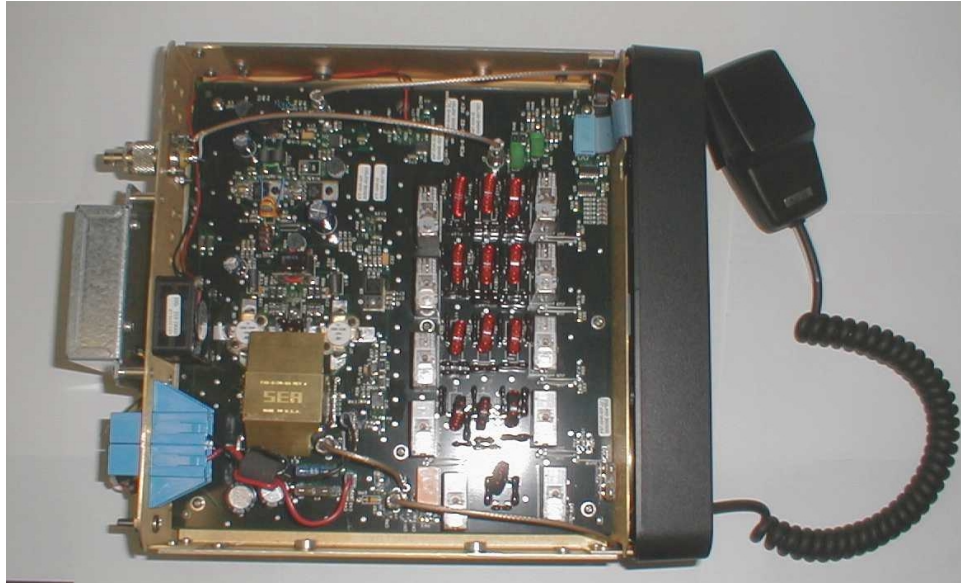




**SEA 245 FRONT VIEW**



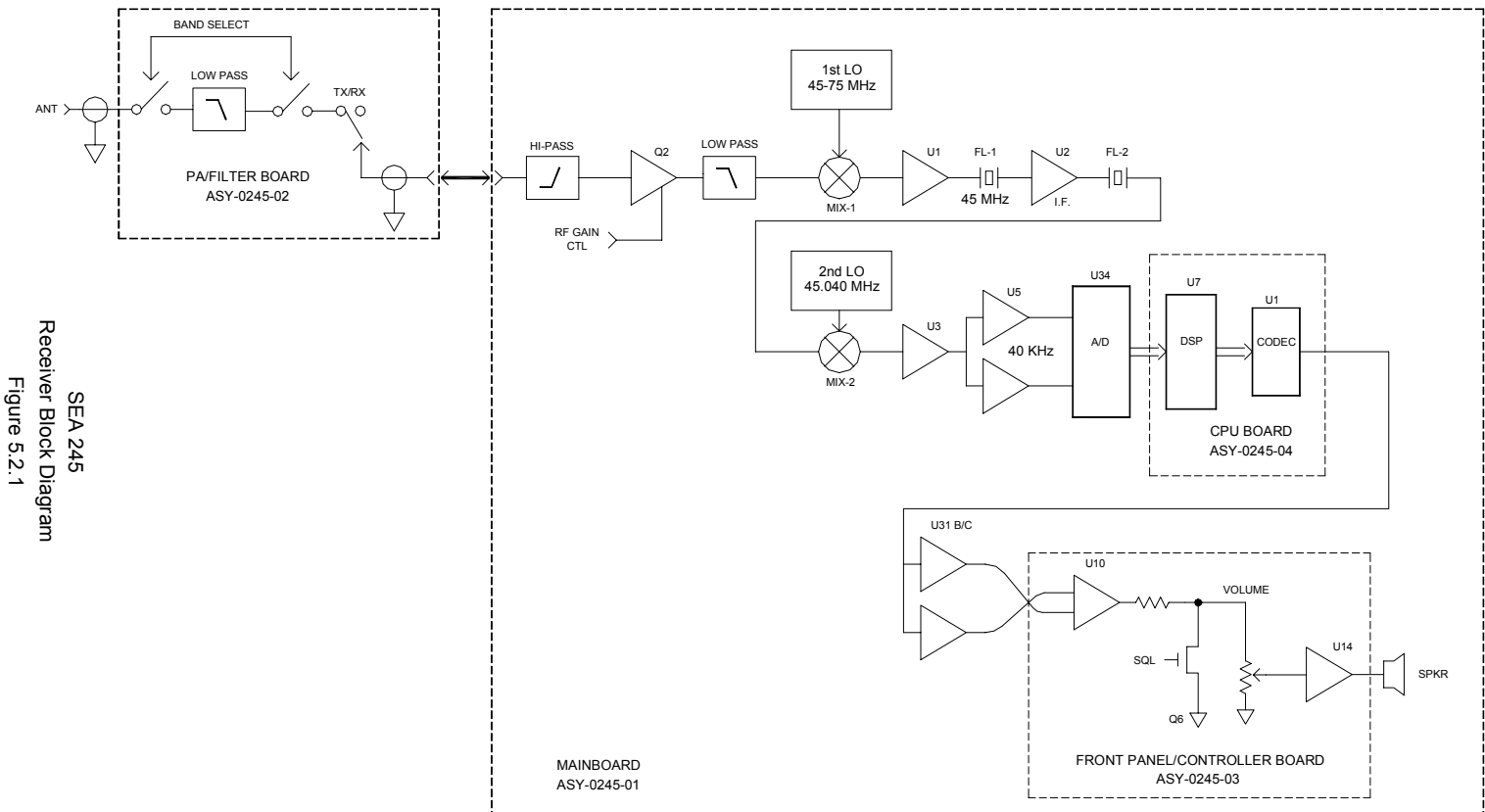
**SEA 245 REAR VIEW**



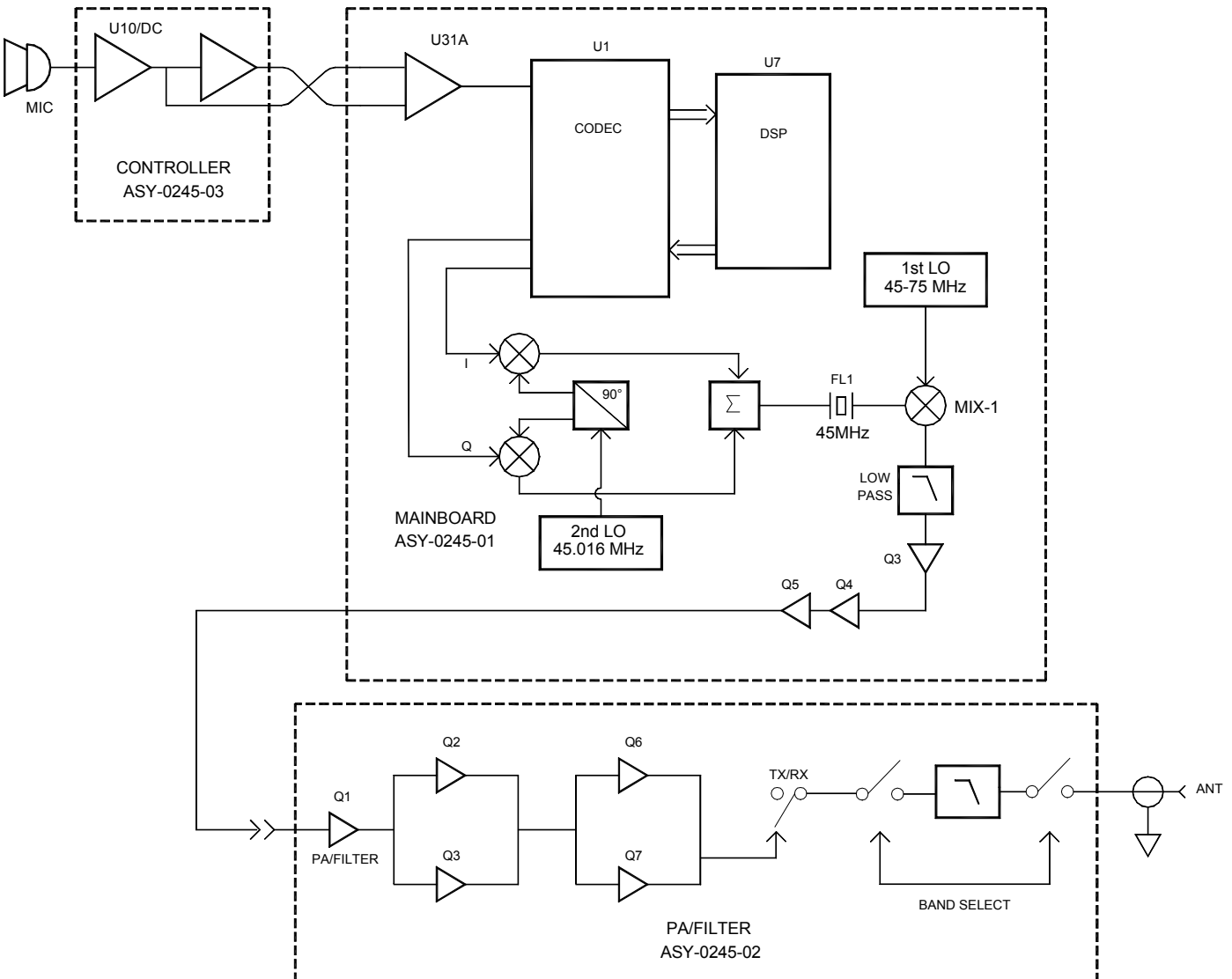
**SEA 245 INTERNAL TOP VIEW**



**SEA 245 INTERNAL BOTTOM VIEW**

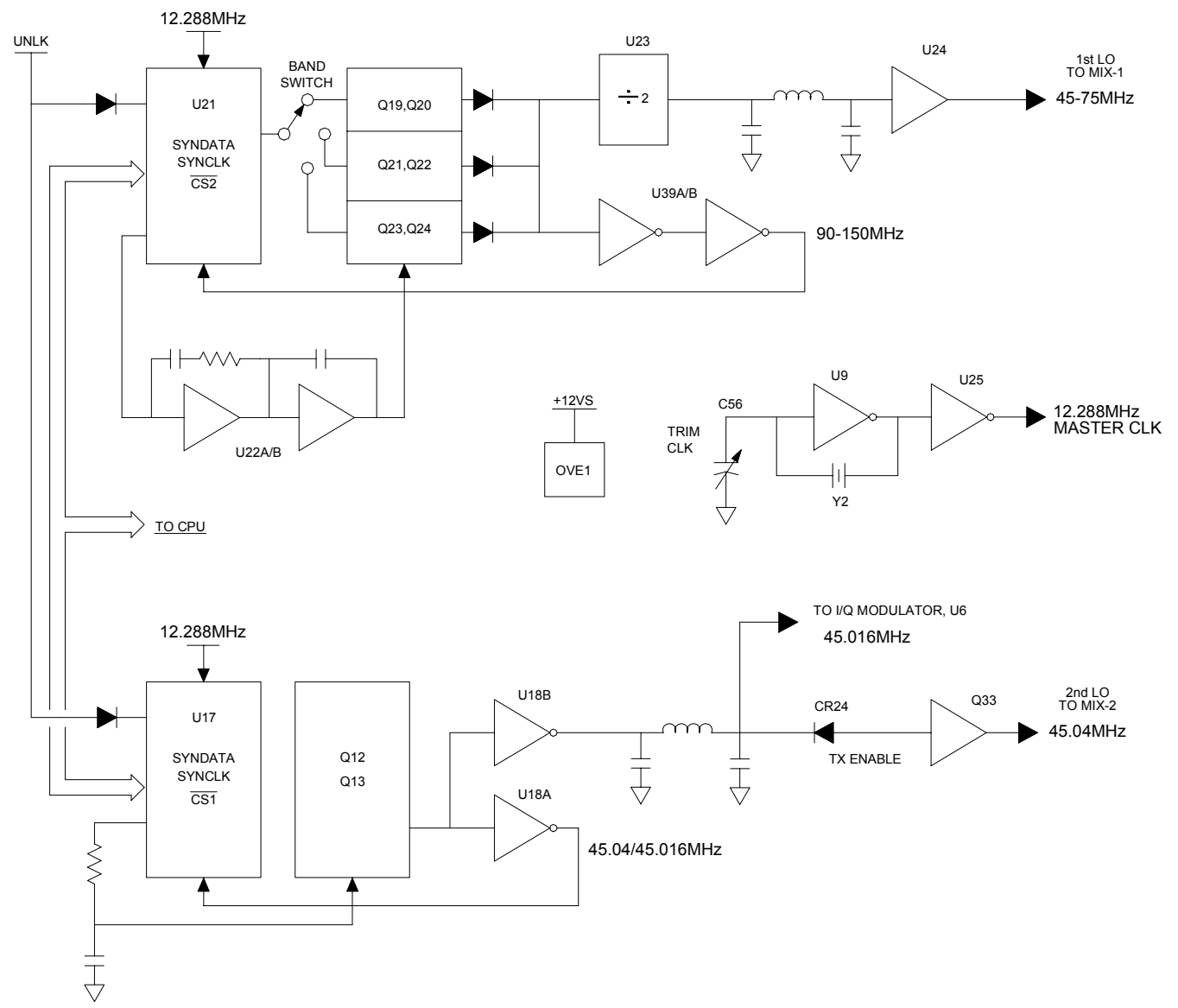


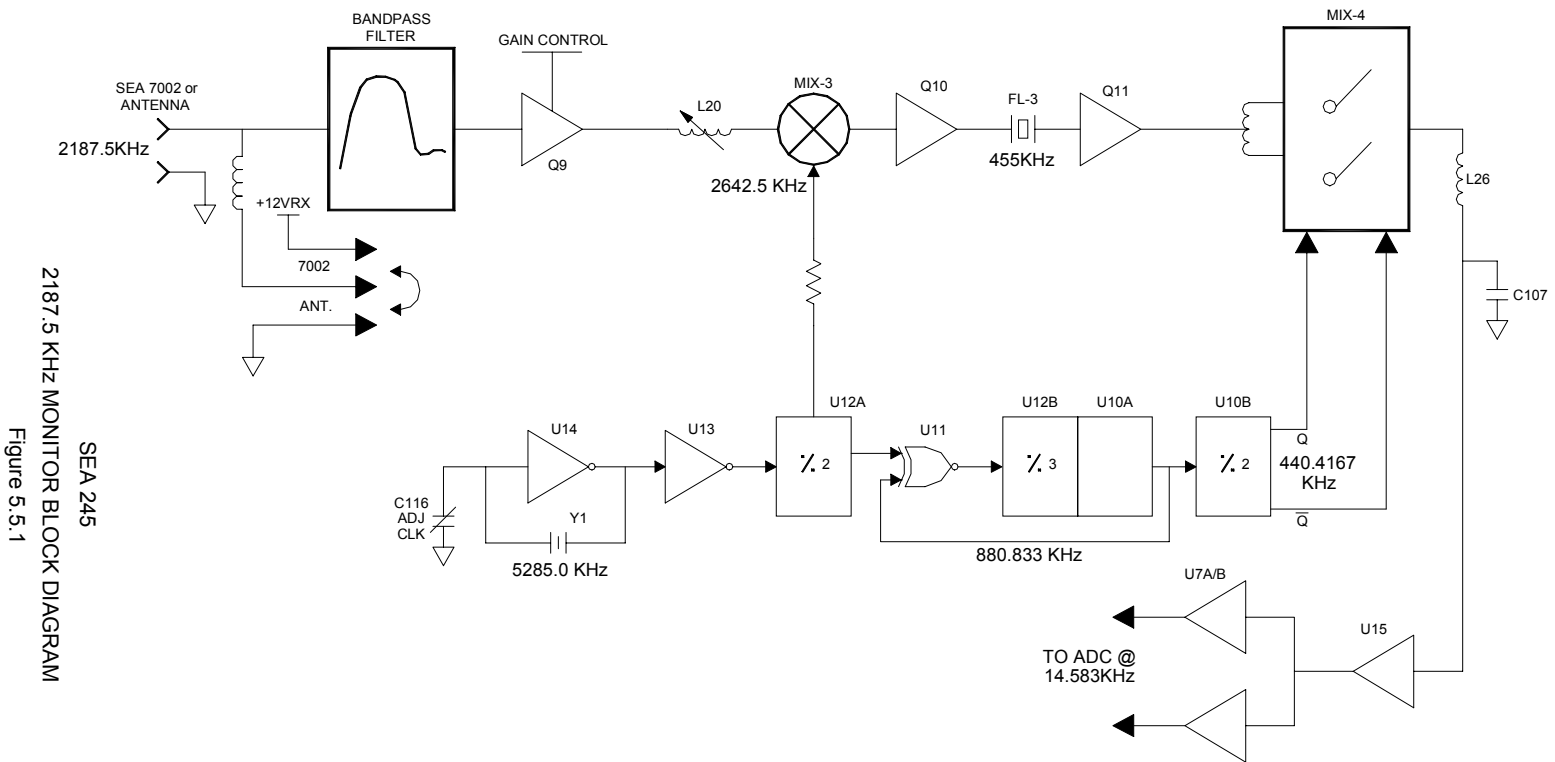
SEA 245  
Receiver Block Diagram  
Figure 5.2.1



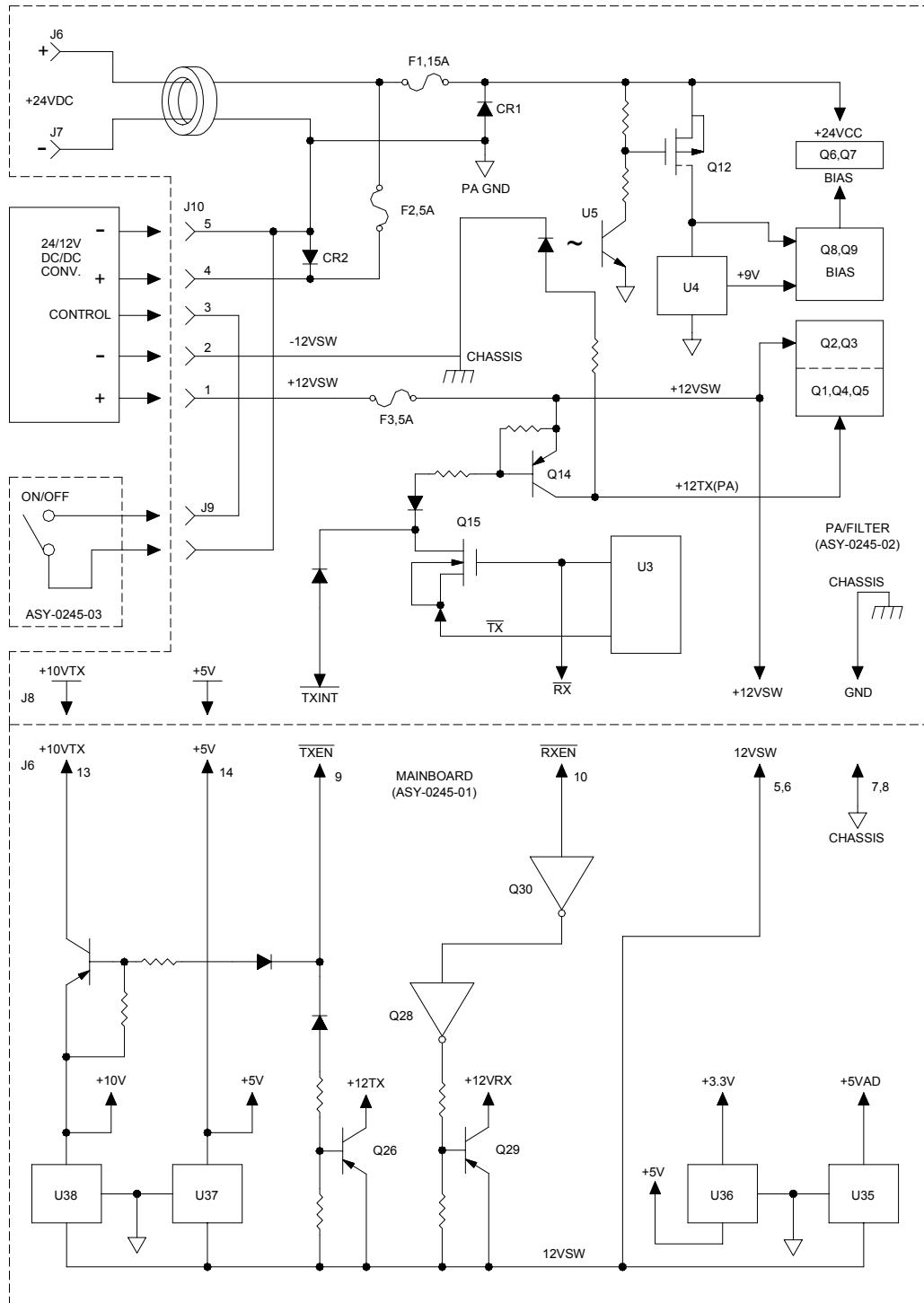
SEA 245  
Transmitter Block Diagram  
Figure 5.3.1

SEA 245  
Synthesizer Block Diagram  
Figure 5.4.1



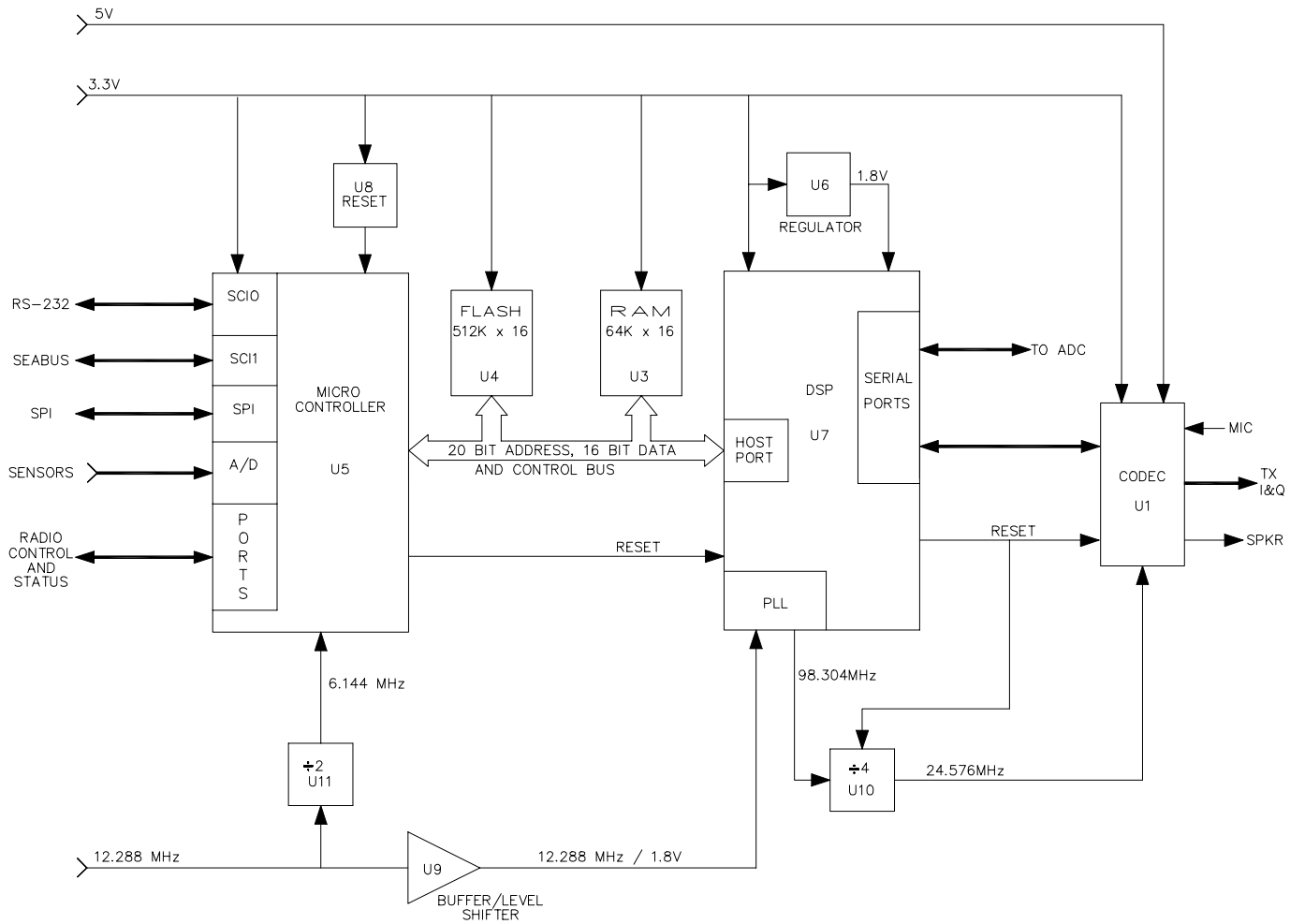


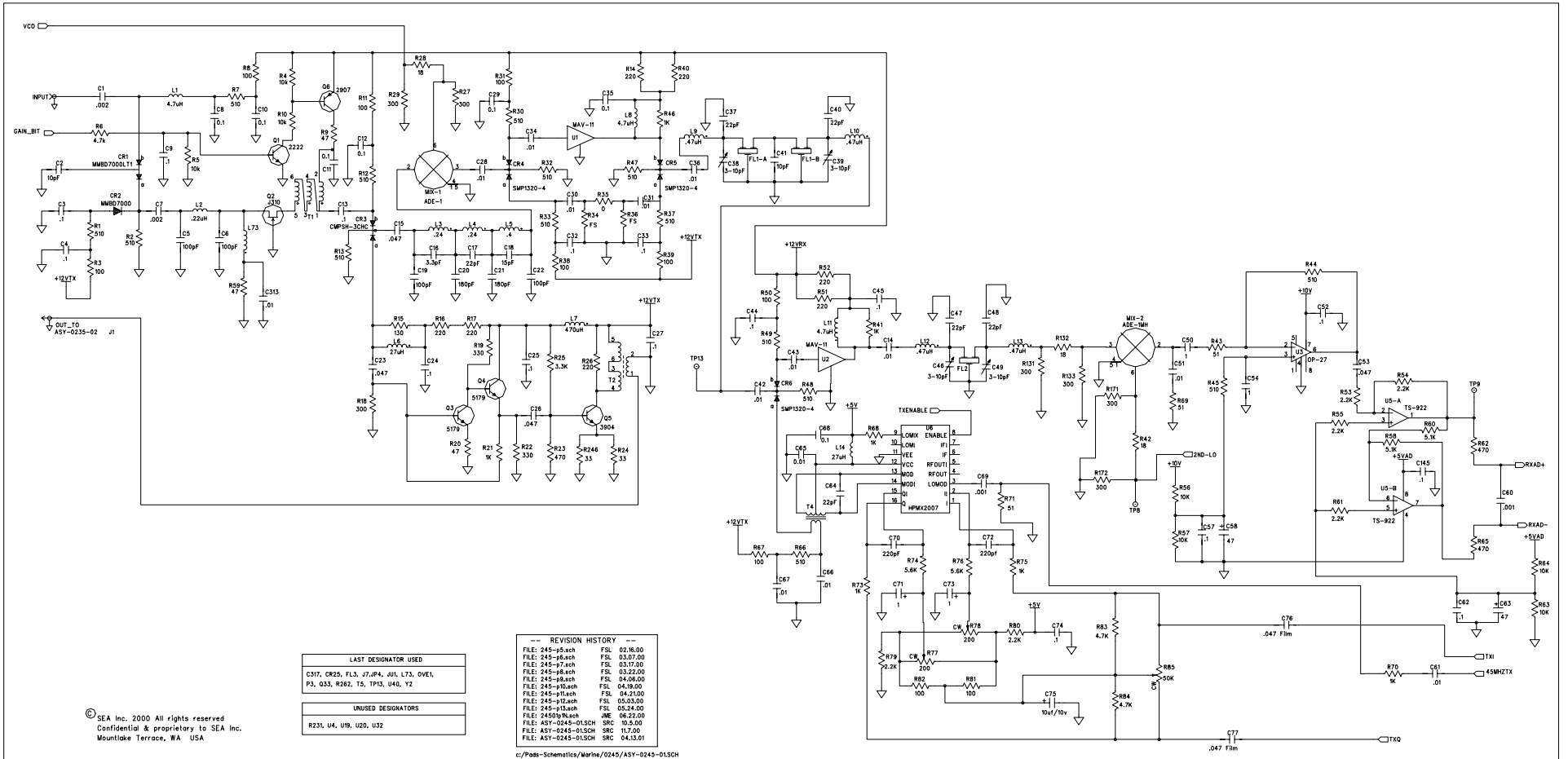
U7A/B  
U15  
TO ADC @  
14.583KHz



SEA 245  
Power Distribution Block Diagram  
Figure 5.6.1

SEA 245 Processor Assembly  
Block Diagram  
Figure 5.7.1





LAST DESIGNATOR USED	
C317, CR29, FL3, J7, JPA, JU1, L73, OV1L, P3, Q33, R282, TS, TP13, U40, Y2	
UNUSED DESIGNATORS	
R231, U4, U9, U20, U32	

--- REVISION HISTORY ---			
FILE: 245-p5.sch	FSL	02.16.00	
FILE: 245-p6.sch	FSL	03.07.00	
FILE: 245-p7.sch	FSL	03.17.00	
FILE: 245-p8.sch	FSL	03.22.00	
FILE: 245-p9.sch	FSL	04.06.00	
FILE: 245-p10.sch	FSL	04.09.00	
FILE: 245-p11.sch	FSL	04.21.00	
FILE: 245-p12.sch	FSL	05.03.00	
FILE: 245-p13.sch	FSL	05.24.00	
FILE: 245019N.sch	ME	06.22.00	
FILE: ASY-0245-01SCH	SRG	10.30.00	
FILE: ASY-0245-01SCH	SRG	11.27.00	
FILE: ASY-0245-01SCH	SRG	04.13.01	

c:/Pads-Schematics/Marine/0245/ASY-0245-01SCH

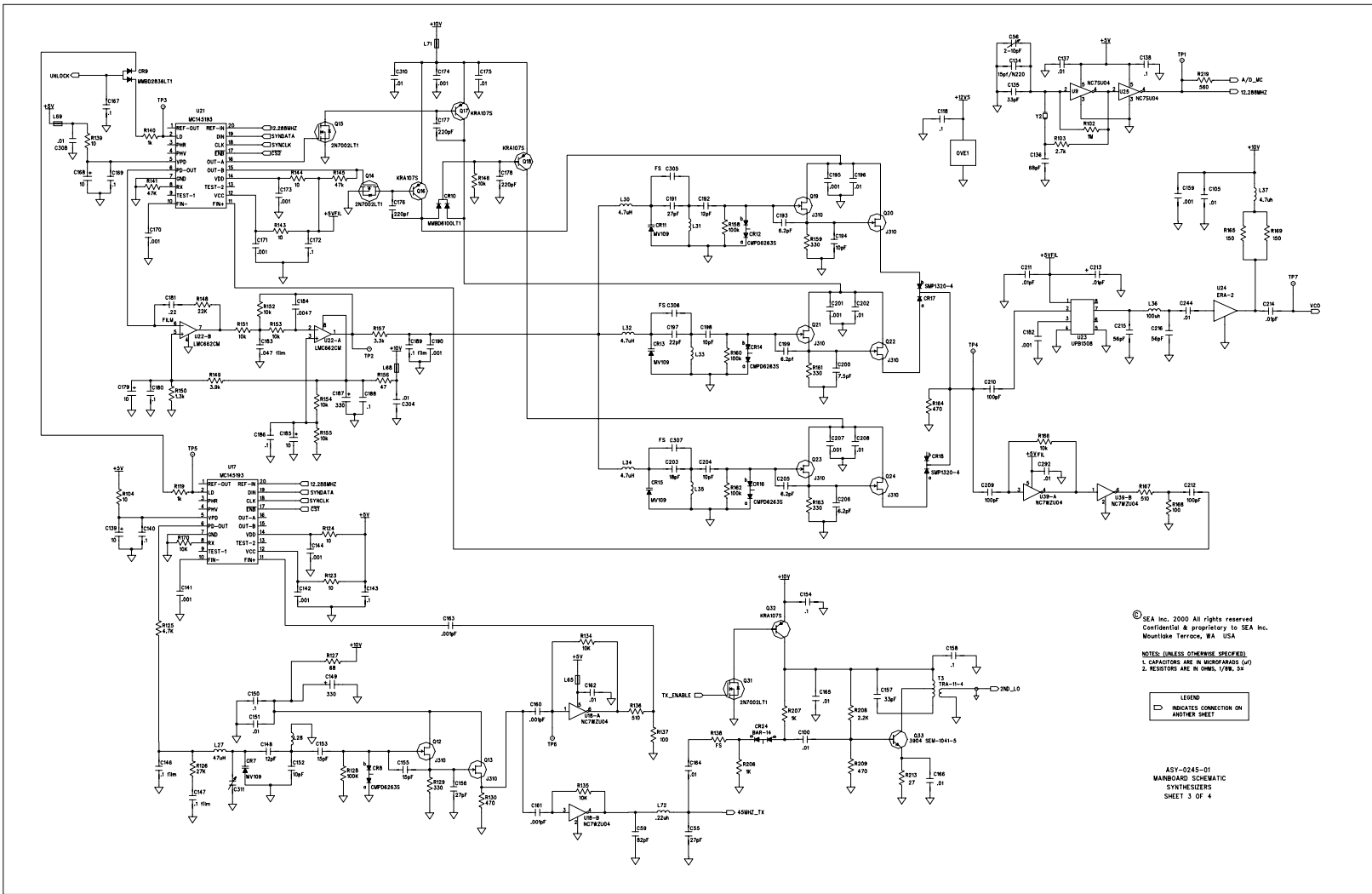
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Mountlake Terrace, WA USA

NOTES: (UNLESS OTHERWISE SPECIFIED)  
1. CAPACITORS ARE IN MICROFARADS (uF)  
2. RESISTORS ARE IN OHMS, /WK, 5%

LEGEND  
◻ INDICATES CONNECTION TO ANOTHER SHEET

ASY-0245-01  
MAINBOARD SCHEMATIC  
MAIN RECEIVER / TRANSMITTER  
SHEET 1 OF 4



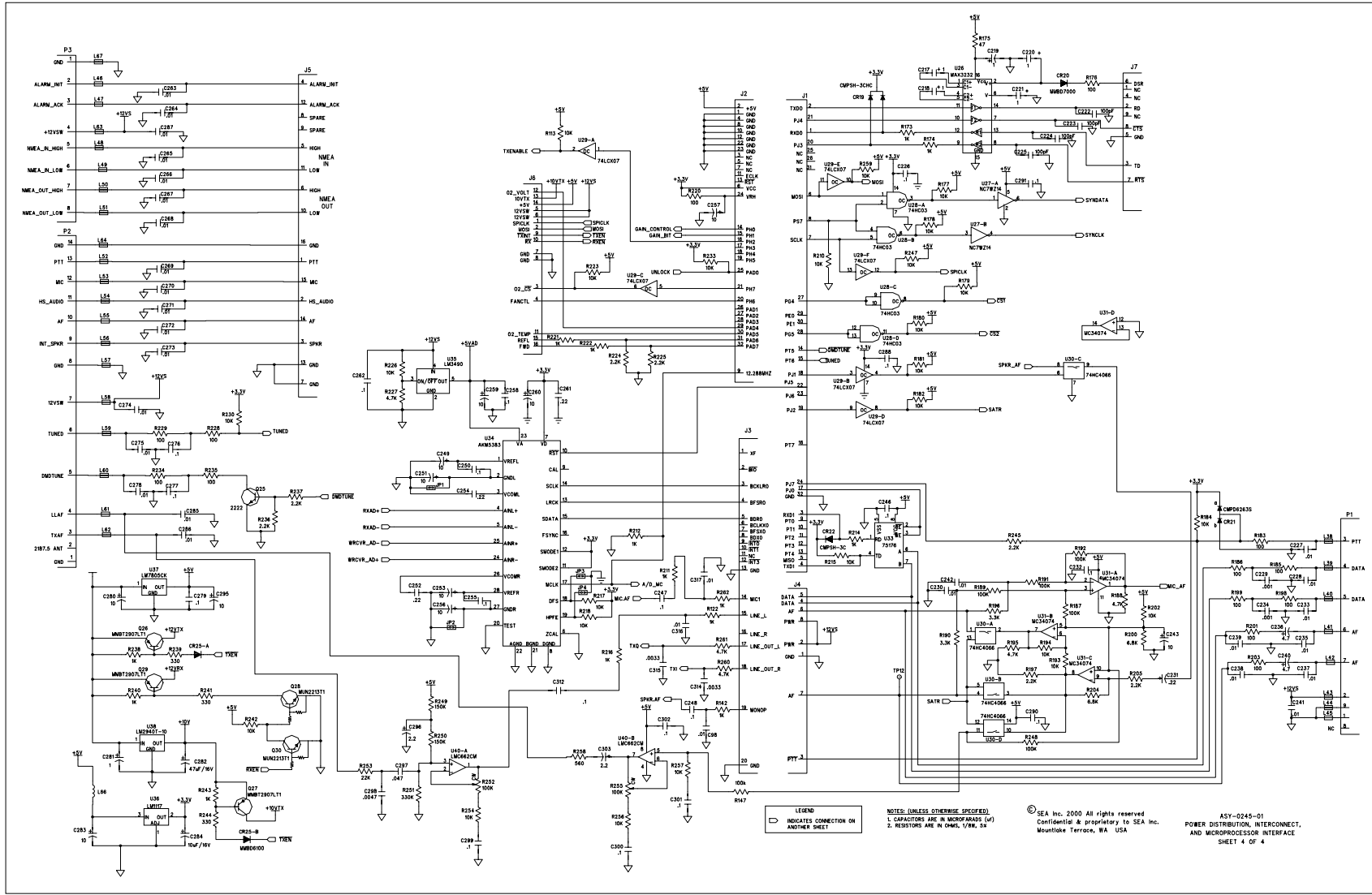


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NOTES (UNLESS OTHERWISE SPECIFIED)  
 1. CAPACITORS ARE IN MICROFARADS (µF)  
 2. RESISTORS ARE IN OHMS, 1/100, 5%

LEGEND  
 □ INDICATES CONNECTION ON ANOTHER SHEET

ASY-0245-01  
 MAINBOARD SCHEMATIC  
 SYNTHESIZERS  
 SHEET 3 OF 4



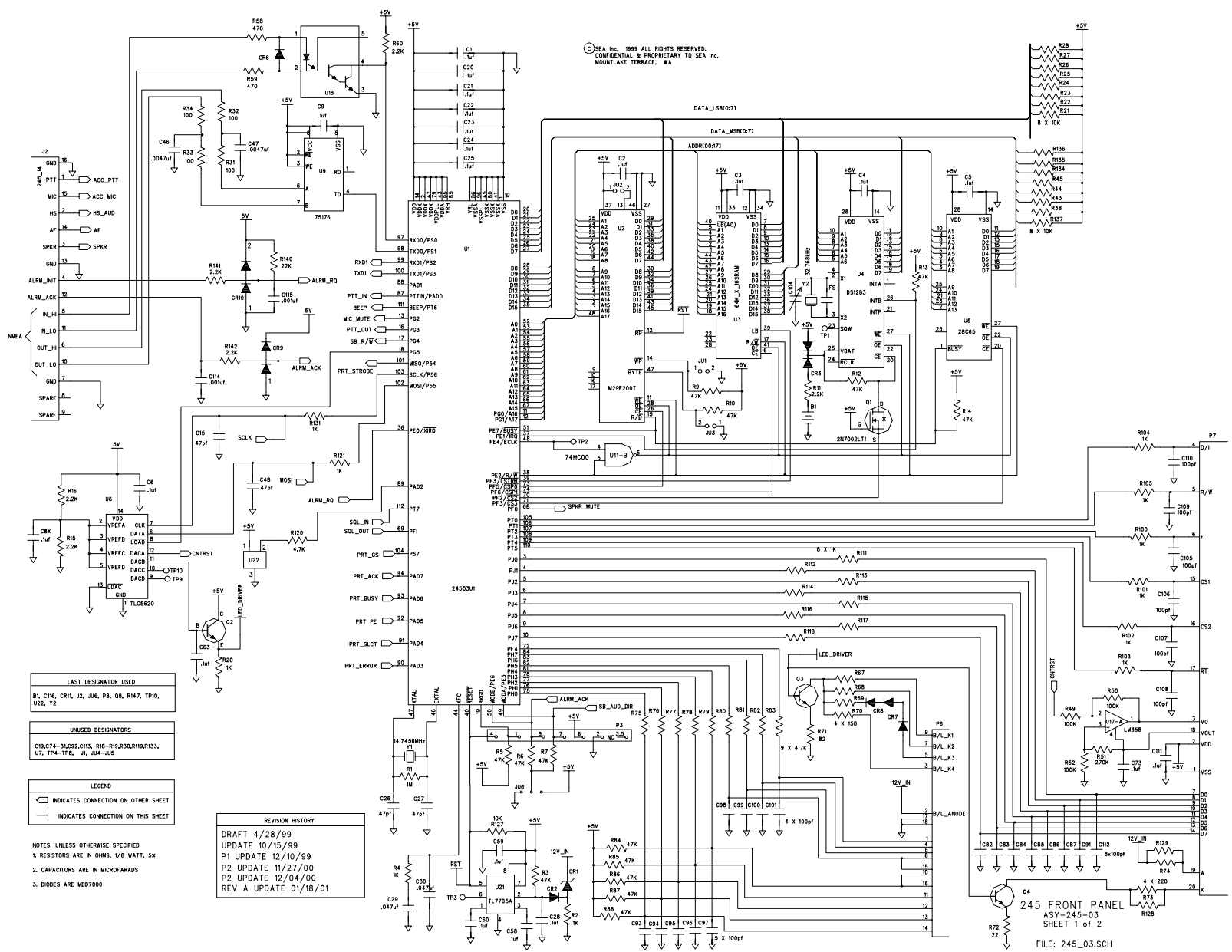
LEGEND  
 □ INDICATES CONNECTION ON ANOTHER SHEET

NOTES (UNLESS OTHERWISE SPECIFIED)  
 1. CAPACITORS ARE IN MICROFARADS (µF)  
 2. RESISTORS ARE IN OHMS, 1/8W, 5%

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POWER DISTRIBUTION, INTERCONNECT,  
 AND MICROPROCESSOR INTERFACE  
 SHEET 4 OF 4

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 MOUNTLAKE TERRACE, WA



LAST DESIGNER USED  
 B1, C16, CR11, J2, JU6, P8, G8, R147, TP10, U22, Y2

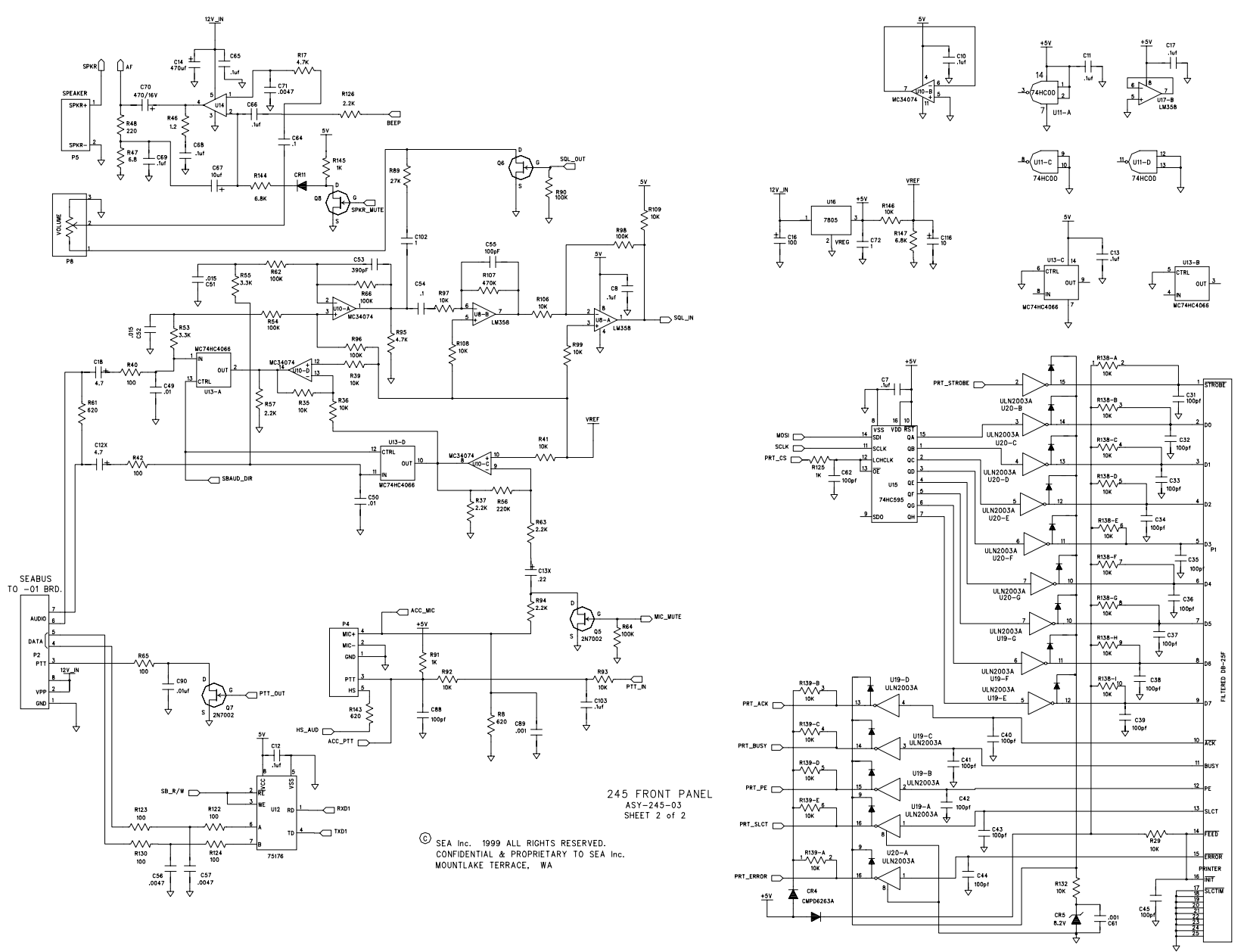
UNUSED DESIGNATORS  
 C18, C74-B, C92, C115, R18-R19, R30, R119, R133, U7, TP4-TP6, G1, J84-J85

LEGEND  
 ○ INDICATES CONNECTION ON OTHER SHEET  
 | INDICATES CONNECTION ON THIS SHEET

NOTES: UNLESS OTHERWISE SPECIFIED  
 1. RESISTORS ARE IN OHMS, 1/8 WATT, 5X  
 2. CAPACITORS ARE IN MICROFARADS  
 3. DIODES ARE MBD7000

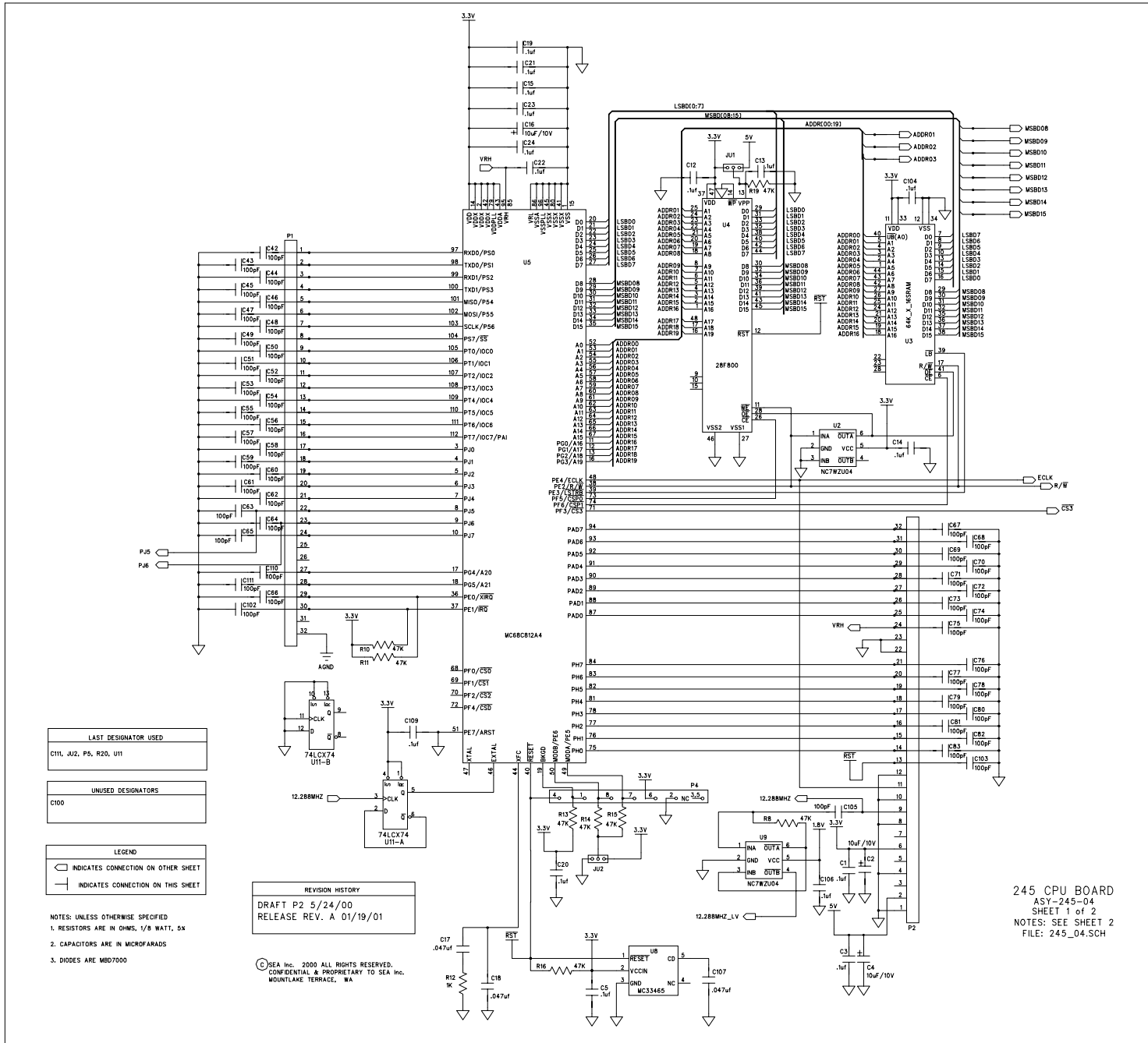
REVISION HISTORY  
 DRAFT 4/28/99  
 UPDATE 10/15/99  
 P1 UPDATE 12/10/99  
 P2 UPDATE 11/27/00  
 P2 UPDATE 12/04/00  
 REV A UPDATE 01/18/01

245 FRONT PANEL  
 ASY-245-03  
 SHEET 1 of 2  
 FILE: 245\_03.SCH

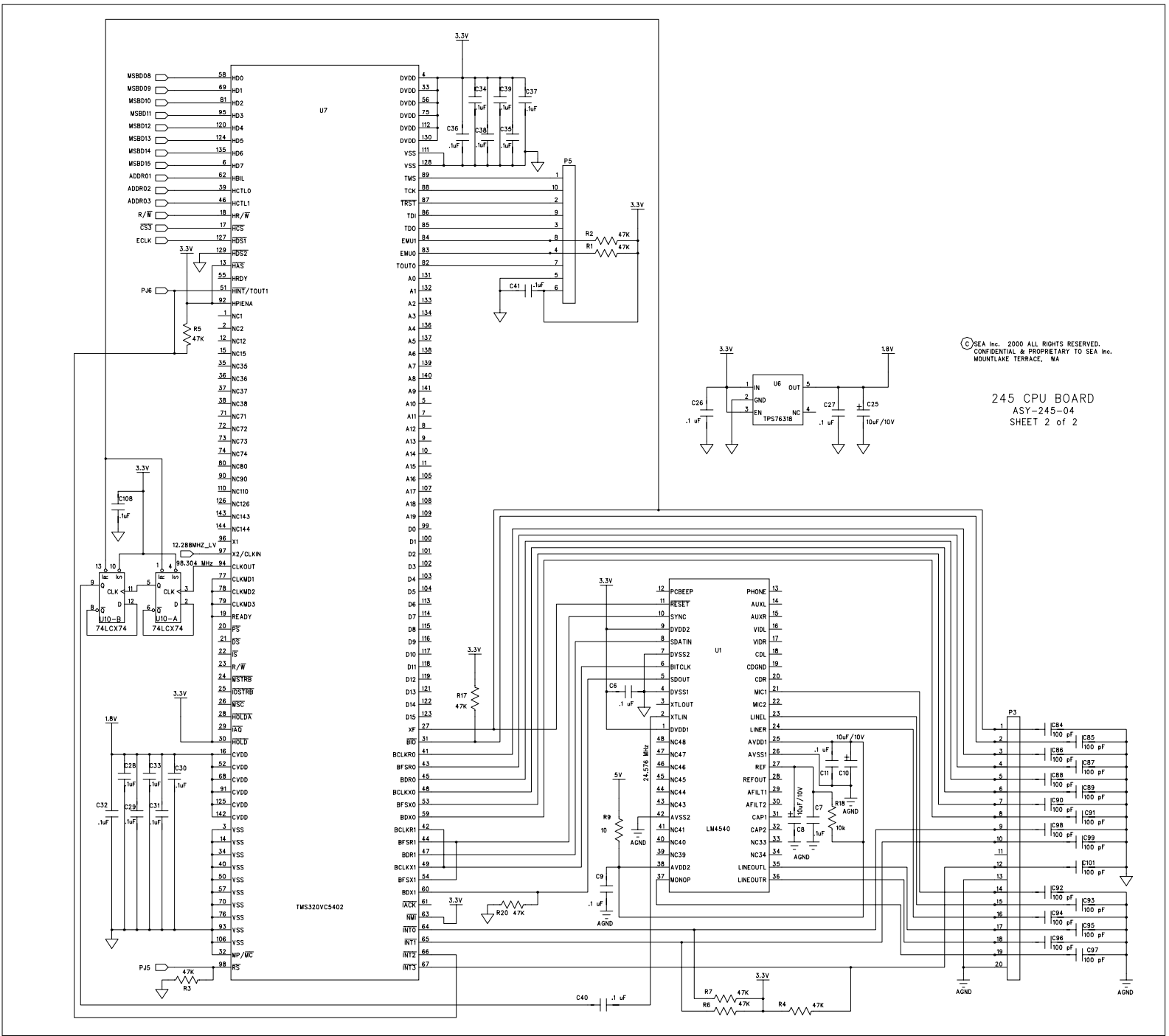


245 FRONT PANEL  
 ASY-245-03  
 SHEET 2 of 2

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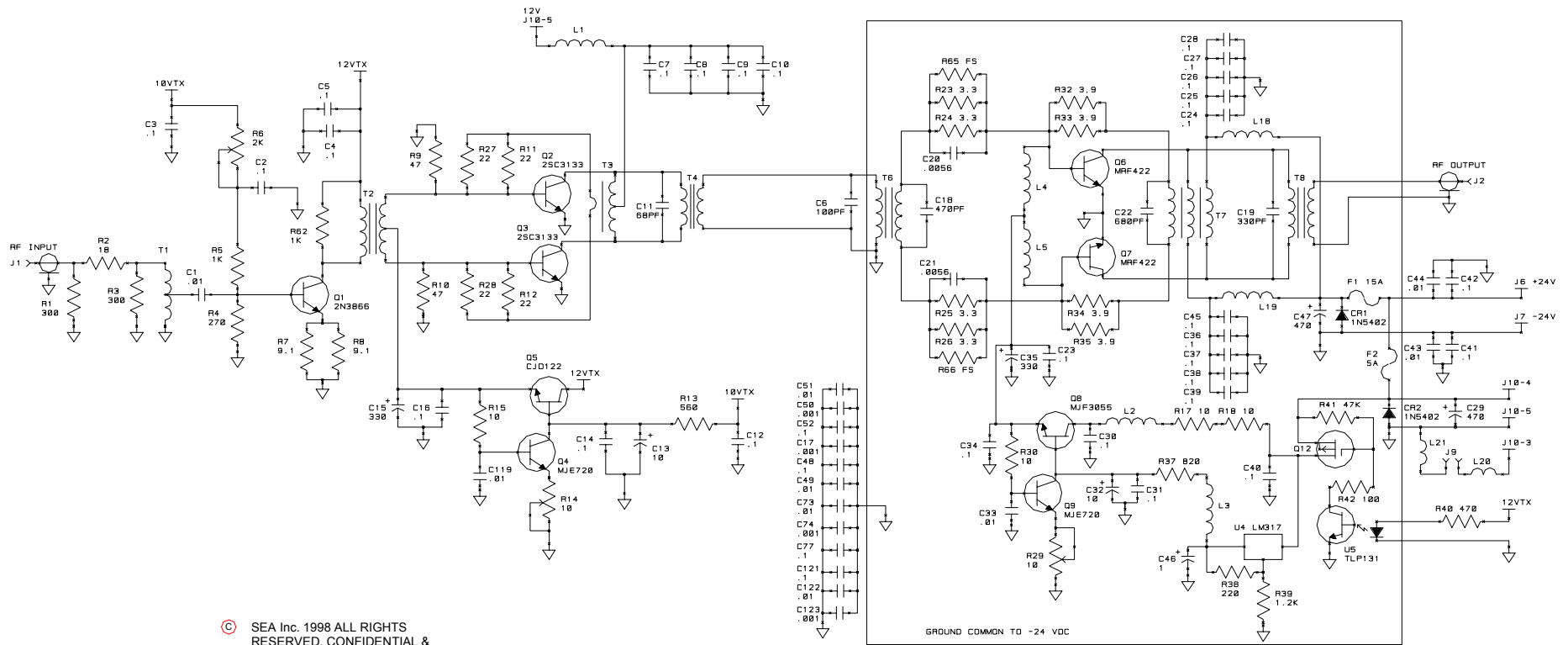
245 CPU BOARD  
 ASY-245-04  
 SHEET 1 of 2  
 NOTES: SEE SHEET 2  
 FILE: 245\_04.SCH



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245 CPU BOARD  
 ASY-245-04  
 SHEET 2 of 2





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NOTES: UNLESS OTHERWISE SPECIFIED  
 1. RESISTORS ARE IN OHMS, 1/4 W. 5%  
 2. CAPACITORS ARE IN MICROFARADS.  
 3. DIODES ARE MMB07000.

ASY-0245-02  
 SHEET 2 of 2

## SEA245 BILL OF MATERIALS

RefDes	Component	Component Description	Level
	ASY-245	245 BASIC RADIO ASSY (TESTED)	1
	PST-245	245 BASIC RADIO ASSY (UNTESTED)	2
P2/A	HAR-0084-187	JACK SCREW HX ZS 4-40X3/1	3
P2/B	HAR-0084-187	JACK SCREW HX ZS 4-40X3/1	3
	ASY-0245-01	MAINBOARD	3
L28	FAB-7001-05	HI/LO VCO SHIELD	4
L31	FAB-7001-05	HI/LO VCO SHIELD	4
L33	FAB-7001-05	HI/LO VCO SHIELD	4
L35	FAB-7001-05	HI/LO VCO SHIELD	4
	PST-0245-01	MAIN BOARD (UNTESTED)	4
C56	CAP-0025-002	CAPACITOR TRIMMER 2-10PF	5
FIL1	FIL-0020-001	FILTER,XTAL,4 POLE,45MHZ, 2 PCS	5
FL1A	HAR-0029-010	INSULATOR,MYLAR,3 HOLE,0.074IN SP	5
FL1B	HAR-0029-010	INSULATOR,MYLAR,3 HOLE,0.074IN SP	5
FL2	FIL-0020-003	FILTER,2 POLE,45MHZ (1/2 FIL-20-1)	5
FL2	HAR-0029-010	INSULATOR,MYLAR,3 HOLE,0.074IN SP	5
J8 TO J9	CAB-0501-001	MINI COAX CABLE, 70 MM	5
L17	ASY-0009-22	IND,TOR 22T18-226 ON 9-1	5
L18	ASY-0009-19	IND,TOR 19T18-226 ON 9-1	5
L28	ASY-0017-11	IND,TOR 11T18-228 ON 12-2	5
L3	ASY-0017-09	IND,TOR 9T18-228 ON 12-2	5
L31	ASY-0156-L3	TOROID ASY, 10T #26	5
L33	ASY-0156-L3	TOROID ASY, 10T #26	5
L35	ASY-0156-L3	TOROID ASY, 10T #26	5
L4	ASY-0017-09	IND,TOR 9T18-228 ON 12-2	5
L5	ASY-0017-08	IND,TOR 8T18-228 ON 12-2	5
L73	ASY-0022-14	IND,TOR 14T18-228 ON 3-1	5
OVE1	OVE-0005-004	OVEN,75 DEG C,13 VDC, W/INSULATOR	5
RX COAX	ASY-0235-C06	14.5" COAX WITH PHONO PLUG	5
T1	ASY-0222-TT5	INDUCTOR,T TRIFI ON #43	5
T2	ASY-0222-TT5	INDUCTOR,T TRIFI ON #43	5
T5	ASY-0209-T1M	TRANSFORMER	5
TX COAX	ASY-0235-C07	10.875" COAX WITH PHONO PLUG	5
Y1	CRY-0019-005	CRYSTAL,5.285MHZ 25C 20PF 3LEG	5
Y1	HAR-0029-011	INSULATOR,MYLAR,3 HOLE,0.096IN SP	5
Y2	CRY-0028-002	CRYSTAL,12.288MHZ @75C,HC43/U	5
Y2	HAR-0029-007	CRYSTAL INSULATOR,MYLAR	5
	HAR-0106-003	SHIELD,PCB,2.5X4.0X.8H	5
	STF-0245-01	MAIN BOARD, STUFFED	5
C116	CAP-0076-002	TRIMMER CAPACITOR,3-10PF,SEALED	6
C146	CAP-0027-104	CAP,FILM,CK05,.1UF,100/63V,5-10%	6
C147	CAP-0027-104	CAP,FILM,CK05,.1UF,100/63V,5-10%	6
C149	CAP-0037-012	CAP, ELECT. 330UF RAD	6
C181	CAP-0027-224	CAP,FILM,CK05,.22UF,100/63V,5-10%	6
C183	CAP-0027-473	CAP,FILM,CKO5,.047UF,100/63V,5-10%	6
C187	CAP-0037-012	CAP, ELECT. 330UF RAD	6
C189	CAP-0027-104	CAP,FILM,CK05,.1UF,100/63V,5-10%	6
C311	CAP-0076-002	TRIMMER CAPACITOR,3-10PF,SEALED	6

## SEA245 BILL OF MATERIALS

C38	CAP-0076-002	TRIMMER CAPACITOR,3-10PF,SEALED	6
C39	CAP-0076-002	TRIMMER CAPACITOR,3-10PF,SEALED	6
C46	CAP-0076-002	TRIMMER CAPACITOR,3-10PF,SEALED	6
C49	CAP-0076-002	TRIMMER CAPACITOR,3-10PF,SEALED	6
C76	CAP-0027-473	CAP,FILM,CKO5,.047UF,100/63V,5-10%	6
C77	CAP-0027-473	CAP,FILM,CKO5,.047UF,100/63V,5-10%	6
FIL3	FIL-0004-007	FILTER, 455KHZ, +-2KHZ 6DB BW	6
J1	CON-0043-018	SOCKET,SIP,1X32,.1"SP,.3"PCB SPACED	6
J2	CON-0043-018	SOCKET,SIP,1X32,.1"SP,.3"PCB SPACED	6
J3	CON-0043-016	SOCKET,SIP,1X20,.1"SP,.3"PCB SPACED	6
J4	SOC-0002-008	IC SOCKET, 8 PIN DIP	6
J5	SOC-0002-016	IC SOCKET, 16 PIN DIP	6
J6	SOC-0002-016	IC SOCKET, 16 PIN DIP	6
J7	CON-0020-025	D-SUB,9-PIN FEMALE,FERRITE,BRD LCK	6
J8	CON-0001-010	JACK, MINI RF 90DEG	6
J9	CON-0001-010	JACK, MINI RF 90DEG	6
JU1	CON-0240-030	3 PIN SINGLE ROW HEADER	6
L14	ID-0022-270-16A	.4 LS, 27UH	6
L15	IND-0022-471	IND,470UH,MINI	6
L20	IND-0036-106	IND,10UH+/-10%,7MM,VARIABLE COIL	6
L22	TRA-0014-002	TRANSFORMER,455KHZ 7MM 1ST IF	6
L23	IND-0022-471	IND,470UH,MINI	6
L24	IND-0022-471	IND,470UH,MINI	6
L25	IND-0022-471	IND,470UH,MINI	6
L26	IND-0022-471	IND,470UH,MINI	6
L6	ID-0022-270-16A	.4 LS, 27UH	6
L7	IND-0022-471	IND,470UH,MINI	6
MIX1	MIX-0002-001	DBL BAL MIXER	6
P1	CON-0061-009	3.5MM PITCH RT ANGLE HEADER,9 PIN	6
P2	CON-0061-014	3.5MM PITCH RT ANGLE HEADER,14 PIN	6
P3	CON-0070-008	HEADER,2.5MM PITCH,RT ANGLE,8 PIN	6
R252	RES-0027-104	TRIMMER, 100K	6
R255	RES-0027-104	TRIMMER, 100K	6
R77	RES-0027-201	TRIMMER, 200 OHM POT	6
R78	RES-0027-201	TRIMMER, 200 OHM POT	6
R85	RES-0027-503	RESISTOR, TRIMMER 50K	6
T3	TRA-0011-004	7MM IF TRANSFORMER FOR 45	6
T4	TRA-0011-004	7MM IF TRANSFORMER FOR 45	6
U37	SM-0109-001-13B	FIXTURE #6 CUT, 7805	6
	MSK-0245-01	MAIN BOARD, MASKED	6
	SMT-0245-01Q	SMT-0245-01 QC'D	7
	SMT-0245-01	MAIN BOARD SMT ASSY	8
C1	CAP-1206-222	CAP,CER,SMD,.002UF,COG,50V,5%	9
C10	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C100	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C101	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C102	CAP-1014-476	CAP,TANT,SMD,47UF,16V,10%,CASE D	9
C103	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C104	CAP-1206-105T	CAP,TANCER,SMD,1UF,Y5V,25V,+80/-20%	9
C105	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9

SEA245 BILL OF MATERIALS

C106	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C107	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C108	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C109	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C11	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C110	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C111	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C112	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C113	CAP-0805-330	CAP,CER,SMD,33PF,COG,50V,5%	9
C115	CAP-0805-150	CAP,CER,SMD,15PF,COG,50V,5%	9
C117	CAP-0805-473	CAP,CER,SMD,.047UF,X7R,50V,10%	9
C118	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C119	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C12	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C120	CAP-1014-106	CAP,TANT,SMD,10UF,16V,10%,CASE C	9
C121	CAP-1206-102	CAP,CER,SMD,.001UF,NPO,100V,5%,BLUA	9
C122	CAP-1206-391	CAP,CER,SMD,390PF,NPO,100V,5%	9
C123	CAP-1206-102	CAP,CER,SMD,.001UF,NPO,100V,5%,BLUA	9
C124	CAP-1206-102	CAP,CER,SMD,.001UF,NPO,100V,5%,BLUA	9
C125	CAP-1206-102	CAP,CER,SMD,.001UF,NPO,100V,5%,BLUA	9
C126	CAP-1206-561	CAP,CER,SMD,560PF,NPO,100V,5%	9
C127	CAP-1206-102	CAP,CER,SMD,.001UF,NPO,100V,5%,BLUA	9
C128	CAP-1206-102	CAP,CER,SMD,.001UF,NPO,100V,5%,BLUA	9
C129	CAP-1206-102	CAP,CER,SMD,.001UF,NPO,100V,5%,BLUA	9
C13	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C130	CAP-1206-471	CAP,CER,SMD,470PF,NPO,100V,5%	9
C131	CAP-1206-270	CAP,CER,SMD,27PF,NPO,100V,5%	9
C132	CAP-1206-101	CAP,CER,SMD,100PF,NPO,100V,5%	9
C133	CAP-0805-221	CAP,CER,SMD,220PF,COG,50V,5%	9
C134	CAP-0805R2H-150	CAP,CER,SMD,15PF,TC,N220,50V,5%	9
C135	CAP-0805-330	CAP,CER,SMD,33PF,COG,50V,5%	9
C136	CAP-0805-680	CAP,CER,SMD,68PF,COG,50V,5%	9
C137	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C138	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C139	CAP-1014-106	CAP,TANT,SMD,10UF,16V,10%,CASE C	9
C14	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C140	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C141	CAP-0805-102	CAP,CER,SMD,.001UF,NPO,50V,5%,"A3"	9
C142	CAP-0805-102	CAP,CER,SMD,.001UF,NPO,50V,5%,"A3"	9
C143	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C144	CAP-0805-102	CAP,CER,SMD,.001UF,NPO,50V,5%,"A3"	9
C145	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C148	CAP-0805-120	CAP,CER,SMD,12PF,COG,50V,5%	9
C15	CAP-0805-473	CAP,CER,SMD,.047UF,X7R,50V,10%	9
C150	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C151	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C152	CAP-0805-100	CAP,CER,SMD,10PF,COG,50V,+/- .25PF	9
C153	CAP-0805-150	CAP,CER,SMD,15PF,COG,50V,5%	9
C154	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C155	CAP-0805-150	CAP,CER,SMD,15PF,COG,50V,5%	9

## SEA245 BILL OF MATERIALS

C156	CAP-0805-270	CAP,CER,SMD,27PF,COG,50V/100V,5%	9
C157	CAP-0805-330	CAP,CER,SMD,33PF,COG,50V,5%	9
C158	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C159	CAP-0805-102	CAP,CER,SMD,.001UF,NPO,50V,5%,"A3"	9
C16	CAP-0805-033	CAP,CER,SMD,3.3PF,NPO,50V,+/- .25PF	9
C160	CAP-0805-102	CAP,CER,SMD,.001UF,NPO,50V,5%,"A3"	9
C161	CAP-0805-102	CAP,CER,SMD,.001UF,NPO,50V,5%,"A3"	9
C162	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C163	CAP-0805-102	CAP,CER,SMD,.001UF,NPO,50V,5%,"A3"	9
C164	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C165	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C166	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C167	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C168	CAP-1014-106	CAP,TANT,SMD,10UF,16V,10%,CASE C	9
C169	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C17	CAP-0805-220	CAP,CER,SMD,22PF,NPO,100V,5%	9
C170	CAP-0805-102	CAP,CER,SMD,.001UF,NPO,50V,5%,"A3"	9
C171	CAP-0805-102	CAP,CER,SMD,.001UF,NPO,50V,5%,"A3"	9
C172	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C173	CAP-0805-102	CAP,CER,SMD,.001UF,NPO,50V,5%,"A3"	9
C174	CAP-0805-102	CAP,CER,SMD,.001UF,NPO,50V,5%,"A3"	9
C175	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C176	CAP-0805-221	CAP,CER,SMD,220PF,COG,50V,5%	9
C177	CAP-0805-221	CAP,CER,SMD,220PF,COG,50V,5%	9
C178	CAP-0805-221	CAP,CER,SMD,220PF,COG,50V,5%	9
C179	CAP-1014-106	CAP,TANT,SMD,10UF,16V,10%,CASE C	9
C18	CAP-0805-150	CAP,CER,SMD,15PF,COG,50V,5%	9
C180	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C182	CAP-0805-102	CAP,CER,SMD,.001UF,NPO,50V,5%,"A3"	9
C184	CAP-0805-472	CAP,CER,SMD,.0047UF,X7R,50V,10%	9
C185	CAP-1014-106	CAP,TANT,SMD,10UF,16V,10%,CASE C	9
C186	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C188	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C19	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	9
C190	CAP-1206-102	CAP,CER,SMD,.001UF,NPO,100V,5%,BLUA	9
C191	CAP-0805-270	CAP,CER,SMD,27PF,COG,50V/100V,5%	9
C192	CAP-0805-120	CAP,CER,SMD,12PF,COG,50V,5%	9
C193	CAP-0805-062	CAP,CER,SMD,6.2PF,NPO,50V,+/- .5PF	9
C194	CAP-0805-100	CAP,CER,SMD,10PF,COG,50V,+/- .25PF	9
C195	CAP-0805-102	CAP,CER,SMD,.001UF,NPO,50V,5%,"A3"	9
C196	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C197	CAP-0805-220	CAP,CER,SMD,22PF,NPO,100V,5%	9
C198	CAP-0805-100	CAP,CER,SMD,10PF,COG,50V,+/- .25PF	9
C199	CAP-0805-062	CAP,CER,SMD,6.2PF,NPO,50V,+/- .5PF	9
C2	CAP-0805-100	CAP,CER,SMD,10PF,COG,50V,+/- .25PF	9
C20	CAP-0805-181	CAP,CER,SMD,180PF,COG,50V,5%	9
C200	CAP-0805-075	CAP,CER,SMD,7.5PF,COG,100V,+/- .25PF	9
C201	CAP-0805-102	CAP,CER,SMD,.001UF,NPO,50V,5%,"A3"	9
C202	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C203	CAP-0805-180	CAP,CER,SMD,18PF,COG,50V/100V,5%	9

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C204	CAP-0805-100	CAP,CER,SMD,10PF,COG,50V,+/- .25PF	9
C205	CAP-0805-062	CAP,CER,SMD,6.2PF,NPO,50V,+/- .5PF	9
C206	CAP-0805-062	CAP,CER,SMD,6.2PF,NPO,50V,+/- .5PF	9
C207	CAP-0805-102	CAP,CER,SMD,.001UF,NPO,50V,5%,"A3"	9
C208	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C209	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	9
C21	CAP-0805-181	CAP,CER,SMD,180PF,COG,50V,5%	9
C210	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	9
C211	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C212	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	9
C213	CAP-1014-106	CAP,TANT,SMD,10UF,16V,10%,CASE C	9
C214	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C215	CAP-0805-560	CAP,CER,SMD,56PF,COG,50V,5%	9
C216	CAP-0805-560	CAP,CER,SMD,56PF,COG,50V,5%	9
C217	CAP-1014-105	CAP,TANT,SMD,1UF,16V,10%,CASE A	9
C218	CAP-1014-105	CAP,TANT,SMD,1UF,16V,10%,CASE A	9
C219	CAP-1014-105	CAP,TANT,SMD,1UF,16V,10%,CASE A	9
C22	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	9
C220	CAP-1014-105	CAP,TANT,SMD,1UF,16V,10%,CASE A	9
C221	CAP-1014-105	CAP,TANT,SMD,1UF,16V,10%,CASE A	9
C222	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	9
C223	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	9
C224	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	9
C225	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	9
C226	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C227	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C228	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C229	CAP-0805-102	CAP,CER,SMD,.001UF,NPO,50V,5%,"A3"	9
C23	CAP-0805-473	CAP,CER,SMD,.047UF,X7R,50V,10%	9
C230	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C231	CAP-1017-224	CAP,TANT,SMD,.22UF,35V,10%,CASE A	9
C232	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C233	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C234	CAP-0805-102	CAP,CER,SMD,.001UF,NPO,50V,5%,"A3"	9
C235	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C236	CAP-1013-475B	CAP,TANT,SMD,4.7UF,10V,10%,CASE B	9
C237	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C238	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C239	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C24	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C240	CAP-1013-475B	CAP,TANT,SMD,4.7UF,10V,10%,CASE B	9
C241	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C242	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C243	CAP-1014-106	CAP,TANT,SMD,10UF,16V,10%,CASE C	9
C244	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C246	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C247	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C248	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C249	CAP-1014-106	CAP,TANT,SMD,10UF,16V,10%,CASE C	9
C25	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9

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C250	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C251	CAP-1014-106	CAP,TANT,SMD,10UF,16V,10%,CASE C	9
C252	CAP-0805-224	CAP,CER,SMD,.22UF,Z5U,25V,20%	9
C253	CAP-1014-106	CAP,TANT,SMD,10UF,16V,10%,CASE C	9
C254	CAP-0805-224	CAP,CER,SMD,.22UF,Z5U,25V,20%	9
C255	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C256	CAP-1014-106	CAP,TANT,SMD,10UF,16V,10%,CASE C	9
C257	CAP-1014-106	CAP,TANT,SMD,10UF,16V,10%,CASE C	9
C258	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C259	CAP-1014-106	CAP,TANT,SMD,10UF,16V,10%,CASE C	9
C26	CAP-0805-473	CAP,CER,SMD,.047UF,X7R,50V,10%	9
C260	CAP-1014-106	CAP,TANT,SMD,10UF,16V,10%,CASE C	9
C261	CAP-0805-224	CAP,CER,SMD,.22UF,Z5U,25V,20%	9
C262	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C263	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C264	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C265	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C266	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C267	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C268	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C269	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C27	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C270	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C271	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C272	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C273	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C274	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C275	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C276	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C277	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C278	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C279	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C28	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C280	CAP-1014-106	CAP,TANT,SMD,10UF,16V,10%,CASE C	9
C281	CAP-1014-105	CAP,TANT,SMD,1UF,16V,10%,CASE A	9
C282	CAP-1014-476	CAP,TANT,SMD,47UF,16V,10%,CASE D	9
C283	CAP-1014-106	CAP,TANT,SMD,10UF,16V,10%,CASE C	9
C284	CAP-1014-106	CAP,TANT,SMD,10UF,16V,10%,CASE C	9
C285	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C286	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C287	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C288	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C29	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C290	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C291	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C292	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C293	CAP-1014-476	CAP,TANT,SMD,47UF,16V,10%,CASE D	9
C294	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C295	CAP-1014-106	CAP,TANT,SMD,10UF,16V,10%,CASE C	9
C296	CAP-1016-225	CAP,TANT,SMD,2.2UF,25V,10%,CASE B	9

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C297	CAP-0805-473	CAP,CER,SMD,.047UF,X7R,50V,10%	9
C298	CAP-0805-472	CAP,CER,SMD,.0047UF,X7R,50V,10%	9
C299	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C3	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C30	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C300	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C301	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C302	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C303	CAP-1016-225	CAP,TANT,SMD,2.2UF,25V,10%,CASE B	9
C304	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C308	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C309	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C31	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C310	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C312	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C313	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C314	CAP-1206-332	CAP,CER,SMD,3300PF,NPO,50V/100V,5%	9
C315	CAP-1206-332	CAP,CER,SMD,3300PF,NPO,50V/100V,5%	9
C316	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C317	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C32	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C33	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C34	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C35	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C36	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C37	CAP-0805-220	CAP,CER,SMD,22PF,NPO,100V,5%	9
C4	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C40	CAP-0805-220	CAP,CER,SMD,22PF,NPO,100V,5%	9
C41	CAP-0805-100	CAP,CER,SMD,10PF,COG,50V,+/- .25PF	9
C42	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C43	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C44	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C45	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C47	CAP-0805-220	CAP,CER,SMD,22PF,NPO,100V,5%	9
C48	CAP-0805-220	CAP,CER,SMD,22PF,NPO,100V,5%	9
C5	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	9
C50	CAP-1206-105T	CAP,TANCER,SMD,1UF,Y5V,25V,+80/-20%	9
C51	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C52	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C53	CAP-0805-473	CAP,CER,SMD,.047UF,X7R,50V,10%	9
C54	CAP-1206-105T	CAP,TANCER,SMD,1UF,Y5V,25V,+80/-20%	9
C55	CAP-0805-820	CAP,CER,SMD,82PF,COG,50V,5%	9
C57	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C58	CAP-1014-476	CAP,TANT,SMD,47UF,16V,10%,CASE D	9
C59	CAP-0805-820	CAP,CER,SMD,82PF,COG,50V,5%	9
C6	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	9
C60	CAP-0805-102	CAP,CER,SMD,.001UF,NPO,50V,5%,"A3"	9
C61	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C62	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C63	CAP-1014-476	CAP,TANT,SMD,47UF,16V,10%,CASE D	9

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C64	CAP-0805-220	CAP,CER,SMD,22PF,NPO,100V,5%	9
C65	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C66	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C67	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C68	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C69	CAP-0805-102	CAP,CER,SMD,.001UF,NPO,50V,5%,"A3"	9
C7	CAP-1206-222	CAP,CER,SMD,.002UF,COG,50V,5%	9
C70	CAP-0805-221	CAP,CER,SMD,220PF,COG,50V,5%	9
C71	CAP-1014-105	CAP,TANT,SMD,1UF,16V,10%,CASE A	9
C72	CAP-0805-221	CAP,CER,SMD,220PF,COG,50V,5%	9
C73	CAP-1014-105	CAP,TANT,SMD,1UF,16V,10%,CASE A	9
C74	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C75	CAP-1014-106	CAP,TANT,SMD,10UF,16V,10%,CASE C	9
C78	CAP-1206-222	CAP,CER,SMD,.002UF,COG,50V,5%	9
C79	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C8	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C80	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C81	CAP-1206-222	CAP,CER,SMD,.002UF,COG,50V,5%	9
C82	CAP-1206-102	CAP,CER,SMD,.001UF,NPO,100V,5%,BLUA	9
C83	CAP-1206-102	CAP,CER,SMD,.001UF,NPO,100V,5%,BLUA	9
C84	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C85	CAP-0805-471	CAP,CER,SMD,470PF,COG,50V,5%	9
C86	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C87	CAP-0805-102	CAP,CER,SMD,.001UF,NPO,50V,5%,"A3"	9
C88	CAP-0805-473	CAP,CER,SMD,.047UF,X7R,50V,10%	9
C89	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C9	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C90	CAP-0805-473	CAP,CER,SMD,.047UF,X7R,50V,10%	9
C91	CAP-1014-106	CAP,TANT,SMD,10UF,16V,10%,CASE C	9
C92	CAP-1014-106	CAP,TANT,SMD,10UF,16V,10%,CASE C	9
C93	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C94	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C95	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	9
C96	CAP-0805-473	CAP,CER,SMD,.047UF,X7R,50V,10%	9
C97	CAP-1206-105T	CAP,TANCER,SMD,1UF,Y5V,25V,+80/-20%	9
C98	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	9
C99	CAP-0805-102	CAP,CER,SMD,.001UF,NPO,50V,5%,"A3"	9
CR1	SEM-1003-004	MMBD7000L DL SW, A1, SOT-	9
CR10	SEM-1003-001	BAV74 DL SW, CC3, SOT23,	9
CR11	SEM-1006-001	MMBV109L VVD, HA, A1, SOT	9
CR12	SEM-1005-004	CMPD6263S DL HC,A1,SOT23	9
CR13	SEM-1006-001	MMBV109L VVD, HA, A1, SOT	9
CR14	SEM-1005-004	CMPD6263S DL HC,A1,SOT23	9
CR15	SEM-1006-001	MMBV109L VVD, HA, A1, SOT	9
CR16	SEM-1005-004	CMPD6263S DL HC,A1,SOT23	9
CR17	SEM-1003-008	SMP1320-004 DL PIN CC3 SOT23	9
CR18	SEM-1003-008	SMP1320-004 DL PIN CC3 SOT23	9
CR19	SEM-1005-003	CMPSH-3C DL HC,CC3,100MA	9
CR2	SEM-1003-004	MMBD7000L DL SW, A1, SOT-	9
CR20	SEM-1003-004	MMBD7000L DL SW, A1, SOT-	9

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CR21	SEM-1005-004	CMPD6263S DL HC,A1,SOT23	9
CR22	SEM-1005-003	CMPSH-3C DL HC,CC3,100MA	9
CR24	SEM-1003-005	BAR14-1 DL PIN, A1, SOT-2	9
CR25	SEM-1003-001	BAV74 DL SW, CC3, SOT23,	9
CR3	SEM-1005-003	CMPSH-3C DL HC,CC3,100MA	9
CR4	SEM-1003-008	SMP1320-004 DL PIN CC3 SOT23	9
CR5	SEM-1003-008	SMP1320-004 DL PIN CC3 SOT23	9
CR6	SEM-1003-008	SMP1320-004 DL PIN CC3 SOT23	9
CR7	SEM-1006-001	MMBV109L VVD, HA, A1, SOT	9
CR8	SEM-1005-004	CMPD6263S DL HC,A1,SOT23	9
CR9	SEM-1003-006	DIODE,DUAL,CMP2836,COMMON ANODE	9
L1	IND-1210-475	IND,SMD,4.7UH,10%	9
L10	IND-1210-474	IND,SMD,0.47UH,5%-20%	9
L11	IND-1210-475	IND,SMD,4.7UH,10%	9
L12	IND-1210-474	IND,SMD,0.47UH,5%-20%	9
L13	IND-1210-474	IND,SMD,0.47UH,5%-20%	9
L16	IND-1210-475	IND,SMD,4.7UH,10%	9
L19	IND-1210-475	IND,SMD,4.7UH,10%	9
L2	IND-1210-224	IND,SMD,0.22UH,10%	9
L21	IND-1210-475	IND,SMD,4.7UH,10%	9
L27	IND-1812S-476	IND,SMD,47UH+/-10% SHIELDED	9
L30	IND-1210-475	IND,SMD,4.7UH,10%	9
L32	IND-1210-475	IND,SMD,4.7UH,10%	9
L34	IND-1210-475	IND,SMD,4.7UH,10%	9
L36	IND-0805-104	IND,SMD,.1UH	9
L37	IND-1210-475	IND,SMD,4.7UH,10%	9
L38	IND-0805-000	IND,SMD,BEAD,Z @100MHZ=30 OHMS	9
L39	IND-0805-000	IND,SMD,BEAD,Z @100MHZ=30 OHMS	9
L40	IND-0805-000	IND,SMD,BEAD,Z @100MHZ=30 OHMS	9
L41	IND-0805-000	IND,SMD,BEAD,Z @100MHZ=30 OHMS	9
L42	IND-0805-000	IND,SMD,BEAD,Z @100MHZ=30 OHMS	9
L43	IND-0805-000	IND,SMD,BEAD,Z @100MHZ=30 OHMS	9
L44	IND-0805-000	IND,SMD,BEAD,Z @100MHZ=30 OHMS	9
L45	IND-0805-000	IND,SMD,BEAD,Z @100MHZ=30 OHMS	9
L46	IND-0805-000	IND,SMD,BEAD,Z @100MHZ=30 OHMS	9
L47	IND-0805-000	IND,SMD,BEAD,Z @100MHZ=30 OHMS	9
L48	IND-0805-000	IND,SMD,BEAD,Z @100MHZ=30 OHMS	9
L49	IND-0805-000	IND,SMD,BEAD,Z @100MHZ=30 OHMS	9
L50	IND-0805-000	IND,SMD,BEAD,Z @100MHZ=30 OHMS	9
L51	IND-0805-000	IND,SMD,BEAD,Z @100MHZ=30 OHMS	9
L52	IND-0805-000	IND,SMD,BEAD,Z @100MHZ=30 OHMS	9
L53	IND-0805-000	IND,SMD,BEAD,Z @100MHZ=30 OHMS	9
L54	IND-0805-000	IND,SMD,BEAD,Z @100MHZ=30 OHMS	9
L55	IND-0805-000	IND,SMD,BEAD,Z @100MHZ=30 OHMS	9
L56	IND-0805-000	IND,SMD,BEAD,Z @100MHZ=30 OHMS	9
L57	IND-1612-000	IND,SMD,BEAD,Z @ 25MHZ=30	9
L58	IND-1612-000	IND,SMD,BEAD,Z @ 25MHZ=30	9
L59	IND-0805-000	IND,SMD,BEAD,Z @100MHZ=30 OHMS	9
L60	IND-0805-000	IND,SMD,BEAD,Z @100MHZ=30 OHMS	9
L61	IND-0805-000	IND,SMD,BEAD,Z @100MHZ=30 OHMS	9

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L62	IND-0805-000	IND,SMD,BEAD,Z @100MHZ=30 OHMS	9
L63	IND-0805-000	IND,SMD,BEAD,Z @100MHZ=30 OHMS	9
L64	IND-0805-000	IND,SMD,BEAD,Z @100MHZ=30 OHMS	9
L65	IND-0805-000	IND,SMD,BEAD,Z @100MHZ=30 OHMS	9
L66	IND-1612-000	IND,SMD,BEAD,Z @ 25MHZ=30	9
L67	IND-0805-000	IND,SMD,BEAD,Z @100MHZ=30 OHMS	9
L68	IND-0805-000	IND,SMD,BEAD,Z @100MHZ=30 OHMS	9
L69	IND-0805-000	IND,SMD,BEAD,Z @100MHZ=30 OHMS	9
L70	IND-0805-000	IND,SMD,BEAD,Z @100MHZ=30 OHMS	9
L71	IND-0805-000	IND,SMD,BEAD,Z @100MHZ=30 OHMS	9
L72	IND-1210-224	IND,SMD,0.22UH,10%	9
L8	IND-1210-475	IND,SMD,4.7UH,10%	9
L9	IND-1210-474	IND,SMD,0.47UH,5%-20%	9
MIX2	MIX-1001-003	MIXER,ADE-1MH,+13DBM LO,SMD	9
MIX3	MIX-1001-002	MIXER,ADE-1,+7DBM LO,SMD	9
Q1	SEM-1041-001	2222, NPN GP TRANS, 1B/1 SOT-23	9
Q10	SEM-1055-001	J310, RF N-CH JFET, 6T SOT-23	9
Q11	SEM-1041-005	3904,NPN GP TRANS,C1A/1AM SOT23	9
Q12	SEM-1055-001	J310, RF N-CH JFET, 6T SOT-23	9
Q13	SEM-1055-001	J310, RF N-CH JFET, 6T SOT-23	9
Q14	SEM-1051-001	2N7002, N-CH MOSFET, 702 SOT-23	9
Q15	SEM-1051-001	2N7002, N-CH MOSFET, 702 SOT-23	9
Q16	SEM-1042-006	TRANSISTOR, DIGITAL PNP, 10K/47K	9
Q17	SEM-1042-006	TRANSISTOR, DIGITAL PNP, 10K/47K	9
Q18	SEM-1042-006	TRANSISTOR, DIGITAL PNP, 10K/47K	9
Q19	SEM-1055-001	J310, RF N-CH JFET, 6T SOT-23	9
Q2	SEM-1055-001	J310, RF N-CH JFET, 6T SOT-23	9
Q20	SEM-1055-001	J310, RF N-CH JFET, 6T SOT-23	9
Q21	SEM-1055-001	J310, RF N-CH JFET, 6T SOT-23	9
Q22	SEM-1055-001	J310, RF N-CH JFET, 6T SOT-23	9
Q23	SEM-1055-001	J310, RF N-CH JFET, 6T SOT-23	9
Q24	SEM-1055-001	J310, RF N-CH JFET, 6T SOT-23	9
Q25	SEM-1041-001	2222, NPN GP TRANS, 1B/1 SOT-23	9
Q26	SEM-1042-001	2907, PNP GP TRANS, 2B/2 SOT-23	9
Q27	SEM-1042-001	2907, PNP GP TRANS, 2B/2 SOT-23	9
Q28	SEM-1041-003	2213,TRANS.,DIG,NPN,47K/47K (8C)	9
Q29	SEM-1042-001	2907, PNP GP TRANS, 2B/2 SOT-23	9
Q3	SEM-1045-001	5179, NPN RF TRANS, 7H SOT-23	9
Q30	SEM-1041-003	2213,TRANS.,DIG,NPN,47K/47K (8C)	9
Q31	SEM-1051-001	2N7002, N-CH MOSFET, 702 SOT-23	9
Q32	SEM-1042-006	TRANSISTOR, DIGITAL PNP, 10K/47K	9
Q33	SEM-1041-005	3904,NPN GP TRANS,C1A/1AM SOT23	9
Q4	SEM-1045-001	5179, NPN RF TRANS, 7H SOT-23	9
Q5	SEM-1043-003	PZT3904,GP NPN BIP SOT-223	9
Q6	SEM-1042-001	2907, PNP GP TRANS, 2B/2 SOT-23	9
Q7	SEM-1042-001	2907, PNP GP TRANS, 2B/2 SOT-23	9
Q8	SEM-1041-001	2222, NPN GP TRANS, 1B/1 SOT-23	9
Q9	SEM-1055-001	J310, RF N-CH JFET, 6T SOT-23	9
R1	RES-0805-511	RES,SMD,510 OHM,1/10W,5%	9
R10	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9

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R100	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	9
R101	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	9
R102	RES-0805-105	RES,SMD,1MEG OHM,1/10W,5%	9
R103	RES-0805-272	RES,SMD,2.7K OHM,1/10W,5%	9
R104	RES-0805-100	RES,SMD,10 OHM,1/10W,5%	9
R105	RES-0805-302	RES,SMD,3K OHM,1/10W,5%	9
R106	RES-0805-302	RES,SMD,3K OHM,1/10W,5%	9
R107	RES-0805-302	RES,SMD,3K OHM,1/10W,5%	9
R108	RES-0805-302	RES,SMD,3K OHM,1/10W,5%	9
R109	RES-0805-302	RES,SMD,3K OHM,1/10W,5%	9
R11	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	9
R110	RES-0805-302	RES,SMD,3K OHM,1/10W,5%	9
R111	RES-0805-471	RES,SMD,470 OHM,1/10W,5%	9
R112	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R113	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R114	RES-0805-471	RES,SMD,470 OHM,1/10W,5%	9
R115	RES-0805-511	RES,SMD,510 OHM,1/10W,5%	9
R116	RES-0805-511	RES,SMD,510 OHM,1/10W,5%	9
R117	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R118	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R119	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	9
R12	RES-0805-511	RES,SMD,510 OHM,1/10W,5%	9
R120	RES-0805-105	RES,SMD,1MEG OHM,1/10W,5%	9
R121	RES-0805-182	RES,SMD,1.8K OHM,1/10W,5%	9
R122	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	9
R123	RES-0805-100	RES,SMD,10 OHM,1/10W,5%	9
R124	RES-0805-100	RES,SMD,10 OHM,1/10W,5%	9
R125	RES-0805-472	RES,SMD,4.7K OHM,1/10W,5%	9
R126	RES-0805-273	RES,SMD,27K OHM,1/10W,5%	9
R127	RES-0805-220	RES,SMD,22 OHM,1/10W,5%	9
R128	RES-0805-104	RES,SMD,100K OHM,1/10W,5%	9
R129	RES-0805-331	RES,SMD,330 OHM,1/10W,5%	9
R13	RES-0805-511	RES,SMD,510 OHM,1/10W,5%	9
R130	RES-0805-471	RES,SMD,470 OHM,1/10W,5%	9
R131	RES-0805-301	RES,SMD,300 OHM,1/10W,5%	9
R132	RES-0805-180	RES,SMD,18 OHM,1/10W,5%	9
R133	RES-0805-301	RES,SMD,300 OHM,1/10W,5%	9
R134	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R135	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R136	RES-0805-511	RES,SMD,510 OHM,1/10W,5%	9
R137	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	9
R139	RES-0805-100	RES,SMD,10 OHM,1/10W,5%	9
R14	RES-1206-331	RES,SMD,330 OHM,1/4W,5%	9
R140	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	9
R141	RES-0805-473	RES,SMD,47K OHM,1/10W,5%	9
R142	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	9
R143	RES-0805-100	RES,SMD,10 OHM,1/10W,5%	9
R144	RES-0805-100	RES,SMD,10 OHM,1/10W,5%	9
R145	RES-0805-473	RES,SMD,47K OHM,1/10W,5%	9
R146	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9

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R147	RES-0805-104	RES,SMD,100K OHM,1/10W,5%	9
R148	RES-0805-223	RES,SMD,22K OHM,1/10W,5%	9
R149	RES-0805-392	RES,SMD,3.9K OHM,1/10W,5%	9
R15	RES-0805-131	RES,SMD,130 OHM,1/10W,5%	9
R150	RES-0805-132	RES,SMD,1.3K OHM,1/10W,5%	9
R151	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R152	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R153	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R154	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R155	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R156	RES-0805-470	RES,SMD,47 OHM,1/10W,5%	9
R157	RES-0805-332	RES,SMD,3.3K OHM,1/10W,5%	9
R158	RES-0805-104	RES,SMD,100K OHM,1/10W,5%	9
R159	RES-0805-331	RES,SMD,330 OHM,1/10W,5%	9
R16	RES-0805-221	RES,SMD,220 OHM,1/10W,5%	9
R160	RES-0805-104	RES,SMD,100K OHM,1/10W,5%	9
R161	RES-0805-331	RES,SMD,330 OHM,1/10W,5%	9
R162	RES-0805-104	RES,SMD,100K OHM,1/10W,5%	9
R163	RES-0805-331	RES,SMD,330 OHM,1/10W,5%	9
R164	RES-0805-471	RES,SMD,470 OHM,1/10W,5%	9
R165	RES-1206-151	RES,SMD,150 OHM,1/4W,5%	9
R166	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R167	RES-0805-511	RES,SMD,510 OHM,1/10W,5%	9
R168	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	9
R169	RES-1206-151	RES,SMD,150 OHM,1/4W,5%	9
R17	RES-0805-221	RES,SMD,220 OHM,1/10W,5%	9
R170	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R171	RES-0805-301	RES,SMD,300 OHM,1/10W,5%	9
R172	RES-0805-301	RES,SMD,300 OHM,1/10W,5%	9
R173	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	9
R174	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	9
R175	RES-0805-470	RES,SMD,47 OHM,1/10W,5%	9
R176	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	9
R177	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R178	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R179	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R18	RES-0805-301	RES,SMD,300 OHM,1/10W,5%	9
R180	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R181	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R182	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R183	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	9
R184	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R185	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	9
R186	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	9
R187	RES-0805-104	RES,SMD,100K OHM,1/10W,5%	9
R188	RES-0805-472	RES,SMD,4.7K OHM,1/10W,5%	9
R189	RES-0805-104	RES,SMD,100K OHM,1/10W,5%	9
R19	RES-0805-331	RES,SMD,330 OHM,1/10W,5%	9
R190	RES-0805-332	RES,SMD,3.3K OHM,1/10W,5%	9
R191	RES-0805-104	RES,SMD,100K OHM,1/10W,5%	9

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R192	RES-0805-104	RES,SMD,100K OHM,1/10W,5%	9
R193	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R194	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R195	RES-0805-472	RES,SMD,4.7K OHM,1/10W,5%	9
R196	RES-0805-332	RES,SMD,3.3K OHM,1/10W,5%	9
R197	RES-0805-222	RES,SMD,2.2K OHM,1/10W,5%	9
R198	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	9
R199	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	9
R2	RES-0805-511	RES,SMD,510 OHM,1/10W,5%	9
R20	RES-0805-470	RES,SMD,47 OHM,1/10W,5%	9
R200	RES-0805-682	RES,SMD,6.8K OHM,1/10W,5%	9
R201	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	9
R202	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R203	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	9
R204	RES-0805-682	RES,SMD,6.8K OHM,1/10W,5%	9
R205	RES-0805-222	RES,SMD,2.2K OHM,1/10W,5%	9
R206	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	9
R207	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	9
R208	RES-0805-222	RES,SMD,2.2K OHM,1/10W,5%	9
R209	RES-0805-471	RES,SMD,470 OHM,1/10W,5%	9
R21	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	9
R210	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R211	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	9
R212	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	9
R213	RES-0805-270	RES,SMD,27 OHM,1/10W,5%	9
R214	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	9
R215	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R216	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	9
R217	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R218	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R219	RES-0805-561	RES,SMD,560 OHM,1/10W,5%	9
R22	RES-0805-331	RES,SMD,330 OHM,1/10W,5%	9
R220	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	9
R221	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	9
R222	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	9
R223	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R224	RES-0805-222	RES,SMD,2.2K OHM,1/10W,5%	9
R225	RES-0805-222	RES,SMD,2.2K OHM,1/10W,5%	9
R226	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R227	RES-0805-472	RES,SMD,4.7K OHM,1/10W,5%	9
R228	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	9
R229	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	9
R23	RES-0805-471	RES,SMD,470 OHM,1/10W,5%	9
R230	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R231	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	9
R232	RES-0805-222	RES,SMD,2.2K OHM,1/10W,5%	9
R233	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R234	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	9
R235	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	9
R236	RES-0805-222	RES,SMD,2.2K OHM,1/10W,5%	9

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R237	RES-0805-222	RES,SMD,2.2K OHM,1/10W,5%	9
R238	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	9
R239	RES-0805-331	RES,SMD,330 OHM,1/10W,5%	9
R24	RES-1206-330	RES,SMD,33 OHM,1/4W,5%	9
R240	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	9
R241	RES-0805-331	RES,SMD,330 OHM,1/10W,5%	9
R242	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R243	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	9
R244	RES-0805-331	RES,SMD,330 OHM,1/10W,5%	9
R245	RES-0805-222	RES,SMD,2.2K OHM,1/10W,5%	9
R246	RES-1206-330	RES,SMD,33 OHM,1/4W,5%	9
R247	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R248	RES-0805-104	RES,SMD,100K OHM,1/10W,5%	9
R249	RES-0805-154	RES,SMD,150K OHM,1/10W,5%	9
R25	RES-0805-332	RES,SMD,3.3K OHM,1/10W,5%	9
R250	RES-0805-154	RES,SMD,150K OHM,1/10W,5%	9
R251	RES-0805-334	RES,SMD,330K OHM,1/10W,5%	9
R253	RES-0805-223	RES,SMD,22K OHM,1/10W,5%	9
R254	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R256	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R257	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R258	RES-0805-561	RES,SMD,560 OHM,1/10W,5%	9
R259	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R26	RES-0805-221	RES,SMD,220 OHM,1/10W,5%	9
R260	RES-0805-472	RES,SMD,4.7K OHM,1/10W,5%	9
R261	RES-0805-472	RES,SMD,4.7K OHM,1/10W,5%	9
R262	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	9
R263	RES-1206-331	RES,SMD,330 OHM,1/4W,5%	9
R264	RES-1206-331	RES,SMD,330 OHM,1/4W,5%	9
R27	RES-0805-301	RES,SMD,300 OHM,1/10W,5%	9
R28	RES-0805-180	RES,SMD,18 OHM,1/10W,5%	9
R29	RES-0805-301	RES,SMD,300 OHM,1/10W,5%	9
R3	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	9
R30	RES-0805-511	RES,SMD,510 OHM,1/10W,5%	9
R31	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	9
R32	RES-0805-511	RES,SMD,510 OHM,1/10W,5%	9
R33	RES-0805-511	RES,SMD,510 OHM,1/10W,5%	9
R34	RES-0805-471	RES,SMD,470 OHM,1/10W,5%	9
R35	RES-0805-100	RES,SMD,10 OHM,1/10W,5%	9
R36	RES-0805-471	RES,SMD,470 OHM,1/10W,5%	9
R37	RES-0805-511	RES,SMD,510 OHM,1/10W,5%	9
R38	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	9
R39	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	9
R4	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R40	RES-1206-331	RES,SMD,330 OHM,1/4W,5%	9
R41	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	9
R42	RES-0805-180	RES,SMD,18 OHM,1/10W,5%	9
R43	RES-0805-510	RES,SMD,51 OHM,1/10W,5%	9
R44	RES-0805-511	RES,SMD,510 OHM,1/10W,5%	9
R45	RES-0805-511	RES,SMD,510 OHM,1/10W,5%	9

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R46	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	9
R47	RES-0805-511	RES,SMD,510 OHM,1/10W,5%	9
R48	RES-0805-511	RES,SMD,510 OHM,1/10W,5%	9
R49	RES-0805-511	RES,SMD,510 OHM,1/10W,5%	9
R5	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R50	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	9
R51	RES-1206-331	RES,SMD,330 OHM,1/4W,5%	9
R52	RES-1206-331	RES,SMD,330 OHM,1/4W,5%	9
R53	RES-0805-222	RES,SMD,2.2K OHM,1/10W,5%	9
R54	RES-0805-222	RES,SMD,2.2K OHM,1/10W,5%	9
R55	RES-0805-222	RES,SMD,2.2K OHM,1/10W,5%	9
R56	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R57	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R58	RES-0805-512	RES,SMD,5.1K OHM,1/10W,5%	9
R59	RES-0805-470	RES,SMD,47 OHM,1/10W,5%	9
R6	RES-0805-472	RES,SMD,4.7K OHM,1/10W,5%	9
R60	RES-0805-512	RES,SMD,5.1K OHM,1/10W,5%	9
R61	RES-0805-222	RES,SMD,2.2K OHM,1/10W,5%	9
R62	RES-0805-471	RES,SMD,470 OHM,1/10W,5%	9
R63	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R64	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R65	RES-0805-471	RES,SMD,470 OHM,1/10W,5%	9
R66	RES-0805-511	RES,SMD,510 OHM,1/10W,5%	9
R67	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	9
R68	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	9
R69	RES-0805-510	RES,SMD,51 OHM,1/10W,5%	9
R7	RES-0805-511	RES,SMD,510 OHM,1/10W,5%	9
R70	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	9
R71	RES-0805-510	RES,SMD,51 OHM,1/10W,5%	9
R72	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R73	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	9
R74	RES-0805-562	RES,SMD,5.6K OHM,1/10W,5%	9
R75	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	9
R76	RES-0805-562	RES,SMD,5.6K OHM,1/10W,5%	9
R79	RES-0805-222	RES,SMD,2.2K OHM,1/10W,5%	9
R8	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	9
R80	RES-0805-222	RES,SMD,2.2K OHM,1/10W,5%	9
R81	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	9
R82	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	9
R83	RES-0805-472	RES,SMD,4.7K OHM,1/10W,5%	9
R84	RES-0805-472	RES,SMD,4.7K OHM,1/10W,5%	9
R86	RES-0805-472	RES,SMD,4.7K OHM,1/10W,5%	9
R87	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R88	RES-0805-472	RES,SMD,4.7K OHM,1/10W,5%	9
R89	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	9
R9	RES-0805-470	RES,SMD,47 OHM,1/10W,5%	9
R90	RES-0805-470	RES,SMD,47 OHM,1/10W,5%	9
R91	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	9
R92	RES-0805-272	RES,SMD,2.7K OHM,1/10W,5%	9
R93	RES-0805-181	RES,SMD,180 OHM,1/10W,5%	9

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R94	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	9
R95	RES-0805-220	RES,SMD,22 OHM,1/10W,5%	9
R96	RES-0805-362	RES,SMD,3.6K OHM,1/10W,5%	9
R97	RES-0805-472	RES,SMD,4.7K OHM,1/10W,5%	9
R98	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	9
R99	RES-0805-510	RES,SMD,51 OHM,1/10W,5%	9
U1	SEM-1023-006	MAV-11SM,12.7DB GAIN AT 100MHZ	9
U10	SEM-1015-074	74HC74, DUAL F/F, SO-14	9
U11	SEM-1033-086	NC7S86 TINY 2 INPUT X-OR GATE	9
U12	SEM-1015-074	74HC74, DUAL F/F, SO-14	9
U13	SEM-1033-U04	NC7SU04M5 UNBUFFERED INVERTER	9
U14	SEM-1033-U04	NC7SU04M5 UNBUFFERED INVERTER	9
U15	SEM-1022-019	OP27GS,LO NOISE PRECISION OP AMP SO8	9
U16	SEM-1015-066	74HC4066 QUAD ANALOG SWI RAILS ONLY	9
U17	SEM-1020-012	MC145193F 1.1GHZ PPL (SO-20)	9
U18	SEM-1033-004	INVERTER, UHS DUAL UNBUFFERED	9
U2	SEM-1023-006	MAV-11SM,12.7DB GAIN AT 100MHZ	9
U21	SEM-1020-012	MC145193F 1.1GHZ PPL (SO-20)	9
U22	SEM-1022-023	TLC2272ACD DUAL RAIL/RAIL OP AMP	9
U23	SEM-1019-004	3.0 GHZ ./ 2 PRESCALER	9
U24	SEM-1023-003	ERA-2SM/SNA-286 MMIC (E2 S2)	9
U25	SEM-1033-U04	NC7SU04M5 UNBUFFERED INVERTER	9
U26	SEM-1017-013	MAX3232CSE LO PWR DUAL RS232 NARROW	9
U27	SEM-1033-114	NC7WZ14 DUAL INVERTER SCHMITT TRIG	9
U28	SEM-1015-003	GATE, QUAD 2 INPUT NAND, 74HC03	9
U29	SEM-1039-007	74LVC07A HEX BUFFER OPEN DRAIN OUTS	9
U3	SEM-1022-019	OP27GS,LO NOISE PRECISION OP AMP SO8	9
U30	SEM-1015-066	74HC4066 QUAD ANALOG SWI RAILS ONLY	9
U31	SEM-1022-009	MC34074, QUAD OPAMP, SO-1	9
U33	SEM-1017-002	75176, RS-485 DIFF BUS XC	9
U34	SEM-1029-014	AK5383 DUAL 24BIT ADC,SERIAL OUT	9
U35	SEM-1024-018	REGULATOR, VOLTAGE LM3490	9
U36	SEM-1024-028	LM1117DT-3.3, 3.3V .8A LD REG	9
U38	SEM-1024-015	LM2940S-10, 10V LIN REG, 1A, TO-263	9
U39	SEM-1033-004	INVERTER, UHS DUAL UNBUFFERED	9
U40	SEM-1022-002	LMC662, DUAL OPAMP, SO-8	9
U5	SEM-1022-020	TS922ID,DUAL R-R HI CURRENT OP AMP	9
U6	SEM-1027-015	HPMX2007 I/Q MOD	9
U7	SEM-1022-020	TS922ID,DUAL R-R HI CURRENT OP AMP	9
U9	SEM-1033-U04	NC7SU04M5 UNBUFFERED INVERTER	9
	PCB-0245-01	MAIN BOARD	9
	ASY-0245-02	PA/FILTER ASSY (TESTED)	3
	PST-0245-02	PA/FILTER POST ASSY (UNTESTED)	4
Q2	SEM-0068-003	2SC3133 NPN HF PWR TO-220	5
Q3	SEM-0068-003	2SC3133 NPN HF PWR TO-220	5
Q4	HAR-0029-003	SIL PAD FOR TRANSISTOR	5
Q4	SM-0070-001-38A	SILVER UP, LONG LEGS, MJE720	5
Q6	SEM-0066-003	SD1407 NPN HF PWR 125W 28V	5
Q7	SEM-0066-003	SD1407 NPN HF PWR 125W 28V	5
Q9	HAR-0029-003	SIL PAD FOR TRANSISTOR	5

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Q9	HAR-0039-003	WSHR NY SHLDR .24X4X.112	5
Q9	SM-0070-001-38A	SILVER UP, LONG LEGS, MJE720	5
U6	SEM-0159-005	LM61CIZ,PRECISION TEMP SENSOR TO-92	5
	ASY-0245-SEP	SEPTUM ASSY	5
	FAB-0330-11	SHIM, OUTPUT	5
	PST-0245-02P	PA/FILTER POST1 ASSY	5
F1	FUS-0013-015	FUSE,AUTOBLADE 15A	6
F2	FUS-0013-005	FUSE,AUTOBLADE 5A	6
F3	FUS-0013-005	FUSE,AUTOBLADE 5A	6
Q1	HEA-0003-001	HEAT SINK	6
T1	ASY-0010-07	7 TURN TRANSFORMER	6
T13	ASY-0225-T1	XFORMER,20T12-XX ON 23-1	6
T14	ASY-0225-T1	XFORMER,20T12-XX ON 23-1	6
T2	ASY-0222-T11	INDUCTOR, TOROID	6
T3	ASY-0223-L2M	INDUCTOR (ODD)	6
T4	ASY-3302-T5	XFORMER, DRIVER	6
T7	ASY-3302-T9	XFORMER,FEEDBACK 330	6
	ASY-0235-C03	5.5" COAX WITH PHONO PLUG	6
	STF-0245-02	PA/FILTER STUFFED	6
BLK	TER-0004-004	TERMINAL PIN	7
C100	CAP-0003-025	CAPACITOR DM19 560PF	7
C101	CAP-0007-004	CAP,DM15,10PF,500V,MICA,PREPPE	7
C102	CAP-0003-021	CAPACITOR DM19 200PF	7
C103	CAP-0003-013	CAPACITOR DM19 150PF	7
C104	CAP-0003-014	CAPACITOR DM19 620PF	7
C105	CAP-0007-270	CAPACITOR DM15 27PF	7
C106	CAP-0003-030	CAPICITOR DM19 68PF	7
C107	CAP-0003-391	CAPACITOR DM19 390PF	7
C108	CAP-0003-025	CAPACITOR DM19 560PF	7
C109	CAP-0003-003	CAPACITOR DM19 330PF	7
C110	CAP-0003-002	CAPACITOR DM19 220PF	7
C111	CAP-0003-112	CAPACITOR DM19 1100PF	7
C112	CAP-0007-002	CAPACITOR DM15 47PF	7
C113	CAP-0003-024	CAPACITOR DM19 430PF	7
C114	CAP-0003-019	CAPACITOR DM19 270PF	7
C115	CAP-0003-132	CAPACITOR DM19 1300PF	7
C116	CAP-0007-220	CAPACITOR DM15 22PF	7
C117	CAP-0003-029	CAPACITOR DM19 120PF	7
C118	CAP-0003-017	CAPACITOR DM19 750PF	7
C127	CAP-0003-029	CAPACITOR DM19 120PF	7
C128	CAP-0007-220	CAPACITOR DM15 22PF	7
C129	CAP-0003-034	CAPICITOR DM19 18PF	7
C15	CAP-0037-012	CAP, ELECT. 330UF RAD	7
C20	CAP-0043-562	CAP,CER,.0056UFX7R(NPO)100WV	7
C21	CAP-0043-562	CAP,CER,.0056UFX7R(NPO)100WV	7
C22	CAP-0003-005	CAPACITOR DM19 680PF	7
C29	CAP-0037-016	CAP, ELECT. 470UF 63V RAD	7
C35	CAP-0037-012	CAP, ELECT. 330UF RAD	7
C47	CAP-0037-016	CAP, ELECT. 470UF 63V RAD	7
C53	CAP-0003-027	CAP,MICA,50PF,500V,5%,DM19	7

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C78	CAP-0037-102	CAP,AL.ELECT.,1000UF,35V,20%,RAD	7
C80	CAP-0003-033	CAPICITOR DM19 82PF	7
C81	CP-0007-003-10B	.25LS, 15PF DM15	7
C82	CAP-0003-033	CAPICITOR DM19 82PF	7
C83	CAP-0003-031	CAPICITOR DM19 33PF	7
C84	CAP-0003-030	CAPICITOR DM19 68PF	7
C85	CAP-0003-023	CAPACITOR DM19 130PF	7
C87	CAP-0007-002	CAPACITOR DM15 47PF	7
C88	CAP-0003-031	CAPICITOR DM19 33PF	7
C89	CAP-0003-001	CAP,MICA,100PF,500V,5%,DM19	7
C90	CAP-0003-029	CAPACITOR DM19 120PF	7
C91	CAP-0003-028	CAPACITOR DM19 300PF	7
C92	CAP-0003-032	CAPACITOR DM19 180PF	7
C93	CAP-0003-028	CAPACITOR DM19 300PF	7
C94	CAP-0003-034	CAPICITOR DM19 18PF	7
C95	CAP-0003-034	CAPICITOR DM19 18PF	7
C96	CAP-0003-013	CAPACITOR DM19 150PF	7
C97	CAP-0003-019	CAPACITOR DM19 270PF	7
C98	CAP-0003-032	CAPACITOR DM19 180PF	7
C99	CAP-0003-033	CAPICITOR DM19 82PF	7
CR1	SM-0089-001-06A	.8 LS CUT, 1N5402 3A DIODE	7
CR2	SM-0089-001-06A	.8 LS CUT, 1N5402 3A DIODE	7
CR3	SM-0098-002-02A	.45 LS, 1N5282 DIODE	7
CR4	SM-0098-002-02A	.45 LS, 1N5282 DIODE	7
CR5	SM-0096-002-17A	.5 LS, KS1001	7
F1	FUS-0007-006	FUSEHOLDER,AUTOBLADE,PCB MOUNT	7
F2	FUS-0007-006	FUSEHOLDER,AUTOBLADE,PCB MOUNT	7
F3	FUS-0007-006	FUSEHOLDER,AUTOBLADE,PCB MOUNT	7
J1	CON-0004-002	JACK, PHONO PCB	7
J10	CON-0034-050	CON,5 PIN RT ANG,PCB HEADER W/PEGS	7
J2	CON-0004-002	JACK, PHONO PCB	7
J3	CON-0004-002	JACK, PHONO PCB	7
J4	CON-0004-002	JACK, PHONO PCB	7
J6	TER-0019-002	TERMINAL, DISCONNECT TAB	7
J7	TER-0019-002	TERMINAL, DISCONNECT TAB	7
J8	SOC-0002-016	IC SOCKET, 16 PIN DIP	7
J9	CON-0025-027	CONN, LOCKING P/H 2.1	7
JU1	JUM-0002-075	JUMPER,.75X.125 LEGS,#24 TEFLON	7
JU10	JUM-0002-060	JUMPER,.60X.125 LEGS,#24 TEFLON	7
JU11	JUM-0002-075	JUMPER,.75X.125 LEGS,#24 TEFLON	7
JU12	JUM-0002-075	JUMPER,.75X.125 LEGS,#24 TEFLON	7
JU2	JUM-0002-075	JUMPER,.75X.125 LEGS,#24 TEFLON	7
JU3	JUM-0002-075	JUMPER,.75X.125 LEGS,#24 TEFLON	7
JU4	JUM-0002-075	JUMPER,.75X.125 LEGS,#24 TEFLON	7
JU5	JUM-0002-075	JUMPER,.75X.125 LEGS,#24 TEFLON	7
JU6	JUM-0002-075	JUMPER,.75X.125 LEGS,#24 TEFLON	7
JU7	JUM-0002-075	JUMPER,.75X.125 LEGS,#24 TEFLON	7
JU8	JUM-0002-075	JUMPER,.75X.125 LEGS,#24 TEFLON	7
JU9	JUM-0002-075	JUMPER,.75X.125 LEGS,#24 TEFLON	7
K1	REL-0007-007	D/P BASE REL W/ CLEAR COV	7

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K10	REL-0007-007	D/P BASE REL W/ CLEAR COV	7
K11	REL-0018-001	RELAY,PCB DPST 5AMP,10MS OP TIME	7
K2	REL-0007-007	D/P BASE REL W/ CLEAR COV	7
K3	REL-0007-007	D/P BASE REL W/ CLEAR COV	7
K4	REL-0007-007	D/P BASE REL W/ CLEAR COV	7
K5	REL-0007-007	D/P BASE REL W/ CLEAR COV	7
K6	REL-0007-007	D/P BASE REL W/ CLEAR COV	7
K7	REL-0007-007	D/P BASE REL W/ CLEAR COV	7
K8	REL-0007-007	D/P BASE REL W/ CLEAR COV	7
K9	REL-0007-007	D/P BASE REL W/ CLEAR COV	7
L1	FER-0022-001	TYPE 43 FERRITE BEAD-ON-A	7
L10	ASY-0018-08	IND,TOR 8T18-20 ON 27-1	7
L11	ASY-0018-09	IND,TOR 9T18-20 ON 27-1	7
L12	ASY-0018-12	IND,TOR 12T18-20 ON 27-1	7
L13	ASY-0018-12	IND,TOR 12T18-20 ON 27-1	7
L14	ASY-0018-13	IND,TOR 13T18-20 ON 27-1	7
L15	ASY-0018-17	IND,TOR 17T18-20 ON 27-1	7
L16	ASY-0018-17	IND,TOR 17T18-20 ON 27-1	7
L17	ASY-0018-22	IND,TOR 22T18-20 ON 27-1	7
L18	FER-0022-001	TYPE 43 FERRITE BEAD-ON-A	7
L19	FER-0022-001	TYPE 43 FERRITE BEAD-ON-A	7
L22	ASY-0019-08	IND,TOR 8T18-20 ON 27-2	7
L4	ASY-3302-L2	IND,2.5T 11-24 ON 2-5	7
L5	ASY-3302-L2	IND,2.5T 11-24 ON 2-5	7
L6	ASY-0019-06	IND,TOR 6T18-20 ON 27-2	7
L7	ASY-0019-06	IND,TOR 6T18-20 ON 27-2	7
L8	ASY-0019-06	IND,TOR 6T18-20 ON 27-2	7
L9	ASY-0018-08	IND,TOR 8T18-20 ON 27-1	7
Q1	HAR-0023-005	INSULATOR, T0-5 PACKAGE	7
Q1	SEM-0063-001	2N3866 NPN VHF/UHF, TO-39	7
Q16	SEM-0021-004	VN2222LL 60V FET (RED)	7
Q8	SEM-0026-004	MJF122 NPN DARL 5A ISOL,	7
R14	RES-0027-100	TRIMMER, 10 OHM POT	7
R29	RES-0027-100	TRIMMER, 10 OHM POT	7
R6	RES-0027-202	RESISTOR, TRIMPOT 2K	7
R62	RES-0001-102	RES,CF,1K OHM,1/4W,5%	7
RED	TER-0004-004	TERMINAL PIN	7
U4	SEM-0109-105	LM317LZ .1A ADJ REG,TO-92	7
	STF-0245-02P	PA/FILTER STUFFED	7
T6	ASY-3302-T7	XFORMER,INPUT/FINAL 330	8
T8	ASY-0245-T8	XFORMER,OUTPUT 245	8
	MSK-0245-02	PA/FILTER MASKED	8
	SMT-0245-02Q	SMT-0245-02 QC'D	9
	SMT-0245-02	PA/FILTER SMT ASSY	10
C1	CAP-1206-103	CAP,CER,SMD,.01UF,X7R,100V,10%	11
C10	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C11	CAP-1206-680	CAP,CER,SMD,68PF,NPO,100V,5%	11
C119	CAP-1206-103	CAP,CER,SMD,.01UF,X7R,100V,10%	11
C12	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C120	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11

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C121	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C122	CAP-1206-103	CAP,CER,SMD,.01UF,X7R,100V,10%	11
C123	CAP-1206-102	CAP,CER,SMD,.001UF,NPO,100V,5%,BLUA	11
C124	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C125	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C126	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C13	CAP-1014-106	CAP,TANT,SMD,10UF,16V,10%,CASE C	11
C14	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C16	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C17	CAP-1206-102	CAP,CER,SMD,.001UF,NPO,100V,5%,BLUA	11
C2	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C23	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C24	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C25	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C26	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C27	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C28	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C3	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C30	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C31	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C32	CAP-1014-106	CAP,TANT,SMD,10UF,16V,10%,CASE C	11
C33	CAP-1206-103	CAP,CER,SMD,.01UF,X7R,100V,10%	11
C34	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C36	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C37	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C38	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C39	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C4	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C40	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C41	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C42	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C43	CAP-1206-103	CAP,CER,SMD,.01UF,X7R,100V,10%	11
C44	CAP-1206-103	CAP,CER,SMD,.01UF,X7R,100V,10%	11
C45	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C46	CAP-1014-105	CAP,TANT,SMD,1UF,16V,10%,CASE A	11
C48	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C49	CAP-1206-103	CAP,CER,SMD,.01UF,X7R,100V,10%	11
C5	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C50	CAP-1206-102	CAP,CER,SMD,.001UF,NPO,100V,5%,BLUA	11
C51	CAP-1206-103	CAP,CER,SMD,.01UF,X7R,100V,10%	11
C52	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C54	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C55	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C56	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C57	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C58	CAP-1206-103	CAP,CER,SMD,.01UF,X7R,100V,10%	11
C59	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C6	CAP-1206-101	CAP,CER,SMD,100PF,NPO,100V,5%	11
C60	CAP-1206-103	CAP,CER,SMD,.01UF,X7R,100V,10%	11
C61	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11

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C62	CAP-1206-103	CAP,CER,SMD,.01UF,X7R,100V,10%	11
C63	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C64	CAP-1206-103	CAP,CER,SMD,.01UF,X7R,100V,10%	11
C65	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C66	CAP-1206-103	CAP,CER,SMD,.01UF,X7R,100V,10%	11
C67	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C68	CAP-1206-103	CAP,CER,SMD,.01UF,X7R,100V,10%	11
C69	CAP-1206-103	CAP,CER,SMD,.01UF,X7R,100V,10%	11
C7	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C70	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C71	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C72	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C73	CAP-1206-103	CAP,CER,SMD,.01UF,X7R,100V,10%	11
C74	CAP-1206-102	CAP,CER,SMD,.001UF,NPO,100V,5%,BLUA	11
C75	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C76	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C77	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C79	CAP-1016-475	CAP,TANT,SMD,4.7UF,25V,10%,CASE C	11
C8	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
C9	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	11
CR11	SEM-1003-004	MMBD7000L DL SW, A1, SOT-	11
CR12	SEM-1003-004	MMBD7000L DL SW, A1, SOT-	11
CR13	SEM-1003-004	MMBD7000L DL SW, A1, SOT-	11
CR14	SEM-1003-004	MMBD7000L DL SW, A1, SOT-	11
CR6	SEM-1003-004	MMBD7000L DL SW, A1, SOT-	11
CR7	SEM-1003-004	MMBD7000L DL SW, A1, SOT-	11
CR8	SEM-1001-001	CMR1-02,1AMP GP RECT,VR=200V,SMB	11
CR9	SEM-1003-004	MMBD7000L DL SW, A1, SOT-	11
L2	IND-1612-000	IND,SMD,BEAD,Z @ 25MHZ=30	11
L20	IND-1612-000	IND,SMD,BEAD,Z @ 25MHZ=30	11
L21	IND-1612-000	IND,SMD,BEAD,Z @ 25MHZ=30	11
L3	IND-1612-000	IND,SMD,BEAD,Z @ 25MHZ=30	11
Q12	SEM-1052-002	IRFR9110 P-CH MOSFET 3A TO-252	11
Q14	SEM-1044-003	CJD32C,PNP PWR,DPAK	11
Q15	SEM-1051-001	2N7002, N-CH MOSFET, 702 SOT-23	11
Q17	SEM-1041-008	A42,NPN HI VOLT,1D/C1D,SOT-23	11
Q5	SEM-1043-002	CJD122,NPN PWR DARL,DPAK	11
R1	RES-1206-301	RES,SMD,300 OHM,1/4W,5%	11
R10	RES-1206-470	RES,SMD,47 OHM,1/4W,5%	11
R11	RES-1206-220	RES,SMD,22 OHM,1/4W,5%	11
R12	RES-1206-220	RES,SMD,22 OHM,1/4W,5%	11
R13	RES-1206-561	RES,SMD,560 OHM,1/4W,5%	11
R15	RES-1206-100	RES,SMD,10 OHM,1/4W,5%	11
R17	RES-2512-100	RES,SMD,10 OHM,1W,5%	11
R18	RES-2512-100	RES,SMD,10 OHM,1W,5%	11
R2	RES-1206-180	RES,SMD,18 OHM,1/4W,5%	11
R23	RES-2010-3R3	RES,SMD,3.3 OHM,1/2W,5%	11
R24	RES-2010-3R3	RES,SMD,3.3 OHM,1/2W,5%	11
R25	RES-2010-3R3	RES,SMD,3.3 OHM,1/2W,5%	11
R26	RES-2010-3R3	RES,SMD,3.3 OHM,1/2W,5%	11

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R27	RES-1206-220	RES,SMD,22 OHM,1/4W,5%	11
R28	RES-1206-220	RES,SMD,22 OHM,1/4W,5%	11
R3	RES-1206-301	RES,SMD,300 OHM,1/4W,5%	11
R30	RES-1206-100	RES,SMD,10 OHM,1/4W,5%	11
R32	RES-2010-5R1	RES,SMD,5.1 OHM,1/2W,5%	11
R33	RES-2010-5R1	RES,SMD,5.1 OHM,1/2W,5%	11
R34	RES-2010-5R1	RES,SMD,5.1 OHM,1/2W,5%	11
R35	RES-2010-5R1	RES,SMD,5.1 OHM,1/2W,5%	11
R37	RES-1206-561	RES,SMD,560 OHM,1/4W,5%	11
R38	RES-1206-221	RES,SMD,220 OHM,1/4W,5%	11
R39	RES-1206-122	RES,SMD,1.2K OHM,1/4W,5%	11
R4	RES-1206-271	RES,SMD,270 OHM,1/4W,5%	11
R40	RES-1206-471	RES,SMD,470 OHM,1/4W,5%	11
R41	RES-1206-473	RES,SMD,47K OHM,1/4W,5%	11
R42	RES-1206-101	RES,SMD,100 OHM,1/4W,5%	11
R44	RES-2512-470	RES,SMD,47 OHM,1W,5%	11
R45	RES-1206-104	RES,SMD,100K OHM,1/4W,5%	11
R46	RES-1206-102	RES,SMD,1K OHM,1/4W,5%	11
R47	RES-2512-101	RES,SMD,100 OHM,1W,5%	11
R48	RES-2512-101	RES,SMD,100 OHM,1W,5%	11
R49	RES-1206-513	RES,SMD,51K OHM,1/4W,5%	11
R5	RES-1206-102	RES,SMD,1K OHM,1/4W,5%	11
R50	RES-1206-513	RES,SMD,51K OHM,1/4W,5%	11
R51	RES-1206-102	RES,SMD,1K OHM,1/4W,5%	11
R52	RES-1206-100	RES,SMD,10 OHM,1/4W,5%	11
R53	RES-1206-100	RES,SMD,10 OHM,1/4W,5%	11
R54	RES-1206-100	RES,SMD,10 OHM,1/4W,5%	11
R55	RES-1206-100	RES,SMD,10 OHM,1/4W,5%	11
R56	RES-1206-100	RES,SMD,10 OHM,1/4W,5%	11
R57	RES-1206-100	RES,SMD,10 OHM,1/4W,5%	11
R58	RES-1206-102	RES,SMD,1K OHM,1/4W,5%	11
R59	RES-2512-201	RES,SMD,200 OHM,1W,5%	11
R60	RES-1206-683	RES,SMD,68K OHM,1/4W,5%	11
R61	RES-1206-103	RES,SMD,10K OHM,1/4W,5%	11
R63	RES-1206-103	RES,SMD,10K OHM,1/4W,5%	11
R64	RES-1206-222	RES,SMD,2.2K OHM,1/4W,5%	11
R7	RES-1206-091	RES,SMD,9.1 OHM,1/4W,5%	11
R8	RES-1206-091	RES,SMD,9.1 OHM,1/4W,5%	11
R9	RES-1206-470	RES,SMD,47 OHM,1/4W,5%	11
U1	SEM-1022-002	LMC662, DUAL OPAMP, SO-8	11
U2	SEM-1014-094	MC14094BD, 8 BIT SHFT REG	11
U3	SEM-1017-001	ULN2003 NPN DARL DRVR ARR	11
U5	SEM-1179-001	PC353T, OPTO-ISOLATOR	11
	PCB-0245-02	PCB, POWER AMP	11
	ASY-0245-04	CPU/DSP BOARD	3
	PST-0245-04	CPU/DSP POST ASSY	4
JU1	CON-0240-030	3 PIN SINGLE ROW HEADER	5
JU2	CON-0240-030	3 PIN SINGLE ROW HEADER	5
P1	CON-0043-017	HEADER,SIP,1X32,.1"SP,.3"PCB SPACED	5
P2	CON-0043-017	HEADER,SIP,1X32,.1"SP,.3"PCB SPACED	5

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P3	CON-0043-015	HEADER,SIP,1X20,.1"SP,.3"PCB SPACED	5
	SMT-0245-04Q	SMT-0245-04 QC'D	5
	SMT-0245-04	CPU/DSP SMT ASSY	6
C1	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C10	CAP-1013-106	CAP,TANT,SMD,10UF,10V,10%,CASE B	7
C101	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C102	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C103	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C104	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C105	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C106	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C107	CAP-0805-473	CAP,CER,SMD,.047UF,X7R,50V,10%	7
C108	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C109	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C11	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C110	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C111	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C12	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C13	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C14	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C15	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C16	CAP-1013-106	CAP,TANT,SMD,10UF,10V,10%,CASE B	7
C17	CAP-0805-473	CAP,CER,SMD,.047UF,X7R,50V,10%	7
C18	CAP-0805-473	CAP,CER,SMD,.047UF,X7R,50V,10%	7
C19	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C2	CAP-1013-106	CAP,TANT,SMD,10UF,10V,10%,CASE B	7
C20	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C21	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C22	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C23	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C24	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C25	CAP-1013-106	CAP,TANT,SMD,10UF,10V,10%,CASE B	7
C26	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C27	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C28	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C29	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C3	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C30	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C31	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C32	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C33	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C34	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C35	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C36	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C37	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C38	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C39	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C4	CAP-1013-106	CAP,TANT,SMD,10UF,10V,10%,CASE B	7
C40	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C41	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7

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C42	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C43	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C44	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C45	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C46	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C47	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C48	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C49	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C5	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C50	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C51	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C52	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C53	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C54	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C55	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C56	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C57	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C58	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C59	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C6	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C60	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C61	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C62	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C63	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C64	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C65	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C66	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C67	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C68	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C69	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C7	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C70	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C71	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C72	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C73	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C74	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C75	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C76	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C77	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C78	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C79	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C8	CAP-1013-106	CAP,TANT,SMD,10UF,10V,10%,CASE B	7
C80	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C81	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C82	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C83	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C84	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C85	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C86	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C87	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7

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C88	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C89	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C9	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	7
C90	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C91	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C92	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C93	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C94	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C95	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C96	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C97	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C98	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
C99	CAP-0603-101	CAP,CER,SMD,100PF,COG,100V,5%	7
P5	CON-1004-010	HEADER,SMD,2X5,.050"SP,.25"HIGH	7
R1	RES-0603-473	RES,SMD,47K OHM,1/10W,5%	7
R10	RES-0603-473	RES,SMD,47K OHM,1/10W,5%	7
R11	RES-0603-473	RES,SMD,47K OHM,1/10W,5%	7
R12	RES-0603-102	RES,SMD,1K OHM,1/10W,5%	7
R13	RES-0603-473	RES,SMD,47K OHM,1/10W,5%	7
R14	RES-0603-473	RES,SMD,47K OHM,1/10W,5%	7
R15	RES-0603-473	RES,SMD,47K OHM,1/10W,5%	7
R16	RES-0603-473	RES,SMD,47K OHM,1/10W,5%	7
R17	RES-0603-473	RES,SMD,47K OHM,1/10W,5%	7
R18	RES-0603-103	RES,SMD,10K OHM,1/10W,5%	7
R19	RES-0603-473	RES,SMD,47K OHM,1/10W,5%	7
R2	RES-0603-473	RES,SMD,47K OHM,1/10W,5%	7
R20	RES-0603-473	RES,SMD,47K OHM,1/10W,5%	7
R3	RES-0603-473	RES,SMD,47K OHM,1/10W,5%	7
R4	RES-0603-473	RES,SMD,47K OHM,1/10W,5%	7
R5	RES-0603-473	RES,SMD,47K OHM,1/10W,5%	7
R6	RES-0603-473	RES,SMD,47K OHM,1/10W,5%	7
R7	RES-0603-473	RES,SMD,47K OHM,1/10W,5%	7
R8	RES-0603-473	RES,SMD,47K OHM,1/10W,5%	7
R9	RES-0805-100	RES,SMD,10 OHM,1/10W,5%	7
U1	SEM-1029-008	CODEC, LM4540	7
U10	SEM-1039-074	74LVC74A DUAL D POS-EDGE-TRIG F/F	7
U11	SEM-1039-074	74LVC74A DUAL D POS-EDGE-TRIG F/F	7
U2	SEM-1033-004	INVERTER, UHS DUAL UNBUFFERED	7
U3	SEM-1025-013	AS7C31026,FAST SRAM 64KX16,3.3V	7
U4	SEM-1025-014	TE28F800C3TA-90 FLASH, 8MEG	7
U5	SEM-1026-026	MC68C812A4,16 BIT CPU TQFP112,3.3V	7
U6	SEM-1024-016	REGULATOR, VOLTAGE TPS76318DBVT	7
U7	SEM-1026-024	DSP, FIXED-POINT TMS320VC5402	7
U8	SEM-1024-030	MC33465N-30 UNDERVOLTAGE SENSOR	7
U9	SEM-1033-004	INVERTER, UHS DUAL UNBUFFERED	7
	PCB-0245-04	CPU/DSP BOARD	7
	ASY-0245-10	FRONT PANEL ASSEMBLY	3
MIC-RED	FER-0004-003	BEAD,#43,.140ODX.070IDX.122H	4
MIC-YELLOW	FER-0004-003	BEAD,#43,.140ODX.070IDX.122H	4
	ASY-0235-M9	235/7157 MICROPHONE (MERRY)	4

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	ASY-0245-03	FRONT PANEL BOARD	4
	BAT-0003-001	3V COIN BAT. W/SOLDER LEADS	5
	PST-0245-03	FRONT PANEL POST ASSY	5
C104	CAP-0025-001	CAPACITOR TRIMMER 2-20PF	6
DISPLAY CONNECTOR	CON-0043-015	HEADER,SIP,1X20,.1"SP,.3"PCB SPACED	6
JU6/1-2	CON-0026-001	JUMPER, POST HEADER	6
P6	CON-0045-001	SOCKET, 2 ROW X 9, 3/4"	6
P7	CON-0043-016	SOCKET,SIP,1X20,.1"SP,.3"PCB SPACED	6
Y1	CRY-0009-009	CRYSTAL, 14.7456 MHZ, AT-51, 30PF	6
Y1	HAR-0029-007	CRYSTAL INSULATOR,MYLAR	6
Y2	CRY-0020-001	CRYSTAL,32.768KZ,NC38,SERIES,TUNING	6
	DIS-7157-001	DISPLAY, GRAPHICS LCD, 128X64	6
	HAR-0044-005	#2 SPACER, .300LX.091I.D.X.187OD NY	6
	STF-0245-03	FRONT PANEL ASSY, STUFFED	6
C14	CAP-0037-010	CAP, ELECT. 470UF RAD	7
C16	CAP-0039-107	CAP,ELECT.,100UF,35V,20%	7
C68	CAP-0027-104	CAP,FILM,CK05,.1UF,100/63V,5-10%	7
C70	CAP-0037-010	CAP, ELECT. 470UF RAD	7
J2	SOC-0002-016	IC SOCKET, 16 PIN DIP	7
JU6	CON-0240-030	3 PIN SINGLE ROW HEADER	7
P1	CON-0044-026	HEADER,2 X 13,.1"SP .240"H	7
P2	SOC-0002-008	IC SOCKET, 8 PIN DIP	7
P3	CON-0242-006	POST HEADER, 2X3, 0.1 SPA	7
P4	TER-0026-105	PCB MINI TERM BLOCK 5 POS,.1IN SP	7
P5	CON-0241-002	RIGHT ANGLE 2 PIN HEADER	7
P8	CON-0241-030	RIGHT ANGLE 3 PIN HEADER	7
R138	RES-0028-103	RESISTOR NETWORK 10K	7
R139	RES-0056-103	SIP RES 10KX5 6-PIN COMMON BOURNS	7
U14	SEM-0153-003	TDA2002H OR TDA2003H AUDIO AMP	7
U16	SEM-0109-001	7805 VOLTAGE REG, 5V (MC7805CT)	7
	MSK-0245-03	FRONT PANEL MASKED ASSY	7
	SMT-0245-03Q	SMT-0245-03 QC'D	8
	SMT-0245-03	FRONT PANEL SMT ASSY	9
C1	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C10	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C100	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C101	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C102	CAP-0805-105	CAP,CER,SMD,1UF,Y5V,16V,+80-20%	10
C103	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C105	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C106	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C107	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C108	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C109	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C11	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C110	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C111	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C112	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C114	CAP-0805-102	CAP,CER,SMD,.001UF,NPO,50V,5%,"A3"	10
C115	CAP-0805-102	CAP,CER,SMD,.001UF,NPO,50V,5%,"A3"	10

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C116	CAP-1014-106	CAP,TANT,SMD,10UF,16V,10%,CASE C	10
C12	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C12X	CAP-1013-475B	CAP,TANT,SMD,4.7UF,10V,10%,CASE B	10
C13	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C13X	CAP-1017-224	CAP,TANT,SMD,.22UF,35V,10%,CASE A	10
C15	CAP-0805-470	CAP,CER,SMD,47PF,COG,50V,5%	10
C17	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C18	CAP-1013-475B	CAP,TANT,SMD,4.7UF,10V,10%,CASE B	10
C2	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C20	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C21	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C22	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C23	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C24	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C25	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C26	CAP-0805-470	CAP,CER,SMD,47PF,COG,50V,5%	10
C27	CAP-0805-470	CAP,CER,SMD,47PF,COG,50V,5%	10
C28	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C29	CAP-1031-473	CAP,FILM,SMD,.047UF,16V,5%	10
C3	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C30	CAP-1031-473	CAP,FILM,SMD,.047UF,16V,5%	10
C31	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C32	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C33	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C34	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C35	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C36	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C37	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C38	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C39	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C4	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C40	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C41	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C42	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C43	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C44	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C45	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C46	CAP-0805-472	CAP,CER,SMD,.0047UF,X7R,50V,10%	10
C47	CAP-0805-472	CAP,CER,SMD,.0047UF,X7R,50V,10%	10
C48	CAP-0805-470	CAP,CER,SMD,47PF,COG,50V,5%	10
C49	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	10
C5	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C50	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	10
C51	CAP-0805-153	CAP,CER,SMD,.015UF,X7R,50/100V,10%	10
C52	CAP-0805-153	CAP,CER,SMD,.015UF,X7R,50/100V,10%	10
C53	CAP-0805-391	CAP,CER,CMD,390PF,COG,50/100V,5%	10
C54	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C55	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C56	CAP-0805-472	CAP,CER,SMD,.0047UF,X7R,50V,10%	10
C57	CAP-0805-472	CAP,CER,SMD,.0047UF,X7R,50V,10%	10

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C58	CAP-0805-105	CAP,CER,SMD,1UF,Y5V,16V,+80-20%	10
C59	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C6	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C60	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C61	CAP-0805-102	CAP,CER,SMD,.001UF,NPO,50V,5%,"A3"	10
C62	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C63	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C64	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C65	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C66	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C67	CAP-1014-106	CAP,TANT,SMD,10UF,16V,10%,CASE C	10
C69	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C7	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C71	CAP-0805-472	CAP,CER,SMD,.0047UF,X7R,50V,10%	10
C72	CAP-0805-105	CAP,CER,SMD,1UF,Y5V,16V,+80-20%	10
C73	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C8	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C82	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C83	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C84	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C85	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C86	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C87	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C88	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C89	CAP-0805-102	CAP,CER,SMD,.001UF,NPO,50V,5%,"A3"	10
C8X	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C9	CAP-0805-104	CAP,CER,SMD,.1UF,Y5V,25V,+80-20%	10
C90	CAP-0805-103	CAP,CER,SMD,.01UF,X7R,50V,10%	10
C91	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C93	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C94	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C95	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C96	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C97	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C98	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
C99	CAP-0805-101	CAP,CER,SMD,100PF,COG,50V,5%	10
CR1	SEM-1008-082	MMBZ5237B,8.2ZD,A1,SOT23	10
CR10	SEM-1003-004	MMBD7000L DL SW, A1, SOT-	10
CR11	SEM-1003-004	MMBD7000L DL SW, A1, SOT-	10
CR2	SEM-1003-004	MMBD7000L DL SW, A1, SOT-	10
CR3	SEM-1005-003	CMP SH-3C DL HC,CC3,100MA	10
CR4	SEM-1005-005	CMPD6263A DL HC,CA3,SOT23	10
CR5	SEM-1008-082	MMBZ5237B,8.2ZD,A1,SOT23	10
CR6	SEM-1003-004	MMBD7000L DL SW, A1, SOT-	10
CR7	SEM-1003-004	MMBD7000L DL SW, A1, SOT-	10
CR8	SEM-1003-004	MMBD7000L DL SW, A1, SOT-	10
CR9	SEM-1003-004	MMBD7000L DL SW, A1, SOT-	10
Q1	SEM-1051-001	2N7002, N-CH MOSFET, 702 SOT-23	10
Q2	SEM-1041-001	2222, NPN GP TRANS, 1B/1 SOT-23	10
Q3	SEM-1041-001	2222, NPN GP TRANS, 1B/1 SOT-23	10

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Q4	SEM-1041-001	2222, NPN GP TRANS, 1B/1 SOT-23	10
Q5	SEM-1051-001	2N7002, N-CH MOSFET, 702 SOT-23	10
Q6	SEM-1051-001	2N7002, N-CH MOSFET, 702 SOT-23	10
Q7	SEM-1051-001	2N7002, N-CH MOSFET, 702 SOT-23	10
Q8	SEM-1051-001	2N7002, N-CH MOSFET, 702 SOT-23	10
R1	RES-0805-105	RES,SMD,1MEG OHM,1/10W,5%	10
R10	RES-0805-473	RES,SMD,47K OHM,1/10W,5%	10
R100	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	10
R101	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	10
R102	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	10
R103	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	10
R104	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	10
R105	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	10
R106	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	10
R107	RES-0805-474	RES,SMD,470K OHM,1/10W,5%	10
R108	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	10
R109	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	10
R11	RES-0805-222	RES,SMD,2.2K OHM,1/10W,5%	10
R111	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	10
R112	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	10
R113	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	10
R114	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	10
R115	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	10
R116	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	10
R117	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	10
R118	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	10
R12	RES-0805-473	RES,SMD,47K OHM,1/10W,5%	10
R120	RES-0805-472	RES,SMD,4.7K OHM,1/10W,5%	10
R121	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	10
R122	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	10
R123	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	10
R124	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	10
R125	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	10
R126	RES-0805-222	RES,SMD,2.2K OHM,1/10W,5%	10
R127	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	10
R128	RES-0805-221	RES,SMD,220 OHM,1/10W,5%	10
R129	RES-0805-221	RES,SMD,220 OHM,1/10W,5%	10
R13	RES-0805-473	RES,SMD,47K OHM,1/10W,5%	10
R130	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	10
R131	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	10
R132	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	10
R134	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	10
R135	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	10
R136	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	10
R137	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	10
R14	RES-0805-473	RES,SMD,47K OHM,1/10W,5%	10
R140	RES-0805-223	RES,SMD,22K OHM,1/10W,5%	10
R141	RES-0805-222	RES,SMD,2.2K OHM,1/10W,5%	10
R142	RES-0805-222	RES,SMD,2.2K OHM,1/10W,5%	10
R143	RES-0805-621	RES,SMD,620 OHM,1/10W,5%	10

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R144	RES-0805-682	RES,SMD,6.8K OHM,1/10W,5%	10
R145	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	10
R146	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	10
R147	RES-0805-682	RES,SMD,6.8K OHM,1/10W,5%	10
R15	RES-0805-222	RES,SMD,2.2K OHM,1/10W,5%	10
R16	RES-0805-222	RES,SMD,2.2K OHM,1/10W,5%	10
R17	RES-0805-472	RES,SMD,4.7K OHM,1/10W,5%	10
R2	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	10
R20	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	10
R21	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	10
R22	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	10
R23	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	10
R24	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	10
R25	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	10
R26	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	10
R27	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	10
R28	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	10
R29	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	10
R3	RES-0805-473	RES,SMD,47K OHM,1/10W,5%	10
R31	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	10
R32	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	10
R33	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	10
R34	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	10
R35	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	10
R36	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	10
R37	RES-0805-222	RES,SMD,2.2K OHM,1/10W,5%	10
R38	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	10
R39	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	10
R4	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	10
R40	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	10
R41	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	10
R42	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	10
R43	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	10
R44	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	10
R45	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	10
R46	RES-0805-012	RES,SMD,1.2 OHM,1/10W,5%	10
R47	RES-0805-068	RES,SMD,6.8 OHM,1/10W,5%	10
R48	RES-0805-221	RES,SMD,220 OHM,1/10W,5%	10
R49	RES-0805-104	RES,SMD,100K OHM,1/10W,5%	10
R5	RES-0805-473	RES,SMD,47K OHM,1/10W,5%	10
R50	RES-0805-104	RES,SMD,100K OHM,1/10W,5%	10
R51	RES-0805-274	RES,SMD,270K OHM,1/10W,5%	10
R52	RES-0805-104	RES,SMD,100K OHM,1/10W,5%	10
R53	RES-0805-332	RES,SMD,3.3K OHM,1/10W,5%	10
R54	RES-0805-104	RES,SMD,100K OHM,1/10W,5%	10
R55	RES-0805-332	RES,SMD,3.3K OHM,1/10W,5%	10
R56	RES-0805-224	RES,SMD,220K OHM,1/10W,5%	10
R57	RES-0805-222	RES,SMD,2.2K OHM,1/10W,5%	10
R58	RES-0805-471	RES,SMD,470 OHM,1/10W,5%	10
R59	RES-0805-471	RES,SMD,470 OHM,1/10W,5%	10

## SEA245 BILL OF MATERIALS

R6	RES-0805-473	RES,SMD,47K OHM,1/10W,5%	10
R60	RES-0805-222	RES,SMD,2.2K OHM,1/10W,5%	10
R61	RES-0805-621	RES,SMD,620 OHM,1/10W,5%	10
R62	RES-0805-104	RES,SMD,100K OHM,1/10W,5%	10
R63	RES-0805-222	RES,SMD,2.2K OHM,1/10W,5%	10
R64	RES-0805-104	RES,SMD,100K OHM,1/10W,5%	10
R65	RES-0805-101	RES,SMD,100 OHM,1/10W,5%	10
R66	RES-0805-104	RES,SMD,100K OHM,1/10W,5%	10
R67	RES-0805-151	RES,SMD,150 OHM,1/10W,5%	10
R68	RES-0805-151	RES,SMD,150 OHM,1/10W,5%	10
R69	RES-0805-151	RES,SMD,150 OHM,1/10W,5%	10
R7	RES-0805-473	RES,SMD,47K OHM,1/10W,5%	10
R70	RES-0805-151	RES,SMD,150 OHM,1/10W,5%	10
R71	RES-0805-820	RES,SMD,82 OHM,1/10W,5%	10
R72	RES-0805-220	RES,SMD,22 OHM,1/10W,5%	10
R73	RES-0805-221	RES,SMD,220 OHM,1/10W,5%	10
R74	RES-0805-221	RES,SMD,220 OHM,1/10W,5%	10
R75	RES-0805-472	RES,SMD,4.7K OHM,1/10W,5%	10
R76	RES-0805-472	RES,SMD,4.7K OHM,1/10W,5%	10
R77	RES-0805-472	RES,SMD,4.7K OHM,1/10W,5%	10
R78	RES-0805-472	RES,SMD,4.7K OHM,1/10W,5%	10
R79	RES-0805-472	RES,SMD,4.7K OHM,1/10W,5%	10
R8	RES-0805-621	RES,SMD,620 OHM,1/10W,5%	10
R80	RES-0805-472	RES,SMD,4.7K OHM,1/10W,5%	10
R81	RES-0805-472	RES,SMD,4.7K OHM,1/10W,5%	10
R82	RES-0805-472	RES,SMD,4.7K OHM,1/10W,5%	10
R83	RES-0805-472	RES,SMD,4.7K OHM,1/10W,5%	10
R84	RES-0805-473	RES,SMD,47K OHM,1/10W,5%	10
R85	RES-0805-473	RES,SMD,47K OHM,1/10W,5%	10
R86	RES-0805-473	RES,SMD,47K OHM,1/10W,5%	10
R87	RES-0805-473	RES,SMD,47K OHM,1/10W,5%	10
R88	RES-0805-473	RES,SMD,47K OHM,1/10W,5%	10
R89	RES-0805-273	RES,SMD,27K OHM,1/10W,5%	10
R9	RES-0805-473	RES,SMD,47K OHM,1/10W,5%	10
R90	RES-0805-104	RES,SMD,100K OHM,1/10W,5%	10
R91	RES-0805-102	RES,SMD,1K OHM,1/10W,5%	10
R92	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	10
R93	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	10
R94	RES-0805-222	RES,SMD,2.2K OHM,1/10W,5%	10
R95	RES-0805-472	RES,SMD,4.7K OHM,1/10W,5%	10
R96	RES-0805-104	RES,SMD,100K OHM,1/10W,5%	10
R97	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	10
R98	RES-0805-104	RES,SMD,100K OHM,1/10W,5%	10
R99	RES-0805-103	RES,SMD,10K OHM,1/10W,5%	10
U1	SEM-1026-020	MC68HC812A4,16 BIT CPU TQFP112	10
U10	SEM-1022-009	MC34074, QUAD OPAMP, SO-1	10
U11	SEM-1015-000	MC74HC00AD, QUAD 2 INP NA	10
U12	SEM-1017-002	75176, RS-485 DIFF BUS XC	10
U13	SEM-1015-066	74HC4066 QUAD ANALOG SWI RAILS ONLY	10
U15	SEM-1015-595	74HC595 8-BIT SHIFT REG S	10

SEA245 BILL OF MATERIALS

U17	SEM-1022-004	LM358, DUAL OPAMP, SO-8	10
U18	SEM-1179-001	PC353T, OPTO-ISOLATOR	10
U19	SEM-1017-001	ULN2003 NPN DARL DRVR ARR	10
U2	SEM-1025-008	128K/256K 16/8 FLASH, 5V, TOP BOOT	10
U20	SEM-1017-001	ULN2003 NPN DARL DRVR ARR	10
U21	SEM-1024-022	TL7705 RESET GEN/SUPPLY SUPERVISOR	10
U22	SEM-1035-001	LM50CIM SOT23 TEMP SENSOR	10
U3	SEM-1025-009	FAST SRAM 64K X 16	10
U4	SEM-1032-001	DS1283S WATCHDOG TIMEKEEPER CMOS	10
U5	SEM-1025-002	8K X 8 CMOS EEPROM	10
U6	SEM-1029-009	TLC5620CD QUAD SPI DAC	10
U8	SEM-1022-004	LM358, DUAL OPAMP, SO-8	10
U9	SEM-1017-002	75176, RS-485 DIFF BUS XC	10
	PCB-0245-03	FRONT PANEL BOARD	10
	ASY-0245-08	245 FRONT PANEL W/O DISPLAY	4
	ASY-0156-06	SPKR W/ CABLE	5
SPE1	SPE-0001-010	SPEAKER, 2 1/2" 4 OHM 3 WATT	6
	ASY-0235-04	PCB KEYPANEL ASSY	5
	ASY-0235-C09	CONTROLLER GROUND CABLE 2.25"	5
	ASY-0245-C05	PWR SWITCH CABLE,5.0" LONG	5
	ASY-0245-C06	VOL POT CABLE,3.6" LONG	5
	FAB-0235-01	FRONT PANEL	5
	FAB-0235-09	BEZEL, MOLDED	5
	FAB-0235-11	ADHESIVE, SPACER	5
	FAB-0245-10	ELASTOMER KEYPAD	5
	FAB-7157-08	LENS, ACRYLIC, LCD	5
	KNO-0005-001	KNOB,BLACK W/WHT DOT .25"SHAFT	5
	LBL-0245-01	LABEL,NAMEPLATE FOR 245 RADIO/DSC	5
	RES-0019-003	RES,POT,SWITCH,10K,20%,TAPER,24MM	5
	ASY-0245-15	DC/DC CONV W/MTG PLATE	3
	ASY-0245-05	DC/DC CONVERTER BOARD	4
	PST-0245-05	DC/DC CONV POST ASSY	5
C5	CAP-0102-107	CAP, 100UF 50V AL EL, LOW IMP, RAD	6
	POS-2412-060	DC/DC CONVERTER,24VIN/12VOUT,60W	6
	SMT-0245-05Q	SMT-0245-05 QC'D	6
	SMT-0245-05	DC-DC CONVERTER INTERFACE	7
C1	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	8
C2	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	8
C3	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	8
C4	CAP-1206-104	CAP,CER,SMD,.1UF,X7R,50V,10%,RED A5	8
C6	CAP-1016-106	CAP,TANT,SMD,10UF,25V,10%,CASE D	8
L1	IND-1612-000	IND,SMD,BEAD,Z @ 25MHZ=30	8
L2	IND-1612-000	IND,SMD,BEAD,Z @ 25MHZ=30	8
L3	IND-1612-000	IND,SMD,BEAD,Z @ 25MHZ=30	8
L4	IND-1612-000	IND,SMD,BEAD,Z @ 25MHZ=30	8
L5	IND-1612-000	IND,SMD,BEAD,Z @ 25MHZ=30	8
	PCB-0245-05	DC/DC CONVERTER BOARD	8
	CON-0034-003	TERMINAL, FEMALE #18-24AWG	4
	CON-0034-051	CONNECTOR,5 PIN RECEPTACLE	4
	FAB-0245-15	POWER SUPPLY MTG PLATE	4

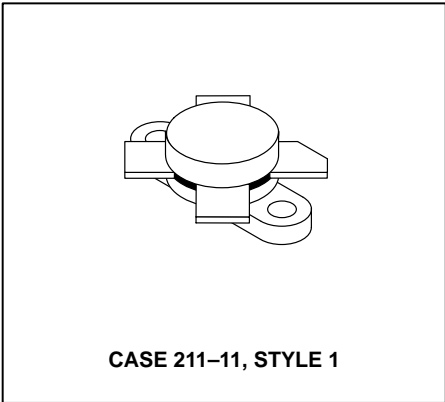
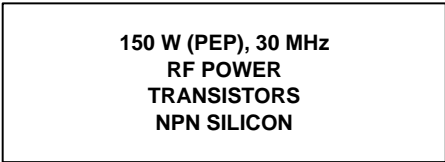
SEA245 BILL OF MATERIALS

HAR-0047-008	GROMMET,RUBBER,ROUND,1/4 HOLE,BUNAS	4
ASY-0245-C01	PRINTER CABLE ASSEMBLY,10.5" LONG	3
ASY-0245-C02	16 PIN RIBBON CABLE,4.40" LONG	3
ASY-0245-C03	8 PIN RIBBON CABLE,3.2"LONG 1UP/1DN	3
ASY-7157-C01	DIG I/F TO -01 ASSY,6.5"LONG,16 PIN	3
FAB-0245-14	FRONT SHIELD	3
FAB-0245-16	POWER SUPPLY COVER	3
BOX-0225-01	BOX, OUTER SHIPPING	1
BOX-0225-02	INSERT, TOP SPACER	1
CON-0060-009	3.5MM PITCH,9 PIN PLUG SCREW TERM	1
CON-0060-014	3.5MM PITCH,14 PIN PLUG SCREW TERM	1
CON-0069-008	2.5MM PITCH,8 PIN PLUG SPRING-CAGE	1
FAB-0235-05	COVER	1
FAB-0235-06	MOUNTING BRACKET	1
FOM-0235-03	FOAM END CAP INSERTS (2/BOX)	1
HAR-060D-313	SCREW,6-32X5/16,PAN-L,SS,BLK,W/WSHR	1
KIT-0245-99	245 PARTS KIT	1
OPR-245	OPERATOR'S MANUAL, SEA 245	1
OPR-245-INST	INSTALLATION MANUAL, SEA245	1

The RF Line  
**NPN Silicon**  
**RF Power Transistor**

Designed primarily for applications as a high-power linear amplifier from 2.0 to 30 MHz.

- Specified 28 Volt, 30 MHz Characteristics —  
Output Power = 150 W (PEP)  
Minimum Gain = 10 dB  
Efficiency = 40%
- Intermodulation Distortion @ 150 W (PEP) —  
IMD = -30 dB (Min)
- 100% Tested for Load Mismatch at all Phase Angles with 30:1 VSWR



**MAXIMUM RATINGS**

Rating	Symbol	Value	Unit
Collector-Emitter Voltage	V <sub>CEO</sub>	40	Vdc
Collector-Base Voltage	V <sub>CBO</sub>	85	Vdc
Emitter-Base Voltage	V <sub>EBO</sub>	3.0	Vdc
Collector Current — Continuous	I <sub>C</sub>	20	Adc
Withstanding Current — 10 s	—	30	Adc
Total Device Dissipation @ T <sub>C</sub> = 25°C Derate above 25°C	P <sub>D</sub>	290 1.66	Watts W/°C
Storage Temperature Range	T <sub>stg</sub>	-65 to +150	°C

**THERMAL CHARACTERISTICS**

Characteristic	Symbol	Max	Unit
Thermal Resistance, Junction to Case	R <sub>θJC</sub>	0.6	°C/W

**ELECTRICAL CHARACTERISTICS** (T<sub>C</sub> = 25°C unless otherwise noted.)

Characteristic	Symbol	Min	Typ	Max	Unit
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**OFF CHARACTERISTICS**

Collector-Emitter Breakdown Voltage (I <sub>C</sub> = 200 mAdc, I <sub>B</sub> = 0)	V <sub>(BR)CEO</sub>	35	—	—	Vdc
Collector-Emitter Breakdown Voltage (I <sub>C</sub> = 100 mAdc, V <sub>BE</sub> = 0)	V <sub>(BR)CES</sub>	85	—	—	Vdc
Collector-Base Breakdown Voltage (I <sub>C</sub> = 100 mAdc, I <sub>E</sub> = 0)	V <sub>(BR)CBO</sub>	85	—	—	Vdc
Emitter-Base Breakdown Voltage (I <sub>E</sub> = 10 mAdc, I <sub>C</sub> = 0)	V <sub>(BR)EBO</sub>	3.0	—	—	Vdc
Collector Cutoff Current (V <sub>CE</sub> = 28 Vdc, V <sub>BE</sub> = 0, T <sub>C</sub> = 25°C)	I <sub>CES</sub>	—	—	20	mAdc

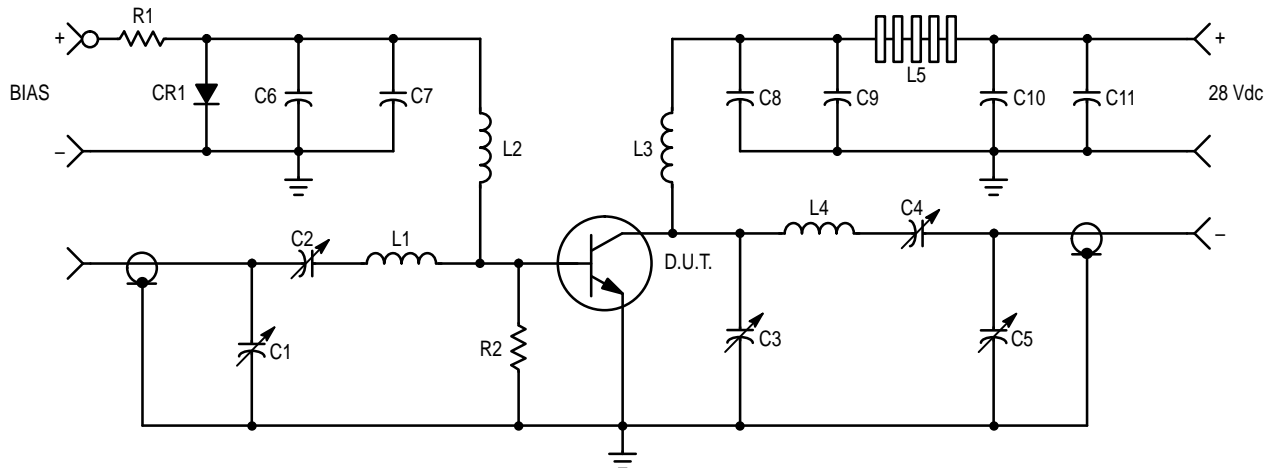
(continued)

**ELECTRICAL CHARACTERISTICS — continued** ( $T_C = 25^\circ\text{C}$  unless otherwise noted.)

Characteristic	Symbol	Min	Typ	Max	Unit
<b>ON CHARACTERISTICS</b>					
DC Current Gain ( $I_C = 5.0 \text{ Adc}$ , $V_{CE} = 5.0 \text{ Vdc}$ )	$h_{FE}$	15	30	120	—
<b>DYNAMIC CHARACTERISTICS</b>					
Output Capacitance ( $V_{CB} = 28 \text{ Vdc}$ , $I_E = 0$ , $f = 1.0 \text{ MHz}$ )	$C_{ob}$	—	420	—	pF
<b>FUNCTIONAL TESTS</b>					
Common-Emitter Amplifier Power Gain ( $V_{CC} = 28 \text{ Vdc}$ , $P_{out} = 150 \text{ W (PEP)}$ , $I_{C(max)} = 6.7 \text{ Adc}$ , $I_{CQ} = 150 \text{ mA dc}$ , $f = 30, 30.001 \text{ MHz}$ )	$G_{PE}$	10	13	—	dB
Collector Efficiency ( $V_{CC} = 28 \text{ Vdc}$ , $P_{out} = 150 \text{ W (PEP)}$ , $I_{C(max)} = 6.7 \text{ Adc}$ , $I_{CQ} = 150 \text{ mA dc}$ , $f = 30, 30.001 \text{ MHz}$ )	$\eta$	—	45	—	%
Intermodulation Distortion (1) ( $V_{CE} = 28 \text{ Vdc}$ , $P_{out} = 150 \text{ W (PEP)}$ , $I_C = 6.7 \text{ Adc}$ , $I_{CQ} = 150 \text{ mA dc}$ , $f = 30, 30.001 \text{ MHz}$ )	IMD	—	-33	-30	dB
Output Power ( $V_{CE} = 28 \text{ Vdc}$ , $f = 30 \text{ MHz}$ )	$P_{out}$	150	—	—	Watts (PEP)

**NOTE:**

- To Mil-Std-1311 Version A, Test Method 2204, Two Tone, Reference each Tone.



- C1, C2, C3, C5 — 170–680 pF, ARCO 469
- C4 — 80–480 pF, ARCO 466
- C6, C8, C11 — ERIE 0.1  $\mu\text{F}$ , 100 V
- C7 — MALLORY 500  $\mu\text{F}$ , 15 V Electrolytic
- C9 — UNDERWOOD 1000 pF, 350 V
- C10 — 10  $\mu\text{F}$ , 50 V Electrolytic
- R1 — 10  $\Omega$ , 25 Watt Wire Wound
- R2 — 10  $\Omega$ , 1.0 Watt Carbon
- CR1 — 1N4997

- L1 — 3 Turns, #16 Wire, 5/16" I.D., 5/16" Long
- L2 — 10  $\mu\text{H}$  Molded Choke
- L3 — 12 Turns, #16 Enameled Wire, Close Wound, 1/4" Dia.
- L4 — 5 Turns, 1/8" Copper Tubing
- L5 — 10 Ferrite Beads — FERROXCUBE #56-590-65/3B

**Figure 1. 30 MHz Test Circuit Schematic**

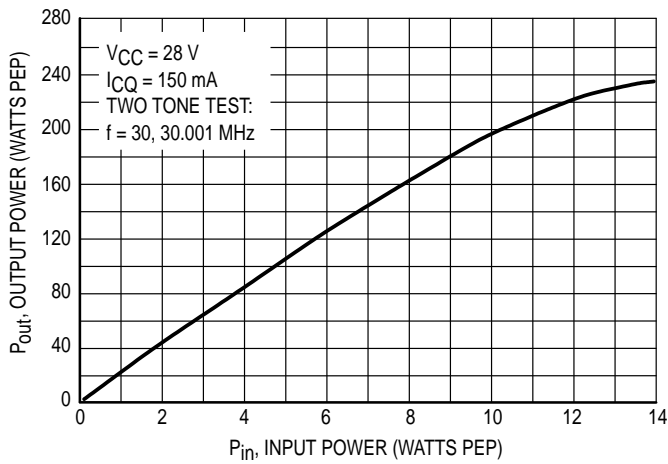


Figure 2. Output Power versus Input Power

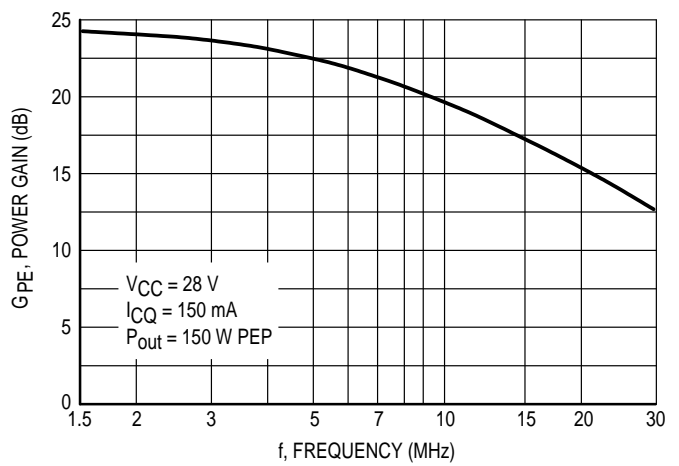


Figure 3. Power Gain versus Frequency

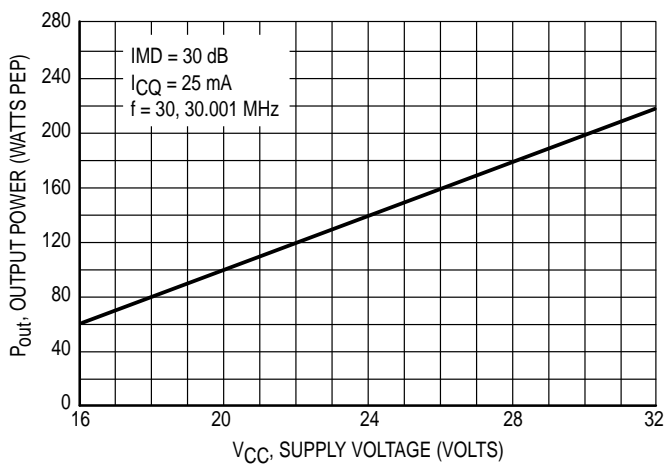


Figure 4. Linear Output Power versus Supply Voltage

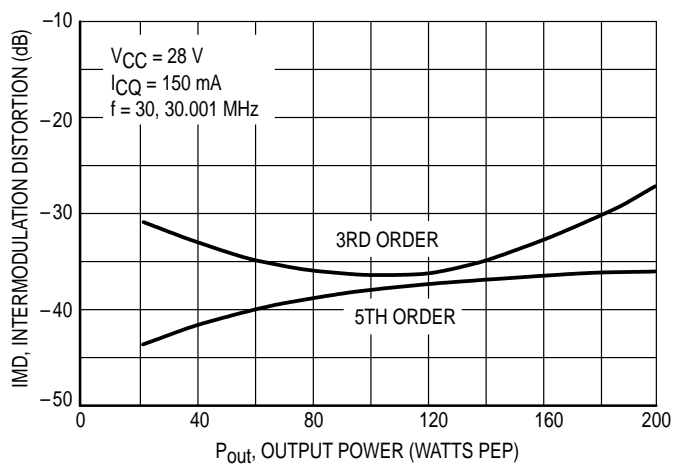


Figure 5. Intermodulation Distortion versus Output Power

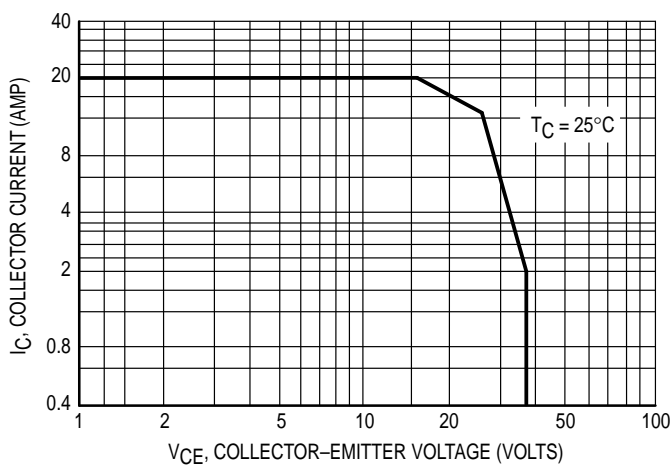


Figure 6. DC Safe Operating Area

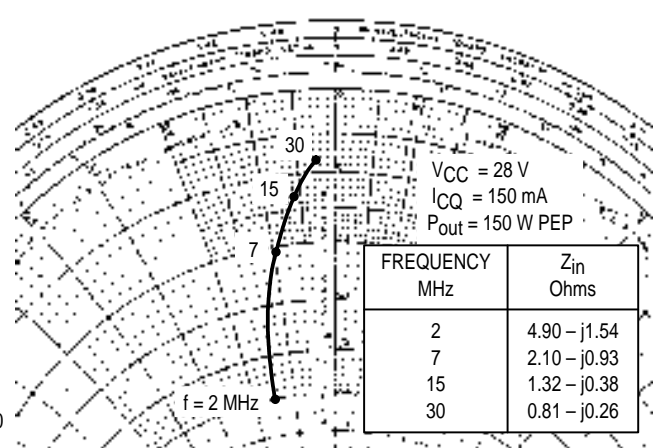


Figure 7. Series Input Impedance

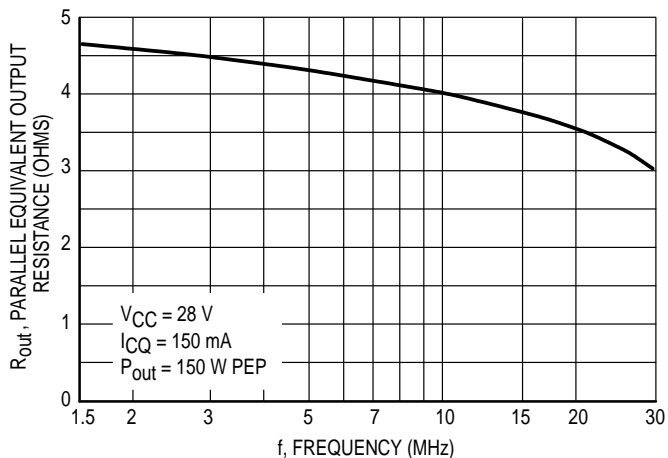


Figure 8. Output Resistance versus Frequency

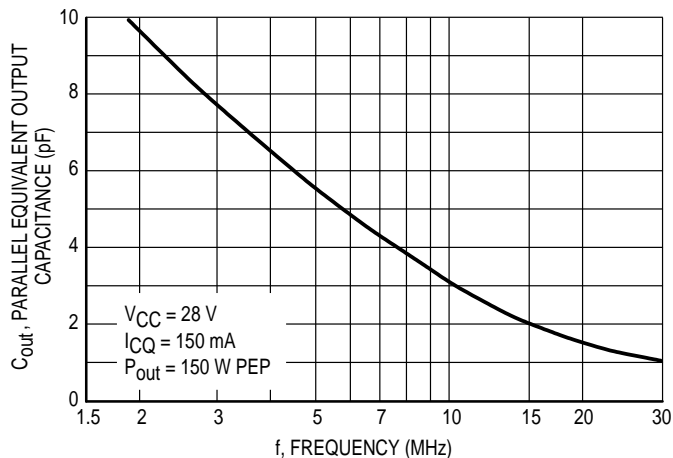
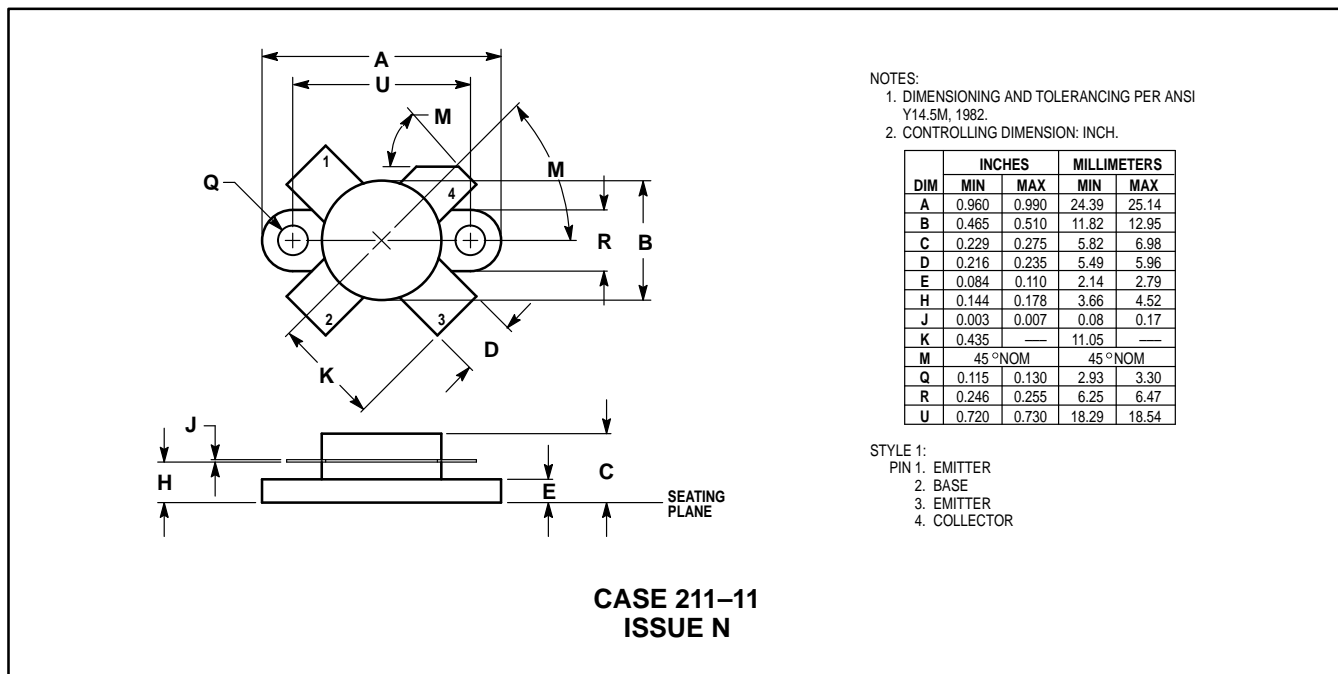


Figure 9. Output Capacitance versus Frequency

PACKAGE DIMENSIONS



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