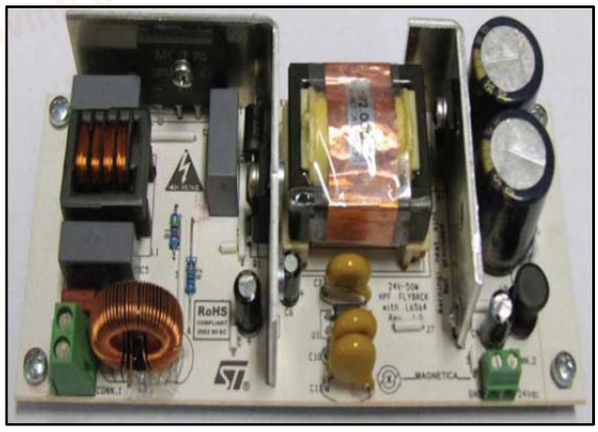
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STEVAL-ISA142V1

50 W, wide-range, high power factor flyback converter using the L6564

Data brief



Description

The STEVAL-ISA142V1 product evaluation board implements a 50 W, wide-range mains input, power factor-corrected power supply suitable for all low power applications requiring a high power factor, such as lighting applications and LED power supplies. Use of the low-cost L6564 combined with simple flyback topology provide a very competitive solution.

Features

- Line voltage range: 90 to 265 VAC
- Minimum line frequency (fl): 47-63 Hz
- Minimum switching frequency: 44 KHz
- Reflected voltage: 140 V
- Regulated output voltage: 24 V
- Rated output power: 50 W
- Power factor (load ≥ 50%): 0.9 minimum
- Minimum efficiency at full load: 88%
- Maximum 2 fl output voltage ripple: 1.1 V pk-pk (V_{IN}=230 V_{AC}, P_{out}=50 W)
- Maximum ambient temperature: 50 °C
- Conducted EMI: in accordance with EN55022 class-B
- PCB type and size: single-sided, 35 um, CEM-1, 140 x 60 mm
- RoHS compliant

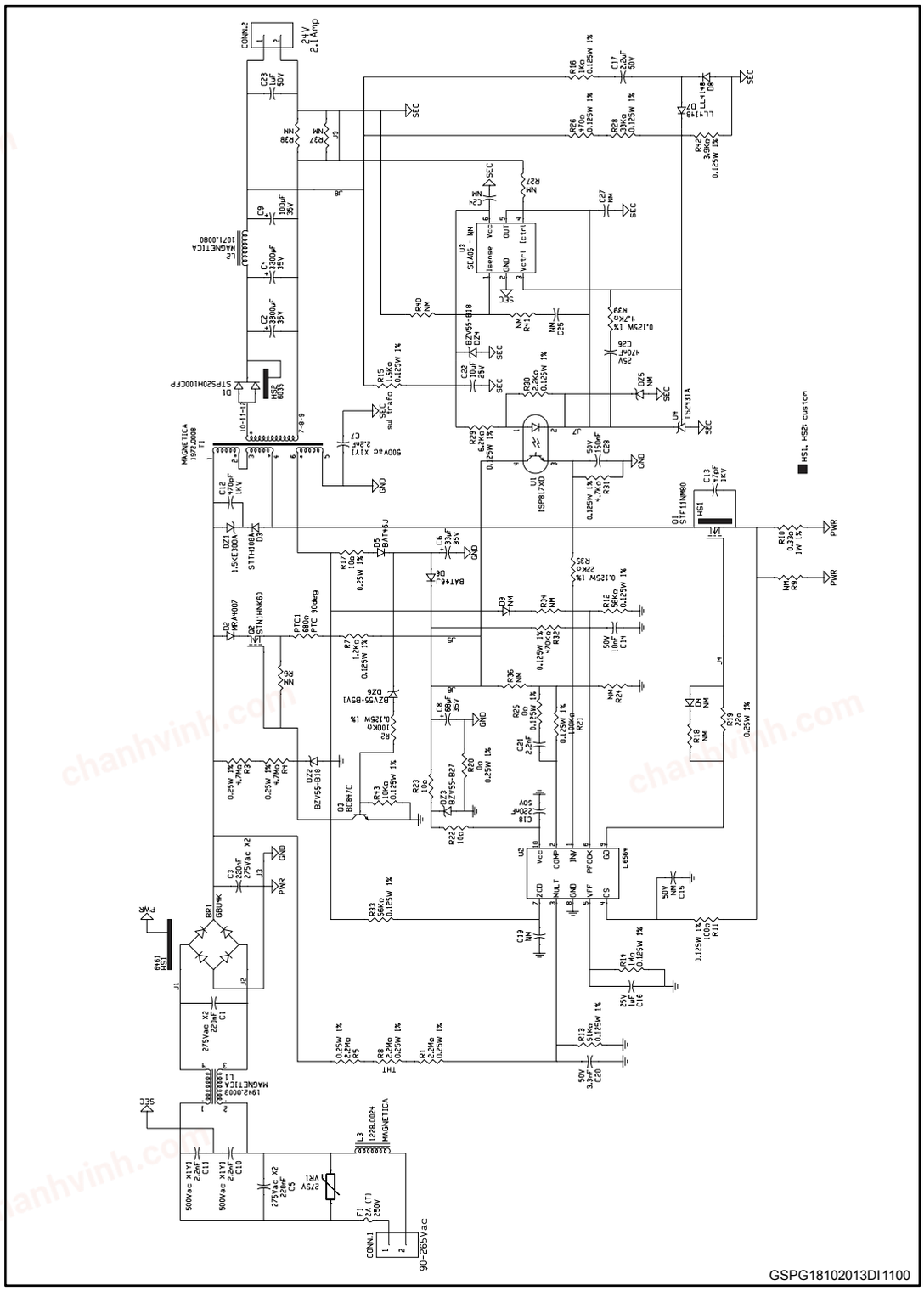
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1 Schematic diagram

Figure 1: Circuit schematic



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2 Revision history

Table 1: Document revision history

Date	Rev	Changes
11-Nov-2013	1	First release

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