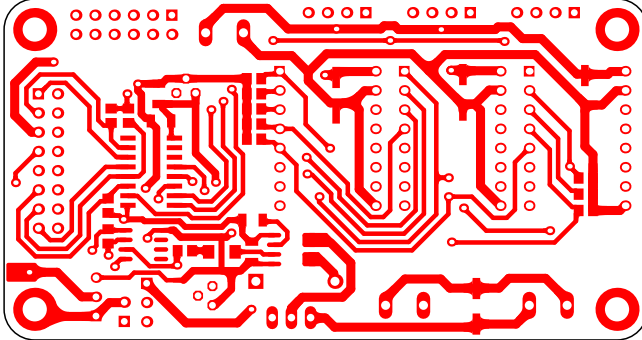
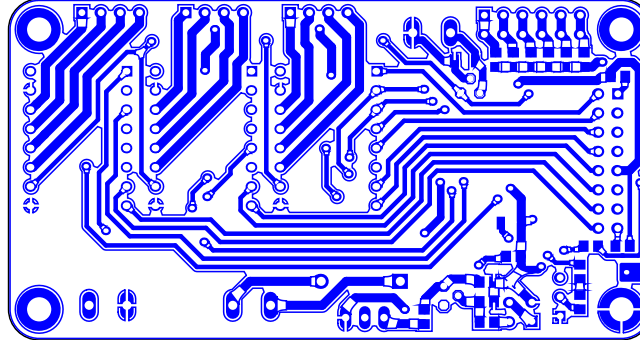


Top Layer (Scale 1:1)



Bottom Layer (Scale 1:1)



Bill of Materials

Line #	Designator	Quantity	CHIPIDIP-code	Description	Manufacturer	Manufacturer_Part_Number
1	C1, C2, C3, C8	4	9000565735	Polarized Capacitor (Radial) 16V, 105°C, 20% 6.3x5.4mm	JB	JCL1C101M063054
2	C4, C5, C7, C10	4	348319975	Capacitor ceramic SMD	Murata	GRM319R71H104K
3	C6	1	694027236	Capacitor ceramic SMD	Murata	GRM216R71H102KA01D
4	C9	1	344025606	Capacitor ceramic SMD	Murata	GRM319R71H334KA01D
5	D1	1	3519	1 Amp General Purpose Rectifier	DC COMPONENTS CO., LTD.	1N4006
6	IC1	1	2032142511	5V Voltage Regulator	Fairchild	LM78L05ACZ
7	MOT1, MOT2, MOT3	3	174993133	Header, 4-Pin	Connfly	DS1021-1*4SF11-B
8	P1	1	4114	Header, 8-Pin, Dual row	Connfly	DS1021-2*8SF11-B
9	P2	1	none	Header, 6-Pin, Dual row	Connfly	DS1021-2*6SF11-B
10	P3, P5, P6	3	43112	Screw connector, 2-Pin	Ningbo Xinya M&E	XY306A-5.0-2P-12
11	P4	1	132511368	Header, 3-Pin	Connfly	DS1021-1*3SF11-B
12	P7	1	260750144	Header, 2-Pin	Connfly	DS1021-1*2SF11-B
13	Q1	1	363567003	NPN Bipolar Transistor	ON Semiconductor	KSP2222ABU
14	Q2	1	387859736	N-Channel Power MOSFET	Infineon Technologies	IRL540NPBF
15	R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R27, R29, R30	20	9000079514	Rectangular Thick Film Chip Resistor	Yageo	RC0805FR-0710KL
16	R18, R23	2	9000079538	Rectangular Thick Film Chip Resistor	Yageo	RC0805FR-07100KL
17	R19, R24	2	9000079478	Rectangular Thick Film Chip Resistor	Yageo	RC0805FR-07470RL
18	R20, R21	2	9000079684	Rectangular Thick Film Chip Resistor	Yageo	RC1206FR-0730KL
19	R22, R26	2	9000079462	Rectangular Thick Film Chip Resistor	Yageo	RC0805FR-07100RL
20	R25	1	9000079486	Rectangular Thick Film Chip Resistor	Yageo	RC0805FR-071KL
21	R28	1	9000079470	Rectangular Thick Film Chip Resistor	Yageo	RC0805FR-07220RL
22	R31	1	4464	Potentiometer	Bourns	3296W-1-102LF
23	U1, U2, U4	3	none	Stepper motor driver	China	LV7829 Module
24	U3	1	37776	8-bit shift register with 3-state output register	TI	SN74HC595D
25	U5	1	9000043254	Hall-Effect-Based Linear Current Sensor +-5A	Allegro	ACS712ELCTR-05B
26	U6	1	39253	FET Operational Amplifier	TI	LM358M/NOPB