

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.



STEVAL-ISA019V3

Circuit schematic STEVAL-ISA019V3

Circuit schematic 1

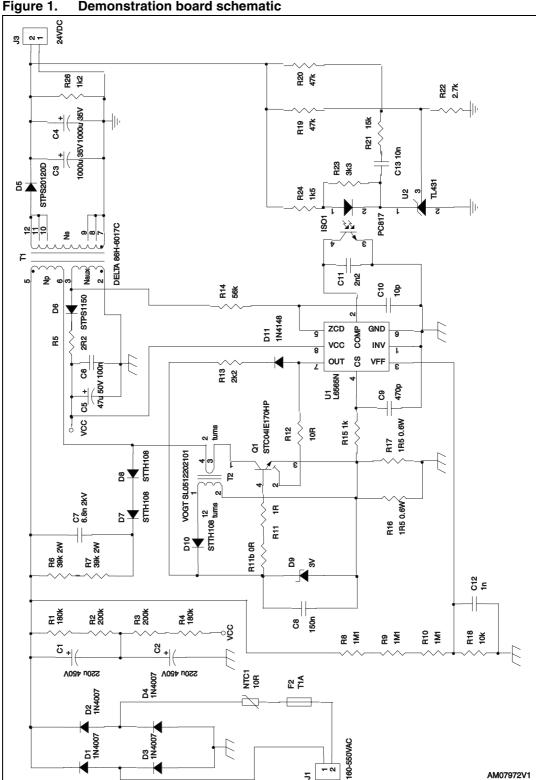


Figure 1. **Demonstration board schematic**

STEVAL-ISA019V3 Revision history

2 Revision history

Table 1. Document revision history

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

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