

QTY	Part Name
1	Arduino Uno
1	8x32 LED Matrix
1	Buck Converter
1	Female Barrel Jack
2	Linear Potentiometer
1	2200uF 10V Capacitor
1	Circuit Board
1	3D printed case
1	Female Pin Header
4	Nylon Hex Standoff
3	Male Pin Header
2	Potentiometer Knob
1	Push Button
1	ADXL335 Accelerometer
1	120VAC->9VDC 2A

QTY	Part Name
1	Laser Printer
1	Clear Acetate Sheet
1	Presensitized Copper PCB
1	Dremel Tool
5	Various drill bits
1	Matte Black Spray Paint
1	Clear Conformal Coating
8	Jumper wires
1	Ferric Chloride
1	Strong Light
1	Acetone
3	Plastic Containers
1	Soldering Iron/Solder

Description	Price Per Unit	Total Price
Main Microcontroller	\$ 33.10	\$ 33.10
Included MAX7219 controller chips	\$ 9.45	\$ 9.45
Convert input DC from 9->5V at 2A	\$ 4.39	\$ 4.39
Input for power supply	\$ 1.89	\$ 1.89
10K Ohm, 6cm	\$ 3.66	\$ 7.32
Electrolytic bypass capacitor	\$ 0.98	\$ 0.98
Presensitised board including supplies	\$ 16.90	\$ 16.90
Material and electricity included	\$ 0.24	\$ 0.24
For easy removal of the Accelerometer	\$ 0.05	\$ 0.05
Including 4 M3x0.5 bolts	\$ 0.02	\$ 0.08
Mounting the Arduino Uno to the PCB	\$ 0.05	\$ 0.15
For easier moving of potentiometers	\$ 1.80	\$ 3.60
To erase the screen without shaking	\$ 0.20	\$ 0.20
Erase the screen by shaking	\$ 21.40	\$ 21.40
DC wall converter	\$ 9.85	\$ 9.85
Total:		\$ 109.60

Description
Inkjet will not work printing on clear sheet
8.5" x 11" for printing circuit on
11.5 x 16.5 cm Copper Clad Board
Rotary drill with universal chuck
0.5mm to 1mm for drilling holes in PCB
Painting the top side of the board
Seal the copper traces so they do not oxidize
Top side traces of the board
Removes copper, around 1 liter
Photo etch the mask on top of the copper
Remove the green photo mask after etching
Storing developer, water, and Ferric Chloride
Solder the components on the board