



STEVAL-ISA019V3

80 W ESBT quasi-resonant wide-range SMPS demonstration board based on the L6565 for 3-phase applications

Data brief

Features

- 3-phase 80 W auxiliary output SMPS
- Quasi-resonant SMPS
- Input: 180 V_{AC} to 600 V_{AC}
- Output voltage: 24 V, 3.3 A
- Maximum output power: 80 W
- Efficiency > 80 %
- Switching frequency > 50 kHz
- Safety compliant according to EN60950
- Feedback: secondary regulation
- RoHS compliant



Description

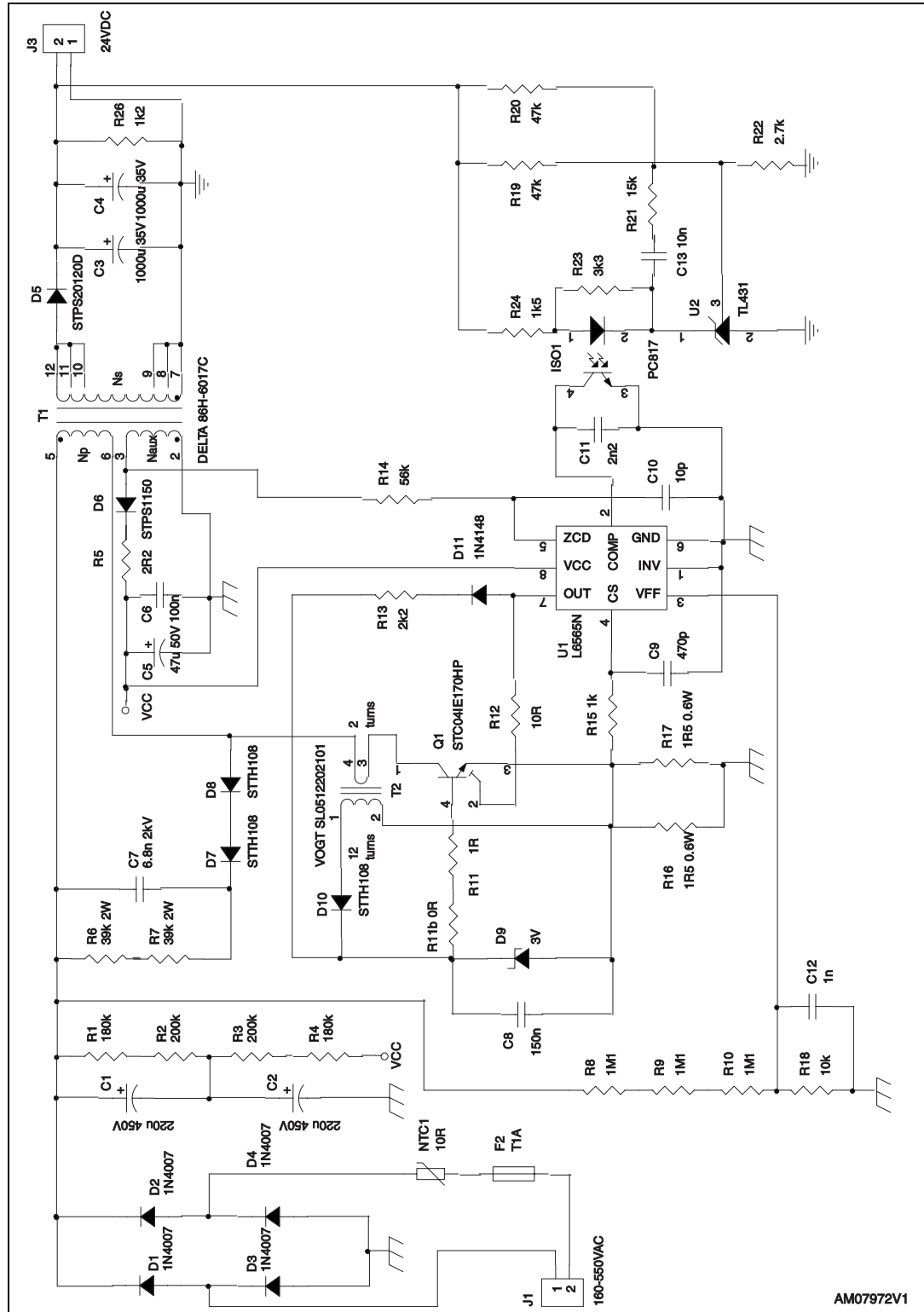
The STEVAL-ISA019V3 demonstration board is a 3-phase auxiliary power supply with an 80 W dual output SMPS, using the L6565 PWM driver and the STC04IE170HP ESBT as the main switch.

The combination of these ST parts provides a high-efficiency solution for high DC input voltage, a typical requirement of any 3-phase application.

The necessity to handle both high output power and wide input voltage is resolved using a flyback stage working in mixed operation mode: discontinuous and continuous.

1 Circuit schematic

Figure 1. Demonstration board schematic



2 Revision history

Table 1. Document revision history

Date	Revision	Changes
28-Apr-2011	1	Initial release.

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