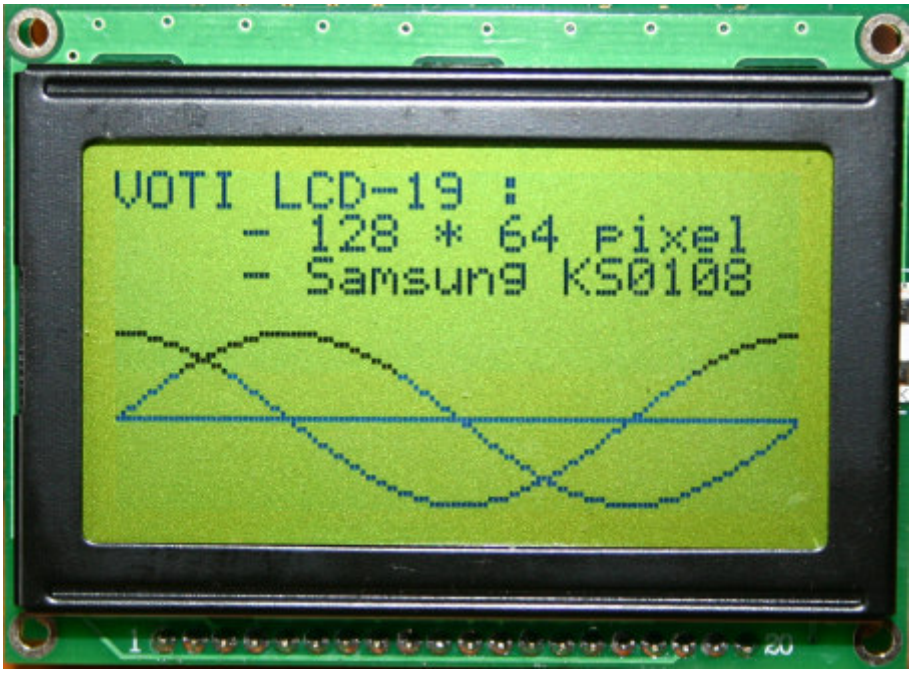
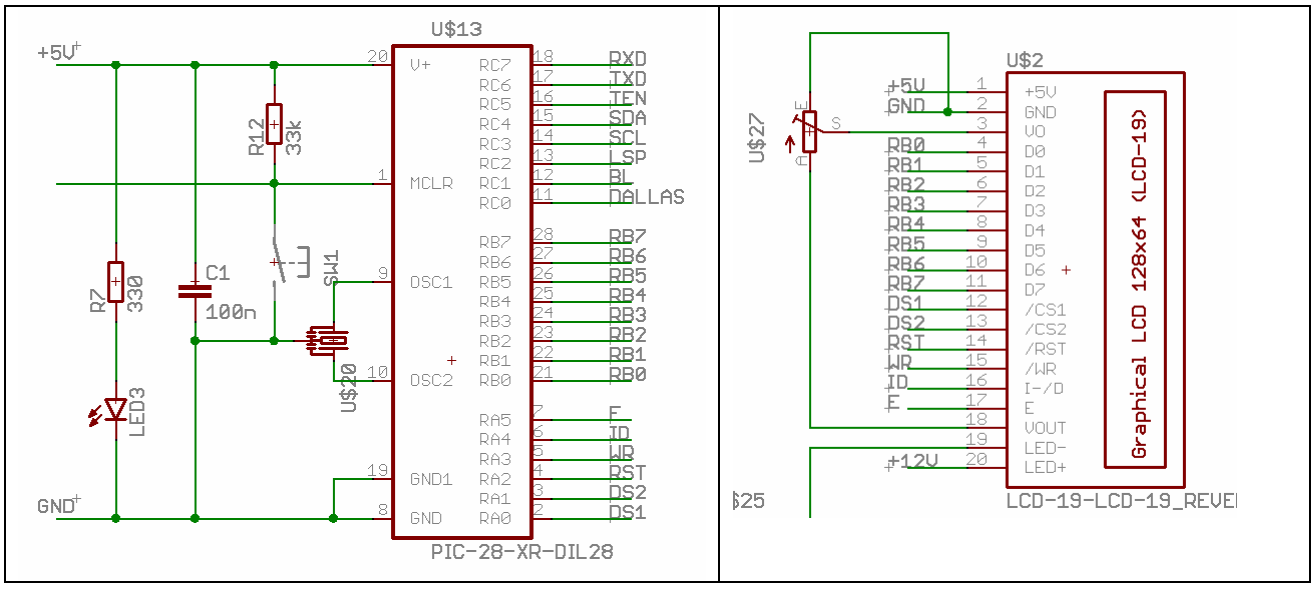
LCD-19 test



This is a simple test I made using an LCD-19, an 18F252, and Proton PIC Basic. The circuit I used is shown below, but I had to add a 2k2 pull-up on RA4 (because it is an open-drain pin). I also added two 2k2 series resistors between RB6/7 of the PIC and the LCD, to make in-circuit programming possible. Never mind the port C connections, this was part of a larger circuit. The backlight was not used.



The PIC Basic code I used is shown below. The result is shown at the top of this page. The .bas and .hex files can be found at my site (check the LCD-19 product page).

```
Device = 18F252
XTAL = 10
ALL_DIGITAL = TRUE

@CONFIG_REQ
@__CONFIG config1h, OSCS_OFF_1 & HS_OSC_1
@__CONFIG config2l, BOR_ON_2 & BORV_20_2 & PWRT_ON_2
@__CONFIG config2h, WDT_OFF_2 & WDTPS_128_2
@__CONFIG config3h, CCP2MX_ON_3
@__CONFIG config4l, STVR_ON_4 & LVP_OFF_4 & DEBUG_OFF_4

' LCD spec and pins
LCD_TYPE = SAMSUNG
  LCD_DTPORT = PORTB
  LCD_RSPIN = PORTA.4
  LCD_ENPIN = PORTA.5
  LCD_RWPIN = PORTA.3
LCD_CS1PIN = PORTA.0
  LCD_CS2PIN = PORTA.1
  INTERNAL_FONT = On
  FONT_ADDR = 0

' reset the display controller
TRISA = %00000000
PORTA.2 = 1
DelayMS 10
PORTA.2 = 0
DelayMS 10

' clear screen and print some text
Cls
Print At 0,0, "VOTI LCD-19 : "
Print At 1,4, "- 128 * 64 pixel"
Print At 2,4, "- Samsung KS0108"

' show a sine and a cosine
Dim X As Byte, Y As Byte, Q As Float
For X = 0 To 127
    Q = X * 0.049
        Plot 46, X
  Y = 46 - 16 * Sin ( Q )
        Plot Y, X
        Y = 46 - 16 * Cos ( Q )
        Plot Y, X
Next

Stop

Include "FONT.INC"
```