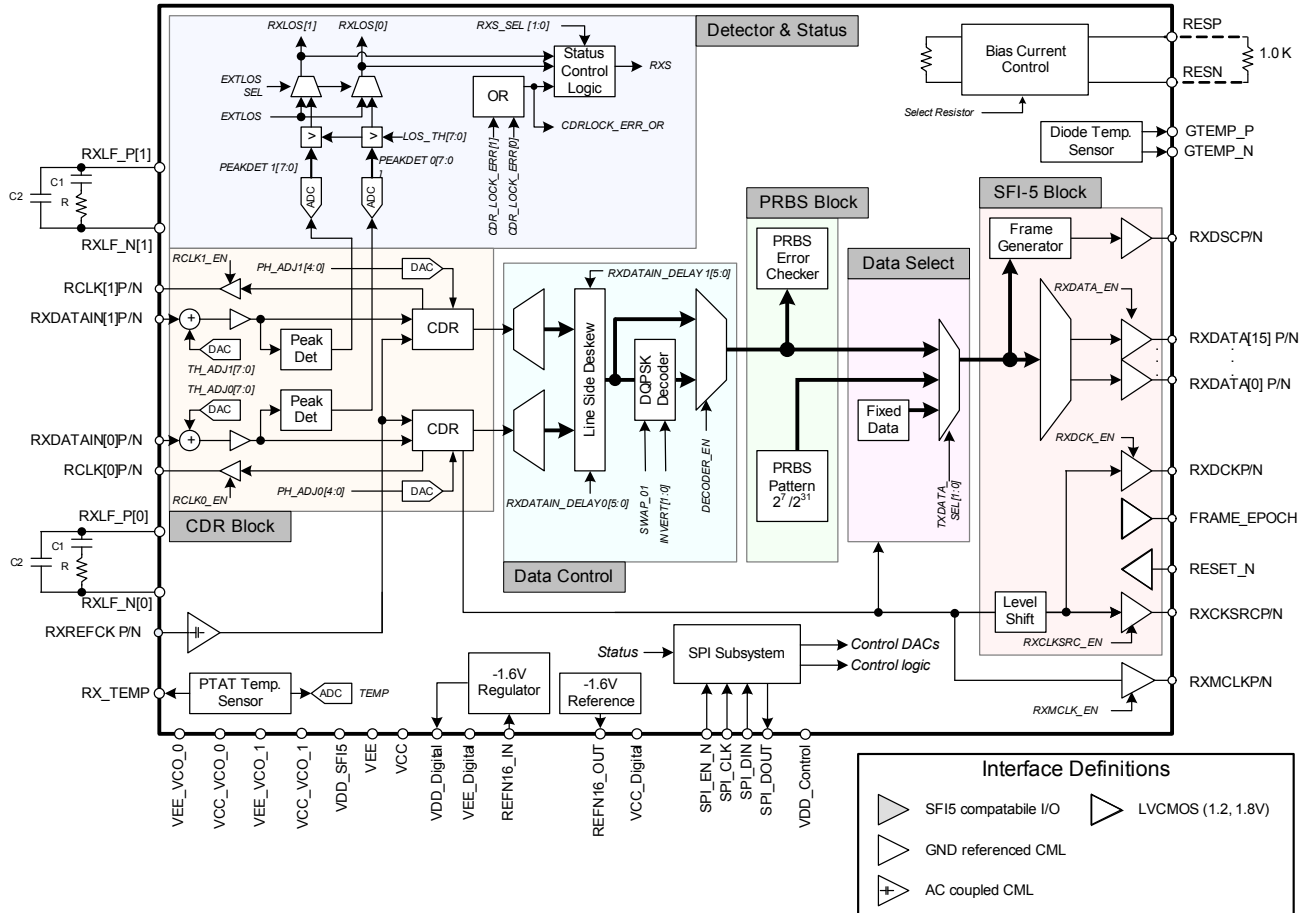
- ▶ SPI Control Interfaces Support 1.2V or 1.8V LVCMOS
- ▶ Temperature Sense Output Voltage
- ▶ Power Supplies: 1.2 to 1.8V, and -2.8V ( $V_{ee}$ )
- ▶ Low Power Consumption: 2.2 Watts (typical)

#### Applications

- ▶ OTU4/100GE Modules and Transponders
- ▶ IP Routers and Switches

# Product Brief

## SMI5037 Block Diagram — 2:16 DQPSK CDR/Demultiplexer



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.