

⚠ MAXIMUM current per pin
40mA, 20mA recommended

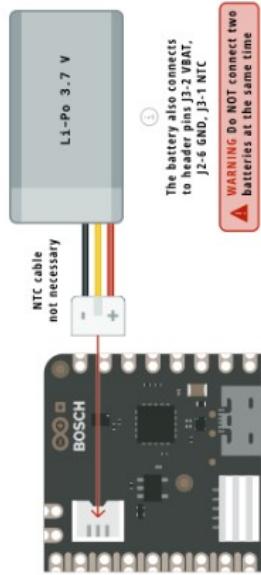
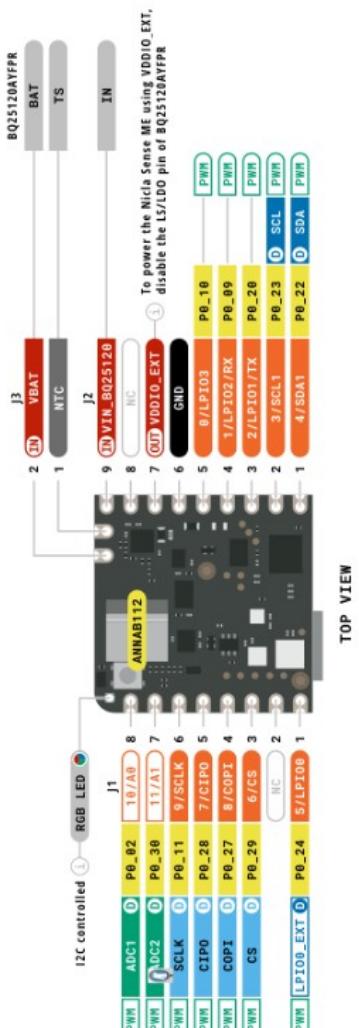
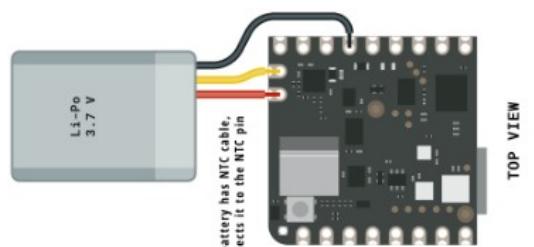
⚠ MAXIMUM current 200mA
for the entire package

⚠ The total current of each port power group **should not exceed** 100mA

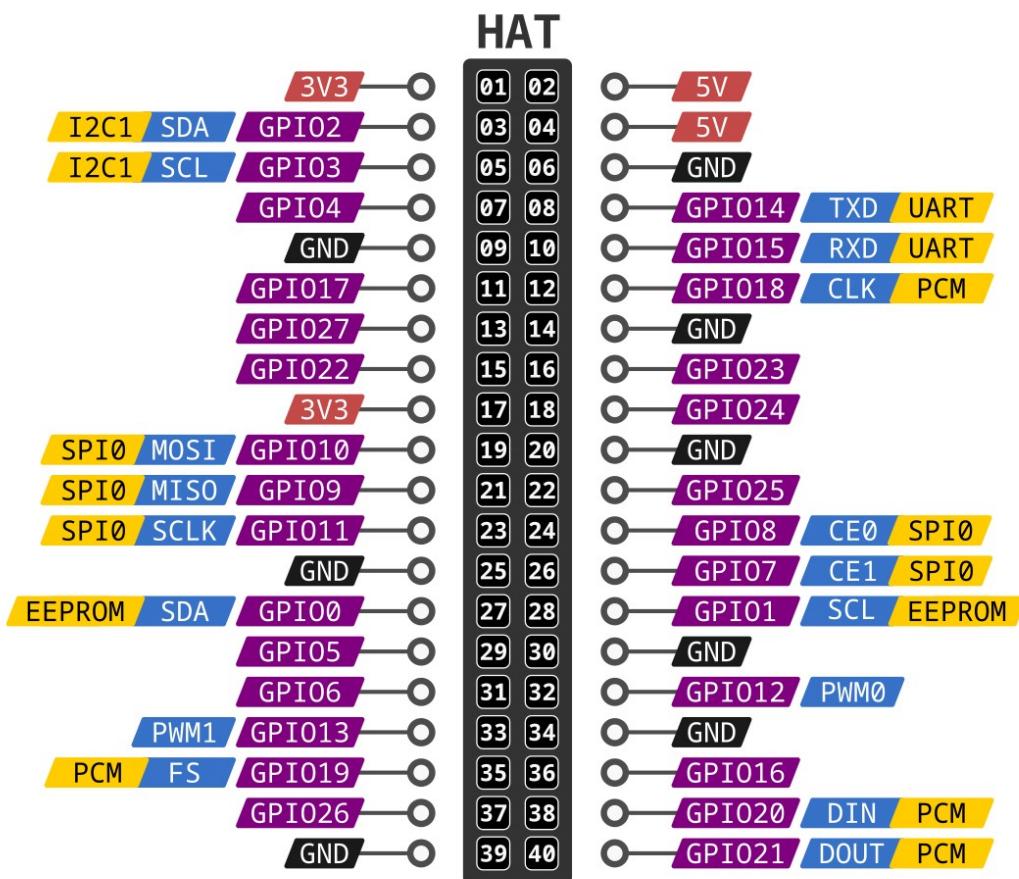
VIN 7-21 V input to the board.

NOTE: CIPO/COPI have previously been referred to as MISO/MOSI

■ Ground	■ Digital Pin
■ Power	■ Analog Pin
■ LED	■ Other Pin
■ Internal Pin	■ Microcontroller's Port
■ SWD Pin	■ Default



Legend:	MAXIMUM GPIOs are driven by bidirectional transistors powered by VDDIO_EXT. These transistors are meant for low power and can only drive very limited current. Please check transistor datasheet for details.	
■ Power	■ Power Input	□ Default
■	■ Power Output	□ Default
■ Ground	■ Analog External	□ Default
■	□ Analog External	□ Default
■ Main Part	■ UART/USART	□ Default
■	□ Secondary Part	□ Other SERIAL Communication
■ Internal Component	■ Analog	□ Default
■	□ PWM/Timer	□ Other Pins (Reset, System Control, Debugging)
■	□ LED	□ RGB LED
■	□ SPI	□ Other
■	□ I2C	□ CPIO/COPI



GND

 POWER

 GPIO NUMBER

 PIN FUNCTION

BeagleY-AI

40-pin HAT header pinout

4 Bands

 **1.2 Ω 10%**

Color	1st Digit	2nd Digit	Multiplier	Tolerance
Black	0	0	1	
Brown	1	1	10	1%
Red	2	2	100	2%
Orange	3	3	1 K	
Yellow	4	4	10 K	
Green	5	5	100 K	0.5%
Blue	6	6	1 M	0.25%
Violet	7	7	10 M	0.1%
Gray	8	8		0.05%
White	9	9		
Gold			0.1	5%
Silver			0.01	10%



Resistor Color Codes

1K = 1 000
1M = 1 000 000