LoPy®
PINOUT

Internal Functions

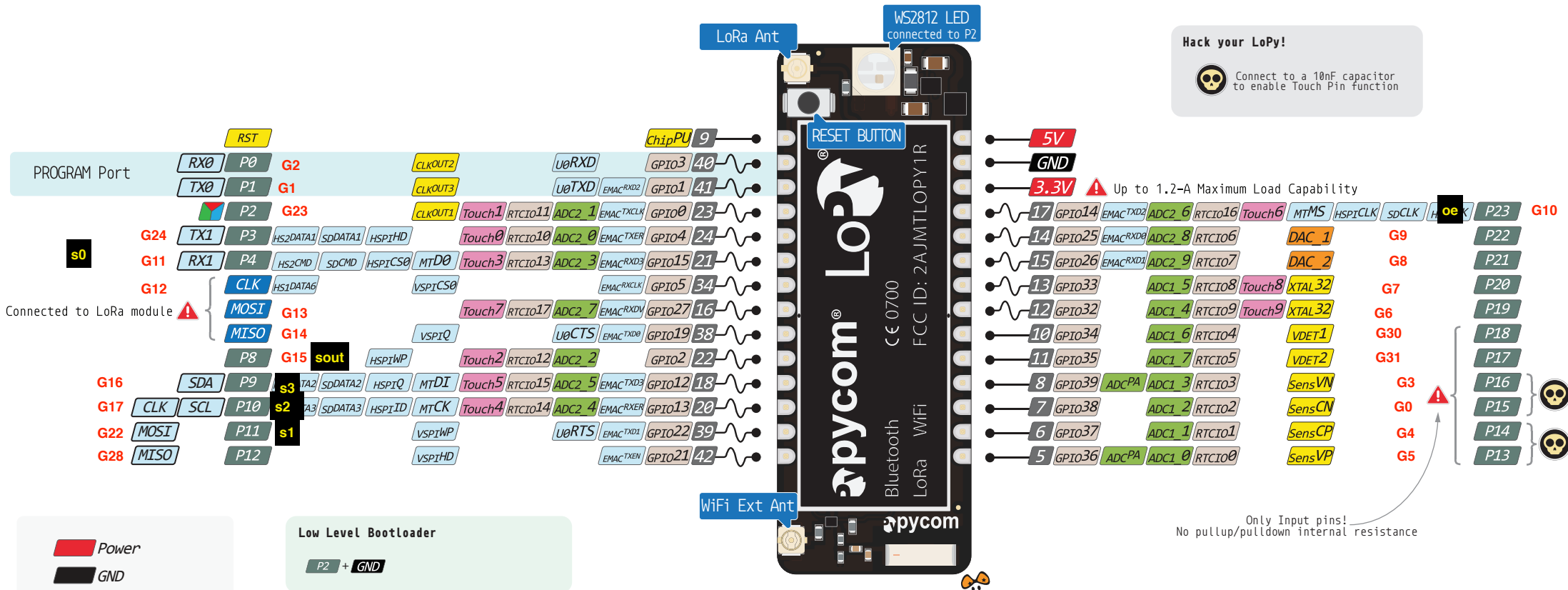|				
35	GPIO18		VSPICLK HS1DATA7	Lora Reset
25	GPIO16 EMACCLKOUT	U2RXD	HS1DATA4	External Antenna Switch
36	GPIO23		VSPIID HS1STROBE	Lora Interrupt
27	GPIO17 EMACC0180	U2TXD	HS1DATA5	Lora Select

⚠ <u>Absolute</u> MAX per pin 12mA
recommended 6mA

Hack your LoPy!

☠ Connect to a 10nF capacitor
to enable Touch Pin function

LoRa Ant

WS2812 LED connected to P2

RESET BUTTON

WiFi Ext Ant

							ChipPU	9	
PROGRAM Port	RX0	P0	**G2**	CLKOUT2		U0RXD	GPIO3	40	
	TX0	P1	**G1**	CLKOUT3		U0TXD EMACRXD2	GPIO1	41	
		P2	**G23**	CLKOUT1	Touch1 RTCIO11 ADC2_1 EMACTXCLK	GPIO0	23	
G24	TX1	P3	HS2DATA1 SDDATA1 HSPIHD	Touch0 RTCIO10 ADC2_0 EMACTXER	GPIO4	24	
G11	RX1	P4	HS2CMD SDCMD HSPICS0	MTD0 Touch3 RTCIO13 ADC2_3 EMACRXD3	GPIO15	21	
G12	CLK		HS1DATA6	VSPICS0	EMACRXCLK	GPIO5	34	
Connected to LoRa module ⚠	MOSI	**G13**		Touch7 RTCIO17 ADC2_7 EMACRXDV	GPIO27	16	
	MISO	**G14**		VSPIQ	U0CTS EMACTXD0	GPIO19	38	
	P8	**G15**	**sout**	HSPIWP	Touch2 RTCIO12 ADC2_2	GPIO2	22	
G16	SDA	P9	**s3**	TA2 SDDATA2 HSPIQ MTDI	Touch5 RTCIO15 ADC2_5 EMACTXD3	GPIO12	18	
G17	CLK SCL	P10	**s2**	A3 SDDATA3 HSPIID MTCK	Touch4 RTCIO14 ADC2_4 EMACRXER	GPIO13	20	
G22	MOSI	P11	**s1**		VSPIWP	U0RTS EMACTXD1	GPIO22	39	
G28	MISO	P12			VSPIHD	EMACTXEN	GPIO21	42	

s0

							5V	
							GND	
							3.3V ⚠ Up to 1.2-A Maximum Load Capability	
17	GPIO14 EMACTXD2 ADC2_6 RTCIO16 Touch6	MTMS HSPICLK SDCLK H oe K	P23	**G10**
14	GPIO25 EMACRXD0 ADC2_8 RTCIO6	DAC_1	P22	**G9**
15	GPIO26 EMACRXD1 ADC2_9 RTCIO7	DAC_2	P21	**G8**
13	GPIO33 ADC1_5 RTCIO8 Touch8	XTAL32	P20	**G7**
12	GPIO32 ADC1_4 RTCIO9 Touch9	XTAL32	P19	**G6**
10	GPIO34 ADC1_6 RTCIO4	VDET1	P18	**G30**
11	GPIO35 ADC1_7 RTCIO5	VDET2	P17	**G31**
8	GPIO39 ADCPA ADC1_3 RTCIO3	SensVN	P16	**G3**
7	GPIO38 ADC1_2 RTCIO2	SensCN	P15	**G0** ⚠
6	GPIO37 ADC1_1 RTCIO1	SensCP	P14	**G4**
5	GPIO36 ADCPA ADC1_0 RTCIO0	SensVP	P13	**G5**

Only Input pins!
No pullup/pulldown internal resistance

Pycom LoPy CE 0700 FCC ID: 2AJMTLOPY1R
Bluetooth LoRa WiFi

Legend

- 🟥 Power
- ⬛ GND
- 🟦 Serial Pin
- 🟩 Analog Pin
- 🟨 Control
- ⬜ Physical Pin
- 🟫 Port Pin
- 🟪 Touch Pin
- 🟧 DAC Pin
- ∿ PWM Pin

Low Level Bootloader

P2 + GND

Boot modes and safe boot

P12 + 3.3V

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

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ver 1 rev 5