

## AT32F4xx Memory Protection Unit

## Introduction

This example code demonstrates how to use and configure Memory Protection Unit.

Applicable products:

Product series	AT32Fxx series
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List of major peripherals used:

Peripherals	USART
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# 1 Quick start

## 1.1 Hardware resources

AT-START-F403A V1.0 evaluation board

## 1.2 Software resources

1. This Demo is based on AT32F403A, and AT32F403A\_407\_Firmware\_Library\_V2.x.x (BSP version)
2. AT32F403A supports up to eight programmable memory regions (from 0 to 7). It also supports a background region feature ("region -1"). These regions are numbered. When two or more regions are overlapped, the higher-numbered region is given priority to be configured. For more information, please see "readme.txt" under project directory.

## 1.3 Example case

- 1) After program execution starts, relevant information, such as whether to support MCU, will be sent via a serial interface. If normal run, green LED will blink.
- 2) When a prompt says "press enter", the program CPU will enter "user" mode and start to test the configured MPU area
- 3) Start testing read and write permissions, an error "MemManagerFault" will occur, green LED stops blinking, yellow LED turns on, and "Generated a MemManageFault" comes out via the serial interface

Table 1. Document revision history

Date	Revision	Changes
2021.12.03	2.0.0	Initial release

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