

# ARM® Cortex®-M0 32-bit Microcontroller

# NuMicro<sup>®</sup> Family NUC029xAN Series 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 3.00.006 (Released 2024-07-31)

- 1. Set [clear ADF flag operation] to the first operation in ADC\_IRQHandler.
- 2. Fixed multi-function pin setting of SPI sample code.
- 3. Used "volatile" with the function pointer to disable compiler optimizations in I2C sample code.
- 4. Added timeout handler for infinite loop.
- 5. Enabled LVR in SYS\_PowerDown\_MinCurrent sample code to prevent power on/off fail.
- 6. Added SYS PowerDown MinCurrent sample code.
- 7. Updated SPI\_Loopback sample code.
- 8. Added I2C hang up & recover mechanism for I2C Master and Slave sample code.

### Revision 3.00.005 (Released 2021-01-19)

- Fixed CLK\_SetModuleClock function clear others divider issue in Library/StdDriver/src/clk.c
- 2. Added Apache-2.0 license declaration in driver source.
- 3. Added README.md file.

#### Revision 3.00.004 (Released 2019-11-12)

- 1. Added ISP Sample codes to bsp\SampleCode\ISP folder.
- 2. Supports GNU GCC.

#### Revision 3.00.003 (Released 2018-10-08)

- 1. Fixed MFP configuration in Hard Fault sample code.
- 2. Fixed wrong PLL default setting value in CLK EnablePLL().
- 3. Fixed CLK\_SetHCLK() in CLK driver which enable HIRC before switching HCLK.
- 4. Fixed PWM\_DisableCaptureInt() in PWM driver.
- 5. Fixed booting flow to use software reset in FMC\_IAP sample code.
- 6. Fixed build errors in sample codes which caused by including path.

## Revision 3.00.002 (Released 2017-10-23)

- 1. Fixed UART\_SelectLINMode() clear enable bit setting bug.
- 2. Fixed UART baud rate caculation bug in UART\_Open(), UART\_SetLine\_Config() and UART\_SelectIrDAMode().
- 3. Fixed GPIO\_ENABLE\_DOUT\_MASK() and GPIO\_DISABLE\_DOUT\_MASK() definitions.
- 4. Fixed bug in CLK SetCoreClock().
- 5. Fixed clear RS-485 address byte detection flag bug.
- 6. Fixed clear flag bug to clear one flag in one time in UART ClearIntFlag().
- 7. Fixed clear Receive Line Status interrupt flag bug in UART\_ClearIntFlag().
- 8. Fixed PLL clock source selection bug in CLK\_SetCoreClock().
- 9. Fixed CLK\_SysTickDelay() bug.
- 10. Added more wake up sample codes.
- 11. Added CLK SysTickLongDelay() for long delay.
- 12. Modified to ignore debug message when enabling semihost without NuLink connected.
- 13. Modified CLK\_EnableModuleClock() and CLK\_DisableModuleClock() for
- 14. Modified void CLK\_WaitClockReady(uint32\_t u32ClkMask) to uint32\_t CLK\_WaitClockReady(uint32\_t u32ClkMask).



- 15. Removed CLKO divide 1 function in CLK\_EnableCKO() for NUC029xAN does not have this function.
- 16. Added "ISP\_MODULE", "EBI\_MODULE" and "HDIV\_MODULE" constant define in MODULE constant definitions for CLK\_EnableModuleClock() and CLK\_DisableModuleClock().
- 17. Added constant define "CLK\_CLKSEL0\_STCLK\_S\_HCLK" in CLKSEL0 constant definitions for CLK\_EnableSysTick().
- 18. Added new function to control systick and select systick clock source, CLK\_EnableSysTick() and CLK\_DisableSysTick().
- 19. Added missing macro, SYS\_IS\_LVR\_RST().

#### **Revision 3.00.001** (Released 2014-05-08)

1. First 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