



Technical Manual

SURROUND SOUND PROCESSOR **RSP-985**

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Specification

Audio

Total Harmonic Distortion (10 Hz - 70k Hz)	<0.03 %
Intermodulation Distortion (60 Hz : 7 kHz)	<0.03 %
Frequency Response (line level)	20 Hz - 20 kHz, ± 1 dB
Signal to Noise Ratio(IHF"A"weighted)	100 dB (Stereo) 90 dB (Dolby Digital, dts)
Gain/Input Impedance	
Analog Gain	10dB/47 kohms
Digital	0.5V/-20DBFS
Tone Controls (Bass/Treble)	± 6 dB at 50 Hz/15 kHz

Video

Frequency Response	3 Hz - 10 MHz, ± 3 dB
Signal to Noise Ratio	45 dB
Input Impedance	75 ohms
Output Impedance	75 ohms
Output Level	1 volt

General

Power Consumption	46 watts
Power Requirements (AC)	115 volts, 60 Hz (USA version) 230 volts, 50 Hz (Europe version)
Weight	7.0 kg/15.4 lb.
Dimensions(W x H x D)	440 x 121 x 329 mm 17 ³ / ₈ " x 4 ⁷ / ₈ " x 13"

THE ROTEL CO., LTD

SHINSEN-BLD. 4F 10-10 SHINSEN-CHO, SHIBUYA-KU,
TOKYO 150-0045, JAPAN

Serial. NO. Beginning

Parts List-1

SYMBOL	PARTS NO.	DESCRIPTION
1261 PCB ASSEMBLY		
C1-17	042 TP50V103J	CAP,MYLAR 50V0.01UF
C18	041 UTSS1E101-FB	CAP,ELEC.25V100UF
C19,20	044 S50V100PJ	CAP,STYROL 50V100PF
C21	041 UTSS1E101-FB	CAP,ELEC.25V100UF
C22,23	041 UTSS1H220-FB	CAP,ELEC.50V22UF
C24-35	041 UTSS1H4R7-FB	CAP,ELEC.50V4.7UF
C36-39	042 TP50V103J	CAP,MYLAR 50V0.01UF
C40-53	044 S50V100PJ	CAP,STYROL 50V100PF
C54-59	041 UTSS1H220	CAP,ELEC.50V22UF
	053 CR14-471J-A	R,CARBON 470R
C60	042 TP50V103J	CAP,MYLAR 50V0.01UF
C61	041 UTSS1H100-FB	CAP,ELEC.50V10UF
C62	044 50MSAN104	CAP,FILM 50V0.1UF
C63,64	044 S50V100PJ	CAP,STYROL 50V100PF
C65-70	044 S50V120PJ	CAP,STYROL 50V120PF
C71	041 UTSS1H100-FB	CAP,ELEC.50V10UF
C72	041 UTSS1E101-FB	CAP,ELEC.25V100UF
C73	041 UTSS1H100-FB	CAP,ELEC.50V10UF
C74	041 UTSS1E101-FB	CAP,ELEC.25V100UF
C75-85	044 50MSAN104J	CAP,FILM 50V0.1UF
C86	041 UTSS1H100-FB	CAP,ELEC.50V10UF
C87	041 UTSS1E101-FB	CAP,ELEC.25V100UF
C88,89	044 S50V100PJ	CAP,STYROL 50V100PF
C90,91	044 50MSAN104J	CAP,FILM 50V0.1UF
C92,93	041 UTSS1H100-FB	CAP,ELEC.50V10UF
C94-103	041 UTSS1E101-FB	CAP,ELEC.25V100UF
C104,105	041 UTSS1H220-FB	CAP,ELEC.50V22UF
C106-109	041 UTSS1E101-FB	CAP,ELEC.25V100UF
C110	041 UTSS1E221-FB	CAP,ELEC.25V220UF
C111	041 UTSS1H220-FB	CAP,ELEC.50V22UF
C112	044 S50V56PJ	CAP,STYROL 50V56PF
C113	041 UTSS1H100-FB	CAP,ELEC.50V10UF
C114,115	044 50MSAN104J	CAP,FILM 50V0.1UF
C116	044 S50V100PJ	CAP,STYROL 50V100PF
C117,118	041 UTSS1H4R7-FB	CAP,ELEC.50V4.7UF
C119	044 S50V56PJ	CAP,STYROL 50V56PF
C120	041 UTSS1E101-FB	CAP,ELEC.25V100UF
C121	044 S50V56PJ	CAP,STYROL 50V56PF
C122	044 50MSAN104J	CAP,FILM 50V0.1UF
C123	044 S50V56PJ	CAP,STYROL 50V56PF
C124,125	044 50MSAN104J	CAP,FILM 50V0.1UF
C126	041 UTSS1E221-FB	CAP,ELEC.25V220UF
C127-132	044 50MSAN104J	CAP,FILM 50V0.1UF
C133	041 UTSS1E101-FB	CAP,ELEC.25V100UF
C134	041 UTSS1H220-FB	CAP,ELEC.50V22UF
C135	041 S50V56PJ	CAP,STYROL 50V56PF
C136	041 UTSS1H4R7-FB	CAP,ELEC.50V4.7UF
C137	044 S50V100PJ	CAP,STYROL 50V100PF
C138	041 UTSS1H4R7-FB	CAP,ELEC.50V4.7UF
C139	044 S50V56PJ	CAP,STYROL 50V56PF

SYMBOL	PARTS NO.	DESCRIPTION
C140	041 UTSS1H100-FB	CAP,ELEC.50V10UF
C141,142	041 UTSS1E101-FB	CAP,ELEC.25V100UF
C143	044 50MSAN104J	CAP,FILM 50V0.1UF
C144,145	041 UTSS1H100-FB	CAP,ELEC.50V10UF
C146-151	041 UTSS1E101-FB	CAP,ELEC.25V100UF
C152	041 UTSS1H220-FB	CAP,ELEC.50V22UF
C153,154	044 50MSAN104J	CAP,FILM 50V0.1UF
C155,156	041 UTSS1H220-FB	CAP,ELEC.50V22UF
C157,158	044 50MSAN104J	CAP,FILM 50V0.1UF
C159,160	041 UTSS1H220-FB	CAP,ELEC.50V22UF
C161,162	044 50MSAN104J	CAP,FILM 50V0.1UF
C163	041 UTSS1H220-FB	CAP,ELEC.50V22UF
C164	041 UTSS1H100-FB	CAP,ELEC.50V10UF
C165-170	044 50MSAN104J	CAP,FILM 50V0.1UF
C171	041 UTSS1E101-FB	CAP,ELEC.25V100UF
C172	041 UTSS1E221-FB	CAP,ELEC.25V220UF
C173-176	044 50MSAN104J	CAP,FILM 50V0.1UF
C177	041 UTSS1E221-FB	CAP,ELEC.25V220UF
C178	041 UTSS1H100-FB	CAP,ELEC.50V10UF
C179-184	044 50MSAN104J	CAP,FILM 50V0.1UF
C185-191	041 UTSS1E101-FB	CAP,ELEC.25V100UF
C192-197	043 TC50VCH100	CAP,CERA.50V10PF
C198	042 TP50V103J	CAP,MYLAR 50V0.01UF
C199	041 UTSS1C222	CAP,ELEC.16V2200UF
C200-201	043 TC50V101	CAP,CERA.50V100PF
C202	041 UTSS1E221-FB	CAP,ELEC.25V220UF
C203,204	042 TP50V103J	CAP,MYLAR 50V0.01UF
C205,206	044 50MSAN104J	CAP,FILM 50V0.1UF
C207	046 T50V473K	CAP,CERA.50V0.047UF
C208	042 TP50V103J	CAP,MYLAR 50V0.01UF
C209	041 UTSS1E101-FB	CAP,ELEC.25V100UF
C210-213	044 50MSAN104J	CAP,FILM 50V0.1UF
C214	042 TP50V103J	CAP,MYLAR 50V0.01UF
C215	041 UTSS1E221-FB	CAP,ELEC.25V220UF
C216,217	043 TC50V101	CAP,CERA.50V100PF
C218	041 UTSS1E101-FB	CAP,ELEC.25V100UF
C219	041 UTSS1C222	CAP,ELEC.16V2200UF
C220-223	046 T50V473K	CAP,CERA.50V0.047UF
C224-227	043 TC50V101	CAP,CERA.50V100PF
C228	042 TP50V102J	CAP,MYLAR 50V1000PF
C229,230	046 T50V473K	CAP,CERA.50V0.047UF
C231	042 TP50V103J	CAP,MYLAR 50V0.01UF
C232	041 UTSS1C472	CAP,ELEC.16V4700UF
C233	041 UTSS1E101-FB	CAP,ELEC.25V100UF
C234,235	046 T50V473K	CAP,CERA.50V0.047UF
C236	043 TC500V103	CAP,CERA.500V0.01UF
C237	044 50MSAN104J	CAP,FILM 50V0.1UF
C238,239	043 TC500V103	CAP,CERA.500V0.01UF
C240	041 UTSS1E221-FB	CAP,ELEC.25V220UF
C241	044 50MSAN104J	CAP,FILM 50V0.1UF

Parts List-2

SYMBOL	PARTS NO.	DESCRIPTION	
C242	046	T50V473K	CAP,CERA.50V0.047UF
C243	043	TC500V103	CAP,CERA.500V0.01UF
C244	041	UTSS1H010-FB	CAP,ELEC.50V1UF
C245	041	UTSS1E101-FB	CAP,ELEC.25V100UF
C246	041	UTSS1H010-FB	CAP,ELEC.50V1UF
C247	041	UTSS1E101-FB	CAP,ELEC.25V100UF
C248	046	T50V473K	CAP,CERA.50V0.047UF
C249	041	UTSS1E101-FB	CAP,ELEC.25V100UF
C250	046	T50V473K	CAP,CERA.50V0.047UF
C251	041	UTSS1H010-FB	CAP,ELEC.50V1UF
C252	041	UTSS1E101-FB	CAP,ELEC.25V100UF
C253	044	50MSAN104J	CAP,FILM 50V0.1UF
C254	043	TC50VCH220	CAP,CERA.50V22PF
C255	046	T50V473K	CAP,CERA.50V0.047UF
C256	041	UTSS1E101-FB	CAP,ELEC.25V100UF
C257	044	50MSAN104J	CAP,FILM 50V0.1UF
C258	041	UTSS1E101-FB	CAP,ELEC.25V100UF
C259	042	TP50V103J	CAP,MYLAR 50V0.01UF
C260	043	TC50VCH220	CAP,CERA.50V22PF
C261	042	TP50V103J	CAP,MYLAR 50V0.01UF
C262,263	041	UTSS1C222	CAP,ELEC.16V2200UF
NO MARK	041	UTCX1C4R7	CAP,ELEC.16V4.7UF
D1-6	034	T1N4148-86	DIODE
D7	034	TRD5.1JST1	ZENER DIODE
HS1-4	017	4TR-2792#2	HEAT SINKER BOARD 50MM
HS5	017	4TR-2792#3	HEAT SINKER BOARD 35MM
HS6	017	4TR-2792#1	HEAT SINKER BOARD 25MM
IC1-10	031	NJM5532DD	IC
IC11-14	031	TC9163AN	IC
IC15	031	NJM7815FA	IC
IC16,17	031	NJM5532DD	IC
IC18	031	TC9213P	IC
IC19,20	031	NJM5532DD	IC
IC21	031	NJM7915FA	IC
IC22	031	NJM7812FA	IC
IC23	031	NJM5532DD	IC
IC24	031	TC9213P	IC
IC25,26	031	NJM5532DD	IC
IC27	031	TC9213P	IC
IC28,29	031	NJM5532DD	IC
IC30	031	TC9213P	IC
IC31	031	NJM5532DD	IC
IC32	031	NJM7912FA	IC
IC33-35	031	NJM5532DD	IC
IC36	031	NJM7805FA	IC
IC37	031	TC74HC244AP	IC
IC38	031	PC817B	IC
IC39	031	LB1641	IC
IC40	031	NJM7905FA	IC
IC41	031	M51953BL	IC

SYMBOL	PARTS NO.	DESCRIPTION	
IC42-45	031	TC74HC574AP	IC
IC46	031	TC74HC151AP	IC
IC48	031	TC74HC573AP	IC
IC49	031	MC27C512-15F1	IC
IC50	031	TC74HC244AP	IC
IC51	031	MC68HC11E1FN	IC
IC52	031	DS26LS32CN	IC
IC53	031	TC74AC00P	IC
IC54	031	TC74AC138P	IC
L1-7	021	LF144A00	COIL DSS706-351D221M25-50
L8	021	TRL-239	MICRO INDUCTOR 2.2UH
L9	021	LF144A00	COIL DSS706-351D221M25-50
P1,2	051	C-4170A28	VARIABLE RESISTOR 20KB
Q1	032	TC3399	TRANSISTOR
Q2-7	032	TC2878-A	TRANSISTOR
Q8	032	TA1345	TRANSISTOR
Q9	032	TC3399	TRANSISTOR
Q10	032	TA1345	TRANSISTOR
Q11,12	032	TC2878-A	TRANSISTOR
Q13	032	TC3399	TRANSISTOR
Q14	032	TA1345	TRANSISTOR
Q15,16	032	TC2878-A	TRANSISTOR
Q17	032	TC3399	TRANSISTOR
Q18	032	TA1345	TRANSISTOR
Q19-22	032	TC2878-A	TRANSISTOR
Q23	032	TA1345	TRANSISTOR
Q24	032	TC3399	TRANSISTOR
Q25	032	TA1783-ST	TRANSISTOR
Q26	032	TC3399	TRANSISTOR
R1,2	053	CR16-102J-A	R,CARBON 1K
R3,4	5MM		JUMPER WIRE
R5	053	CR16-104J-A	R,CARBON 100K
R6	5MM		JUMPER WIRE
R7-20	053	CR16-203J-A	R,CARBON 20K
R21,22	053	CR16-102J-A	R,CARBON 1K
R23	053	CR16-103J-A	R,CARBON 10K
R24	053	CR16-104J-A	R,CARBON 100K
R25	053	CR16-103J-A	R,CARBON 10K
R26	053	CR16-104J-A	R,CARBON 100K
R27	053	CR16-103J-A	R,CARBON 10K
R28	053	CR16-104J-A	R,CARBON 100K
R29	053	CR16-103J-A	R,CARBON 10K
R30	053	CR16-104J-A	R,CARBON 100K
R31	053	CR16-103J-A	R,CARBON 10K
R32	053	CR16-104J-A	R,CARBON 100K
R33	053	CR16-103J-A	R,CARBON 10K
R34	053	CR16-104J-A	R,CARBON 100K
R35,36	053	CR16-102J-A	R,CARBON 1K
R37-39	053	CR16-103J-A	R,CARBON 10K
R40-43	053	CR16-750J-A	R,CARBON 75R

Parts List-3

SYMBOL	PARTS NO.	DESCRIPTION
R44	053 CR16-104J-A	R,CARBON 100K
R45-59	053 CR16-103J-A	R,CARBON 10K
R60	053 CR16-104J-A	R,CARBON 100K
R61-64	053 CR16-102J-A	R,CARBON 1K
R66	053 CR16-220J-A	R,CARBON 22R
R67	053 CR16-103J-A	R,CARBON 10K
R68	053 CR16-203J-A	R,CARBON 20K
R69	053 CR16-104J-A	R,CARBON 100K
R70	053 CR16-203J-A	R,CARBON 20K
R71	053 CR16-104J-A	R,CARBON 100K
R72	053 CR16-203J-A	R,CARBON 20K
R73	053 CR16-104J-A	R,CARBON 100K
R74,75	053 CR16-103J-A	R,CARBON 10K
R76	053 CR16-104J-A	R,CARBON 100K
R77	053 CR16-203J-A	R,CARBON 20K
R78	053 CR16-104J-A	R,CARBON 100K
R79	053 CR16-203J-A	R,CARBON 20K
R80	053 CR16-104J-A	R,CARBON 100K
R81	053 CR16-203J-A	R,CARBON 20K
R82	053 CR16-104J-A	R,CARBON 100K
R83-88	053 CR16-103J-A	R,CARBON 10K
R89,90	053 CR16-102J-A	R,CARBON 1K
R91-96	053 CR16-220J-A	R,CARBON 22R
R97,98	053 CR16-102J-A	R,CARBON 1K
R99,100	053 CR16-220J-A	R,CARBON 22R
R101	053 CR16-102J-A	R,CARBON 1K
R102	053 CR16-104J-A	R,CARBON 100K
R103,104	053 CR16-220J-A	R,CARBON 22R
R105-107	053 CR16-103J-A	R,CARBON 10K
R108,109	053 CR16-104J-A	R,CARBON 100K
R110,111	053 CR16-220J-A	R,CARBON 22R
R112	053 CR16-102J-A	R,CARBON 1K
R113	053 CR16-104J-A	R,CARBON 100K
R114	053 CR16-220J-A	R,CARBON 22R
R115,116	053 CR16-103J-A	R,CARBON 10K
R117,118	053 CR16-474J-A	R,CARBON 470K
R119	053 CR16-104J-A	R,CARBON 100K
R120	053 CR16-203J-A	R,CARBON 20K
R121	053 CR16-474J-A	R,CARBON 470K
R122	053 CR16-101J-A	R,CARBON 100R
R123	053 CR16-103J-A	R,CARBON 10K
R124	053 CR16-472J-A	R,CARBON 4.7K
R125	053 CR16-103J-A	R,CARBON 10K
R126	053 CR16-333J-A	R,CARBON 33K
R127,128	053 CR16-471J-A	R,CARBON 470R
R129	053 CR16-473J-A	R,CARBON 47K
R130,131	053 CR16-561J-A	R,CARBON 560R
R132	053 CR16-473J-A	R,CARBON 47K
R133,134	053 CR16-203J-A	R,CARBON 20K
R135,136	053 CR16-101J-A	R,CARBON 100R

SYMBOL	PARTS NO.	DESCRIPTION
R137	053 CR16-104J-A	R,CARBON 100K
R138	053 CR16-203J-A	R,CARBON 20K
R139	053 CR16-474J-A	R,CARBON 470K
R140	053 CR16-101J-A	R,CARBON 100R
R141,142	053 CR16-103J-A	R,CARBON 10K
R143	053 CR16-333J-A	R,CARBON 33K
R144	053 CR16-472J-A	R,CARBON 4.7K
R145	053 CR16-104J-A	R,CARBON 100K
R146	053 CR16-103J-A	R,CARBON 10K
R147	5MM	JUMPER WIRE
R148-153	053 CR16-202J-A	R,CARBON 2K
R154-159	053 CR16-163J-A	R,CARBON 16K
R160	053 CR16-104J-A	R,CARBON 100K
R161,162	053 CR16-471J-A	R,CARBON 470R
R163,164	053 CR16-104J-A	R,CARBON 100K
R165,166	053 CR16-471J-A	R,CARBON 470R
R167,168	053 CR16-104J-A	R,CARBON 100K
R169,170	053 CR16-471J-A	R,CARBON 470R
R171	053 CR16-104J-A	R,CARBON 100K
R172-177	053 CR16-220J-A	R,CARBON 22R
R179,180	053 CR16-750J-A	R,CARBON 75R
R181	053 CR16-101J-A	R,CARBON 100R
R182	053 CR16-100J-A	R,CARBON 10R
R183	053 CR16-103J-A	R,CARBON 10K
R184	053 CR16-100J-A	R,CARBON 10R
R185	053 CR16-104J-A	R,CARBON 100K
R186-193	053 CR16-103J-A	R,CARBON 10K
R194	5MM	JUMPER WIRE
R195,196	053 CR16-103J-A	R,CARBON 10K
R197	053 CR16-474J-A	R,CARBON 470K
R198	5MM	JUMPER WIRE
R199,200	053 CR16-103J-A	R,CARBON 10K
R201	053 CR16-101J-A	R,CARBON 100R
R202,203	053 CR16-103J-A	R,CARBON 10K
R204-207	054 SE8103J	THICK FILM RS NETWORK
R208	053 CR16-474J-A	R,CARBON 470K
R209-211	053 CR16-103J-A	R,CARBON 10K
R212	053 CR16-752J-A	R,CARBON 7.5K
R213	053 CR16-103J-A	R,CARBON 10K
R214	5MM	JUMPER WIRE
R215-219	053 CR16-103J-A	R,CARBON 10K
R220	053 CR16-105J-A	R,CARBON 1M
R221-223	5MM	JUMPER WIRE
REC1	066 GP1F32R	OPTICAL TERMINAL
RECT1	034 W02M	BRIDGED DIODE
SW1	061 C-4172A10	3KEY PUSH SWITCH
X1	066 4TR-2166#5	2P PINJACK
X2	066 4TR-2408#10	4P PINJACK(BLK)
X3	066 4TR-2408#3	4P PINJACK(RED/WHT)
X4	068 DBL25PBTk1NS	D-SUB 25PIN MALE

Parts List-4

SYMBOL	PARTS NO.	DESCRIPTION
X5,6	066 4TR-3184	6P PINJACK
X7-9	066 4TR-2408#3	4P PINJACK(RED/WHT)
X10	068 PHDS26G1	BASE POST 26PIN
XTAL1	023 HC49U-005	CRYSTAL 8MHZ
	068 FHDS20GI	PCB SOCKET 20PIN
	068 ISS28T1/06	IC SOCKET 28PIN
	068 PLCC52TD	IC SOCKET 52PIN
E-1262 PCB ASSEMBLY		
C1-18	041 UTSS1E470-FB	CAP,ELEC.25V47UF
C19-24	041 UTSS1E101-FB	CAP,ELEC.25V100UF
C25,26	041 UTSS1E470-FB	CAP,ELEC.25V47UF
C27	043 TC50V471	CAP,CERA.50V470PF
C28	041 UTSS1H100-FB	CAP,ELEC.50V10UF
C29,30	042 TP50V102J	CAP,MYLAR 50V1000PF
C31-38	041 UTSS1E470-FB	CAP,ELEC.25V47UF
C39	044 50MSAN104J	CAP,FILM 50V0.1UF
C40	041 UTSS1H100-FB	CAP,ELEC.50V10UF
C41	041 UTSS1E101-FB	CAP,ELEC.25V100UF
C42,43	046 T50V473K	CAP,CERA.50V0.047UF
C44	041 UTSS1E101-FB	CAP,ELEC.25V100UF
C45	046 T50V473K	CAP,CERA.50V0.047UF
C46	043 TC50VCH330	CAP,CERA.50V33PF
C47	041 UTSS1E101-FB	CAP,ELEC.25V100UF
C48	043 TC50VCH050	CAP,CERA.50V5PF
C49-52	044 50MSAN104J	CAP,FILM 50V0.1UF
C53-56	041 UTSS1E101-FB	CAP,ELEC.25V100UF
C57-60	043 TC50VCH330	CAP,CERA.50V33PF
C61-64	044 50MSAN104J	CAP,FILM 50V0.1UF
C65-68	041 UTSS1E101-FB	CAP,ELEC.25V100UF
C69-72	042 TP50V103J	CAP,MYLAR 50V0.01UF
C73,74	043 TC50VCH330	CAP,CERA.50V33PF
C75,76	042 TP50V103J	CAP,MYLAR 50V0.01UF
C77	043 TC50V101	CAP,CERA.50V100PF
CR1	023 HC49U-001	CRYSTAL 14.31818MHZ
CR2	023 HC49U-003	CRYSTAL 17.734475MHZ
D1,2	034 T1N4148-86	DIODE
HS1,2	017 4TR-2792#1	HEAT SINKER BOARD 25MM
IC1-3	031 TC9163AN	IC
IC4	031 TC74HC00AP	IC
IC5	031 TC74HC14AP	IC
IC6	031 UPD6464ACS	IC
IC7	031 NJM7906FA	IC
IC8	031 NJM7806FA	IC
L1	021 LF142A01	MICRO INDUCTOR 39UH
L2,3	021 LF144A00	COIL DSS706-351D221M25-50
L4	021 TRL-239	MICRO INDUCTOR 2.2UH
Q1	033 TC3708-ST	TRANSISTOR
Q2	033 TA1450-ST	TRANSISTOR
Q3	033 TC3708-ST	TRANSISTOR
Q4	033 TA1450-ST	TRANSISTOR

SYMBOL	PARTS NO.	DESCRIPTION
Q5	033 TC3708-ST	TRANSISTOR
Q6	033 TA1450-ST	TRANSISTOR
Q7	033 TC3708-ST	TRANSISTOR
Q8	033 TA1450-ST	TRANSISTOR
Q9	033 TC3708-ST	TRANSISTOR
Q10	033 TA1450-ST	TRANSISTOR
Q11	033 TC3708-ST	TRANSISTOR
Q12	033 TA1450-ST	TRANSISTOR
Q13	033 TC3708-ST	TRANSISTOR
Q14,15	033 TA1450-ST	TRANSISTOR
Q16	033 TC3708-ST	TRANSISTOR
Q17	033 TA1450-ST	TRANSISTOR
Q18	033 TC3708-ST	TRANSISTOR
Q19	033 TA1450-ST	TRANSISTOR
Q20	033 TC3708-ST	TRANSISTOR
Q21	033 TA1450-ST	TRANSISTOR
Q22	033 TC3708-ST	TRANSISTOR
Q23	033 TA1450-ST	TRANSISTOR
Q24	033 TC3708-ST	TRANSISTOR
Q25	033 TA1450-ST	TRANSISTOR
Q26	033 TC3708-ST	TRANSISTOR
Q27	033 TA1450-ST	TRANSISTOR
R1-6	053 CR16-750J-A	R,CARBON 75R
R7-12	053 CR16-680J-A	R,CARBON 68R
R13-18	053 CR16-750J-A	R,CARBON 75R
R19-21	053 CR16-680J-A	R,CARBON 68R
R22-27	053 CR16-750J-A	R,CARBON 75R
R28,29	053 CR16-680J-A	R,CARBON 68R
R31-36	053 CR16-220J-A	R,CARBON 22R
R37,38	053 CR16-5R6J-A	R,CARBON 5.6R
R39,40	053 CR16-103J-A	R,CARBON 10K
R41	053 CR16-391J-A	R,CARBON 390K
R42	053 CR16-121J-A	R,CARBON 120R
R43	053 CR16-103J-A	R,CARBON 10K
R44	053 CR16-104J-A	R,CARBON 100K
R45	053 CR16-752J-A	R,CARBON 7.5K
R46-50	053 CR16-121J-A	R,CARBON 120R
R51-60	053 CR16-682J-A	R,CARBON 6.8K
R61	053 CR16-271J-A	R,CARBON 270R
R62	053 CR16-101J-A	R,CARBON 100R
R63-67	053 CR16-560J-A	R,CARBON 56R
R68	053 CR16-104J-A	R,CARBON 100K
R69	053 CR16-122J-A	R,CARBON 1.2K
R70-79	053 CR16-563J-A	R,CARBON 56K
R80	053 CR16-222J-A	R,CARBON 2.2K
R81	053 CR16-680J-A	R,CARBON 68R
R82,83	053 CR16-222J-A	R,CARBON 2.2K
R84	053 CR16-680J-A	R,CARBON 68R
R85,86	053 CR16-222J-A	R,CARBON 2.2K
R87	053 CR16-680J-A	R,CARBON 68R

Parts List-5

SYMBOL	PARTS NO.	DESCRIPTION
R88,89	053 CR16-222J-A	R,CARBON 2.2K
R90	053 CR16-680J-A	R,CARBON 68R
R91,92	053 CR16-222J-A	R,CARBON 2.2K
R93	053 CR16-680J-A	R,CARBON 68R
R94,95	053 CR16-222J-A	R,CARBON 2.2K
R96	053 CR16-512J-A	R,CARBON 5.1K
R97-106	053 CR16-220J-A	R,CARBON 22R
R107	053 CR16-222J-A	R,CARBON 2.2K
R108-110	053 CR16-103J-A	R,CARBON 10K
R111	053 CR16-105J-A	R,CARBON 1M
R112,113	053 CR16-101J-A	R,CARBON 100R
R114	053 CR16-105J-A	R,CARBON 1M
R115	053 CR16-101J-A	R,CARBON 100R
R116	5MM	JUMPER WIRE
X1,2	065 YKB21-5103A	MINI JACK
X3-11	066 C-4466A00	MINI DIN JACK 4P
X12-14	066 4TR-2964#3	3P PINJACK
X15	066 4TR-2487#9	1P PINJACK
X16	066 C-4466A00	MINI DIN JACK 4P
E-1263 PCB ASSEMBLY		
C1	041 UTSS1E101-FB	CAP,ELEC.25V100UF
C2-5	046 T50V473K	CAP,CERA.50V0.047UF
IC1-4	031 TC74HC574AP	IC
LED1-23	034 LTL4262N	LED
R1	5MM	JUMPER WIRE
R2-7	053 CR16-102J-A	R,CARBON 1K
R8,9	053 CR16-103J-A	R,CARBON 10K
R10,11	053 CR16-821J-A	R,CARBON 820R
R12	5MM	JUMPER WIRE
R13	053 CR16-103J-A	R,CARBON 10K
R14-18	053 CR16-821J-A	R,CARBON 820R
R19	053 CR16-103J-A	R,CARBON 10K
R20-25	053 CR16-102J-A	R,CARBON 1K
R26	053 CR16-821J-A	R,CARBON 820R
R27	5MM	JUMPER WIRE
R28	053 CR16-821J-A	R,CARBON 820R
R29	5MM	JUMPER WIRE
R30,31	053 CR16-103J-A	R,CARBON 10K
R32-39	053 CR16-821J-A	R,CARBON 820R
R40-42	053 CR16-102J-A	R,CARBON 1K
R43,44	5MM	JUMPER WIRE
SW1-12	061 4TR-2343	KEYBOARD SWITCH
	019 4TR-3213	LED HOLDER
E-1264 PCB ASSEMBLY		
C901	044 DE1307E472M	SPARK KILLER
C903-906	043 TC500V103	CAP,CERA.500V0.01UF
C907	041 UTSS1H102	CAP,ELEC.50V1000UF
C908,909	041 50USP472	CAP,ELEC.50V4700UF
C910	041 UTES1E102	CAP,ELEC.25V1000UF

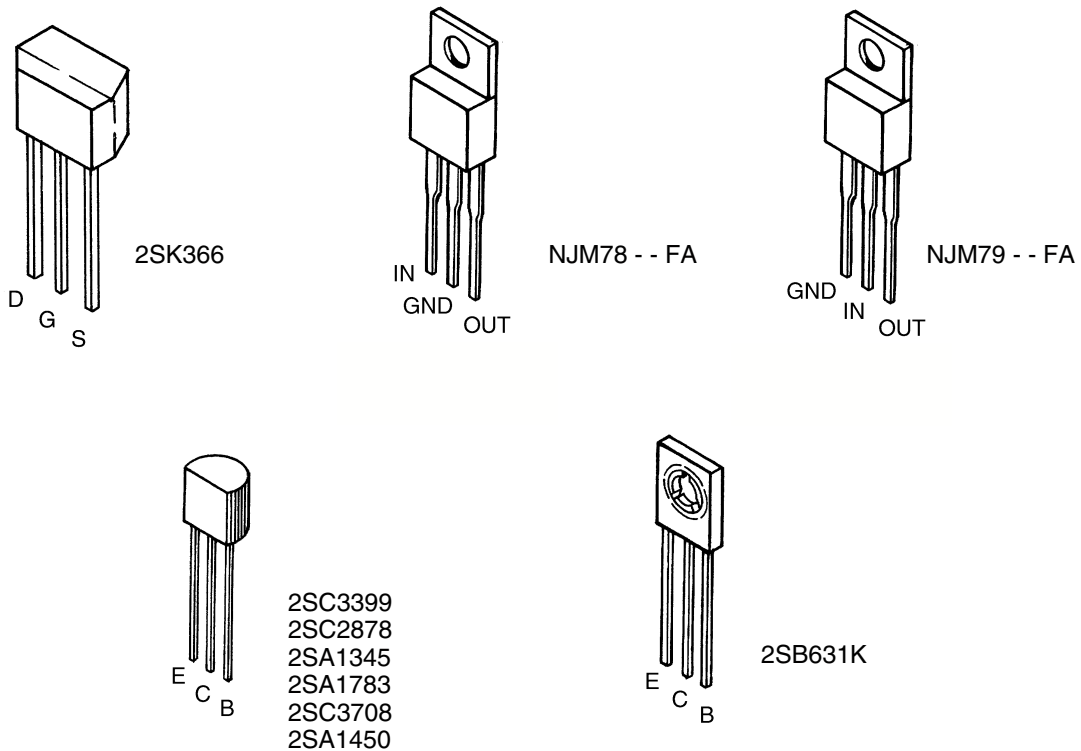
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C911	041 UTSS1E101-FB	CAP,ELEC.25V100UF
C912-917	043 TC500V103	CAP,CERA.500V0.01UF
D901	034 T1N4148-86	DIODE
D902-907	034 T1N4003-TB	DIODE
D908,909	034 T1N4148-86	DIODE
D910	034 BR64	BRIDGED DIODE
F901-904	036 5ST2	MINI FUSE 250VT2A
F905	036 5ST500	MINI FUSE 250VT500MA
IC901	031 NJM7805FA	IC
L901	021 TRL-356	LINE CHOKE COIL
Q901	032 B631-EF	TRANSISTOR
Q902	032 TC3399	TRANSISTOR
R901	053 CR14-180J-A	R,CARBON 18R
R903	053 CR14-223J-A	R,CARBON 22K
R904	053 CR14-103J-A	R,CARBON 10K
R905,906	053 CR14-560J-A	R,CARBON 56R
RY901	063 DG1U-24	RELAY
RY902,903	063 DH2U-24	RELAY
T901	022 T-1059N01	POWER TRANS FORMER
	017 C-4401A01	HEAT SINKER BOARD
	069 C-3417A	FUSE CLIP
X-1265-01 PCB ASSEMBLY		
C001	046 T50V473K	CAP,CERA.50V0.047UF
IC001	031 PC817B	IC
R001	053 CR14-101J-A	R,CARBON100R
REC001	066 GP1F32R	OPTICALTERMINAL
X001	065 YKB21-5103A	MINIJACK
X-1265-02 PCB ASSEMBLY		
R021	053 CR14-821J-A	R,CARBON 820R
S021	061 4TR-3011	PUSH SWITCH(STANDBY)
X-1265-03 PCB ASSEMBLY		
C003	044 50MSAN473J	CAP,FILM 50V0.047UF
IC003	031 SBX1810-52	IC
X-1265-04 PCB ASSEMBLY		
R041	053 CR14-101J-A	R,CARBON 100R
R042	053 CR14-273J-A	R,CARBON 27K
R043	053 CR14-471J-A	R,CARBON 470R
VR401	051 4TR-3189	VARIABLE RESISTOR 50KBX2
X-1265-05 PCB ASSEMBLY		
	069 C-4372AA00	AC OUTLET for STD
X-1265-06 PCB ASSEMBLY		
IC47	031 NJM7805FA	IC
	017 QZ4-26A00	HEAT SINKER BOARD
X-1276 PCB ASSEMBLY		
C201	041 UTSS1H220-FB	CAP,ELEC.50V22UF
C202	043 TC50V101	CAP,CERA.50V100PF
C203-206	041 UTSS1H220-FB	CAP,ELEC.50V22UF
C207	042 TP50V103J	CAP,MYLAR 50V0.01UF
D201-203	034 T1N4148-86	DIODE

Parts List-6

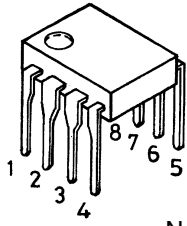
SYMBOL	PARTS NO.	DESCRIPTION
Q201,202	032 2K366-GR	FET
R201	053 CR14-102J-A	R,CARBON 1K
R202	053 CR14-224J-A	R,CARBON 220K
R203	053 CR14-102J-A	R,CARBON 1K
R204	053 CR14-272J-A	R,CARBON 2.7K
R205	053 CR14-474J-A	R,CARBON 470K
R206	053 CR14-100J-A	R,CARBON 10R
R207	053 CR14-680J-A	R,CARBON 68R
RY201	063 V23106-12	RELAY
OTHERS		
011	FP-497C	FRONT PANEL ASSY
012	PR4-13A00T	PUSH BUTTON 5X20
012	QT4-08A00T	KNOB ASSY 43F
012	QZ3-08A00T	TACT BUTTON MOULD
012	4TQF-15	POWER BUTTON
012	4TSA-7	KNOB 11F
014	C-4450A18	UPPER COVER
015	RP-350	PRINTED REAR CHASSIS
019	4TSH-19#2	PLASTIC FOOT
034	SEL1124R	LED

SYMBOL	PARTS NO.	DESCRIPTION
069	C-4629A01	AC INLET
069	S2-729T-100	AC OUTLET for CEE
069	S2-741T-120	AC OUTLET for UK,AUSTRALIA
072	C-4621A01	AC CORD SET for STD
072	C-4622A01	AC CORD SET for AUSTRALIA
072	C-4623A01	AC CORD SET for UK
072	C-4624A01	AC CORD SET for CEE
072	C-4631A00	25P D-SUB CABLE
081	QZ4-21A00	INSIDE CARTON
081	TZ-158	STYROL MOULDING
092	C-4640A00	AC3/DTS DSP MODULE
092	RR-939B	REMOTE UNIT

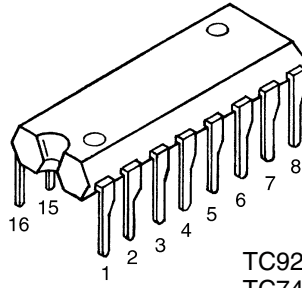
Case Outline



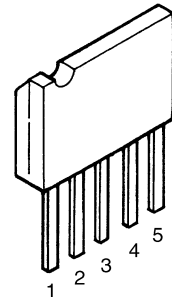
Case Outline



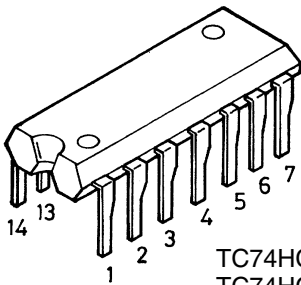
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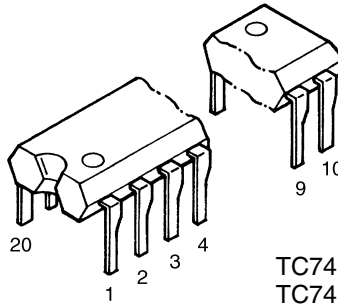
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TC74HC151AP
DS26LS32CN
TC74AC138P



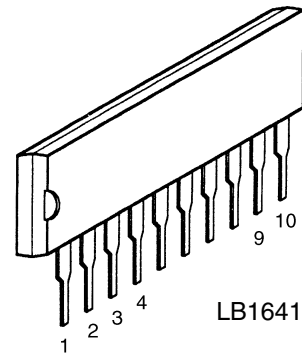
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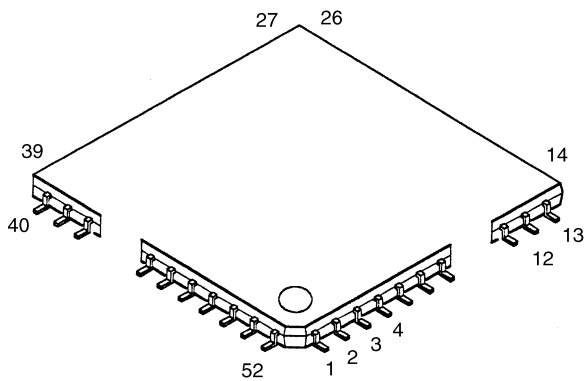
TC74HC14AP
TC74HC00AP
TC74AC00AP



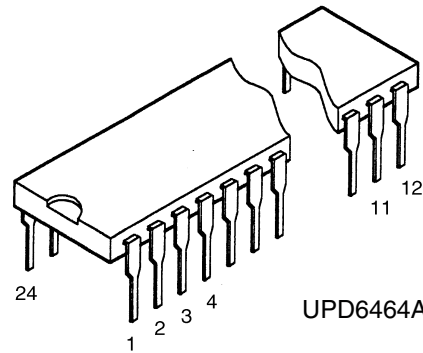
TC74HC573AP
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TC74HC244AP



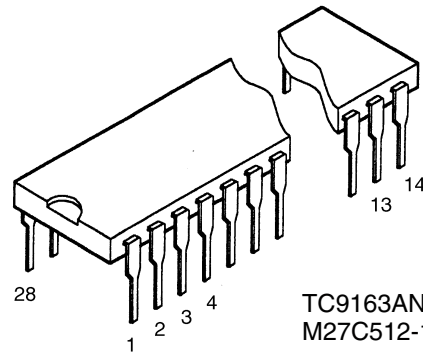
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MC68HC11EIFN

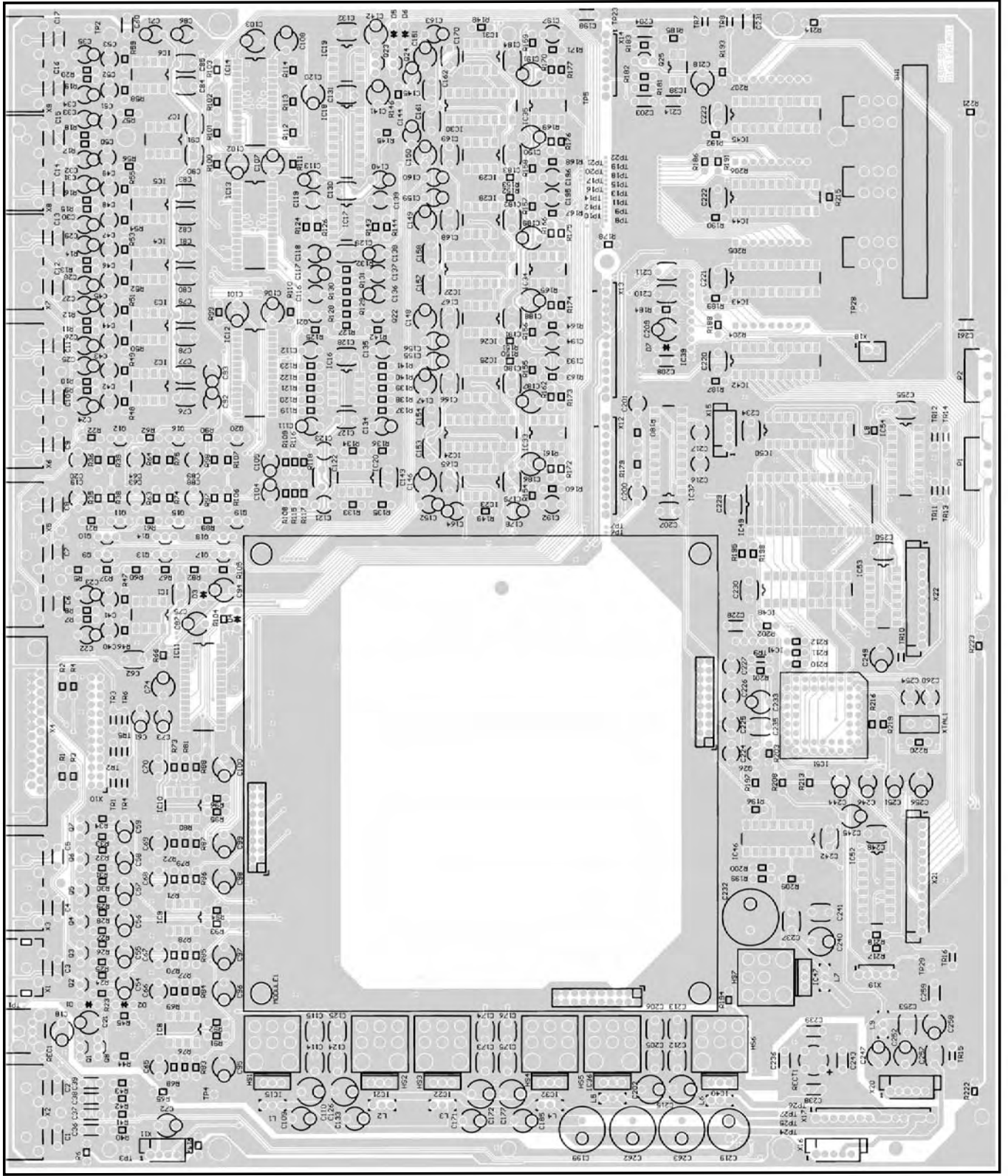


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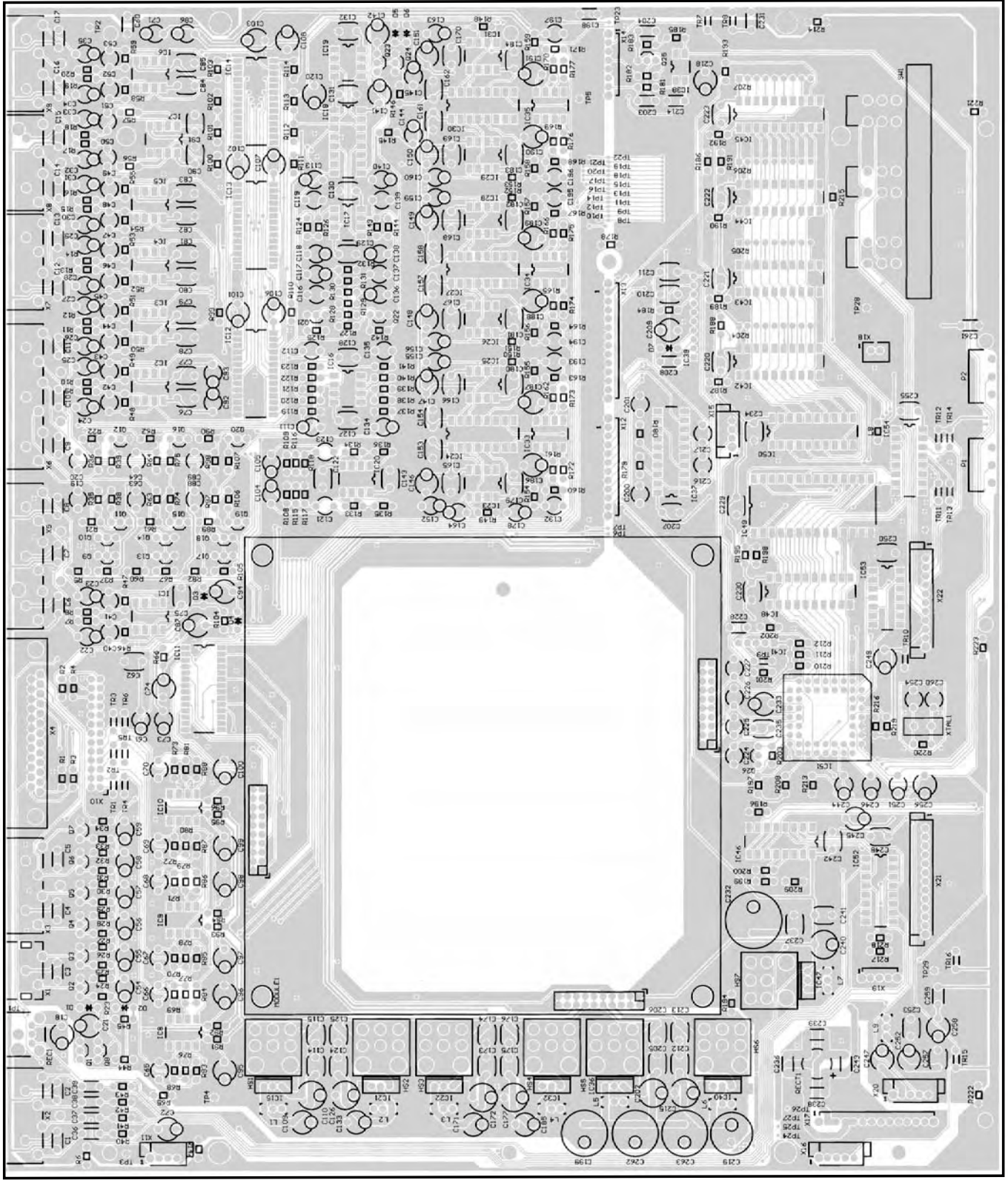


TC9163AN
M27C512-15F1

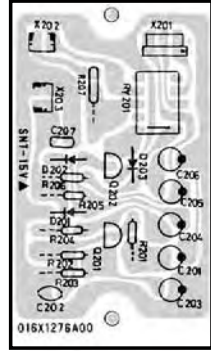
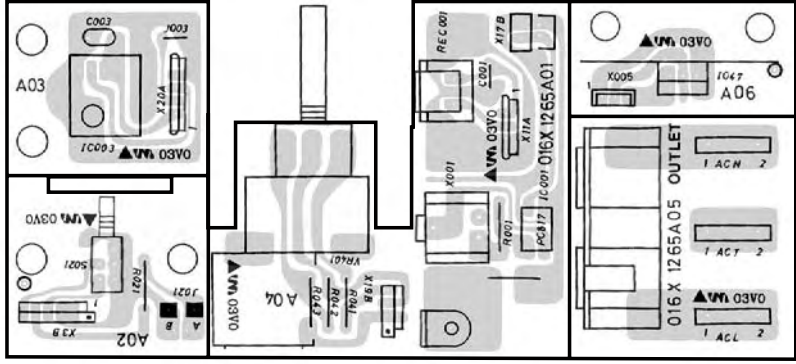
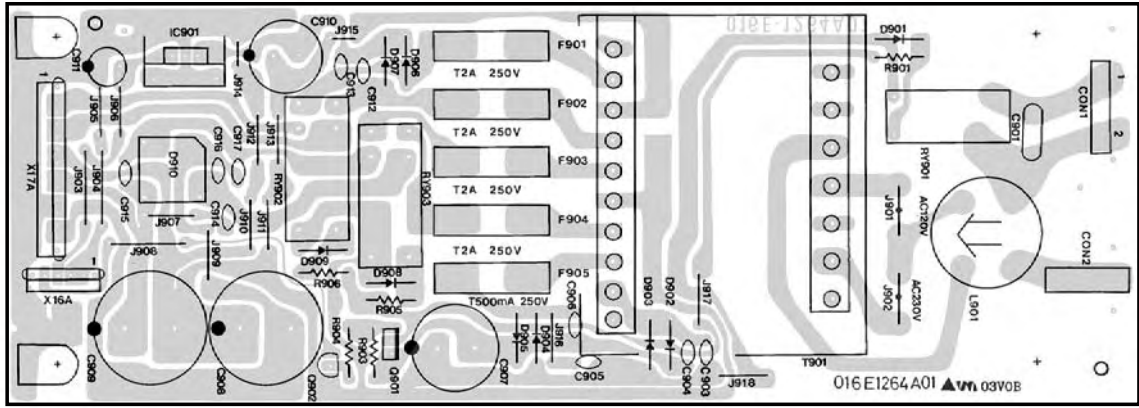
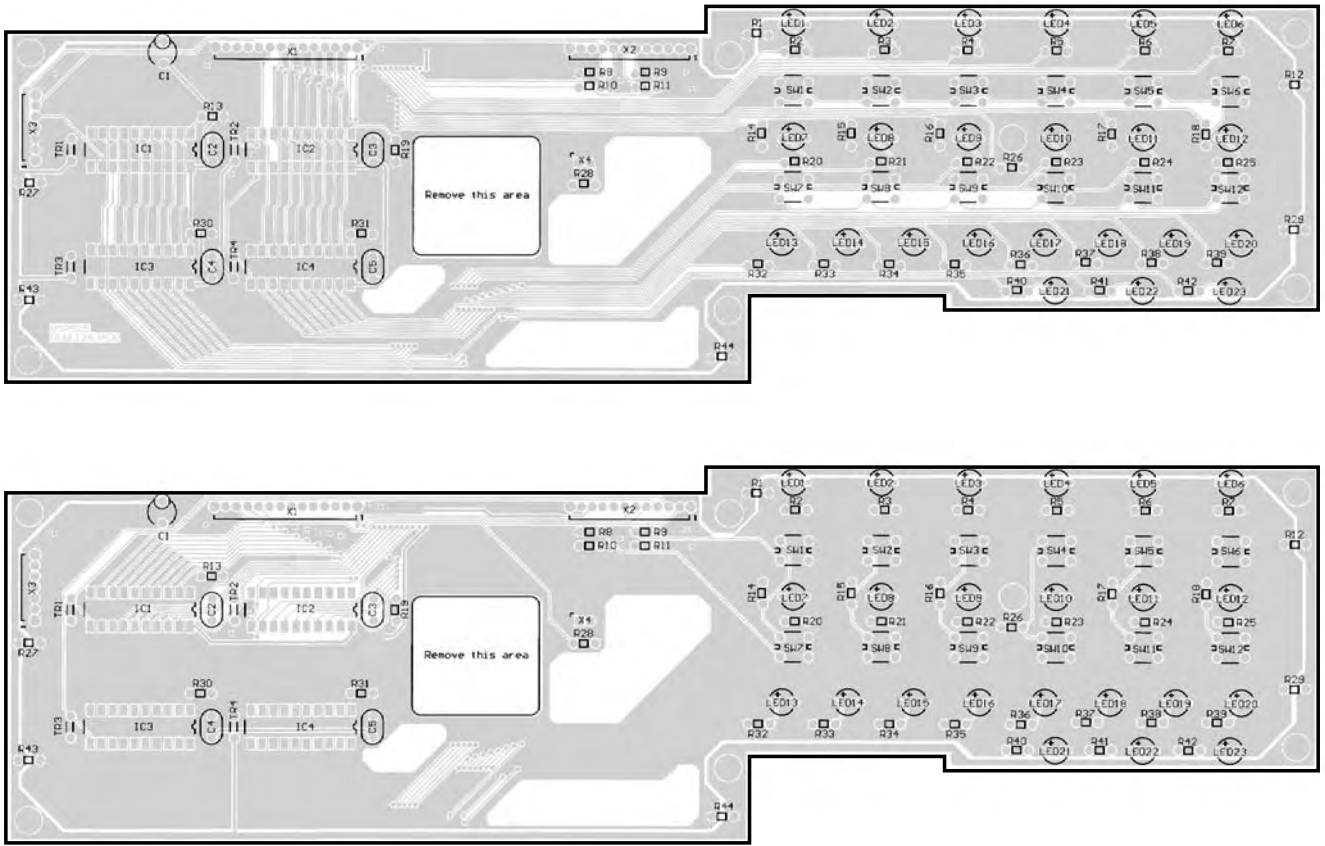
PCB Assembly-1



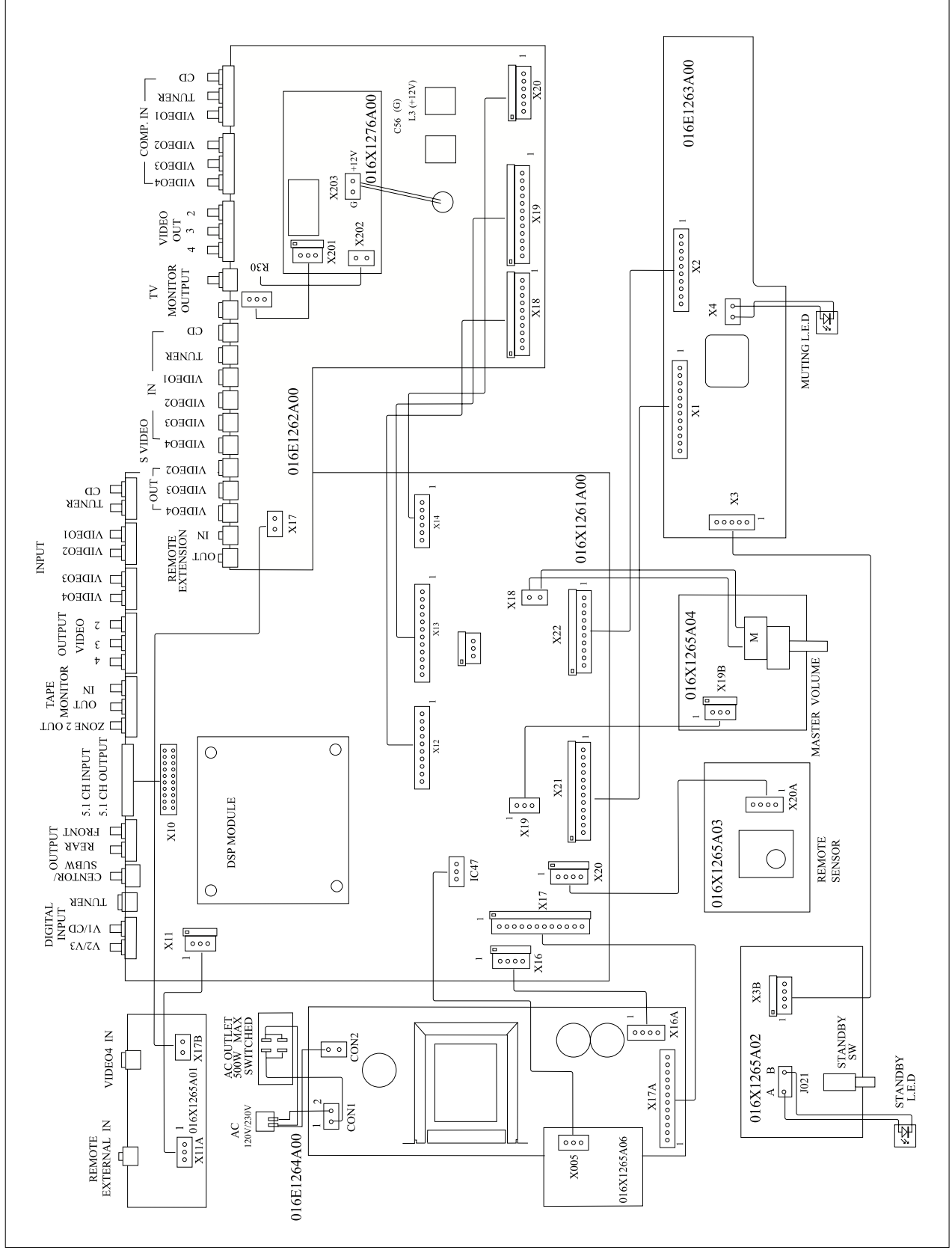
PCB Assembly-2



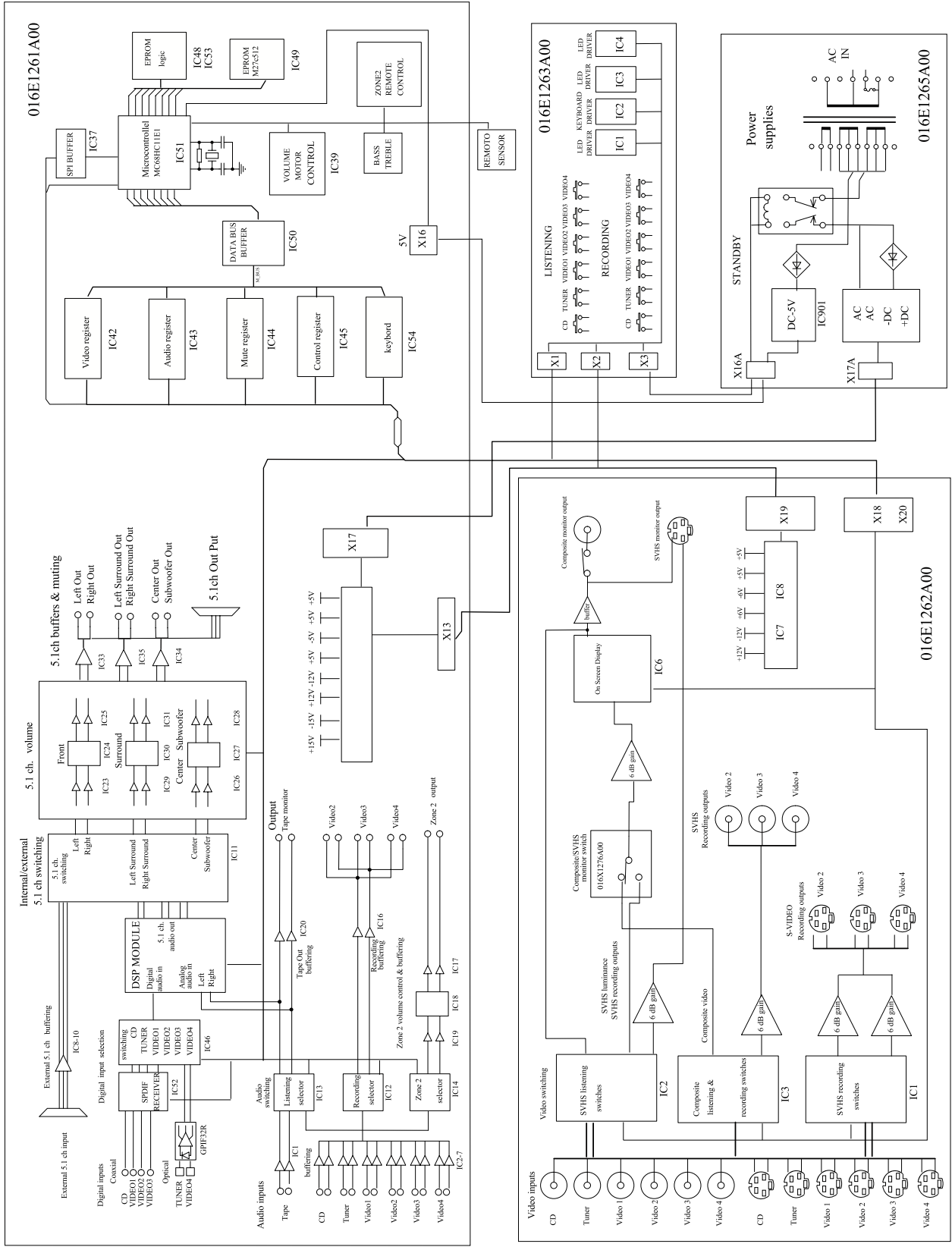
PCB Assembly-4



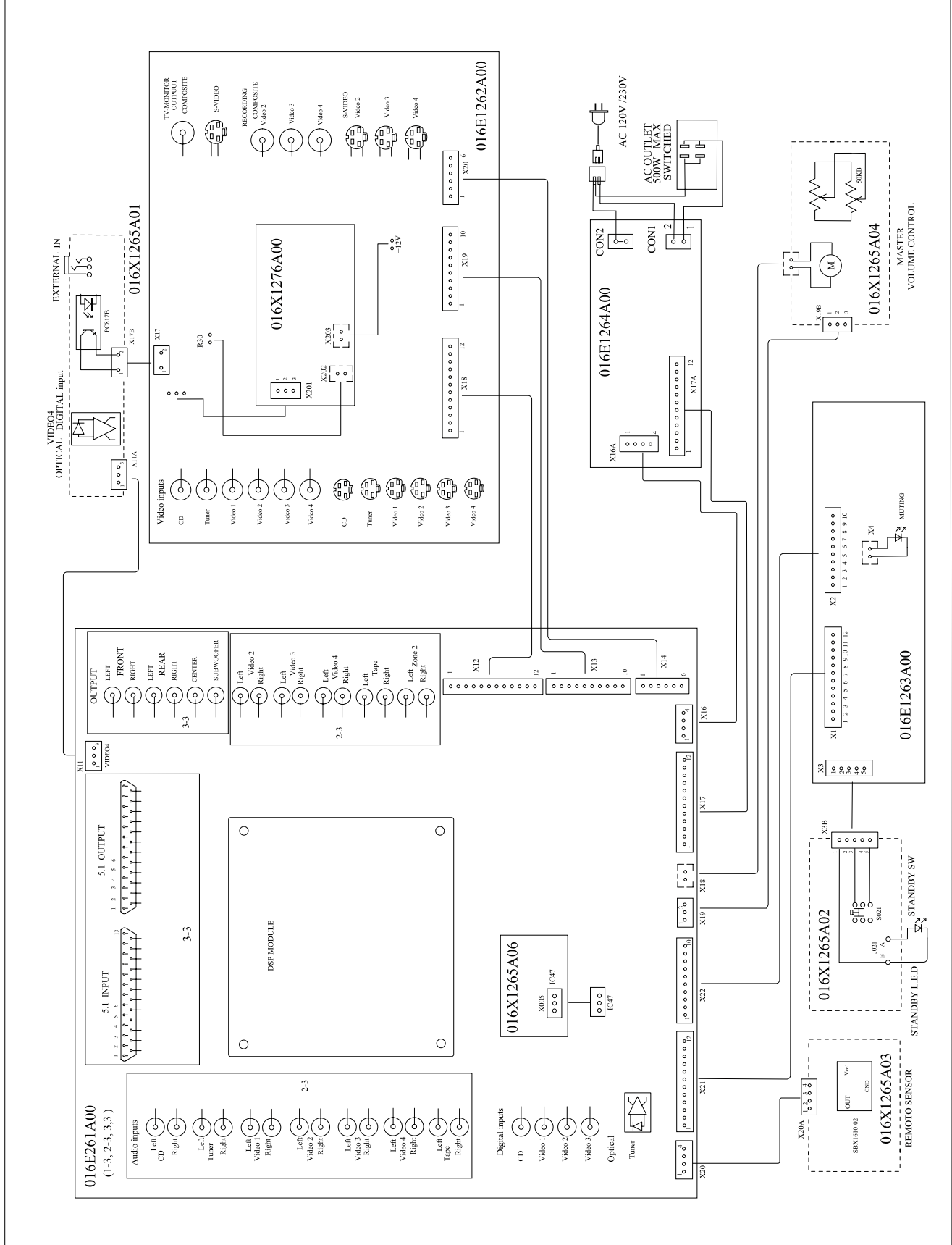
Wiring Diagram



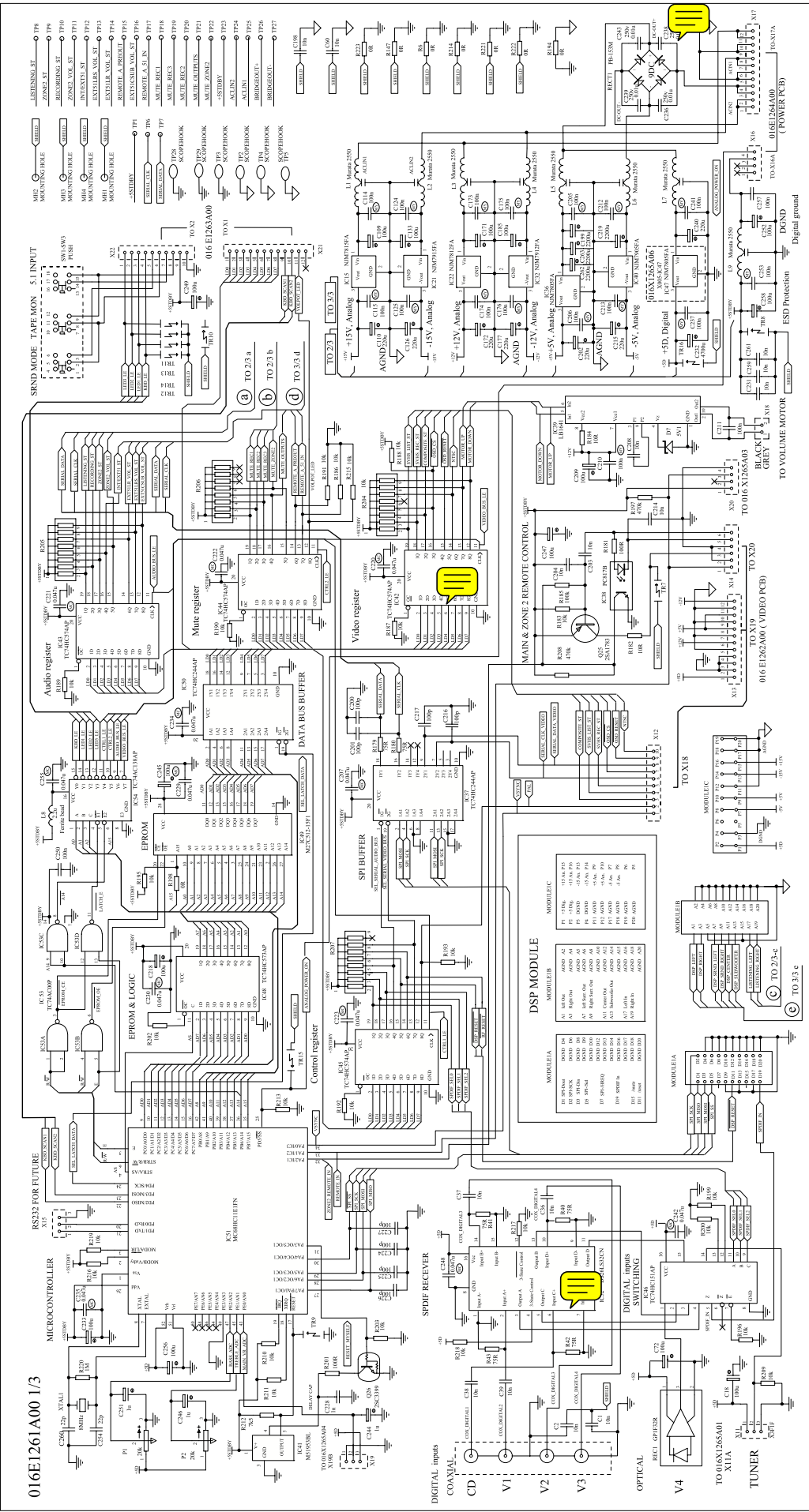
Block Diagram



Schematic Diagram-1

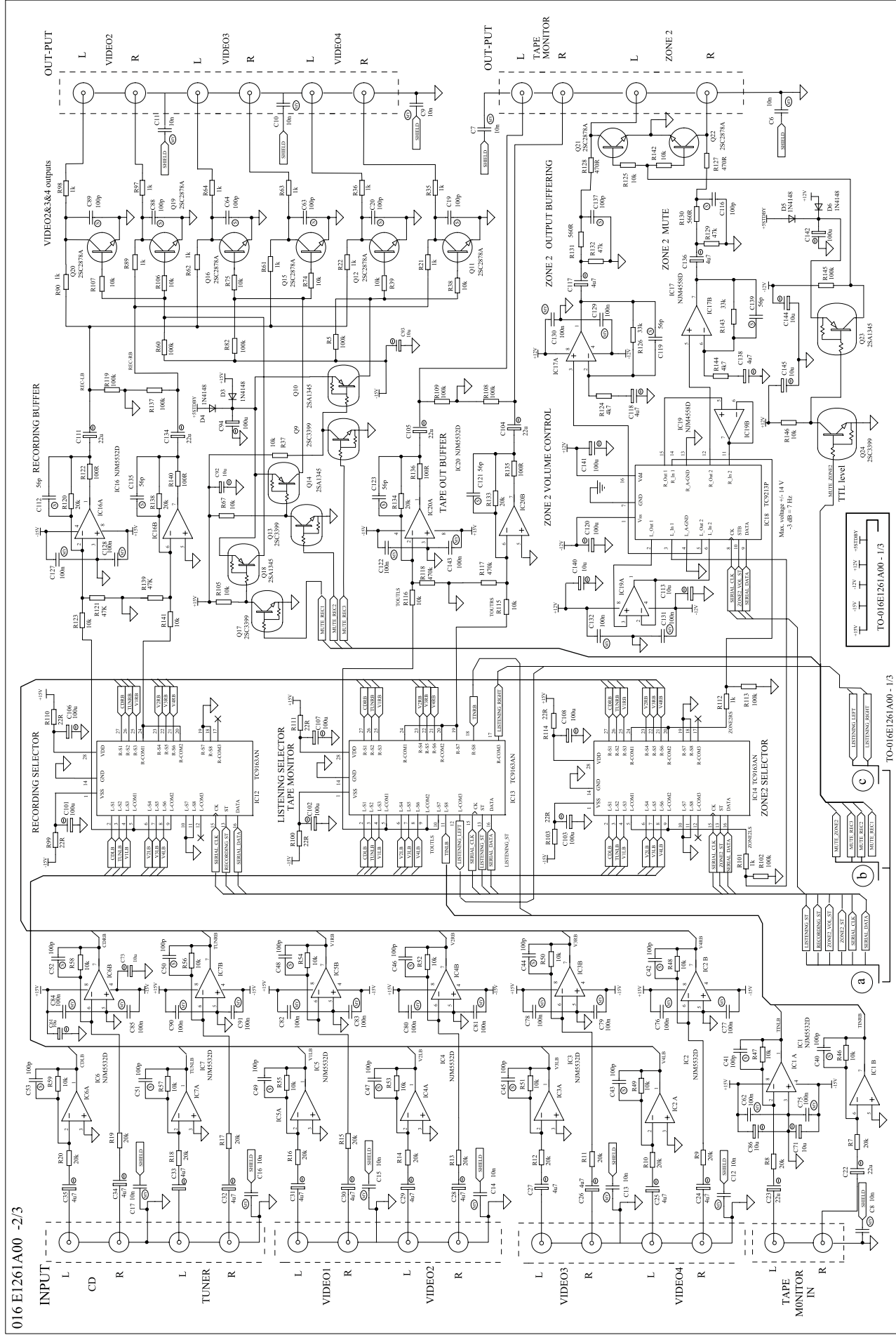


Schematic Diagram-2

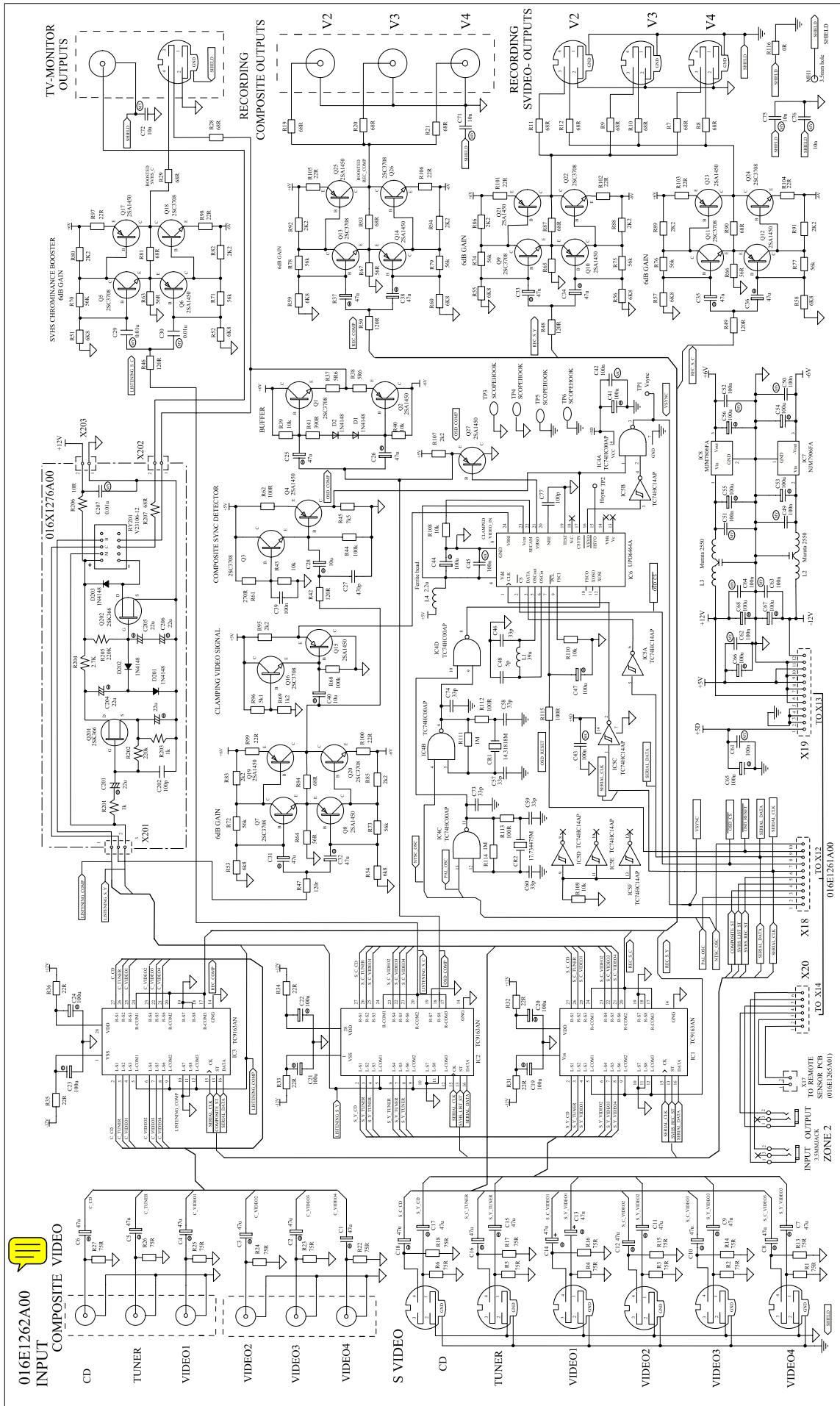


Schematic Diagram-3

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Schematic Diagram-5



Schematic Diagram-6

