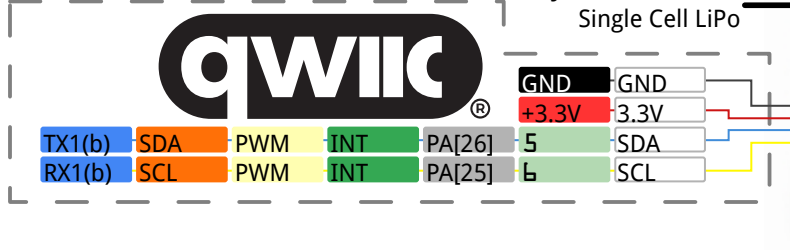
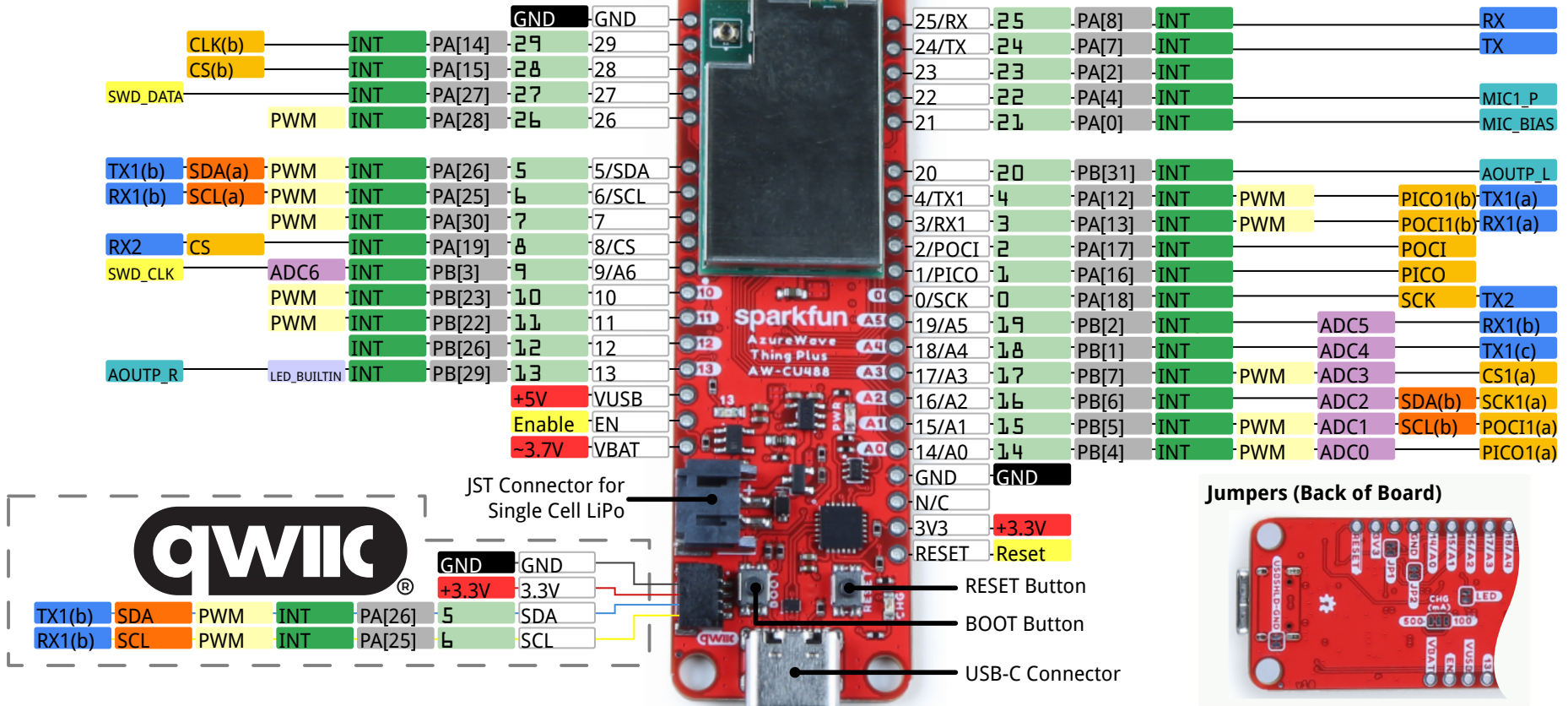
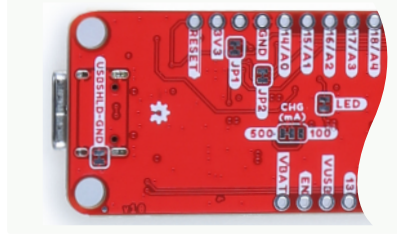


# SparkFun AzureWave Thing Plus (AW-CU488)

DEV-19957



## Jumpers (Back of Board)



### 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

### AzureWave AW-CU488 Module

- Realtek RTL8721DM Dual Processor Core
- Real-M300 CPU (Arm v8-M, Cortex-M33)
- Real-M200 CPU (Arm v8-M, Cortex-M23)
- up to 200MHz operating frequency
- 512kB SRAM and 4MB PSRAM
- 32Mbit SPI Flash
- 2.4GHz/5GHz WiFi 802.11a/b/g/n 1T1R WLAN
- Built-in Antenna w/ Internal Shielding Antenna
- 2-Channel Audio CODEC (8/12/16/24/32/48/.../176.4 KHz)

### Interfaces

- 30x GPIO, 30x Interrupts, 7x 12-bit ADC, 11x PWM, 2x UART, 2x SPI, 1x I2C

### User Interfaces

- RST Button
- BOOT Button

### LEDs

- User LED: Blue (13)
- Power LED: Red
- Charge LED: Orange

### Notes

- The GPIO can be muxed. Pins labeled with the (a) or (b) are alternative locations.
- If pin 27 is connected to GND when AW-CU488 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.

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

