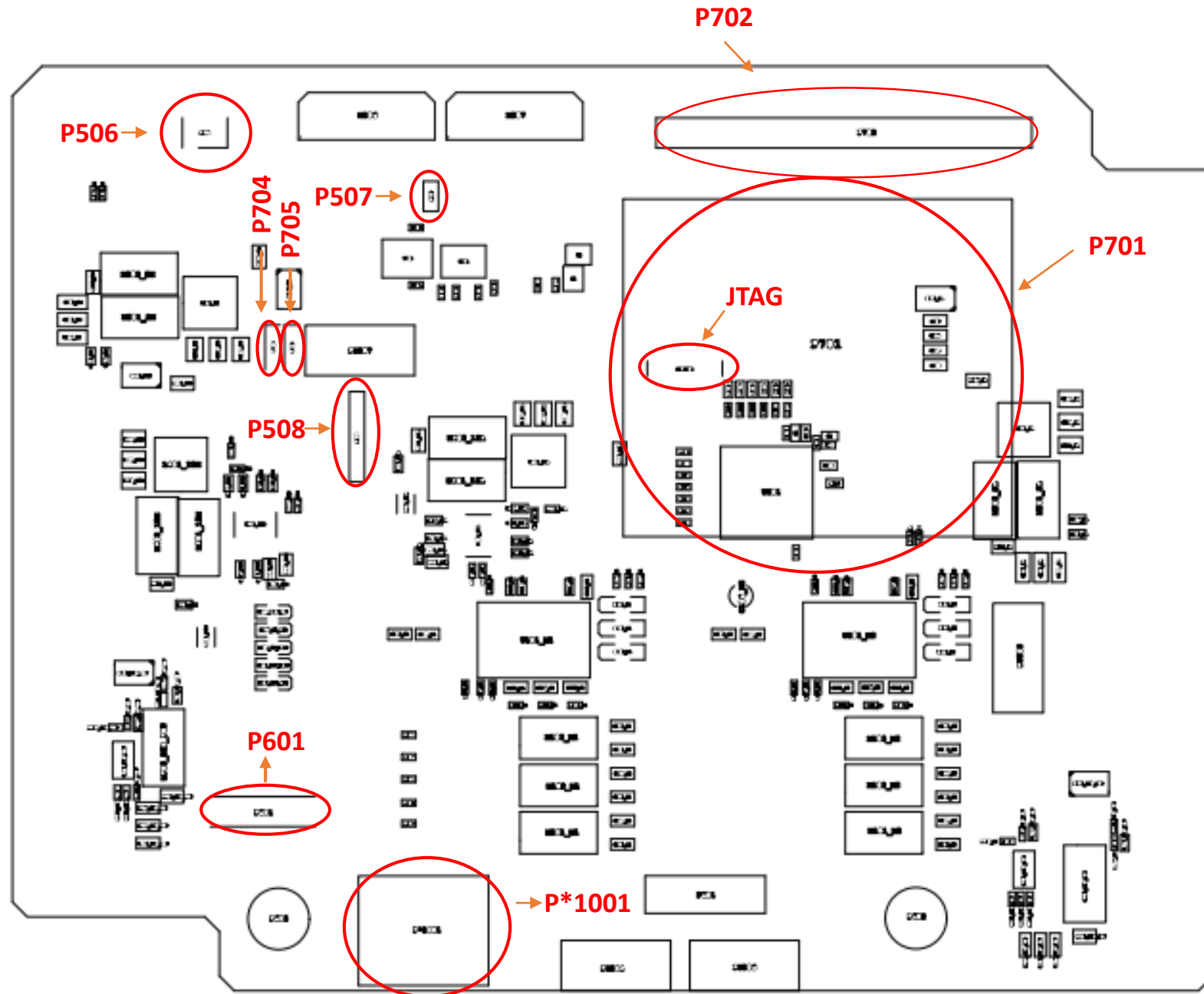
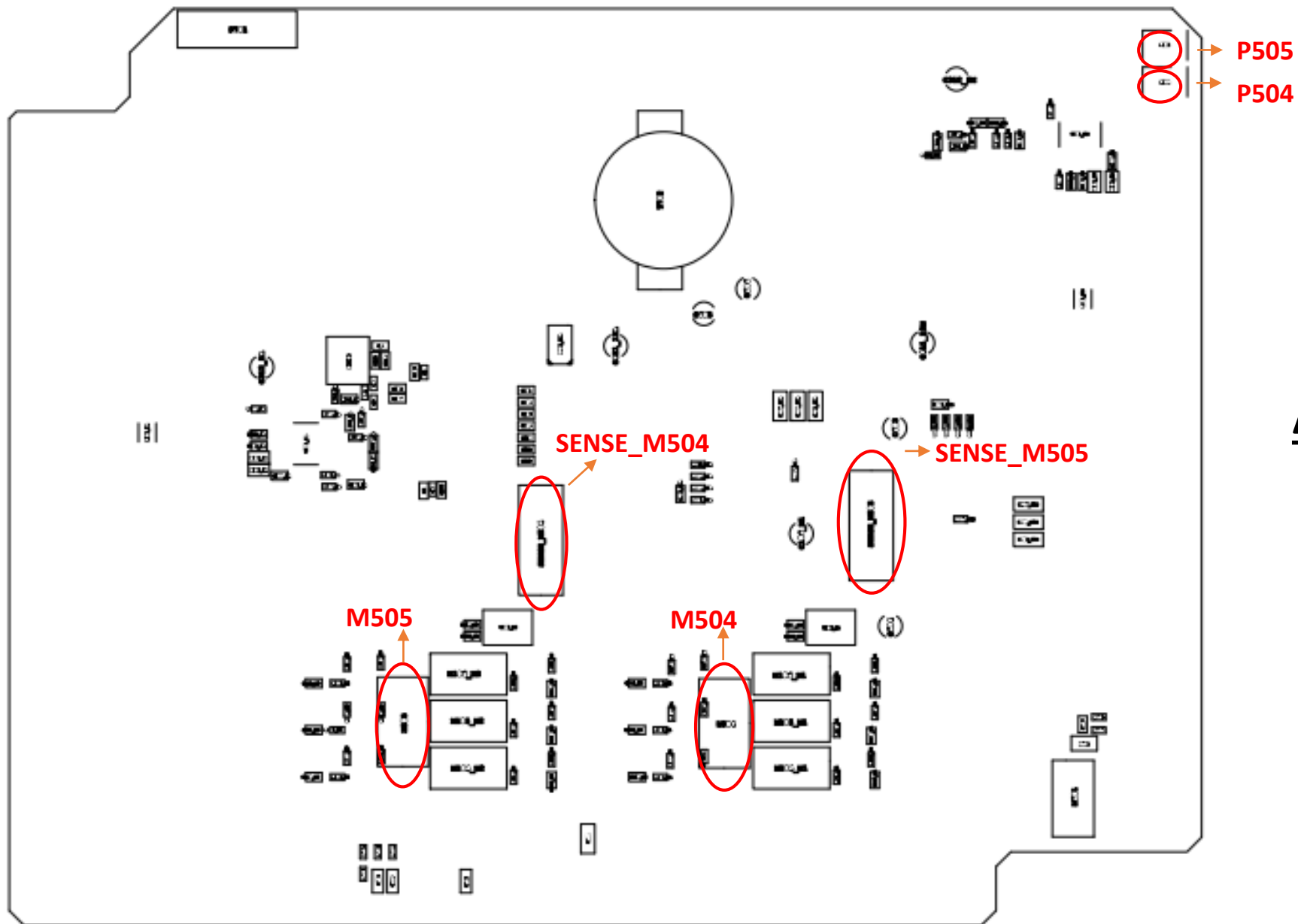


Motor Control Board Connector Pinout



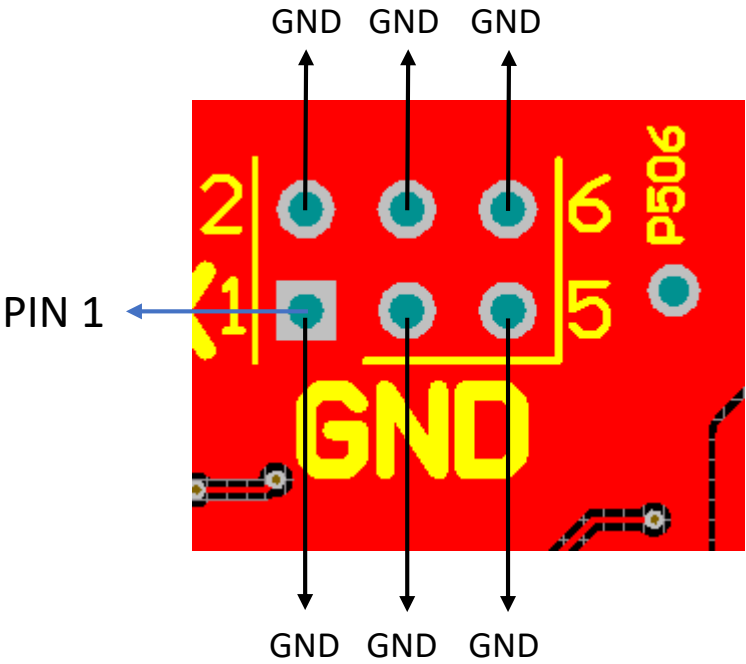
ASSEMBLY
TOP



ASSEMBLY BOTTOM

Top Side

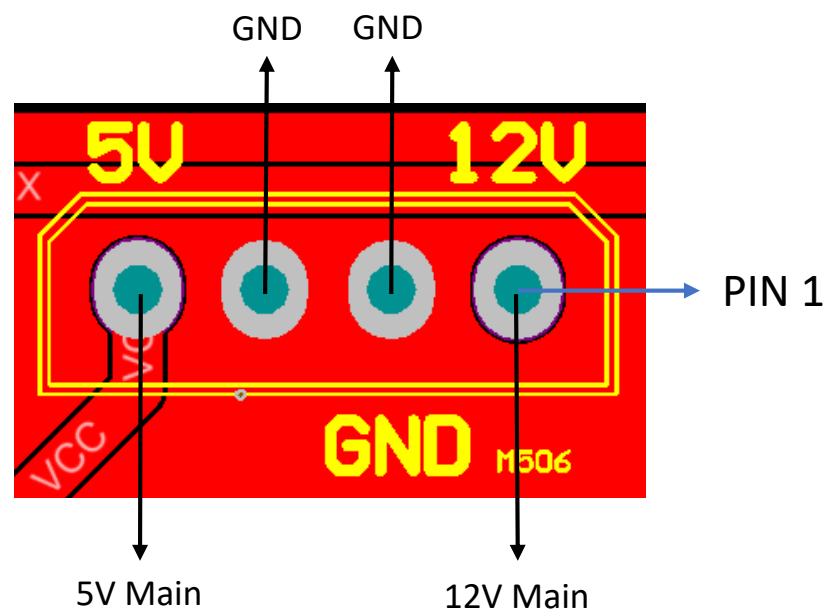
Connector : P506



Pin Number	Pin Description
1	GND
2	GND
3	GND
4	GND
5	GND
6	GND

Connector : M506

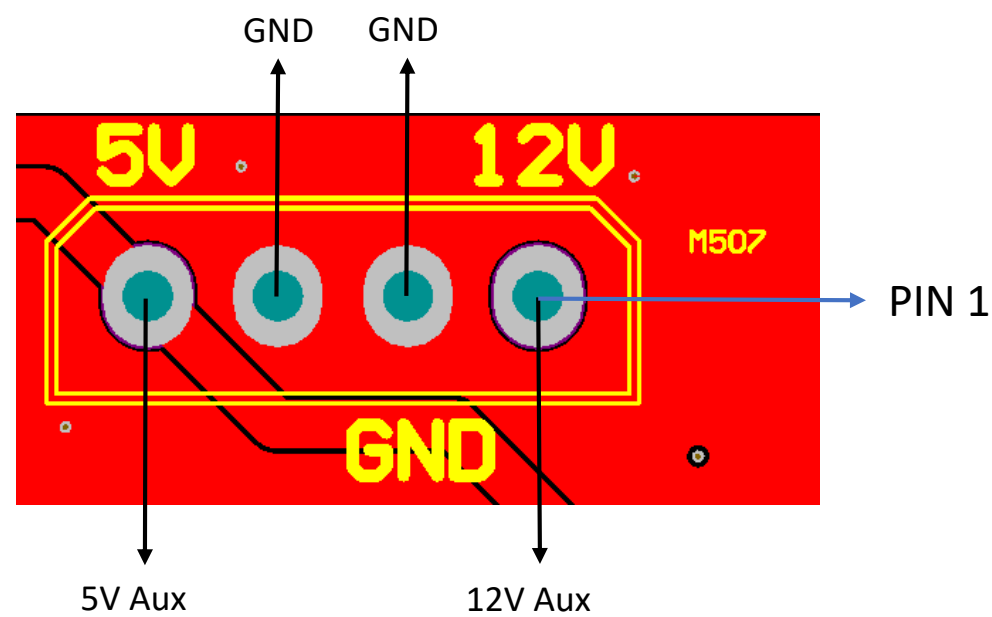
5V Main (Total 5V Main power 7A, up to 3A used by system 4A min. available to user) Regulated
12V Main (Total 12V Main power 7A, up to 0.5A used by system 6.5A min. available to user) Regulated



Pin Number	Pin Description
1	12V Main
2	GND
3	GND
4	5V Main

Connector : M507

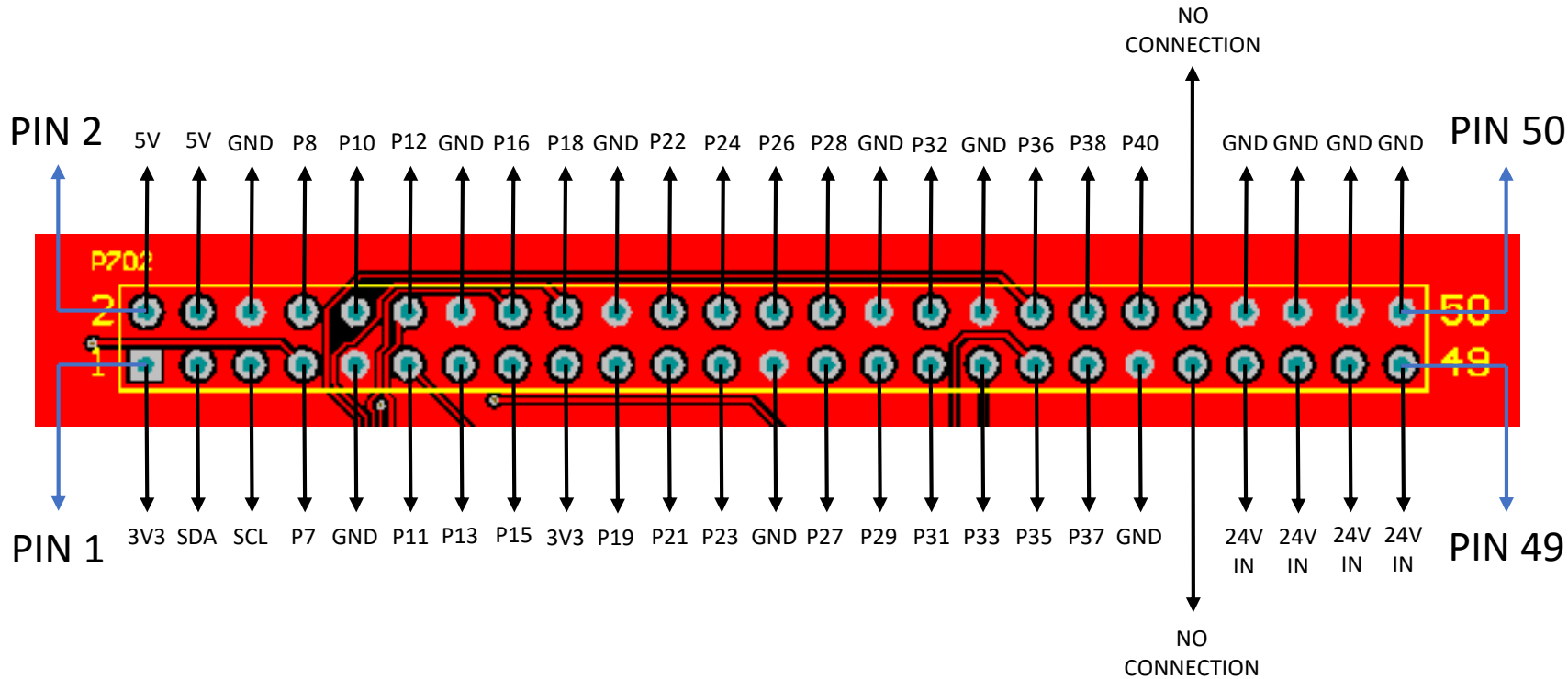
5V Aux (Total 5V Aux power 7A) Regulated
12V Aux (Total 12V Aux power 7A) Regulated



Pin Number	Pin Description
1	12V Aux
2	GND
3	GND
4	5V Aux

Connector : P702

24V Battery - 9A limited by pin - Unregulated
5V Main (Total 5V Main power 7A, up to 3A used by system 4A min. available to user) Regulated



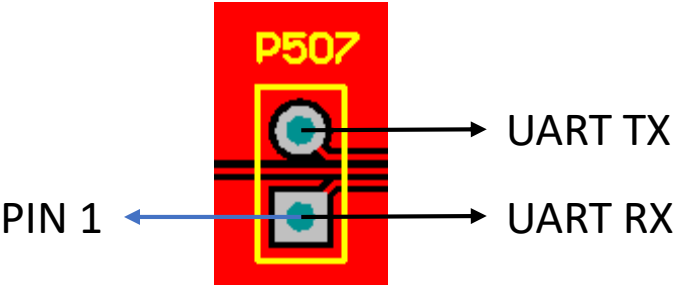
Pin Number	Pin Description
1	3V3
2	5V
3	SDA
4	5V
5	SCL
6	GND
7	P7
8	P8
9	GND
10	P10
11	P11
12	P12
13	P13
14	GND
15	P15

Pin Number	Pin Description
16	P16
17	3V3
18	P18
19	P19
20	GND
21	P21
22	P22
23	P23
24	P24
25	GND
26	P26
27	P27
28	P28
29	P29
30	GND

Pin Number	Pin Description
31	P31
32	P32
33	P33
34	GND
35	P35
36	P36
37	P37
38	P38
39	GND
40	P40
41	NOT CONNECT
42	NOT CONNECT
43	24V IN
44	GND
45	24V IN

Pin Number	Pin Description
46	GND
47	24V IN
48	GND
49	24V IN
50	GND

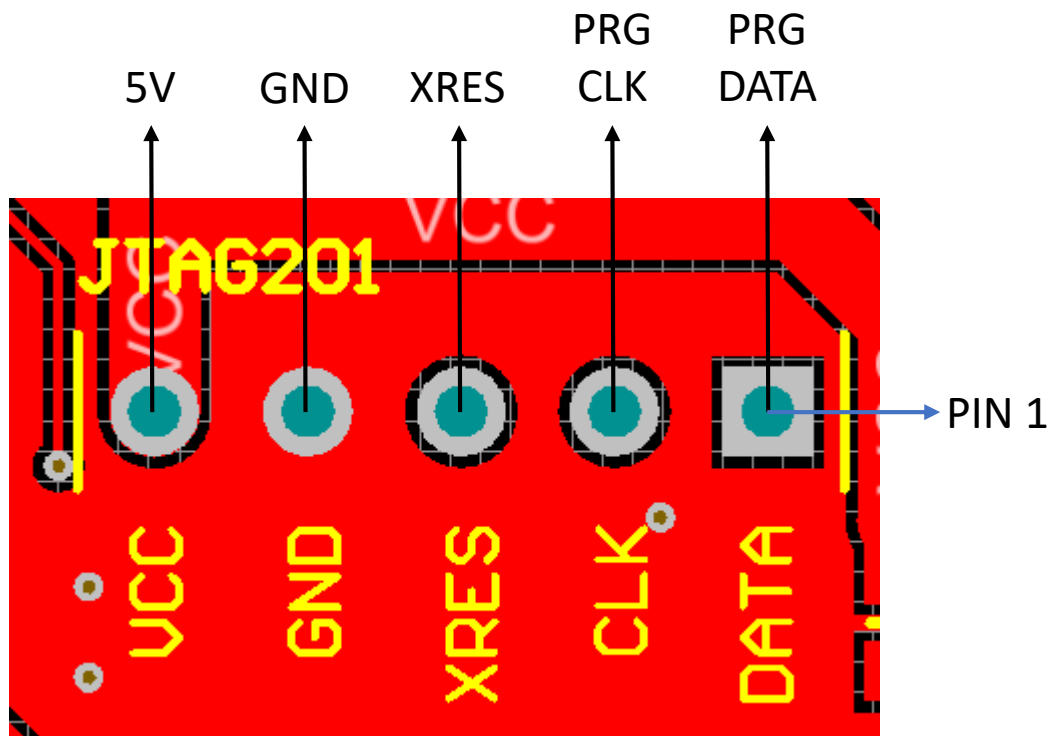
Connector : P507



Pin Number	Pin Description
1	UART RX
2	UART TX

Connector : JTAG201

5V Main (Total 5V Main power 7A, up to 3A used by system 4A min. available to user) Regulated

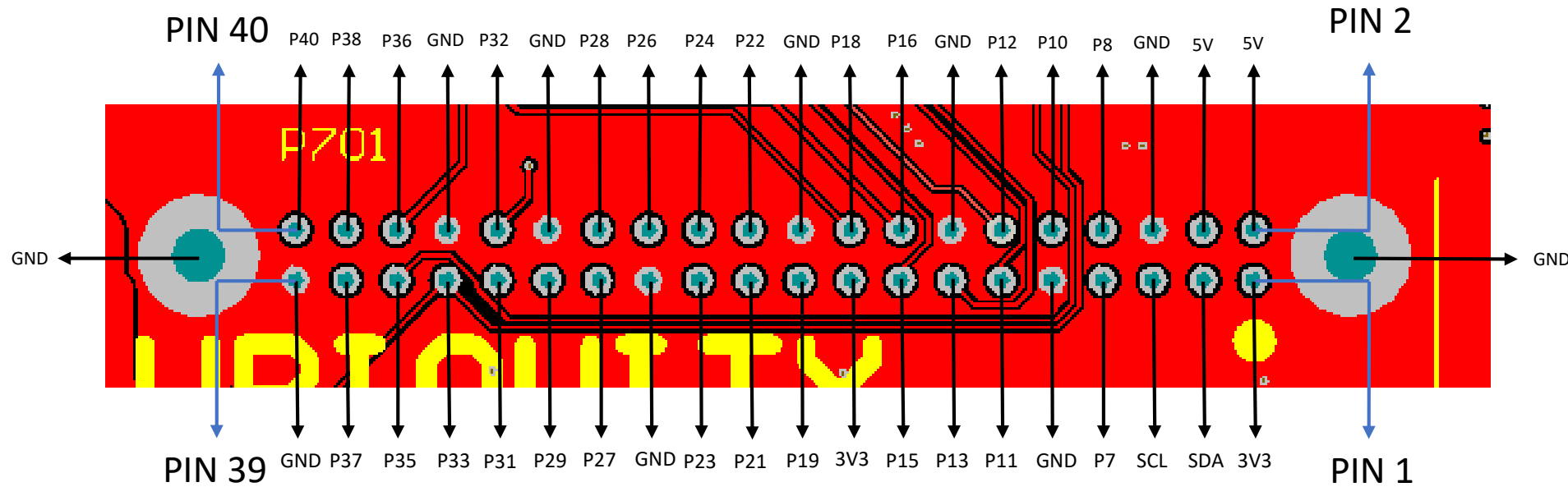


Pin Number	Pin Description
1	Program Data
2	Program Clock
3	XRES
4	GND
5	5V

Connector : P701

Raspberry pi 3B+ header

5V Main (Total 5V Main power 7A, up to 3A used by system 4A min. available to user) Regulated

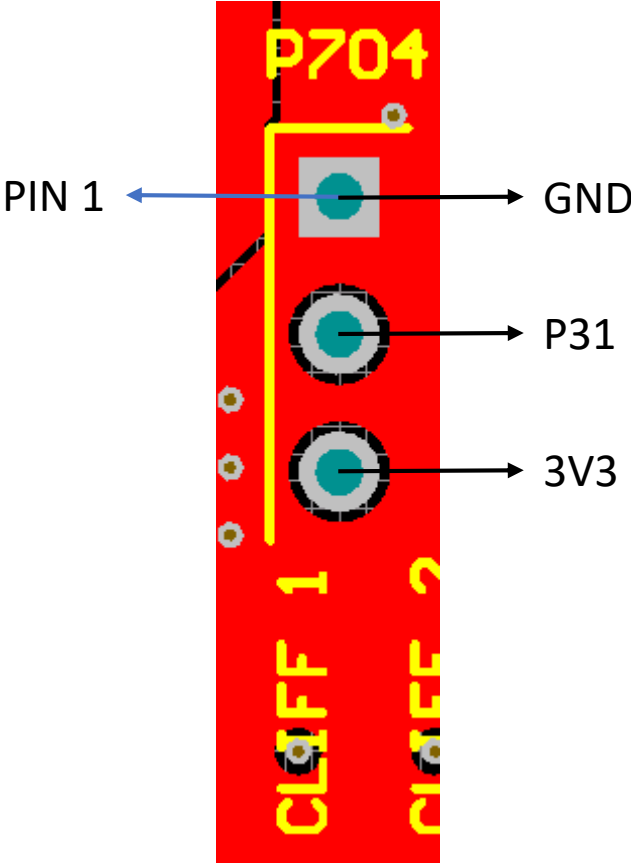


Pin Number	Pin Description
1	3V3
2	5V
3	SDA
4	5V
5	SCL
6	GND
7	P7
8	P8
9	GND
10	P10
11	P11
12	P12
13	P13
14	GND
15	P15

Pin Number	Pin Description
16	P16
17	3V3
18	P18
19	P19
20	GND
21	P21
22	P22
23	P23
24	P24
25	GND
26	P26
27	P27
28	P28
29	P29
30	GND

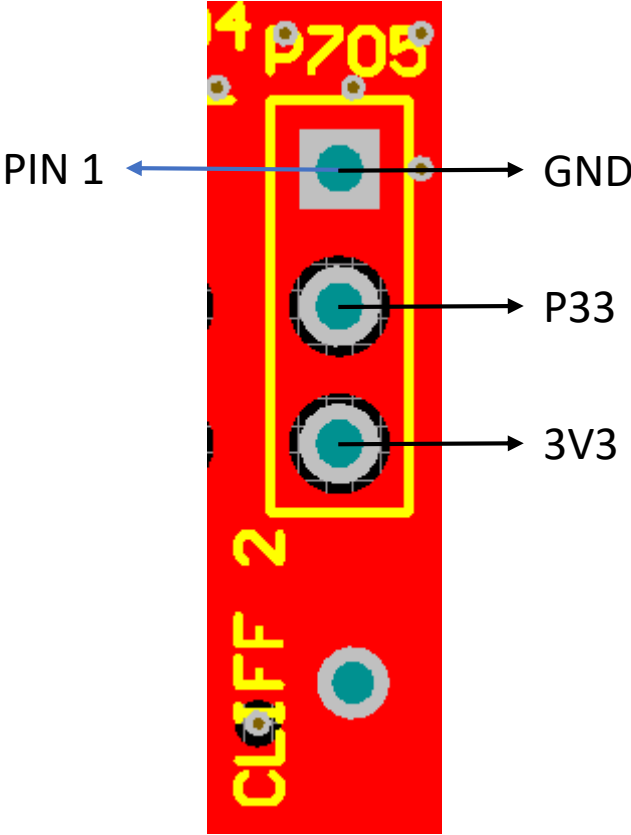
Pin Number	Pin Description
31	P31
32	P32
33	P33
34	GND
35	P35
36	P36
37	P37
38	P38
39	GND
40	P40

Connector : P704



Pin Number	Pin Description
1	GND
2	P31
3	3V3

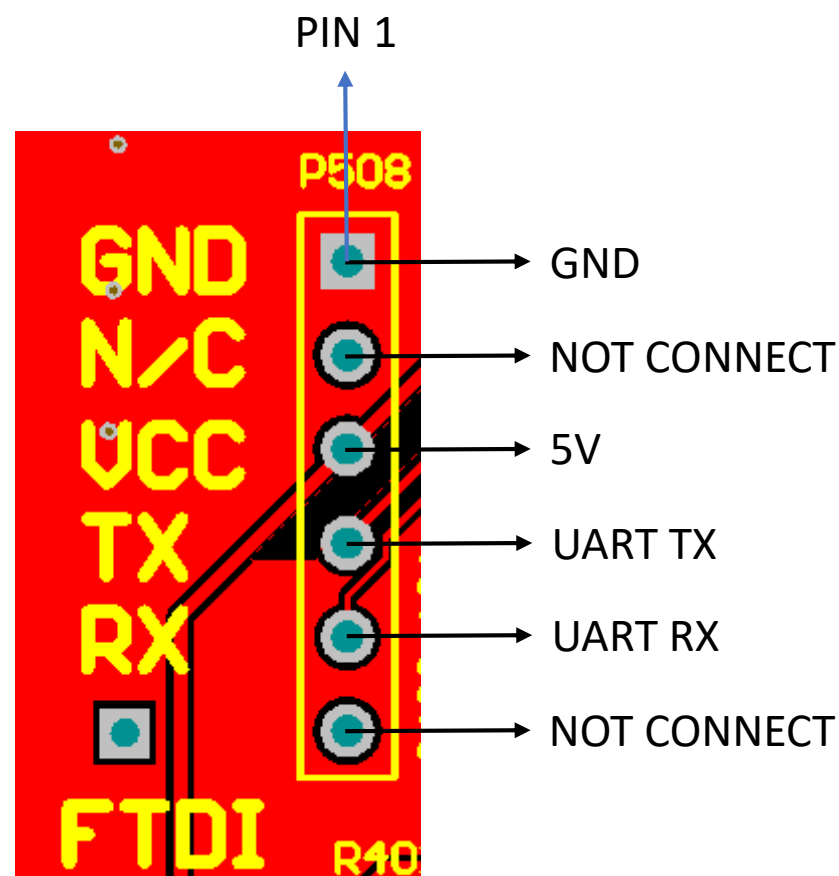
Connector : P705



Pin Number	Pin Description
1	GND
2	P33
3	3V3

Connector : P508

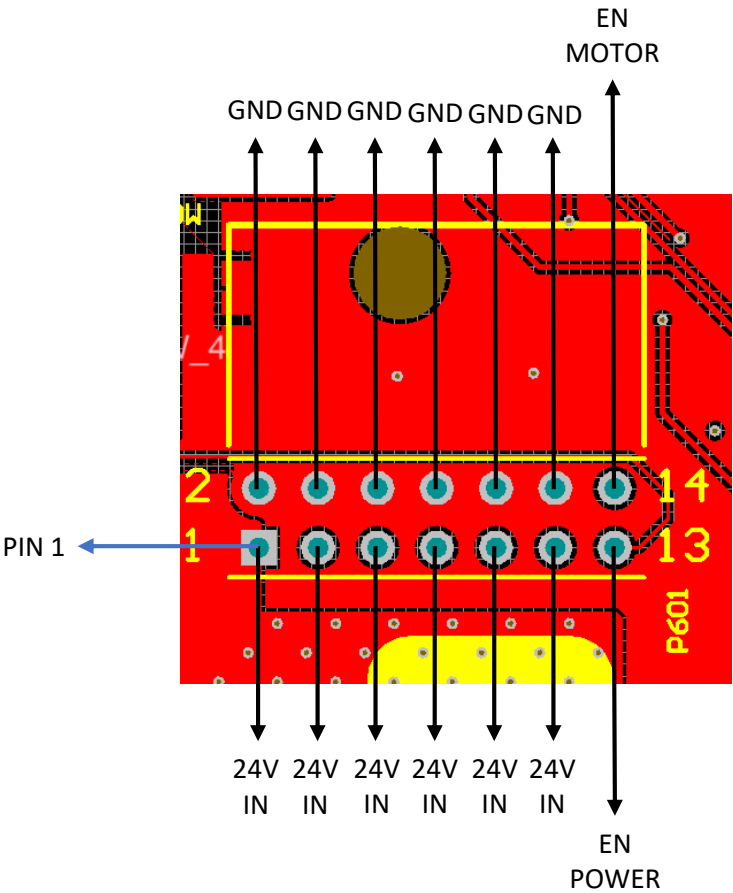
5V Main (Total 5V Main power 7A, up to 3A used by system 4A min. available to user) Regulated



Pin Number	Pin Description
1	GND
2	NOT CONNECT
3	5V
4	UART TX
5	UART RX
6	NOT CONNECT

Connector : P601

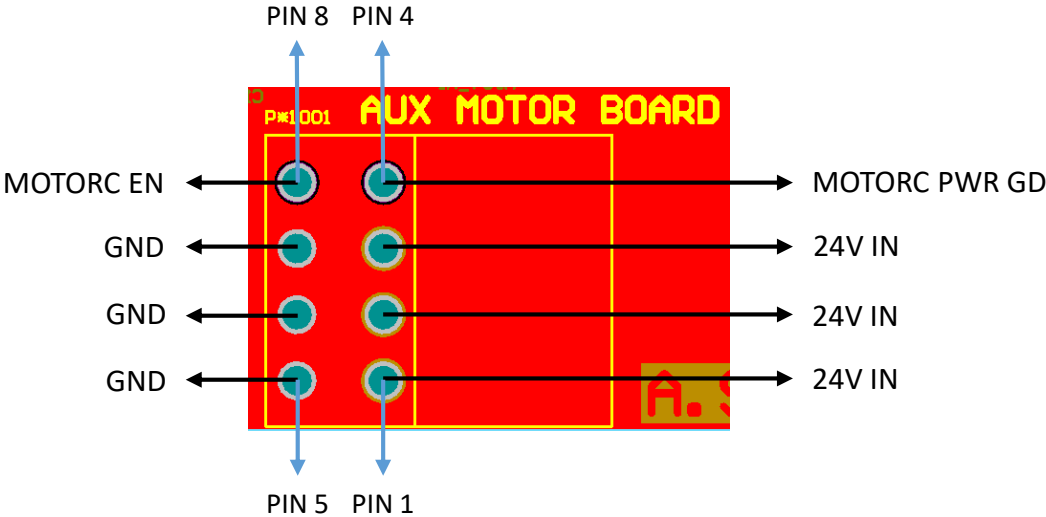
24V Battery - 9A limited by pin - unregulated



Pin Number	Pin Description
1	24V IN
2	GND
3	24V IN
4	GND
5	24V IN
6	GND
7	24V IN
8	GND
9	24V IN
10	GND
11	24V IN
12	GND
13	ENABLE POWER
14	ENABLE MOTOR

Connector : P*1001

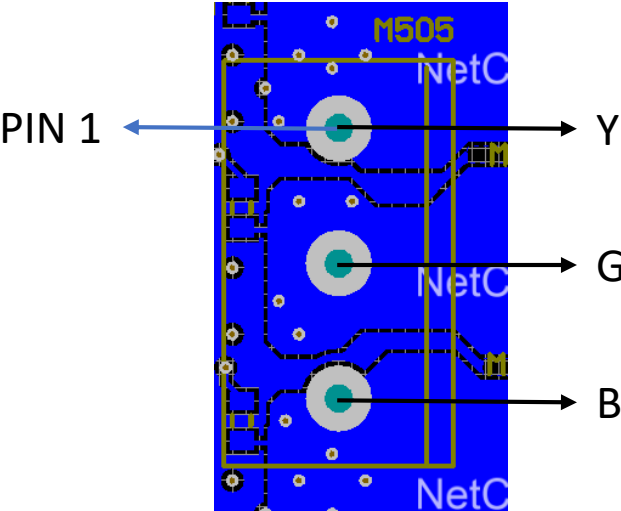
24V Battery - 9A limited by pin - unregulated



Pin Number	Pin Description
1	24V IN
2	24V IN
3	24V IN
4	MOTORC PWR GD
5	GND
6	GND
7	GND
8	MOTORC EN

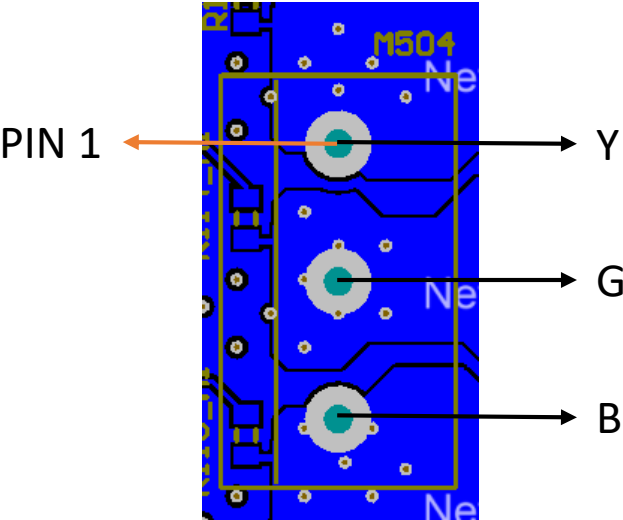
Bottom Side

Connector : M505



Pin Number	Pin Description
1	Y
2	G
3	B

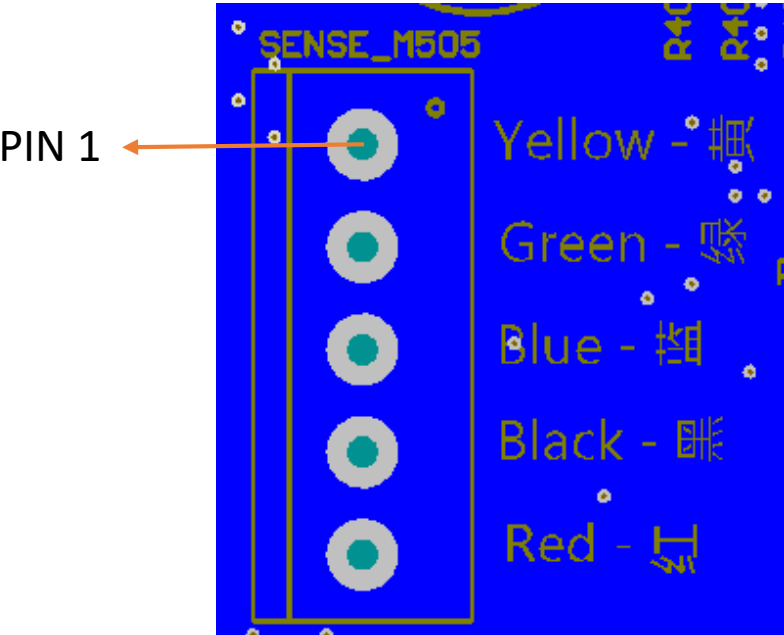
Connector : M504



Pin Number	Pin Description
1	Y
2	G
3	B

Connector : SENSE_M505

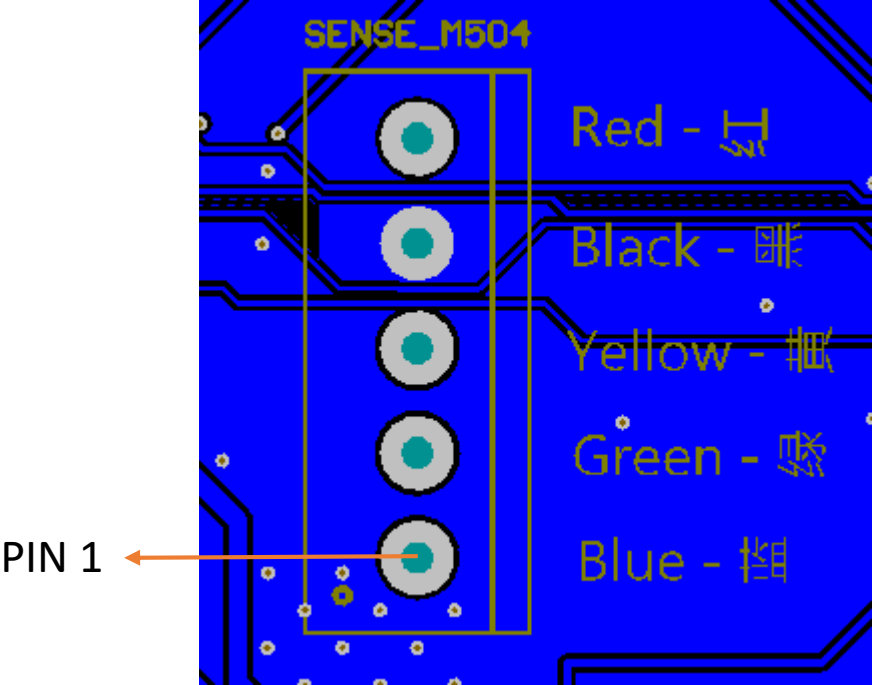
5V Main (Total 5V Main power 7A, up to 3A used by system 4A min. available to user) Regulated



Pin Number	Pin Description
1	Yellow
2	Green
3	Blue
4	Black
5	Red

Connector : SENSE_M504

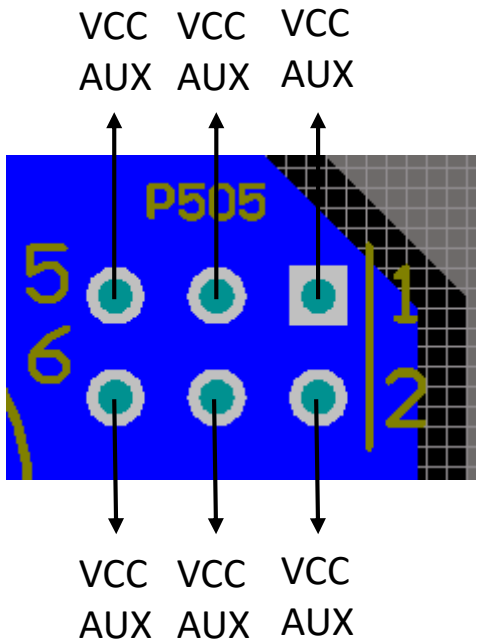
5V Main (Total 5V Main power 7A, up to 3A used by system 4A min. available to user) Regulated



Pin Number	Pin Description
1	Blue
2	Green
3	Yellow
4	Black
5	Red

Connector : P505

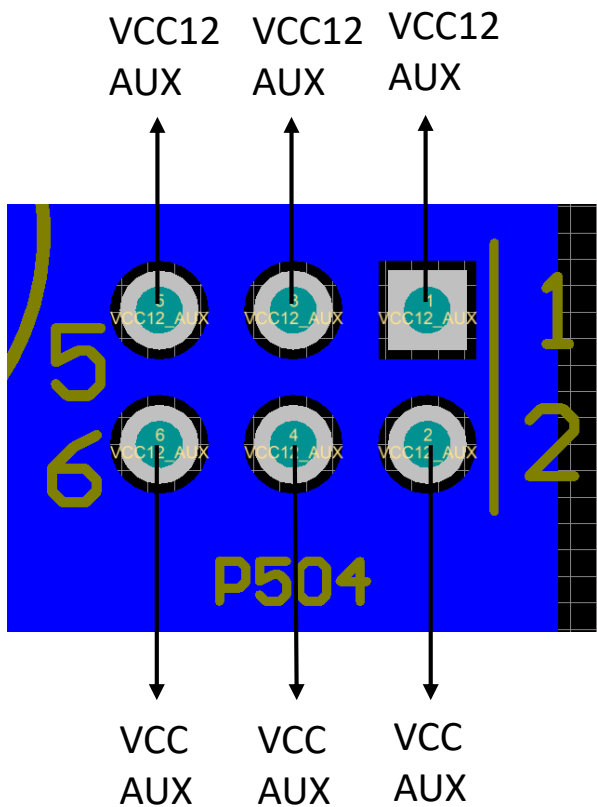
5V Aux (Total 5V Aux power 7A) Regulated



Pin Number	Pin Description
1	VCC AUX
2	VCC AUX
3	VCC AUX
4	VCC AUX
5	VCC AUX
6	VCC AUX

Connector : P504

12V Aux (Total 12V Aux power 7A) Regulated



Pin Number	Pin Description
1	VCC12 AUX
2	VCC12 AUX
3	VCC12 AUX
4	VCC12 AUX
5	VCC12 AUX
6	VCC12 AUX

Thank You