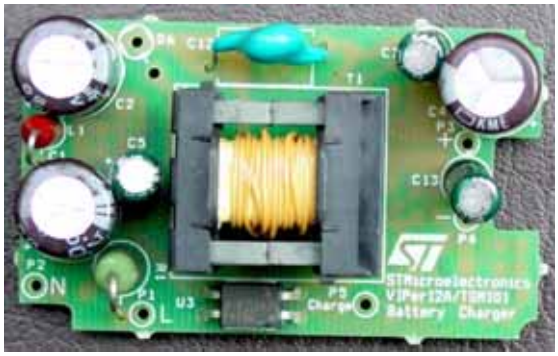
STEVAL-ISA020V1

3.5 W battery charger demonstration board based on the VIPer12AS-E and TSM101

Data Brief

Features

- Input voltage:
  - V_{IN}: 88 - 264 Vac
  - frequency: 50-60 Hz
- Output voltages:
  - V_{OUT} = 0 to 7 V
  - I_{OUT} = 0.5 A
- Output signal: low battery check



STEVAL-ISA020V1

Description

The STEVAL-ISA020V1 battery charger demonstration board utilizes an AC-DC single output converter with approximately 3.5 W of power capability.

The simple and cost-effective design is based on the Viper12AS-E low power off-line SMPS primary switcher for power conversion, and the TSM101 voltage and current controller for monitoring the battery charge level.

1 Circuit schematic and PCB layout

Figure 1. Schematic diagram

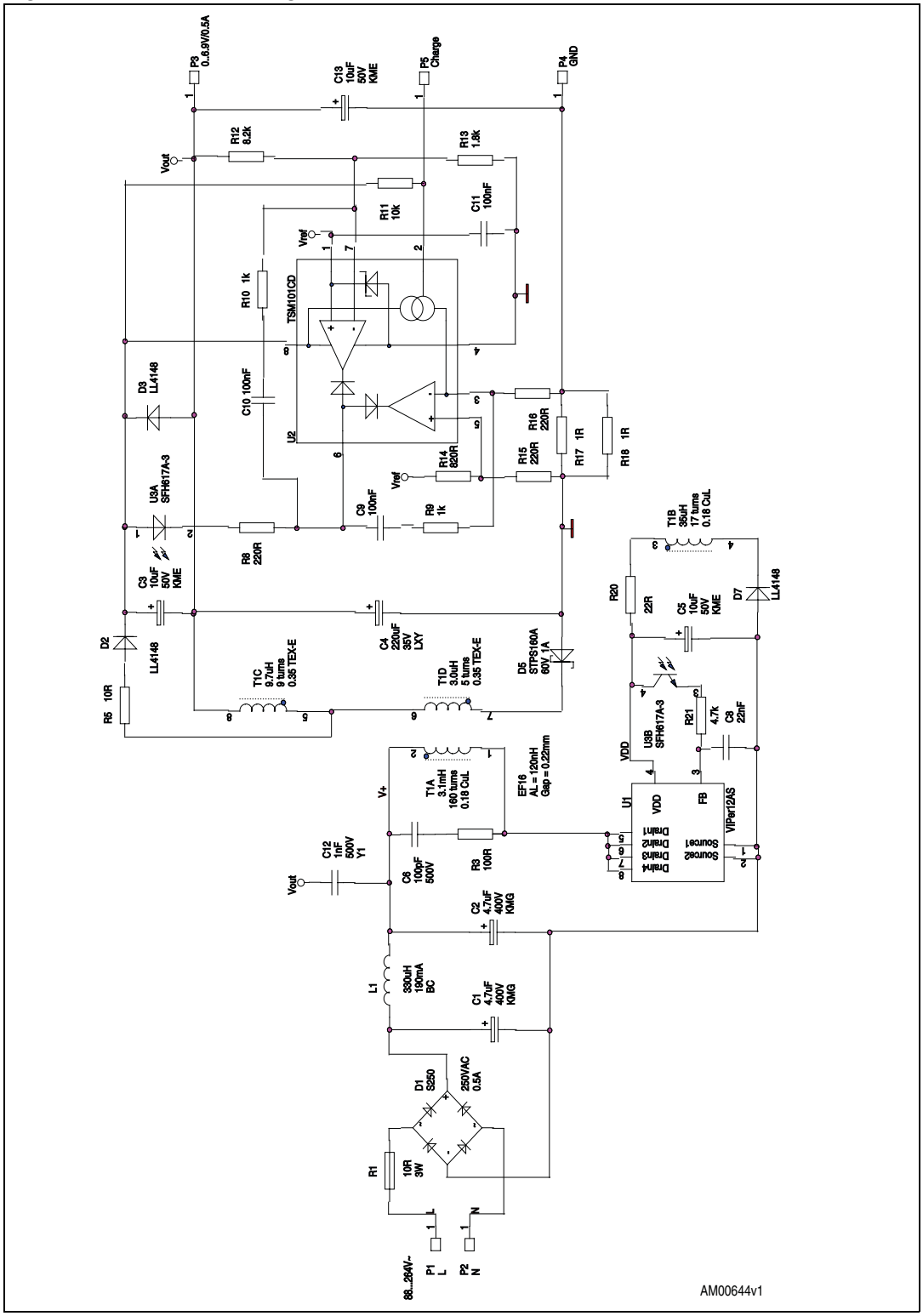


Figure 2. PCB layout (solder side)

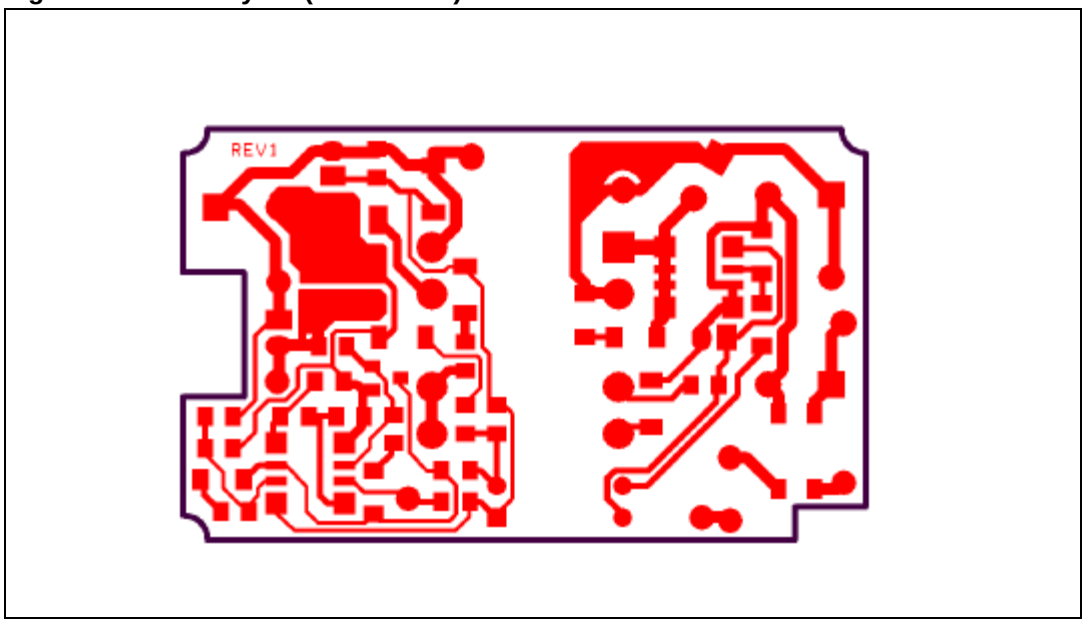


Figure 3. Assembly (top)

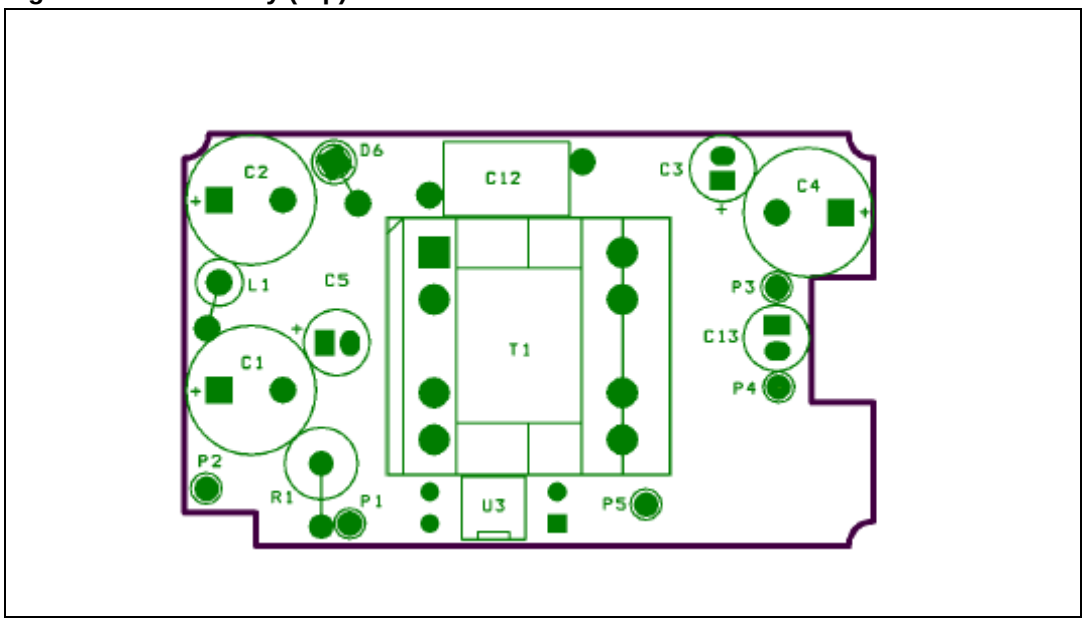
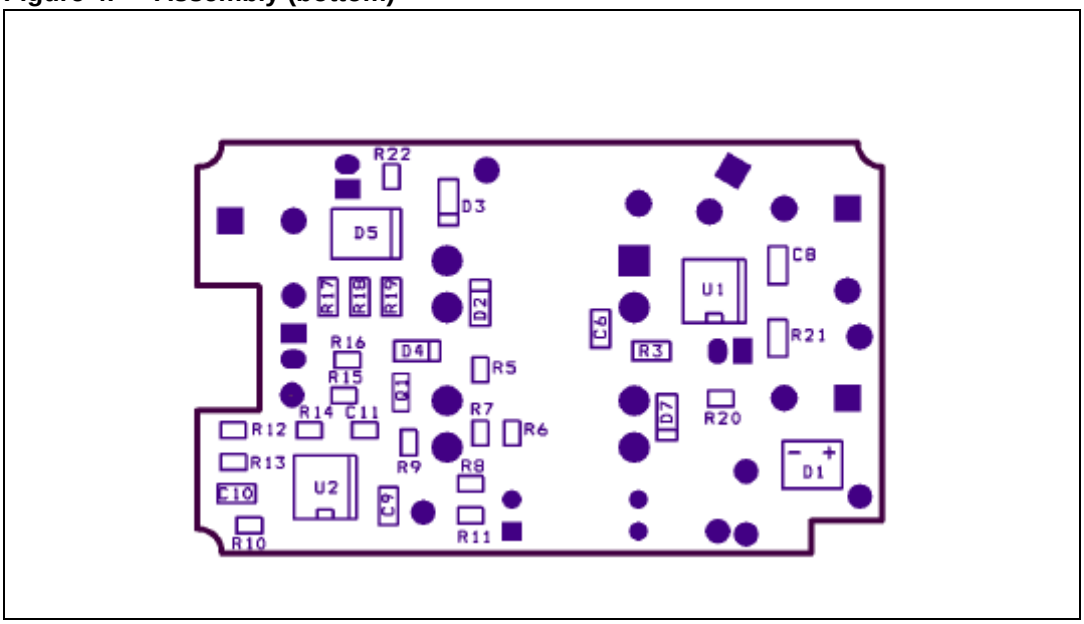


Figure 4. Assembly (bottom)



2 Revision history

Table 1. Document revision history

Date	Revision	Changes
07-Jul-2008	1	Initial release.

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