

## Signal Conditioning BOM

Item	Ref	Qty	Manufacturer	Part Number	Description	Distributor	Stock Number	Value	Modifier	Cost
1	C1	1	Nichicon	UPW1E221MPD	Capacitor, Electrolytic, 220uF, 25V, 20%, Radial	Digi-Key	493-1823-ND	220uF	25V	1.05
2	C2	1	Kemet	C317C101K2R5TA	Capacitor, Ceramic, 100pF, 200V, 10%, X7R, Radial	Digi-Key	399-4200-ND	100pF	200V	0.22
3	C3	1	Nichicon	UPW1E221MPD	Capacitor, Electrolytic, 220uF, 25V, 20%, Radial	Digi-Key	493-1823-ND	220uF	25V	1.05
4	C4	1	EPCOS Inc	B32521C225J	Capacitor, Metallized Polyester Film, 2.2uF, 63V, 5%, Radial	Digi-Key	495-1125-ND	2.2uF	63V	1.42
5	C5	1	Nichicon	UPW1E221MPD	Capacitor, Electrolytic, 220uF, 25V, 20%, Radial	Digi-Key	493-1823-ND	220uF	25V	1.05
6	C6	1	Nichicon	UPW1E221MPD	Capacitor, Electrolytic, 220uF, 25V, 20%, Radial	Digi-Key	493-1823-ND	220uF	25V	1.05
7	C7	1	Kemet	C317C101K2R5TA	Capacitor, Ceramic, 100pF, 200V, 10%, X7R, Radial	Digi-Key	399-4200-ND	100pF	200V	0.22
8	C8	1	EPCOS Inc	B32521C225J	Capacitor, Metallized Polyester Film, 2.2uF, 63V, 5%, Radial	Digi-Key	495-1125-ND	2.2uF	63V	1.42
9	C9	1	Nichicon	UPW1E221MPD	Capacitor, Electrolytic, 220uF, 25V, 20%, Radial	Digi-Key	493-1823-ND	220uF	25V	1.05
10	C10	1	Nichicon	UPW1E221MPD	Capacitor, Electrolytic, 220uF, 25V, 20%, Radial	Digi-Key	493-1823-ND	220uF	25V	1.05
11	C11	1	Kemet	C317C101K2R5TA	Capacitor, Ceramic, 100pF, 200V, 10%, X7R, Radial	Digi-Key	399-4200-ND	100pF	200V	0.22
12	C12	1	EPCOS Inc	B32521C225J	Capacitor, Metallized Polyester Film, 2.2uF, 63V, 5%, Radial	Digi-Key	495-1125-ND	2.2uF	63V	1.42
13	C13	1	Nichicon	UPW1E221MPD	Capacitor, Electrolytic, 220uF, 25V, 20%, Radial	Digi-Key	493-1823-ND	220uF	25V	1.05
14	C14	1	Nichicon	UPW1E221MPD	Capacitor, Electrolytic, 220uF, 25V, 20%, Radial	Digi-Key	493-1823-ND	220uF	25V	1.05
15	C15	1	Kemet	C317C101K2R5TA	Capacitor, Ceramic, 100pF, 200V, 10%, X7R, Radial	Digi-Key	399-4200-ND	100pF	200V	0.22
16	C16	1	EPCOS Inc	B32521C225J	Capacitor, Metallized Polyester Film, 2.2uF, 63V, 5%, Radial	Digi-Key	495-1125-ND	2.2uF	63V	1.42
17	C17	1	Nichicon	UPW1E221MPD	Capacitor, Electrolytic, 220uF, 25V, 20%, Radial	Digi-Key	493-1823-ND	220uF	25V	1.05
18	C18	1	Nichicon	UPW1E221MPD	Capacitor, Electrolytic, 220uF, 25V, 20%, Radial	Digi-Key	493-1823-ND	220uF	25V	1.05
19	C19	1	Nichicon	UPW1E221MPD	Capacitor, Electrolytic, 220uF, 25V, 20%, Radial	Digi-Key	493-1823-ND	220uF	25V	1.05
20	C20	1	Nichicon	UPW1E221MPD	Capacitor, Electrolytic, 220uF, 25V, 20%, Radial	Digi-Key	493-1823-ND	220uF	25V	1.05
21	C21	1	Kemet	C317C101K2R5TA	Capacitor, Ceramic, 100pF, 200V, 10%, X7R, Radial	Digi-Key	399-4200-ND	100pF	200V	0.22
22	C22	1	EPCOS Inc	B32521C225J	Capacitor, Metallized Polyester Film, 2.2uF, 63V, 5%, Radial	Digi-Key	495-1125-ND	2.2uF	63V	1.42
23	C23	1	Nichicon	UPW1E221MPD	Capacitor, Electrolytic, 220uF, 25V, 20%, Radial	Digi-Key	493-1823-ND	220uF	25V	1.05
24	C24	1	Nichicon	UPW1E221MPD	Capacitor, Electrolytic, 220uF, 25V, 20%, Radial	Digi-Key	493-1823-ND	220uF	25V	1.05
25	C25	1	Nichicon	UPW1E221MPD	Capacitor, Electrolytic, 220uF, 25V, 20%, Radial	Digi-Key	493-1823-ND	220uF	25V	1.05
26	C26	1	Nichicon	UPW1E221MPD	Capacitor, Electrolytic, 220uF, 25V, 20%, Radial	Digi-Key	493-1823-ND	220uF	25V	1.05
27	C27	1	Kemet	C317C101K2R5TA	Capacitor, Ceramic, 100pF, 200V, 10%, X7R, Radial	Digi-Key	399-4200-ND	100pF	200V	0.22
28	C28	1	EPCOS Inc	B32521C225J	Capacitor, Metallized Polyester Film, 2.2uF, 63V, 5%, Radial	Digi-Key	495-1125-ND	2.2uF	63V	1.42
29	C29	1	Nichicon	UPW1E221MPD	Capacitor, Electrolytic, 220uF, 25V, 20%, Radial	Digi-Key	493-1823-ND	220uF	25V	1.05
30	C30	1	Nichicon	UPW1E221MPD	Capacitor, Electrolytic, 220uF, 25V, 20%, Radial	Digi-Key	493-1823-ND	220uF	25V	1.05
31	C31	1	Kemet	C317C153K5R5TA	Capacitor, Ceramic, 0.015uF, 50V, 10%, X7R, Radial	Digi-Key	399-4217-ND	0.015uF	50V	0.21
32	C32	1	Kemet	C322C104K5R5TA	Capacitor, Ceramic, 0.1uF, 50V, 10%, X7R, Radial	Digi-Key	399-4329-ND	0.1uF	50V	0.21
33	C33	1	Kemet	C330C105K5R5TA	Capacitor, Ceramic, 1.0uF, 50V, 10%, X7R, Radial	Digi-Key	399-4389-ND	1.0uF	50V	
34	C34	1	Kemet	C330C105K5R5TA	Capacitor, Ceramic, 1.0uF, 50V, 10%, X7R, Radial	Digi-Key	399-4389-ND	1.0uF	50V	
35	C35	1	EPCOS Inc	B32521C225J	Capacitor, Metallized Polyester Film, 2.2uF, 63V, 5%, Radial	Digi-Key	495-1125-ND	2.2uF	63V	1.42
36	J1	1	Molex Connector Corporation	38720-6210	Connector, Barrier Strip, 10 Position, 0.375", Through Hole	Digi-Key	WM5748-ND	10 Pos	15A, 300V	9.67
37	J2	1	Molex Connector Corporation	38720-6210	Connector, Barrier Strip, 10 Position, 0.375", Through Hole	Digi-Key	WM5748-ND	10 Pos	15A, 300V	9.67
38	J3	1	Molex Connector Corporation	38720-6210	Connector, Barrier Strip, 10 Position, 0.375", Through Hole	Digi-Key	WM5748-ND	10 Pos	15A, 300V	9.67
39	R1	1	Vishay/BC Components	PR01000105609JR500	Resistor, Metal Film, 56R, 1W, 5%, Through-Hole	Digi-Key	PPC56W-1CT-ND	56R	1W	0.348
40	R2	1	Vishay/BC Components	PR01000105609JR500	Resistor, Metal Film, 56R, 1W, 5%, Through-Hole	Digi-Key	PPC56W-1CT-ND	56R	1W	0.348
41	R3	1	Vishay/BC Components	PR01000105609JR500	Resistor, Metal Film, 56R, 1W, 5%, Through-Hole	Digi-Key	PPC56W-1CT-ND	56R	1W	0.348
42	R4	1	Vishay/BC Components	PR01000105609JR500	Resistor, Metal Film, 56R, 1W, 5%, Through-Hole	Digi-Key	PPC56W-1CT-ND	56R	1W	0.348
43	R5	1	Vishay/BC Components	PR01000105609JR500	Resistor, Metal Film, 56R, 1W, 5%, Through-Hole	Digi-Key	PPC56W-1CT-ND	56R	1W	0.348
44	R6	1	Vishay/BC Components	PR01000105609JR500	Resistor, Metal Film, 56R, 1W, 5%, Through-Hole	Digi-Key	PPC56W-1CT-ND	56R	1W	0.348
45	R7	1	Yageo Corporation	MFR-25F8B-86K6	Resistor, Metal Film,86K6, 0.25W, 1%, Through-Hole	Digi-Key	86.6KX8K-ND	86K6	0.25W	
46	R8	1	Yageo Corporation	MFR-25F8B-1K00	Resistor, Metal Film, 1K00, 0.25W, 1%, Through-Hole	Digi-Key	1.00KX8K-ND	1K00	0.25W	
47	U1	1	PowerEx	M57161L-01	Gate Driver with Isolated Power Supply	Digi-Key	M57161L-01-ND			36.99
48	U2	1	PowerEx	M57161L-01	Gate Driver with Isolated Power Supply	Digi-Key	M57161L-01-ND			36.99
49	U3	1	PowerEx	M57161L-01	Gate Driver with Isolated Power Supply	Digi-Key	M57161L-01-ND			36.99
50	U4	1	PowerEx	M57161L-01	Gate Driver with Isolated Power Supply	Digi-Key	M57161L-01-ND			36.99
51	U5	1	PowerEx	M57161L-01	Gate Driver with Isolated Power Supply	Digi-Key	M57161L-01-ND			36.99
52	U6	1	PowerEx	M57161L-01	Gate Driver with Isolated Power Supply	Digi-Key	M57161L-01-ND			36.99
53	U7	1	Allegro Microsystems Inc	ACS713ELCTR-20A-T	IC, Current Sense, Hall Effect, Isolated, 20A, SOIC8	Digi-Key	620-1192-1-ND	20A	185mV/A	2.9
54	U8	1	Texas Instruments	ISO124P	IC, Op-Amp, Isolated, DIP16	Digi-Key	ISO124P-ND	50kHz	2V/us	12.01
55	U9	1	Texas Instruments	DCP011515DBP	IC, DC-DC Converter, Isolated, ±15V, 33mA, DIP14	Digi-Key	DCP011515DBP-ND	±15V, 33mA	13.5 ~ 16.5V Input	9.83
									Total:	246.68