Description

The STEVAL-ISA135V1 is a 12 V - 4 W power supply in isolated flyback topology based on the ViPer06HS, a new offline high voltage converter having, as main features: 800 V avalanche rugged power section, PWM operation at 115 kHz with frequency jittering for lower EMI, cycle-by-cycle current limit with adjustable set point, on-board soft-start and safe auto-restart after a fault condition.

Features

- AC main input voltage: $V_{\text{IN}}$ 85 VAC - 265 VAC
- Main frequency: $f_L$ 50 Hz - 60 Hz
- Output voltage: $V_{\text{OUT}}$ 12 V
- Max output current: $I_{\text{OUT}}$ 333 mA
- Precision of output regulation: $\Delta V_{\text{OUT,LF}}$ ±5 %
- High frequency output voltage ripple: $\Delta V_{\text{OUT,HF}}$ 50 mV
- Min active mode efficiency: $\eta_{\text{AV}}$ 71 %
- Max ambient operating temperature: $T_{\text{AMB}}$ 60 °C
- Thermal shutdown with hysteresis
- Delayed overload protection
- Open loop failure protection (if auxiliary winding is used)
- RoHS compliant
1 Schematic diagram

Figure 1: STEVAL-ISA135V1 circuit schematic
2 Revision history

Table 1: Document revision history

<table>
<thead>
<tr>
<th>Date</th>
<th>Version</th>
<th>Change</th>
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<tbody>
<tr>
<td>02-Oct-2013</td>
<td>1</td>
<td>Initial release.</td>
</tr>
<tr>
<td>08-May-2014</td>
<td>2</td>
<td>Title has been updated.</td>
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