Arduino Ethernet with PoE module

The Arduino Ethernet Shield with PoE Module allows an Arduino board to connect to the internet. It is based on the Wiznet W5100 ethernet chip (datasheet). 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. The latest revision of the shield adds a micro-SD card slot, which can be used to store files for serving over the network. It is compatible with the Arduino Duemilanove and Mega (using the Ethernet library). It also adds a separate power-over-Ethernet (PoE) module that is soldered to the board to provide power from a conventional twisted pair Category 5 Ethernet cable. It is IEEE802.3af compliant, and works with all compliant PoE injectors currently available.

An onboard microSD card reader, which can be used to store files for serving over the network, is accessible through the SD Library. Pin 10 is reserved for the Wiznet interface, SS for the SD card is on Pin 4.