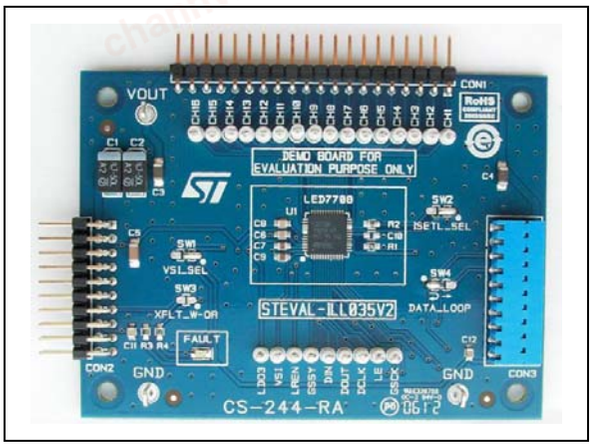
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STEVAL-ILL035V2

Multi-channel LED driver with integrated boost controller for medium/large LCD panel backlight based on LED7708

Data brief



Features

- Wide DC input voltage: 10 V - 28 V
- 16-channels with up to 85 mA/channel current capability and independent PWM brightness control
- Up to 15 white LEDs per channel
- Embedded open-channel and LED short-circuit faults management
- Expansion connector to cascade other STEVAL-ILL035V2 evaluation boards
- RoHS compliant

Description

The STEVAL-ILL035V2 product evaluation board is an extension (daughterboard) of the STEVAL-ILL035V1 (motherboard) based on the LED7708 LED driver. It allows implementation of a daisy-chained configuration for applications requiring more than 16 channels.

The LED7708 is configured as slave on the STEVAL-ILL035V2, and as master on the STEVAL-ILL035V1.

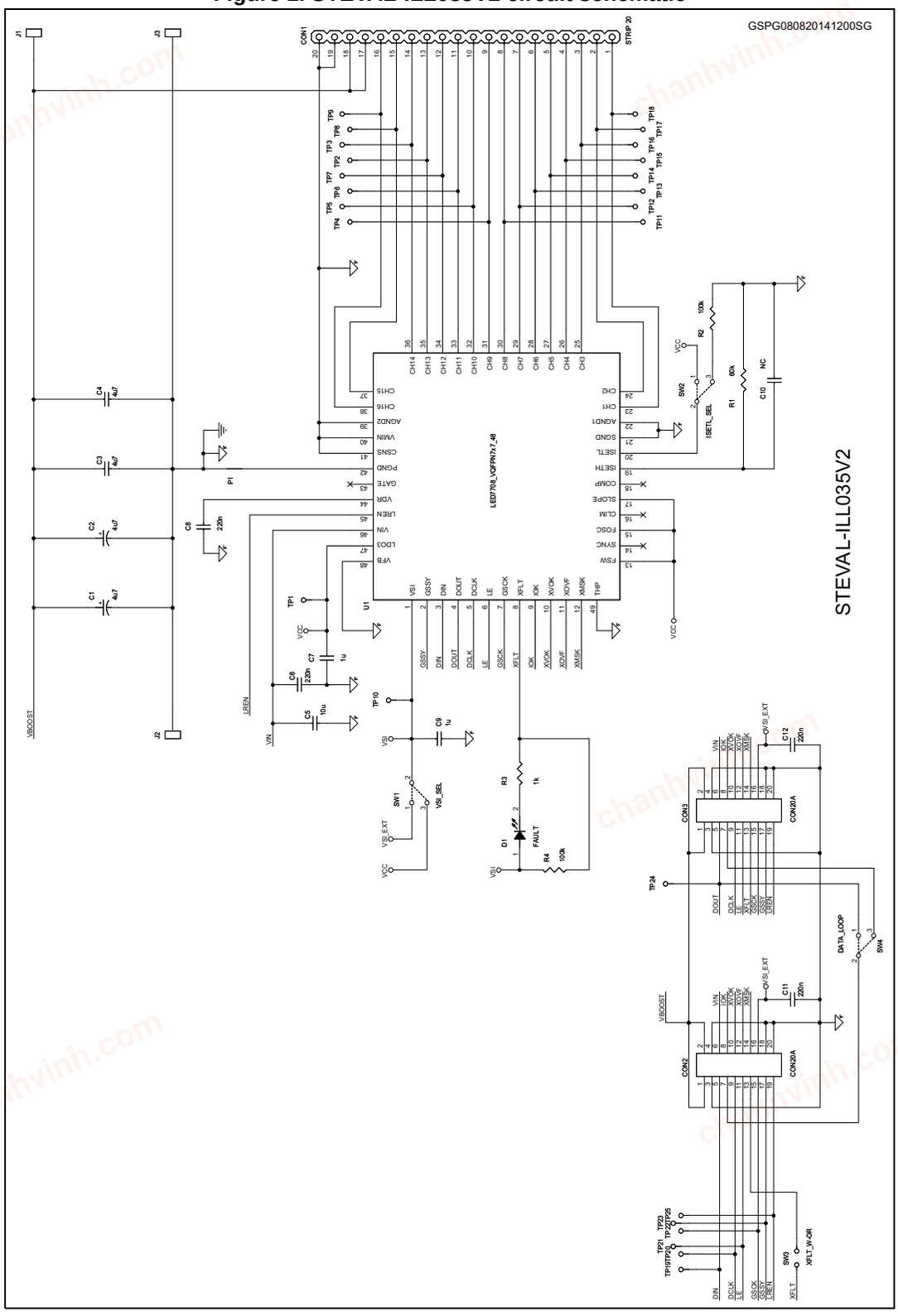
The boost controller section is not used and the supply voltage for the LED strings is derived from the motherboard (STEVAL-ILL035V1, master) by extending the output voltage optimization through dedicated hand-shake signals. Additional daughterboards can be connected to a single motherboard to increase the number of channels. The brightness control of the LED strings and the fault management options are identical to the ones available for the STEVAL-ILL035V1 evaluation board. The evaluation board is intended as a solution for medium/large LCD panel backlight drivers, but is suitable for any application involving several LEDs arranged is strings (e.g. advertisement panels, signs, gaming, etc.).

For further information contact your local STMicroelectronics sales office. www.st.com

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1 Schematic diagram

Figure 1. STEVAL-ILL035V2 circuit schematic



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2 Revision history

Table 1. Document revision history

Date	Revision	Changes
08-Aug-2014	1	Initial release.

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