

PmEth

This Pmod™ compatible module features an integrated PHY and RJ45 connector, providing up to 100Mbit/s Ethernet connectivity. Designed for easy integration, it connects directly to systems with a Pmod™ connectors, enabling rapid networking capabilities.

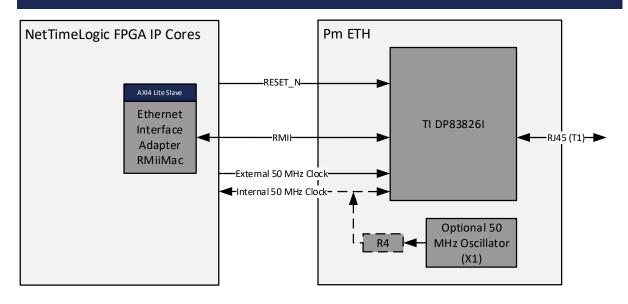
Key Features:

- Up to 100Mbit/s Ethernet Connectivity via RMII interface
- Low-Profile RJ45 Connector
- Plug-and-Play: PHY is preconfigured via strapping pins
- Compact Design
- Versatile Applications
- Optionally configurable via strapping pins (solder option)

Module:

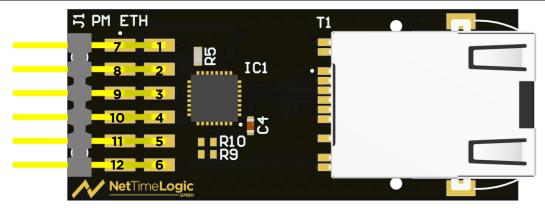


Block Diagram:



Specification:				
PHY	Texas Instruments DP83826I			
ETH Connector	ector RJ45 (8P8C)			
	Green LED: Link status and activity			
	Yellow LED: Link speed			
	o On: Link is 100 M			
	o Off: Link is 10 M			
Config	Soldered strapping configuration (default):			
	R5 (1.5 kOhm) assembled: Full-Duplex			
	R9 (1.5 kOhm) not assembled: 100 Mbit			
	R10 (1.5 kOhm) not assembled: AN ON			
	R4 (0 Ohm) not assembled: 50MHz PHY from external			
Power	~45mA @ 3.3V			

Pmod™ Pins and Module Overview:



Pin	Signal	Direction	Description
Pmod™ Header (J1)			
1	RESET_N	In	RESET_N to the RESET Pin of the PHY (Pin 32)
2	RX D0	Out	RMII Reception Data O Pin of the PHY (Pin 16)
3	TX EN	In	RMII Transmission Enable of the PHY (Pin 23)
4	TX D0	In	RMII Transmission Data O Pin of the PHY (Pin 24)
5	GND		GND connection to the carrier board
6	VCC		3.3V supply from the carrier board
7	EXT/INT CLK	EXT: In	Clock for the PHY (Pin 9)
		INT: Out	External: If PmEth does not use the oscillator (X1) (default)
			Internal: If PmEth use the oscillator (X1)
8	RX D1	Out	RMII Reception Data 1 Pin of the PHY (Pin 15)
9	CRS DV	Out	RMII Carrier and Receive Data Valid indicator of the PHY (Pin 18)
10	TX D1	In	RMII Transmission Data 1 Pin of the PHY (Pin 25)
11	GND		GND connection to the carrier board
12	VCC		3.3V supply from the carrier board
RJ45 Connector (T1)			
T1	RJ45	In/Out	RJ45 (8P8C) connector for Ethernet connectivity up to 100 Mbit/s



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