

Zlob Modular: Entropy Expander v5 BOM

please do not substitute parts not listed on my BOM  
 unless you understand the potential consequences

Qty	Value	Device	Package	Parts
2	100K	6pin array(can be substituted for 6 100k single resistors)	SIL6	mouser 652-4606X-2LF-100K
1	10K	6pin array(can be substituted for 3 10k single resistors)	SIL6	digkey 770-63-R10KP-ND
1	1k	8pin array(can be substituted for 4 1k single resistors)	SIL8	mouser 268-1.0K-RC
2	47k	(1% or 5% 1/4 watt, 1/8 watt should be fine too. from tayda or mouser)		
2	20k	RESISTOR.1	RES-VERT-.1	R9
2	10k	RESISTOR.1	RES-VERT-.1	R21, R31
2	5.6k	RESISTOR.1	RES-VERT-.1	R15, R20
2	470R	RESISTOR.1	RES-VERT-.1	R13, R17
1	270k			
1	33k	RESISTOR.1	RES-VERT-.1	R14
1	18k	RESISTOR.1	RES-VERT-.1	R18
1	1k	RESISTOR.1	RES-VERT-.1	R26
1	100k	AL(sets brightness of blue entropy out led,might have to be adjusted if not using blue tayda 3mmled)		
1	20k	BL(sets brightness of red entropy out led,might have to be adjusted if not using red tayda 3mm led)		
1	20k	GL(sets brightness of random gate led, might have to be adjusted if not using red tayda 3mm led)		
6	0.1uf	CAPACITOR(mlcc)	CAP/.15X.08	mouser 594-K104K15X7RF53L2
1	0.22uf	CAPACITOR(mlcc)	CAP/.15X.08	mouser 75-1C10Z5U224M050B
2	10uf	CAPACITOR(electrolytic)	CAP/5MMX2MM	C8, C9 mouser 647-USR1E100MDD
2	4.7nf(0.0047uf)	(greenie,film)(mlcc should be fine too)		C050-024X04 (tayda)
2	1N4001	Diode	D041-10	(all actives semiconductors:tayda)
1	1n4148	Diode		
2	3mm	red led		
1	3mm	blue led		
5	2N3904	NPN transistors		
1	CD4040BE	Divider	DIL16	IC2
1	CD4053	(has to be the CD4053 CMOS) Switch	DIL16	IC1
1	tl072	OPAMP/DUALDIP	8-DIP	TL072
1	tl074	OPAMP/QUAD	14-PDIP	TL074
2	16pin dip socket(tayda)			
1	14pin dip socket			
1	8pin dip socket			
1	1M	6MM pcb TRIM (tayda)		
1	b500k	song huei tall trimmer potentiometer (from me, thonk, synthcube)		
1	b100k	song huei tall trimmer potentiometer (from me, thonk, synthcube)		
7	qingpu mono jacks(thonkiconn)(from me, thonk, synthcube)			
7	nuts for jacks			
	(buy a long header strip from tayda and cut it up)			
2	3pin right angle male header		JMP/3P/SIP1	
1	6pin right angle male header		JMP/6P/SIP	JMP/4P/SIP
1	5pin right angle male header		JMP/5P/SIP	U\$2
1	4pin right angle male header		JMP/4P/SIP	
1	3pin straight male header		JMP/3P/SIP	
1	shunt/shorting block (tayda)			
1	(10 pin)dual 5pin row right angle male header		JMP/10P/DIP	U\$3
1	10pin to 10pin ribbon cable(expander cable)			
1	dual 10 to 16 pin ribbon cable(power)			