

# ***Release Notes for AT32F421 Firmware Library***

## **V2.1.5-2024/01/05**

1. Updated the counter counting mode in the input\_capture demo timer
2. Updated the systick initialization function in the systick interrupt demo
3. Updated some pin configuration in ADC demo
4. Updated the method on how to call the xx\_interrupt\_flag\_get function in all demos

## **V2.1.4-2023/10/26**

1. Updated some notes
2. Refer to driver release notes to obtain details on driver update

## **V2.1.3-2023/08/04**

1. Added AT32IDE project to demons under utilities
2. Added CRC polynomial support
4. Improved redirecting compatibility whiles using printf in IAR9
5. Added macro definitions regarding Flash size and Flash demo
6. Updated related notes

## **V2.1.2-2023/02/16**

1. Fixed AC6 compilation problems in freertos demo in *utilities*
2. Added LEXT\_VALUE macro definition in *at32f421\_conf.h*
3. Modified the location of crm\_reset in system\_clock\_config function to avoid any error during system clock switch
4. Updated some notes

## **V2.1.1-2022/11/18**

1. Deleted the version and date entries from the header of each file
2. Added *Release Notes\_Drivers* to record the updates of drivers separately, which is located under *libraries\drivers*
3. Added repeat\_conversion\_loop\_transfer demo to ADC to allow DMA to obtain ADC data in a circular way

## **V2.1.0-2022/10/28**

1. Added AT32F4212C8T7
2. Updated IAP\_Programmer.exe
3. Added interrupt enable determination to the flag bit detection for the interrupt function

of USART interrupt demo

### **V2.0.9-2022/09/28**

1. Updated I2C interrupts and changed DMA demo to non-blocking
2. Isolated macros for peripherals according to the specific model
3. Updated ERTC code to optimize the write protection unlock process

### **V2.0.8-2022/08/16**

1. Updated the I2C eeprom demo with additional 16-bit address support
2. Added IAR V9.3 project demo under template
3. Fixed the problem of printf's failure to output in gcc environment
4. Startup file supports configuration wizard

### **V2.0.7-2022/06/28**

1. Added a demo on how to enable Flash access protection
2. Added IO toggle demo
3. Updated some demos, their drive processes, and some notes

### **V2.0.6-2022/05/20**

1. Updated some demos, their drive processes, and some notes

### **V2.0.5-2022/04/02**

1. Added wdt\_standby demo
2. Introduced DSP-related source code, and added cmsis\_dsp demo
3. Updated some demos, their drive processes, and some notes

### **V2.0.4-2021/02/11**

1. Updated some demos, their drive processes, and some notes

### **V2.0.3-2021/12/31**

1. Revised wrong parameter definitions in the interrupt priority group
2. Integrated the serial port initialization and redirection functions of printf into xx\_board.c, and removed related contents in demo
3. Updated some demo to support AC6 and -O3 compilation

### **V2.0.3-2021/12/17**

1. Revised flag clear functions of peripherals in order to avoid inappropriate bit operations
2. Updated pwc\_wakeup\_pin\_enable function interface
3. Updated timer frequency configuration process for triggering ADC conversions in ADC demo

### **V2.0.1-2021/11/26**

1. Updated some notes and readme
2. Updated demos related to Deepsleep mode, and revised code procedure of entering Deepsleep mode
3. Added SCFG PA11\_PA12 remap demo
4. Added USART Rx Tx swap demo
5. Changed the name of GPIO swjtag\_remap demo to swd\_mux
6. Updated pwc\_wakeup\_pinx\_enable and pin-related functions to enable pin functions to call the same interface pwc\_wakeup\_pin\_enable

## **V2.0.0-2021/11/12**

1. Initial release of AT32F421 firmware library