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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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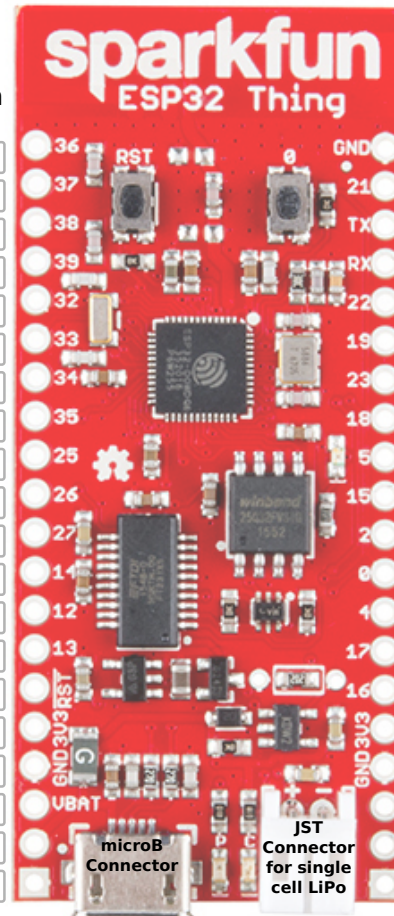
SparkFun ESP32 Thing (DEV-13907)

PCB Antenna

Reset button

Button: GPIO 0

	ADC1_0*	GPIO36*	SenseVP	36
	ADC1_1*	GPIO37*	CapVP	37
	ADC1_2*	GPIO38*	CapVN	38
	ADC1_3*	GPIO39*	SensVN	39
Touch9	ADC1_4	GPIO32	XTAL32	32
Touch8	ADC1_5	GPIO33	XTAL32	33
	VDET1	ADC1_6	GPIO34*	34
	VDET2	ADC1_7	GPIO35*	35
	DAC1	ADC2_8	GPIO25	25
	DAC2	ADC2_9	GPIO26	26
	Touch7	ADC2_7	GPIO27	27
Touch6	HSPI_CLK	ADC2_6	GPIO14	14
Touch5	HSPI_Q	ADC2_5	GPIO12	12
Touch4	HSP_ID	ADC2_4	GPIO13	13
		Reset	RST	
		3.3V	3V3	
		GND	GND	
		VBAT	VBAT	
		VUSB	VUSB	
		GND	GND	



GND				
21	SDA	GPIO21	V_SPI_HD	
TX	CLK3	GPIO1	U0_TXD	
RX	CLK2	GPIO3	U0_RXD	
22	SCL	GPIO22	V_SPI_WP	U0_RTS
19	MISO	GPIO19	V_SPI_Q	U0_CTS
23	MOSI	GPIO23	V_SPI_D	
18	SCK	GPIO18	V_SPI_CLK	
5	GPIO5	V_SPI_CS0	LED (Blue)	
15	GPIO15	ADC2_3	HSPI_CS0	Touch3
2	CS	GPIO2	ADC2_2	HSPI_WP Touch2
0	CLK1	GPIO0	ADC2_1	Touch1 Button
4	GPIO4	ADC2_0	HSPI_HD	Touch0
17	GPIO17	U2_TXD		
16	GPIO16	U2_RXD		
3V3	3.3V			
GND	GND			
VBAT	VBAT			
VUSB	VUSB			
GND	GND			

Power LED: Red
Charge LED: Yellow

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

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

Jumpers

SJ1: Can be cut to change charge current

SJ2: Disconnect to disable Power LED

SJ3: Use to change voltage to flash chip

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
4MB external flash

Multiplexed I/Os allow up to
18 ADC channels
3 SPI interfaces
3 UART interfaces
2 I2C interfaces
2 I2S interfaces
16 LED PWM outputs
2 DACs
10 Capacitive Touch Inputs

ADC Preamp
GPIO pins 36, 67, 38, and 39 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

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ELECTRONICS