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## Instructions

Fill in the cells with the YELLOW highlight. **Do not edit red cells.** WE WILL ADJUST THE MULTIPLIER TO ACCOUNT FOR MULTIPLE BOARDS, YOU SHOULD NOT. Fill out the Digi-Key part # OR the Mouser Part #, DO NOT fill out both. Choose the cheapest distributor that has the part in stock. If the part is not in stock by the time we order parts, there is a risk that we will not purchase it. For any **approved Amazon or Adafruit parts**, leave Digi-key and Mouser Part# columns blank like the example. For **approved Amazon** parts, put the ASIN (under the Product Information Section) for Manufacturer Part # in the format "Amazon - #####". For **approved Adafruit parts**, put the Product ID for Manufacturer Part # in the format "Adafruit - #####".

**Total Price for Project**

49.5

Qty (for 1 board)	Manufacturer Part #	Digi-key Part#/SKU	Mouser Part#/SKU	Price/unit (\$)	Purchase URL	Reference Designator	Description (include component value if ≠ Datasheet Link	Multiple	Total Qty	Total Price/part (\$)	
1	TPS61023DRLR	296-TPS61023DRLRCT-ND		1.01	<a href="https://www.digikey.com/en">https://www.digikey.com/en</a>	U1	IC REG BOOST ADJ 3A SOT563	<a href="https://www.ti.com/lit/ds/symlink/tps61023.pdf">https://www.ti.com/lit/ds/symlink/tps61023.pdf</a>	2	2	2.02
2	GRM188R60J226MEA0D	490-7611-1-ND		0.14	<a href="https://www.digikey.com/en">https://www.digikey.com/en</a>	Cout	CAP CER 22UF 6.3V X5R 0603	<a href="https://search.digikey.com/?lang=en&amp;term=GRM188R60J226MEA0D">https://search.digikey.com/?lang=en&amp;term=GRM188R60J226MEA0D</a>	2	4	0.56
1	CRCW0603100KFKEA	541-100KHTR-ND		0.1	<a href="https://www.digikey.com/en">https://www.digikey.com/en</a>	R	100 kOhms ±1% 0.1W, 1/10W	<a href="https://www.vishay.com/docs/40472/crcw0603100kfkea.pdf">https://www.vishay.com/docs/40472/crcw0603100kfkea.pdf</a>	2	2	0.2
1	CRCW0603453KFKEA	541-453KHCT-ND		0.1	<a href="https://www.digikey.com/en">https://www.digikey.com/en</a>	R	453 kOhms ±1% 0.1W, 1/10W	<a href="https://www.vishay.com/docs/40472/crcw0603453kfkea.pdf">https://www.vishay.com/docs/40472/crcw0603453kfkea.pdf</a>	2	2	0.2
1	IHLP1212AEERR47M11	541-1330-1-ND		1.22	<a href="https://www.digikey.com/en">https://www.digikey.com/en</a>	L	470 nH Shielded Molded Indu	<a href="https://www.vishay.com/docs/40472/ihlp1212aeerr47m11.pdf">https://www.vishay.com/docs/40472/ihlp1212aeerr47m11.pdf</a>	2	2	2.44
1	GRM188R60J226MEA0D	490-7611-1-ND		0.14	<a href="https://www.digikey.com/en">https://www.digikey.com/en</a>	Cin	22 µF ±20% 6.3V Ceramic Cap	<a href="https://search.digikey.com/?lang=en&amp;term=GRM188R60J226MEA0D">https://search.digikey.com/?lang=en&amp;term=GRM188R60J226MEA0D</a>	2	2	0.28
1	UJ20-C-H-G-MSMT-3-P16-	2223-UJ20-C-H-G-MSMT-3-		0.62	<a href="https://www.digikey.com/en">https://www.digikey.com/en</a>	J1	USB-C (USB TYPE-C) USB 2.0 R	<a href="https://www.samsung.com/usa/support/mobile-devices/samsung-usb-c-cable/">https://www.samsung.com/usa/support/mobile-devices/samsung-usb-c-cable/</a>	2	2	1.24
2	RES 5.1K OHM 1% 1/4W A	13-MFR-25FRF52-5K1CT-NI		0.1	<a href="https://www.digikey.com/en">https://www.digikey.com/en</a>	R	5.1 kOhms ±1% 0.25W, 1/4W	<a href="https://www.yageo.com/Products/Resistors/5.1K-1%-%2F4W-13-MFR-25FRF52-5K1CT-NI">https://www.yageo.com/Products/Resistors/5.1K-1%-%2F4W-13-MFR-25FRF52-5K1CT-NI</a>			
1	LQW18ANR27J00D	490-1181-1-ND		0.14	<a href="https://www.digikey.com/en">https://www.digikey.com/en</a>	L	FIXED IND 270NH 110MA 3.4V	<a href="https://search.digikey.com/?lang=en&amp;term=LQW18ANR27J00D">https://search.digikey.com/?lang=en&amp;term=LQW18ANR27J00D</a>	2	2	0.28
3	CC0603KPX7R9BB101	13-CC0603KPX7R9BB101C		0.1	<a href="https://www.digikey.com/en">https://www.digikey.com/en</a>	C	CAP CER 100PF 50V X7R 0603	<a href="https://www.yageo.com/Products/Capacitors/CC0603KPX7R9BB101C">https://www.yageo.com/Products/Capacitors/CC0603KPX7R9BB101C</a>	2	6	0.6
1	LM4910MM/NOPB		926-LM4910MM/NOPB	0.73	<a href="https://www.mouser.com/ProductDetail/Texas-Instruments/LM4910MM-NOPB">https://www.mouser.com/ProductDetail/Texas-Instruments/LM4910MM-NOPB</a>	LM4910	Audio Amplifiers 35-mW, st	<a href="https://www.ti.com/lit/ds/symlink/lm4910.pdf">https://www.ti.com/lit/ds/symlink/lm4910.pdf</a>	2	2	1.46
4	CRCW060320K0FKEA	541-20.0KHCT-ND		0.1	<a href="https://www.digikey.com/en">https://www.digikey.com/en</a>	R	20 kOhms ±1% 0.1W, 1/10W C	<a href="https://www.vishay.com/docs/40472/crcw060320k0fkea.pdf">https://www.vishay.com/docs/40472/crcw060320k0fkea.pdf</a>	2	8	0.8
2	GCM188R71C394KA55D	490-GCM188R71C394KA55		0.13	<a href="https://www.digikey.com/en">https://www.digikey.com/en</a>	C	0.39 µF ±10% 16V Ceramic Ca	<a href="https://search.digikey.com/?lang=en&amp;term=GCM188R71C394KA55D">https://search.digikey.com/?lang=en&amp;term=GCM188R71C394KA55D</a>	2	4	0.52
1	GRT188R71E105KE13D	490-GRT188R71E105KE13		0.13	<a href="https://www.digikey.com/en">https://www.digikey.com/en</a>	C	1 µF ±10% 25V Ceramic Capac	<a href="https://search.digikey.com/?lang=en&amp;term=GRT188R71E105KE13D">https://search.digikey.com/?lang=en&amp;term=GRT188R71E105KE13D</a>	2	2	0.26
2	CRCW0603100KFKEA	541-100KHTR-ND		0.1	<a href="https://www.digikey.com/en">https://www.digikey.com/en</a>	R	100 kOhms ±1% 0.1W, 1/10W	<a href="https://www.vishay.com/docs/40472/crcw0603100kfkea.pdf">https://www.vishay.com/docs/40472/crcw0603100kfkea.pdf</a>	2	4	0.4
2	125uF capacitors								2	4	0
2	BLM18BD252SN1D	490-1028-1-ND		0.1	<a href="https://www.digikey.com/en">https://www.digikey.com/en</a>	F	2.5 kOhms @ 100 MHz 1 Signi	<a href="https://www.murata.com/en-us/products/inductors/bleeders/blm18bd252sn1d">https://www.murata.com/en-us/products/inductors/bleeders/blm18bd252sn1d</a>	2	4	0.4
1	TNPW080510K0BYEN	541-4414-1-ND		0.94	<a href="https://www.digikey.com/en">https://www.digikey.com/en</a>	R	10 kOhms ±0.1% 0.26W Chip I	<a href="https://www.vishay.com/docs/40472/tnpw080510k0byen.pdf">https://www.vishay.com/docs/40472/tnpw080510k0byen.pdf</a>	2	2	1.88
1	54-00174	839-54-00174CT-ND		0.78	<a href="https://www.digikey.com/en">https://www.digikey.com/en</a>	J	3.50mm (0.141", 1/8", Mini PI	<a href="https://tensility.com/products/54-00174/">https://tensility.com/products/54-00174/</a>	2	2	1.56
3	ESD Diodes?								2	6	0
1	LM4890MX/NOPB	296-47333-1-ND		1.29	<a href="https://www.digikey.com/en">https://www.digikey.com/en</a>	U	Amplifier IC 1-Channel (Mono	<a href="https://www.ti.com/lit/ds/symlink/lm4890.pdf">https://www.ti.com/lit/ds/symlink/lm4890.pdf</a>	2	2	2.58
1	CMS-28588N-L152	102-3850-ND		3.9	<a href="https://www.digikey.com/en">https://www.digikey.com/en</a>	?	Amplifier IC 1-Channel (Mono	<a href="https://www.ti.com/lit/ds/symlink/cms28588n.pdf">https://www.ti.com/lit/ds/symlink/cms28588n.pdf</a>	2	2	7.8
2	CRCW060320K0FKEA	541-20.0KHCT-ND		0.1	<a href="https://www.digikey.com/en">https://www.digikey.com/en</a>	R	20 kOhms ±1% 0.1W, 1/10W C	<a href="https://www.vishay.com/docs/40472/crcw060320k0fkea.pdf">https://www.vishay.com/docs/40472/crcw060320k0fkea.pdf</a>	2	4	0.4
2	GRT188R71E105KE13D	490-GRT188R71E105KE13		0.13	<a href="https://www.digikey.com/en">https://www.digikey.com/en</a>	C	1 µF ±10% 25V Ceramic Capac	<a href="https://search.digikey.com/?lang=en&amp;term=GRT188R71E105KE13D">https://search.digikey.com/?lang=en&amp;term=GRT188R71E105KE13D</a>	2	4	0.52
1	GCM188R71C394KA55D	490-GCM188R71C394KA55		0.13	<a href="https://www.digikey.com/en">https://www.digikey.com/en</a>	C	0.39 µF ±10% 16V Ceramic Ca	<a href="https://search.digikey.com/?lang=en&amp;term=GCM188R71C394KA55D">https://search.digikey.com/?lang=en&amp;term=GCM188R71C394KA55D</a>	2	2	0.26
2	PEC12R-4220F-N0024	PEC12R-4220F-N0024-ND		1.28	<a href="https://www.digikey.com/en">https://www.digikey.com/en</a>	SW	Rotary Encoder Mechanical 24	<a href="https://www.bourns.com/products/rotary-encoders/pec12r">https://www.bourns.com/products/rotary-encoders/pec12r</a>	2	4	5.12
1	C503B-RAN-CZ0C0AA2	C503B-RAN-CZ0C0AA2CT-N		0.18	<a href="https://www.digikey.com/en">https://www.digikey.com/en</a>	D	Red 624nm LED Indication - D				