

# Wiring Pi

## *GPIO Interface library for the Raspberry Pi*



### Raspberry Pi Specifics

These functions are not part of the core **wiringPi** set, but act specifically on the Raspberry Pi hardware itself. Some external hardware driver modules may provide some of this functionality though.

- **void digitalWriteByte (int value) ;**

This writes the 8-bit byte supplied to the first 8 GPIO pins. It's the fastest way to set all 8 bits at once to a particular value, although it still takes two write operations to the Pi's GPIO hardware.

- **pwmSetMode (int mode) ;**

The PWM generator can run in 2 modes – “balanced” and “mark:space”. The mark:space mode is traditional, however the default mode in the Pi is “balanced”. You can switch modes by supplying the parameter: **PWM\_MODE\_BAL** or **PWM\_MODE\_MS**.

- **pwmSetRange (unsigned int range) ;**

This sets the range register in the PWM generator. The default is 1024.

- **pwmSetClock (int divisor) ;**

This sets the divisor for the PWM clock.

**Note:** The PWM control functions can not be used when in Sys mode. To understand more about the PWM system, you'll need to read the Broadcom ARM peripherals manual.

- **piBoardRev (void) ;**

This returns the board revision of the Raspberry Pi. It will be either 1 or 2. Some of the BCM\_GPIO pins changed number and function when moving from board revision 1 to 2, so if you are using BCM\_GPIO pin numbers, then you need to be aware of the differences.

- **wpiPinToGpio (int wPiPin) ;**

This returns the BCM\_GPIO pin number of the supplied **wiringPi** pin. It takes the board revision into account.

- **physPinToGpio (int physPin) ;**

This returns the BCM\_GPIO pin number of the supplied physical pin on the **P1** connector.

- **setPadDrive (int group, int value) ;**

This sets the “strength” of the pad drivers for a particular group of pins. There are 3 groups of pins and the drive strength is from 0 to 7. Do not use this unless you know what you are doing.