pycom GO INVENT

lopy

Pinout diagram

Absolute MAX per pin 12mA
recommended 6mA

LoRa External Antenna Connector — WS2812 LED
Reset Button

Vin (3.5–5.5V)
GND
3V3 — Up to 1.2–A Maximum Load Capability. Output ONLY.

RST				ChipPU	9		
RX0	P0		CLKOUT2	U0RXD	GPIO3	40	
TX0	P1		CLKOUT3	U0TXD EMACRXD2	GPIO1	41	
	P2	RGB_LED	CLKOUT1 Touch1 RTCIO11	ADC2_1 EMACTXCLK	GPIO0	23	
TX1	P3	HS2DATA1 SDDATA1 HSPIHD	Touch0 RTCIO10	ADC2_0 EMACTXER	GPIO4	24	
RX1	P4	HS2CMD SDCMD HSPICS0	MTD0 Touch3 RTCIO13	ADC2_3 EMACRXD3	GPIO15	21	
CLK		HS1DATA6	VSPICS0	EMACRXCLK	GPIO5	34	
MOSI			Touch7 RTCIO17	ADC2_7 EMACRXDV	GPIO27	16	
MISO			VSPIQ	U0CTS EMACTXD0	GPIO19	38	
	P8	SDDATA0 HSPIWP	Touch2 RTCIO12	ADC2_2	GPIO2	22	
SDA	P9	HS2DATA2 SDDATA2 HSPIQ	MTDI Touch5 RTCIO15	ADC2_5 EMACTXD3	GPIO12	18	
CLK SCL	P10	HS2DATA3 SDDATA3 HSPIID	MTCK Touch4 RTCIO14	ADC2_4 EMACRXER	GPIO13	20	
MOSI	P11		VSPIWP	U0RTS EMACTXD1	GPIO22	39	
MISO	P12		VSPIHD	EMACTXEN	GPIO21	42	

PROGRAM Port

Connected to LoRa module

17	GPIO14 EMACTXD2	ADC2_6 RTCIO16 Touch6	MTMS	HSPICLK SDCLK HS2CLK	P23
14	GPIO25 EMACRXD0	ADC2_8 RTCIO6		DAC_1	P22
15	GPIO26 EMACRXD1	ADC2_9 RTCIO7		DAC_2	P21
13	GPIO33	ADC1_5 RTCIO8 Touch8	XTAL32		P20
12	GPIO32	ADC1_4 RTCIO9 Touch9	XTAL32		P19
10	GPIO34	ADC1_6 RTCIO4	VDET1		P18
11	GPIO35	ADC1_7 RTCIO5	VDET2		P17
8	GPIO39 ADCPA	ADC1_3 RTCIO3	SensVN		P16
7	GPIO38	ADC1_2 RTCIO2	SensCN		P15
6	GPIO37	ADC1_1 RTCIO1	SensCP		P14
5	GPIO36 ADCPA	ADC1_0 RTCIO0	SensVP		P13

Only Input pins!
No pullup/pulldown internal resistance

Hack your LoPy
Connect to a 10nF capacitor to enable Touch Pin function

WiFi / Bluetooth External Antenna Connector

Board: LoRa Bluetooth WiFi — pycom GO INVENT — Model: LoPy1.0 — FCC ID: 2AJMTLOPY1R — CE 0700 — lopy pycom

Legend
- **Power** (red)
- **GND** (black)
- **Serial Pin** (light blue)
- **Analog Pin** (green)
- **Control** (yellow)
- **Physical Pin** (gray)
- **Port Pin** (tan)
- **Touch Pin** (pink)
- **DAC Pin** (orange)
- ~ **PMW Pin**

Low Level Bootloader
P2 + GND

Boot modes and safe boot
P12 + 3V3

1-3 sec   Safe boot, latest firmware is selected
4-6 sec   Safe boot, previous user update selected
7-9 sec   Safe boot, the factory firmware is selected

Internal Functions

35	GPIO18		VSPICLK HS1DATA7	LoRa Reset
25	GPIO16 EMACCLKOUT	u2RXD HS1DATA4	External Antenna Switch
36	GPIO23		VSPIID HS1STROBE	LoRa Interrupt
27	GPIO17 EMACCO180	u2TXD HS1DATA5	LoRa Select

05/12/17

To order contact sales@pycom.io