

# ***Release Notes for AT32F402\_405 Firmware Library***

## **V2.1.2-2025/01/20**

1. Updated some SPI and I2SF demos.
2. Updated USB driver and some demos.
3. Updated IAP\_Programmer.exe.
4. Updated LDO output level settings.
5. Updated some notes.

## **V2.1.1-2024/12/13**

1. Updated core DSP library.
2. Updated CAN driver.
3. Added support for AT32IDE project in SLIB demo.
4. Updated USB driver.
5. Updated I2C eeprom demo and added multi-page write logic.
6. Optimized PWR driver and demo.
7. Optimized QSPI driver in XIP mode.
8. Updated some notes.

## **V2.1.0-2024/08/08**

1. Updated USB driver.
2. Updated msc iap demo and improved compatibility.
3. Updated QSPI interface initialization in QSPI demo.
4. Updated initialization configuration process in I<sup>2</sup>C DAM related demos.
5. Revised AC6 compilation problems of some demos.
6. Updated IAR project link file for sLib demo.
7. Updated some notes.

## **V2.0.9-2024/05/10**

1. Revised UART7/8 APB clock get.

## **V2.0.8-2024/04/30**

1. Adjusted the function for OTGHS to lower power consumption.
2. Updated sram\_parity\_check demo.
3. Revised QSPI DAM FIFO threshold enumeration parameter name from "QSPI\_DMA\_FIFO\_THOD\_WORD32" to "QSPI\_DMA\_FIFO\_THOD\_WORD24".
4. Fixed AC6 compilation warning issues and errors of some demos.
5. Updated some notes and readme.

## **V2.0.7-2024/04/08**

1. Updated some QSIP demos, and added the "qspi\_auto\_ispc\_enable" function.
2. Revised USB host out stall state assignment method.

## **V2.0.6-2024/03/01**

1. Added run\_in\_qspi\_flash demo.
2. Updated some QSPI demos.

## **V2.0.5-2024/02/01**

1. Revised some USB demos.

## **V2.0.4-2024/01/26**

1. Updtaed usbd\_core\_type 4-byte alignment.
2. Updated USB HID report descriptor.
3. Updated SRAM size related configuration.
4. Updated some notes.

### **V2.0.3-2024/01/05**

1. Updated timer input\_capture demo counting method.
2. Fixed HID low-speed identification problems in USB demo.
3. Updated systick initialization function in systick interrupt demo.
4. Added winusb demo.
5. Added ADC loop\_transfer demo.
6. Updated the mode to call xx\_interrupt\_flag\_get function in all demos.

### **V2.0.2-2023/10/28**

1. Updated GPIO configuration in QSPI demo.
2. Updated USB drivers.
3. Updated some notes.

### **V2.0.1-2023/09/28**

1. Updated the calculation process of the "system\_core\_clock" global variable.
2. Added dual OTG device demo and dual OTG host demo.
3. Revised the SRAM size configuration in Keil project.
4. Updated USB keyboard and mouse descriptor drivers.

### **V2.0.0-2023/08/18**

1. Initial release of AT32F402 and AT32F405 series firmware library.