# STSW-IFAPGUI

Data brief

## Graphical user interface for the industrial IPS expansion boards for STM32 Nucleo

| Product summary | |
|---|---|
| Graphical user interface for the industrial IPS expansion boards for STM32 Nucleo | STSW-IFAPGUI |
| Evaluation firmware for STSW-IFAPGUI and IPS expansion boards | STSW-OUT1F4 |
| | STSW-OUT1G4 |
| | STSW-OUT02 |
| | STSW-OUT3F4 |
| | STSW-OUT3G4 |
| | STSW-OUT5F4 |
| | STSW-OUT5G4 |
| | STSW-OUT7F4 |
| | STSW-OUT7G4 |
| | STSW-OUT8F4 |
| | STSW-OUT8G4 |
| | STSW-OUT3D8F4 |
| | STSW-OUT3D8G4 |
| | STSW-OUT5D4F4 |
| | STSW-OUT5D4G4 |
| | STSW-OUT9F4 |
| | STSW-OUT9G4 |
| | STSW-OUT11F4 |
| | STSW-OUT11G4 |
| | STSW-OUT12F4 |
| | STSW-OUT12G4 |
| | STSW-OUT15F4 |
| | STSW-OUT15G4 |
| | STSW-OUT16F4 |
| | STSW-OUT16G4 |
| | STSW-DO40F4 |

## Features

- Automatic identification of firmware version and application board
- Support for intelligent power switch (IPS) expansion boards
  - X-NUCLEO-OUT01A2
  - X-NUCLEO-OUT02A1
  - X-NUCLEO-OUT03A1, STDES-OUT03DO8
  - X-NUCLEO-OUT04A1, STDES-OUT04DO8
  - X-NUCLEO-OUT05A1, STDES-OUT05DO4
  - X-NUCLEO-OUT06A1, STDES-OUT06DO4
  - X-NUCLEO-OUT07A1
  - X-NUCLEO-OUT08A1
  - X-NUCLEO-OUT09A1
  - X-NUCLEO-OUT10A1
  - X-NUCLEO-OUT11A1
  - X-NUCLEO-OUT12A1
  - X-NUCLEO-OUT13A1
  - X-NUCLEO-OUT14A1
  - X-NUCLEO-OUT15A1
  - X-NUCLEO-OUT16A1
  - X-NUCLEO-OUT17A1
  - X-NUCLEO-OUT19A1
  - X-NUCLEO-DO40A1
  - X-NUCLEO-DO41A1
- Control of the expansion board from a PC/laptop via USB cable and STM32 Nucleo development board USART interface

## Description

The STSW-IFAPGUI graphical user interface is designed to facilitate the control of the industrial IPS expansion boards for STM32 Nucleo.

The common software engine embedded in the STSW-IFAPGUI lets you control different applications with the same GUI.

The automatic detection feature communicates with the firmware that runs on the STM32 Nucleo development board, which is connected via USB to a laptop or PC, and then opens the control window of the detected device.

The GUI is available free of charge on www.st.com.

| Product summary | |
|---|---|
| Evaluation firmware for STSW-IFAPGUI and IPS expansion boards | STSW-DO40G4 |
| Applications | Industrial Safety<br>Industrial Tools |

## Revision history

**Table 1. Document revision history**

| Date | Version | Changes |
|---|---|---|
| 12-Nov-2018 | 1 | Initial release. |
| 04-Mar-2019 | 2 | Added references to STSW-OUT02 firmware. |
| 16-Jun-2020 | 3 | Added X-NUCLEO-OUT08A1, X-NUCLEO-OUT010A1, STSW-OUT8F4 and STSW-OUT8G4 compatibility information. |
| 15-Nov-2021 | 4 | Added X-NUCLEO-OUT03A1, X-NUCLEO-OUT04A1, STSW-OUT3F4 and STSW-OUT3G4 compatibility information. |
| 12-Apr-2022 | 5 | Added X-NUCLEO-OUT05A1, X-NUCLEO-OUT06A1, STSW-OUT5F4, STSW-OUT5G4, STDES-OUT03DO8, STDES-OUT04DO8, STSW-OUT3D8F4 and STSW-OUT3D8G4 compatibility information. |
| 30-May-2022 | 6 | Added STDES-OUT05DO4, STDES-OUT06DO4, STSW-OUT5D4F4 and STSW-OUT5D4G4 compatibility information. |
| 30-Jun-2022 | 7 | Added STSW-OUT15F4 and STSW-OUT15G4 compatibility information. |
| 26-May-2023 | 8 | Added X-NUCLEO-OUT09A1, X-NUCLEO-OUT11A1, X-NUCLEO-OUT12A1, X-NUCLEO-OUT13A1, X-NUCLEO-OUT14A1, X-NUCLEO-OUT19A1 and STSW-OUT9F4, STSW-OUT9G4, STSW-OUT11F4, STSW-OUT11G4, STSW-OUT12F4, STSW-OUT12G4 compatibility information. |
| 19-Oct-2023 | 9 | Updated product summary in cover page.<br>Added X-NUCLEO-OUT01A2, STSW-OUT1F4 and STSW-OUT1G4 compatibility information. |
| 04-Oct-2024 | 10 | Updated product summary in cover page.<br>Added X-NUCLEO-OUT07A1, X-NUCLEO-OUT16A1, X-NUCLEO-OUT17A1 and STSW-OUT7F4, STSW-OUT7G4, STSW-OUT16F4, STSW-OUT16G4 compatibility information. |
| 14-Jan-2025 | 11 | Updated product summary in cover page.<br>Added X-NUCLEO-DO40A1, X-NUCLEO-DO41A1 and STSW-DO40F4, STSW-DO40G4 compatibility information. |

**IMPORTANT NOTICE – 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 acknowledgment.

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, 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.

© 2025 STMicroelectronics – All rights reserved