Comment	Description	Designator	Footprint
16Mhz crystal	Resistance Weld Thru-H	Y1	FOX-FOXSLF160-20
SN74HC595N	8-Bit Shift Registers Wi	U2, U3	N0016A
ATmega328-PU	8-bit AVR Microcontrol	U1	28P3
Joystick	HW-504	inserted into P1	
330R	Axial Resistor, 100 KOh	R3, R4, R5, R6, R7	RESA60-630X240
2K	Axial Resistor, 100 KOh	R2	RESA60-630X240
10k	Axial Resistor, 100 KOh	R1	RESA60-630X240
Piezo Buzzer	High Temp Piezo Trans	PZ1	Buzzer
Header 6	Header, 6-Pin	P3	HDR1X6
USB_TTL_6_socket	Female Header	P2	TTL USB (6 SOCKETS)
joystick_5_socket	Female Header	P1	joystick
TB002-500-02BE	2~24 Poles, Screw Type	J1	CUI_TB002-500-02BE
4 digit display	Displays Segmented Pa	D1	7 SEG DISPLAY (DIP12)
22pF	capacitor	C3, C4	Ceramic Capacitor
100nF	capacitor	C2	Ceramic Capacitor
10uF	capacitor	C1	electrolytic_capacitor

5 jumper wires female to male
TTL USB adapter ftdi ft232rl module
mini USB B cable with data transmission and power
8 small screws
small piece of cardboard

Tools
3D printer
soldering iron
wire cutter (for tidying up the PCB)
screw driver
duct tape

Additional for voltmeter/battery tester
Wires (I used yellow and blue ones)
2 split pins
heat shrink tubing
Wire stripper
Hot glue gun

LibRef	Quantity
CMP-1749-00003-1	1
CMP-0780-00137-3	2
CMP-0095-00015-2	1
	1
CMP-1659-00073-1	5
CMP-1659-00073-1	1
CMP-1659-00073-1	1
TP124005-2	1
Header 6	1
USB_TTL_6_socket	1
joystick_5_socket	1
TB002-500-02BE	1
LTC-5723HR	1
capacitor	2
capacitor	1
electrolytic capacitor	1