STMP15X-SHIELD

User Manual

Rev.1.0 October 2022

olimex.com

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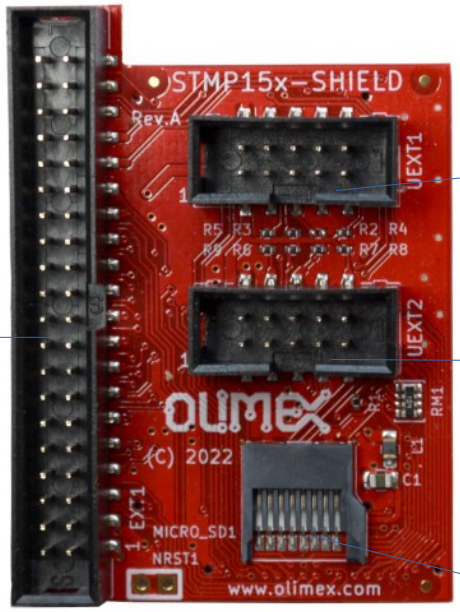
What is STMP15X-SHIELD

STMP15X-SHIELD is Open Source Hardware Industrial grade -25+85ºC development board compatible with STMP157-OLinuXino and adds:

- two UEXT connectors
- 40 pin GPIO connector with 0.1” step (2.54 mm) step
- micro SD card connector



40 pin GPIO 0.1” (2.54 mm) step connector

UEXT 1

UEXT 2

Micro SD card

STMP15X-SHIELD ordering options

STMP15X-SHIELD can be ordered as:

- STMP15X-SHIELD

Additional accessories:

Micro SD cards: MICRO-SD-CLASS10

UEXT cables: CABLE-IDC10-15cm

UEXT modules: UEXT-MODULES

Jumper wires: JW-200x10-FF, JW-200x10-FM

STMP15X-SHIELD Open Source Licensee

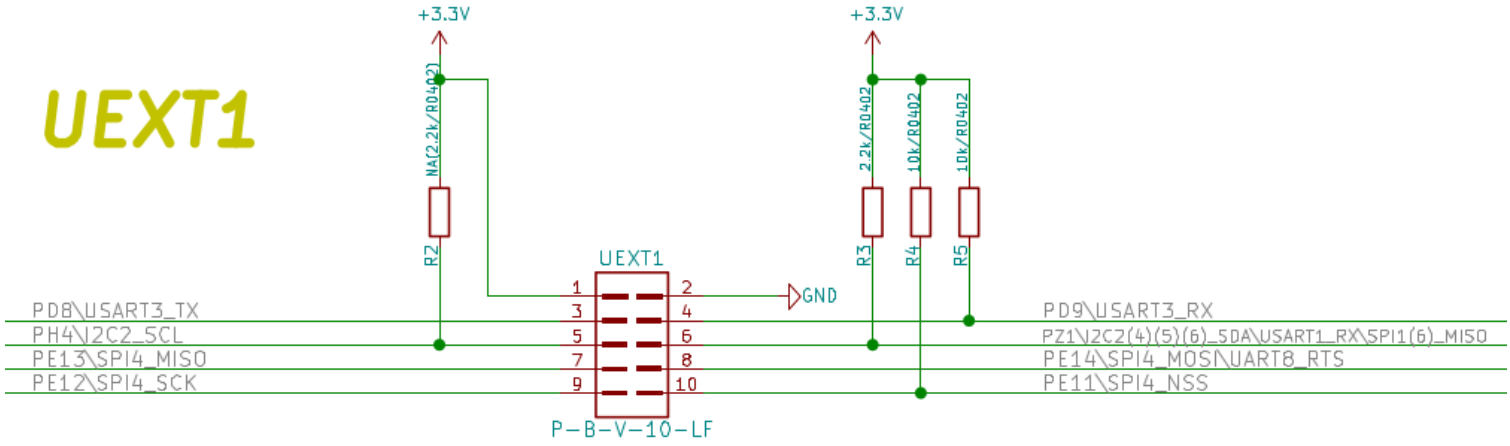
STMP15X-SHIELD is Open Source Hardware.

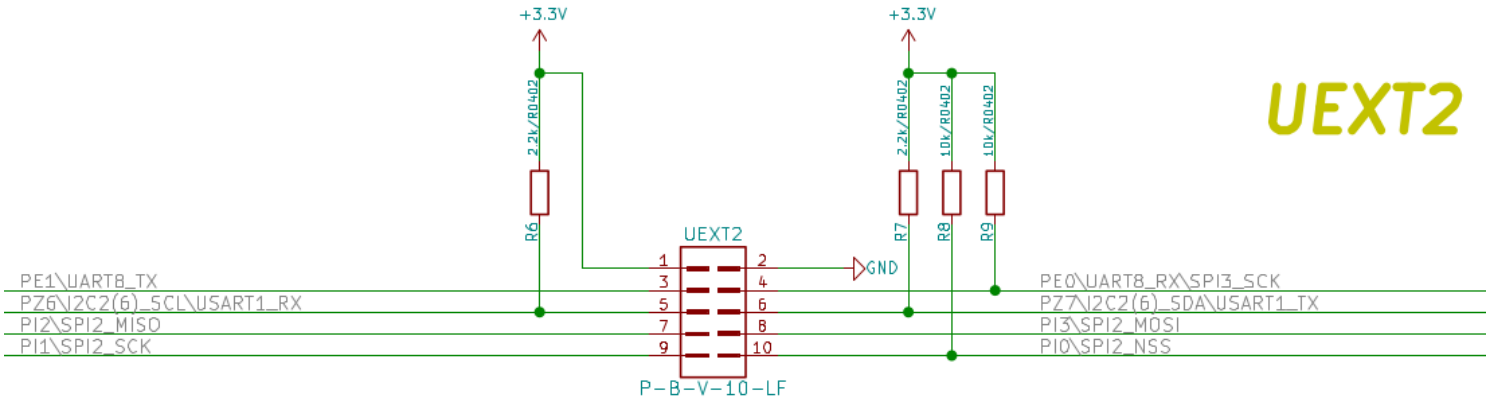
The Hardware files are released under CERN OSHW licensee.
The software is released under GPL 3 licensee.
The documentation is released under CC BY-SA 3.0 licensee.

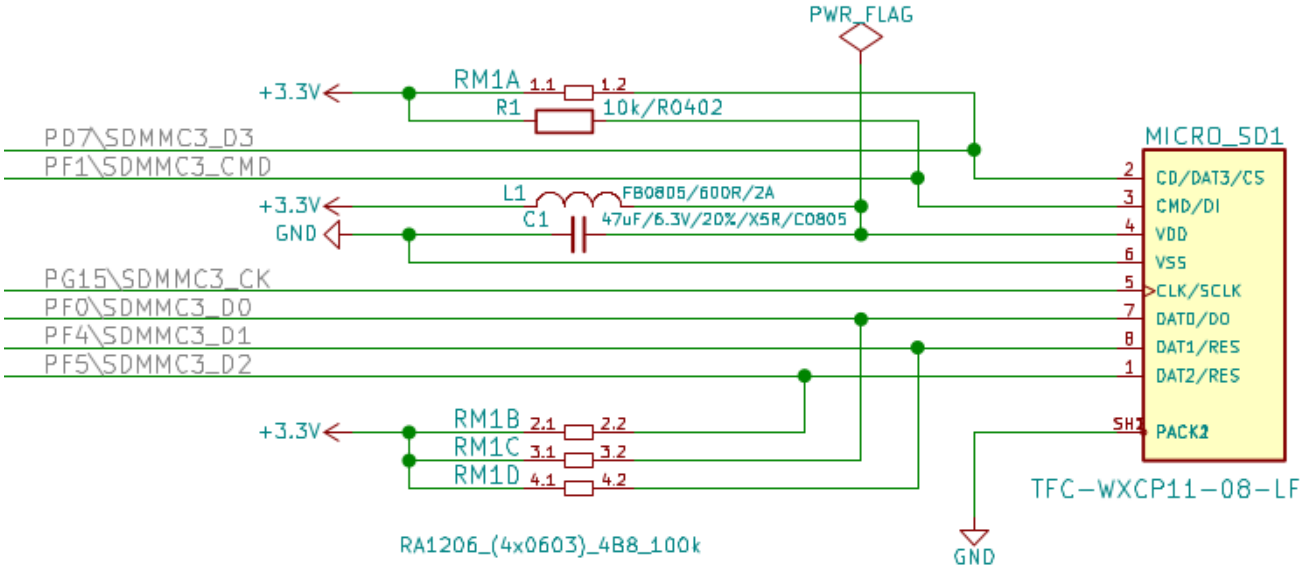
STMP15X-SHIELD software installation

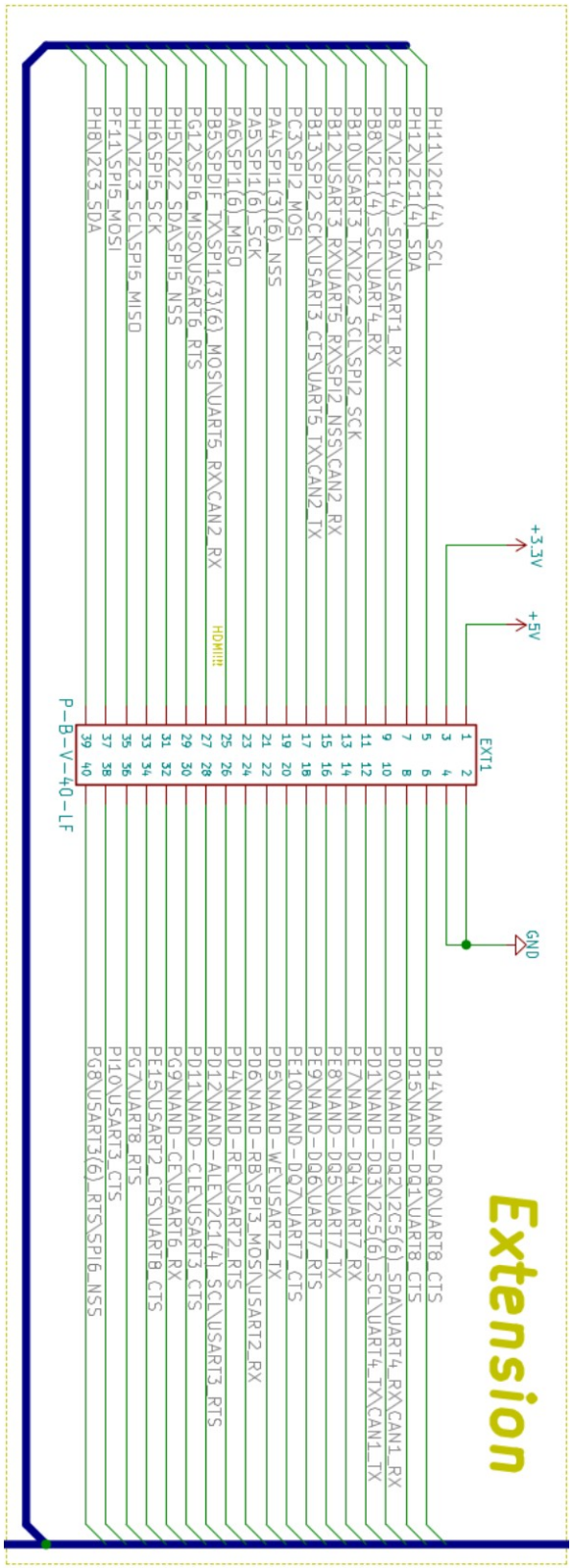
STMP15X-SHIELD overlays are set by default in OLIMAGE Linux generated images.

STMP15X-SHIELD connector pinout description:








Extension
+3.3V
+5V
GND
EXT1
P-B-V-40-LF
PH11\I2C1(4)_SCL
PH12\I2C1(4)_SDA
PB7\I2C1(4)_SDA\USART1_RX
PB8\I2C1(4)_SCL\UART4_RX
PB10\USART3_TX\I2C2_SCL\SPI2_SCK
PB12\USART3_RX\UART5_RX\SPI2_NSS\CAN2_RX
PB13\SPI2_SCK\USART3_CTS\UART5_TX\CAN2_TX
PC3\SPI2_MOSI
PA4\SPI1(3)(6)_NSS
PA5\SPI1(6)_SCK
PA6\SPI1(6)_MISO
PB5\SPDIF_TX\SPI1(3)(6)_MOSI\UART5_RX\CAN2_RX
PG12\SPI6_MISO\USART6_RTS
PH5\I2C2_SDA\SPI5_NSS
PH6\SPI5_SCK
PH7\I2C3_SCL\SPI5_MISO
PF11\SPI5_MOSI
PH8\I2C3_SDA
HDMI!!!
PD14\NAND-DQ0\UART8_CTS
PD15\NAND-DQ1\UART8_CTS
PD0\NAND-DQ2\I2C5(6)_SDA\UART4_RX\CAN1_RX
PD1\NAND-DQ3\I2C5(6)_SCL\UART4_TX\CAN1_TX
PE7\NAND-DQ4\UART7_RX
PE8\NAND-DQ5\UART7_TX
PE9\NAND-DQ6\UART7_RTS
PE10\NAND-DQ7\UART7_CTS
PD5\NAND-WE\USART2_TX
PD6\NAND-RB\SPI3_MOSI\USART2_RX
PD4\NAND-RE\USART2_RTS
PD12\NAND-ALE\I2C1(4)_SCL\USART3_RTS
PD11\NAND-CLE\USART3_CTS
PG9\NAND-CE\USART6_RX
PE15\USART2_CTS\UART8_CTS
PG7\UART8_RTS
PJ10\USART3_CTS
PG8\USART3(6)_RTS\SPI6_NSS

STMP15X-SHIELD schematic

STMP15X-SHIELD schematic on GitHub

Revision History

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