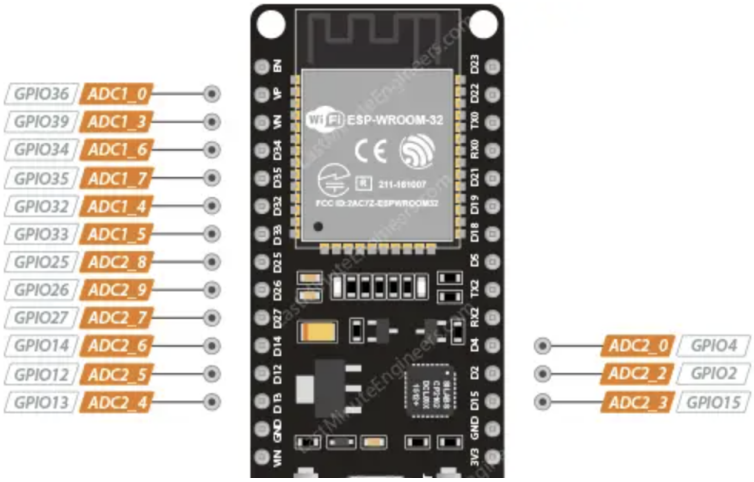
// currSensorValue = analogRead(A12);

Read the sensor values from an actual ADC pin

ESP32 ADC Pins

The ESP32 includes two 12-bit SAR ADCs – ADC1 and ADC2 – and supports measurements on 18 channels (analog-enabled pins). ADC1 is available on eight GPIOs (32 to 39), while ADC2 is available on ten GPIOs (0, 2, 4, 12 to 15 and 25 to 27).

However, the DEVKIT V1 DOIT board (the version with 30 GPIOs) has only 15 ADC channels, as shown in the figure below.

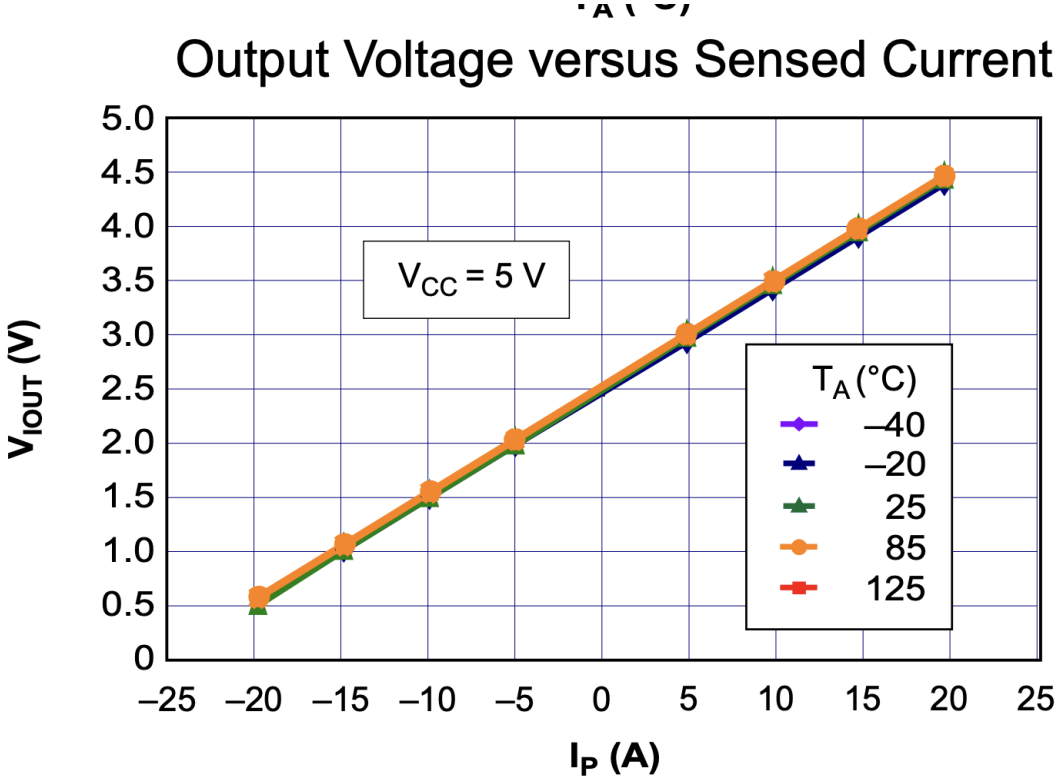


// currVoltage = (currSensorValue * (5.0/ 1024));

Have to bring this signal to a digital equivalent by multiplying by Vref and then dividing by the ADC resolution bits.

// current = (2.5 - currVoltage) / 0.185;

Match the Vout to a sensed current using the linear equation from the graph



// volSensorValue = analogRead(12);
Analog read on an actual ADC pin

// voltage = (volSensorValue / 4095.0) * 3.3;
Have to bring this signal to a digital equivalent by multiplying by Vref and then dividing by the ADC resolution bits.

Don’t have anything else to do with the signal because the module takes care of everything else.