

STEVAL-ISA054V1

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

Features

■ Input voltage

- connector 1: 400 Vac RMS ± 20%

■ Input voltage

- connector 2: 180 - 265 Vac RMS

Input frequency: 50 HzOutput 1: 24 V @ 4 A

■ Output 2: 5V @ 1 A or 3.3 V @ 1 A

Output power: 100 WSafety: EN60950EMI: 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.

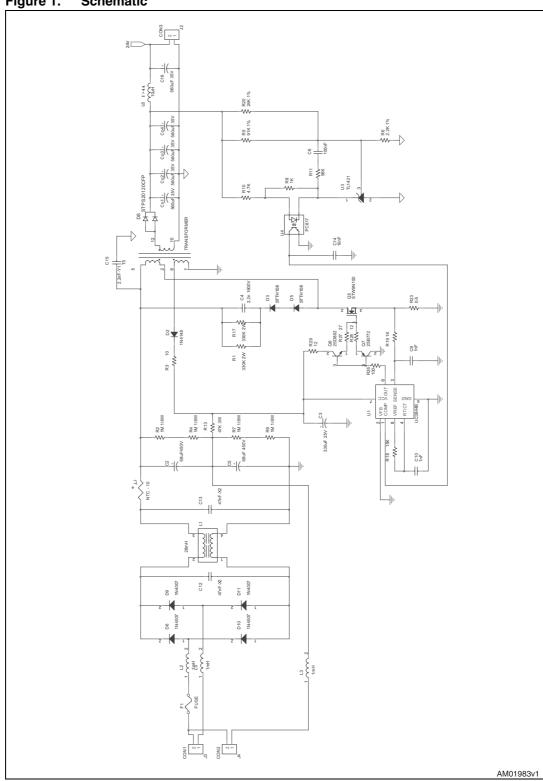


STEVAL-ISA054V1

Circuit schematic STEVAL-ISA054V1

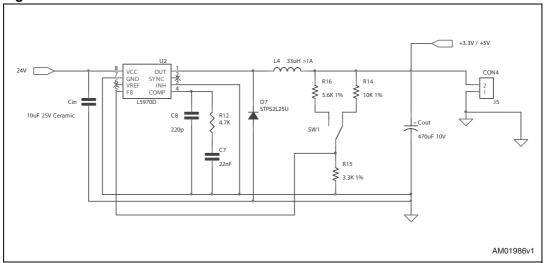
Circuit schematic 1

Figure 1. **Schematic**



STEVAL-ISA054V1 Circuit schematic

Figure 2. DC-DC converter



Revision history STEVAL-ISA054V1

2 Revision history

Table 1. Document revision history

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

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