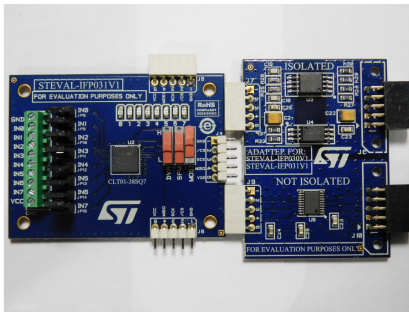


High speed digital input current limiter evaluation board based on CLT01-38SQ7



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.

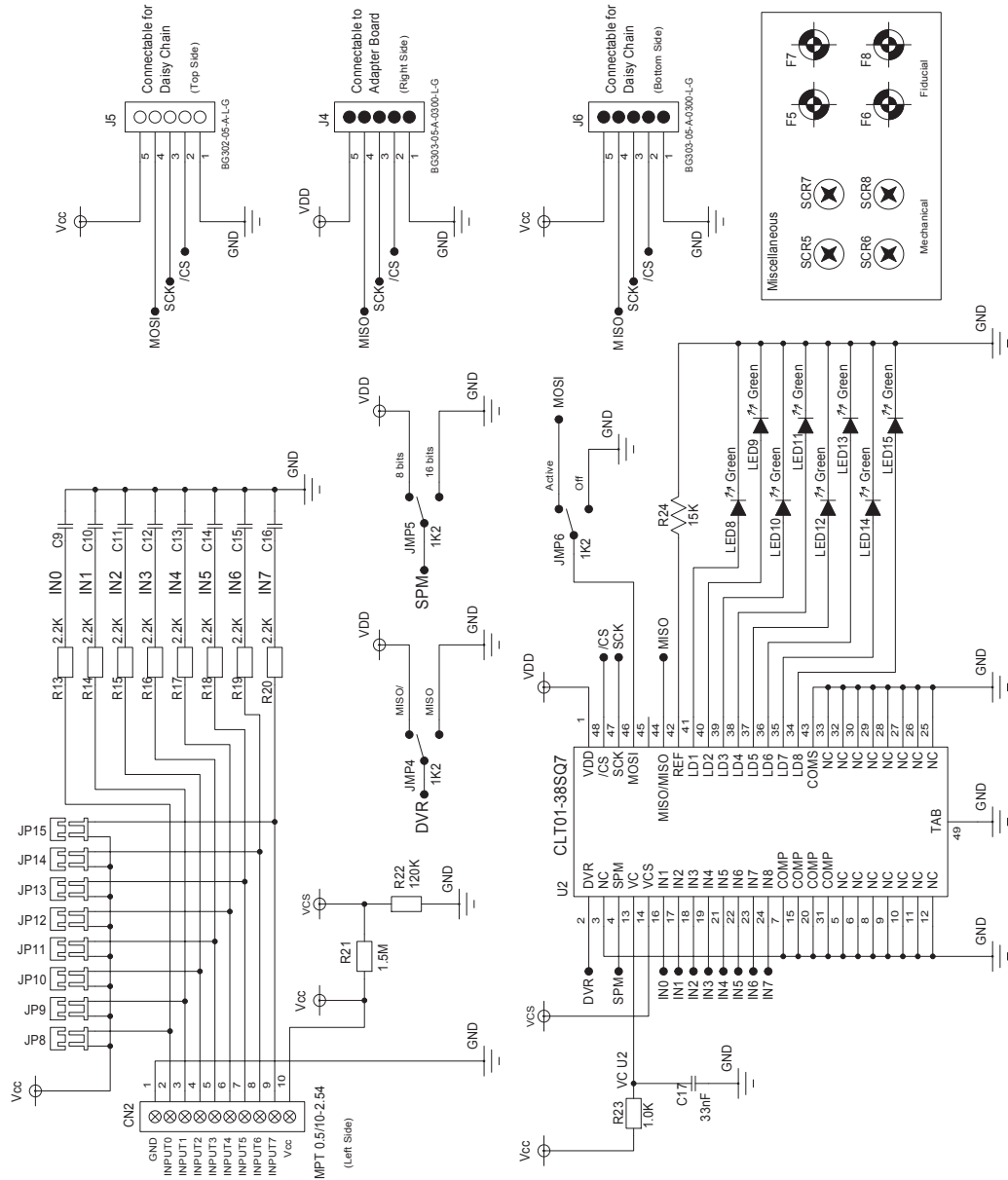
Its 6.25 MHz SPI peripheral output serializes the input state transfer to the I/O module controller.

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

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