## ball\_heater\_printout

Surface	<b>Mount Parts</b>			
	References	Quantity Per PCB	Description	Value
	C6 C7 C8 C9			
	C10 C11	6	0805 SMD Capacitor	0.1uF
	C5	1	0805 SMD Capacitor	2.2uF
	C3 C4	2	0805 SMD Capacitor	4.7uF
	C2 C12	2	0805 SMD Capacitor	10uF
	D1	1	Diode	S1G
	J3 J4	2	JST PH 3 pin vertical	B3B-PH-SM4-TB
	J2	1	JST SH 4 pin vertical	qwiic
	Q1	1	MOSFET 2N-CH 50V 0.2A SC70-6	BSS138DW-7-F
	Q2	1	MOSFET N-CH 60V 115MA SOT-23	TSM170N06CP
	R2	1	0805 SMD Resistor	10R
	R1 R5 R6	3	0805 SMD Resistor	10k
	R3 R4	2	0805 SMD Resistor	10k 1%
	RN1 RN2	2	4 resistor network, parallel topology, split	10k
	SW2	1	SMD DPST switch	CL-SB-12A-01T
	3442		SINID DI 31 SWILCII	CL-3D-12A-011
Through	Hole Parts			
	References	Quantity Per PCB	Description	Value
	A1	2	14 position female headers	
	A1	1	Metro Mini	Arduino_UNO_R3
	C1	1	TH Capacitor 12.5 by 5mm pitch	470uF
	J6	1	DC Barrel Jack	
	J5	1	M8 4 pin connector	M8S-04PFFR-SF8001
	J1	1	Screw Terminal, 2 pos	Screw_Terminal_01x02
	PS1	1	5V to 12V DC-DC PSU	F0512S-1WR3
	SW1	1	Rotary encoder, dual channel, incremental quadrate outputs, with switch	RotaryEncoder Switch
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