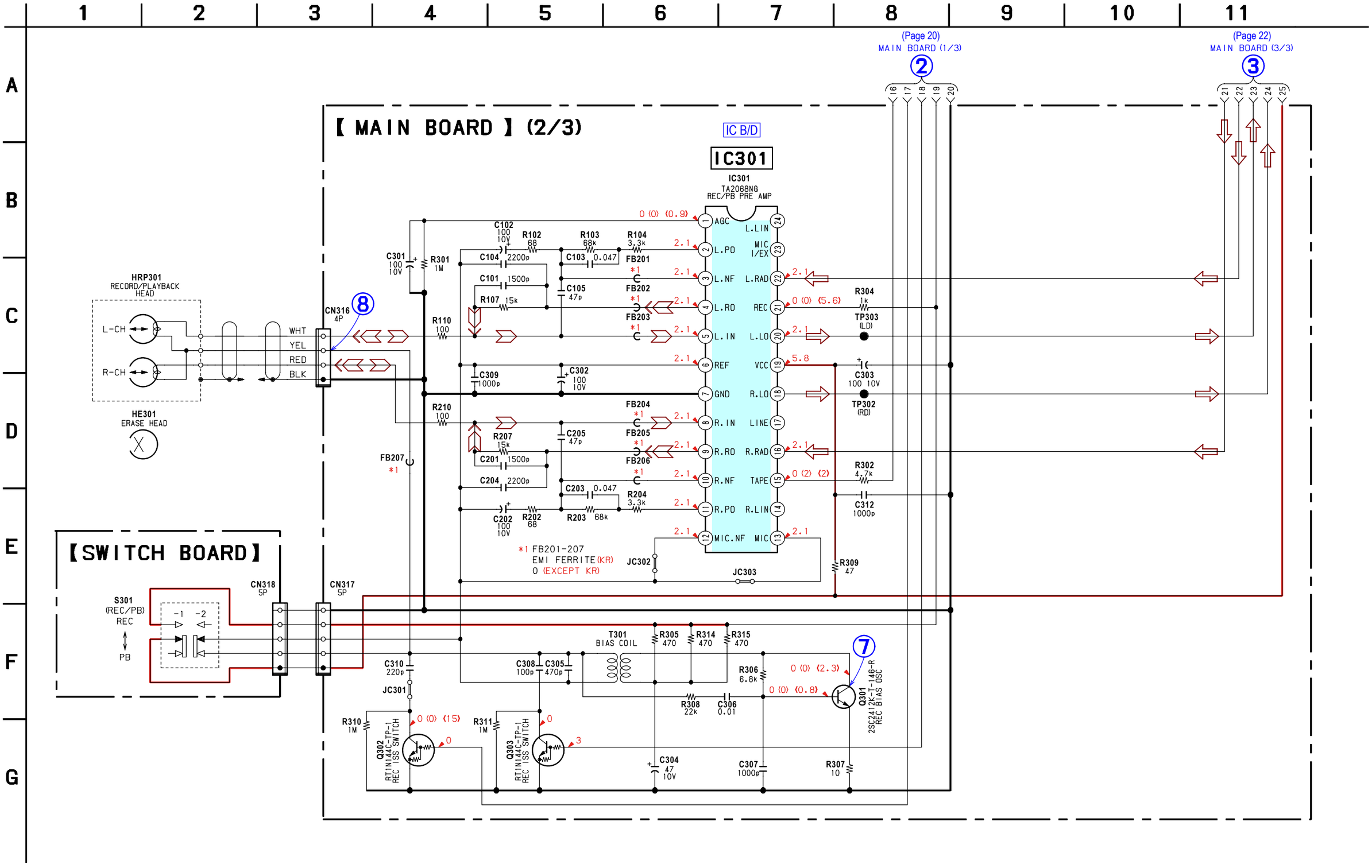
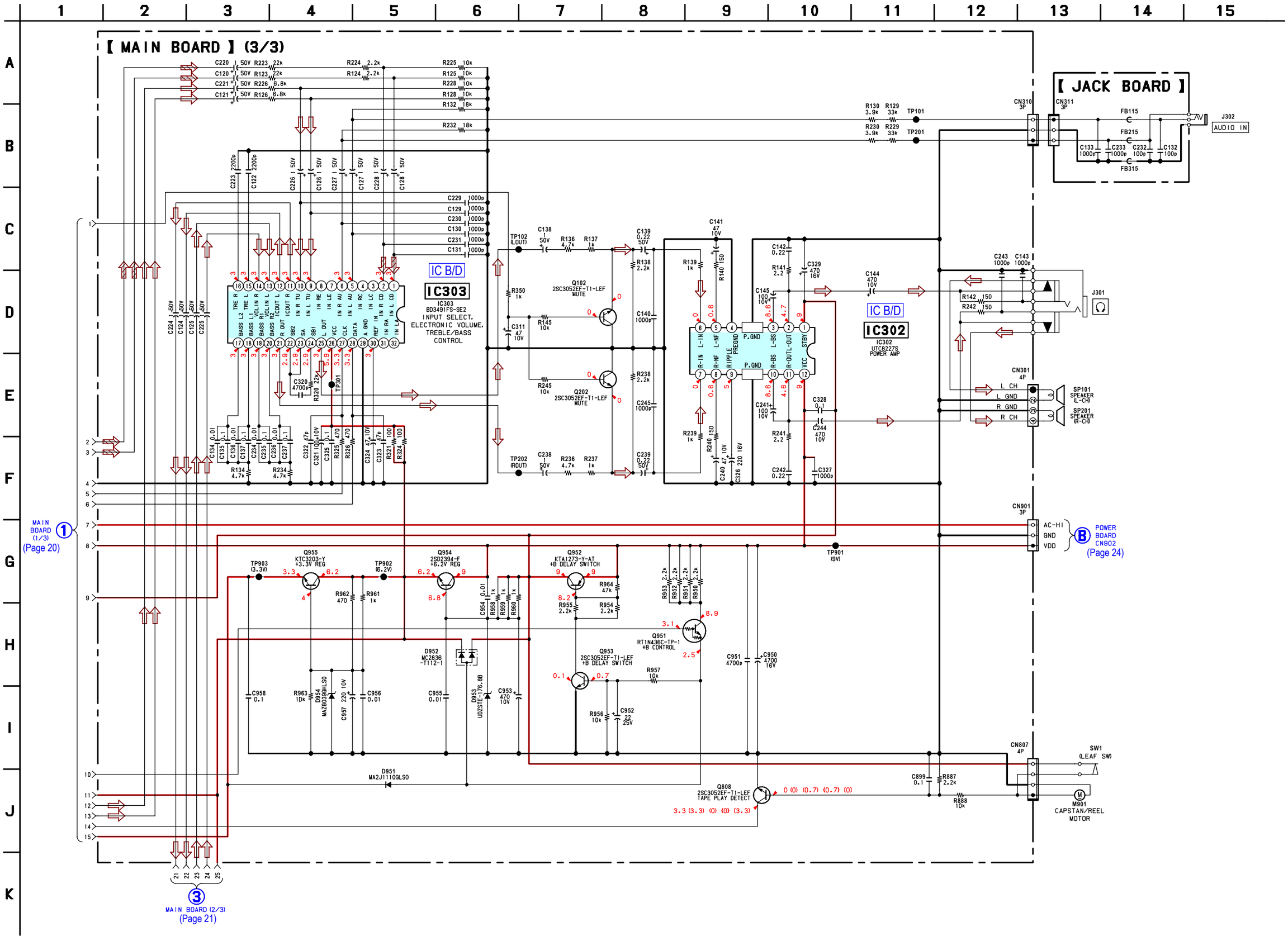
5-6. SCHEMATIC DIAGRAM – MAIN Section (2/3) – • See page 17 for waveforms. • See page 26 for IC Block Diagram.

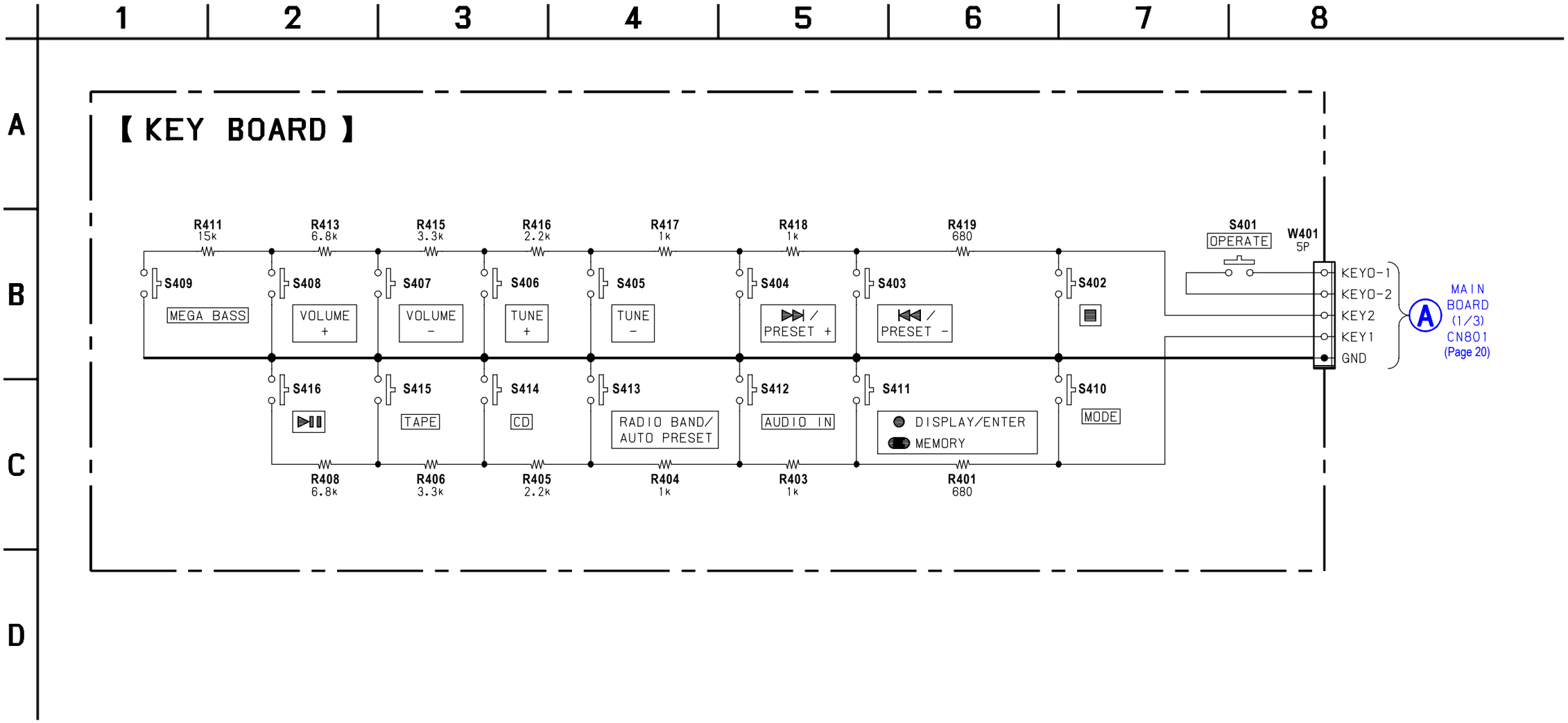


5-7. SCHEMATIC DIAGRAM – MAIN Section (3/3) –

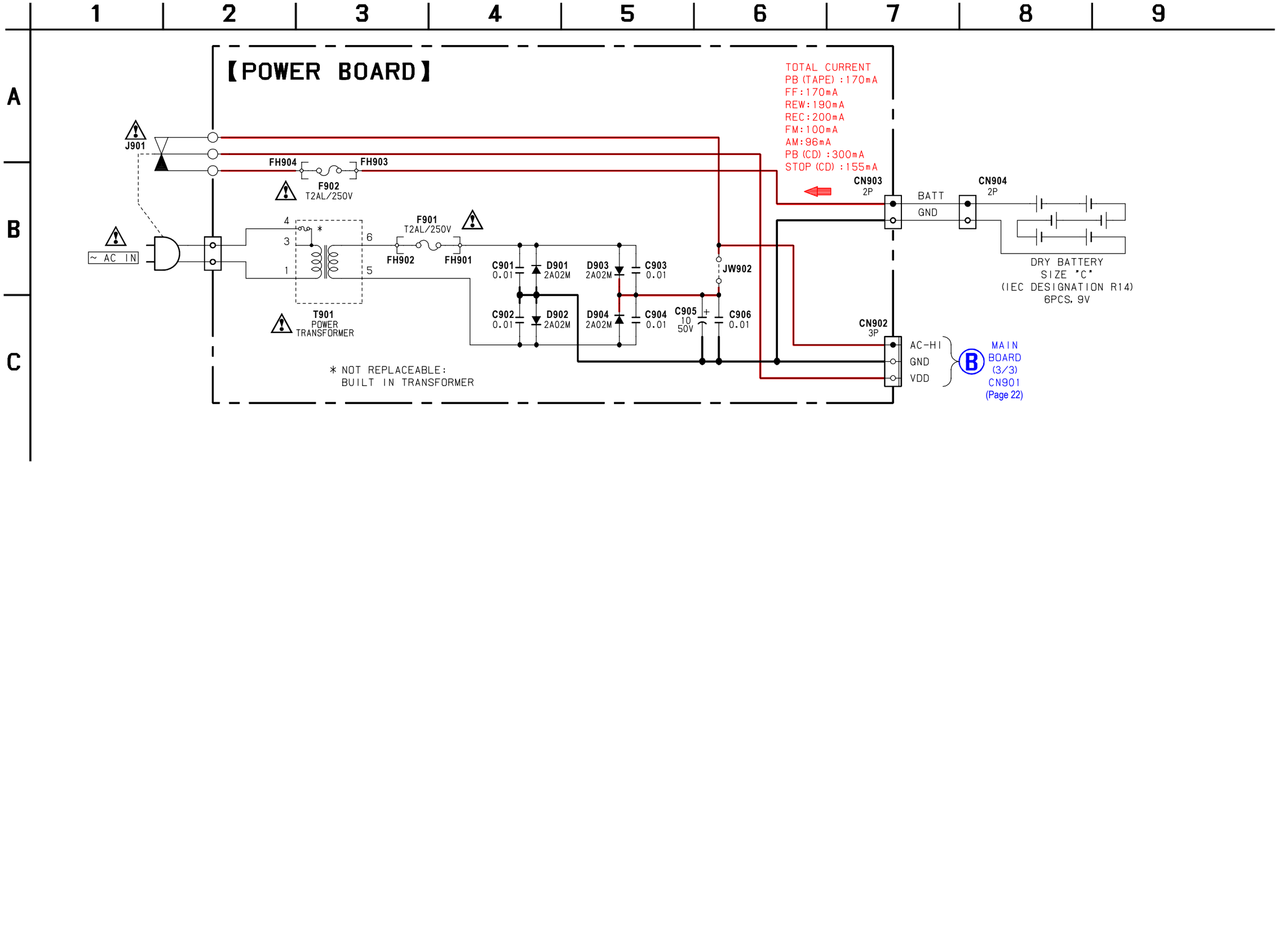
• See page 27 for IC Block Diagrams.



5-8. SCHEMATIC DIAGRAM – KEY Section –

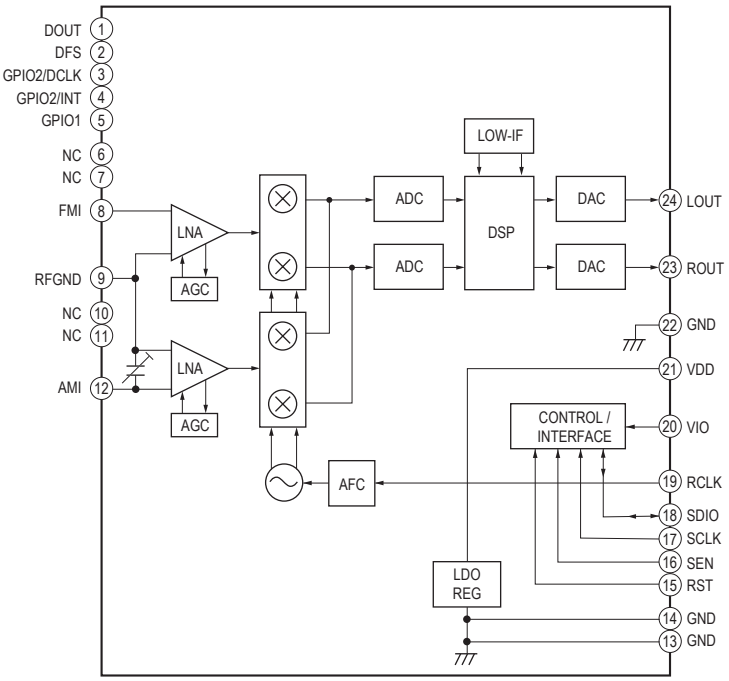


5-9. SCHEMATIC DIAGRAM – POWER Section –

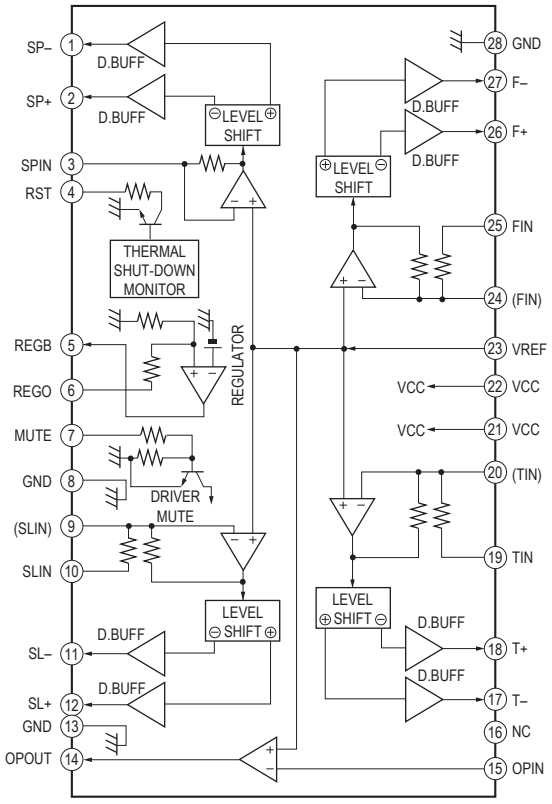


- **IC Block Diagrams**

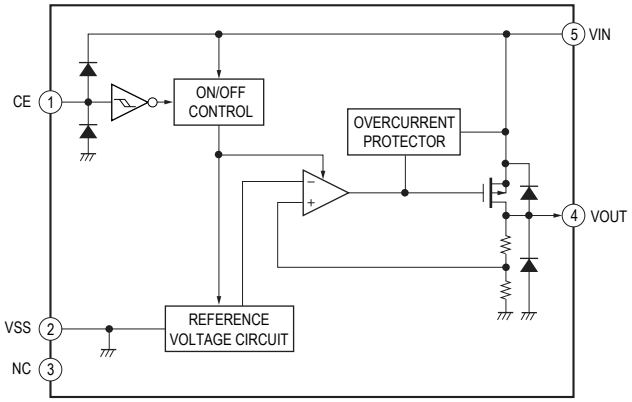
IC1 SI4730-C40 (MAIN Board (1/3))



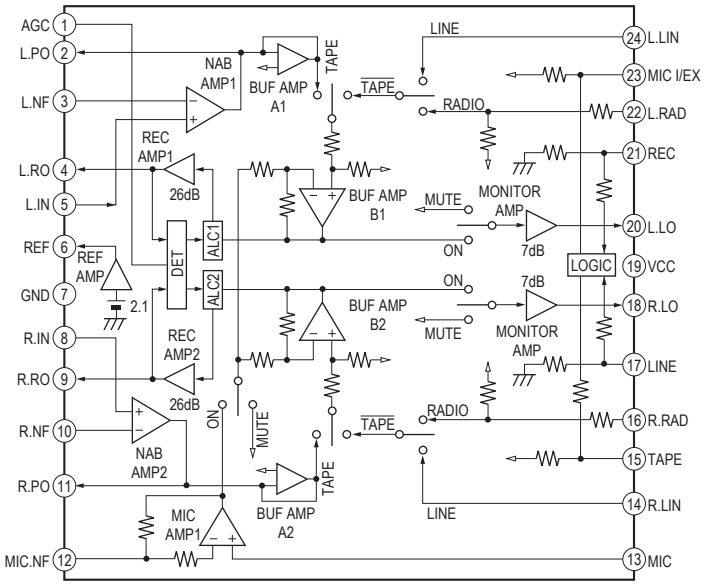
IC701 BA5826HFP-E2 (MAIN Board (1/3))



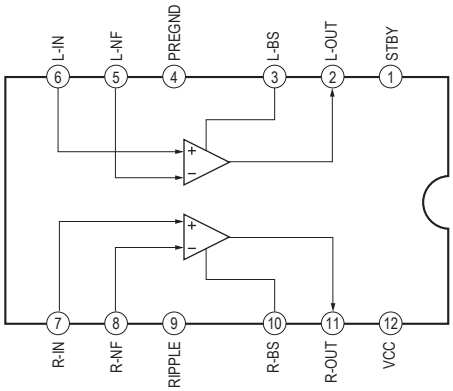
IC803 S-T111B15MC-OGATFG (MAIN Board (1/3))
IC804 S-T111B15MC-OGATFG (MAIN Board (1/3))



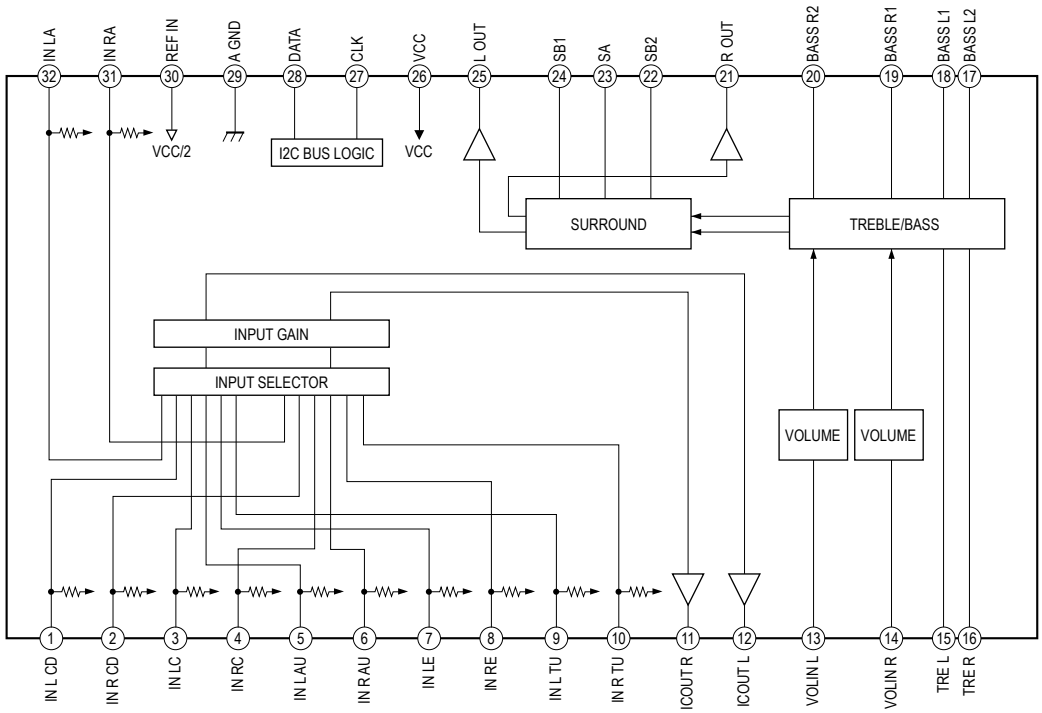
IC301 TA2068NG (MAIN Board (2/3))



IC302 UTC8227S (MAIN Board (3/3))



IC303 BD3491FS-SE2 (MAIN Board (3/3))



• **IC Pin Function Description**

MAIN BOARD (1/3) IC801 TC94B10FG-919
(CD-RF AMP/SERVO CONTROL, AUDIO DAC, DSP, LCD DRIVER, SYSTEM CONTROL)

Pin No.	Pin Name	I/O	Description
1	FMO	O	Feed (Sled) servo equalizer signal output
2	DMO	O	Disc (spindle) servo equalizer signal output
3	KEY1-I	I	Key signal input
4	KEY2-I	I	Key signal input
5	CD_LIMIT/LID IN	I	CD Door open/close and CD Limit switch signal input
6	BATT-CHK-H	I	Battery voltage power check input
7	6V CHK	I	6.2V power check input
8	SIMUKE	I	Model destination input
9	VREG	—	1.5V reference voltage terminal
10	MXO	O	Sub system oscillation output (75kHz)
11	MXI	I	Sub system oscillation input (75kHz)
12	VDD3	—	Power supply (VDD+3.3V (I/O))
13	VSS	—	Ground
14	VSSP3	—	Ground (VCO)
15	VCOI	I	VCO input
16	VDDP3	—	Power supply (VDD+3.3V (VCO))
17	FUNC_TC	O	Tape function select signal output
18	RESET	I	Initial reset signal input
19	VDD1	—	Power supply (VDD+1.5V)
20	VSS	—	Ground
21	DVSS3	—	Ground (DAC)
22	LO	O	CD audio L-CH signal output
23	DVR	I	DAC reference voltage terminal
24	RO	O	CD audio R-CH signal output
25	DVDD3	—	Power supply (VDD+3.3V (DAC))
26	XVSS1	—	Ground (OSC)
27	XI	I	Main system oscillation input (16.93MHz)
28	XO	O	Main system oscillation output (16.94MHz)
29	XVDD1	—	Power supply (VDD+1.5V (OSC))
30	ACDC CHK	I	AC power supply check signal input (L:DC, H:AC)
31	TU-DAT	I/O	Tuner serial I2C data input/output
32	TU-CLK	O	Tuner serial I2C clock output
33	EEP-CLK	O	EEPROM/EVR control serial I2C clock output
34	EEP-DAT	I/O	EEPROM/EVR control serial I2C data input/output
35	TU RESET	O	Tuner reset signal output
36	VSS	—	Ground
37	VDD1	—	Power supply (VDD+1.5V)
38	P-CONT	O	Power control signal output
39	A-MUTE	O	Audio mute signal output
40	MOTOR-MUTE	O	Motor drive mute signal output
41	ISS1	O	Tuner beat change signal output
42	ISS2	O	Tuner beat change signal output
43	POWER KEY	I	Power key signal input
44	AUDIO IN CHECK	—	Not used (Pull up)
45	TC-OPERATION	I	Tape play detect signal input (L:Play)
46	TAPE REC	I	Tape REC signal input (H:REC)
47 to 49	SEG11 to SEG9	O	LCD segment driver signal output
50	VDD3	—	Power supply (+3.3V)
51 to 58	SEG8 to SEG1	O	LCD segment driver signal output
59 to 62	COM4 to COM1	O	LCD common driver signal output
63	VDDM1	—	Power supply (Memory VDD+1.5V)
64	HOLD	I	Hold input
65	VSS	—	Ground
66	VDD1	—	Power supply (VDD+1.5V)
67	PDO	O	EFM and PLCK phase deference signal output
68	TMAX	O	TMAX detection result output

Pin No.	Pin Name	I/O	Description
69	LPFN	I	PLL circuit LPF amplifier inversion input
70	LPFO	O	PLL circuit LPF amplifier output
71	PVREF	—	PLL circuit 1.65V reference voltage terminal
72	VCOF	—	VCO filter terminal
73	RVDD3	—	Power supply (CD+3.3V)
74	SLCO	O	EFM slice level output terminal
75	RFI	I	RF signal input
76	RFRPI	I	RF ripple signal input
77	RFGO	O	RF equalizer amplifier output
78	AGCI	I	RF signal AGC amplifier input
79	RFO	O	RF signal generation amplifier output
80	EQSET	O	Test monitor output
81	RVSS3	—	Power supply (+3.3V (RF/VCO/PLL))
82	FNI2 (C)	I	CD pick-up main beam C signal input
83	FNI1 (A)	I	CD pick-up main beam A signal input
84	FPI2 (D)	I	CD pick-up main beam D signal input
85	FPI1 (B)	I	CD pick-up main beam B signal input
86	TPI (F)	I	CD pick-up main beam F signal input
87	TNI (E)	I	CD pick-up main beam E signal input
88	VRO	—	Reference voltage (1.65V) terminal
89	MDI	I	Monitor photo diode amplifier input
90	LDO	O	Laser diode drive control signal output
91	AVSS3	—	Ground
92	RFZI	I	RF ripple zero-cross signal input
93	RFRP	O	RF ripple signal output
94	SBAD	O	RFDC output
95	FEI	O	Focus error signal output
96	TEI	O	Tracking error signal output
97	TEZI	I	Tracking error zero -cross signal input
98	AVDD3	—	Power supply (+3.3V)
99	FOO	O	Focus servo equalizer signal output
100	TRO	O	Tracking servo equalizer signal output

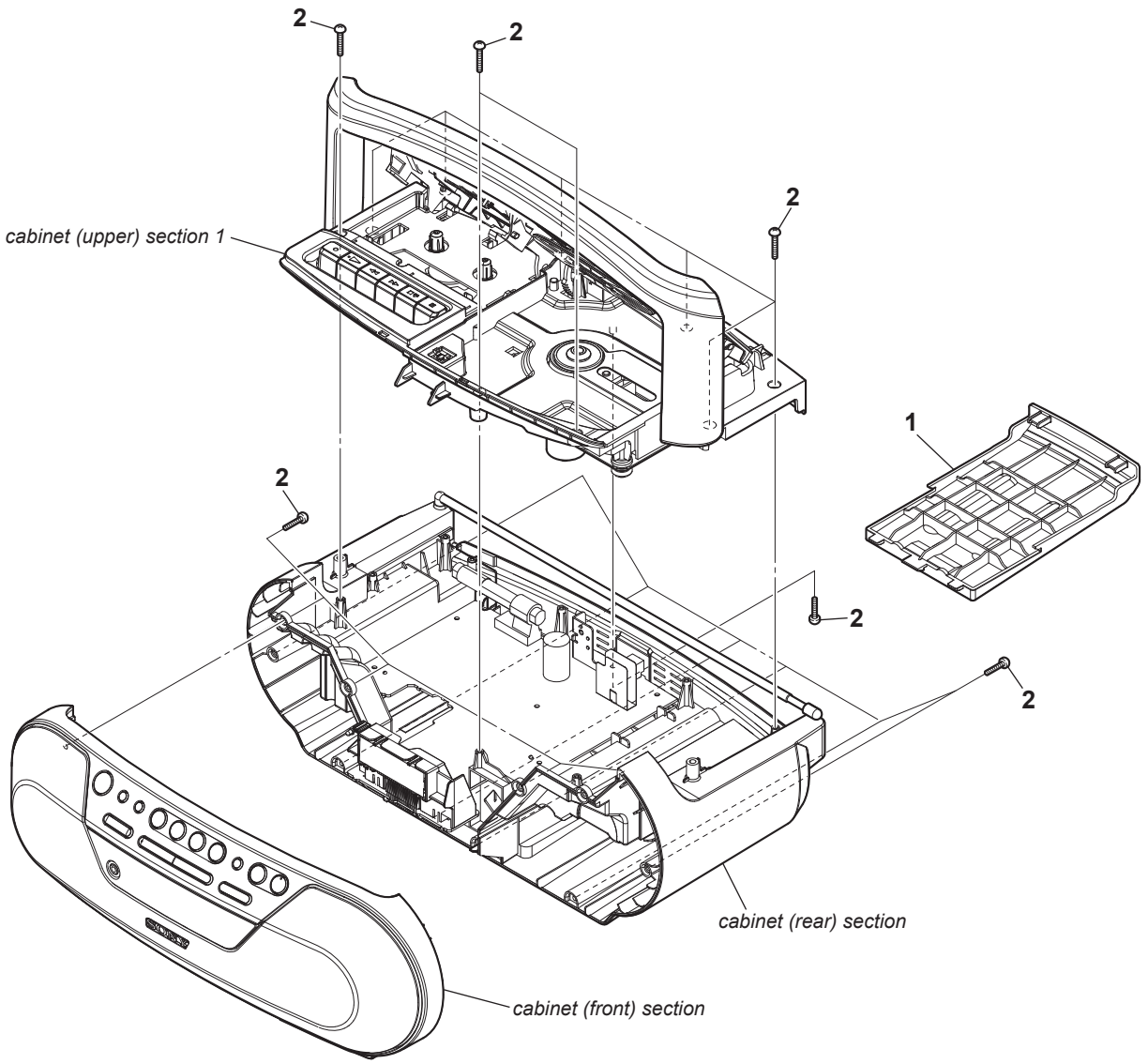
SECTION 6
EXPLODED VIEWS

Note:

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Color Indication of Appearance Parts Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Accessories are given in the last of the electrical parts list.
- Abbreviation
  AUS : Australian model
  KR : Korean model
  SP : Singapore model
  TH : Thai model
  TW : Taiwan model

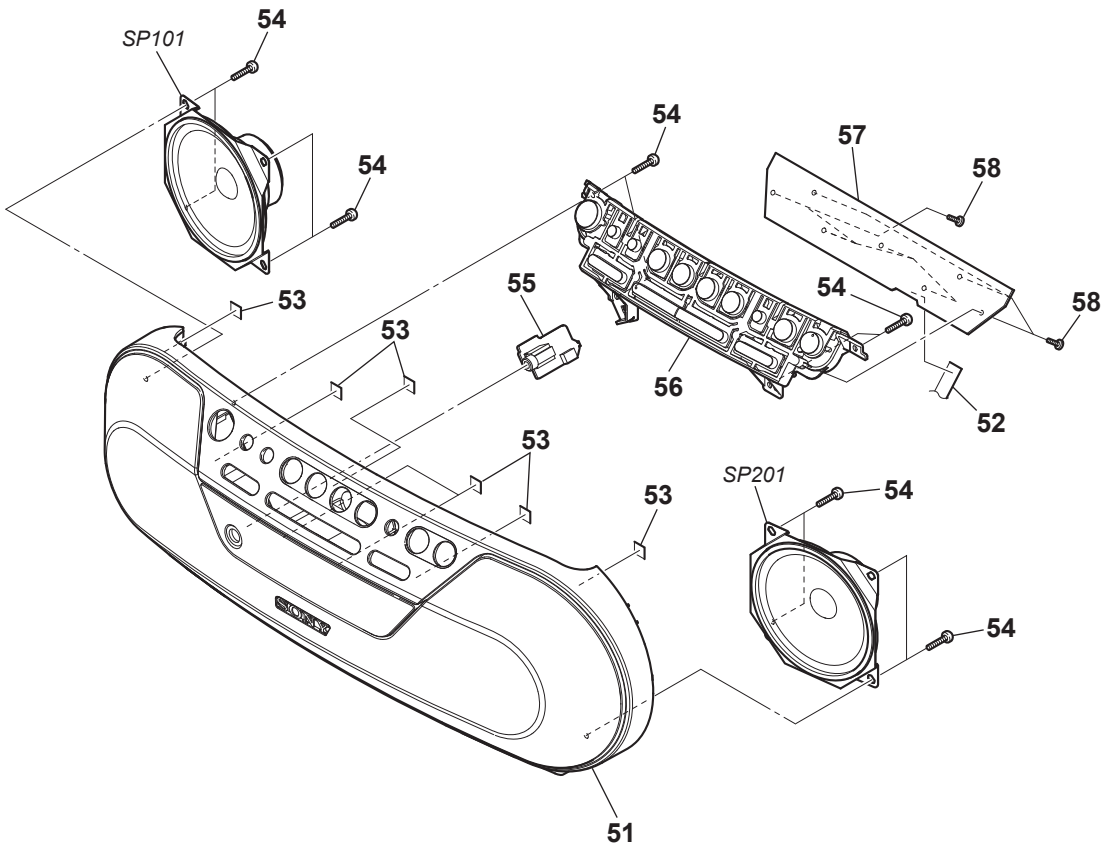
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

6-1. OVERALL SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	4-167-386-01	LID, BATTERY CASE		2	3-252-827-01	SCREW (B2.6), (+) BV TAPPING	

6-2. CABINET (FRONT) SECTION



Note: If the wire (flat type) was replaced, fold it some as the wire (flat type) before replacement.

Ref. No.	Part No.	Description	Remark
51	X-2548-744-1	CABINET (FRONT) ASSY	
52	1-831-985-32	CABLE, FLEXIBLE FLAT (5 CORE)	
53	3-831-441-11	CUSHION (B)	
54	3-252-827-01	SCREW (B2.6), (+) BV TAPPING	
55	A-1760-723-A	JACK BOARD, COMPLETE	

Ref. No.	Part No.	Description	Remark
56	4-167-385-01	BUTTON	
57	A-1760-722-A	KEY BOARD, COMPLETE	
58	3-254-070-01	SCREW	
SP101	1-826-280-61	SPEAKER (7.7cm) (L-CH)	
SP201	1-826-280-61	SPEAKER (7.7cm) (R-CH)	