1. Why esp32 not arduino?

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| Properties | Esp32 | Arduino Uno |
| Wi-Fi | Yes | No |
| Bluetooth | Yes | No |
| Operating Voltage | 3.3 V | 5 V |
| Power Supply | 7 V – 12 V | 7 V – 12 V |
| Current Consumption | 20 mA – 240 mA | 45 mA – 80 mA |
| Current Consumption deep sleep | 5 uA | 35 mA |
| Digital I/O Pins | 36 | 14 |
| Digital I/O Pins with PWM | 36 | 6 |
| Analog Pin | 15 | 6 |
| Clock speed | 52 MHz – 160 MHz | 16 MHz |
| Size | **‎25.5 mm x 18 mm** | 68.6 mm x 53.4 mm |
| SPI / I2C / I2S / UART | **4 / 2 / 2 / 2** | 1 / 1 / 1 / 1 |
| Flash Memory | **4 MB** | 32 KB |
| SRAM | **520 KB** | 2 KB |
| Clock Speed | **80 MHz / 160 MHz** | 16 MHz |
| Resolution of PWM signal | **1 – 16 bit** | 8 bit |