

## ATTiny AVR 0-Series & 1-Series Microcontrollers

### GPIO manipulation

PINx\_bm (bitmap of pin x)

#### Port Direction:

PORTn.DIR

PORTA.DIR = 0b00010110 (set pins PA1, PA2 and PA4 as outputs, the rest as inputs)

PORTn.DIRSET

PORTA.DIRSET & PIN0\_bm (change pin PA0 to output without modifying others)

PORTn.DIRCLR

PORTB.DIRCLR & PIN6\_bm (change PB6 to input without modifying others)

PORTn.DIRTGL

PORTA.DIRTGL & PIN7\_bm (toggle PA7 from input-to-output or output-to-input)

#### Port Control:

PORTn.PINxCTRL

INVEN				Pullup	ISC	ISC	ISC
7	6	5	4	3	2	1	0

#### Port Output:

PORTn.OUT

PORTn.OUTSET

PORTn.OUTCLR

PORTn.OUTTGL

#### Port Input:

PORTn.IN

PORTA.IN & PIN5\_bm (true if PA5 is high)

~PORTB.IN & PIN0\_bm (true if PB0 is low)

- [TB3229 - Getting Started with GPIO](#)
- [TB3209 - Getting Started with ADC](#)
- [TB3210 - Getting Started with DAC](#)
- [TB3211 - Getting Started with AC](#)
- [TB3212 - Getting Started with TCD](#)
- [TB3213 - Getting Started with RTC](#)
- [TB3214 - Getting Started with TCB](#)
- [TB3215 - Getting Started with SPI](#)
- [TB3216 - Getting Started with USART](#)
- [TB3217 - Getting Started with TCA](#)
- [TB3218 - Getting started with CCL](#)
- [AN3007 - Getting Started with FreeRTOS on megaAVR 0-series](#)
- [AN2451 - Getting Started with Core Independent Peripherals on AVR Microcontrollers](#)
- [AVR1000: Getting Started with Writing C-Code for XMEGA](#)
- [AVRAPPS-1544: Getting Started with Events on the tinyAVR 1-series](#)