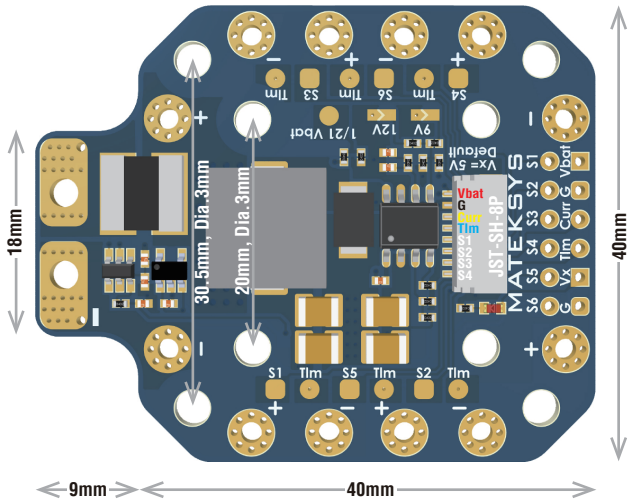
MATEKSYS PDB-HEX

QUICK START GUIDE

LAYOUT

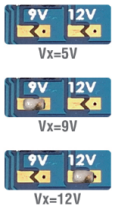


+ & - : LiPO & ESC power pads
6~60V (2~12S)

PDB/Current Sense resistor: 140A continuous, 264A burst.

Vbat: Battery voltage
G: Ground
Curr: current sensor signal, 264A range
Tlm: Duplicates Tlm pads for BLheli32 ESC telemetry,
Tlm pads are all shorted together

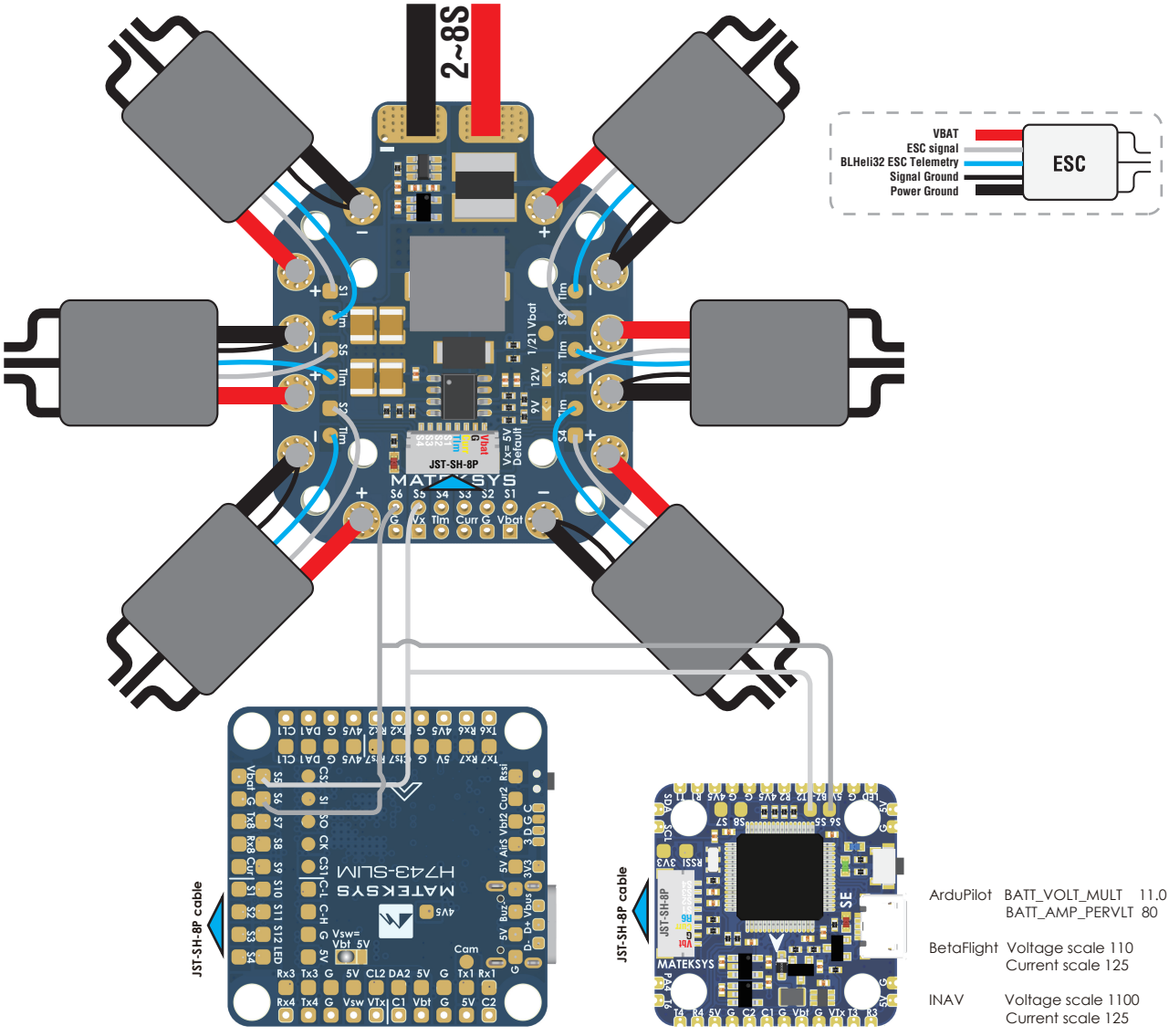
Vx: Regulator output
Vx= 5V by default, 5A cont.
Vx= 9V, 4A cont. 5A burst
Vx= 12V, 4A cont. 5A burst



S1/S2/S3/S4/S5/S6: ESC signal

1/21 Vbat: 1K:20K voltage divider
can be connected directly to MCU ADC pin

WIRING (2~8S)

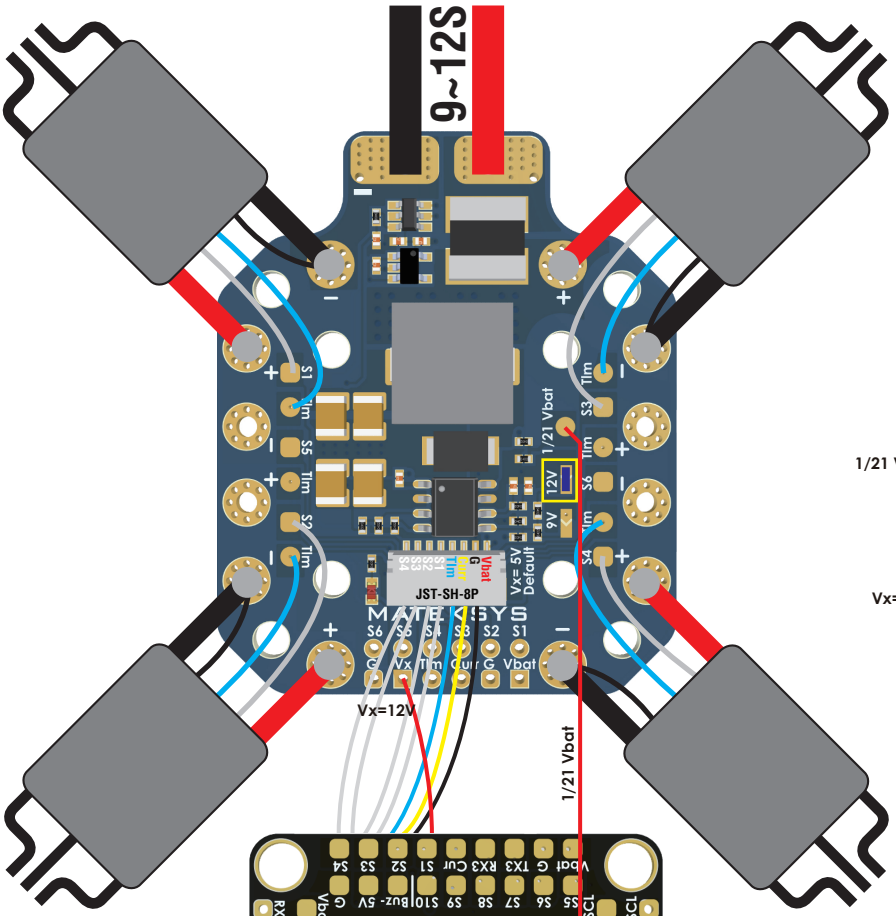


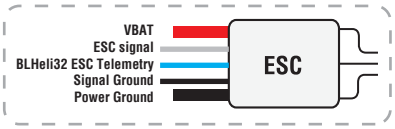
ArduPilot BATT_VOLT_MULT 11.0
BATT_AMP_PERVLT 80

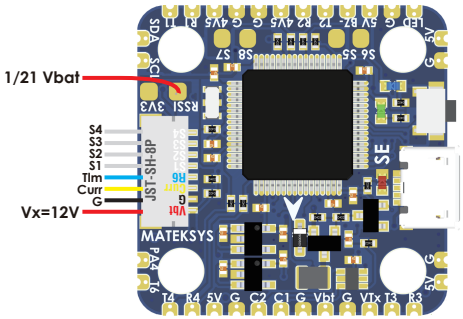
BetaFlight Voltage scale 110
Current scale 125

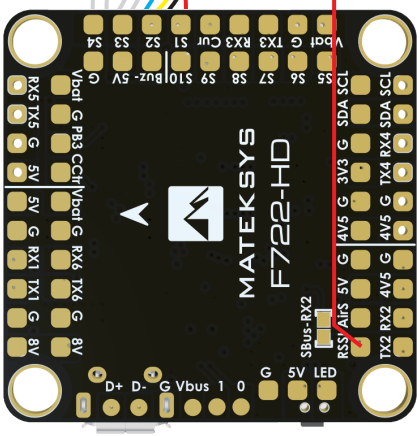
INAV Voltage scale 1100
Current scale 125

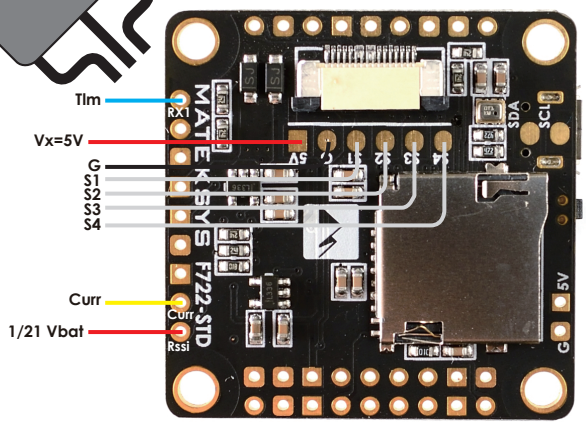
WIRING (9~12S)











BetaFlight

CLI *resource* to locate RSSI pin name
RSSI pin is ***C00***
then
resource ADC_RSSI 1 none
resource ADC_BATT 1 C00
set vbat_scale = 210
set ibata_scale = 125
save

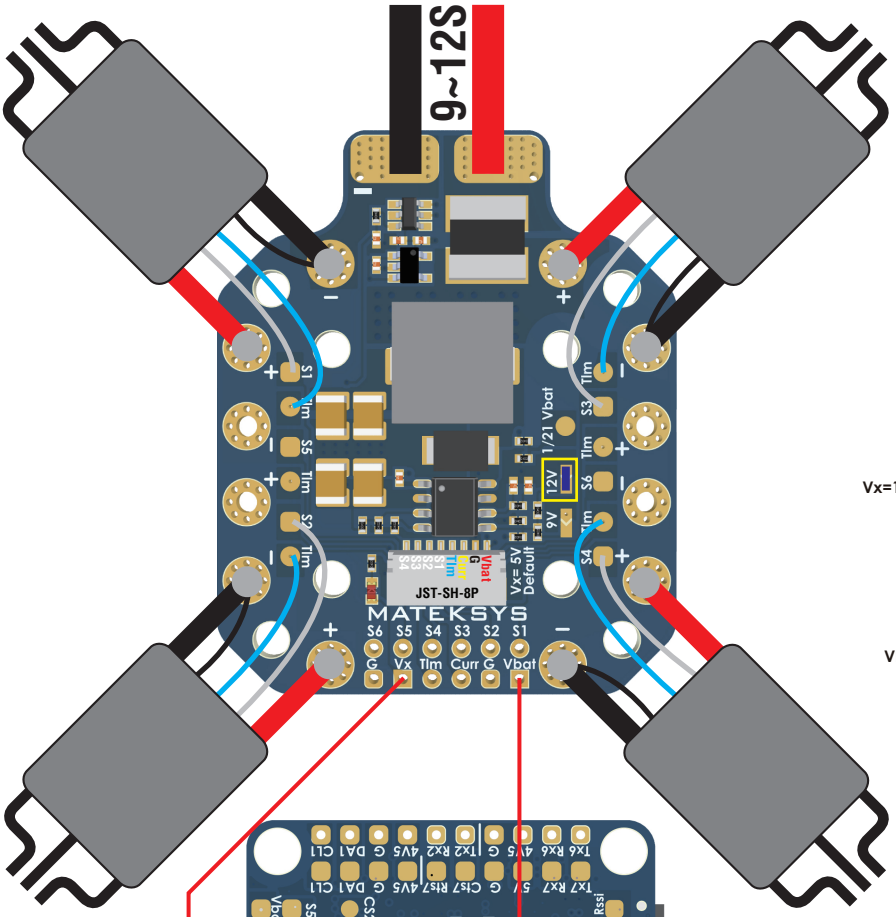
```
resource SPI_MOSI 2 C03
resource CAMERA_CONTROL 1 B15
resource ADC_BATT 1 C02
resource ADC_RSSI 1 C00
resource ADC_CURR 1 C01
resource ADC_EXT 1 A04
resource PINIO 1 A15
resource PINIO 2 B03
```

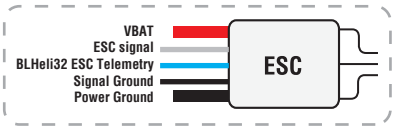
INAV

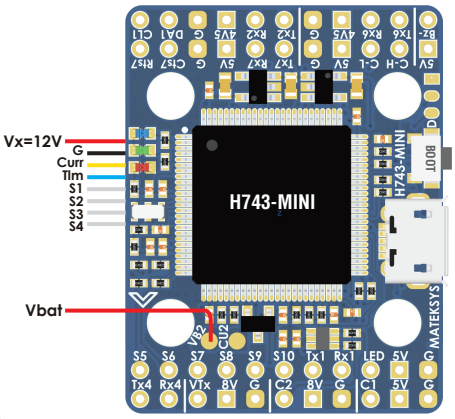
CLI *get adc* to locate rssi_adc_channel
rssi_adc_channel is ***3*** by default
then
set rssi_adc_channel = 0
set vbat_adc_channel = 3
set vbat_scale = 2100
set current_meter_scale = 125
save

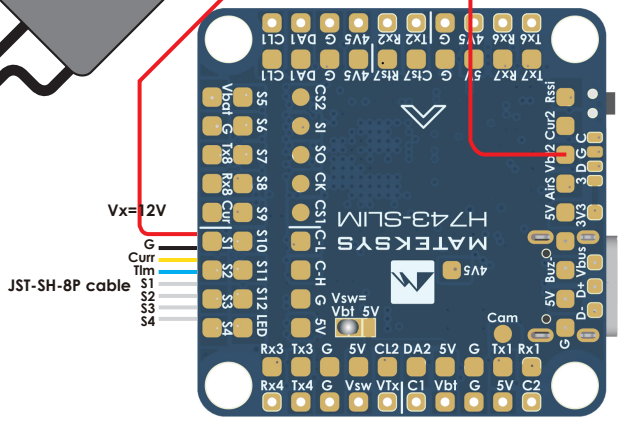
```
# get adc
vbat_adc_channel = 1
Allowed range: 0 - 4

rssi_adc_channel = 3
Allowed range: 0 - 4

current_adc_channel = 2
Allowed range: 0 - 4

airspeed_adc_channel = 4
Allowed range: 0 - 4
```

WIRING (9~12S)









H743-slim Vbt2 pad, H743-mini VB2 pad support 0~69V.

ArduPilot	BetaFlight
BATT_AMP_PERVLT 80	CLI
	resource ADC_BATT 1 A04
BATT2_VOLT_PIN 18	set vbat_scale = 210
BATT2_VOLT_MULT 21	set ibata_scale = 125
or	save
BATT_VOLT_PIN 18	
BATT_VOLT_MULT 21	