

SCREAM!

It's what's for breakfast

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Animation by Paul Lau & Roy Stanfield

```
import serial

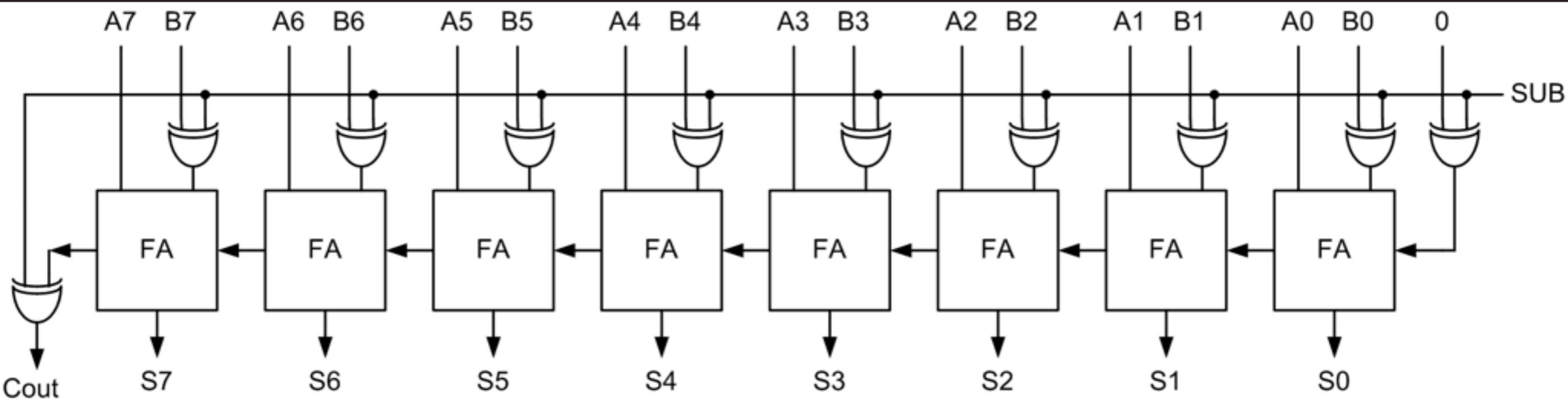
ser = serial.Serial('/dev/tty.usbserial-FTELSI2D', 9600)
ser.write("some stuff")
byte = ser.read()
```



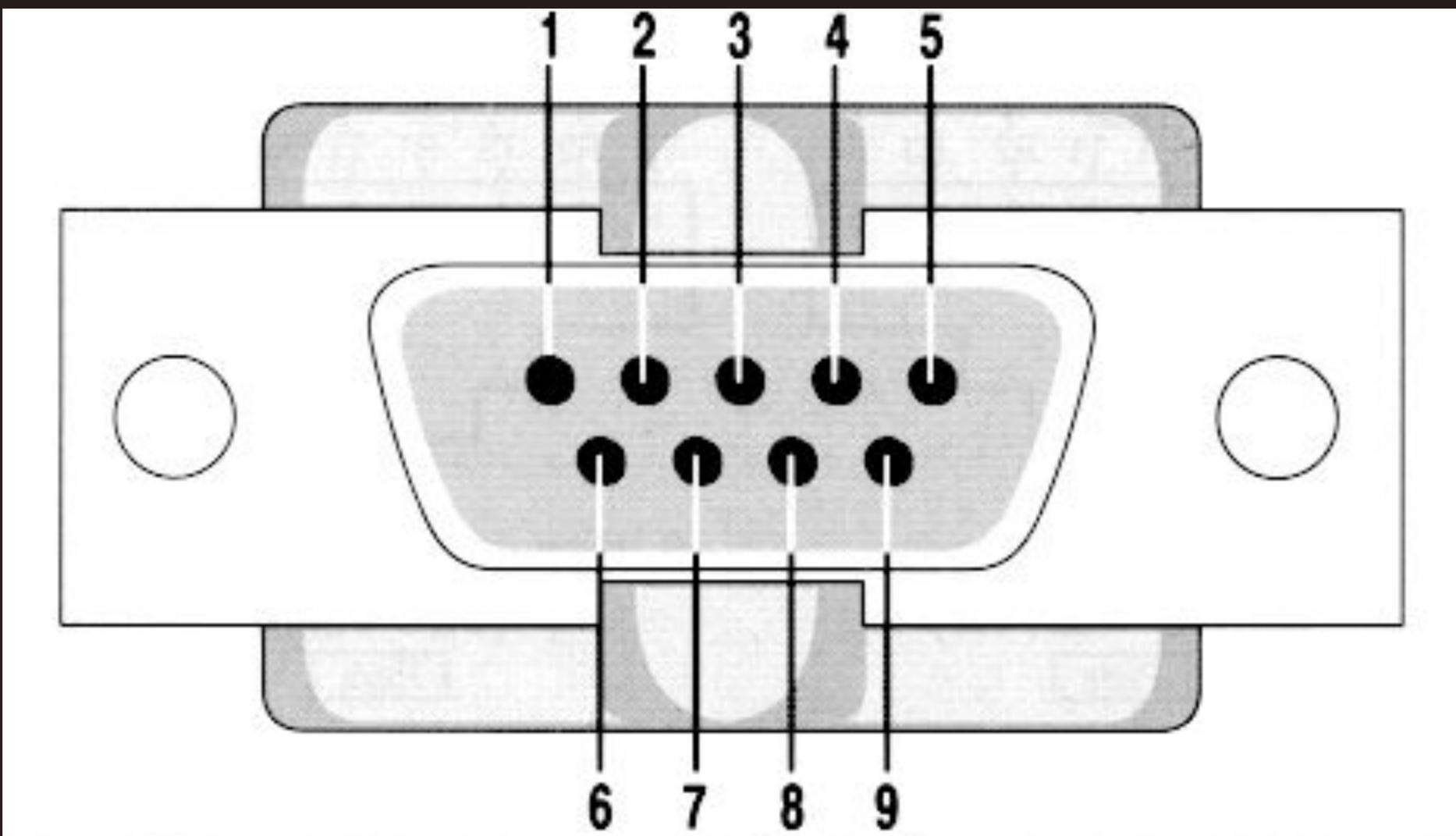


serial | parallel









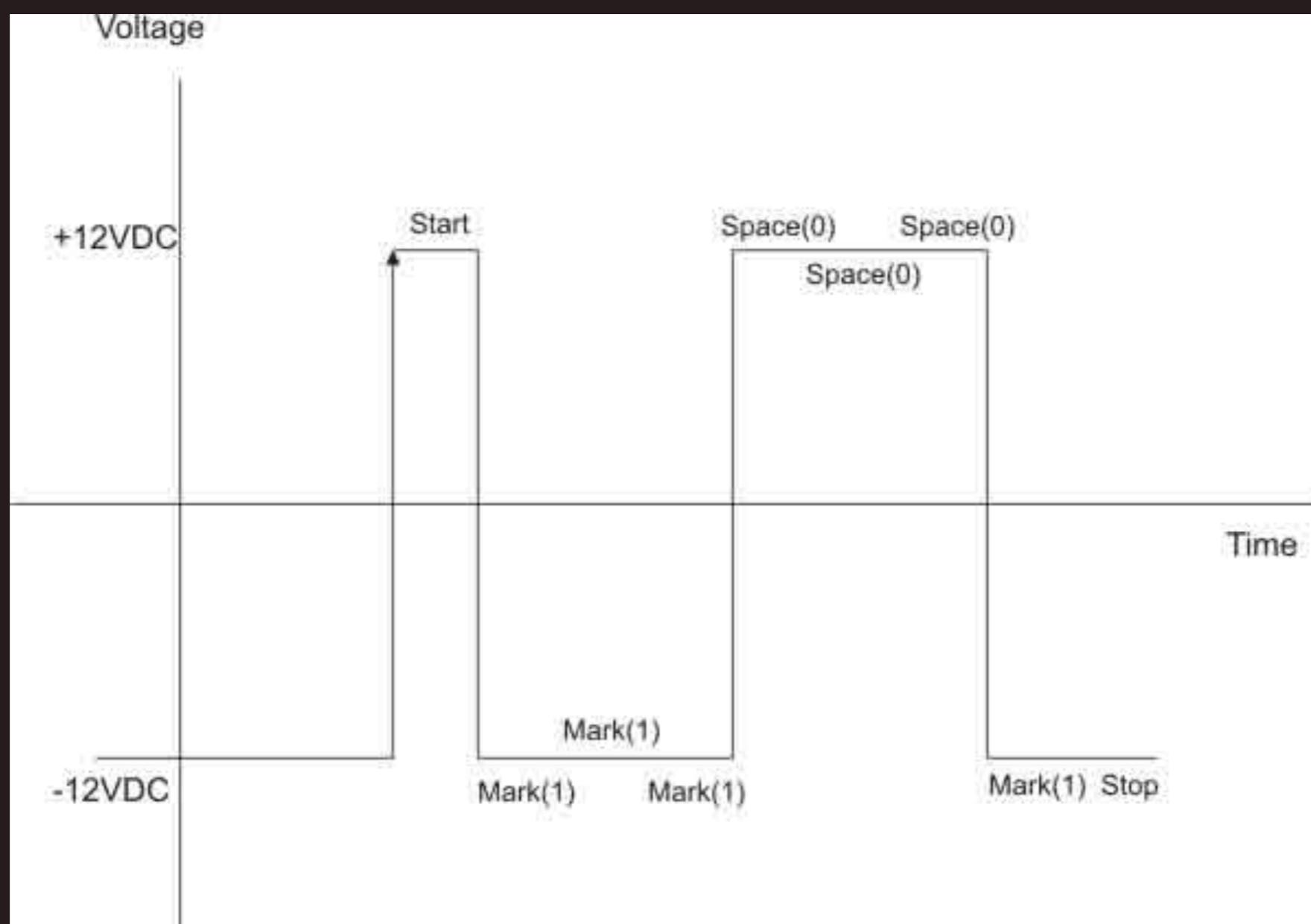
Pin	Signal	Pin	Signal
1	Data Carrier Detect	6	Data Set Ready
2	Received Data	7	Request to Send
3	Transmitted Data	8	Clear to Send
4	Data Terminal Ready	9	Ring Indicator
5	Signal Ground		

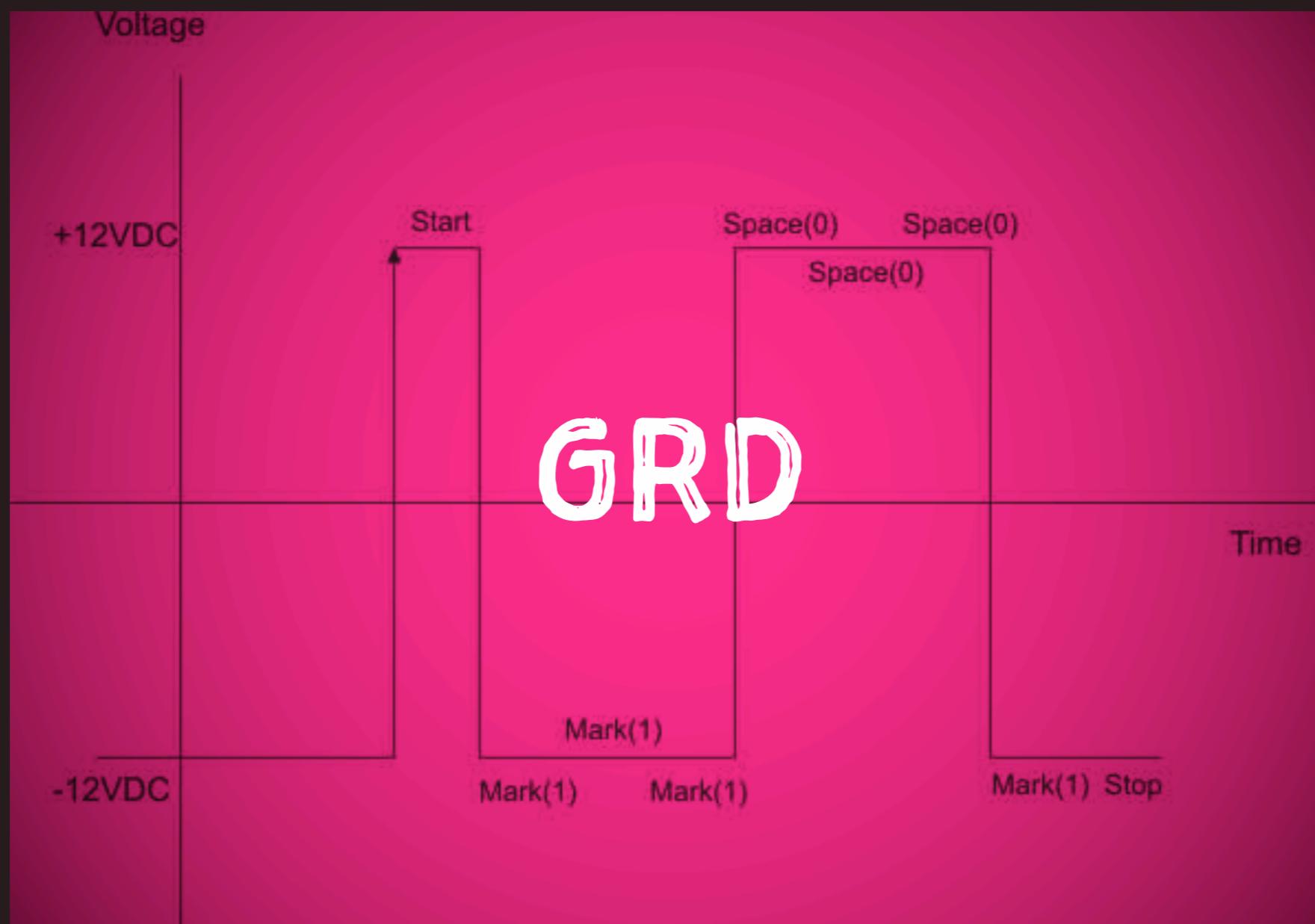
pins, wtf!

RX	Received Data	Pin 2
TX	Transmitted Data	Pin 3
GRD	Ground	Pin 5
RTS	Ready to Send	Pin 7
CTS	Clear to Send	Pin 8



TX / RX





00100110

frames!

00100110|0111

00100110|0|11

```
#define CS5      0x00000000 /* 5 bits (pseudo) */
#define CS6      0x00000100 /* 6 bits */
#define CS7      0x00000200 /* 7 bits */
#define CS8      0x00000300 /* 8 bits */
```

00100110|0|11

parity: odd, even, mark, space, none

00100110|00|11

stop: 1, 1.5, 2

8N1



5E2

speed!

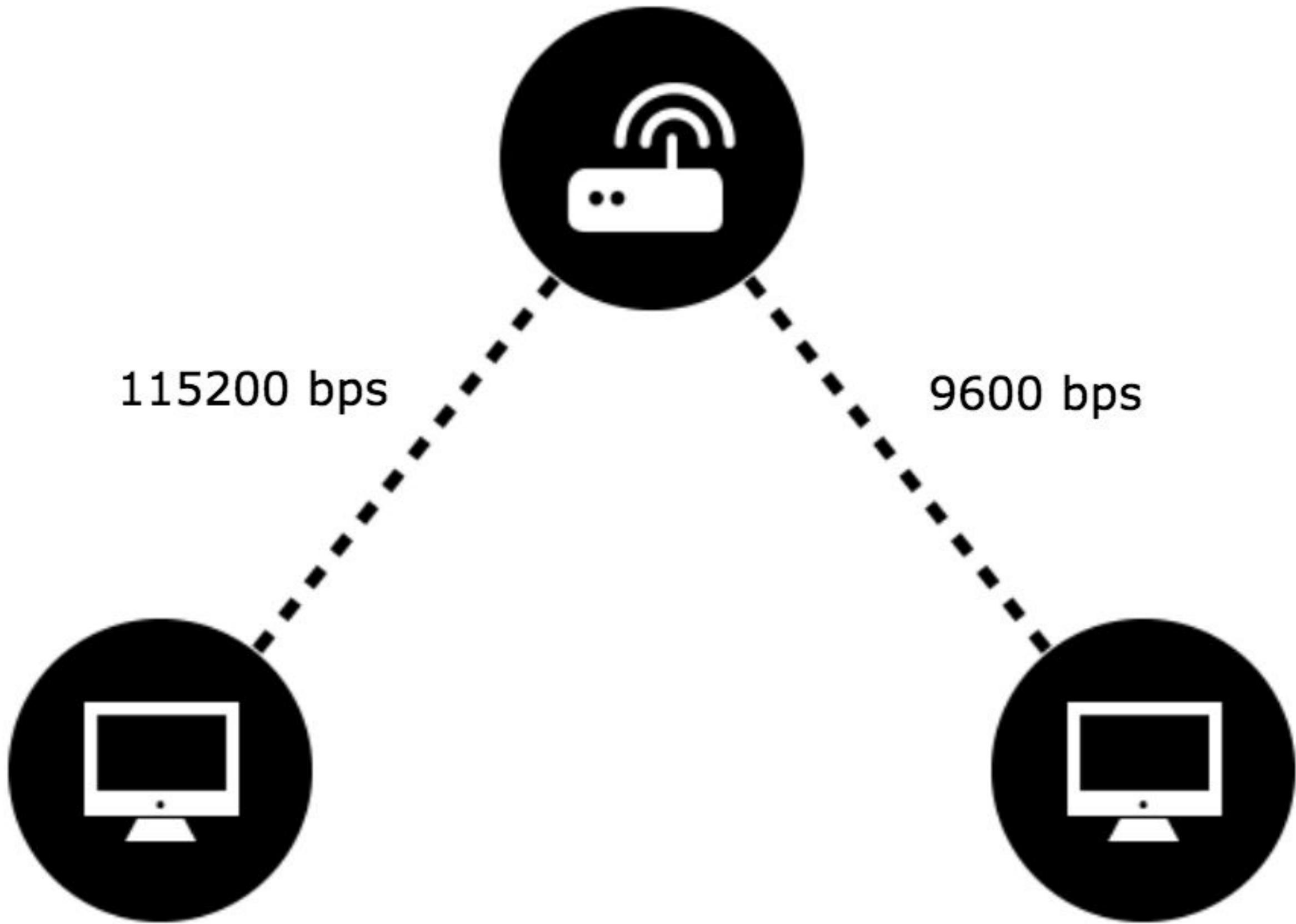
baud rate

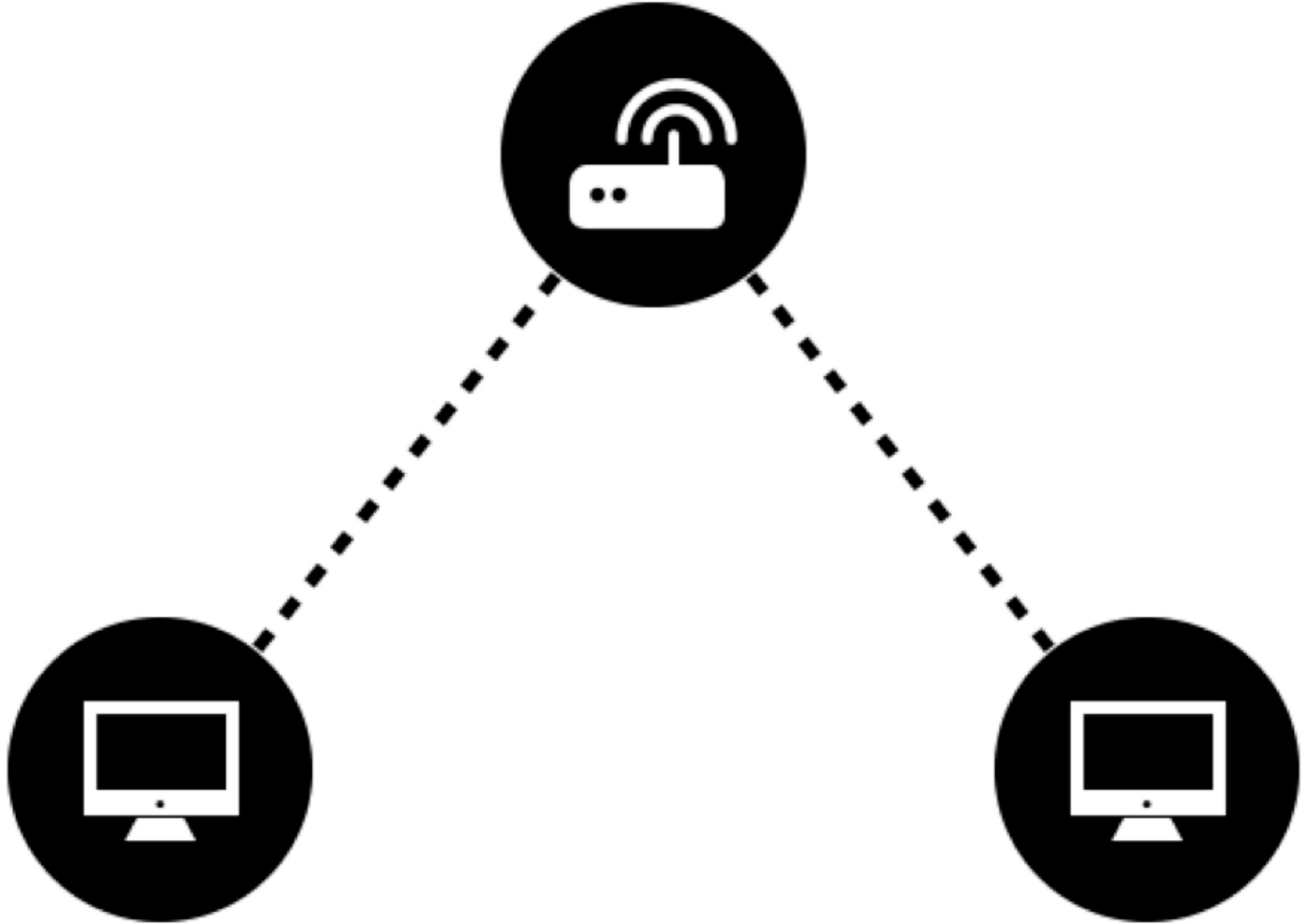
9600 bps

115200 bps

```
import serial

ser = serial.Serial('/dev/tty.usbserial-FTELSI2D', 9600)
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byte = ser.read()
```

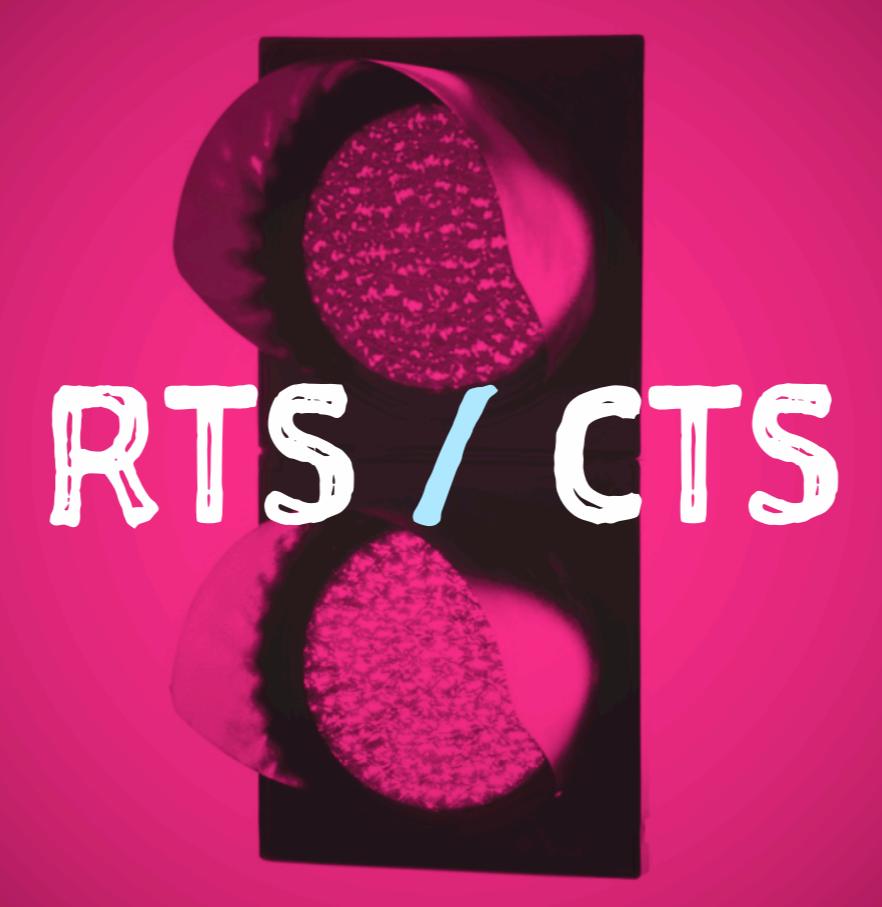




<3 <3 <3

33<

control flow!



RTS / CTS

RTS

CTS

Ready to Send

Clear to Send

Pin 7

Pin 8

XON 17



XOFF 18

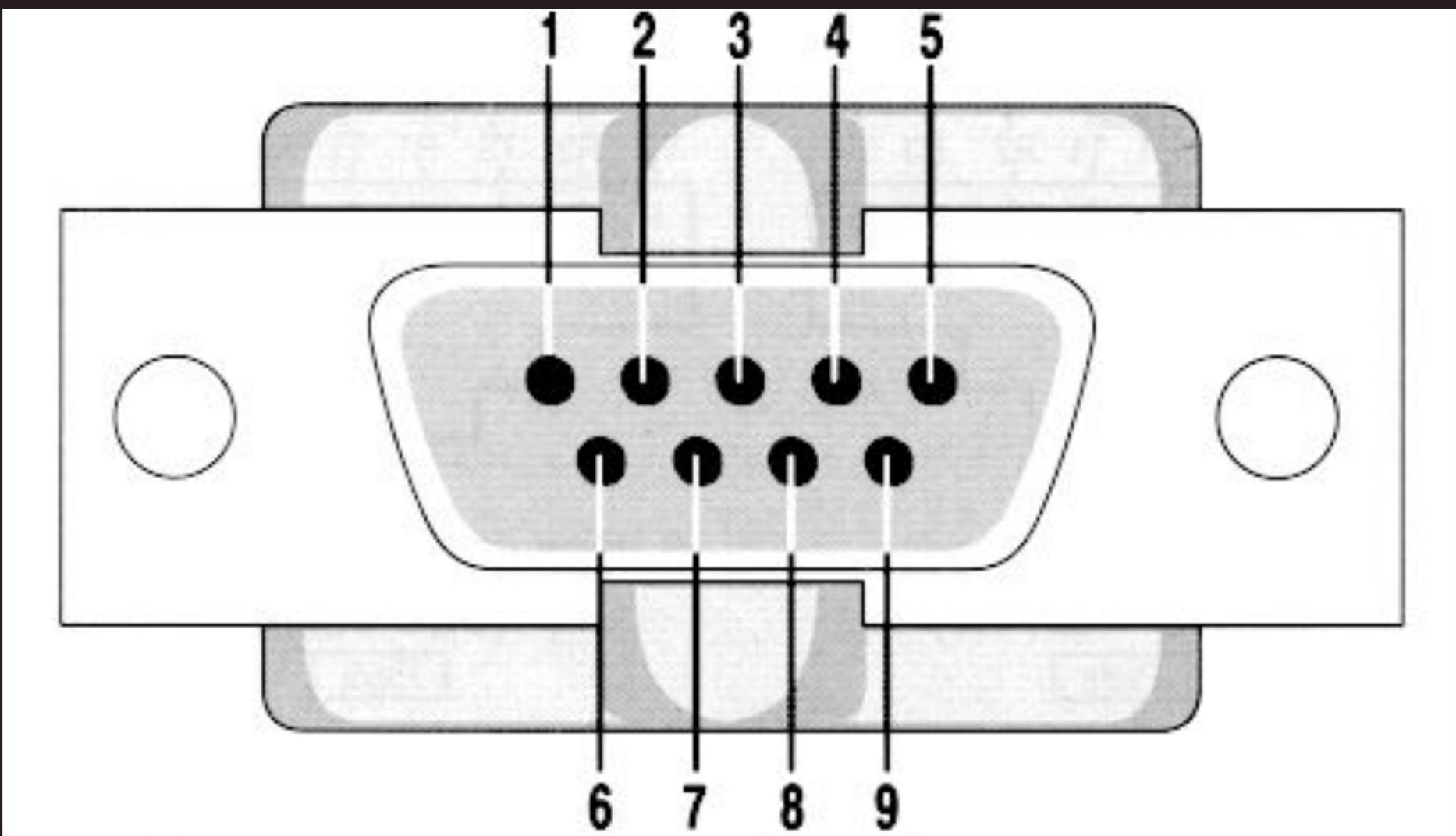
but how!

```
/*
 * Defaults on "first" open.
 */

#define TTYDEF_IFLAG      (BRKINT | ICRNL | IMAXBEL | IXON | IXANY)
#define TTYDEF_OFLAG      (OPOST | ONLCR)
#define TTYDEF_LFLAG      (ECHO | ICANON | ISIG | IEXTEN | ECHOE|ECHOKE|ECHOCTL)
#define TTYDEF_CFLAG      (CREAD | CS8 | HUPCL)
#define TTYDEF_SPEED      (B9600)
```

/usr/include/sys/termios.h

/usr/include/sys/ttydefaults.h



Pin	Signal	Pin	Signal
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5	Signal Ground		



lisaneigut — bash — 80x24

Last login: Sat May 17 21:41:49 on ttys000

↳ 07:42:55 ~ └─

