

Serial Library

WiringPi includes a simplified serial port handling library. It can use the on-board serial port, or any USB serial device with no special distinctions between them. You just specify the device name in the initial open function.

To use, you need to make sure your program includes the following file:

```
#include <wiringSerial.h>
```

Then the following functions are available:

```
int serialOpen (char *device, int baud) ;
```

This opens and initialises the serial device and sets the baud rate. It sets the port into “raw” mode (character at a time and no translations), and sets the read timeout to 10 seconds. The return value is the file descriptor or -1 for any error, in which case *errno* will be set as appropriate.

```
void serialClose (int fd) ;
```

Closes the device identified by the file descriptor given.

```
void serialPutchar (int fd, unsigned char c) ;
```

Sends the single byte to the serial device identified by the given file descriptor.

```
void serialPuts (int fd, char *s) ;
```

Sends the nul-terminated string to the serial device identified by the given file descriptor.

```
void serialPrintf (int fd, char *message, ...) ;
```

Emulates the system printf function to the serial device.

```
int serialDataAvail (int fd) ;
```

Returns the number of characters available for reading, or -1 for any error condition, in which case *errno* will be set appropriately.

```
int serialGetchar (int fd) ;
```

Returns the next character available on the serial device. This call will block for up to 10 seconds if no data is available (when it will return -1)

