TRU COMPONENTS

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BN 2268123

Network module ENC28J60 for Arduino™

GB Operating instructions

Latest operating instructions

Download the latest operating instructions at www.conrad.com/downloads or scan the QR code shown. Follow the instructions on the website.

Delivery contents

• ENC28J60 Network module for Arduino™

Description

The ENC28J60 network module allows you to extend your Arduino™ with a LAN module. This makes it possible, for example, set up a web server with an Arduino™ UNO, or to exchange data with other devices over the network.

The module communicates with the Arduino™ via the SPI interface.

Product features

• HR911105A network board
• SPI interface
• ENC28J60 network chip
• RJ45 LAN socket
• Arduino™ compatible
• Can also be used for other microcontrollers
• Easy to program thanks to Arduino™ library

Requirements

The following components are required to use the board:

• 1 Arduino™ UNO or similar
• 5 jumpers (jump wires) pin to socket (max. 10 cm long)
• 1 network cable to the router or switch

Hardware

The LAN module features pin contacts that are used to establish the connection to the Arduino™.

The following overview shows the functions of the contacts.

VCC	Power supply (3.3 V/DC)
GND	Ground connection for power supply
SO	SPI MISO
SI	SPI MOSI
SCK	SPI CLK/SCK
CS	SPI SS

Operation

Connect the LAN module to an Arduino™ UNO as follows:

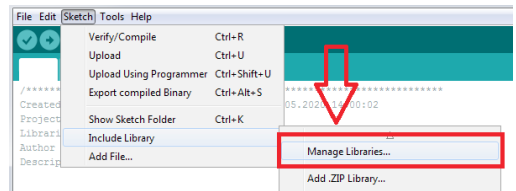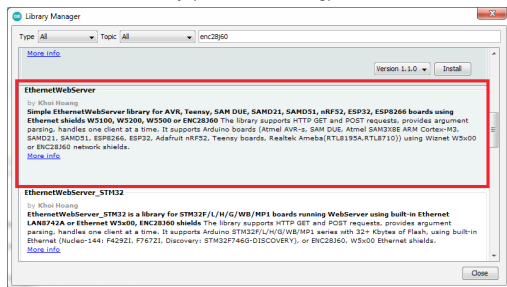| Display	Arduino™
VCC	+5V
GND	GND
SO	D12
SI	D11
SCK	D13
SC	D10

Test program

The libraries for the ENC28J60 are required in order to operate the LAN module.

You also need to use Arduino™ IDE version 1.8.7 or later.

Download the libraries from the Arduino™ IDE.

To do this, open the "**Manage Libraries...**" menu, which you will find in the Arduino™ IDE under "**Sketch**" - "**Include Library**".

In the search field, type **"ENC28J60"** and install the **"EthernetWebServer"** library (from Khoi Hoang).
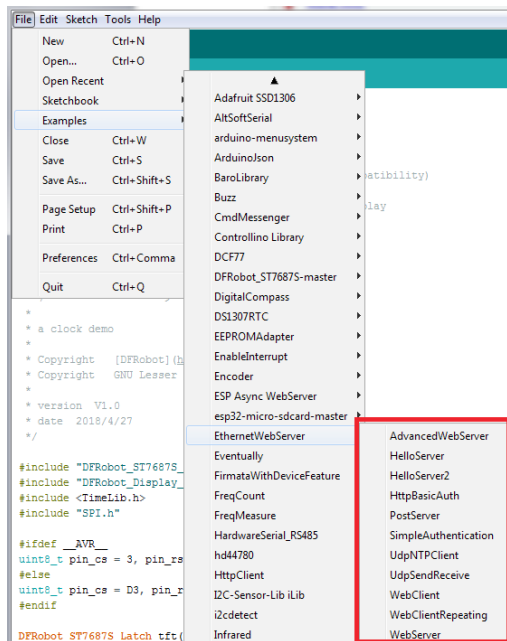

After installation, go to **"Examples"** to view various examples that you can try out with this LAN module.

If necessary, change the pin assignment in the examples to your wiring configuration!

A detailed description of the library can be found at the following link:

» https://github.com/khoih-prog/EthernetWebServer

Note:

There are several libraries on the Internet for the ENC28J60 that you can use with this LAN module. In the examples, you only need to adjust the connection pins.

Disposal

Electronic devices are recyclable waste and must not be placed in household waste. At the end of its service life, dispose of the product in accordance with the applicable regulatory guidelines.

You thus fulfil your statutory obligations and contribute to protection of the environment.

Specifications

Operating voltage ....3.3 V/DC

Connection RJ45

Quartz frequency....................................25 MHz

Ethernet chip ENC28J60-I/SO

Interface...SPI

Modules cascadable...............................Yes

Pin spacing of pin strip (width)...............2.54 mm

Mounting holes Ø ....3 mm

Dimensions (W x H x D) ....34 x 15 x 56 mm

Weight ....15 g