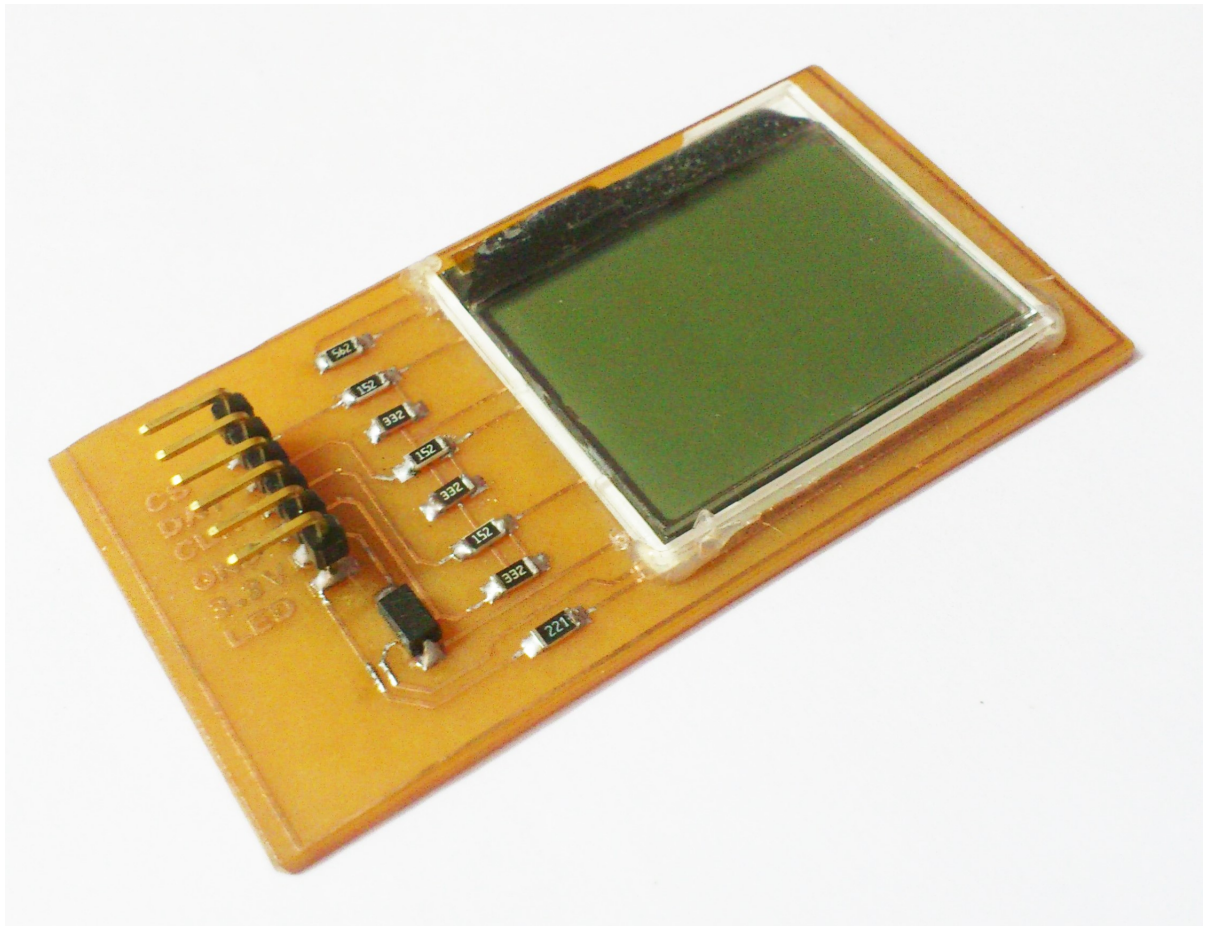


Monochrome Display User Guide

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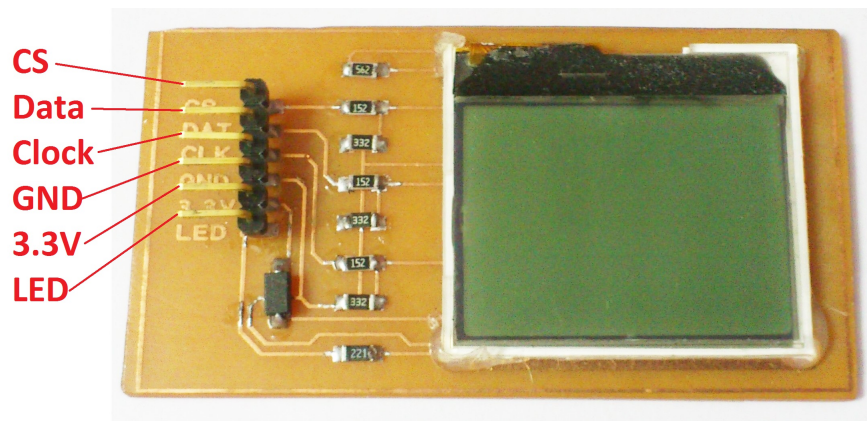
Specifications

- 1.3" diagonal LCD display.
- Monochrome display.
- 96 x 68 pixels.
- STE2007 controller.
- IO pins are 5V compatible, built in level converter.
- 3 pin SPI digital interface.
- Example codes are included.
- Library has text and geometric functions.
- Requires only 3 IO of the micro-controller to drive the LCD.
- LCD dimension 35mm x 31 mm.
- Video of different demo can be found here:
<https://www.youtube.com/playlist?list=PLXmFn1t1oCOGQAfpgBrAcLJo2DrieCy3K>

Pin Connection

Arduino function			Arduino function
reset	(PCINT14/RESET) PC6	1	28 PC5 (ADC5/SCL/PCINT13) analog input 5
digital pin 0 (RX)	(PCINT16/RXD) PD0	2	27 PC4 (ADC4/SDA/PCINT12) analog input 4
digital pin 1 (TX)	(PCINT17/TXD) PD1	3	26 PC3 (ADC3/PCINT11) analog input 3
digital pin 2	(PCINT18/INT0) PD2	4	25 PC2 (ADC2/PCINT10) analog input 2
digital pin 3 (PWM)	(PCINT19/OC2B/INT1) PD3	5	24 PC1 (ADC1/PCINT9) analog input 1
digital pin 4	(PCINT20/XCK/T0) PD4	6	23 PC0 (ADC0/PCINT8) analog input 0
VCC	VCC	7	22 GND GND
GND	GND	8	21 AREF analog reference
crystal	(PCINT6/XTAL1/TOSC1) PB6	9	20 AVCC VCC
crystal	(PCINT7/XTAL2/TOSC2) PB7	10	19 PB5 (SCK/PCINT5) digital pin 13
digital pin 5 (PWM)	(PCINT21/OC0B/T1) PD5	11	18 PB4 (MISO/PCINT4) digital pin 12
digital pin 6 (PWM)	(PCINT22/OC0A/AIN0) PD6	12	17 PB3 (MOSI/OC2A/PCINT3) digital pin 11 (PWM)
digital pin 7	(PCINT23/AIN1) PD7	13	16 PB2 (SS/OC1B/PCINT2) digital pin 10 (PWM)
digital pin 8	(PCINT0/CLKO/ICP1) PB0	14	15 PB1 (OC1A/PCINT1) digital pin 9 (PWM)

Digital Pins 11, 12 & 13 are used by the ICSP header for MOSI, MISO, SCK connections (Atmega168 pins 17, 18 & 19). Avoid low-impedance loads on these pins when using the ICSP header.

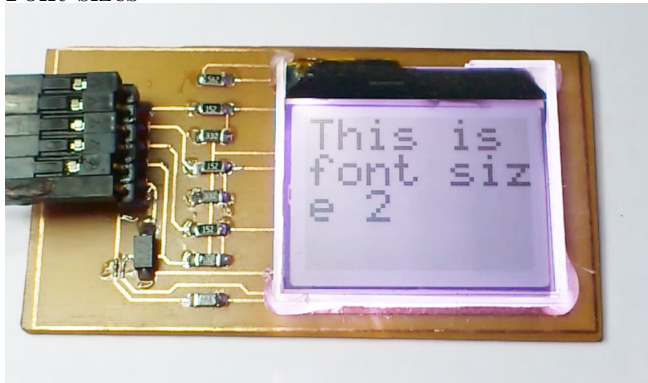


LCD	Arduino	General
CS	Analog 2	PC2
Data	Analog 1	PC1
Clock	Analog 0	PC0
Gnd	Gnd	Gnd
3.3v	3.3v supply	3.3V
LED	PWM/3.3v	3.3v

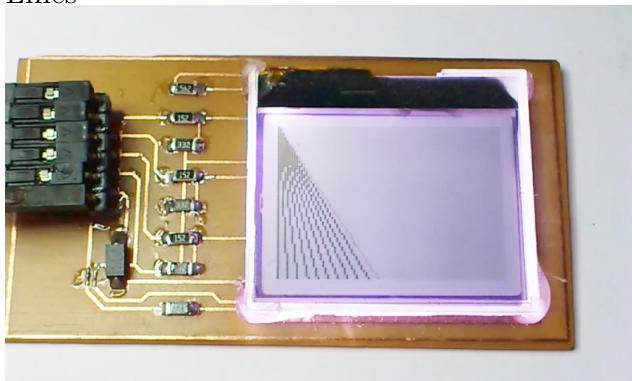
Code Example

The video illustrates all the possible functions needed to develop a project.
Further

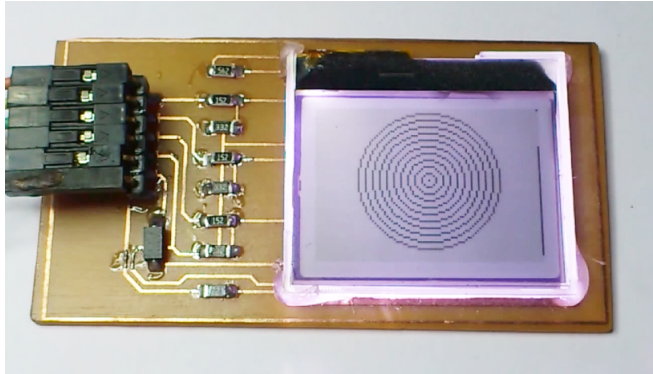
- Font sizes



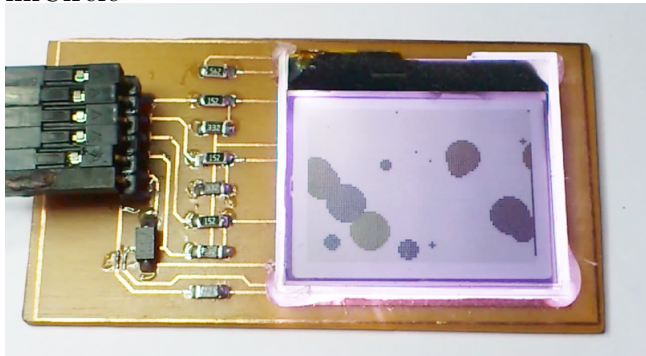
- Lines



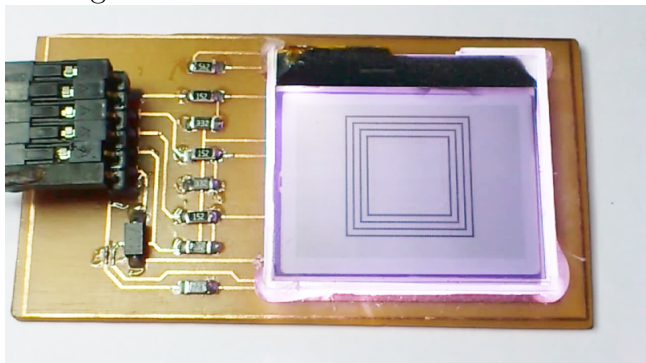
- Circle



- fillCircle



- rectangle



- fillRectangle

