8.8 Serial 12832 LCD Setting

EG8010 supports 12832 LCD modules. It can display inverter's voltage, frequency, temperature and current information to the user. Figure 8.8a shows how to connect EG8010 with 12832 LCD.

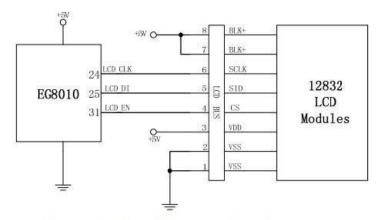


Figure 8.8a EG8010 Serial 12832 LCD

EG8010's LCD communication control protocol supports ST7920 LCD modules such as 12832

SPI Pin definition:

GND: Power ground

VCC: Power

CLK: Clock line

MOSI: Data cable

RES: Reset line

DC: Data/commands

CS: Chip select (when not use can be grounded directly)



It is SPI but with a single bidirectional pin e.g.

LED backlight, sometimes called BL. (it might be LED anode or cathode)

SDA bidirectional data pin. Connect to MOSI

SCK clock. sometimes called SCLK, SCL, ...

A0 data/command pin. sometimes called DC, RS, ...

RESET reset pin. you must connect. (or pullup)

CS chip select

Regular SPI has SCK, MOSI, MISO. In which case TFT pins are called SCK, SDI, SDO. If the pin is bidirectional, it is called SDA. You can use it unidirectionally via MOSI. MISO pin is unused. The AVR hardware can **not** handle bidirectional data pin.