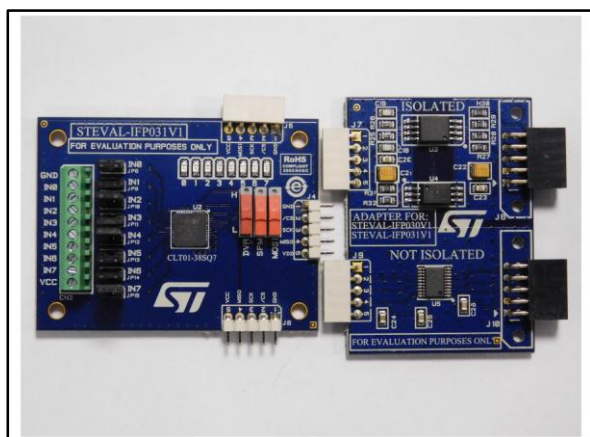


## High speed digital input current limiter evaluation board based on CLT01-8SQ7

Data brief



### 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 CLT01-8SQ7 device, which enhances the I/O module density by cutting dissipation (78 mW per input) and reducing 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.

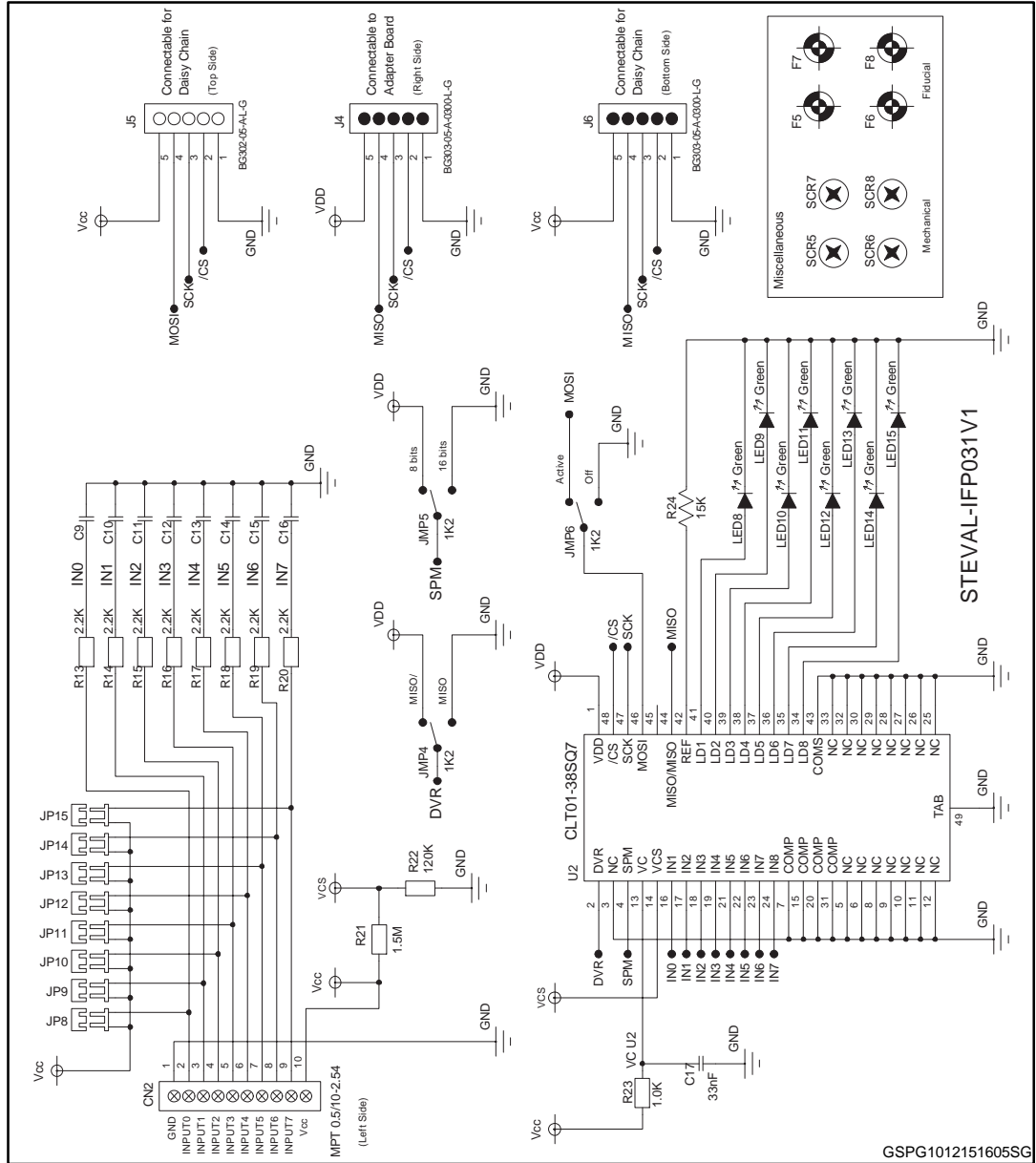
The STEVAL-IFP030V1 evaluation board illustrates the SCTL3-8BQ7 flexibility with: 8/16-bit mode with parity check, temperature and voltage alarms; daisy chain capability; MISO-MISO/.

The STEVAL-IFP031V1 evaluation board can be chained with many other STEVAL-IFP031V1 evaluation boards.

The adapter board can be placed between the first STEVAL-IFP031V1 evaluation board of the chain and the STEVAL-PCC009V2 STM32x microcontroller evaluation board. This adapter offers 2 buses: isolated and non-isolated.

# 1 Schematic diagram

Figure 1: CLT01-8SQ7 circuit schematic



GSPG1012151605SG

## 2 Ordering information

To order the PLC digital input kit based on CLT01-8SQ7, use the order code STEVAL-IFP031V1 and STEVAL-PCC009V2.

### 3 Revision history

Table 1: Document revision history

Date	Version	Changes
17-Dec-2015	1	Initial release.

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