

# Arm<sup>®</sup> Cortex<sup>®</sup>-M55 32-bit Microcontroller

## NuMicro<sup>®</sup> Family M5531 Series BSP Revision History

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#### Revision 3.01.002 (Released 2025-8-8)

- Startup
  - SysTick vector on flash used Default\_Handler.
- Peripheral header
  - canfd\_reg.h
    - CANFD\_RXF0A\_F0AI\_Msk: Replaced CANFD\_RXF0A\_F0A\_Msk.
    - > CANFD RXF0A F0AI Pos: Replaced CANFD RXF0A F0A Pos.
  - hsusbd\_reg.h: Fixed definitions of HSUSBD\_EPBUFSTART\_SADDR\_Msk and HSUSBD\_EPBUFSTART\_SADDR\_Pos.
- Standard driver
  - CANFD: Removed unsupported UTSU function.
  - HSUSBD: HSUSBD\_DISABLE\_HS\_HANDSHAKE and HSUSBD ENABLE HS HANDSHAKE added.
  - SPI: SPI\_DISABLE\_3WIRE\_MODE and SPI\_ENABLE\_3WIRE\_MODE added.
  - SPIM
    - Raised voltage to 1.2V for HyperBus device and octal SPI flash.
    - Supported Infineon octal SPI flash.
  - SYS
    - SYS\_GPC\_MFP0\_PC2MFP\_UTCPD0\_CCDB2: Replaced SYS\_GPC\_MFP0\_PC2MFP\_UTCPD0\_CCDB1.
    - SYS\_GPC\_MFP0\_PC3MFP\_UTCPD0\_CCDB1: Replaced SYS\_GPC\_MFP0\_PC3MFP\_UTCPD0\_CCDB2.
    - SYS ResetModule: Added SPIM clock setting handling.
- CMSIS driver
  - CAN, ETH\_MAC, Flash, GPIO, I2C, MCI, SAI, SPI, USART, USBD, USBH: Added.
- Library
  - CryptoAccelerator: Improved cache coherence.
  - JpegAcceleratorLib: Improved performance.
  - UsbHostLib: Added UVC support.
- Sample code
  - AWF GSensor Wakeup: Used I/O buffer to replace fixed address.
  - DMIC VAD Wakeup: Increased VAD power threshold.
  - HSUSBD\_Audio20\_Codec and HSUSBD\_Audio20\_Headset: Fixed no sound issue.
  - HSUSBD\_HID\_Mouse: Improved LPM stability.
  - HSUSBD RNDIS: Added.
  - HSUSBD\_Video\_CAM: Fixed UVC image noise issue.
  - HSUSBH\_USBH\_UVC: Added.
  - I3C samples: I3C pins enable Schmitt trigger.
  - ISP\_DFU\_20 and ISP\_HID\_20: Fixed USB high-speed issue.
  - ISP\_I2C and ISP\_SPI: Fixed potential command failure.
  - KS AESKey: Improved cache coherence.
  - RTC\_TimeAndTick: Removed because almost the same as RTC\_Time\_Display.
  - SecureApplication samples: VSCode projects require Python 3.12 at least for post-build.



- SPIM\_HYPER\_ExeInHRAM: Fixed I/O buffer alignment and GCC project execution failure.
- SPIM\_HYPER\_RW\_MemMap: Fixed I/O buffer alignment.
- USBD samples: Improved stability and performance.
- VSCode projects updated for Nuvoton NuMicro Cortex-M Pack.

### Revision 3.01.001 (Released 2025-3-26)

■ Initial release.



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