ARM® Cortex®-M0

32-bit Microcontroller

NuMicro® Family
Mini55 Series CMSIS BSP
Revision History

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

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Revision 3.01.001 (Released 2017-04-21)

1. Updated CMSIS to v4.5.0.
2. Updated CLK_Idle() to clear CLK_PWRCTL_PDEN_Msk flag before entering idle mode.
3. Updated I2C_STOP() to clear I2C_CTL_SI_Msk bit and check I2C_CTL_STO_Msk until it is cleared before return.
4. Updated retarget.c to disable uart console when semihost is enabled.
5. Fixed UART1 clock setting error in UART_Open().
6. Fixed ADC_Open() channel setting error.
7. Added P2.4 and P2.5 pin definition for RX1 and TX1.

Revision 3.01.000 (Released 2015-07-10)

1. Updated TIMER_T structure, and moved CCAPCTL and CCAP[3] to a new structure named TIMER_AC_T in Mini55Series.h.
2. Updated the bit field name of PWM_CTL register from CMPINV[1~5] to PINV[1~5] in Mini55Series.h.
3. Updated mask and position of GPIO bit field to be consistent with Mini55 Technical Reference Manual in Mini55Series.h.
4. Updated UART_INTSTS_MODENIF_Pos and UART_INTSTS_MODENIF_Msk to UART_INTSTS_MODEMIF_Pos and UART_INTSTS_MODEMIF_Msk in Mini55Series.h.
5. Updated CLK_EnableXtalRC() to support run time change of XTLEN(CLK_PWRCTL[1:0]) in clk.c.
6. Updated PWM_GetADCTriggerFlag() to report a flag of each trigger soure instead of a combinational result.
7. Updated SPI_Close() so it does not disable SPI peripheral clock in spi.c.
8. Updated SYS_EnableBOD() to support all the eight BOD levels in sys.c.
9. Updated TIMER_Delay() and replaced the variable type used for calculation from "float" to "long long" to get more accurate value in timer.c.
10. Removed DID related functions and macros in fmc.[ch].
11. Removed CHIP_RST and CPU_RST definition, but called SYS_ResetCPU() and SYS_ResetChip() directly in sys.h.
12. Removed SYS_BODCTL_BOD_DISABLE definition in sys.h.
13. Fixed ACMP_SET_NEG_SRC() syntax error in acmp.h.
14. Fixed ACMP_CRV_SEL() implementation error, and updated incorrect mask name to fix the compilation error in acmp.h.
15. Fixed ACMP_ENABLE_RISING_EDGE_TRIGGER() implementation error that disables rising edge trigger in acmp.h.
16. Fixed CLK_SysTickDelay() bug that delay time is sometimes incorrect in clk.c.
17. Fixed CLK_CLKSEL1_UART1SEL_HIRC, UART1_MODULE definition error in clk.h.
18. Fixed GPIO_DISABLE_DOUT_MASK() and GPIO_ENABLE_DOUT_MASK() error in gpio.h.
19. Fixed I2C_GetBusClockFreq() bug that always gets divider from I2C0 in i2c.c.
20. Fixed I2C_CLEAR_WAKEUP_FLAG() bug that may clear more than one bit in i2c.h.
21. Fixed I2C_WAIT_READY() bug that polls a wrong bit in i2c.h.
22. Fixed PWM_FB1_ACMP0 definition error in pwm.h.
23. Fixed PWM_ENABLE_OUTPUT_INVERTER() bug that sets incorrect bit field in pwm.h.
24. Fixed PWM_EnablePeriodInt(), PWM_DisableCenterInt(), PWM_ClearCenterIntFlag(), and PWM_GetCenterIntFlag() implementation errors in pwm.c.

25. Fixed SPI_EnableAutoSS() bug that old settings are not cleared before updating new value in spi.c.
26. Fixed SPI_SetBusClock() bus clock calculation error in spi.c.
27. Fixed SPI_SET_xSB_FIRST() implementation error in spi.h.
28. Fixed SYS_IsRegLocked() return value inverted bug in sys.c.
29. Fixed TIMER_Open() and TIMER_Delay() time-out calculation if timer clock is faster than 0x1FFFFFF Hz in timer.c.
30. Fixed TIMER_EnableCaptureDebounce() and TIMER_DisableCaptureDebounce() implementation errors in timer.h.
31. Fixed TIMER_CAPTURE_RISING_* definition error in timer.h.
32. Fixed UART_ClearIntFlag() bug that clears more flags than desired in uart.c.
33. Fixed UART_Open(), UART_SelectIrDAMode(), and UART_SetLine_Config() baudrate calculation bugs in uart.c.
34. Fixed UART_Write() bug that data is not actually sent out in uart.c.
35. Fixed UART_CLEAR_RTS() implementation error in uart.h.
36. Fixed sample code bug that XTL is enabled before configuring multi-function pins.
37. Fixed ACMP_TriggerTimerCapture sample bug that calculates input frequency based on incorrect frequency.
38. Fixed UART_RS485 sample MODEM register and address setting error.
39. Added ADC_SeqModeEnable() and ADC_SeqModeTriggerSrc() APIs in adc.c.
40. Added CLK_EnableSysTick() and CLK_DisableSysTick() to control SysTick and select SysTick clock source in clk.c.
41. Added CLK_CLKDIV_UART0(), CLK_CLKDIV_UART1(), and CLK_CLKDIV_HCLK() macro definitions in clk.h.
42. Added SPI_GET_TX_FIFO_FULL_FLAG() macro in spi.h.
43. Added PWM_EnableRiseInt(), PWM_DisableRiseInt(), PWM_ClearRiseIntFlag(), PWM_GetRiseIntFlag(), PWM_GetCenterIntFlag(), and PWM_ClearCenterIntFlag() functions in pwm.c.
44. Added SYS_GET_IRCTRIM_INT_FLAG() and SYS_CLEAR_IRCTRIM_INT_FLAG() macro definitions in sys.h.
45. Added SYS_EnableIRCTrim() and SYS_DisableIRCTrim() functions in sys.c.
46. Added CLK_SwtichHCLK, I2C_FIFO_EEPROM, Timer_Wakeup, SPI_FIFO_FLASH, and SYS_TrimIRC samples.

Revision 3.00.000 (Released 2014-09-26)

1. Initial release.

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