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STEVAL-ISA130V1

12 V 140 mA 30 kHz non-isolated buck topology regulator based on VIPer06XN

Data brief



Features

- 800 V avalanche-rugged power section
- PWM operation current mode controller
- Limiting current with adjustable set point
- Fixed frequency with jitter for EMI improvement
- Operating frequency: 30 kHz
- Input voltage range: 85 V to 265 V AC or 100 V to 375 V DC
- Low power application without auxiliary winding
- No load consumption below 30 mW @ 265 V_{ac}
- On-board soft-start
- Auto-restart after a fault condition
- Feedback disconnection protection
- Hysteretic thermal shutdown
- RoHS compliant

Description

The STEVAL-ISA130V1 demonstration board implements a non-isolated buck topology regulator using the VIPer06, which supplies a 12 V output at up to 140 mA with an operating frequency of 30 kHz.

The output voltage of this power supply can be easily set by changing the value of one resistor.

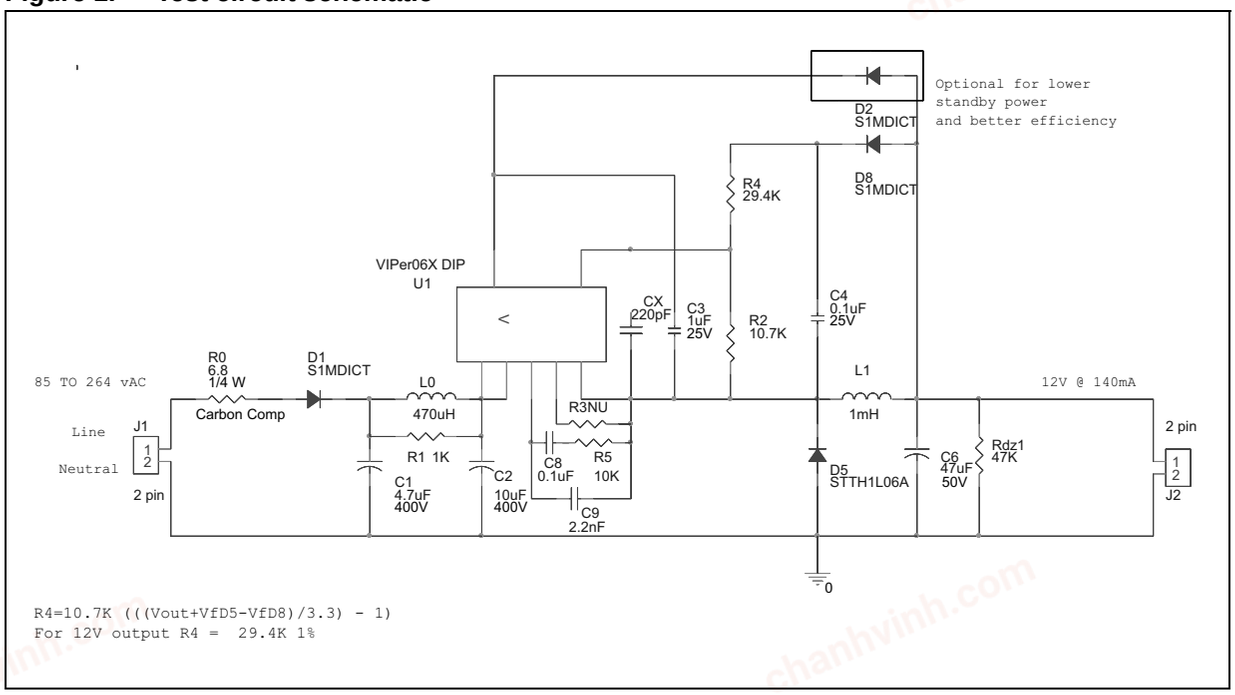
The circuit can be powered by either 85 V to 265 V AC or 100 V to 375 V DC.

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1 Test circuit

Figure 1. Test circuit schematic



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2 Revision history

Table 1. Document revision history

Date	Revision	Changes
02-Aug-2013	1	Initial release.

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