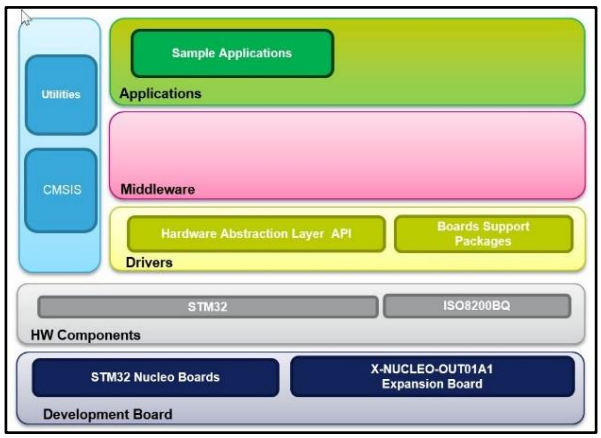
X-CUBE-OUT1

Industrial digital output software expansion for STM32Cube

Data brief



Features

- Complete software package to build industrial digital output applications cases based on the ISO8200BQ device
- Driver layer for easy management of the ISO8200BQ device
- Easy portability across different MCU families thanks to STM32Cube
- Free user-friendly license terms
- Sample implementation available on the X-NUCLEO-OUT01A1 expansion board when connected on NUCLEO-F103RB or NUCLEO-F302R8 or NUCLEO-F401RE

Description

The X-CUBE-OUT1 expansion software for STM32Cube runs on STM32 with drivers for the ISO8200BQ galvanic isolated octal high-side smart power solid state-relay.

The software comes with sample implementations of the drivers running on the X-NUCLEO-OUT01A1 expansion board connected to a NUCLEO-F103RB, NUCLEO-F302R8 or NUCLEO-F401RE development board to kick-start development.

The expansion is built on STM32Cube software technology to ease portability across different STM32 microcontrollers.

What is STM32Cube?

STMCube™ is designed by STMicroelectronics to reduce development effort, time and cost across the entire STM32 portfolio.

STM32Cube version 1.x includes:

- STM32CubeMX, a graphical software configuration tool that allows the generation of C initialization code using graphical wizards.
- A comprehensive embedded software platform specific to each series (such as the STM32CubeF4 for the STM32F4 series), which includes:
  - the STM32Cube HAL embedded abstraction-layer software, ensuring maximized portability across the STM32 portfolio
  - a consistent set of middleware components such as RTOS, USB, TCP/IP and graphics
  - all embedded software utilities with a full set of examples

How does this firmware complement STM32Cube?

This firmware is based on the STM32CubeHAL hardware abstraction layer for STM32 microcontrollers. The package extends STM32Cube with a specific board support package (BSP) for the X-NUCLEO-OUT01A1 expansion board.

The drivers abstract low-level hardware details to access the ISO8200BQ device data in a hardware-independent manner. The package includes a set of examples that the developer can use to start experimenting with the code.

Revision history

Table 1: Document revision history

Date	Version	Changes
22-May-2017	1	Initial release.

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