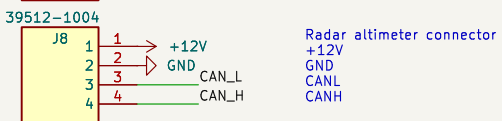
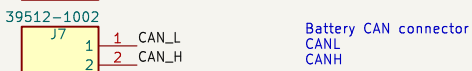
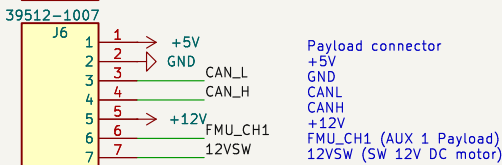
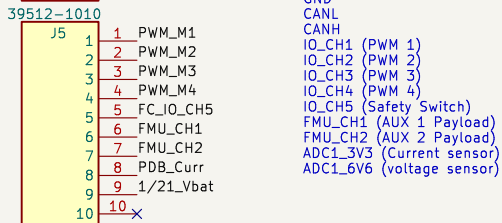
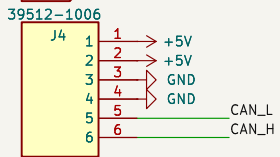
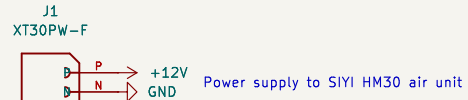
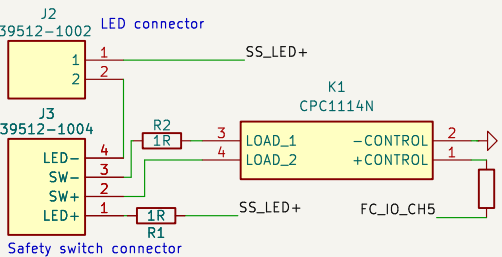


### Additional outside connectors



### Safety switch; external LED



### Connectors on this PCB:

- SIYI HM30 power connector
- FC connector (6+10 pin)
- Payload connector
- Battery CAN connector
- Radar altimeter connector
- Safety Switch LED connector
- Safety Switch connector
- Precharge/power switch connector
- Motor 1 connectors (XT60+5 pin)
- Motor 2 connectors (XT60+5 pin)
- Motor 3 connectors (XT60+5 pin)
- Motor 4 connectors (XT60+5 pin)

### Note to other connections not on this PCB

- FC and SIYI HM30 are directly connected on top of battery
- Camera and Gimbal are directly connected to HM30
- FC and GPS/Compass are directly connected on top of battery

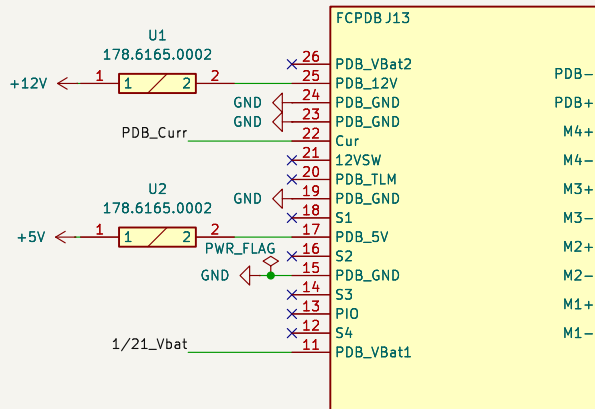
### Note to power consumption of Quiver

- SIYI A8 /12V = avg. 5W and peak up to 12W
  - HM30 video transmitter /12V = 5W
  - Radar altimeter /12V or 5V = up to 2W
  - Pixhawk 6X /5V = up to 2.5W
  - Pixhawk 6X peripherals /5V = limited to 1.5A / 7.5W
  - Payload around 10W at 12V (intermittent activation)
- = -22W on the 12V bus and -10W on the 5V bus

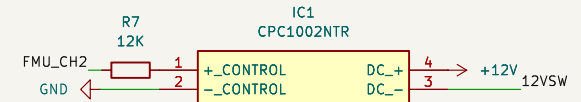
### Note regarding the precharge/power connector:

A switch is connected to the precharge/power connector. When the switch is enabled the power system will be precharged and 12V and 5V will be distributed to all devices. The drone is powered on. During precharge state the main voltage will be low to arm the drone. Before flight the solid state safety switch has to be enabled (this can be included into the arming workflow).

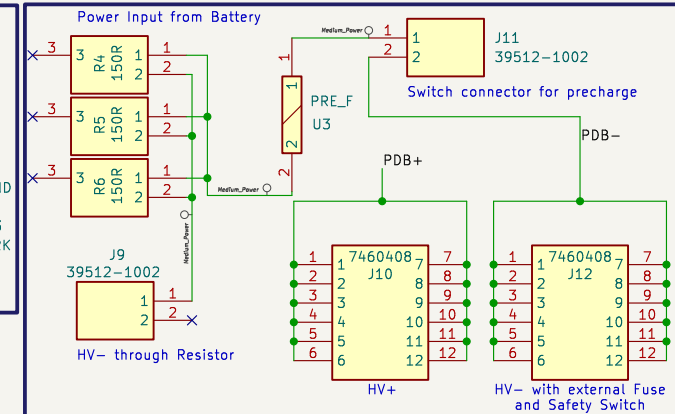
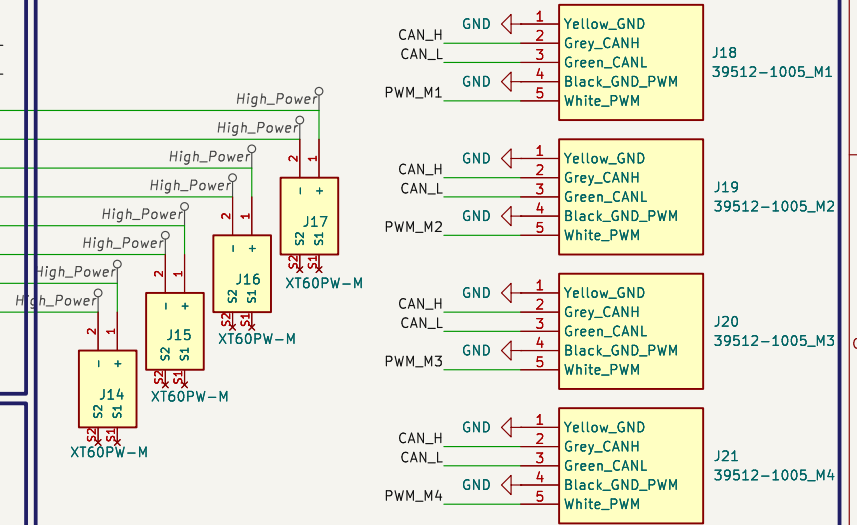
PDB  
Power supply  
5V - 5A cont. / 6A burst (25W)  
12V - 4A cont. /5A burst (48W)  
Current measurement up to 440A burst (3.3V)  
Voltage measurement 1/21 (max 2.857V output at 60V)



### 12V switch for payload DC motor



### Motor Connectors



Sheet: /  
File: Quiver\_PDB\_01.kicad\_sch

### Title:

Size: A4  
KiCad E.D.A. 9.0.0

Date:

Rev:

Id: 1/1