

I/O Expanders (PI410E5V6408):

- E0 @ 0x43 (buttons & LoRa control)
- E1 @ 0x44 (power/UI: LCD reset/backlight, GROVE power, VIN detect, LED)

Legend:

Power	Power Input	GPIO Digital External	I2C	Default	LED
Ground	Power Output	Analog External	SPI	Default	RGB LED
		Main Part	UART/USART	Default	
		Secondary Part	Other SERIAL	Default	
		Internal Component	Analog		
		Other Pins (Reset, System Control, Debugging)	PWM/Timer		

WARNING All GPIO pins are 3.3V logic only and are not 5V tolerant.

WARNING Handle the internal LiPo battery with care. Do not puncture, short-circuit, expose to high temperatures.

NESSO N1

SKU code: TPX00227
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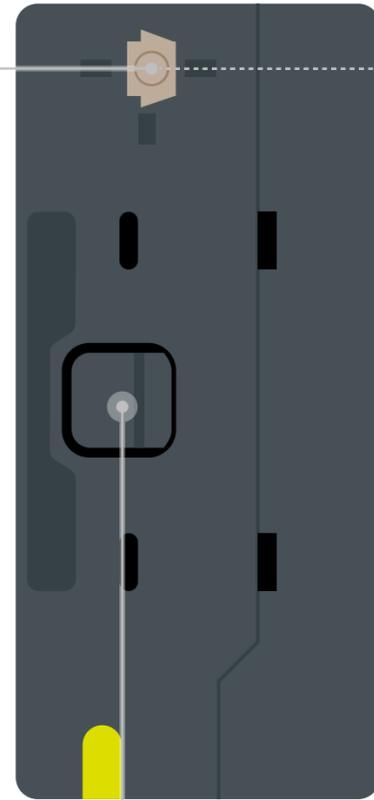
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Connection point for the detachable external LoRa antenna, linking it to the internal SX1262 LoRa module.

LoRa MMCX Connector

LoRa SX1262 MODULE

LoRa SX1262	I/O Expander	ESP32-C6	Digital
LORA MOSI		GPI021	MOSI
LORA SCK		GPI020	SCK
LORA CS		GPI023	LORA_CS
LORA MISO		GPI022	MISO
LORA BUSY		GPI019	LORA_BUSY
LORA IRQ		GPI015	LORA_IRQ
LORA RESET	E0.P7		LORA_ENABLE
LORA ANTENNA SWITCH	E0.P6		LORA_ANTENNA_SWITCH
LORA LNA ENABLE	E0.P5		LORA_LNA_ENABLE



USER BUTTON

E0.P1 KEY2
I/O Expander Digital



LoRa Antenna
850-960 MHz

Connect to the main board MMCX connector, enabling long-range communication in the 850-960 MHz frequency band



WARNING always use the LoRa radio module with its antenna connected, not using the antenna can damage the LoRa module.

I/O Expanders (PI4IOE5V6408):



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Legend:

- Power
- Ground

- IN Power Input
- OUT Power Output

- GPIO Digital External
- Analog External
- Main Part
- Secondary Part
- Internal Component
- Other Pins (Reset, System Control, Debugging)

- I2C
- SPI
- UART/USART
- Other SERIAL
- Analog
- PWM/Timer
- Default
- Default
- Default
- Default

- LED
- RGB LED

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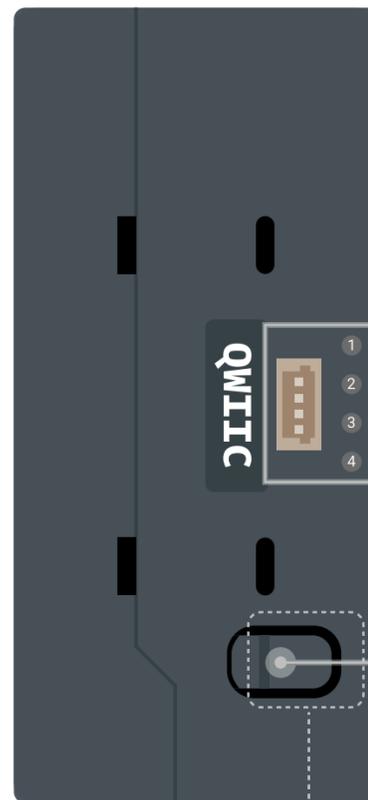
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BUZZER
 GPIO11 BEEP_PIN
 ESP32-C6 Digital



QWIIC CONNECTOR

1	GND	
2	+3V3	OUT
3	SDA	GPIO10
4	SCL	GPIO8

Digital ESP32-C6

Power On / Reset / Power Off

POWER	E1.P0	POWEROFF
Function	I/O Expander	Digital

Power on: in the off state, click the power button to turn on
 Reset: in the power-on state, click the power button to reset
 Power Off: double-click the power button to shut down
 Bootloader mode: press and hold to enter Bootloader mode

BUILTIN LED (GREEN)
 E1.P7 LED_BUILTIN
 I/O Expander Digital

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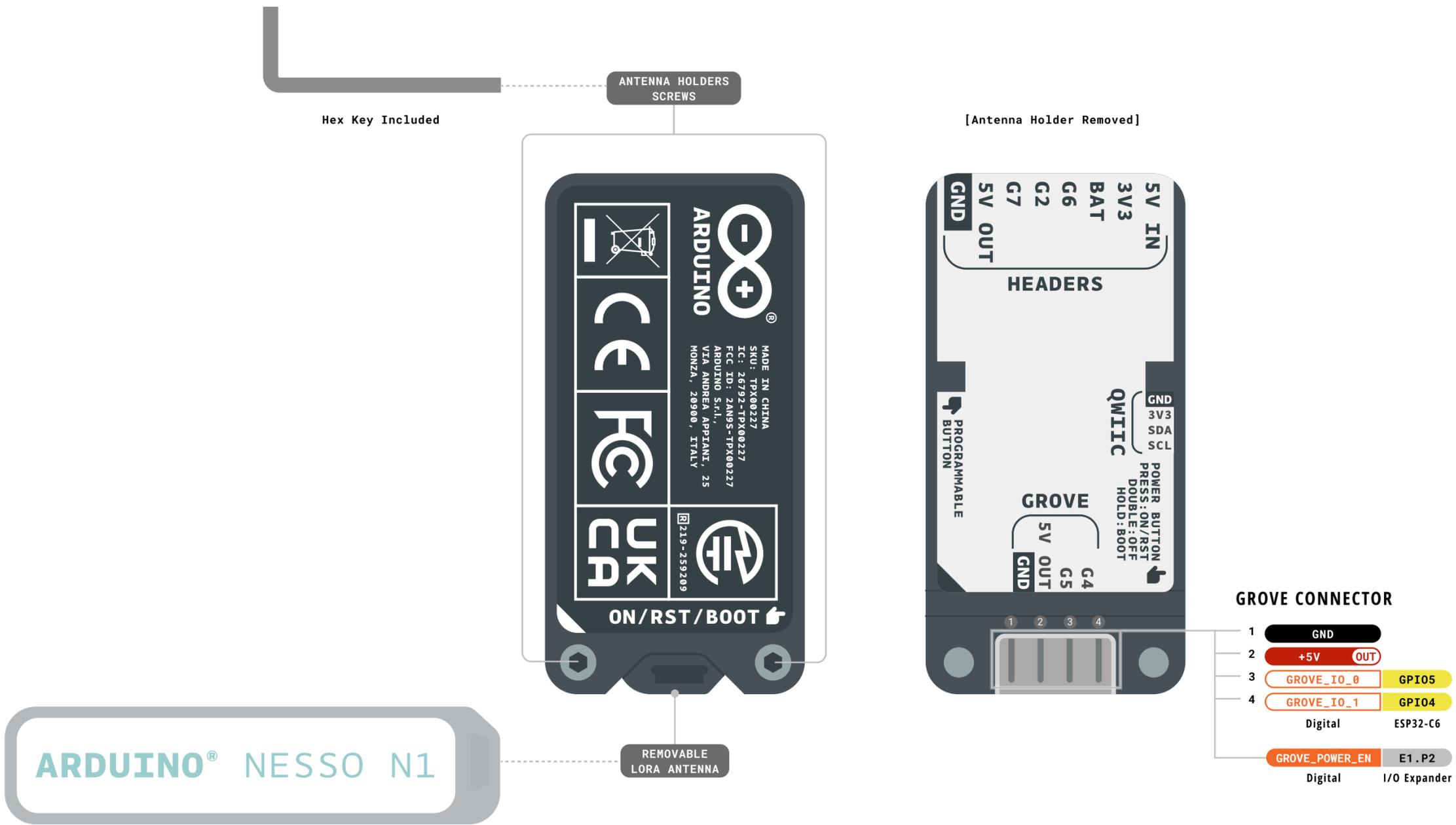
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I/O Expanders (PI4IOE5V6408):

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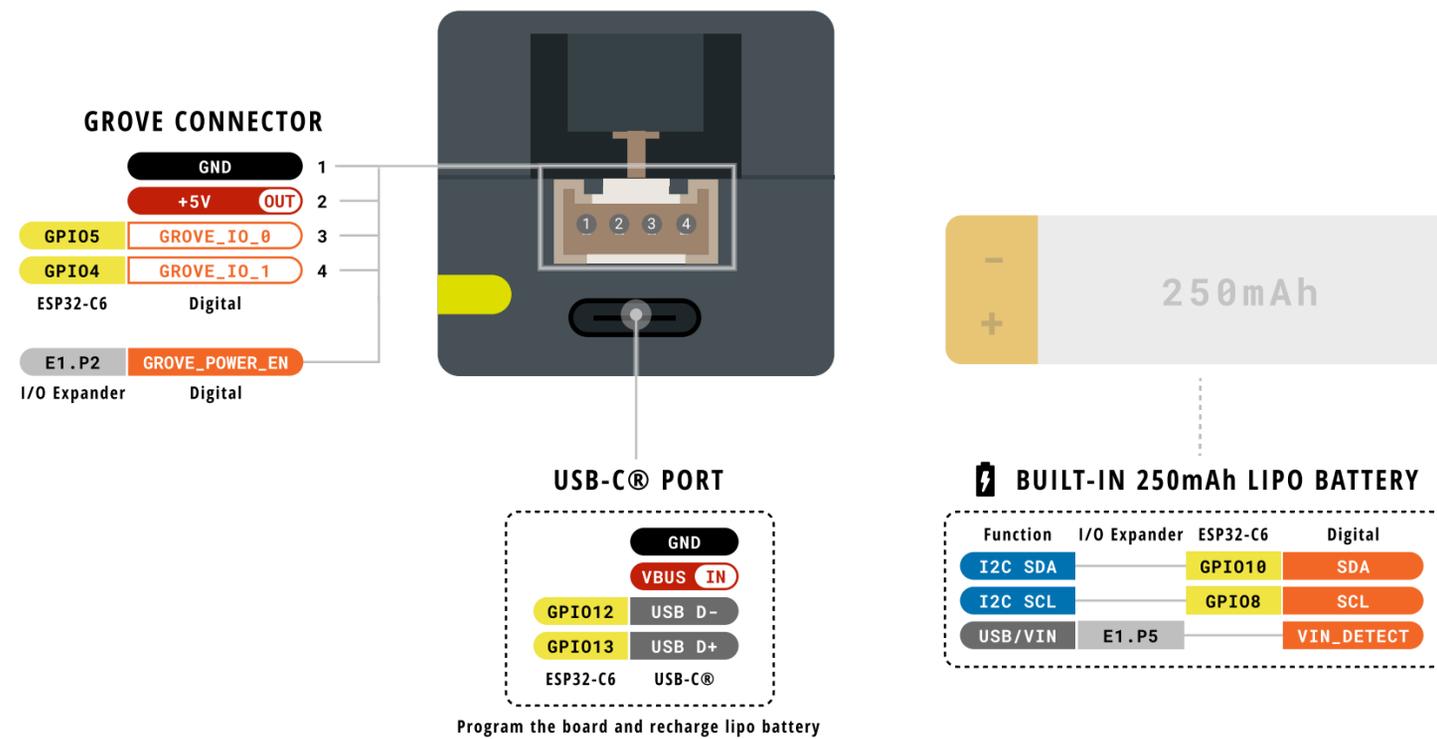
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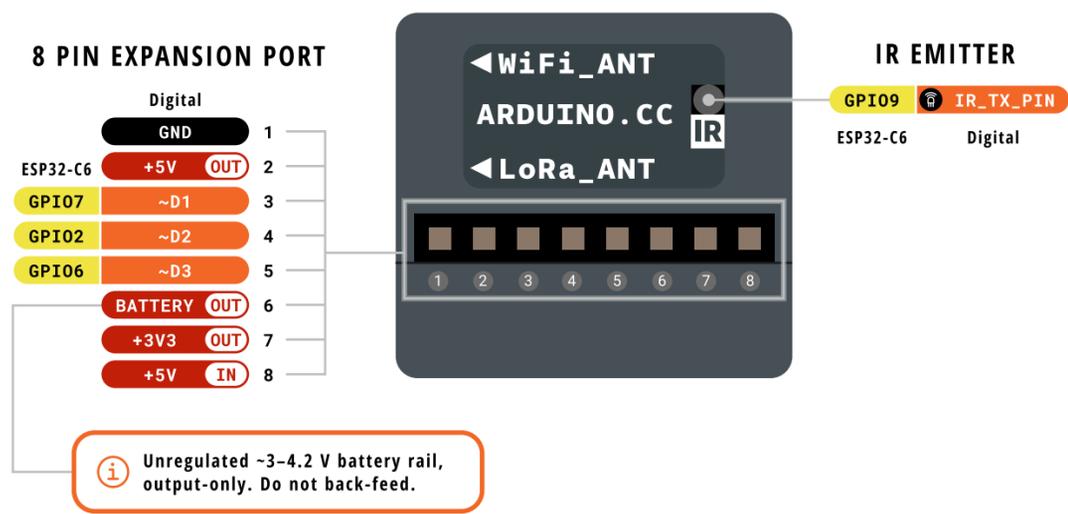
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8-pin expansion port compatible with the M5StickC HAT series

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