

NuMicro[®] Family
Arm[®] Cortex[®]-M0-based Microcontroller

M031 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 and microprocessor 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 3.06.000 (Released 2023-11-14)

1. Added PWM_Brake and ADC_SingleCycleScanMode2 samples.
2. Added LED status for USB_D samples.
3. Fixed USB MSC sample access fail issue.
4. Fixed Keil Compiler 6 issue.
5. Minor changes for sample code.
6. Minor bug fix.

Revision 3.05.000 (Released 2022-03-18)

1. BLE supported GCC and IAR toolchain.
2. Removed emWin samples and library.
3. Minor changes for sample code.
4. Minor bug fix.

Revision 3.04.000 (Released 2021-12-28)

1. Supported BLE for M031BT/M032BT.
2. Added I2C_SMBus_Master and I2C_SMBus_Slave samples.
3. Added Sample codes for FreeRTOS V2020.12.
4. Added ISP_MSC sample.
5. Added Cache invalidation for FMC Write related functions.
6. Added new API for TIMER.
7. Updated I²C driver to check STOP bit when I²C transmission completed.
8. Updated HID samples polling interval to 10.
9. Updated samples to avoid infinite loop.
10. Fixed the missing UART6/UART7 in UART_Open function.
11. Minor changes for sample code.
12. Minor bug fix.

Revision 3.03.000 (Released 2020-09-14)

1. Added Apache-2.0 license declaration into BSP.
2. Added fmc_ap_main.uvproj Keil project in FMC_IAP sample.
3. Updated preferences.ini for Eclipse V1.01.016 or later.
4. FMC_IAP sample uses hardware reset instead of software reset.
5. Fixed HIRC trim setting in USB_D_Audio_NAU8822_Headset, USB_D_Audio_NAU8822_Microphone, and USB_D_Audio_NAU8822_Speaker samples.
6. Fixed I²C wakeup done flag checking fail issue.
7. Minor changes for sample code.
8. Minor bug fix.

Revision 3.02.000 (Released 2019-10-4)

1. Supported GPIOE, GPIOG, GPIOH, UART3/4/5/6/7, USCI-1, BPWM, QSPI and RTC for new M031 part numbers.
2. Removed I2C_Master_PDMA, I2C_PDMA, I2C_Slave_PDMA and USB_D_Audio_NAU8822 samples.
3. Added ISP related samples.
4. Added BPWM, QSPI and RTC related samples.
5. Added emWin sample codes and library.

6. Updated I2C_PDMA_TRX, USCI_SPI_PDMA_LoopTest, USCI_I2C_Loopback_10bit, USCI_I2C_Loopback, FMC_CRC32, FMC_ExecInSRAM, FMC_MultiBoot, FMC_MultiWordProgram, FMC_ReadAllOne, USBD_Audio_NAU8822_HeadSet, USBD_Audio_NAU8822_Microphone and USBD_Audio_NAU8822_Speaker samples.
7. Minor changes for sample code.
8. Minor bug fix.

Revision 3.01.000 (Released 2019-04-12)

1. Added USBD_Audio_NAU8822 sample for UAC class.
2. Removed I2C_Double_Buffer_Slave sample.
3. Updated default stack size from 1KB to 512B.
4. Updated definition from SYS_xx_ADC_xx to SYS_xx_ADC0_xx.
5. Updated samples for M031EB0AE, M031FB0AE and M031TB0AE.
6. Minor changes for sample code.
7. Minor bug fix.

Revision 3.00.000 (Released 2018-06-29)

1. Preliminary release version.

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.*