ARM® Cortex®-M23

32-bit Microcontroller

NuMicro® Family
M2351 Series BSP
Revision History

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Revision 3.00.006 (Released 2022-08-16)

1. Fixed return in main() cause hardfault issue.
2. Updated ThirdParty/FreeRTOS to v10.4.6.
3. Added timeout handler for infinite loop.
4. Fixed USBD_Mass_Storage_CDROM crash on Linux.
5. Fixed an exteranl hub driver bug in Library/UsbHostLib/src_core/hub.c.
6. Added XOM protect mechanism to prevent illegal region configuration in Library/StdDriver/inc/fmc.h and fmc.c.
7. Added timer init code of CRYPTO_ECC_Demo sample code.
8. Fixed trace MFP macro define in Library/StdDriver/inc/sys.h.
9. Removed setting for __ARM_use_on_argv to fix build error in Library/StdDriver/src/retarget.c.
10. Enabled schmitt trigger of I2C sample code.
11. Changed the optimization of ISP_HID sample code.
12. Added handup process of I2C Slave sample code.
13. Fixed UART TX FIFO control issue in USBD_VCOM sample code.

Revision 3.00.005 (Released 2021-01-18)

1. Fixed ECAP error coding of clear INT flag.
2. Added new sample USBH_HID_Mouse_Keyboard, USBH_VENDOR_LBK, QSPI_Slave3Wire, SPI_HalfDuplex and USBD_VENDOR_LBK.
3. Modified the size of slave data buffer is configurable of I2C_GCMode, I2C_Loopback and I2C_Slave sample code.
4. Created mbedTLS library in ThirdParty and adapt the library in Crypto sample code.
5. Fixed UART_Write function to wait Tx full bug.
6. Created mbedTLS ECDSA sample code and add performance log for all mbedTLS sample code.
7. Fixed SPI TFT fail on lower SPI clock issue.
8. Extended the firmware size limitation for calculating SHA value from SD card of SecureOTADemo sample code.
9. Fixed USPI_SET_SS_HIGH macro and USBH driver issue.
10. Modified FMC_OTP sample code.
11. Fixed USBH_SecureISP send data issue and some typo.
12. Fixed build FwInfo.bin was failed of SecureBootDemo sample code.
13. Added Apache-2.0 license declaration in driver source.
14. Added GPIO_SingleCycleIO sample code.

Revision 3.00.004 (Released 2019-10-01)

1. Added ISP Sample codes to bsp\SampleCode\ISP folder.
2. Added Mass Storage sample code to support SDCard.
3. Added Third Party TEE and Cloud client: QinglianCloud
4. Modify I2C error handling example code to I2C_Master, I2CSlave, I2C_GCMode_Master, and I2C_GCMode_Slave.
5. Modify SHA256 function to SHAHash to support more SHA functions in CRYPTO_SHA256_Flash sample code.

Revision 3.00.003 (Released 2019-08-05)

1. Fixed build errors of XOM on SecureBootDemo and SecureISPDemo sample codes.
2. Fixed retarget.c macro option bug with Arm compiler 6.x.
3. Upgraded emWin library to V5.48K.1.

4. Upgraded FwSign.exe to v1.3.
5. Updated BSP to be more easy to use with TrustZone. Add more debug information in hardfault handler.
6. Added emWin documents to ThridParty/emWin/Doc/.
7. Added USBH_SecureISP to transmit vendor command to SecureISP USB mode in SecureISPDemo.
8. Added KEIL RTX RTOS Sample Code.
9. Added TRNG_Verify sample code for RNG verification with NIST SP800-22.
10. Added I2C_PDMA_TRx to replace I2C_Master_PDMA and I2C_Slave_PDMA.
11. Added USBD_Mass_Storage_Flash sample code.
12. Added SecureFlashDemo sample code for M2353 embedded secure flash.

Revision 3.00.002 (Released 2018-11-05)

1. Fixed XOM region description and Semihost for Keil MDK v5.26.
2. Fixed build error in Linux build environment.
3. Update emWin quick start guide.
4. Update board quick start guide for Nuvoton edition free Keil MDK.
5. Added TRNG and SHA256 of flash data sample code.

Revision 3.00.001 (Released 2018-06-29)

1. Initial Release.

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