

## Bill of Materials

ID	Part Number	Description	Qty.
<b>HV Charge Circuit</b>			
TR1, TR2	ATB3225	Step-Up Transformer	2
U2, U6	LT3468	Photoflash Charger	2
D1, D2	B0540W	0.5A SOD123 SCHOTTKY BARRIER RECTIFIER	2
D3, D4	MMBD5004S	HIGH VOLTAGE DUAL SWITCHING DIODE	2
C4	-	2.2 F 2220 (5750) SMD Capacitor	1
C5, C9	-	6.3 F 0603 SMD Capacitor	2
C6	-	100pF 0603 SMD Capacitor	1
R2	-	10MOhm 0603 SMD Resistor	1
R3	-	100kOhm 0603 SMD Resistor	1
<b>HV Control Circuit</b>			
U1	HV513	8-Channel Low voltage serial to high voltage parallel IC	1
		<i>OR</i>	
U9	HV507	64-Channel Low voltage serial to high voltage parallel IC	1
<b>LV Control Circuit</b>			
		<i>All Components possibly from Tinket-M0</i>	
U?	ATSAMD21E	Trinket M0 CPU	1
U3	AP2204K-3.3	3.3V Voltage regulator	1
U4	AP2204K-5.0	5.0V Voltage regulator	1
C2, C3	-	1 F 0603 SMD Capacitor	2
C1, C7, C8	-	10 F 0805 SMD Capacitor	3
R1	-	1.5kOhm 0603 SMD Resistor	1
R4	-	10kOhm 0603 SMD Resistor	1
L1	-	Red 0603 SMD LED	1
PWR1	-	Green Bright 0603 SMD LED	1
Q2	-	Tactile Switch SMT4.6X2.8	1
CN1	-	Micro USB Female	1

## Digikey Cart

*Parts excluding 0603 caps and resistors, and microcontroller stuff:* - Double quantity except for HV507 <https://www.digikey.com/short/pc8p74> - Single quantity <https://www.digikey.com/short/pc8p89>