ESP32 DevKitC - SY8

ESP32CUBE

EN					EN
OD/ID	S_VP	ADC1_0	RTC	GPIO36	VP
OD/ID	S_VN	ADC1_3	RTC	GPIO39	VN
OD/ID	VDET_1	ADC1_6	RTC	GPIO34	D34
OD/ID	VDET_2	ADC1_7	RTC	GPIO35	D35
OD/ID	32K_XP	TOUCH9	ADC1_4	RTC	GPIO32	D32
OD/ID	32K_XN	TOUCH8	ADC1_5	RTC	GPIO33	D33
OD/ID	DAC_1	ADC1_8	RTC	GPIO25	D25
OD/ID	DAC_2	ADC1_9	RTC	GPIO26	D26
OD/ID	TOUCH7	ADC2_7	RTC	GPIO27	D27

VSPI_MOSI • GPIO23 • SPI_MOSI • OD/IE
GPIO22 • I2C_SCL • OD/IE
GPIO1 • U0TXD • SERIAL_TX • OD/IE/WPU
GPIO3 • U0RXD • SERIAL_RX • OD/IE/WPU
GPIO21 • I2C_SDA • OD/IE
GPIO19 • VSPI_MISO • OD/IE
GPIO18 • VSPI_SCK • OD/IE
GPIO5 • VSPI_SS • SDIO • OD/IE/WPU
GPIO17 • OD/IE
GPIO16 • OD/IE

OD/IE/WPU • HSPI_SCK • MTMS • TOUCH6 • ADC2_6 • RTC • GPIO14 • D14
OD/IE/WPU • VDD_FLASH • HSPI_MISO • MTDI • TOUCH5 • ADC2_5 • RTC • GPIO12 • D12
OD/IE/WPU • HSPI_MOSI • MTCK • TOUCH4 • ADC2_4 • RTC • GPIO13 • D13
GND
5V0 • VIN

D23 • D22 • TX0 • RX0 • D21 • D19 • D18 • D5 • TX2 • RX2

D4 • GPIO4 • RTC • ADC2_0 • TOUCH0 • OD/IE/WPU
D2 • GPIO2 • RTC • ADC2_2 • TOUCH2 • OD/IE/WPU
D15 • GPIO15 • RTC • ADC2_3 • TOUCH3 • MTDO • HSPI_SS • LOG • OD/IE/WPU
GND • GND
3V3 • 3V3

ESP-WROOM-32
WiFi
P11-166007
FCC ID:2AC7Z-ESPWROOM32
CP2102
AMS1117
3.3 H637PE
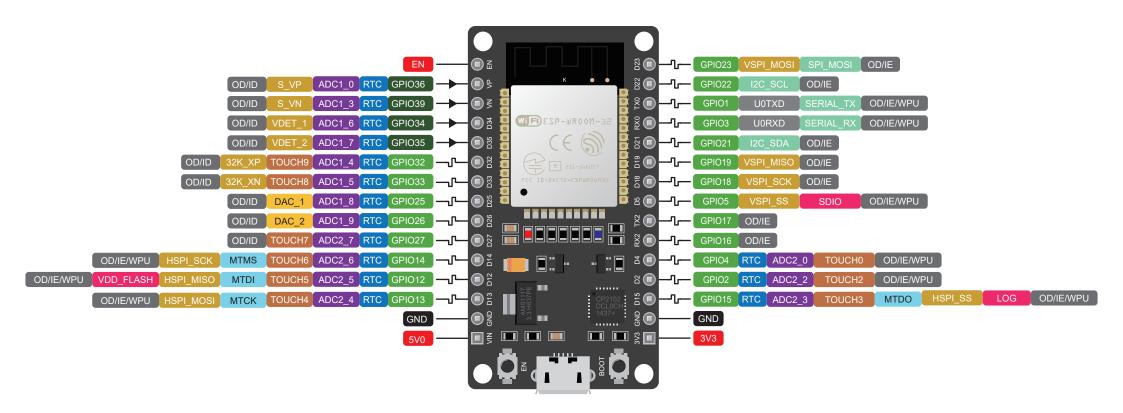
ESP32 Specs

32-bit Xtensa@ dual-core @24oMHz

Wi-Fi IEEE 802.11 b/q/n 2.4GHz

BLuetooth 4.2 BR/EDR and BLE

520 KB SRAM (16 KB for cache)

448 KB ROM

34 GPIOs, 4x SPI, 3x UART,2x I2C,

2x I2S, RMT, LED, PWM, 1 host SD/eMMC/SDIO

1 slave SDIO/SPI, TWAI@, 12-bit ADC, Ethernet

Symbol	Description
⎍	PWM Capable Pin
→ GPIOX	GPIO Input Only
GPIOX	GPIO Input and Output
DAC_X	Digital-to-Analog Converter
DEBUG	JTAG for Debugging
FLASH	External Flash Memory(SPI)
ADCX_CH	Analog-to-Digital Converter
TOUCHX	Touch Sensor Input Channel
OTHER	Other Related Functions
SERIAL	Serial for Debug/Programming
ARDUINO	Arduino Related Functions
STRAP	Strapping Pin Functions

RTC	RTC Power Domain(VDD3P3_RTC)
GND	GND
PWD	Power Rails (3V3 and 5V)

GPIOSTATE

WPU: Weak Pull-up(Internal)

WPD: Weak Pull-down (Internal)

PU: Pull-up(External)

IE: Input Enable(After Reset)

ID: Input Disabled(After Reset)

OE: Output Enable(AfterReset)

OD: Output Disabled(After Reset)