

Introduction

This sample code demonstrates how to use ACC in AT32Fxx 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	OTG
	ACC

1 Quick start

1.1 Hardware resources

- 1) AT-START-F435 V1.0 evaluation board
- 2) OTG port

1.2 Software resources

- 1) SourceCode
 - ACC

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 “ACC” source code, compile and download it to the board
- 2) AT-START-F435 V1.0 board is used in the example. Note that not all of AT32 series support ACC feature, that is, only several product series offer ACC function.
- 3) The Demo demonstrates how to use ACC module to calibrate HSI clock in AT32F435 series. As an internal high-speed clock, HSI frequency is less accurate due to temperature variations. So when HSI is selected as a system clock, ACC module can be a solution to the inaccuracy of HSI.
- 4) OTG module is required to use ACC, with the reason being that an external time base is needed for ACC to calibrate, while the SOF signal on OTG can be generated every millisecond to serve as a time base.
- 5) To use this demo, first download the code to the evaluation board, and connect OTG port to PC. In this case, OTG in device mode will receive SOF signal from PC and send it to ACC that uses such signal as a time base for calibrating HSI.

2 Revision history

Table 1. Document revision history

Date	Revision	Changes
2021.12.07	2.0.0	Initial release

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