

Service Manual

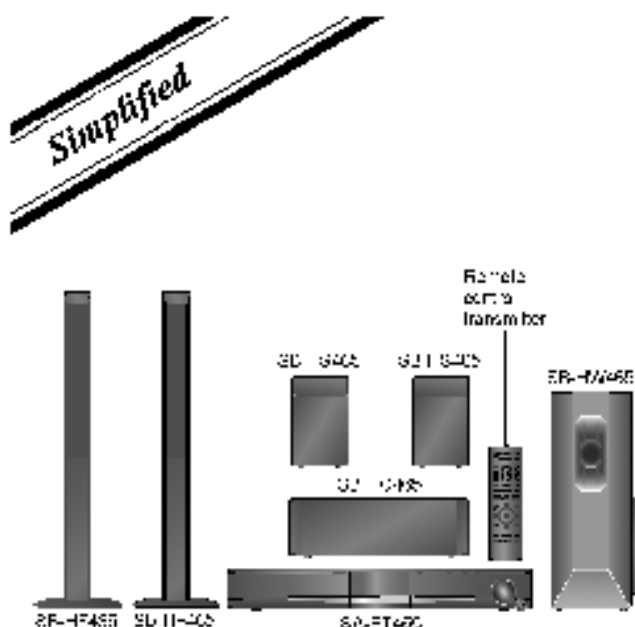
DVD Home Theater Sound System

SA-PT465E

Colour

(S).....Silver Type

(K).....Black Type



Notes 1: This model is based on SA-PT460EB/EG-K,EG-S. Please refer to the original service manual (Order no. MD0801001CE).

Notes 2: This model's CD/DVD mechanism is DLS6. Please refer to the original service manual (Order No. MD0801003CE) for this mechanism.

Specifications

●GENERAL

Power supply: AC 230-240 V, 50 Hz

Power consumption: This unit 125 W

Power consumption in standby mode: approx. 0.4 W

Dimensions (W×H×D): 430 mm×63 mm×327 mm

Mass: This unit 3.4 kg

Operating temperature range: +5 °C to +35 °C

Operating humidity range: 5 % to 90 % RH
(no condensation)

●AMPLIFIER SECTION

RMS Output Power: Dolby Digital Mode

Front Ch: 125 W per channel (3 Ω), 1 kHz, 10% THD

Surround Ch: 125 W per channel (3 Ω), 1 kHz, 10% THD

Center Ch: 125 W per channel (3 Ω), 1 kHz, 10% THD

Subwoofer Ch: 125 W per channel (3 Ω), 1 kHz, 10% THD

125 W per channel (3 Ω), 100 Hz, 10 % THD

Total RMS Dolby Digital mode power: 750 W

DIN Output Power: Dolby Digital Mode

Front Ch: 75 W per channel (3 Ω), 1 kHz, 1% THD

Surround Ch: 75 W per channel (3 Ω), 1 kHz, 1% THD

Center Ch: 75 W per channel (3 Ω), 1 kHz, 1% THD

Subwoofer Ch: 75 W per channel (3 Ω), 100 Hz, 1 % THD

Total DIN Dolby Digital mode power: 450 W

●FM TUNER, TERMINALS SECTION

Panasonic

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Preset Memory: FM 30 stations

Frequency Modulation (FM)

Frequency range: 87.50-108.00 MHz (50-kHz step)

Antenna terminals: 75 Ω (unbalanced)

Digital audio input

Optical digital input: Optical terminal

Sampling frequency: 32 kHz, 44.1 kHz, 48 kHz

Phone jack

Terminal: Stereo, 3.5 mm jack

USB Port

USB standard: USB 2.0 full speed

Media file format support: MP3 (*.mp3)

WMA (*.wma)

JPEG (*.jpg) (*.jpeg)

MPEG4 (*.asf) (For EG only)

USB device file system: FAT12, FAT16, FAT32

USB Port power: Max. 500 mA

●DISC SECTION

Discs played [8 cm or 12 cm]:

- (1) DVD (DVD-Video, DivX^{*5,6})
- (2) DVD-RAM (DVD-VR, MP3^{*2,5}, JPEG^{*4,5}, MPEG4^{*5,7}, DivX^{*5,6})
- (3) DVD-R (DVD-Video, DVD-VR, MP3^{*2,5}, JPEG^{*4,5}, MPEG4^{*5,7}, DivX^{*5,6})
- (4) DVD-R DL (DVD-Video, DVD-VR)
- (5) DVD-RW (DVD-Video, DVD-VR, MP3^{*2,5}, JPEG^{*4,5}, MPEG4^{*5,7}, DivX^{*5,6})
- (6) +R/+RW (Video)
- (7) +R DL (Video)
- (8) CD, CD-R/RW [CD-DA, Video CD, SVCD^{*1}, MP3^{*2,5}, WMA^{*3}, JPEG^{*4,5}, MPEG4^{*5,7}, DivX^{*5,6}]

^{*1} Conforming to IEC62107

^{*2} MPEG-1 Layer 3, MPEG-2 Layer 3

^{*3} Windows Media Audio Ver.9.0 L3

●Not compatible with Multiple Bit Rate (MBR)

^{*4} Exif Ver 2.1 JPEG Baseline files

●Picture resolution: between 160 x 120 and 6144 x 4096 pixels (Sub sampling is 4:0:0, 4:2:0, 4:2:2 or 4:4:4). Extremely long and narrow pictures may not be displayed.

^{*5} The total combined maximum number of recognizable audio, picture and video contents and groups: 4000 audio, picture and video contents and 400 groups.

^{*6} Plays all versions of DivX® video (including DivX®6) with standard playback of DivX® media files. Certified to the DivX Home Theater Profile.

^{*7} MPEG4 data recorded with the Panasonic SD multi cameras or DVD video recorders.

●Conforming to SD VIDEO specifications (ASF standard)/MPEG4 (Simple Profile) video system/G.726 audio system.

Pick up

Wavelength (DVD/CD): 655/785 nm

Laser power (DVD/CD): CLASS 1/CLASS 1M

Audio output (Disc)

Number of channels: 5.1 ch (FL, FR, C, SL, SR, SW)

●VIDEO SECTION

Video system: PAL625/50, PAL525/60, NTSC

Composite video output

Output level: 1 Vp-p (75 Ω)

Terminal: Scart jack (1 system)

S-video output

Y output level: 1 Vp-p (75 Ω)

C output level: PAL; 0.3 Vp-p (75 Ω)

NTSC; 0.286 Vp-p (75 Ω)

Terminal: Scart jack (1 system)

RGB video output

R output level: 0.7 Vp-p (75 Ω)

G output level: 0.7 Vp-p (75 Ω)

B output level: 0.7 Vp-p (75 Ω)

Terminal: Scart jack (1 system)

HDMI AV output

Terminal: 19pin type A connector

HDAVI Control:

This unit supports "HDAVI Control 3" function.

Note:

1. Specifications are subject to change without notice.
- Mass and dimensions are approximate.
2. Total harmonic distortion is measured by the digital spectrum analyzer.

Solder:

This model uses lead free solder (PbF).

Mechanism:

This model uses DLS6 mechanism.

System	SC-PT405E-S/K
Main unit	SA-FT485F-S/K
Speaker system	SL-FT485F-S/K
Speaker system	SB-FT465E-S/K
Front speakers	SL-IF465F-S/K*
Center speaker	SL-IC485F-S/K*
Surround speakers	SB-S465E-S/K*
Subwoofer	SB-HW405E-K*

Refer to their respective original service manuals for *1.

■ Built-in decoders

You can play discs with these symbols.



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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.

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1 Notes:

—This service manual contains technical information which will allow service personnel's to understand and service this model.

—If the circuit is changed or modified, this information will be followed by supplement service manual to be filled with the original service manual.

1) The base for this model is SA-PT460EB/EG-K,EG-S. You can refer to the original service manual (Order no. MD0801001CE). As such this service manual does not contain the following information as below:-

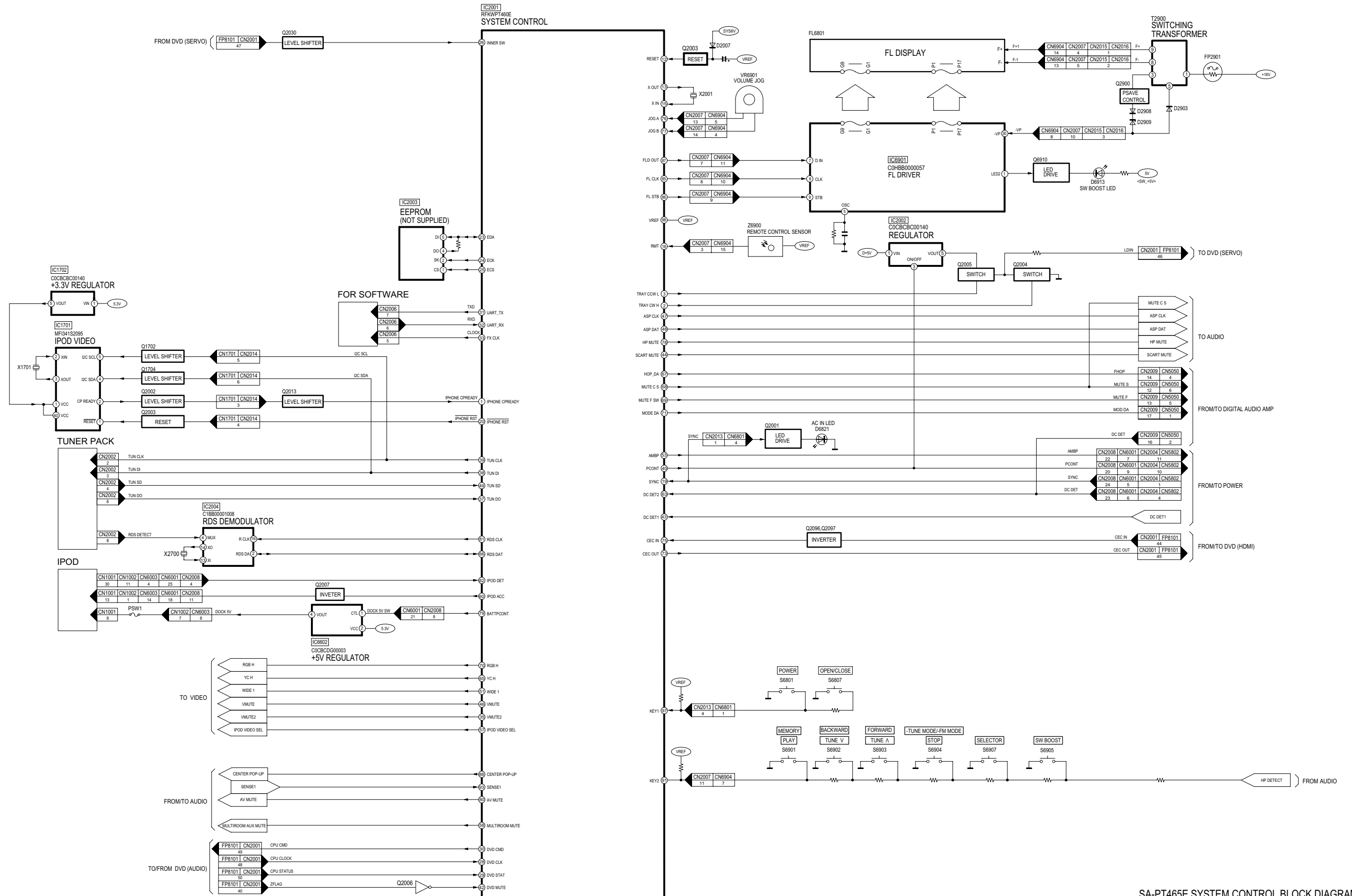
- Operation Procedures
- Self-diagnosis & Special Mode Setting
- Assembling & Disassembling
- Service Position
- Measurements & Adjustments
- Voltage & Waveform Chart
- Illustration of IC's, Transistors & Diodes
- Wiring Connection Diagram
- Schematic Diagram Notes

2) Contents include for this service manual:-

- Block Diagram (System Control/DVD (Audio)/Audio/D-Amp)
- Schematic Diagram (DVD Module/Main/D-Amp)
- Printed Circuit Board (Main/Power/D-Amp)
- Cabinet Exploded Views (Packaging)
- Replacement Parts List

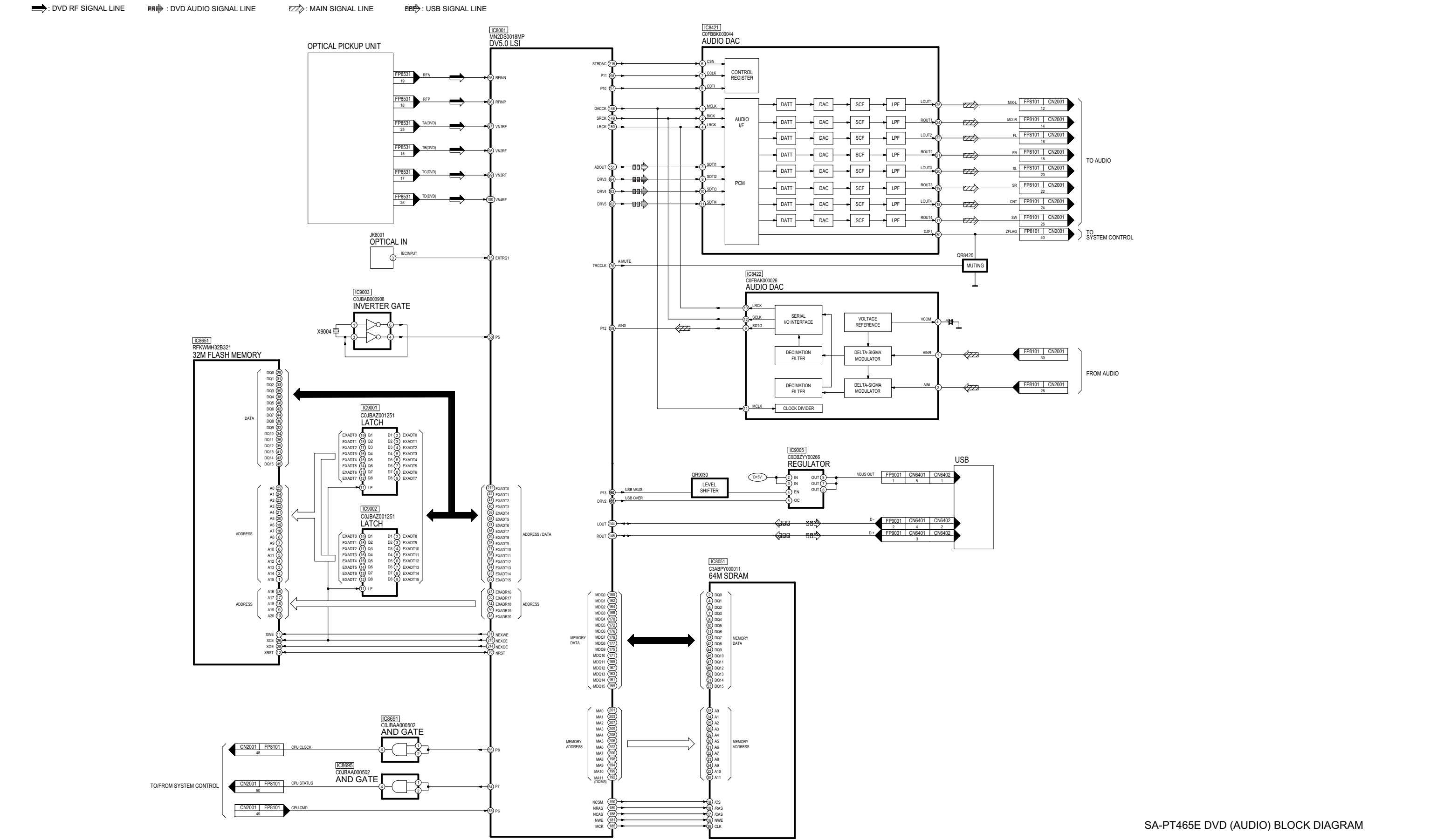
2 Block Diagram

2.1. System Control



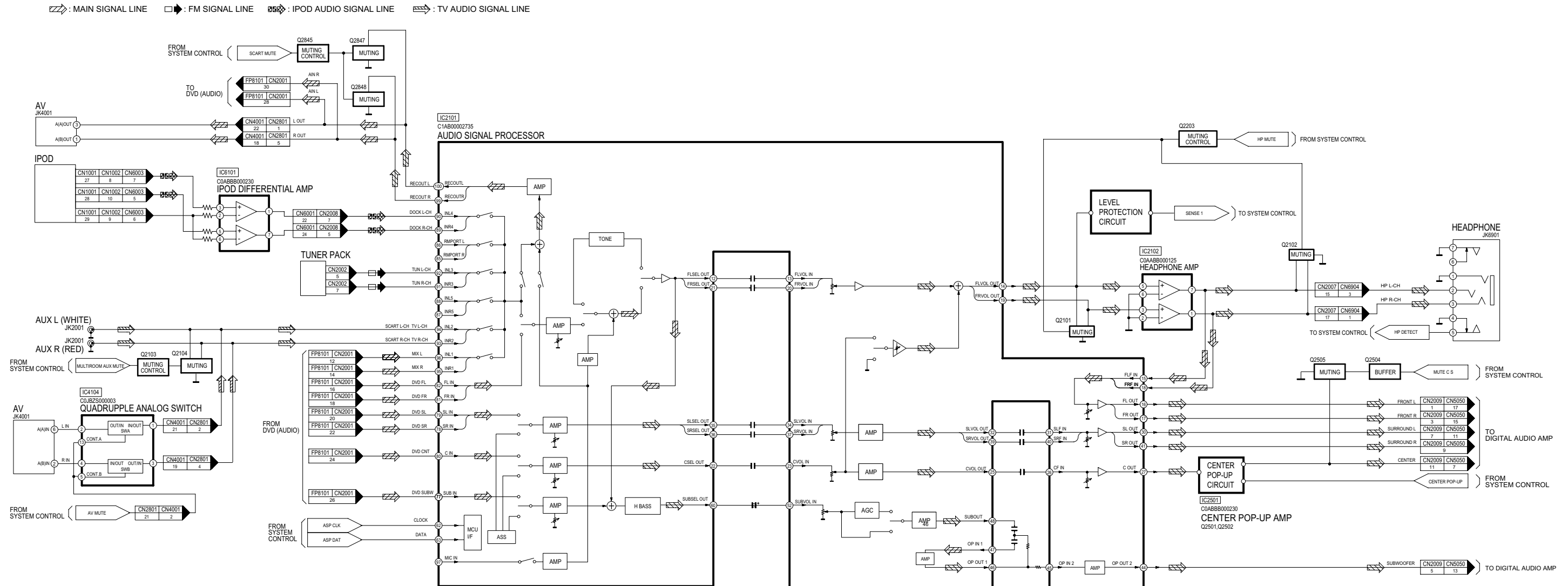
SA-PT465E SYSTEM CONTROL BLOCK DIAGRAM

2.2. DVD (Audio)

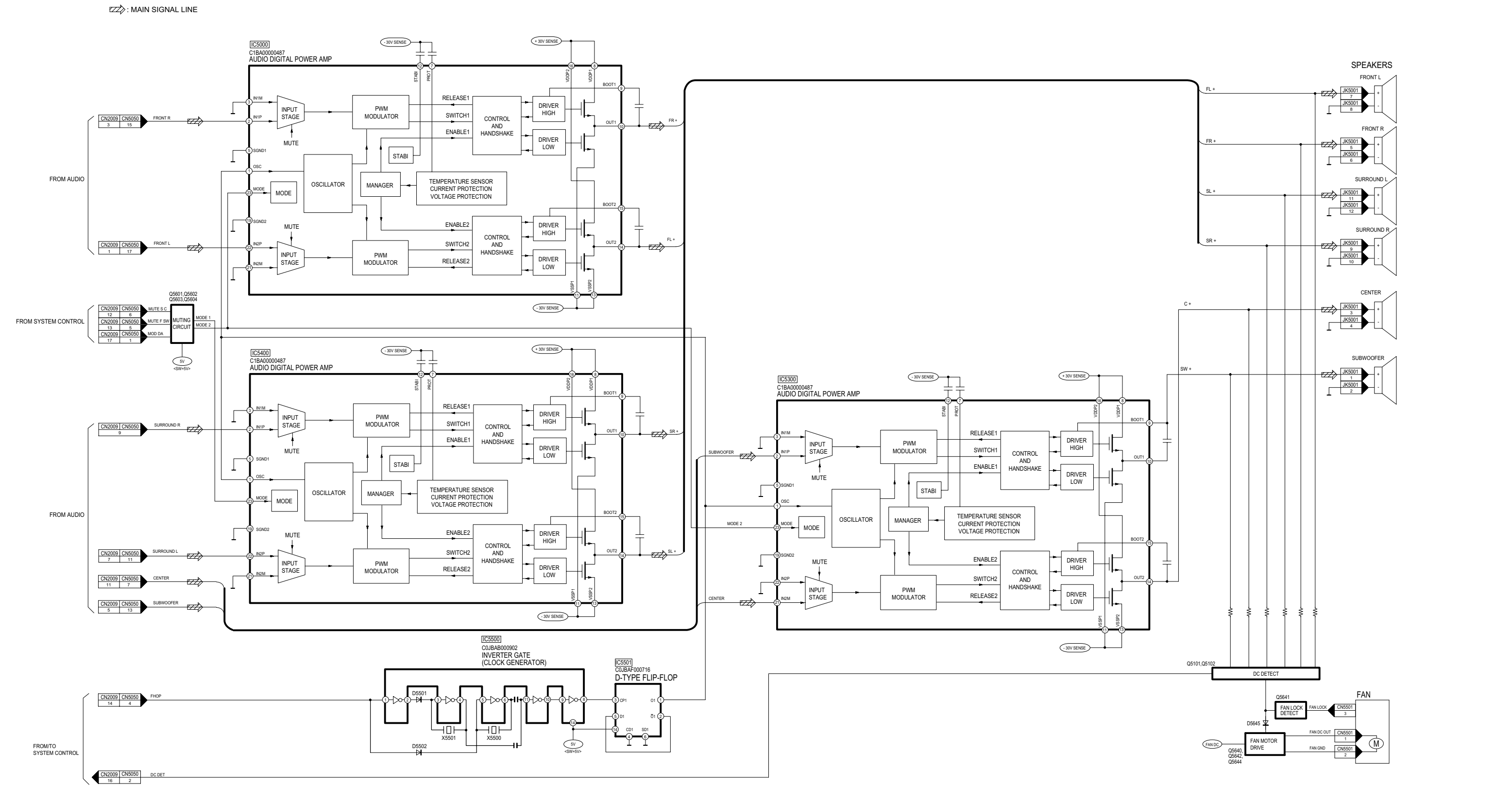


SA-PT465E DVD (AUDIO) BLOCK DIAGRAM

2.3. Audio



2.4. Digital Audio Amp



SA-PT465E DIGITAL AUDIO AMP BLOCK DIAGRAM

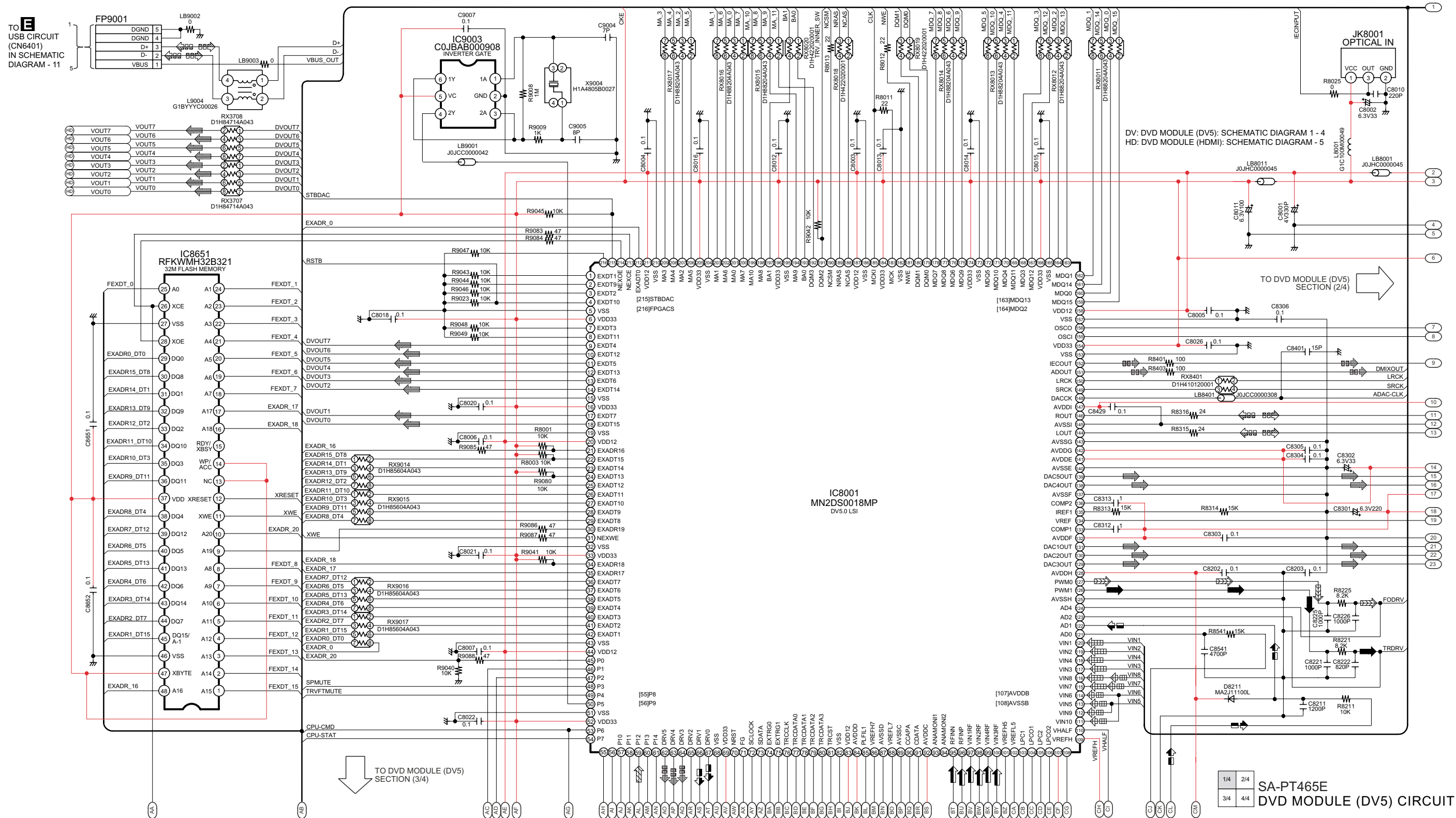
3 Schematic Diagram

3.1. DVD Module Circuit

SCHEMATIC DIAGRAM - 1

A DVD MODULE (DV5) CIRCUIT

CD HEAD SIGNAL LINE
 DVD RF SIGNAL LINE
 DVD VIDEO SIGNAL LINE
 FOCUS ERROR SIGNAL LINE
 MAIN SIGNAL LINE
 +B SIGNAL LINE
 DVD HEAD SIGNAL LINE
 MOTOR DRIVE SIGNAL LINE
 DVD AUDIO SIGNAL LINE
 TRACKING ERROR SIGNAL LINE
 USB SIGNAL LINE

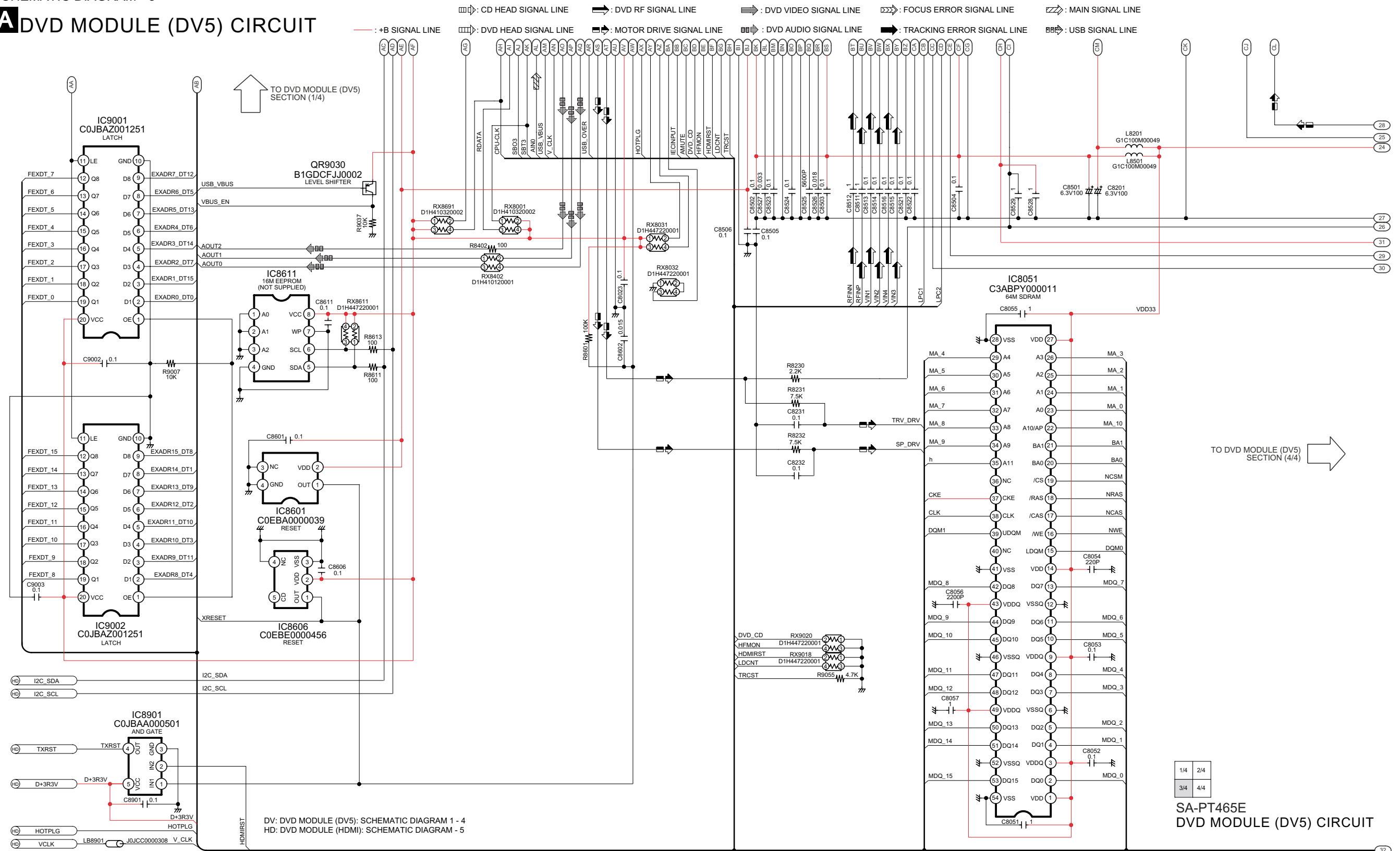


 : +B SIGNAL LINE
 : CD HEAD SIGNAL LINE
 : DVD RF SIGNAL LINE
 : DVD VIDEO SIGNAL LINE
 : FOCUS ERROR SIGNAL LINE
 : MAIN SIGNAL LINE
 : MOTOR DRIVE SIGNAL LINE
 : DVD AUDIO SIGNAL LINE
 : TRACKING ERROR SIGNAL LINE
 : USB SIGNAL LINE



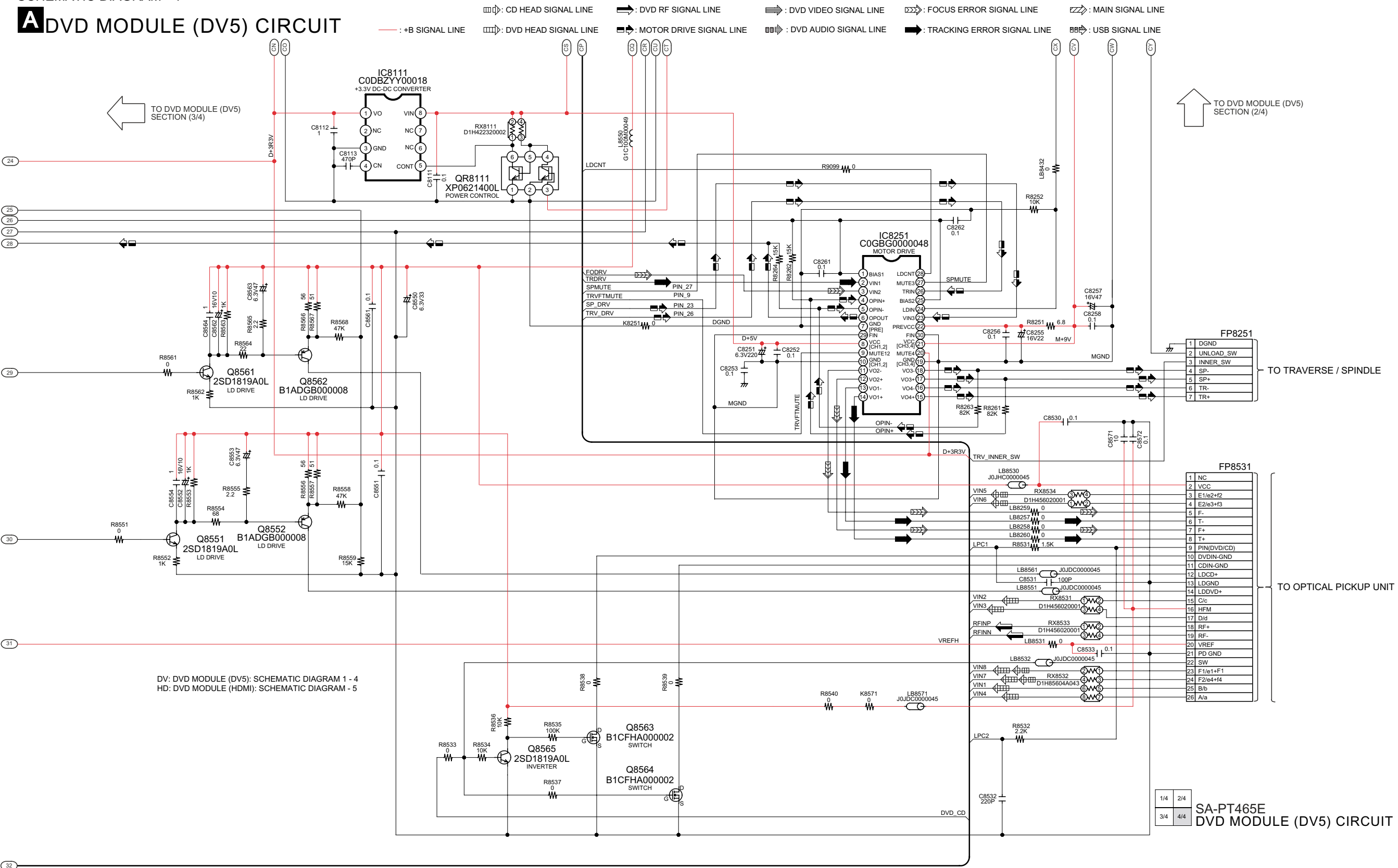
SCHEMATIC DIAGRAM - 3

DVD MODULE (DV5) CIRCUIT



SCHEMATIC DIAGRAM - 4

A DVD MODULE (DV5) CIRCUIT

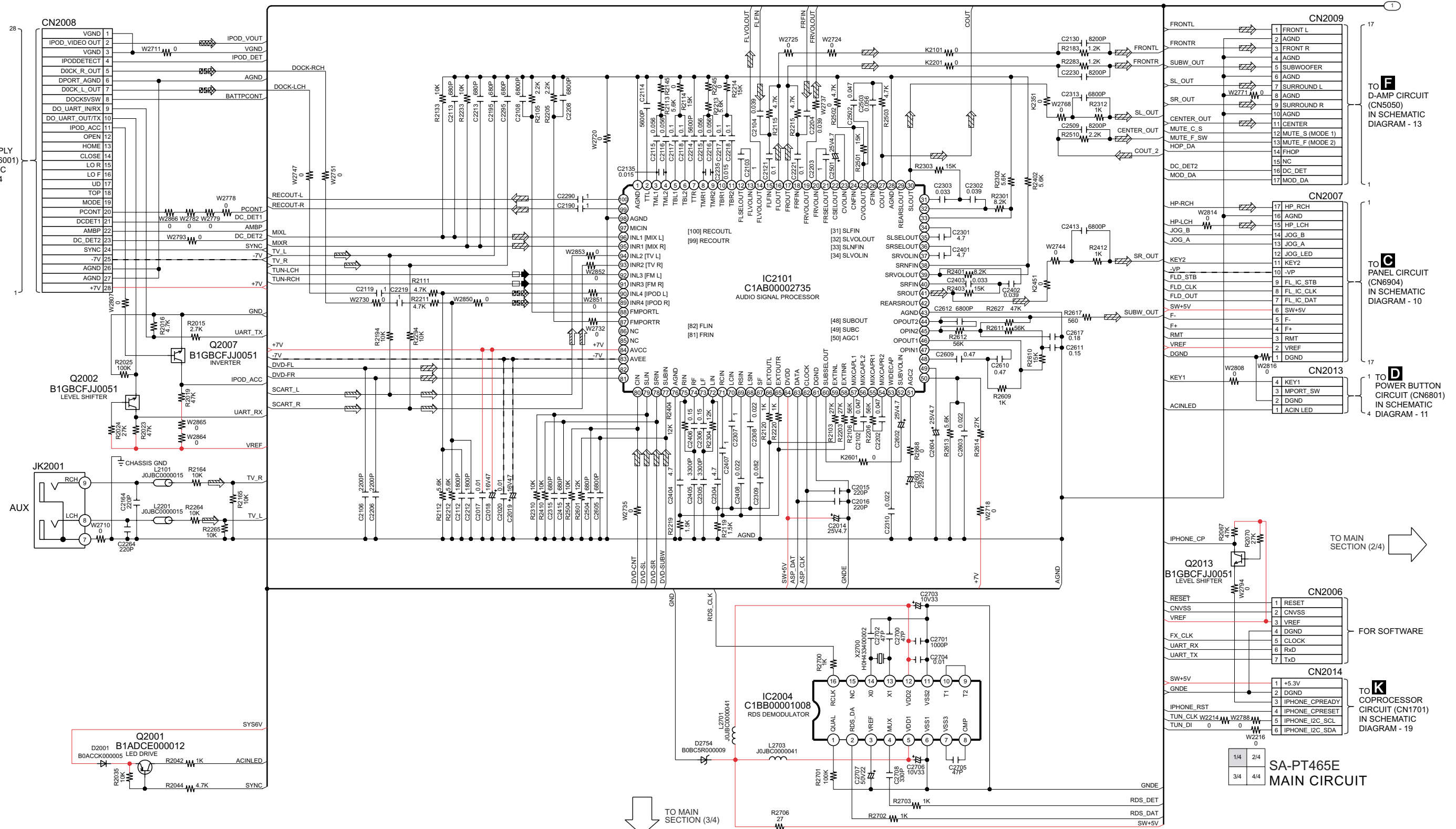


3.2. Main Circuit

SCHEMATIC DIAGRAM - 6

B MAIN CIRCUIT

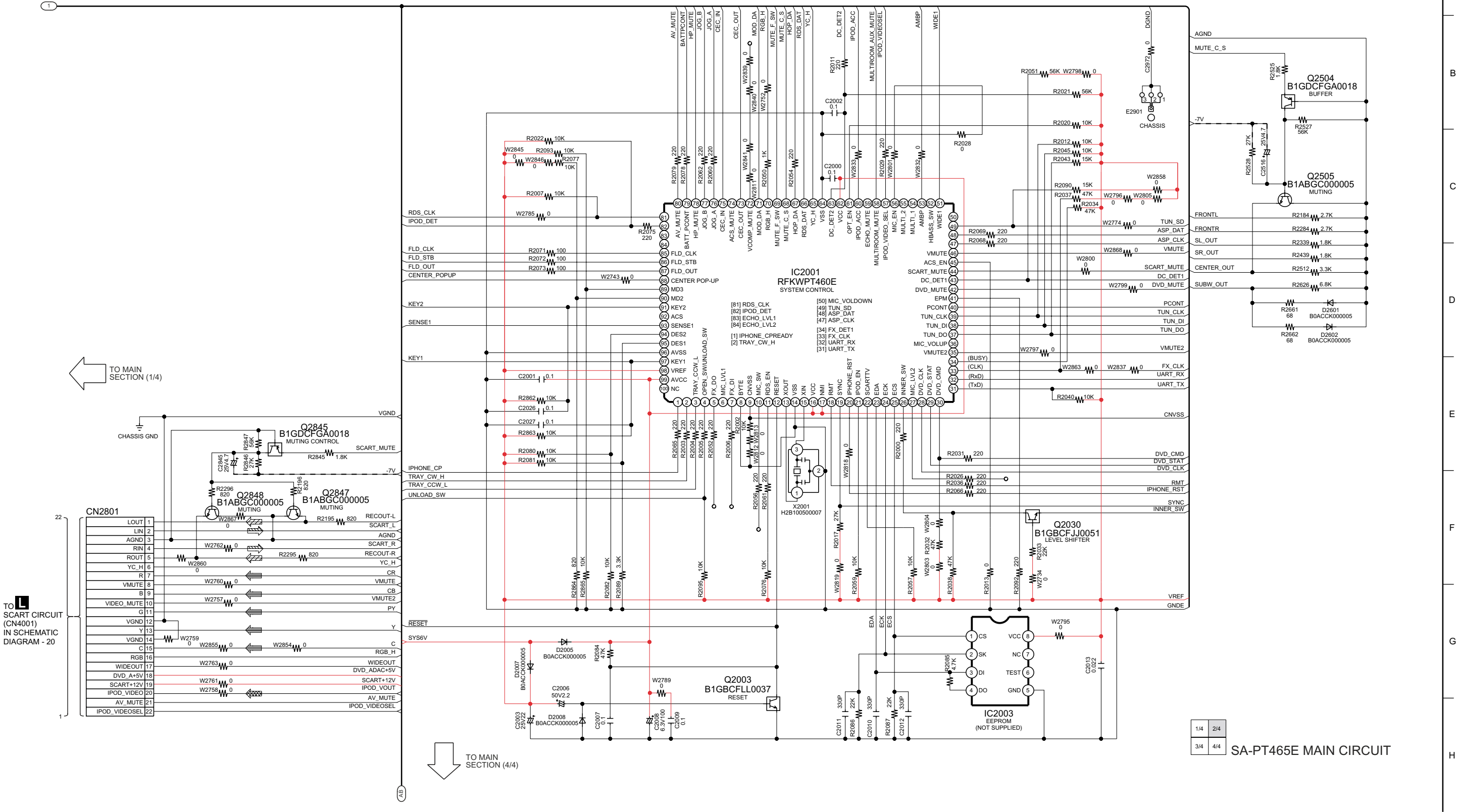
— : +B SIGNAL LINE --- : -B SIGNAL LINE  : MAIN SIGNAL LINE  : FM SIGNAL LINE  : DVD VIDEO SIGNAL LINE  : IPOD VIDEO SIGNAL LINE  : IPOD AUDIO SIGNAL LINE  : TV AUDIO SIGNAL LINE



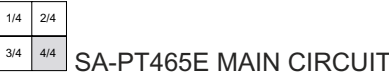
SCHEMATIC DIAGRAM - 7

B MAIN CIRCUIT

— : +B SIGNAL LINE - - - : -B SIGNAL LINE ≡ : MAIN SIGNAL LINE □ : FM SIGNAL LINE ≡ : DVD VIDEO SIGNAL LINE ≡ : IPOD VIDEO SIGNAL LINE ≡ : IPOD AUDIO SIGNAL LINE ≡ : TV AUDIO SIGNAL LINE





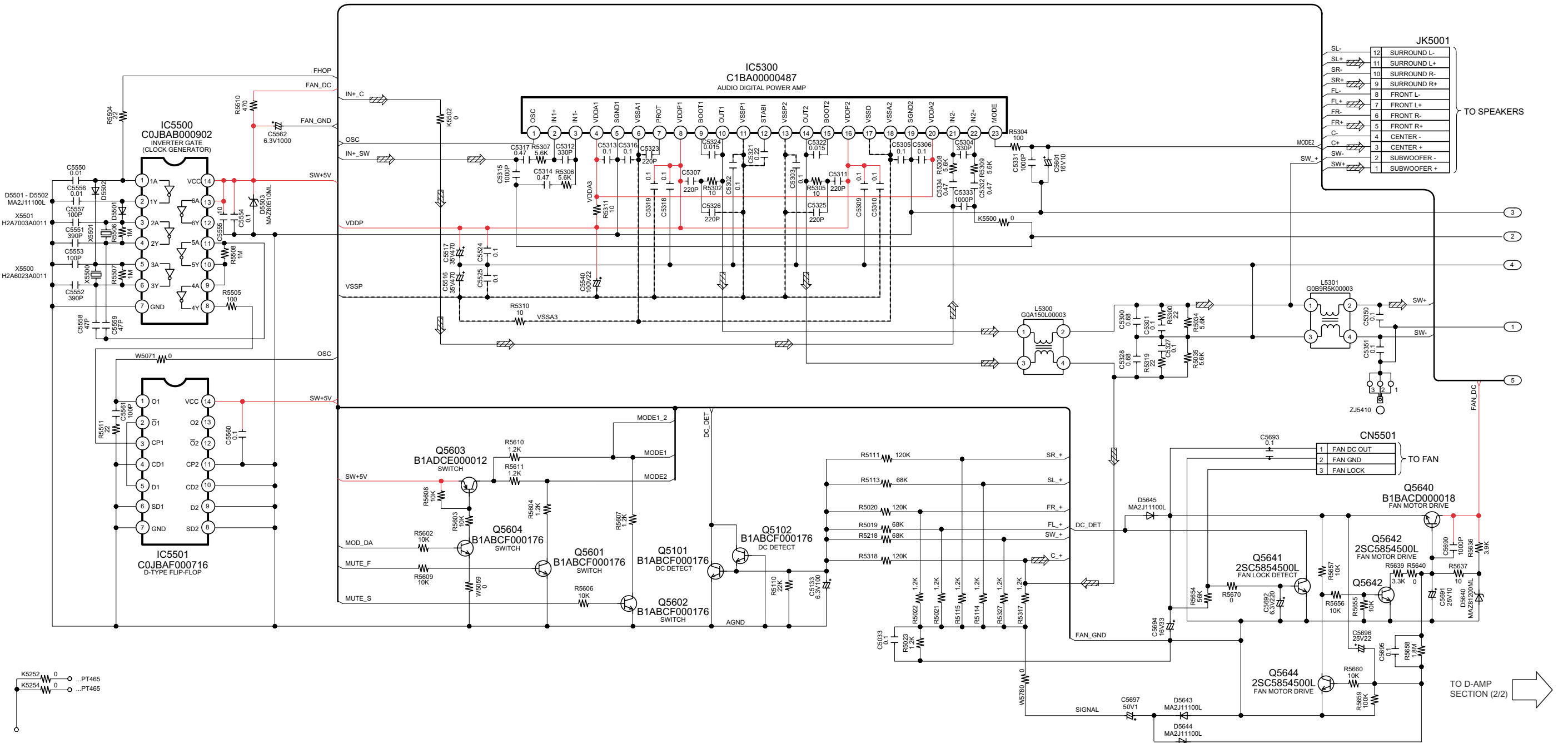


3.3. D-Amp Circuit

SCHEMATIC DIAGRAM - 12

D-AMP CIRCUIT

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



F D-AMP CIRCUIT

TO **H**
SMPS CIRCUIT
(H5801*)
IN SCHEMATIC
DIAGRAM - 16

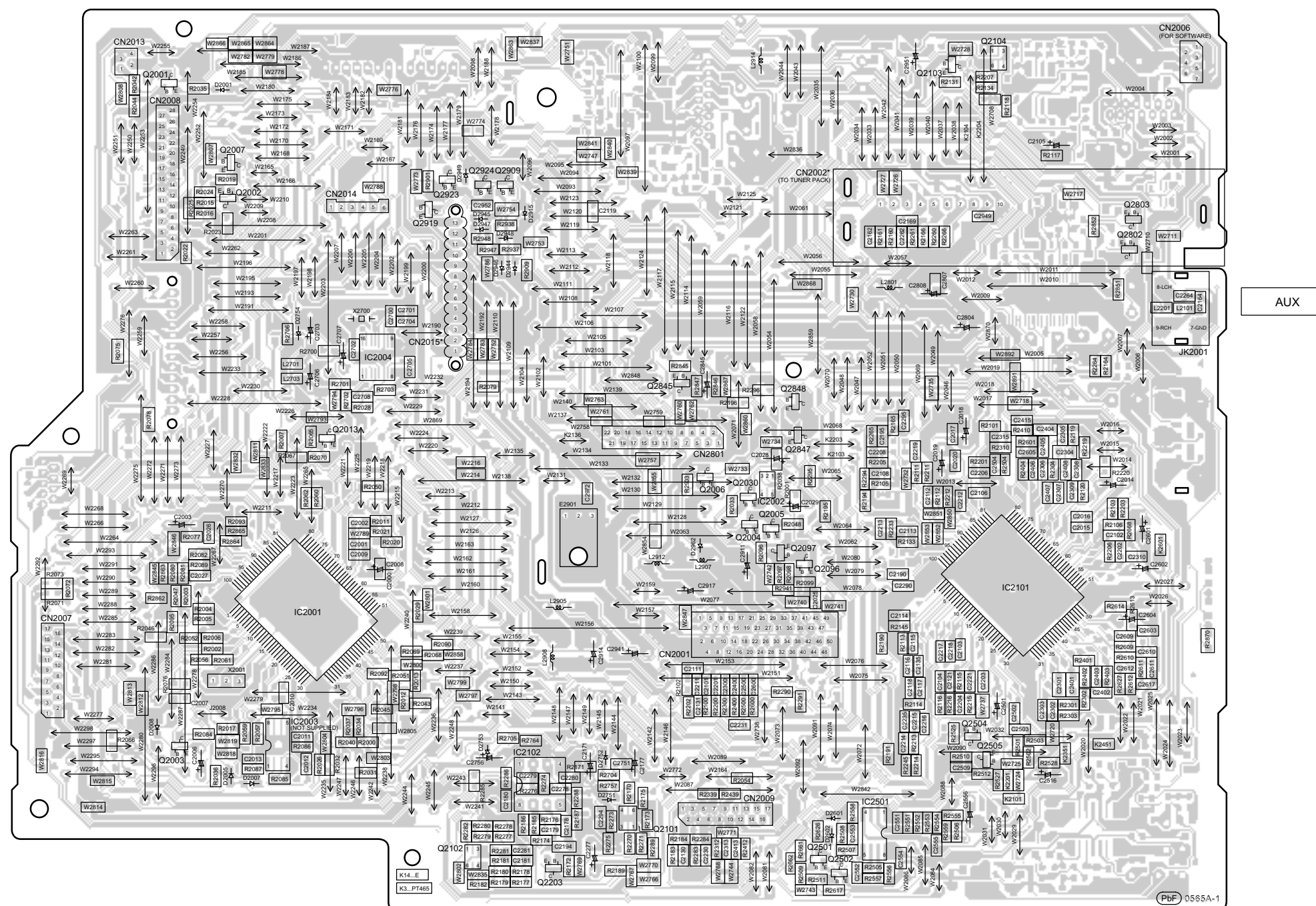
☐ TO D-AMP
SECTION (1/2)

TO **B**
MAIN CIRCUIT
(CN2009)
IN SCHEMATIC
DIAGRAM - 6



4 Printed Circuit Board

4.1. Main P.C.B.

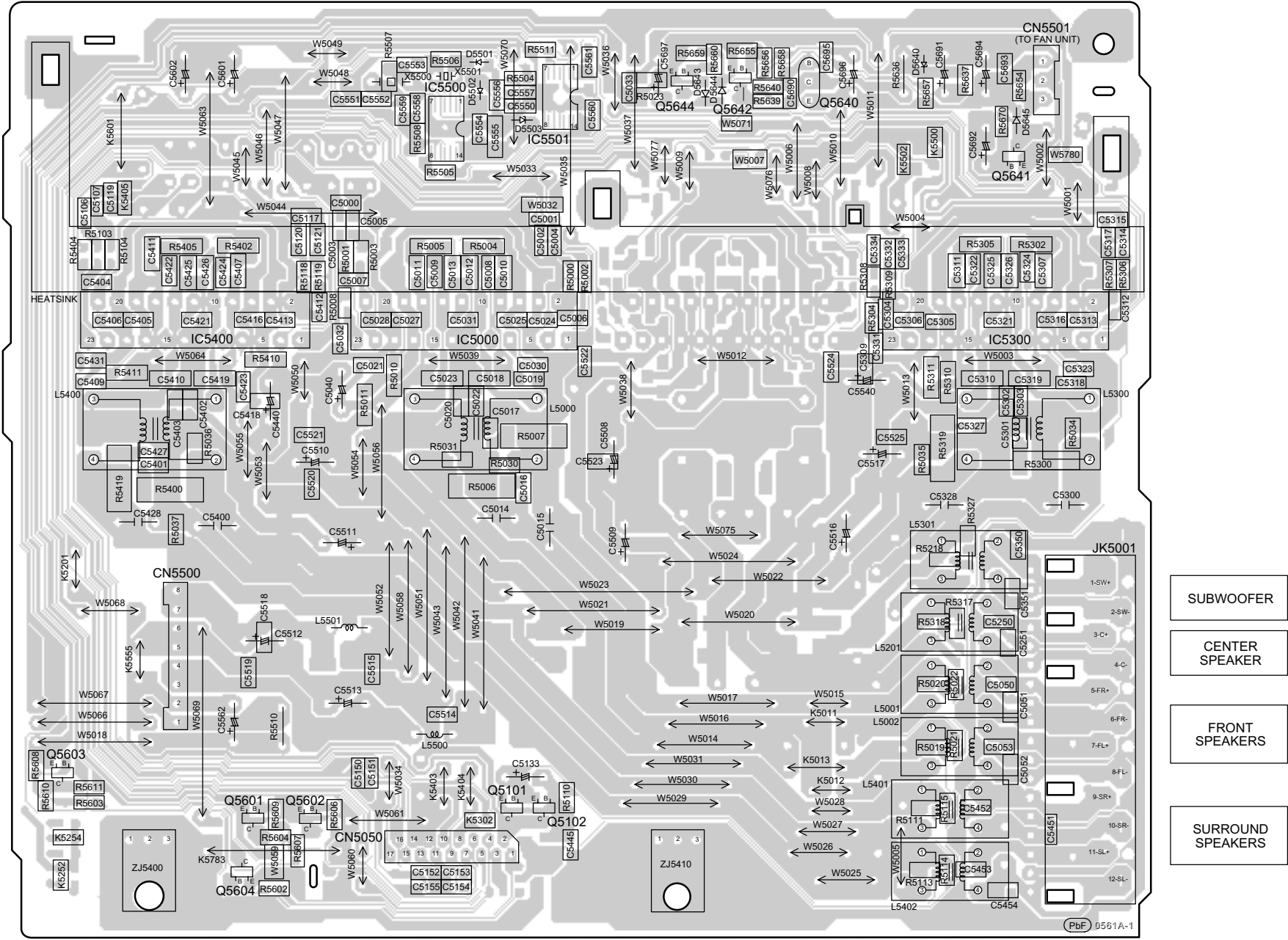
B MAIN P.C.B. (REPX0630C)

* FOR INDICATION ONLY

SA-PT465E
MAIN P.C.B.

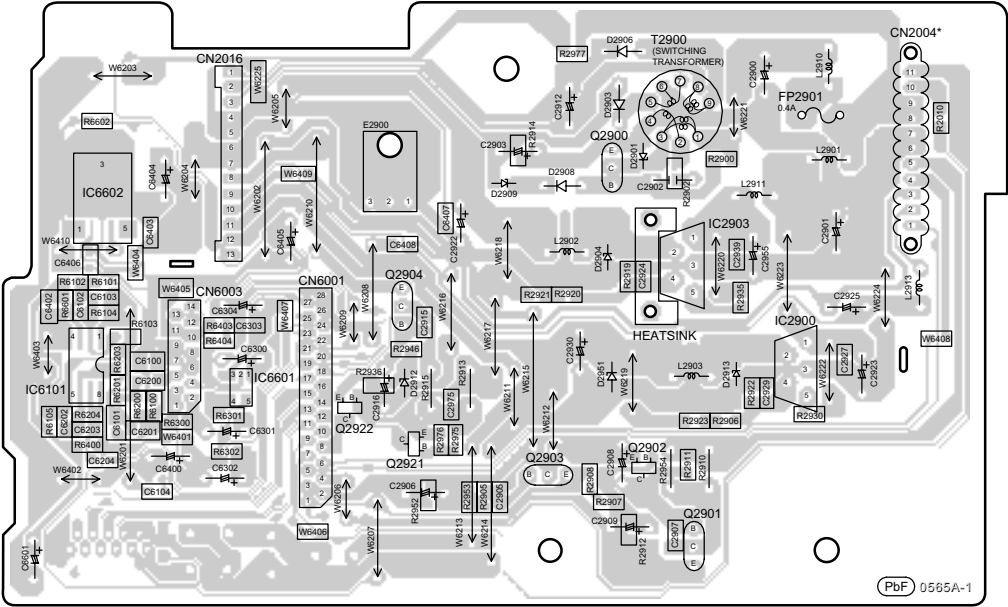
4.2. D-Amp P.C.B.

F D-AMP P.C.B. (REPX0621F)

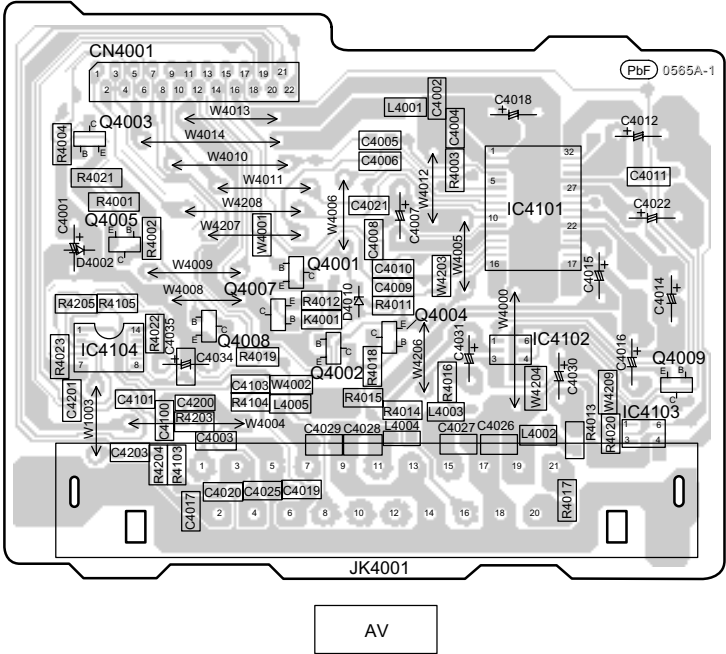


4.3. Power, Scart P.C.B

G POWER SUPPLY P.C.B. (REPX0630C)



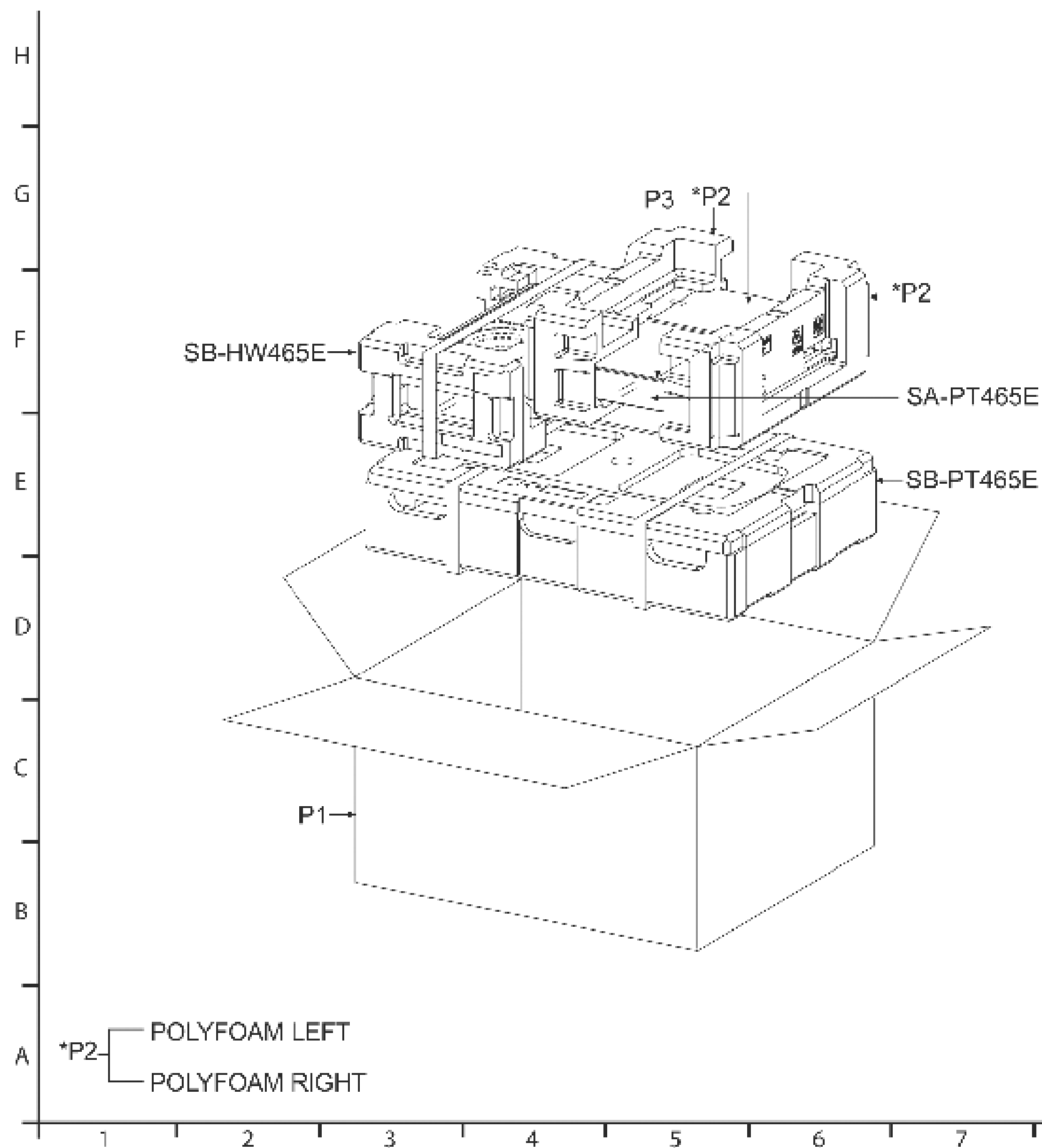
L SCART P.C.B. (REPX0630C)



* FOR INDICATION ONLY

5 Exploded Views

5.1. Packaging



ACCESSORIES BAG



A1 REMOTE CONTROL



A2 AC CORD



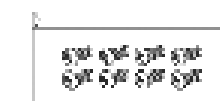
A3 OI BOOK



A4 FM INDOOR ANTENNA



A5 SPEAKER LABEL



A6 SCREW



A7 CTR SPK CORD A'SSY

6 Replacement Parts List

Notes:

- Important safety notice:
Components identified by  mark have special characteristics important for safety purpose.
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.
- Warning: This product uses a laser diode. Refer to caution statements.
ACHTUNG:
- Die Lasereinheit nicht zerlegen.
- Die Lasereinheit darf nur gegen eine vom Hersteller spezifizierte Einheit ausgetauscht werden.
- Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM), 1M=1,000K (OHM).
- The parenthesized indications in the Remarks columns specify the model names and areas. (Refer to the cover page)
- The marking (RTL) indicates the retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.
- Parts mentioned [M] are supplied from PAVCSG.
- Parts mentioned [SPG] are supplied from PAVC.
- Reference for O/I book languages are as follows:

Ar: Arabic	Du: Dutch	It: Italian	Sp: Spanish
Cf: Canadian French	En: English	Ko: Korean	Sw: Swedish
Cz: Czech	Fr: French	Po: Polish	Co: Traditional Chinese
Da: Danish	Ge: German	Ru: Russian	Cn: Simplified Chinese
Pe: Persian	Ur: Ukrainian	Pr: Portuguese	

6.1. Component Parts List

Note: With reference to section 25 of original service manual for SA-PT460EB/EG-K,EG-S.

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	
1	L6FAJCCH0007	DC FAN MOTOR	[M]
2	REEX0813	22P FFC WIRE (MN-SCART)	[M]
3	REEX0814	50P FFC WIRE (MN-DVD)	[M]
4	REEX0815	17P FFC WIRE (MN-DAMP)	[M]
5	REEX0817	7P FFC WIRE (OPU-DVD)	[M]
6	REEX0820	17P FFC WIRE (PAN-MN)	[M]
7	REEX0821	14P FFC WIRE (IPOD-PWRSUPP)	[M]
8	REEX0822	28P FFC WIRE (PWRSUPP-MN)	[M]
9	REEX0823	4P FFC WIRE (PWRBUT-MN)	[M]
10	RGUX0744-K	SUBWOOFER BUTTON	[M] K
10	RGUX0744-S	SUBWOOFER BUTTON	[M] S
11	REXX0636-J	5P USB WIRE (USB-DVD)	[M]
12	REXX0640-J	BLACK WIRE (AC-SMPS)	[M] △
13	REXX0641-J	RED WIRE (AC-SMPS)	[M] △
14	REXX0651	8P FLAT WIRE (SMPS-DAMP)	[M]
15	RGB0164-S	PANASONIC BADGE	[M]
16	RGKX0443-K	DVD LID	[M]
17	RGKX0489-S	FRONT ORNAMENT	[M]
18	VHD1224-1	SCREW	[M]
19	RYPX0258-K1	CRADLE UNIT	[M] K
19	RYPX0258-S1	CRADLE UNIT	[M] S
20	RGLX0160-Q	LIGHTING CHIP	[M]
21	RGPX0334-K3	FRONT PANEL	[M] K
21	RGPX0334-S3	FRONT PANEL	[M] S
22	RGPX0335B-K2	CRADLE CHASSIS	[M] K
22	RGPX0335B-S2	CRADLE CHASSIS	[M] S
23	RGRX0067A-C2	REAR PANEL	[M] △
24	RGUX0741-K1	OPEN CLOSE BUTTON	[M] K
24	RGUX0741-S1	OPEN CLOSE BUTTON	[M] S
25	RGUX0742-K	POWER BUTTON	[M] K
25	RGUX0742-S	POWER BUTTON	[M] S
26	RXXX0085-1J	HEATSINK UNIT A	[M]
27	RGUX0745-K	OPERATION BUTTON	[M] K
27	RGUX0745-S	OPERATION BUTTON	[M] S
28	RGWX0104-K	VOLUME KNOB	[M] K
28	RGWX0104-S	VOLUME KNOB	[M] S
29	RHD26046	SCREW	[M]
30	RHD30007-1SJ	SCREW	[M] K
30	RHD30007-K2J	SCREW	[M] S
31	RHD30090-1	SCREW	[M]
32	RHD30111-3	SCREW	[M]
33	RHD30119-S	SCREW	[M]
34	ENG07824QRF	TUNER PACK	[M]
35	RHDX03001	SCREW	[M]
36	RKA0059-K	LEG FELT	[M]
37	RKWX0279-Q	FL WINDOW	[M]
38	RMAX0118-1	PCB BRACKET	[M]
39	RMAX0129	PANEL ANGLE	[M]
40	RMAX0130	DVD LID HOLDER	[M]
41	RMAX0131	MAIN PCB BRACKET B	[M]
42	RMAX0132	MECHA CHASSIS	[M]
43	RMBX0075	DOOR SPRING	[M]
44	RMC0465	TR SPRING	[M]
45	RM CX0042	EARTH SPRING	[M]
46	RM CX0055	SPRING PLATE	[M]
47	RM CX0057	EARTH PART (FOR USB)	[M]
48	RM GX0050	CRADLE RUBBER	[M]
49	RM NX0207	SMPS PCB INSULATOR	[M]
50	RXQX0077	FL SHIELD PLATE UNIT	[M]
51	RM NX0254	USB BRACKET	[M]
52	RM NX0260	FL HOLDER	[M]
53	RM NX0282A	AC-IN PC SHEET A	[M]
54	RM NX0282B	AC-IN PC SHEET B	[M]
55	RXXX0104	HEATSINK UNIT B	[M]
56	RXQX0041	CUSHION ASSY	[M]
57	RM NX0286	HDMI PC SHEET	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
58	RMQX0233-K	FAN COVER	[M]
59	RM R0502A-W	PCB SUPPORT	[M]
60	RXXX0105	HEATSINK UNIT C	[M]
61	RMVX0117-K	CONNECTOR COVER	[M] K
61	RMVX0117-S	CONNECTOR COVER	[M] S
62	RMX0302	DAMPER RUBBER	[M]
63	RM YX0191	HEATSINK EXTRUSSION	[M]
64	RM ZX0038	IC INSULATOR	[M]
65	RSCX0188	AC-IN SHIELD PLATE	[M]
66	RKMX0141-K	TOP CABINET	[M] △
66	RKMX0141-S	TOP CABINET	[M] △
67	RSCX0191	HDMI SHIELD PLATE	[M]
68	RMKX0144	BOTTOM CHASSIS	[M]
69	XSN3+4FJ	SCREW	[M]
70	XTB3+10JFJ	SCREW	[M]
71	XTB3+8JFJ	SCREW	[M]
72	XTW3+8TFJ	SCREW	[M]
73	REXX0653-J	13P WIRE (MAINN-PWRSUPP)	[M]
74	REXX0639-J	11P WIRE (SMPS-PWRSUPP)	[M]
		PRINTED CIRCUIT BOARDS	
	REPX0621F	D-AMP P.C.B.	[M] (RTL)
	REPX0630C	MAIN/SCART/POWER P.C.B.	[M] (RTL)
		INTEGRATED CIRCUITS	
IC2001	RFK WPT460E	IC SYSTEM CONTROL	[M]
IC8651	RFK WMH32B321	IC 32MB FLASH ROM	[SPG]
		TRANSISTORS	
Q2504	B1GDCFGA0018	TRANSISTOR	[M]
Q2505	B1ABGC000005	TRANSISTOR	[M]
		COILS AND INDUCTORS	
L5002	G0B9R5K00004	LINE FILTER	[M]
L5201	G0B9R5K00004	LINE FILTER	[M]
L5402	G0B9R5K00004	LINE FILTER	[M]
		PACKING MATERIALS	
P1	RP GX1869-1	PACKING CASE	[M] K
P1	RP GX1950-1	PACKING CASE	[M] S
P2	RP NX0529	POLYFOAM	[M]
		ACCESSORIES	
A3	RQTX0087-1R	O/I BOOK (En)	[M]
A5	RQCA0968	SPEAKER LABEL	[M]
A6	XTN5+10FFJK	SCREW	[M]
A7	REEX0858	CTR SPK CORD A'SSY	[M]
		RESISTORS	
R2006	ERJ3GEYJ221V	220 1/10W	[M]
R2026	ERJ3GEYJ221V	220 1/10W	[M]
R2052	ERJ3GEYJ221V	220 1/10W	[M]
R2056	ERJ3GEYJ221V	220 1/10W	[M]
R2082	ERJ3GEYJ103V	10K 1/10W	[M]
R2115	ERJ3GEYJ472V	4.7K 1/10W	[M]
R2174	ERJ3GEYJ682V	6.8K 1/10W	[M]
R2175	ERJ3GEYJ122V	1.2K 1/10W	[M]
R2176	ERJ3GEYJ333V	33K 1/10W	[M]
R2184	ERJ3GEYJ272V	2.7K 1/10W	[M]
R2186	ERJ3GEYJ152V	1.5K 1/10W	[M]
R2187	ERJ3GEYJ122V	1.2K 1/10W	[M]
R2215	ERJ3GEYJ472V	4.7K 1/10W	[M]
R2274	ERJ3GEYJ682V	6.8K 1/10W	[M]
R2275	ERJ3GEYJ122V	1.2K 1/10W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R2276	ERJ3GEYJ333V	33K 1/10W	[M]
R2284	ERJ3GEYJ272V	2.7K 1/10W	[M]
R2286	ERJ3GEYJ152V	1.5K 1/10W	[M]
R2288	ERJ3GEYJ122V	1.2K 1/10W	[M]
R2302	ERJ3GEYJ562V	5.6K 1/10W	[M]
R2303	ERJ3GEYJ153V	15K 1/10W	[M]
R2312	ERJ3GEYJ102V	1K 1/10W	[M]
R2339	ERJ3GEYJ182V	1.8K 1/10W	[M]
R2402	ERJ3GEYJ562V	5.6K 1/10W	[M]
R2403	ERJ3GEYJ153V	15K 1/10W	[M]
R2412	ERJ3GEYJ102V	1K 1/10W	[M]
R2439	ERJ3GEYJ182V	1.8K 1/10W	[M]
R2502	ERJ3GEYJ472V	4.7K 1/10W	[M]
R2510	ERJ3GEYJ222V	2.2K 1/10W	[M]
R2512	ERJ3GEYJ332V	3.3K 1/10W	[M]
R2525	ERJ3GEYJ182V	1.8K 1/10W	[M]
R2527	ERJ3GEYJ563V	56K 1/10W	[M]
R2528	ERJ3GEYJ273V	27K 1/10W	[M]
R2611	ERJ3GEYJ563V	56K 1/10W	[M]
R2626	ERJ3GEYJ682V	6.8K 1/10W	[M]
R2627	ERJ3GEYJ473V	47K 1/10W	[M]
R2865	ERJ3GEYJ103V	10K 1/10W	[M]
K3	ERJ3GEYOR00V	0 1/10W	[M]
K14	ERJ3GEYOR00V	0 1/10W	[M]
K5252	ERJ3GEYOR00V	0 1/10W	[M]
K5405	ERJ8GEYOR00V	0 1/4W	[M]
K5502	ERJ3GEYOR00V	0 1/10W	[M]
		CAPACITORS	
C2104	ECJ1VB1C393K	0.039uF 16V	[M]
C2113	ECJ1VB1H681K	680pF 50V	[M]
C2121	ECJ1VB1H104K	0.1uF 50V	[M]
C2130	ECJ1VB1H822K	8200pF 50V	[M]
C2131	ECJ1VB1H153K	0.015uF 50V	[M]
C2179	ECJ1VC1H820J	82pF 50V	[M]
C2204	ECJ1VB1C393K	0.039uF 16V	[M]
C2213	ECJ1VB1H681K	680pF 50V	[M]
C2221	ECJ1VB1H104K	0.1uF 50V	[M]
C2230	ECJ1VB1H822K	8200pF 50V	[M]
C2231	ECJ1VB1H153K	0.015uF 50V	[M]
C2279	ECJ1VC1H820J	82pF 50V	[M]
C2303	ECJ1VB1H333K	0.033pF 50V	[M]
C2313	ECJ1VB1H682K	6800pF 50V	[M]
C2403	ECJ1VB1H333K	0.033pF 50V	[M]
C2413	ECJ1VB1H682K	6800pF 50V	[M]
C2502	ECJ1VB1H473K	0.047uF 50V	[M]
C2503	ECJ1VB1C563K	0.056uF 16V	[M]
C2504	ECJ1VB1H681K	680pF 50V	[M]
C2509	ECJ1VB1H822K	8200pF 50V	[M]
C2516	ECEA1EKS4R7B	4.7uF 25V	[M]
C2609	ECJ1VB1A474K	0.470uF 10V	[M]
C2610	ECJ1VB1A474K	0.470uF 10V	[M]
C2611	ECJ1VB1A154K	0.150uF 10V	[M]
C2612	ECJ1VB1H682K	6800pF 50V	[M]
C2617	ECJ1VB1A184K	0.180uF 10V	[M]
C2949	ECJ1VB1H104K	0.1uF 50V	[M]
C5016	ECJ1VB1H104K	0.1uF 50V	[M]
C5017	ECJ1VB1H104K	0.1uF 50V	[M]
C5020	ECJ1VB1H104K	0.1uF 50V	[M]
C5021	ECJ1VB1H104K	0.1uF 50V	[M]