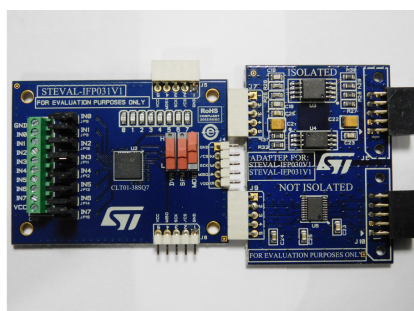


High speed digital input current limiter evaluation board based on CLT01-38SQ7



Features

- 8 inputs - 8-bit SPI output
- High side input with common ground
- 5 V voltage regulator
- Package: QFN 7 x 7 - 48 L
- 30 V reverse polarity capable
- Adjustable current limiters
- LED output for visual status
- Optional 16-bit mode with parity check, temperature and voltage alarms
- Daisy chain capable
- Power dissipation 78 mW per channel
- RoHS compliant

Description

This evaluation board implements an 8-line protected digital input termination with serialized state transfer for Programmable Logic Controllers. It is based on the [CLT01-38SQ7](#) device, which enhances I/O module density by reducing dissipation (78 mW per input) and the number of opto-transistors. A LED driver is embedded in each input section.

Its 6.25 MHz SPI peripheral output serializes the input state transfer to the I/O module controller.

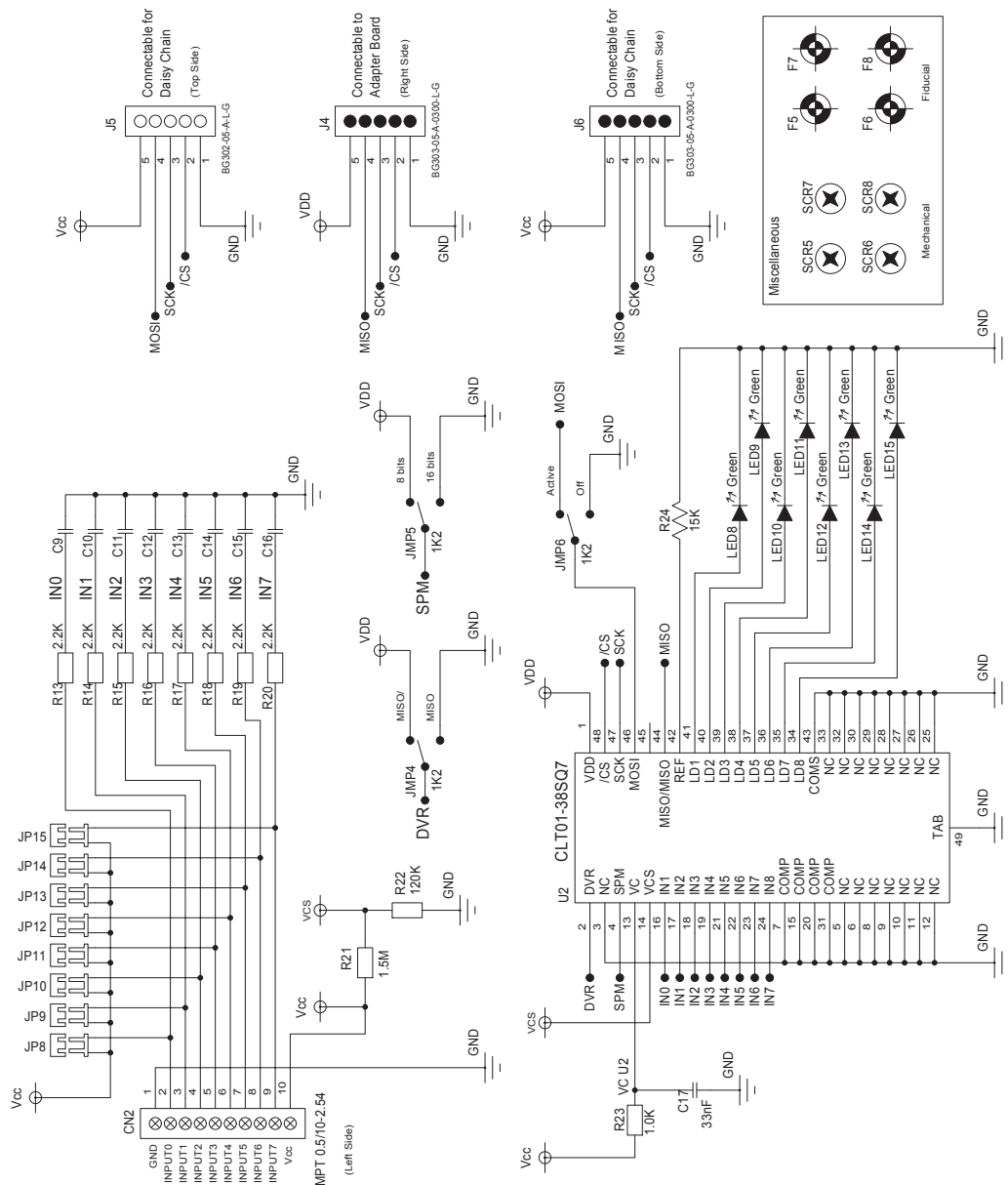
The [STEVAL-IFP031V1](#) evaluation board can be connected in daisy chain with other [STEVAL-IFP031V1](#) evaluation boards.

The adapter board can be placed between the first [STEVAL-IFP031V1](#) evaluation board in the chain and the [STEVAL-PCC009V2](#) STM32x microcontroller evaluation board. This adapter offers two buses: isolated and non-isolated.

Product summary	
High speed digital input current limiter evaluation board based on CLT01-38SQ7	STEVAL-IFP031V1
High speed digital input current limiter	CLT01-38SQ7
STM32-based USB-to-serial interface bridge board	STEVAL-PCC009V2

1 Schematic diagram

Figure 1. STEVAL-IFP031V1 circuit schematic



Revision history

Table 1. Document revision history

Date	Version	Changes
17-Dec-2015	1	Initial release.
05-Mar-2018	2	text and formatting changes

IMPORTANT NOTICE – PLEASE READ CAREFULLY

STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers' products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2018 STMicroelectronics – All rights reserved

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[STMicroelectronics:](#)

[STEVAL-IFP031V1](#)