

# Mega 2560 vs Mega 1280 vs Due vs GIGA R1 WiFi vs Raspberry Pi 4

| Feature      | Mega 2560         | Mega 1280         | Due                  | GIGA R1 WiFi              | Raspberry Pi 4 B      |
|--------------|-------------------|-------------------|----------------------|---------------------------|-----------------------|
| CPU          | ATmega2560        | ATmega1280        | SAM3X8E Cortex-M3    | STM32H747XI M7+M4         | BCM2711 Cortex-A72    |
| Architecture | 8-bit AVR         | 8-bit AVR         | 32-bit ARM Cortex-M3 | 32-bit ARM M7/M4          | 64-bit ARM Cortex-A72 |
| Clock Speed  | 16 MHz            | 16 MHz            | 84 MHz               | 480 MHz (M7)+240 MHz (M4) | 1.5 GHz Quad-core     |
| Cores        | 1                 | 1                 | 1                    | 2                         | 4                     |
| Flash        | 256 KB            | 128 KB            | 512 KB               | 2 MB + ext Flash          | SD card (GB-TB)       |
| SRAM         | 8 KB              | 8 KB              | 96 KB                | 1 MB + 16 MB SDRAM        | 1-8 GB LPDDR4         |
| EEPROM       | 4 KB              | 4 KB              | None                 | None                      | None                  |
| Networking   | None              | None              | None                 | WiFi + BT                 | Ethernet, WiFi, BT    |
| USB          | USB-B             | USB-B             | USB Micro-B OTG      | USB-C                     | USB-C, 2xUSB2, 2xUSB3 |
| OS           | Bare metal        | Bare metal        | Bare metal           | Bare metal, Mbed          | Linux (Raspbian)      |
| Use Case     | Basic I/O control | Basic I/O control | Faster 32-bit RT     | IoT, UI, WiFi             | Full Linux computer   |