5 V / 0.36 A buck converter using VIPerPlus – VIPer11

Features

- Universal AC main input voltage range: 85 V<sub>AC</sub> to 265 V<sub>AC</sub>
- Output range: 5 V / 0.36 A
- Rated output power: 1.8 W
- Input power in standby at 230 V<sub>AC</sub>: less than 18 mW
- Active mode efficiency: > 65%
- EMI: according to EN55022-Class-B
- RoHS compliant

Description

The STEVAL-ISA95V1 evaluation board implements a wide range mains buck converter (5 V / 0.36 A) developed for general purpose applications.

The design is built around the VIPer11 off-line high voltage converter from the VIPerPlus family, which intelligently integrates an 800 V rugged power MOSFET with a current-mode control PWM.

The main characteristics of the evaluation board are its single layer, small size and minimal BoM, high efficiency and low standby consumption.

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<th>Product summary</th>
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<td>5 V / 0.36 A buck converter using VIPerPlus – VIPer11</td>
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<td>energy saving off-line high voltage converter</td>
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1 Schematic diagrams

Figure 1. STEVAL-ISA195V1 circuit schematic

IN: $85V_{AC} \sim 265V_{AC}$
OUT: 5V/360mA
VIPer115XS
## Revision history

Table 1. Document revision history

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<tr>
<th>Date</th>
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<tr>
<td>09-May-2018</td>
<td>1</td>
<td>Initial release.</td>
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