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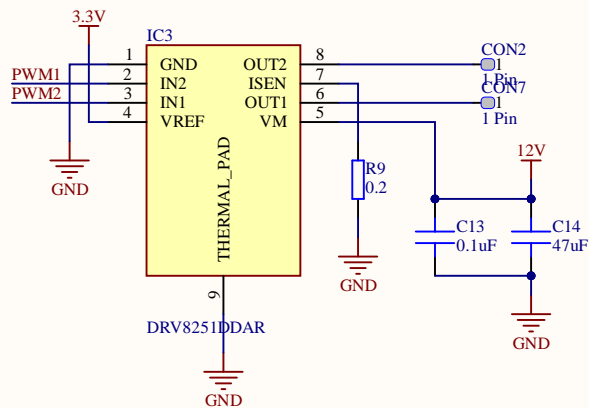
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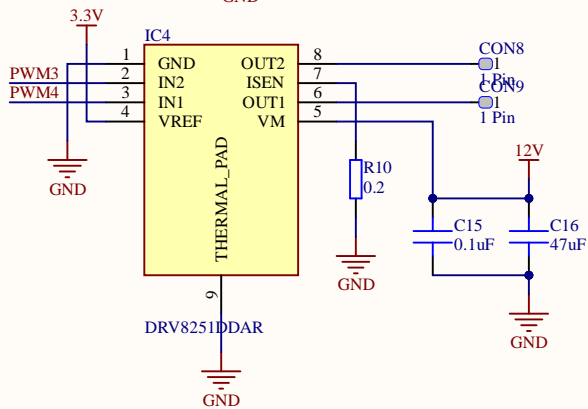
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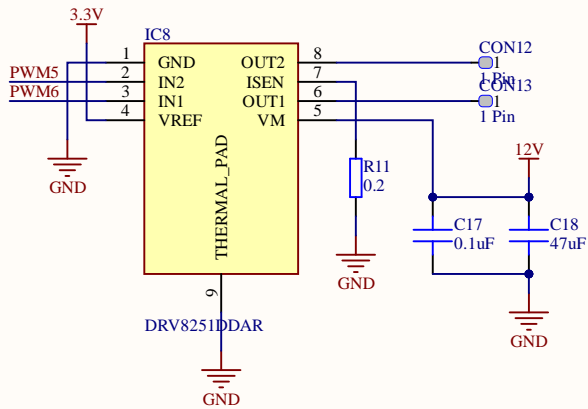
A



B



C



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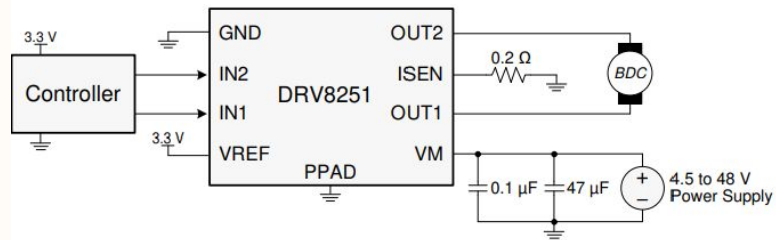
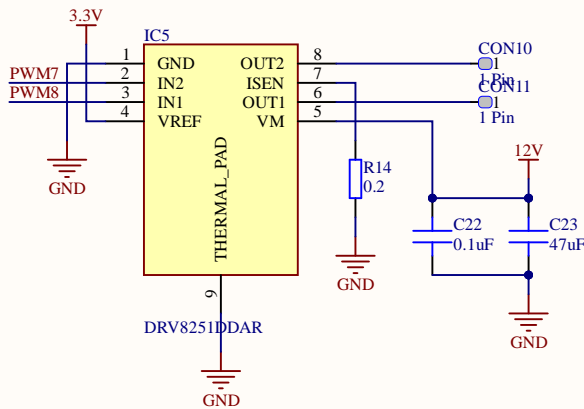


Figure 9-1. Typical Connections



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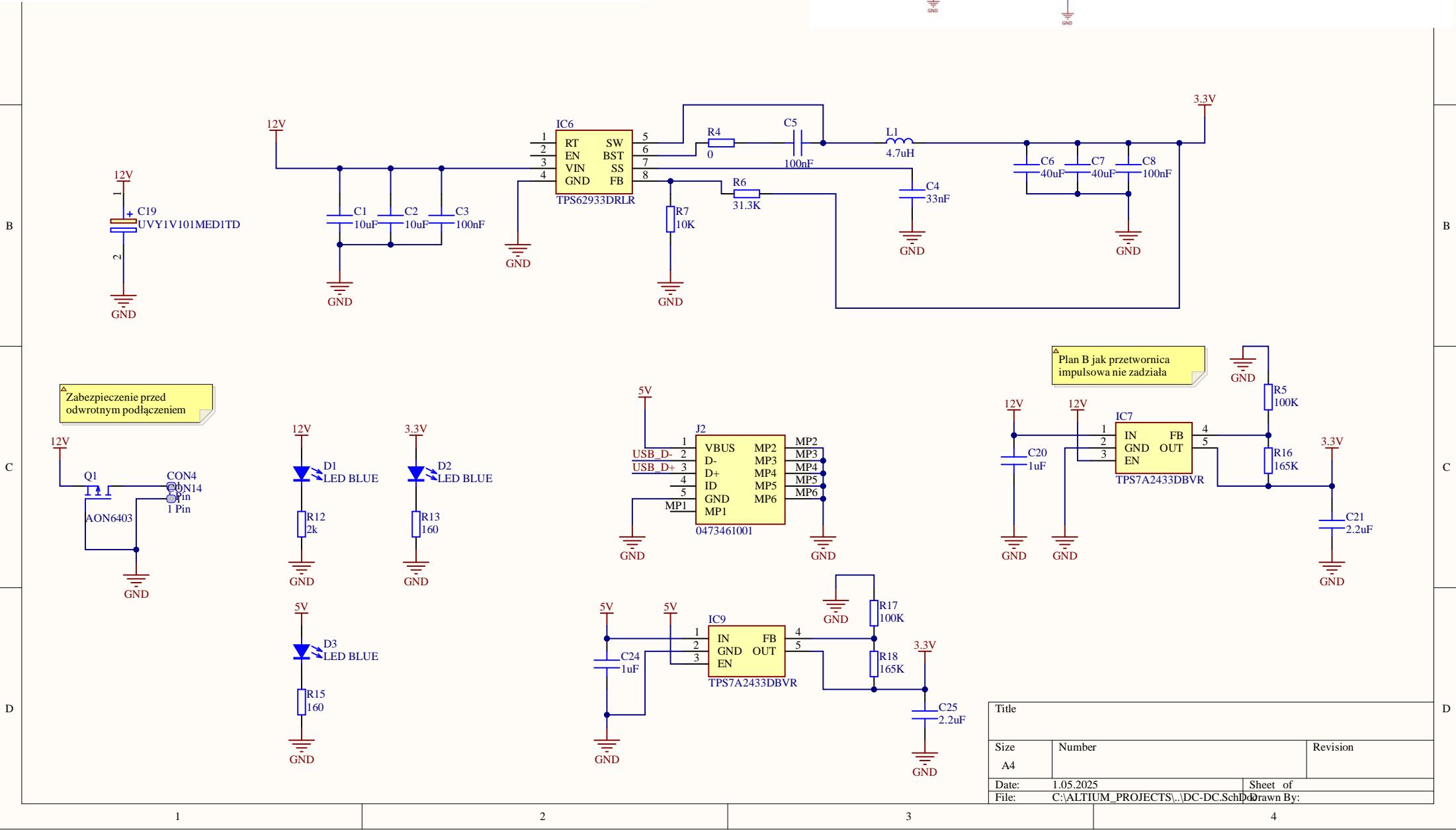
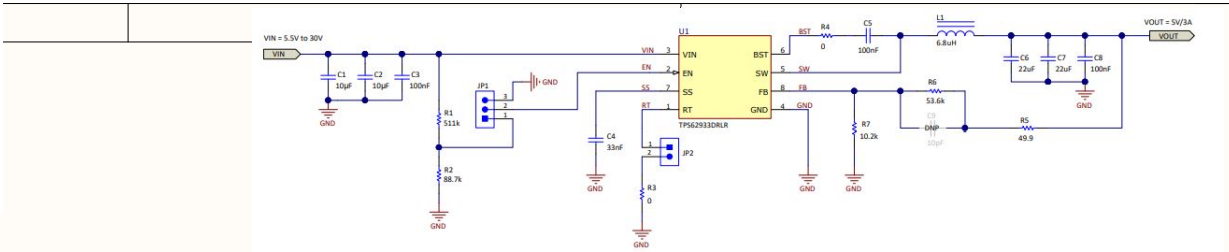
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Table 10-2. Recommended LC Combination for TPS62933

V _{OUT} (V)	f _{SW} (kHz)	R _{TOP} (kΩ)	R _{DOWN} (kΩ)	Typical Inductor L (μH)	Typical Effective C _{OUT} (μF)	Minimum Effective C _{OUT} (μF)
3.3	500	31.3	10.0	4.7	40	15
	1200			2.2	30	10
5	500	52.5	10.0	6.8	20	10
	1200			3.3	20	10
12	500	140.0	10.0	12	15	10



Comment	Description	Designator	Footprint	LibRef	Quantity
LSM6DSOXTR	Accelerometer	AC1	LGA-14_1	LSM6DSOXTR	1
10uF	MLCC Capacitor	C1, C2	C 1206	Capacitor	2
100nF	MLCC Capacitor	C3, C8	C 0603	Capacitor	2
33nF	MLCC Capacitor	C4	C 0402	Capacitor	1
100nF	MLCC Capacitor	C5, C9, C12	C 0402	Capacitor	3
40uF	MLCC Capacitor	C6, C7	C 1206	Capacitor	2
1uF	MLCC Capacitor	C10, C11	C 0402	Capacitor	2
0.1uF	MLCC Capacitor	C13, C17, C22	C 0402	Capacitor	3
47uF	MLCC Capacitor	C14, C18, C23	C 1206	Capacitor	3
0.1uF	MLCC Capacitor	C15	C 0603	Capacitor	1
47uF	MLCC Capacitor	C16	C 0805	Capacitor	1
UVY1V101MED1TD	Capacitor Polarised	C19	CAPPRD250W50D655 H1250	UVY1V101MED1TD	1
1uF	MLCC Capacitor	C20, C24	C 0603	Capacitor	2
2.2uF	MLCC Capacitor	C21, C25	C 0603	Capacitor	2
1 Pin		CON1, CON2, CON3, CON4, CON5, CON6, CON7, CON8, CON9, CON10, CON11, CON12, CON13, CON14	SMD PAD	1 Pin	14
LED BLUE		D1, D2, D3	LED 0603 BLUE	LED BLUE	3
HDC1080DMBR	Integrated Circuit	IC1	SON100P300X300X80- 7N-D	HDC1080DMBR	1
ESP32-S3-WROOM-1- N16R8	Integrated Circuit	IC2	ESP32S3WROOM1N1 6R8	ESP32-S3-WROOM-1- N16R8	1
DRV8251DDAR	Integrated Circuit	IC3, IC4, IC5, IC8	SOIC127P600X170-9N	DRV8251DDAR	4
TPS62933DRLR	Integrated Circuit	IC6	SOTFL50P160X60-8N	TPS62933DRLR	1
TPS7A2433DBVR	Integrated Circuit	IC7, IC9	SOT95P280X145-5N	TPS7A2433DBVR	2
09185066324	Connector	J1	09185066324	09185066324	1
0473461001	Connector	J2	0473461001	0473461001	1
4.7uH	General pourpouse inductor	L1	HPI0630	Inductor	1
AON6403	P-Mosfet 30V 67A Rds(on) 3.1mR	Q1	DFN 5x6	AON6403	1
10k	General pourpouse resistor	R1, R2, R3, R7, R8	R 0402	Resistor	5
0	General pourpouse resistor	R4	R 0402	Resistor	1
100K	General pourpouse resistor	R5, R17	R 0402	Resistor	2
31.3K	General pourpouse resistor	R6	R 0402	Resistor	1
0.2	General pourpouse resistor	R9, R10, R11, R14	R 1206	Resistor	4
2k	General pourpouse resistor	R12	R 0402	Resistor	1
160	General pourpouse resistor	R13, R15	R 0402	Resistor	2
165K	General pourpouse resistor	R16, R18	R 0402	Resistor	2