



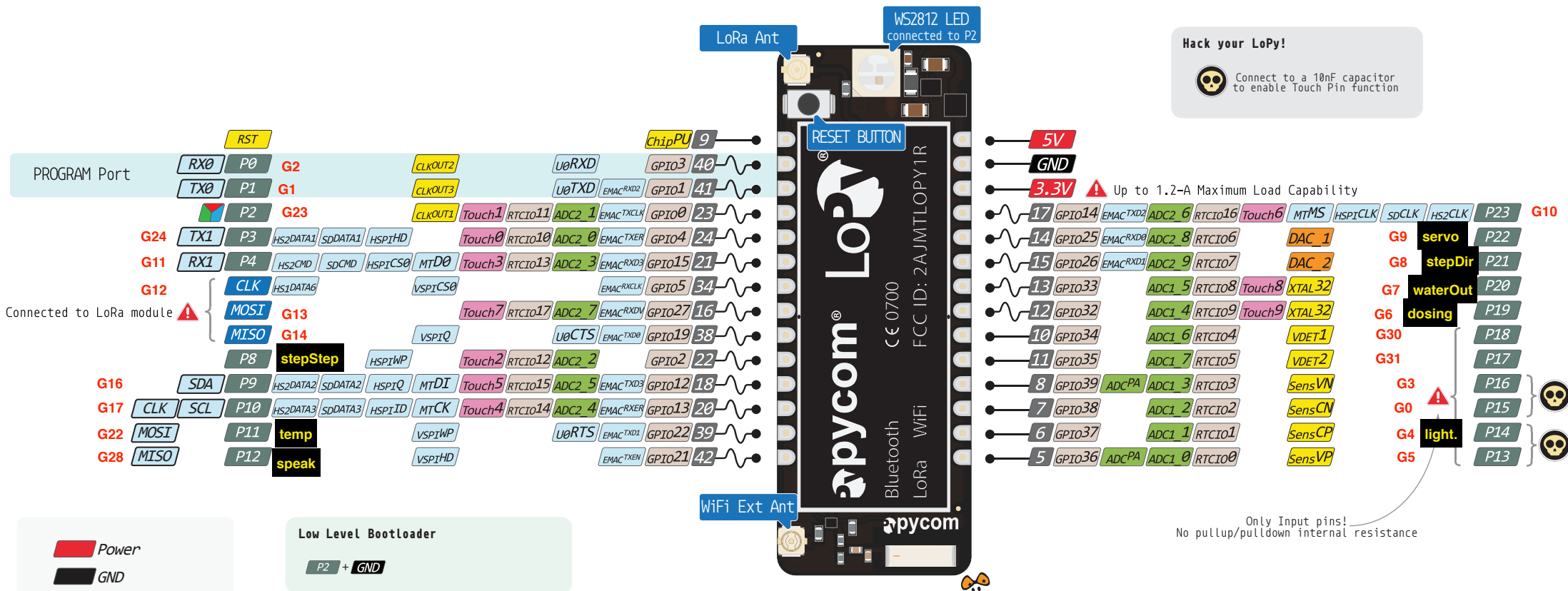
## Internal Functions

35	GPIO18	VSPICLK	HS1DATA7	Lora Reset
25	GPIO16	EMACCLKOUT	U2RXD	External Antenna Switch
36	GPIO23	VSPID	HS1STRB6	Lora Interrupt
27	GPIO17	EMACCS1080	U2TXD	Lora Select

## Hack your LoPy!



Connect to a 10nF capacitor to enable Touch Pin function



Only Input pins!  
No pullup/pulldown internal resistance






## 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 |

