Matek Systems

MANUAL

FCHUB-6S

w/ Current Sensor 184A, BEC 5V & 10V, 6S Max.

This PDB distributes power from a 3~6S LiPo pack to 4 ESCs, as well as providing regulated & filtered DC 5V & DC 10V outputs for powering Cameras, RC receiver, Flight Controllers, Video Transmitters, LEDs, etc.
It also has built-in 184A current Sensor, and offers a FFC socket to connect the MATEKSYS Flight Controller conveniently.

Functions

- Total 4 pairs ESC solder tabs are fit for X type frame
- Max.27V input w/ TVS protection
- Built-in current sensor 184A
- PDB: 4*30A (4*46A, 5 seconds), 4layers*2oz copper PCB
- BEC 5V/1.5A(2A Max) w/ 100uF panasonic POSCAP filter
- BEC 10V/1.5A(2A Max.) w/ 47uF TDK MLCC filter
- 5V & 10V Output LED indicators & Short circuit tolerant

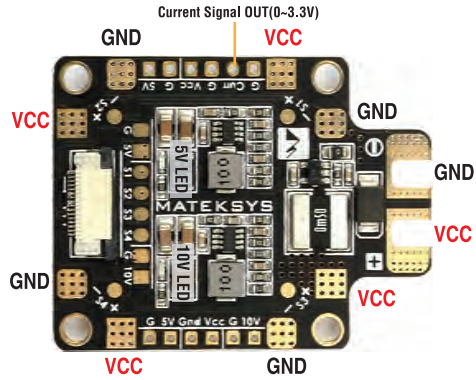
Current Module
- Max.range 184A
- 3.3V ADC
- Scale the output voltage to milliamps(1/10th mV/A): 179

BEC 5V output:
- Designed for RC Receivers, Flight controllers, OSD, and Servos.
- DC/DC synchronous buck regulator.
- Voltage: 5.0 +/- 0.1VDC
- Continuous current: 1.5 Amps (Max.2.0A 10s/minute)
- Short-circuit tolerant (2 seconds/minute)

BEC 10V output:
- Designed for Video TX or FPV camera.
- Voltage: 10.0 +/- 0.2VDC
- Continuous current: 1.5 Amps (Max.2.0A 10s/minute)
- Short-circuit tolerant (2 seconds/minute)
- 10V can be used to power cameras labeled as 12V
- The 3S LiPo input voltage should be 11V plus

Physical:
- Mounting: 30.5 x 30.5mm, Φ3mm
- Dimensions: 36 x 46 x 4 mm
- Weight: 8.5g

Layout



VCC = Battery Voltage

No nets on the mounting holes

Connections

