

ARM[®] Cortex[®]-M0 32-bit Microcontroller

NuMicro[®] Family NANO100BN Series CMSIS BSP Revision History

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Revision 3.03.000 (Released 2018-05-30)

- 1. Added Eclipse project support.
- 2. Minor bug fix.

Revision 3.02.002 (Released 2017-03-10)

- 1. Fixed INTR T structure base address definition error.
- 2. Fixed smartcard driver and library behaviors that do not comply with EMV2000 spec.
- 3. Fixed CCID sample bug that incorrect error code is returned.
- 4. Fixed the bug that time-out interrupt flag is cleared at wrong time in I2C_Loopback sample code.
- 5. Fixed USBD Audio Speaker sample code interrupt control error.
- 6. Added Interface Association Descriptor(IAD) in USBD_Audio_Speaker_And_HID_Transfer sample code.
- Updated SC_ReadSimPhoneBook sample code to support SIM card with CHV1 disabled.

Revision 3.02.001 (Released 2016-07-28)

- 1. Updated CMSIS to v4.5.0.
- 2. Added sample codes including USBD_HID_Transfer_CTRL, USBD_Vendor_LBK, and USBD_Mass_Storage_SDCard.
- 3. Fixed the HIDTransferTest.exe bug to use correct sector size to compare data.
- 4. Updated HIDTransferTest.exe to support the connection of the composite device with HID interface number other than 0.
- 5. Fixed the USBD_VCOM_SerialEmulator, USBD_VCOM_DualPort, USBD_VCOM_And_Mass_Storage, USBD_VCOM_And_HID_Transfer, and USBD_VCOM_And_HID_Keyboard samples bug to ensure SET_LINE_CODE command is properly handled.
- 6. Minor bug fixes.

Revision 3.02.000 (Released 2015-08-07)

- Removed FMC driver's FMC_SetBootSource(),FMC_DisableAPUpdate(),FMC_DisableConfigUpdate(),FMC_ DisableLDUpdate(),FMC_EnableAPUpdate(),FMC_EnableConfigUpdate(),FMC_EnableLDUpdate() in fmc.h, because there exist functionally identical macros.
- 2. Removed SYS_IRCTRIMCTL_SEL_MASK, SYS_IRCTRIMCTL_LOOP_MASK and SYS_IRCTRIMCTL_RETRY_COUNT in sys.h.
- 3. Removed SPI_ENABLE_DUAL_MODE() in spi.h.
- 4. Modified SPI_ENABLE_DUAL_INPUT_MODE() and SPI_ENABLE_DUAL_OUTPUT_MODE() to enable dual I/O with direction.
- 5. Modified USBD driver to pass USB Command Verify test in usbd.c and usbd.h.
- 6. Modified UART_SelectIrDAMode() to reload UART clock before calculating baudrate, in uart.c.
- 7. Modified SD card clock speed from 24 MHz to 5 MHz to make SPI operations stable in SDCard.c.



- 8. Modified MMC FLASH Init() to retry SD CMD0 command until success in SDCard.c.
- 9. Modified TIMER_Open() to not start timer in timer.c.
- 10. Updated TIMER_Open() and TIMER_Delay() to support extreme high clock input, in timer.c.
- 11. Renamed sample CRC to CRC_CCITT in StdDriver.
- 12. Renamed sample GPIO to GPIO_IOTest in StdDriver.
- 13. Renamed sample PDMA to PDMA_Memory in StdDriver.
- 14. Renamed sample SYS to SYS Control in StdDriver.
- 15. Renamed SYS Int xxx Msk to SYS xxx Msk in sys.h.
- 16. Renamed GP_DBNCECON_PUEN_* to GP_DBNCECON_DBCLKSEL_* in Nano100Series.h.
- 17. Renamed SYS_IRCTRIMINT_32KERR_ENNT to SYS_IRCTRIMINT_32KERR_INT in sys.h.
- 18. Fixed the bug that RTC_AER enable flow may be interrupted by interrupt service routine in rtc.c.
- 19. Fixed the bug that PWM_ENABLE_OUTPUT_INVERTER() does not clear register field before writing input parameter to it in pwm.h.
- 20. Fixed the bug that TIMER_Delay() sets prescale to wrong register in timer.c.
- 21. Fixed SCUART_Open() and SCUART_SetLineConfig() baudrate calculation prescale setting error in scuart.c.
- 22. Fixed bugs of SPI_EnableAutoSS () and SPI_SetBusClock () in spi.c, and cleared bit mask of register field before writing input parameter to it.
- 23. Fixed the CLK_SysTickDelay() bug that continuously calling CLK_SysTickDelay() may imply an incorrect delay time by clearing control register on each call in clk.c.
- 24. Fixed implementation errors of CLK_PLLCTL_FB_DV_Msk and CLK_APBCLK_I2C0_EN in Nano100Series.h.
- 25. Fixed SYS_CLEAR_RST_SOURCE implementation error in sys.h.
- 26. Fixed CLK_WK_INTSTS_IS implementation error in clk.h.
- 27. Fixed "GPIO_DISABLE_DOUT_MASK" and "GPIO_ENABLE_DOUT_MASK" implementation errors in gpio.h.
- 28. Fixed SC_SET_STOP_BIT_LEN implementation error in sc.h.
- 29. Fixed PDMA IS CH BUSY implementation error in pdma.h.
- 30. Fixed LCD_CPUMP_DIV128 implementation error in lcd.h.
- 31. Fixed RTC CLEAR TAMPER FLAG() implementation bug in rtc.h.
- 32. Fixed ADC SET DMOF() implementation error in adc.h.
- 33. Fixed CRC_SET_SEED ()implementation error in crc.h.
- 34. Disabled Rx before raising RST high during cold reset in SmartCardLib library.
- 35. Checked SC_RST and SC_DAT_O pin status during deactivation in SmartCardLib library.
- 36. Added SYS PA H MFP PA9 MFP LCD S7 macro in sys.h.
- 37. Added I2C_ClearIntFlag() and I2S_SetFIFO() functions in i2c.c.
- 38. Added bit definitions of MCLKO (Module Clock CKO) register in clk.h.
- 39. Added LCD_MODULE and DAC_MODULE macro sets in clk.c.
- 40. Added CLK_EnableSysTick() and CLK_DisableSysTick() in clk.c.
- 41. Added macros CLK_PLLCTL_*MHz_HXT and CLK_PLL_*MHz_HIRC for setting PLLCTL value in clk.c.
- 42. Added SYS_EnableIRCTrim() and SYS_DisableIRCTrim() functions in sys.c, and added macros SYS_GET_IRCTRIM_INT_FLAG() and SYS_CLEAR_IRCTRIM_INT_FLAG() in sys.h.
- 43. Added UART_SelectLINMode() in uart.c, and added UART_FUNC_SEL_LIN in uart.h.
- 44. Added a sample USBD_Audio_Speaker_And_HID_Transfer to Nu-LB-NANO130.



- 45. Added samples SYS_MCLKO, SYS_PLLClockOutput, and SYS_TrimIRC to StdDriver.
- 46. Added a sample Timer_Wakeup to StdDriver.
- 47. Added samples USBD_HID_Keyboard, USBD_HID_MouseKeyboard, USBD_HID_Touch, USBD_HID_Transfer_And_Keyboard, USBD_HID_Transfer_And_MSC, USBD_Mass_Storage_CDROM, USBD_Micro_Printer, USBD_Printer_And_HID_Transfer, USBD_VCOM_And_HID_Keyboard, USBD_VCOM_And_HID_Transfer, USBD_VCOM_And_Mass_Storage, USBD_VCOM_DualPort, and USBD_VCOM_SerialEmulator to StdDriver.

Revision 3.01.000 (Released 2014-09-19)

- 1. Renamed register TESTCLK to MCLKO.
- 2. Renamed registers PDSSR0 and PDSSR1 to DSSR0 and DSSR1.
- 3. Renamed UBSD_ENABLE_INT() to USBD_ENABLE_INT().
- 4. Renamed I2S_Enable_MCLK()/I2S_Disable_MCLK() to I2S_EnableMCLK()/I2S_DisableMCLK().
- 5. Renamed CLK_CLKSEL1_PWM1_CH01_S_Msk/CLK_CLKSEL1_PWM1_CH23_S_Msk to
- CLK_CLKSEL2_PWM1_CH01_S_Msk/CLK_CLKSEL2_PWM1_CH23_S_Msk.
 6. Renamed RTC RIIR SNOOPIS Msk to RTC RIIR SNOOPIF Msk.
- 7. Renamed PDMA IER BLKD IE Msk to PDMA IER TD IE Msk.
- 8. Modified PWM_EnablePDMA() function prototype, and added one more parameter to select captured edge.
- 9. Modified PWM capture interrupt flag relative macro definitions to improve performance.
- 10. Added ADC clock source bit position and mask definition.
- 11. Added ADC_SET_REF_VOLTAGE() macro and RES/REF definitions.
- 12. Added DAC driver.
- 13. Added ADC_Compare, ADC_TimerTrigger, ADC_PDMA, DAC_PDMATrigger, DAC_SoftwareTrigger, DAC_TimerTrigger, GPIO_PowerDown, Hard_Fault_Sample, PWM_CapturePDMA, SPI_LoopbackPDMA, UART_FlowCtrl, UART_TxRxPDMA, and USBD_HID_Transfer samples.

Revision 3.00.000 (Released 2014-02-20)

- 1. Update major version number from 2 to 3.
- 2. Renamed RTC_GetDatAndTime() to RTC_GetDateAndTime().

Revision 2.00.000 (Released 2014-01-11)

1. Primary release version.



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