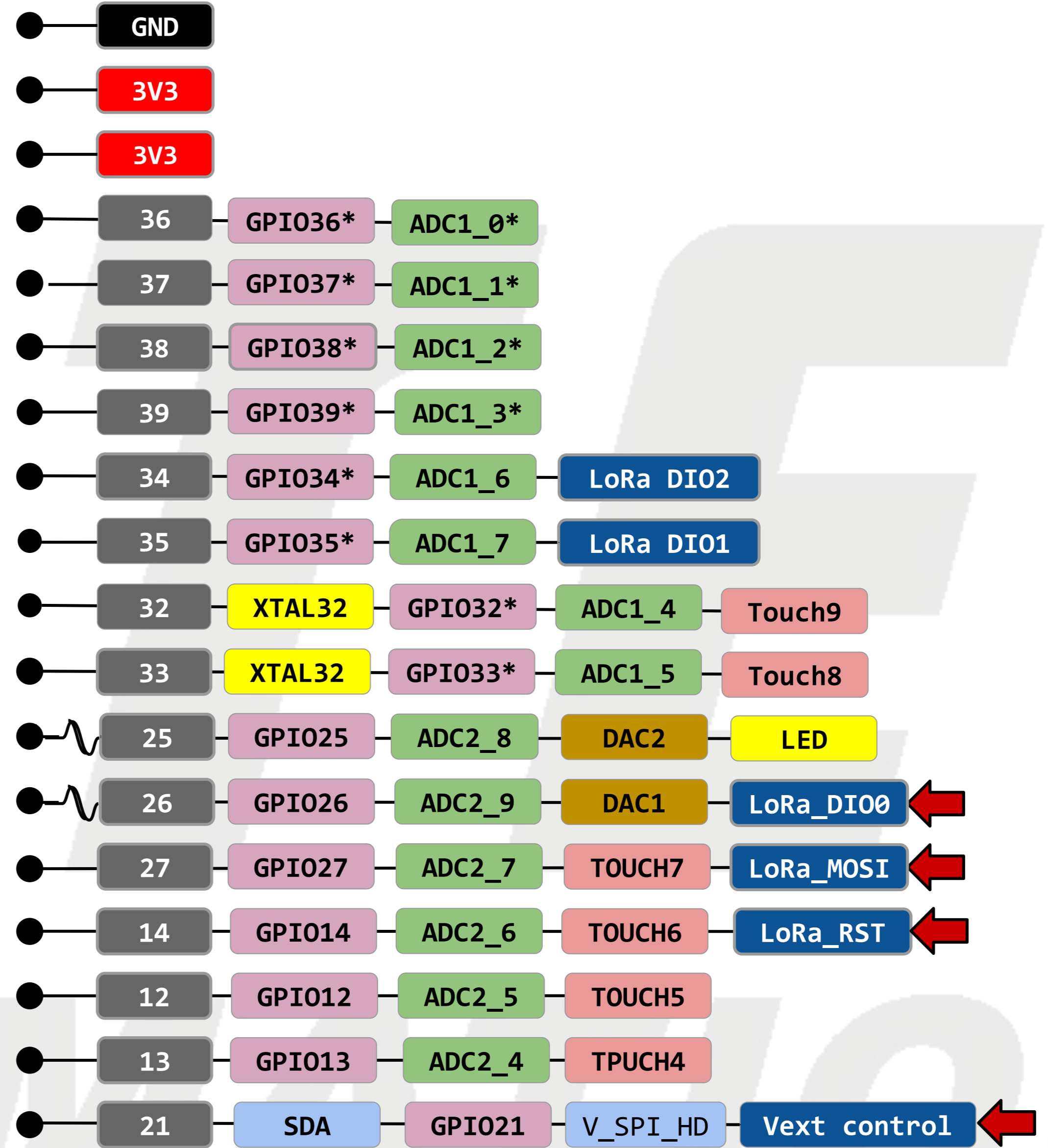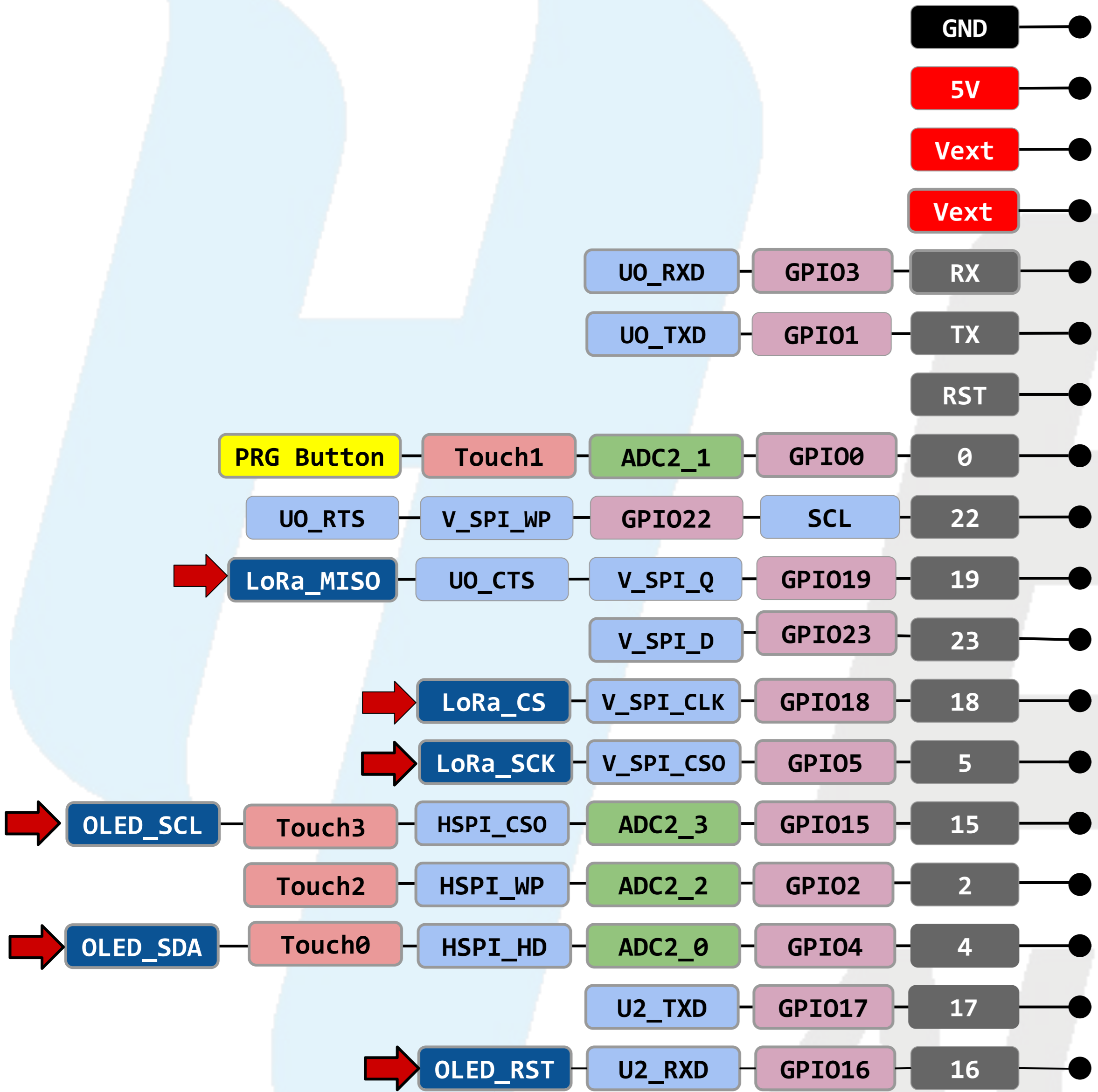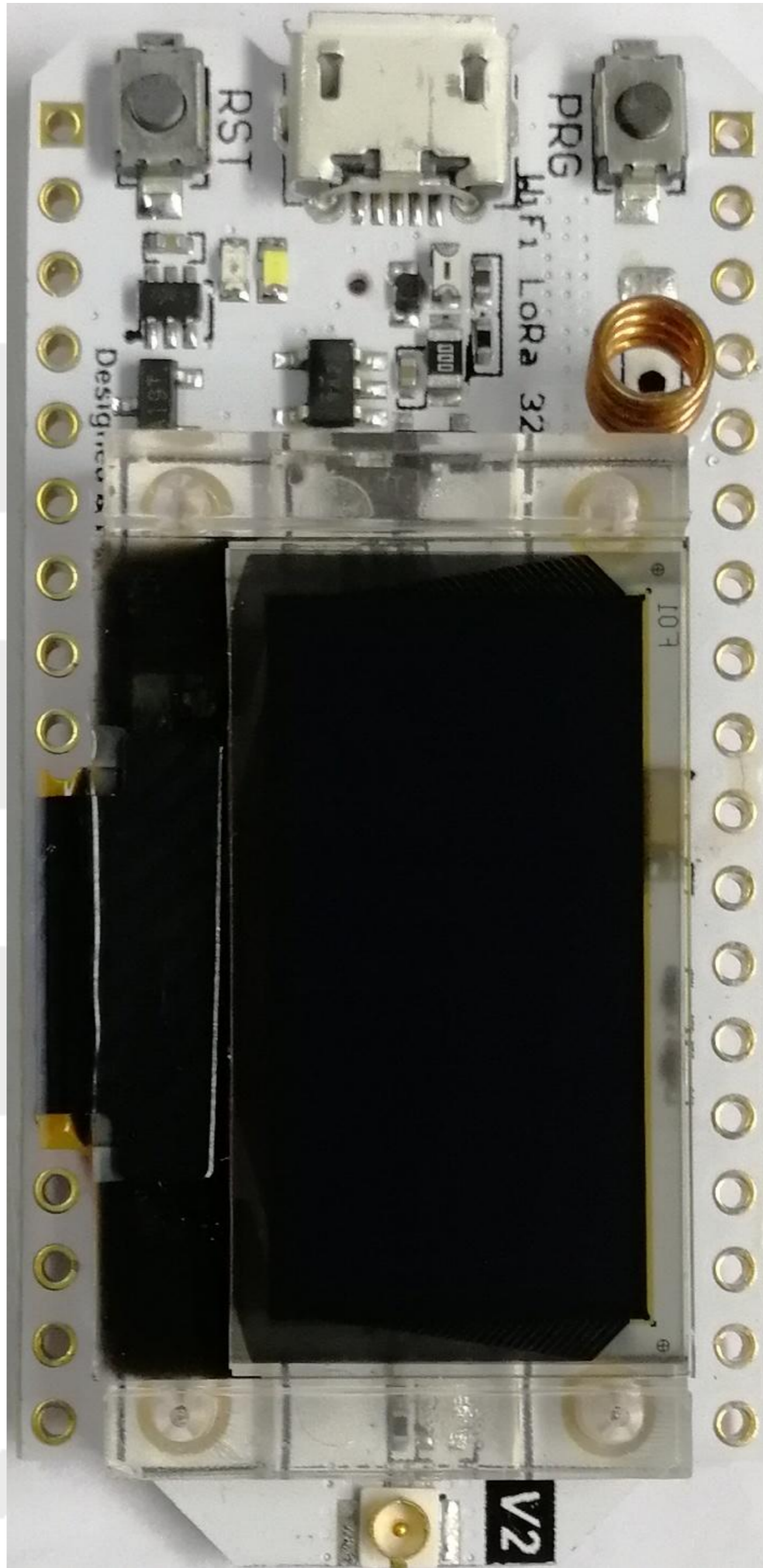WIFI LoRa 32(V2) Pinout Diagram

Notes:
*GPIO input only
*ADC preamplifier
GPIOs are 3.3V tolerant only

Legend:
- GND
- Power
- Control
- Touch Pin
- GPIO Port pin
- Analog Pin
- DAC
- Serial SPI I2C
- Physical Pin
- On-board hardware Pin

Left side (top to bottom):
				Physical Pin
			GND		GND
			5V		5V
			Vext		Vext
			Vext		Vext
UO_RXD	GPIO3			RX	RX
UO_TXD	GPIO1			TX	TX
				RST	RST
PRG Button	Touch1	ADC2_1	GPIO0	0
UO_RTS	V_SPI_WP	GPIO22	SCL	22
LoRa_MISO ←	UO_CTS	V_SPI_Q	GPIO19	19
		V_SPI_D	GPIO23	23
LoRa_CS ←	V_SPI_CLK	GPIO18	18
LoRa_SCK ←	V_SPI_CS0	GPIO5	5
OLED_SCL ←	Touch3	HSPI_CS0	ADC2_3	GPIO15	15
Touch2	HSPI_WP	ADC2_2	GPIO2	2
OLED_SDA ←	Touch0	HSPI_HD	ADC2_0	GPIO4	4
U2_TXD	GPIO17	17
OLED_RST ←	U2_RXD	GPIO16	16

Right side (top to bottom):
Physical Pin				
GND				
3V3				
3V3				
36	GPIO36*	ADC1_0*		
37	GPIO37*	ADC1_1*		
38	GPIO38*	ADC1_2*		
39	GPIO39*	ADC1_3*		
34	GPIO34*	ADC1_6	LoRa DIO2	
35	GPIO35*	ADC1_7	LoRa DIO1	
32	XTAL32	GPIO32*	ADC1_4	Touch9
33	XTAL32	GPIO33*	ADC1_5	Touch8
25	GPIO25	ADC2_8	DAC2	LED
26	GPIO26	ADC2_9	DAC1	LoRa_DIO0 ←
27	GPIO27	ADC2_7	TOUCH7	LoRa_MOSI ←
14	GPIO14	ADC2_6	TOUCH6	LoRa_RST ←
12	GPIO12	ADC2_5	TOUCH5	
13	GPIO13	ADC2_4	TPUCH4	
21	SDA	GPIO21	V_SPI_HD	Vext control ←

GPIO21 -- Vext control

LOW → Vext(3.3V/250mA) ON
HIGH → Vext(3.3V/250mA) OFF

← Pins with this arrow are used by on-board OLED or LoRa, they must not be used for other purpose unless you know what you are doing!