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STEVAL-ISA116V1

5 W, 2-output wide-range buck converter based on the VIPER26LD

Data brief

Features

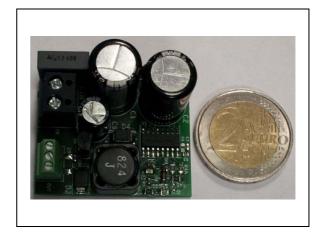
- Universal input mains range:
 - input voltage: 80 280 V_{AC}
 - frequency: 45 65 Hz
- Double-output voltage:
 - 16 V @ 0.3 A continuous operation
 - 5 V through LDO
- Standby mains consumption: < 100 mW @ 265 V_{AC}
- Fully protected against faults (overload, feedback disconnection and overheating)
- EMI: according to EN55022-Class-B
- RoHS compliant

Description

The STEVAL-ISA116V1 demonstration board implements a double-output power supply set in buck topology using the VIPER26LD, a new off-line high voltage converter by STMicroelectronics.

The features of the device include an 800 V avalanche-rugged power section, PWM operation at 60 kHz with frequency jittering for lower EMI, current limiting with adjustable set point, on-board soft-start, safe auto-restart after a fault condition and low standby power consumption.

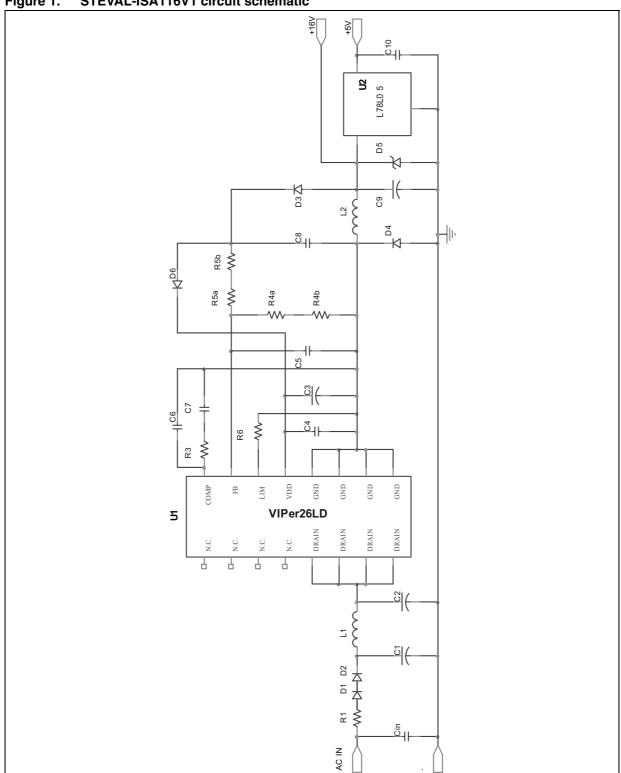
The protection features include thermal shutdown with hysteresis, delayed overload protection and open loop failure protection. All protection is autorestart mode.



Schematic diagram STEVAL-ISA116V1

Schematic diagram 1

Figure 1. STEVAL-ISA116V1 circuit schematic



STEVAL-ISA116V1 Revision history

2 Revision history

Table 1. Document revision history

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