STEVAL-ISA081V1

12 V /1 A SMPS wide range demonstration board based on the VIPER26

Features
- Vin: 85 ~ 305 Vrms / f: 45 ~ 66 Hz
- \( V_{\text{out1}} \): 12 VDC ± 10 %, 1 A (at 3.3 V not loaded)
- \( V_{\text{out2}} \): 3.3 VDC ± 4 %, 100 mA
- Maximum total output current: 1 A
- Standby < 120 mW at 230 VAC
- Short-circuit: protected
- PCB type and size: FR4, single-side 35 µm, 32 x 90 mm
- Isolation: isolated 4 kV / 8 mm
- EMI: according to EN55022 Class
- RoHS compliant

Description
The STEVAL-ISA081V1 demonstration board is a switched mode power supply (SMPS) demonstration board and it is an isolated SMPS capable of delivering a 12 W output over a wide input voltage range.

It is designed for a mains application focusing on cost and size effective solutions.

The STEVAL-ISA081V1 SMPS generates 12 V nominal output voltage using primary regulation and it is based on the VIPER26 monolithic converter, integrating a high voltage MOSFET and PWM controller in one package.
1 Schematic diagram

Figure 1. Circuit schematic
2 Revision history

Table 1. Document revision history

<table>
<thead>
<tr>
<th>Date</th>
<th>Revision</th>
<th>Changes</th>
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<tbody>
<tr>
<td>05-Nov-2010</td>
<td>1</td>
<td>Initial release.</td>
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