

Display expansion board for STM32 Nucleo-144



*X-NUCLEO-GFX02Z1 top view.
Picture is not contractual.*

Features

- 2.2" 8-bit parallel interface QVGA TFT LCD
- 64-Mbit Q-SPI NOR Flash memory
- Joystick for easy menu navigation
- Compatible with selected STM32 Nucleo-144 boards using the Zio connector

Description

The X-NUCLEO-GFX02Z1 expansion board adds graphic user interface (GUI) capability to STM32 Nucleo-144 boards.

It features a 2.2" 8-bit parallel interface TFT display as well as a 64-Mbit Q-SPI NOR Flash memory for storing graphic images, texts and texture. The expansion board also offers a joystick for GUI navigation.

X-NUCLEO-GFX02Z1 features the Zio connector. It is compatible with the NUCLEO-F412ZG, NUCLEO-F413ZH, NUCLEO-F446ZE, NUCLEO-F722ZE, NUCLEO-F746ZG, NUCLEO-F756ZG, NUCLEO-F767ZI, NUCLEO-H743ZI, NUCLEO-H723ZG, NUCLEO-H753ZI, NUCLEO-H745ZI-Q, NUCLEO-H755ZI-Q, NUCLEO-H7A3ZI-Q, NUCLEO-L496ZG, NUCLEO-L496ZG-P, NUCLEO-L4A6ZG, NUCLEO-L4P5ZG, NUCLEO-L4R5ZI, NUCLEO-L4R5ZI-P, NUCLEO-L552ZE-Q and NUCLEO-U575ZI-Q Nucleo-144 boards.

Product status link

X-NUCLEO-GFX02Z1



1 Ordering information

To order the X-NUCLEO-GFX02Z1 expansion board, refer to Table 1.

Table 1. Ordering information

Order code	Board reference	User manual
X-NUCLEO-GFX02Z1	MB1818	UM2905

The STM32 Nucleo-144 boards feature STM32 32-bit microcontrollers based on the Arm® Cortex®-M processor.

Note: Arm is a registered trademark of Arm Limited (or its subsidiaries) in the US and/or elsewhere.



1.1 Product marking

The stickers located on the top or bottom side of the PCB provide product information:

- Product order code and product identification for the first sticker
- Board reference with revision, and serial number for the second sticker

On the first sticker, the first line provides the product order code, and the second line the product identification.

On the second sticker, the first line has the following format: "MBxxx-Variant-yyz", where "MBxxx" is the board reference, "Variant" (optional) identifies the mounting variant when several exist, "y" is the PCB revision and "zz" is the assembly revision, for example B01. The second line shows the board serial number used for traceability.

Evaluation tools marked as "ES" or "E" are not yet qualified and therefore not ready to be used as reference design or in production. Any consequences deriving from such usage will not be at ST charge. In no event, ST will be liable for any customer usage of these engineering sample tools as reference designs or in production.

"E" or "ES" marking location is next to the evaluation tool ordering part number that is stuck or silk-screen printed on the board.

2 Development environment

2.1 Demonstration software

The demonstration software supporting the X-NUCLEO-GFX02Z1 expansion board is available from the X-CUBE-DISPLAY STM32Cube Expansion Package and must be programmed into the corresponding Nucleo-144 board. The latest versions of the demonstration source code and associated documentation can be downloaded from www.st.com.

Revision history

Table 2. Document revision history

Date	Revision	Changes
9-Sep-2021	1	Initial release.

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