| **STM32G431KBT6** | | |
| --- | --- | --- |

<https://www.digikey.com/en/products/detail/stmicroelectronics/STM32G431KBT6/10231564>

Specs:

Price - $6.35 per unit

Core size - 32 bit

Pinout - 26 I/O pins

Voltage supply - 1.71V ~ 3.6V

Comments: A little outdated and impractical but has a lot of pinouts.

**PIC18F18076**

<https://www.microchip.com/en-us/development-tool/EV53Z50A>

Specs:

Price - $24.02 per unit

Core size - 8 bit

Pinout - 24 I/O pins

Voltage supply - 1.81V ~ 5.1V

Comments:

# **Arduino Uno Rev3**

<https://store-usa.arduino.cc/products/arduino-uno-rev3?selectedStore=us>

Specs:

Price - $27.60 per unit

Core size - 8 bit

Pinout - 14 I/O pins

Operating Voltage - 5V

Recommended input Voltage - 7-12v

Comments:

# **Arduino Nano ESP32**

<https://store-usa.arduino.cc/products/nano-esp32>

Specs:

Price - $20.00 per unit

Core size - 32 bit

Pinout - 14 I/O pins

Operating Voltage - 3.3v

Compatibility of the Microcontroller

* Look up how the chips are powered
* Check to see if there are enough pinouts
* Some pins might need a
* range of voltages, make sure they are connected to pins on the microcontroller pin that has a DAC

#### **ESP32-WROOM-32D**

[Link](https://www.digikey.com/en/products/detail/espressif-systems/ESP32-WROOM-32D-N4/9381716)(without Dev board)

[ESP with dev board](https://www.digikey.com/en/products/detail/espressif-systems/ESP32-DEVKITC-32UE/12091813?utm_adgroup=&utm_source=google&utm_medium=cpc&utm_campaign=PMax%20Shopping_Product_Low%20ROAS%20Categories&utm_term=&utm_content=&utm_id=go_cmp-20243063506_adg-_ad-__dev-c_ext-_prd-12091813_sig-CjwKCAiAlcyuBhBnEiwAOGZ2S2n0K9tyK10mdnVAGIQ-kKgARnKtznGf3bW2zeewnh_lMT6MU6pvVhoCZx8QAvD_BwE&gad_source=1&gclid=CjwKCAiAlcyuBhBnEiwAOGZ2S2n0K9tyK10mdnVAGIQ-kKgARnKtznGf3bW2zeewnh_lMT6MU6pvVhoCZx8QAvD_BwE)

Specs:

Price - $2.68 per unit

Core count - 2

Pinout - 38 I/O pins

Voltage supply - 3v - 3.6v

ESP32 Vids:

[**Introduction to ESP32 - Getting Started**](https://www.youtube.com/watch?v=xPlN_Tk3VLQ)

[**Getting Started with ESP32 - Step-By-Step Tutorial**](https://www.youtube.com/watch?v=tc3Qnf79Ny8)