

## AT32F4xx DAC Dual Channels Output Triangle Waveforms

## Introduction

This sample code demonstrates how to use DAC dual channels to output triangle waves 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 series
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List of major peripherals used:

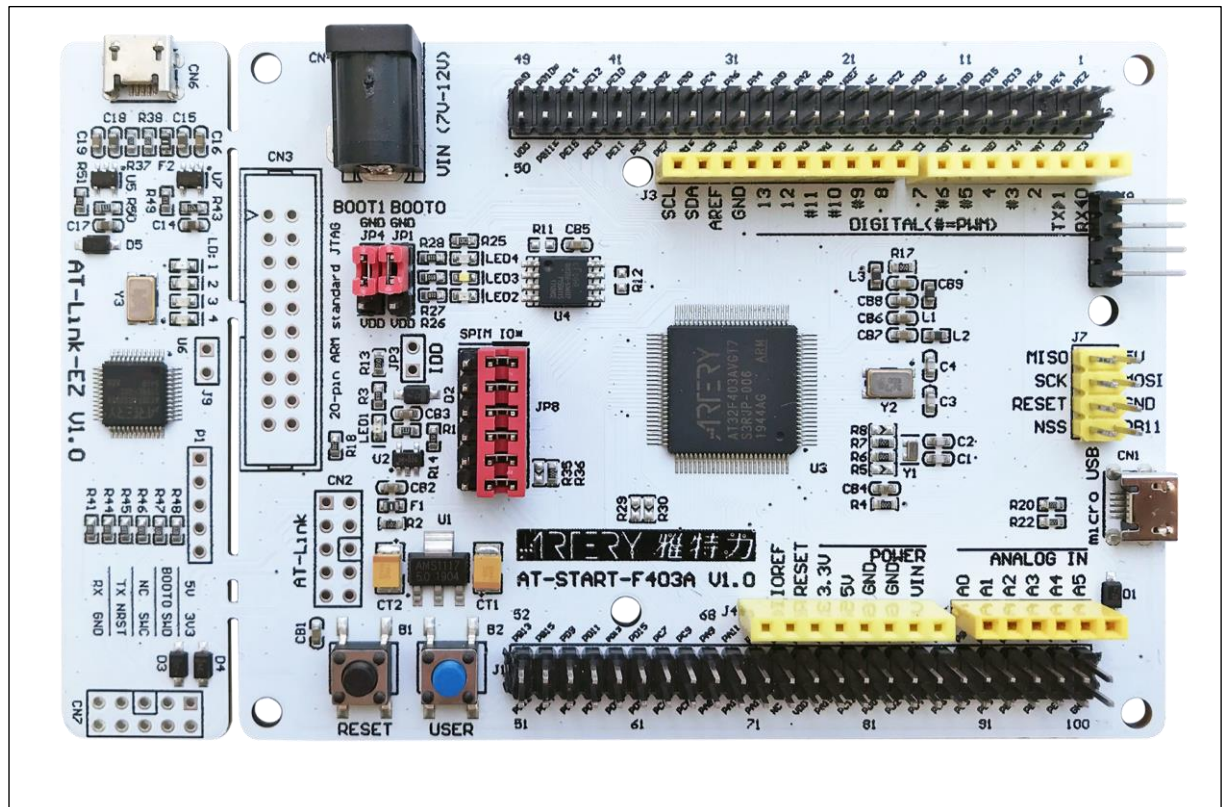
Peripherals	TMR
	DAC
	GPIO

# 1 Quick start

## 1.1 Hardware resources

- 1) AT-START-F403A V1.0 evaluation board (use evaluation board corresponding to specific product series)
- 2) PA4/PA5 for waveform output

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



## 1.2 Software resources

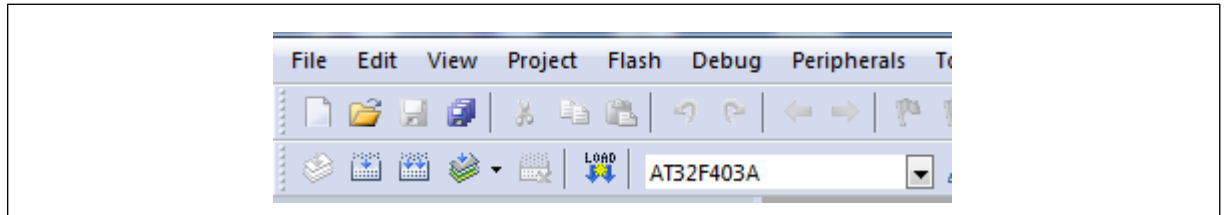
- 1) SourceCode
  - DAC\_TwoChannels\_TriangleWave

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

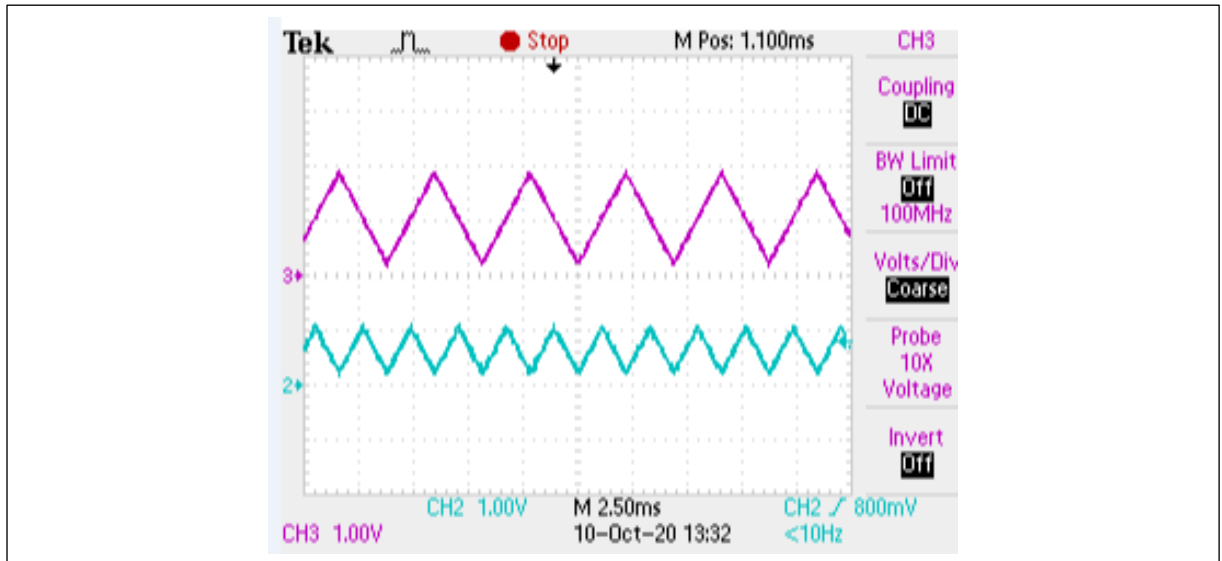
- 1) Open "DAC\_TwoChannels\_TriangleWave" source code, compile and download it to the evaluation board
- 2) As AT-START-F403A V1.0 is used in the example, we choose AT32F403A project here

Figure 2. Keil project selection



- 3) Reset the evaluation board, and use an oscilloscope to output waveforms of PA4 and PA5

Figure 3. View results



## 2 Revision history

Table 1. Document revision history

Date	Revision	Changes
2021.12.06	2.0.0	Initial release

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