

ARM® Cortex®-M4 32-bit Microcontroller

NuMicro™ Family NUC505 Series BSP Revision History

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Revision 3.03.001 (Released 2019-11-07)

- 1. Added ISP sample codes.
- 2. Minor changes for sample code.
- 3. Minor bug fix.

Revision 3.03.000 (Released 2018-11-26)

- 1. Added USBD_VCOM_And_HID sample code.
- 2. Added Eclipse project support.
- 3. Updated FreeRTOS from V7.4.0 to V10.0.0
- 4. Minor changes for sample code.
- 5. Minor bug fix.

Revision 3.02.000 (Released 2017-07-31)

- 1. Fixed CLK DisablePLL() function implementation.
- 2. Fixed CLK Idle() function implementation.
- 3. Fixed RTC_Open() implementation for Wakeup Key.
- 4. Fixed the last audio data not played in I2S_NAU8822_WAVPLAYER_SD, I2S_NAU8822_WAVPLAYER_USB, I2S_NAU8822_WAVRECORDER_SD, I2S_WAVPLAYER_SD, I2S_WAVPLAYER_USB and I2S_WAVRECORDER_SD samples.
- 5. Updated I²S engine clock source for accurate 8 kHz sampling rate in I2S_WAVPLAYER_SD, I2S_WAVPLAYER_USB and I2S_WAVRECORDER_SD samples.
- 6. Removed CLK USBH SRC EXT definition.
- 7. Redefined HID DEV T structure.
- 8. Redefined TD T structure.
- 9. Updated CMSIS to V4.5.0.
- 10. Updated RXCLKDLY register definition in SPIM IP.
- 11. Updated USBD Audio Microphone and USBD Audio Speaker sample codes.
- 12. Added Overlay sample in BootTemplate folder.
- 13. Added ISP sample code.
- 14. Added USBD_Audio_Headset sample code.
- 15. Added USBH_UAC_HID sample code.
- 16. Enhanced id3 tags parsing in I2S_MP3PLAYER_SD, I2S_MP3PLAYER_USB, I2S_NAU8822_MP3PLAYER_SD and I2S_NAU8822_MP3PLAYER_USB samples.
- 17. Supported UAC in UsbHostLib.
- 18. Supported Winbond SPI flash in SPIM_CheckIF, SPIM_DMA, SPIM_DMM, SPIM_IO and SPIM_SPIROM samples.
- 19. Supported digital microphone in I2S_InternalCODEC sample.
- 20. Minor changes for sample code.
- 21. Minor bug fix.

Revision 3.01.000 (Released 2016-02-24)

- Supported NUC505YO13Y device selected by default in the Keil project file with the latest Nu Link Keil driver.
- 2. Modified S USBD INFO T structure definition for USB IF Test.
- 3. Fixed the AER Enable fail issue for each RTC API.



- 4. Modified macro PWM_ENABLE_OUTPUT_INVERTER(pwm, u32ChannelNum) to PWM_ENABLE_OUTPUT_INVERTER(pwm, u32ChannelMask).
- 5. Removed RXCLKDLY register definition in SPIM IP.
- 6. Removed TIMER_CAPTURE_FALLING_THEN_RISING_EDGE and TIMER_CAPTURE_RISING_THEN_FALLING_EDGE definitions and added TIMER CAPTURE FALLING AND RISING EDGE definition.
- 7. Fixed the bug of USB transfer length equal to maximum packet size for the control endpoint in USBD sample.
- 8. Fixed the incorrect reset delay period issue in WDT_Open() function.
- 9. Updated RSTSTS register offset from 0x10 to 0x20 for WDT.
- 10. Updated FATFS from R0.09b to R0.11a version and made sample code related modifications for this FATFS update.
- 11. Added LOWPWREN to USBD_PHYCTL[3] bit field for USB low power mode.
- 12. Added extra 8 SD clock cycles after CMD7 in SD_SelectCardType() and SD_Get_SD_info() function.
- 13. Added USBD_HID_Transfer, USBD_VCOM_SerialEmulator and USBD_Audio_Microphone sample code.
- 14. Added I2S SetFIFO() to set TX and RX FIFO in one API.
- 15. Added CLK STICK SRC EXT and CLK STICK SRC HCLK definitions.
- 16. Added CLK_EnableSysTick()and CLK_DisableSysTick() functions to enable and disable system tick.
- 17. Minor changes for sample code.
- 18. Minor bug fix.

Revision 3.00.003 (Released 2015-03-19)

- 1. Supported eMMC in SD driver.
- 2. Redefined GPIO T and GPIO DB T structures to unify the NuMicro™ calling style.
- 3. Redefined SPIM Open() function to detect internal SPI interface automatically.
- 4. Renamed SYS_GPA_MFPH_PA9MFP_SPIM_SCLK to SYS_GPA_MFPH_PA9MFP_SPIM_CLK.
- 5. Renamed SYS_GP*_MFPH_P***MFP_TMR*_CNT_OUT to SYS_GP*_MFPH_P***MFP_TM*_CNT_OUT.
- 6. Renamed SYS_GP*_MFPH_P***MFP_TMR*_EXT to SYS_GP*_MFPH_P***MFP_TM*_EXT.
- 7. Renamed SYS_GPB_MFP*_PB*MFP_SPI*_SCLK to SYS_GPB_MFP*_PB*MFP_SPI*_CLK.
- 8. Renamed SYS_GPD_MFPL_PD4MFP_RIGHT_LINE_IN to SYS_GPD_MFPL_PD4MFP_RLINEIN.
- 9. Added SPIM_CheckIF sample.
- 10. Added SPIM_SetIF() function to change SPI interface.
- 11. Minor changes for sample code.
- 12. Minor bug fix.

Revision 3.00.002 (Released 2014-12-02)

- 1. Supported IAR project.
- 2. Removed Demo CodeOnSPIFlash and Demo CodeOnSRAM samples.
- 3. Renamed UPLL to PLL.
- 4. Renamed command code for SPIM Quad mode.
- 5. Renamed RTC_INIT_INIT_ACTIVE_Pos to RCT_INIT_ACTIVE_Pos and RCT_INIT_INIT_ACTIVE_Msk to RCT_INIT_ACTIVE_Msk.
- 6. Renamed I2S_ExternalCODEC sample to I2S_NAU8822.
- 7. Updated USBD register definition.



- 8. Minor changes for some bit field definitions.
- Added BootTemplate, I2S_MP3PLAYER_SD, I2S_MP3PLAYER_USB, I2S_NAU8822_MP3PLAYER_SD, I2S_NAU8822_MP3PLAYER_USB, I2S_NAU8822_WAVPLAYER_SD, I2S_NAU8822_WAVPLAYER_USB, I2S_NAU8822_WAVRECORDER_SD, I2S_WAVPLAYER_SD, I2S_WAVPLAYER_USB, I2S_WAVRECORDER_SD and USBD_Mass_Storage_SD samples.
- 10. Minor changes for sample code.
- 11. Minor bug fix.

Revision 3.00.001 (Released 2014-10-09)

- 1. Removed NVIC_EnableIRQ() function call in I2S_Open() and SD_Open().
- 2. Removed Multi-function pin control in SD_Open().
- 3. Removed uCOS-II and uCOS-III samples.
- 4. Added Cortex-M4 BitBand and MPU sample codes.
- 5. Updated original USBH HID library with Nuvoton HID library with less footprint.
- 6. Redefined GPIO_T structure.
- 7. Renamed pin names.
- 8. Renamed MIC1/MIC2 to MIC0/MIC1.
- 9. Added SYS_PowerDownConsumption sample code.
- 10. Minor changes for sample code.
- 11. Minor bug fix.

Revision 3.00.000 (Released 2014-08-07)

1. First release version.



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