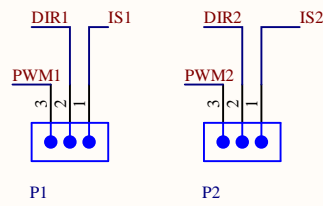
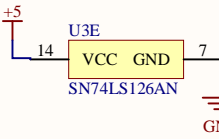


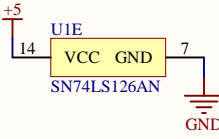
Signals_Pins



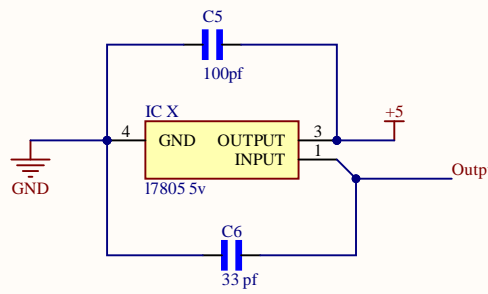
Buffer2 POWER PINS



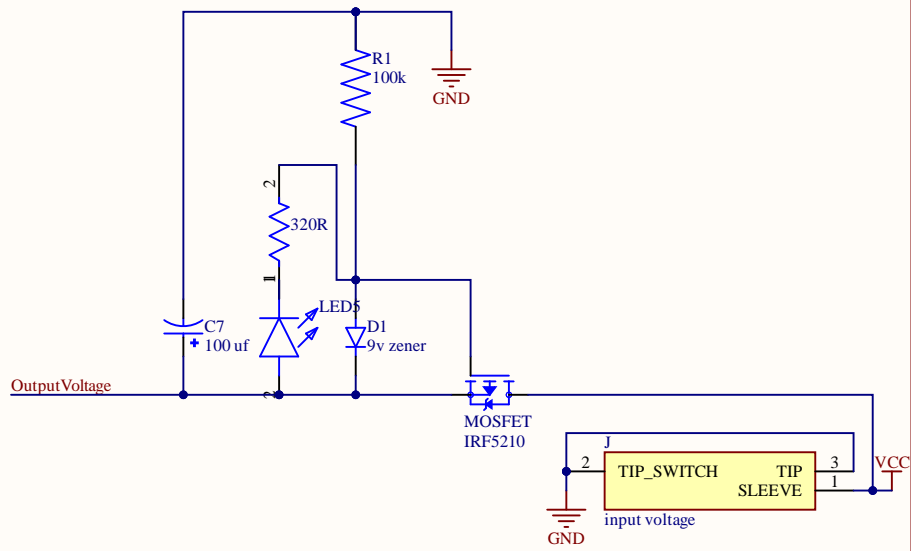
Buffer1 POWER PINS



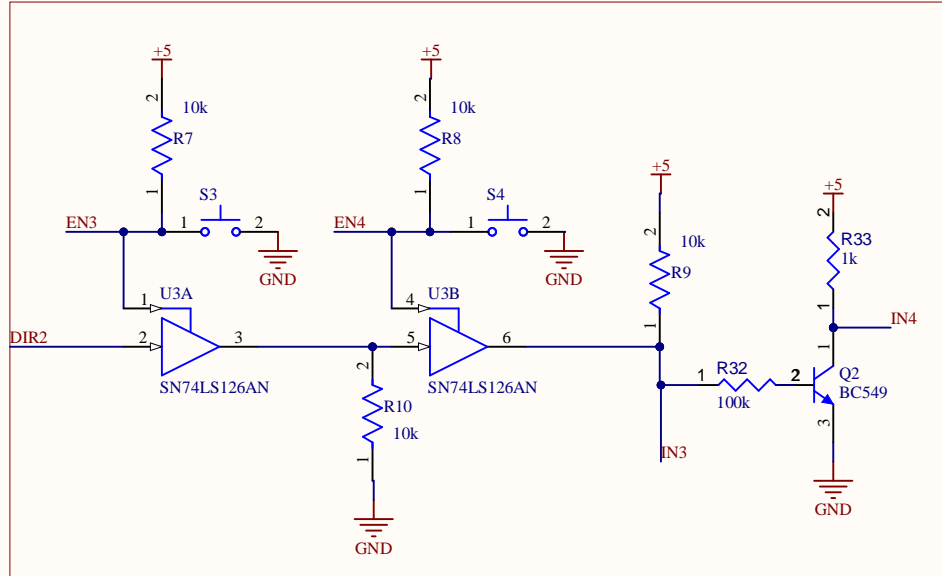
5v out



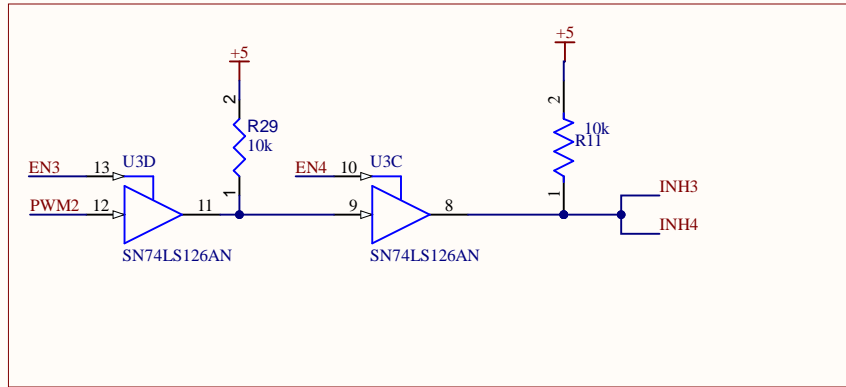
reverse polarity



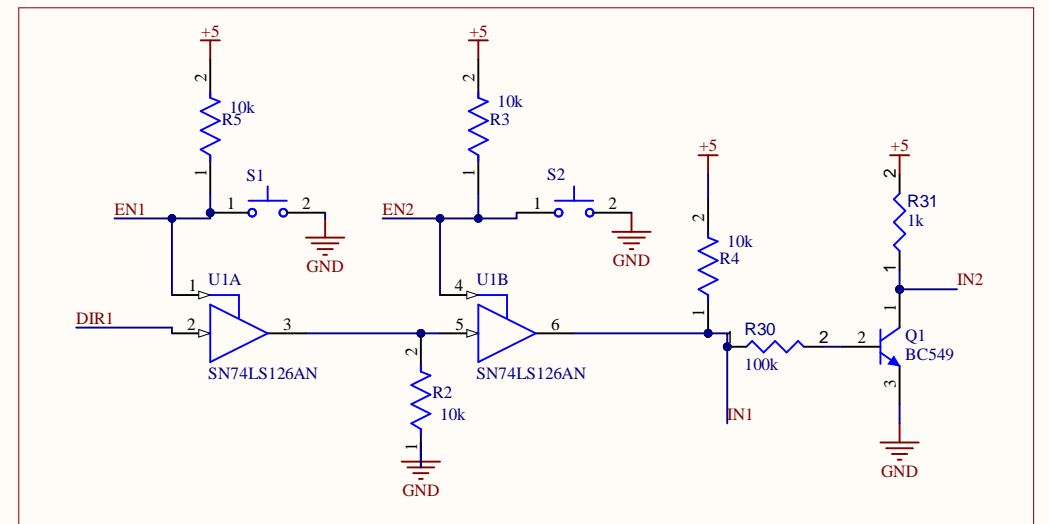
DIR SIGNAL MOTOR 2



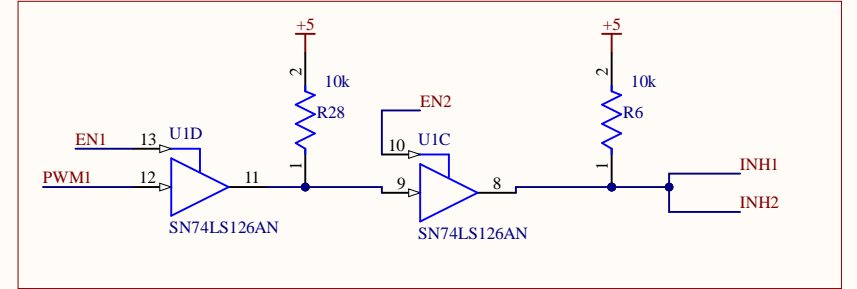
PWM SIGNAL MOTOR 2



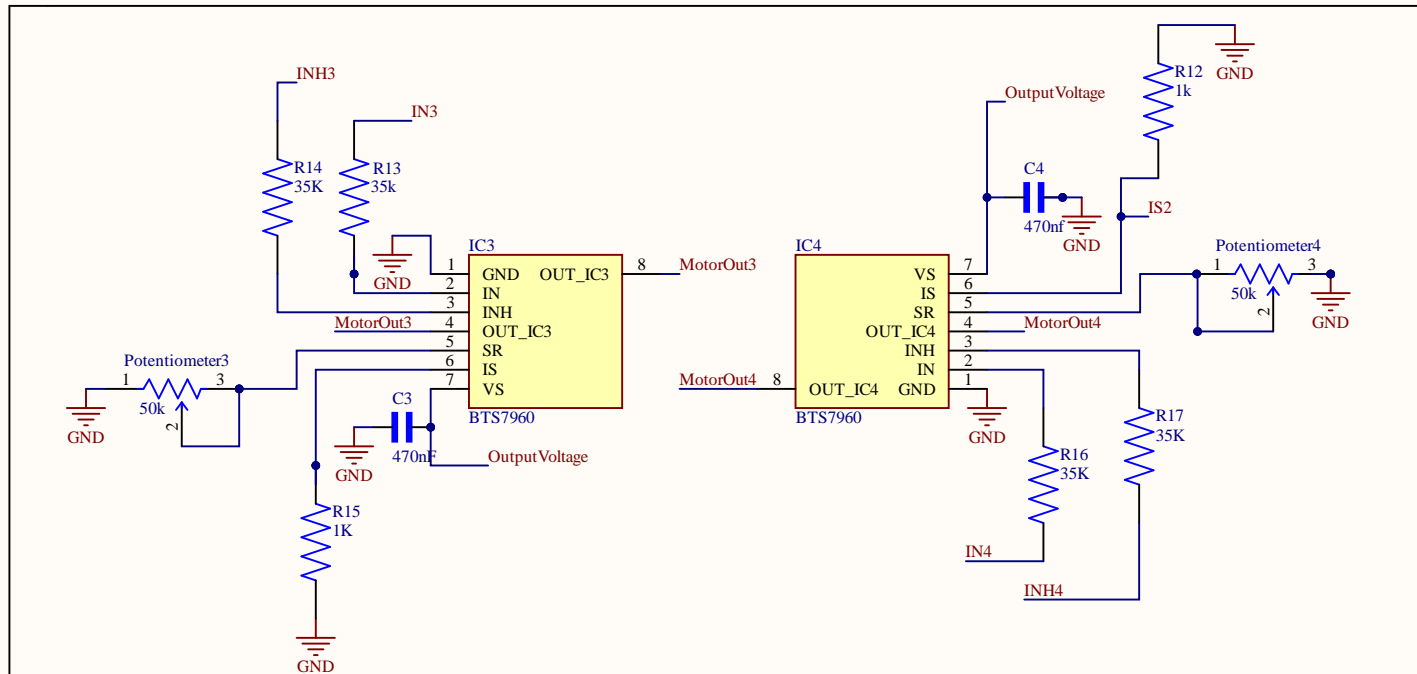
DIR SIGNAL MOTOR 1



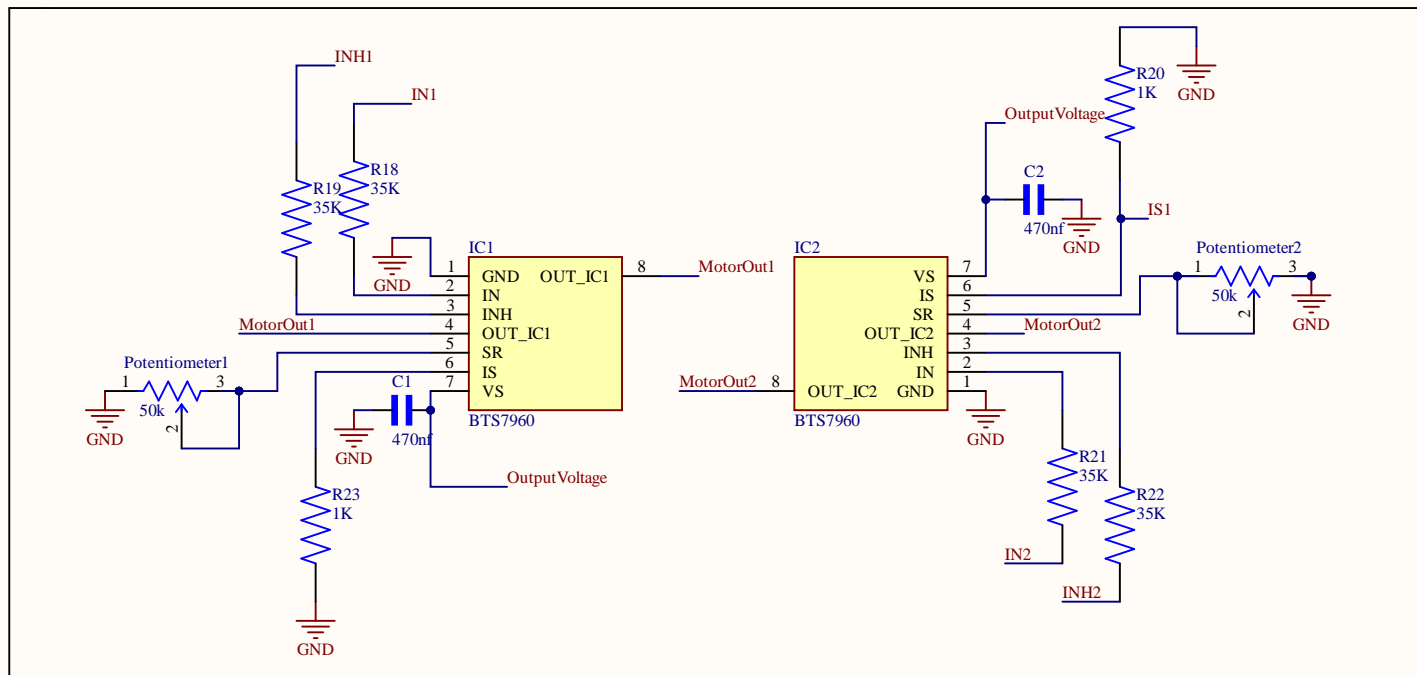
PWM SIGNAL MOTOR 1



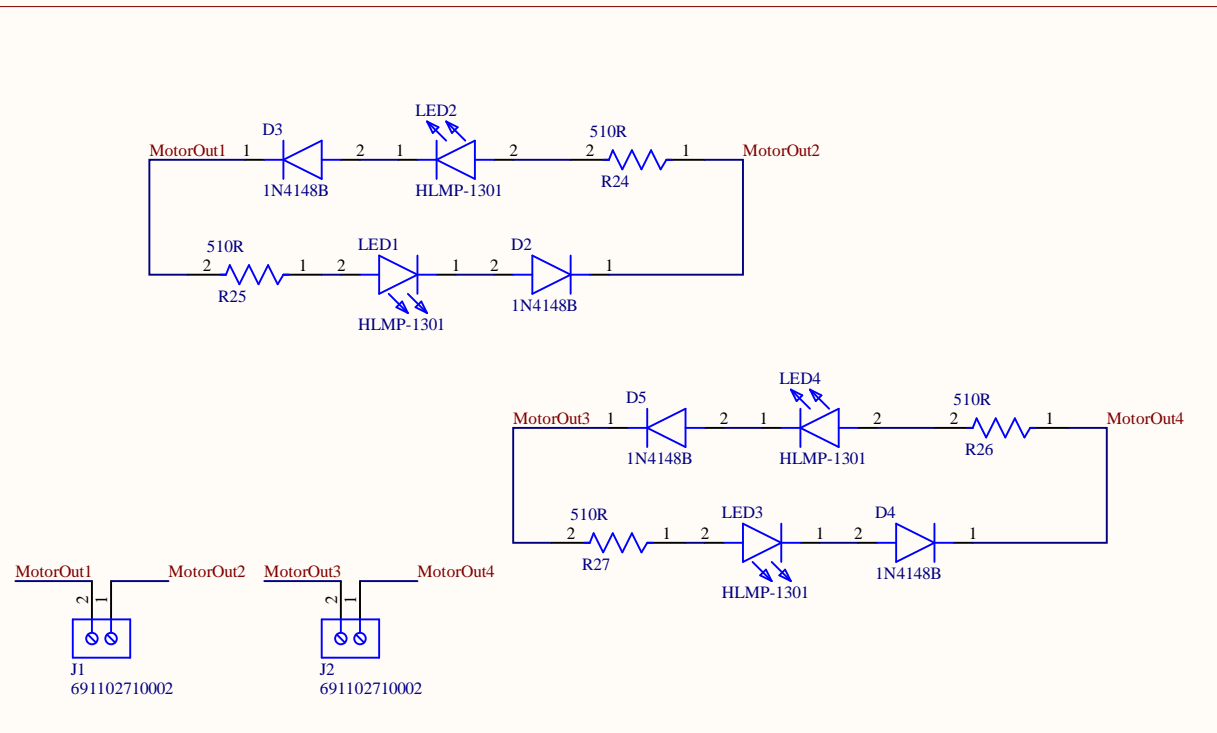
H-Bridge for Motor_2



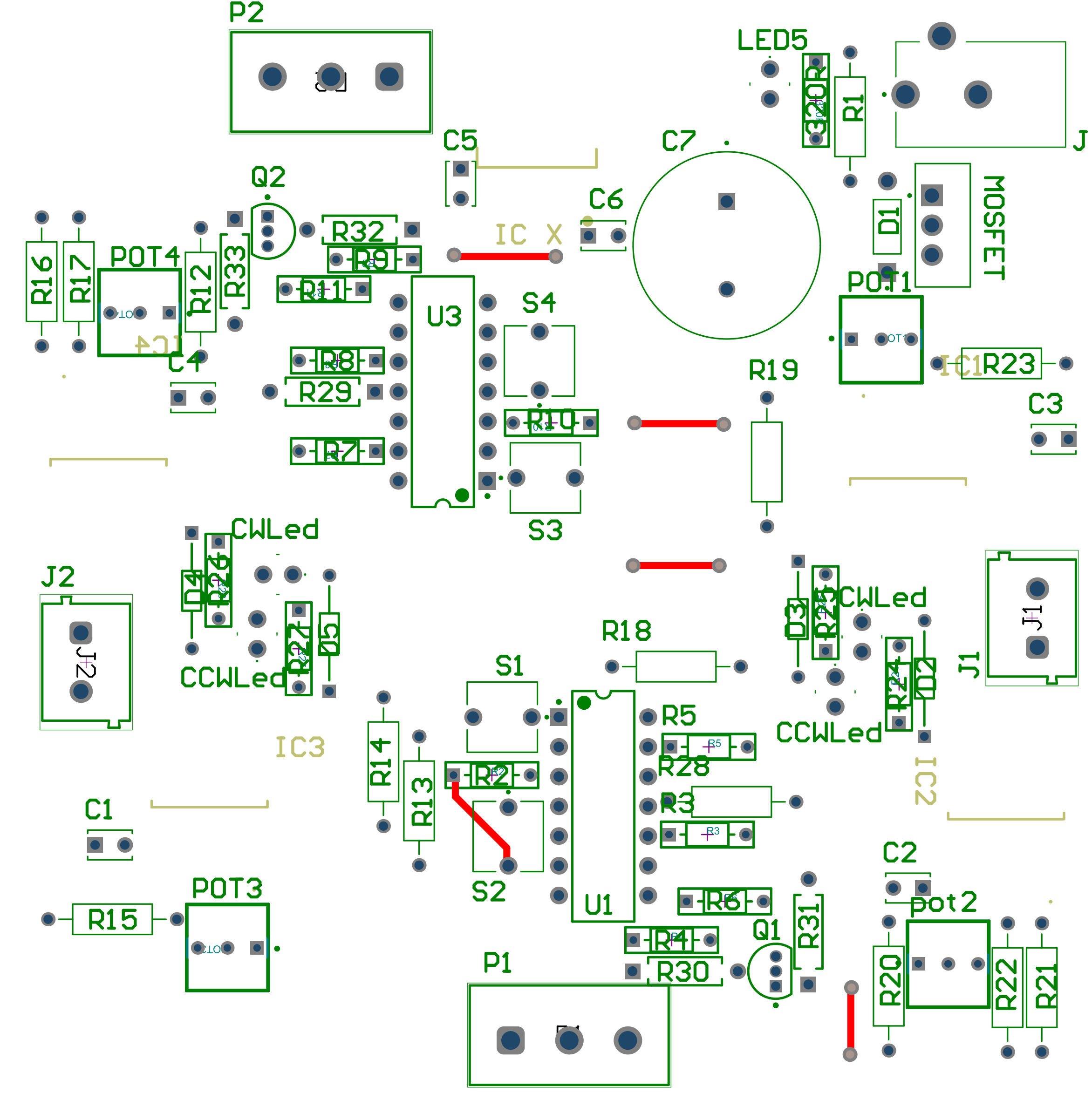
H-Bridge for Motor_1

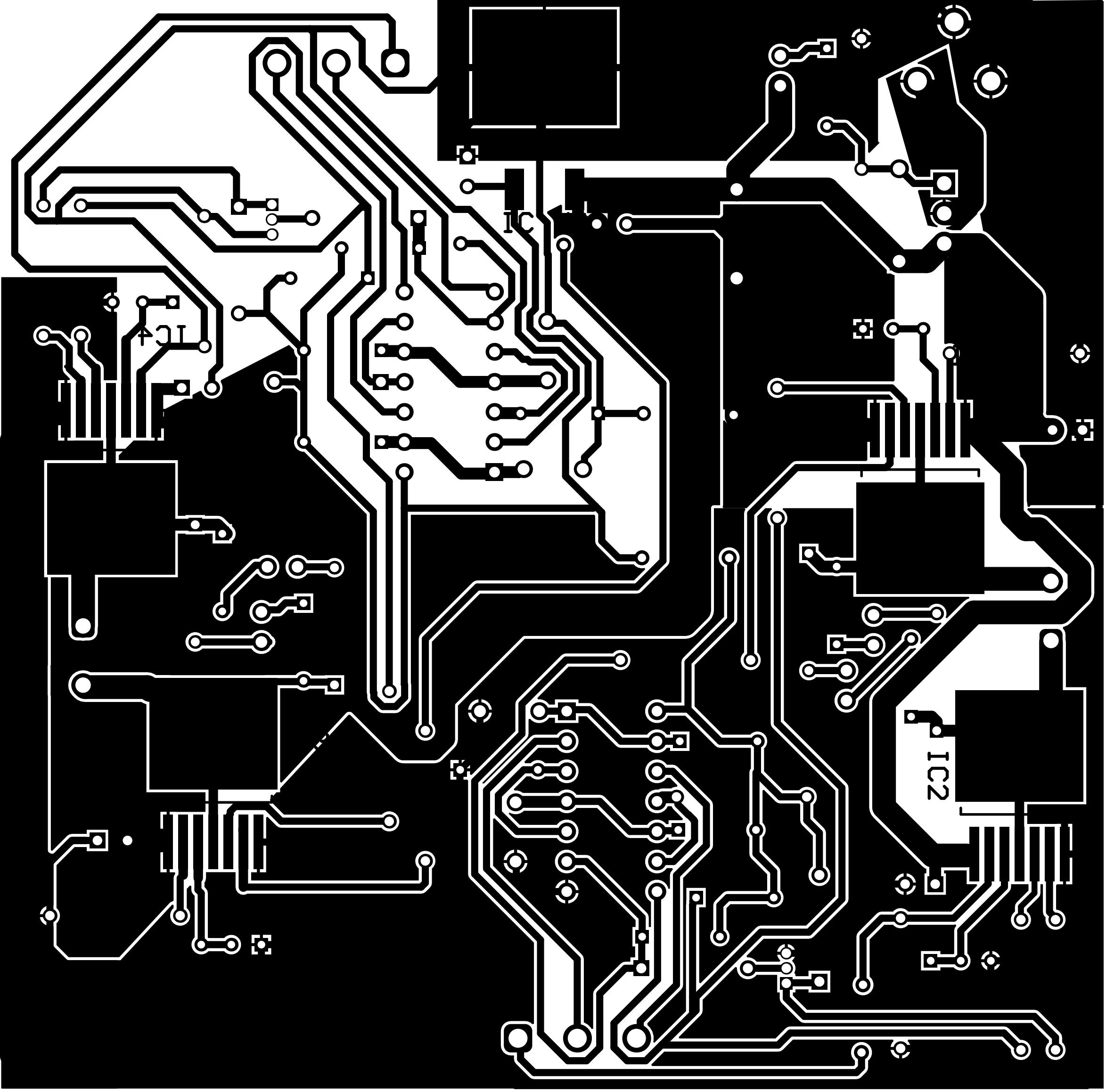


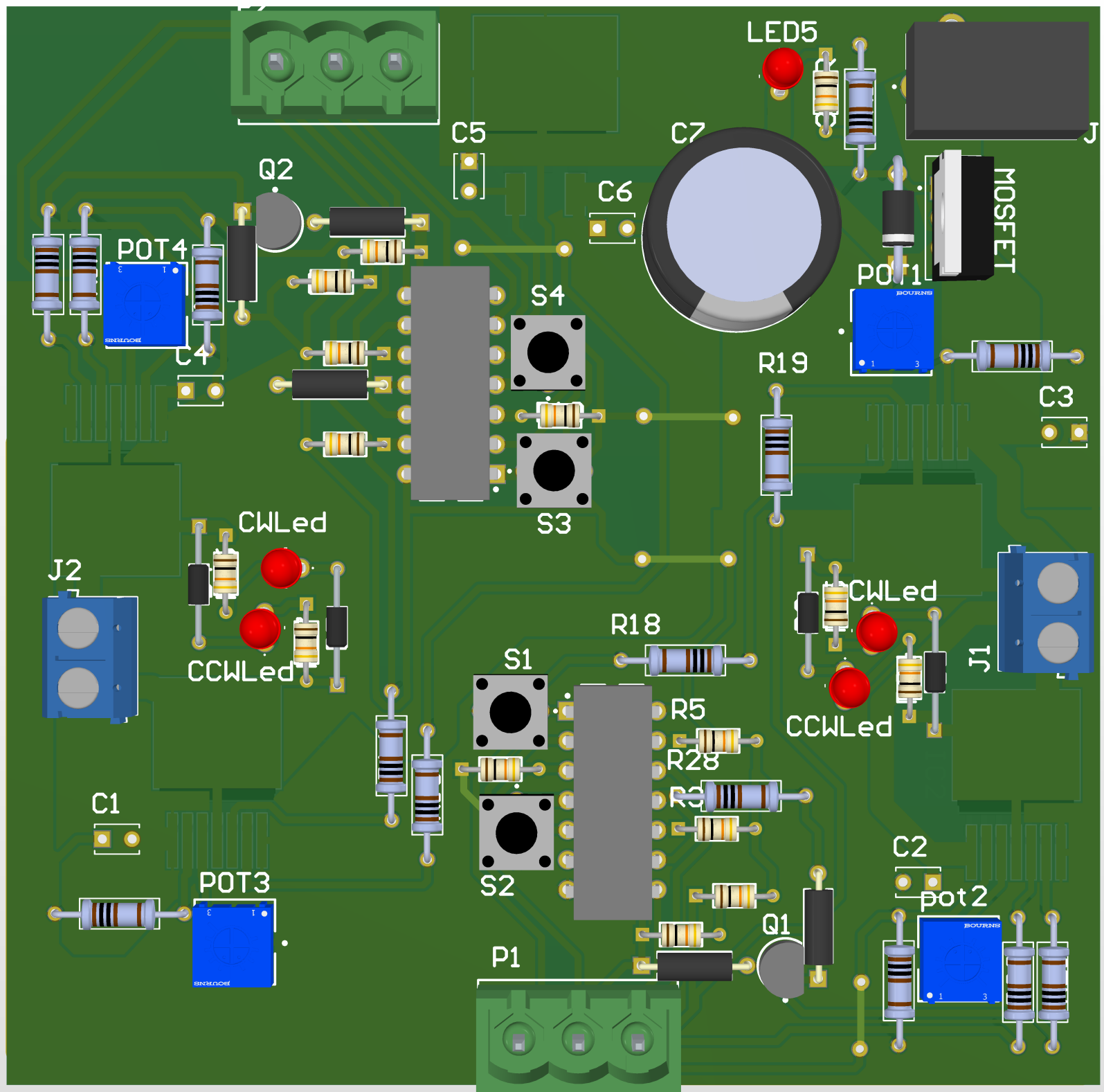
LedDirectionIndicatorsForThe2Motors

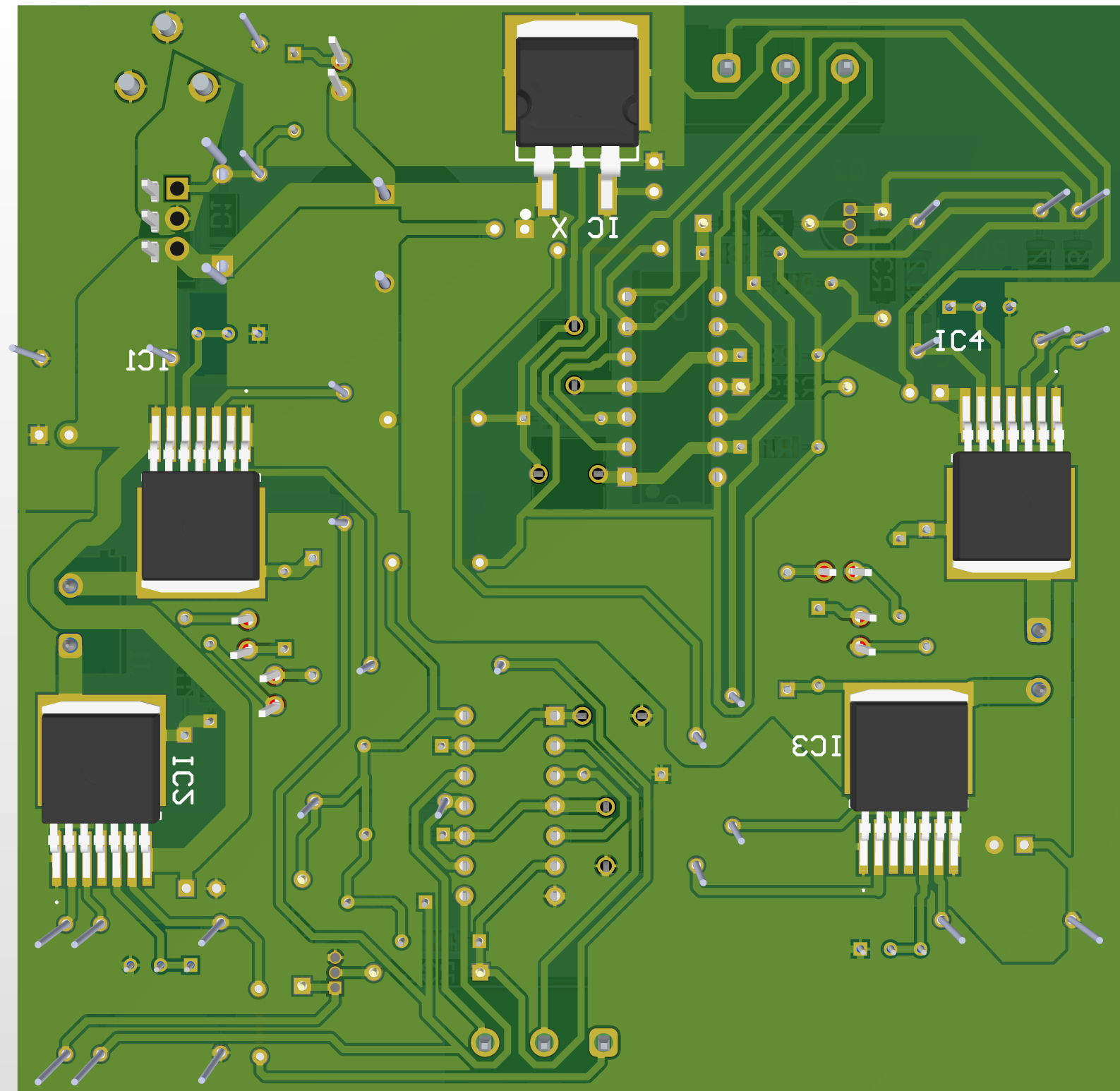


Title		
Size	Number	Revision
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Date:	2/27/2024	Sheet of
File:	C:\Users\...\motordriverschematic.SchDoc	Drawn By:









Design Rules Verification Report

Filename : C:\Users\Public\Documents\Altium\mega_last\MotorDriverPcb.PcbDoc

Warnings 0
Rule Violations 0

Warnings	
Total	0

Rule Violations	
Clearance Constraint (Gap=0.6mm) (InPolygon),(All)	0
Clearance Constraint (Gap=0.245mm) (All),(All)	0
Short-Circuit Constraint (Allowed=No) (All),(All)	0
Un-Routed Net Constraint ((All))	0
Modified Polygon (Allow modified: No), (Allow shelved: No)	0
Width Constraint (Min=0.4mm) (Max=2mm) (Preferred=2mm) (All)	0
Power Plane Connect Rule(Relief Connect)(Expansion=0.508mm) (Conductor Width=0.254mm) (Air Gap=0.254mm)	0
Hole Size Constraint (Min=0.025mm) (Max=2.54mm) (All)	0
Hole To Hole Clearance (Gap=0.254mm) (All),(All)	0
Silk To Solder Mask (Clearance=0.254mm) (IsPad),(OnLayer('Top Layer'))	0
Net Antennae (Tolerance=0mm) (All)	0
Height Constraint (Min=0mm) (Max=25.4mm) (Preferred=12.7mm) (All)	0
Total	0

Line #	Name	Description	Designator	Revision ID	Revision State	Revision Status	Quantity	Manufacturer 1	Manufacturer Part Number 1	Manufacturer Lifecycle 1	Supplier 1	Supplier Part Number 1	Supplier Unit Price 1	Supplier Subtotal 1
	CF18J10KD	RES 10K OHM 1/8W 5% CF AXIAL	320R		Not managed		1							
	470nf	Capacitor: ceramic; MLCC, monolithic; 47pF; 100V; COG; A±5% THT	C1, C2, C4		Not managed		3							
	470nF	Capacitor: ceramic; MLCC, monolithic; 47pF; 100V; COG; A±5% THT	C3		Not managed		1							
	100pf	Capacitor: ceramic; MLCC, monolithic; 47pF; 100V; COG; A±5% THT	C5		Not managed		1							
	33 pf	Capacitor: ceramic; MLCC, monolithic; 47pF; 100V; COG; A±5% THT	C6		Not managed		1							
	100 uf	CAP ALUM 680UF 20% 63V THRU HOLE	C7		Not managed		1							
	9v zener	Diode Standard 1A 1000V 1M DO41 Diodes Inc 1N4007-T	D1		Not managed		1							
	1N4148B	Diode	D2, D3, D4, D6		Not managed		4							
	BTS7060	Integrated Circuit	IC1, IC2, IC3, IC4		Not managed		4							
	17805 5v	Integrated Circuit	IC X		Not managed		1							
	input voltage	Connector	J		Not managed		1							
	691102710002		J1, J2	CMP-1502-03259-2	Released	Up to date	2	Würth Electronics	691102710002	Volume Production	Digikey	732-2028-ND	0.73	1.46
	HLMF-1301	LED	LED1, LED2, LED3, LED4, LED5		Not managed		5							
	IRF5210	P-Channel 100V 38A, Tc, 3.1W Ta, 170W, Tc, Surface Mount D2PAK	MOSFET		Not managed		1							
	691311700103		P1, P2	CMP-1502-02034-2	Released	Up to date	2	Würth Electronics	691311700103	Volume Production	Mouser	710-691311700103	0.74	1.48
	3362U-1-204LF	TRIMMER 200K OHM 0.5W PC PIN TOP	Potentiometer1, Potentiometer2, Potentiometer3, Potentiometer4	CMP-07234-000033-1	New From Design	Up to date	4	Bourns	3362U-1-204LF	Volume Production	Mouser	652-3362U-1-204LF	1.54	6.16
	BC549CG	Low Noise Transistor, NPN Silicon, 3-Pin TO- 92, Pb-Free, Bulk Box	Q1, Q2	CMP-1048-01353-1	Released	Up to date	2	ON Semiconductor	BC549CG	Obsolete	Farnell	4182301	0.11168	558.38
	100k	1.07k Ohms A±1% 0.25W, 1/4W Through Hole Resistor Axial - Metal Film	R1		Not managed		1							
	10k	RES 10K OHM 1/8W 5% CF AXIAL	R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R28		Not managed		11							
	1k	1.07k Ohms A±1% 0.25W, 1/4W Through Hole Resistor Axial - Metal Film	R12		Not managed		1							
	35k	1.07k Ohms A±1% 0.25W, 1/4W Through Hole Resistor Axial - Metal Film	R13		Not managed		1							
	35K	1.07k Ohms A±1% 0.25W, 1/4W Through Hole Resistor Axial - Metal Film	R14, R16, R17, R18, R19, R21, R22		Not managed		7							
	1K	1.07k Ohms A±1% 0.25W, 1/4W Through Hole Resistor Axial - Metal Film	R15, R20, R23		Not managed		3							
	510R	RES 10K OHM 1/8W 5% CF AXIAL	R24, R25, R26, R27		Not managed		4							
	MFR25FBF52-22K1	Axial Resistor, 22.1K Ohm, +/- 1%, 0.25W, -55 to 155 degC, 2-Pin THT, RoHS, Bulk	R29	CMP-009-00052-4	Draft	Up to date	1	Yageo	MFR25FBF52-22K1	Volume Production	Arrow Electronics	MFR25FBF52-22K1	0.062	0.062
	MFR25FBF52-2K21	Axial Resistor, 2.21K Ohm, +/- 1%, 0.25W, -55 to 155 degC, 2-Pin THT, RoHS, Bulk	R30, R31, R32, R33	CMP-009-00054-4	Draft	Up to date	4	Yageo	MFR25FBF52-2K21	Volume Production	Newark	49AK6111	0.012	0.048
	BUTT-2	Tactile Switches MINI PUSH BUTTON SWITCH 2-PIN QTY. 4	S1, S2, S3, S4		Not managed		4							
	SN74LS126AN	Quadruple Bus Buffer 3-State Outputs	U1, U3		Not managed		2							