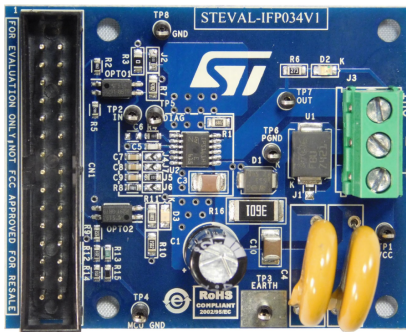
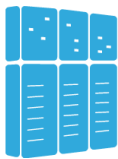


## Single high-side driver based on IPS161H



## Features

- Operating voltage range: 8 to 60 V
- Operating current: 0.5 A max
- Programmable cut-off delay time
- Reverse polarity protection
- Galvanic isolation on PCB
- Input pins compatible with  $V_{CC}$  rails
- Green LED for channel ON/OFF status
- Red LED for Common Diagnostics on:
  - open load in OFF state
  - cut-off
  - thermal protection
- Microcontroller interface
- Compliant with IEC 61000-4-2, IEC61000-4-4 and IEC 61000-4-5
- RoHS compliant



## Description

The [STEVAL-IFP034V1](#) evaluation board is designed to analyze the [IPS161H](#) device functionality.

It provides galvanic isolation between the user interface and the power interface through optical isolation implemented with optocouplers OPTO1 for forward signals to the device and OPT2 for diagnostic feedback signals.

IEC 61000-4-2, IEC61000-4-4 and IEC 61000-4-5 compliance is achieved by the [IPS161H](#) itself and the U1 component (the external TVS between  $V_{CC}$  supply rail and power ground).

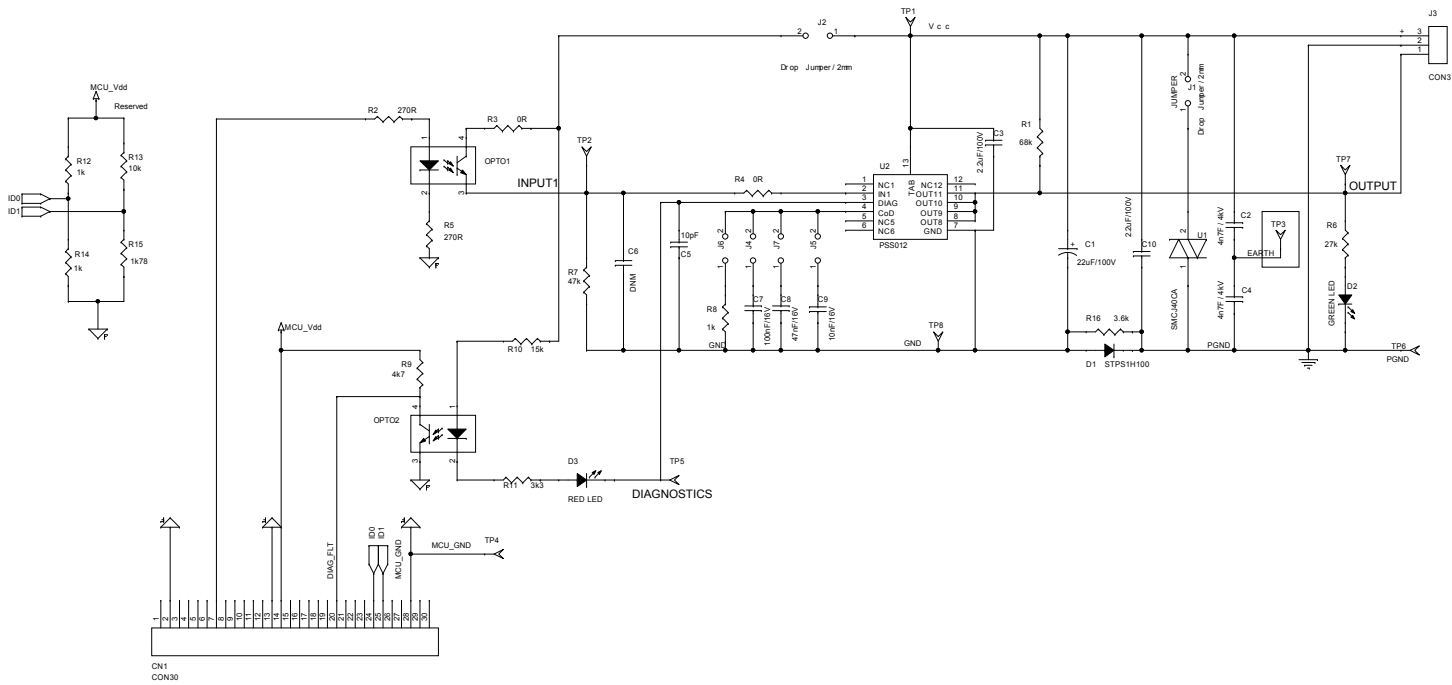
A dedicated GUI interface helps you test [IPS161H](#) functionality. To use it, ensure the [STEVAL-IFP034V1](#) is connected via a 30-way flat cable to a [STEVAL-PCC009V2](#), which is connected via USB to the PC running the GUI.

## Product summary

Single high side driver based on <a href="#">IPS161H</a>	<a href="#">STEVAL-IFP034V1</a>
Single high-side switch for safety integrity level (SIL2 and SIL3) compliant systems	<a href="#">IPS161H</a>

# 1 Schematic diagram

Figure 2. STEVAL-IFP034V1 board schematic



## Revision history

**Table 1. Document revision history**

Date	Version	Changes
18-Jan-2017	1	Initial release.
10-May-2019	2	Updated <a href="#">Section 1 Schematic diagram</a> Added new logos and product summary table in first page

**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](http://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.

© 2019 STMicroelectronics – All rights reserved