

## I2C to LCD interface

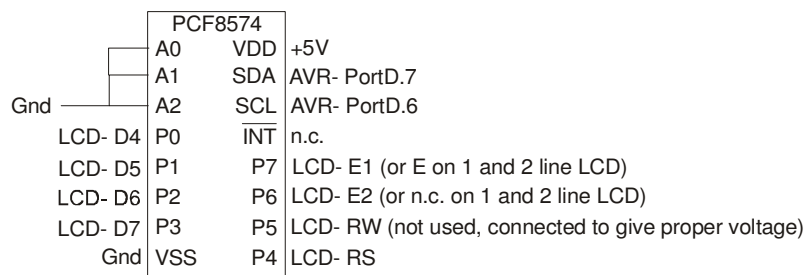
Here follows a short description on how to use my `i2c_lcd` library, with this you could use any AVR circuit with a LCD with minimal extra hardware. The interface from the i2c to LCD consists of a PCF8574 8bit I/O module, so with only 2 pins you could interface to the LCD. The library replaces BASCOM:s LCD calls, so you only need to address the library and configure the i2c pins and that's it.

What you need to add in the beginning of your program is the following:

```
$lib "Lcd_i2c.lib"  
Const Pcf8574_lcd = &H40  
Config Scl = Portd.6  
Config Sda = Portd.7  
Dim _lcd_e As Byte  
_lcd_e = 128
```

Yes, there is one thing added, the `_lcd_e` byte, it's used to control which half of a 4-line LCD to use, with 128 controlling the upper half (or a 2-line LCD) 64 controls the lower half and 192 when you what to control both halves at the same time (CIs, Deflcdchar)

The PCF8574 is connected as follows:



A0, A1 and A2 gives the address of the chip

A0	A1	A2	Pcf8574_lcd
0	0	0	&H40
1	0	0	&H42
0	1	0	&H44
1	1	0	&H46
0	0	1	&H48
1	0	1	&H4A
0	1	1	&H4C
1	1	1	&H4E