

EECS PARTS LIST

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE. PARTS CONTINUE ON NEXT PAGE OF PRINTOUT. PRICES EFFECTIVE MARCH, 2012. AVAILABILITY OF STOCK OF PARTS IS NOT GUARANTEED BUT PARTS ARE USUALLY AVAILABLE UNLESS EXTREME DEMAND IS UNFORESEEN AND CAUSES SHORTAGE.

SMALL SIGNAL TRANSISTORS

<u>Part No.</u>	<u>Description</u>	<u>Cost</u>
2N2222A	(NPN)	\$0.50
2N3904	(NPN)	\$0.25
2N3906	(PNP)	\$0.25
2N4401	(NPN)	\$0.25
2N4403	(PNP)	\$0.25
2N5089	(NPN)	\$0.35
2N6028	(PROG. UNIUNCTION)	\$0.50
ALD1106	(NPN)	\$1.50
ALD1107	(PNP)	\$1.50
CA3096	(16 PIN MONO, 3 NPN, 2 PNP)	\$1.00
MPQ3904	(QUAD NPN ARRAY)	\$1.25
MPQ3906	(QUAD PNP ARRAY)	\$1.25
J271	(P JFET)	\$0.50
J309	(N JFET)	\$0.50
CA3146	(14 PIN MONO, 5 NPN)	\$1.00
MPS4126	(PNP) (DROP AT 0)	\$0.05
MPSH10	(NPN,RF)	\$0.25
MPSH81	(PNP,RF)	\$0.25
NPD5566	(DUAL,MONO, N-JFET)	\$2.50
MPF102	(FET, N-Ch., Lo-Noise Amp)	\$0.50

POWER TRANSISTORS

<u>Part No.</u>	<u>Description</u>	<u>Cost</u>
2N5875	(PNP, 150W, 4MHZ, 10A,60V)	\$1.25
2N6650	(PNP, 100W, 20MHZ, 10A, 80V, Darlington)	\$1.50
D40E5	(NPN, 8W, 230MHZ, 2A, 60V)	\$1.25
D41E5	(PNP, 8W, 175MHZ, 2A, 60V)	\$1.25
MJ4237	(PNP, 90W 75MHZ, 8A 120V)	\$1.75
MTP3055E	(NMOS, 60V, 12A, 40W)	\$1.00
2N7000	(NMOS, 60V, 0.2A, 0.4W)	\$0.45
VP1306	(PMOS, 60V, 0.5A, 3W)	\$0.50

MEMORY IC'S

<u>Part No.</u>	<u>Description</u>	<u>Cost</u>
NMC2732Q	(E-PROM, 32K,5V)	\$5.00

DIODES

<u>Part No.</u>	<u>Description</u>	<u>Cost</u>
1N34A	(60V, GERMANIUM)	\$0.30
1N4004	(1A,400V, RECTIFIER)	\$0.10
1N4148	(SM.SIG.DIODE)	\$0.10
1N5404	(3A,400V, RECTIFIER)	\$0.20
1N5817	(SCHOTTKY DIODE)	\$0.20
1N6263	(SCHOTTKY DIODE)	\$0.60
C106B1	(4A, 200V, SCR)	\$0.50

ZENER DIODES (SILICON, REFERENCE)

(ALL + OR - 5%, 1/2 WATT)

<u>Part No.</u>			<u>Cost</u>
1N5228B (3.9 V)	1N5235B (6.8 V)	1N5242B (12 V)	\$0.15
1N5229B (4.3 V)	1N5236B (7.5 V)	1N5243B (13 V)	
1N5230B (4.7 V)	1N5237B (8.2 V)	1N5244B (14 V)	
1N5231B (5.1 V)	1N5239B (9.1 V)	1N5245B (15 V)	
1N5232B (5.6 V)	1N5240B (10 V)	1N5250B (20 V)	
1N5234B (6.2 V)	1N5241B (11 V)	1N5252B (24 V)	

(+OR-5%, 1 WATT)

<u>Part No.</u>			<u>Cost</u>
1N4739A (9 V)	1N4742A (12 V)	1N4744A (15 V)	\$0.40
TL 431	ADJUSTABLE, PRECISION, ZENER DIODE,		\$0.50

CAPACITORS - CERAMIC DISK, 500VDC, 20% TOLERANCE (PF)

						<u>Cost</u>
1	10	47	270	1000	3900	\$0.20
2.2	12	68	300	1500	4700	
3.3	15	75	360	1800	5600	
4.7	18	82	470	2000	6800	
5.6	20	100	560	2200	7500	
6.8	25	120	680	2500	8200	
7.5	33	150	750	2700		
8.2	39	220	820	3000		

CAPACITORS - PLASTIC (+1-10% TOL), ALL 100V (uF)

					<u>Cost</u>
1					\$0.75
0.001	0.033	0.068	0.22	0.47	\$0.50
0.022	0.047	0.082	0.33		

CAPACITOR 0.1uF (+1-10%),X7R, CER. 50/100 VDC; FOR HI-FREQ BYPASS \$0.25

CAPACITOR 0.01uF (+1-10%),X7R, CER. 63DC; FOR HI-FREQ. BYPASS \$0.25

ELECTROLYTIC, ALUMINUM 25 VDC, - 50,-100% TOLERANCE

<u>Rating</u>	<u>Voltage</u>	<u>Cost</u>
4.7 uF	25 V	\$0.25
10 uF	35 V	\$0.25
22 uF	35 V	\$0.25
47 uF	35 V	\$0.25
100 uF	35 V	\$0.30
220 uF	50 V	\$0.40
470 uF	35 V	\$0.50
1000 uF	35 V	\$0.75
2200 uF	35 V	\$1.00

VARIABLE CAPACITORS

<u>Rating</u>	<u>Cost</u>
5 TO 50 PF (TYPE 462)	\$0.90
5 TO 100 PF (50V)	\$0.50
75 TO 380 PF	\$2.25

SEE BULLETIN BOARD FOR LISTING OF RESISTOR VALUES EXCEPT FOR VALUES OF VARIABLE RESISTORS WHICH ARE LISTED BELOW. ALL NORMAL 5%, 1/4 WATT, CARBON-FILM VALUES ARE STOCKED FROM 10-OHMS TO 1 MEGOHMS. SELECTED VALUES OF 5% 1/4 WATT, CARBON-COMPOSITION VALUES ARE AVAILABLE FROM 1.5 MEGOHMS TO 20 MEGOHMS. SELECTED VALUES OF 10%, 1/2 WATT, CARBON VALUES ARE STOCKED FROM 2.7 OHMS TO 50 MEGOHMS.

RESISTANCE VALUES

<u>Description</u>	<u>Cost</u>
10.0 TO 20M, 1/4 WATT	\$0.05
1.0 TO 15M, 1/2 WATT	\$0.05
1.0 TO 15M, 1 WATT	\$0.15
0.47 TO 1.0, 2 WATT(metal oxide film)(+/- 5%)	\$0.20
1.0 TO 15M, 2 WATT	\$0.20
1% TOLERANCE RESISTORS, METALFILM (FROM 10 OHM TO 1 MEG)	\$0.20

VARIABLE RESISTORS

<u>Description</u>	<u>Cost</u>
1-TURN, 1/4 WATT	
100, 200, 500, 1K, 2K, 5K, 10K, 20K, 500K	\$0.30
15-TURN, 3/4 WATT (TRIM POT)	
100, 500, 1K, 5K, 10K, 50K, 100K, 500K	\$1.50

INDUCTORS

<u>Part No.</u>	<u>Description</u>	<u>Cost</u>
104J	100mH	\$1.00
43LH210	1mH	\$1.00

CRYSTAL

<u>Part No.</u>	<u>Description</u>	<u>Cost</u>
SE3333	100.000KHz Crystal	\$1.50

SOCKETS

<u>Part No.</u>	<u>Description</u>	<u>Cost</u>
TO-3	POWER TRANSISTOR SOCKET	\$0.75
3 PIN	TRANSISTOR SOCKET	\$0.40
PCV340	LED SOCKET VER.	\$0.35
PCH330	LED SOCKET HOR.	\$0.35
IC 8S	8 PIN DIP SOLDER TAB	\$0.25
IC 8W	8 PIN DIP WIRE WRAP	\$1.00
IC 14S	14 PIN DIP SOLDER TAB	\$0.50
IC 14W	14 PIN DIP WIRE WRAP	\$0.25
IC 16S	16 PIN DIP SOLDER TAB	\$0.25
IC 16W	16 PIN DIP WIRE WRAP	\$0.75
IC 18S	18 PIN DIP SOLDER TAB	\$0.50
IC 20W	20 PIN DIP WIRE WRAP	\$0.75
IC 24S	24 PIN DIP SOLDER TAB	\$0.30
IC 40S	40 PIN DIP SOLDER TAB	\$0.75

HEAT SINKS AND FITTINGS

<u>Description</u>	<u>Cost</u>
CLIP-ON, 6020A, FOR DIP'S (38 DEG C/W)	\$0.25
CLIP-ON, FOR TO-92, 6024U (58 DEG C/W)	\$0.10
TO-3 HEAT SINK (TYPE 606)	\$0.50
TO-3 HEAT SINK (TYPE 686) 1"	\$0.90
TO-3 HEAT SINK (1.5 DEG C/W)	\$5.00
THERMAL JOINT COMPOUND	12.90
MYLAR, TO-3 INSULATOR	\$0.05

WIRE & CABLE

<u>Description</u>	<u>Cost</u>
WIRE (22 SOLID, MULTIPLE COLORS)	\$0.05/FT
WIRE (10 GAUGE STRANDED BLK.)	\$0.15/FT
MAGNET WIRE (18, 22, 26 GAUGES AVAILIABLE)	\$0.05/FT

INTEGRATED CIRCUITS-DIGITAL (POSITIVE LOGIC)

(TTL=0.50, CMOS=0.25 UNLESS NOTED)	<u>TTL</u>	<u>CMOS</u>
QUAD - 2 IN NAND	7400, 74F00, 74HC00N, 74LS00	
QUAD - 2 IN NOR	74LS02	4001
QUAD - 2 IN NAND W/0 COLL	74LS03, 7403	
HEX INVERTER – DRIVER	74LS04	74HC04 (\$0.50)
HEX INV W/0 COLL.	74LS05	
QUAD - 2 IN AND	74LS08	
TRIPLE 3 IN NAND	74F10, 74LS10	4023
HEX SCHMITT TRIGGER INV	74LS14	
DUAL 4 IN NAND GATE	7420, 74LS20	4012
DUAL 4 IN NOR	7425 (\$0.85)	4002
TRIPLE 3 IN NOR	74LS27, 7427	4025
QUAD 2-INPUT OR GATE	74LS32	
BCD TO SEGMENT DECODER/DRIVER	74LS48 (\$1.25)	4511 (\$0.75)
DUAL 2 IN AND - OR - INV GATE	7450	
DUAL 2 IN AND - OR - INV GATE	74LS51	4019
3-2-2-3 INPUT AND/OR INVERT GATE	74LS54 (\$0.50)	
DUAL DTYPE FF	74F74, 74LS74	4013 (\$0.30)
QUAD. BISTABLE D LATCH	7475 (\$0.75)	
DUAL JK FF	74LS76	4027
4-BIT BINARY FULL ADDER	74LS83 (\$0.75)	
QUAD EXCL. OR	74LS86	4030
DECADE COUNTER	74LS90	
4 BIT BINARY COUNTER	7493	
RETRIG. MONOSTABLE MULTI.	74122 (\$1.50)	
DUAL, RE-TRIG RESET MONO	74LS123 (\$0.75)	4528 (\$0.50)
8-INPUT MUX	74LS151 (\$0.75)	
DUAL 2 TO 4 LINE DECODER	74LS155	
QUAD 2 TO 1 LINE SELECTOR/ MULTIPLEXER	74LS157	
HEX D FLIP FLOP	74F174, 74LS174	
QUAD D FLIP FLOP	74LS175	
MULTIPLEXER	74LS251	
DUAL, COMP. PAIR + INV.		4007 (\$0.35)
BCD TO DECIMAL/HEXADECIMAL DECODER		4028 (\$0.50)
12 STAGE COUNTER		4040 (\$0.75)
8 INPUT MULTI-FUNC. GATE		4048 (\$0.50)
QUAD. BILATERAL SWITCH		4066 (\$0.50)

TEST LEADS & SCOPE PROBES

<u>Description</u>	<u>Cost</u>
10PK ALLIGATOR CLIP-CLIP	\$5.00
MULTI-METER LEADS	\$3.00
SCOPE PROBE KIT (BNC TO CLIPS)	\$3.50
BNC EXTENSION CABLE 3'	\$5.00

POWER CORDS

<u>Description</u>	<u>Cost</u>
AC LINE CORD-GROUND & PLUG 6 FT. 3 CON.	\$3.00
AC LINE CORD-WITH PLUG, 6 FT. 2 CONDUCTOR	\$1.00

SWITCHES AND RELAYS

<u>Description</u>	<u>Cost</u>
MINI-DIP SWITCHES FROM 2 TO 4 ALL	\$0.75
5 PIN DIP	\$0.85
6 PIN DIP	\$0.90
SPST MINI DIP 8 SWITCHES	\$2.00
SPST, PC SLIDE SWITCH	\$0.25
DPDT, 0.5A, 125V	\$0.60
THUMB WHEEL SWITCH	\$1.00
REED RELAY 171DIP-2	\$3.50

LAMPS & LED'S

<u>Part No.</u>	<u>Description</u>	<u>Cost</u>
	LAMP, T1-3/4, RED, YELLOW, GREEN (REG. LED)	\$0.20
	LED GR/OR T1-3/4	\$0.75
LDS-C514RI	.60" HIGH, 7 SEGMENT LED, COM.CATHODE	\$1.75
FCD830	OPTOISOLATOR	\$1.00
MRD 701	OPTO-TRANSISTOR	\$0.55
	LED MOUNTING RING	\$0.05
NE-2	LAMP	\$0.15
MLED 71	LED	\$0.50
LN166	INFRARED EMITTER T1-3/4	\$1.00
160-1032	PHOTODIODE (BLACK PLASTIC)	\$0.75

HARDWARE

<u>Description</u>	<u>Cost</u>
SOLDER WICK	\$5.50
DB 25 MALE-FEMALE SOCKET	\$1.25
RS-232 HOOD CONN. COVERS	\$1.00
BINDING POST, 5 WAY (RED OR BLACK)	\$1.10
FUSE BLOCK FOR 3 AG FUSE	\$0.60
FUSE HOLDER, PANEL MOUNT FOR 3 AG FUSE	\$1.55
FUSE HOLDER, IN-LINE	\$1.00
BATTERY CLIP, HOLDS 2AA CELLS	\$0.25
BANANA JACK (RED, YELLOW, BLK & WHITE)	\$0.25
PROJECT BOX (7.5"x4.3"x2.2") PLASTIC	\$3.25
BNC PLUG	\$1.75
BNC PANNEL CONNECTOR	\$1.25
SCREW & NUT	\$0.05
SOLDER (1 YD) #22	\$0.15
SOLDER (ROLL)	\$10.00
PUSH-IN TERMINAL TOOL	\$0.75
STAND-OFF (PLASTIC, SCREW TYPE)	\$0.25
STAND-OFF (PLASTIC, CLIP TYPE)	\$0.05
9 VOLT BATTERY CLIP	\$0.25
ALLIGATOR CLIP	\$0.25
ALLIGATOR CLIP INSULATOR	\$0.15
BANANA PLUG	\$1.15
HEATSHRINK TUBING 1/4"--1/8"	\$3.25
ELECTRICAL TAPE	\$3.00
WIRE TIES (8")	\$0.05
SPEAKER (8 OHM, 0.5W)	\$2.00

TRANSFORMERS

<u>Part No.</u>	<u>Description</u>	<u>Cost</u>
LP-433	Universal, Center Taps, 110/220V, 9-0-9V, 1A	\$3.10
P-8677	115 V TO 12V/24 V, RMS, C.T., 4A	\$20.00
PC-34-125	115 V TO 17 V, RMS, DUAL SEC. 0.11A	\$7.50
PC-34-35	115V TO 34V .035A	\$4.75
EL-40-110A26	115V to 20V/40V 4.4VA	\$5.50
42TU013-RC	Signal XFMR EI-24 1KCT-PCT	\$3.00

MAGNETIC TORROID CORES

<u>Part No.</u>	<u>Description</u>	<u>Cost</u>
T 50-2	OD = .500 in, ID = .303 in, Ht = .190 in, .25 MHz - 10 MHz	\$0.85
T 50-6	OD = .500 in, ID = .303 in, Ht = .190 in, 3 MHz - 40 MHz	\$0.85
T 68-2	OD = .690 in, ID = .370 in, Ht = .190 in, .25 MHz - 10 MHz	\$1.10
T 80-2	OD = .795 in, ID = .495 in, Ht = .250 in, .25 MHz - 10 MHz	\$1.50

METERS

<u>Part No.</u>	<u>Description</u>	<u>Cost</u>
DM 2	BECKMAN METER (NO WARRANTY)	\$5.00

BATTERIES

<u>Part No.</u>	<u>Description</u>	<u>Cost</u>
AAA	AAA ALKALINE BATTERY	\$0.70
AA	AA ALKALINE BATTERY	\$0.70
9 V	9 V ALKALINE BATTERY	\$1.90
D / C	D OR C CELL ALKALINE BATTERY	\$1.10

CIRCUIT BOARDS

<u>Description</u>	<u>Cost</u>
CIRCUIT VECTOR BOARD, "G" PATTERN	\$0.50 / in
CIRCUIT VECTOR BOARD, "H" PATTERN	\$7.00
SINGLE-SIDE 1 OZ. COPPER 7" X 10" G 10 EPOXY	\$6.50
DOUBLE-SIDE 1 OZ. COPPER 7" X 10"	\$8.00
DOUBLE-SIDE 2 OZ. COPPER 7" X 10"	\$9.00
PUSH-IN TERMINALS FOR VECTOR BOARD (2)	\$0.05
SINGLE BREADBOARD	\$5.00
DOUBLE BREADBOARD	\$17.50
BREADBOARD WIRE KIT (70PC)	\$3.00
300 LAB KIT	\$55.25

INTEGRATED CIRCUITS-LINEAR

<u>Part No.</u>	<u>Description</u>	<u>Cost</u>
LM723	(14 PIN POS. REGULATOR)	\$0.25
LM317T	(3-TERM. ADJ. POS. VOLTAGE REGULATOR, I(MAX)=1.5A)	\$1.00
LM337T	(3-TERM. ADJ. NEG.VOLTAGE REGULATOR, I(MAX)=1.5A)	\$1.00

OPERATIONAL AMPLIFIERS

<u>Part No.</u>	<u>Description</u>	<u>Cost</u>
741	(BIPOLAR, 1MHz GB, 0.5V/USEC)	\$0.50
34072	(DUAL 34071 BIPOLAR, 4.5MHz GB, 13V/USEC, GND SENSING)	\$1.00
34081	(JFET, 8MHz GB, 25V/USEC)	\$1.30
OP-27	(BIPOLAR, PRECISION,8MHZ GB,2.8V/USEC, LOW NOISE)	\$2.75
CA3080E	(OPER. TRANS. AMP.)	\$0.80
AD811AN	(BIPOLAR, CURRENT FB, 110MHz GB)	\$5.75

OTHER FUNCTIONS

<u>Part No.</u>	<u>Description</u>	<u>Cost</u>
393	(BIPOLAR, DUAL, COMPARATOR)	\$0.50
329BZ	(6.9V, 15PPM/DEG C MAX, PRECISION REFERENCE)	\$1.50
331N	(PRECISION, V-F CONVERTER, CHEAP 8-BIT A/D CONV.)	\$6.55
TLC555	(CMOS, TIMER)	\$0.50
565	(PHASE-LOCKED LOOP)(drop at 0)	\$1.00
RL2604-582- 97-D1	NTC THERMISTER	\$1.25

METAL-OXIDE-VARISTOR(MOV)

<u>Part No.</u>	<u>Description</u>	<u>Cost</u>
ZNR7K201U	130V RMS, 200V 500A PEAK	\$0.75
ZNR14K201U	130V RMS, 200V 4500A PEAK	\$1.50
39Z1GEE4	25V RMS, 250A PEAK	\$0.75