

NEsesity v1.0 Parts List

Name	Description	Part I.D.	Package	Digikey Part #	Mouser Part #	Price	Qty Price
	NEsesity PCB v1.0						
U1	Asynchronous SRAM 32k x 8 Parallel	70ns	DIP 28 0.6"	1450-1183-5-ND		\$3.20	\$2.903
U2	Octal D Type-Transparent Latch; 3 State	74HC373	DIP 20	TC74HC373APF-ND		\$0.56	\$0.495
U3	Dual 2-to-4 Line Decoder / Demultiplexer	74HC139	DIP 16	296-8230-5-ND		\$0.43	\$0.371
U4	Asynchronous SRAM 32k x 8 Parallel	70ns	DIP 28 0.6"	1450-1183-5-ND		\$3.20	\$2.903
U5	40p DIP Precision IC Socket		DIP 40	ED90522-ND		\$2.68	\$2.575
U6	40p DIP Precision IC Socket		DIP 40	ED90522-ND		\$2.68	\$2.575
U7	IC Inverter Dual 4,2-Input	74HC368	DIP 16	296-8308-5-ND		\$0.65	\$0.555
U8	IC Inverter Dual 4,2-Input	74HC368	DIP 16	296-8308-5-ND		\$0.65	\$0.555
U9	Hex Inverter	74ACT04	DIP 14	296-9820-5-ND		\$0.49	\$0.424
U10	105mw Stereo Headphone Amplifier	LM4808	SOIC 8	LM4808M/NOPB-ND		\$0.91	\$0.811
U11*	LM324 Quad Op Amp	LM324	SOIC 14	296-9540-1-ND		\$0.48	\$0.363
	7 pin Right Angle Header Connector 2mm pitch			455-1739-1-ND		\$0.94	\$0.827
	7 pin Right Angle Header Connector 2mm pitch			455-1739-1-ND		\$0.94	\$0.827
	15 pin D Sub Connector Male Pins			AE10979-ND		\$0.88	\$0.778
	8p JST male connector 2mm pitch			455-2232-ND		\$0.37	\$0.354
qty. 2	8p JST connector housing 2mm pitch x 2			455-1902-ND		\$0.16	\$0.147
qty. 8	Pre-Crimped JST jumper wire 22ga 4in x 8			455-4221-ND		\$0.74	\$0.690
D1*	1N4148 Diode	1N4148		1N4148FS-ND		\$0.10	\$0.060
Q1	NPN Transistor	2N3904		2N3904FS-ND		\$0.20	\$0.162
Q2	NPN Transistor	2N3904		2N3904FS-ND		\$0.20	\$0.162
Q3	PNP Transistor	2N3906		2N3906-APCT-ND		\$0.17	\$0.158
X1	21.47727 MHz Crystal				HC49US-21.47727-MABJ-UB	\$0.59	\$0.495
MIC*	Electret Condenser Microphone	CMC-504TF		102-1723-ND		\$0.86	\$0.715
TC1	Adjustable Capacitor	30p		SG3005-ND		\$1.30	\$1.300
C1	Ceramic Capacitor	15p		445-175535-ND		\$0.26	\$0.176
C2	Ceramic Capacitor	18p		445-181734-ND		\$0.26	\$0.176
C3	Ceramic Capacitor	33p		445-173189-1-ND		\$0.24	\$0.162
C4	Ceramic Capacitor	47p		445-173196-1-ND		\$0.24	\$0.162
C5	Ceramic Capacitor	47p		445-173196-1-ND		\$0.24	\$0.162
C6	Ceramic Capacitor	68p		445-175351-ND		\$0.26	\$0.176
C7	Ceramic Capacitor	220p		445-181735-ND		\$0.22	\$0.152
C8	Ceramic Capacitor	330p		445-181238-ND		\$0.22	\$0.152
C9	Ceramic Capacitor	330p		445-181238-ND		\$0.22	\$0.152
C10	Ceramic Capacitor	330p		445-181238-ND		\$0.22	\$0.152
C11	Ceramic Capacitor	0.1uF		445-173265-1-ND		\$0.18	\$0.102
C12	Ceramic Capacitor	0.1uF		445-173265-1-ND		\$0.18	\$0.102
C13	Ceramic Capacitor	0.1uF		445-173265-1-ND		\$0.18	\$0.102
C14	Ceramic Capacitor	0.1uF		445-173265-1-ND		\$0.18	\$0.102
C15	Ceramic Capacitor	0.1uF		445-173265-1-ND		\$0.18	\$0.102
C16	Ceramic Capacitor	0.1uF		445-173265-1-ND		\$0.18	\$0.102
C17	Ceramic Capacitor	0.1uF		445-173265-1-ND		\$0.18	\$0.102
C18	Ceramic Capacitor	0.1uF		445-173265-1-ND		\$0.18	\$0.102
C19	Ceramic Capacitor	0.1uF		445-173265-1-ND		\$0.18	\$0.102
C20*	Ceramic Capacitor	0.1uF		445-173265-1-ND		\$0.18	\$0.102
C21	Ceramic Capacitor	33uF		445-8338-ND		\$0.71	\$0.501
C22	Electrolytic Capacitor	1uF		493-5954-ND		\$0.24	\$0.167
C23*	Electrolytic Capacitor	1uF		493-5954-ND		\$0.24	\$0.167
C24	Electrolytic Capacitor	4.7uF		P974-ND		\$0.24	\$0.167
C25	Electrolytic Capacitor	4.7uF		P974-ND		\$0.24	\$0.167
C26	Electrolytic Capacitor	10uF		P19580CT-ND		\$0.22	\$0.153
C27	Electrolytic Capacitor	220uF		P829-ND		\$0.23	\$0.160
C28	Electrolytic Capacitor	220uF		P829-ND		\$0.23	\$0.160

Name	Description	Part I.D.	Package	Digikey Part #	Mouser Part #	Price	Qty Price
RA1	10k x 8 Bussed Resistor Array	10k	9 SIP	4609X-101-103LF-ND		\$0.56	\$0.432
RA2	10k x 8 Bussed Resistor Array	10k	9 SIP	4609X-101-103LF-ND		\$0.56	\$0.432
R1	1/4W Metal Film Resistor 1% Tolerance	100 ohm		100XBK-ND		\$0.08	\$0.056
R2	1/4W Metal Film Resistor 1% Tolerance	100 ohm		100XBK-ND		\$0.08	\$0.056
R3	1/4W Metal Film Resistor 1% Tolerance	100 ohm		100XBK-ND		\$0.08	\$0.056
R4	1/4W Metal Film Resistor 1% Tolerance	150 ohm		150XBK-ND		\$0.08	\$0.056
R5	1/4W Metal Film Resistor 1% Tolerance	220 ohm		215XBK-ND		\$0.08	\$0.056
R6	1/4W Metal Film Resistor 1% Tolerance	510 ohm		511XBK-ND		\$0.08	\$0.056
R7	1/4W Metal Film Resistor 1% Tolerance	1k		1.00KXBK-ND		\$0.08	\$0.056
R8	1/4W Metal Film Resistor 1% Tolerance	1.2k		1.21KXBK-ND		\$0.08	\$0.056
R9	1/4W Metal Film Resistor 1% Tolerance	3.9k		3.92KXBK-ND		\$0.08	\$0.056
R10	1/4W Metal Film Resistor 1% Tolerance	3.9k		3.92KXBK-ND		\$0.08	\$0.056
R11	1/4W Metal Film Resistor 1% Tolerance	10k		10.0KXBK-ND		\$0.08	\$0.056
R12	1/4W Metal Film Resistor 1% Tolerance	100k		100KXBK-ND		\$0.08	\$0.056
R13	1/4W Metal Film Resistor 1% Tolerance	100k		100KXBK-ND		\$0.08	\$0.056
R14	1/4W Metal Film Resistor 1% Tolerance	150k		150KXBK-ND		\$0.08	\$0.056
R15	1/4W Metal Film Resistor 1% Tolerance	220k		221KXBK-ND		\$0.08	\$0.056
R16	10k Potentiometer	10k		3306F-103-ND		\$0.43	\$0.400
R17	10k Potentiometer	10k		3306F-103-ND		\$0.43	\$0.400
R18	50k Potentiometer	50k		3306F-503-ND		\$0.43	\$0.400
R19*	100k Potentiometer	100k		3362P-104LF-ND		\$1.02	\$0.900
R20*	1/8W Carbon Resistor 5%	1k		CF18JT1K00CT-ND		\$0.05	\$0.036
R21*	1/8W Carbon Resistor 5%	1k		CF18JT1K00CT-ND		\$0.05	\$0.036
R22*	1/8W Carbon Resistor 5%	10k		CF18JT10K0CT-ND		\$0.05	\$0.036
R23*	1/8W Carbon Resistor 5%	10k		CF18JT10K0CT-ND		\$0.05	\$0.036
R24*	1/8W Carbon Resistor 5%	56k		CF18JT56K0CT-ND		\$0.05	\$0.036
R25*	1/8W Carbon Resistor 5%	100k		CF18JT100KCT-ND		\$0.05	\$0.036
R26*	1/8W Carbon Resistor 5%	100k		CF18JT100KCT-ND		\$0.05	\$0.036
R27*	1/4W 0805 SMT Resistor	150		RNCP0805FTD150RCT-ND		\$0.10	\$0.037
LED*	Blue SMT LED			732-4982-1-ND		\$0.18	\$0.172
						\$35.17	\$29.754
	RF Module Replacement PCB						
	5.5 x 2.1mm Power Input Jack			CP-202A-ND		\$0.60	\$0.558
	Yellow RCA Jack Right Angle			CP-1421-ND	806-KLPX-0848A-2YG	\$1.36	\$1.193
	White RCA Jack Right Angle			CP-1420-ND	806-KLPX-0848A-2WG	\$1.36	\$1.193
	Red RCA Jack Right Angle			CP-1419-ND	806-KLPX-0848A-2RG	\$1.36	\$1.193
	SPDT On-On Right Angle Slide Switch			EG1917-ND		\$0.60	\$0.578
	8p JST male connector 2mm pitch			455-2232-ND		\$0.37	\$0.354
REG	+5v Switching Regulator 1.5A (option)	OKI-78SR		811-2196-5-ND		\$4.30	\$4.230
	+5v Linear Regulator 5v			497-1443-5-ND		\$0.83	\$0.726
	Heatsink			HS230-ND		\$0.68	\$0.649
REL	DPDT 3A Relay 12v coil			PB384-ND		\$3.46	\$3.240
D3	2A Rectifier Diode			RL201-TPCT-ND		\$0.10	\$0.050
D4	2A Rectifier Diode			RL201-TPCT-ND		\$0.10	\$0.050
D5	2A Rectifier Diode			RL201-TPCT-ND		\$0.10	\$0.050
D6	2A Rectifier Diode			RL201-TPCT-ND		\$0.10	\$0.050
D2	1N4001 Diode	1N4001		1N4001GOS-ND		\$0.21	\$0.194
C35	Electrolytic Capacitor	2200uF		493-1086-ND		\$0.99	\$0.782
C33	Electrolytic Capacitor	100uF		P833-ND		\$0.23	\$0.160
C34	Electrolytic Capacitor	100uF		P833-ND		\$0.23	\$0.160
						\$16.98	\$15.410