

ENC28J60 SPI Ethernet Controller

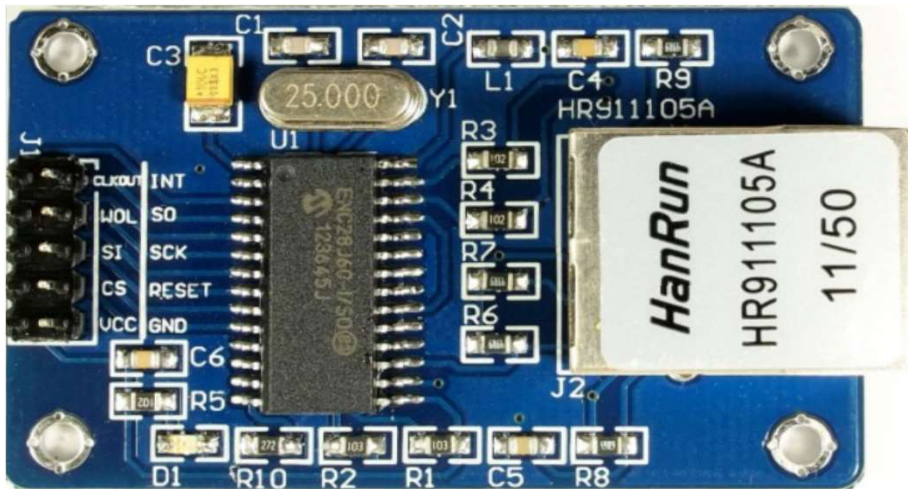
Module: MD0099 / 181476

Description:

KEYESTUDIO ETHERNET ENC28J60 is a low-cost Ethernet LAN Network Module equipped with ENC28J60 integrated circuit to handle most of the network protocols requirements meeting all the IEEE 802.3 standards. ENC28J60 module has an ability to connect directly to most of the microcontrollers with a standard SPI interface. The module has 25MHZ crystal with Ethernet RJ45 Jack HR911105A and integrated LEDs. It is widely used with the small-sized embedded systems due to its simple and easy connections and low cost. The module can offer a maximum speed of 10 MBPS. It supports both full and half-duplex modes. ENC28J60 module outperforms other devices in web servers such as communication convertor and instrument, transaction terminal, IP telephone, and other Ethernet applications.

Features:

- IEEE 802.3 compactable Ethernet controller
- SPI interface with a maximum speed of 10MBPS
- Supports full-duplex and half-duplex modes
- Programmable automatic retransmit on a collision
- Programmable padding and CRC generation
- Programmable automatic rejection of erroneous packets
- Two status LED outputs for LINK, TX, RX, collision and full/half-duplex status
- PCB size: 55x36 mm



PINOUT: ENC28J60 Ethernet LAN Module connection to Arduino

| PINS | ARDUINO UNO | ARDUINO MEGA |
|--------|-------------|--------------|
| VCC | 3.3V | 3.3V |
| GND | GND | GND |
| CLKout | – | – |
| WOL | – | – |
| INT | D2 | D2 |
| S0 | D12 | D50 |
| S1 | D11 | D51 |
| SCK | D13 | D52 |
| CS | D10 | D53 |
| RESET | RESET | RESET |

Specifications:

Operating voltage: 3.1V to 3.6V (typically 3.3V)
5V tolerant input
Six interrupt sources and one interrupt output pin
25 MHz clock input requirement
Built-in isolation transformer RJ45 connectors HR911105A
Buffer size: 8KB
Temperature range: 0°C to 70°C

Applications and uses:

A simple way and low-cost module to provide LAN connectivity to any controller with an SPI interface.

Link to the Library, one of the examples.

<https://github.com/njh/EtherCard>

Related Product:

https://wiki.keyestudio.com/Ks0156_keyestudio_W5100_Ethernet_Shield