

5V 2.25A SMPS DC-DC Converter

Hardware Manual Rev 1r0



Works with 8V-35VDC input. Efficient switching operations allows full load operation without heat-sink even with high input-output voltage differential. Made to order 3.3V to 24VDC output and up to 80VDC input available.

FEATURES

- 8V-35VDC power input
- 3.3V-24VDC power output
- Efficient switching operations allows full load operation without heatsink.

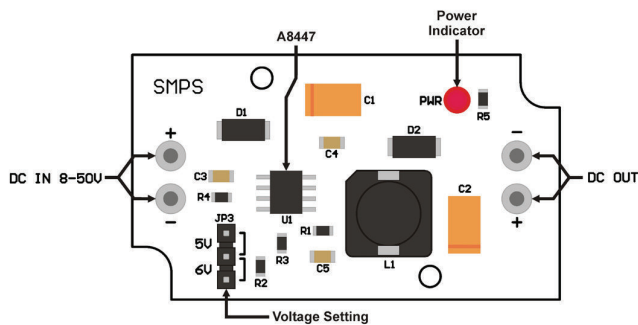


Figure 1. SMPS and its major components

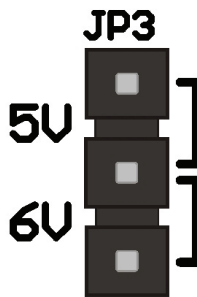


Figure 3. Voltage setting illustration

Place a jumper to set what voltage you want to use either 5V or 6V

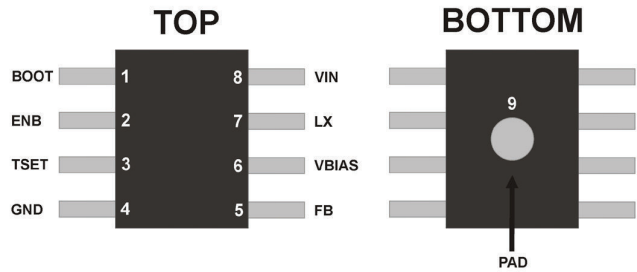


Figure 2. On-board 'U1' Pin assignments and pin numbers

Table 1. U1 pin descriptions

I.D.	Description
BOOT	Gate drive boost node
ENB	On/off control; logic input
TSET	Off-time setting
GND	Ground
FB	Feedback for adjustable regulator
VBIAS	Bias supply input
LX	Buck switching node
VIN	Supply input
PAD	Thermal Pad

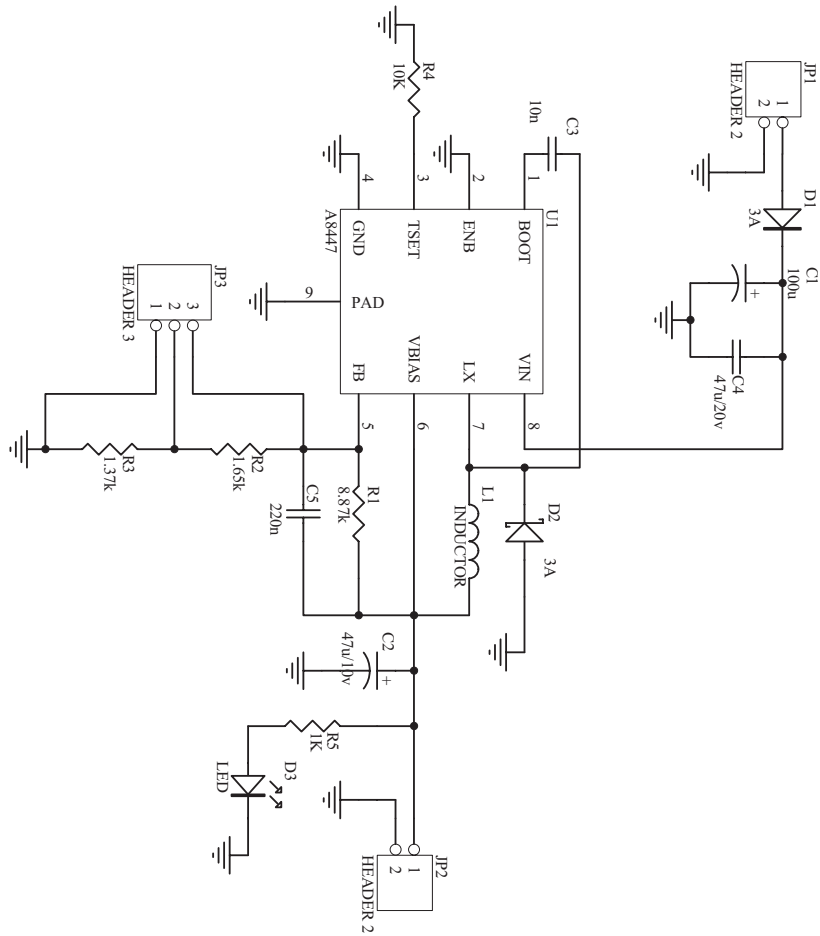


Figure 5. Schematic Diagram of SMPS

PCB BOARD PRESENTATION

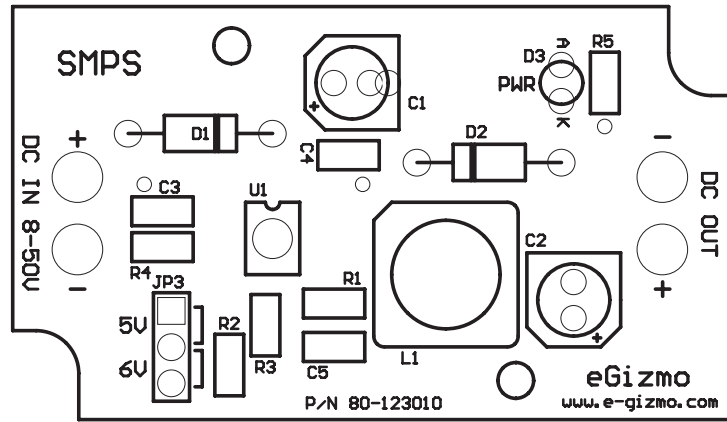


Figure 6. SMPS PCB
(silkscreen layout)

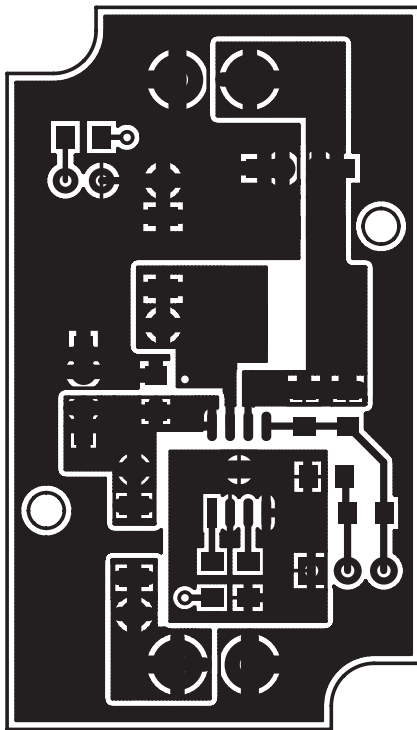


Figure 7. SMPS PCB Copper
Pattern (Top Layer)

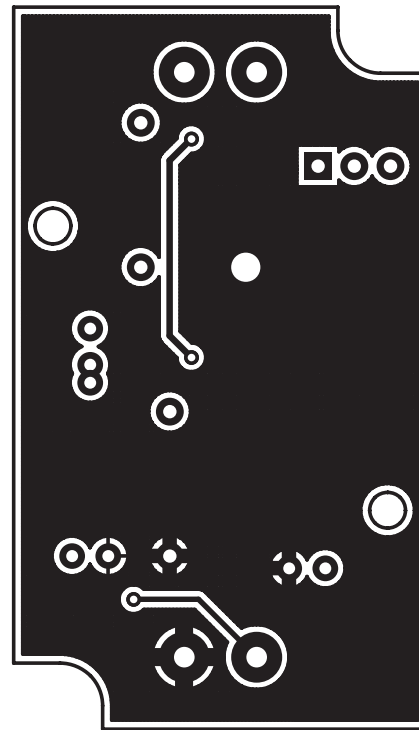


Figure 8. SMPS PCB Copper
Pattern (Bottom Layer)