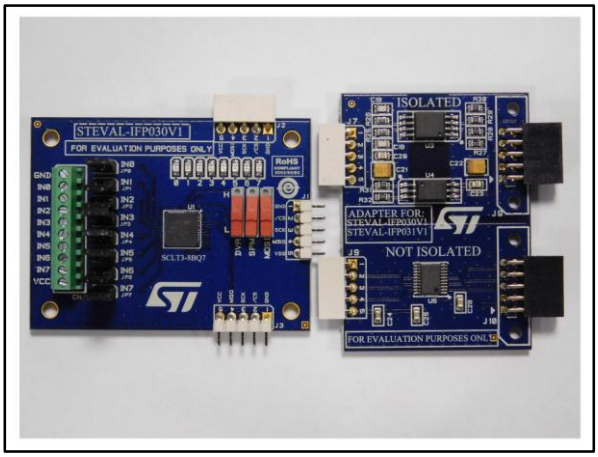
STEVAL-IFP030V1

High speed digital input current limiter evaluation board based on SCLT3-8BQ7

Data brief



Features

- 8 inputs - 8-bit SPI output
- High side input with common ground
- 5 V voltage regulator
- Package: QFN 7 x 7 - 48L
- 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
- Input digital filter with adjustable 20 to 160 µs delay
- 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 SCLT3-8BQ7 device.

The SCLT3-8BQ7 enhances the I/O module density by cutting the dissipation (78 mW per input) and reducing the opto-transistor count. An adjustable digital filter and an LED driver are embedded in each input section. Its 2 MHz SPI peripheral output serializes the input state transfer to the I/O module controller.

The STEVAL-IFP030V1 evaluation board illustrates the flexibility of the SCTL3-8BQ7 with: 8/16-bit mode with parity check, temperature and voltage alarms; daisy-chain capability; adjustable digital minimal filter time (20 µs /160 µs).

The STEVAL-IFP030V1 evaluation board can be chained with many other STEVAL-IFP030V1 evaluation boards.

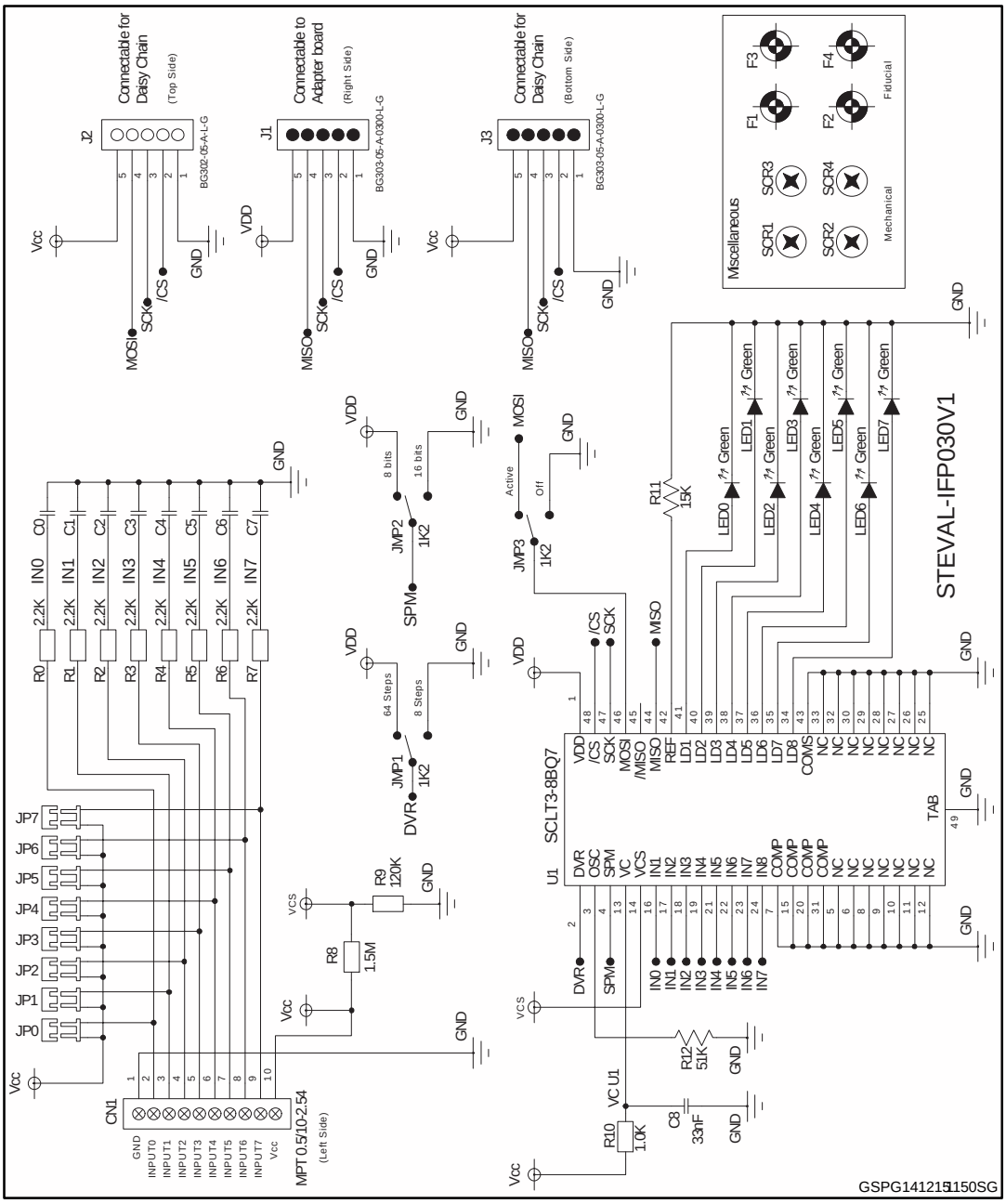
The adapter board can be placed between the first STEVAL-IFP030V1 evaluation board of the chain and the STEVAL-PCC009V2 STM32x microcontroller evaluation board. This adapter provides 2 buses: isolated and non-isolated.

For further information contact your local STMicroelectronics sales office

www.st.com

1 Schematic diagram

Figure 1: SCLT3-8BQ7 circuit schematic



2 Ordering information

To order the PLC digital input kit based on SCLT3-8BQ7, use the order codes STEVAL-IFP030V1 and STEVAL-PCC009V2.

3 Revision history

Table 1: Document revision history

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

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.

© 2015 STMicroelectronics – All rights reserved

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Power Management IC Development Tools ***category:***

Click to view products by STMicroelectronics ***manufacturer:***

Other Similar products are found below :

EVAL-ADM1168LQEBZ EVB-EP5348UI MIC23451-AAAYFL EV MIC5281YMME EV DA9063-EVAL ADP122-3.3-EVALZ ADP130-0.8-EVALZ ADP130-1.2-EVALZ ADP130-1.5-EVALZ ADP130-1.8-EVALZ ADP1714-3.3-EVALZ ADP1716-2.5-EVALZ ADP1740-1.5-EVALZ ADP1752-1.5-EVALZ ADP1828LC-EVALZ ADP1870-0.3-EVALZ ADP1871-0.6-EVALZ ADP1873-0.6-EVALZ ADP1874-0.3-EVALZ ADP1882-1.0-EVALZ ADP199CB-EVALZ ADP2102-1.25-EVALZ ADP2102-1.875EVALZ ADP2102-1.8-EVALZ ADP2102-2-EVALZ ADP2102-3-EVALZ ADP2102-4-EVALZ ADP2106-1.8-EVALZ ADP2147CB-110EVALZ AS3606-DB BQ24010EVM BQ24075TEVM BQ24155EVM BQ24157EVM-697 BQ24160EVM-742 BQ24296MEVM-655 BQ25010EVM BQ3055EVM NCV891330PD50GEVB ISLUSBI2CKIT1Z LM2744EVAL LM2854EVAL LM3658SD-AEV/NOPB LM3658SDEV/NOPB LM3691TL-1.8EV/NOPB LM4510SDEV/NOPB LM5033SD-EVAL LP38512TS-1.8EV EVAL-ADM1186-1MBZ EVAL-ADM1186-2MBZ