

## How to set AT32F4xx IO ports connected to power supply

### Questions:

When replacing a different microcontroller with AT32F4xx series, if some I/Os of AT32F4xx series are connected to PCB power supply (VDD/GND), how to set them?

### Answer:

During power-on, power-down reset and code execution, without software intervention, I/Os will keep in floating state. Applying 0 to 5.5 V to the I/Os that are connected to power supply would not cause any influence.

Example of IO ports connected to power supply during product replacement or migration:

Pin number	AT32 part number Pin name	Replaced product Pin name
	AT32F413RxT7 AT32F415RxT7	Gx32F103RxT6/ Gx32F303RxT6 Sxx32F103RxT6/ Sxx32F401RxT6 Sxx32F030RCT6/ Sxx32F072RxT6
18	PF4	VSS
19	PF5	VDD
47	PF6	VSS
48	PF7	VDD
	AT32F413CxT7 AT32F415CxT7	Gx32F103CxT6/ Gx32F303CxT6 Sxx32F103CxT6/ Sxx32F302CxT6 Sxx32F303CxT6/ Sxx32F030CCT6 Sxx32F072CxT6
35	PF6	VSS
36	PF7	VDD
	AT32F413CxU7 AT32F415CxU7	Sxx32F103CxU6/ Sxx32F072CxU6
35	PF6	VSS
36	PF7	VDD
	AT32F413RxT7 AT32F415RxT7	Sxx32F302RxT6/ Sxx32F303RxT6
19	PF5	VDD
47	PF6	VSS
48	PF7	VDD
	AT32F421CxT7	Sxx32F030CCT6
35	PF6	VSS
36	PF7	VDD

**Type:** MCU application

**Applicable products:** AT32F413, AT32F415, AT32F421

**Main function:** GPIO

**Other function:** None

## Document revision history

Date	Revision	Changes
2022.2.25	2.0.0	Initial release

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