

**ARM® Cortex®-M0**  
**32-bit Microcontroller**

**NuMicro® Family**  
**NUC131 Series BSP**  
**Revision History**

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**Revision 3.00.006 (Released 2024-06-14)**


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1. Added CAN\_BasicMode\_SilentMode and CAN\_NormalMode\_SilentMode sample code.
2. Added PWM\_GET\_CNR() and PWM\_GET\_CMR() to pwm.h.
3. Fixed the problem that ISP\_CAN sample code cannot run to APROM.
4. Used volatile with the function pointer to disable compiler optimizations in I2C sample code.
5. Enabled LVR in SYS\_PowerDown\_MinCurrent sample code to prevent power on/off fail.
6. Added SYS\_PowerDown\_MinCurrent sample code.
7. Modified UART\_Read() to return received data count when time-out.
8. Modified SYS\_UnLockReg() time-out handler.
9. Added timeout handler for infinite loop.

**Revision 3.00.005 (Released 2021-01-21)**


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1. Fixed warnings of adc driver in Library/StdDriver/src/adc.c
2. Added Apache-2.0 license declaration in driver source.
3. Added README.md file.

**Revision 3.00.004 (Released 2019-11-11)**


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1. Added ISP Sample codes to bsp\SampleCode\ISP folder.
2. Supports GNU GCC.
3. Fixed CLK\_SetHCLK() bug of CLK driver.
4. Fixed CLK\_EnablePLL() wrong PLL default setting value of CLK driver.

**Revision 3.00.003 (Released 2017-10-24)**


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1. Fixed CLK\_SysTickDelay() bug.
2. Fixed UA\_LIN\_CTL[4] bit field name is "MUTE\_EN" not "WAKE\_EN" in UA\_LIN\_CTL constants definitions.
3. Fixed bug of PWM\_MASK\_OUTPUT() that mask function can't be disabled.
4. Fixed bug for return value error of PWM\_ConfigOutputChannel()/BPWM\_ConfigOutputChannel().
5. Fixed UART\_SelectLINMode() clear enable bit setting bug.
6. Fixed PLL clock source selection bug in CLK\_SetCoreClock()
7. Fixed clear Receive Line Status interrupt flag bug in UART\_ClearIntFlag().
8. Fixed u32idmask for Standard ID issue in CAN\_SetRxMsgObjAndMsk() function.
9. Modified to disable debug message when enabling semihost without NuLink connection.
10. Added ADC\_MeasureAVDD sample code
11. Added new function to control systick and select systick clock source, CLK\_EnableSysTick() and CLK\_DisableSysTick()
12. Added CLK\_SysTickLongDelay() for long delay
13. Added CAN\_SetRxMsgObjAndMsk() function declaration.

**Revision 3.00.002 (Released 2015-01-16)**


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1. Fixed PWM driver bug for output low when duty is 100%
2. Fixed BPWM driver bug for output low when duty is 100%
3. Fixed CLK driver bug in CLK\_SetCoreClock():
4. Fixed CLK driver constant definitions error of (B)PWM0/1\_MODULE clock source selection.

5. Fixed GPIO\_ENABLE\_DOUT\_MASK() and GPIO\_DISABLE\_DOUT\_MASK() bug of GPIO driver.
6. Fixed PWM driver bug of PWM\_MASK\_OUTPUT() to remove redundant parenthesis.
7. Fixed BPWM driver bug of BPWM\_MASK\_OUTPUT() to remove redundant parenthesis.
8. Fixed UART driver clear flag bug in UART\_ClearIntFlag().
9. Fixed I2C driver module reset bug of I2C\_Close().
10. Fixed clear RS-485 address byte detection flag bug in UART\_RS485\_CLEAR\_ADDR\_FLAG() of UART driver.
11. Fixed SYS\_IS\_SYSTEM\_RST() bug, it is "SYS\_RSTSRC\_RSTS\_SYS\_Msk" but "SYS\_RSTSRC\_RSTS\_MCU\_Msk".
12. Fixed clear RS-485 address byte detection flag clear bug in RS485\_HANDLE() of UART\_RS485\_Slave sample code.
13. Fixed UART RS485 RTS active level to high level active in RS485\_9bitModeMaster() of UART RS485 Sample code.
14. Fixed NVIC\_EnableIRQ() to NVIC\_DisableIRQ() after CHIP wake-up in I2C\_Wakeup\_Slave sample code
15. Added PWM\_EnableLoadMode() and PWM\_DisableLoadMode() functions to PWM driver
16. Added PWM\_SetBrakePinSource() function to PWM driver
17. Added CLK\_GetPCLKFreq() function to CLK driver
18. Added new macro PWM\_SET\_DEADZONE\_CLK\_SRC() to PWM driver
19. Added new macro SYS\_IS\_LVR\_RST() to SYS driver.
20. Added non-blocking printf implementation and use predefine compiler option to enable/disable it.

### **Revision 3.00.001** (Released 2014-06-12)

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1. First Release

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