






Acrobotic AVR Synthesizer

Part	Qty.	Reference	Description
	2	R1, R6	10K Ohm 1/4W Resistor
	3	R2, R3, R5	270Ω 1/4W Resistor
	1	R4	220Ω 1/4W Resistor
	1	R7	4.7KΩ 1/4W Resistor
	5	VR1, VR2, VR3, VR4, VR5	10KΩ Potentiometer
	1	VR6	10KΩ Trimmer (Optional)
	2	C1, C2	4.7μF Capacitor (Electrolytic)
 22J	2	C3, C4	22pF Capacitor (Ceramic)
 473	2	C5, C6	0.047μF Capacitor (Ceramic)
 104	2	C7, C8	0.1μF Capacitor (Ceramic)
	2	L1, L2	4700μH Inductor
	1	D1	Small-Signal Diode
	1	D2	General Purpose Rectifier Diode
	1	Q1	16MHz Crystal Oscillator
	1	U1	28-Pin Socket
	2	U2, U3	8-Pin Socket
	1	(U1)	ATMega328p IC

 TLC6632	1	(U2)	Rail-to-Rail Dual Op Amp IC
 6N138	1	(U3)	High-Gain Darlington Optocoupler IC
	3	R2, R3, R5	270Ω 1/4W Resistor
	1	R4	220Ω 1/4W Resistor
	1	R7	4.7KΩ 1/4W Resistor
	5	VR1, VR2, VR3, VR4, VR5	10KΩ Potentiometer
	1	VR6	10KΩ Trimmer (Optional)
	2	C1, C2	4.7μF Capacitor (Electrolytic)
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	2	L1, L2	4700μH Inductor
	1	D1	Small-Signal Diode
	1	D2	General Purpose Rectifier Diode
 MHZ	1	Q1	16MHz Crystal Oscillator
	1	U1	28-Pin Socket
	2	U2, U3	8-Pin Socket
	1	(U1)	ATMega328p IC