

AT32F4xx GPIO pull-up & pull-down resistors settings

Questions:

What's the status of GPIO's pull-up/pull-down resistors in different modes?

Answer:

AT32F4xx series GPIO internal pull-up/pull-down resistor settings in different modes

Series	AT32 F403	AT32 F413	AT32 F415	AT32 F403A	AT32 F407	AT32 F421	AT32 F435/437	AT32 F425
General-purpose input	Y	Y	Y	Y	Y	Y	Y	Y
Analog input	N	N	N	N	N	N	N	N
General purpose push-pull output	N	N	N	N	N	N	Y	Y
General purpose open-drain output	N	N	N	N	N	N	Y	Y
Multiplexed push-pull output	N	N	N	N	N	N	Y	Y
Multiplexed open-drain output	N	N	N	N	N	N	Y	Y
Special purpose pins:								
NRST	Do not configure. Pull-up resistors are always on (resistance is around 40kΩ, different from GPIO)							
BOOT0	Do not configure. Pull-down resistors are always on except in Standby mode.							
PA13	Default SWDIO function after reset, and pull-up resistors are always on.							
PA14	Default SWCLK function after reset, and pull-down resistors are always on.							

Type: MCU application

Applicable products: AT32F403, AT32F413, AT32F415, AT32F403A, AT32F407, AT32F421, AT32F435/437, AT32F425

Main function: GPIO

Other function: None

Document revision history

Date	Revision	Changes
2022.2.18	2.0.0	Initial release

IMPORTANT NOTICE – PLEASE READ CAREFULLY

Purchasers are solely responsible for the selection and use of ARTERY's products and services, and ARTERY assumes no liability whatsoever relating to the choice, selection or use of the ARTERY products and services described herein.

No license, express or implied, to any intellectual property rights is granted under this document. If any part of this document deals with any third party products or services, it shall not be deemed a license grant by ARTERY for the use of such third party products or services, or any intellectual property contained therein, or considered as a warranty regarding the use in any manner whatsoever of such third party products or services or any intellectual property contained therein.

Unless otherwise specified in ARTERY's terms and conditions of sale, ARTERY provides no warranties, express or implied, regarding the use and/or sale of ARTERY products, including but not limited to any implied warranties of merchantability, fitness for a particular purpose (and their equivalents under the laws of any jurisdiction), or infringement of any patent, copyright or other intellectual property right.

Purchasers hereby agrees that ARTERY's products are not designed or authorized for use in: (A) any application with special requirements of safety such as life support and active implantable device, or system with functional safety requirements; (B) any air craft application; (C) any automotive application or environment; (D) any space application or environment, and/or (E) any weapon application. Purchasers' unauthorized use of them in the aforementioned applications, even if with a written notice, is solely at purchasers' risk, and is solely responsible for meeting all legal and regulatory requirement in such use

Resale of ARTERY products with provisions different from the statements and/or technical features stated in this document shall immediately void any warranty grant by ARTERY for ARTERY products or services described herein and shall not create or expand in any manner whatsoever, any liability of ARTERY.

© 2023 Artery Technology -All rights reserved