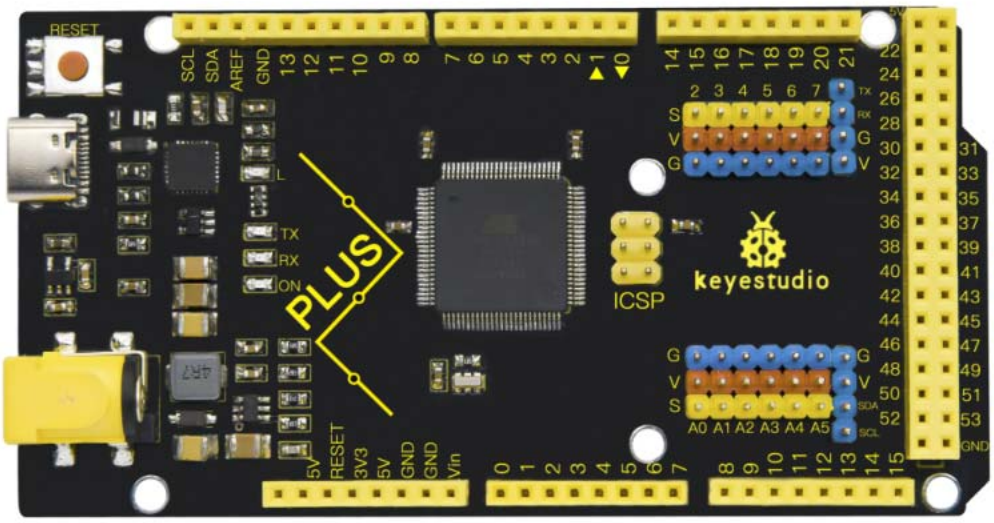
# KS0499 KEYESTUDIO Mega 2560 Plus Board




## Contents

Description

Specification

Interfaces Description

Special Interfaces Description

**Install Arduino IDE and Driver**

- Installing Arduino IDE
- **Installing Driver**
- **Arduino IDE Setting**

**Resources**

**Start Your First Program**

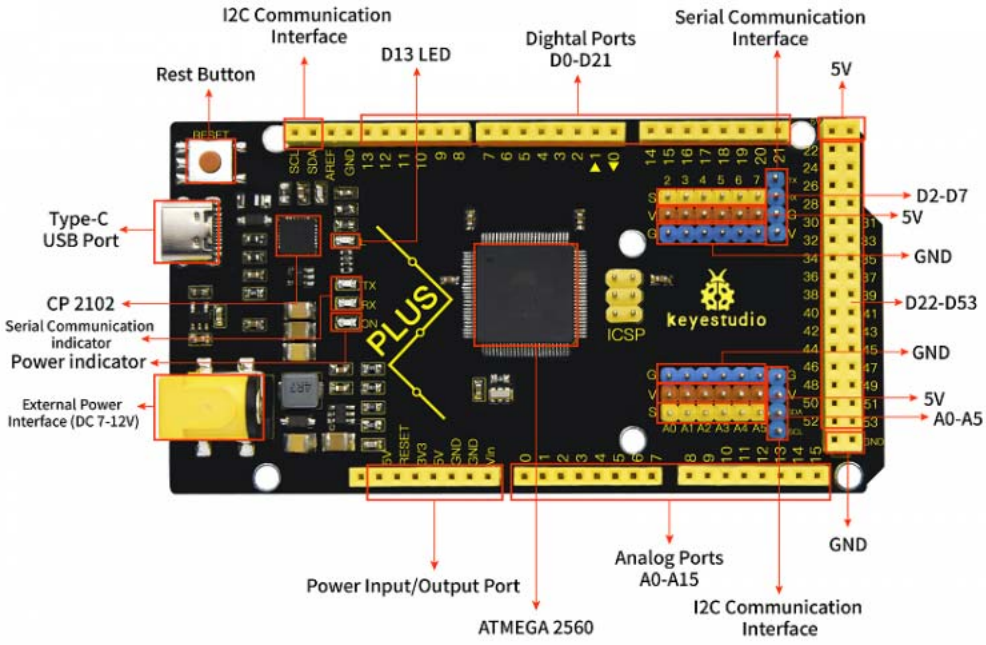
# Description

KEYESTUIDO Mega 2560 plus Board, whose processor core is ATMEGA2560-16AU, is fully compatible with ARDUINO MEGA 2560 REV3. USB to TTL chip adopts more economic and stable CP2012. This plus board consists of 54-channel digital input and output ports, of which 15 pins are served as PWM output, 16 analog inputs, 4 serial communication ports, one 16MHz crystal oscillator, 1 USB port, 1 power socket, 1 ICSP interface and 1 reset button.

# Specification

- Microcontroller: ATMEGA2560-16AU
- USB to TTL chip： CP2102
- Operating Voltage: 5V
- Input Voltage (recommended):DC 7-12V
- Digital I/O Pins: 54 (D0-D53)
- PWM Digital I/O Pins： 15(D2-D13 D44-D46)
- Analog Input Pins: 16(A0-A15)
- DC Current per I/O Pin: 20 mA
- DC Current for 3.3V Pin: 50 mA
- Flash Memory: 256 KB of which 8 KB used by bootloader
- SRAM: 8 KB
- EEPROM: 4 KB
- Clock Speed: 16 MHz
- LED_BUILTIN:D13

# Interfaces Description




# Special Interfaces Description

- Serial communication interface(4 channel): Serial（D0 =RX0, D1 =TX0）, Serial1（D19 is RX1, D18 is TX1)
- Serial2 （D17 is RX2, D16 equals to TX2）, Serial3（D15 is RX3, D14 is TX3), D0 and D1 are connected to ATMEGA16U2-MU
- PWM port（Pulse width modulation): D2-D13 and D44-D46
- External interrupt pins：D2（interrupt 0), D3(interrupt 1), D21（interrupt 2), D20 (interrupt 3), D19(interrupt 4）and D18（interrupt 5）
- SPI communication interface：D53 stands for SS, D51 is MOSI, D50 is MISO, D52 equals to SCK
- IIC communication interface：D20 represents SDA, D21 is SCL

# Install Arduino IDE and Driver

## Installing Arduino IDE

We firstly navigate the ARDUINO official website: https://www.arduino.cc/, click “SOFTWARE”----”DOWNLOADS”, we’ll see the following page.