

clee Looping Gain Sequencer BOM

Resistors					
	Designator	Quantity	Value	Package	Notes
1	R118	1	100R	R_0805	Tayda 1% 805 SMD
2	R138 R312	2	300R	R_0805	Tayda 1% 805 SMD
3	R357 R356 R353 R348 R347 R336 R346 R345 R335 R344 R343 R334 R342 R341 R333 R328 R327 R316 R326 R325 R315 R324 R323 R314 R322 R321 R313	26	1K	R_0805	Tayda 1% 805 SMD
4	R273	1	3.3K	R_0805	Tayda 1% 805 SMD
5	R102 R101 R137 R134 R108 R109 R119 R223 R224 R225 R226 R227 R228 R229 R241 R242 R243 R244 R245 R246 R247 R288 R293 R291 R289 R355 R311	27	10K	R_0805	Tayda 1% 805 SMD
6	R117 R135 R133	3	15K	R_0805	Tayda 1% 805 SMD
7	R309	1	20K	R_0805	Tayda 1% 805 SMD
8	R114 R115 R235 R234 R233 R232 R231 R237 R236 R340 R339 R338 R337 R320 R319 R318 R317	17	22K (RLED)	R_0805	Tayda 1% 805 SMD
9	R130 R127	2	38K	R_0805	Tayda 1% 805 SMD
10	R120 R113 R126 R122	5	47K	R_0805	Tayda 1% 805 SMD
11	R211 R212 R213 R214 R215 R209 R210 R354	8	51K	R_0805	Tayda 1% 805 SMD
12	R107	1	68K	R_0805	Tayda 1% 805 SMD

cle Looping Gain Sequencer BOM

13	R104 R103 R116 R106 R105 R132 R125 R124 R123 R129 R136 R121 R272 R265 R266 R267 R268 R269 R270 R271 R301 R352 R351 R350 R349 R332 R331 R330 R329 R310 R308 R307 R306 R305 R304 R303 R302	37	100K	R_0805	Tayda 1% 805 SMD
14	R111	1	160K	R_0805	Tayda 1% 805 SMD
15	R110 R112 R128 R131	4	200K	R_0805	Tayda 1% 805 SMD
16	R294 R292 R290	3	10M	R_0805	Tayda 1% 805 SMD
17	R216 R217 R218 R219 R220 R222 R221 R249 R250 R254 R255 R252 R253 R251	14	20M	R_0805	Tayda or Digikey 1% 805 https://www.digikey.com/en/products/detail/yageo/RC0805JR-0720ML/5919059

Resistors 0.1%					
	Designator	Quantity	Value	Package	Notes
18	R201 R202 R203 R204 R205 R206 R207 R208 R257 R258 R260 R261 R262 R263 R264 R259	16	1K 0.1%	R_0805	Digikey 0.1% 805 https://www.digikey.com/en/products/detail/panasonic-electronic-components/ERA-6AEB102V/1465748
19	R274 R275 R276 R277 R278 R279 R280 R281 R282 R283 R284 R285 R286 R287 R256 R248 R239 R238 R230 R240	20	100K 0.1%	R_0805	Digikey 0.1% 805 https://www.digikey.com/en/products/detail/panasonic-electronic-components/ERA-6AEB104V/1465797

Capacitors					
	Designator	Quantity	Value	Package	Notes
20	C101 C102	2	10ufd	THT:CP_Radial	Or similar https://www.taydaelectronics.com/capacitors/electrolytic-capacitors/10uf-25v-105c-aluminum-electrolytic-capacitor-5x11mm.html
21	C301	1	5p	C_0805	Tayda 805 SMD

clee Looping Gain Sequencer BOM

22	C105 C106 C110 C111	4	22p	C_0805	Tayda 805 SMD
23	C107	1	5n	C_0805	Tayda 805 SMD
24	C308 C309 C310 C314 C313 C312 C311 C307	8	10n	C_0805	Tayda 805 SMD
25	C109 C103 C104 C306 C305 C336 C333 C335 C334 C329 C304 C303 C332 C326 C323 C318 C315 C320 C331 C330 C328 C327 C325 C324 C322 C321 C319 C317 C316	29	BP(100n)	C_0805	Tayda 805 SMD
26	C108	1	330n	C_0805	Tayda 805 SMD
27	C201 C302	2	NF	C_0805 Not Fitted	empty footprint

Diodes					
	Designator	Quantity	Value	Package	Notes
28	D101 D102 D318 D317 D316 D315 D314 D313 D308 D307 D306 D305	12	4148	SOD-80	Tayda SOD-080 https://www.taydaelectronics.com/diodes/fd114148-small-signal-diode-200ma-100v.html
29	D103 D106	2	LS103A	SOD-80_SHOTTKY	Digikey SOD-080 https://www.digikey.com/en/products/detail/vishay-general-semiconductor-diodes-division/LS103A-GS08/4831810
30	D105 D104 D205 D204 D202 D203 D201 D207 D206 D312 D311 D310 D309 D304 D303 D302 D301	17	LED	3.0mm_LED	Tayda or similar ** Adjust RLED values for desired brightness **

Silicon					
	Designator	Quantity	Value	Package	Notes
31	Q309 Q308 Q307 Q306 Q305 Q304 Q303 Q302 Q301	9	BC847	SOT-23	Tayda https://www.taydaelectronics.com/bc847-transistor-npn-45v-0-1a-sot-23-3-bc847b-215.html

clee Looping Gain Sequencer BOM

32	U210	1	LM4040 8.2	SOT-23	Digikey https://www.digikey.com/en/products/detail/texas-instruments/LM4040CIM3-8-2-NOPB/305137
33	U106	1	AS3364	SOIC-16	Infinite Machinery has SOIC in stock https://www.infinitemachinery.com/as3364d
34	U101 U209	2	TL074	SOIC-14	Tayda or similar SOIC
35	U102 U103 U105 U104 U301	5	TL072	SOIC-8	Tayda or similar SOIC
36	U302	1	TL071	SOIC-8	Digikey SOIC https://www.digikey.com/en/products/detail/texas-instruments/TL071CDR/562850
37	U201 U206 U203 U205 U204 U202	6	LM339	SOIC-14	Tayda or similar SOIC
38	U208 U207	2	4030	SOIC-14	Digikey https://www.digikey.com/en/products/detail/texas-instruments/CD4030BM96/1690963
39	U107	1	L7805	TO-92_Inline	Tayda or similar https://www.taydaelectronics.com/ic-integrated-circuits/voltage-regulators/l78l05acz-l78l05-78l05-5-volts-100ma-voltage-regulator-ic.html

Other					
	Designator	Quantity	Value	Package	Notes
40	FB101 FB102	2	Ferrite_Bead_Small	THT:R_Axial	https://www.taydaelectronics.com/axial-ferrite-bead-76-ohm.html
41	RV104 RV102 RV101 RV107 RV103 RV106 RV307 RV308 RV306 RV305 RV304 RV303 RV302 RV301	14	50K	Alpha_RD901F-Vertical	Tayda or similar https://www.taydaelectronics.com/50k-ohm-linear-taper-potentiometer-round-shaft-pcb-9mm.html
42	SW101	1	SW_SPDT	submini_SPDT	SynthCube – SPDT PCB mount sub-mini toggle https://synthcube.com/cart/spdt-sub-mini-short-lever-pc-mount-on-on?search=SPDT&description=true
43		17	LED FRESNEL		Digikey https://www.digikey.com/en/products/detail/visual-communications-company-vcc/SMB-200-CTP/4515612

clee Looping Gain Sequencer BOM

44	RV109 RV108 RV105	3	20K	Bourns_3296W_Vertical	Tayda or similar https://www.taydaelectronics.com/potentiometer-variable-resistors/cermet-potentiometers/3296w/20k-ohm-trimmer-potentiometer-cermet-25-turns-3296w.html
45	B103 B104 B105 B101 B102 B310 B301 B309 B308 B307 B306 B305 B304 B303 B302	15	Banana jacks		Suggested: 14 Blue and 1 Red https://synhcube.com/cart/banana-jacks?search=banana&description=true
46	J112	1	Test Point 01	PinHeader_2.54mm	2.54mm header pins https://www.taydaelectronics.com/connectors-sockets/pin-headers/40-pin-male-2-54-mm-single-row-pin-header-break-away-round-pin-gold-plated.html
47	J105 J106 J103 J104 J110 J111 J114 J102 J109 J117 J118 J108 J107 J201 J202 J203 J204 J205 J206 J207 J208 J214 J215 J209 J210 J211 J213 J212	38	38 positions	PinHeader_2.54_Vertical	2.54mm header pins https://www.taydaelectronics.com/connectors-sockets/pin-headers/40-pin-male-2-54-mm-single-row-pin-header-break-away-round-pin-gold-plated.html
48	J115 J116	38	38 positions	PinSocket_2.54mm_Vertical	2.54mm header sockets https://www.taydaelectronics.com/connectors-sockets/pin-headers/40-pin-2-54-mm-single-row-right-angle-female-pin-header.html
49	J101	1	Molex Header Pins	0.156 pin spacing	

For 15 volt systems – regulate power to +/-12 volt

	Designator	Quantity	Value	Package	Notes
50	U108	1	L7812	TO-220	
51	U109	1	L7912	TO-220	
52	C114 C115	2	BP(100n)	C_0805	Tayda 805 SMD
53	C112 C113	2	330n	C_0805	Tayda 805 SMD
52	J113	1	Molex Header Pins	0.156 pin spacing	