

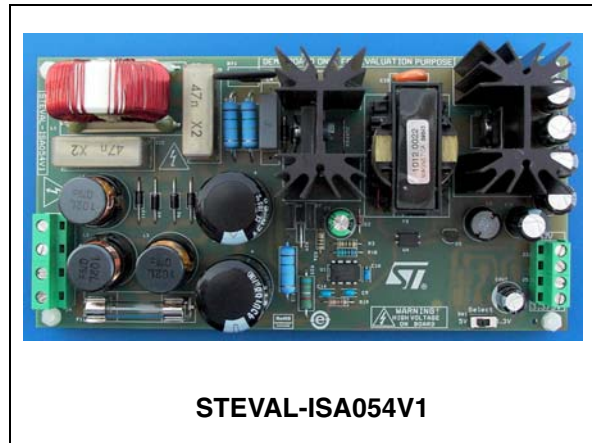


# STEVAL-ISA054V1

100 W 3-phase auxiliary power supply demonstration board  
based on the STW9N150

## Features

- Input voltage
  - connector 1: 400 Vac RMS  $\pm$  20%
- Input voltage
  - connector 2: 180 - 265 Vac RMS
- Input frequency: 50 Hz
- Output 1: 24 V @ 4 A
- Output 2: 5V @ 1 A or 3.3 V @ 1 A
- Output power: 100 W
- Safety: EN60950
- EMI: EN55014
- RoHS compliant



## Description

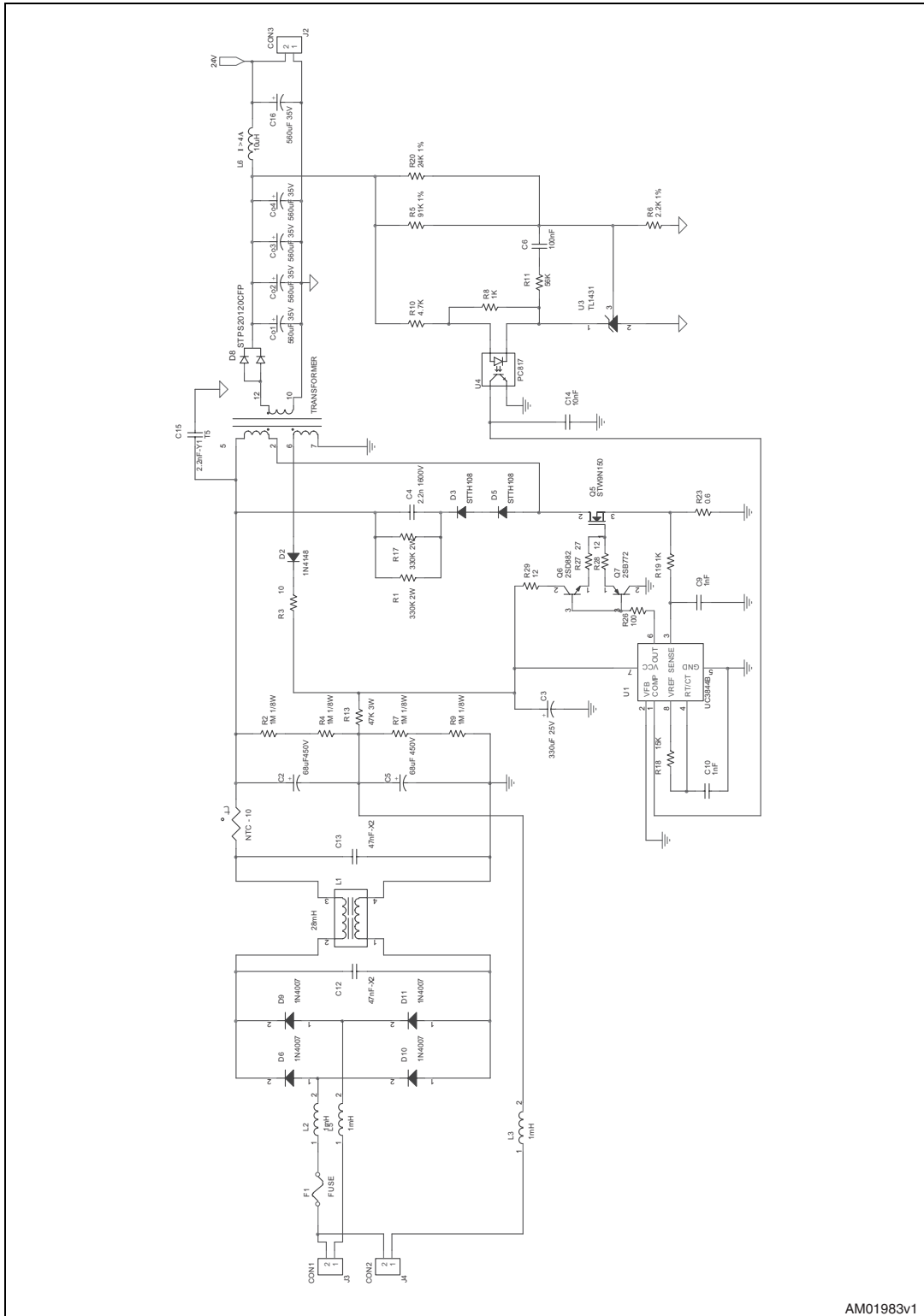
This demonstration board introduces a solution for industrial power supplies. It takes advantage of the high voltage Power MOSFET, i.e. 1500 V breakdown voltage, to optimize the operation of the flyback converter based on the primary controller UC3844B.

The demonstration board has been designed and developed in order to address medium power applications. The board features two outputs, 24 V, 5V or 3.3 V, and is able to deliver more than 100 W in total.

The 5 V/3.3 V output is obtained by means of an integrated DC-DC converter based on L5970D, connected to the 24 V output, and adjustable by means of an external voltage divider.

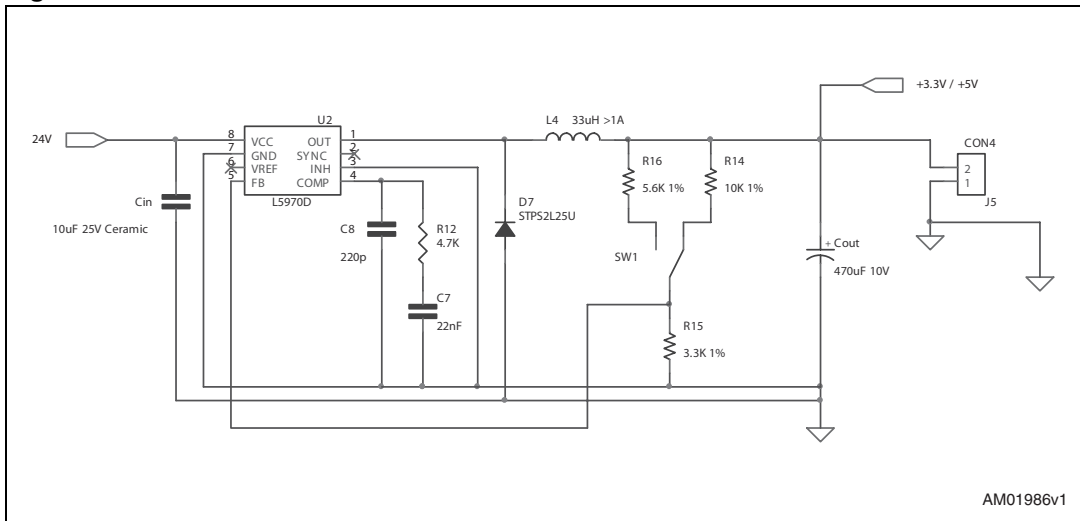
# 1 Circuit schematic

Figure 1. Schematic



AM01983v1

Figure 2. DC-DC converter



AM01986v1

## 2 Revision history

**Table 1. Document revision history**

<b>Date</b>	<b>Revision</b>	<b>Changes</b>
01-Apr-2009	1	Initial release
11-May-2009	2	Updated features in cover page

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