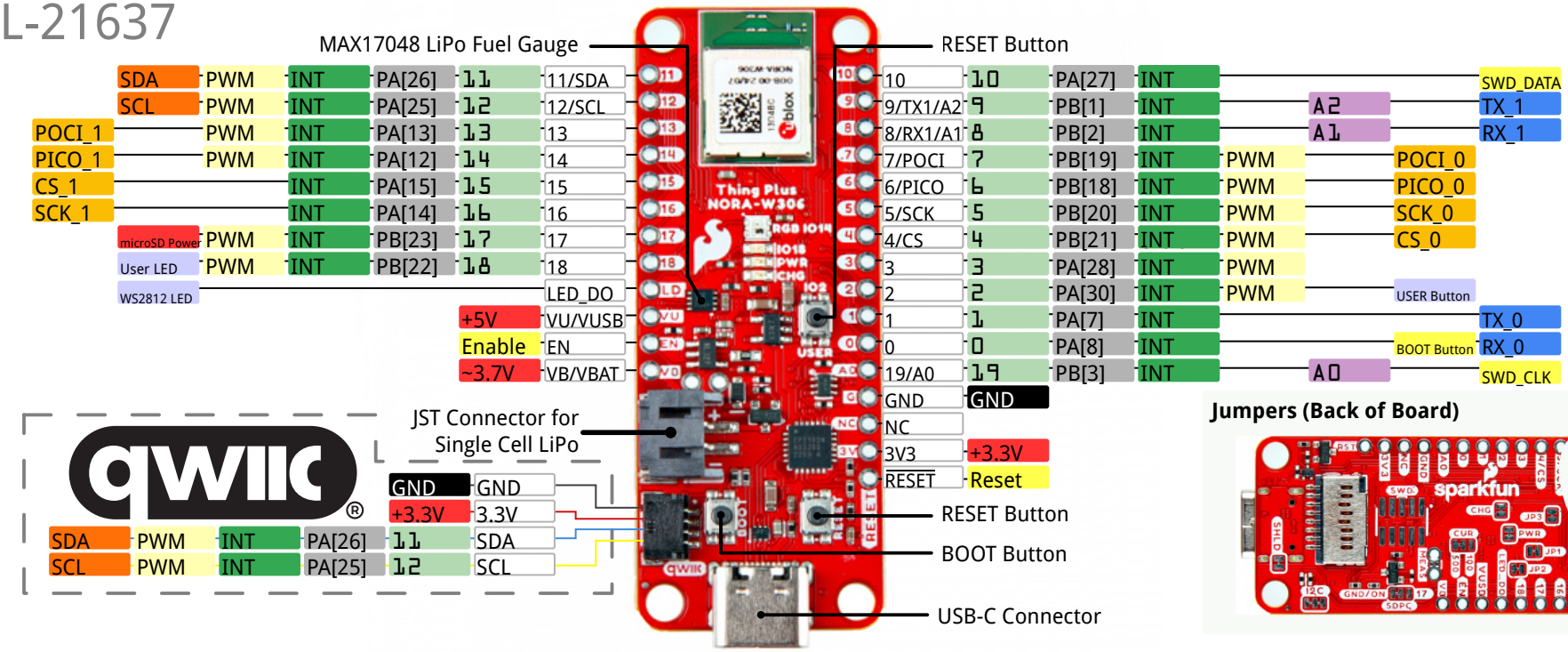
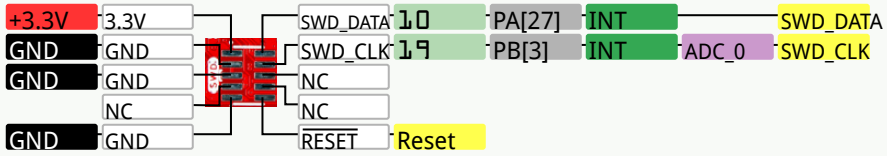
SparkFun Thing Plus (NORA-W306)

WRL-21637



SWD Header Footprint



Power and Logic Levels

VUSB: Direct to USB (5V)
VBAT: Direct to LiPo battery (and Microchip MCP73831 charger, 500mA default charge rate)
3V3: Output of XC6222 regulator (3.3V/700mA)
GPIO logic levels: 3.3V

Notes

- If pin 0 is connected to GND when the NORA-W306 boots up, the Arduino bootloader will not boot up properly and enter "test/debug" mode. Make sure that this pin is left HIGH at bootup so that it can run your code and enter "normal" mode.

U-blox NORA-W306 Module

- Realtek RTL8720DF Dual Processor Core
  - Real-M300 CPU (Arm®v8-M, Cortex®-M33)
  - Real-M200 CPU (Armv8-M, Cortex-M23)
  - Operating frequency: 200MHz M33; 20MHz M23
  - Arm TrustZone™ Hardware Encryption
  - Cryptographic Hardware Accelerator Engine
  - Secure Boot and Secure Debug Interface
  - 4MB Encrypted SPI Flash
  - SRAM: KM4 512kB; KM0 64kB
- 2.4GHz/5GHz WiFi 802.11a/b/g/n
- Bluetooth® BLE 5.3
- Built-in PCB Antenna

Interfaces

- 20x GPIO, 20x Interrupts, 3x 12-bit ADC, 12x PWM, 2x UART, 2x SPI, 1x I²C

User Interfaces

- RESET Button
- BOOT Button
- USER Button (2)
- MAX17048 LiPo Fuel Gauge via I²C
- CP2102N USB-to-Serial Converter

LEDs

- User LED: Blue (18)
- WS2812-2020 RGB LED: DI (14)
- Power LED: Red
- Charge LED: Orange

Legend

Name	Port	PWM
Power	UART	Interrupt
GND	I2C	Misc
Control	SPI	
Arduino	ADC	

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