

PE4201 DC-DC

DC-DC Converter Application

Power Factor Correction

DC-DC-Converter for Car Power Plug Reference Design

This reference design is a non-typical application hint for the PE4201 PFC IC. It can be used for developing DC/DC applications, like converter for car power plugs, targeting applications like laptop power supplies with a maximum power of 50W.

Technical data

Input voltage:	11,5-13,8V DC
Output voltage:	18-20V DC
Max. Output:	50 W
Efficiency:	>85 % (25W), >75 (50W)
Board-Dimension:	106,5 mm x 55 mm x 25mm (L/B/H)

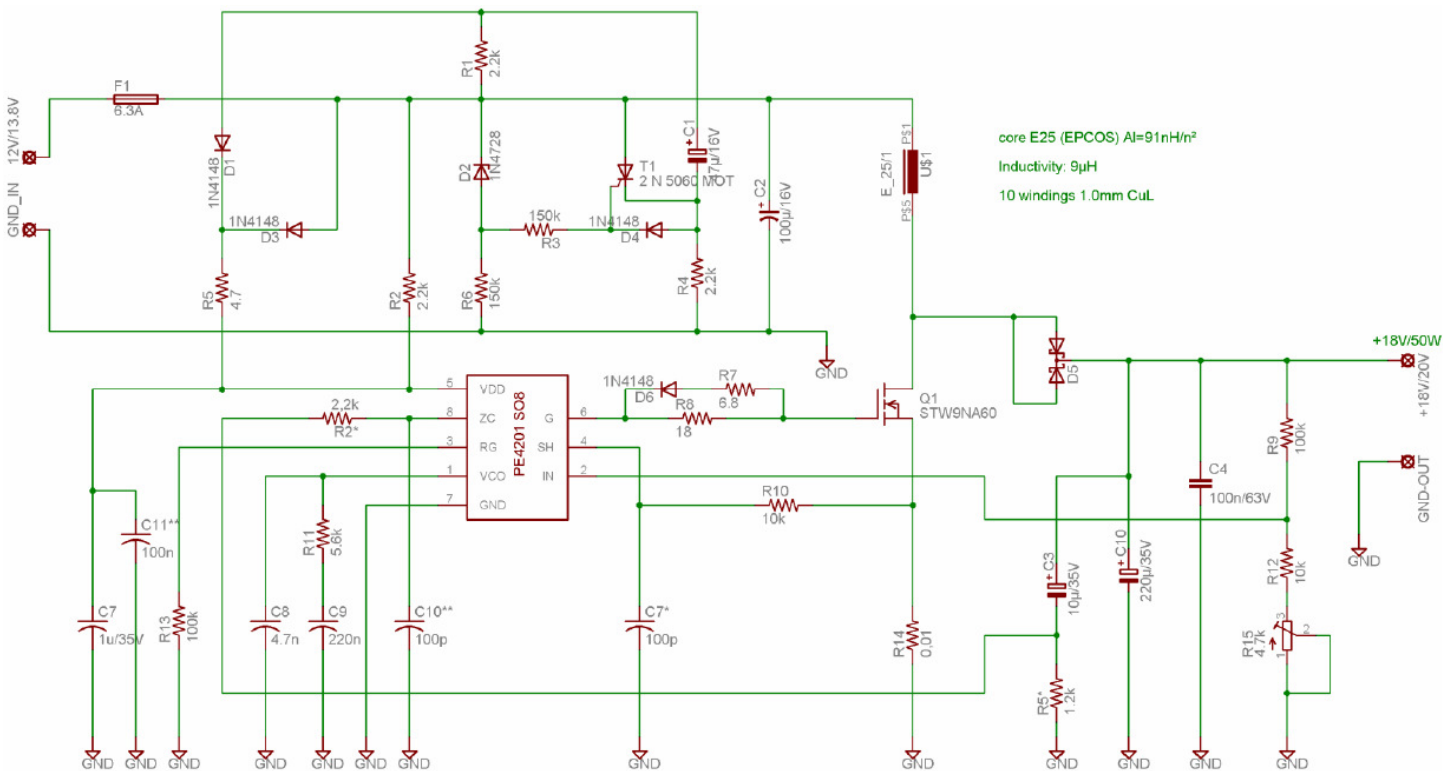


Figure 1: DC/DC converter Application Schematic

Application

- Laptop power supply for 12V/24V car batteries

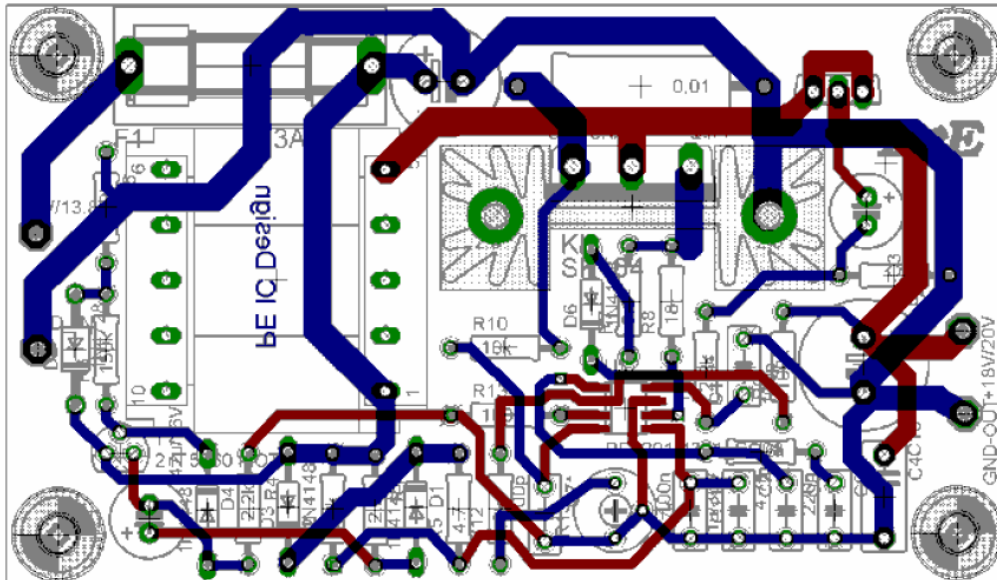


Figure 2: Board Top View

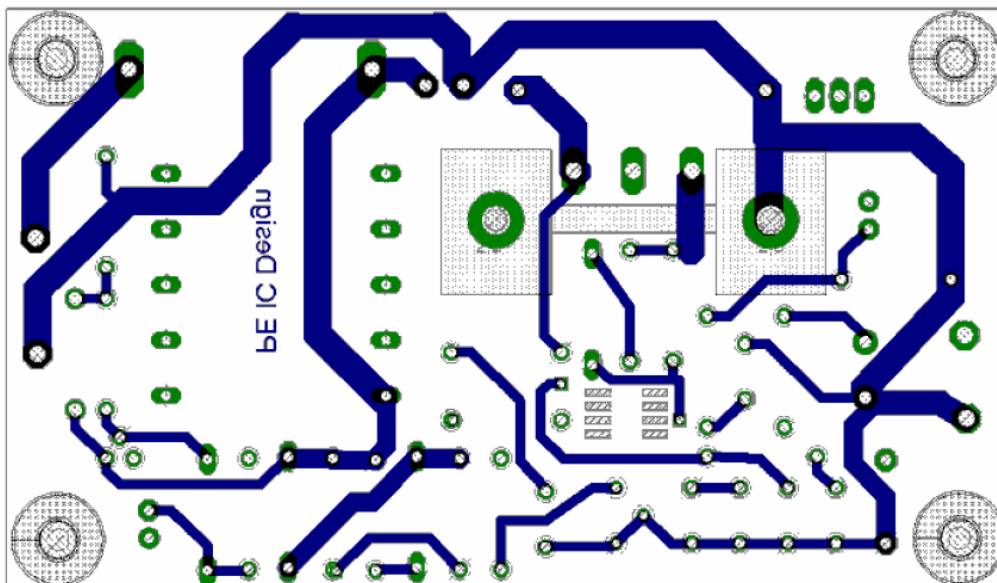


Figure 3: Board bottom view

Notes:

- For detailed description of the ICs and calculation of the surrounding devices see the data sheet and the users guide for the PE4201 Evaluation Board at www.pe-gmbh.com
- Contact PE GmbH for Bill-of-Material Information.
- The layout data base can be found on our website www.pe-gmbh.com

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