
FAQ0019
Frequently Asked Questions

AT32F4xx IO speed setting

Questions:

[AT32F4xx IO speed setting different from other MCUs](#)

Answer: AT32F4xx IO speed setting are described as follows:

1. AT32F4xx IO offers three types of current drive capabilities
 - (1) GPIO_DRIVE_STRENGTH_MODERATE represents moderate sourcing/sinking strength
 - (2) GPIO_DRIVE_STRENGTH_STRONGER represents stronger sourcing/sinking strength
 - (3) GPIO_DRIVE_STRENGTH_MAXIMUM represents maximum sourcing/sinking strength
2. If IO speed is set at maximum sourcing strength, and the load is small, it is likely to cause overshoot and vibrating issue on the IO, which may affect applications.
3. For general applications
GPIO_DRIVE_STRENGTH_MODERATE is recommended.

For those that require strong current:

GPIO_DRIVE_STRENGTH_STRONGER or GPIO_DRIVE_STRENGTH_MAXIMUM is recommended.

Besides, it is possible to connect a resistor to a reserved IO location in series.

Type: MCU

Applicable products: AT32 MCU family

Main function: GPIO

Minor function: None

Document revision history

Date	Revision	Changes
2022.2.16	2.0.0	Initial release

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