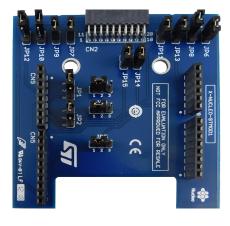


Data brief

STMod+ connector expansion board for STM32 Nucleo



Features

- STMod+ connector compatible with STM32 Nucleo boards
- Full STMod+ support for a range of interfaces: SPI, UART, I²C, RESET, INTERRUPT, ADC, PWM and general purpose I/Os
- STM32 Nucleo support through Arduino UNO V3 connector
- Set of 15 Jumpers to allow multiple configurations and expand the range of possible use cases
- · RoHS compliant

Description

The X-NUCLEO-STMODA1 provides an easy way to expand your STM32 Nucleo board with the STMod+ connector, which allows interaction with the new set of STM32 Nucleo development boards using this connector. It provides an easy way to evaluate the STMod+ board solution together with other STM32 Nucleo boards.

The STMod+ is a 2x10-pin connector providing a set of interfaces such as SPI, UART, I²C and other functions such as RESET, INTERRUPT, ADC, PWM and general purpose I/Os. The X-NUCLEO-STMODA1 has a female STMod+ connector with 2 mm pitch.

The X-NUCLEO-STMODA1 expansion board is equipped with a set of jumpers for the added flexibility of allowing you to also use the board with the STM32 B-L475E-IOT01A discovery kit node board.

| Product summary | | |
|---|--------------------|--|
| STMod+ connector expansion board for STM32 Nucleo | X-NUCLEO- MODA1 | |
| STM32L4 Discovery kit IoT node, Iow-power wireless, BLE, NFC, SubGHz, Wi-Fi | B-L475E-IOT01A | |
| LTE Cellular to Cloud Pack with STM32L496AG MCU | P-L496G-CELL02 | |
| System Workbench for STM32: free IDE on Windows, Linux and OS X | SW4STM32 | |





1 Schematic diagrams

STmod+ 20 19 GPIO4 GPIO3 I2CZ_SDA 10 SPIX_MISOS SPIX_MOSIS 9 GPIO2 GPIO1 18 17 8 7 I2CZ_SCL - I2UZ SUM + +5V - GND - SPIX SCK/UARTY RTS - SPIX MISOP/UARTY RX - SPIX MOSIP/UARTY TX - SPIX NSS/UARTY_CTS GND 16 15 14 13 12 11 6 5 4 3 2 1 +5V PWM ADC RESET INT ADC INT A5 A4 A3 A2 A1 A0 GPIO4
UART_RTS
SPIX_NSS/UARTY_CTS CN8 GND GND USART2_TX USART_TX USART1_TX +5V JP2 USART2_RX USART_RX USART1_RX Arduino Connector CN9 USART2_RX USART2_TX USART1_RX D0 D1 D2 D3 D4 D5 D6 IP3 USART_TX SPIX_MOSIP/UARTY_TX SPI1_MOSI GPIO3 SPIX_MOSIS SPIX_MISOS PWM USART_RX SPIX_MISOP/UARTY_RX SPI1_MISO GPIO2 UART_RTS SPIX_SCK/UARTY_RTS SPI1_SCK USART1_TX RESET GPIO1 D9 D10 D11 D12 D13 SPI1_MOSI SPI1_MISO SPI1_SCK GND I2CZ_SDA I2CZ_SCL D14 D15

Figure 2. X-NUCLEO-MODA1 circuit schematics

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Revision history

Table 1. Document revision history

| Date | Version | Changes |
|-------------|---------|------------------|
| 10-Apr-2018 | 1 | Initial release. |

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