

## AT32F4xx\_I2C Master Recive and Slave Transmit with DMA

## Introduction

This sample code demonstrates how to use AT32F4xx I2C DMA to perform master reception and slave transmission.

*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	AT32F403xx
	AT32F403Axx
	AT32F407xx
	AT32F413xx
	AT32F415xx
	AT32F421xx

List of major peripherals used:

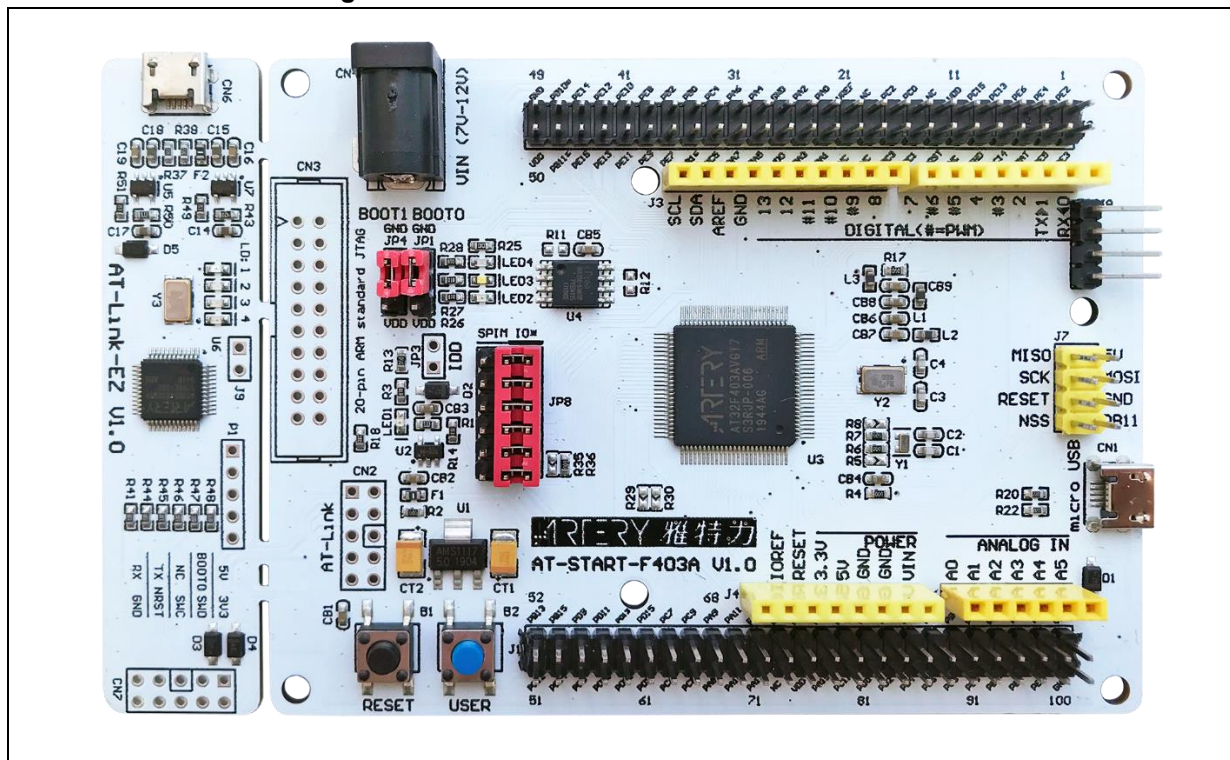
Peripherals	I2C
	DMA

# 1 Quick start

## 1.1 Hardware resources

- 1) AT-START-F403A V1.0 evaluation board (select evaluation board according to the corresponding MCU series)
- 2) Serial output PA9 and PA10

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



## 1.2 Software resources

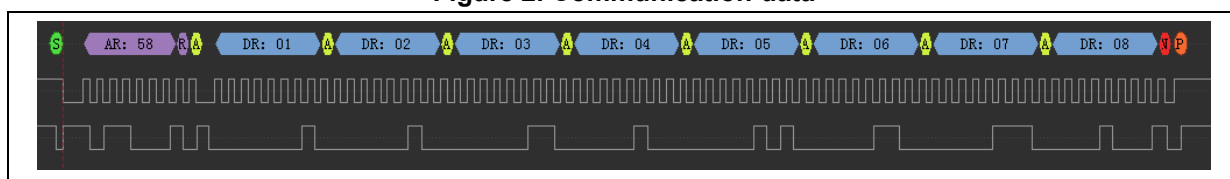
- 1) Source code
  - DMA\_MA\_RX&SLA\_TX

Note: All of projects are built based on Keil 5. For the need to run 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 DMA\_MA\_RX&SLA\_TX, compile and download it to the evaluation board
- 2) View data using logical analyzer

Figure 2. Communication data



## 2 Revision history

Table 1. Document revision history

Date	Revision	Changes
2021.12.20	2.0.0	Initial release
2022.03.25	2.0.1	Updated document format

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