

Arm[®] Cortex[®]-M23 32-bit Microcontroller

M251/M252 Series CMSIS BSP Revision History

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Revision 3.00.005 (Released 2020-4-29)

- Standard driver
 - retarget.c
 - 1. SendChar
 - Fixed uninitialized pointer issue.
 - TIMER driver
 - 1. TIMER_SET_OPMODE
 - New API.
 - UART driver
 - UART_DEGLITCH_DISABLE, UART_DEGLITCH_ENABLE, UART_PDMA_DISABLE, UART_PDMA_ENABLE
 - Added.
 - USCI-UART driver
 - 1. UUART_DEGLITCH_DISABLE, UUART_DEGLITCH_ENABLE
 - Added.
- Sample code
 - CLK ClockDetector
 - 1. HCLK clock source used HXT instead of PLL.
 - USBD CCID
 - 1. New card reader sample code.

Revision 3.00.004 (Released 2019-12-31)

- Removed CRPTO support.
- Standard driver
 - retarget.c
 - 1. _write, SendChar_ToUART
 - > Fixed '\r' issue.
 - CRC driver
 - 1. CRC_SET_WDATA_LEN
 - ➤ New API.
 - FMC driver
 - 1. FMC Write128
 - > Noted to run in SRAM instead of inline function.
 - 2. FMC_WriteConfig
 - Fixed return value.
 - SYS driver



- 1. SYS PLCTL PLSEL PL2
 - Replaced with SYS_PLCTL_PLSEL_PL3.
- TIMER PWM driver
 - TPWM_ConfigOutputFreqAndDuty
 - Fixed wrong configuration for 1 Hz.
- Sample code
 - FMC_MultiWordProgram
 - 1. Used FMC driver API.
 - I2C_Wakeup_Slave
 - 1. Enhanced wakeup robustness.
 - ISP DFU
 - 1. New ISP sample code with USB DFU class.
 - UART_LIN, UART_SingleWire
 - Fixed '\r' issue.
 - All USBD samples
 - Enhanced USB compatability.

Revision 3.00.003 (Released 2019-8-30)

- M251.h
 - Included core_cm23.h instead of core_armv8mbl.h.
- Peripheral header
 - clk reg.h, rtc reg.h
 - 1. Revised based on TRM.
- Standard driver
 - I2C driver
 - I2C_SetSlaveAddr, I2C_SetSlaveAddrMask
 - Added support of 10-bit slave address.
 - Added error handling for new transfer.
 - TIMER driver
 - 1. TIMER GetModuleClock
 - Fixed correct PCLK.
 - 2. TIMER_Open
 - Fixed return value.
 - TIMER_PWM driver
 - TPWM_ClearWakeupFlag, TPWM_DisableTrigger, TPWM_DisableWakeup, TPWM_EnableTrigger, TPWM_EnableWakeup, TPWM_GetWakeupFlag, TPWM_CLEAR_TRG_DAC_STATUS,



TPWM_CLEAR_TRG_PDMA_STATUS, TPWM_GET_TRG_PDMA_STATUS

- Added.
- 2. TPWM_OUTPUT_TOGGLE, TPWM_OUTPUT_NOTHING, TPWM_OUTPUT_LOW, TPWM_OUTPUT_HIGH, TPWM_CLKSRC_HXT, TPWM_CLKSRC_LXT, TPWM_CLKSRC_PCLK, TPWM_CLKSRC_TX, TPWM_CLKSRC_LIRC, TPWM_CLKSRC_HIRC
 - Removed.
- USCI_SPI driver
 - 1. USPI SET SS HIGH
 - Fixed implementation.
- Library
 - Smartcard library
 - SCLIB_CheckCDEvent_ByVar
 - New API to support software card detection.
- Sample code
 - EADC_BandGap
 - 1. Show voltage result and modify extern sample time for band-gap.
 - FMC ExelnSRAM
 - 1. Added GCC project.
 - I2C_Master_PDMA, I2C_PDMA, I2C_Slave_PDMA
 - Deleted. Replaced with I2C_PDMA_TRX.
 - I2C PDMA TRX
 - 1. New sample code for I2C transfer with PDMA.
 - ISP samples
 - New sample codes with ISP Tool.
 - QSPI Slave3Wire, SPI HalfDuplex
 - 1. New sample codes.
 - SC_ReadATR, SC_ReadSimPhoneBook
 - Added support of software card detection.
 - UART TxRx Function
 - 1. Fixed data lost issue.
 - USCI_SPI_Loopback, USCI_SPI_MasterMode, USCI_SPI_SlaveMode
 - 1. Added support of using GPIO pin instead of SS pin.
 - All USBD samples
 - Fixed potential issue.



Revision 3.00.002 (Released 2019-2-22)

- system_M251.c
 - Set flash access cycle to 0x03.
- Standard driver
 - CLK driver
 - 1. CLK_SET_PCLK_DIVIDER
 - Removed.
- Sample code
 - All samples
 - 1. Used other clock source instead of HXT.
 - SYS_TrimHIRC
 - 1. Fixed auto trim disable.
 - USBD_Audio_Codec
 - 1. Cleared buffer before play / record.

Revision 3.00.001 (Released 2018-12-25)

■ Initial release.



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