

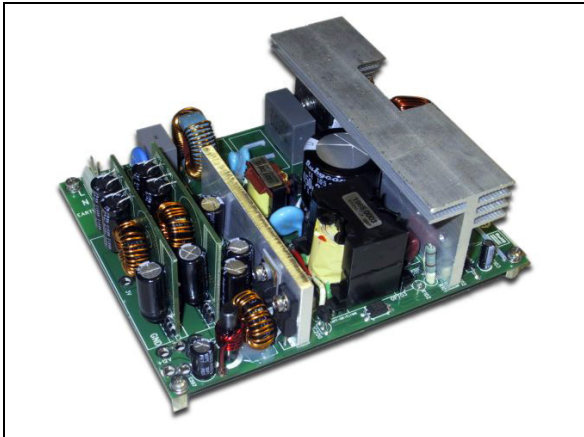


THE DATASHEET OF STEVAL-ISA145V1



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 \pm 2% - 13.5 A, +5 VDC \pm 2% - 12 A, +3.3 VDC \pm 2% - 8 A, +5 V_{STBY} \pm 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 μ m, 148 x 120 mm
- Safety: in accordance with EN60950
- EMI: in accordance with EN55022 - class B
- RoHS compliant

1 Schematic diagram

Figure 1. Input EMI filter and PFC stage

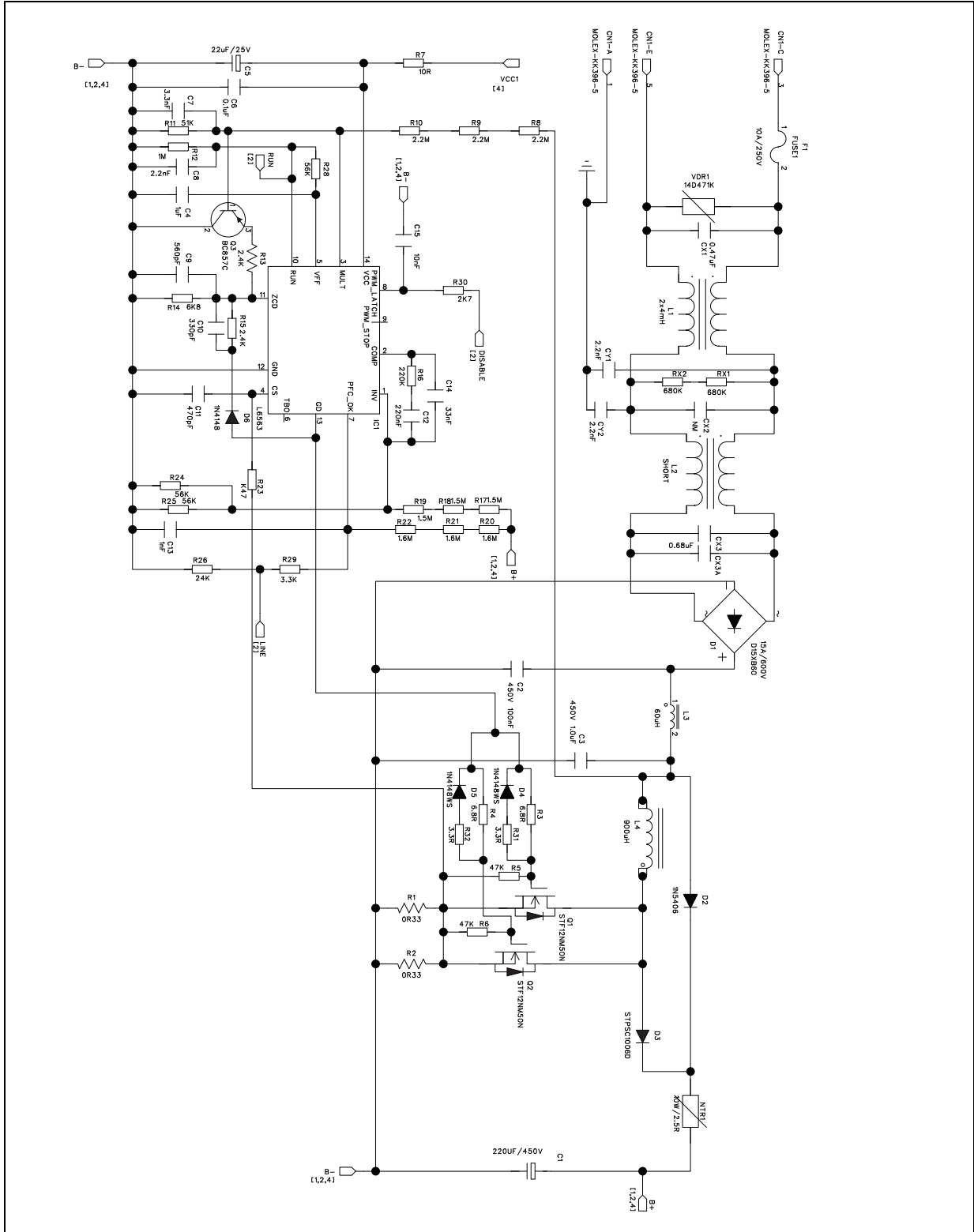


Figure 2. AHB stage

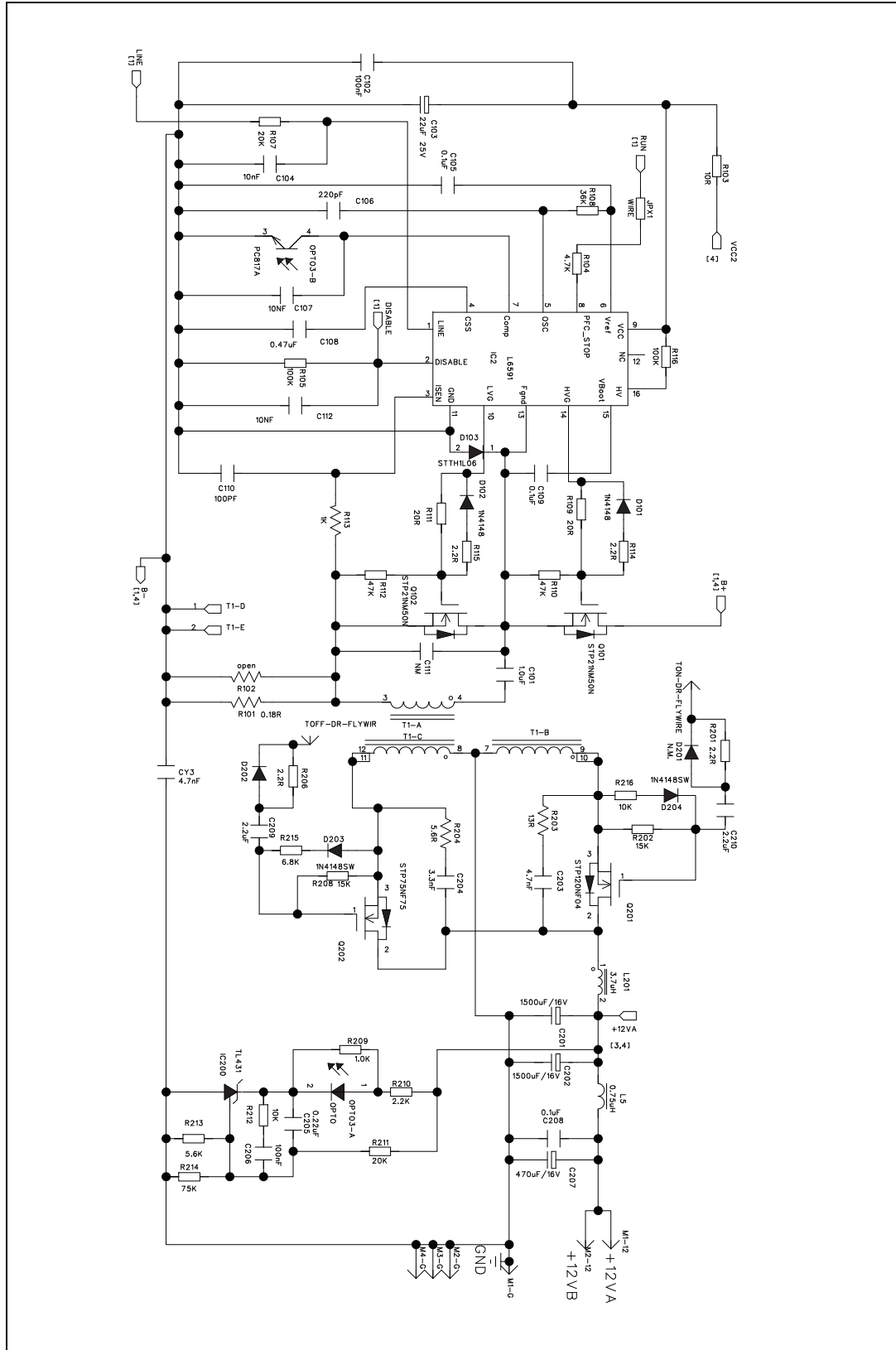


Figure 3. DC-DC stage (1 of 2)

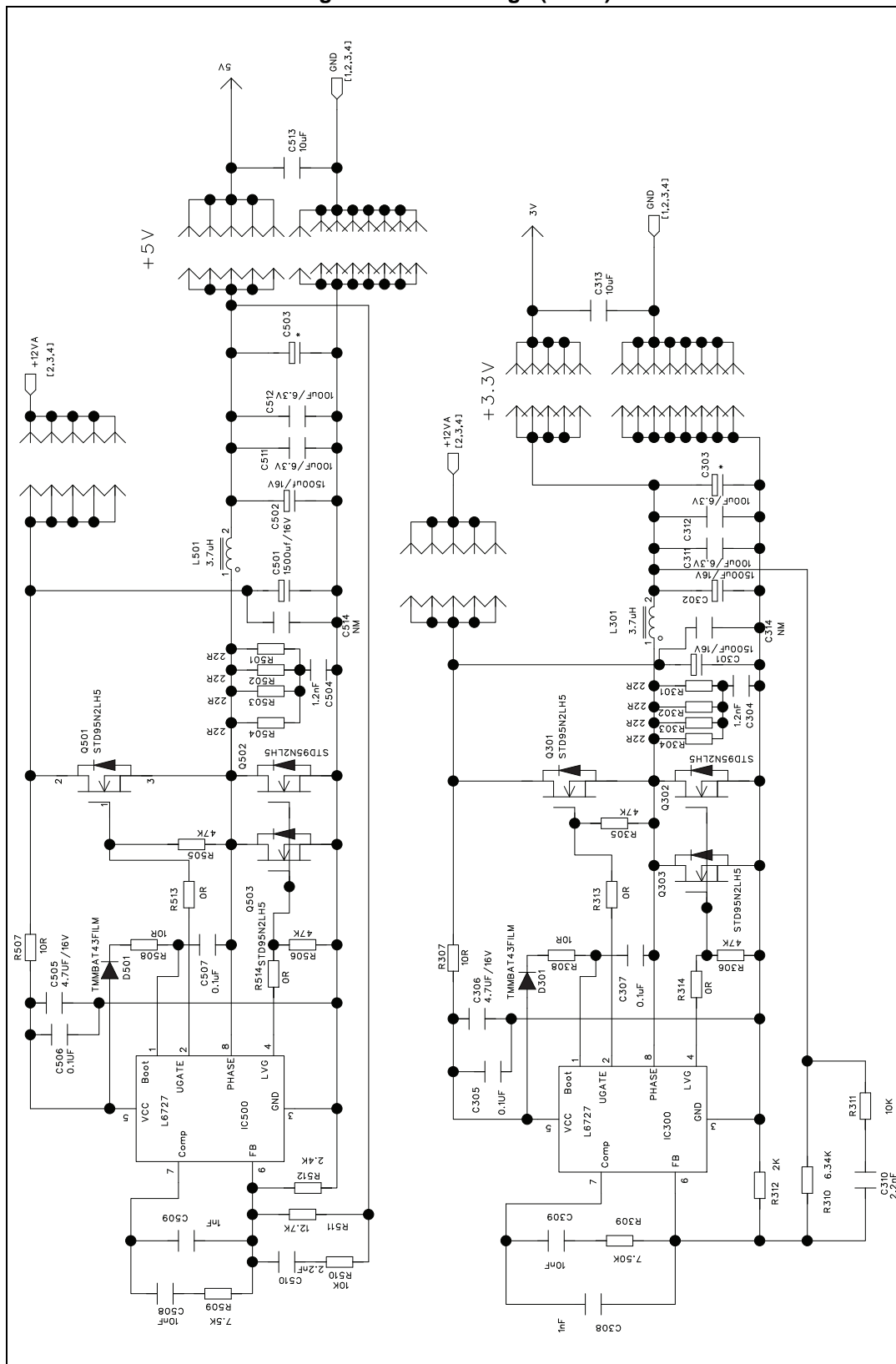
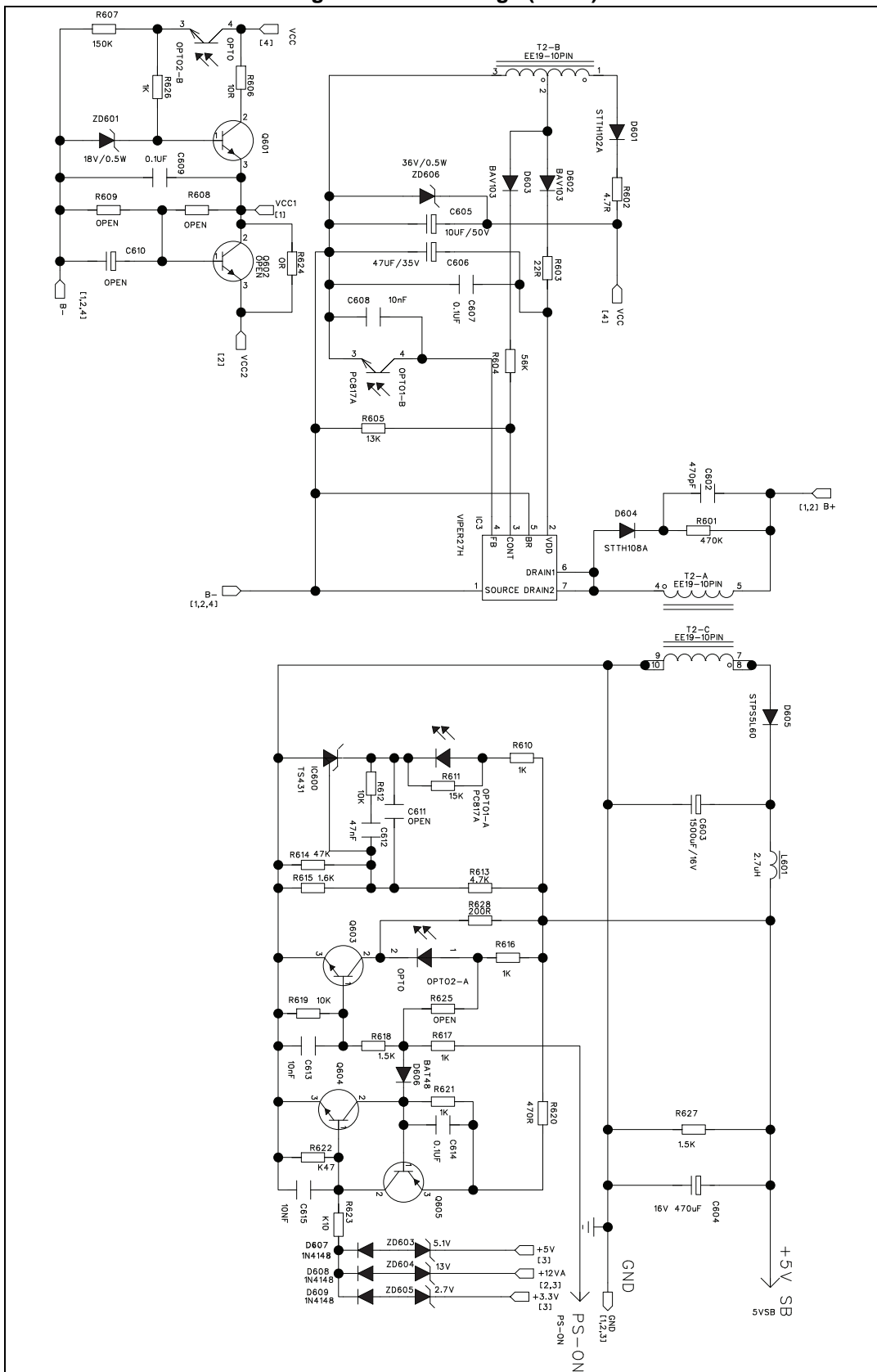


Figure 4. DC-DC stage (2 of 2)



2 Revision history

Table 1. Document revision history

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

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