Release Notes for AT32F413 Firmware Library

V2.1.2-2024/01/05

1. Updated the counter counting mode in the input_capture demo of timer
2. Fixed the issue of the HID in USB demo that is slow to be identified
3. Updated the systick initialization function in the systick interrupt demo
4. Added winusb demo
5. Updated the method on how to call the xx_interrupt_flag_get function in all demos

V2.1.1-2023/10/26

1. Removed SRAM extension demo
2. Updated some notes and readme

V2.1.0-2023/08/04

1. Added AT32 IDE project to demons under utilities
2. Added CRC polynomial support
3. Updated USB driver and demo, improved data alignment and code process
4. Improved redirecting compatibility while using printf in IAR9
5. Added macro definitions regarding Flash size and Flash demo
6. Updated related notes

V2.0.9-2023/02/16

1. Improved AC6 compiling issue in freertos demo under utilities
2. Added LEXT_VALUE definition to the at32f413_conf.h
3. Added SPIM-related section description in the *.ld file to better support SPIM address link in GCC
4. Updated some notes

V2.0.8-2022/11/18

1. Removed the version and date items in the header part of files
2. Added release notes drivers used to record drivers update, located under libraries\drivers
3. Updated I2C interrupts and DMA demo as non-blocking mode
4. Fixed the issue of cdc_msc failed in linux

5. Updated USB's virtual msc iap demo to support linux
6. Updated USB audio content for better compatibility
7. Updated IAR_Programmer.exe
8. Added interrupt enable judgements to flag bit detection in the USART interrupt demo interrupt function
9. Added repeat_conversion_loop_transfer demo to support DAM circular mode to obtain ADC data

V2.0.7-2022/08/16

1. Updated I2C eeprom demo with 16-bit address support
2. Added IAR v9.3 demo to template
3. Fixed the issue of printf being unable to output in GCC
4. Startup file supports configuration wizard

V2.0.6-2022/06/28

1. Added Flash access protection enable demo
2. Added IO toggle demo
3. Updated some demos and driver process, and modified some notes

V2.0.5-2022/05/20

1. Modified the descriptors in the USB virtual msc iap demo
2. Added USB composite_vcp_msc demo
3. Modified SD card demo to optimize card initialization recognition process
4. Revised the settings of baud rate division in some CAN demos
5. Updated some demos and driver process, and modified some notes

V2.0.4-2022/04/02

1. Added wdt_standby demo
2. Added DSP-related source codes and cmsis_dsp demo
3. Updated some demos and driver process, and modified some notes

V2.0.3-2022/02/11

1. Added virtual_comport demo
2. Improved the compatibility of USB msc iap demo used in different systems
3. Updated some demos and driver process, and modified some notes

V2.0.2-2021/12/31

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
4. Added composite_audio_hid demo in the USB, and optimized reporting and synchronization mechanism

V2.0.1-2021/12/17

1. Revised flag clear functions of peripherals in order to avoid improper bit operations
2. Unified pwc_wakeup_pin_enable function interface
3. Revised the 4-byte alignment problem of USB device array
4. Updated the virtual space of virtual_msc_iap demo to 100 MB
5. Revised bulk transfer complete problem of the serial port in the composite_vcp_keyboard demo
6. Update transmit functions related to keyboard in USB demo
7. Updated timer frequency configuration process for triggering ADC conversions in ADC demo

V2.0.0-2021/11/26

1. Initial release of AT32F413 firmware library