Matek Systems

MANUAL

Micro PDB w/ BEC 5V & 12V

SKU: MPDB5V12V

The Micro PDB has been engineered to provide the highest possible performance and reliability in a 32*22mm & 4 layers PCB. It distributes power from a battery pack to 4 ESCs, as well as providing dual synchronised & regulated DC outputs for powering Cameras, Servos, RC receiver, Flight Controllers, Video Transmitters, LEDs, etc.

It offers a very compact solution to achieve 2A continuous output current over a wide input supply range(3S to 5S LiPo).

Features

- 2oz copper & 4-layers PCB.
- · ESC & Battery solder tabs in pairs
- 5V & 12V Output LED indicators & Short circuit tolerant
- Micro size & lightweight

Specifications

General:

- Input voltage range (3S-5S operation): 7 21V DC
- Regulated 5V and 12V outputs
- LED power indicators (5V & 12V outputs)
- 4 ESC outputs

ESC outputs:

- Continuous current: 20A per output
- Peak current (10 seconds/minute): 25A per output

BEC 5V output:

- Designed for RC Receivers, Flight controllers, OSD, and Servos.
- DC/DC synchronous buck regulator.
- Voltage: 5.0 +/- 0.1VDC
- Continuous current: 2 Amps (Max.2.5A 5s/minute)
- Output Ripple: 40mV (VIn=16V, VOut=5V@2A load)
- Short-circuit tolerant (5 seconds/minute)

BEC 12V output:

- The battery should be 4S~5S LiPo (12.8~21V DC)
- Standard output designed to power cameras and video transmitters, etc.
- DC/DC synchronous buck regulator, Efficiency is up to 96%.
- Voltage: 12.0 +/- 0.2VDC
- Output Ripple: 20mV (VIn=16V, VOut=12V@2A Load)
- Continuous current: 2 Amps (Max.2.5A 5s/minute)
- Short-circuit tolerant (5 seconds/minute)

BEC 12V @ 3S LiPo - Output voltage= 3S LiPo voltage x 95%

Physical:

- Dimensions: 32 x 22 x 3 mm
- Weight: 3.5g

Connections



CC GND GND VCC VCC GND VCC=Battery Voltage





