

Introduction

This sample code demonstrates how to use QSPI to drive nand Flash on AT32 MCU.

Applicable products:

| | |
|----------------|----------|
| Product series | AT32F435 |
| | AT32F437 |

List of major peripherals used:

| | |
|-------------|------|
| Peripherals | QSPI |
|-------------|------|

1 Overview

This sample code demonstrates how to use QSPI peripheral of AT32 MCU to access SPI-NAND FLASH. In this code, the NAND Flash used is W25N01GVZEIG from winbond. With the help of QSPI, this demo shows how to read ID, block erase, read and write operations.

2 Quick start

2.1 Hardware resources

- 1) AT-START-F437 board
- 2) nand flash W25N01GVZEIG

2.2 Software resources

- SC0116_SourceCode

2.3 Example case

Open SC0111_SourceCode_V2.0.x\utilities\at32f403a_407_cmsis_freertos_demo\mdk_v5, compile and download it to the evaluation board

For hardware:

Replace QSPI on the U8 of AT-START-F437 board with W25N01GVZEIG

For software:

Open SC0116_SourceCode_V2.x.x\utilities\qspi_access_nand_flash\mdk_v5, compile and download it to the evaluation board.

2.4 Example case

After the program starts running, it will read ID, block erase, and perform write and read operation to NAND Flash. If test OK, LED3 will blink.

3 Revision history

Table 1. Document revision history

| Date | Revision | Changes |
|------------|----------|-----------------|
| 2023.05.04 | 2.0.0 | Initial release |

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