

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

NuMicro[®] Family Mini55 Series CMSIS BSP Revision History

The information described in this document is the exclusive intellectual property of Nuvoton Technology Corporation and shall not be reproduced without permission from Nuvoton.

Nuvoton is providing this document only for reference purposes of NuMicro microcontroller based system design. Nuvoton assumes no responsibility for errors or omissions.

All data and specifications are subject to change without notice.

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

www.nuvoton.com



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.



Important Notice

Nuvoton Products are neither intended nor warranted for usage in systems or equipment, any malfunction or failure of which may cause loss of human life, bodily injury or severe property damage. Such applications are deemed, "Insecure Usage".

Insecure usage includes, but is not limited to: equipment for surgical implementation, atomic energy control instruments, airplane or spaceship instruments, the control or operation of dynamic, brake or safety systems designed for vehicular use, traffic signal instruments, all types of safety devices, and other applications intended to support or sustain life.

All Insecure Usage shall be made at customer's risk, and in the event that third parties lay claims to Nuvoton as a result of customer's Insecure Usage, customer shall indemnify the damages and liabilities thus incurred by Nuvoton.

Please note that all data and specifications are subject to change without notice.

All the trademarks of products and companies mentioned in this datasheet belong to their respective owners