

Data brief

Evaluation board for ISOSD61L isolated sigma-delta converter.



Features

- Low voltage differential signaling
- 6 kV galvanic isolation
- 30 kV/µs high common-mode transient immunity
- 16-bit resolution, no missing codes
- ±320 mV full scale differential input signal range
- · Up to 25 MHz external clock input
- High SNR (86 dB) and bandwidth (49 kHz)
- -40°C to +125°C extended industrial temperature range
- · Coaxial and header pins available for flexible access to the inputs and outputs
- LVDS digital I/O (ISOSD61L) with on-board termination resistors
- · Additional pads for the connection of a shunt current sensor

Description

The EVALST-ISOSD61L is a full-featured evaluation board designed to allow the user to evaluate all the features of the ISOSD61L isolated analog-to-digital converter (ADC).

The ISOSD61L device is a 1-bit sigma-delta modulator with an output buffer separated from the input interface circuitry by a galvanic isolation barrier. The isolation barrier provides galvanic isolation of up to $6000\ V_{PEAK}$. When used in combination with a digital filter, the ISOSD61L device can be used to achieve 16-bit analog-to-digital (A/D) conversion with no missing codes.

Product status link

EVALST-ISOSD61L



Revision history

Table 1. Document revision history

Date	Version	Changes
11-Jan-2021	1	Initial release.
15-Jan-2021	2	Title updated.

DB4384 - Rev 2 page 2/4



Contents

Revision history	 	 • • • •	 	 	 	 • • •	 	 	• • •	• • •	 • • •	2
Contents	 	 	 	 	 	 	 	 			 	3

DB4384 - Rev 2 page 3/4



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. For additional information about ST trademarks, please refer to www.st.com/trademarks. 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.

© 2021 STMicroelectronics - All rights reserved

DB4384 - Rev 2 page 4/4