

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

NuMicro[®] Family NANO100BN Series CMSIS BSP Revision History

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Revision 3.02.001 (Released 2016-07-28)

- 1. Updated CMSIS to v4.5.0.
- Added sample codes including USBD_HID_Transfer_CTRL, USBD_Vendor_LBK, and USBD Mass Storage SDCard
- 3. Minor bug fixes.

Revision 3.02.000 (Released 2015-08-07)

- 4. Removed FMC driver's FMC_SetBootSource(),FMC_DisableAPUpdate(),FMC_DisableConfigUpdate(),FMC_DisableLDUpdate(),FMC_EnableAPUpdate(),FMC_EnableLDUpdate(),FMC_EnableLDUpdate() in fmc.h, because there exist functionally identical macros.
- 5. Removed SYS_IRCTRIMCTL_SEL_MASK, SYS_IRCTRIMCTL_LOOP_MASK and SYS_IRCTRIMCTL_RETRY_COUNT in sys.h.
- Removed SPI_ENABLE_DUAL_MODE() in spi.h.
- 7. Modified SPI_ENABLE_DUAL_INPUT_MODE() and SPI_ENABLE_DUAL_OUTPUT_MODE() to enable dual I/O with direction.
- 8. Modified USBD driver to pass USB Command Verify test in usbd.c and usbd.h.
- 9. Modified UART_SelectIrDAMode() to reload UART clock before calculating baudrate, in uart.c.
- 10. Modified SD card clock speed from 24 MHz to 5 MHz to make SPI operations stable in SDCard.c.
- 11. Modified MMC_FLASH_Init() to retry SD CMD0 command until success in SDCard.c.
- 12. Modified TIMER Open() to not start timer in timer.c.
- 13. Updated TIMER_Open() and TIMER_Delay() to support extreme high clock input, in timer.c.
- 14. Renamed sample CRC to CRC CCITT in StdDriver.
- 15. Renamed sample GPIO to GPIO IOTest in StdDriver.
- 16. Renamed sample PDMA to PDMA_Memory in StdDriver.
- 17. Renamed sample SYS to SYS_Control in StdDriver.
- 18. Renamed SYS_Int_xxx_Msk to SYS_xxx_Msk in sys.h.
- 19. Renamed GP_DBNCECON_PUEN_* to GP_DBNCECON_DBCLKSEL_* in Nano100Series.h.
- 20. Renamed SYS_IRCTRIMINT_32KERR_ENNT to SYS_IRCTRIMINT_32KERR_INT in sys.h.
- 21. Fixed the bug that RTC_AER enable flow may be interrupted by interrupt service routine in rtc.c.
- 22. Fixed the bug that PWM_ENABLE_OUTPUT_INVERTER() does not clear register field before writing input parameter to it in pwm.h.
- 23. Fixed the bug that TIMER_Delay() sets prescale to wrong register in timer.c.
- 24. Fixed SCUART_Open() and SCUART_SetLineConfig() baudrate calculation prescale setting error in scuart.c.
- 25. Fixed bugs of SPI_EnableAutoSS () and SPI_SetBusClock () in spi.c, and cleared bit mask of register field before writing input parameter to it.
- 26. 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.
- 27. Fixed implementation errors of CLK_PLLCTL_FB_DV_Msk and CLK_APBCLK_I2C0_EN in Nano100Series.h.



- 28. Fixed SYS CLEAR RST SOURCE implementation error in sys.h.
- 29. Fixed CLK_WK_INTSTS_IS implementation error in clk.h.
- 30. Fixed "GPIO_DISABLE_DOUT_MASK" and "GPIO_ENABLE_DOUT_MASK" implementation errors in gpio.h.
- 31. Fixed SC_SET_STOP_BIT_LEN implementation error in sc.h.
- 32. Fixed PDMA_IS_CH_BUSY implementation error in pdma.h.
- 33. Fixed LCD CPUMP DIV128 implementation error in lcd.h.
- 34. Fixed RTC_CLEAR_TAMPER_FLAG() implementation bug in rtc.h.
- 35. Fixed ADC_SET_DMOF() implementation error in adc.h.
- 36. Fixed CRC_SET_SEED ()implementation error in crc.h.
- 37. Disabled Rx before raising RST high during cold reset in SmartCardLib library.
- 38. Checked SC_RST and SC_DAT_O pin status during deactivation in SmartCardLib library.
- 39. Added SYS_PA_H_MFP_PA9_MFP_LCD_S7 macro in sys.h.
- 40. Added I2C_ClearIntFlag() and I2S_SetFIFO() functions in i2c.c.
- 41. Added bit definitions of MCLKO (Module Clock CKO) register in clk.h.
- 42. Added LCD_MODULE and DAC_MODULE macro sets in clk.c.
- 43. Added CLK_EnableSysTick() and CLK_DisableSysTick() in clk.c.
- 44. Added macros CLK_PLLCTL_*MHz_HXT and CLK_PLL_*MHz_HIRC for setting PLLCTL value in clk.c.
- 45. 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.
- 46. Added UART_SelectLINMode() in uart.c, and added UART_FUNC_SEL_LIN in uart.h.
- 47. Added a sample USBD Audio Speaker And HID Transfer to Nu-LB-NANO130.
- 48. Added samples SYS_MCLKO, SYS_PLLClockOutput, and SYS_TrimIRC to StdDriver.
- 49. Added a sample Timer_Wakeup to StdDriver.
- 50. 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.
- 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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