
ENC28J60

10Mbps Ethernet Module

Datasheet

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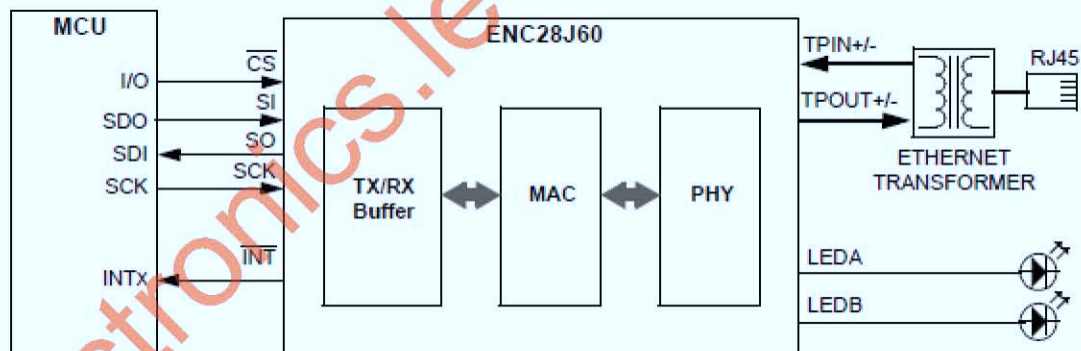
1. Key Features

- IEEE 802.3. Compatible Ethernet Controller
- Fully Compatible with 10/100/1000Base-T Networks
- Integrated MAC and 10Base-T PHY
- Supports One 10Base-T Port with Automatic
- Polarity Detection and Correction
- Supports Full and Half-Duplex modes
- Programmable Automatic Retransmit on Collision
- Programmable Padding and CRC Generation
- Programmable Automatic Rejection of Erroneous Packets
- SPI Interface with Clock Speeds Up to 20 MHz

2. Product Description

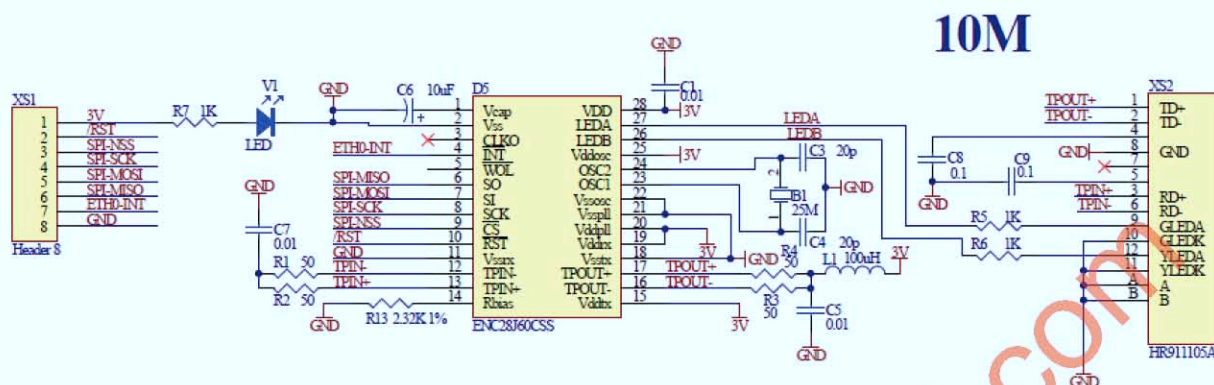
The ENC28J60 is a stand-alone Ethernet controller with an industry standard Serial Peripheral Interface(SPI). It is designed to serve as an Ethernet network interface for any controller equipped with SPI. The ENC28J60 meets all of the IEEE 802.3 specifications. It incorporates a number of packet filtering schemes to limit incoming packets. It also provides an internal DMA module for fast data throughput and hardware assisted checksum calculation, which is used in various network protocols. Communication with the host controller is implemented via an interrupt pin and the SPI, with clock rates of up to 20 MHz. Two dedicated pins are used for LED link and network activity indication.

A typical application circuit using the ENC28J60 module, SPI interface is all that are required to connect a microcontroller to an Ethernet network.



3. Module Schematic

The following schematic is the module, it provide 3.3V logic level SPI connection to outside MCUs. If it is connected to 5V logic level system, a level shifter or translator is required.



4. Pin Definition

Pin	Description
1	3.3 V
2	RSTn
3	SPI_CS _n
4	SPI_SCK
5	SPI_MOSI
6	SPI_MISO
7	ETHO_INTn
8	GND