

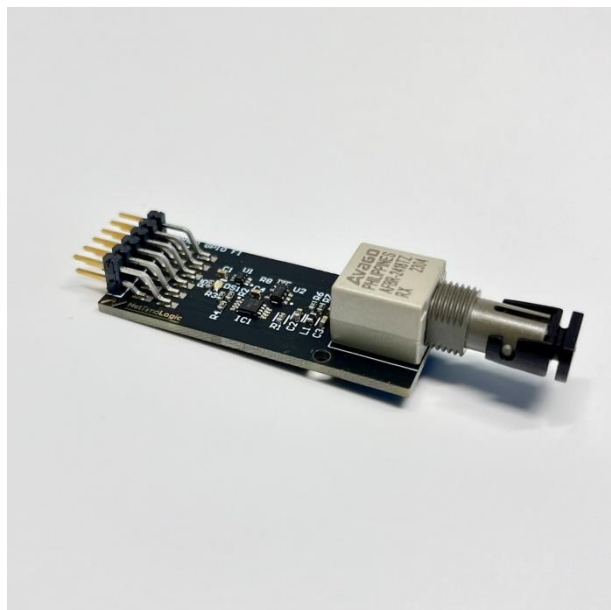
PmGpioFi

This Pmod™ compatible module provides a fiber-optic general-purpose input. The module allows receive signals from DC up to 50 MBd. The module enables use-cases such as receiving optical PPS, IRIG, TOD, etc. For sending data the PM GPIO FO module can be used.

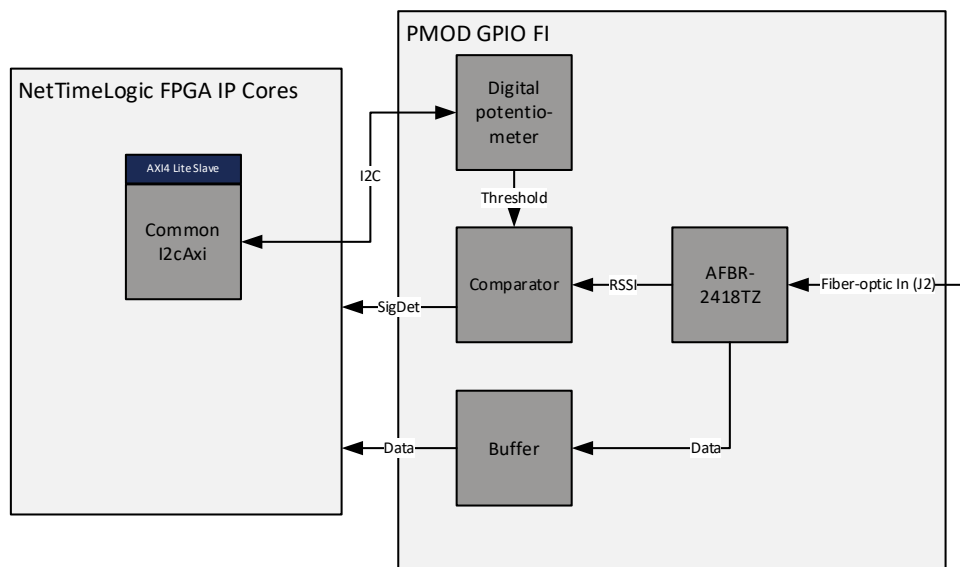
Key Features:

- Fiber-optic general purpose input
- Optical receptions from DC up to 50 MBd
- Configure RSSI threshold via I2C which provides a Signal Detect indication
- Compatible with the PM GPIO FO as a transmitter

Module:



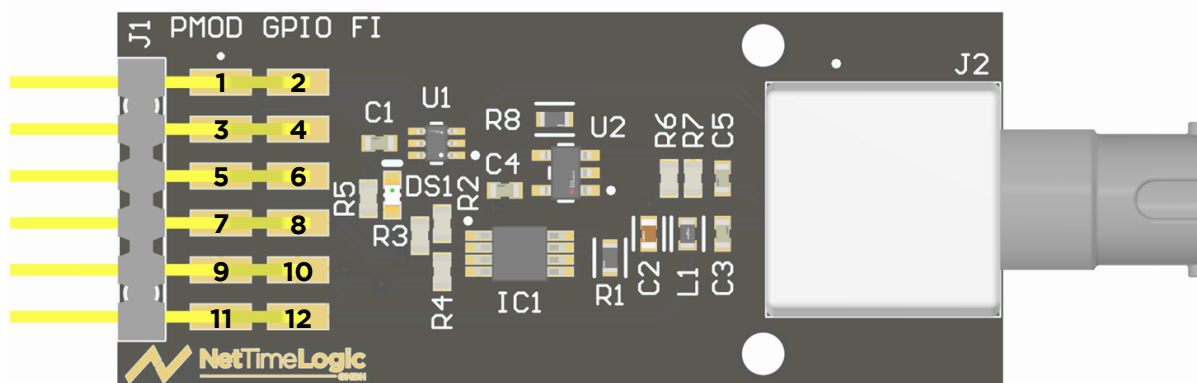
Block Diagram:



Specification:

Fiber-Optic In	AFBR-2418TZ DC-50MBd Miniature Link Fiber Optic Receiver
RSSI Threshold	The value set in the digital potentiometer (ISL95810UIU8Z) determines the RSSI threshold (for the SigDet)
I2C	I2C lines on 3V3 with pull-ups on the board (Address digital potentiometer: 0x28)
Config	The RSSI threshold scales linearly with the value set in the digital potentiometer.
Input	Fiber-optic receiver (J2): Nominal optical wavelength: 820nm

Pmod™ Pins and Module Overview:



Pin	Signal	Direction	Description
Header J1 (Pmod™)			
1	Data	Out	Data received via optical fiber
2	SigDet	Out	High, when RSSI is over a certain threshold, otherwise Low
3	NC		-
4	NC		-
5	NC		-
6	NC		-
7	SCL	In	I2C SCL for the digital potentiometer
8	SDA	In/Out	I2C SDA for the digital potentiometer
9	GND		GND connection to the carrier board
10	GND		GND connection to the carrier board
11	VCC		3.3V supply from the carrier board
12	VCC		3.3V supply from the carrier board