

## PCB111000\_UNO

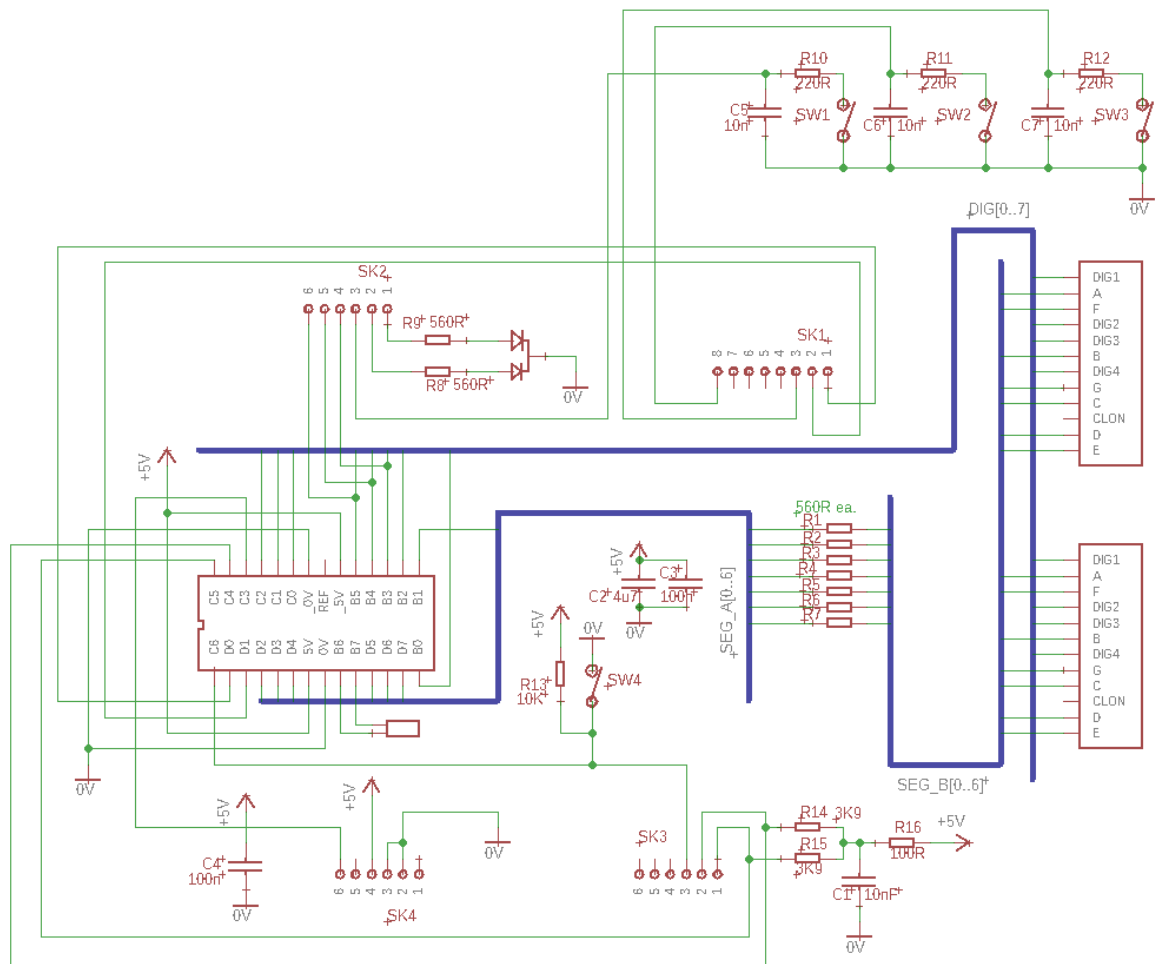
### What is it

It is a simplified version of PCB111000 designed to plug onto an Arduino UNO pcb.

It contains the display, Atmega 328 (with mini-OS and programmer), user switches and the dual led.

The UNO supplies the USB bridge, the Atmega device for user projects (now an Atmega 328), power and sockets.

**Circuit diagram** (note: A watch crystal is connected between B6 and B7)



### ARDUINO UNO connections

SK1		SK2		SK3		SK4	
1	D0 RXD	1	B0	1	C5 SCL	1	
2	D1 TXD	2	B1	2	C4 SDA	2	0V
3	D2	3	B2	3	C3	3	0V
4	D3	4	B3 MOSI	4	C2	4	5V
5	D4	5	B4 MISO	5	C1	5	3V3
6	D5	6	B5 SCK	6	C0	6	C6 RESET
7	D6						
8	D7						

## PCB111000/Arduino interconnections

Note:

The Arduino\_UNO (to be k/a the UNO) contains the user IC, the one that hosts user projects.  
PCB111000\_UNO (to be k/a PCB111000\_1) contains the IC that hosts the mini-OS and programmer.

	PCB111000_1	UNO	
	SW1	B2	User switches
	SW2	D7	
	SW3	D2	
	SW4 C6 RESET	C3	Resets mini-OS/programmer IC
	R8	B0	Dual LED driver
	R9	B1	
	R14	C4 SDA	I2C bus
	R15	C5 SCL	
	B3	B3 MOSI	Bi directional programming interface
	B4	B4 MISO	
	B5	B5 SCK	
	C3	C6 Reset	Resets the user IC

## PCB111000\_1 Display connections

	Segments	Port	Digits	Port
	A	B1	1	B5
	B	D2	2	C0
	C	D3	3	C1
	D	D4	4	C2
	E	D5	5	B0
	F	D6	6	B2
	G	D7	7	B3
			8	B4