

Wide input-range, single-output 5 V / 11 W power supply demonstration board based on the VIPer27

Data brief

Features

- Wide input voltage range (V_{IN}): 90 to 265 V_{rms}
- Nameplate output voltage (V_{out}): 5 V
- Max output current I_{OUT} : 2.2 A
- Precision of output regulation: $\pm 5\%$
- High frequency output voltage ripple (ΔV_{out_HF}): 50 mV
- Max ambient operating temperature (T_A): 60 °C
- RoHS compliant

Description

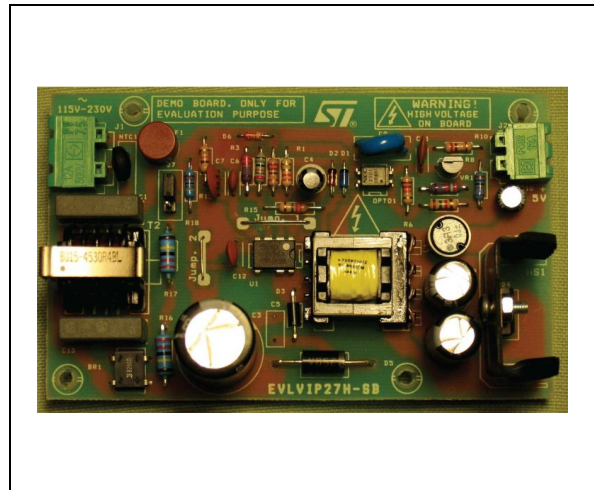
The STEVAL-ISA122V1 demonstration board meets the specifications of a wide range of auxiliary power supplies for applications including LCD or plasma TVs and desktop computers, where the power supply that converts the energy from the mains often includes two modules.

One module is the main power supply which provides most of the power, and is off when the application is shut down or in standby mode.

The other is the auxiliary power supply, which only provides energy to specific parts of the equipment such as the USB ports, remote receivers, or modems, but stays on when the application is in standby mode.

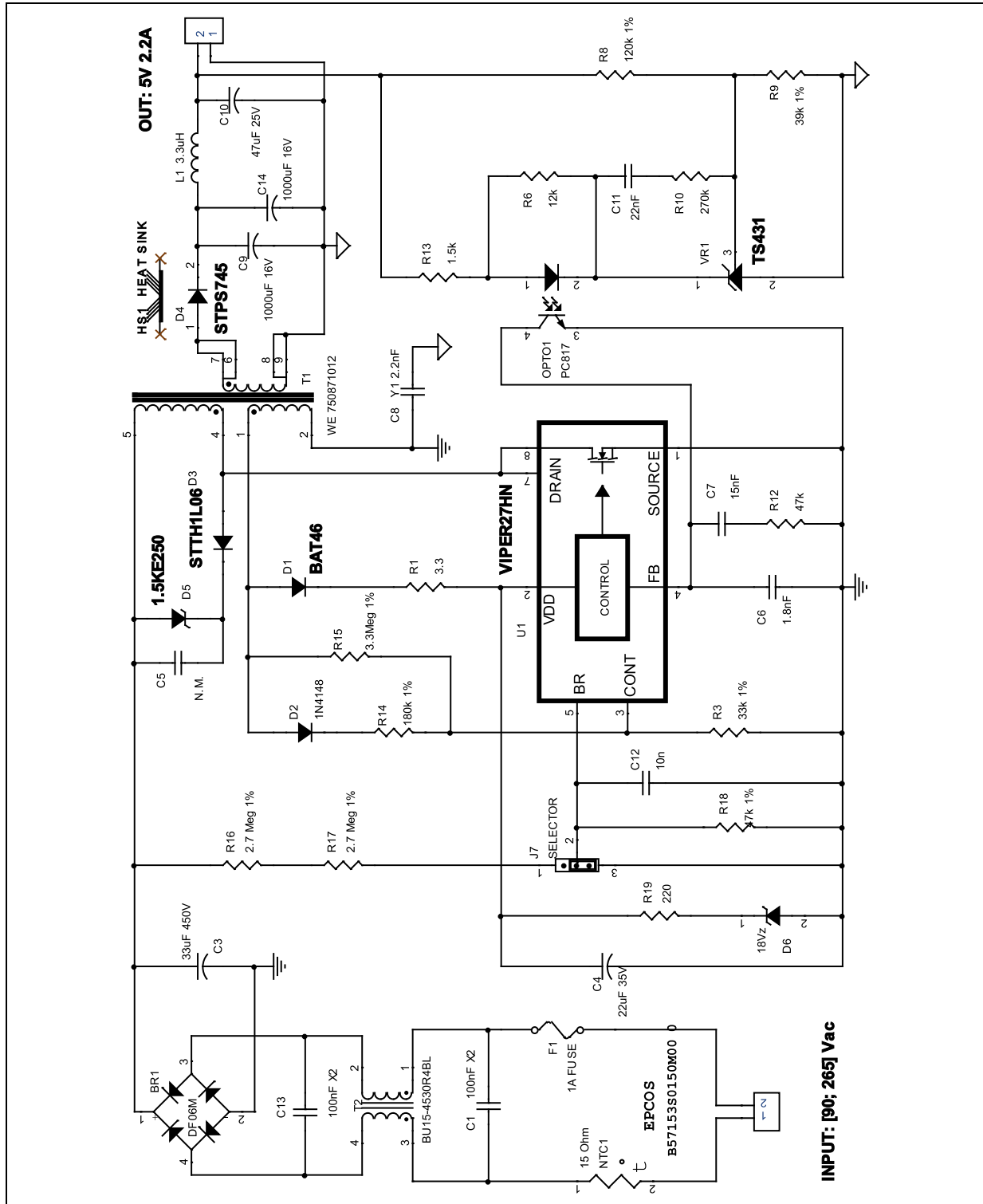
It is optimized for very low standby consumption, which allows it to satisfy the most stringent energy-saving requirements.

The VIPer27 has a switching frequency of 115 kHz, which helps to reduce the transformer size.



1 Schematic diagram

Figure 1. STEVAL-ISA122V1 circuit schematic



2 Revision history

Table 1. Document revision history

Date	Revision	Changes
11-Feb-2013	1	Initial release.

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