

# Arduino Mega 2560

Microcontroller	<a href="#">ATmega2560</a>
Operating Voltage	5V
Input Voltage (recommended)	7-12V
Input Voltage (limit)	6-20V
Digital I/O Pins	54 (of which 15 provide PWM output)
Analog Input Pins	16
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	13
Length	101.52 mm
Width	53.3 mm
Weight	37 g

Source: <https://www.arduino.cc/en/Main/arduinoBoardMega2560#techspecs>

# Freaduino Mega 2560

## Features

- Inherits all of Arduino MEGA2560's features.
- Compatible to Arduino MEGA2560's pin layout, screw hole and dimensions.
- 3.3V or 5v Operating Voltage selectable
- More visible location of Indicator LEDs
- Wide range external input from 7~23V DC
- Evolved with SMD components

Changes vs. original Arduino Mega 2560

	Arduino MEGA2560	Freaduino MEGA2560
USB socket	Type B Female USB connector	Mini USB connector
Operating Voltage	5V	3.3V or 5V selectable by switch
3.3V current	50mA	800mA
5V current	500mA	2A
Input voltage	7V~12V	7V~23V
Reset button location	Hard to press when plug in shield	Easy to press whenever
LED location	Invisible when plug in shield	Visible whenever

MiniUSB changed to Type B USB

Source: [https://www.electfreaks.com/wiki/index.php?title=Freaduino\\_Mega2560](https://www.electfreaks.com/wiki/index.php?title=Freaduino_Mega2560)