FAQ0110

Frequently Asked Questions

Precautions on Flash erase operation in zero-wait area

Questions：

What should we know about Flash erase operation in zero-wait area?

Answer：

Performing Flash erase operation when both conditions below are met will cause the application program to abandon its normal sequence:

1. Zero-wait area (ZW) is being erased;

2. During erase operation, the CPU has the following behavior:
   Fetch a command from a zero-wait area -> Jump to a non-zero-wait area to fetch a command

For example, after the page erase operation in a zero-wait area is enabled, the application first goes to check Flash busy flag (this process is done in a zero-wait area) before responding to interrupt. But if the interrupt function contains a code to be executed in NZW area, an error will occur when accessing the code by the application program.

Option 1: Disable interrupt before enabling erase, and then enable it after the completion of erase

```
__disable_irq();

Erase();

__enable_irq();
```

Option 2: Ensure that all function codes are in zero-wait areas during erase operation.

Type: MCU applications
Applicable products: AT32F413, AT32F403, AT32F403A, AT32F407
Main function: Flash
Minor function: None

Document revision history

Date	Revision	Changes
2022.2.28	2.0.0	Initial release

IMPORTANT NOTICE – PLEASE READ CAREFULLY