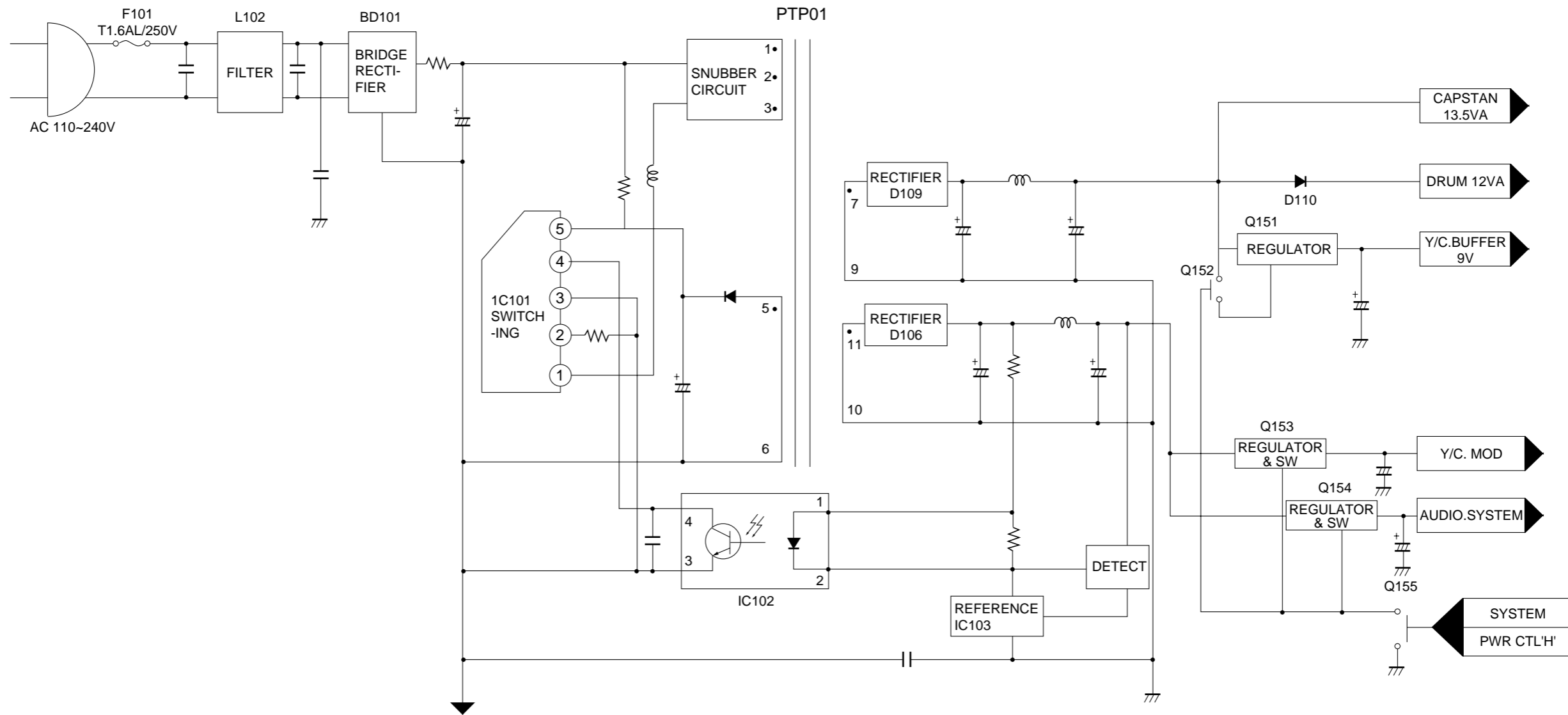


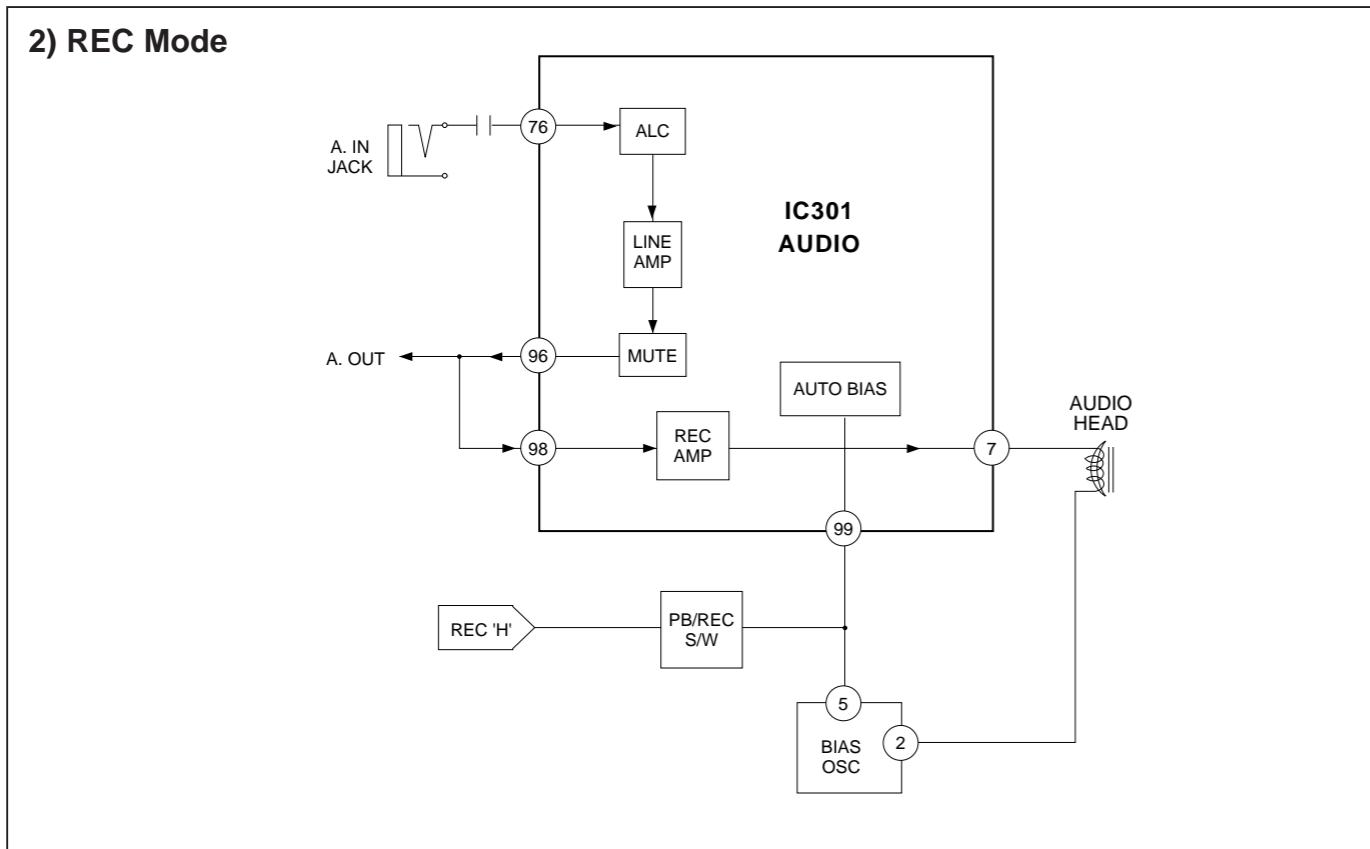
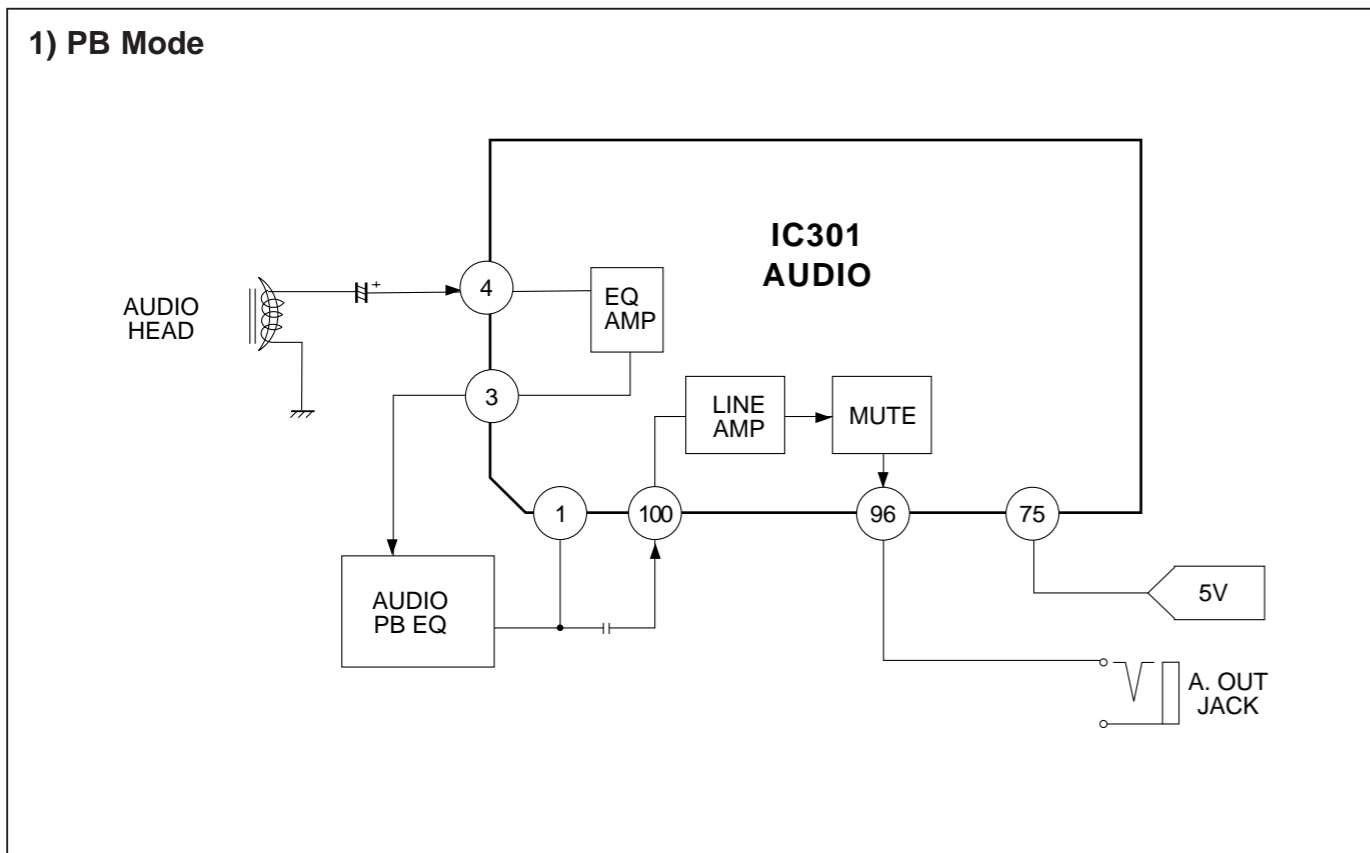
# SECTION 3 CHARTS AND DIAGRAMS

## 3.1 POWER(SMPS) BLOCK DIAGRAM

*NOTE: When ordering parts, be sure to order according to the Part Number indicated in the Parts List.*

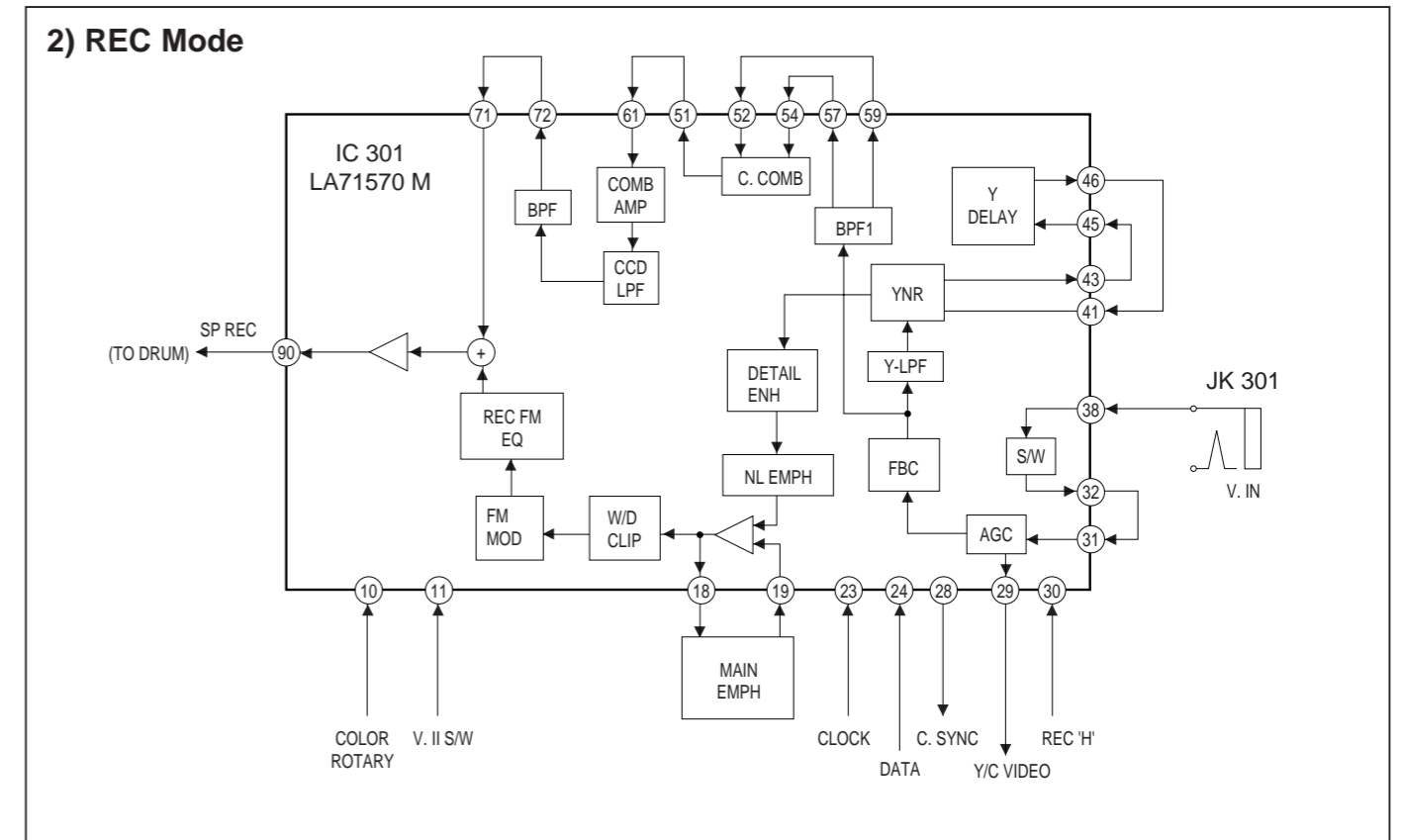
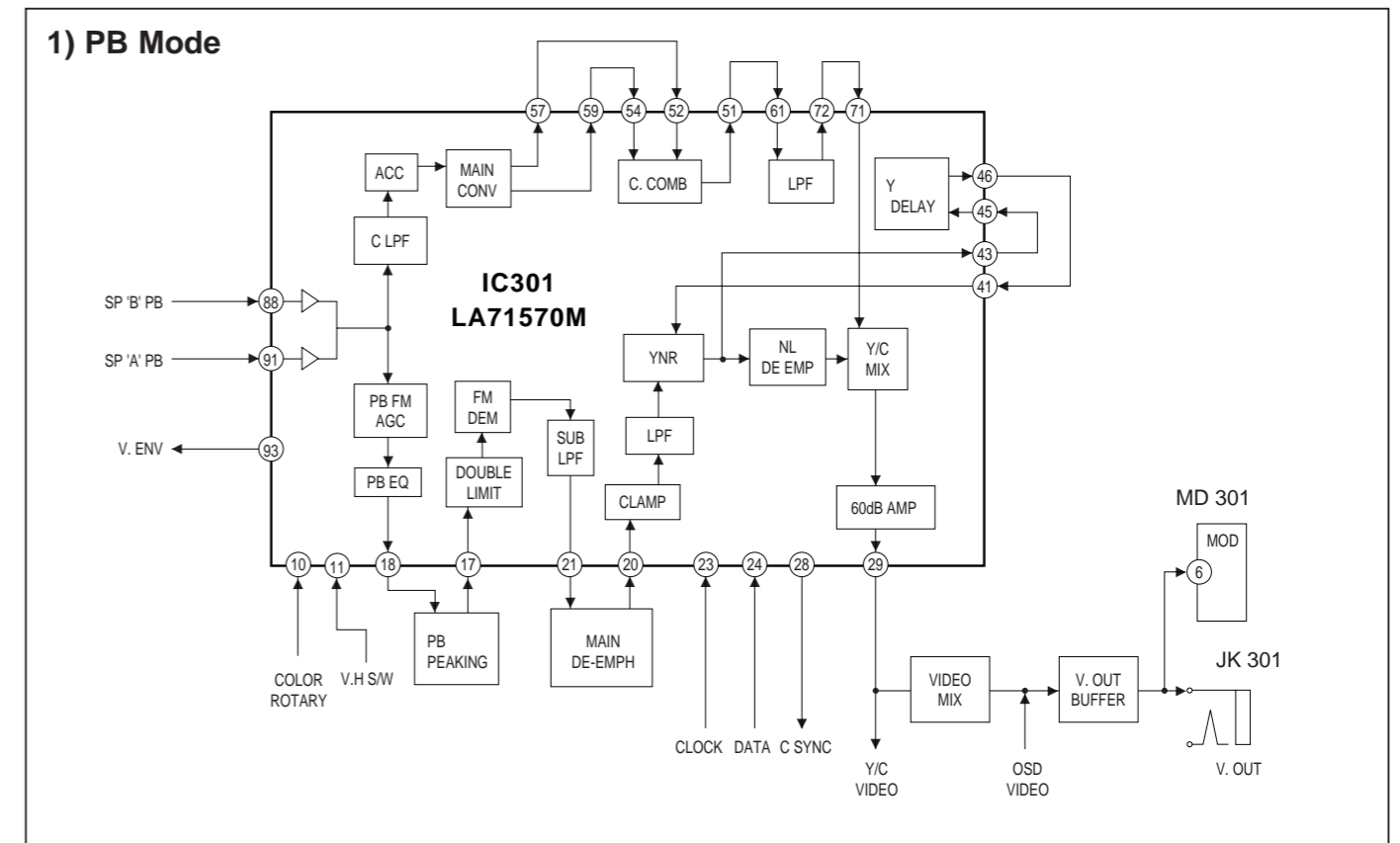


### 3.2 AUDIO BLOCK DIAGRAM



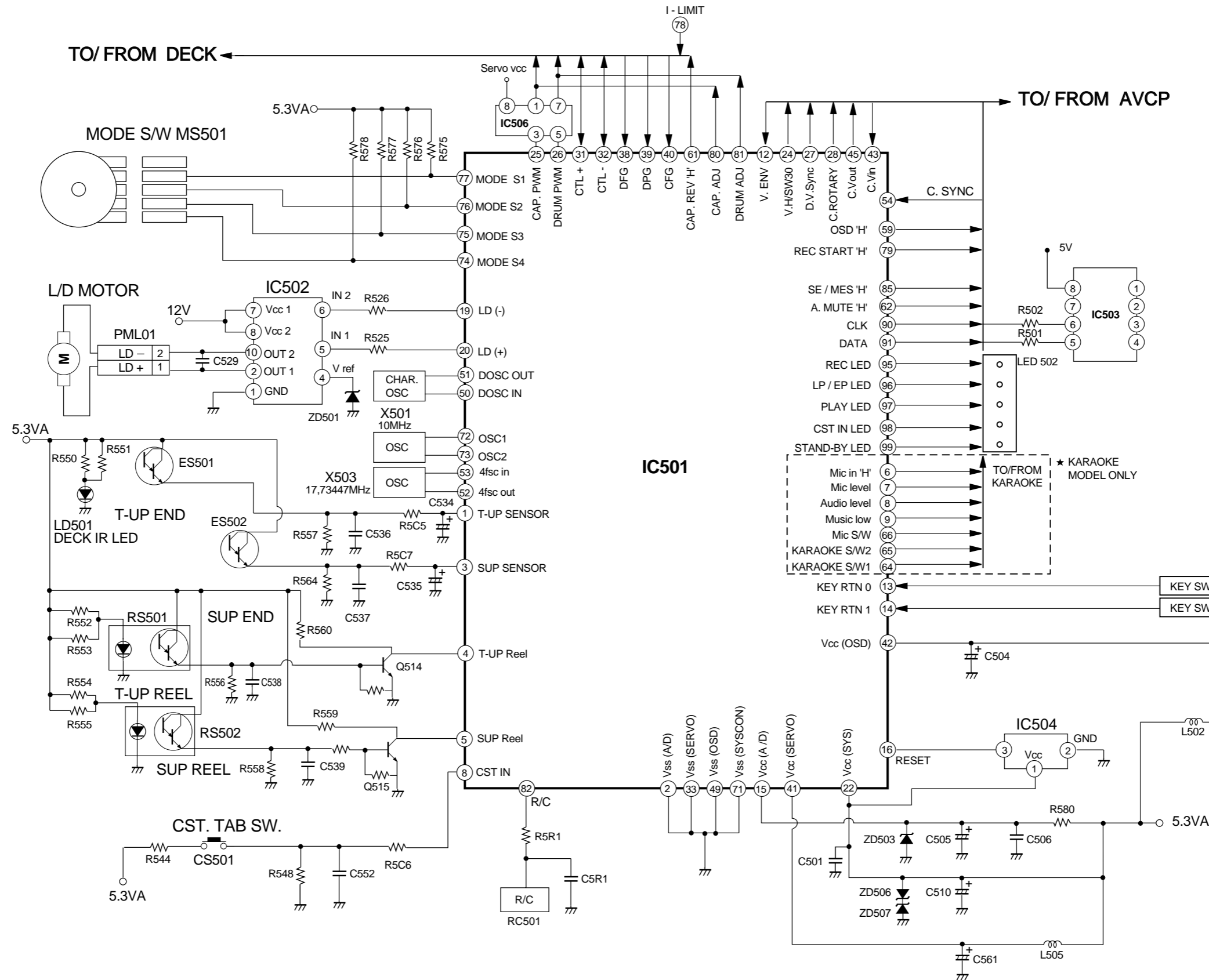
### 3.3 Y/C BLOCK DIAGRAM

**NOTE: When ordering parts, be sure to order according to the Part Number indicated in the Parts List.**



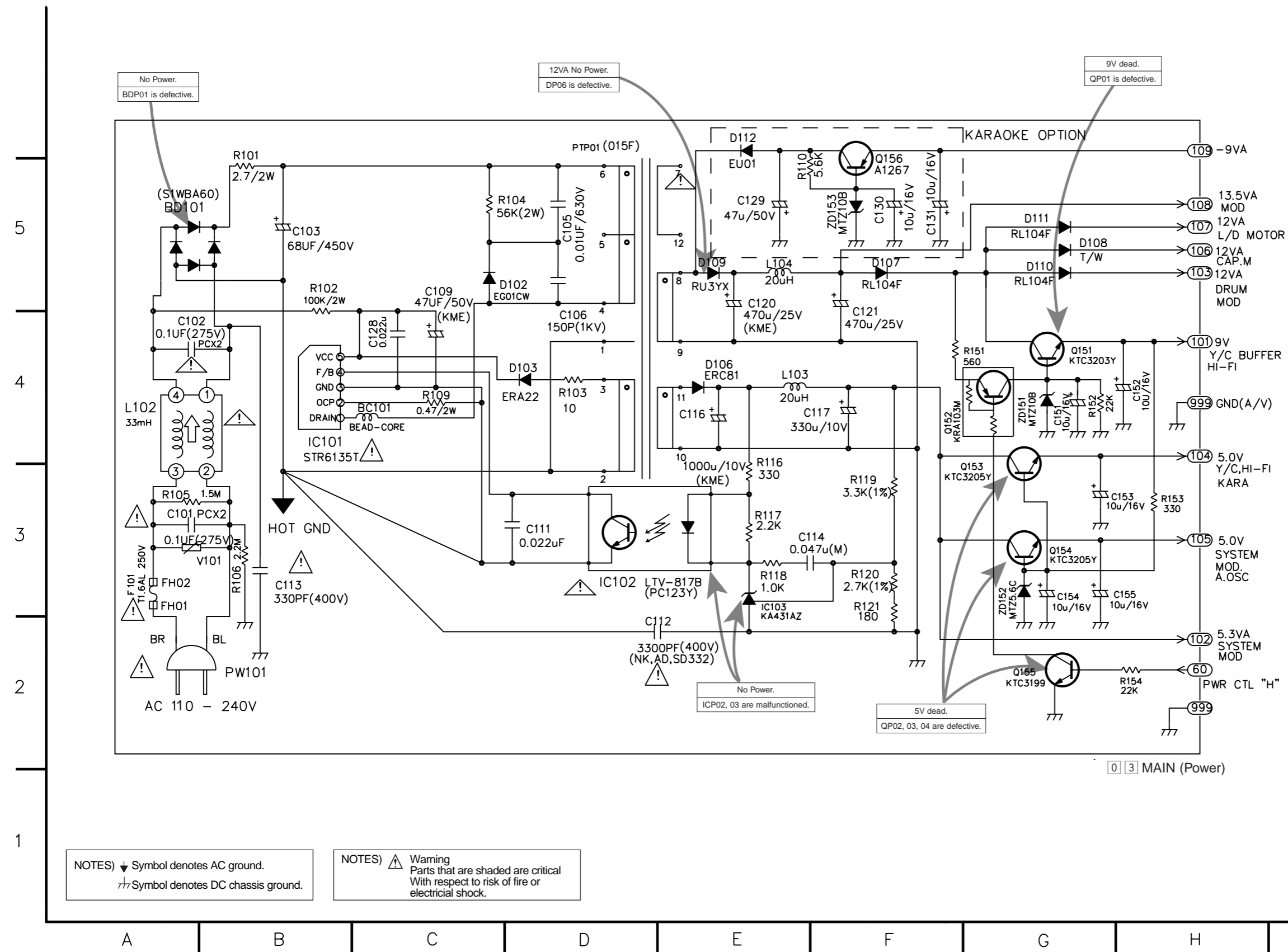
3.4 SYSTEM BLOCK DIAGRAM

**NOTE: When ordering parts, be sure to order according to the Part Number indicated in the Parts List.**



3.5 POWER(SMPS) CIRCUIT DIAGRAM

**NOTE:** When ordering parts, be sure to order according to the Part Number indicated in the Parts List.



LOCATION GUIDE

BC101	C4	Q151	G4
BD101	A5	Q152	F4
C101	A3	Q153	F3
C102	A4	Q154	G3
C103	B5	Q155	G2
C105	D5	Q156	F5
C106	D4	R101	B5
C109	C5	R102	B5
C111	D3	R103	D4
C112	D2	R104	C5
C113	B3	R105	A3
C114	E3	R106	B3
C116	E4	R109	C4
C117	E4	R110	E5
C120	E5	R116	E3
C121	F4	R117	E3
C128	C4	R118	E3
C129	E5	R119	F3
C130	F5	R120	F3
C131	F5	R121	F3
C151	G4	R151	G4
C152	H4	R152	G4
C153	G3	R153	H3
C154	G3	R154	H2
C155	G3	V101	A3
D102	C5	ZD151	G4
D103	D4	ZD152	G3
D106	E4	ZD153	F5
D107	F5		
D108	G5		
D109	E5		
D110	G5		
D112	E6		
FH01	A3		
FH02	A3		
IC101	B4		
IC102	D3		
IC103	E3		
L102	A4		
L103	E4		
L104	E5		
PTP01	D6		
PW101	B2		

NOTES) ⚡ Symbol denotes AC ground.  
 ⚡ Symbol denotes DC chassis ground.

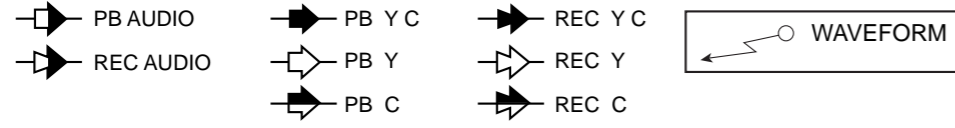
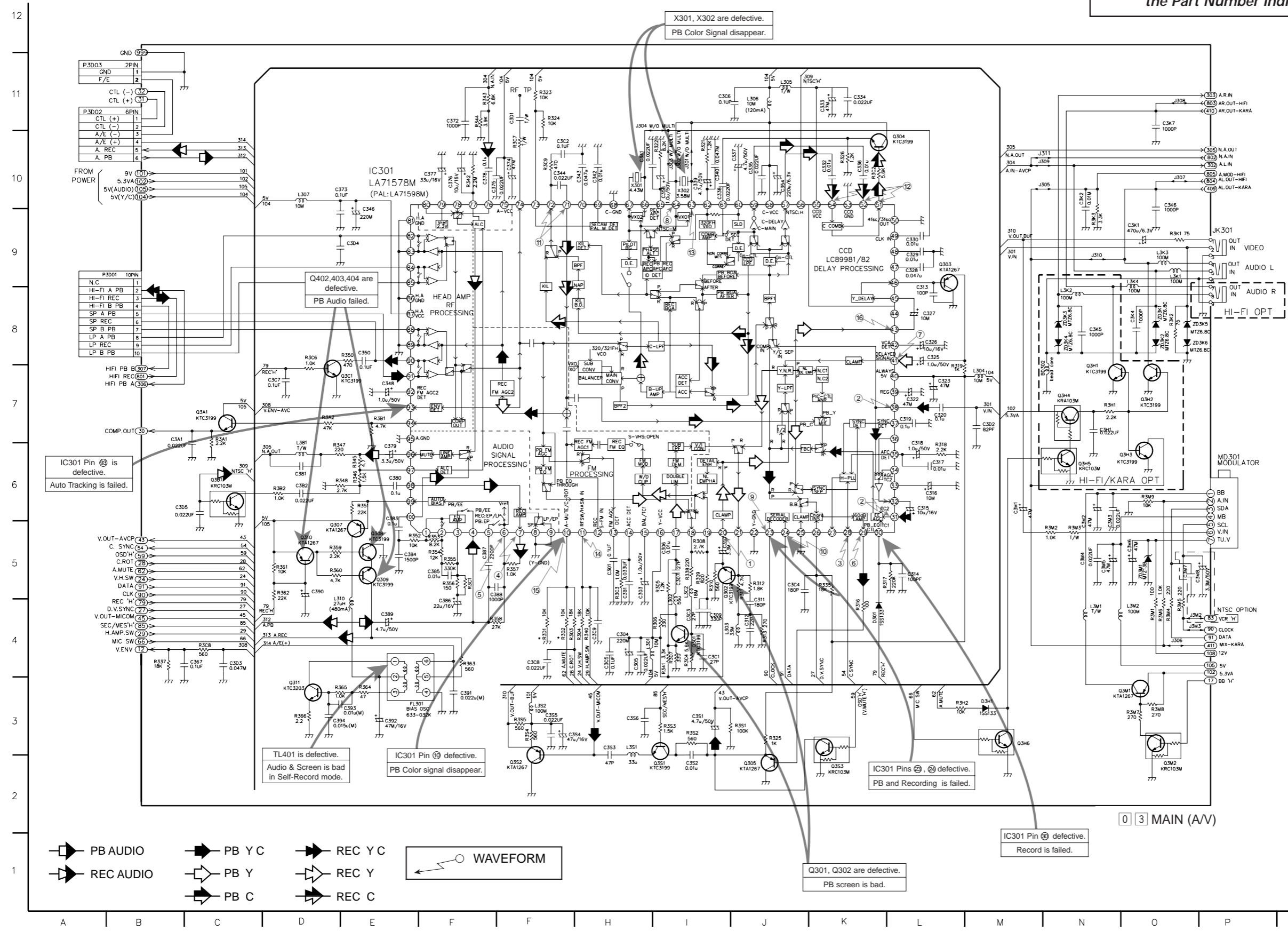
NOTES) ⚠ Warning  
 Parts that are shaded are critical  
 With respect to risk of fire or  
 electrical shock.

3.6 A/V CIRCUIT DIAGRAM

NOTE: When ordering parts, be sure to order according to the Part Number indicated in the Parts List.

LOCATION GUIDE

BD302	N7	C351	I3	R346	E6
C301	H5	C352	I2	R347	D6
C303	H5	C353	H3	R348	D6
C304	H4	C354	G3	R350	E8
C305	H4	C355	G3	R351	E6
C306	I5	C356	H3	R352	E5
C307	I5	D301	K4	R353	F5
C309	I4	D3H1	M3	R354	F5
C310	I5	FL301	E3	R355	F5
C311	J4	IC301	E10	R356	F5
C312	J4	J301	I10	R357	G5
C313	L8	J302	I10	R358	F4
C314	L5	J303	I10	R359	D5
C315	L6	J304	H11	R360	D5
C316	L6	J305	M10	R361	D5
C317	L6	J306	O4	R362	D5
C318	L6	J307	O10	R363	F4
C319	L7	J308	O11	R364	E3
C320	L7	J309	M10	R365	D3
C322	L7	J310	N9	R366	D3
C323	L7	J311	M10	R3A1	C7
C325	L8	J3M2	O4	R3A2	O7
C326	L8	J3M3	O4	R3B1	E7
C327	L8	JK301	P9	R3B2	D6
C328	L9	L301	H4	R3C1	F5
C329	L9	L302	I4	R3C2	K10
C330	L9	L303	I4	R3C3	H5
C332	K10	L304	M7	R3C4	I4
C333	K11	L305	J11	R3C6	D8
C334	K11	L306	J11	R3C7	G10
C335	J10	L310	D4	R3C8	C4
C336	K10	L381	D6	R3C9	G10
C337	J10	L3C2	J10	R3D1	G4
C338	H10	L3K1	O9	R3H1	I7
C339	H10	L3K2	N8	R3H2	L3
C340	H10	L3K3	O9	R3K1	O9
C341	H10	L3K4	O9	R3K2	O8
C342	H10	L3M1	N4	R3K3	N9
C343	H10	L3M2	O4	R3M1	O4
C344	G10	L351	H3	R3M2	N5
C346	E9	L352	G3	R3M3	N5
C348	E7	MD301	P6	R3M4	O4
C350	E8	P3001	A9	R3M5	O4
C354	J10	P3002	A11	R3M6	O4
C358	H10	P3003	A11	R3M7	O3
C367	C4	Q301	I4	R3M8	O3
C372	F11	Q302	I5	R3M9	O6
C373	D10	Q303	L9	R3S1	J3
C374	G10	Q304	L10	R3S2	I3
C375	F10	Q305	J2	R3S3	I3
C376	F10	Q307	D5	R3S4	G3
C377	F10	Q308	E5	R3S5	G3
C379	E6	Q310	D5	X302	I10
C380	E6	Q311	D3	ZD3K1	O8
C381	D6	Q3A1	C7	ZD3K2	O8
C383	E6	Q3B1	C6	ZD3K3	N8
C384	E5	Q3C1	E7	ZD3K4	N8
C385	F5	Q3H1	N7	ZD3K5	O8
C386	F4	Q3H2	O7	ZD3K6	O8
C387	F5	Q3H3	N6	ZD3M1	O5
C388	F5	Q3H4	N7		
C389	F10	Q3H5	N6		
C390	D5	Q3H6	M3		
C391	F3	Q3M1	N3		
C392	E3	Q3M2	O2		
C393	E3	Q3S1	I2		
C394	D3	Q3S2	G2		
C3A1	B7	Q3S3	K2		
C3B1	H5	R302	G4		
C3B2	D6	R303	G4		
C3C1	I4	R304	H4		
C3C2	G10	R305	I5		
C3C3	I4	R306	I4		
C3C4	J5	R307	I4		
C3C5	H4	R308	I5		
C3C6	I11	R309	I5		
C3C7	D7	R310	I5		
C3C8	G4	R311	J4		
C3C9	H4	R312	J5		
C3D1	G11	R313	J4		
C3D2	M7	R316	K4		
C3D3	C4	R317	K5		
C3D4	E9	R318	L6		
C3D5	B6	R319	L7		
C3H1	N7	R321	I10		
C3K1	O9	R322	I10		
C3K2	N10	R323	G11		
C3K4	O8	R324	G11		
C3K5	N8	R325	J3		
C3K6	O10	R326	K10		
C3K7	O11	R335	K5		
C3M1	M5	R337	B4		
C3M2	N5	R338	I5		
C3M3	N5	R340	H4		
C3M4	N5	R341	I4		
C3M5	N5	R342	F10		
C3M6	O5	R343	F11		
C3M7	O5	R344	F11		
C3M8	P5	R345	E6		

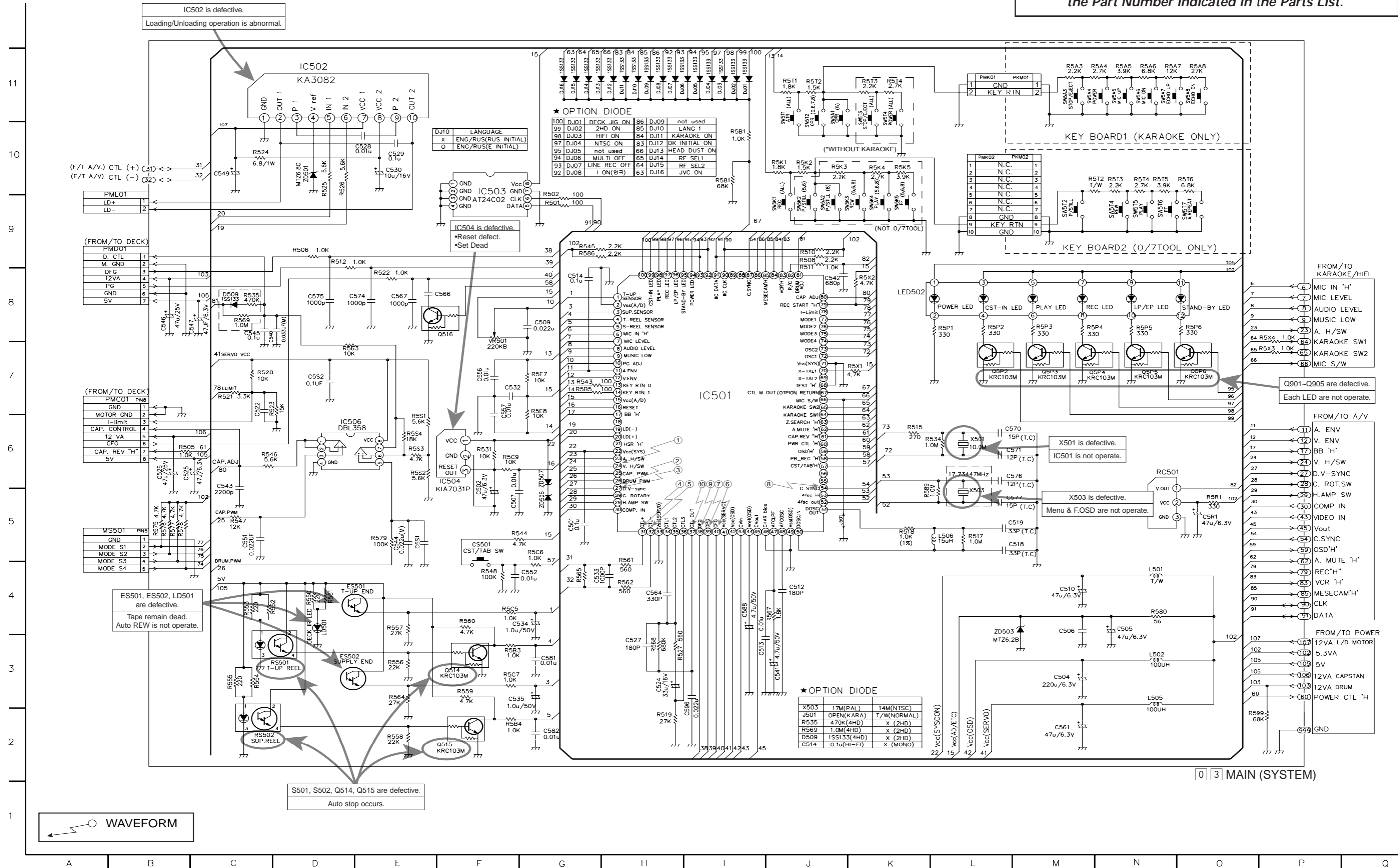


03 MAIN (A/V)



3.7 SYSTEM CIRCUIT DIAGRAM

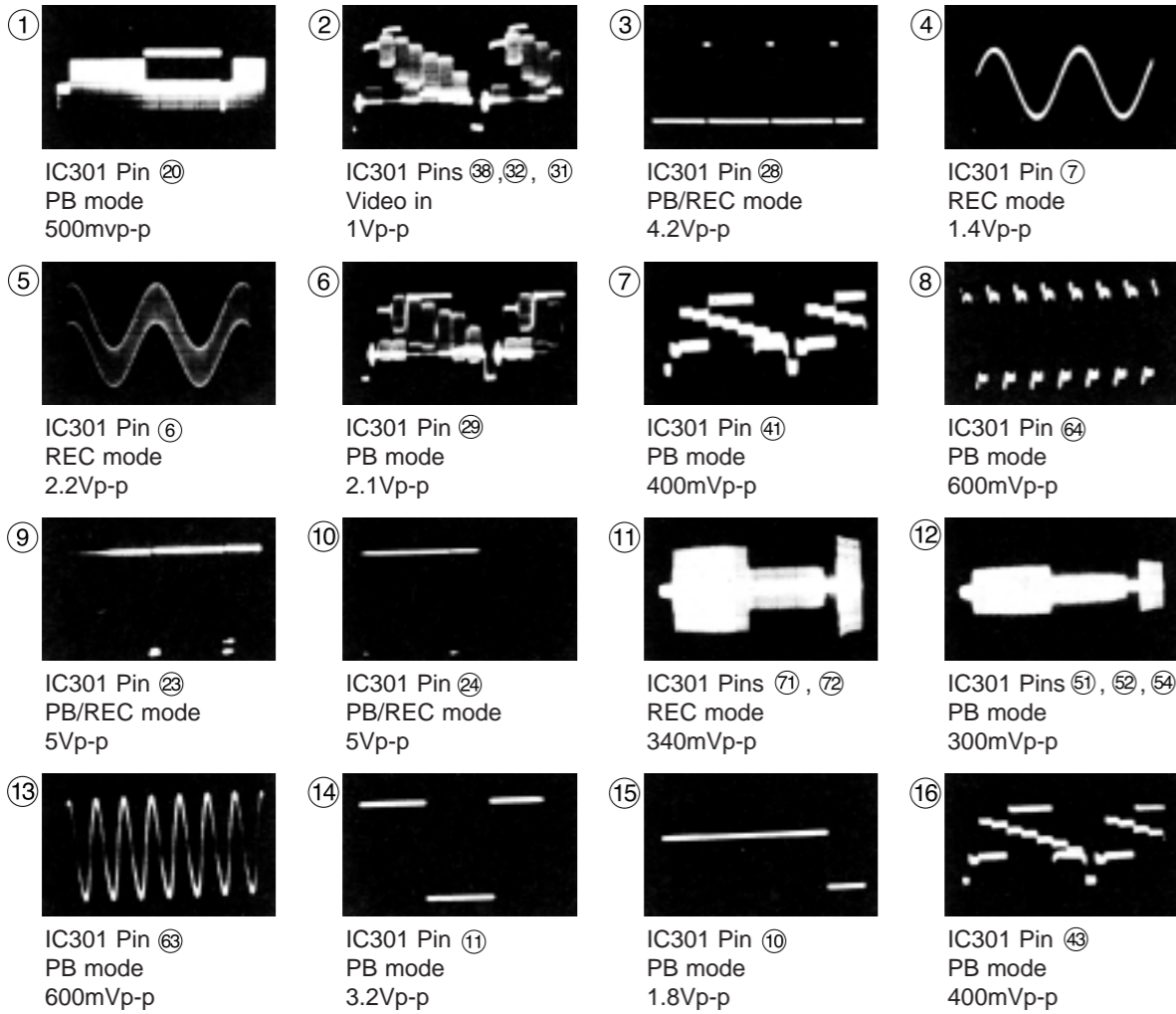
**NOTE: When ordering parts, be sure to order according to the Part Number indicated in the Parts List.**



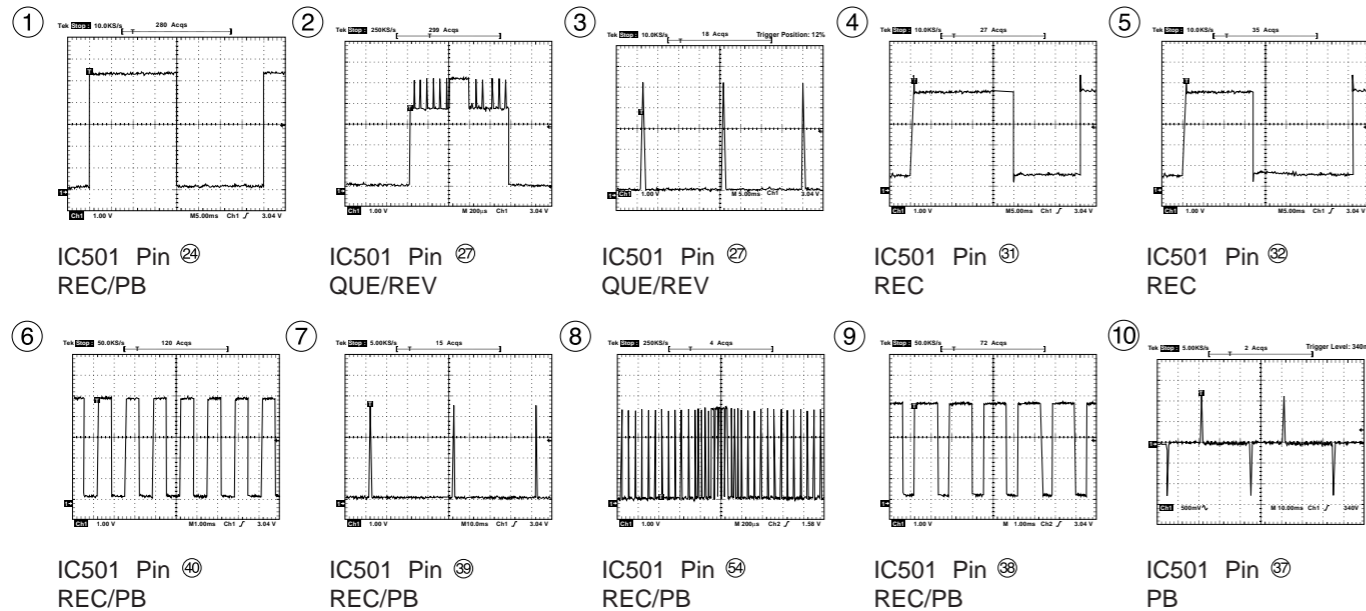
0 3 MAIN (SYSTEM)

### 3.8 WAVEFORM & VOLTAGE SHEET

#### \* IC301 Oscilloscope Waveform



#### \* IC501 Oscilloscope Waveform



#### IC301 Voltage Sheet

PIN	PB	REC	PIN	PB	REC	PIN	PB	REC	PIN	PB	REC	PIN	PB	REC
1	2.44	2.41	21	2.15	2.54	41	3.02	2.9	61	3.36	3.43	81	0.0	0.0
2	2.44	2.41	22	0.0	0.0	42	2.79	3.1	62	3.47	3.45	82	0.01	0.01
3	2.47	2.52	23	4.85	4.85	43	1.96	2.11	63	3.83	3.72	83	0.01	0.01
4	2.45	2.39	24	4.85	4.85	44	0.17	0.17	64	2.63	2.72	84	0.76	0.69
5	0.05	2.4	25	0.0	0.0	45	1.53	2.26	65	2.06	1.35	85	0.76	0.69
6	2.47	2.42	26	0.07	0.07	46	1.64	1.5	66	2.63	2.75	86	0.0	0.0
7	2.47	2.42	27	0.34	0.34	47	9.59	9.53	67	3.9	3.72	87	4.97	4.99
8	0.0	0.0	28	0.34	0.34	48	2.21	2.33	68	0.0	0.0	88	1.89	4.84
9	0.0	0.0	29	1.73	1.94	49	0.88	0.89	69	0.63	0.6	89	0.0	0.0
10	0.97	0.97	30	1.09	4.35	50	0.0	0.0	70	1.98	2.83	90	1.89	0.0
11	1.7	1.7	31	2.88	2.88	51	1.94	1.9	71	2.5	2.43	91	1.89	4.84
12	5.05	2.69	32	1.5	2.27	52	2.59	2.59	72	3.26	3.02	92	0.21	0.23
13	1.5	1.42	33	1.87	1.31	53	0.0	0.0	73	3.4	3.36	93	4.23	0.02
14	1.9	1.53	34	1.82	3.31	54	2.62	2.58	74	1.8	0.01	94	0.01	0.25
15	2.3	2.31	35	1.26	3.36	55	5.07	5.01	75	4.99	4.95	95	0.0	0.0
16	5.07	5.02	36	1.82	3.31	56	0.22	0.53	76	2.44	2.44	96	2.26	2.26
17	3.03	0.17	37	1.61	4.73	57	3.38	3.43	77	0.01	0.01	97	0.0	0.0
18	1.87	2.47	38	2.14	2.24	58	5.01	4.98	78	2.44	2.44	98	2.44	1.62
19	1.12	2.47	39	4.05	4.06	59	3.3	3.36	79	2.47	2.44	99	4.97	4.11
20	2.98	3.04	40	5.08	5.02	60	3.46	3.43	80	2.38	1.92	100	2.44	3.26

	PB	0.42	0.78	12.23	12.17	3.48
REC	0.42	0.78	12.0	12.0	3.48	
<b>IC502 (KA3082)</b>						
	PB	0	0.42	0.78	1.80	3.48
REC	0	0.41	0.78	1.99	3.49	

#### IC501 Voltage Sheet

PIN	PB	REC	PIN	PB	REC	PIN	PB	REC	PIN	PB	REC
1	0	0	26	PWM	PWM	51	OSC(Character)	OSC(Character)	76	5.32	5.32
2	0	0	27	0	0	52	OSC(17MHz)	OSC(17MHz)	77	5.32	5.32
3	0	0	28			53	OSC(17MHz)	OSC(17MHz)	78	3.2	3.2
4	Pulse	Pulse	29	0	0	54	C.sync(4Vp-p)	C.sync(4Vp-p)	79	0	5.06
5	Pulse	Pulse	30	0	0	55	5.32	0	80	2.83	2.83
6	2.40	2.40	31	2.26	Pulse	56	0(LP, EP:5.32V)	0(LP, EP:5.32V)	81	2.39	2.39
7	0	0	32	2.26	Pulse	57	0	0	82	5.06	5.06
8	0	0	33	0	0	58	0	0	83	5.29	5.29
9	0	0	34	2.34	2.28	59	0	0	84	0(SECAM:5.3V)	0(SECAM:5.3V)
10	2.24	2.24	35	2.26	2.26	60	5.3	5.3	85	0(SECAM, MESE-CAM: 5.16V)	0(SECAM, MESE-CAM: 5.16V)
11	0	0	36	2.26	2.26	61	0	0	86	0	0
12	3.1(PAL, SP)	0	37	2.26	2.26	62	0	0	87	C.sync(4Vp-p)	C.sync(4Vp-p)
13	5.3	5.3	38	Pulse	Pulse	63	0	0	88	0	0
14	5.3	5.3	39	Pulse	Pulse	64	0	0	89	0	0
15	5.3	5.3	40	Pulse	Pulse	65	0	0	90	Pulse	Pulse
16	5.3	5.3	41	5.32	5.32	66	0	0	91	Pulse	Pulse
17	0	0	42	4.97	4.97	67	0	0	92	5.3	5.3
18	0	0	43	2.3	2.3	68	0	0	93	0	0
19	5.13	5.13	44	1.3	1.3	69	0	0	94	0	0
20	5.13	5.13	45	2.3	2.3	70	5.32	5.32	95	0	5.27
21	0	0	46	0	0	71	0	0	96	0(LP/EP:5.26V)	0(LP/EP:5.26V)
22	5.32	5.32	47	1.92	1.92	72	OSC(2.1Vp-p)	OSC(2.1Vp-p)	97	5.29	0
23	0	0	48	1.3	1.3	73	OSC(2.6Vp-p)	OSC(2.6Vp-p)	98	5.29	5.29
24	Pulse	Pulse	49	0	0	74	5.32	5.32	99	0	0
25	PWM	PWM	50	OSC(Character)	OSC(Character)	75	0	0	100	5.31(NTSC:0V)	5.31(NTSC:0V)

#### T/R Voltage Sheet

	PB mode			REC mode		
	E	C	B	E	C	B
Q514	Pluse	Pluse	Pluse	Pluse	Pluse	Pluse
Q515	Pluse	Pluse	Pluse	Pluse	Pluse	Pluse
Q522	4.98	4.97	5.32	5.32	5.62	5.63

	PB mode			REC mode		
	E	C	B	E	C	B
Q301	1.18	4.32	1.8	1.71	3.75	2.34
Q302	1.3	5.09	1.9	1.89	5.09	2.51
Q303	2.62	0.0	2.05	2.17	0.0	1.53
Q30S	2.43	0.0	1.75	2.53	0.0	1.87
Q3S1	3.27	2.42	0.02	3.39	2.54	0.02
Q3S2	3.16	0.0	2.47	3.22	0.0	2.54
Q3S3	0.0	2.43	0.01	0.0	2.53	0.01
Q304	1.36	5.08	1.93	1.34	5.02	1.9
Q307	5.01	0.25	4.98	4.93	3.83	4.11
Q310	5.01	4.95	4.33	4.93	-25.2	4.87
Q308	0.0	0.0	0.72	-18.0	0.0	-25.1
Q309	0.0	0.01	0.7	-18.1	0.0	-25.6
Q311	0.0	0.24	0.24	0.29	3.52	0.6
Q3B1	0.0	0.18	0.55	0.0	0.22	0.55

**NOTE: When ordering parts, be sure to order according to the Part Number indicated in the Parts List.**

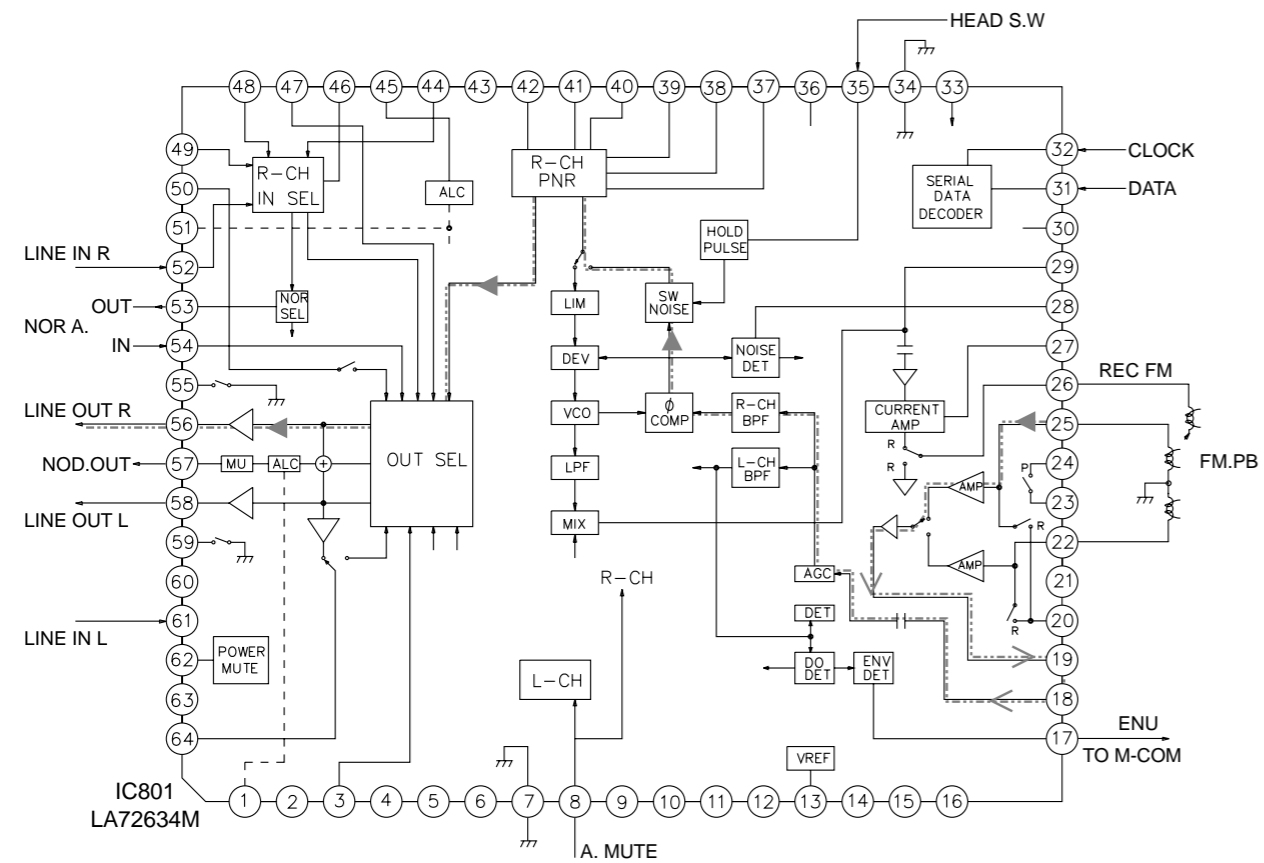




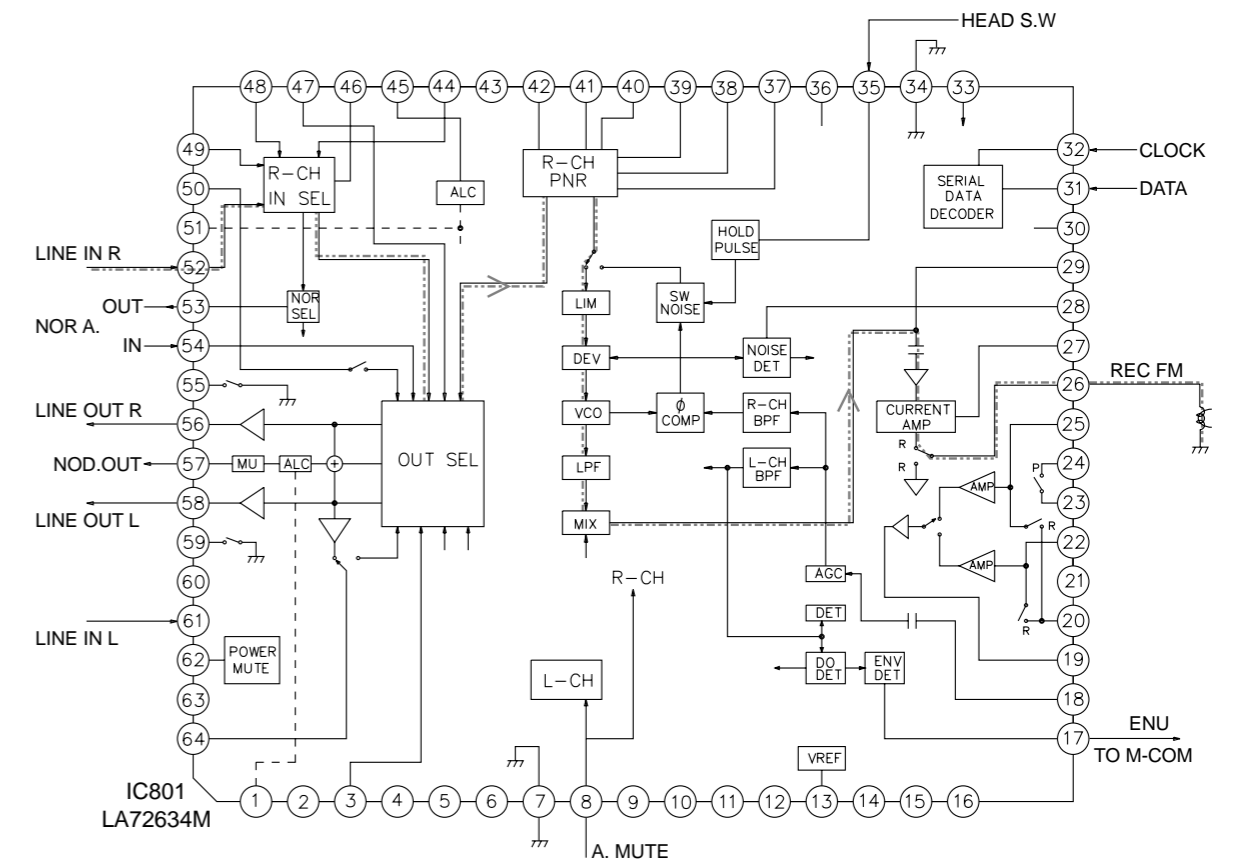


### 3.10 Hi-Fi BLOCK DIAGRAMS

#### (PB Mode)

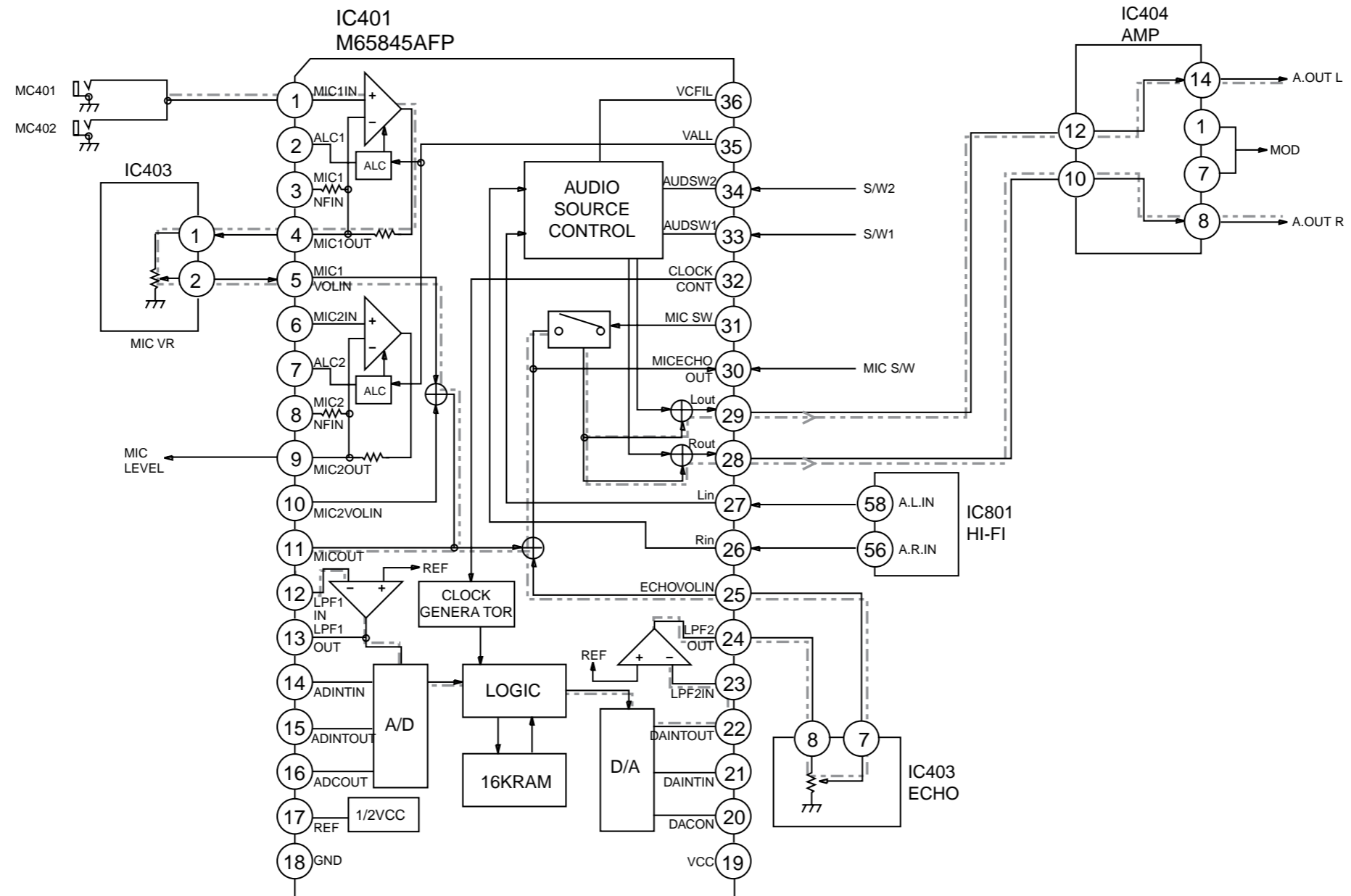


#### (REC Mode)



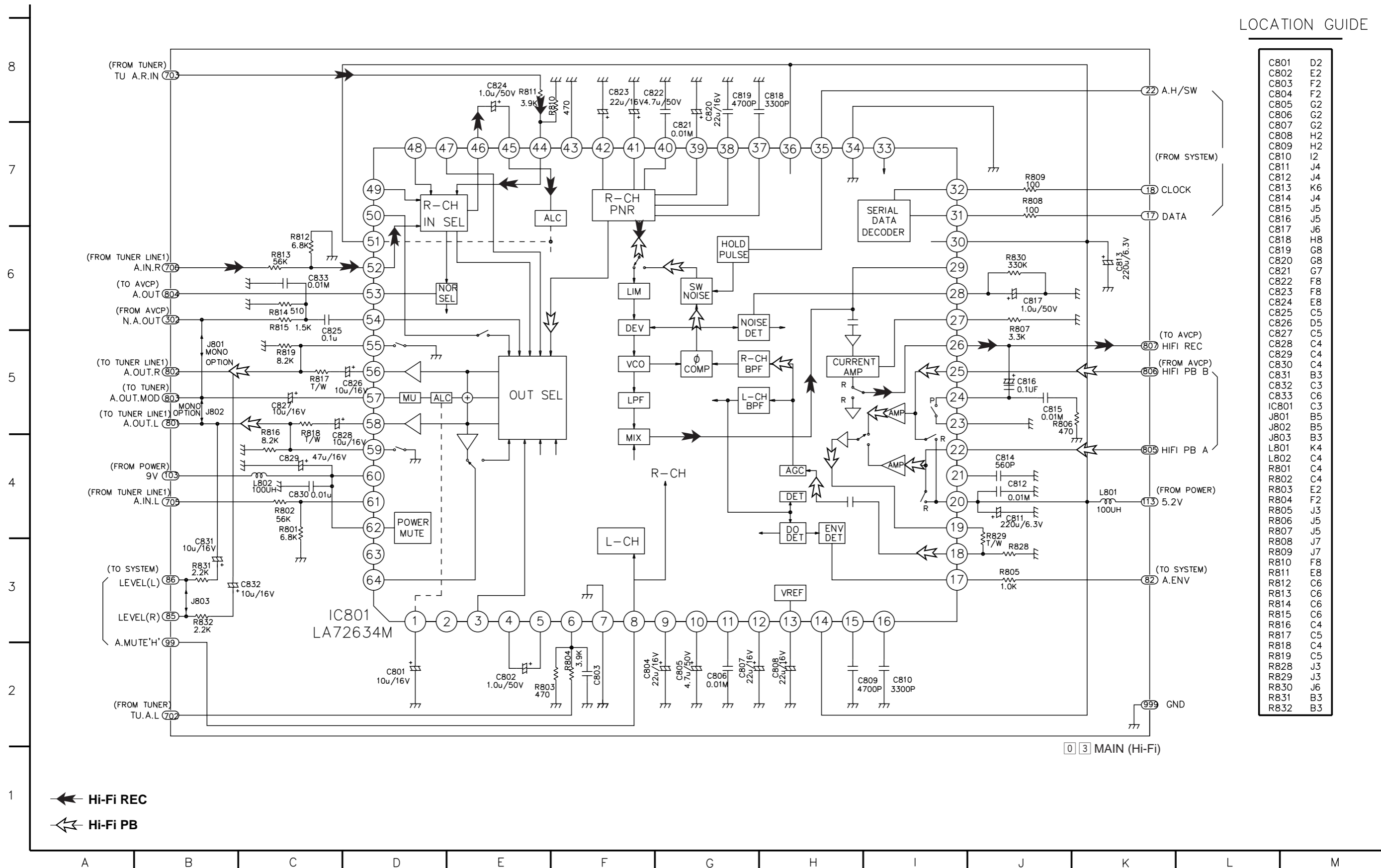
3.11 KARAOKE BLOCK DIAGRAM

(MIC MODE)



3.12 Hi-Fi CIRCUIT DIAGRAM

LOCATION GUIDE



C801	D2
C802	E2
C803	F2
C804	F2
C805	G2
C806	G2
C807	G2
C808	H2
C809	H2
C810	I2
C811	J4
C812	J4
C813	K6
C814	J4
C815	J5
C816	J5
C817	J6
C818	H8
C819	G8
C820	G8
C821	G7
C822	F8
C823	F8
C824	E8
C825	C5
C826	D5
C827	C5
C828	C4
C829	C4
C830	C4
C831	B3
C832	C3
C833	C6
IC801	C3
J801	B5
J802	B5
J803	B3
L801	K4
L802	C4
R801	C4
R802	C4
R803	E2
R804	F2
R805	J3
R806	J5
R807	J5
R808	J7
R809	J7
R810	F8
R811	E8
R812	C6
R813	C6
R814	C6
R815	C6
R816	C4
R817	C5
R818	C4
R819	C5
R828	J3
R829	J3
R830	J6
R831	B3
R832	B3