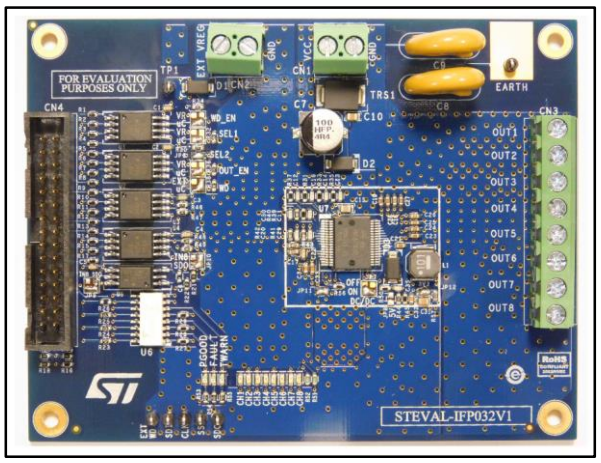
STEVAL-IFP032V1

Eight-channel high-side driver based on the VNI8200XP-32

Data brief



Features

- Operating voltage: from 10.5 to 33 V
- Operating current: 1.2 A for each channel
- Reverse polarity protection
- High-speed opto-isolation for SPI and parallel communication
- Low-speed opto-isolation for device fault signaling
- Step-down converter for 3.3 V or 5 V
- Digital supply voltage
- LED matrix for channel status signaling
- Microcontroller interface
- Designed to meet EMC standard requirements: IEC 61000-4-2, IEC 61000-4-4, IEC 61000-4-5
- RoHS compliant

Description

The STEVAL-IFP032V1 evaluation board, based on the VNI8200XP-32 high-side driver, is intended for device testing in terms of power management and digital interface.

In adherence with industrial standards, the board's isolated interface between the IPS and host controller are implemented using high-speed opto-couplers for IPS driving, and low-speed opto-couplers to receive device status information. Connection is achieved through a 30-pin connector.

A GUI interface provides a user-friendly way to test VNI8200XP-32 device functionality, after connecting the STEVAL-IFP032V1 evaluation board to a PC via a communication board (part number STEVAL-PCC009V2).

Thermal performance is improved thanks to a four-layer design with copper regions distributed across all the layers for more effective heat dissipation. The STEVAL-IFP032V1 evaluation board meets EFT standard requirements IEC 61000-4- 2, IEC 61000-4-4, IEC 61000-4-5.

1 Schematic diagram

Figure 1: STEVAL-IFP032V1 power section

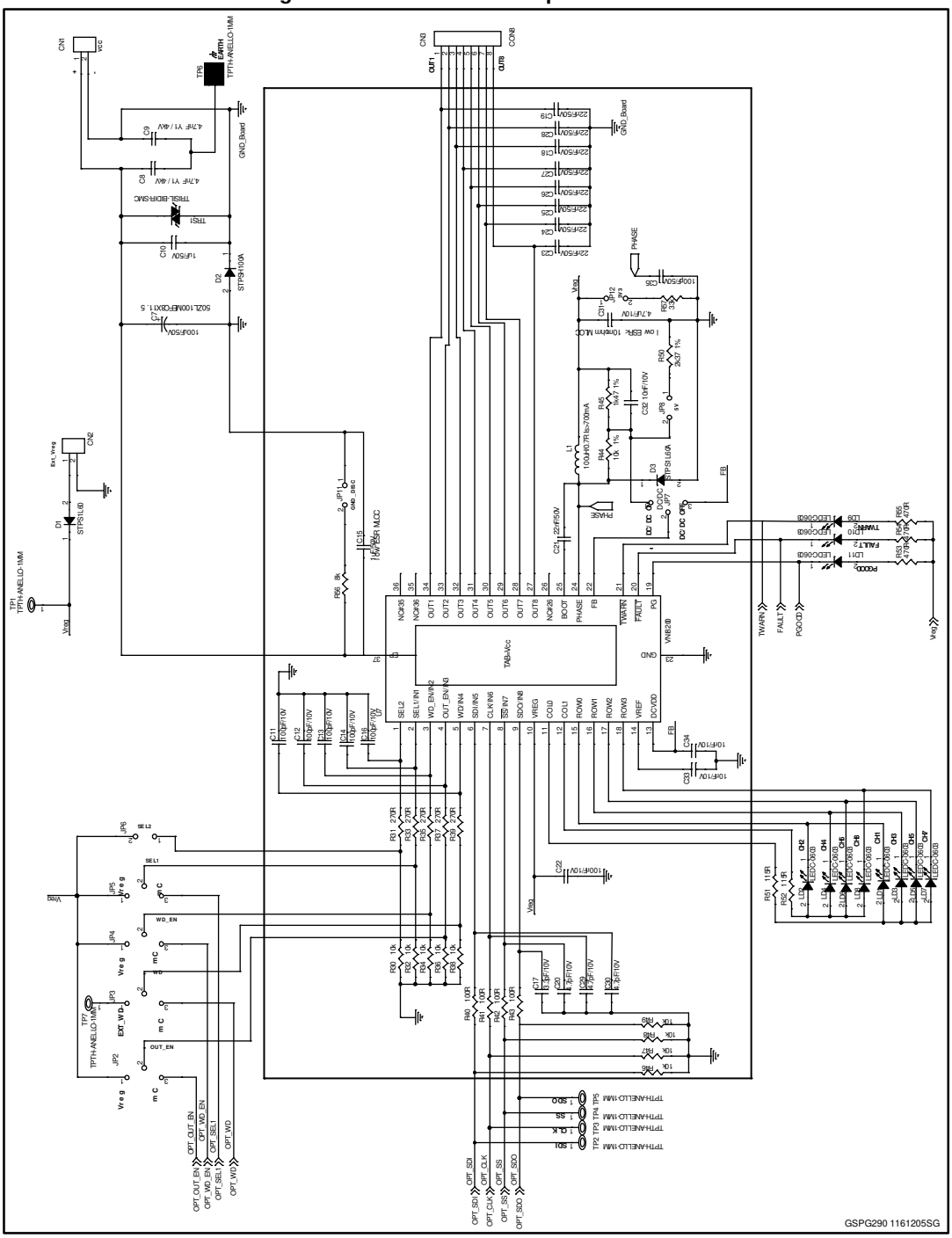
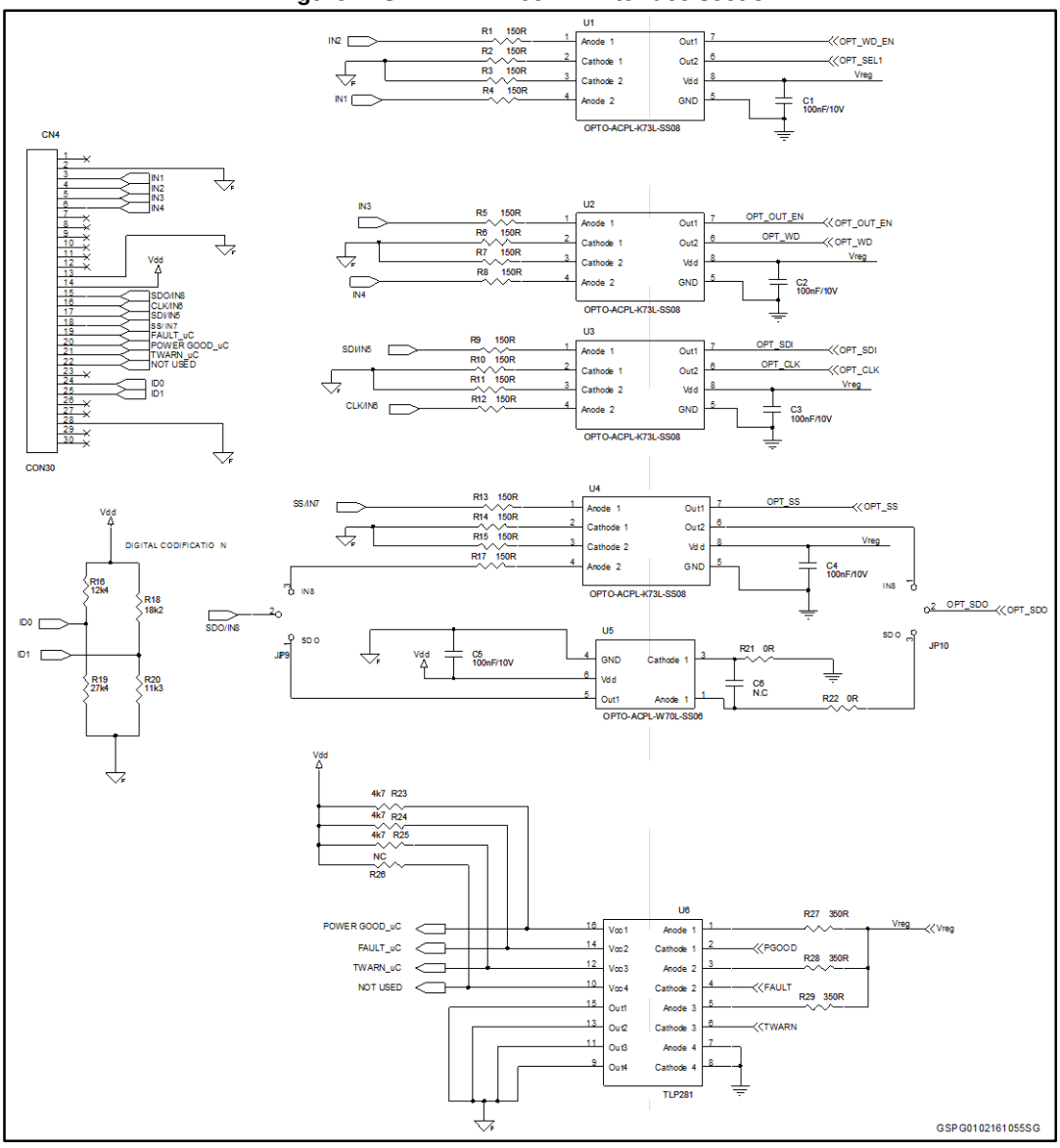


Figure 2: STEVAL-IFP032V1 interface section



2 Revision history

Table 1: Document revision history

Date	Version	Changes
02-Feb-2016	1	Initial release.

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