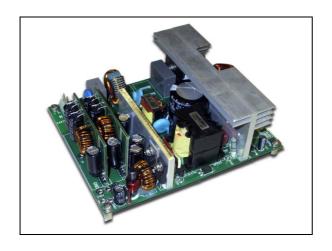


STEVAL-ISA145V1

250 W ATX SMPS evaluation board

Data brief



Description

The STEVAL-ISA145V1 system evaluation board is a 250 W power supply unit that implements an ATX like (multiple output configuration) or a server like (single output configuration) design.

The STEVAL-ISA145V1 has been certified by ECOS Consulting committee compliant to the 80 PLUS® specifications.

Features

- Input mains range: V_{IN}: 88 ~ 264 V_{RMS} frequency: 45 ~ 66 Hz
- Outputs: +12 VDC ± 2% 13.5 A, +5 VDC ± 2% 12 A, +3.3 VDC ± 2% 8 A, +5 V_{STBY} ± 2% 2 A
- Standby consumption: < 0.2 W
- Protection features: short-circuit overload, output overvoltage brownout
- PCB type and size: FR4 double-sided, CU 70 μm, 148 x 120 mm
- Safety: in accordance with EN60950
- EMI: in accordance with EN55022 class B
- RoHS compliant

Schematic diagram STEVAL-ISA145V1

1 Schematic diagram

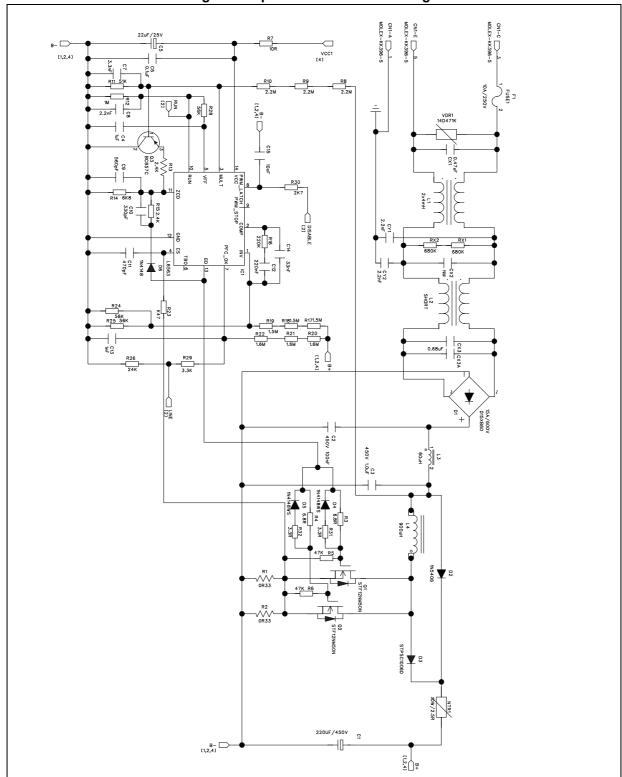


Figure 1. Input EMI filter and PFC stage

STEVAL-ISA145V1 Schematic diagram

₽ E C102 C105 - C105 - C105 - C105 - C103 - C1 R107 RIG. C106 (4) KCCC OPTO3-B * R R 0.47uF C108 R10.5 2 T1-E CY3 4.7nF 5.6R Q202 3.71 0.1uF C208

Figure 2. AHB stage



Schematic diagram STEVAL-ISA145V1

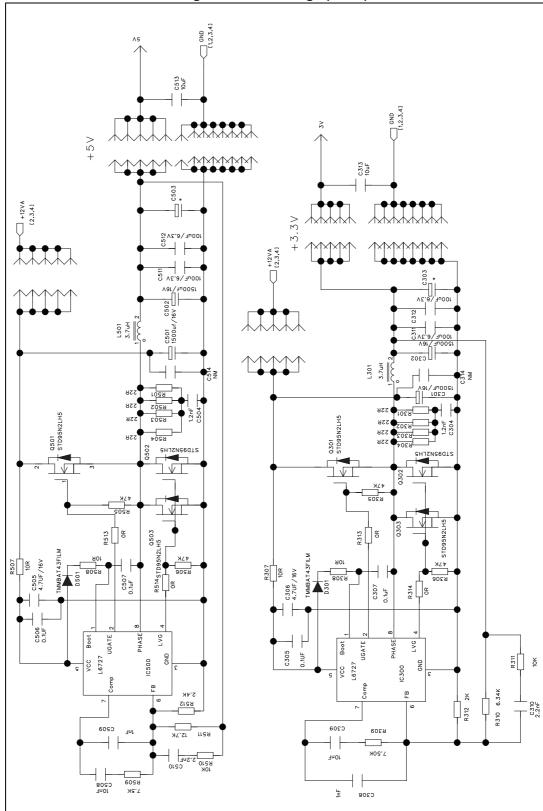


Figure 3. DC-DC stage (1 of 2)



STEVAL-ISA145V1 Schematic diagram

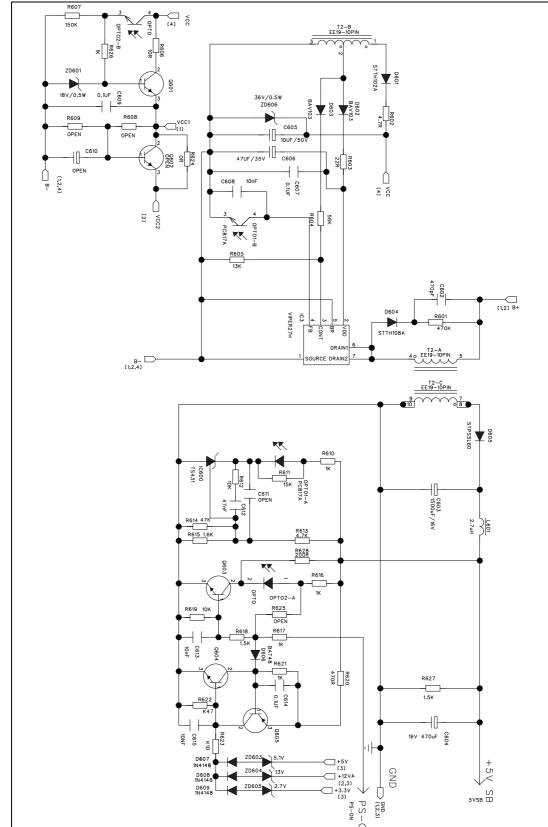


Figure 4. DC-DC stage (2 of 2)

Revision history STEVAL-ISA145V1

2 Revision history

Table 1. Document revision history

Date	Revision	Changes
16-Jan-2014	1	Initial release.

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