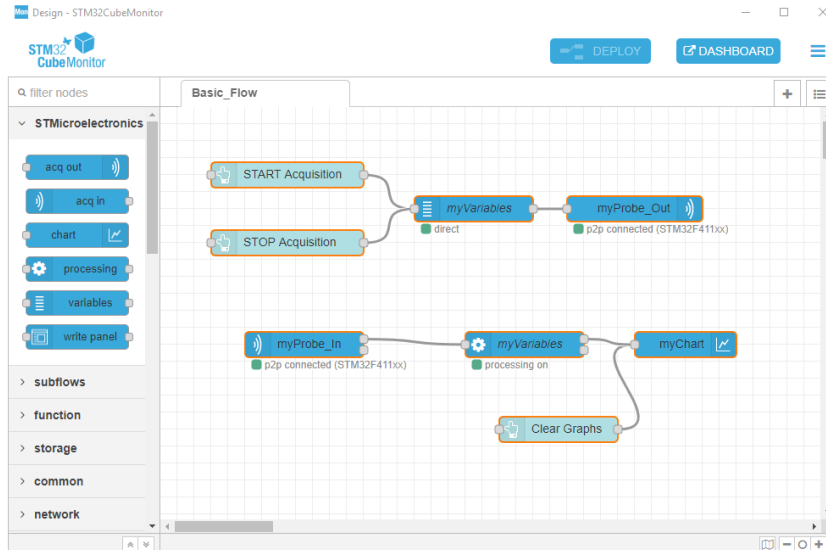


Run-time variables monitoring and visualization tool for STM32 devices



Product status link

[STM32CubeMonitor](#)

Features

- Graphical flow-based editor with no programming needed to build dashboards
- Connects to any STM32 device via ST-LINK (SWD or JTAG protocols)
- Reads and writes variables on-the-fly from and to the RAM in real time while the target application is running
- Parses debugging information from the application executable file
- Direct acquisition mode or snapshot mode
- Trigger to focus on application behaviors of interest
- Enables to log data into a file and replay for exhaustive analysis
- Delivers customized visualization with configurable display windows (such as curves and boxes) and a large choice of widgets (such as gauges, bar graphs and plots)
- Multi-probe support to monitor multiple targets simultaneously
- Remote monitoring with native support of multi-format displays (PCs, tablets, mobile phones)
- Direct support of the Node-RED® open community
- Multi-OS support: Windows®, Linux®, Ubuntu® and macOS®

Description

The STM32CubeMonitor family of tools helps to fine-tune and diagnose STM32 applications at run-time by reading and visualizing their variables in real-time. In addition to specialized versions (power, RF, USB-PD), the versatile [STM32CubeMonitor](#) provides a flow-based graphical editor to build custom dashboards simply, and quickly add widgets such as gauges, bar graphs and plots. With non-intrusive monitoring, STM32CubeMonitor preserves the real-time behavior of applications, and perfectly complements traditional debugging tools to perform application profiling.

With remote monitoring and native support for multi-format displays, STM32CubeMonitor enables users to monitor applications across a network, test multiple devices simultaneously, and perform visualization on various host devices such as PCs, tablets, or mobile phones. Moreover, with the direct support of the Node-RED® open community, STM32CubeMonitor allows an unlimited choice of extensions to address a wide diversity of application types.

1 General information

STM32CubeMonitor supports STM32 devices based on the Arm® Cortex® processor.

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



1.1 Ordering information

STM32CubeMonitor is available for free download from the www.st.com website.

1.2 What is STM32Cube?

STM32Cube is an STMicroelectronics original initiative to significantly improve designer's productivity by reducing development effort, time and cost. STM32Cube covers the whole STM32 portfolio.

STM32Cube includes:

- A set of user-friendly software development tools to cover project development from the conception to the realization, among which:
 - STM32CubeMX, a graphical software configuration tool that allows the automatic generation of C initialization code using graphical wizards
 - STM32CubeIDE, an all-in-one development tool with peripheral configuration, code generation, code compilation, and debug features
 - STM32CubeProgrammer (STM32CubeProg), a programming tool available in graphical and command-line versions
 - STM32CubeMonitor (STM32CubeMonitor, STM32CubeMonPwr, STM32CubeMonRF, STM32CubeMonUCPD) powerful monitoring tools to fine-tune the behavior and performance of STM32 applications in real-time
- STM32Cube MCU & MPU Packages, comprehensive embedded-software platforms specific to each microcontroller and microprocessor series (such as STM32CubeF4 for the STM32F4 Series), which include:
 - STM32Cube hardware abstraction layer (HAL), ensuring maximized portability across the STM32 portfolio
 - STM32Cube low-layer APIs, ensuring the best performance and footprints with a high degree of user control over the HW
 - A consistent set of middleware components such as RTOS, USB, TCP/IP, and graphics
 - All embedded software utilities with full sets of peripheral and applicative examples
- STM32Cube Expansion Packages, which contain embedded software components that complement the functionalities of the STM32Cube MCU & MPU Packages with:
 - Middleware extensions and applicative layers
 - Examples running on some specific STMicroelectronics development boards

1.3 License

STM32CubeMonitor is delivered under the *Mix Ultimate Liberty+OSS+3rd-party V1* software license agreement (SLA0048).

For more details about the license agreement of each component, refer to the release note (RN0119).

Revision history

Table 1. Document revision history

Date	Version	Changes
28-Feb-2020	1	Initial release.

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