

V2.61 BOM

26.11.2014				
Part	Value	Pieces	Description	Remark
BUZ	buzzer	1	5V with generator	max. diameter 14, raster 7.50
C1, C4, C5, C6, C7, C14, C16	100nF	7	monolithic capacitor	raster 5.08
C2, C3	15pF	2	ceramic capacitor	raster 5.08
C8, C15	100u/10V	2	electrolytic capacitor	raster 2.54, diameter ~7, max. height ~10
C9	22p/500V	1	high voltage ceramic capacitor	raster 5.08
C10, C13	220n/630V	2	polypropylene or poliester capacitor	raster 15.24, will be delivered
C11	4n7	1	MKT, MKP or monolithyc capacitor	raster 5.08, will be delivered
C12	22p	1	ceramic capacitor	raster 5.08
CON1	RS232	1	1x4 pin header, angle	optional, raster 2.54
CON2	ISP	1	2x3 pin header, straight	optional, raster 2.54
CON3	MiniUSB-B	1	mini usb b type connector, angle	5 pin, standard, THT
D1	LED	1	3mm, in your favourite colour	
D2	UF4007	1	ultra fast rectifier diode, 1kV	will be delivered
DISP1	Display	1	alphanumeric LCD 2x16 with additional expander*	one of this
DISP2	Display	1	alphanumeric LCD 2x16 with native I2C**	
DZ1, DZ4, DZ5	5V1	3	Zener diode 5.1V	
DZ2, DZ3	3V6	2	Zener diode 3.6V	
IC1	ATmega88P	1	avr microcontroller	programmed, will be delivered
IC2	LM358N	1	dual operational amplifier	
L1	10uH	1	inductor, axial	
L2	22uH	1	inductor, axial	
L3	10mH	1	inductor, vertical	will be delivered
R1	470	1	resistor 1/4W, 5%	
R2	10k	1	resistor 1/4W, 5%	
R3, R4	2k2	2	resistor 1/4W, 5%	mount only with native I2C display
R5, R6	68	2	resistor 1/4W, 5%	
R7	1k5	1	resistor 1/4W, 5%	
R8	470k	1	resistor 0.6W, 1%, metalized	will be delivered
R9, R13	220k	1	resistor 0.6W, 1%, metalized	
R10	200k	1	resistor 0.6W, 1%, metalized	
R11	68k	1	resistor 0.6W, 1%, metalized	
R12, R18	5M1	2	resistor 0.6W, 1%, metalized	will be delivered
R14, R21	100k	2	resistor 0.6W, 1%, metalized	
R15, R16	10M	2	resistor 0.6W, 1%, metalized	will be delivered
R17, R19	33k	2	resistor 0.6W, 1%, metalized	will be delivered
R20	22k	1	resistor 0.6W, 1%, metalized	
R22	1k	1	resistor 0.6W, 1%, metalized	will be delivered
SW1, SW2, SW3	tact switch	3	angle with button height 5.85mm or more	
T1	BS170	1	n-mosfet, TO-92	
T2	BS170	1	n-mosfet, TO-92	mount only with native I2C display
T3	MPSA44	1	high voltage NPN, darlington transistor, TO-92	will be delivered
VR1	10k	1	variable resistor, type 3296W	mount only with native I2C display
X1	20MHz	1	crystal resonator, HC-49S	
GMTUBE	SBM-20 / STS-5 / BOB-33A	1	Geiger-Muller Tube, as specified	will be delivered
Enclosure	KM-33B	1	machined at CNC	will be delivered
Distance	M2.5x10	2		will be delivered
Screw	M2.5x4	4		will be delivered
Tube Holder		1		will be delivered