

Wake up Standby Mode Through PWC Wake-up Pin

Introduction

This sample code demonstrates how to wake up Standby mode through PWC wakeup pin in AT32Fxx series.

Standby mode can be woke up by a rising edge on a standby-wakeup pin, a rising edge on RTC alarm event, external reset on NRST pin and WDT reset.

Note: This sample code is written based on Artery's V2.x.x BSP. For other versions of BSP, users should pay attention to the differences in use.

Applicable products:

Product series	AT32Fxx series
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List of major peripherals used:

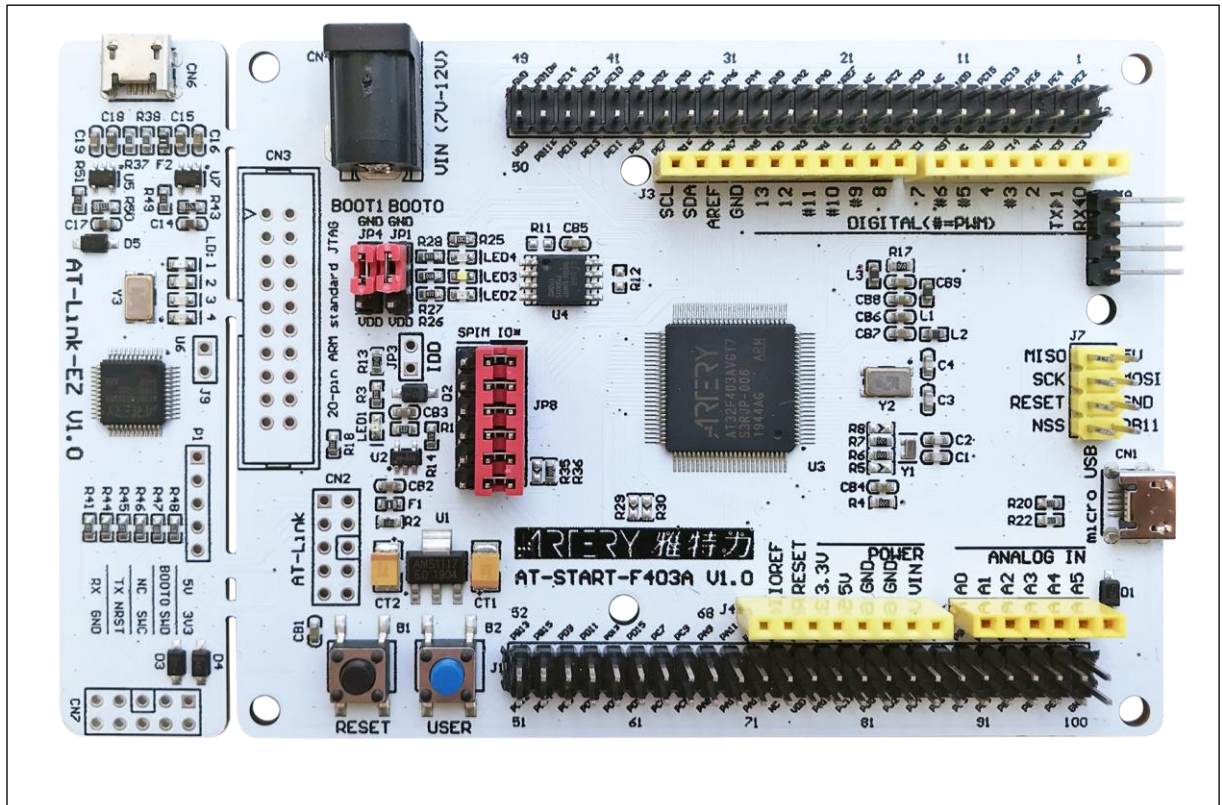
Peripherals	PWC
	GPIO

1 Quick start

1.1 Hardware resources

- 1) AT-START-F403A V1.0 evaluation board (use evaluation board corresponding to specific product series)

Figure 1. AT-START-F403A V1.0 evaluation board



1.2 Software resources

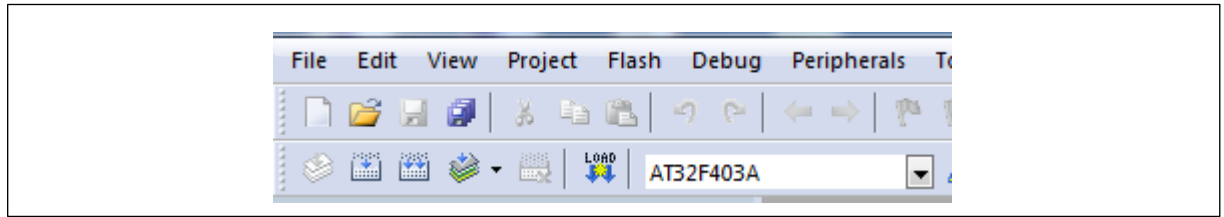
- 1) SourceCode
 - pwc_standby_wakeup_pin

Note: All of projects are built based on Keil 5. For the need to run them in other compiling environments, user can make simple adjustments according to AT32xxx_Firmware_Library_V2.x.x\project\at_start_xxx\templates.

1.3 Example case

- 1) Open "pwc_standby_wakeup_pin" source code, compile and download it to the evaluation board
- 2) As AT-START-F403A V1.0 is used in the example, we choose AT32F403A project here

Figure 2. Keil project selection



- 3) Reset the evaluation board, wait for several seconds until LED4 turns off, press "USER KEY" (it is connected to PA0) on the board, and you can see that LED2, LED3 and LED4 turn on one after another.

Note: The number of standby-wakeup pins depends on specific AT32Fxx series you use. The rising edge of any standby-wakeup pin after being enabled is able to wake up device from Standby mode.

2 Revision history

Table 1. Document revision history

Date	Revision	Changes
2021.12.03	2.0.0	Initial release

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