

SerialOTG

Read, Write, Baudrate, Parity, Dtr, Rts tested with the following serial adapters:

CdcAcm (original Arduino Uno)

PL2303, PL2303HX, (PL2303HXN not implemented yet)

FTDI

CP210x

CH341, CH341 ("fake")

InitializeSerial()

Must be called first, before OpenSerial()

IsInitialized()

OpenSerial()

Open a serial connection for the adapter. Return true if opened.

Sets default values: baud=9600, parity=none, Rts=0, Dsr=0, (databits=8, Stopbits=1, buffer=256)
returns True if success.

Note, first call detects adapter and you must allow USB access. Second call opens the serial connection.

IsOpen()

Return true if opened

CloseSerial()

BytesToRead()

Returns current nr of bytes in driver read buffer. 0 if empty.

ReadSerial()

Returns string, empty string if nothing to read.

WriteSerial(String data)

Write string, return true or false.

PrintSerial(String data)

Write string, append new_line. Return true or false.

ReadSerialLn()

Read serial line up to new_line. If new_line found, return string, else return empty string.

BaudRate(int baudRate) Return true or false.

BaudRate(). Return baudrate.

Baudrate (300, 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200)

Parity(int parity). Return true or false.

Parity(). Return parity.

Parity 0=NONE, 1=ODD, 2=EVEN, (3=MARK 4=SPACE)

Dtr(int dtr). Return true or false.

Dtr(). Return Dtr.

Dtr 0, 1

Rts(int rts). Return true or false.

Rts(). Return Rts.

Rts 0, 1

ReadSerialByte() read a byte as a number 0..255 from serial line, if empty return -1

WriteSerialByte(num) write a number 0..255 as a byte to serial line

ReadSerialHexString() Read bytes as a hex-coded string from serial line. If no data, return empty

WriteSerialHexString(string) Write a hex-coded string as bytes to serial line.

2 hex digits for each byte. Uses digit 0..9 and A..F so no problem with UTF-8 coding

Experimental, may be removed:

ReadSerialHexList(), WriteSerialList(List) Read and write hex coded bytes in a list.

Upload(board,filename) Upload hex file to Arduino.

Redundant functions, can be removed:

BufferSize now set to library read buffer size, 1024b. No reason to change this.

BufferSize() Return buffer size

BufferSize(int bytes) Sets buffer size