

Bill of Materials (Part 1)

Item	Part	Quantity	Value	Part name	Manufacturer	Description	Package Name	Standard Dimensions mm (inch)
1	U1	1	-	TCR2EE33	TOSHIBA	LDO regulator	SOT-553	1.6×1.6×0.55
2	U2	1	-	ADM3202ARUZ	Analog Devices	Interface IC	TSSOP-16	4.5×6.6×1.1
3	U3, U4, U6	3	-	TC75S67TU	TOSHIBA	Operational amplifier	SOT-353F	2.0×2.1×0.7
4	U5	1	-	C4016A1	Nippon Ceramic	Ultrasonic sensors		Φ16.2×12
5	D1, D2	2	-	BAV99	TOSHIBA	Switching Diode	SOT23	2.9×2.4×0.9
6	D3, D4	2	-	JDH2S02FS	TOSHIBA	Schottky barrier Diode	FsC	1.0×0.6×0.48
7	C1, C2, C3, C4, C5, C7, C8, C17, C19, C24	10	100 nF			Ceramic 16 V, ±10 %		1.0×0.5 (0402)
8	C6	1	1 μF			Ceramic 6.3 V, ±10 %		1.0×0.5 (0402)
9	C9	1	10 pF			Ceramic 50 V, ±5 %		1.0×0.5 (0402)
10	C10, C15	2	1 nF			Ceramic 50 V, ±5 %		1.0×0.5 (0402)
11	C11	1	15 pF			Ceramic 50 V, ±5 %		1.0×0.5 (0402)
12	C12, C14	2	330 pF			Ceramic 50 V, ±5 %		1.0×0.5 (0402)
13	C13	1	47 μF			Ceramic 6.3 V, ±20 %		2.0×1.2 (0805)
14	C16, C18, C20, C23	4	10 nF			Ceramic 25 V, ±10 %		1.0×0.5 (0402)
15	C21	1	10 μF			Ceramic 25 V, ±10 %		2.0×1.2 (0805)
16	C22	1	2.2 nF			Ceramic 50 V, ±10 %		1.0×0.5 (0402)

Bill of Materials (Part 2)

Item	Part	Quantity	Value	Part name	Manufacturer	Description	Package Name	Standard Dimensions mm (inch)
17	R1, R3, R14, R15	4	1 kΩ			100 mW, ±1 %		1.0×0.5 (0402)
18	R2, R10, R12, R16	4	0 Ω			1 A		1.0×0.5 (0402)
19	R4, R17	2	10 kΩ			100 mW, ±1 %		1.0×0.5 (0402)
20	R5	1	160 kΩ			100 mW, ±1 %		1.0×0.5 (0402)
21	R6	1	82 kΩ			100 mW, ±1 %		1.0×0.5 (0402)
22	R7	1	5.1 kΩ			100 mW, ±1 %		1.0×0.5 (0402)
23	R8	1	3.3 kΩ			100 mW, ±1 %		1.0×0.5 (0402)
24	R9	1	100 kΩ			100 mW, ±1 %		1.0×0.5 (0402)
25	R11	1	3.9 kΩ			100 mW, ±1 %		1.0×0.5 (0402)
26	R13	1	2.7 kΩ			100 mW, ±1 %		1.0×0.5 (0402)
27	CN2	1	-	110990030	Seeed Studio	Grove connector 4-pin/straight		10×5.1×8.1

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