



## 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

### 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.

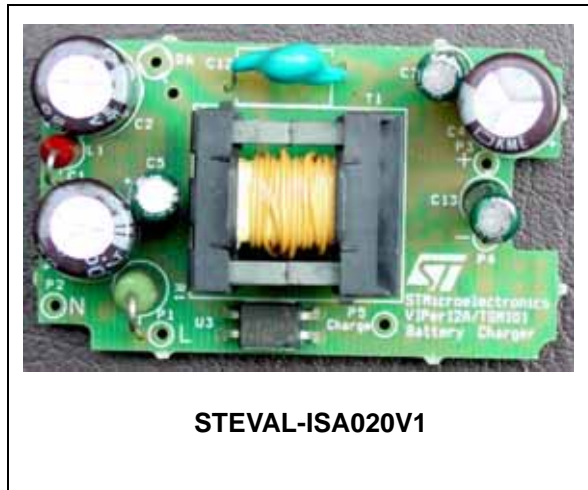




Figure 2. PCB layout (solder side)

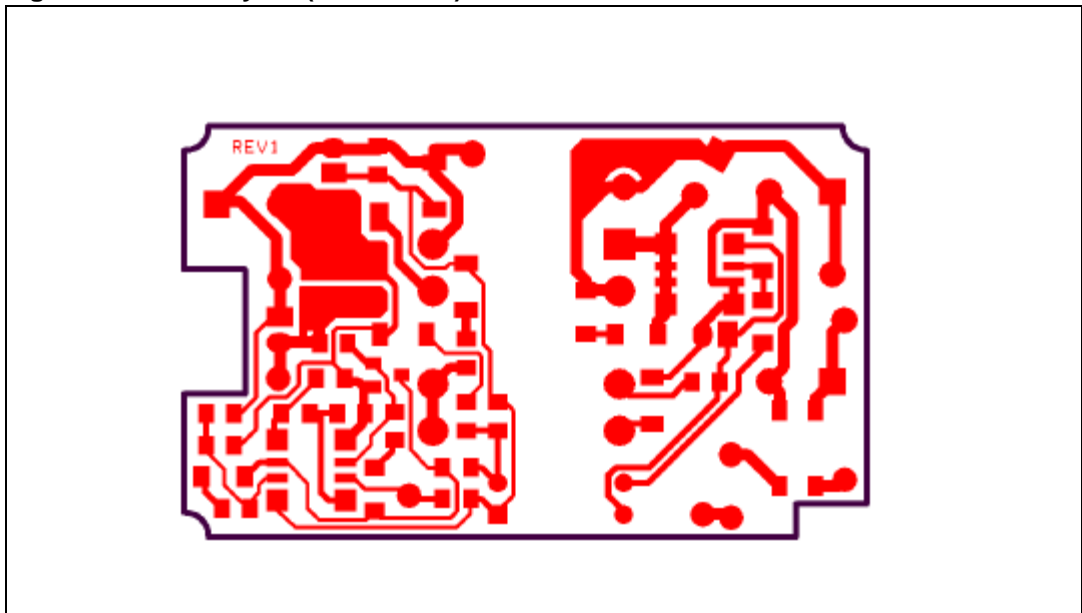


Figure 3. Assembly (top)

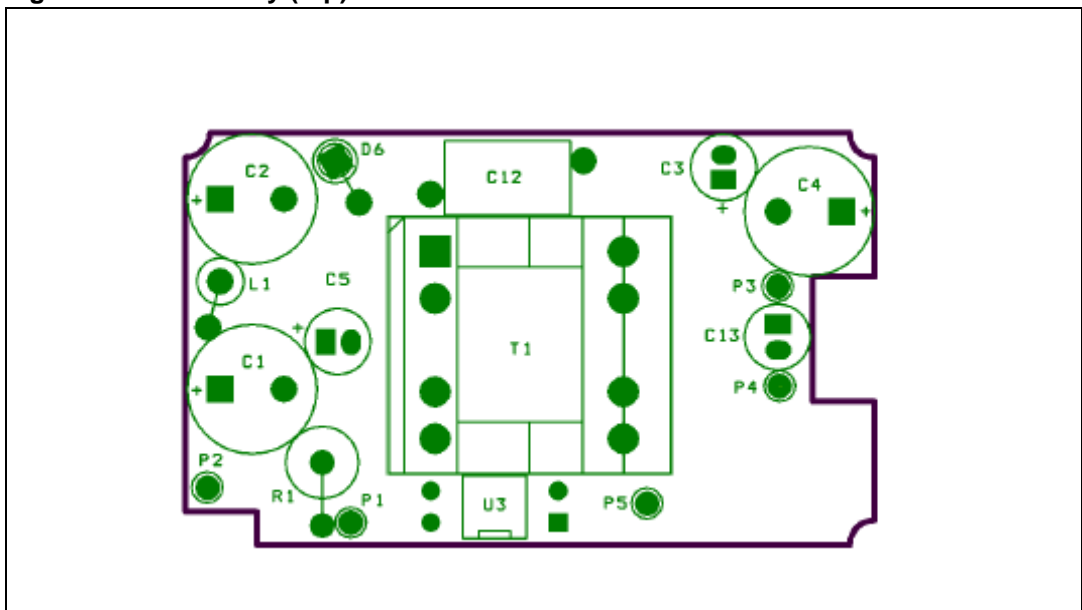
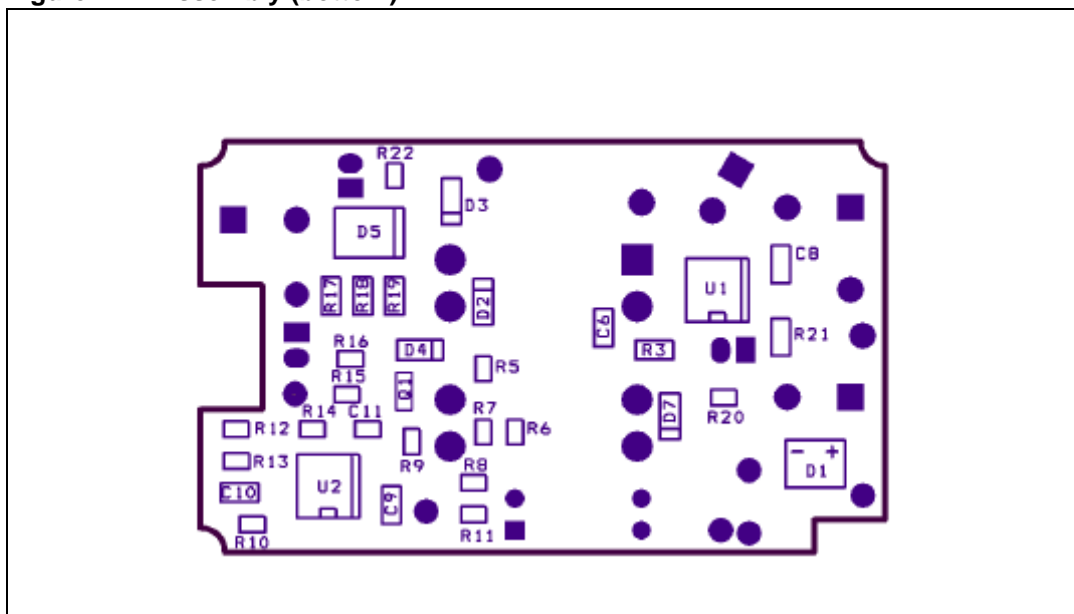


Figure 4. Assembly (bottom)



## 2 Revision history

Table 1. Document revision history

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

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