

Qty	Value	Device	Parts	Description	Manufacturer	Mfg PN	Vendor	Vendor PN	Pice Ea	Price Ext	Comments
1	PCB	none	NA	Printed Circuit Board	www.pmlillett.com	ATEST_N PCB	www.pmlillett.com	ATEST PCB	\$50.00	\$50.00	Includes front and rear panels for case
16	0.1uF	C-EU050-030X075	C1, C4, C6, C9, C11, C12, C14, C15, C16, C17, C19, C20, C23, C24, C25, C26	Cap, 0.1uF 50V film, 5mm LS	Kemet	MMK5104J50J01TR18L16.5TR18	Mouser	80-MMK5104J50J01TR18	\$0.18	\$2.88	Generic OK
2	1uF 400V	C-EU150-084X183	C2, C3	Cap, 1uF 400V film, 22.5mm LS	Vishay BC	BFC237353105	Mouser	594-2222-373-53105	\$2.41	\$4.82	
1	150uF 16V	CPOL-EUE3.5-8	C5	Cap, 150uF 16V Ta 5mm LS	AVX	TAP157M016CRS	Mouser	581-TAP157M016CRS	\$4.10	\$4.10	
1	10uF 16V	CPOL-EUE2-5	C10	Cap, 10uF 16V Ta 2mm LS	AVX	TAP106M035SCS	Mouser	581-TAP106M035SCS	\$0.67	\$0.67	
4	330uF 35V	CPOL-EUE5-10.5	C7, C8, C13, C18	Cap, 330uF 35V electrolytic, 5mm LS 10mm dia	Nichicon	UPW1V331MPD	Mouser	647-UPW1V331MPD	\$0.76	\$3.04	
1	470uF 16V	CPOL-EUE5-10.5	C22	Cap, 470uF 16V electrolytic, 5mm LS 10mm dia	Nichicon	UPW1C471MPD	Mouser	647-UPW1C471MPD	\$0.57	\$0.57	
10	1N4148	1N4148	D5, D6, D7, D8, D10, D11, D12, D13, D14, D15	Diode, 1N4148	Fairchild Semi	1N4148	Mouser	512-1N4148	\$0.10	\$1.00	Any mfg OK
1	1.5KE9.1A	15KEXX	D9	Diode, TVS, 1.5KE9.1A	Vishay	1.5KE9.1A-E3/54	Mouser	625-1.5KE9.1A-E3	\$0.76	\$0.76	Any mfg OK
1	JCA0305D03	DCDC_JCA	DC1	DC/DC converter, +5 to +/-15V	XP Power	JCA0305D03	Mouser	209-JCA0305D03	\$25.10	\$25.10	
1	RUSBF110	POLYFUSE_RUSBF110	F1	PTC Fuse	Tyco Raychem	RUSBF110	Mouser	650-RUSBF110	\$0.57	\$0.57	
2	73137-5003	CON_BNC_RA	J1, J2	Conn. BNC, RA PCB	Molex	73137-5003	Mouser	538-73137-5003	\$1.86	\$3.72	
1	PJ-102	DCJACK	J3	Conn. DC Jack	CUI	PJ-102	Mouser	490-PJ-102AH	\$0.82	\$0.82	
1	61729	CON_USB_B	J4	Conn. USB "B"	FCI	61729-0010BLF	Mouser	649-61729-0010BLF	\$0.58	\$0.58	
2	NYS216	JACK_PHONE	J5, J6	Conn. 1/4" phone jack	Neutrik	NYS216	Mouser	568-NYS216	\$0.70	\$1.40	
1	V125	DPM_V125	M1	Digital Panel Meter	Lascar	V125	Mouser	V125	\$21.99	\$21.99	
1	NA	NA	@M1	Conn. RA socket header	TE / Amp	5535676-7	Mouser	571-5535676-7	\$2.71	\$2.71	
1	10	R1/4W	R24	Res, 1/4W 1% metal film, 10 ohm	Yaego	MFR-25FBF52-10R	Mouser	603-MFR-25FBF52-10R	\$0.10	\$0.10	MF only, generic OK
1	102	R1/4W	R7	Res, 1/4W 1% metal film, 102 ohm	Yaego	MFR-25FBF52-102R	Mouser	603-MFR-25FBF52-102R	\$0.10	\$0.10	MF only, generic OK
1	200	R1/4W	R28	Res, 1/4W 1% metal film, 200 ohm	Yaego	MFR-25FBF52-200R	Mouser	603-MFR-25FBF52-200R	\$0.10	\$0.10	MF only, generic OK
1	909	R1/4W	R6	Res, 1/4W 1% metal film, 909 ohm	Yaego	MFR-25FBF52-909R	Mouser	603-MFR-25FBF52-909R	\$0.10	\$0.10	MF only, generic OK
2	1k	R1/4W	R29, R30	Res, 1/4W 1% metal film, 1.00k	Yaego	MFR-25FBF52-1K	Mouser	603-MFR-25FBF52-1K	\$0.10	\$0.20	MF only, generic OK
2	7.50k	R1/4W	R21, R23	Res, 1/4W 1% metal film, 7.50k	Yaego	MFR-25FBF52-7K5	Mouser	603-MFR-25FBF52-7K5	\$0.10	\$0.20	MF only, generic OK
1	9.09k	R1/4W	R5	Res, 1/4W 1% metal film, 9.09k	Yaego	MFR-25FBF52-9K09	Mouser	603-MFR-25FBF52-9K09	\$0.10	\$0.10	MF only, generic OK
1	10k	R1/4W	R22	Res, 1/4W 1% metal film, 10.0k	Yaego	MFR-25FBF52-10K	Mouser	603-MFR-25FBF52-10K	\$0.10	\$0.10	MF only, generic OK
2	27.4k	R1/4W	R14, R26	Res, 1/4W 1% metal film, 27.4k	Yaego	MFR-25FBF52-27K4	Mouser	603-MFR-25FBF52-27K4	\$0.10	\$0.20	MF only, generic OK
1	15k	R1/4W	R15	Res, 1/4W 1% metal film, 15k	Yaego	MFR-25FBF52-15K	Mouser	603-MFR-25FBF52-15K	\$0.10	\$0.10	MF only, generic OK
1	90.9k	R1/4W	R4	Res, 1/4W 1% metal film, 90.9k	Yaego	MFR-25FBF52-90K9	Mouser	603-MFR-25FBF52-90K9	\$0.10	\$0.10	MF only, generic OK
1	100k	R1/4W	R11	Res, 1/4W 1% metal film, 100k	Yaego	MFR-25FBF52-100K	Mouser	603-MFR-25FBF52-100K	\$0.10	\$0.10	MF only, generic OK
2	49.9k 2W	R2W_5083	R2, R16	Res, 2W 1% metal film, 49.9k	Vishay	CPF249K900FKE14	Mouser	71-CPF249K900FKE14	\$0.42	\$0.84	Metal film only, can use 47.5k
1	5k	TRIMPOT_3266	R9	Trimpot, vertical 3266W type, 5k	Bourns	3266W-1-502LF	Mouser	652-3266W-1-502LF	\$3.86	\$3.86	
1	100k	TRIMPOT_3266	R25	Trimpot, vertical 3266W type, 100k	Bourns	3266W-1-104LF	Mouser	652-3266W-1-104LF	\$4.19	\$4.19	
4	PN22SJNA03QE	SW_DPDT_PN	SW1, SW2, SW3, SW5	Switch, DPDT PB alt action	C&K	PN22SJNA03QE	Mouser	611-PN22SJNA03QE	\$1.87	\$7.48	Generic OK
1	SR10010F-24NS	SW_ROT_2P4T_ALPHA	SW4	Switch, 2P 6T rotary PCB	Alpha	SR10010F-0204-20F0B-C7-N-0027	Mouser	105-SR10010F-24NS	\$5.86	\$5.86	
2	TP_063		TP1, TP2	Test Point	Keystone	5001	Mouser	534-5001	\$0.31	\$0.62	Optional
2	DRV134PA	DRV134_S	U1, U8	IC, balanced driver, DRV134, DIP8	Texas Instruments	DRV134PA	Mouser	595-DRV134PA	\$6.40	\$12.80	G4 suffix same, can use THAT corp 1646P8-U
1	MC78L05	78LXX	U3	IC, +5V linear reg 78L05, TO92	On Semi	MC78L05ACPG	Mouser	863-MC78L05ACPG	\$0.52	\$0.52	Other mfgs OK
1	MC79L05	79LXX	U9	IC, -5V linear reg 79L05, TO92	On Semi	MC79L05ACPG	Mouser	863-MC79L05ACPG	\$0.54	\$0.54	Other mfgs OK
1	OPA2134AP	OPA2134P	U4	IC, dual opamp, OPA2134, DIP8	Texas Instruments	OPA2134AP	Mouser	595-OPA2134PA	\$6.14	\$6.14	G4 suffix same, other dual opamps can be used
1	AD736	AD536N_S	U5	IC, true RMS converter, AD736, DIP8	Analog Devices	AD736JNZ	Mouser	584-AD736JNZ	\$21.56	\$21.56	
2	INA134AP	INA134P	U6, U7	IC, balanced reciever, INA134, DIP8	Texas Instruments	INA134PA	Mouser	595-INA134PA	\$3.68	\$7.36	G4 suffix same, can use THAT corp 1240P08-U
6	Socket		@U1, U4, U5, U6, U7, U8	IC socket, DIP8	Mill-Max	110-99-308-41-001000	Mouser	575-199308	\$0.70	\$4.20	Optional, allows selection of amps

Final Assembly Components

Qty	Value	Device	Parts	Description	Manufacturer	Mfg PN	Vendor	Vendor PN	Pice Ea	Price Ext	Comments
4	Cap	none	@SW1, SW2, SW3, SW5	Button cap (for switches)	C&K	G001G	Mouser	611-G001G	\$0.54	\$2.16	Can use different colors if you want
1	Knob	none	@SW4	Knob	Apem	430211B1/4	Mouser	642-43021-1B1/4	\$1.95	\$1.95	Can use others
1	Enclosure	none	NA	Plastic enclosure	Bud Industries	PC-11403	Mouser	563-PC-11403	\$19.80	\$19.80	
									Total	\$176.11	

Not included in BOM: USB cable or 5V 500mA (or higher) DC adapter to provide power

Many parts are carried by both Digi-Key and Mouser, so if one is out of stock, check the other

www.mouser.com

www.digkey.com