

AT32F4xx 32-Bit TMR

Introduction

This sample code demonstrates how to use 32-bit timers in AT32F4xx series.

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
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List of major peripherals used:

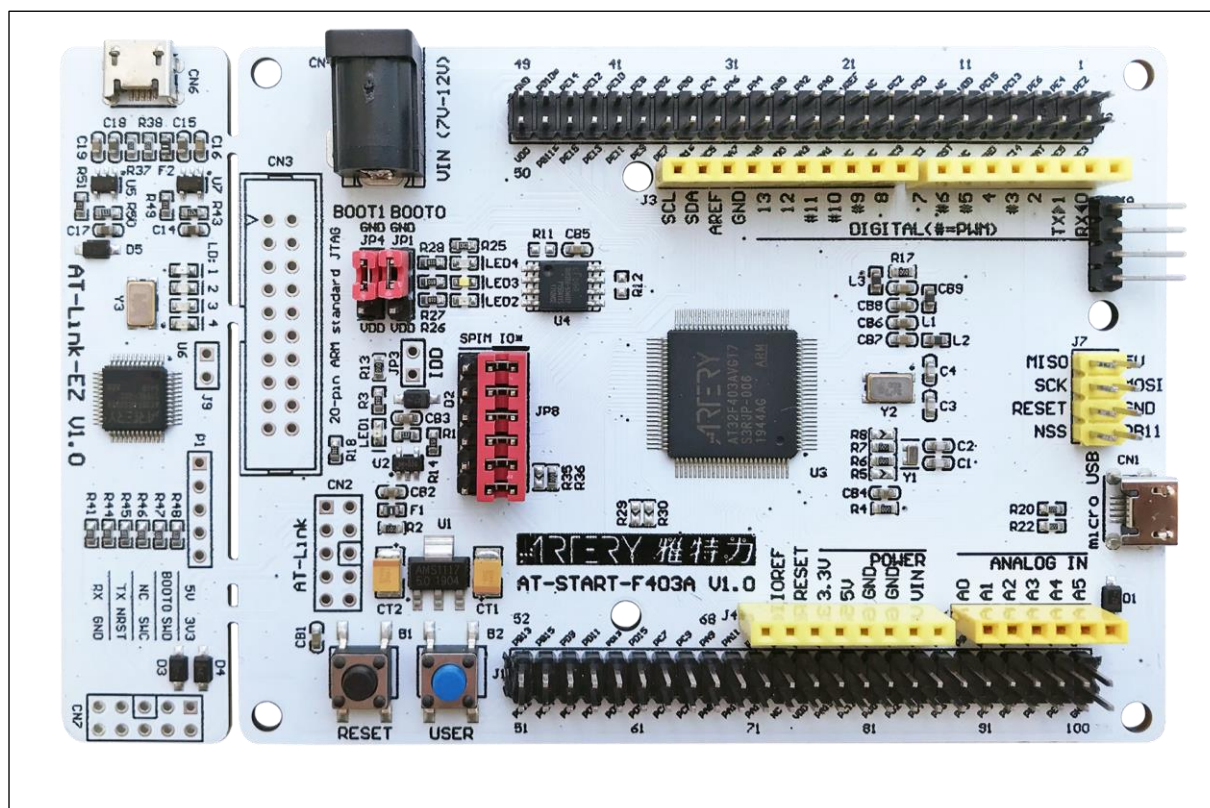
Peripherals	TMR
	GPIO

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

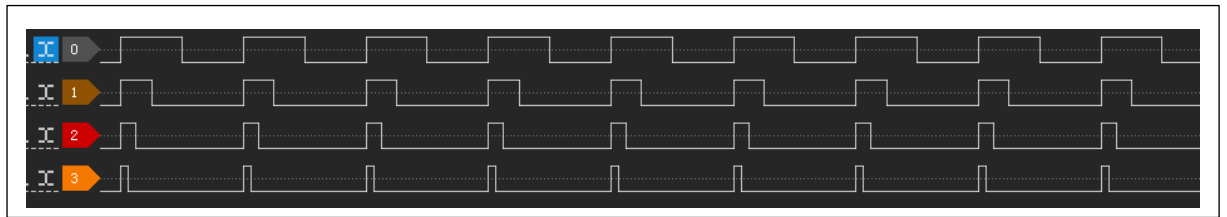
- 1) SourceCode
 - tmr2_32bit

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 "tmr2_32bit" source code, compile and download it to the evaluation board
- 2) As the AT-START-F403A V1.0 is used in the example, we choose AT32F403A project here
- 3) 32-bit TMR is available on TMR2 and TMR5 only. The example uses TMR2 to demonstrate 32-bit timer function
- 4) Use this timer to output four-channel PWM waveforms, which can be captured with a logic analyzer, as shown below

Figure 2. Waveform output



2 Revision history

Table 1. Document revision history

Date	Revision	Changes
2021.12.07	2.0.0	Initial release

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