STEVAL-ISA096V1

Auxiliary power supply in buck-boost topology based on the Viper06

Features

- Input voltage: $V_{\text{in}}$: 85 ~ 264 Vrms; $f$: 45 ~ 66 Hz
- Output voltage: -12 Vdc ± 10%, 150 mA
- Standby < 30 mW at 264 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 B
- RoHS compliant

Description

The STEVAL-ISA096V1 is a switched mode power supply (SMPS) demonstration board. This non-isolated SMPS is designed in a buck-boost topology and is capable of delivering up to 2 W of output over a wide input voltage range.

This board also offers the user the possibility of adapting the circuit to specific needs, thanks to an available free PCB area.

The SMPS generates 12 V of nominal output voltage.

The STEVAL-ISA096V1 demonstration board is based on the VIPer06, a monolithic converter that integrates an 800 V avalanche-rugged MOSFET and PWM controller in one package, offering a cost-effective and space-saving solution.
1 Schematic

Figure 1. Schematic diagram
## 2 Revision history

Table 1. Document revision history

<table>
<thead>
<tr>
<th>Date</th>
<th>Revision</th>
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<tbody>
<tr>
<td>18-Apr-2012</td>
<td>1</td>
<td>Initial release.</td>
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