

# Example : parallel port (LPT1)

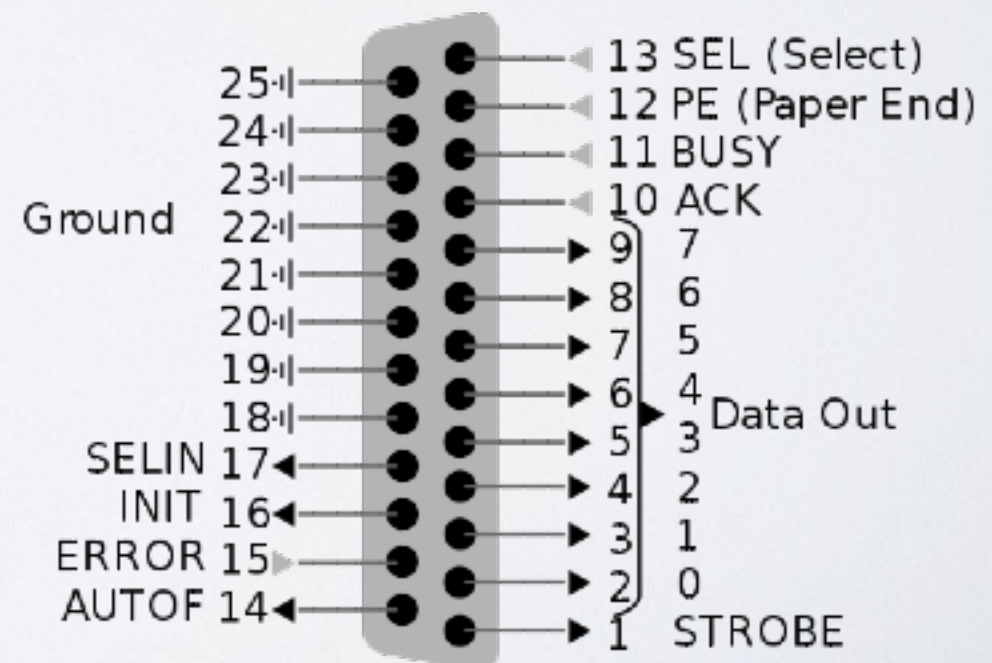
- Three registers

$D_7$	$D_6$	$D_5$	$D_4$	$D_3$	$D_2$	$D_1$	$D_0$
read/write data register (port 0x378)							

$\overline{BSY}$	$\overline{ACK}$	PAP	OFON	$\overline{ERR}$	-	-	-
read-only status register (port 0x379)							

-	-	-	IRQ	DSL	$\overline{INI}$	ALF	STR
read/write control register (port 0x37a)							

- Every bits (except IRQ) corresponds to a pin on 25-pin connector



# Parallel Port Driver

$D_7$	$D_6$	$D_5$	$D_4$	$D_3$	$D_2$	$D_1$	$D_0$
read/write data register (port 0x378)							
$\overline{BSY}$	$\overline{ACK}$	PAP	OFON	$\overline{ERR}$	-	-	-
read-only status register (port 0x379)							
-	-	-	IRQ	DSL	$\overline{INI}$	ALF	STR
read/write control register (port 0x37a)							

```
void
sendbyte(uint8_t byte)
{
    /* Wait until  $\overline{BSY}$  bit is 1. */
    while ((inb (0x379) & 0x80) == 0)
        delay ();

    /* Put the byte we wish to send on pins D7-0. */
    outb (0x378, byte);

    /* Pulse STR (strobe) line to inform the printer
     * that a byte is available */
    uint8_t ctrlval = inb (0x37a);
    outb (0x37a, ctrlval | 0x01);
    delay ();
    outb (0x37a, ctrlval);
}
```