



STEVAL-IPB001V1

2 W, 3-phase SMPS for breaker applications
based on the STC04IE170HP ESBT

Data brief

Features

- Active startup network for improved efficiency
- Input voltage: 150 to 1250 VDC
- Output voltage: 24 V / 83 mA
- Output power: 2 W
- Switching frequency: 30 kHz
- Dedicated transformer construction
- Efficiency: > 80%
- RoHS compliant

Description

The design implemented in the STEVAL-IPB001V1 demonstration board represents a complete solution for a 2 W single-output SMPS (switched-mode power supply), which is widely used to supply power in breaker applications.

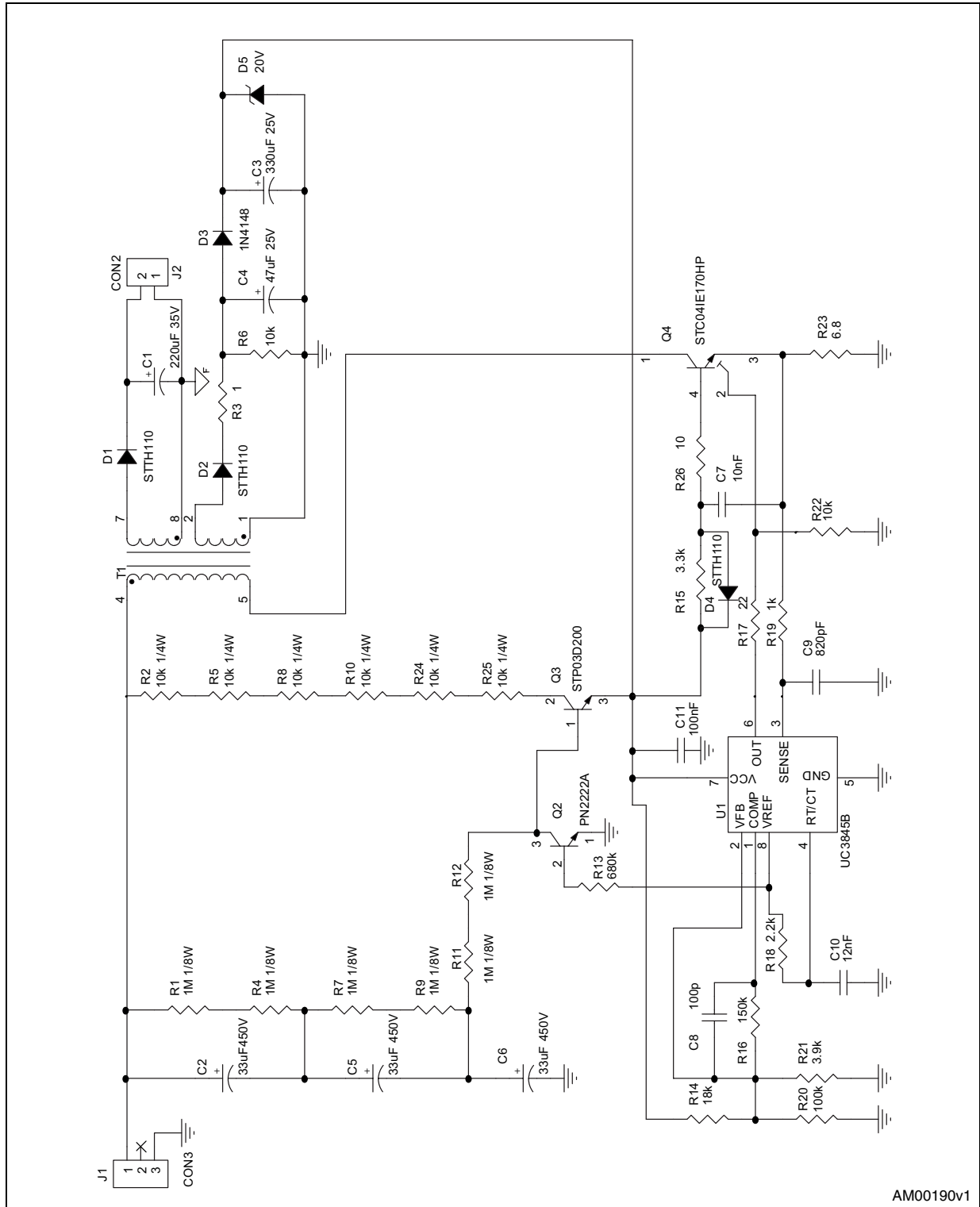
The SMPS employs the UC3845B PWM driver, and uses the STC04IE170HP ESBT as the main switch.

This design can also be applied to power supplies for 3-phase power metering applications, as it can be easily upgraded for higher output power.



1 Schematic diagram

Figure 1. STEVAL-IPB001V1 circuit schematic



AM00190v1



2 Revision history

Table 1. Document revision history

Date	Revision	Changes
18-Nov-2010	1	Initial release.

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