

Service Manual

CD Stereo System

Model No. **SA-AK580PH**
SA-AK580PN

Product Color: (K)...Black Type



Remote
Control
Transmitter



SB-AK780



SA-AK580



SB-AK780

Notes: This model's CD Mechanism Unit (CR14C). Please refer to the Original Service Manual (Order No. MD0805031CE) for this CD Mechanism Unit.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by ⚠ in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

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6 Self-Diagnosis and Special Mode Setting

This unit is equipped with features of self-diagnosis & special mode setting for checking the function & reliability.

Special Note: Checking of the reliability (ageing) & changer operation must be carry out to ensure good working condition in unit.

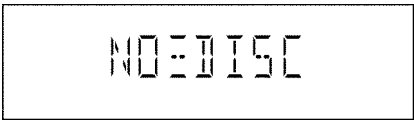
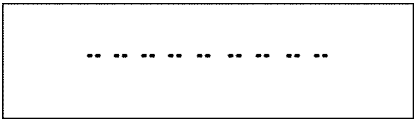
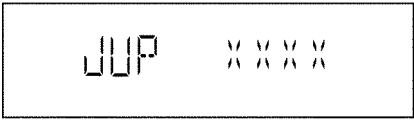
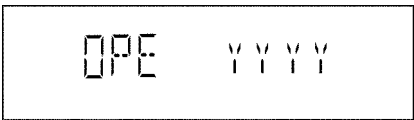
6.1 Doctor Mode Summary Table

Main unit buttons	Remote control unit buttons	Application	Note
[■-DEMO]	[4], [7]	Doctor Mode	(Refer to the section "6.2.1 Doctor Mode Table 1" for more information.)
Doctor Mode	[DISPLAY]	Cold Start	
	[2]	Micro-P Version Display	(Refer to the section "6.2.2 Doctor Mode Table 2" for more information.)
	[7]	Volume 50 Setting Check	
	[8]	Volume 35 Setting Check	
	[9]	Volume 0 Setting Check	
	[PLAYMODE/-REPEAT]	Volume 30 Setting Check	
	[1]	FL Display Check	
	[DEL]	CD Open Test	
	[≥10], [1], [1]	CR14 Reliability Test 1 (no retry)	(Refer to the section "6.2.3 Doctor Mode Table 3" for more information.)
	[≥10], [1], [2]	CR14 Reliability Test 2 (with retry)	
	[DISC]	CR14 Changer Mechanism Check	(Refer to the section "6.2.4 Doctor Mode Table 4" for more information.)
	[≥10], [9], [4]	CR14 Error Late Display	
	[4]	CD to USB Recording & Playing Inspection	(Refer to the section "6.2.4 Doctor Mode Table 4" for more information.)
	[FM/AM]	Tuner Inspection	
	[OK]	Exit Inspection Mode	

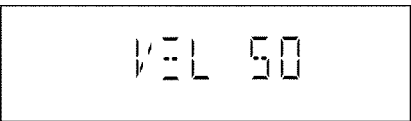
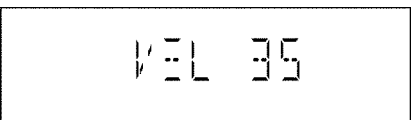
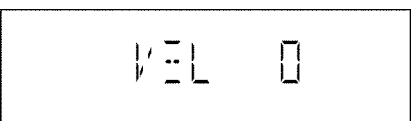
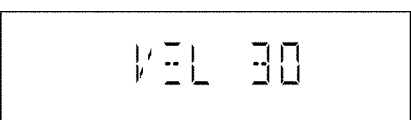
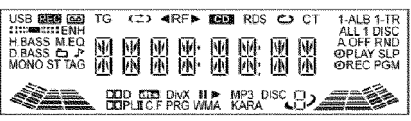
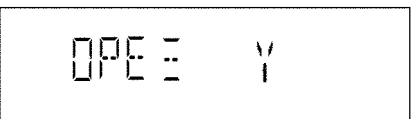
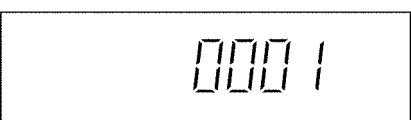
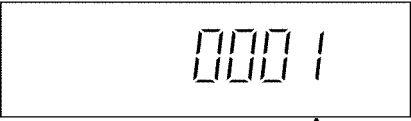
6.2. Doctor Mode Table

Below is the various special modes for checking:-

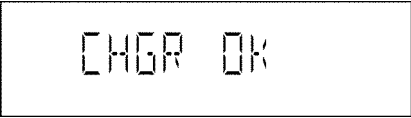
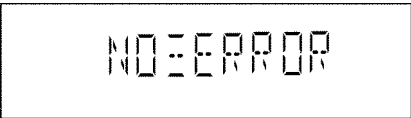
6.2.1. Doctor Mode Table 1

Item		FL Display	Key Operation
Mode Name	Description		Front Key
Doctor Mode	To enter into Doctor Mode.		In CD Mode: 1. Press [■-DEMO] button on main unit follow by [4] and [7] on remote control. To exit Doctor Mode, press [OK] button on remote control.
Cold Start	To activate cold start upon next power up when reset is execute the next time.		In Doctor Mode: 1. Press [DISPLAY] button on remote control.
Micro-P Version Display	To check the firmware version for Jupiter & Microprocessor IC.	Display 1  Jupiter Micro-P Version ↓ Display 2  Micro-processor Version	In Doctor Mode: 1. Press [2] button on remote control.

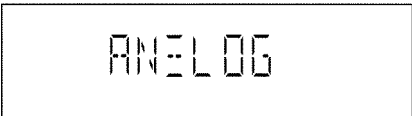
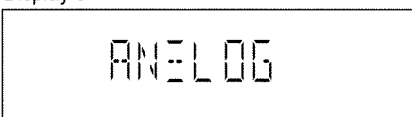
6.2.2. Doctor Mode Table 2

Item		FL Display	Key Operation
Mode Name	Description		Front Key
Volume Setting Check	To check for the volume setting of the main unit. The volume will be automatically set to its respective level (in dB). During this mode, treble/bass/EQ will be set to '0'dB & OFF.	Display 1 	In Doctor Mode: 1. Press [7] button on remote control. To exit Doctor Mode, press [OK] button on main unit or remote control.
		Display 1 	In Doctor Mode: 2. Press [8] button on remote control. To exit Doctor Mode, press [OK] button on main unit or remote control.
		Display 1 	In Doctor Mode: 3. Press [9] button on remote control. To exit Doctor Mode, press [OK] button on main unit or remote control.
		Display 1 	In Doctor Mode: 4. Press [PLAY MODE/-REPEAT] button on remote control. To exit Doctor Mode, press [OK] button on main unit or remote control.
FL Display Check	To check the FL segments display (All segments will light up)		In Doctor Mode: 1. Press [1] button on remote control.
CD OPEN Test	To check the CD OPEN operation.	 Can be any Tray	In Doctor Mode: 1. Press [DEL] button on remote control. 2. Press [OPEN/CLOSE] button on main unit to close the disc tray.
CR14 Reliability Test1 (no retry)	Note: 1. If the mechanism error occurs, it should stop the test. (no retry, no recovery process). 2. The test mode is cleared by power OFF. 3. Reading and playback should not be done.	 The counter will increment by one. When reach 9999 will change to 0000	In Doctor Mode: 1. Press [≥10], [1], [1] button on remote control.
CR14 Reliability Test2 (with retry)	Note: 1. Even if the mechanism error occurs, it should retry as normal operation. 2. The test mode is cleared by power OFF. 3. Reading and playback should not be done.	 The counter will increment by one. When reach 9999 will change to 0000	In Doctor Mode: 1. Press [≥10], [1], [2] button on remote control.

6.2.3. Doctor Mode Table 3

Item		FL Display	Key Operation
Mode Name	Description		Front Key
CR14 Inspection	Below is the process: 1. Load TRAY 1 (Move to PLAY position) 2. After that, TRAY 2 is open (TRAY 1 still in LOAD condition) and close. 3. Next TRAY 3 is open (TRAY 1 still in LOAD condition) and close. 4. Then TRAY 4 is open (TRAY 1 still in LOAD condition) and close. 5. Finally TRAY 5 is open (TRAY 1 still in LOAD condition) and close. 6. Tray 1 is unloaded. (Move to the STOCK position) 7. Tray 1 is loaded. (Move to the PLAY position) When step 1 to 7 operates normally without any error, FL will display [CHGR_OK_]		In Doctor Mode: 1. Press [DISC] button on remote control.
CR14 Error Code Display	To display errors codes for CR14 changer mechanism. Refer to section 6.4.1 (CD Mechanism (CR14) Error code table).		In Doctor Mode: 1. Press [≥10], [9], [4] button on remote control.

6.2.4. Doctor Mode Table 4

Item		FL Display	Key Operation
Mode Name	Description		Front Key
CD to USB Recording & Playing Inspection	-Automatically change to CD -Set it to VOL 0 -Preset EQ Set to FLAT USB Formatted	Display 1 	In Doctor Mode: 1. Press [4] button on remote control.
		↓	
	When high-speed recording	Display 2 	
		↓	
	When analog recording	Display 3 	
		↓	
	- Switches to the USB selector after an analog recording ends (TRACK 1 of ALBUM1) During playback this track - Sets to VOL 50 (0dB) and start playback - It is enabled to accept the SKIP key and the ALBUM key	Display 4 	
		↓	
	Next, play the track analog recorded. (TRACK1 of ALBUM2) During playback this track - It is enabled to accept the SKIP key and the ALBUM key	Display 5 	

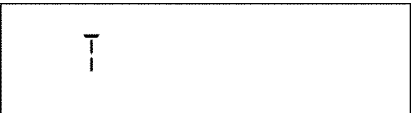
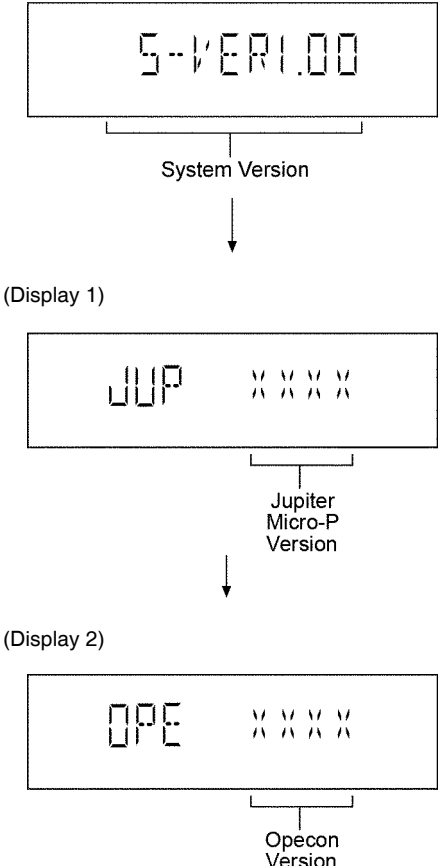
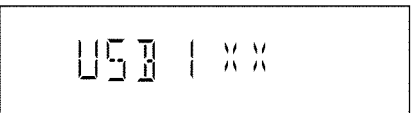
6.3. Service Mode Summary Table

Main unit buttons	Remote control unit buttons	Application	Note
[■ -DEMO]	[▶▶1]	Service Mode	(Refer to the section “6.4.1 Service Mode Table 1” for more information.)
Service Mode	[1]	Error Code History	
	[2]	Micro-P Version Display	
	[5]	USB Error Code History	(Refer to the section “6.4.2 Service Mode Table 2” for more information.)
	[6]	CD Self Adjustment Result	
	[3]	Cold Start	

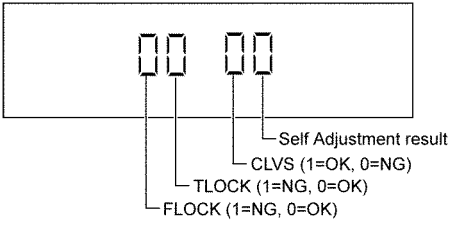
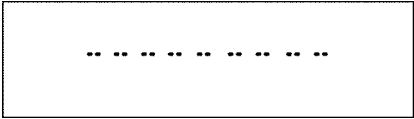
6.4. Service Mode Table

6.4.1. Service Mode Table 1

Below is the various special modes for checking:-

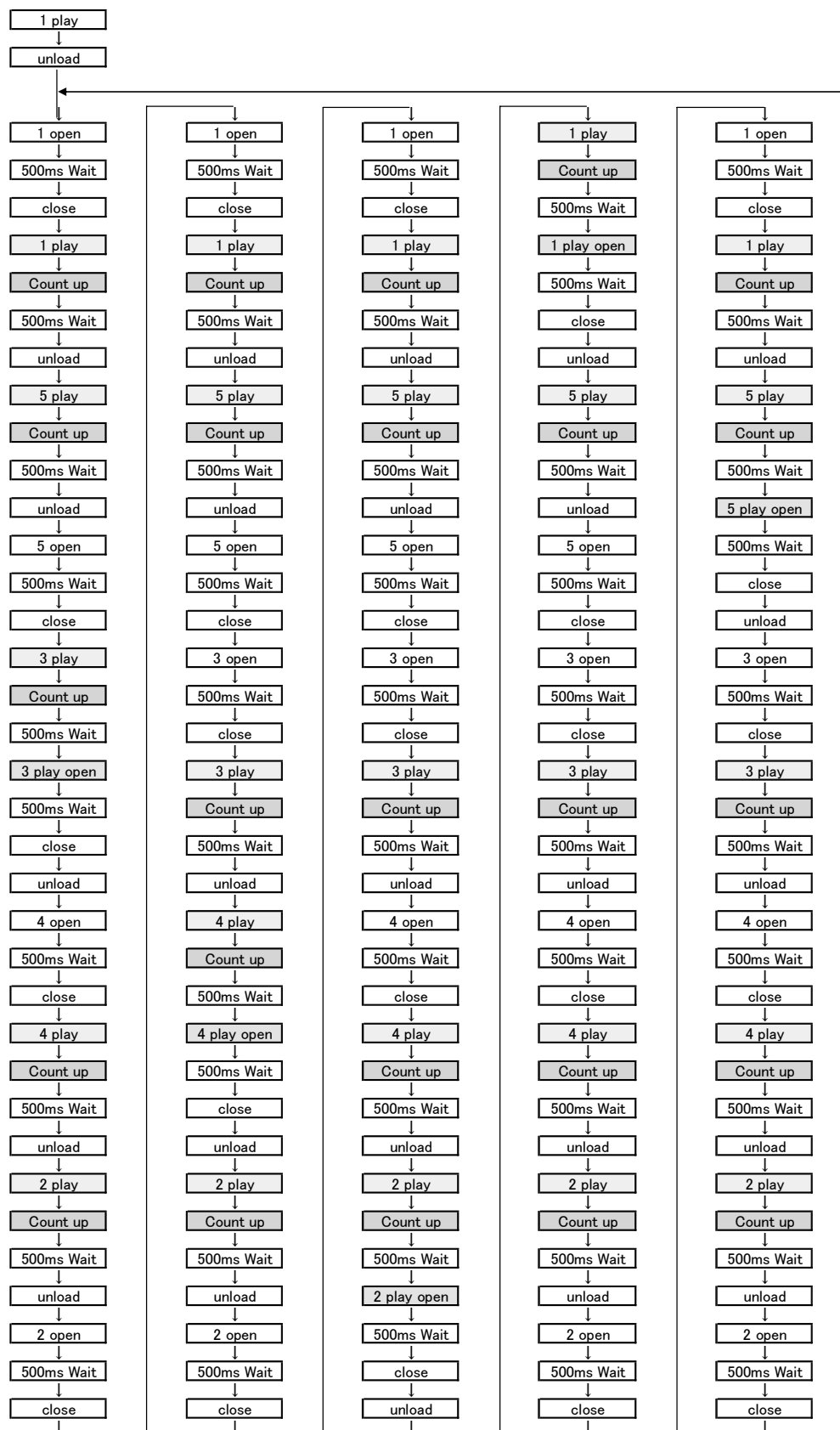
Item		FL Display	Key Operation
Mode Name	Description		Front Key
Service Mode	To enter into Service Mode.		In CD Mode: Press and hold [■-DEMO] button on main unit for 2 seconds follow by [▶▶I] on remote control for 2 seconds. To exit, press [ON/OFF ⏻] button on main unit or remote control.
Error Code History	Checking the records for Error Code.		In Service Mode: 1. Press [1] button on remote control. To clear history, press & hold [0] for 5 seconds or more.
Micro-P Version Display	To Check for following: 1) System Version. 2) Jupiter Micro-processor version. 3) Micro-processor Version		In Service Mode: 1. Press [2] button on remote control.
USB Error Code History	To check for USB error codes.		In Service Mode: 1. Press [5] button on remote control. To clear history, press & hold [0] for 5 seconds or more.

6.4.2. Service Mode Table 2

Item		FL Display	Key Operation
Mode Name	Description		Front Key
CD Self Adjustment Result	To check for CD operation (self-adjustment).		In Service Mode: 1. Press [6] button on remote control.
Cold Start	To reset to default setting.		In Service Mode: 1. Press [3] button on remote control.

6.5. Reliability Test Mode (CD Mechanism Unit CR14C)

Below is the progress flow chart of ageing for the Mechanism unit (CR14C).



6.6. Error Code Table Display

Self-Diagnosis Function (refer Section “6.4.1” Service Mode Table 1”) provides information on any problems occurring for the unit and its respective components by displaying the error codes. These error code such as U**, H** and F** are stored in memory and held unless it is cleared.

The error code is automatically display after entering into self-diagnostic mode.

6.6.1. CD Mechanism Unit (CR14C) Error Code Table

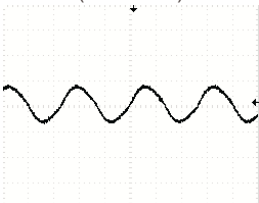
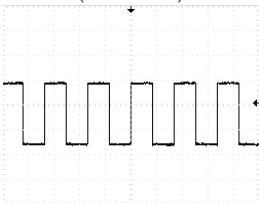
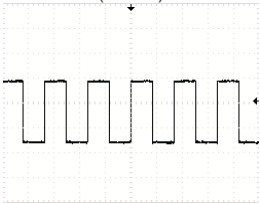
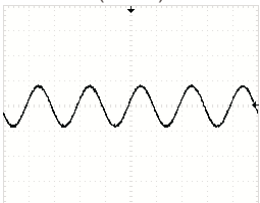
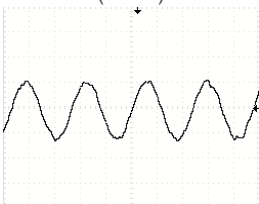
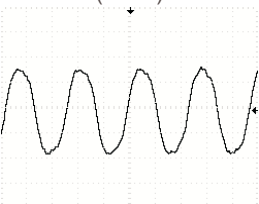
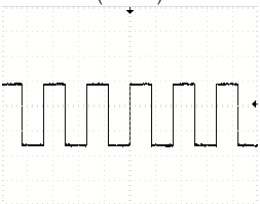
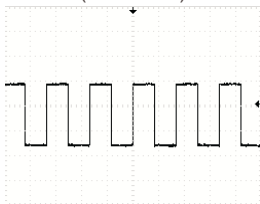
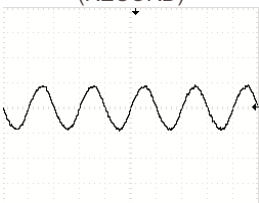
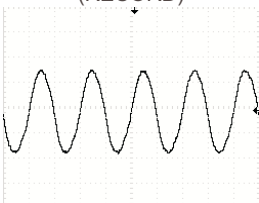
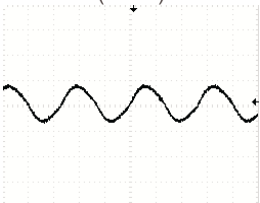
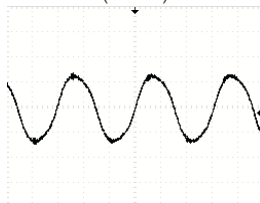
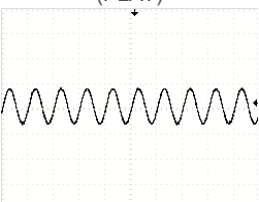
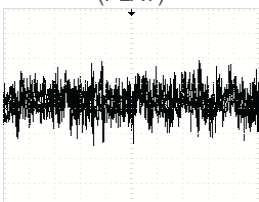
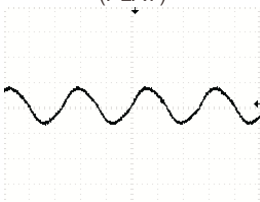
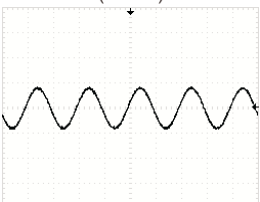
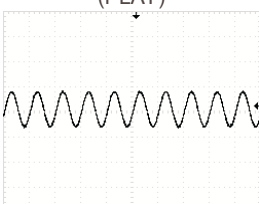
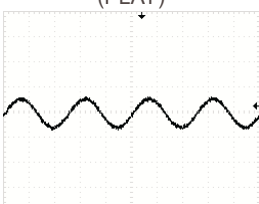
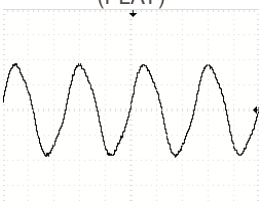
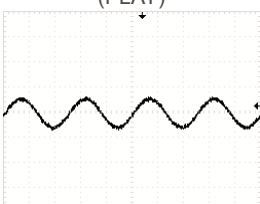
Error Code	Diagnosis Contents	Description of error	Automatic FL Display	Remarks
LOAD	Load operation faulty	The load operation cannot complete when time out occurs.	LOAD	For CD Mechanism unit (CR14C). Press [EXCHANGE] on main unit for next error.
UNLD	Unload operation faulty	The unload operation cannot complete when time out occurs.	UNLD	For CD Mechanism unit (CR14C). Press [EXCHANGE] on main unit for next error.
UP	Exchange open operation faulty	The exchange open operation cannot complete when time out occurs.	UP	For CD Mechanism unit (CR14C). Press [EXCHANGE] on main unit for next error.
DOWN	Down operation faulty	The down operation cannot complete when time out occurs.	DOWN	For CD Mechanism unit (CR14C). Press [EXCHANGE] on main unit for next error.
OPEN	Open operation faulty	The open operation cannot complete when time out occurs.	OPEN	For CD Mechanism unit (CR14C). Press [EXCHANGE] on main unit for next error.
CLOSE	Close operation faulty	The open operation cannot complete when time out occurs.	CLOSE	For CD Mechanism unit (CR14C). Press [EXCHANGE] on main unit for next error.
MODEL	Mode change to updown operation faulty	The mode change to updown operation cannot complete when time out reversing occurs. It changes to up/down.	MODEL	For CD Mechanism unit (CR14C). Press [EXCHANGE] on main unit for next error.

Error Code	Diagnosis Contents	Description of error	Automatic FL Display	Remarks
MODEH	Mode change to horizontal operation faulty	The mode change to horizontal operation cannot complete when time out reversing occurs. (Mode change to horizontal.)	MODEH	For CD Mechanism unit (CR14C). Press [EXCHANGE] on main unit for next error.
INITIALIZE	Initialize operation faulty	The initialize operation cannot complete.	INIT	For CD Mechanism unit (CR14C). Press [EXCHANGE] on main unit for next error.

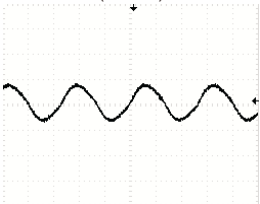
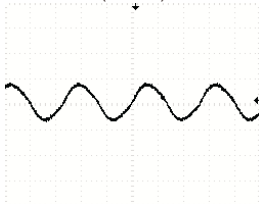
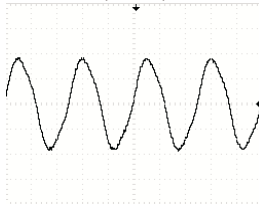
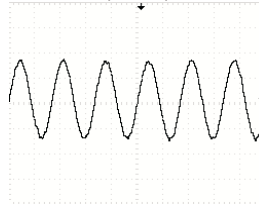
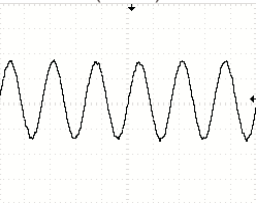
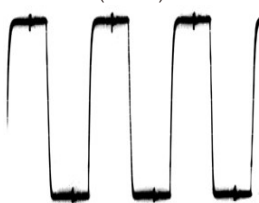
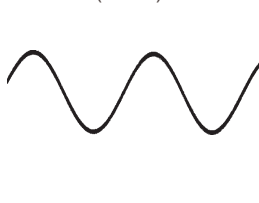
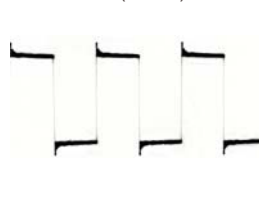
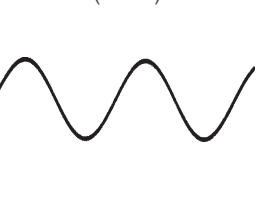
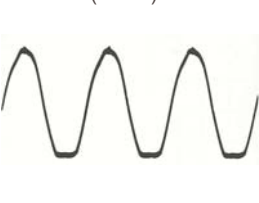
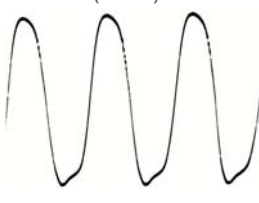
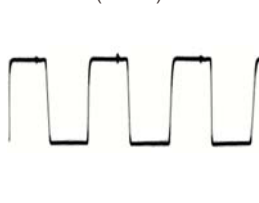
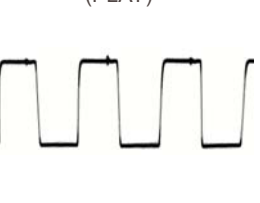
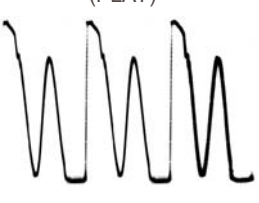
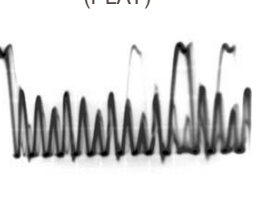
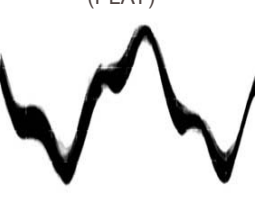
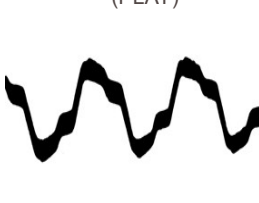
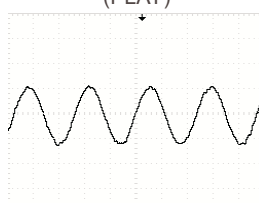
6.6.2. Error Code Table (For Power Supply)

Error Code	Diagnosis Contents	Description of error	Automatic FL Display	Remarks
F61	Power Amp IC output abnormal	Upon power on, PCNT=HIGH, DCDET2=L after checking LSI. DCDET2 = L, Power off process not executed PCNT = L ECONO = L, FL display off	F61 after 2 seconds	For power. Press [■ -DEMO] on main unit for next error.
F76		DCDET1 = L (NG)	F76	
F61-76		Both DCDET1 and DCDET2 = L (NG)	F61-F76	

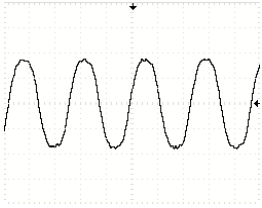
11.11. Waveform Table (1/3)

WF No. IC551 - 1,2 (RECORD)  108mVp-p (50nsec.div)	WF No. IC551 - 9 (RECORD)  3.92Vp-p (500nsec.div)	WF No. IC552 - 3 (PLAY)  3.8Vp-p (500nsec.div)	WF No. IC552 - 9,10 (PLAY)  3.36Vp-p (500usec.div)
WF No. IC801 - 62 (PLAY)  1.2Vp-p (2.5nsec.div)	WF No. IC801 - 63 (PLAY)  3.44Vp-p (25nsec.div)	WF No. IC801 - 118 (PLAY)  3.9Vp-p (500nsec.div)	WF No. IC801 - 121 (RECORD)  3.8Vp-p (500nsec.div)
WF No. IC2801 - 12 (RECORD)  1.84Vp-p (50nsec.div)	WF No. IC2801 - 13 (RECORD)  3.32Vp-p (50nsec.div)	WF No. IC2801 - 15 (PLAY)  880mVp-p (500nsec.div)	WF No. IC2801 - 16 (PLAY)  2.84Vp-p (10usec.div)
WF No. IC2803 - 2,38 (PLAY)  500mVp-p (50 nsec.div)	WF No. IC2803 - 3,37 (PLAY)  700mVp-p (10msec.div)	WF No. IC2803 - 17,22 (PLAY)  804mVp-p (50nsec.div)	WF No. IC2803 - 40,52 (PLAY)  3Vp-p (500usec.div)
WF No. IC2803 - 42,50 (PLAY)  350mVp-p (50usec.div)	WF No. IC2803 - 44,47 (PLAY)  600mVp-p (50nsec.div)	WF No. IC2804 - 1,7 (PLAY)  1.02Vp-p (500usec.div)	WF No. IC2804 - 2,3 (PLAY)  600mVp-p (250nsec.div)

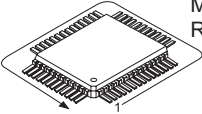
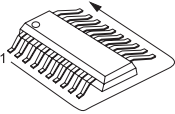
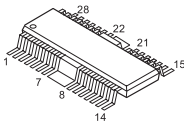
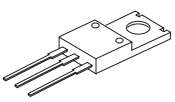
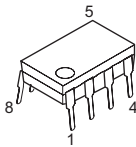
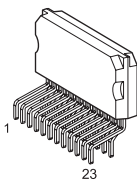
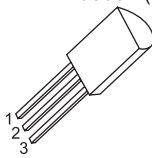
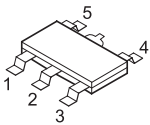
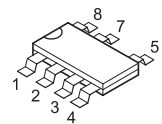
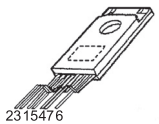
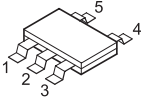
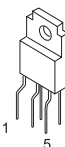
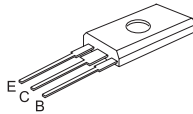
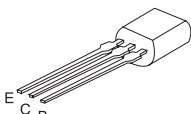
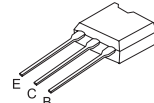
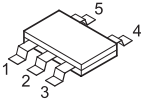
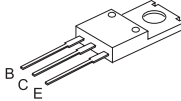
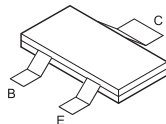
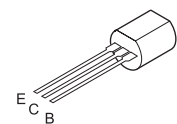
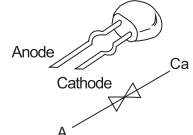
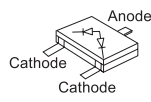
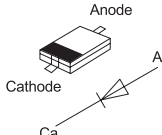
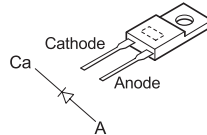
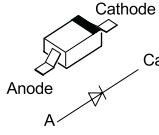
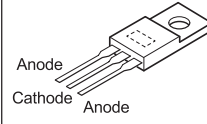
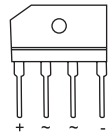
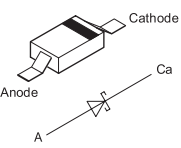
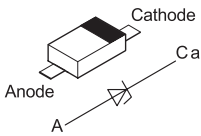
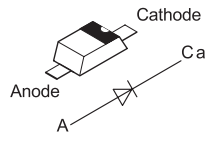
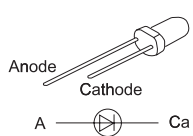
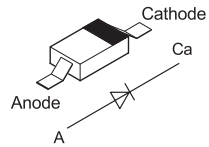
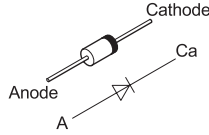
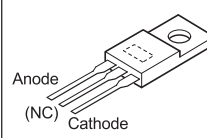
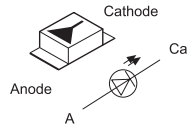
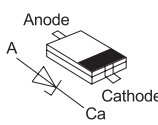
11.12. Waveform Table (2/3)

WF No. IC2804 - 5,6 (PLAY)  109mVp-p (250 nsec.div)	WF No. IC2810 - 1,7 (PLAY)  104mVp-p (250nsec.div)	WF No. IC2121 - 1,7 (PLAY)  2.88Vp-p (250usec.div)	WF No. IC2121 - 2,3 (PLAY)  1.32Vp-p (250usec.div)
WF No. IC2121 - 5,6 (PLAY)  1.3Vp-p (250usec.div)	WF No. IC5000 - 1 (PLAY)  5.6Vp-p (1sec.div)	WF No. IC5000 - 2 (PLAY)  1.4Vp-p (1msec.div)	WF No. IC5000 - 10,14 (PLAY)  80Vp-p (1usec.div)
WF No. IC5000 - 21 (PLAY)  1.5Vp-p (500usec.div)	WF No. IC5500 - 5 (PLAY)  6.8Vp-p (500nsec.div)	WF No. IC5500 - 6 (PLAY)  5.6Vp-p (500nsec.div)	WF No. IC5500 - 8 (PLAY)  5.8Vp-p (500nsec.div)
WF No. IC5501 - 1 (PLAY)  5.2Vp-p (1usec.div)	WF No. IC5701 - 1 (PLAY)  400Vp-p (2usec.div)	WF No. IC5701 - 4,6 (PLAY)  2Vp-p (5usec.div)	WF No. IC5799 - 2 (PLAY)  2Vp-p (5usec.div)
WF No. IC5799 - 3 (PLAY)  9.6Vp-p (5usec.div)	WF No. IC5799 - 5 (PLAY)  240Vp-p (50usec.div)	WF No. IC5899 - 1,2,3 (PLAY)  1.65Vp-p (5msec.div)	WF No. IC7001 - 13 (PLAY)  3.56Vp-p (25nsec.div)

11.13. Waveform Table (3/3)

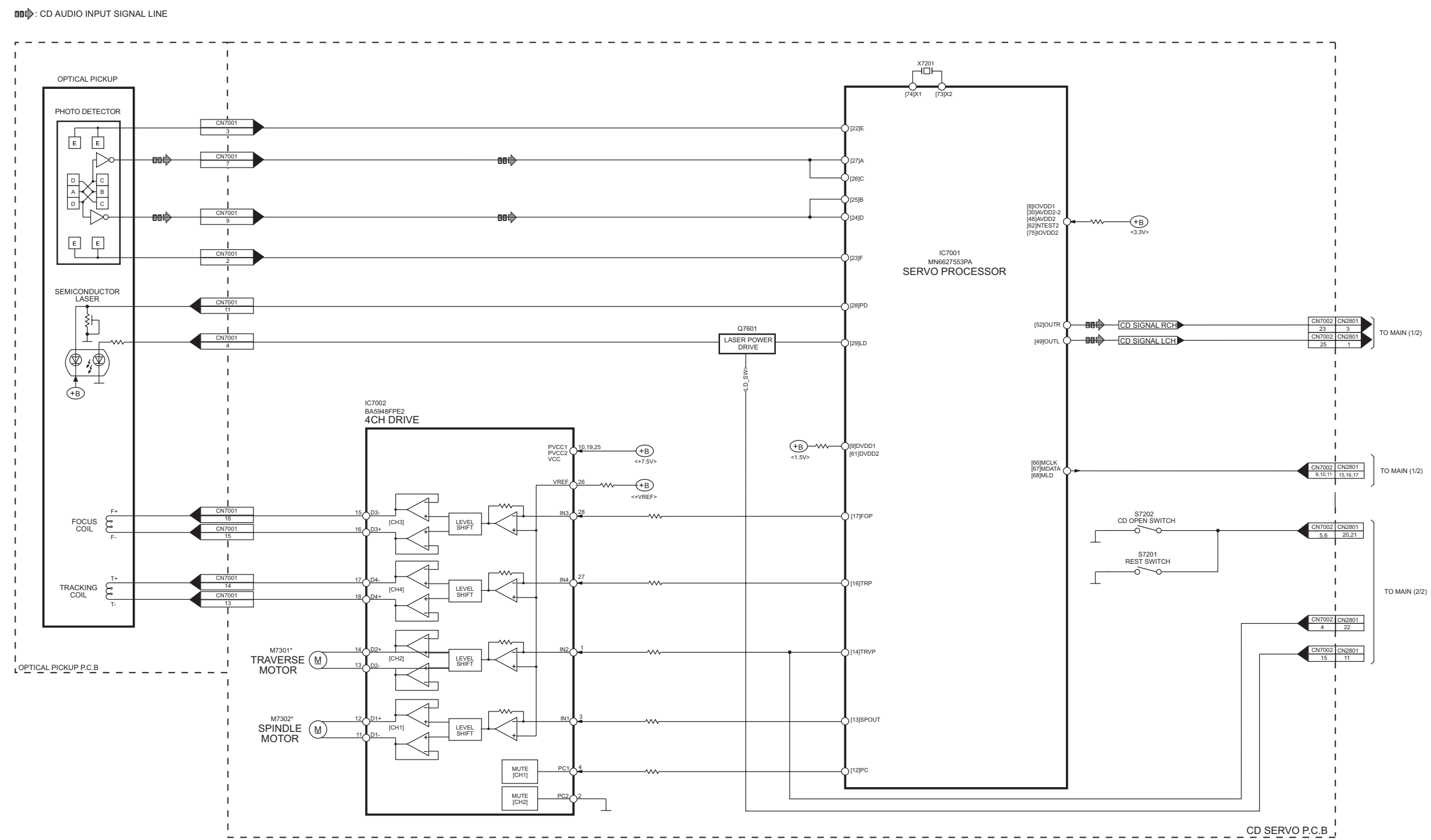
WF No. IC7001 - 14 (PLAY)  1.2Vp-p (25nsec.div)			
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12 Illustration of ICs, Transistor and Diode

C0HBB000057 (44P) C1AB00003093 (52P) MN2WS0042AA (216P) MN6627553PA (80P) RFKWMMAK580PN (100P) 	C0FBBY000027 (16P) C3ABQG000105 (54P) C0FBAK000026 (16P) C1AB00003130 (14P) C0JBAB000902 (14P) C0ABBB000230 (8P) RFKWFAK580PN (48P) RFKWEAK580PN (8P) 		BA5948FPE2 	C0CAAKG00046 	
C0AABB000125 (8P) 	C1BA00000492 (23P) 	C0DABFC00002 (3P) C0DAEMZ00001 (3P) 	C0DBZYY00293 (5P) C0DBGYY00089 (5P) 	MIP4110MSSCF 	C5HACYY00005 (7P) C5HACYY00004 (7P) 
C0DBZHE00026 (5P) 	C0DAAYG00001 (5P) 	B1BACD000018 	B1ACKD000006 	B1BABK000001 	B1FGGCAA0001 (5P) 
B1BACG000023 B1BCCG000002 	B1GBCFJJ0051 B1ABCF000176 B1ADCE000012 B1GBCFJN0033 B1GDCFGA0018 B1GBCFLL0037 B1GBCFGN0016 2SA207700L UNR221400L B1ADCF000001 			2SC3940ARA 	ERZV10V511CS 
B0ADCC000002 B0ADCJ000020 	B0ACCK000005 B0JCMD000022 	B0HFRJ000012 	B0BC035A0007 B0HCSP000001 	B0HBSM000043 	B0FBAR000041 
B0HCMM000019 	MAZ8056GML MAZ8180GML MAZ8051GML MAZ8075GML MAZ8100G0L MAZ8240GHL B0BC5R600003 B0BC9R000008 		B0BC2R4A0006 B0BC6R100010 B0BC4R3A0006 	B3AAA0001031 	
MA2J1110GL MA27D2900L MA2J7280GL 	B0JAME000114 B0EAMM000057 B0HAMP000094 B0EAKM000117 			B0ZAZ0000052 	B3AAB0000322 
B0JCPD000025 					

13 Block Diagram

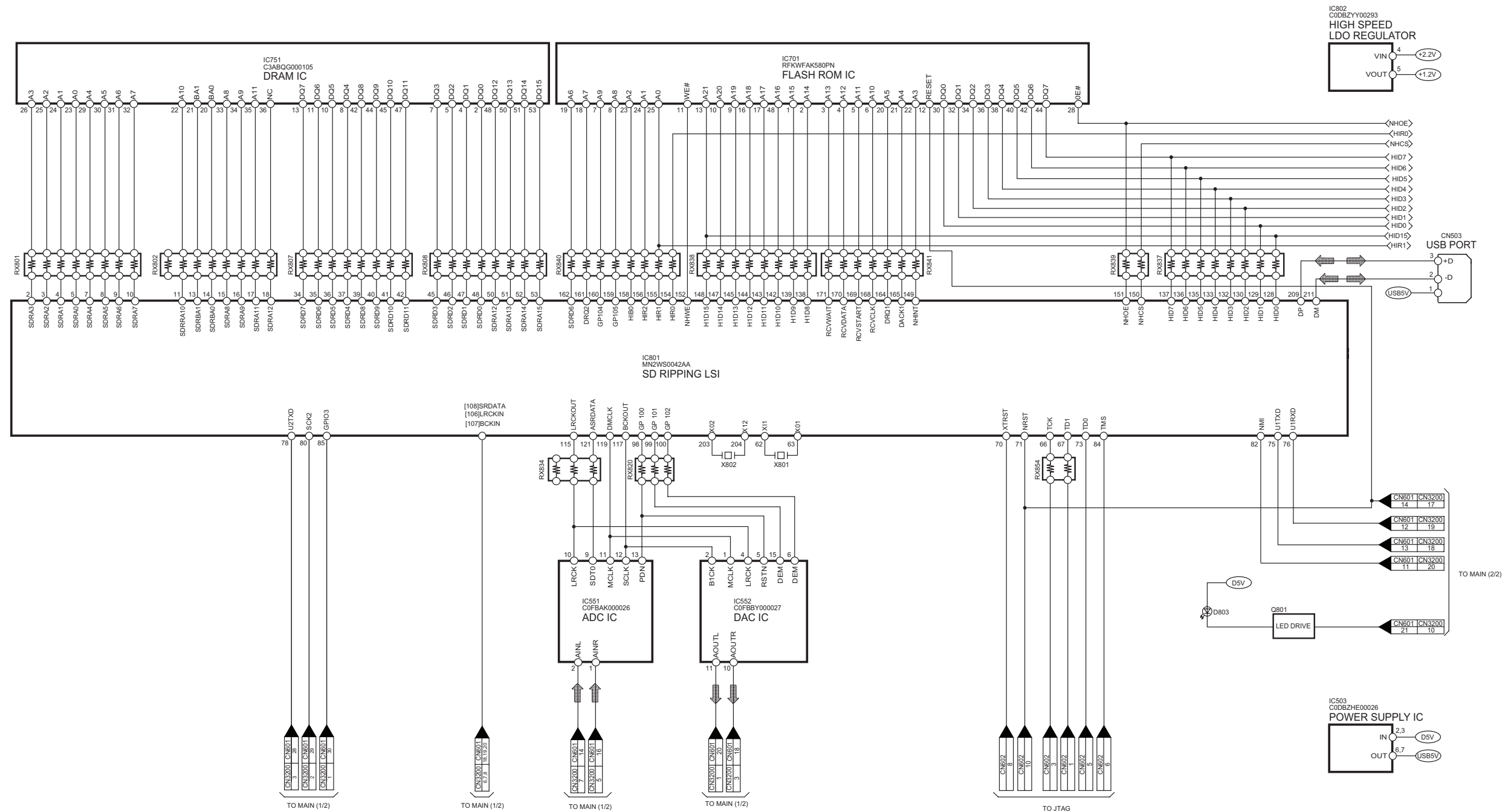
13.1. CD Servo Block Diagram



SA-AK580PH/PN CD SERVO BLOCK DIAGRAM

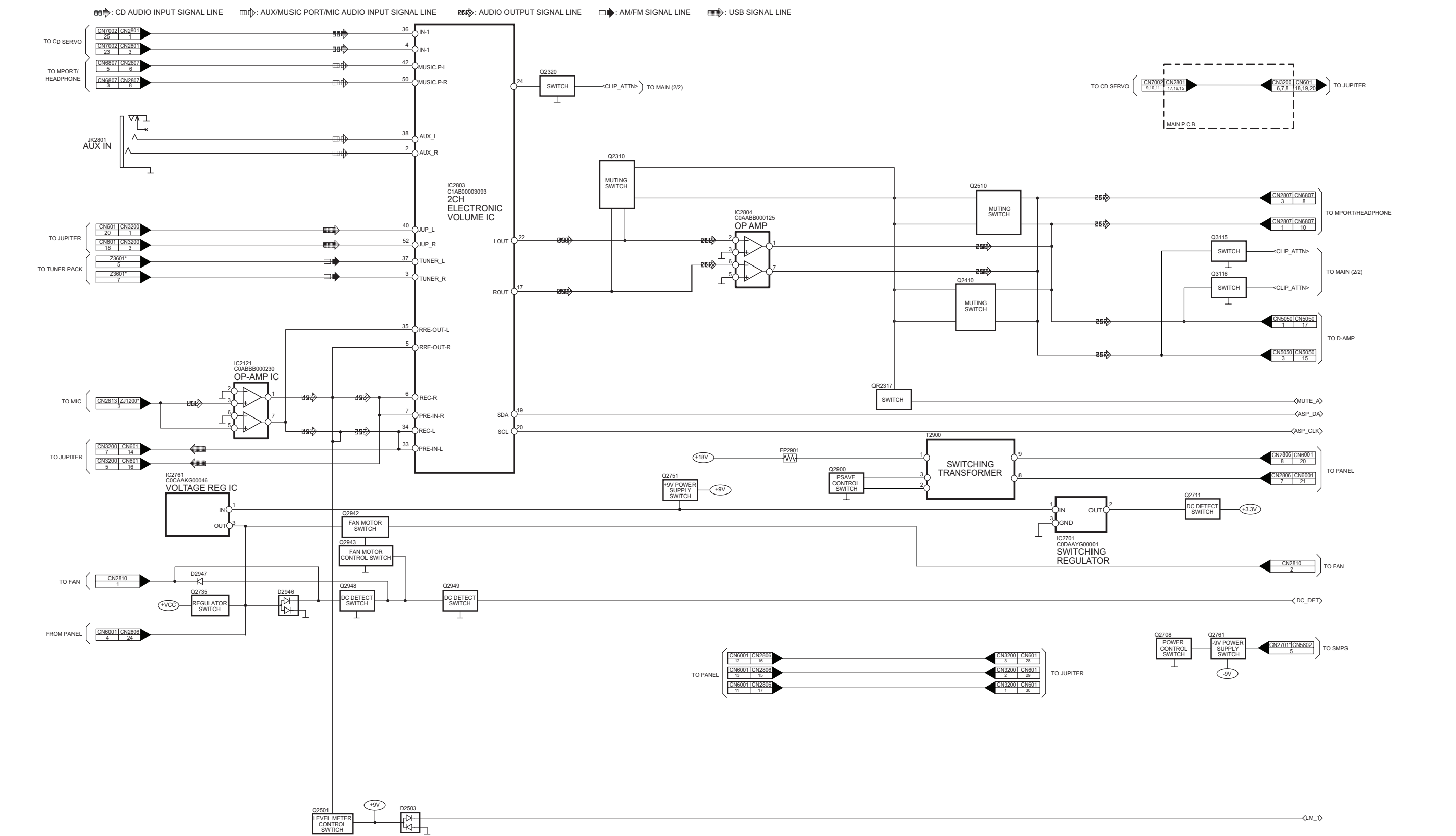
13.2. Jupiter Block Diagram

 : USB SIGNAL LINE



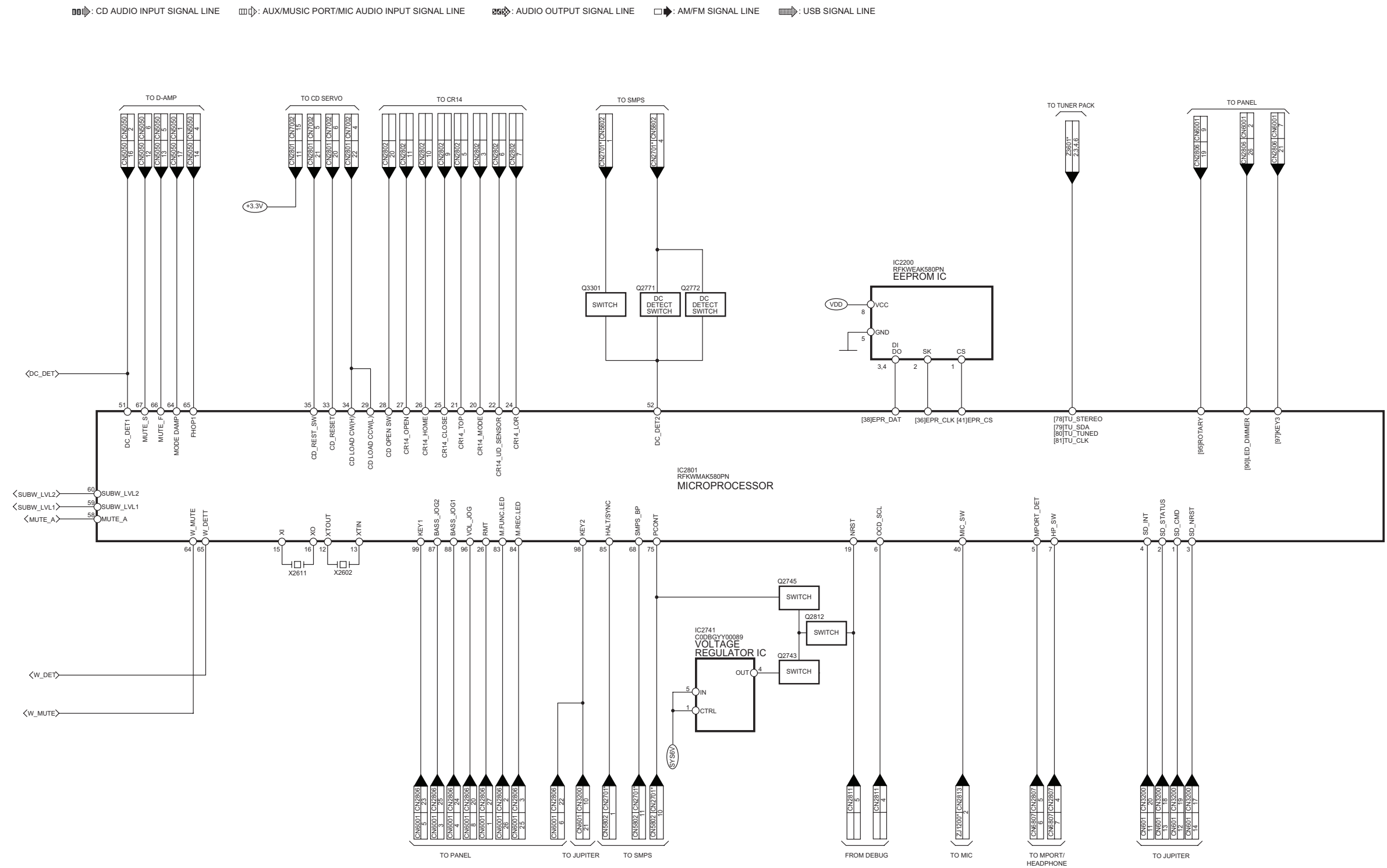
SA-AK580PH/PN JUPITER BLOCK DIAGRAM

13.3. Main(1/2) Block Diagram



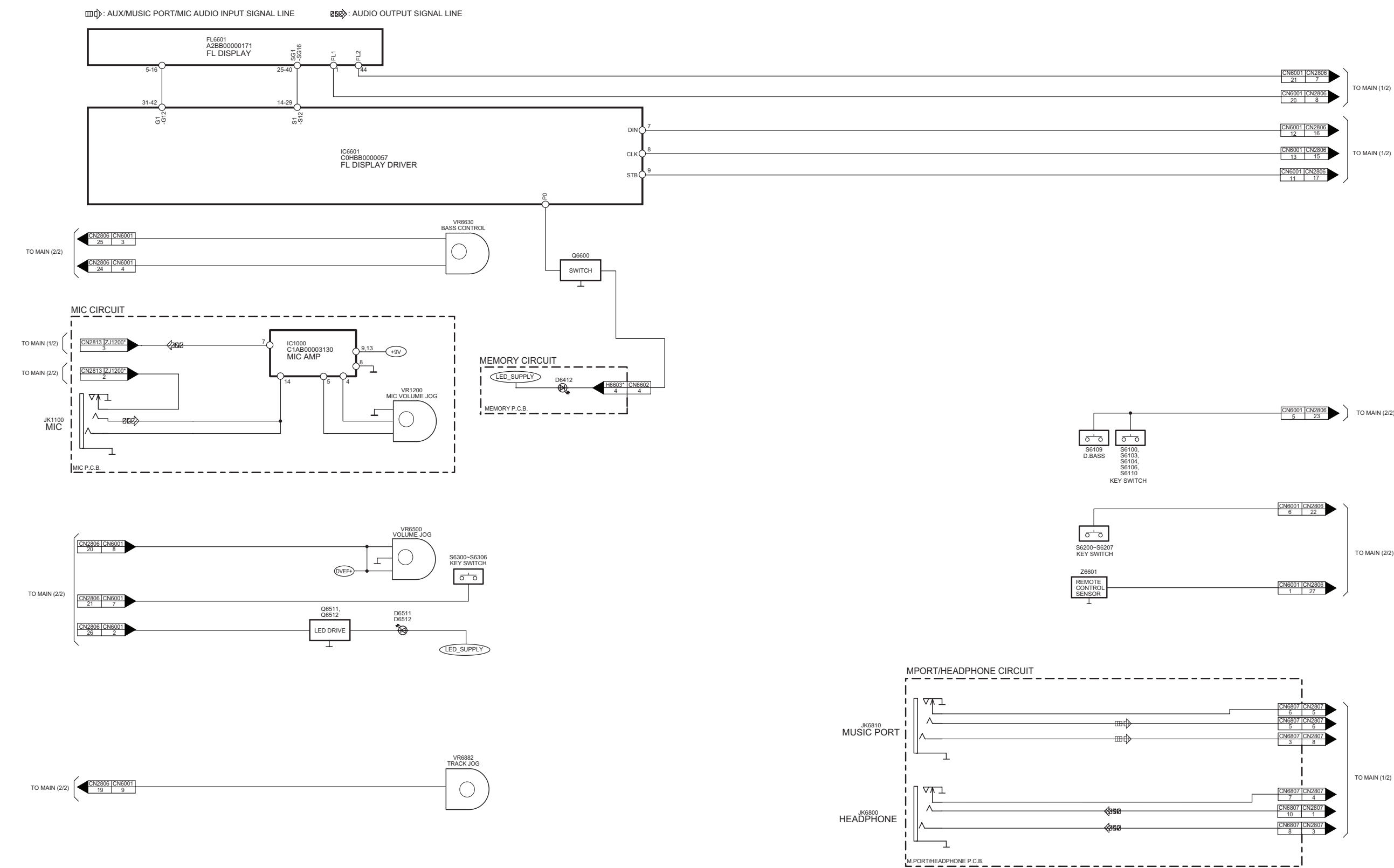
SA-AK580PH/PN MAIN(1/2) BLOCK DIAGRAM

13.4. Main(2/2) Block Diagram

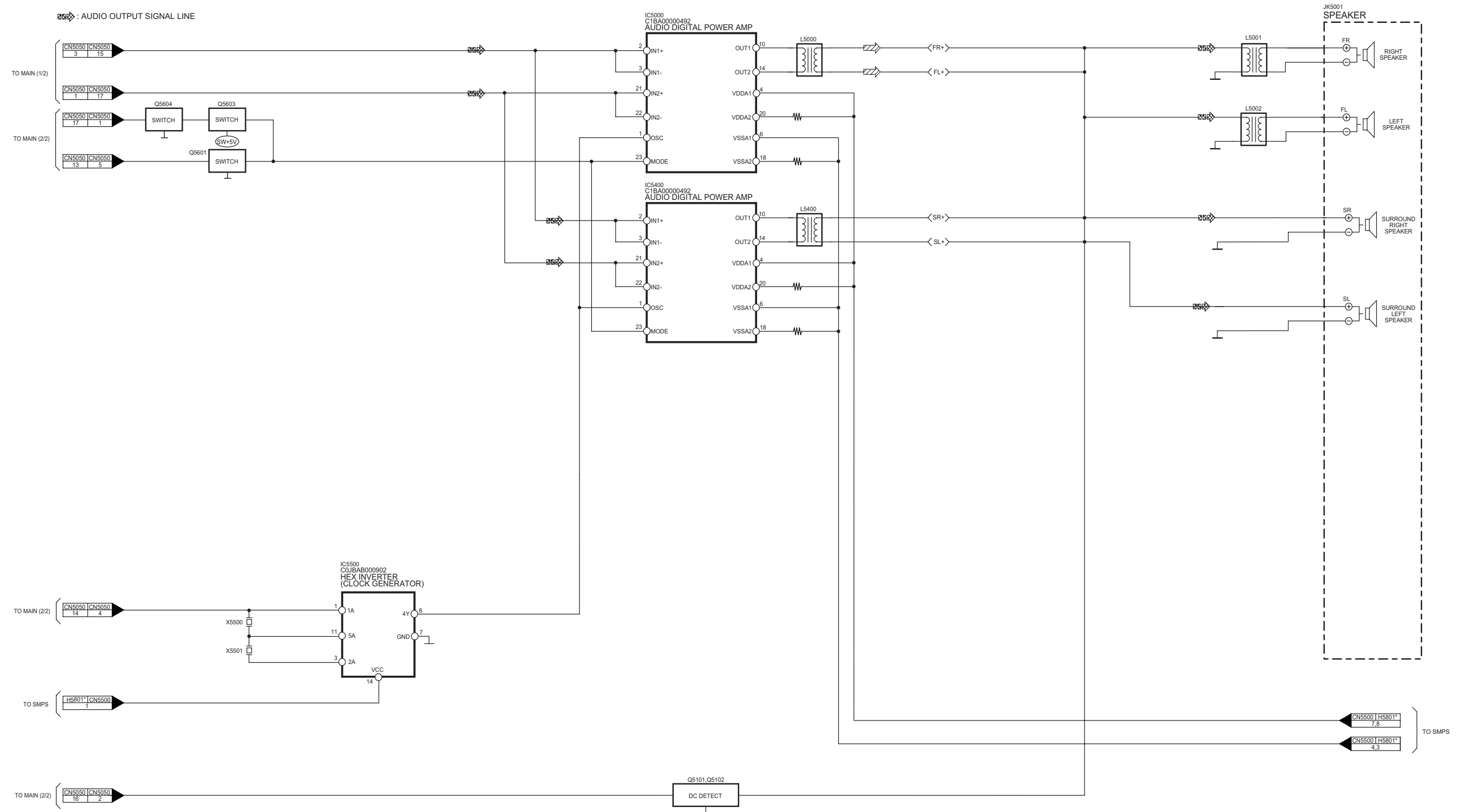


SA-AK580PH/PN MAIN(2/2) BLOCK DIAGRAM

13.5. Panel / MPort/Headphone / Mic / Memory Block Diagram

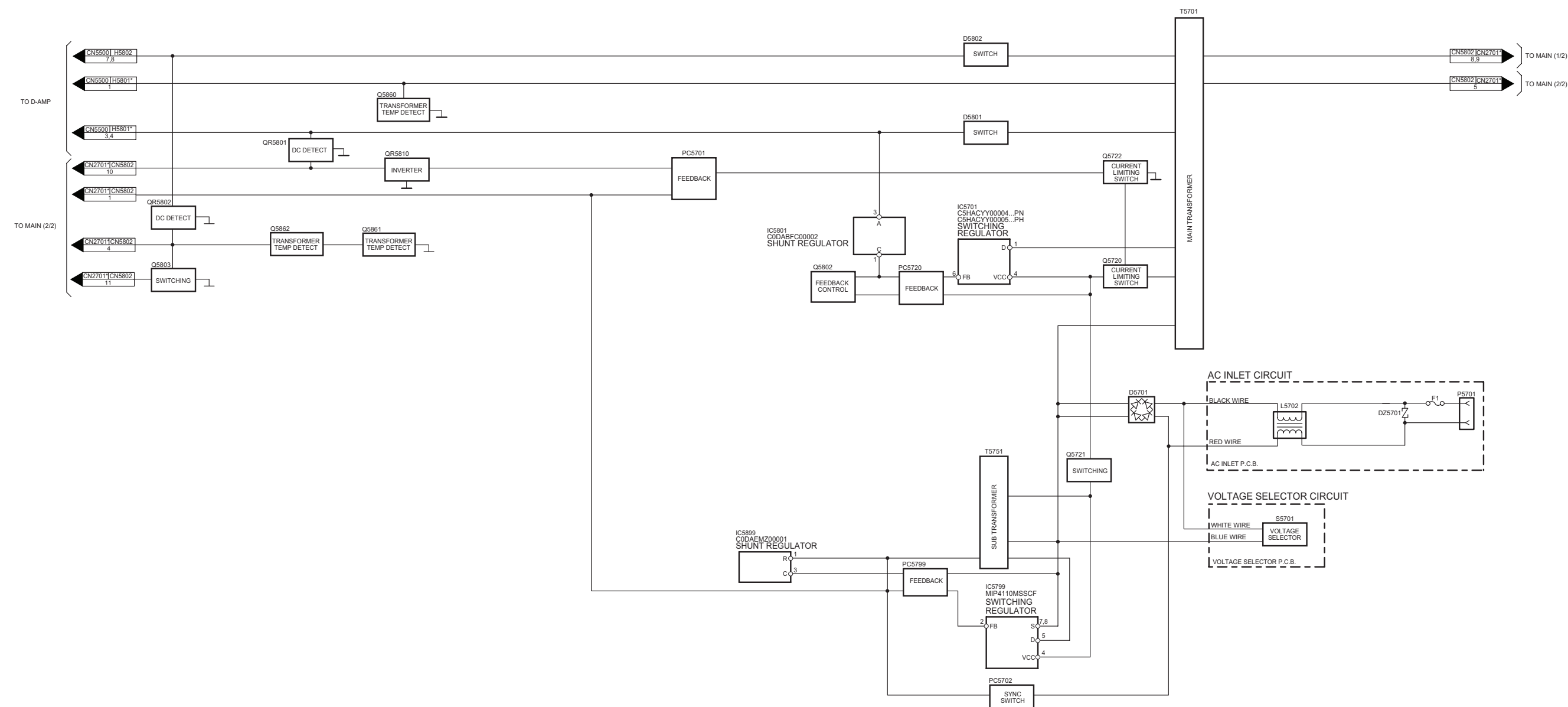


13.6. D-Amp Block Diagram



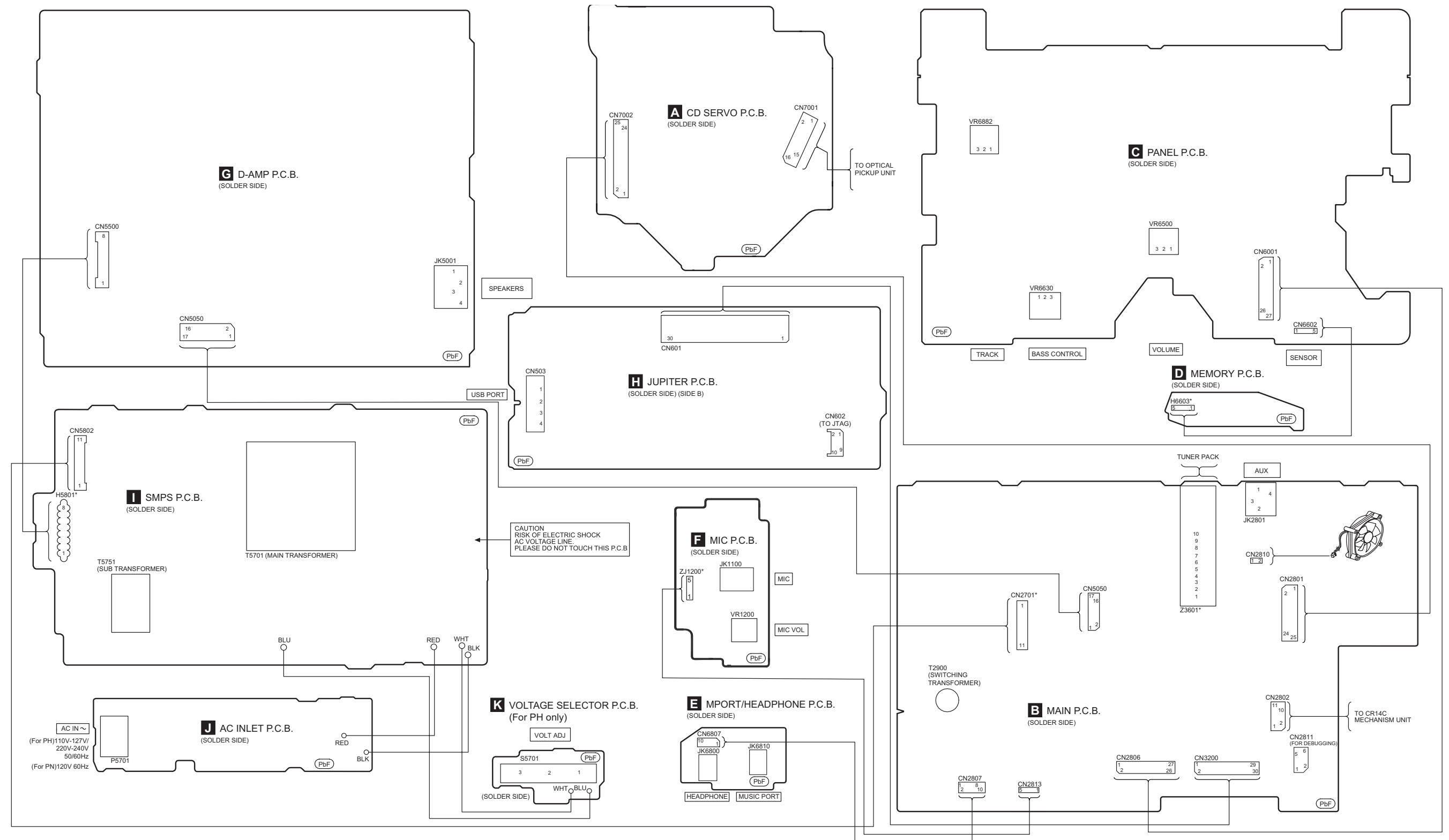
SA-AK580PH/PN D-AMP BLOCK DIAGRAM

13.7. SMPS / AC Inlet / Voltage Selector Block Diagram



SA-AK580PH/PN SMPS / AC INLET / VOLTAGE SELECTOR BLOCK DIAGRAM

14 Wiring Connection Diagram



NOTE: " * " REF IS FOR INDICATION ONLY.

SA-AK580PN/PH WIRING CONNECTION

15 Schematic Diagram Notes

- This schematic diagram may be modified at any time with the development of new technology.

Notes:

S5701:	Voltage Selector switch.
S6100:	Power switch (⏻/⏻).
S6104:	USB REC switch (▶/).
S6109:	D.Bass switch.
S6200:	Open/Close switch (▲).
S6201:	Exchange (▲) switch.
S6202:	CD Disc 1 (1 ▶) switch.
S6203:	CD Disc 2 (2 ▶) switch.
S6204:	CD Disc 3 (3 ▶) switch.
S6205:	CD Disc 4 (4 ▶) switch.
S6206:	CD Disc 5 (5 ▶) switch.
S6207:	Stop/-Demo (■ -DEMO) switch.
S6300:	Manual EQ- (◀◀/◀◀) switch.
S6301:	Manual EQ (MANUAL EQ) switch.
S6302:	Manual EQ+ (▶▶/▶▶) switch.
S6303:	CD (▶/) switch.
S6304:	FM/AM switch.
S6305:	AUX switch.
S6306:	Music Port switch.
S6307:	USB (▶/) switch.
S7201:	Rest switch.
S7202:	CD open switch.
VR1200:	MIC Volume Jog.
VR6500:	Volume Jog.
VR6630:	Bass Control Jog.
VR6882:	Track Jog.

- Important safety notice:

Components identified by △ mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high quality sound (capacitors), low-noise (resistors), etc are used.

When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

- In case of AC rated voltage Capacitors, the part no. and values will be indicated in the Schematic Diagram.

AC rated voltage capacitors:

C5700, C5701, C5703, C5704, C5705, C5706, C5707

- **Resistor**

Unit of resistance is OHM [Ω] (K=1,000, M=1,000,000).

- **Capacitor**

Unit of capacitance is μF, unless otherwise noted. F=Farads, pF=pico-Farad.

- **Coil**

Unit of inductance is H, unless otherwise noted.

- *

REF IS FOR INDICATION ONLY.

- Voltage and signal line

—	: +B signal line
—	: -B signal line
⏻	: CD Audio input signal line
⏻	: AUX/MUSIC PORT/MIC/Audio input signal line
⏻	: Audio output signal line
⏻	: USB signal line
⏻	: AM/FM signal line

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE 233 F1 8A, 125V FUSE (For PN)
TYPE 215 F1 T8AH, 250V FUSE (For PH)



RISK OF FIRE-REPLACE FUSE AS MARKED.

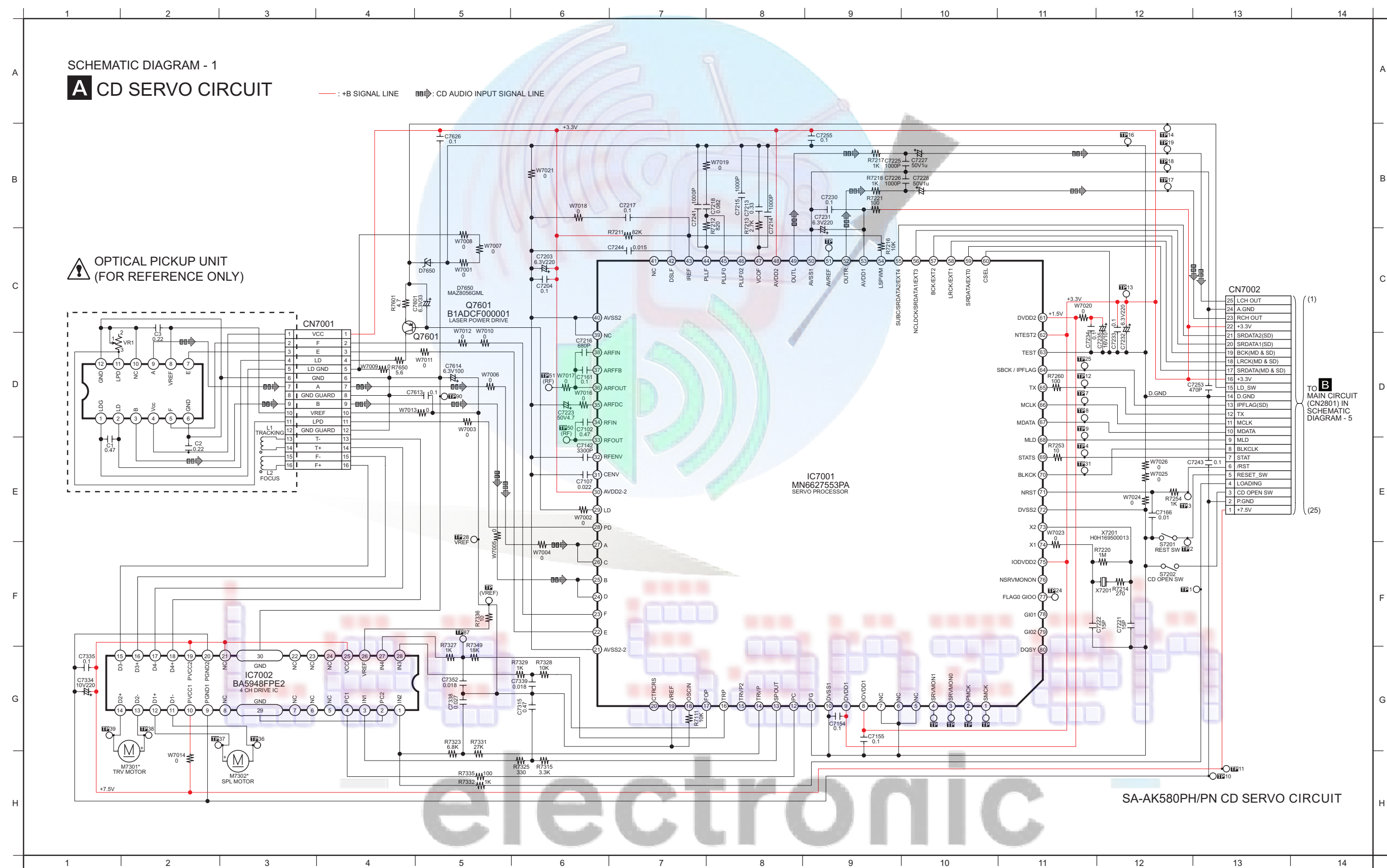
FUSE CAUTION



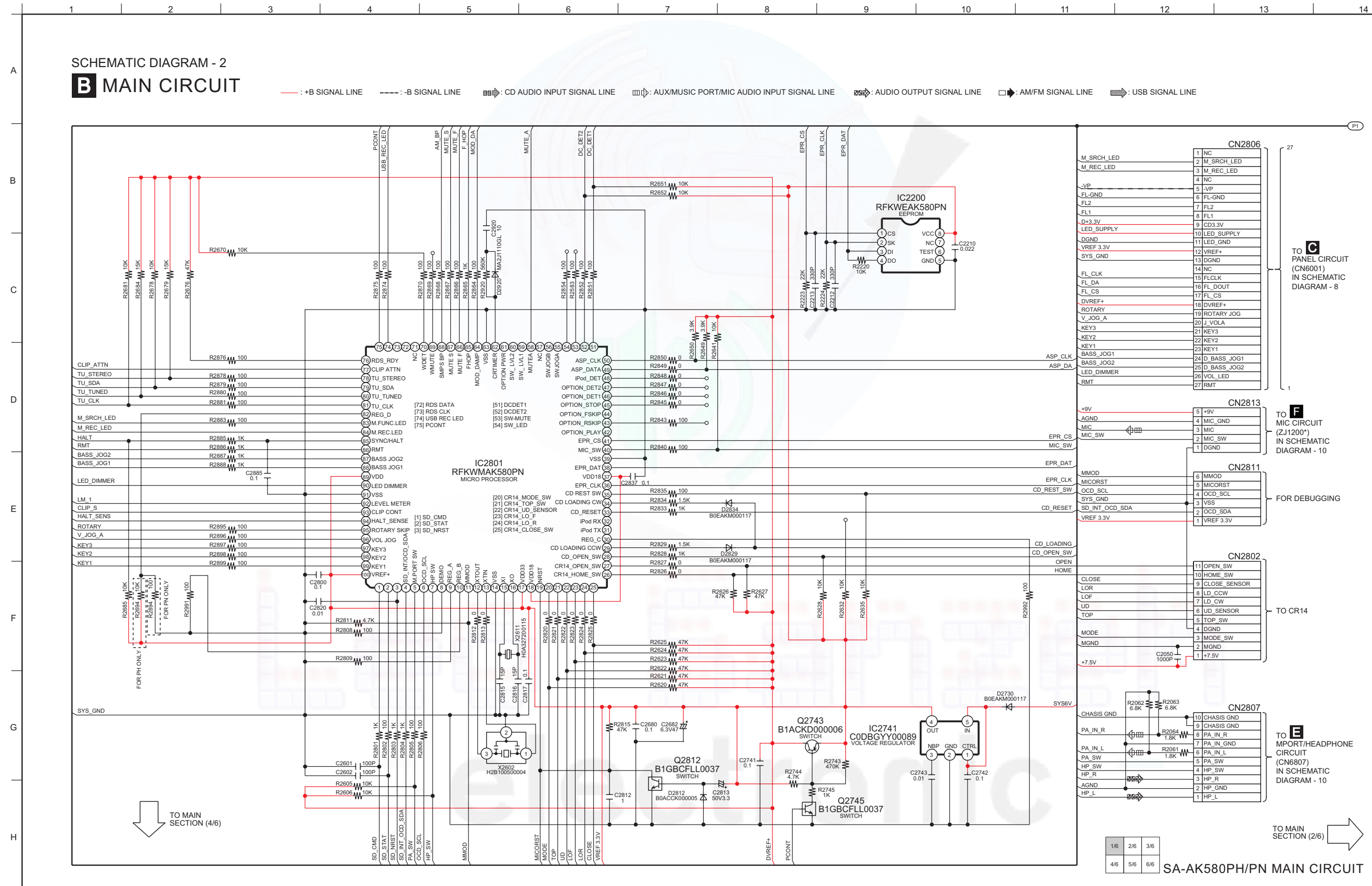
These symbols located near the fuse indicates that the fuse used is a fast operating type. For continued protection against fire hazard, replace with the same type fuse. For fuse rating, refer to the marking adjacent to the symbol.

16 Schematic Diagram

16.1. CD Servo Circuit



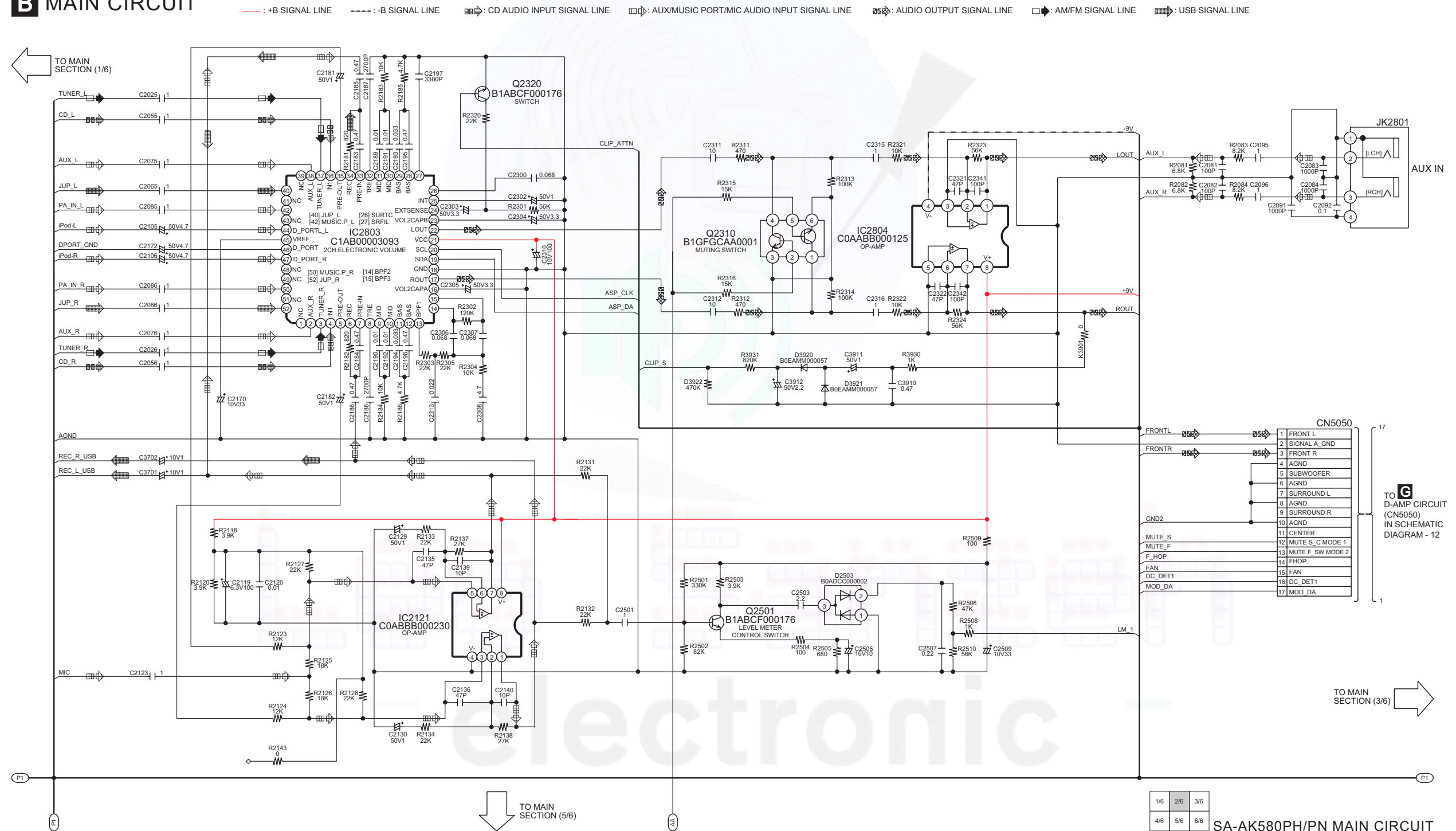
16.2. Main Circuit (1/6)



16.3. Main Circuit (2/6)



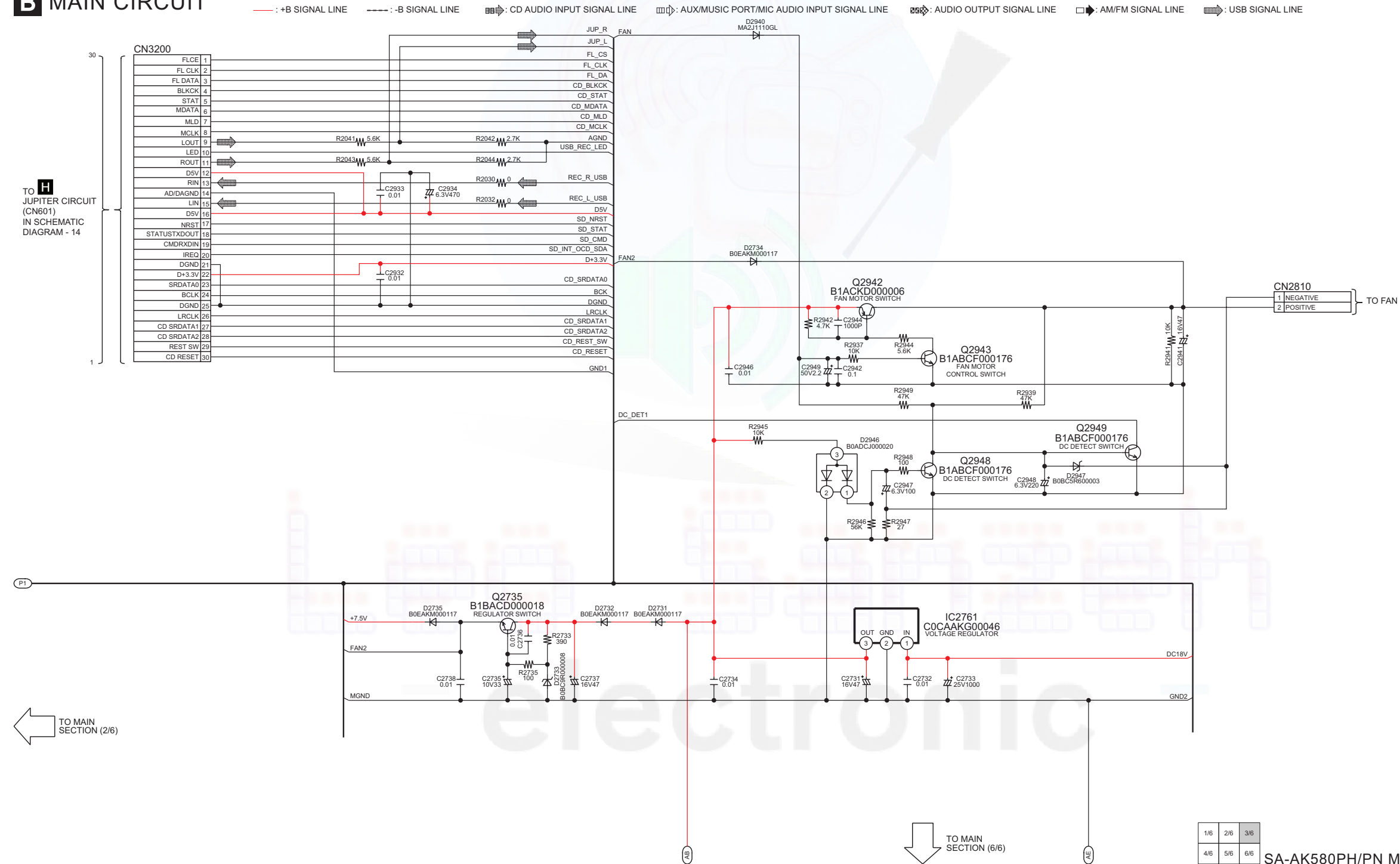
B MAIN CIRCUIT



16.4. Main Circuit (3/6)



B MAIN CIRCUIT

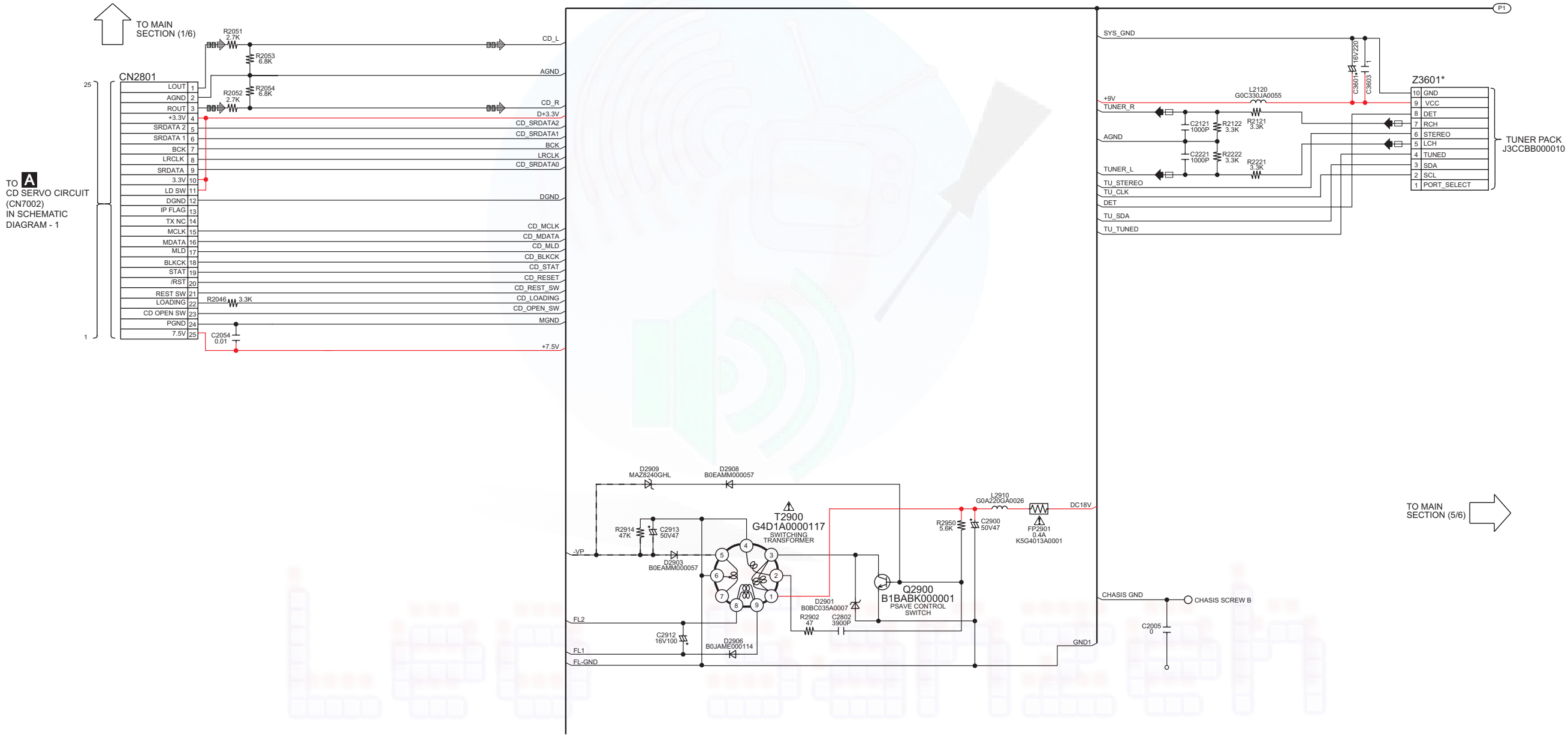


16.5. Main Circuit (4/6)

SCHEMATIC DIAGRAM - 5

B MAIN CIRCUIT

— : +B SIGNAL LINE - - - : -B SIGNAL LINE : CD AUDIO INPUT SIGNAL LINE : AUX/MUSIC PORT/MIC AUDIO INPUT SIGNAL LINE : AUDIO OUTPUT SIGNAL LINE : AM/FM SIGNAL LINE : USB SIGNAL LINE

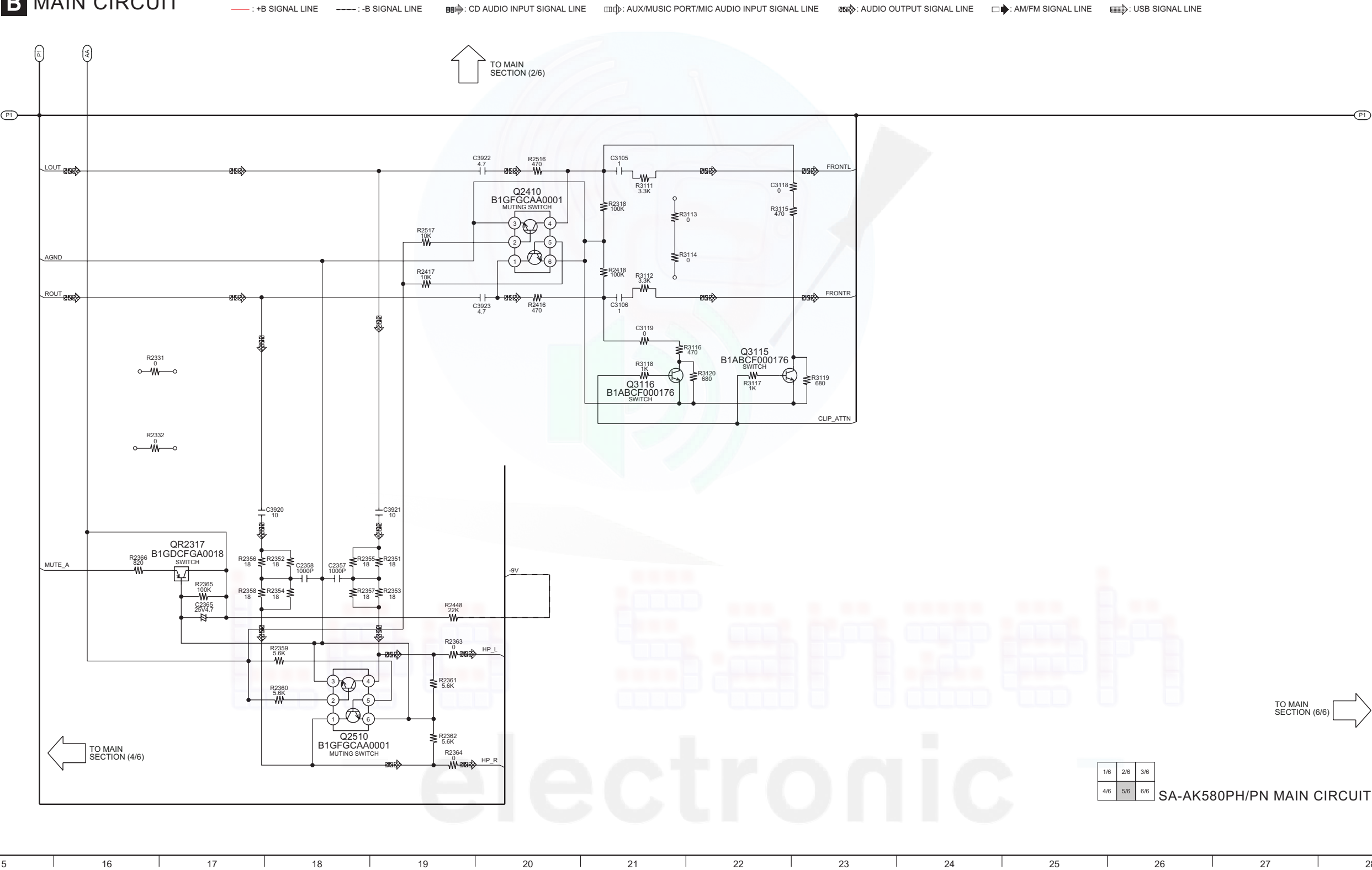


1/6	2/6	3/6
4/6	5/6	6/6

SA-AK580PH/PN MAIN CIRCUIT

16.6. Main Circuit (5/6)

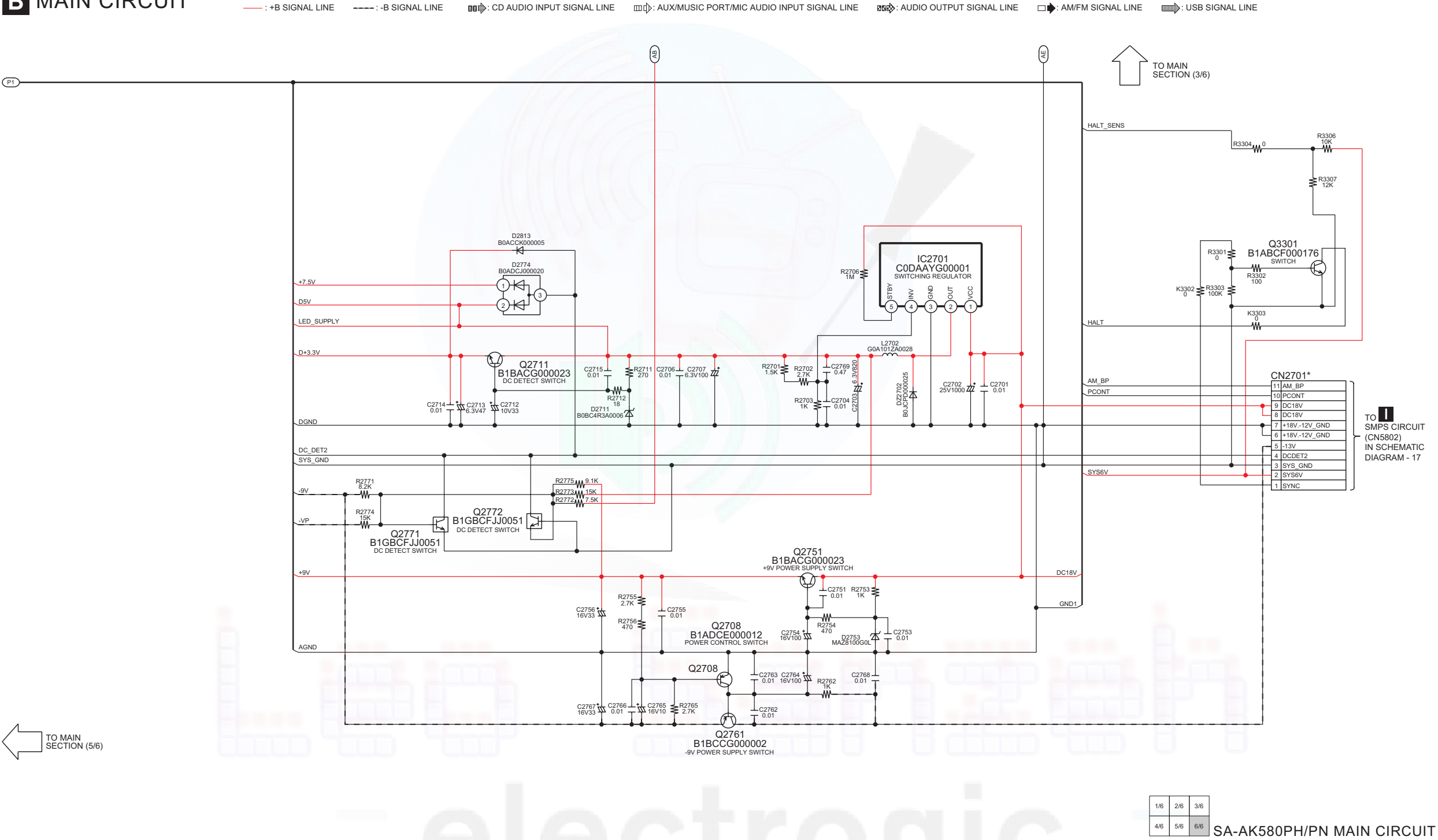
SCHEMATIC DIAGRAM - 6
B MAIN CIRCUIT



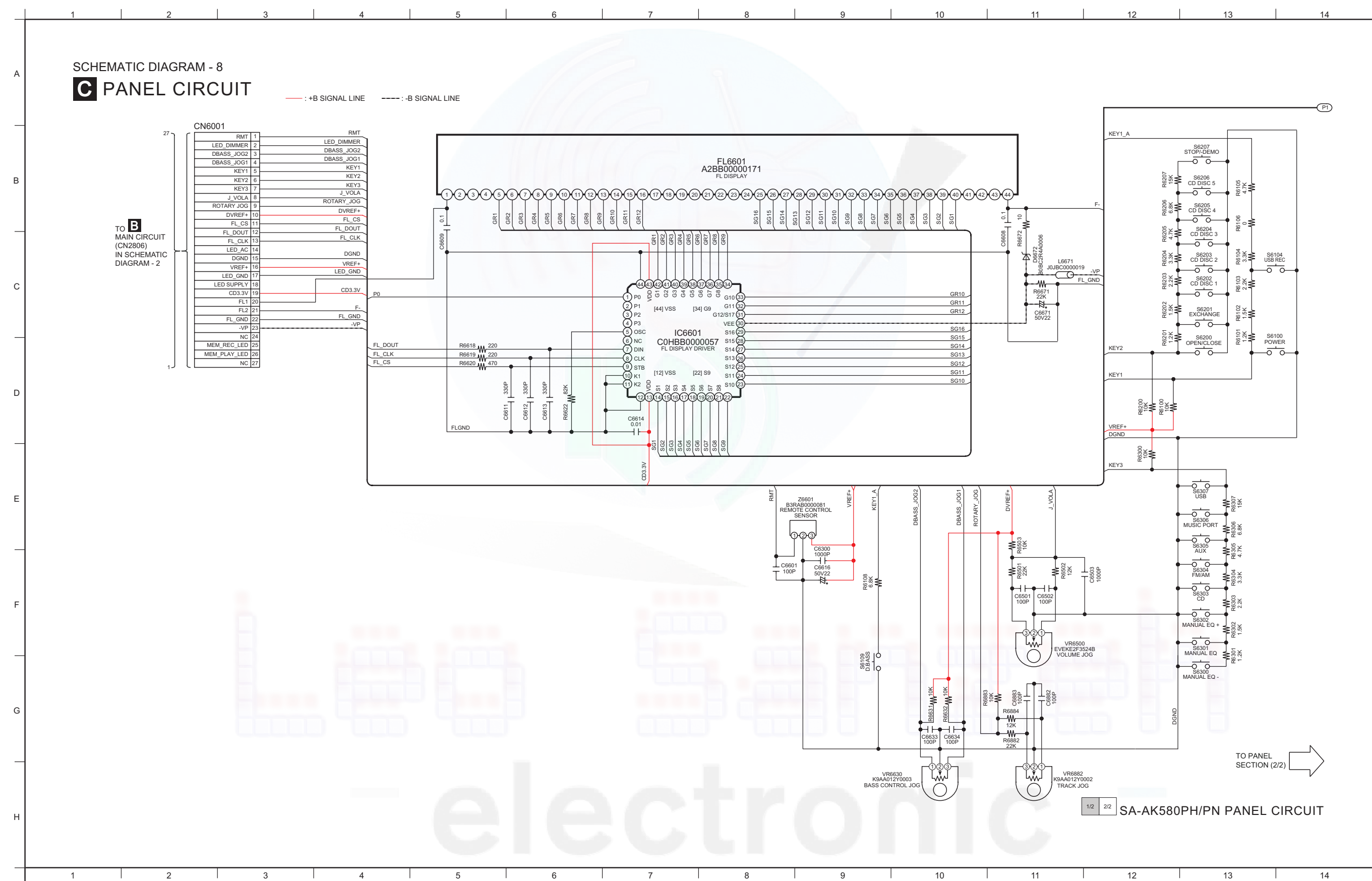
16.7. Main Circuit (6/6)

SCHEMATIC DIAGRAM - 7

B MAIN CIRCUIT



16.8. Panel Circuit (1/2)

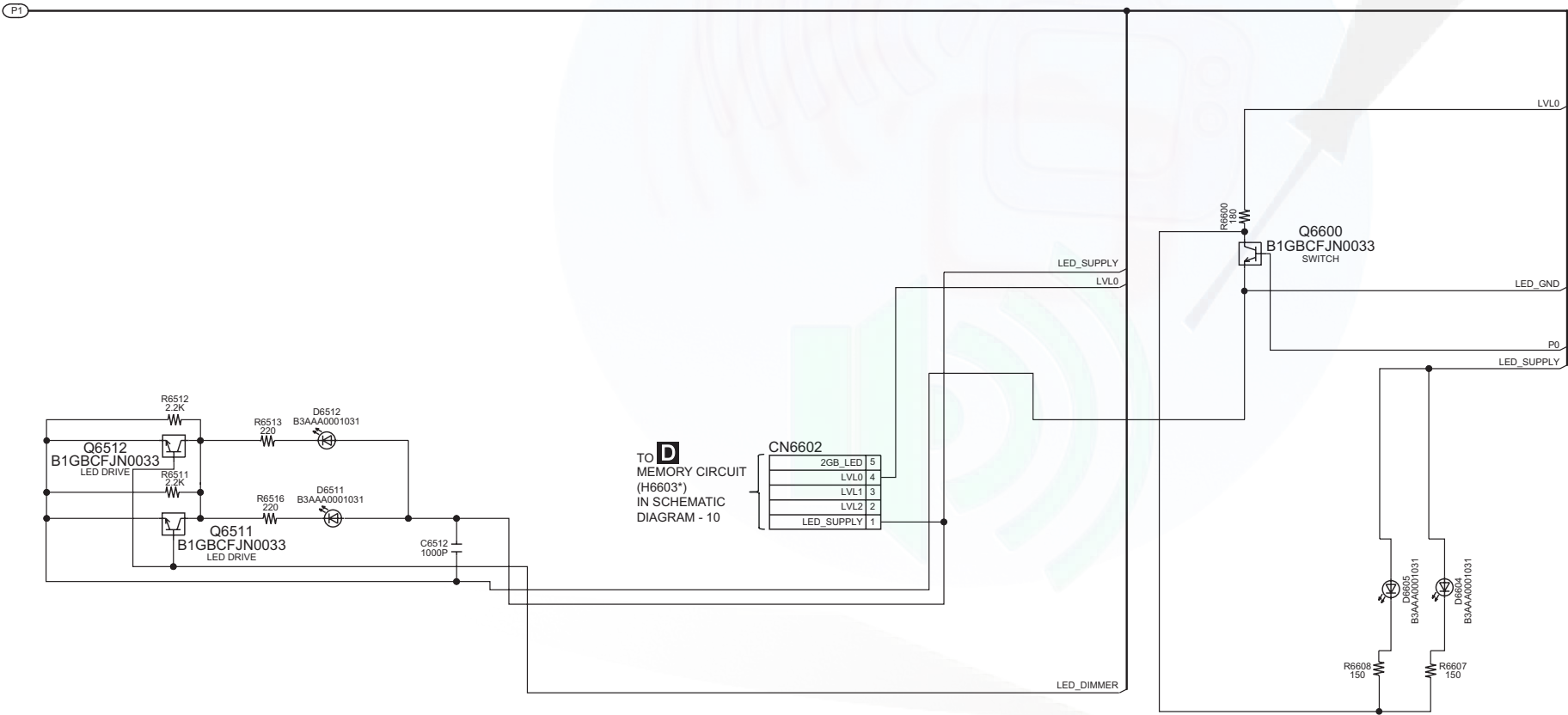


16.9. Panel Circuit (2/2)

SCHEMATIC DIAGRAM - 9

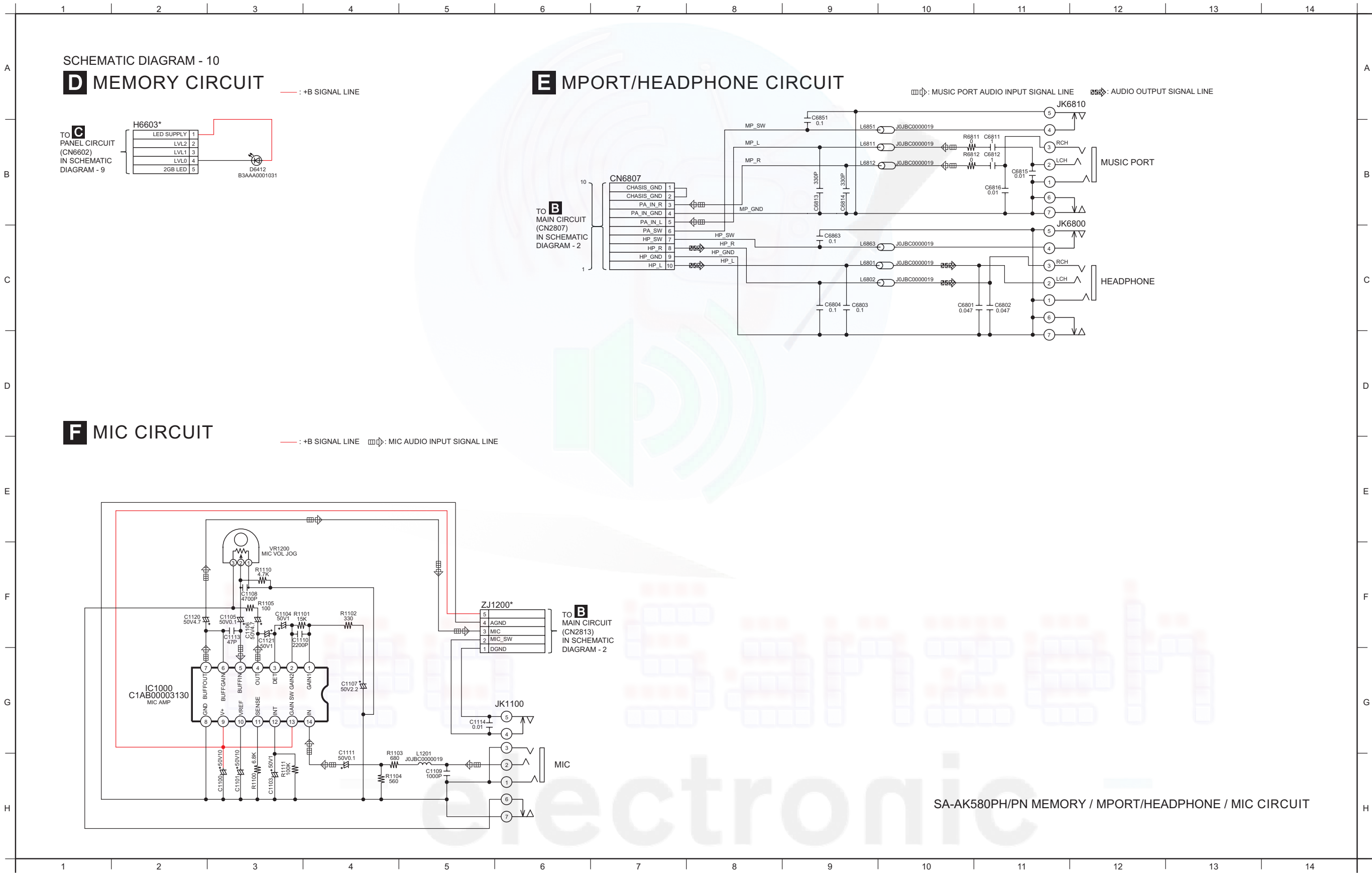
C PANEL CIRCUIT

— : +B SIGNAL LINE --- : -B SIGNAL LINE

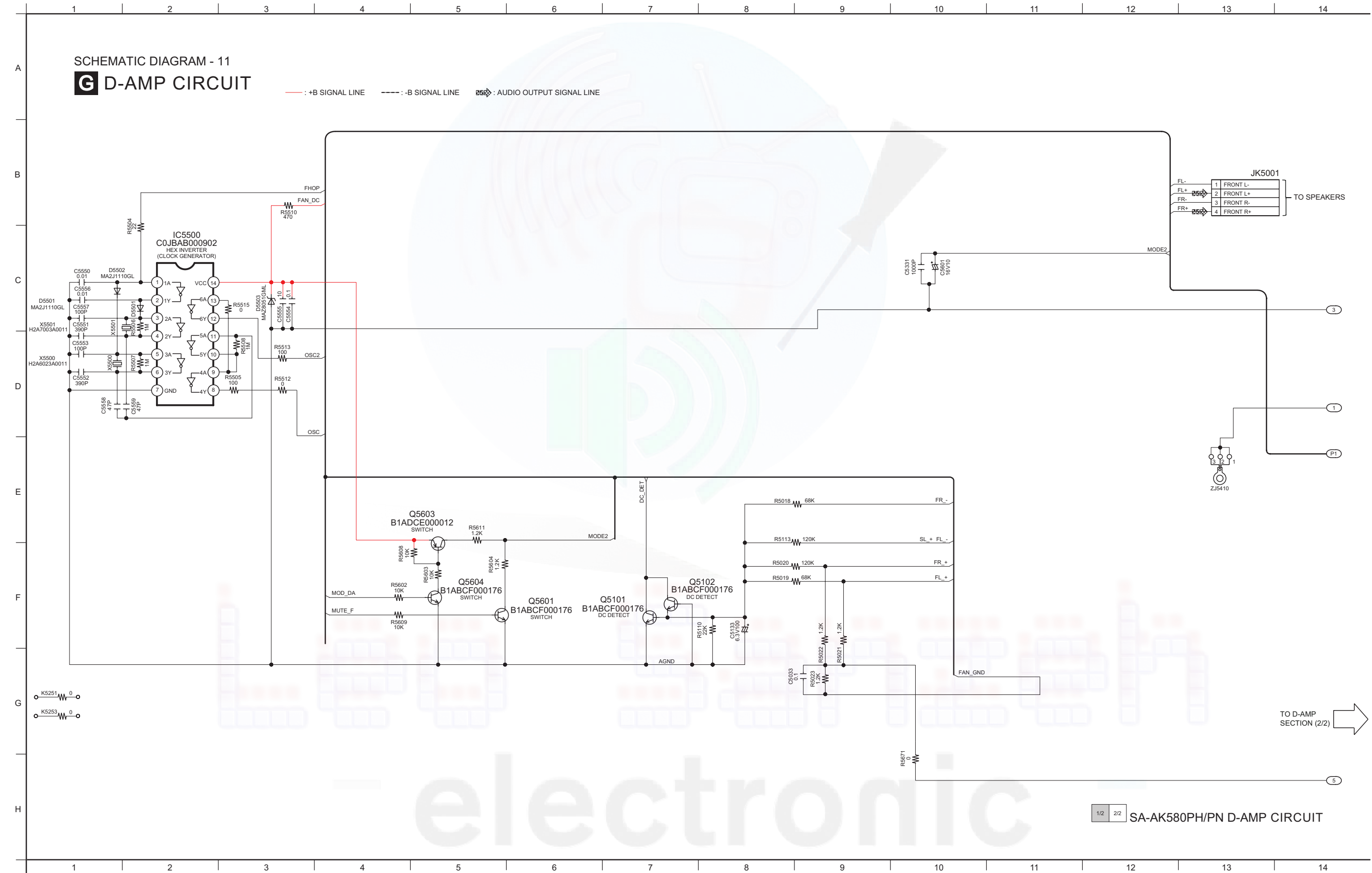


TO PANEL SECTION (1/2)

16.10. Memory / MPort/Headphone / Mic Circuit

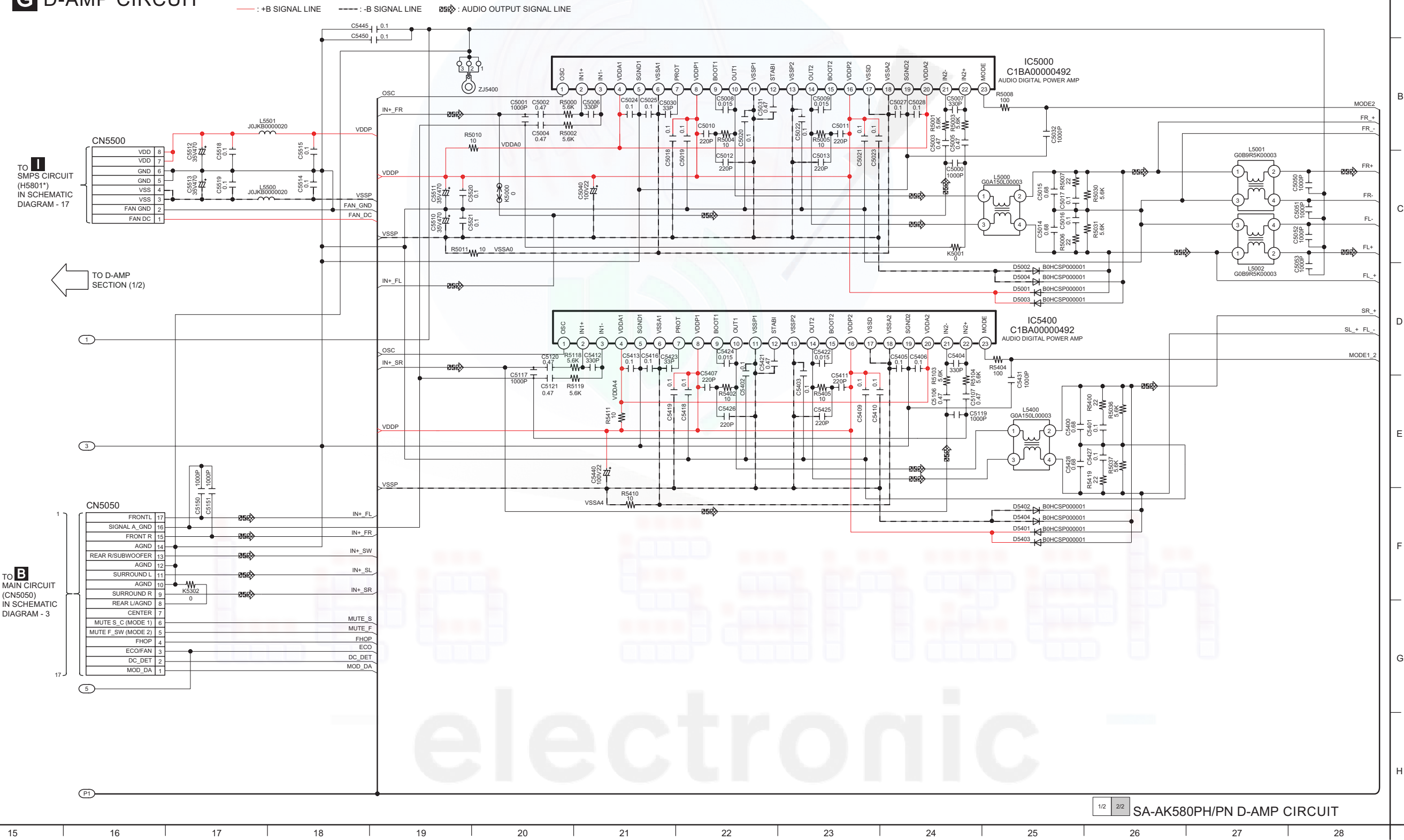


16.11. D-Amp Circuit (1/2)

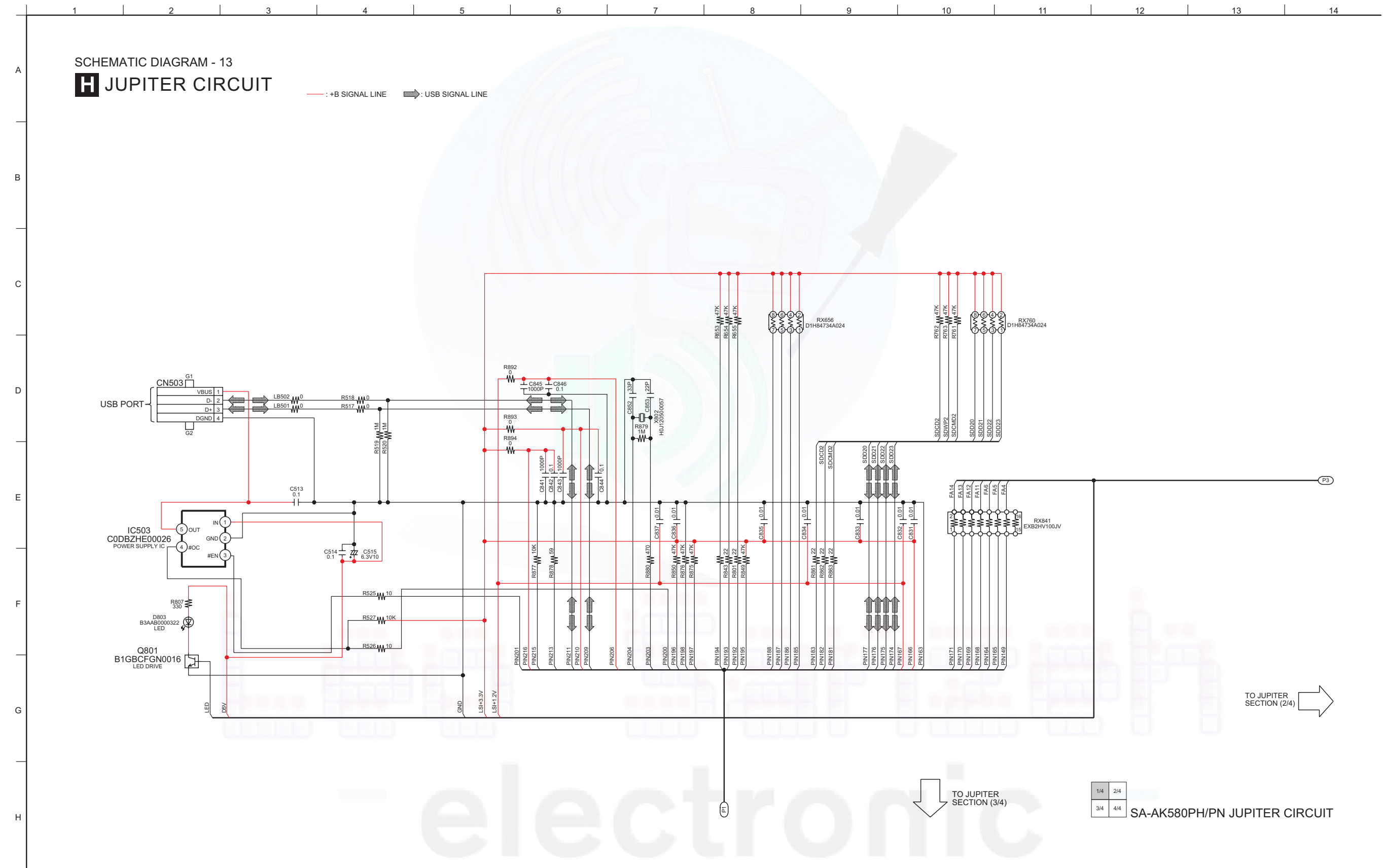


16.12. D-Amp Circuit (2/2)

SCHEMATIC DIAGRAM - 12
G D-AMP CIRCUIT



16.13. Jupiter Circuit (1/4)

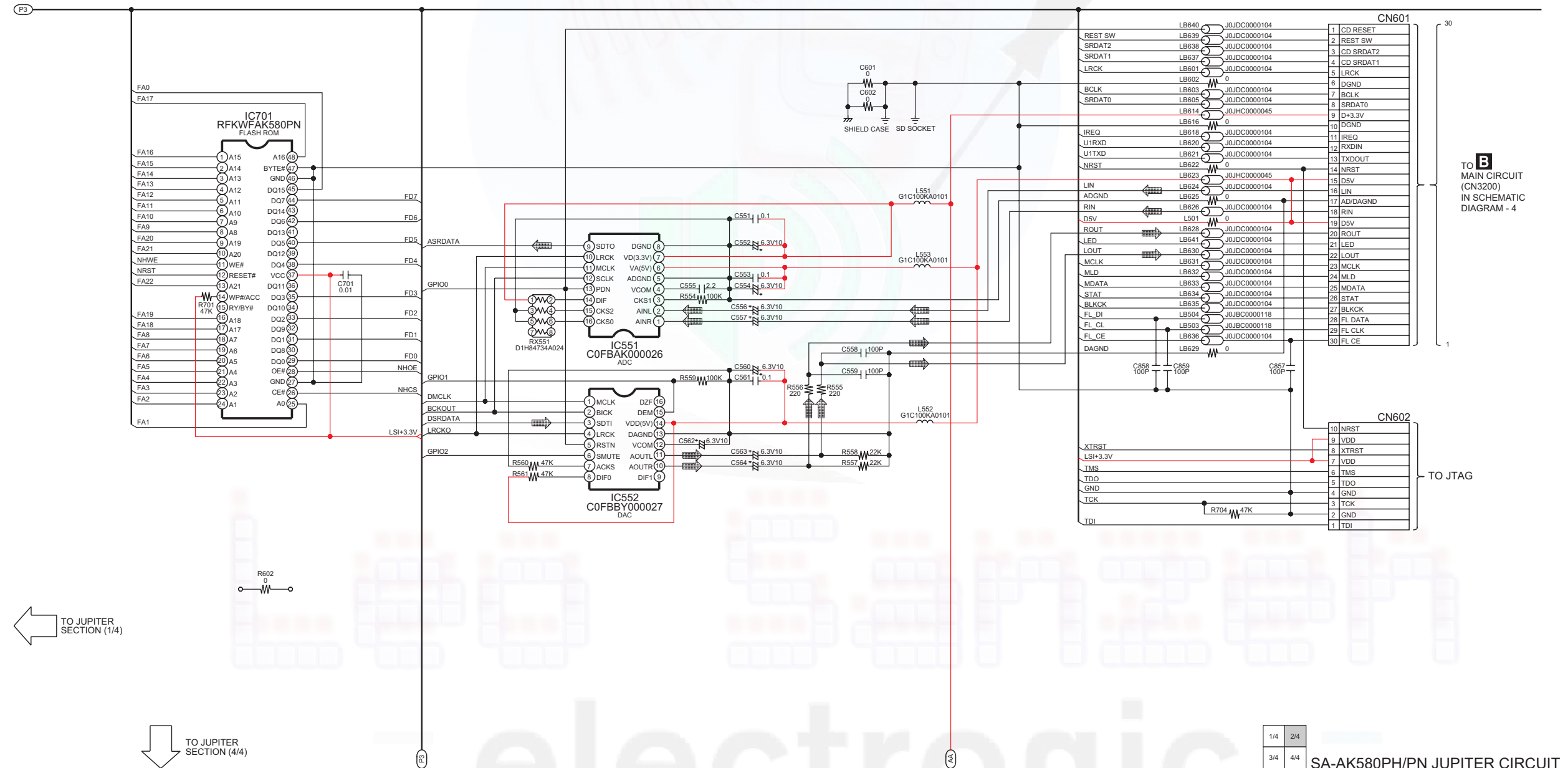


16.14. Jupiter Circuit (2/4)

SCHEMATIC DIAGRAM - 14

H JUPITER CIRCUIT

— : +B SIGNAL LINE  : USB SIGNAL LINE

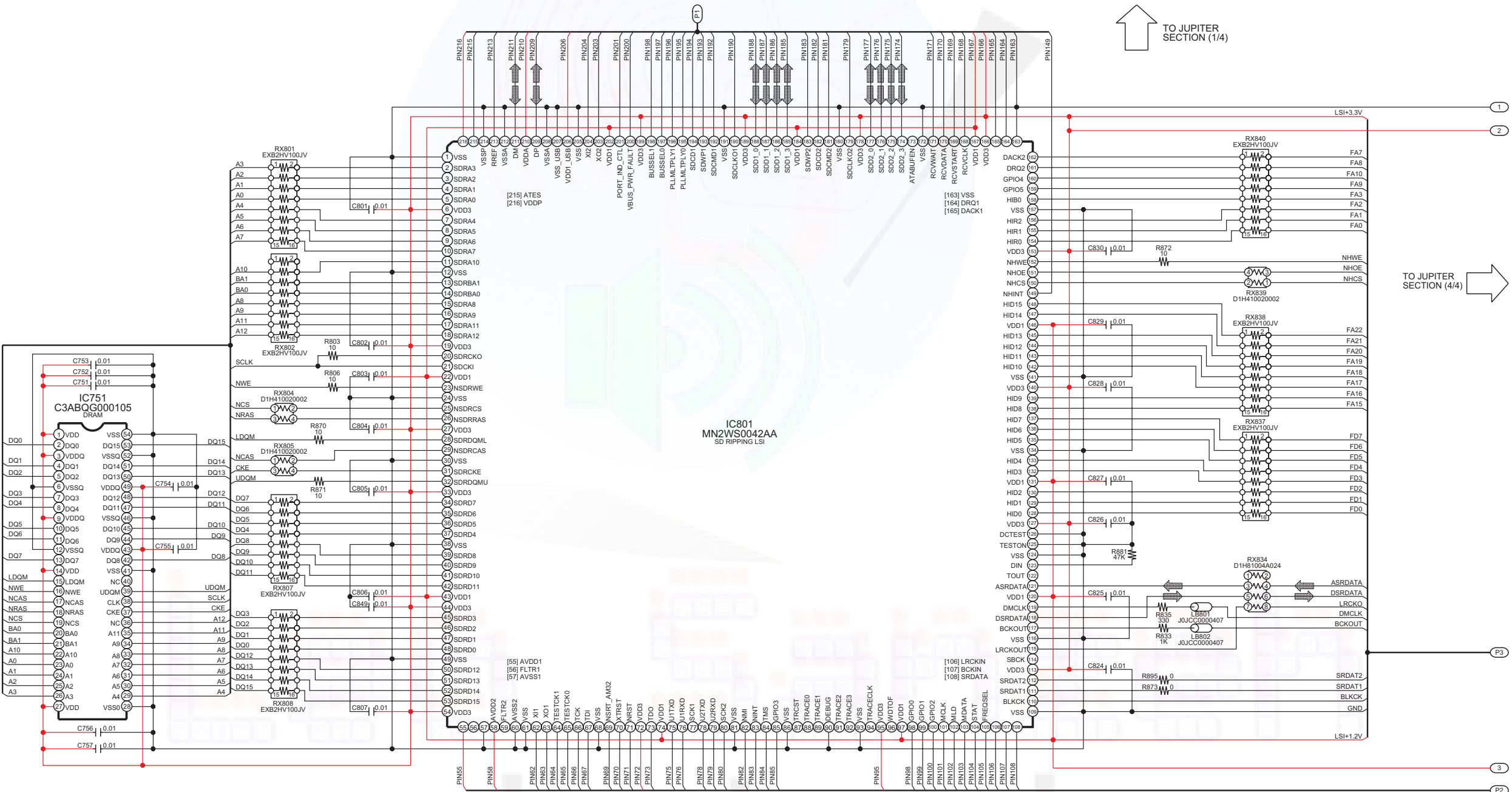


16.15. Jupiter Circuit (3/4)

SCHEMATIC DIAGRAM - 15

H JUPITER CIRCUIT

— : +B SIGNAL LINE  : USB SIGNAL LINE



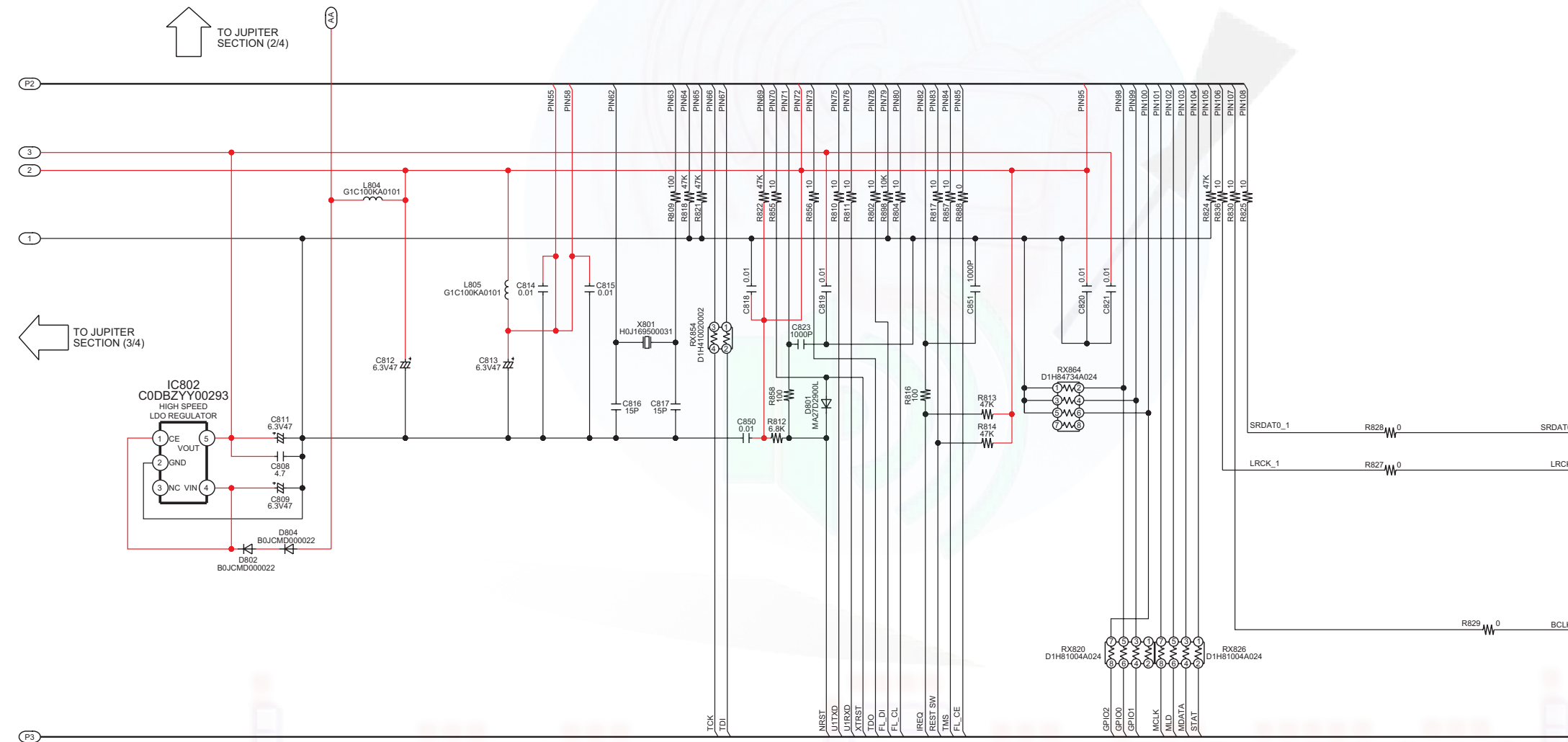
1/4 2/4
3/4 4/4
SA-AK580PH/PN JUPITER CIRCUIT

16.16. Jupiter Circuit (4/4)

SCHEMATIC DIAGRAM - 16

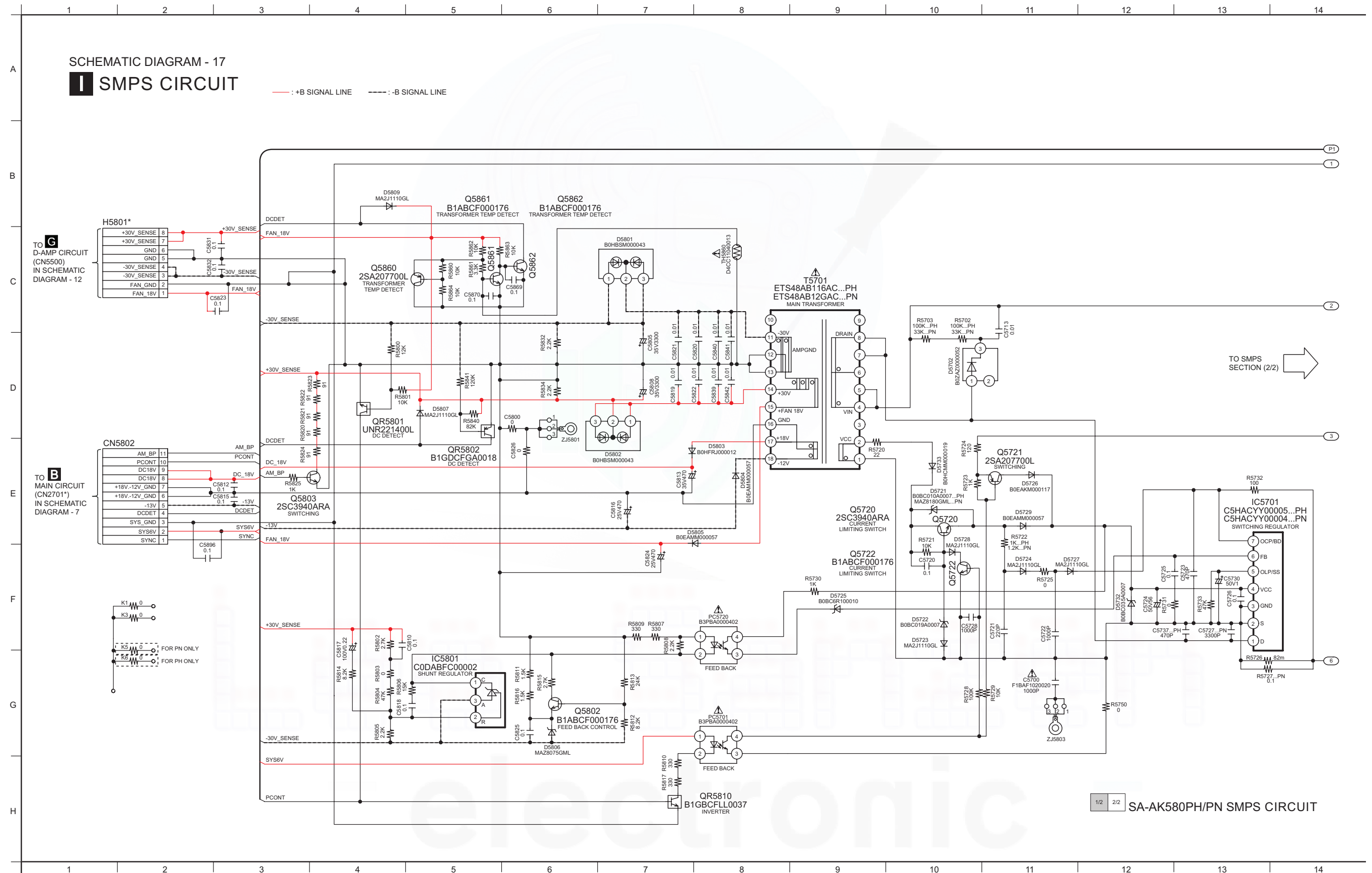
H JUPITER CIRCUIT

— : +B SIGNAL LINE  : USB SIGNAL LINE



1/4	2/4	
3/4	4/4	SA-AK580PH/PN JUPITER CIRCUIT

16.17. SMPS Circuit (1/2)

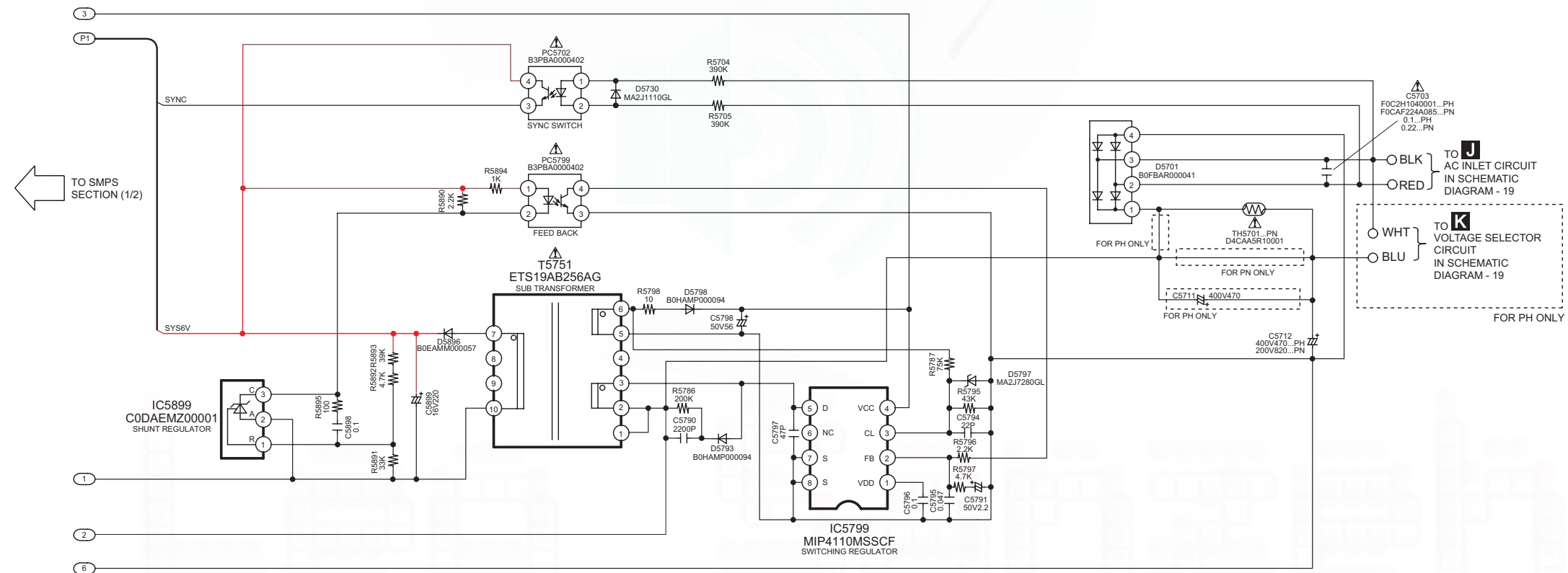


16.18. SMPS Circuit (2/2)

SCHEMATIC DIAGRAM - 18

I SMPS CIRCUIT

— : +B SIGNAL LINE - - - : -B SIGNAL LINE



1/2 2/2 SA-AK580PH/PN SMPS CIRCUIT

16.19. AC Inlet / Voltage Selector Circuit

