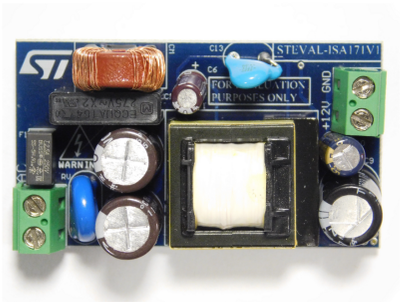
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STEVAI-ISA171V1

Data brief

12 V - 15 W quasi resonant flyback converter based on the VIPER35HD



VIPerPlus

Features

- Wide input voltage range: 90 V_{AC} to 264 V_{AC}
- Output voltage: 12 V
- Output current: 1.25 A
- Rated output power: 15 W
- Quasi resonant operation
- Input power standby @ 230 V_{AC}: < 30 mW
- Active mode efficiency: > 82%
- EMI: pre-compliance with EN55022-Class-B
- RoHS compliant

Description

The STEVAL-ISA171V1 implements a 15 W power supply designed in quasi resonant flyback topology for a wide-range AC input voltage. Its key features are its small size and minimal bill of material, high efficiency and low standby consumption.

The core of the application is the VIPER35, the quasi-resonant offline high voltage converter from the VIPerPLUS product family.

The VIPER35 integrates an 800 V rugged power MOSFET with PWM current-mode control.

Extremely low consumption under no-load conditions is ensured thanks to burst mode operation that reduces the average switching frequency and minimizes all frequency-related losses.

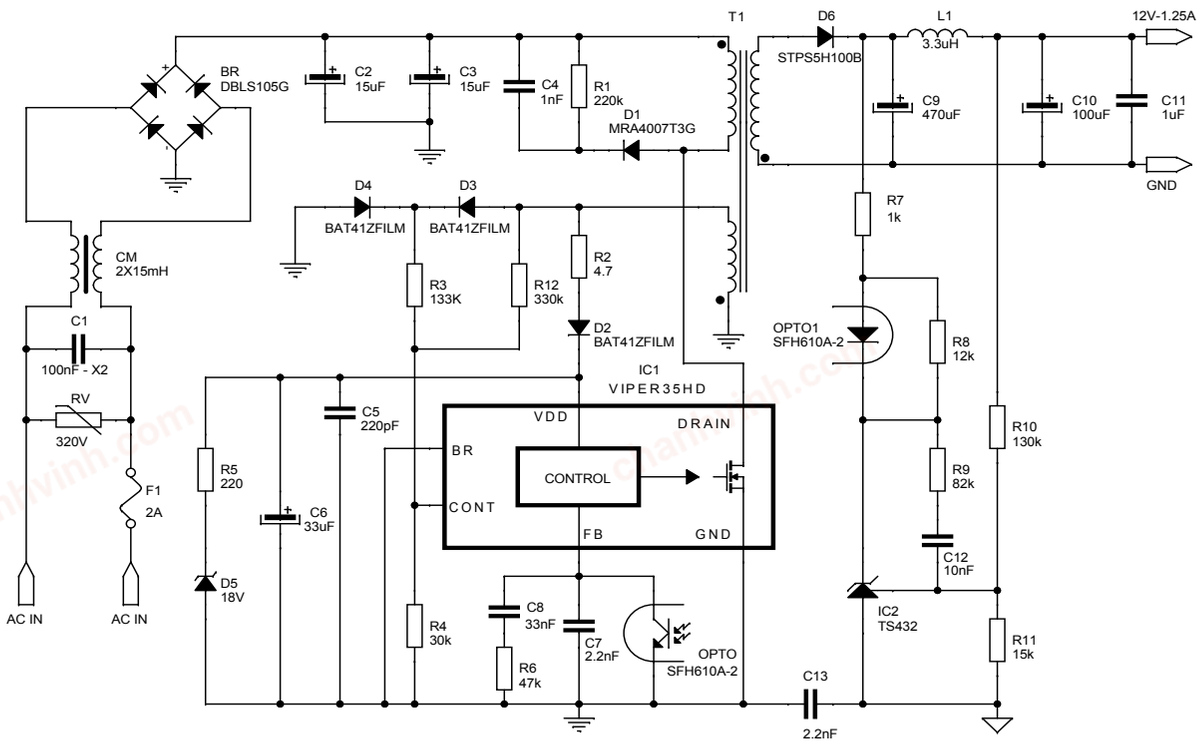
The VIPER35 operates in quasi resonant mode, a feature that helps to meet the EMI standards.

Product summary	
STEVAL-ISA171V1 - 12 V - 15 W quasi resonant flyback converter based on the VIPER35HD	STEVAL-ISA171V1
VIPER35 - VIPerPlus family: Quasi-resonant high performance off line high voltage converter	VIPER35HD

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1 Schematic diagrams

Figure 1. **STEVAL-ISA171V1 circuit schematic**



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Revision history

Table 1. **Document revision history**

Date	Version	Changes
06-Nov-2015	1	Initial release.
19-Sep-2019	2	Updated Figure 1. STEVAL-ISA171V1 circuit schematic

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