	ADCI_O*	Н	GP1036	Н	5_VP	Н	36	-
	ADC1_3*	Н	GP1039	H	5_VN	Н	39	1
				Ī	601009	I	RST	H
			ADCI_6*	Н	601034	Н	34	H
			ADCI_7*	H	601035	Н	35	┡
	ADCI_4*	Н	GP1032	Н	XTAL32	Н	32	H
	ADCI_5*	Н	GP1033	Н	XTAL33	Н	33	1
	DAC2	Н	ADC2_8	H	601025	H	25	H
	TOUCH6	Н	ADC2_6*	Н	GP1014	H	14	H
	TPUCH4	Н	ADC2_4	Н	GP1013	H	13	⊩
TOUCH2	HSPI_WP	Н	ADC2_2	Н	GP1002	H	02	1
			200				GND	-
						Ĩ	5V	1

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



TXD

RXD

23

0

GND

3·3 GND

22

21

3-3 LoRa2 LoRa1 CLX3

CLX2

GP1023

GPI04

CLXI

GP1001

GP1003

V_SPLD

ADC2 0

GPIOO

GP1022

UO EXD

UO_RXD

TOUCHO

TOUCHI

V_SPI_WP - OLED-SDA

V_SPLHD - OLED-SCL

HSPL HD

ADC2 1

Wifi+Buletooth Board TTGO-LoRa T-Beam

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