DFRduino Ethernet Shield (SKU:DFR0125)

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Introduction

The DFRduino Ethernet Shield V2 is finally released. This new version supports Mega both 1280 and 2560. And it supports Micro SD card read/write as well. The ethernet shield is fully functional now.

The V2 Ethernet Shield is fully compatible with Ardunio Ethernet Shield. With the offical ethernet library, you can do exactly the same thing as the original one. But at a more affordable price.

The Arduino Ethernet Shield allows an Arduino board to connect to the internet. It is based on the Wiznet W5100 ethernet chip. The Wiznet W5100 provides a network (IP) stack capable of both TCP and UDP. It supports up to four simultaneous socket connections. Use the Ethernet library to write sketches which connect to the internet using the shield.

The ethernet shield connects to an Arduino board using long wire-wrap headers which extend through the shield. This keeps the pin layout intact and allows another shield to be stacked on top.

Arduino uses digital pins 10, 11, 12, and 13 (SPI) to communicate with the W5100 on the ethernet shield. These pins cannot be used for general i/o.

NOTE: The shield provides a standard RJ45 ethernet jack. The reset button on the shield resets both the W5100 and the Arduino board.

The shield contains a number of informational LEDs:

- PWR: indicates that the board and shield are powered
- LINK: indicates the presence of a network link and flashes when the shield transmits or receives data
- FULLD: indicates that the network connection is full duplex
- 100M: indicates the presence of a 100 Mb/s network connection (as opposed to 10 Mb/s)
- RX: flashes when the shield receives data
- TX: flashes when the shield sends data
- COLL: flashes when network collisions are detected

Compatibility

- Arduino Mega 1280/2560
- Arduino UNO
- Arduino Dumlinove

FAQ

Q1. How to use the onboard micro-SD card slot?

A. Use it as the normal one using Arduino SD library is ok. Note that because the W5100 and SD card share the SPI bus, only one can be active at a time. For more, please check on Arduino, Arduino Ethernet Shield.

For any question/advice/cool idea to share, please visit **DFRobot Forum**.