

## SPI display expansion board for STM32 Nucleo



*X-NUCLEO-GFX01M1 top view.  
Picture is not contractual.*

### Features

- 2.2" SPI QVGA TFT LCD
- 64-Mbit SPI NOR Flash memory
- Joystick for easy menu navigation
- Compatible with selected STM32 Nucleo boards using the ST morpho interface

### Description

The **X-NUCLEO-GFX01M1** expansion board adds graphic user interface (GUI) capability to STM32 Nucleo boards.

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

X-NUCLEO-GFX01M1 uses the ST morpho connector. It is compatible with the **NUCLEO-F030R8**, **NUCLEO-F070RB**, **NUCLEO-F072RB**, **NUCLEO-F091RC**, **NUCLEO-F401RE**, **NUCLEO-F410RB**, **NUCLEO-F411RE**, **NUCLEO-F446RE**, **NUCLEO-G071RB**, **NUCLEO-L053R8**, **NUCLEO-L073RZ**, **NUCLEO-L412RB-P**, **NUCLEO-L433RC-P**, **NUCLEO-L452RE**, **NUCLEO-L452RE-P** and **NUCLEO-L476RG** Nucleo boards.

Product status link

X-NUCLEO-GFX01M1



## 1 Ordering information

To order the X-NUCLEO-GFX01M1 module, refer to Table 1.

**Table 1. Ordering information**

Order code	Board reference	User manual	Target STM32
X-NUCLEO-GFX01M1	MB1642	UM2750	Not applicable

The STM32 Nucleo 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 sticker located on the top or bottom side of the PCB board shows the information about product identification such as board reference, revision and serial number.

The first identification 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 identification line is 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 examples of location:

- On the targeted STM32 that is soldered on the board (For an illustration of STM32 marking, refer to the STM32 datasheet "Package information" paragraph at the [www.st.com](http://www.st.com) website).
- Next to the evaluation tool ordering part number that is stuck or silk-screen printed on the board.

## **2**      **Development environment**

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### **2.1**      **Demonstration software**

The demonstration software supporting the **X-NUCLEO-GFX01M1** expansion board is available from the **X-CUBE-DISPLAY** STM32Cube Expansion Package and must be programmed into the corresponding Nucleo board. The latest versions of the demonstration source code and associated documentation can be downloaded from [www.st.com](http://www.st.com).

## Revision history

**Table 2. Document revision history**

Date	Version	Changes
14-Aug-2020	1	Initial release.



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