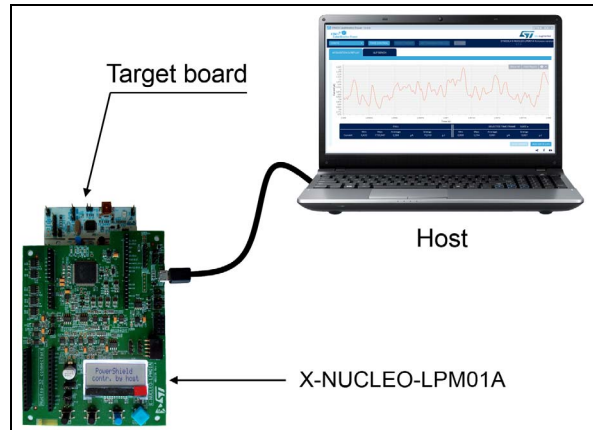


Software tool for power and ultra-low-power measurements

Data brief

Features

- Reception of power measurements done by X-NUCLEO-LPM01A at up to 100 kHz (dynamic measurement from 100 nA up to 50 mA with ~2% accuracy)
- Execution of ULPBench™ tests and estimation of ULPMark™ score
- Data subsampling on reception to allow graphical rendering in real-time, while not losing any data point
- Intuitive navigation into data using mouse-based zoom and move functions
- Control of all X-NUCLEO-LPM01A functions from the graphical interface such as acquisition frequency, supply voltage, triggers, and others
- Computing of consumed energy
- Capability to save acquired data, and to load previously saved data
- Multi-OS support: Windows®, Linux®, and macOS®



Description

STM32CubeMonitor-Power (STM32CUBEMON-PWR) enables developers to swiftly analyze the low-power performance of target boards. This software tool acquires power measurements through the X-NUCLEO-LPM01A specialized intermediate board, and displays these measurements using an intuitive graphical interface. Dynamic measurement of current covers a range from 100 nA to 50 mA, while STM32CubeMonitor-Power allows updating of acquisition parameters, and data rendering in real time. Execution of EEMBC® ULPBench™ tests is also supported to provide an accurate ULPMark™ score directly.



Application pictures

Figure 1. STM32CUBEMON-PWR acquisition and replay screen



Figure 2. STM32CUBEMON-PWR ULPBench™ screen



Revision history

Table 1. Document revision history

Date	Revision	Changes
20-Sep-2017	1	Initial release.

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