
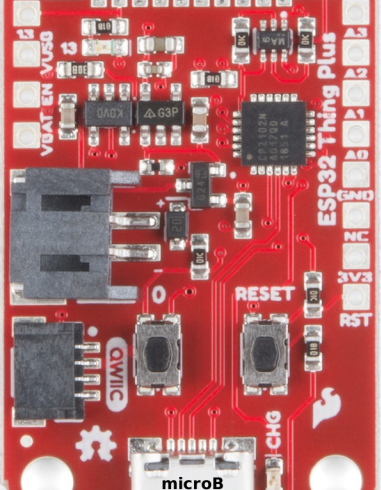


SparkFun ESP32 Thing Plus (WRL-14689)

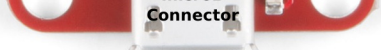
PCB Antenna




ESPRESSIF
ESP32-WROOM-22D



ESP32 Thing Plus




microB Connector

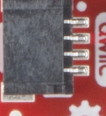


	V_SPI_O	GPIO23	SDA	23	21	GPIO21	V_SPI_HD	
U0_RTS	V_SPI_WP	GPIO22	SCL	22	17	GPIO17	TX1	
Touch6	HSPI_CLK	ADC2_6	GPIO14	14	16	GPIO16	RX1	
Touch9	ADC1_4	GPIO32	XTAL32	32	19	MISO	GPIO19	V_SPI_Q U0_CTS
Touch3	HSPI_CS0	ADC2_3	GPIO15	15	18	MOSI	GPIO18	V_SPI_CLK
Touch8	ADC1_5	GPIO33	XTAL32	33	5	SCK	GPIO5	V_SPI_CS0
	Touch7	ADC2_7	GPIO27	27	A5	GPIO4	ADC2_0	HSPI_HD Touch0
Touch5	HSPI_Q	ADC2_5	GPIO12	12	A4	SenseVP	GPIO36*	ADC1_0*
LED (Blue) Touch4	HSP_ID	ADC2_4	GPIO13	13	A3	SensVN	GPIO39*	ADC1_3*
			VUSB	VUSB	A2	GPIO34*	ADC1_6	VDET1
			EN		A1	GPIO25	ADC2_8	DAC1
			VBAT	VBAT	A0	GPIO26	ADC2_9	DAC2
					GND	GND		
					NC			
					3V3	3.3V		
					RESET	Reset		

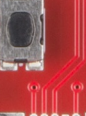
JST Connector for single cell LiPo




Qwiic Connector



RESET



Charge LED: Yellow



Name	ADC
Power	DAC
GND	SPI
Control	UART
Arduino	Touch
GPIO	Misc

*GPIO: Port Input Only
*ADC: Preampifier ADC
GPIO 3.3V tolerant only

Power

ESP32 VCC range: 2.2V-3.6V
VBAT: direct to battery (and charger)
VUSB: direct to USB (5V)
VCC: Output of regulator 3.3V/600mA
Up to 250mA during RF transmissions

Wireless

Wifi: 802.11 b/g/n/e/i
WPA/WPA2/WPA2-Enterprise/SPS
Bluetooth: Bluetooth 4.2/BLE

ESP32

Dual-core Xtensa 32-bit LX6
Up to 240MHz
520kB internal SRAM
16MB external flash

Multiplexed I/Os allow up to

13 ADC channels
3 SPI interfaces
3 UART interfaces
2 I2C interfaces
2 I2S interfaces
16 PWM outputs
2 DACs
8 Capacitive Touch Inputs


ADC Preamp

GPIO pins A3 and A4 are able to be used as a low noise analog pre-amplifier


Other*

Hall Sensor
Temp sensor (-40C to 125C)
SD/SDIO/MMC Host Controller
CAN Bus

*On datasheet, but may not be supported yet



sparkfun
ELECTRONICS



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