

### SC0086 Sample Code

AT32F4xx Three VirtualComport

### Introduction

This sample code provides the demo of usb three virtual comport (implement three virtual port devices), which can be applied to other series in a similar way.

Note: The corresponding code in this application note is developed on the basis of V2.x.x BSP provided by Artery. For other versions of BSP, please pay attention to the differences in usage.

Applicable products:

Part number	AT32F403xx
	AT32F413xx
	AT32F403Axx
	AT32F407xx

List of peripherals:

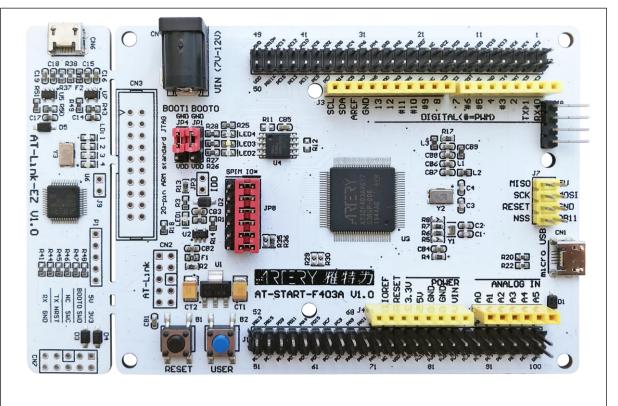
Main peripheral	USB
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## **1** Application method

### 1.1 Hardware requirements

1) AT-START-F403A V1.0 evaluation board (or the corresponding evaluation board of other series)



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

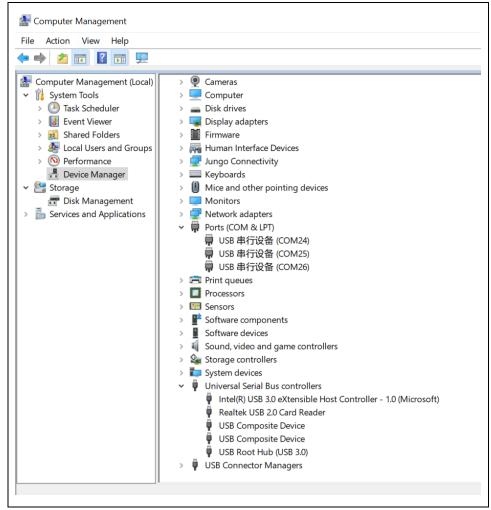
### 1.2 Software requirements

- 1) SourceCode
  - Three virtualcomport source code
- Note: All projects are built around keil 5. If users want to use them in other compiling environments, please refer to BSP\_V2.x.x\project\xxx\templates (such as IAR6/7/8, keil 4/5) for a simple change.

### 1.3 Example of application

1) Open the Three virtualcomport project, compile and download to the evaluation board. Then, connect the on-board usb interface to PC, and PC device manager will display three virtual port devices.

Figure 2. Device enumeration on PC





# 2 Revision history

Date	Version	Revision note
2022.04.14	2.0.0	Initial release.
2022.10.20	2.0.1	Fixed the problem of only one virtual port in Linux.

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