

⚠ **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: CIP0/COPI have previously
been referred to as MISO/MOSI

Ground

Power

LED

Internal Pin

SWD Pin

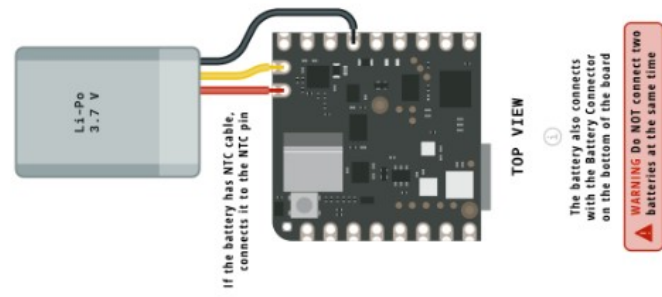
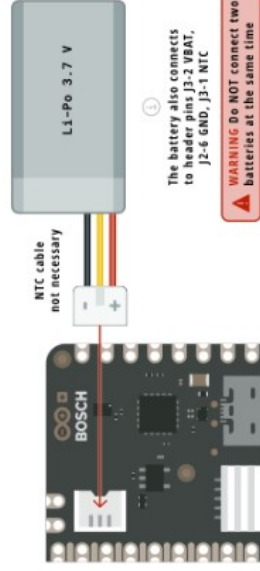
Digital Pin

Analog Pin

Other Pin

Microcontroller's Port

Default



Legend:

	Power
	Power Input
	Power Output
	Ground

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

	I2C
	SPI
	UART/USART
	Other SERIAL Communication
	Analog
	PWM/Timer

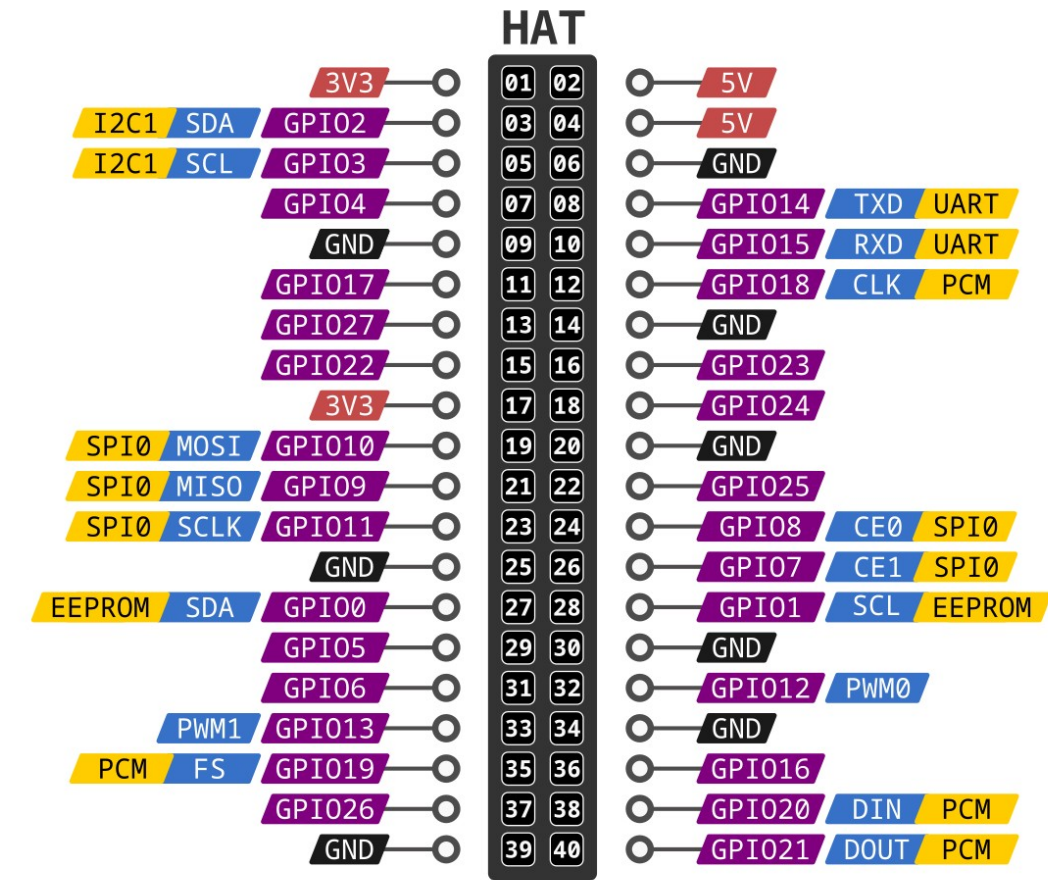
	Default
	Default
	Default
	Default

	LED
	RGB LED
	Other

MAXIMUM LPTIQs are driven by bidirectional translators powered by VDDIO_EXT. These translators are meant for low power and can only drive very limited current. please check translator datasheet for details.

VDDIO_EXT is software programmable between 1.8 and 3.3V

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



GND
 POWER
 GPIO NUMBER
 PIN FUNCTION

BeagleY-AI

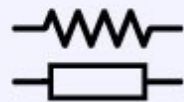
40-pin HAT header pinout

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