

HYPERPANEL HOUSE & INDUSTRIAL COMPUTER

Unleash the I/O and IOT power

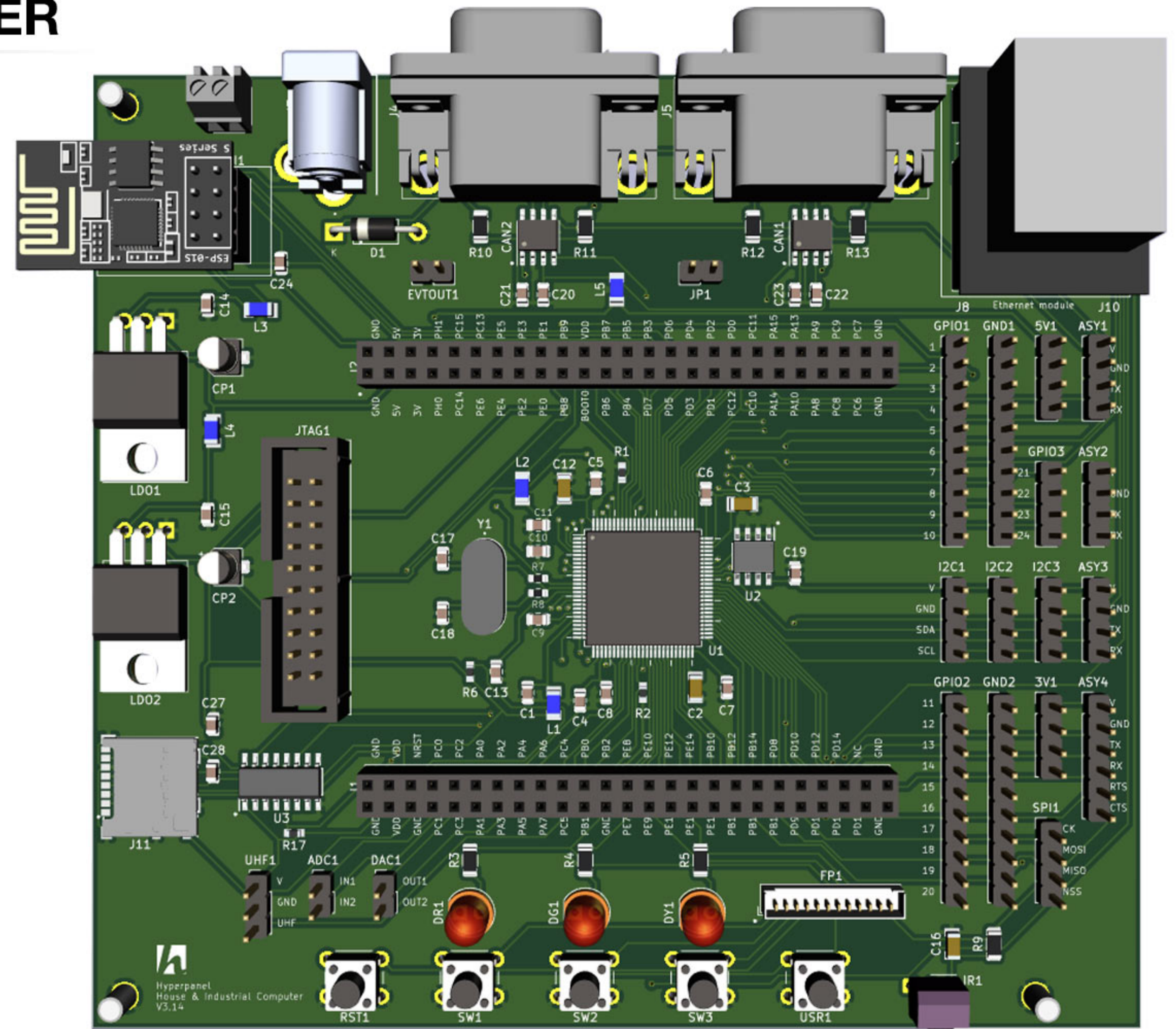
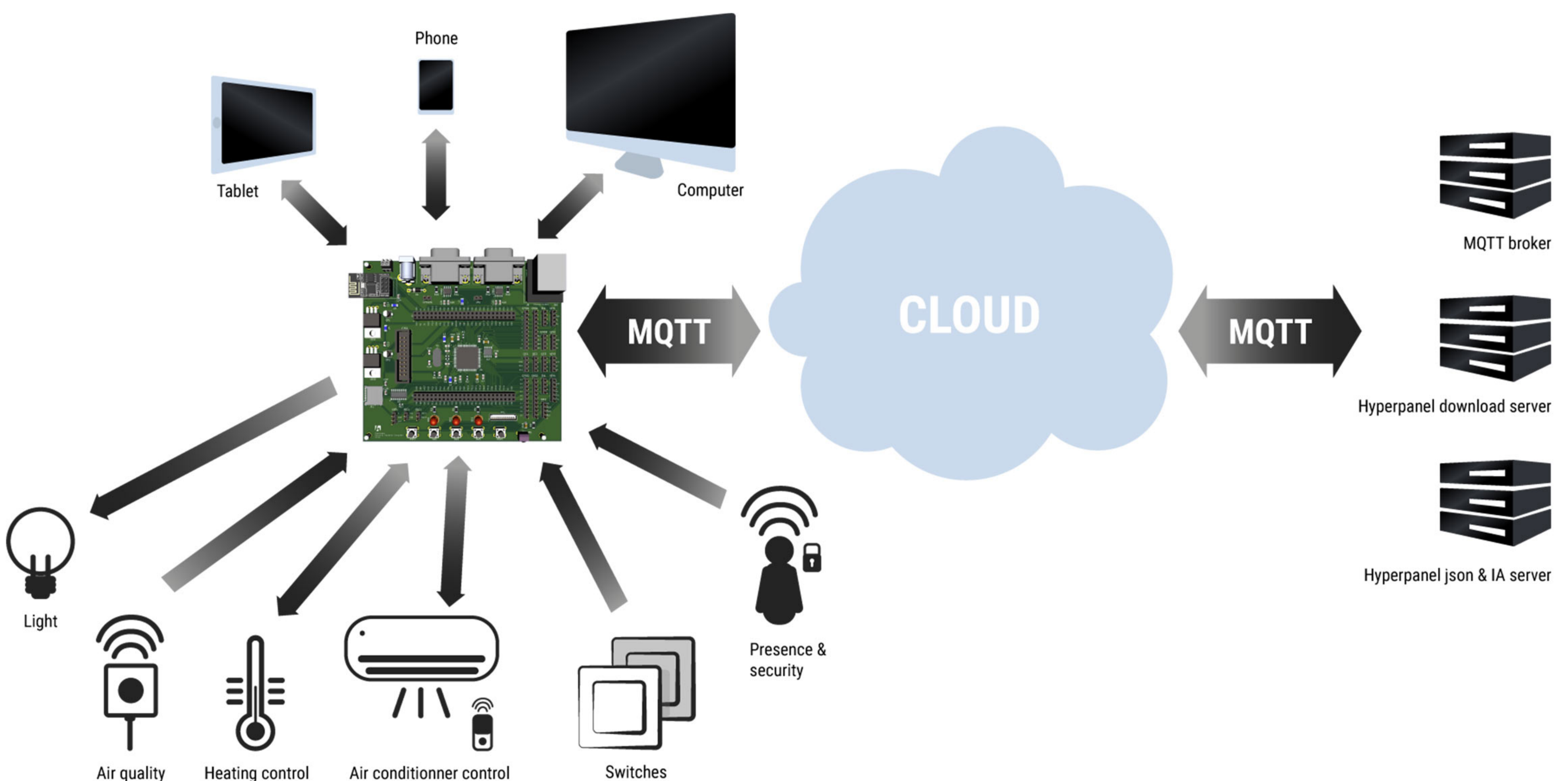
CORE

- Computer board for any house & industrial edge computing and IA app.
- Core STM32F407 32-bit ARM Cortex M4 CPU with FPU, 1Mbytes Flash, 192+4Kbytes RAM.
- Ultra-low power platform, external 12V power supply, 2 on-board TO-220 voltage regulators 5V and 3.3V.
- EEPROM 8Kb.
- MCU LQP100 package with all data signals available on connectors.
- Real-time clock.
- On-board hardware cryptography.

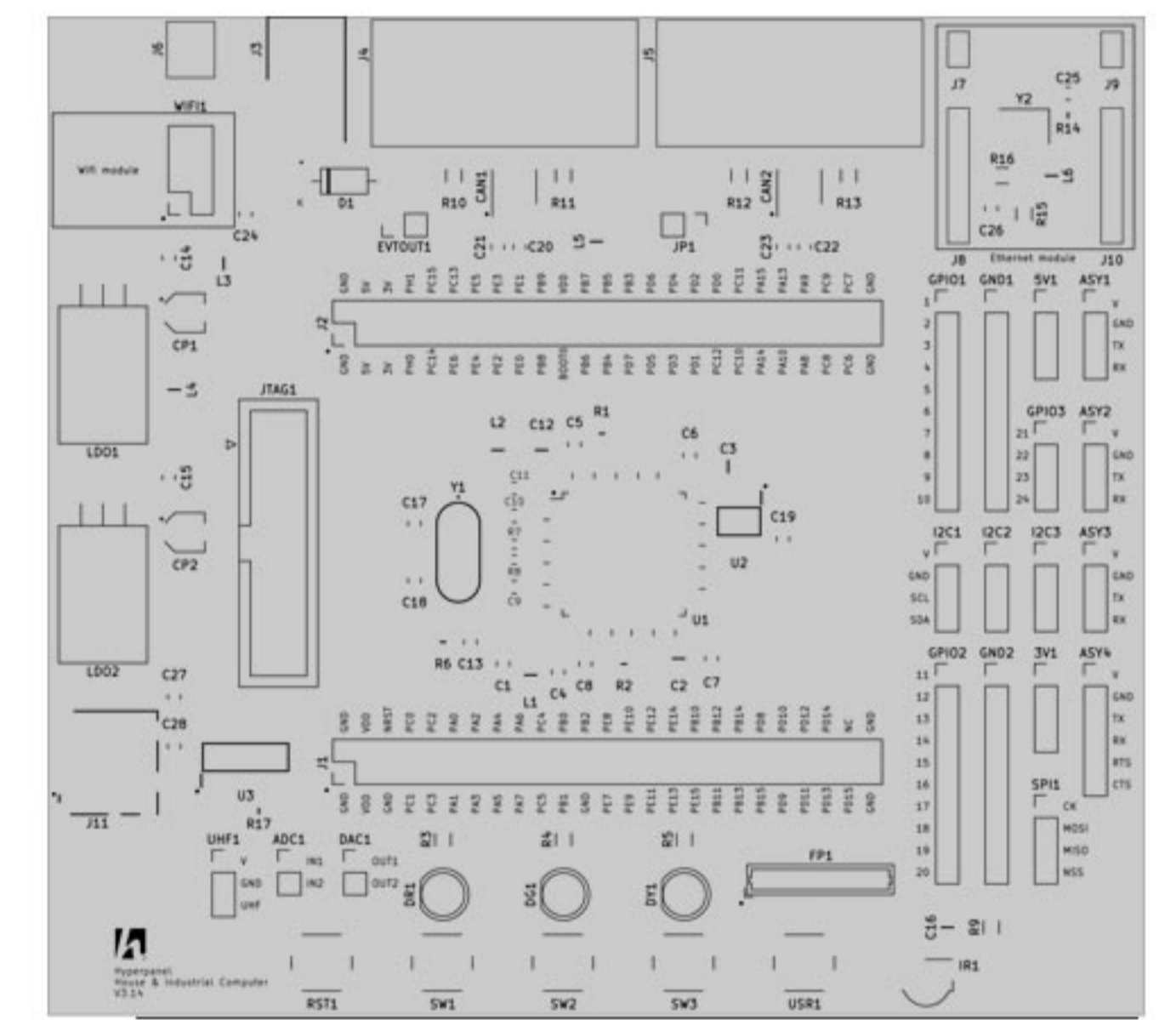
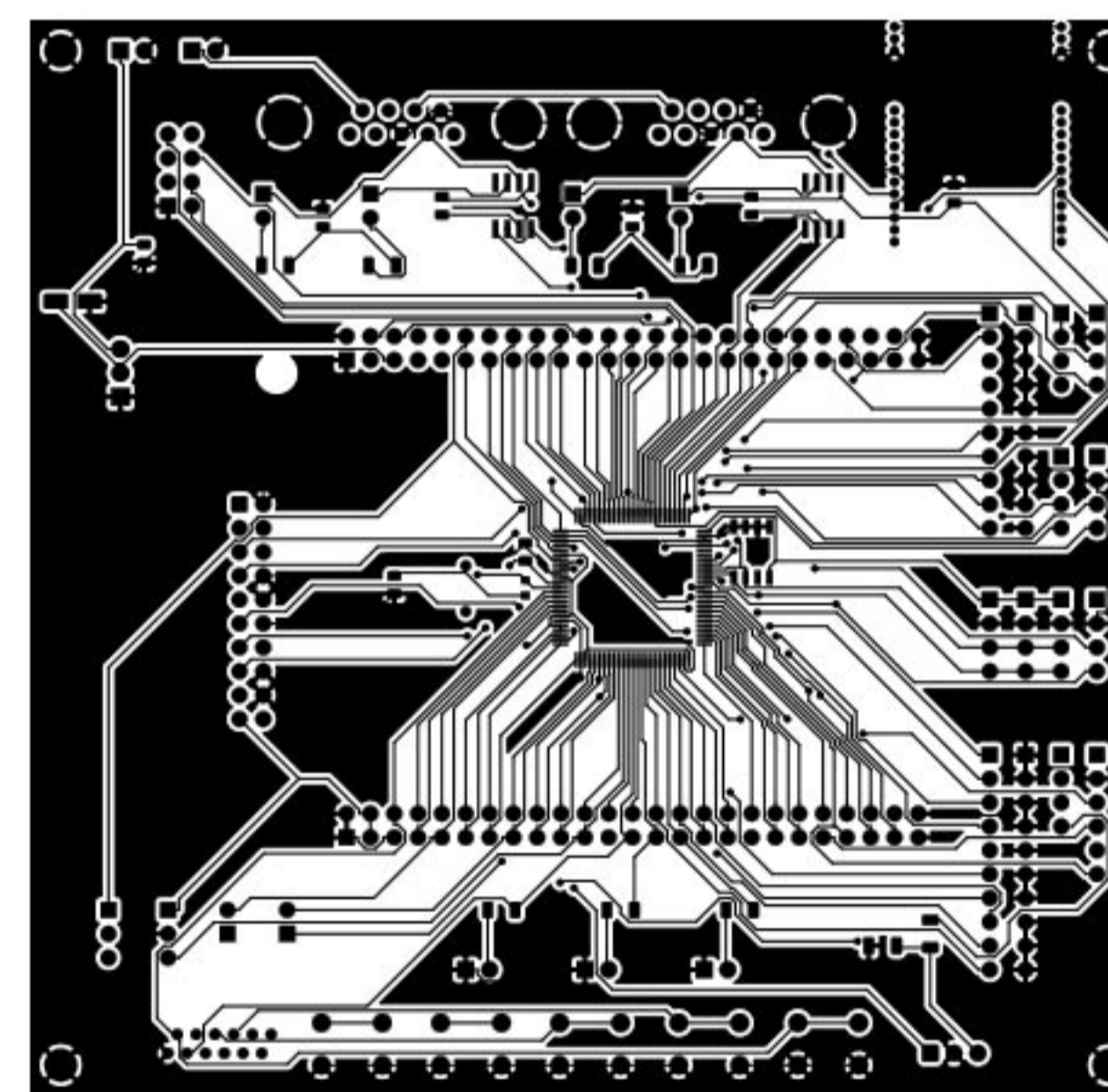
FEATURES

- 2x50 socket connectors for shield daughterboards.
- 3 ASY connectors with TX / RX.
- 1 ASY connector with TX / RX / RTS / CTS.
- 2 on-board CAN TJA1051T transceivers.
- 2 DB-9 connectors ready to use for CAN host computing applications.
- 24 generic GPIO data signals available from dedicated connectors.
- Dedicated EVENTOUT pin.
- 4 generic push buttons + Reset available.
- 2 DAC connectors.
- 2 ADC connectors.
- UHF receiver connector.
- Infrared receiver for remote controller of any common RCU standards.
- JTAG connector for firmware update and development.
- 3 I2C on-board connectors for all compatible I2C devices.
- Serial Peripheral Interface - SPI full duplex connector.
- 3 LEDs.
- Dedicated connector for deported front-panel with switches, LED and IRDA.
- Wi-Fi ready to use - Connector for Wifi ESP8266 Wi-Fi external module.
- Ethernet ready to use - Connector for ETH PY LAN8624 external module.
- Micro SD card reader.

SOFTWARE



PCB



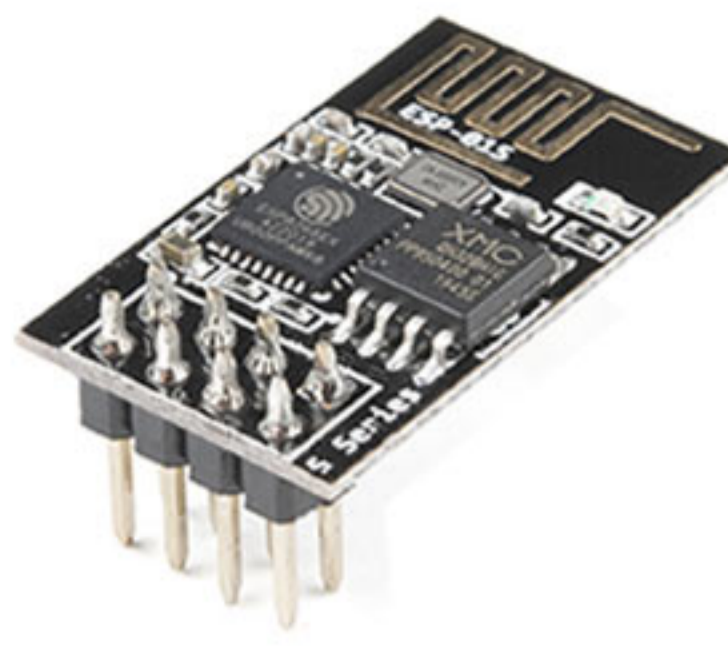
- 2 layers PCB 12x12cm ready for any type of packaging.
- BOM and Gerber files available.

TELECOM

| The motherboard comes with Ethernet and Wi-Fi modules.

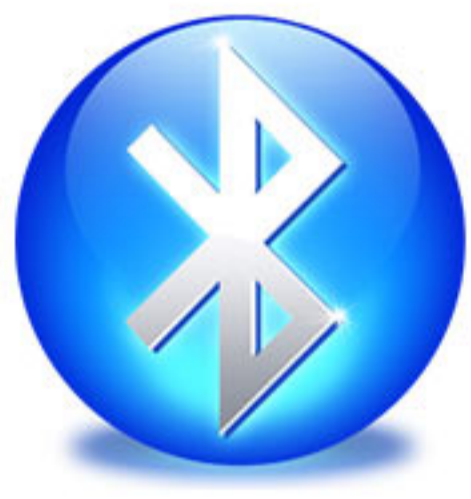


RJ45 / Ethernet module



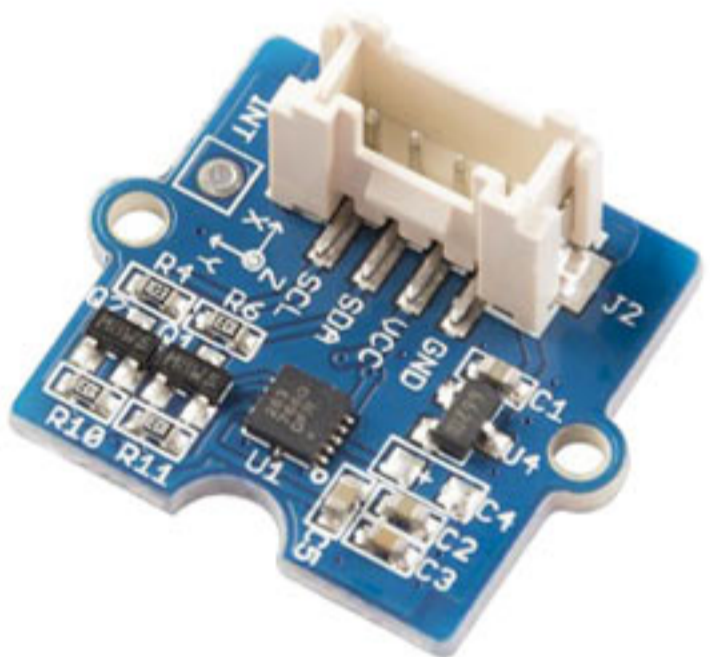
Wi-Fi module

| All standard modules on the market can be used directly via additional shield daughterboards.

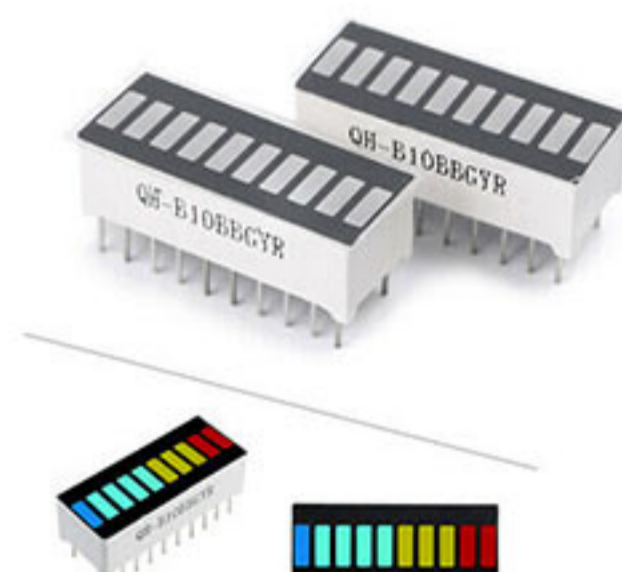


DEVICES

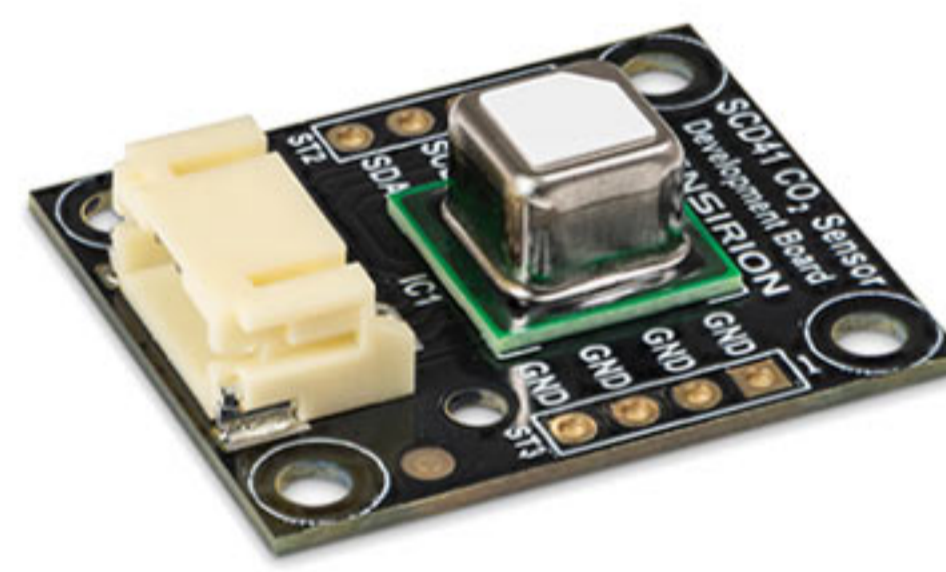
| All these devices and more can be used on shield daughterboards, or directly plugged to the mainboard (<https://tutorial.hyperpanel.com>).



Accelerometer



LED bargraph



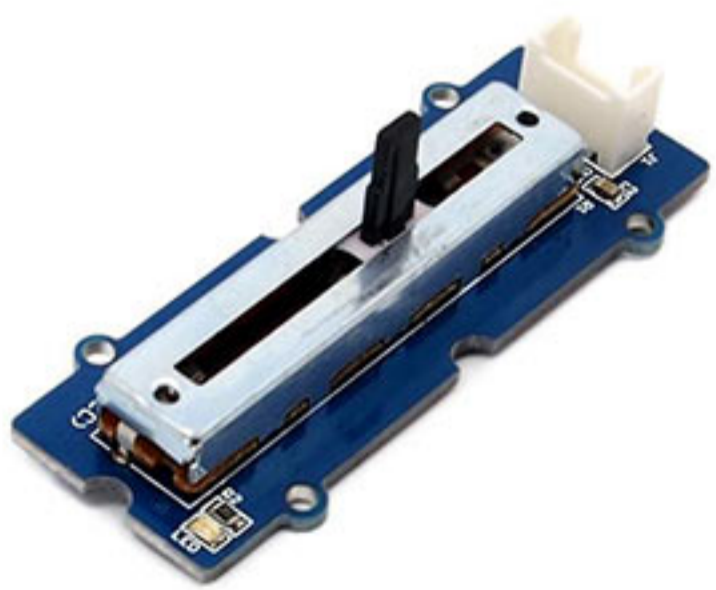
CO2 sensor



7-segments display



Rotary encoder



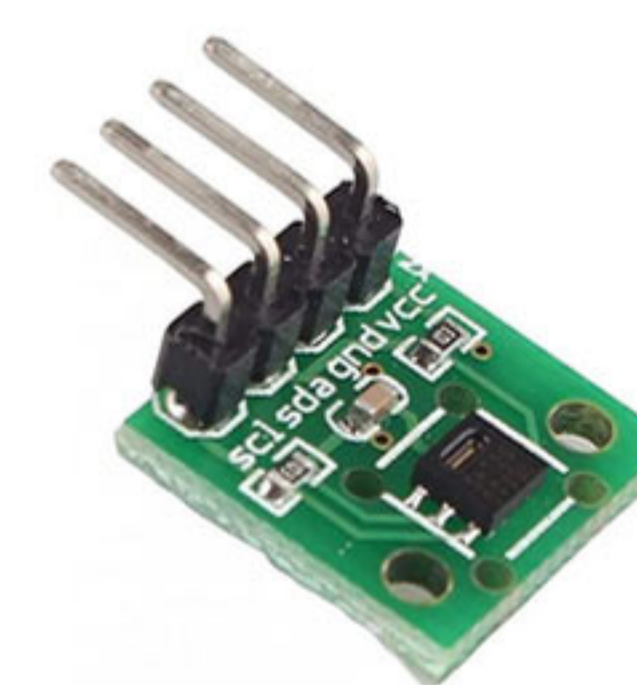
Slider



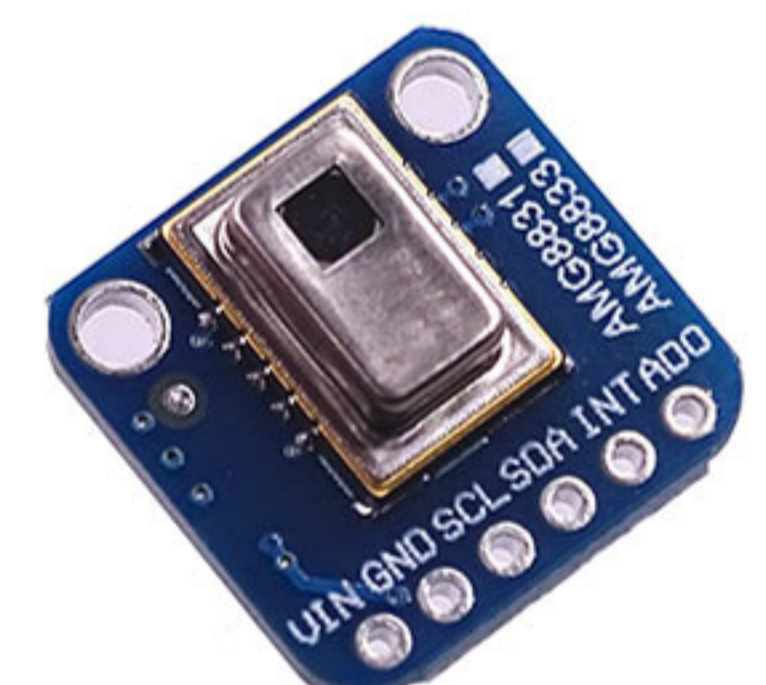
Air quality tracker



Gyroscope



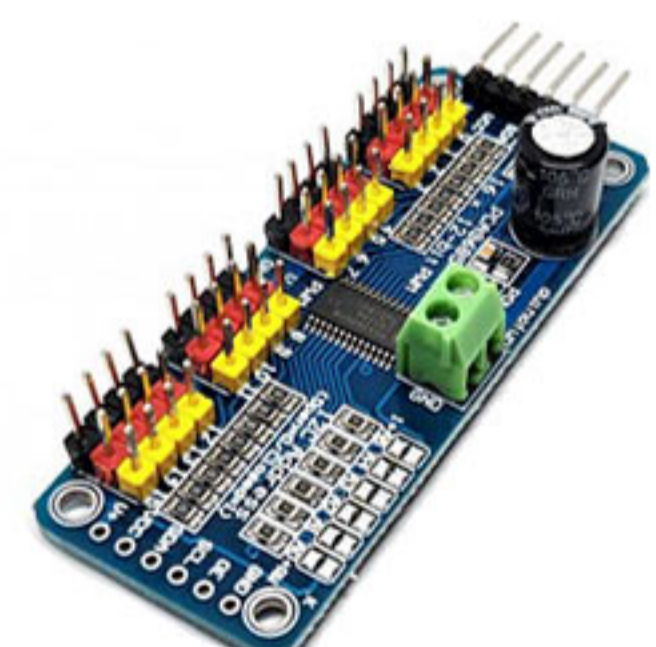
Temperature sensor



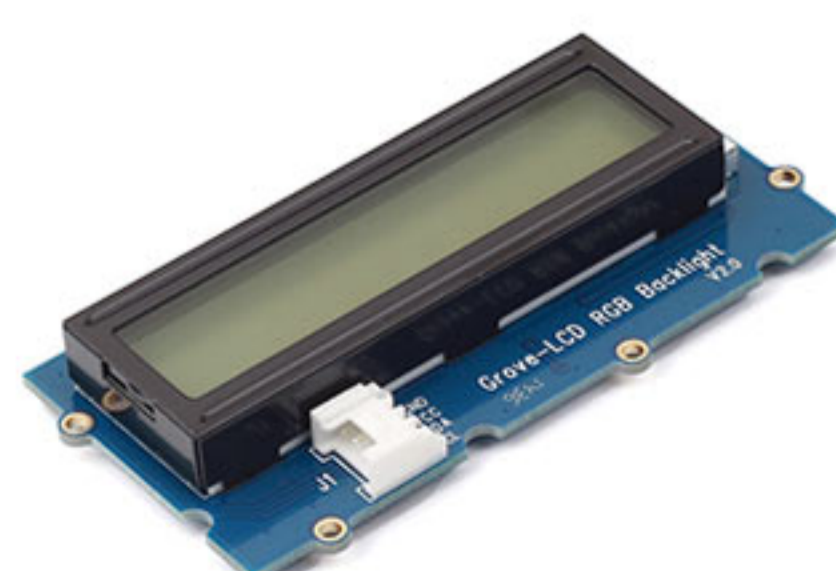
Infrared matrix presence sensor



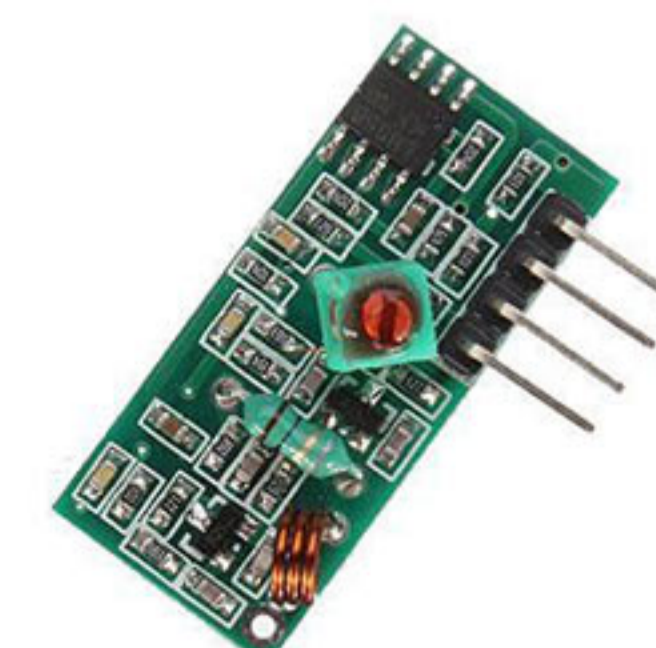
Light sensor



PWM multichannel



RGB screen



433Mhz RF receiver



Joystick