Arm® Cortex®-M0

32-bit Microcontroller

NUC121/NUC125 Series CMSIS BSP Revision History

For additional information or questions, please contact: Nuvoton Technology Corporation.

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Revision 3.01.004 (Released 2019-10-2)

- TIMER driver
  - TIMER_Open
    - Fixed return value.
- USCI_SPI driver
  - USPI_SET_SS_HIGH
    - Fixed implementation.
- Sample code
  - FMC_ExeInSRAM
    - Added IAR / GCC project.
  - I2C_PDMA_TRX
    - New sample code for I2C transfer with PDMA.
  - ISP_DFU
    - New sample code with USB DFU class.
  - ISP_I2C, ISP_RS485, ISP_SPI
    - New sample codes with ISP Tool.
  - UART_TxRx_Function
    - Fixed data lost issue.

Revision 3.01.003 (Released 2019-6-19)

- I^2C driver
  - Added error handling for new transfer.
- TIMER driver
  - TIMER_GetModuleClock
    - Fixed correct PCLK.
- USBD driver
  - Fixed potential issue.
- Sample code
  - ISP_HID, ISP_UART
    - New sample code with ISP Tool.
  - TIMER_Delay
    - Fixed correct PCLK.
  - USBD_Audio_NAU8822, USBD_Audio_HID_NAU8822
    - Clear FIFO before play / record.
  - All USBD samples
    - Fixed potential issue.

Revision 3.01.002 (Released 2018-12-28)

- CMSIS
  - Upgraded to v5.1.1.
- CLK driver
  - CLK_PowerDown
    - Required HIRC / MIRC auto trim disabled.
- PDMA driver
  - PDMA_Open

- Revised to support multi-open.

- Sample code
  - Fixed semihost build failure with GCC toolchain 7-2018-q2.
  - Keil projects use “NULink Debugger” instead of “Nuvoton Nu-Link Debugger”.
  - I2S_PDMA_PlayRecord
    - Fixed race condition.
  - TIMER_CaptureCounter
    - Fixed array access overflow issue.
  - USBD VCOM samples
    - Fixed UART baud rate calculation.
  - USBD_VCOM_And_HID_Transfer
    - Fixed buffer overflow issue.

Revision 3.01.001 (Released 2018-06-27)

- NuMicro.h
  - New header file.
- NUC121.h
  - Separated register declarations of each IP into distinct header files.
- USBD driver
  - Fixed the issue of USB Control-In packet with the same size as endpoint limit.
- Sample code
  - Added Eclipse projects for GCC toolchain.
  - CLK_ClockDetector, HIRC_Trim, UART_Wakeup_LXT, ADC samples
    - Set analog pins as input mode and disabled digital input function.
  - PDMA_ScatterGather_PingPongBuffer
    - Added PDMA error handling.
  - UART_PDMA
    - Added UART error handling.
  - USCI_I2C_Monitor
    - New sample code.

Revision 3.00.003 (Released 2017-12-13)

- NUC121.h
  - TIMER_CTL_TRGDAC_Pos, TIMER_CTL_TRGDAC_Msk
    - Removed.
- I2C driver
  - I2C_ReadByteTwoRegs, I2C_ReadMultiBytesTwoRegs, I2C_WriteByteTwoRegs, I2C_WriteMultiBytesTwoRegs
    - Fixed high byte lost issue.
- SPI driver
  - I2S_Open
    - Improved I2S sample rate accuracy.
- TIMER driver
  - TIMER_TRG_TO_EADC
    - Replaced with TIMER_TRG_TO_ADC.
- USBD driver
  - USBD_L1RESUME

    - Replaced with USBD_STATE_L1RESUME.
  - USBD_L1SUSPEND
    - Replaced with USBD_STATE_L1SUSPEND.
- USCI-I2C driver
  - UI2C_ReadByteTwoRegs, UI2C_ReadMultiBytesTwoRegs, UI2C_WriteByteTwoRegs, UI2C_WriteMultiBytesTwoRegs
    - Fixed high byte lost issue.
- USCI-UART driver
  - UUART_Open, UUART_SetLine_Config
    - Fixed wrong baud rate issue.

Revision 3.00.002 (Released 2017-03-09)

- NUC121.h
  - BPWM0_IRQn, BPWM1_IRQn
    - New definition.
- BPWM driver
  - BPWM_ConfigOutputChannel
    - Fixed 100% duty issue.
- CLK driver
  - CLK_CLKSEL1_ADCSEL_HIRC_DIV2
    - Replaced with CLK_CLKSEL1_ADCSEL_HIRC.
  - GPIOA_MODULE, GPIOB_MODULE, GPIOC_MODULE, GPIOD_MODULE, GPIOE_MODULE, GPIOF_MODULE
    - Fixed definition.
- I^2C driver
  - I2C_CLEAR_WAKEUP_WR_STATUS
    - Redundant, removed.
- PWM driver
  - PWM_ConfigOutputChannel
    - Fixed 100% duty issue.
- SYS driver
  - SYS_GPD_MFPL_PD3MFP_UART0_CTS
    - Replaced with SYS_GPD_MFPL_PD3MFP_UART0_nCTS.
  - SYS_GPD_MFPL_PD3MFP_UART0_RTS
    - Replaced with SYS_GPD_MFPL_PD3MFP_UART0_nRTS.
  - SYS_GPF_MFPL_PF0MFP_XT1_OUT, SYS_GPF_MFPL_PF0MFP_X32_OUT, SYS_GPF_MFPL_PF1MFP_XT1_IN, SYS_GPF_MFPL_PF1MFP_X32_IN
    - New definition for backward compatible.
- Sample code
  - BPWM_DutySwitch
    - Fixed 100% duty issue.
  - FMC_IAP
    - Fixed wrong project setting.
  - LED_Toggle
    - New sample code.
  - PWM_DutySwitch

  - Fixed 100% duty issue.
- UART_Wakeup_LXT
  - New sample code split from UART_Wakeup due to NUC121-B tiny board removed LXT.
- USBD_Audio_HID_NAU8822
  - Fixed PD11 issue.
- All USBD samples
  - Replied USB 2.1 version only if SUPPORT_LPM defined.
- USCI_UART_TxRx_Function
  - Fixed compilation error.

Revision 3.00.001 (Released 2016-10-07)

- Primary release version.

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