

Test Switches

+5V_____PWM_A2

+5V___OO__DIR_A

Boost Gate Control

V_LS-A RESET S THRES > DISCH

TRIG OUT CONT S

Control Circuit Isolation

LED_Ct_-_A_

LED_An_+_A

LED_An_-_A_ LED_Ct_+_A_

LED_Ct_-_A

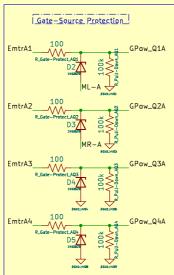
A03405

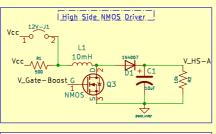
V_Bat

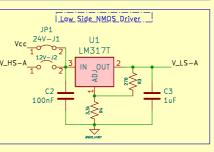
Short circuit protection

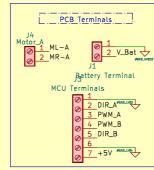
F1
Fuse_30A(Slow) PWM_A LED_An_+_A

250 1 16 V_HS -A
15 EmtrA1
12 14 V_HS -A
13 EmtrA2
250 3
14 V_HS -A
13 EmtrA2
250 12 V_LS -A
11 EmtrA3
250 7
10 V_LS -A
9 EmtrA4

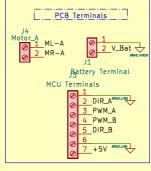


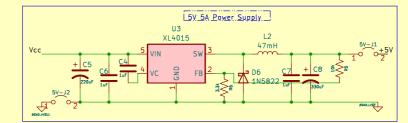


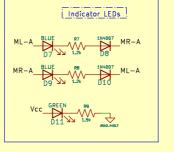












- Features
 1. Back EMF Protection.

 2. 2x Channel.

 2. Able to handle 10A per channel with 30A peak, and 5-30V with 50V peak.

 3. PWM Input should be isolated (No common ground with MCU).

 4. LEDs indicating the direction of the Motor.

 5. Push button for testing the motor in both the directions.

 6. XT60 Terminals.

 7. Should not jitter at low speeds.

 8. Should have a 100k resistor at output to provide a discharge path for Back EMF.

 9. Should have a voltage feedback from the output terminals.

 10. Reverse Voltage Protection from the battery.

 11. Over Current Protection.

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Output filter capacitors

Notes:
1. Driving frequency shouldn't increase more than 100kHz
2. High side NMOS recieves 40V at 24V mode and 26V at 12V mode
3. Switching frequency of boost is 50kHz with 50% duty cycle