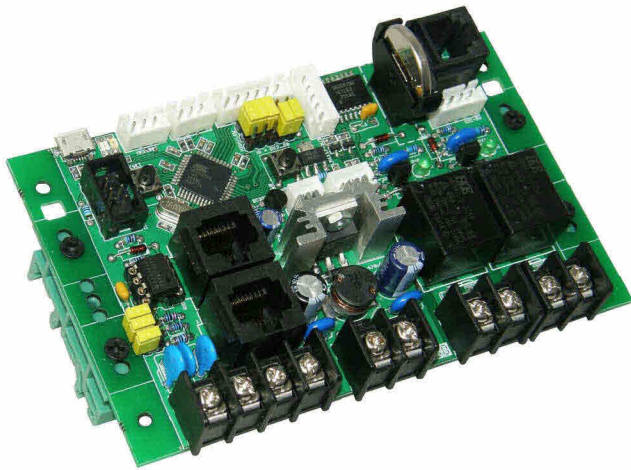
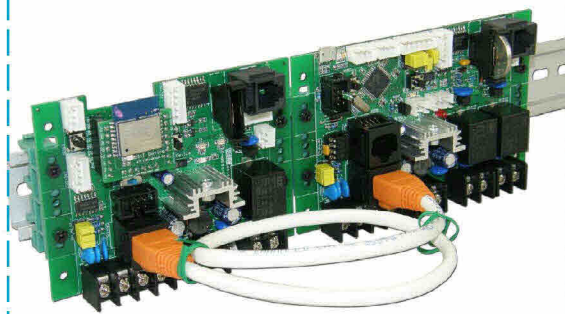
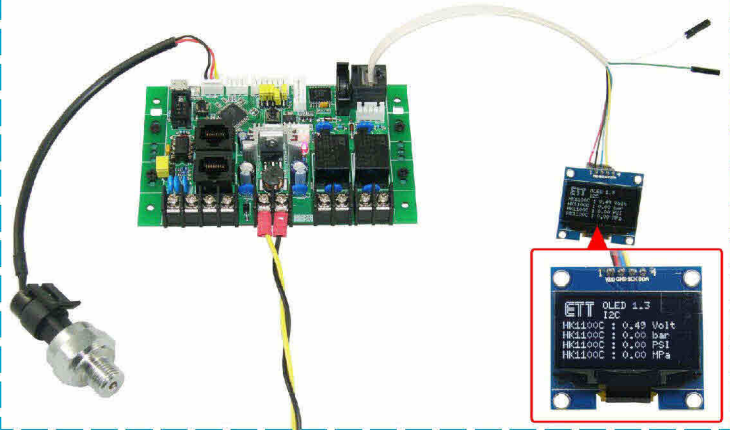


**ET-MEGA32U4-RS485 (P-ET-A-00575)**

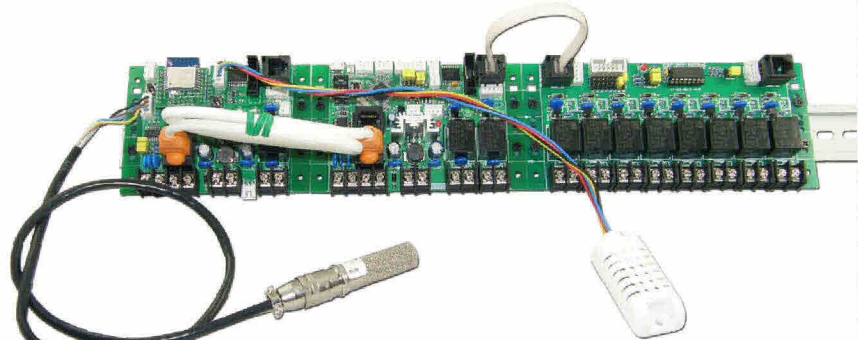
**ET-MEGA32U4-RS485** is Board Controller in the family of AVR that can develop program by C or C++ Language of Arduino; it is OPEN SOURCE. This Board version uses MCU No.ATMEGA32U4 that has USB PORT inside; so, it can be connected to Board USB PORT of computer directly. Moreover, it provides necessary devices on board that user can apply and modify to various PROJECTS as required.



● It illustrates how to connect ET-MEGA32U4-RS485 with SENSOR HK1100C to read value and show the reading value on OLED 1.3 I2C.



● It illustrates how to connect ET-MEGA32U4-RS485 with ET-ESP8266-RS485.



● It illustrates how to connect ET-MEGA32U4-RS485 with ET-ESP8266-RS485 and ET-SENSOR BME280, ET-SHT10 WATER PROOF.

**SPECIFICATIONS**

- Use ATMEGA32U4 44 PIN TQFP as MCU on board, Run with Frequency 16 MHz
- 32 KBYTE FLASH, 2.5 KBYTE RAM, 1 KBYTE EEPROM
- Internal USB CONTROLLER as USB 2.0 can be connected to computer directly to write and develop program; Connector from Board is MICRO USB TYPE
- PORT RS485 2-WIRE HALF DUPLEX; CONNECTOR 4 PIN BARRIER TERMINAL 7.62 mm.; 2 of CONNECTOR FEMAL RJ11; it can connect Signal from board together
- JUMPER chooses 32-ADDRESS; it has to write data to read value of JUMPER
- RTC (REAL TIME CLOCK) No.DS3231 with BATTERY 3V BACK UP
- 2 of OUTPUT RELAY 10A with CONNECTOR 2 PIN BARRIER TERMINAL 7.62mm. with NO/COMMON CONTACT
- BUS I2C can be connected with I2C devices that are either 3V or 5V to expand INPUT/OUTPUT devices like LCD 16x2 I2C, OLED 1.3 I2C, ET-I2C REL8, ET-I2C DCIN8, ET-I2C TO 40 IO-DIN or various I2C SENSOR like ET-SENSOR SHT31(measuring humidity and temperature), ET-SENSOR BME280(measuring humidity, temperature and pressure), and etc.
- CONNECTOR I2C has either FEMALE RJ11 6 PIN, WAFER 4 PIN (2.50 mm.), or WAFER 5 PIN (2.50mm.)
- CONNECTOR 1-WIRE I/O is connected to 1-WIRE or IBUTTON devices like Temperature Sensor No.DS18B20, Connector WAFER 3 PIN (2.50 mm.)
- Have CONNECTOR ANALOG 0-5V or change to DIGITAL I/O as WAFER 6 PIN (2.50 mm.) like connecting to ET-SHT10 WATER PROOF (measuring temperature, humidity with waterproof)
- Have CONNECTOR ANALOG 0-5V or change to DIGITAL I/O as WAFER 3 PIN (2.50 mm.) 2-CH like connecting to SENSOR HK1100C (measuring pressure inside water pipe).
- CONNECTOR ISP 6 PIN (2.54 mm.) under ATMEL Standards for programming via ISP Programmer
- POWER SUPPLY 7-30VDC for board uses IC SWITCHING 5V/1A No.LM2575-5, CONNECTOR POWER 2 PIN BARRIER TERMINAL 7.62mm.
- RAIL DIN 35mm.
- PCB size: 12.2 x 7.6 cm.
- Package of **ET-MEGA32U4-RS485** includes...

1. Board ET-MEGA32U4-RS485
2. CD-ROM Manual and Example Program

