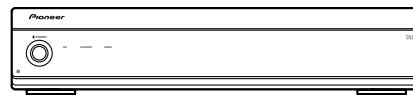


# Service Manual



PDP-R05E

ORDER NO.  
**ARP3225**

MEDIA RECEIVER

**PDP-R05E**  
**PDP-R05XE**  
**PDP-R05FE**

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Model	Type	Power Requirement	Remarks
PDP-R05E	WYVI	AC220-240V	
PDP-R05E	WYVIXK	AC220-240V	
PDP-R05XE	WYVIXK	AC220-240V	
PDP-R05FE	WYVI	AC220-240V	
PDP-R05FE	WYVIXK	AC220-240V	

Please connect it to the PLASMA DISPLAY PDP-505PE or PDP-435PE for adjustment and operation inspection.



For details, refer to "Important Check Points for Good Servicing".

## Confirm it

Serial No.

**WYVI** :  SS ##### △△  
 **WYVIXK** :  UK ##### △△

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# SAFETY INFORMATION



This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.

- **Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.**

## WARNING

- B This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.

Health & Safety Code Section 25249.6 – Proposition 65

## NOTICE

### (FOR CANADIAN MODEL ONLY)

- Fuse symbols (fast operating fuse) and/or (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

## REMARQUE

### (POUR MODÈLE CANADIEN SEULEMENT)

- C Les symboles de fusible (fusible de type rapide) et/ou (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

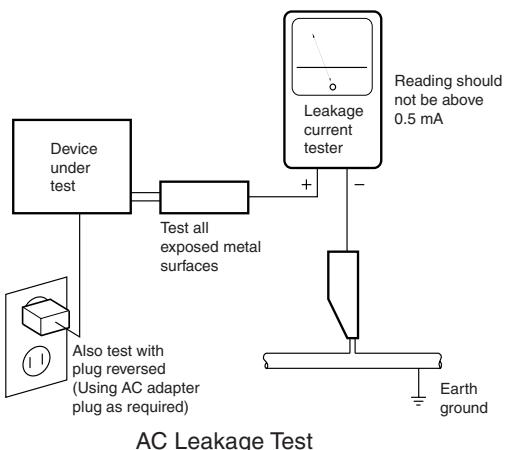
## (FOR USA MODEL ONLY)

### 1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

#### LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60 Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5 mA.



**ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.**

### 2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a  $\Delta$  on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

## **[Important Check Points for Good Servicing]**

In this manual, procedures that must be performed during repairs are marked with the below symbol.  
Please be sure to confirm and follow these procedures.

### 1. Product safety



Please conform to product regulations (such as safety and radiation regulations), and maintain a safe servicing environment by following the safety instructions described in this manual.

- ① Use specified parts for repair.
- Use genuine parts. Be sure to use important parts for safety.
- ② Do not perform modifications without proper instructions.

Please follow the specified safety methods when modification(addition/change of parts) is required due to interferences such as radio/TV interference and foreign noise.

- ③ Make sure the soldering of repaired locations is properly performed.

When you solder while repairing, please be sure that there are no cold solder and other debris.  
Soldering should be finished with the proper quantity. (Refer to the example)

- ④ Make sure the screws are tightly fastened.

Please be sure that all screws are fastened, and that there are no loose screws.

- ⑤ Make sure each connectors are correctly inserted.

Please be sure that all connectors are inserted, and that there are no imperfect insertion.

- ⑥ Make sure the wiring cables are set to their original state.

Please replace the wiring and cables to the original state after repairs.  
In addition, be sure that there are no pinched wires, etc.

- ⑦ Make sure screws and soldering scraps do not remain inside the product.

Please check that neither solder debris nor screws remain inside the product.

- ⑧ There should be no semi-broken wires, scratches, melting, etc. on the coating of the power cord.

Damaged power cords may lead to fire accidents, so please be sure that there are no damages.  
If you find a damaged power cord, please exchange it with a suitable one.

- ⑨ There should be no spark traces or similar marks on the power plug.

When spark traces or similar marks are found on the power supply plug, please check the connection and advise on secure connections and suitable usage. Please exchange the power cord if necessary.

- ⑩ Safe environment should be secured during servicing.

When you perform repairs, please pay attention to static electricity, furniture, household articles, etc. in order to prevent injuries.  
Please pay attention to your surroundings and repair safely.

### 2. Adjustments



To keep the original performance of the products, optimum adjustments and confirmation of characteristics within specification.  
Adjustments should be performed in accordance with the procedures/instructions described in this manual.

### 3. Lubricants, Glues, and Replacement parts



Use grease and adhesives that are equal to the specified substance.  
Make sure the proper amount is applied.

### 4. Cleaning



For parts that require cleaning, such as optical pickups, tape deck heads, lenses and mirrors used in projection monitors, proper cleaning should be performed to restore their performances.

### 5. Shipping mode and Shipping screws



To protect products from damages or failures during transit, the shipping mode should be set or the shipping screws should be installed before shipment. Please be sure to follow this method especially if it is specified in this manual.

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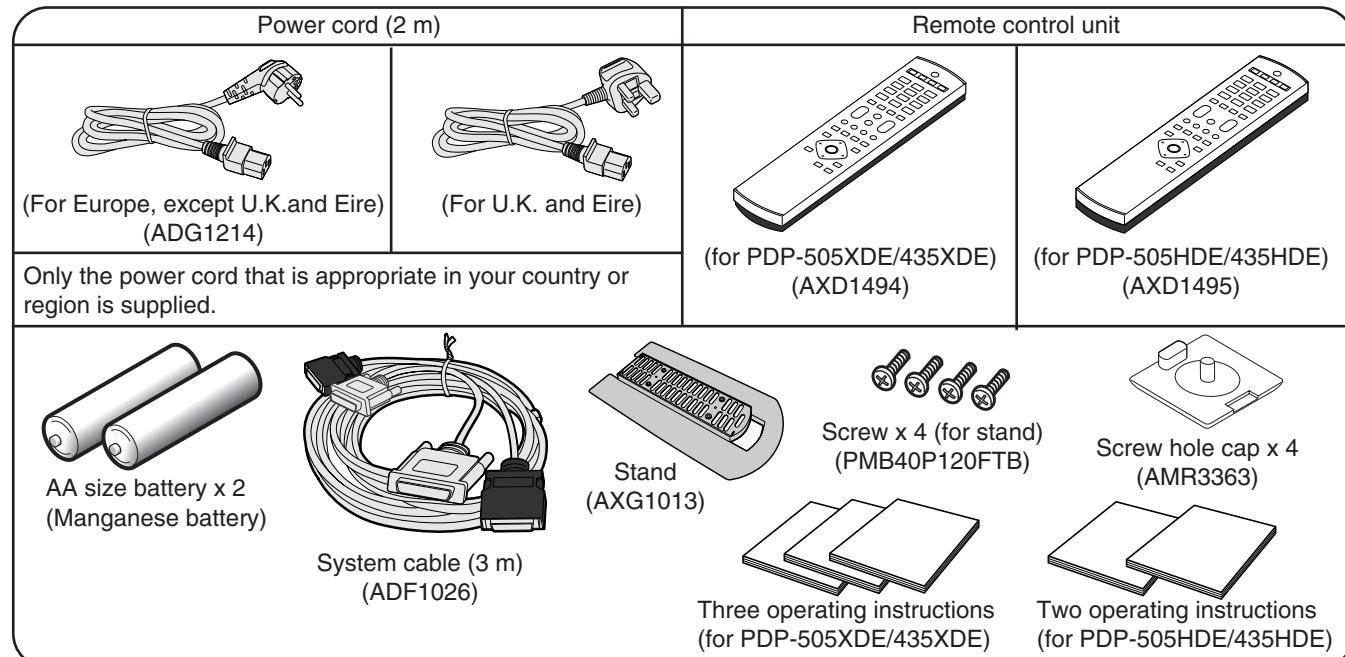
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# 1. SPECIFICATIONS

Item			Media Receiver, Model:PDP-R05XE	Media Receiver, Model:PDP-R05E
A	Colour System	Analogue	PAL/SECAM/NTSC 3.58/NTSC 4.43/PAL 60	
		Digital	PAL/SECAM	Not Applicable
	TV Function (Analogue)	Receiving System	B/G,D/K,I,L/L'	
	Tuner	VHF/UHF	E2 –E69ch,F2 –F10ch,I21 –I69ch,IR A –IR Jch	
		CATV	Hyper-band,S1 –S41ch	
		Auto Channel Preset	99 ch,Auto Preset,Auto Label,Auto Sort	
		STEREO	NICAM/A2	
	TV Function (Digital)	Receiving System	DVB-T (2K/8K COFDM)	
	Tuner	VHF/UHF	VHF Band III (170 to 230 MHz)and UHF Band IV,V (470 to 862 MHz)	Not Applicable
B		Auto Channel Preset	999 ch,Auto Preset,Auto Label,Auto Sort	
		STEREO	MPEG layer I/II,Dolby Digital	
	Terminals	Rear	INPUT 1 SCART (AV in,RGB in,TV out) INPUT 2 SCART (AV in/out,S-VIDEO in,AV link *1)Component Video INPUT 3 SCART (AV in/out,S-VIDEO in,RGB in,AV link *1),HDMI in Antenna 75 Ω Din Type for VHF/UHF in (Analogue) 75 Ω Din Type for VHF/UHF in (Digital) 75 Ω Din Type for VHF/UHF out (Digital)	Not Applicable Not Applicable
C		Front	INPUT 4 S-VIDEO,AV in PC Analogue RGB in,Audio in PC CARD PCMCIA Type II	
	MONITOR OUTPUT Terminal(Rear)		S-VIDEO out,AV out	
	SUB WOOFER OUTPUT Terminal (Rear)		Variable	
	PHONES OUTPUT Terminal (Front)		16 –32 Ω recommended	
	DIGITAL OUT Terminal		Digital audio output (Optical)	Not Applicable
	COMMON INTERFACE (Rear)		CA Module	Not Applicable
	Power Requirement		220 –240 V AC ,50/60 Hz,41 W (1.2 W Standby:Aerial Power Off)	220 –240 V AC ,50/60 Hz,35 W (0.4 W Standby)
D	Dimensions		420 (W) x 90 (H) x 295 (D)mm	
	Weight		5.6 kg	4.9 kg

\* 1 Switchable

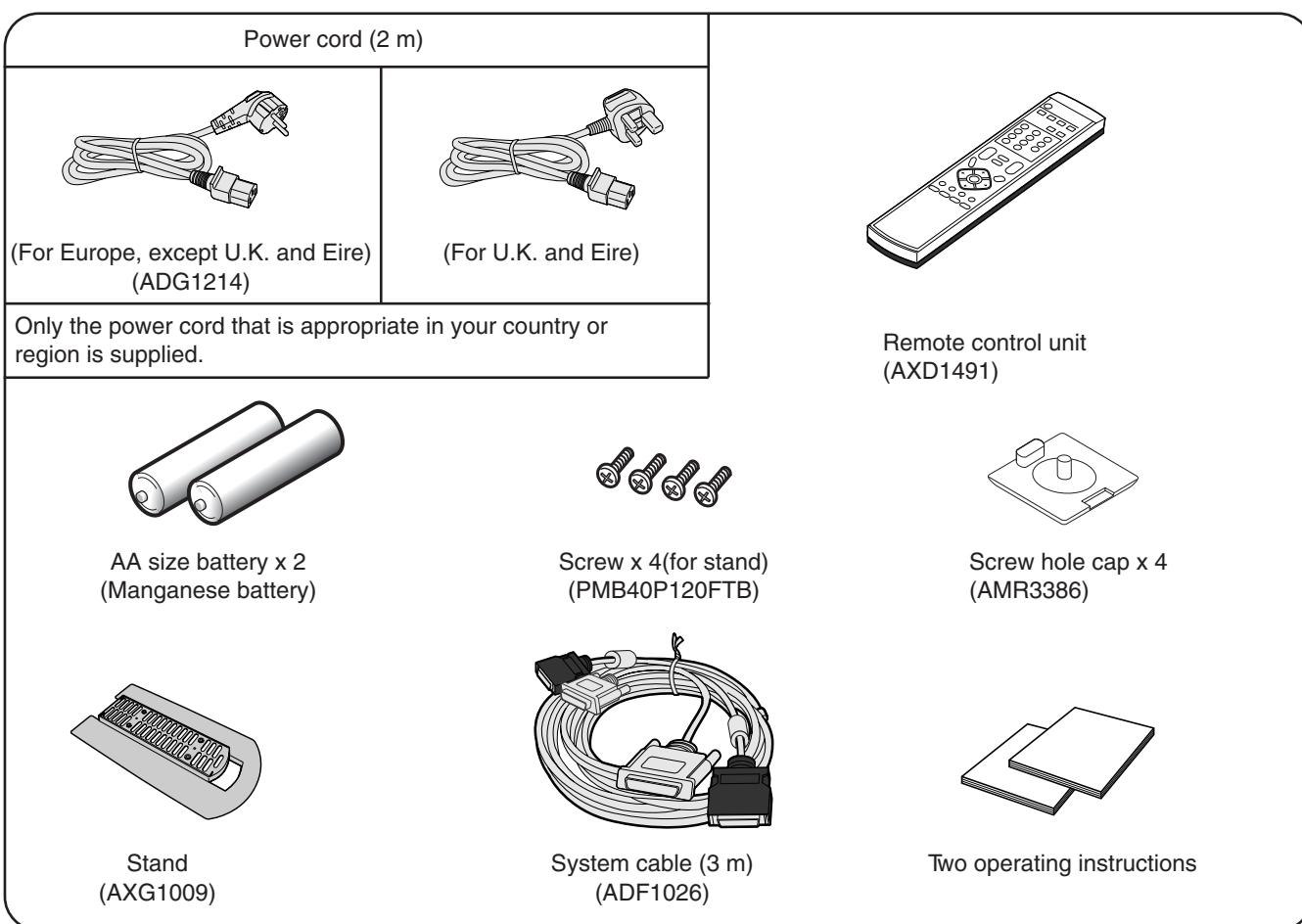
• Design and specifications are subject to change without notice.



<b>Item</b>		<b>Media Receiver, Model:PDP-R05FE</b>	
Colour System		PAL/SECAM/NTSC 3.58/NTSC 4.43/PAL 60	
TV Function	Receiving System	B/G,D/K,I,L/L'	
	Tuner	VHF/UHF	E2 –E69ch,F2 –F10ch,I21 –I69ch,IR A –IR Jch
		CATV	Hyper-band,S1 –S41ch
		Auto Channel Preset	99 ch,Auto Preset,Auto Label,Auto Sort
		STEREO	NICAM/A2
Terminals	Rear	INPUT 1	SCART (AV in,RGB in,TV out)
		INPUT 2	SCART (AV in/out,S-VIDEO in,AV link *1)Component Video
		INPUT 3	SCART (AV in/out,S-VIDEO in,RGB in,AV link *1),HDMI in
		Antenna	75 Ω Din Type for VHF/UHF in
	Front	INPUT 4	S-VIDEO,AV in
MONITOR OUTPUT Terminal (Rear)		S-VIDEO out,AV out	
Power Requirement		220 –240 V AC ,50/60 Hz,27 W (0.4 W Standby)	
Dimensions		420 (W) x 90 (H) x 295 (D)mm	
Weight		4.8 kg	

\*1 Switchable

• Design and specifications are subject to change without notice.

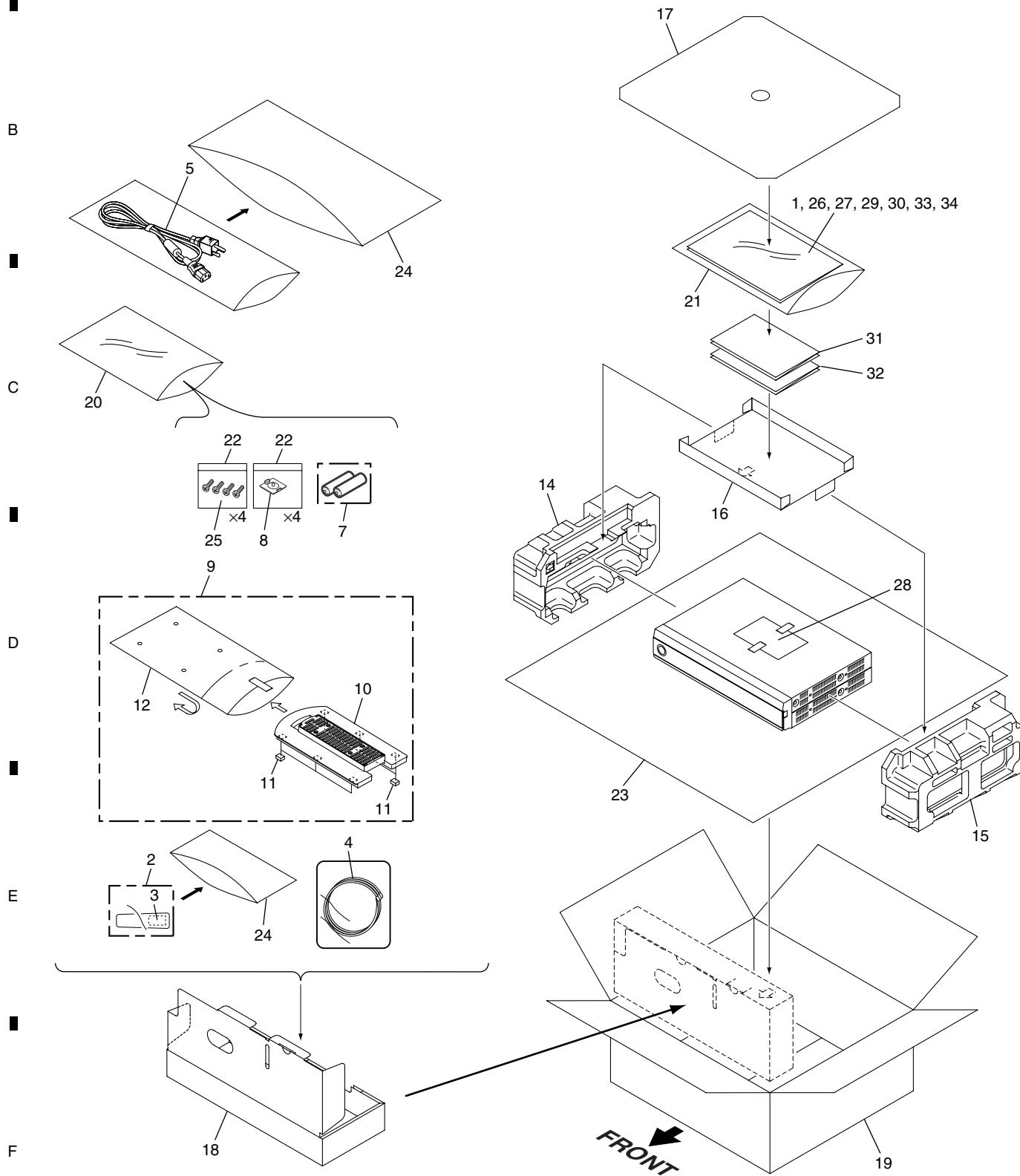


## **2. EXPLODED VIEWS AND PARTS LIST**

**NOTES:**

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Screws adjacent to  mark on product are used for disassembly.
- For the applying amount of lubricants or glue, follow the instructions in this manual.  
(In the case of no amount instructions, apply as you think it appropriate.)

## 2.1 PACKING SECTION



## PACKING SECTION PARTS LIST

<b>Mark No.</b>	<b>Description</b>	<b>Part No.</b>	<b>Mark No.</b>	<b>Description</b>	<b>Part No.</b>
1	Operating Instructions	See Contrast table (2)	19	Carton	See Contrast table (2)
2	Remote Control Unit	See Contrast table (2)	NSP 20	Literature Bag	AHG1303
3	Battery Cover	See Contrast table (2)			A
4	System Cable (3m)	ADF1026	21	Vinyl Bag	AHG1340
△ 5	Power Cord	ADG1214	22	Vinyl Bag	AHG1337
6	•••••		23	Laminated Sheet	AHG1350
NSP 7	Dry Cell Battery (R6/AA)	VEM1031	24	Air Capsule Bag	AHG1351
8	Screw Hole Cap	See Contrast table (2)	25	Screw	PMB40P120FTB
9	Stand Assy	See Contrast table (2)	26	Operating Instructions	See Contrast table (2)
NSP 10	Stand	See Contrast table (2)	27	Caution Card	ARM1223
NSP 11	Stand Cushion	AEB1390	28	Caution Card	ARM1234
12	Laminated Sheet Bag	AHG1334	29	Operating Instructions	See Contrast table (2)
13	•••••		30	Errata	See Contrast table (2)
14	Pad L	See Contrast table (2)	31	User Card A	See Contrast table (2)
15	Pad R	See Contrast table (2)	32	User Card B	See Contrast table (2)
16	IM Pad	See Contrast table (2)	33	Caution Manual	See Contrast table (2)
17	Top Pad	See Contrast table (2)	NSP 34	Block Diagram	See Contrast table (2)
18	Accessory Box	See Contrast table (2)			

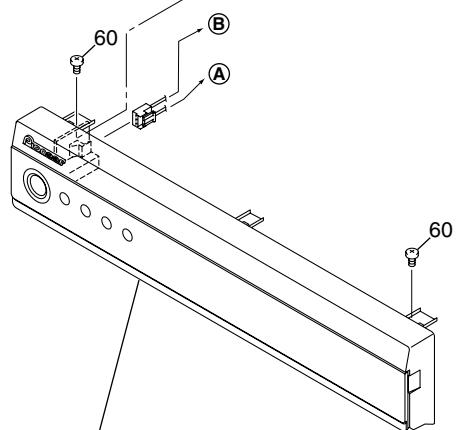
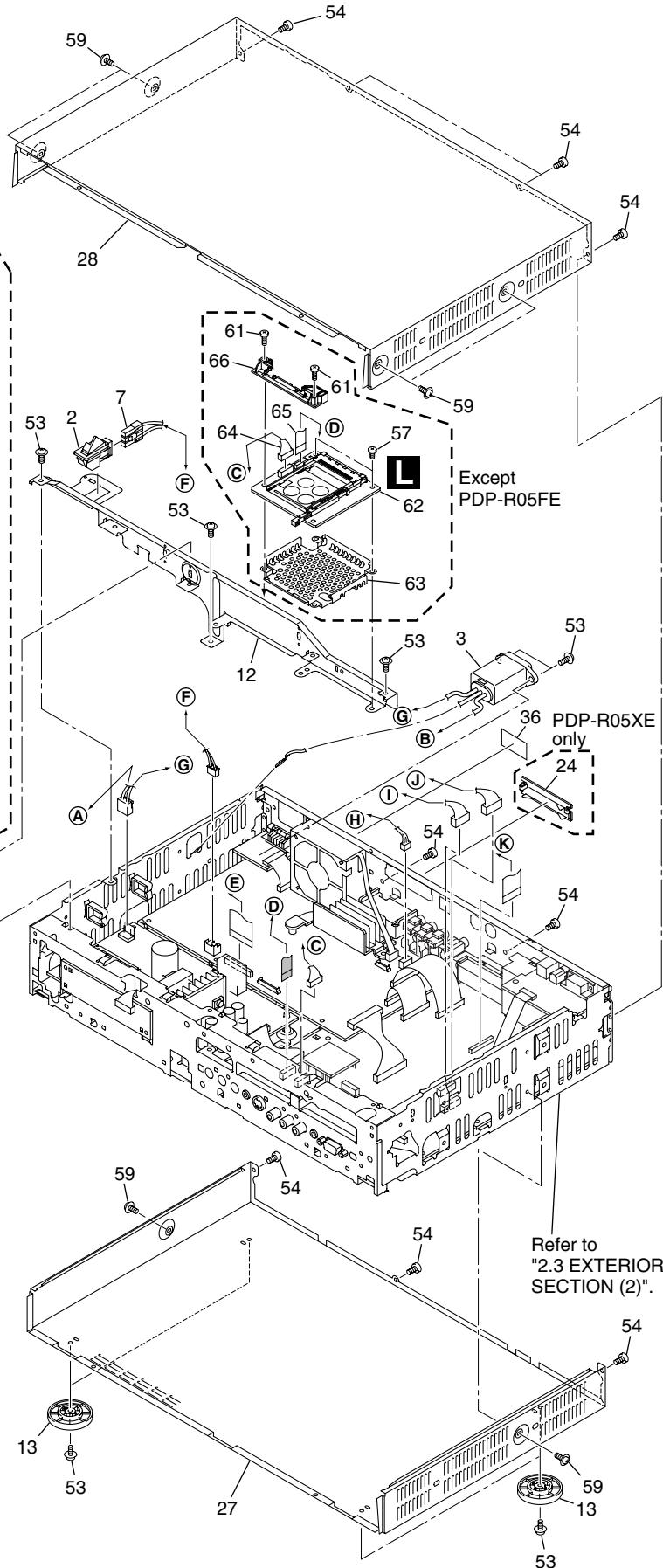
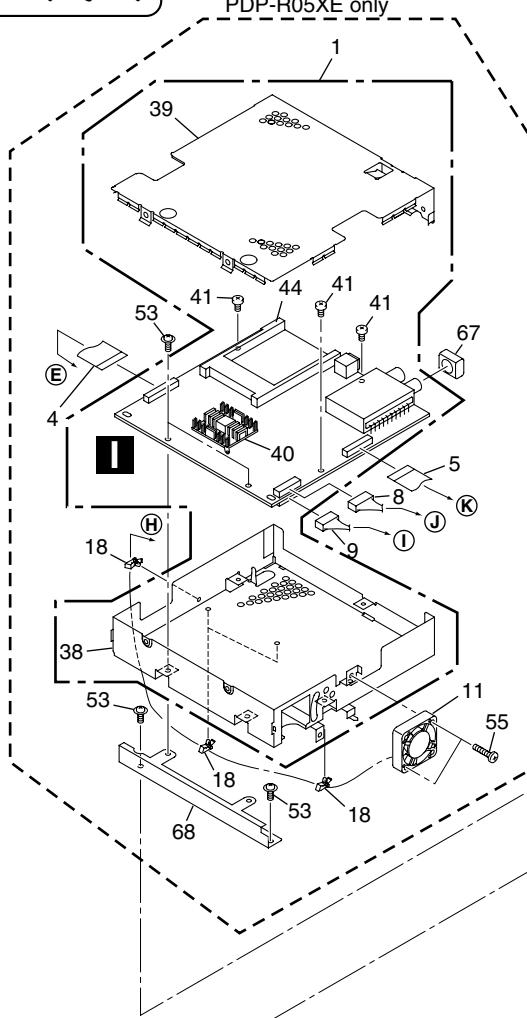
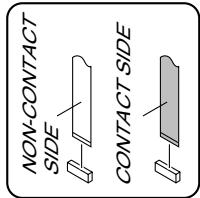
## (2) CONTRAST TABLE

PDP-R05E/WYVI, /WYVIXK, PDP-R05XE/WYVIXX, PDP-R05FE/WYVI and / WYVIXK are constructed the same except for the following:

<b>Mark</b>	<b>No.</b>	<b>Description</b>	<b>PDP-R05E/ WYVI</b>	<b>PDP-R05E/ WYVIXK</b>	<b>PDP-R05XE/ WYVIXX</b>	<b>PDP-R05FE/ WYVI</b>	<b>PDP-R05FE/ WYVIXK</b>
NSP	1	Operating Instructions (English/French/German)	ARE1391	ARE1380	ARE1380	ARE1392	ARE1383
	2	Remote Control Unit	AXD1495	AXD1495	AXD1494	AXD1491	AXD1491
	3	Battery Cover	AZN7919	AZN7919	AZN7919	AZA7424	AZA7424
	8	Screw Hole Cap	AMR3363	AMR3363	AMR3363	Not used	Not used
	8	Screw Hole Cap UE	Not used	Not used	Not used	AMR3386	AMR3386
	9	Stand Assy	AXG1013	AXG1013	AXG1013	Not used	Not used
	9	Stand Assy UE	Not used	Not used	Not used	AXG1009	AXG1009
	10	Stand	AMR3352	AMR3352	AMR3352	Not used	Not used
	10	Stand UE	Not used	Not used	Not used	AMR3382	AMR3382
	14	Pad L	AHA2370	AHA2396	AHA2396	AHA2370	AHA2396
NSP	15	Pad R	AHA2371	AHA2397	AHA2397	AHA2371	AHA2397
	16	IM Pad	AHB1253	AHB1259	AHB1259	AHB1253	AHB1259
	17	Top Pad	AHB1256	AHB1260	AHB1260	AHB1256	AHB1260
	18	Accessory Box	AHC1053	AHC1056	AHC1056	AHC1053	AHC1056
	19	Carton E	AHD3247	AHD3293	Not used	Not used	Not used
	19	Carton XE	Not used	Not used	AHD3246	Not used	Not used
	19	Carton FE	Not used	Not used	Not used	AHD3248	AHD3283
	26	Operating Instructions (Italian/Dutch/Swedish/Spanish)	ARC1541	ARC1533	ARC1533	Not used	Not used
	26	Operating Instructions (Italian/Dutch/Spanish)	Not used	Not used	Not used	ARC1542	ARC1535
	29	Operating Instructions (English/French/German) (Italian/Dutch/Swedish/Spanish)	Not used	Not used	ARE1390	Not used	Not used
NSP	30	Errata	ARX1120	ARX1121	ARX1121	ARX1120	ARX1121
	31	User Card A	Not used	ARY1150	ARY1150	Not used	ARY1150
	32	User Card B	Not used	ARY1151	ARY1151	Not used	ARY1151
	33	Caution Manual	ARM1263	ARM1264	ARM1264	ARM1263	ARM1264
	34	Block Diagram	Not used	ARY1159	ARY1159	Not used	ARY1159

## 2.2 EXTERIOR SECTION (1)

PDP-R05XE only



Refer to  
"2.4 FRONT PANEL SECTION".

## EXTERIOR SECTION (1) PARTS LIST

<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>
1	TUNER BOARD Assy	See Contrast table (2)	50	•••••	
△ 2	Power Switch (TRAP)(S1)	ASG1089	51	•••••	A
△ 3	AC Inlet (CN1)	AKP1257	52	•••••	
4	Flexible Cable (J209)	See Contrast table (2)	53	Screw	ABZ30P080FTC
5	Flexible Cable (J210)	See Contrast table (2)	54	Screw	BBZ30P060FTB
6	•••••		55	Screw	See Contrast table (2)
7	3P Housing Wire (J107)	ADX2836	56	•••••	
8	9P Housing Wire (J113)	See Contrast table (2)	57	Screw	ABZ30P080FTC
9	8P Housing Wire (J114)	See Contrast table (2)	58	•••••	
10	•••••		59	Screw	See Contrast table (2)
△ 11	Fan Motor 42 x 10.5L	See Contrast table (2)	60	Screw	ABZ30P060FTB
12	Center Stay U	ANG2564	61	Screw	B
13	Leg Assy	AXG1012	62	PC Card Module	
14	•••••		63	PC Shield	
15	•••••		64	6P Housing Wire (J111)	
16	•••••		65	Flexible Cable (J208)	
17	•••••		66	PC Guide	
18	Side Type Mini Clamp	See Contrast table (2)	67	Gasket XE	
19	•••••		68	Tuner Adaptor	
20	•••••				C
21	•••••				
22	•••••				
23	•••••				
24	Rear Cover	AMR3425			
25	•••••				
26	•••••				
27	Metal Bonnet Bottom	See Contrast table (2)			D
28	Metal Bonnet Top	See Contrast table (2)			
29	Serial Sheet	AAX2609			
30	•••••				
31	•••••				
32	•••••				
33	•••••				
34	•••••				
35	•••••				
NSP 36	Serial Label	ARW1100			
37	•••••				
NSP 38	Bottom Can	See Contrast table (2)			E
39	Top Can	See Contrast table (2)			
40	Heat Sink	See Contrast table (2)			
41	Screw	See Contrast table (2)			
42	Screw	See Contrast table (2)			
43	•••••				
44	PCMCIA Ejector	See Contrast table (2)			
45	•••••				
46	•••••				F
47	•••••				
48	•••••				
49	•••••				

**(2) CONTRAST TABLE**

PDP-R05E/WYVI, /WYVIXK, PDP-R05XE/WYVIXK, PDP-R05FE/WYVI and / WYVIXK are constructed the same except for the following:

A	Mark	No.	Description	PDP-R05E/ WYVI	PDP-R05E/ WYVIXK	PDP-R05XE/ WYVIXK	PDP-R05FE/ WYVI	PDP-R05FE/ WYVIXK
B	⚠	1	TUNER BOARD Assy	Not used	Not used	AWE1301	Not used	Not used
		4	Flexible Cable (J209)	Not used	Not used	ADD1280	Not used	Not used
		5	Flexible Cable (J210)	Not used	Not used	ADD1267	Not used	Not used
		8	9P Housing Wire (J113)	Not used	Not used	ADX3017	Not used	Not used
		9	8P Housing Wire (J114)	Not used	Not used	ADX3018	Not used	Not used
	NSP	11	Fan Motor 42 x 10.5L)	Not used	Not used	AXM1049	Not used	Not used
		18	Side Type Mini Clamp	Not used	Not used	AEC2003	Not used	Not used
		24	Rear Cover	Not used	Not used	AMR3425	Not used	Not used
		27	Metal Bonnet Bottom	ANE1631	ANE1631	ANE1631	Not used	Not used
		27	Metal Bonnet Bottom (UE)	Not used	Not used	Not used	ANE1634	ANE1634
C	NSP	28	Bonnet Top	ANE1632	ANE1632	ANE1632	Not used	Not used
		28	Bonnet Top (FE)	Not used	Not used	Not used	ANE1637	ANE1637
		38	Bottom Can	Not used	Not used	XNA1004	Not used	Not used
		39	Top Can	Not used	Not used	XNG1001	Not used	Not used
		40	Heat Sink	Not used	Not used	XNH1004	Not used	Not used
	ABZ	41	Screw	Not used	Not used	BBZ30P060FTB	Not used	Not used
		42	Screw	Not used	Not used	PMZ20P100FNI	Not used	Not used
		44	PCMCIA Ejector	Not used	Not used	ANG2673	Not used	Not used
		55	Screw	Not used	Not used	BBZ30P140FTC	Not used	Not used
		59	Screw	ABZ30P080FTC	ABZ30P080FTC	ABZ30P080FTC	ABZ30P060FTB	ABZ30P060FTB
D	ABZ	61	Screw	ABZ30P180FTC	ABZ30P160FTC	ABZ30P160FTC	Not used	Not used
		62	PC Card Module	AXY1073	AXY1073	AXY1073	Not used	Not used
		63	PC Shield	ANG2578	ANG2578	ANG2578	Not used	Not used
		64	6P Housing Wire (J111)	ADX3016	ADX3016	ADX3016	Not used	Not used
		65	Flexible Cable (J208)	ADD1226	ADD1226	ADD1226	Not used	Not used
	AMR	66	PC Guide	AMR3393	AMR3393	AMR3393	Not used	Not used
		67	Gasket XE	Not used	Not used	ANK1756	Not used	Not used
		68	Tuner Adaptor	Not used	Not used	ANG2672	Not used	Not used

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PDP-R05E

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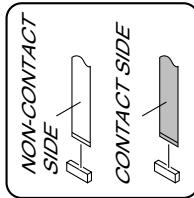
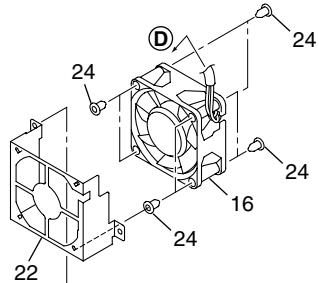
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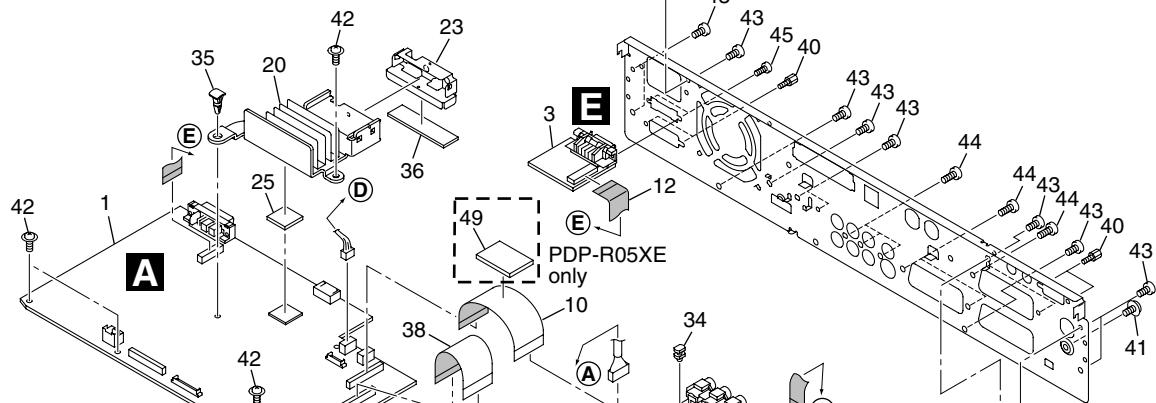
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## 2.3 EXTERIOR SECTION (2)

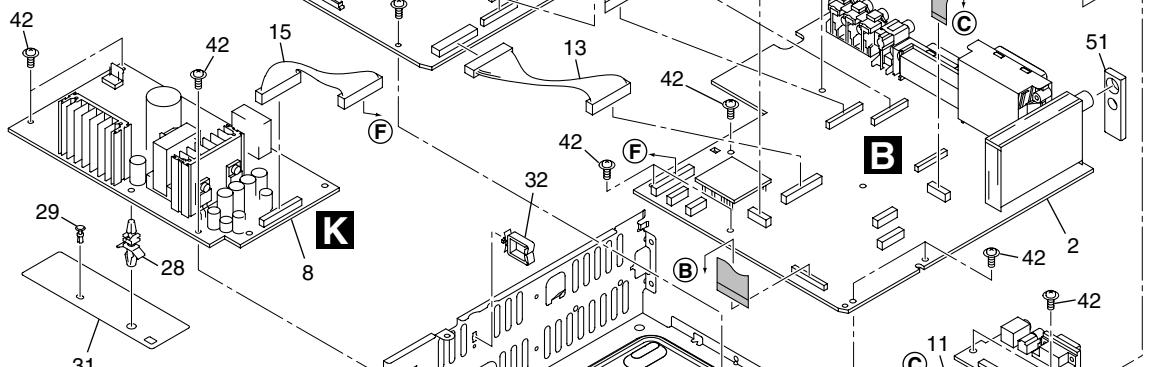
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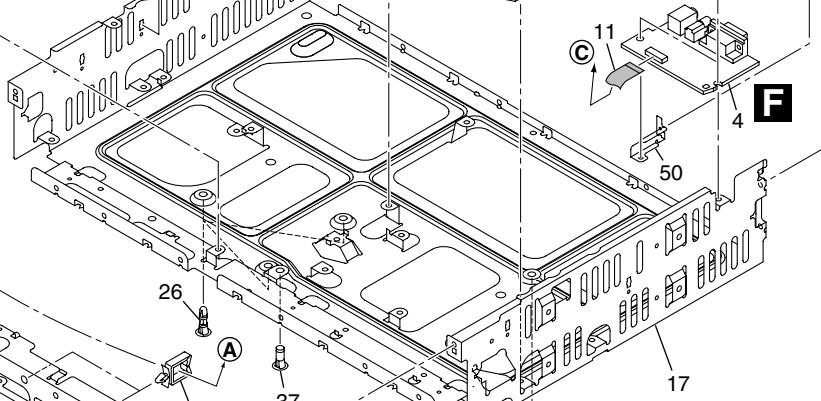
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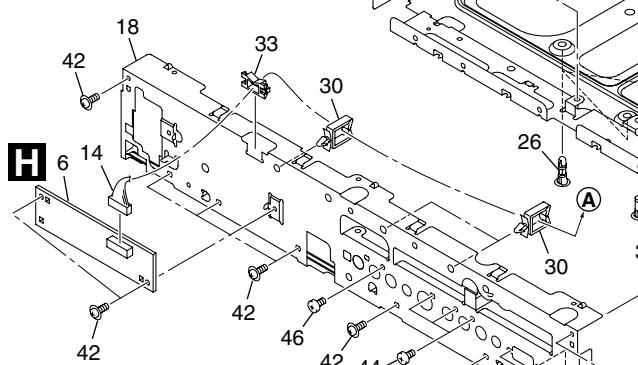
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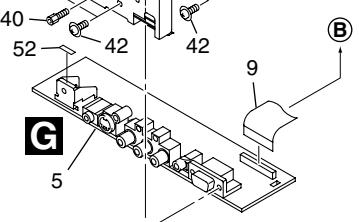
D



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## EXTERIOR SECTION (2) PARTS LIST

<b>Mark No.</b>	<b>Description</b>	<b>Part No.</b>	<b>Mark No.</b>	<b>Description</b>	<b>Part No.</b>
1	MR MAIN BOARD Assy	See Contrast table (2)	31	Barrier A	AEC2017
2	AV BOARD Assy	See Contrast table (2)	32	Re-use Wire Saddle	AEC1945
3	MDR Assy	AWZ6948	33	Edge Saddle	AEC1946
4	SR Assy	See Contrast table (2)	34	Mini Card Spacer	AEC1959
5	FRONT Assy	See Contrast table (2)	35	Circuit Board Spacer	AEC1964
6	LED Assy	See Contrast table (2)	36	Gasket F	ANK1722
7	•••••		37	Card Spacer A	BEC1120
8	POWER SUPPLY Unit	AXY1091	38	Flexible Cable (J202)	ADD1209
9	Flexible Cable (J201)	ADD1209	39	•••••	
10	Flexible Cable (J203)	ADD1210	40	Hexagon Head Screw	BBA1051
11	Flexible Cable (J206)	ADD1213	41	Screw	ABZ30P060FTB
12	Flexible Cable (J207)	ADD1214	42	Screw	ABZ30P080FTC
13	15P Housing Wire (J105)	ADX2833	43	Screw	BBZ30P060FTB
14	7P Housing Wire (J109)	ADX3015	44	Screw	BPZ30P100FTB
15	16P Housing Wire (J112)	ADX2917	45	Screw	PMZ26P060FTB
16	Fan Motor 60 x 25L	AXM1045	46	Screw	BMZ30P060FTC
17	Base Chassis	ANA1811	47	•••••	
18	Front Chassis	See Contrast table (2)	48	•••••	
19	Terminal Panel	See Contrast table (2)	49	FFC Cushion (XE)	See Contrast table (2)
20	Heatsink HDMI	ANH1618	50	SR Holder E	ANG2581
21	•••••		51	Gasket	ANK1730
22	Fan Holder	ANG2568	52	Front Ground Spacer	AEC2016
23	HDMI Shield	ANG2646			
24	Insulation Rubber	AEB1377			
25	Silicone Sheet HDMI	AEB1379			
26	PCB Holder	AEC1097			
27	Spacer	AEC1256			
28	Locking Card Spacer	AEC1429			
29	Nylon Rivet	AEC1671			
30	Wire Saddle	AEC1745			

### (2) CONTRAST TABLE

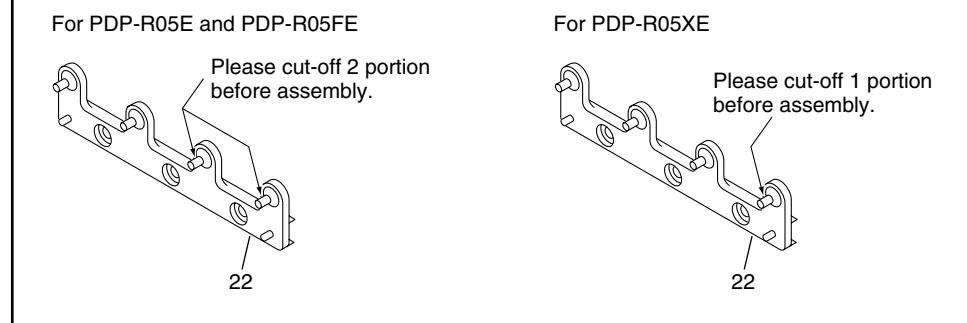
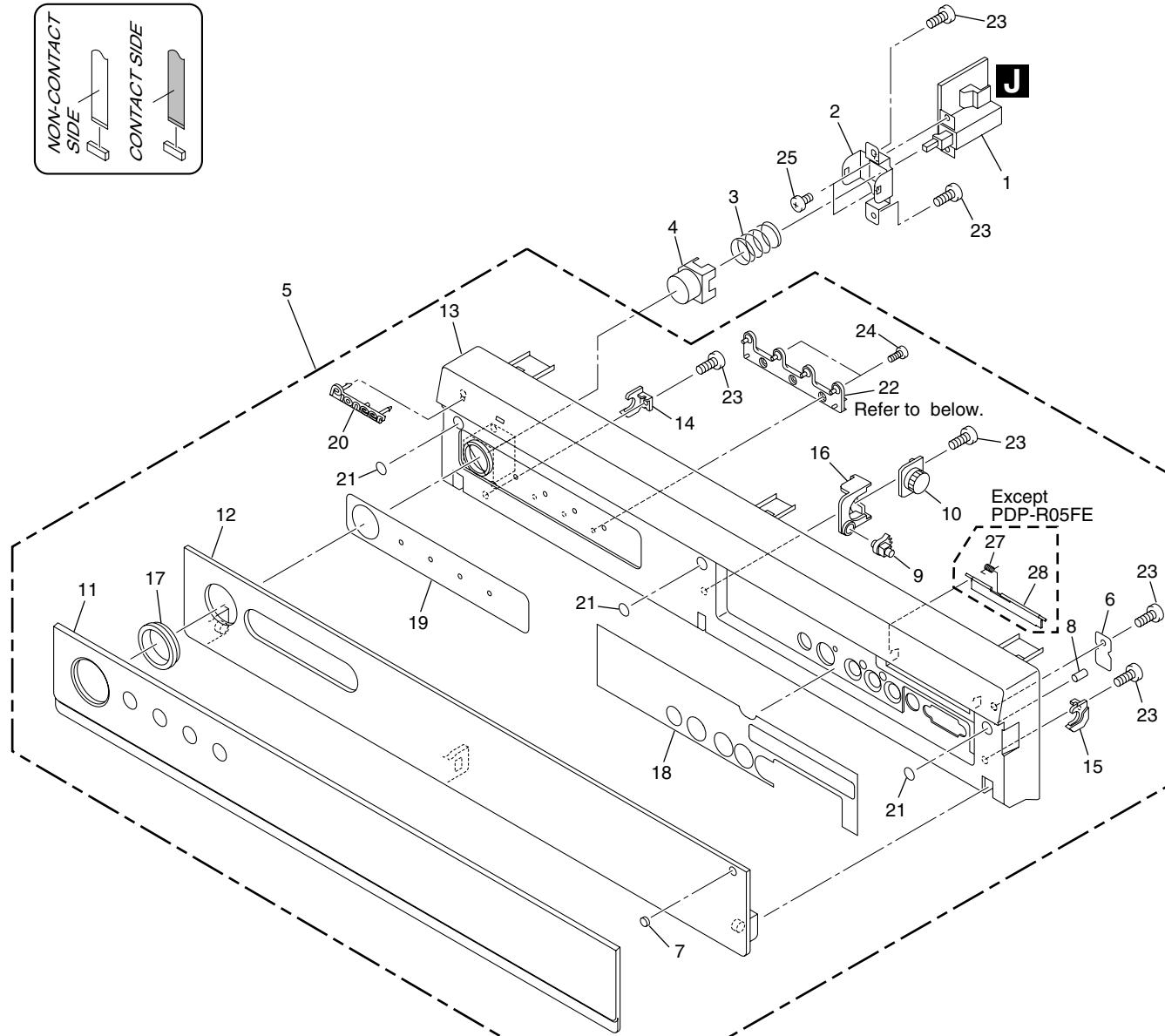
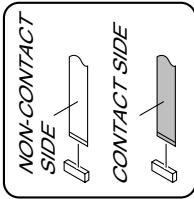
PDP-R05E/WYVI, /WYVIXK, PDP-R05XE/WYVIXK, PDP-R05FE/WYVI and / WYVIXK are constructed the same except for the following:

<b>Mark</b>	<b>No.</b>	<b>Description</b>	<b>PDP-R05E/ WYVI</b>	<b>PDP-R05E/ WYVIXK</b>	<b>PDP-R05XE/ WYVIXK</b>	<b>PDP-R05FE/ WYVI</b>	<b>PDP-R05FE/ WYVIXK</b>
	1	MR MAIN BOARD Assy	AWZ6944	AWZ6944	AWZ6990	AWZ6945	AWZ6945
	2	AV BOARD Assy	AWZ6946	AWZ6946	AWZ6986	AWZ6947	AWZ6947
	4	SR Assy	AWZ6949	AWZ6949	AWZ6949	AWZ6950	AWZ6950
	5	FRONT Assy	AWZ6951	AWZ6951	AWZ6951	AWZ6952	AWZ6952
	6	LED Assy	AWZ6953	AWZ6953	AWZ6953	AWZ6954	AWZ6954
	18	Front Chassis E	ANB1867	ANB1867	ANB1867	Not used	Not used
	18	Front Chassis	Not used	Not used	Not used	ANB1866	ANB1866
	19	Terminal Panel E	ANC2363	ANC2369	Not used	Not used	Not used
	19	Terminal Panel XE	Not used	Not used	ANC2362	Not used	Not used
	19	Terminal Panel FE	Not used	Not used	Not used	ANC2364	ANC2370
	49	FFC Cushion (XE)	Not used	Not used	AEB1407	Not used	Not used

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**2.4 FRONT PANEL SECTION**



## FRONT PANEL SECTION PARTS LIST

<b>Mark No.</b>	<b>Description</b>	<b>Part No.</b>	<b>Mark No.</b>	<b>Description</b>	<b>Part No.</b>
1	SW Assy	AWZ6920	16	Damper Holder	AMR3416
2	SW Holder	ANG2670	17	Escutcheon Ring	ADD4130
3	SW Spring	ABH1109	18	Sealing Sheet	See Contrast table (2)
4	Power Button	ADD4128	19	Sealing Sheet S	See Contrast table (2)
5	Front Panel Assy	See Contrast table (2)	20	Pioneer Badge	VAM1124
6	Magnet Holder	ANG2671	21	Door Cushion	See Contrast table (2)
7	Magnet Catcher	ANG2675	22	LED Lens	AMR3417
8	Magnet	AMF1004	23	Screw	BPZ30P100FTB
9	Gear	AMR3418	24	Screw	JPZ20P035FNI
10	Damper	AXA1018	25	Screw	BMZ30P060FTC
11	Panel	See Contrast table (2)	26	•••••	
12	Door	AAN1473	27	PC Spring	See Contrast table (2)
13	Front Panel	See Contrast table (2)	28	PC Card Door	See Contrast table (2)
14	Door Holder L	AMR3414			
15	Door Holder R	AMR3415			

### (2) CONTRAST TABLE

PDP-R05E/WYVI, /WYVIXK, PDP-R05XE/WYVIXK, PDP-R05FE/WYVI and / WYVIXK are constructed the same except for the following:

<b>Mark</b>	<b>No.</b>	<b>Description</b>	<b>PDP-R05E/ WYVI</b>	<b>PDP-R05E/ WYVIXK</b>	<b>PDP-R05XE/ WYVIXK</b>	<b>PDP-R05FE/ WYVI</b>	<b>PDP-R05FE/ WYVIXK</b>
	5	Front Panel Assy E	AXG1021	AXG1021	Not used	Not used	Not used
	5	Front Panel Assy XE	Not used	Not used	AXG1020	Not used	Not used
	5	Front Panel Assy FE	Not used	Not used	Not used	AXG1022	AXG1022
	11	Panel (E)	AAK2826	AAK2826	Not used	AAK2826	AAK2826
	11	Panel (XE)	Not used	Not used	AAK2825	Not used	Not used
	13	Front Panel (E)	AMB2829	AMB2829	Not used	Not used	Not used
	13	Front Panel (XE)	Not used	Not used	AMB2828	Not used	Not used
	13	Front Panel (FE)	Not used	Not used	Not used	AMB2830	AMB2830
	18	Sealing Sheet (XE E)	AAL2547	AAL2547	AAL2547	Not used	Not used
	18	Sealing Sheet (FE)	Not used	Not used	Not used	AAL2548	AAL2548
	19	Sealing Sheet S (GC)	AAL2555	AAL2555	Not used	AAL2555	AAL2555
	19	Sealing Sheet S (E)	Not used	Not used	AAL2554	Not used	Not used
	21	Door Cushion	AEB1391	AEB1391	AEB1391	AEB1394	AEB1394
	27	PC Spring	ABH1112	ABH1112	ABH1112	Not used	Not used
	28	PC Card Door	AMR3365	AMR3365	AMR3365	Not used	Not used

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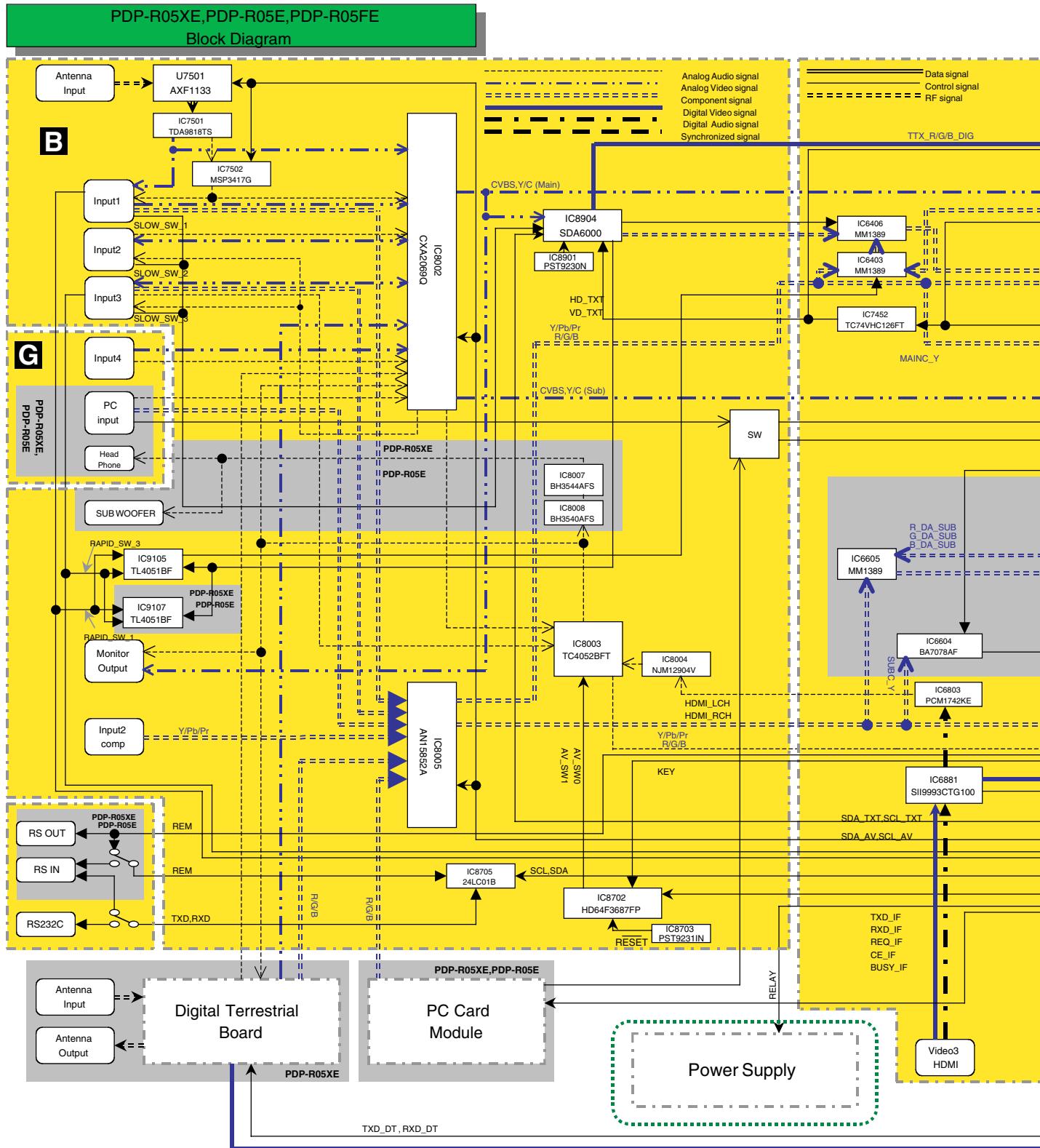
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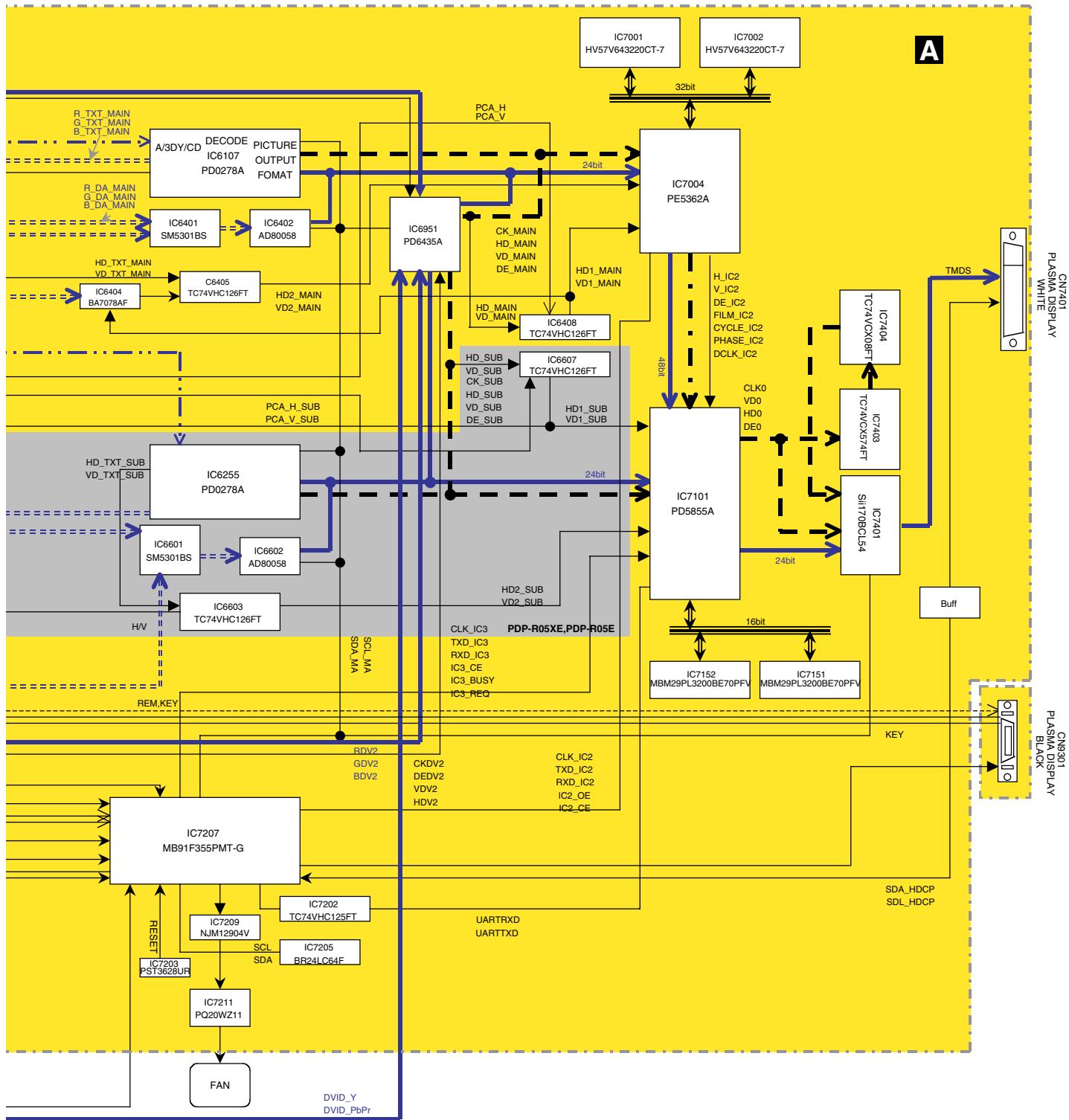
### **3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM**

### **3.1 BLOCK DIAGRAM**

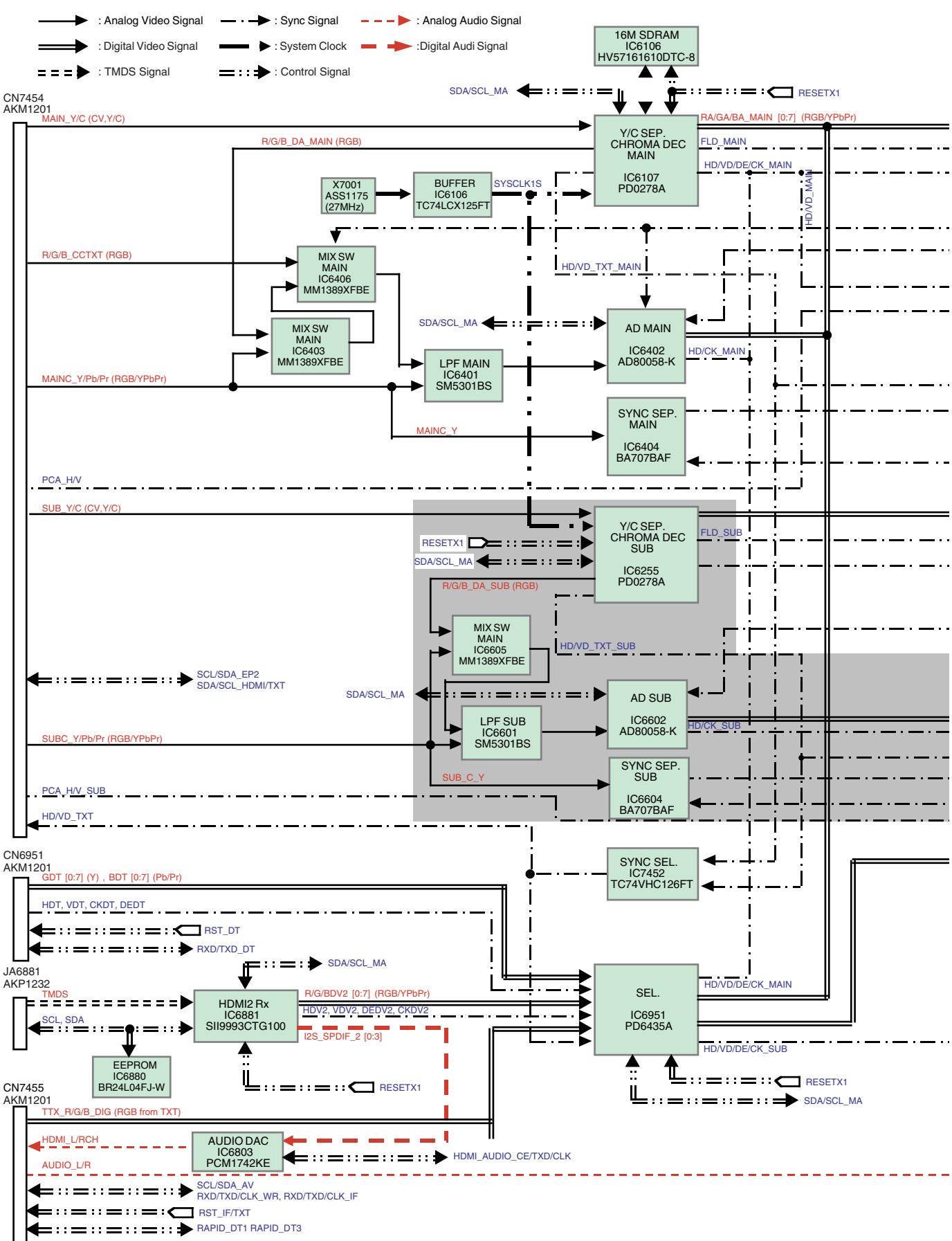
### **3.1.1 SIGNAL ROUTE**

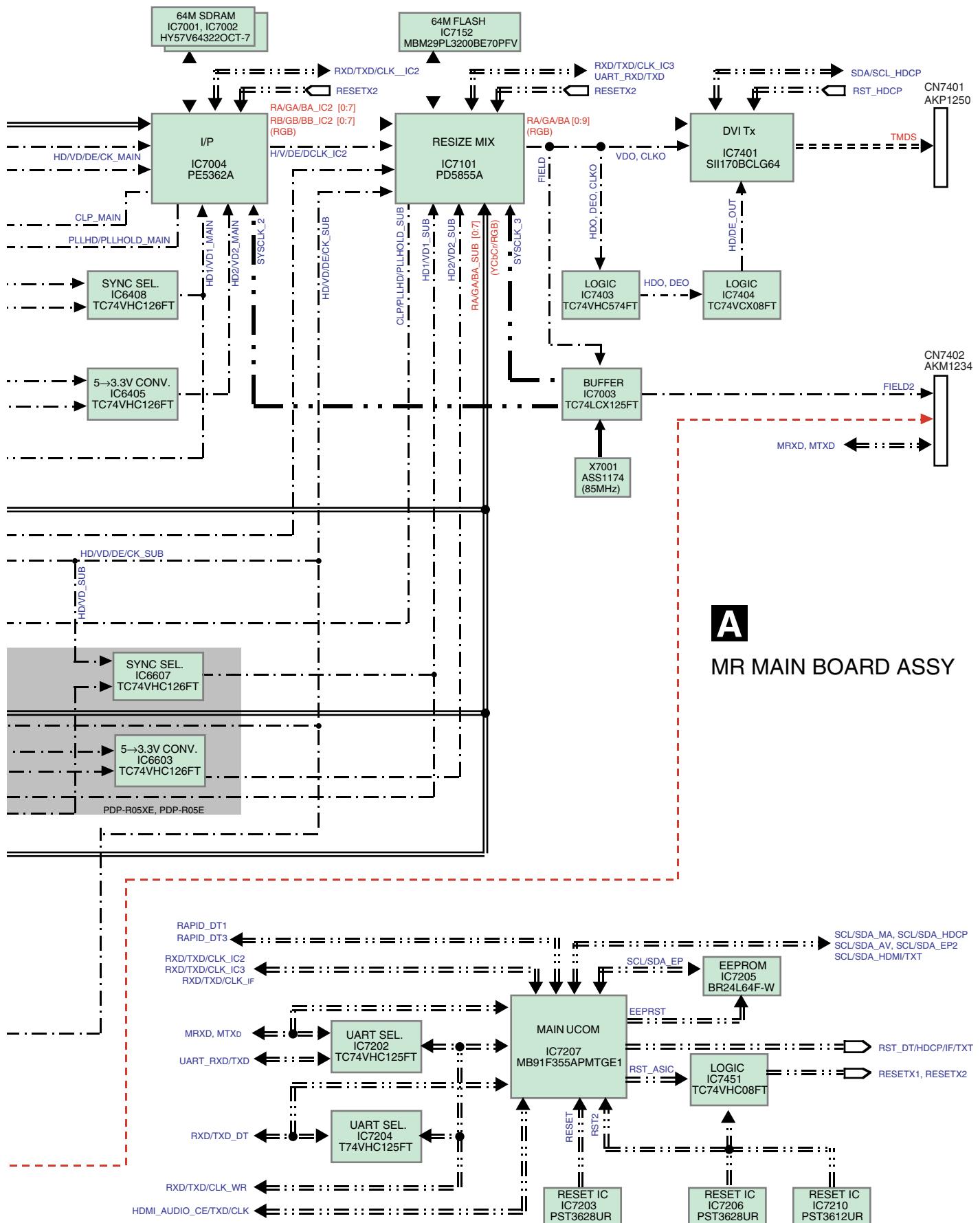
A





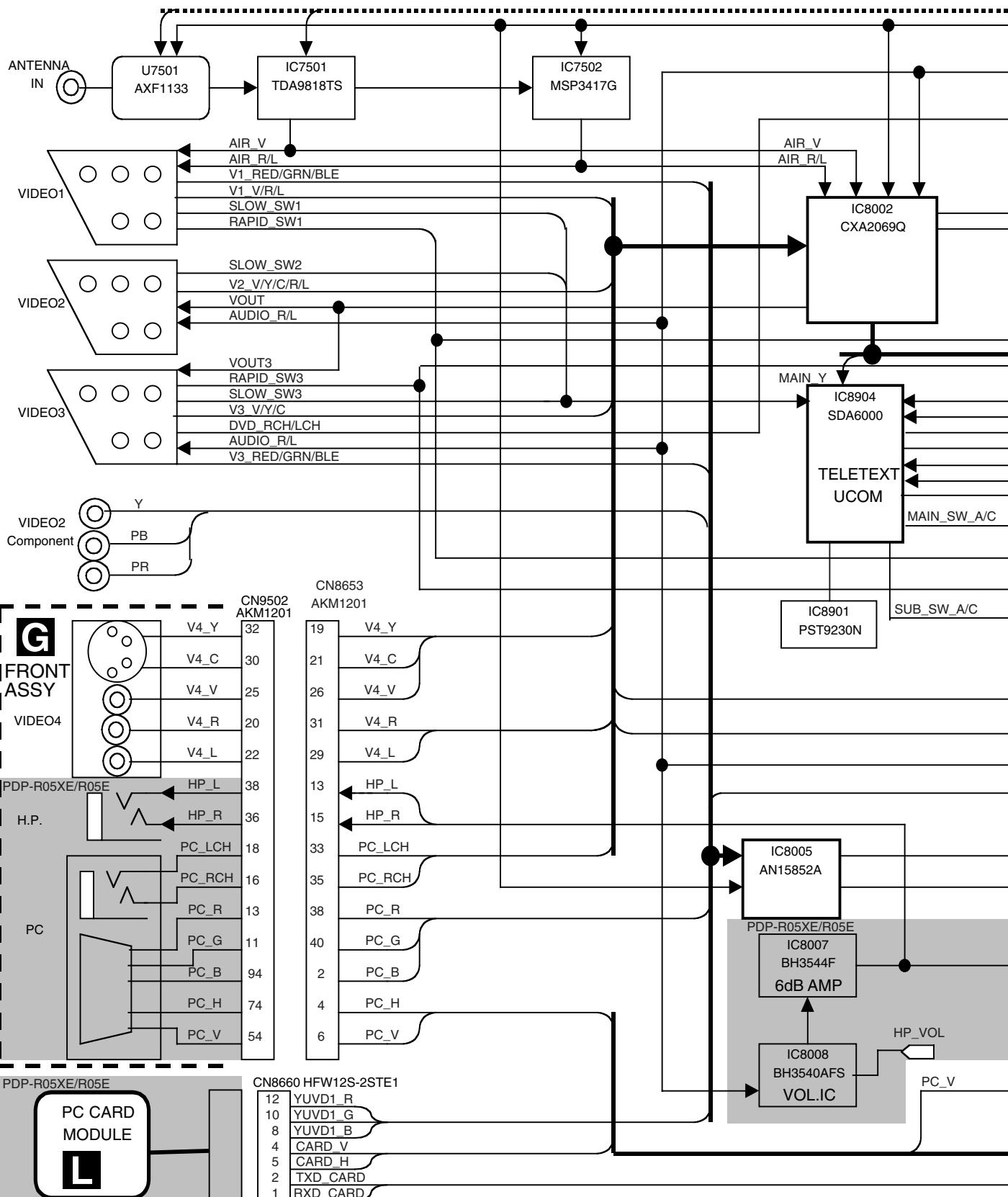
### 3.1.2 MR MAIN BOARD ASSY

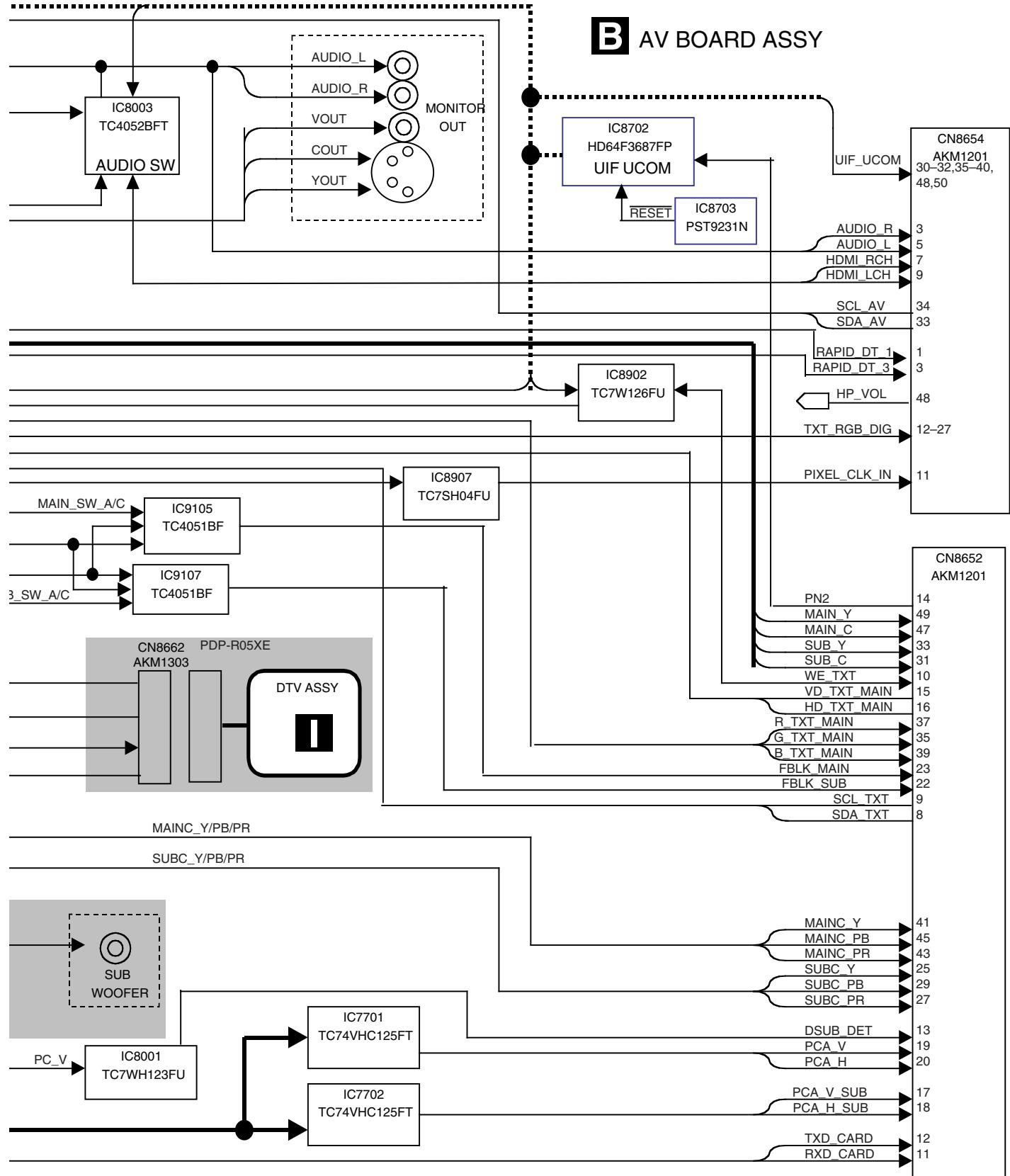




### 3.1.3 AV BOARD ASSY

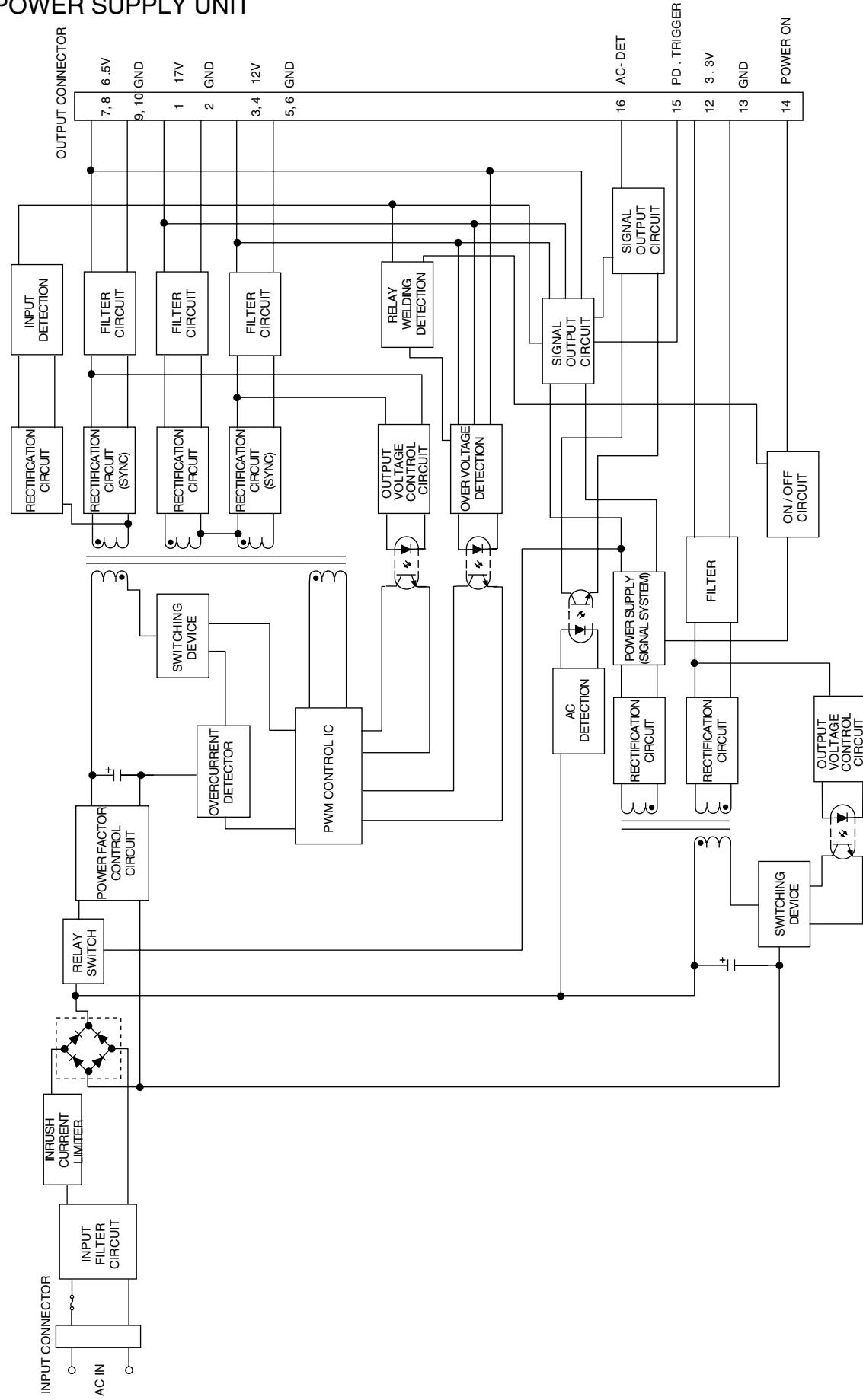
A



**B AV BOARD ASSY**

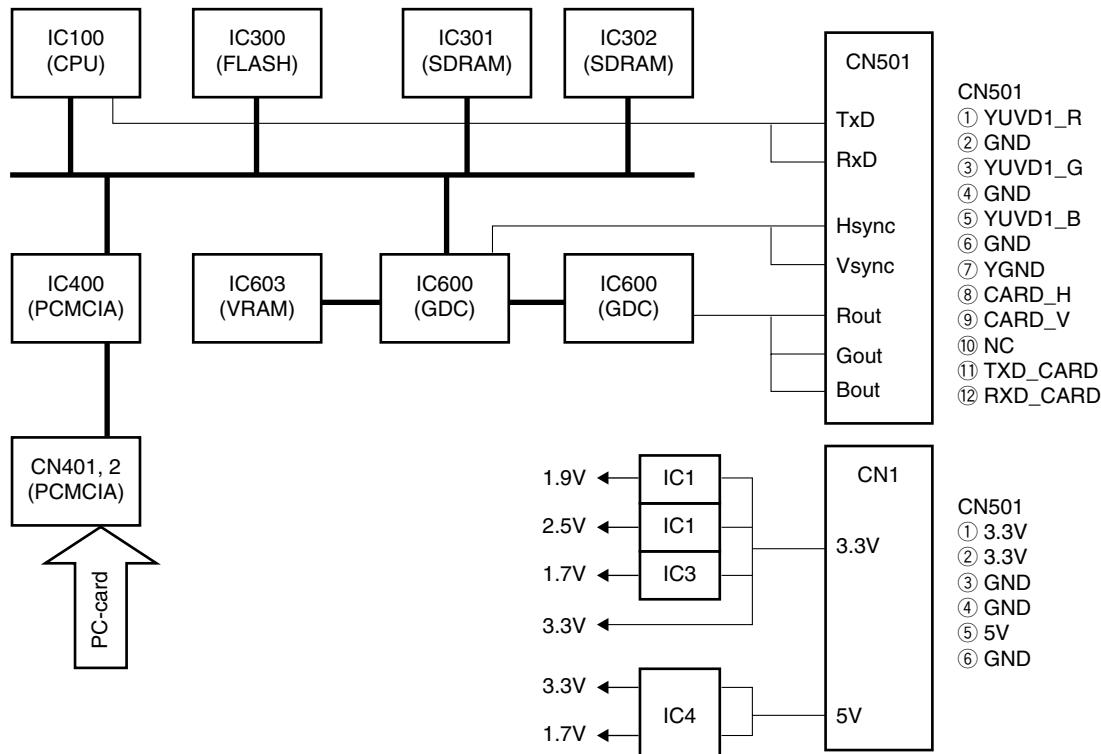
### 3.1.4 POWER SUPPLY UNIT

#### K POWER SUPPLY UNIT



### 3.1.5 PC CARD MODULE

#### J PC CARD MODULE



A

B

C

D

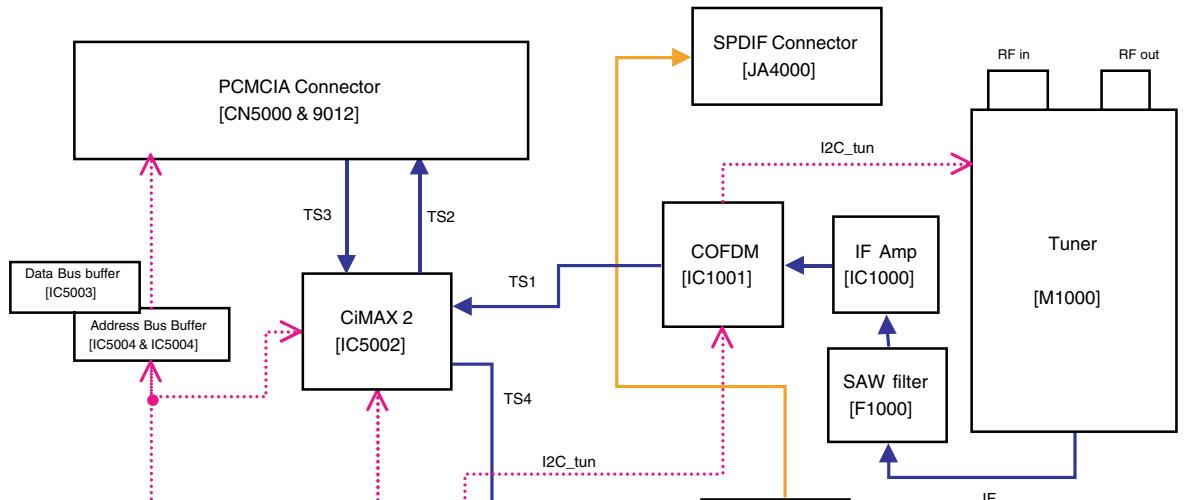
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### 3.1.6 TUNER BOARD ASSY

Media Receiver European Digital Tuner PDP-R05XE

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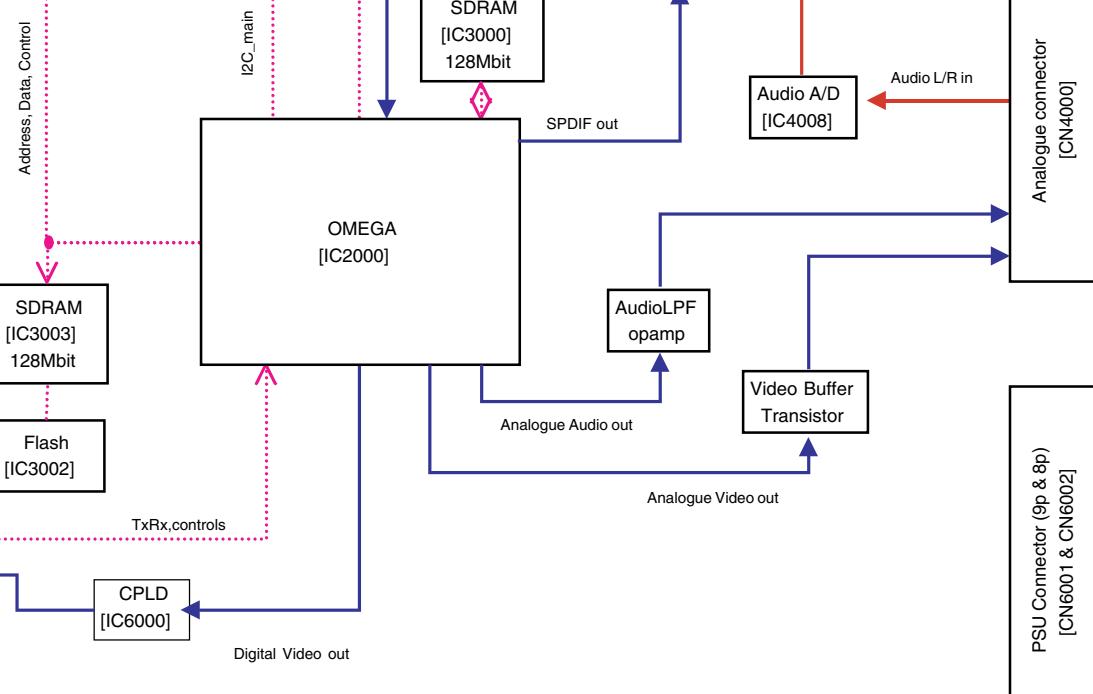


B

Address, Data, Control

TxRx, controls

Digital Video out



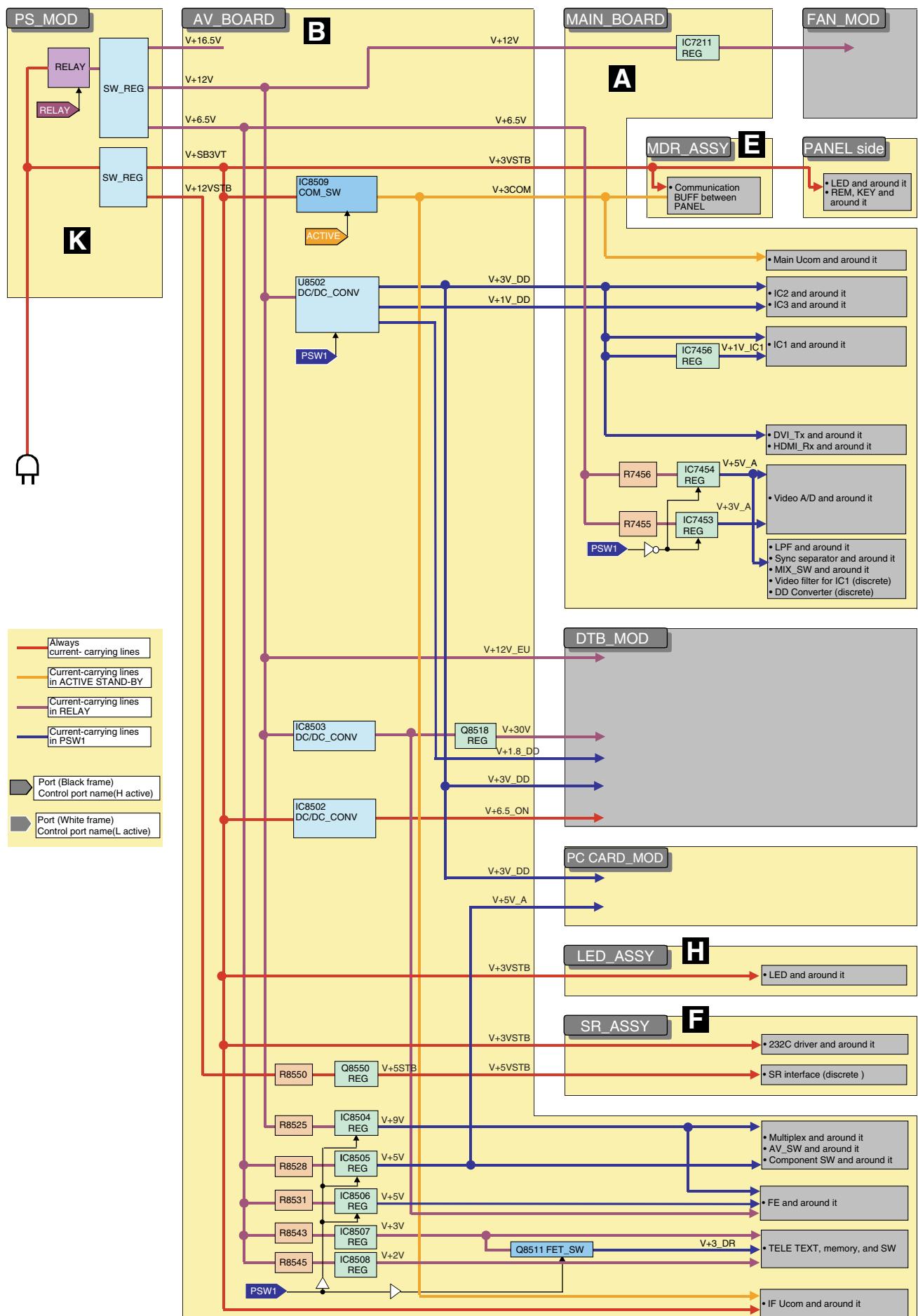
C

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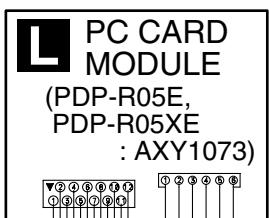
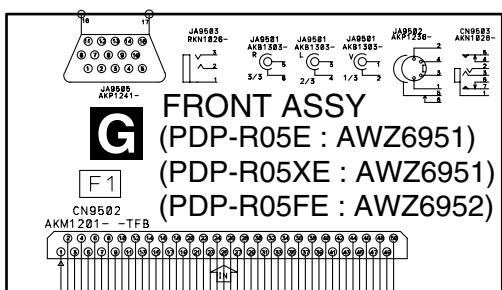
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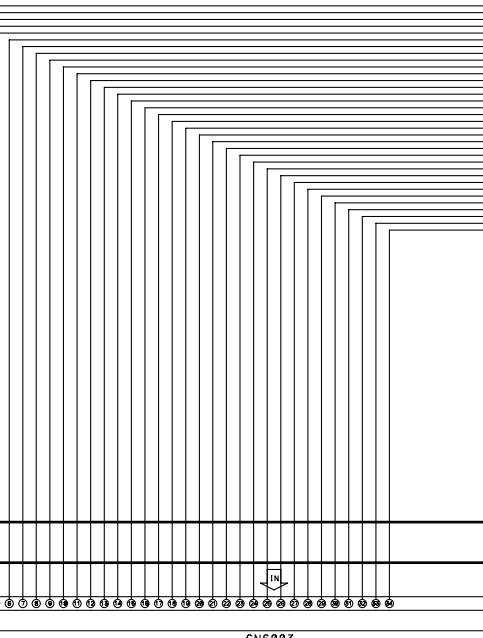
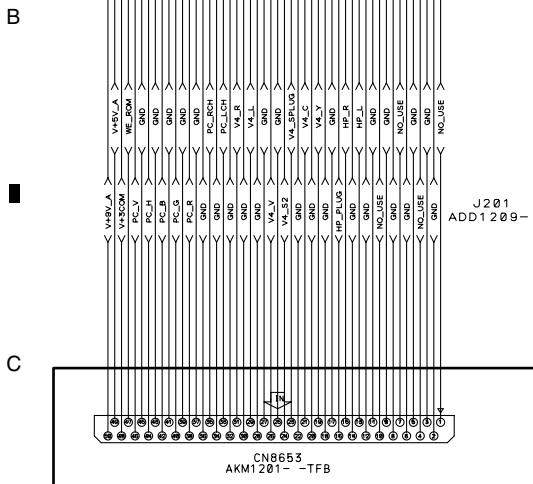
### 3.1.7 POWER SUPPLY



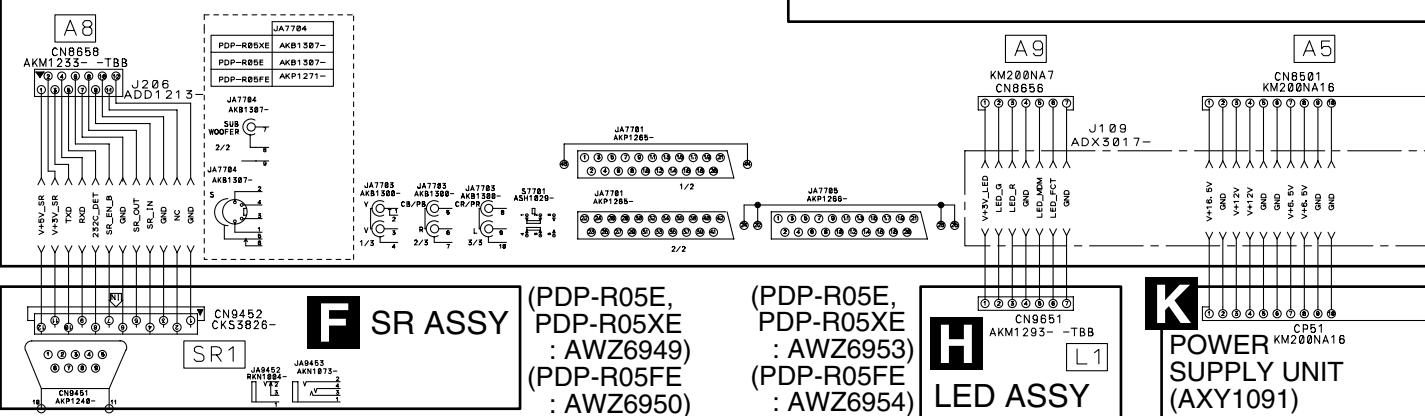
## 3.2 OVERALL WIRING CONNECTION DIAGRAM



	PDP-R05FE	PDP-R05E	PDP-R05XE
AYX1073-	NOT USE	USE	USE
ADD1226-	NOT USE	USE	USE
ADX3016-	NOT USE	USE	USE

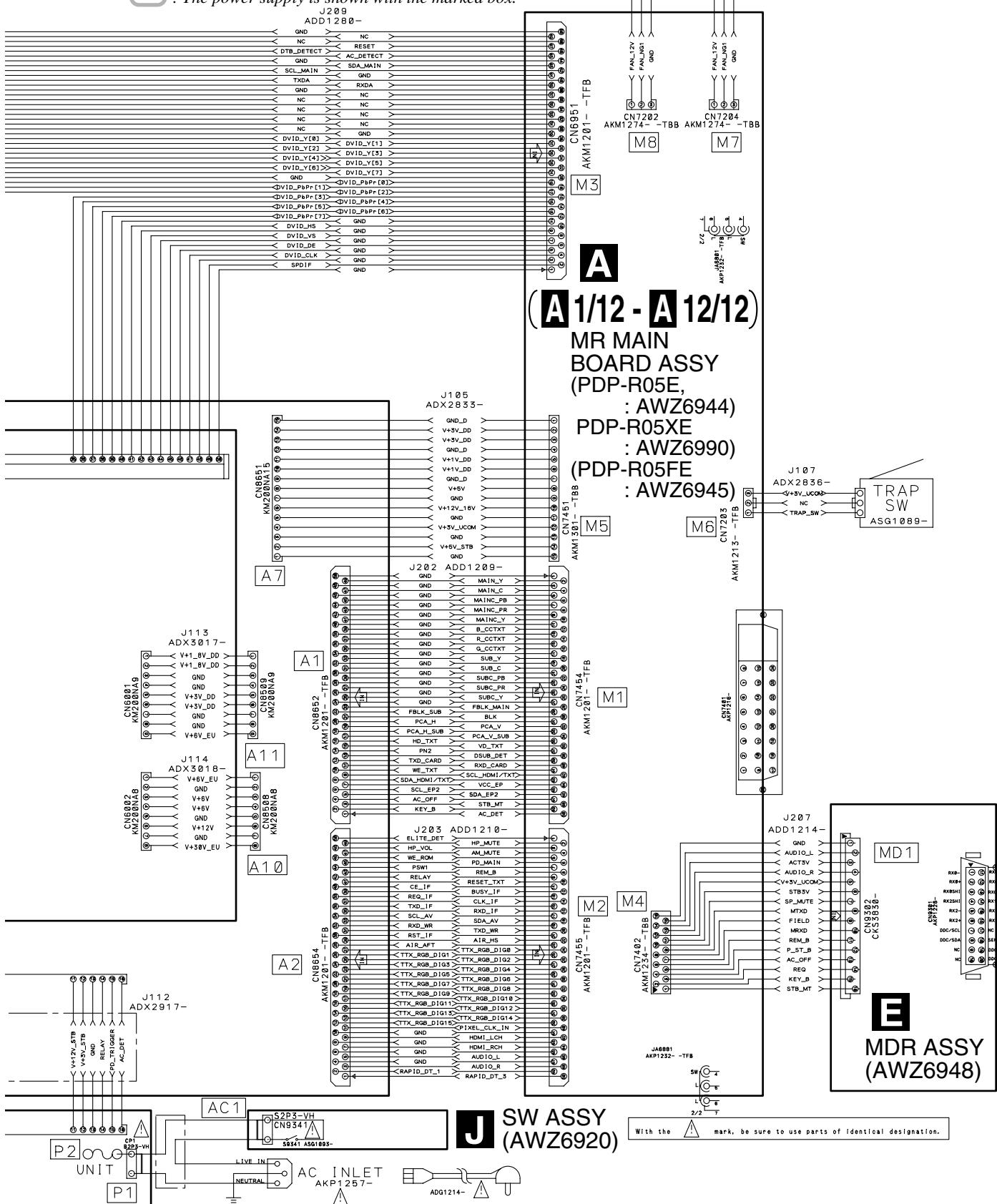


	PDP-R05FE	PDP-R05E	PDP-R05XE
AYX1074-	NOT USE	NOT USE	USE
ADD1227-	NOT USE	NOT USE	USE
ADX3017-	NOT USE	NOT USE	USE
ADX3018-	NOT USE	NOT USE	USE
	NOT USE	NOT USE	USE



**NOTES:** • When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST".

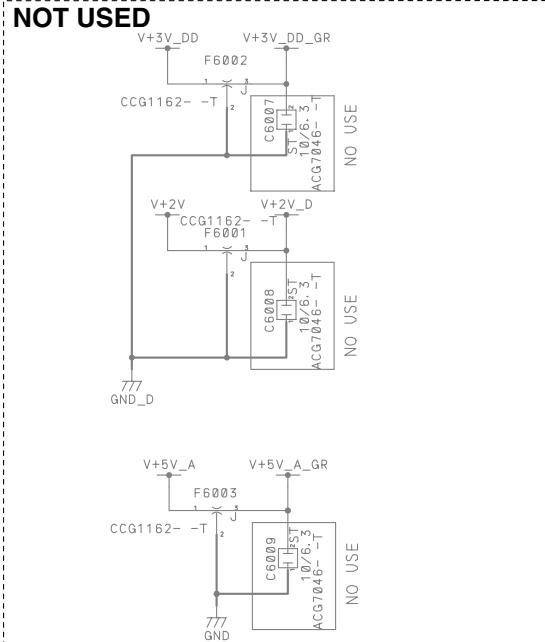
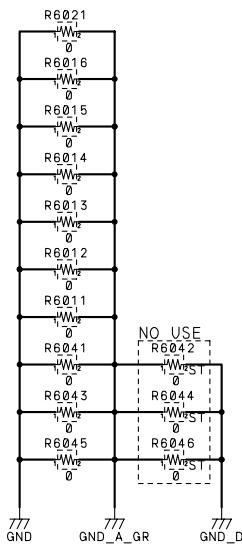
- The mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- : The power supply is shown with the marked box.



1 2 3 4  
**3.3 MR MAIN BOARD ASSY (1/12)**

**A A 1/12 MR MAIN BOARD ASSY**  
(PDP-R05E : AWZ6944)  
(PDP-R05XE : AWZ6990)  
(PDP-R05FE : AWZ6945)

● GR BLOCK



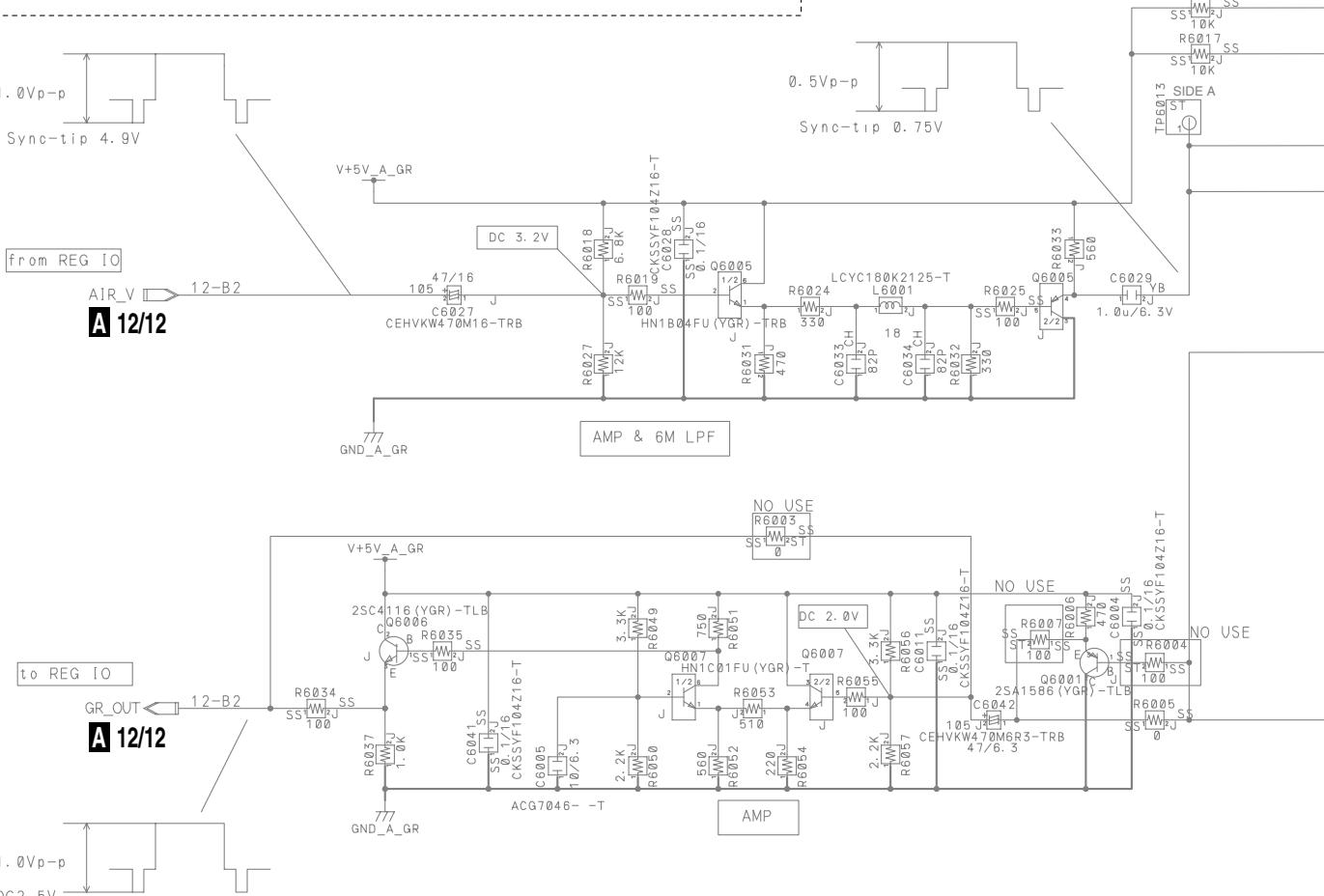
B

C

D

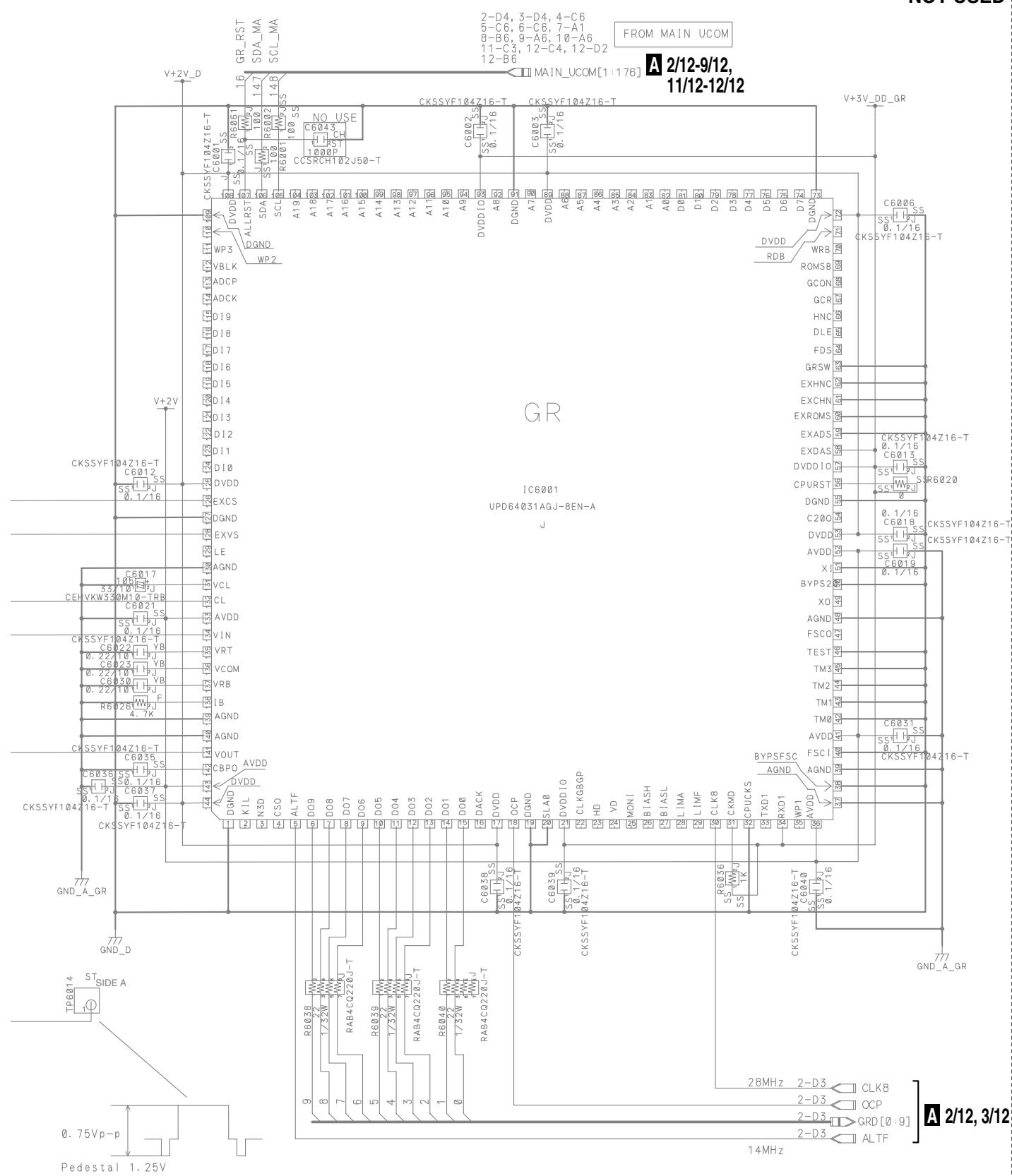
E

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**A A 1/12**

A

**NOT USED**

### **3.4 MR MAIN BOARD ASSY (2/12)**

**A 2/12** MR MAIN BOARD ASSY (PDF)

(PDP-R05E : AWZ6944)  
(PDP-R05XE : AWZ6990)  
(PDP-R05FE : AWZ6945)

• MICHEL MAIN BLOCK

• MICHEE MAIN BEECK

(PDP-F00XE : AWZ6900)  
(PDP-B05EE : AWZ6945)

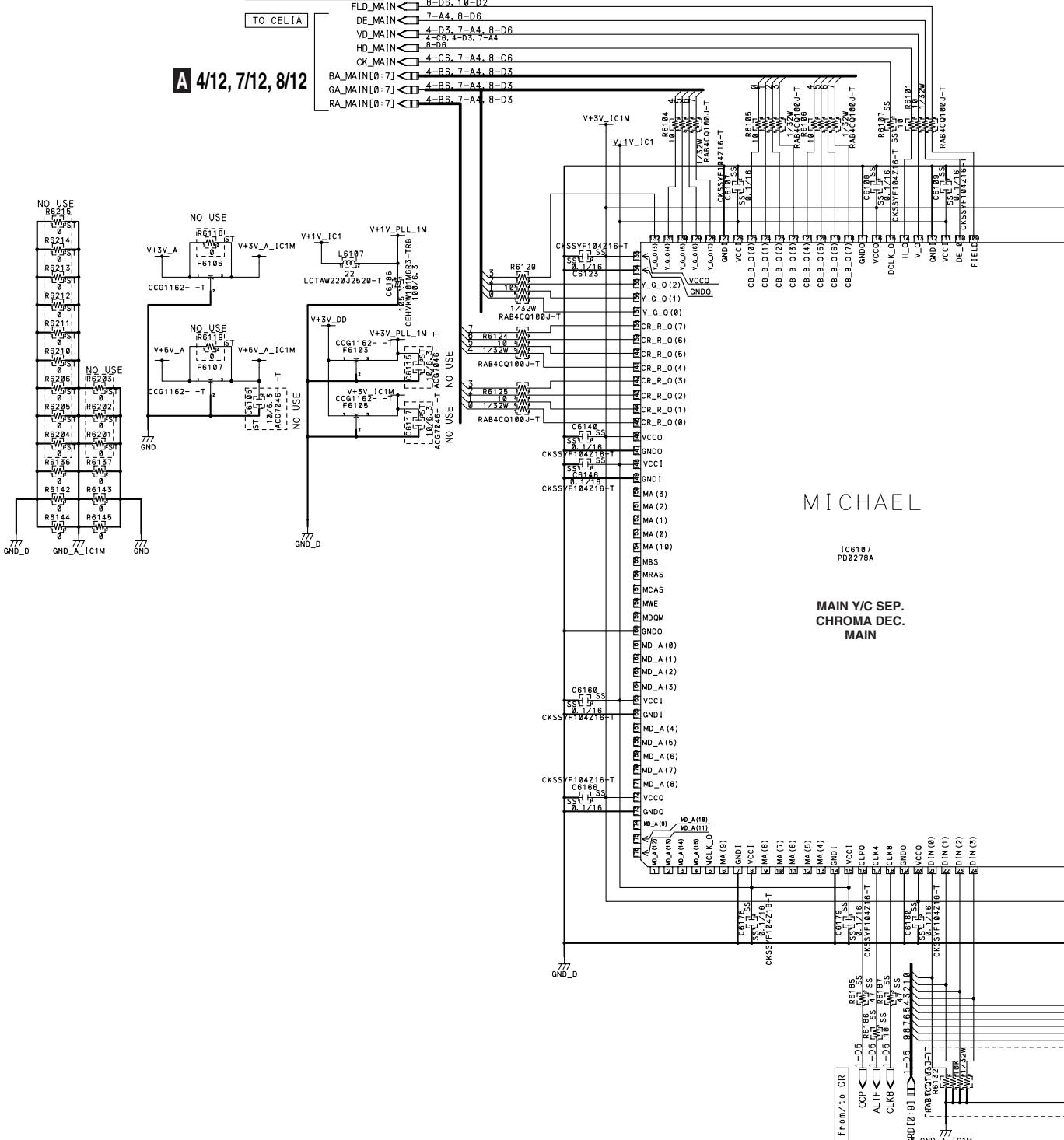
(PDP-R05FE : AWZ6945)

(FDI-11051 E . AWZ0945)

A 8/12, 10/12

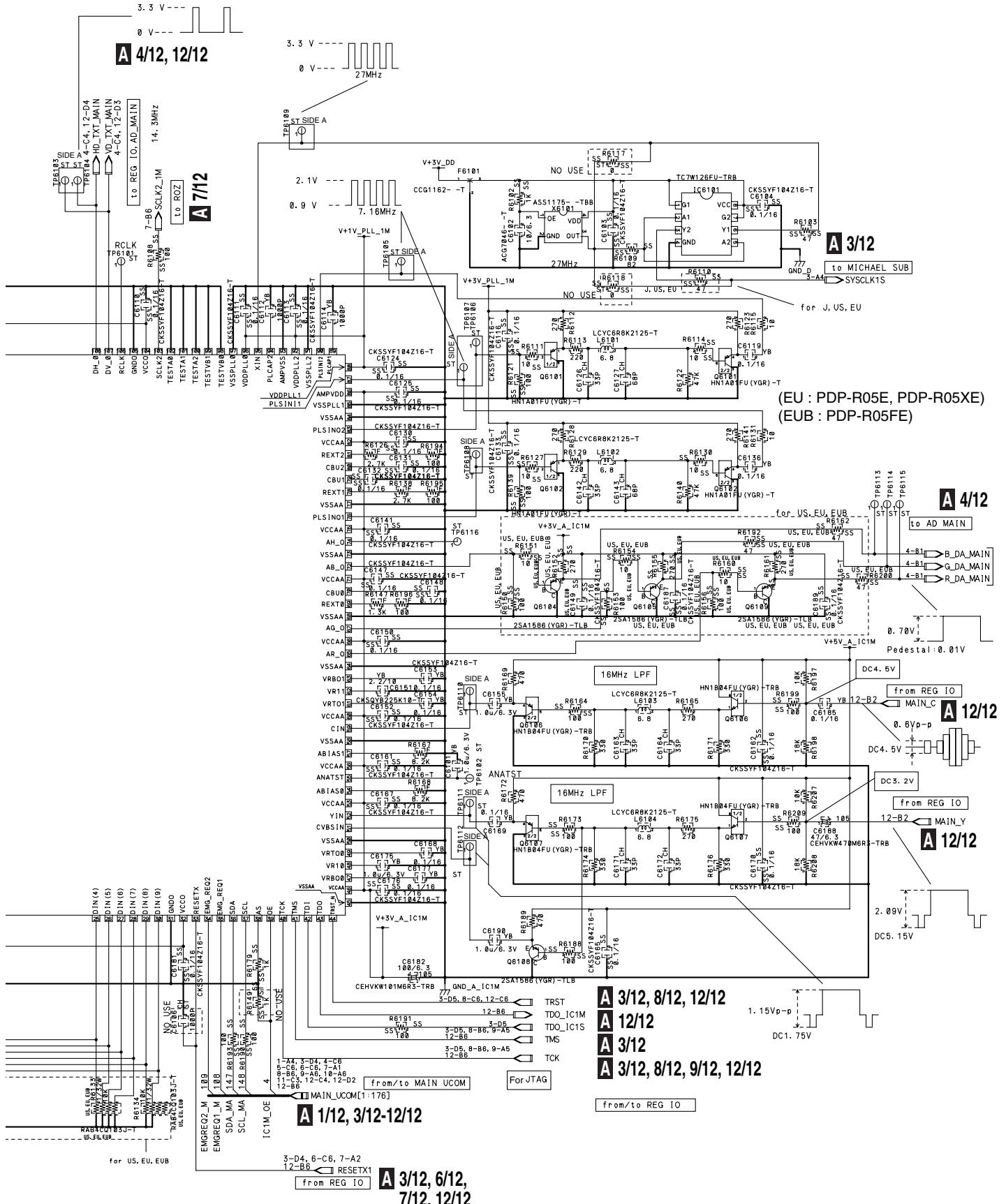
TO CELIA , MAIN UCOM

A 4/12, 7/12, 8/12



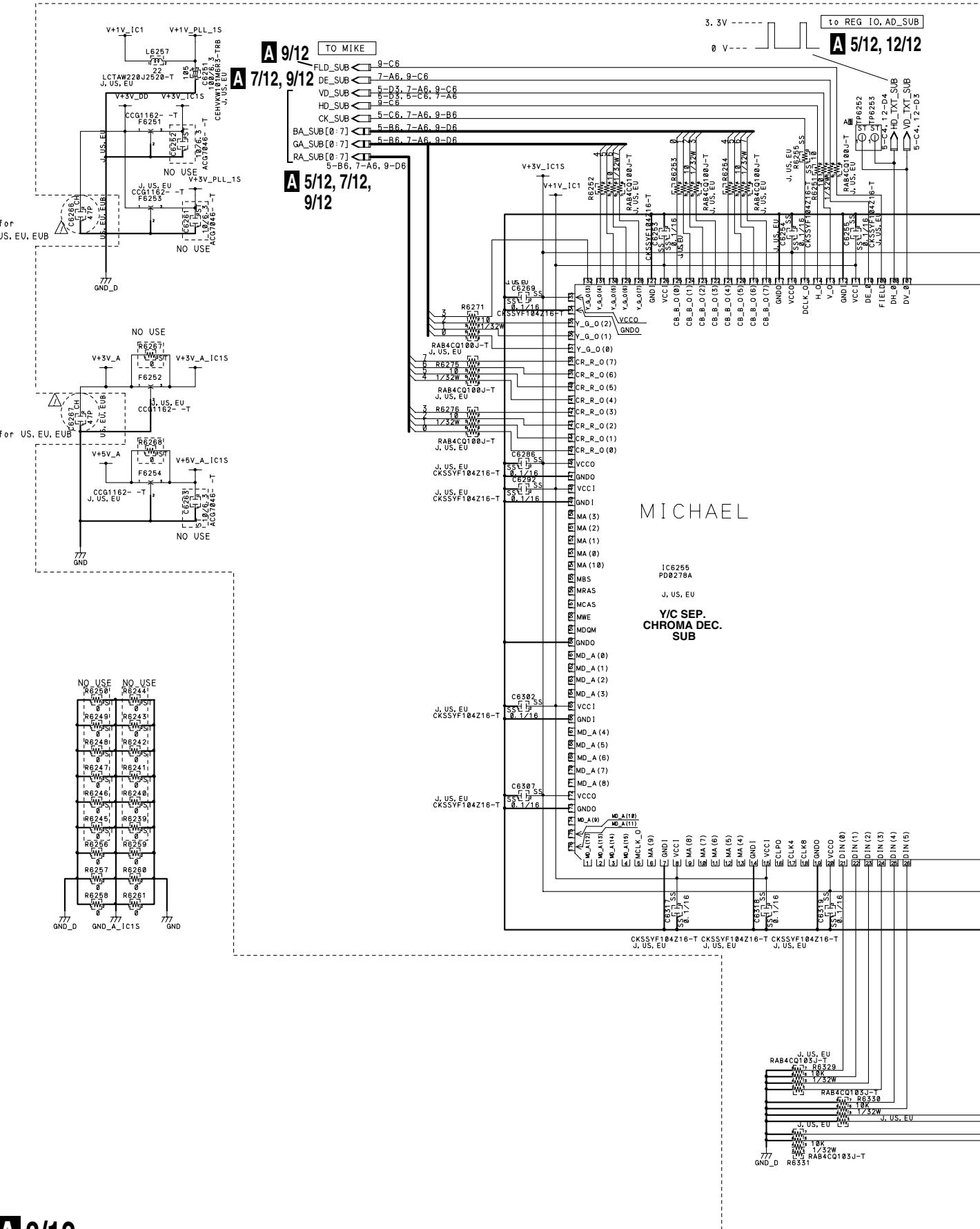
A 1/12

A 2/12

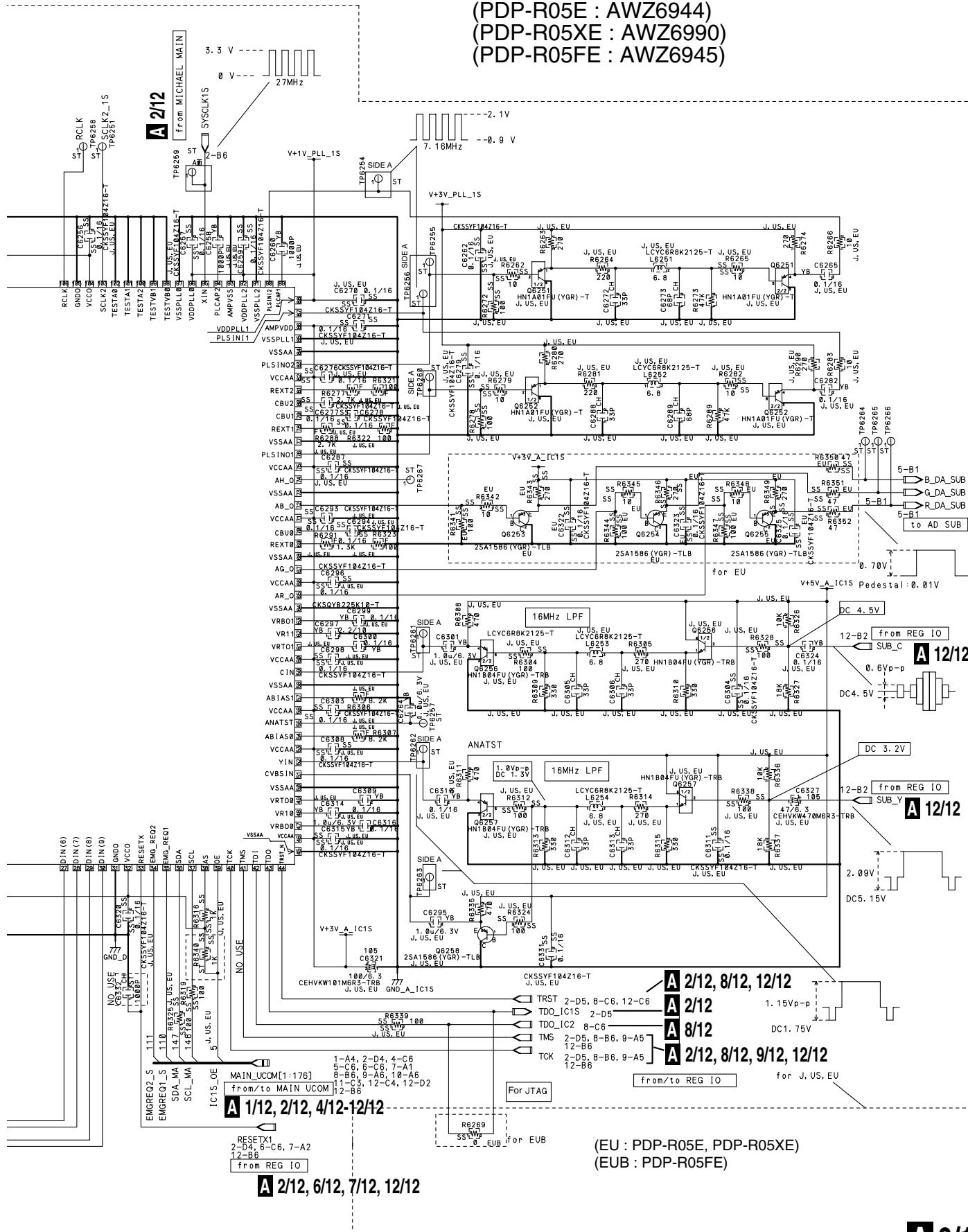


### **3.5 MR MAIN BOARD ASSY (3/12)**

## ● MICHEL SUB BLOCK



**A 3/12** MR MAIN BOARD ASSY  
(PDP-R05E : AWZ6944)  
(PDP-R05XE : AWZ6990)  
(PDP-R05FE : AWZ6945)



A 2/12, 6/12, 7/12, 12/12

(EU : PDP-R05E, PDP-R05XE)  
(EUB : PDP-R05FE)

A 3/12

### **3.6 MR MAIN BOARD ASSY (4/12)**

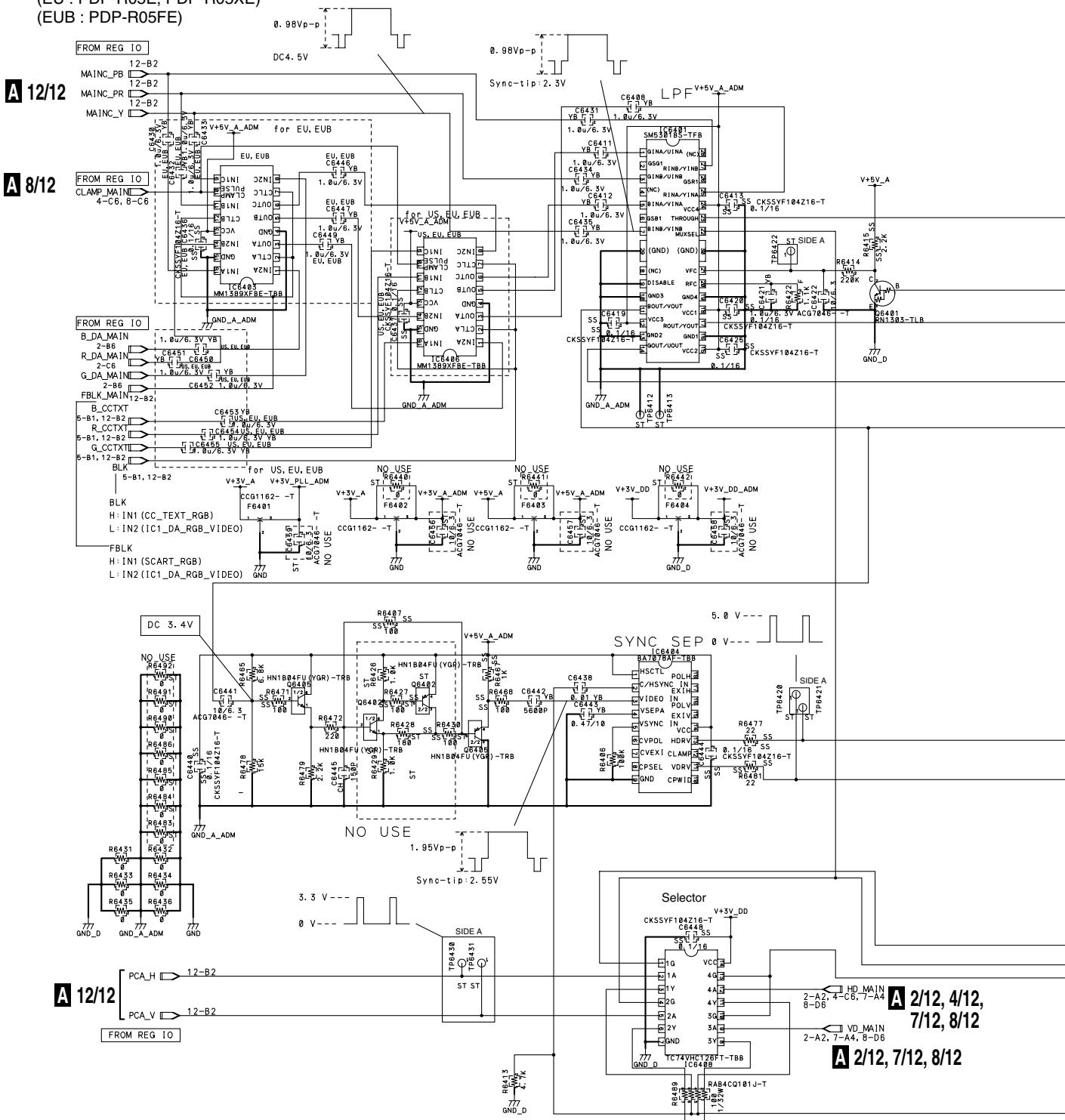
**A 4/12** MR MAIN BOARD ASSY (PDP-R05E : AWZ6944)

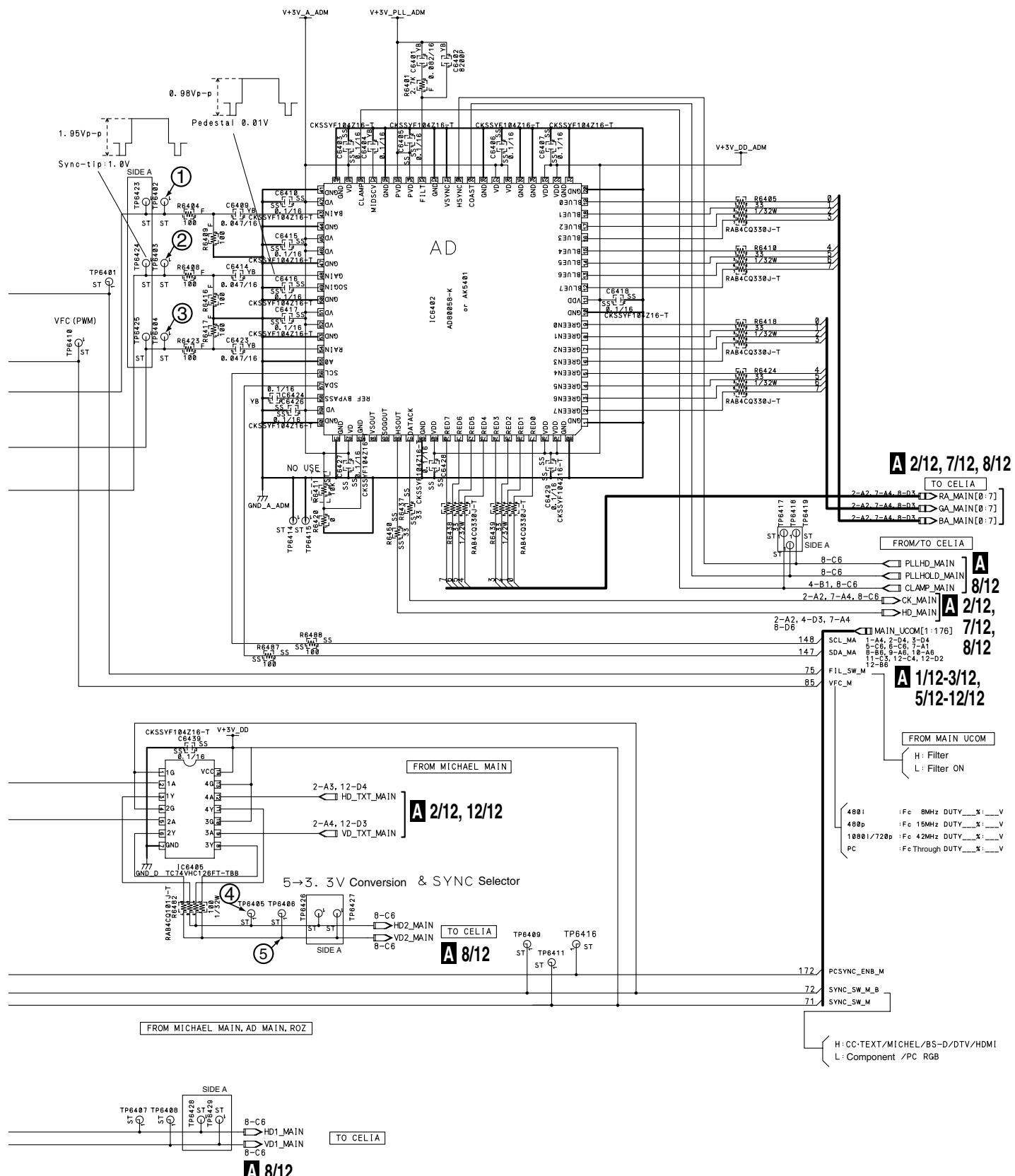
• AD MAIN BLOCK

(PDP-R05FE : AWZ6945)

(FBI File # 77WZ6646)

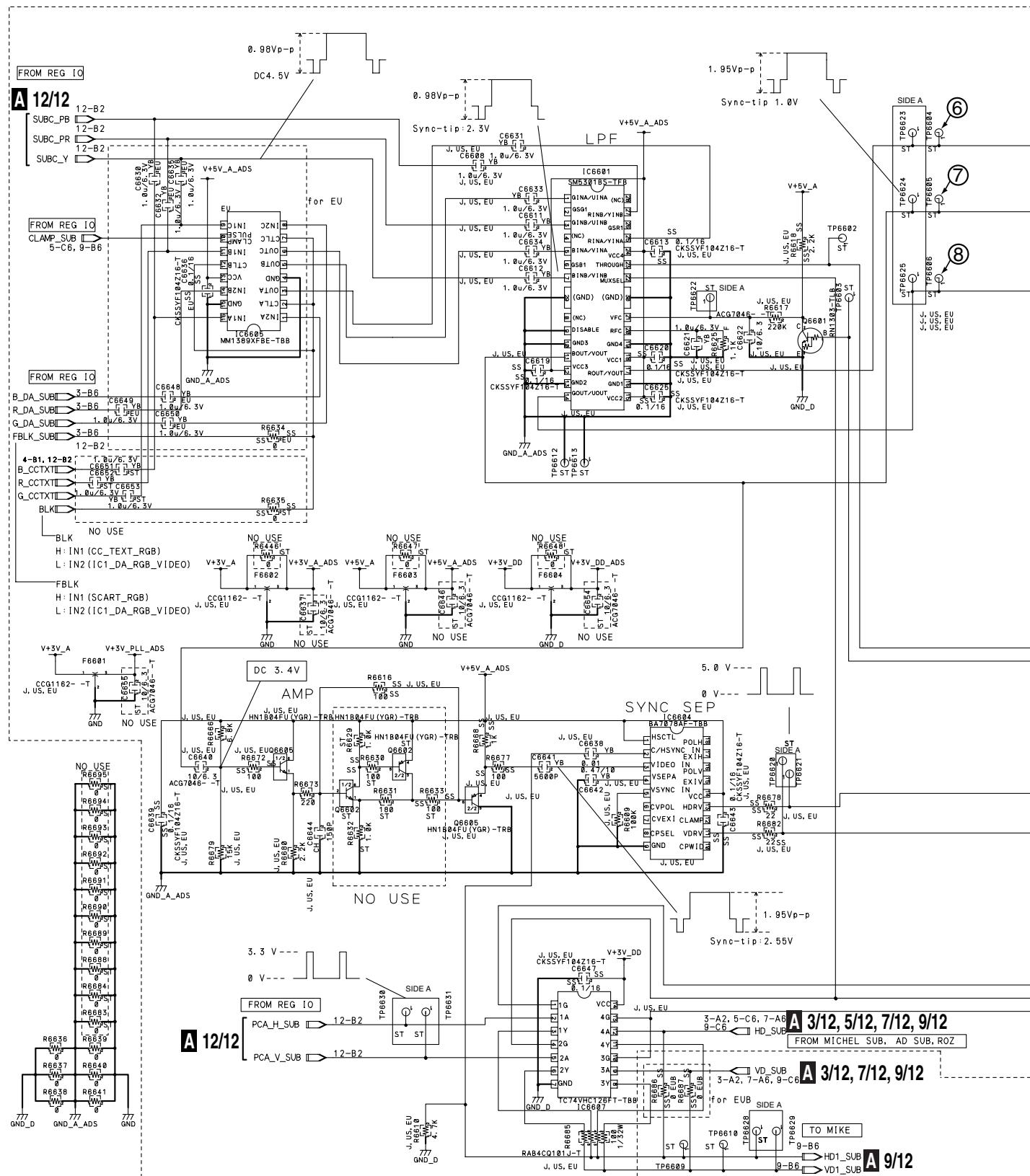
(EU : PDP-R05E, PDP-R05XE)  
(EUB : PDP-R05FE)

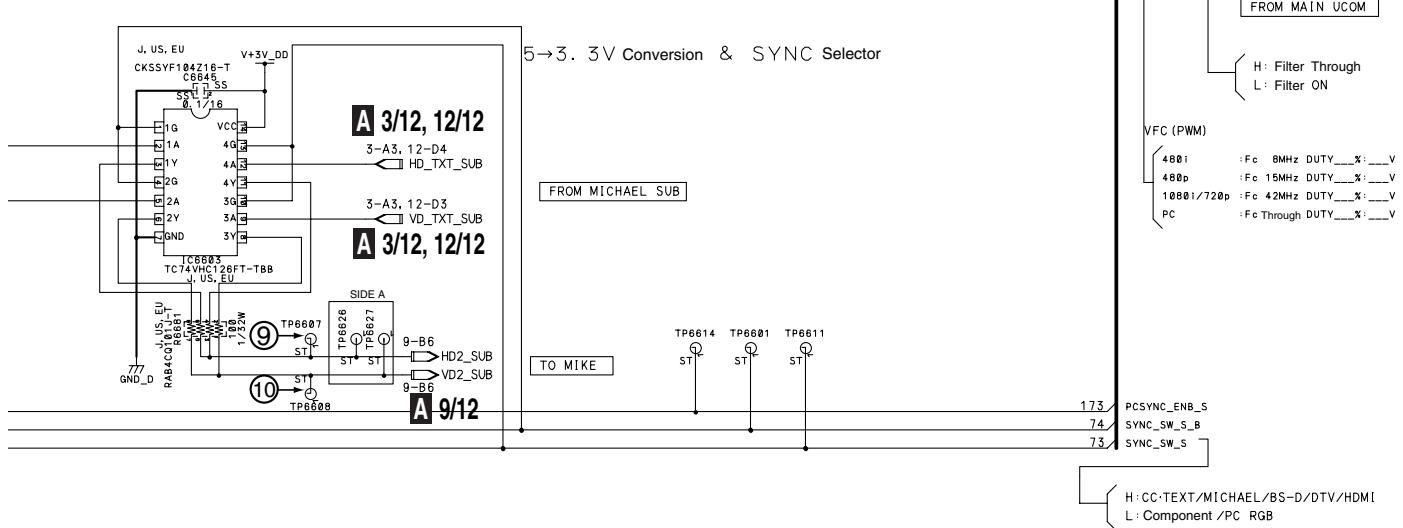
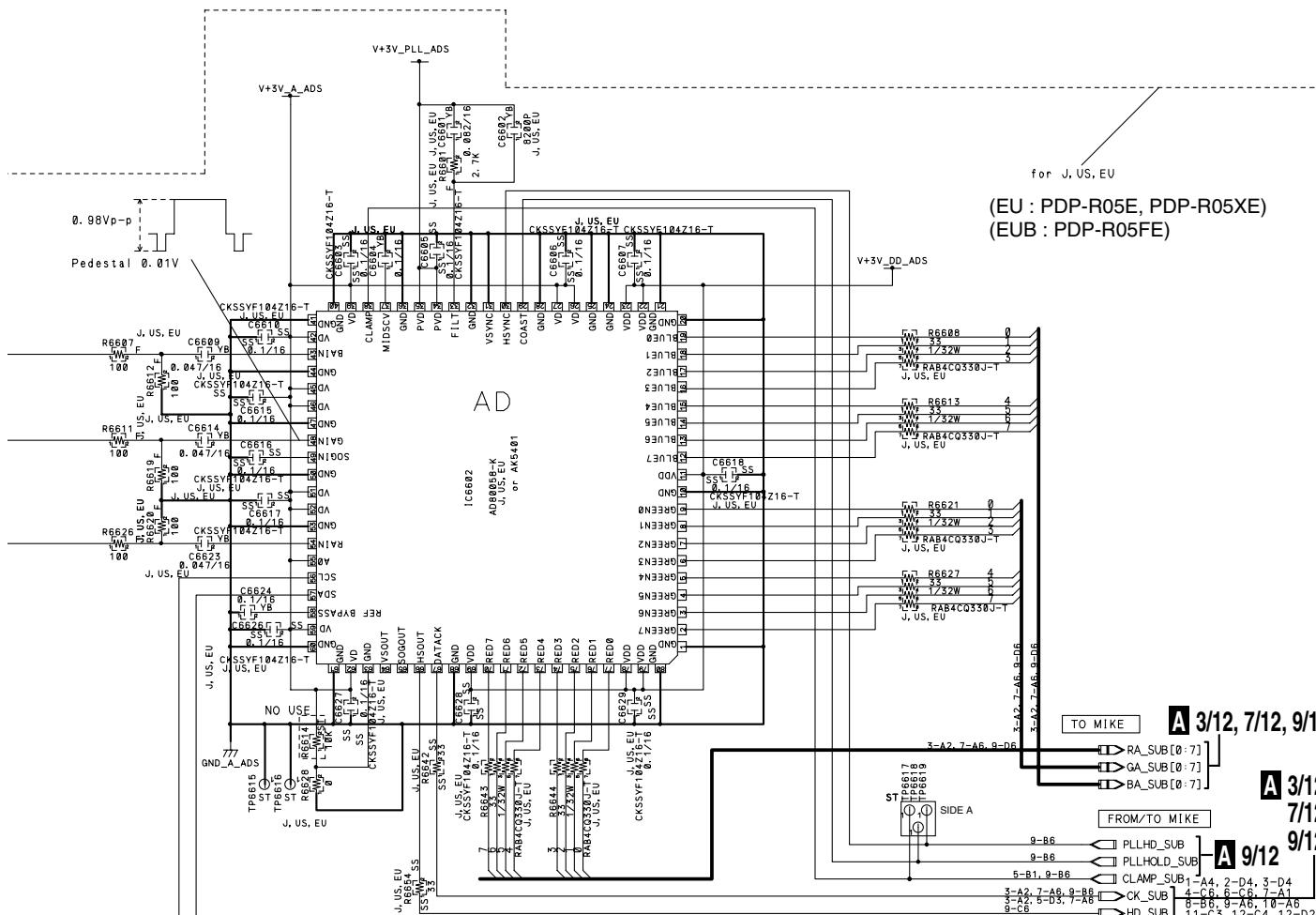




1 2 3 4  
3.7 MR MAIN BOARD ASSY (5/12)

A A 5/12 MR MAIN BOARD ASSY (PDP-R05E : AWZ6944)  
● AD SUB BLOCK (PDP-R05XE : AWZ6990)  
(PDP-R05FE : AWZ6945)





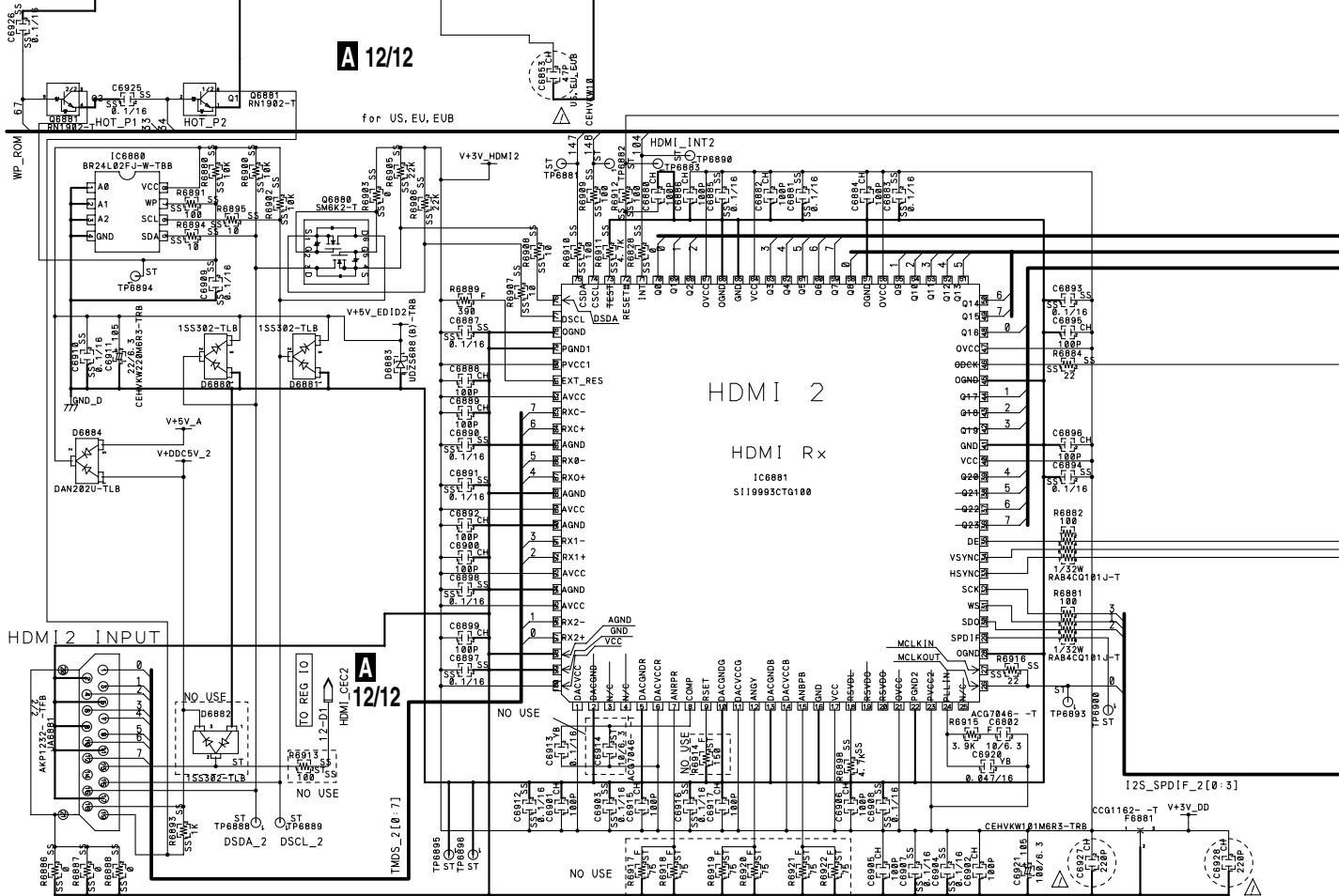
1 2 3 4  
3.8 MR MAIN BOARD ASSY (6/12)

**A 6/12** MR MAIN BOARD ASSY (PDP-R05E : AWZ6944)  
 ● HDMI RX BLOCK (PDP-R05XE : AWZ6990)  
 (PDP-R05FE : AWZ6945)

B



C



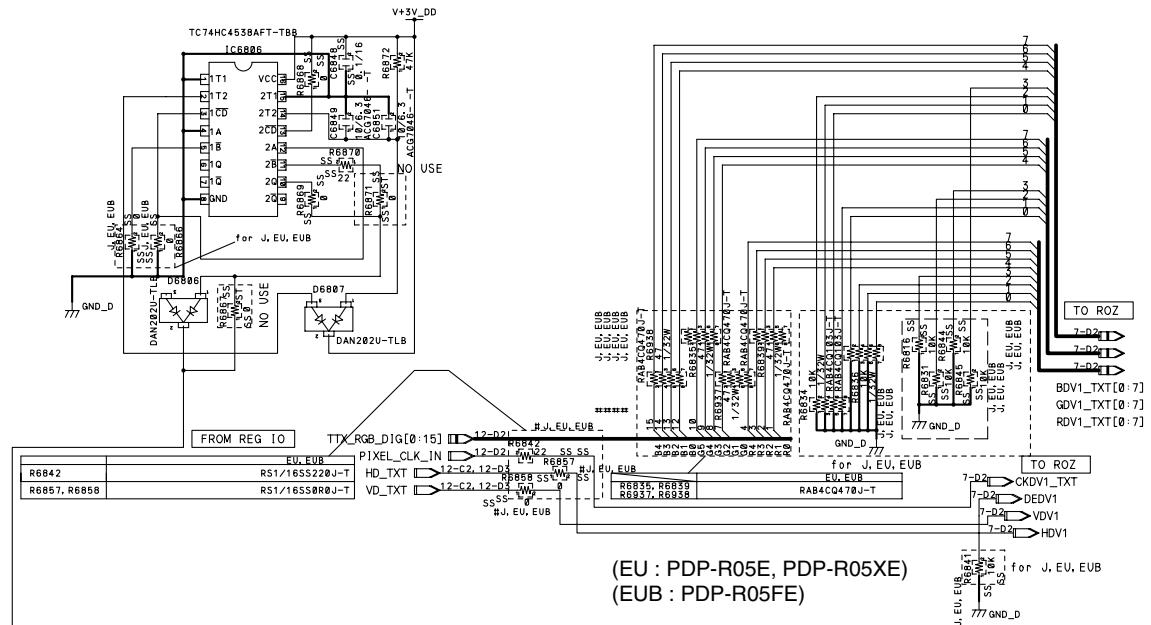
**A 6/12**

40

PDP-R05E

3

4

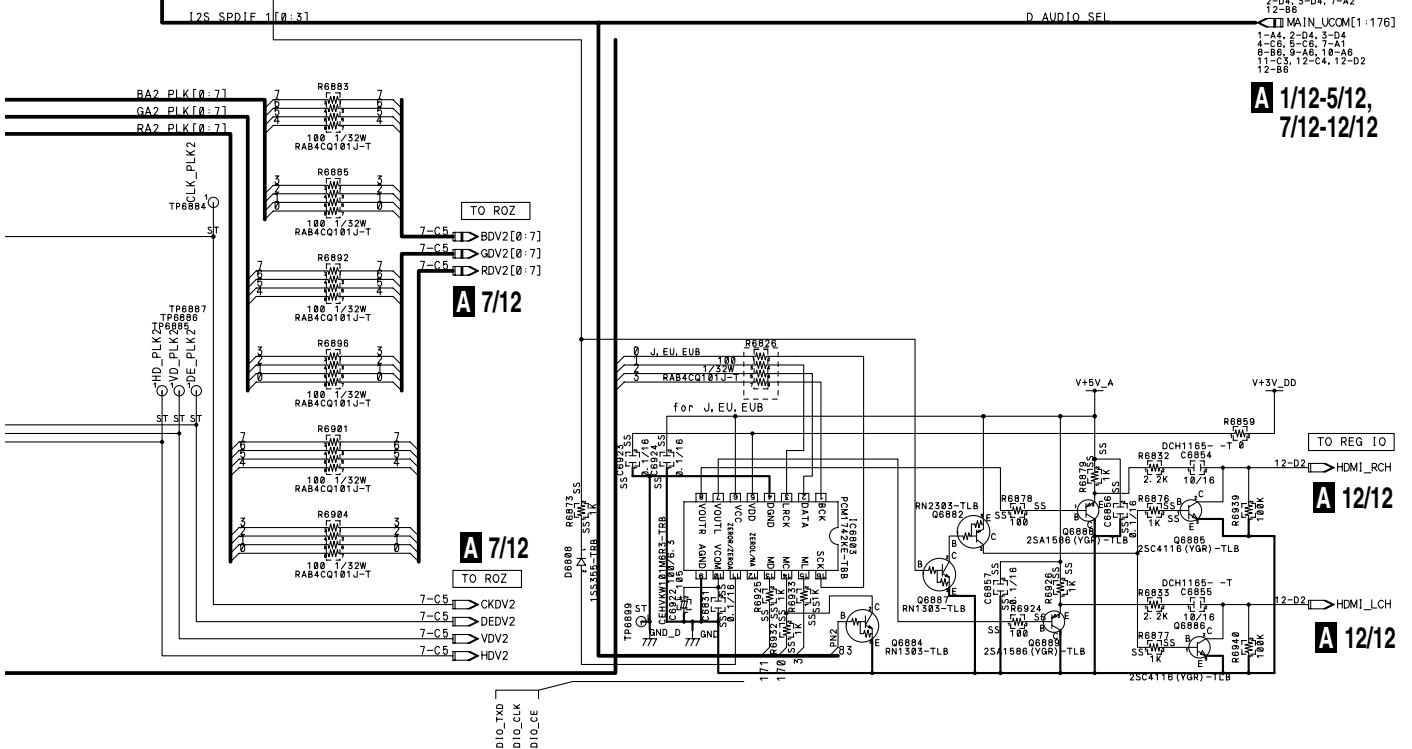


**A 2/12, 3/12,  
7/12, 12/12**

FROM REG IO

RESETX1  
2-D4, 3-D4, 7-A2  
MAIN\_LCOM[1:176]  
1-A4, 2-D4, 3-D4  
4-C6, 6-C6, 7-A1  
8-B6, 9-A6, 10-A6  
11-C6, 12-C4, 12-D2  
12-B6

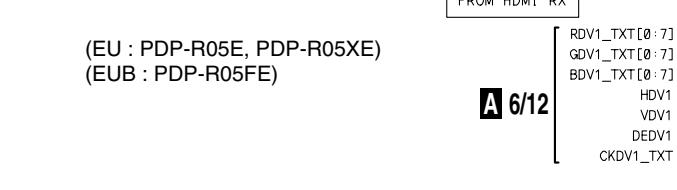
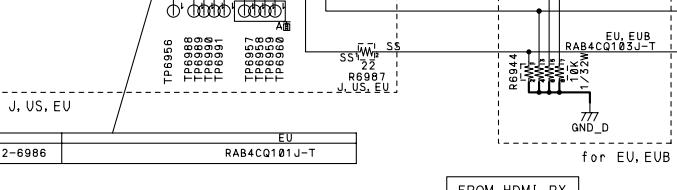
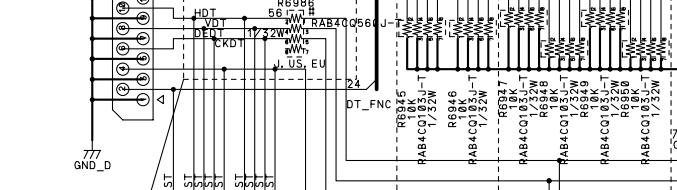
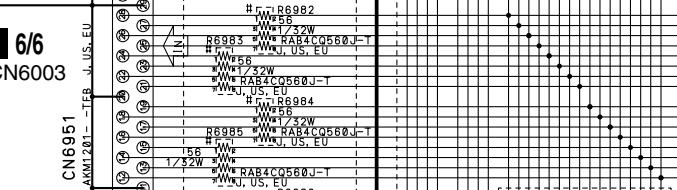
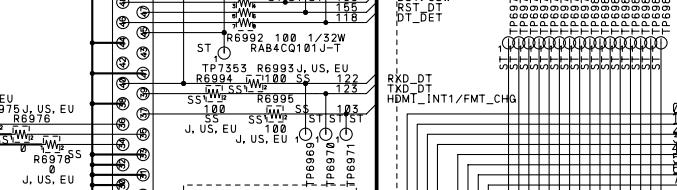
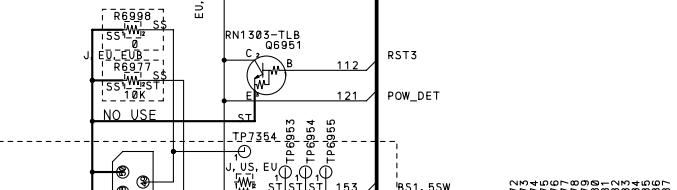
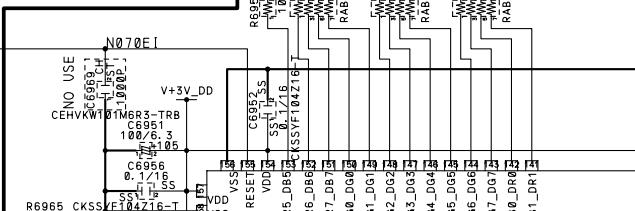
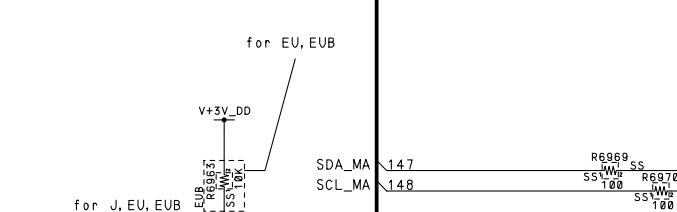
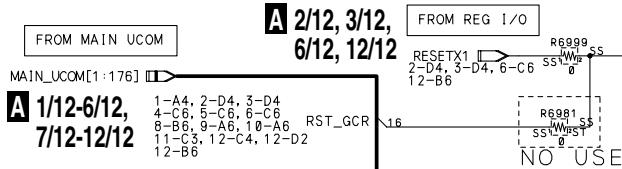
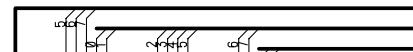
**A 1/12-5/12,  
7/12-12/12**



1 2 3 4  
3.9 MR MAIN BOARD ASSY (7/12)

**A 7/12** MR MAIN BOARD ASSY  
● ROZ BLOCK

(PDP-R05E : AWZ6944)  
(PDP-R05XE : AWZ6990)  
(PDP-R05FE : AWZ6945)

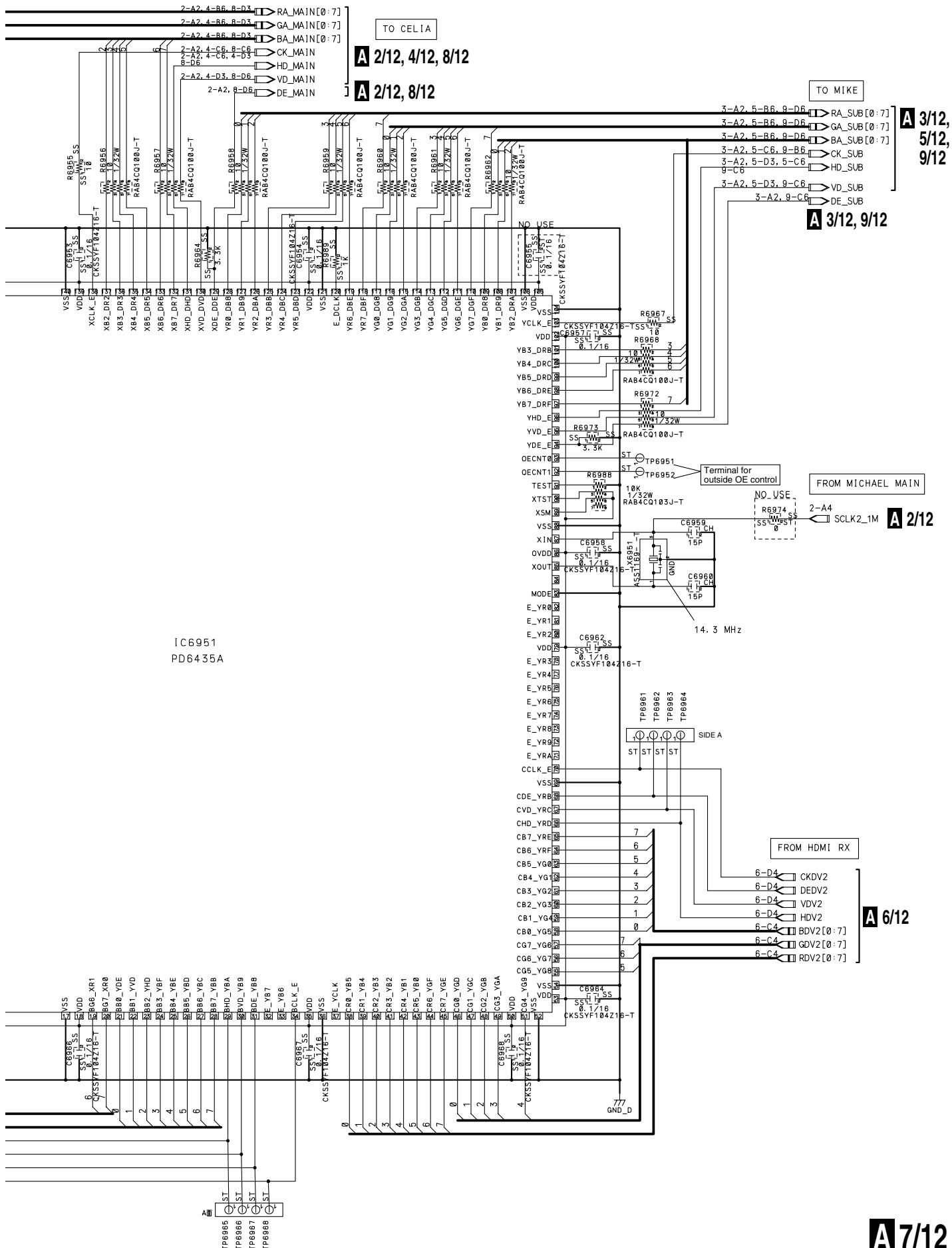


(EU : PDP-R05E, PDP-R05XE)  
(EUB : PDP-R05FE)

**A 6/12**

- RDV1\_TXT[0:7] 6-B6
- GDV1\_TXT[0:7] 6-B6
- BDV1\_TXT[0:7] 6-B6
- HDV1 6-B6
- VDV1 6-B6
- DEV1 6-B6
- CKDV1\_TXT 6-B6

**A 7/12**



1 2 3 4  
3.10 MR MAIN BOARD ASSY (8/12)

**A 8/12** MR MAIN BOARD ASSY (PDP-R05E : AWZ6944)  
 ● CELIA BLOCK (PDP-R05XE : AWZ6990)  
 (PDP-R05FE : AWZ6945)

A

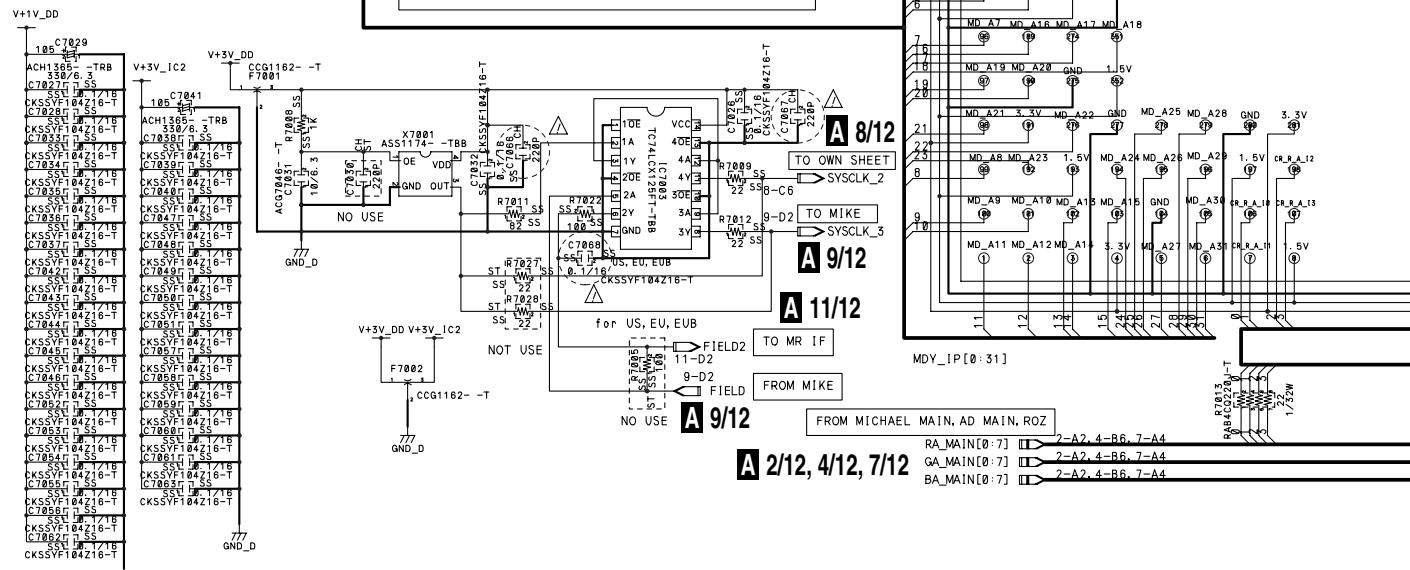
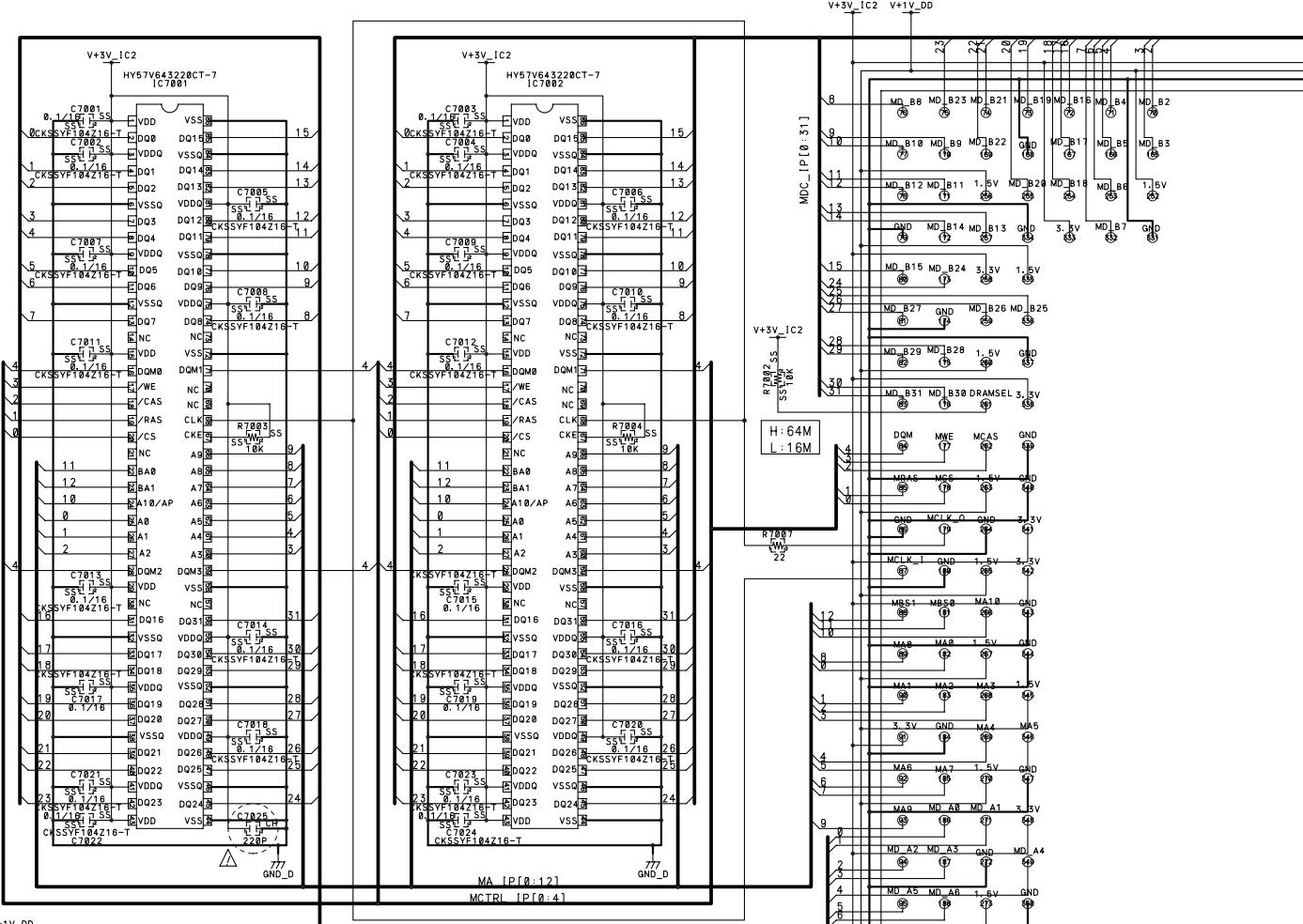
B

C

D

E

F



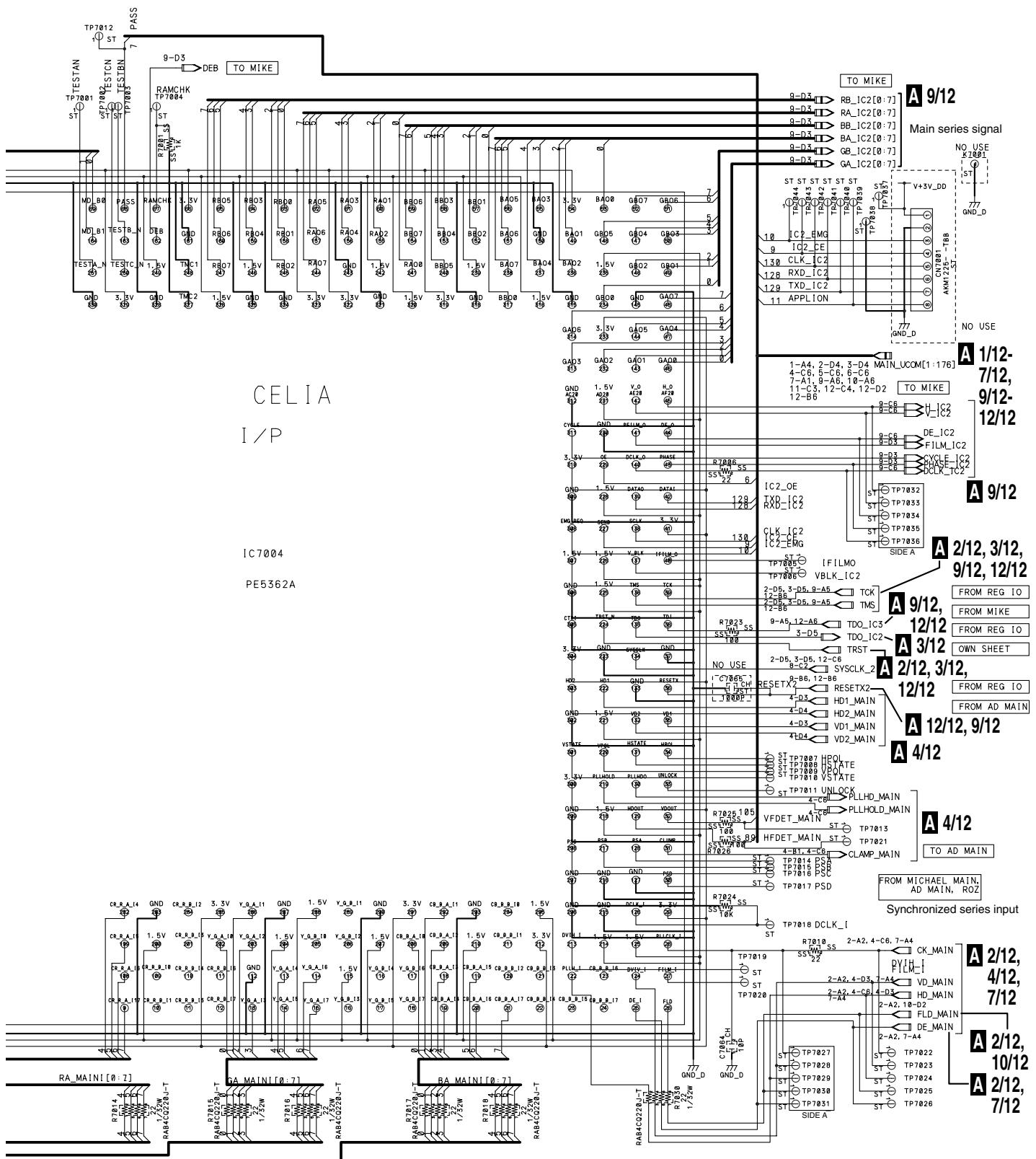
**A 8/12**

44

PDP-R05E

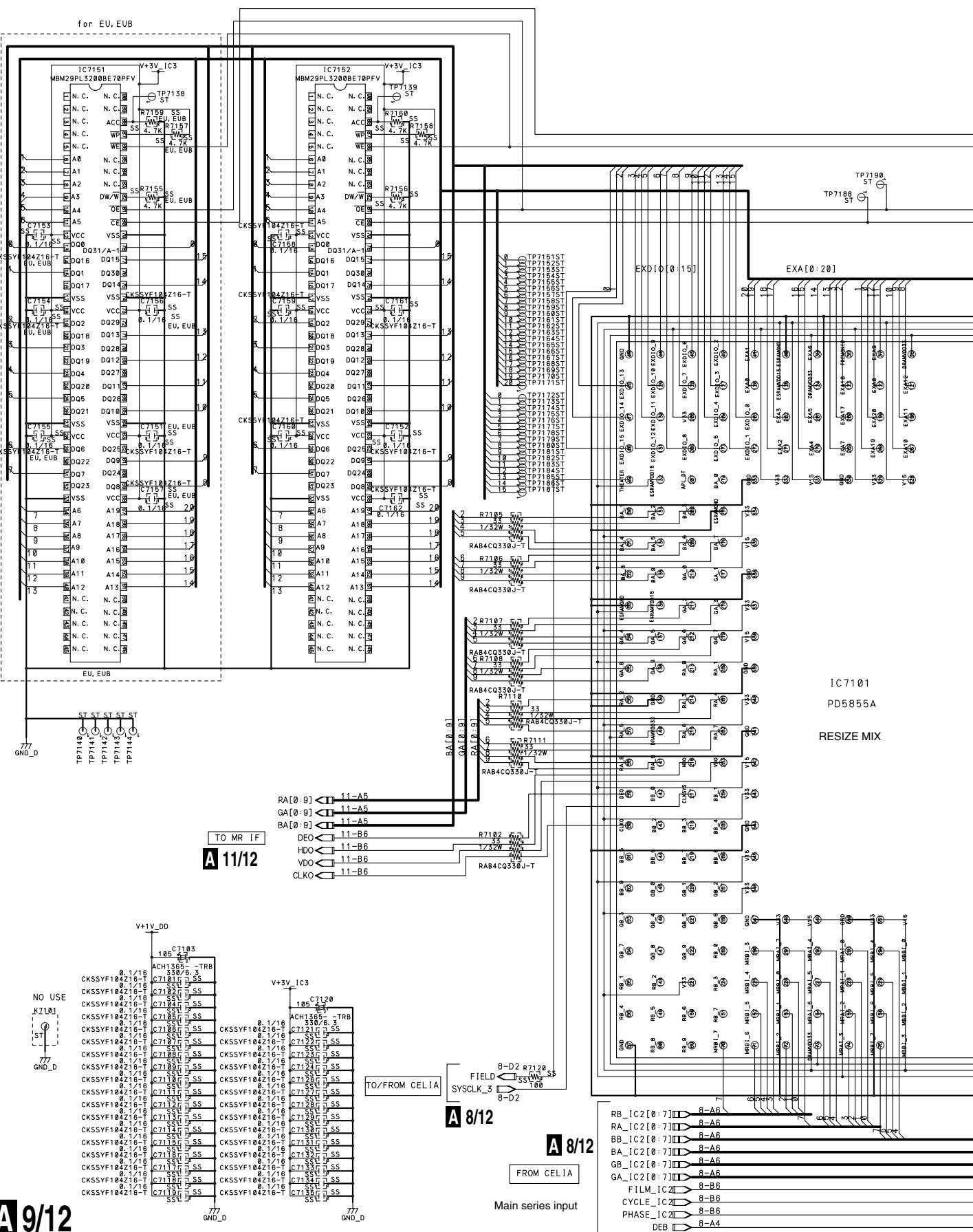
3

4

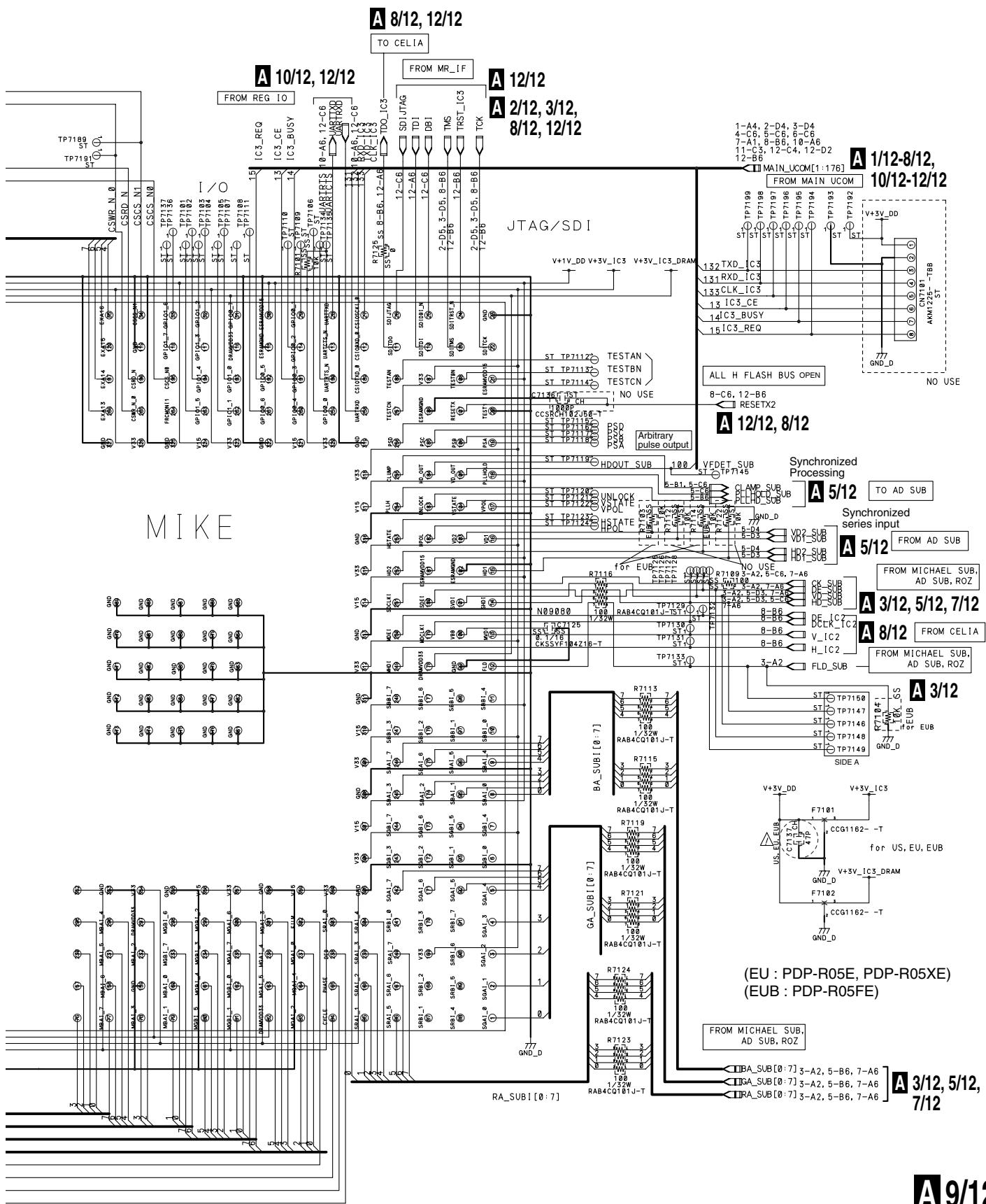


1 2 3 4  
3.11 MR MAIN BOARD ASSY (9/12)

**A 9/12 MR MAIN BOARD ASSY (PDP-R05E : AWZ6944) (PDP-R05XE : AWZ6990)  
● MIKE BLOCK**

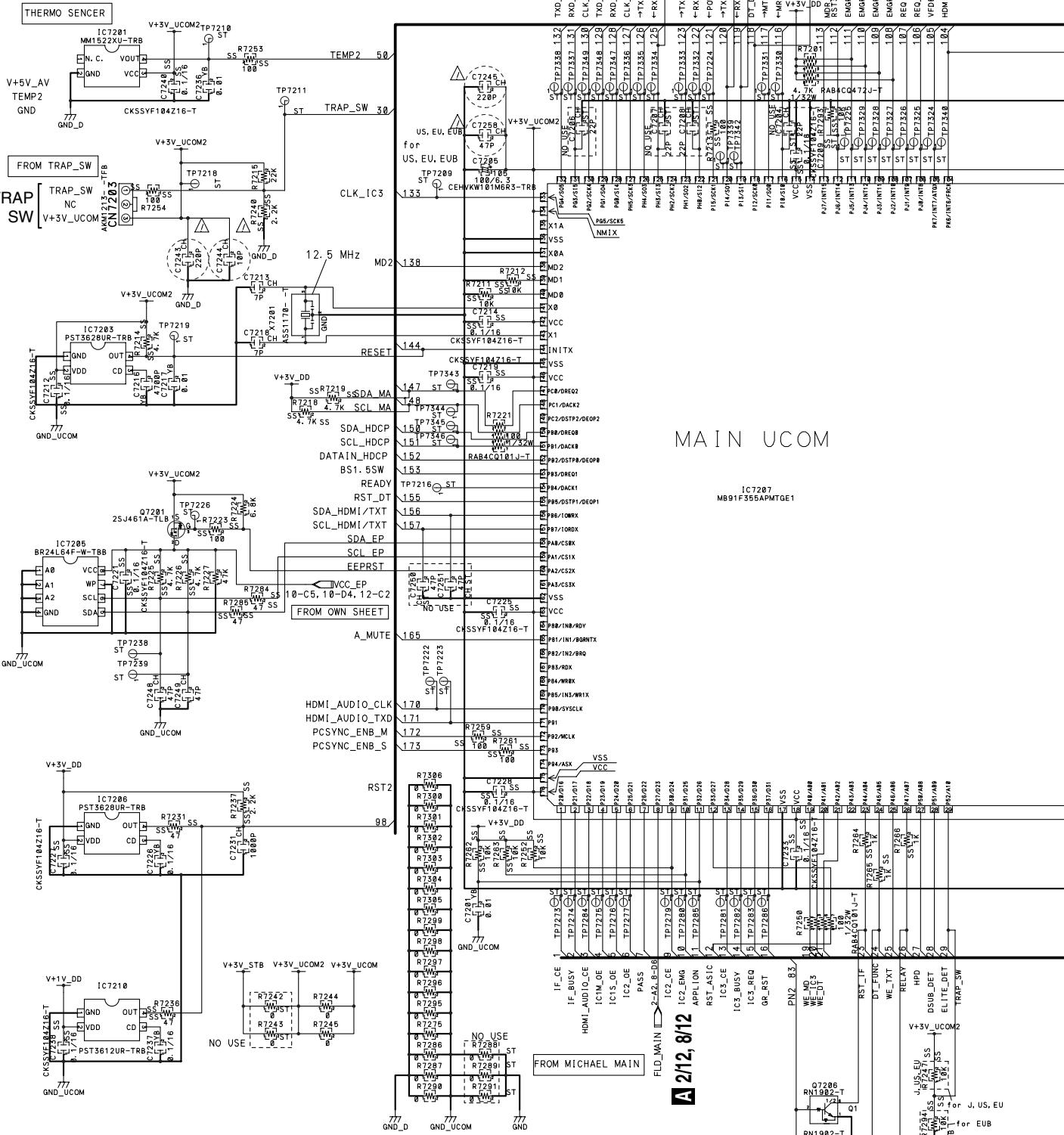


A

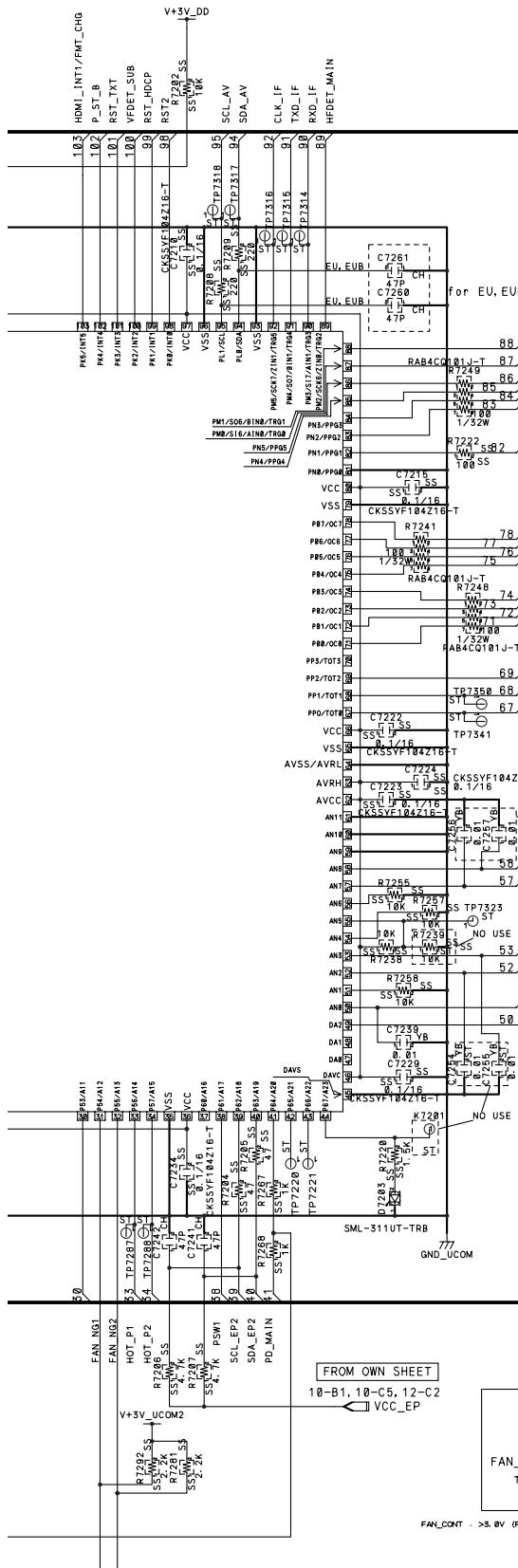


# 3.12 MR MAIN BOARD ASSY (10/12)

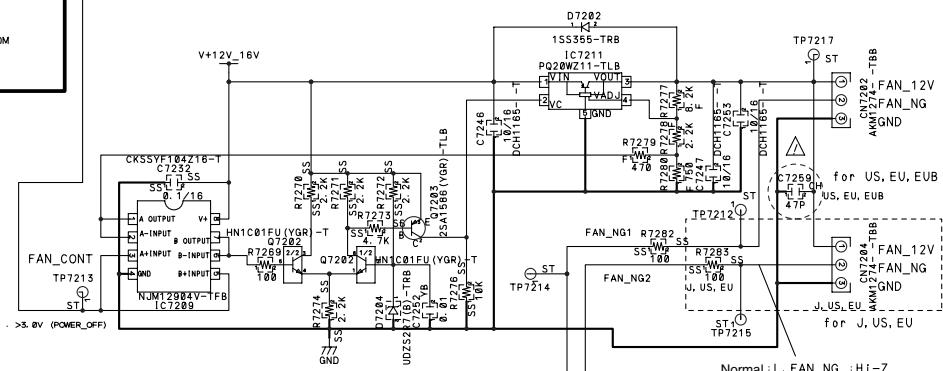
## A 10/12 MR MAIN BOARD ASSY (PDP-R05E : AWZ6944) (PDP-R05XE : AWZ6990) (PDP-R05FE : AWZ6945)



**A 1012**



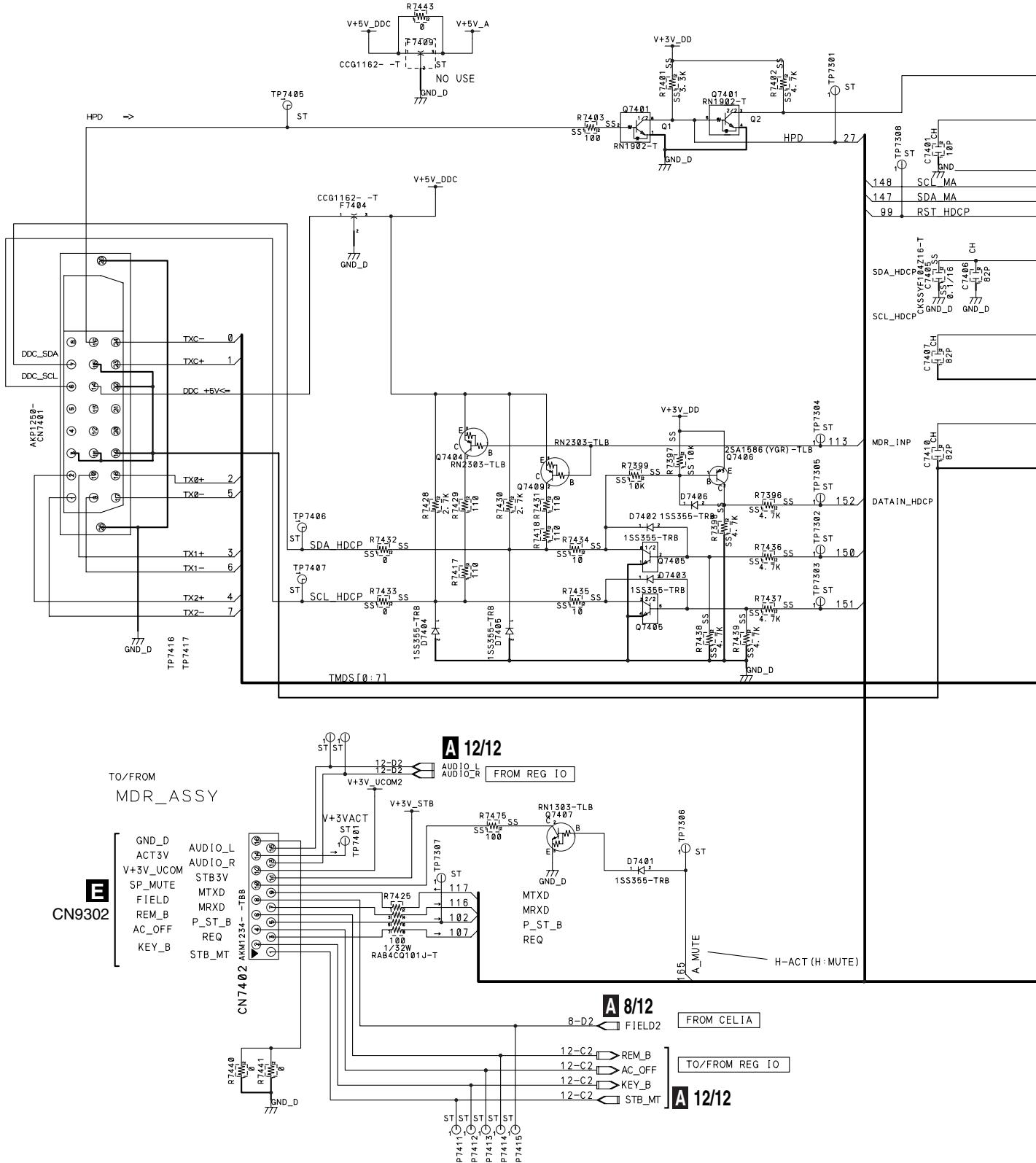
A 12/12



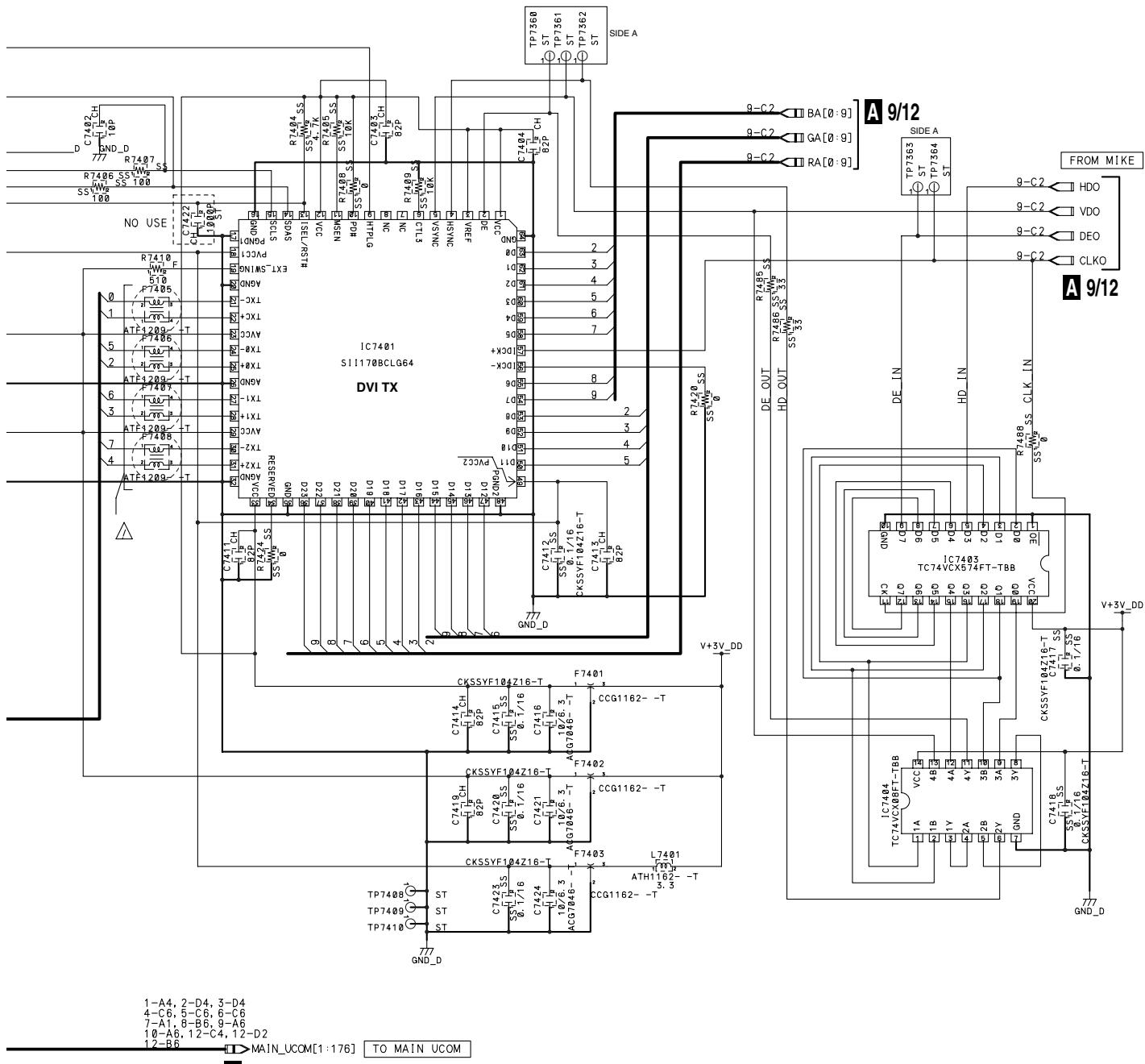
A 10/12

### **3.13 MR MAIN BOARD ASSY (11/12)**

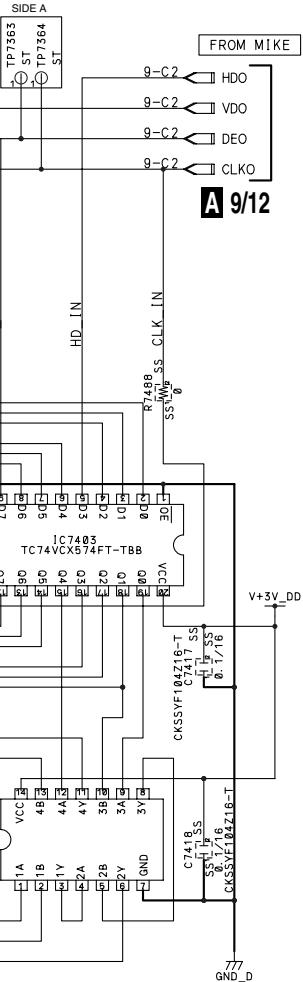
**A 11/12** MR MAIN BOARD ASSY (PDP-R05E : AWZ6944) (PDP-R05XE : AWZ6990)  
● MR I/F BLOCK (PDP-R05FE : AWZ6945)



**A 11/12**



**A 1/12-10/12,  
12/12**

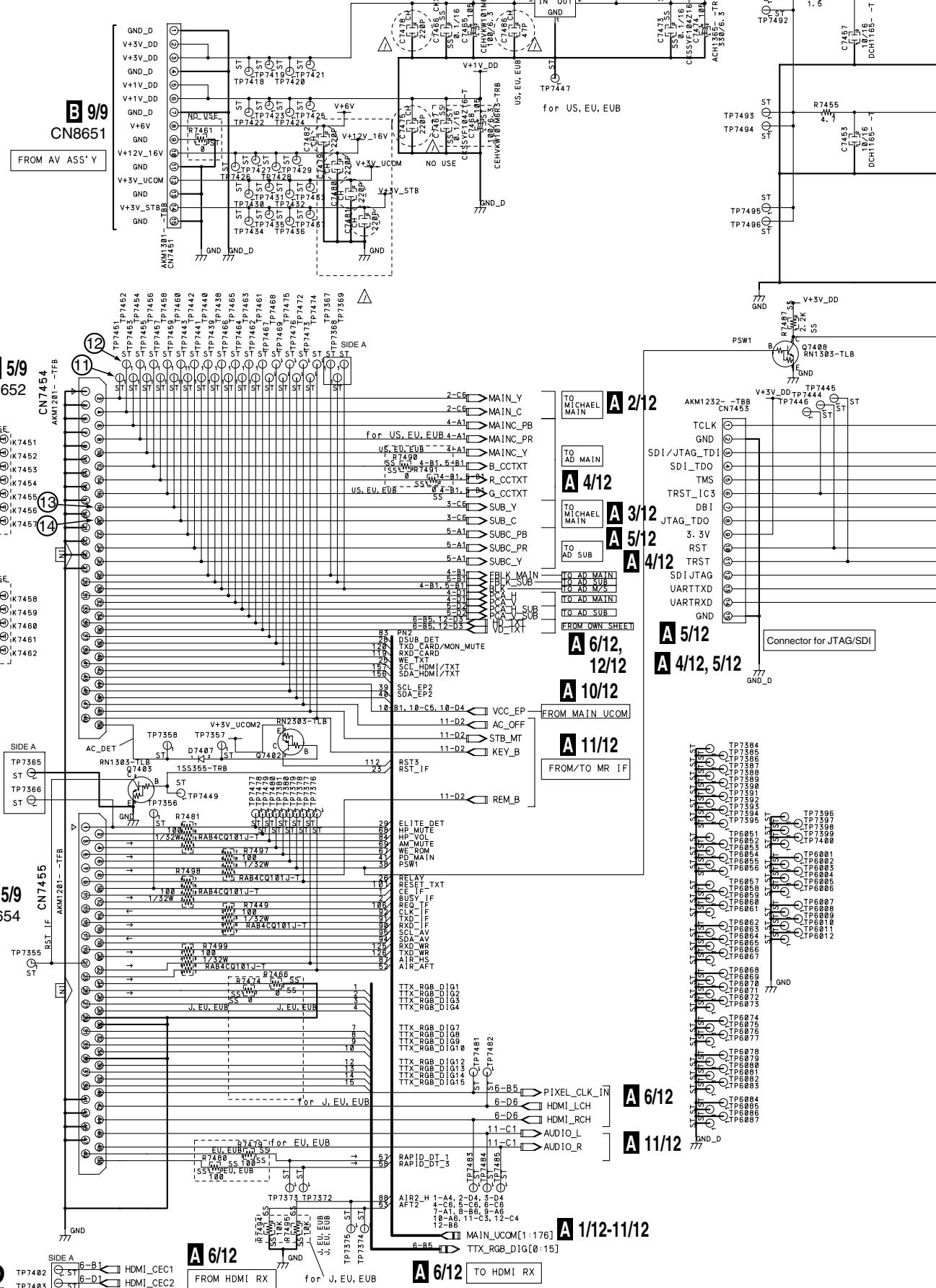


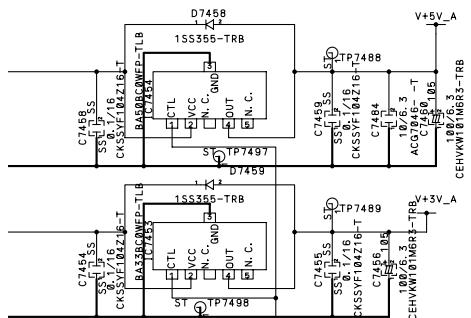
**A 11/12**

### **3.14 MR MAIN BOARD ASSY (12/12)**

A

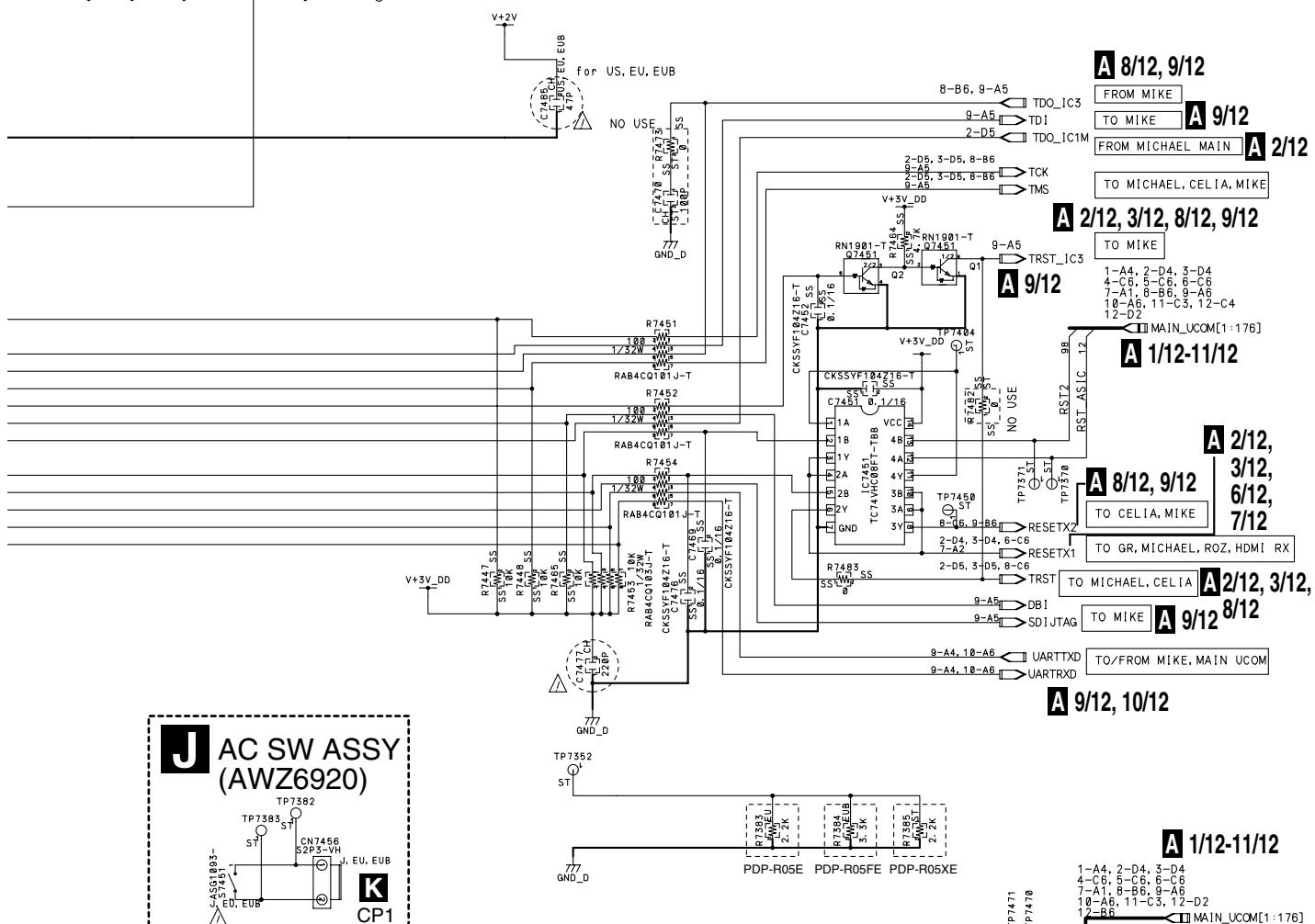
## ● REGULATOR BLOCK



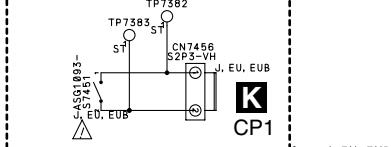


## A 12/12 MR MAIN BOARD ASSY

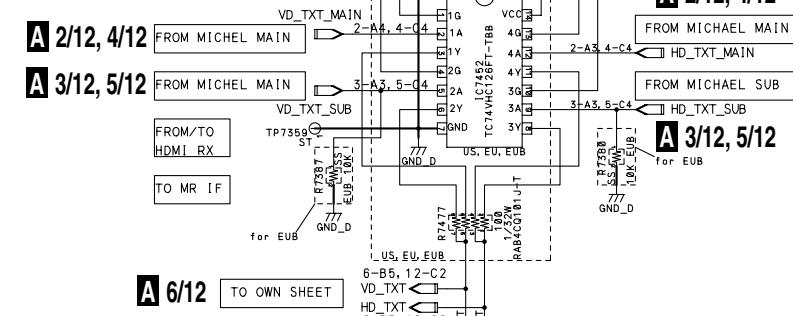
(PDP-R05E : AWZ6944)  
(PDP-R05XE : AWZ6990)  
(PDP-R05FE : AWZ6945)



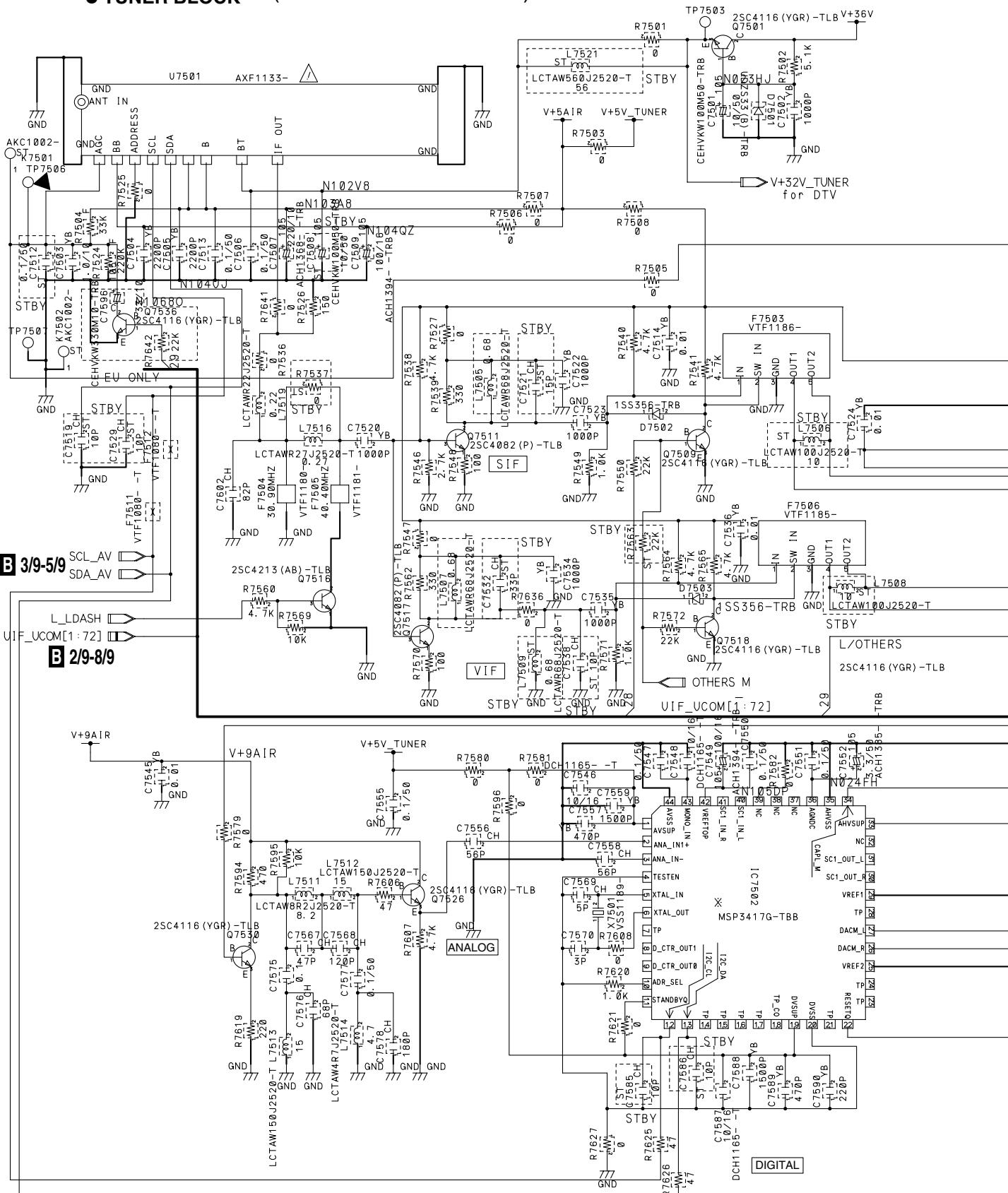
## J AC SW ASSY (AWZ6920)

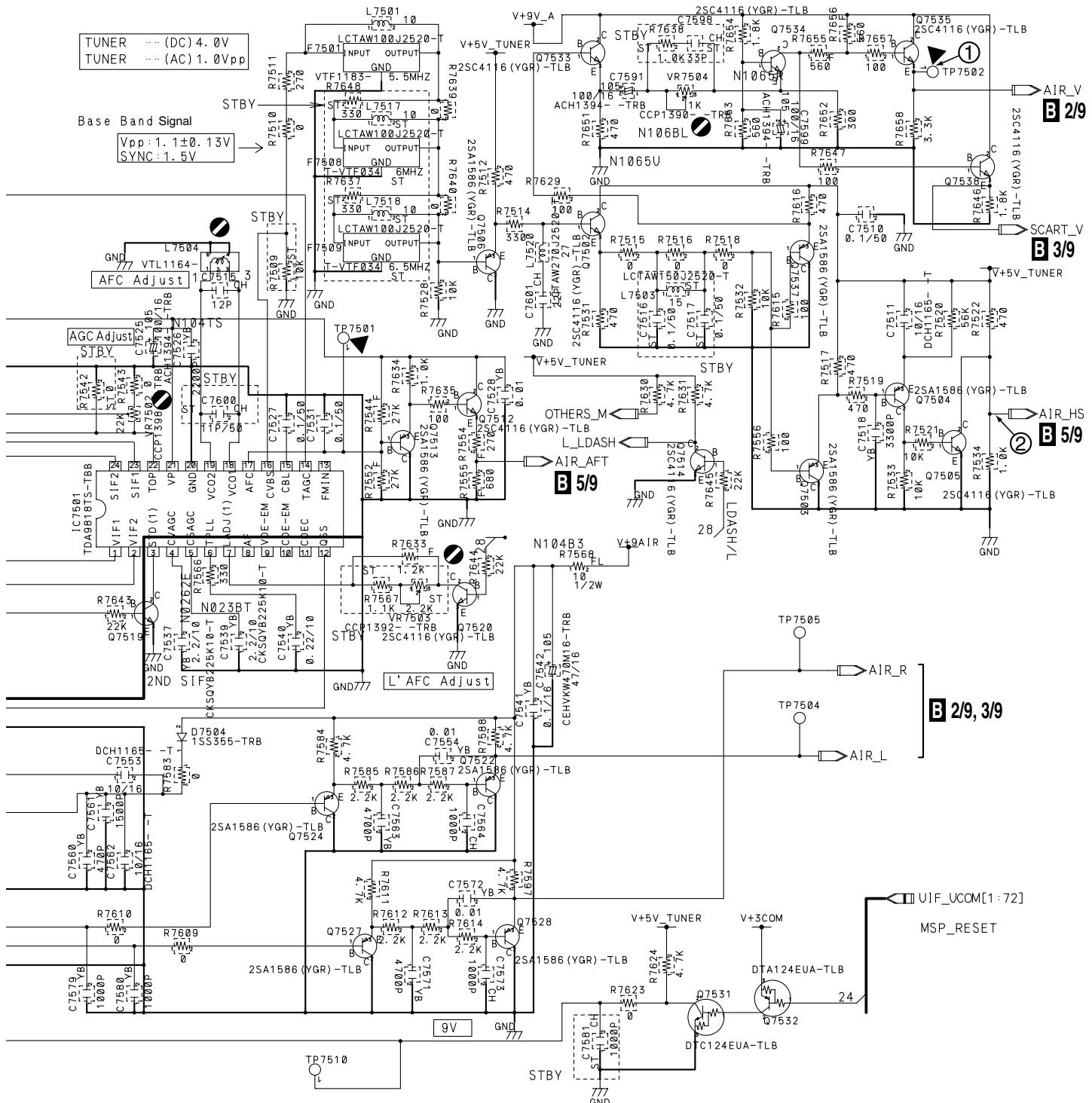


(EU : PDP-R05E, PDP-R05XE)  
(EUB : PDP-R05FE)



**J A 12/12**

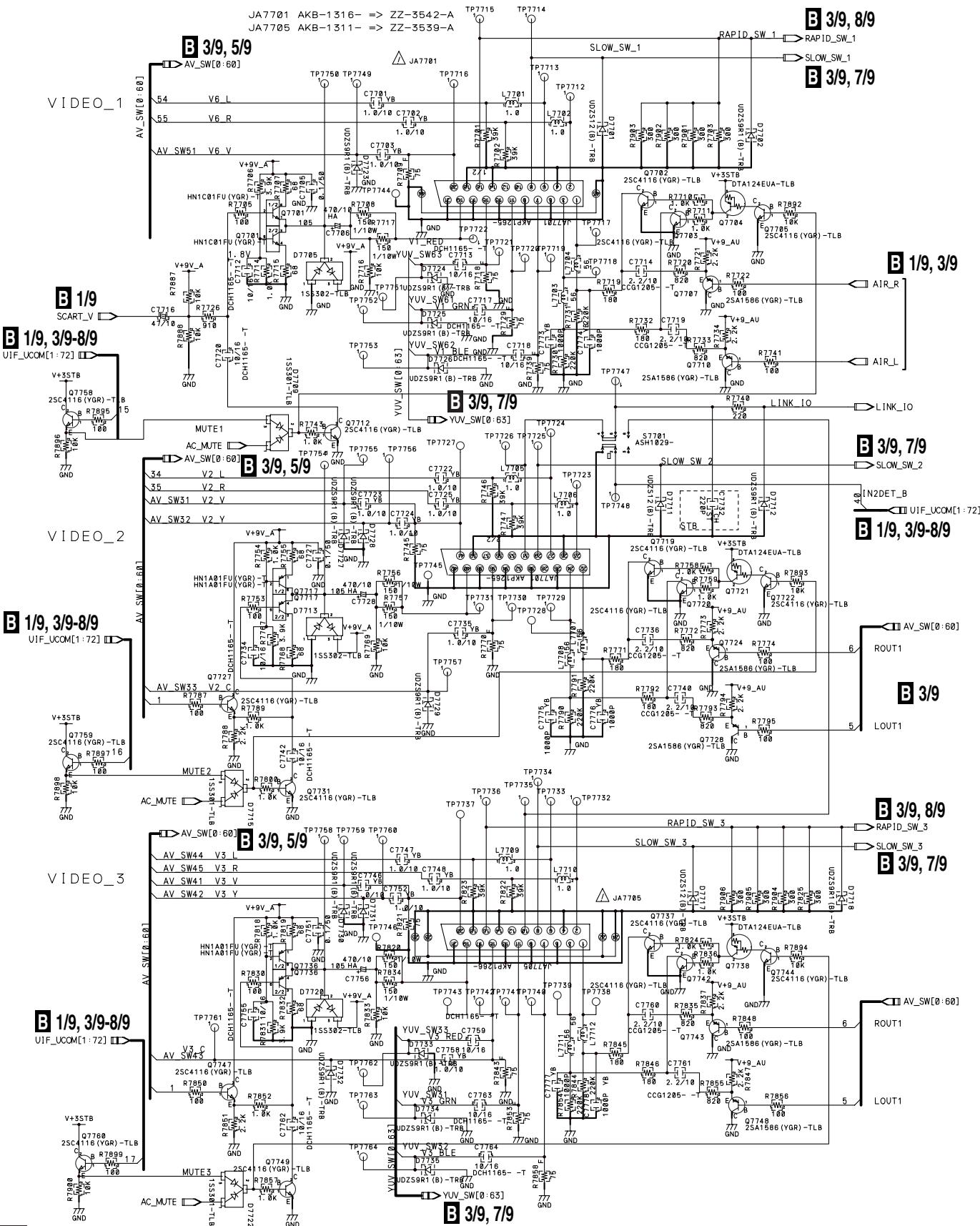




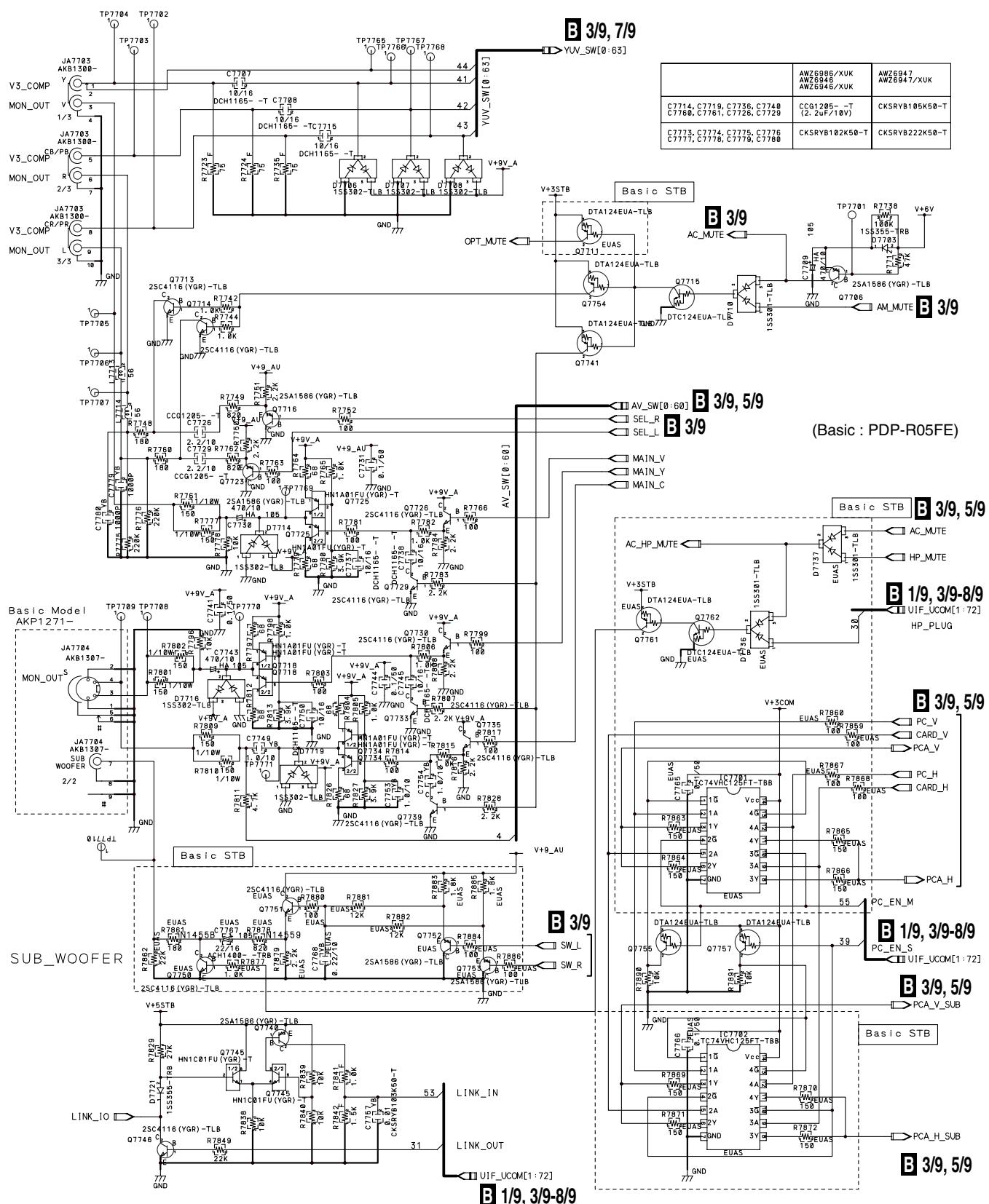
### **3.16 AV BOARD ASSY (2/9)**

**B 2/9** AV BOARD ASSY (PDP-R05E : AWZ6946) (PDP-R05XE : AWZ6986)

### ● AV I/O BLOCK (PDP-R05FE : AWZ6947)



A



With the  mark, be sure to use parts of identical designation.

B 2/9

# 3.17 AV BOARD ASSY (3/9)

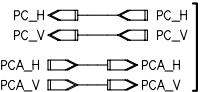
## B 3/9 AV BOARD ASSY (PDP-R05E : AWZ6946) (PDP-R05XE : AWZ6986) (PDP-R05FE : AWZ6947)

### ● SW BLOCK

**B 2/9, 5/9**

AV\_SW[0:60]

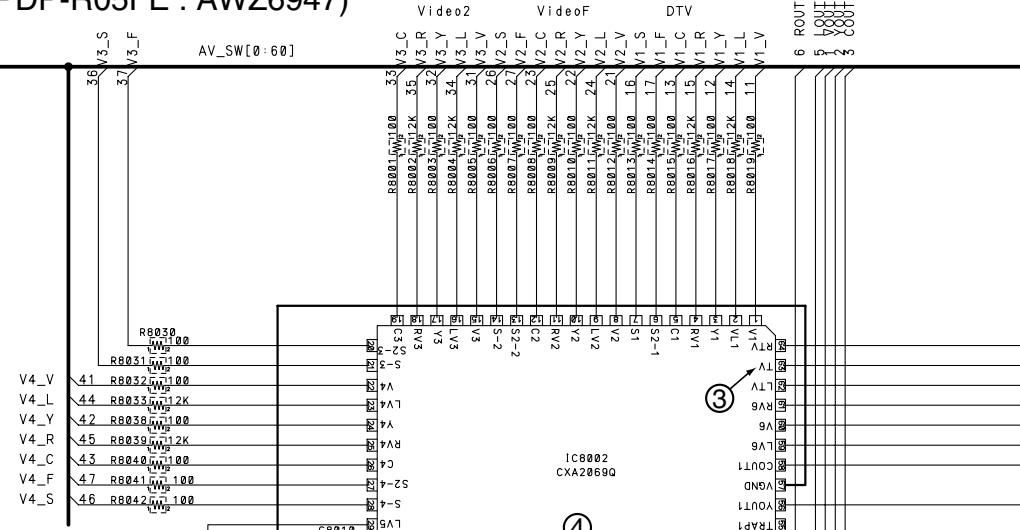
TO/FROM AV\_IO



**B 2/9, 5/9**

PCA\_H\_SUB ↔ PCA\_H\_SUB  
PCA\_V\_SUB ↔ PCA\_V\_SUB  
CARD\_H ↔ CARD\_H  
CARD\_V ↔ CARD\_V  
CARD\_L\_CH ↔ CARD\_L\_CH  
CARD\_RCH ↔ CARD\_RCH

**B 2/9**



**B 2/9**

**B 2/9, 5/9**

DVD\_LCH ↔ DVD\_LCH  
DVD\_RCH ↔ DVD\_RCH  
MON\_MUTE ↔ MON\_MUTE

TO/FROM AV\_IO

**B 2/9**

SEL\_R ↔ SEL\_L

TO/FROM AV\_IO

**B 2/9, 7/9**

YUV\_SW[0:63]

**B 1/9, 2/9, 4/9-8/9**

UIF\_UCOM[1:72] ↔ UIF\_UCOM[1:72]

SLOW\_SW\_1 ↔ SLOW\_SW\_1

SLOW\_SW\_2 ↔ SLOW\_SW\_2

SLOW\_SW\_3 ↔ SLOW\_SW\_3

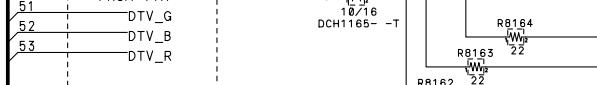
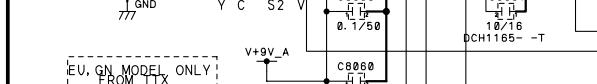
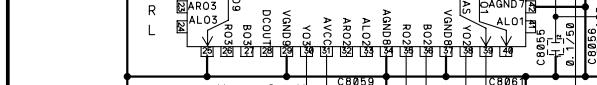
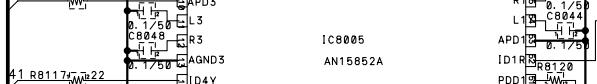
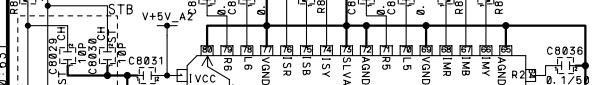
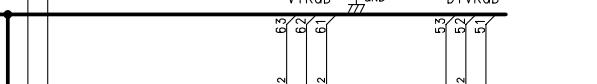
RAPID\_SW\_1 ↔ RAPID\_SW\_1

RAPID\_SW\_3 ↔ RAPID\_SW\_3

AIR\_V ↔ AIR\_V  
AIR\_L ↔ AIR\_L  
AIR\_R ↔ AIR\_R

**B 1/9, 2/9**

**B 8/9**



**B 5/9**

TC4052BF-TBB

C8025

R8076

R8077

R8078

R8079

R8080

R8081

R8082

R8083

R8084

R8085

R8086

R8087

R8088

R8089

R8090

R8091

R8092

R8093

R8094

R8095

R8096

R8097

R8098

R8099

R8100

R8101

R8102

R8103

R8104

R8105

R8106

R8107

R8108

R8109

R8110

R8111

R8112

R8113

R8114

R8115

R8116

R8117

R8118

R8119

R8120

R8121

R8122

R8123

R8124

R8125

R8126

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R8210

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R8215

R8216

R8217

R8218

R8219

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R8221

R8222

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R8226

R8227

R8228

R8229

R8230

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R8242

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R8250

R8251

R8252

R8253

R8254

R8255

R8256

R8257

R8258

R8259

R8260

R8261

R8262

R8263

R8264

R8265

R8266

R8267

R8268

R8269

R8270

R8271

R8272

R8273

R8274

R8275

R8276

R8277

R8278

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R8284

R8285

R8286

R8287

R8288

R8289

R8290

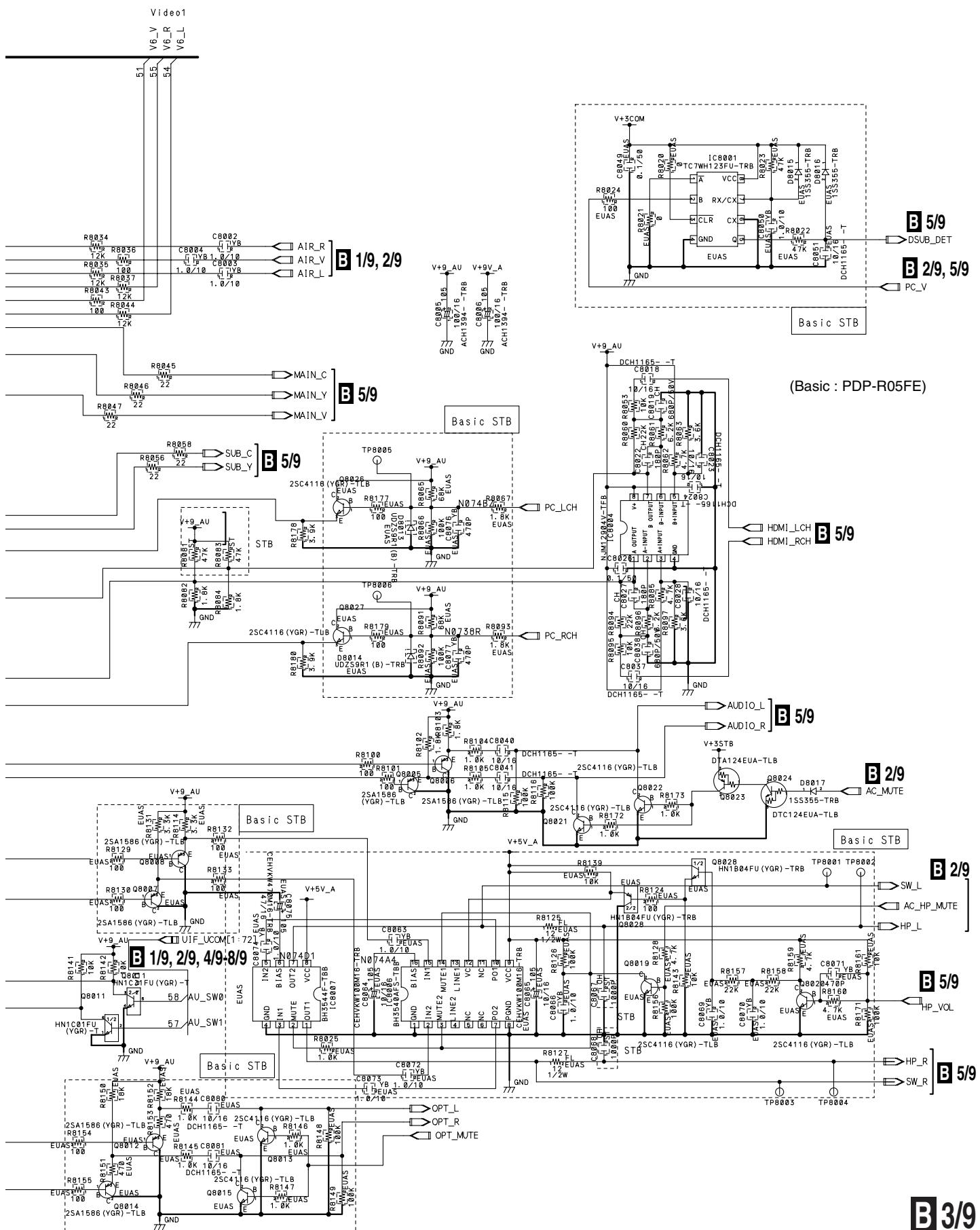
R8291

R8292

R8293

R8294

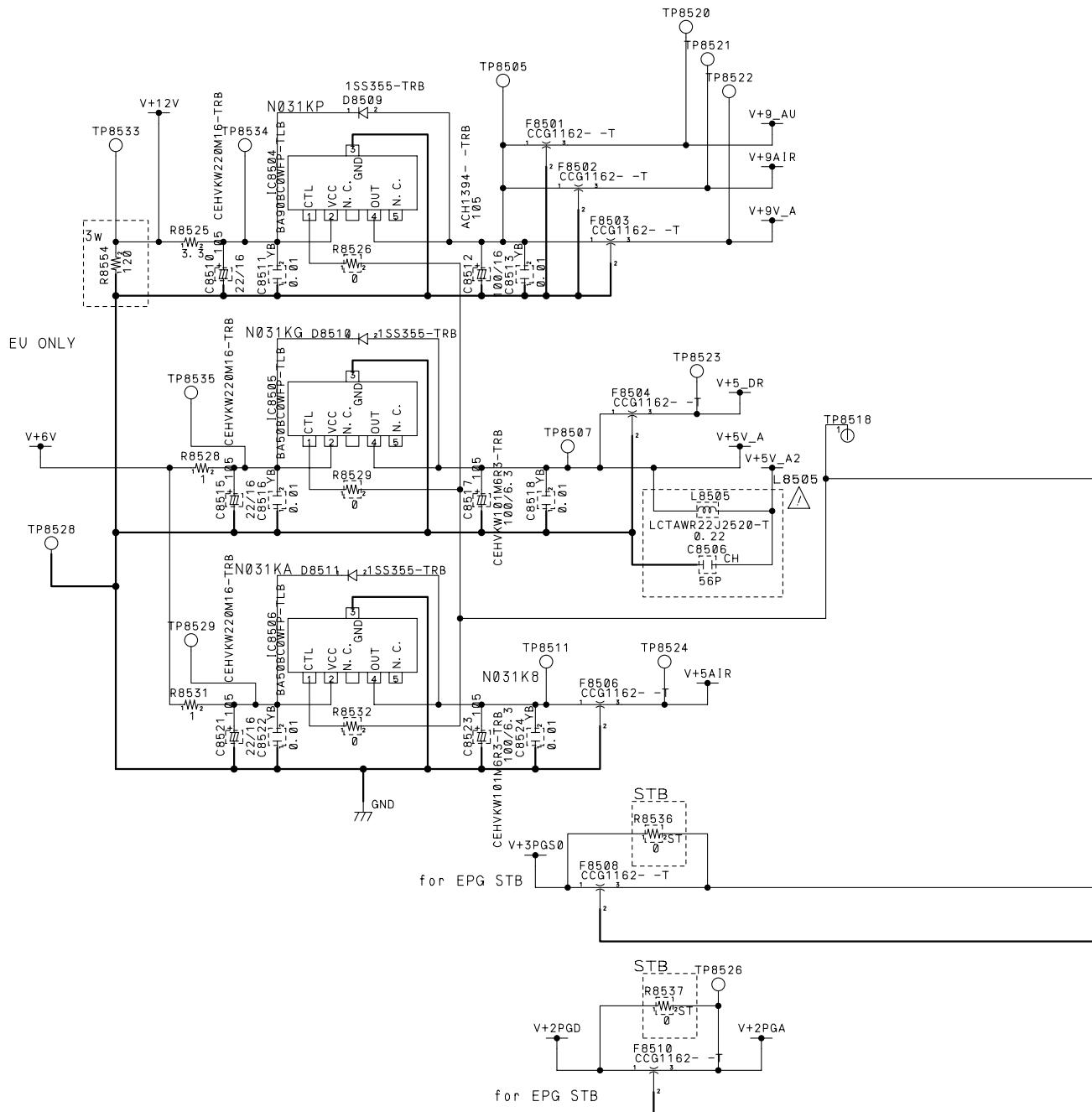
A



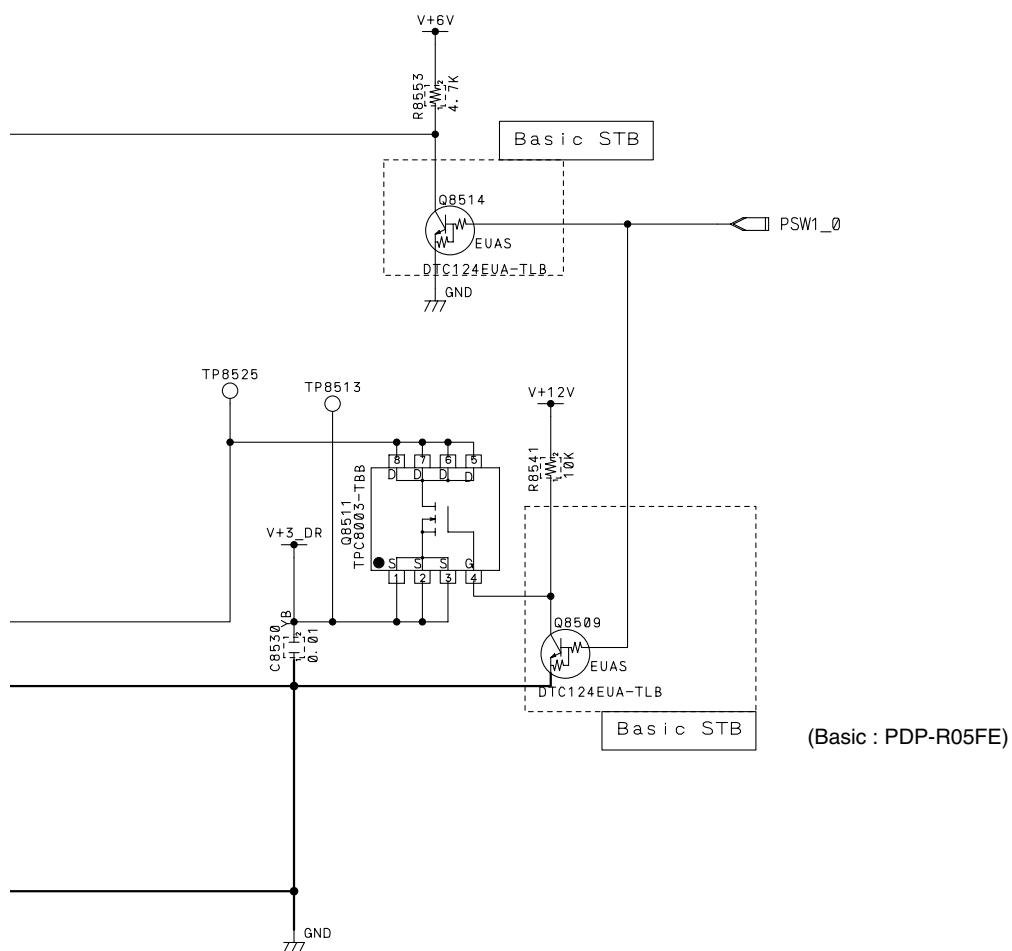
## **3.18 AV BOARD ASSY (4/9)**

**B 4/9** AV BOARD ASSY (PDP-R05E : AWZ6946) (PDP-R05XE : AWZ6986)  
● AV\_REG\_BLOCK (PDP-R05FE : AWZ6947)

#### ● AV\_REG\_BLOCK (PDP-R05FE : AWZ6947)



B 4/9



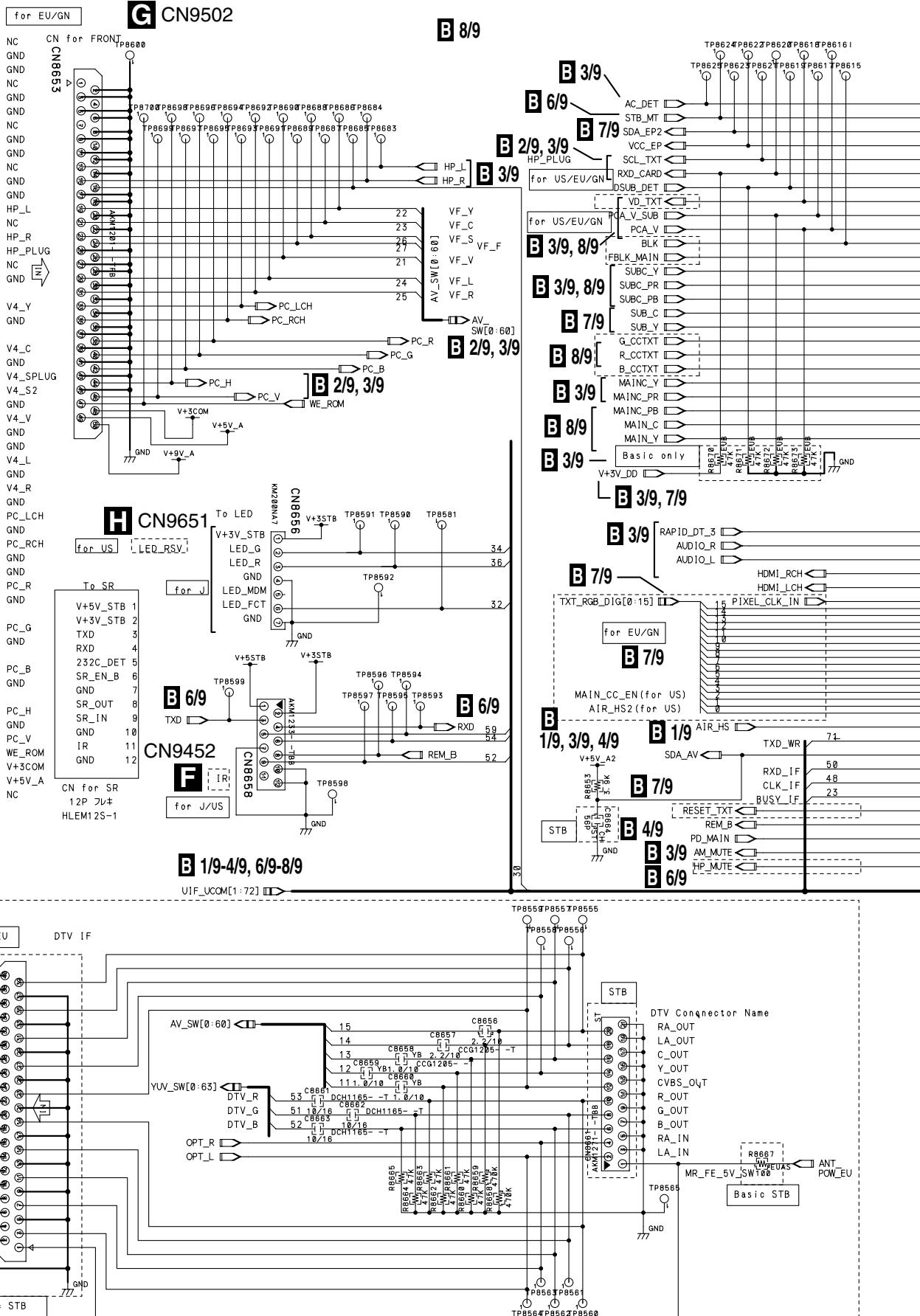
With the mark, be sure to use parts of identical designation.

**B 4/9**

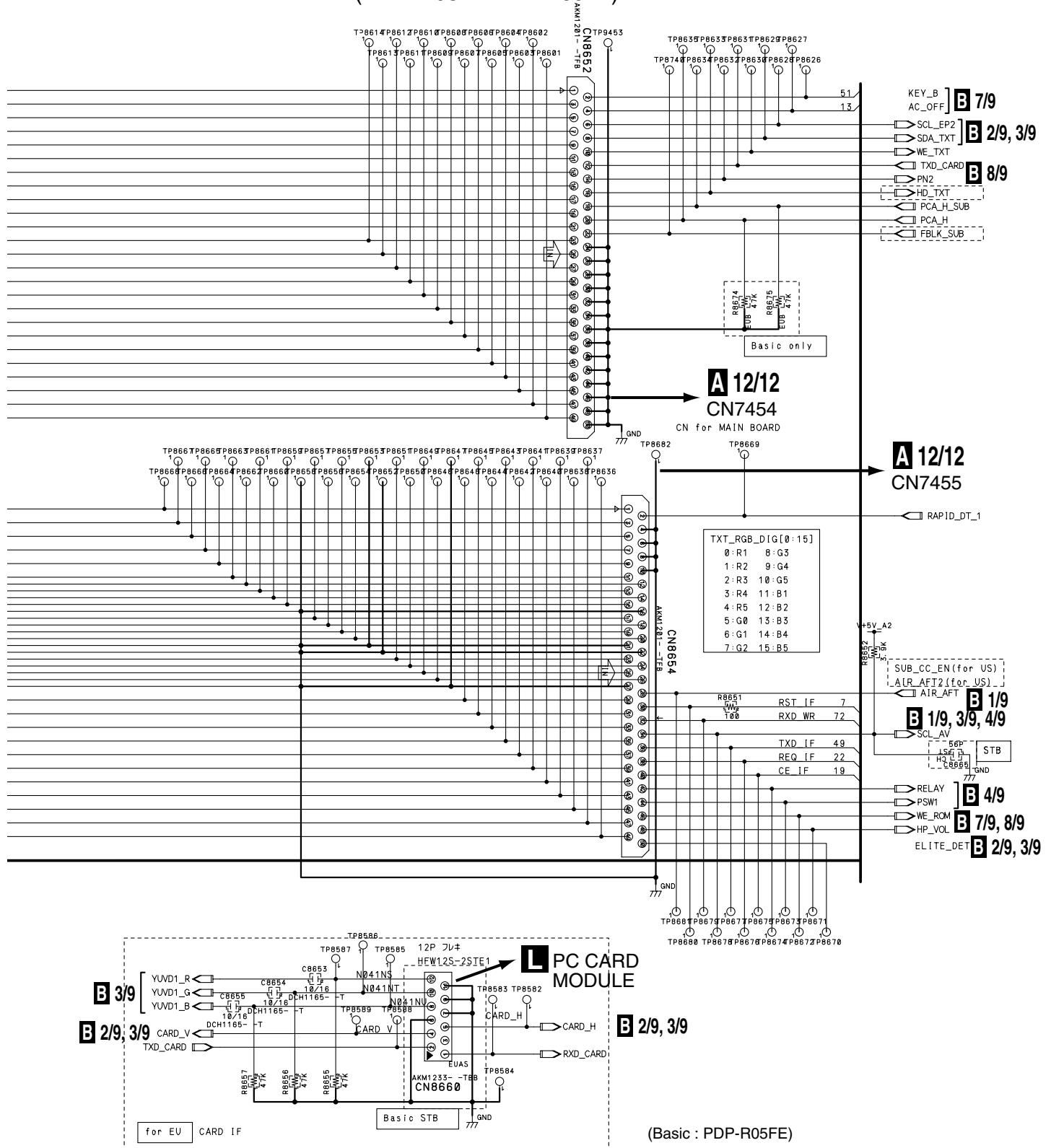
61

# 3.19 AV BOARD ASSY (5/9)

## ● IF BLOCK



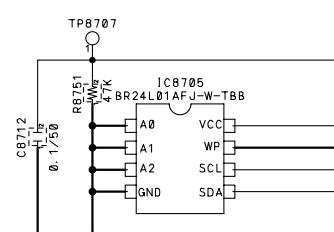
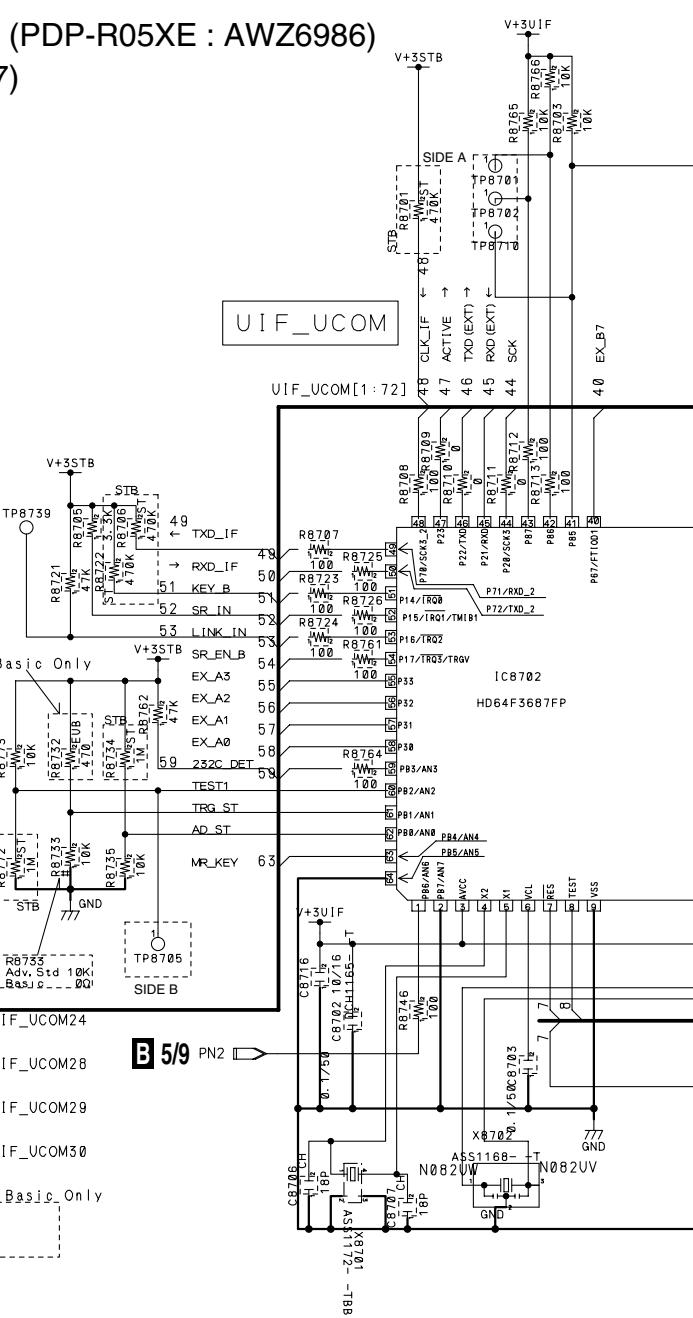
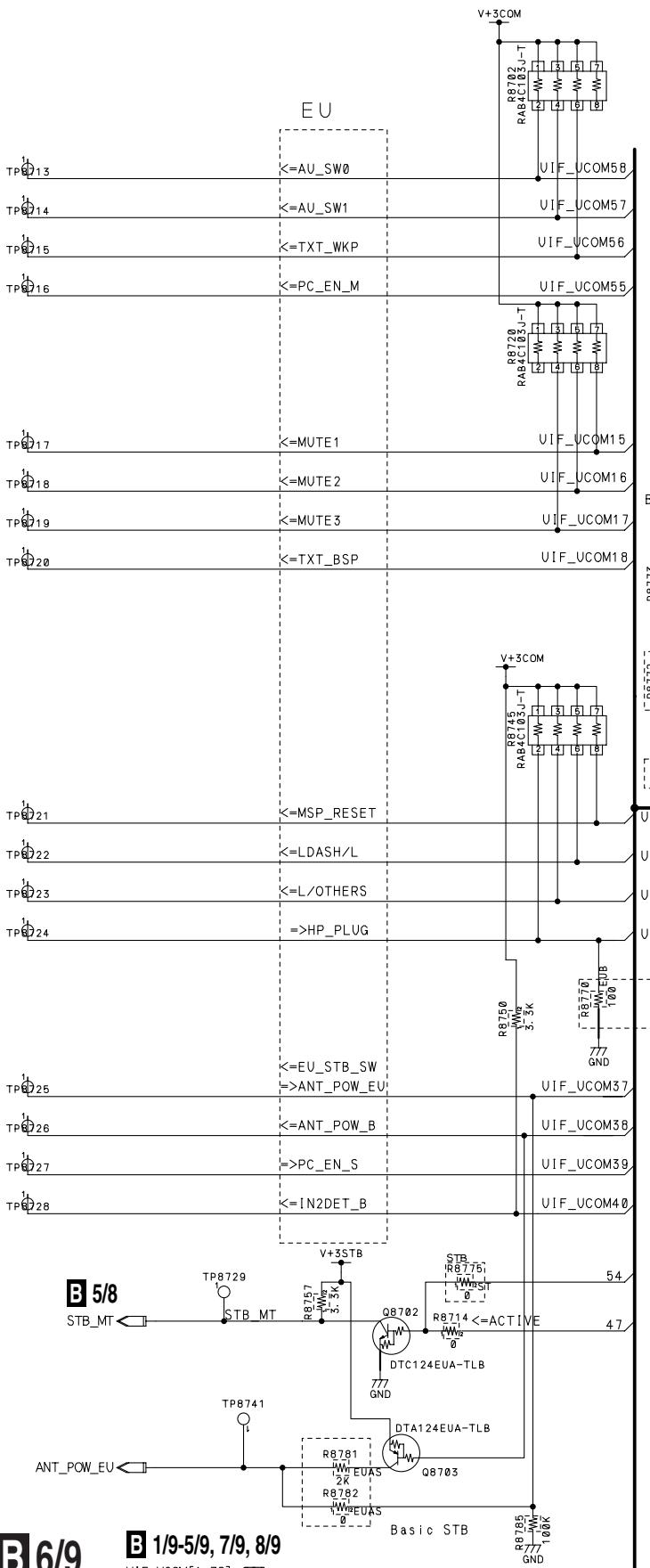
**B 5/9** AV BOARD ASSY (PDP-R05E : AWZ6946) (PDP-R05XE : AWZ6986)  
(PDP-R05FE : AWZ6947)

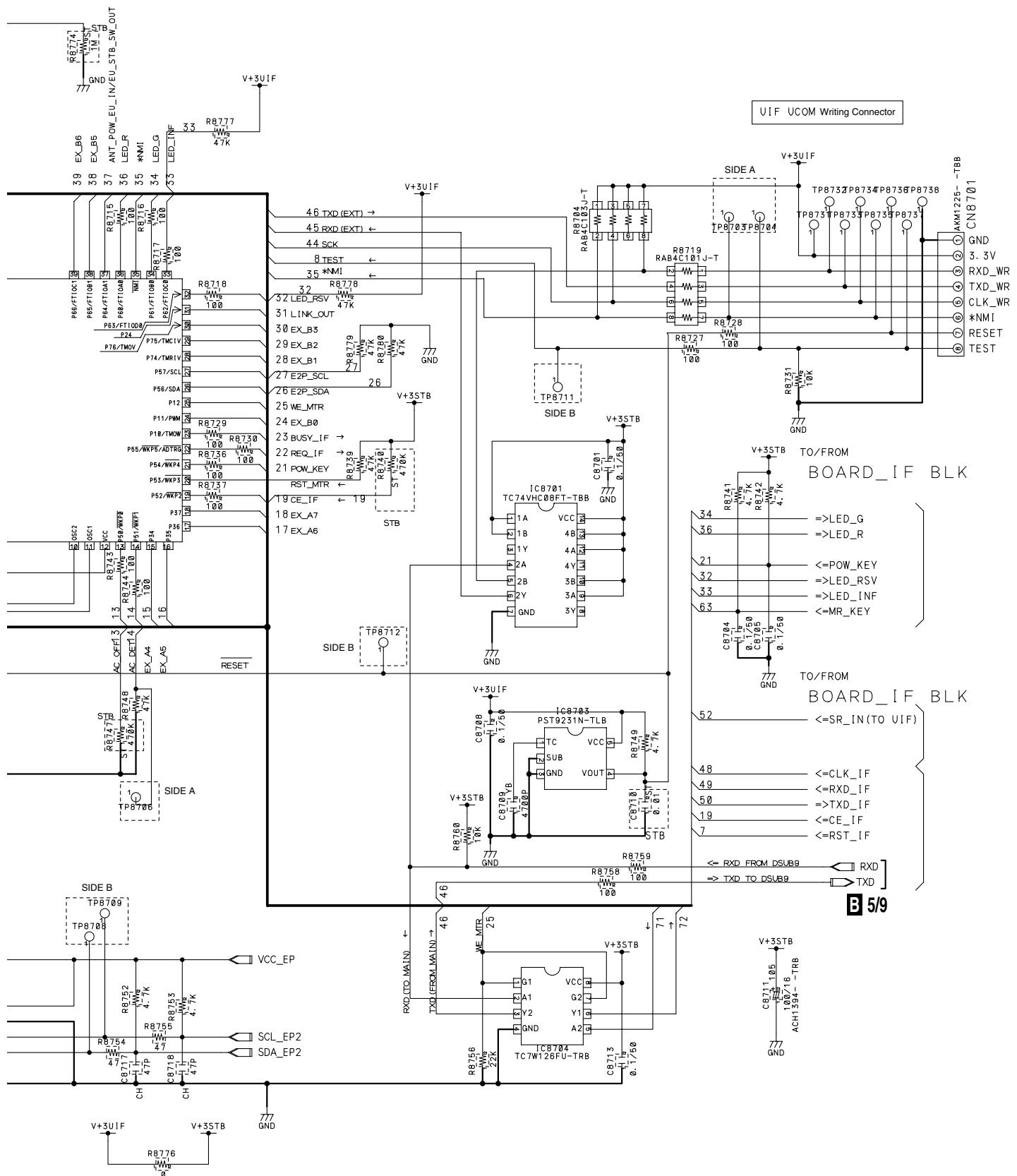


### **3.20 AV BOARD ASSY (6/9)**

**B 6/9** AV BOARD ASSY (PDP-R05E : AWZ6946) (PDP-R05XE : AWZ6986)

● UCOM BLOCK (PDP-R05FE : AWZ6947)



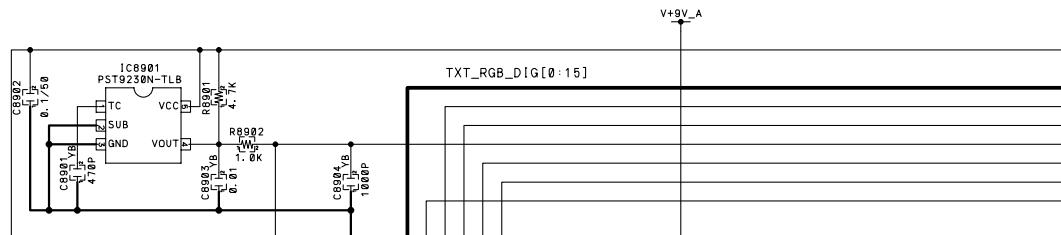


■ 1 ■ 2 ■ 3 ■ 4  
3.21 AV BOARD ASSY (7/9)

**B 7/9** AV BOARD ASSY (PDP-R05E : AWZ6946) (PDP-R05XE : AWZ6986)  
● TELE TEXT BLOCK (PDP-R05FE : AWZ6947)

**B 5/9**  
to BOARD\_L/F BLOCK  
TXT\_RGB\_DIG[0:15]

TXT_RGB_DIG[0:15]	
0: R1	8: G3
1: R2	9: G4
2: R3	10: G5
3: R4	11: B1
4: R5	12: B2
5: G0	13: B3
6: G1	14: B4
7: G2	15: B5

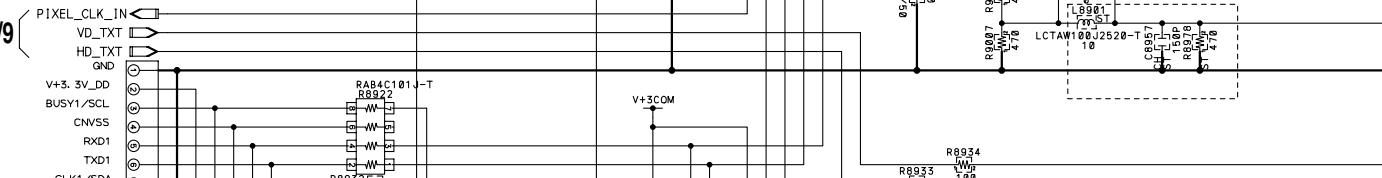


**B** from/to AV\_SW BLOCK

**B 2/9, 3/9** MAIN\_Y

**B 3/9, 5/9**

**B 5/9**

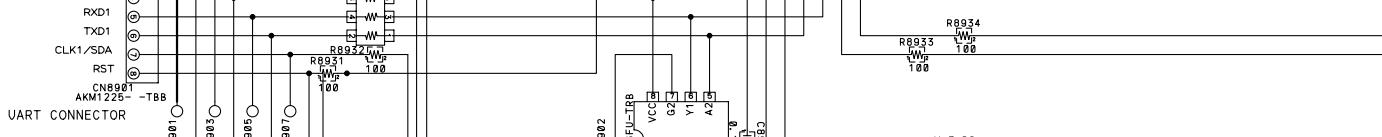


**B** from/to AV\_SW BLOCK

**B 2/9, 3/9** MAIN\_Y

**B 3/9, 5/9**

**B 5/9**



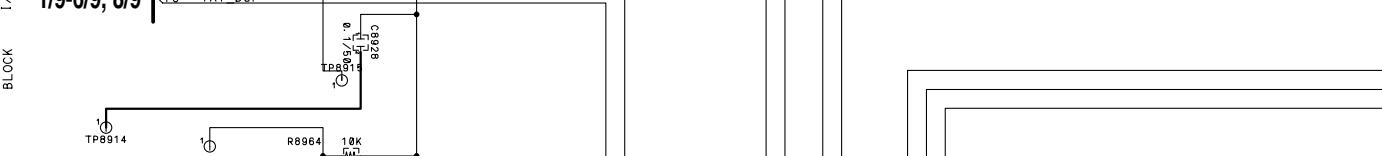
**C** from I2C\_MAIN\_BLOCK

**B 5/9**

**B 4/9**

**B 5/9**

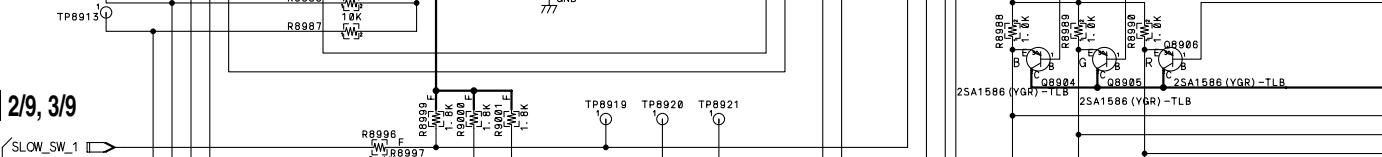
**B 5/9**



**D** from MA\_IN\_UCOM\_BLOCK

**B 1/9-6/9, 8/9**

**B 1/9-6/9, 8/9**

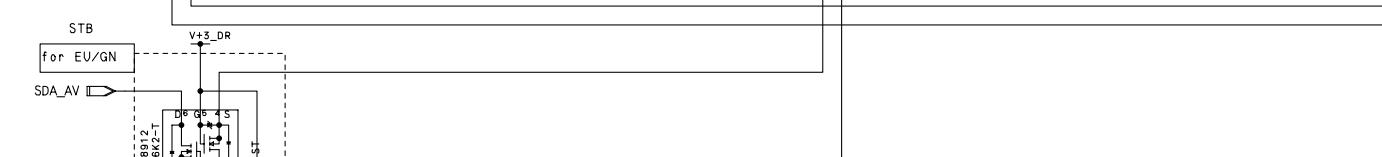


**E** from SCART\_BLOCK

**B 2/9, 3/9**

**B 2/9, 3/9**

**B 2/9, 3/9**



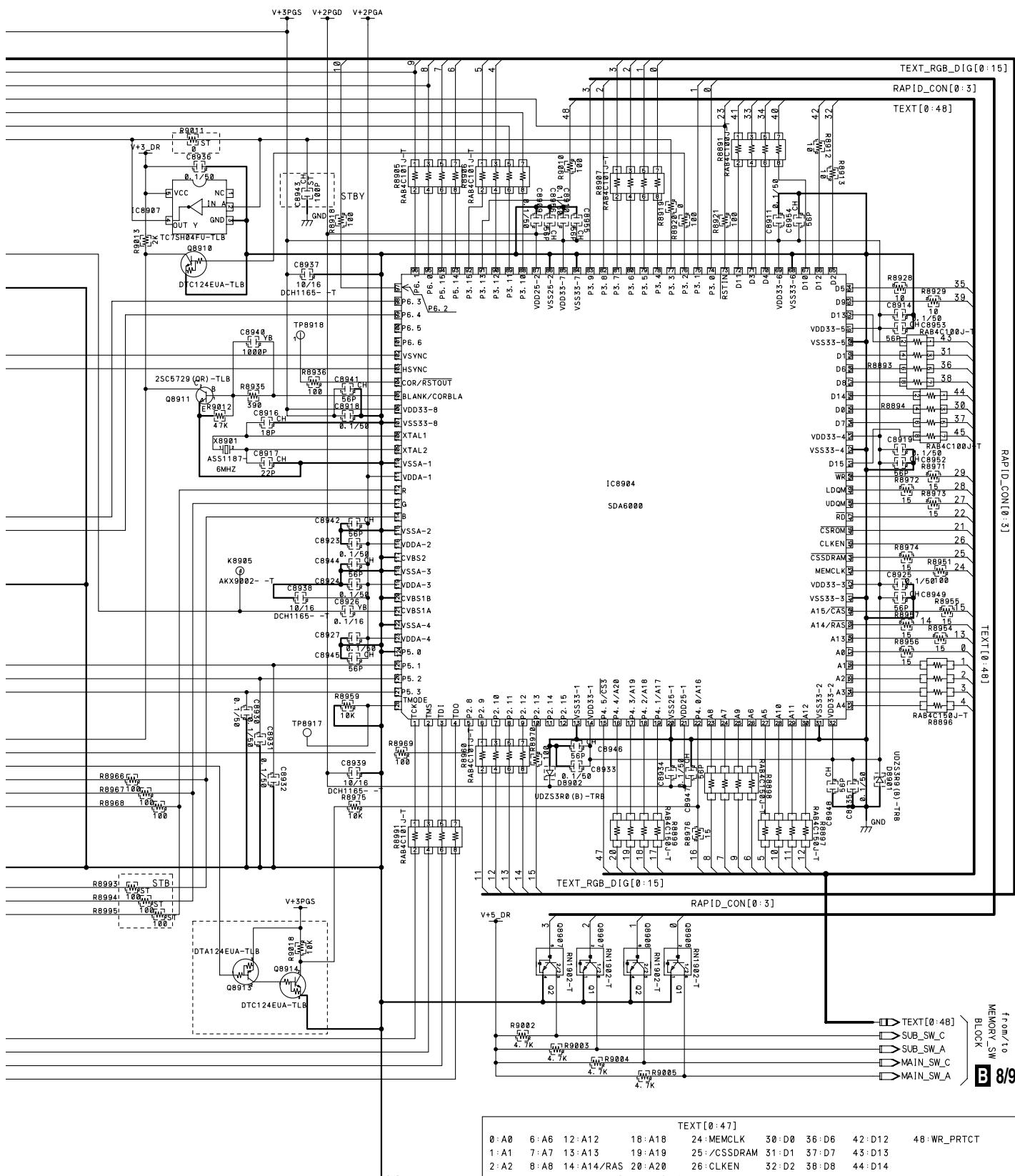
**F** to BOARD\_L/F\_BLOCK

**B 7/9**

**B 7/9**

**B 7/9**



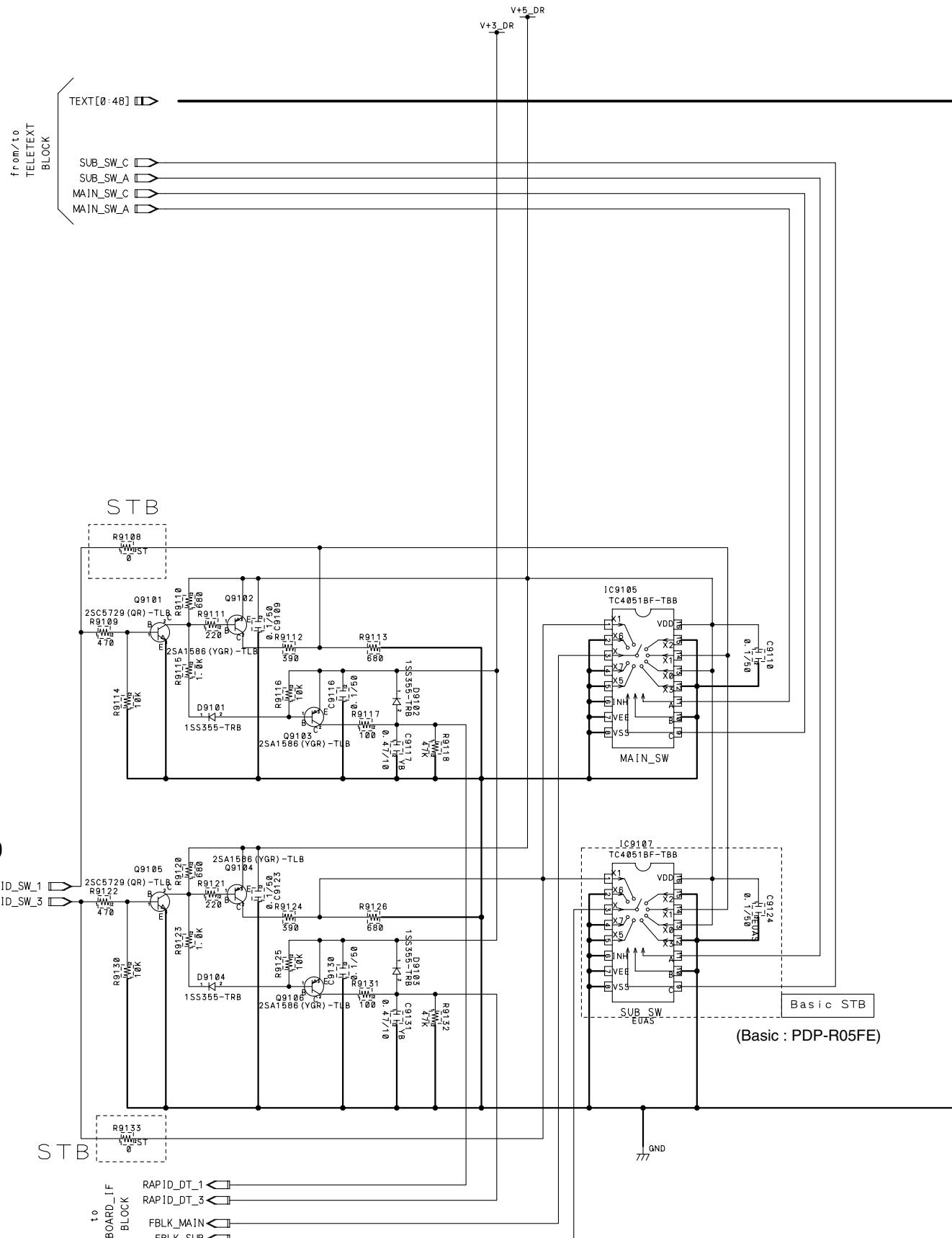


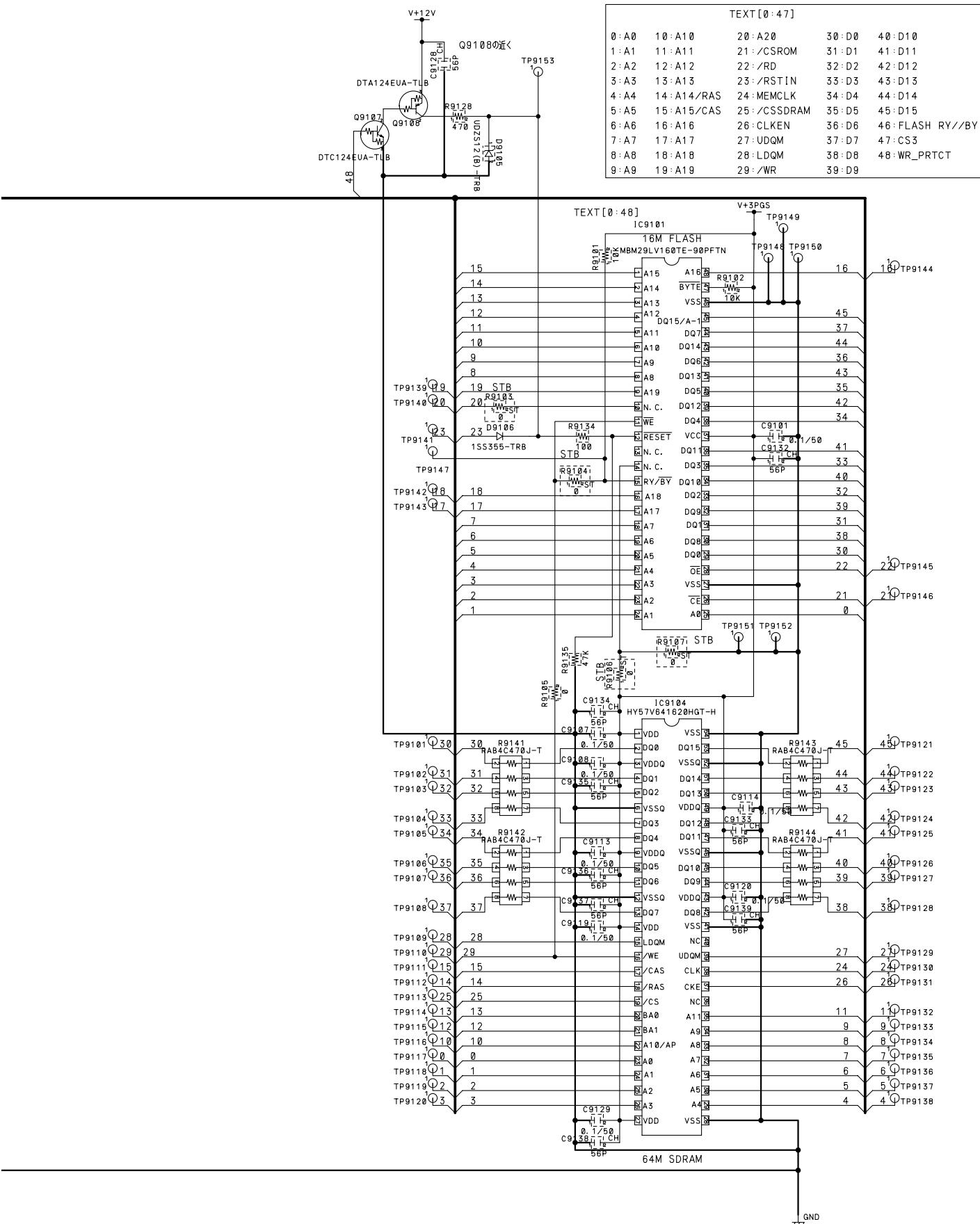
TEXT[0:47]									
0:A0	6:A6	12:A12	18:A18	24:MEMCLK	30:D0	36:D6	42:D12	48:WR_PRTC	
1:A1	7:A7	13:A13	19:A19	25:/CSDRAM	31:D1	37:D7	43:D13		
2:A2	8:A8	14:A14/RAS	20:A20	26:CLKEN	32:D2	38:D8	44:D14		
3:A3	9:A9	15:A15/CAS	21:/CSROM	27:UDQM	33:D3	39:D9	45:D15		
4:A4	10:A10	16:A16	22:/RD	28:LDQM	34:D4	40:D10	46:FLASH_RY//BY		
5:A5	11:A11	17:A17	23:/RSTIN	29:WR	35:D5	41:D11	47:CS3		

■ 1 ■ 2 ■ 3 ■ 4  
**3.22 AV BOARD ASSY (8/9)**

**B 8/9 AV BOARD ASSY (PDP-R05E : AWZ6946) (PDP-R05XE : AWZ6986)  
(PDP-R05FE : AWZ6947)**

● MEMORY\_SW BLOCK





# 3.23 AV BOARD ASSY (9/9)

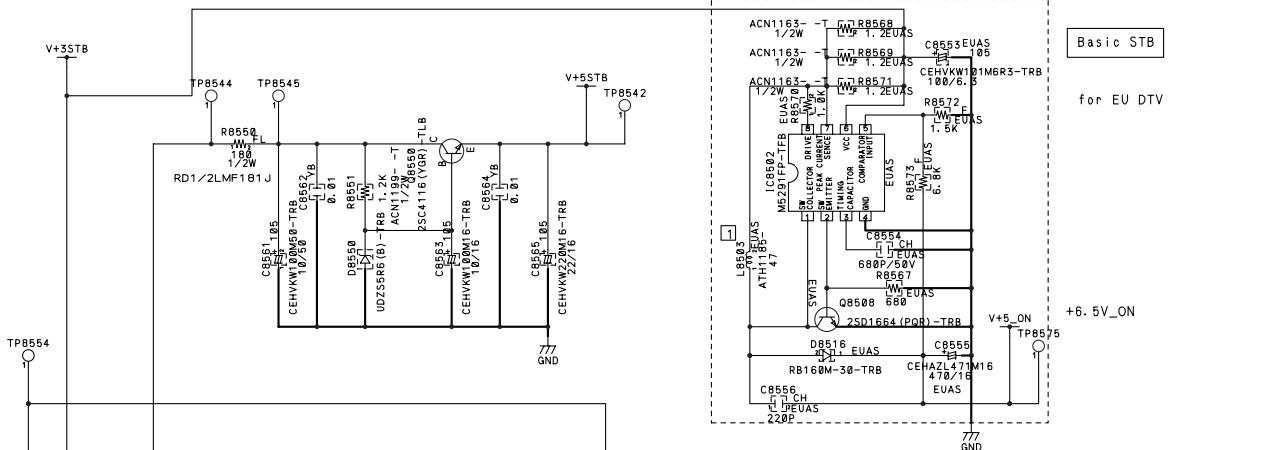
1

2

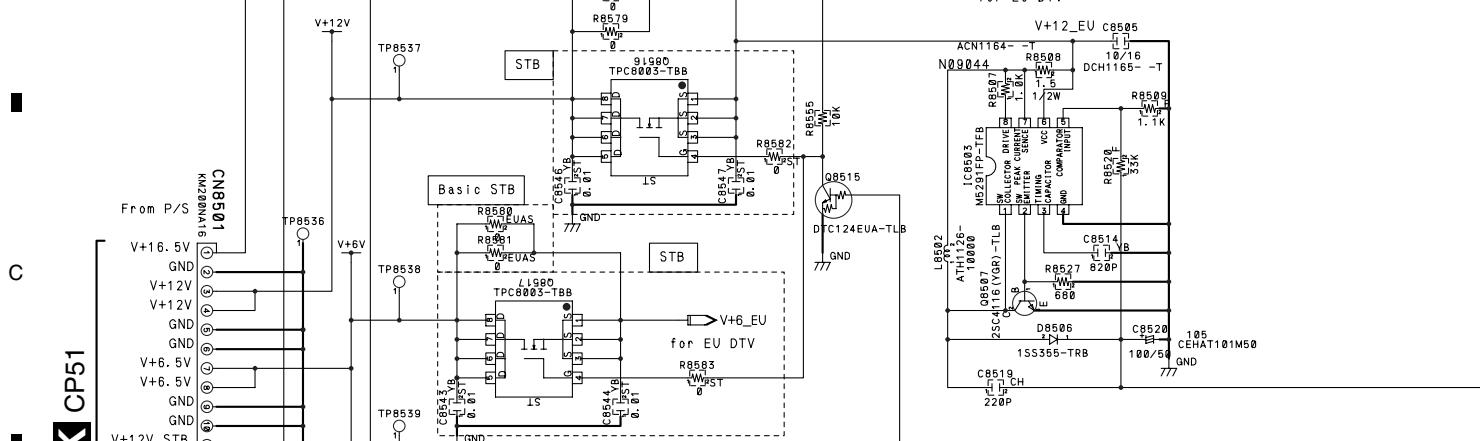
3

4

A



B



C

K CP51

D

E

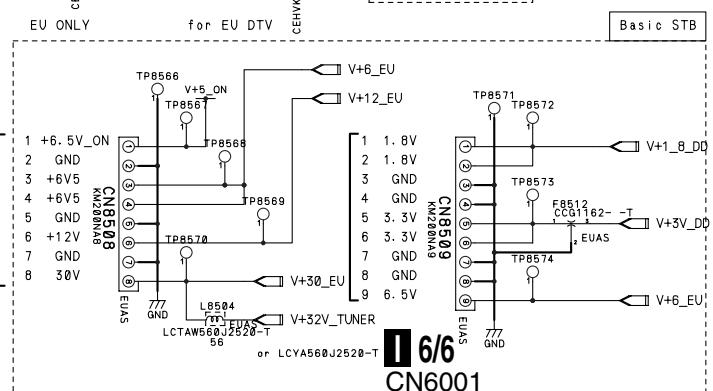
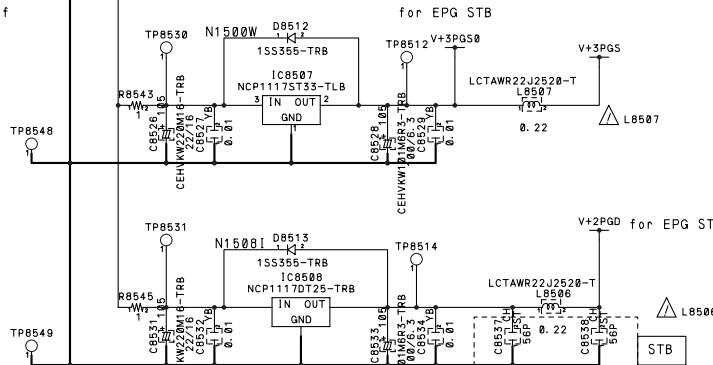
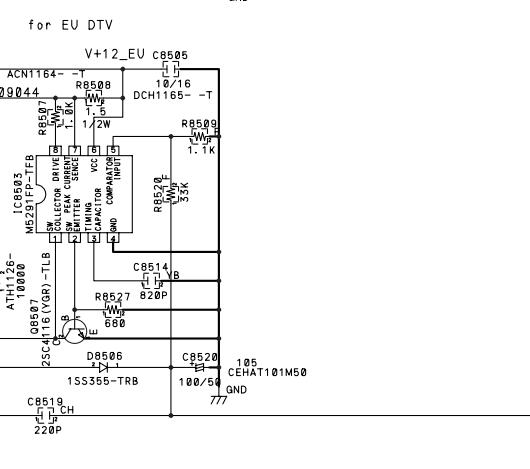
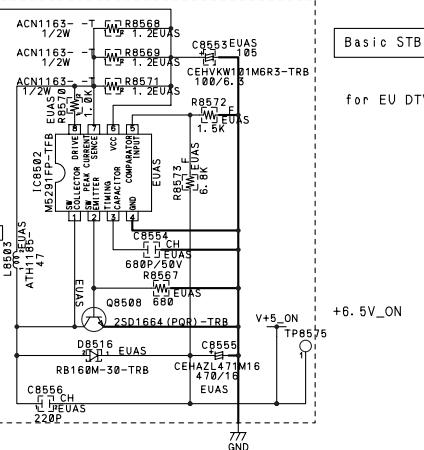
F

I 6/6  
CN6002

B 9/9

70

PDP-R05E

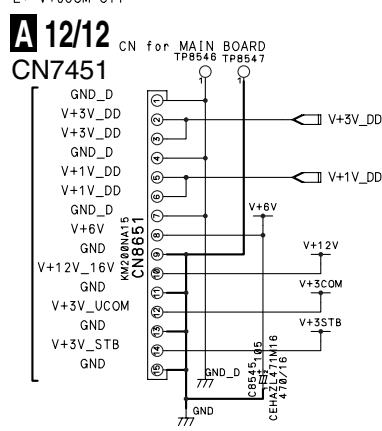
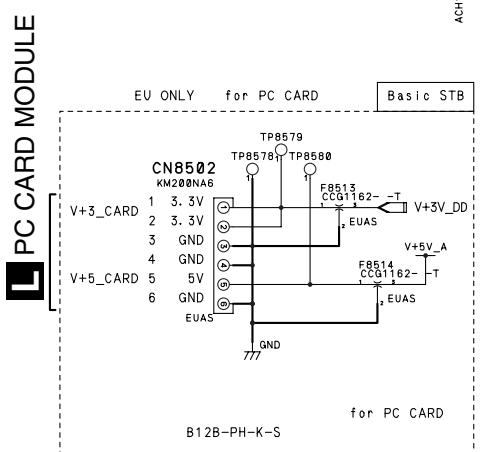
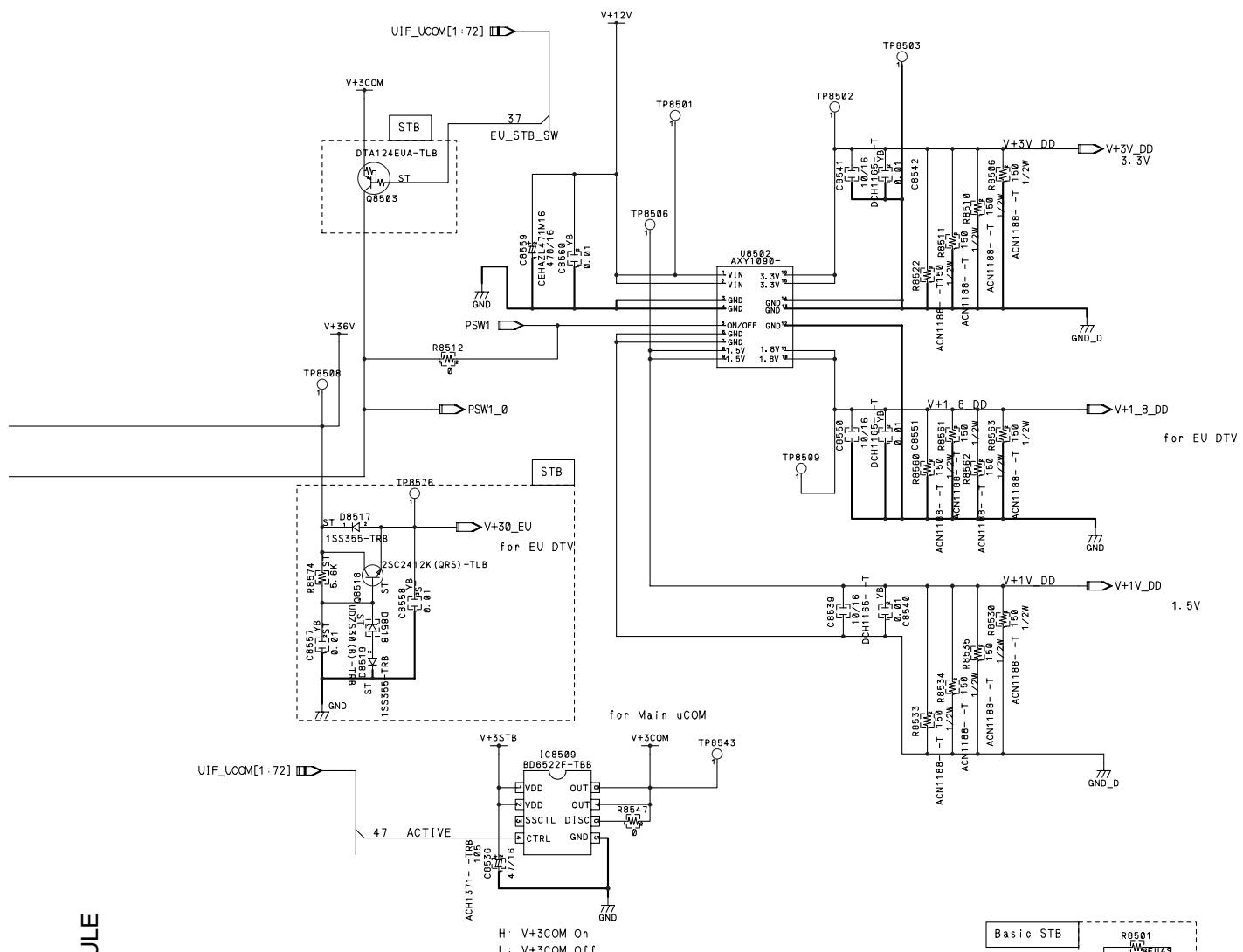
I 6/6  
CN6001

PDP-R05E

3

4

**B 9/9** AV BOARD ASSY (PDP-R05E : AWZ6946) (PDP-R05XE : AWZ6986)  
• REG BLOCK 2 (PDP-R05FE : AWZ6947)



With the  mark, be sure to use parts of identical designation.

(Basic : PDP-R05FE)

## 3.24 MDR ASSY

### E MDR ASSY (AWZ6948)

A

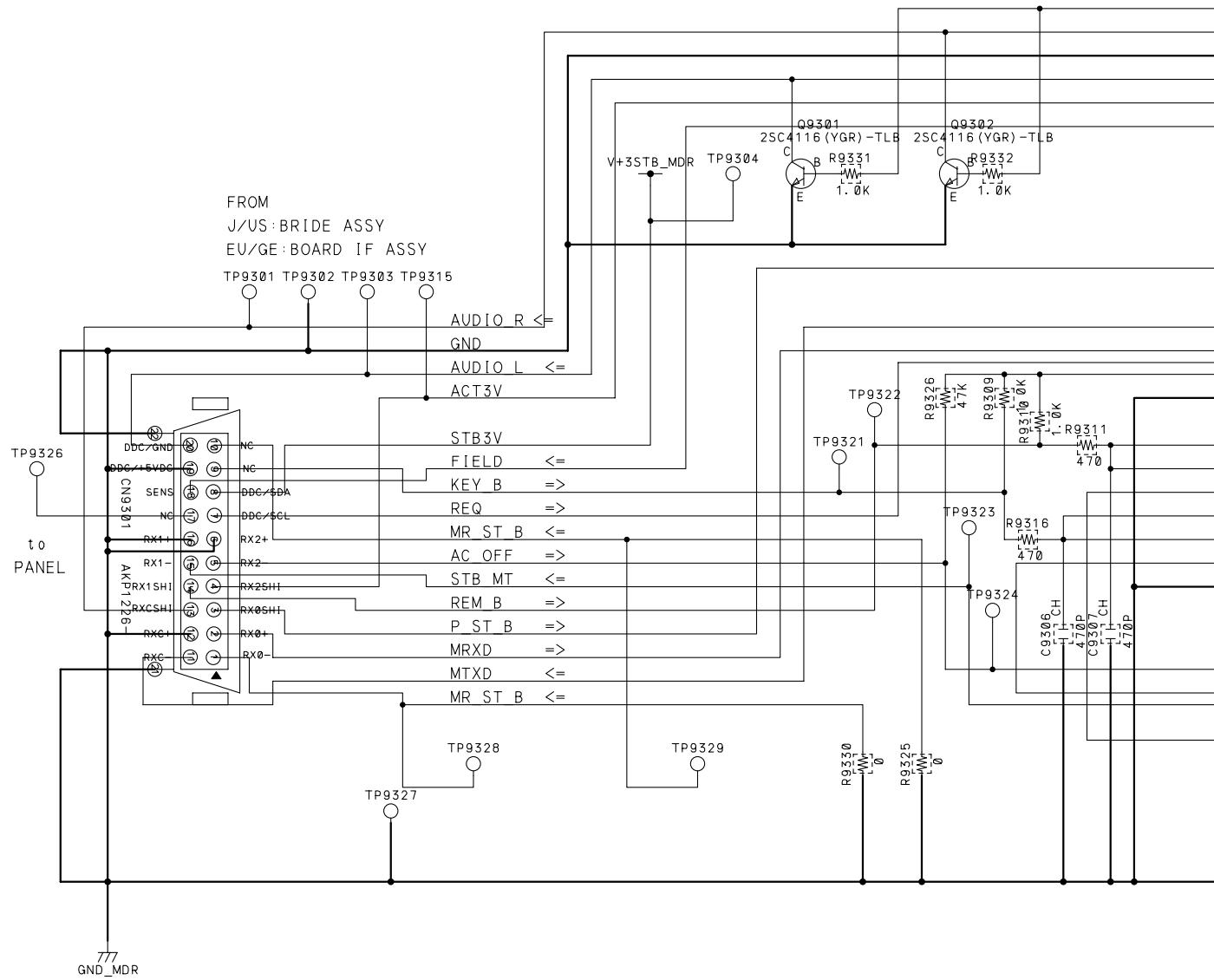
B

C

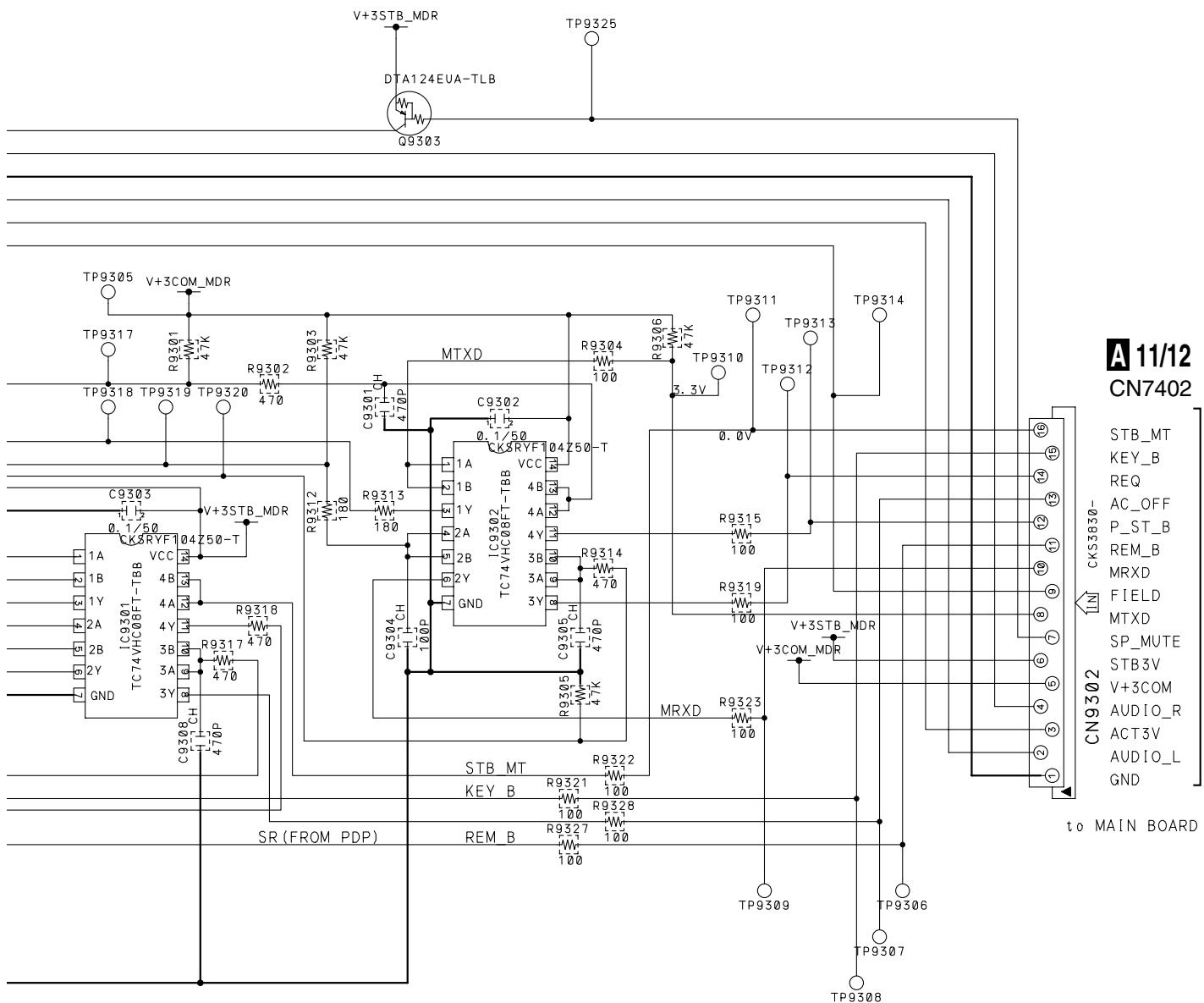
D

E

F



A



ITEM	USED	VACANT
R	9301-9332	9320
C	9301-9308	
Q	9301-9303	
D		
IC	9301, 9302	
CN	9301, 9302, 9341	
S	9341	

F

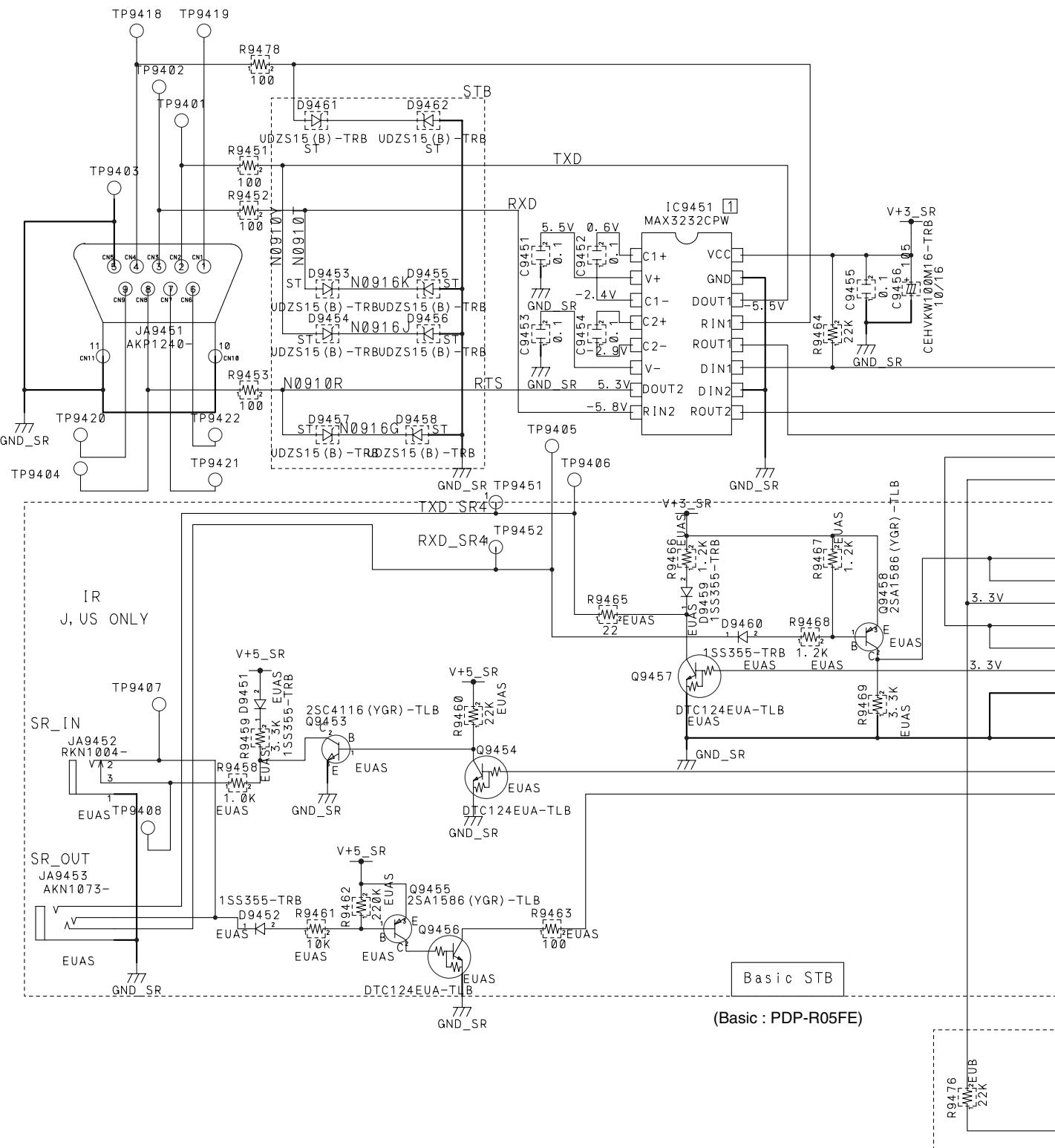
E

73

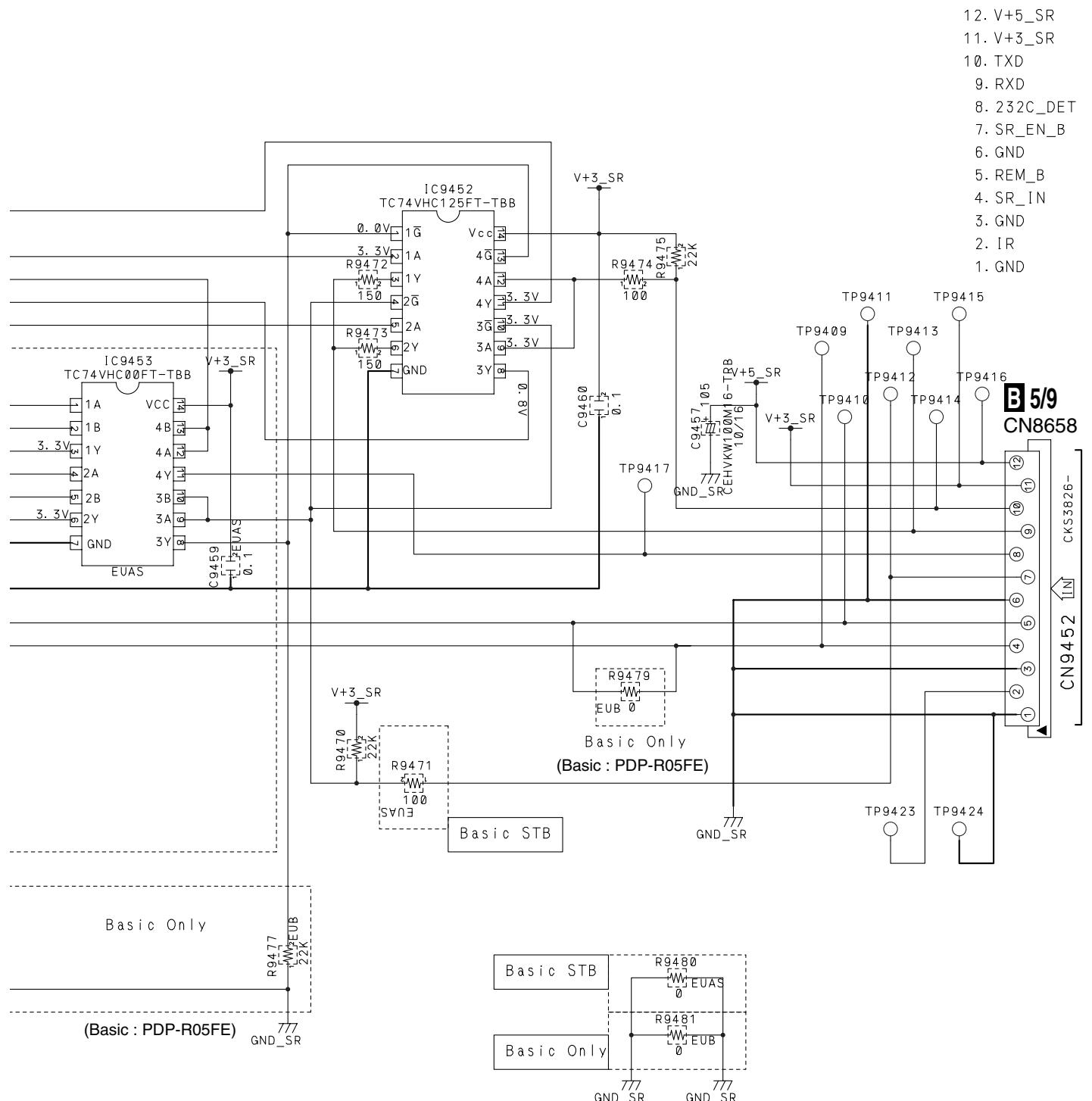
### **3.25 SR ASSY**

**F** SR ASSY

(PDP-R05E, PDP-R05XE : AWZ6949)(PDP-R05FE : AWZ6950)



A



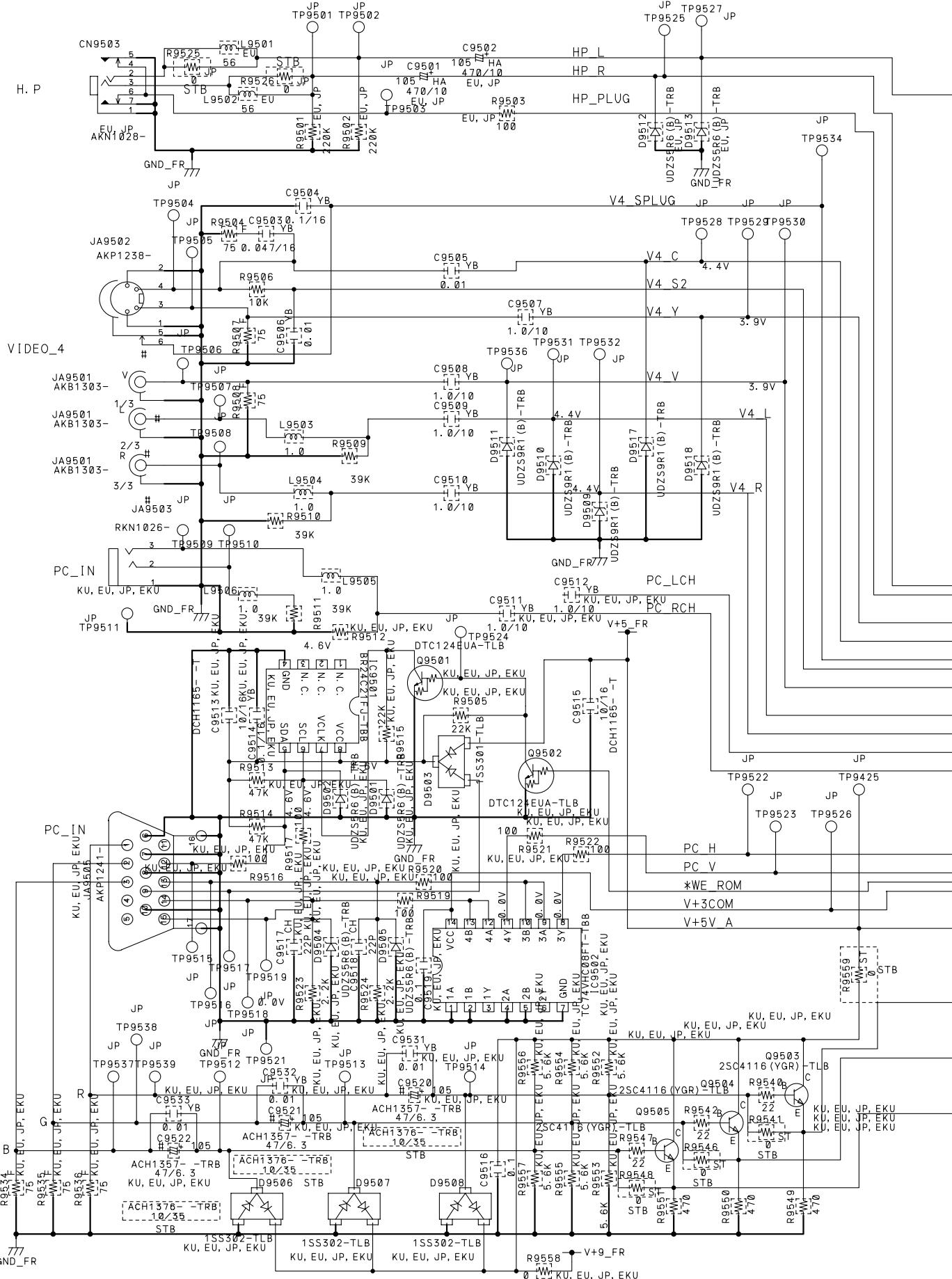
B

6

D

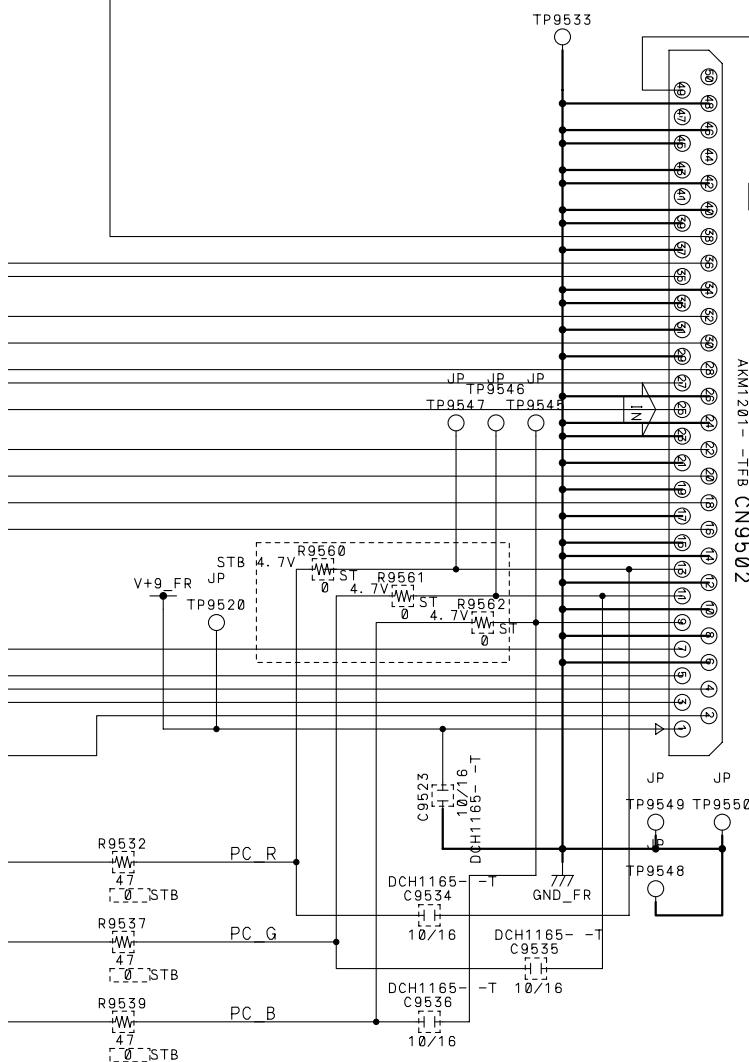
E

F



# G FRONT ASSY

(PDP-R05E, PDP-R05XE : AWZ6951)  
(PDP-R05FE : AWZ6952)



## B 5/9

CN8653

- 25. V4\_V
- 24. GND
- 23. GND
- 22. V4\_L
- 21. GND
- 20. V4\_R
- 19. GND
- 18. PC\_LCH
- 17. GND
- 16. PC\_RCH
- 15. GND
- 14. GND
- 13. PC\_R
- 12. GND
- 11. PC\_G
- 10. GND
- 9. PC\_B
- 8. GND
- 7. PC\_H
- 6. GND
- 5. PC\_V
- 4. WE\_ROM
- 3. V+3COM
- 2. V+5V\_A
- 1. V+9V\_A
- 25. V4\_V
- 49. TEMP2
- 48. GND to AV BOARD
- 47. PR\_COMP4
- 46. GND
- 45. GND
- 44. PB\_COMP4
- 43. GND
- 42. GND
- 41. Y\_COMP4
- 40. GND
- 39. GND
- 38. HP\_L
- 37. GND
- 36. HP\_R
- 35. HP\_PLUG
- 34. GND
- 33. GND
- 32. V4\_Y
- 31. GND
- 30. V4\_C
- 29. GND
- 28. V4\_SPLUG
- 27. V4\_S2
- 26. GND

AWV2136- AWZ6951  
AWV2137- AWZ6952

ITEM	USED	VACANT
R	9501-9583 9651, 9658-9661	9531, 9541, 9548, 9559-9567, 9538
C	9501-9540	
Q	9501-9508	
D	9501-9518	
IC	9501-9502	
CN	9502-9503	
JA	9501-9505	

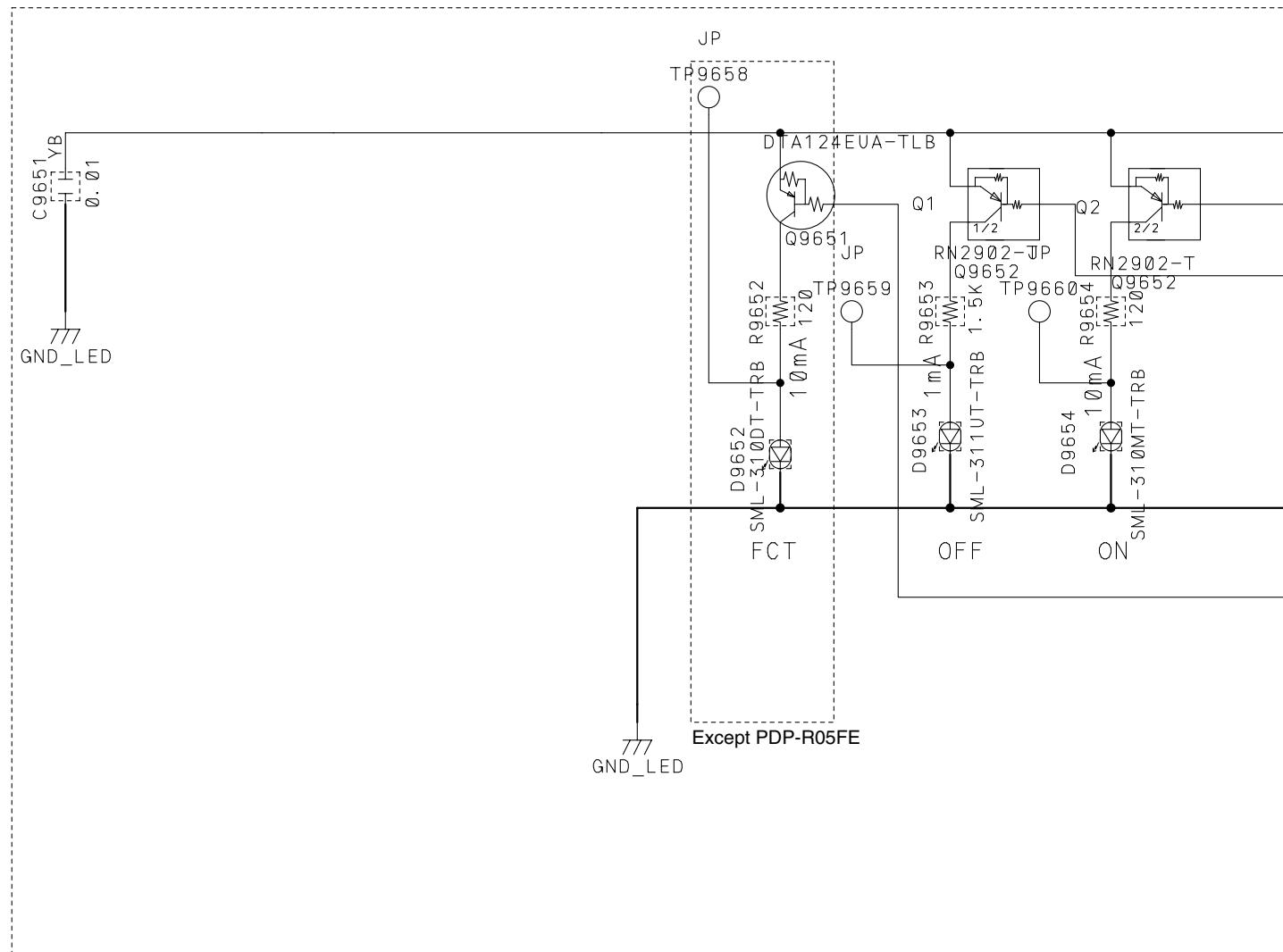
G

## 3.27 LED ASSY

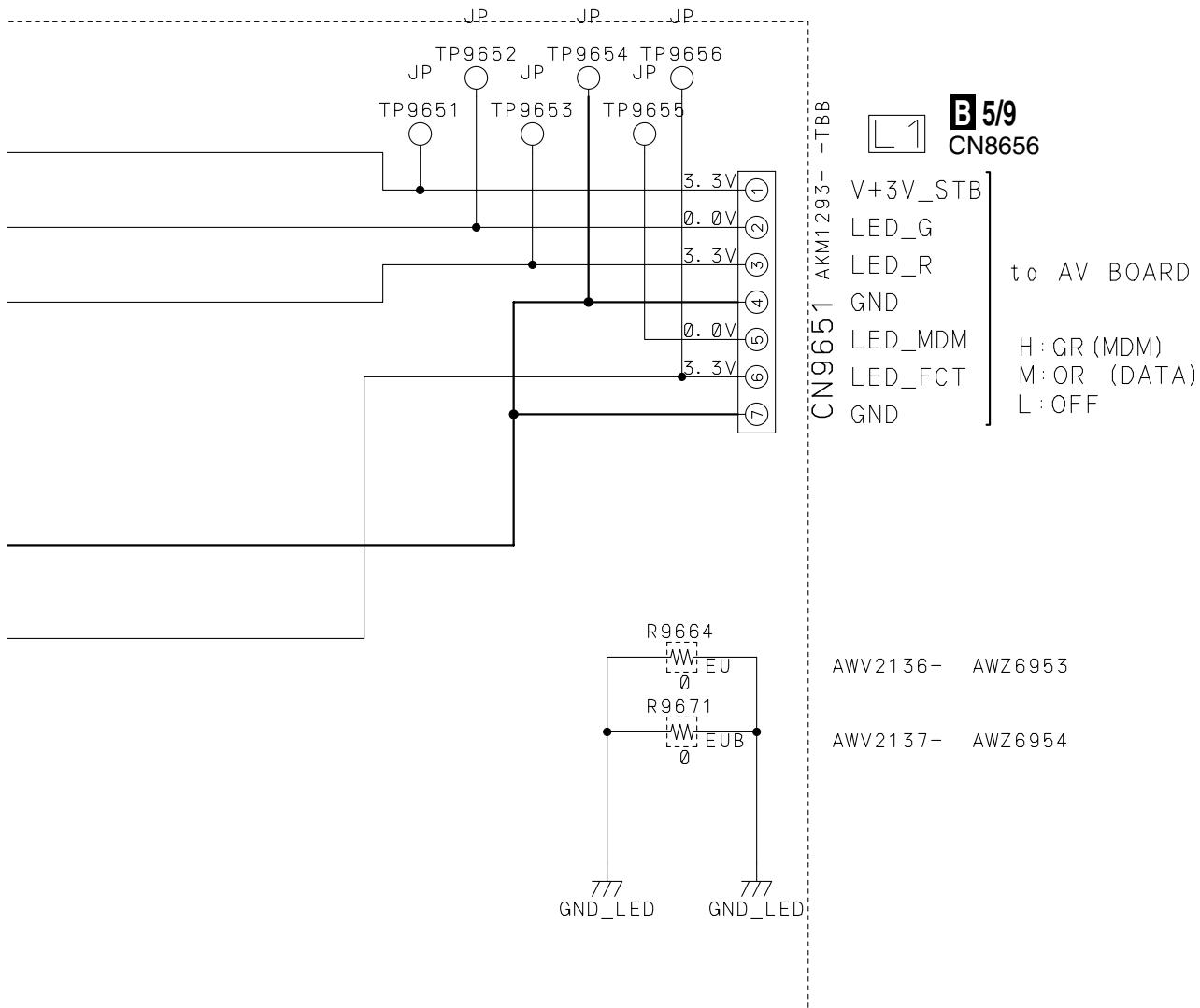
### H LED ASSY

(PDP-R05E, PDP-R05XE : AWZ6953)(PDP-R05FE : AWZ6954)

### LED ASSY

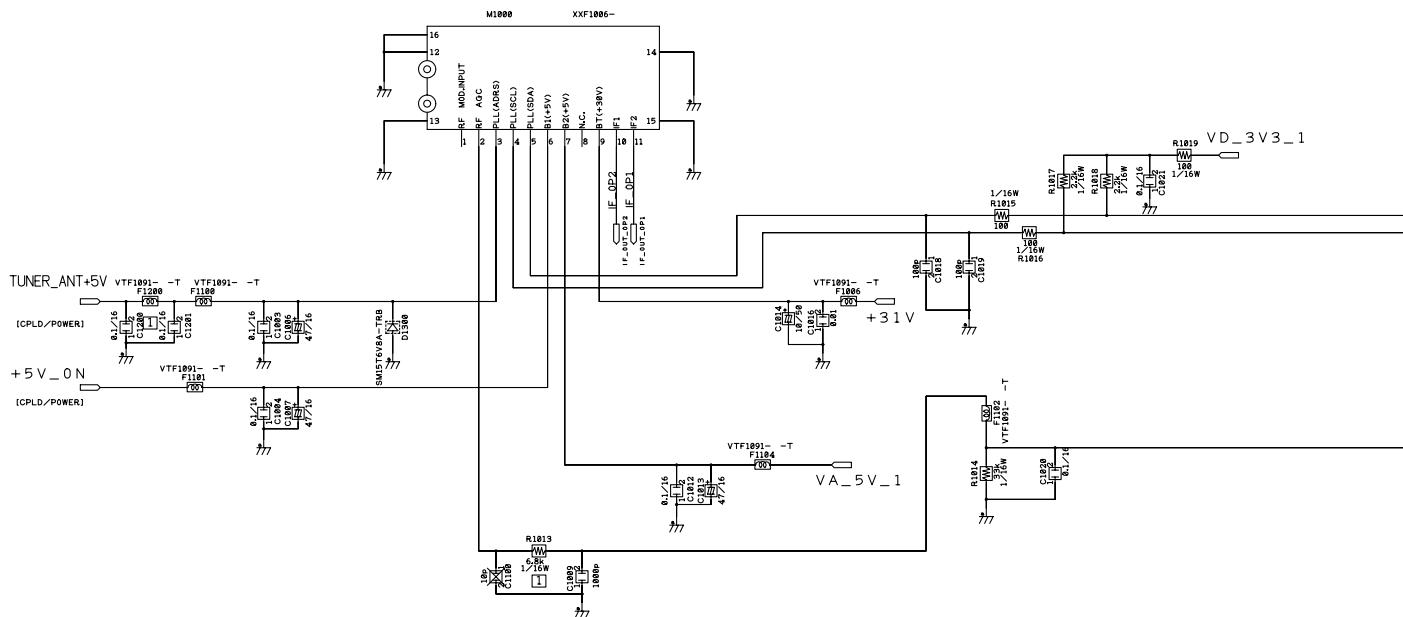


ITEM	USED	VACANT
R	9652-9671	9658-9661
C	9651, 9652	
Q	9651-9654	
D	9652-9655	
IC		
CN	9651	



■ 1 2 3 4  
3.28 TUNER BOARD ASSY (1/6)

A **| 1/6** TUNER BOARD ASSY (AWE1301)



A

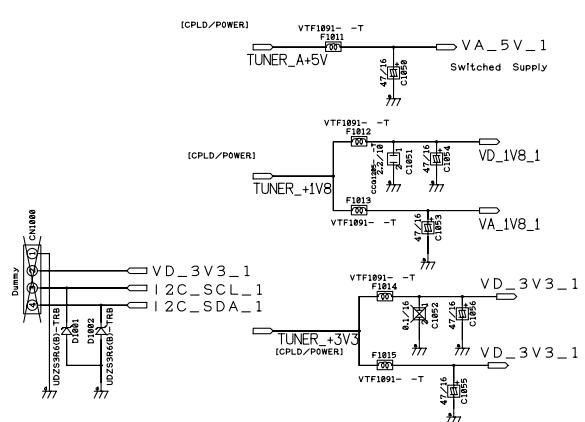
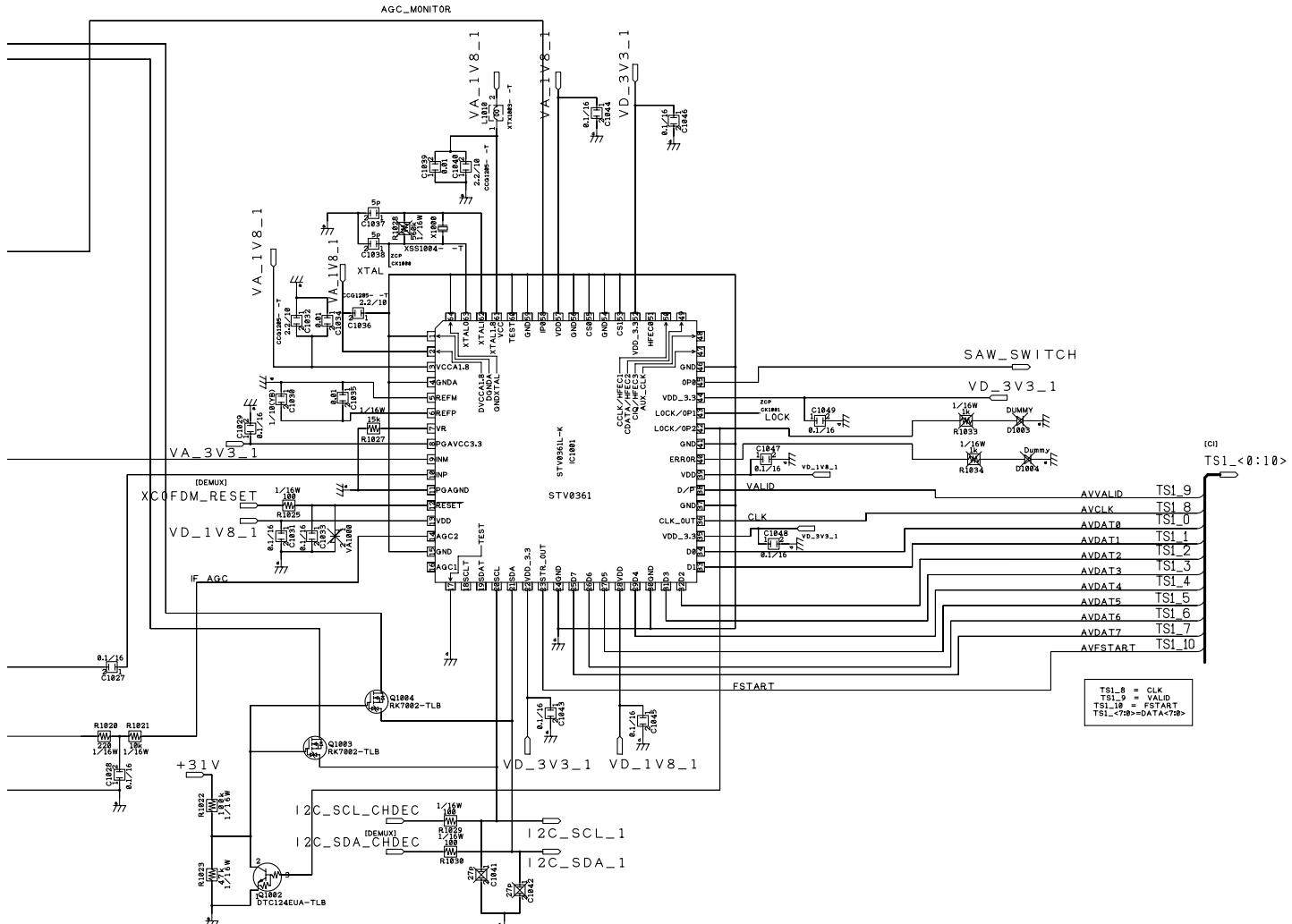
B

C

D

E

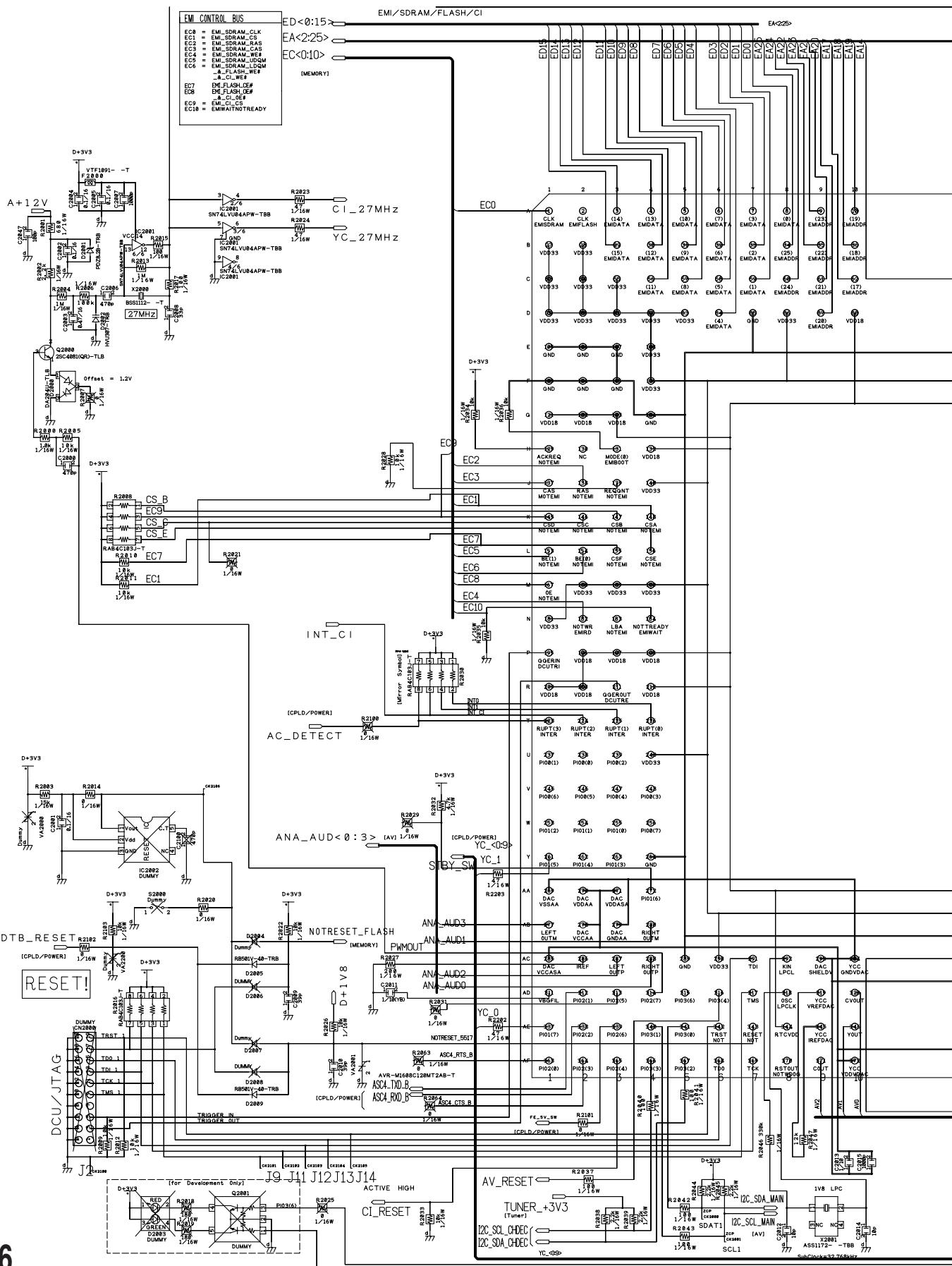
F



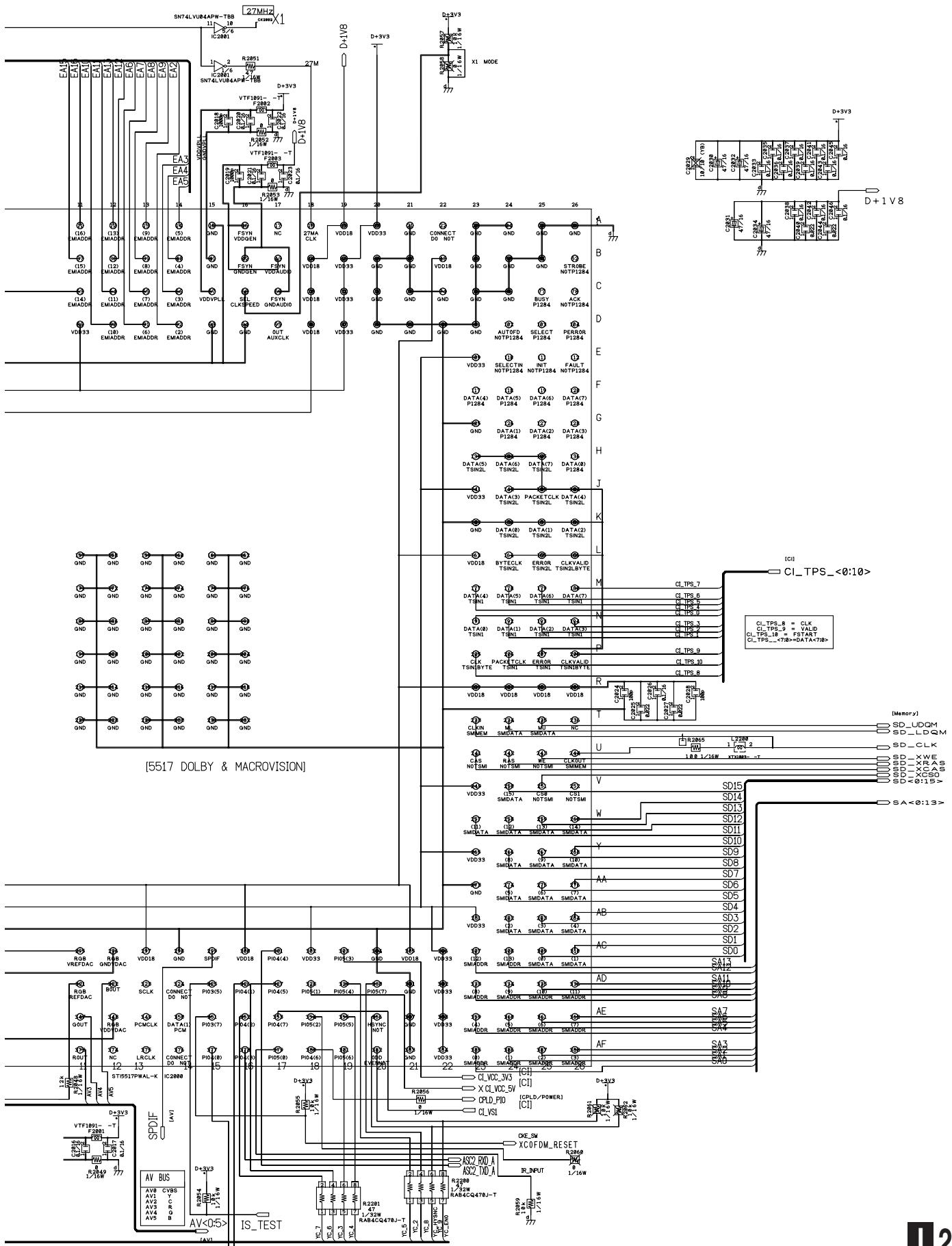
### **3.29 TUNER BOARD ASSY (2/6)**

## **2/6 TUNER BOARD ASSY (AWE1301)**

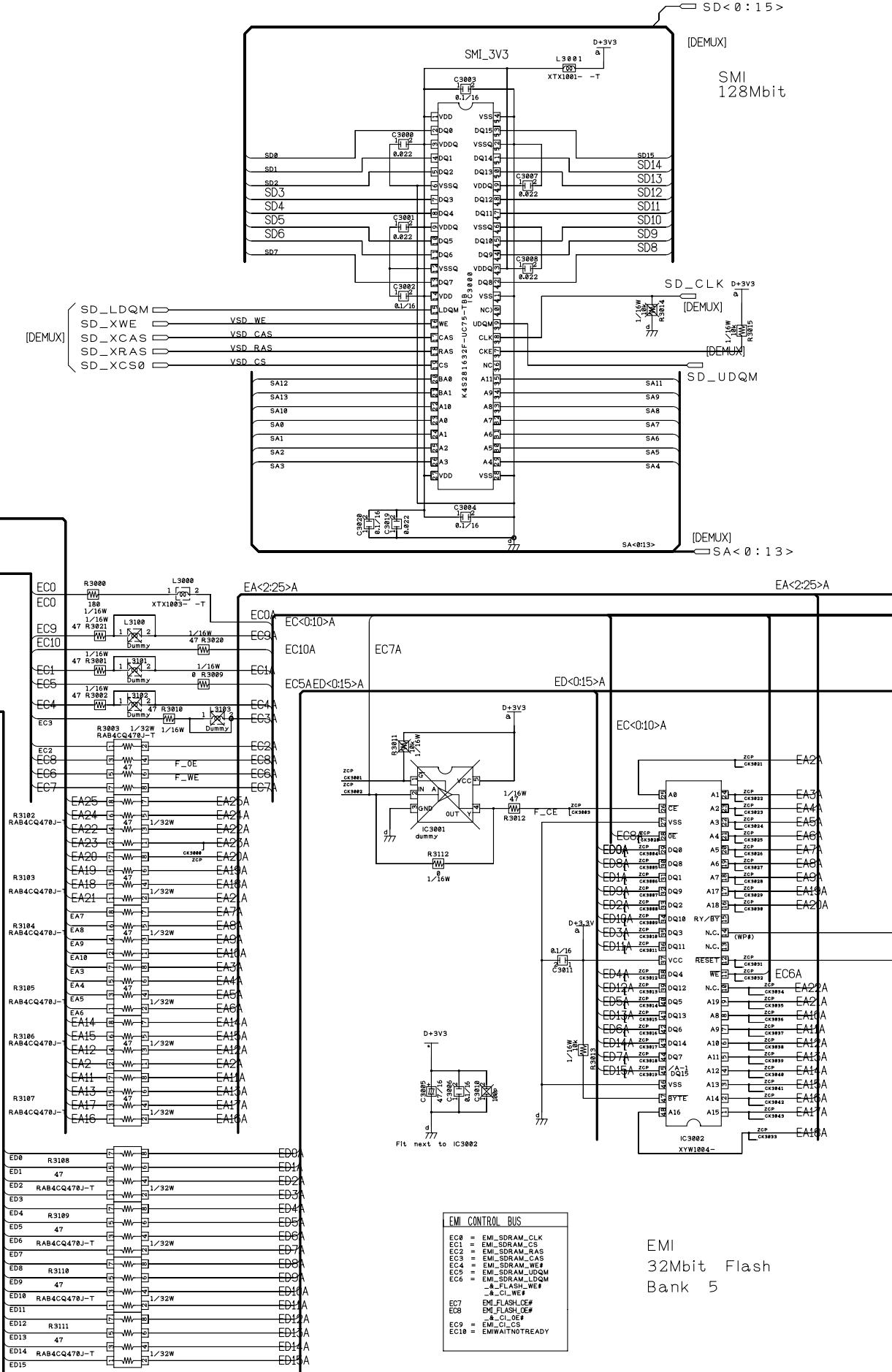
A



2/6



### **3.30 TUNER BOARD ASSY (3/6)**

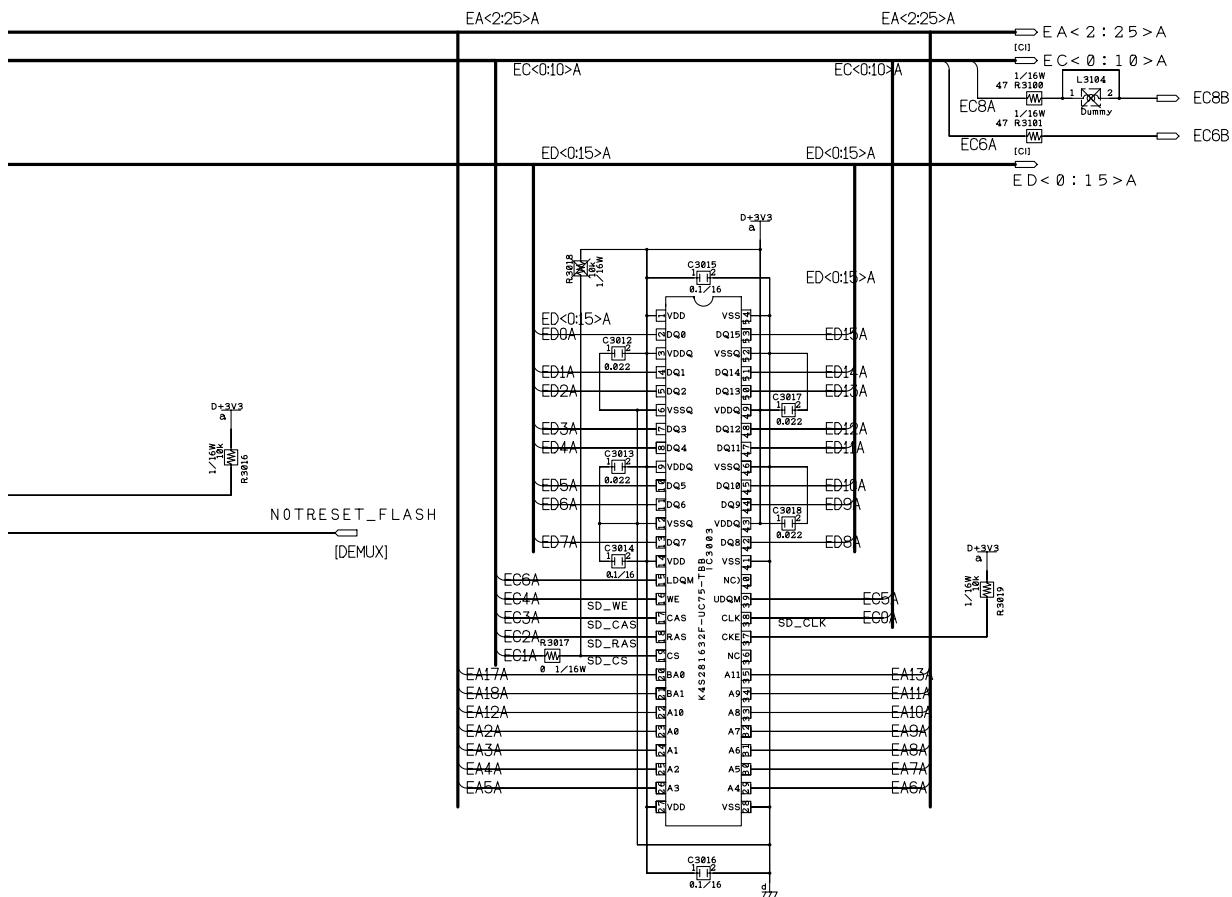


# I 3/6 TUNER BOARD ASSY (AWE1301)

A

B

C



EMI  
128Mbit  
Bank 0

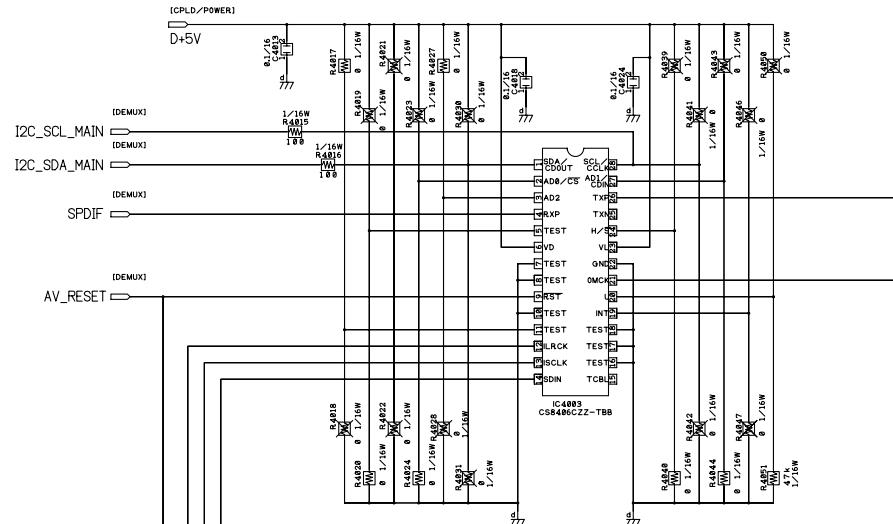
I 3/6

85

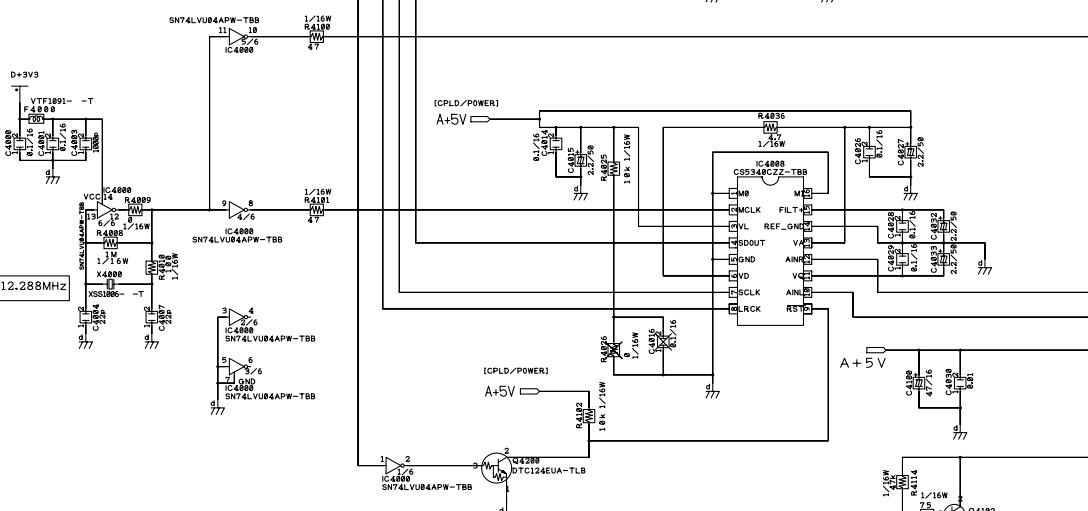
### **3.31 TUNER BOARD ASSY (4/6)**

A

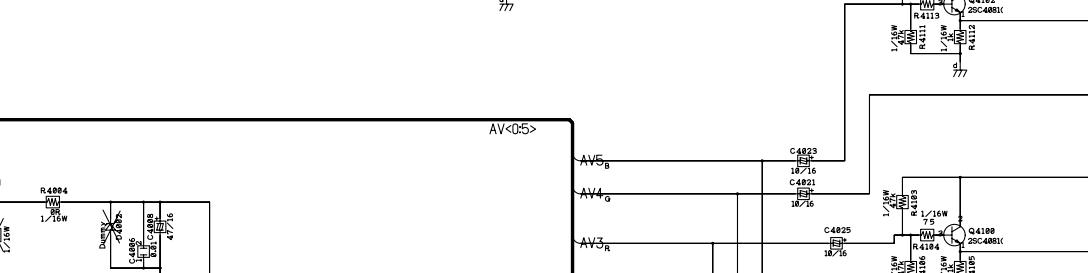
## I 4/6 TUNER BOARD ASSY (AWE1301)



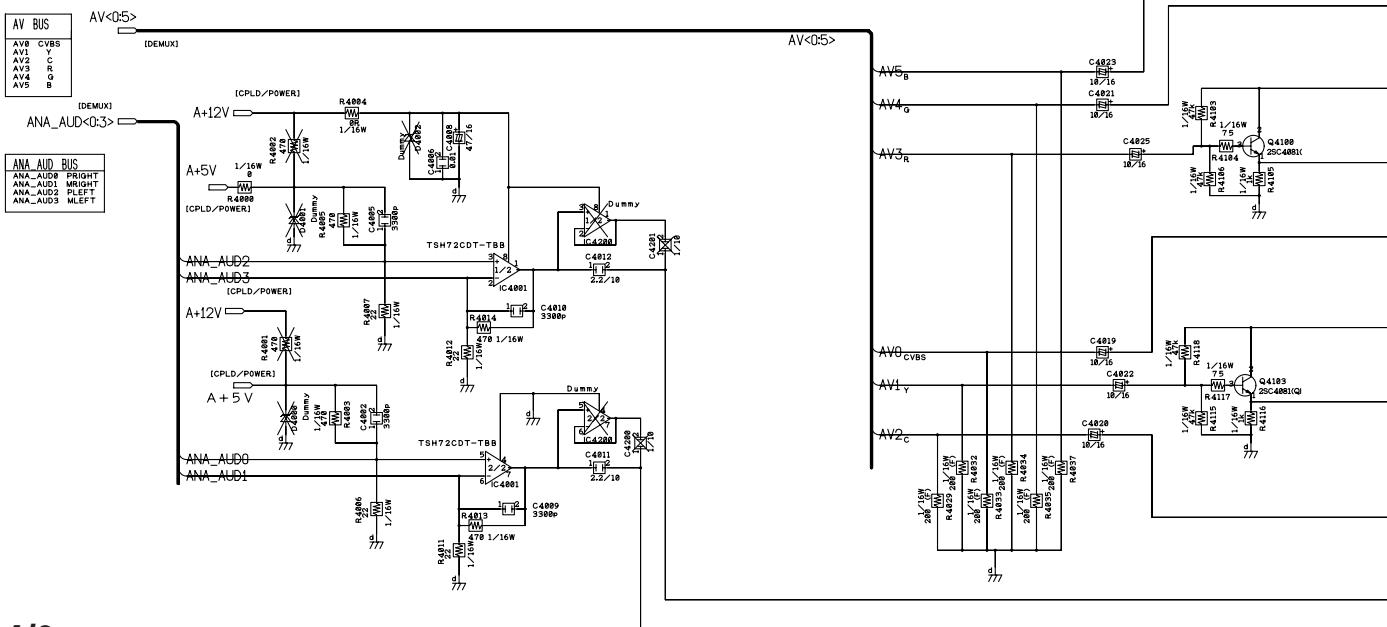
B



C



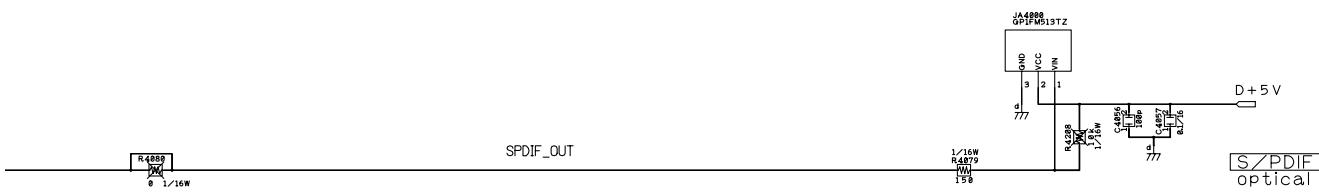
D



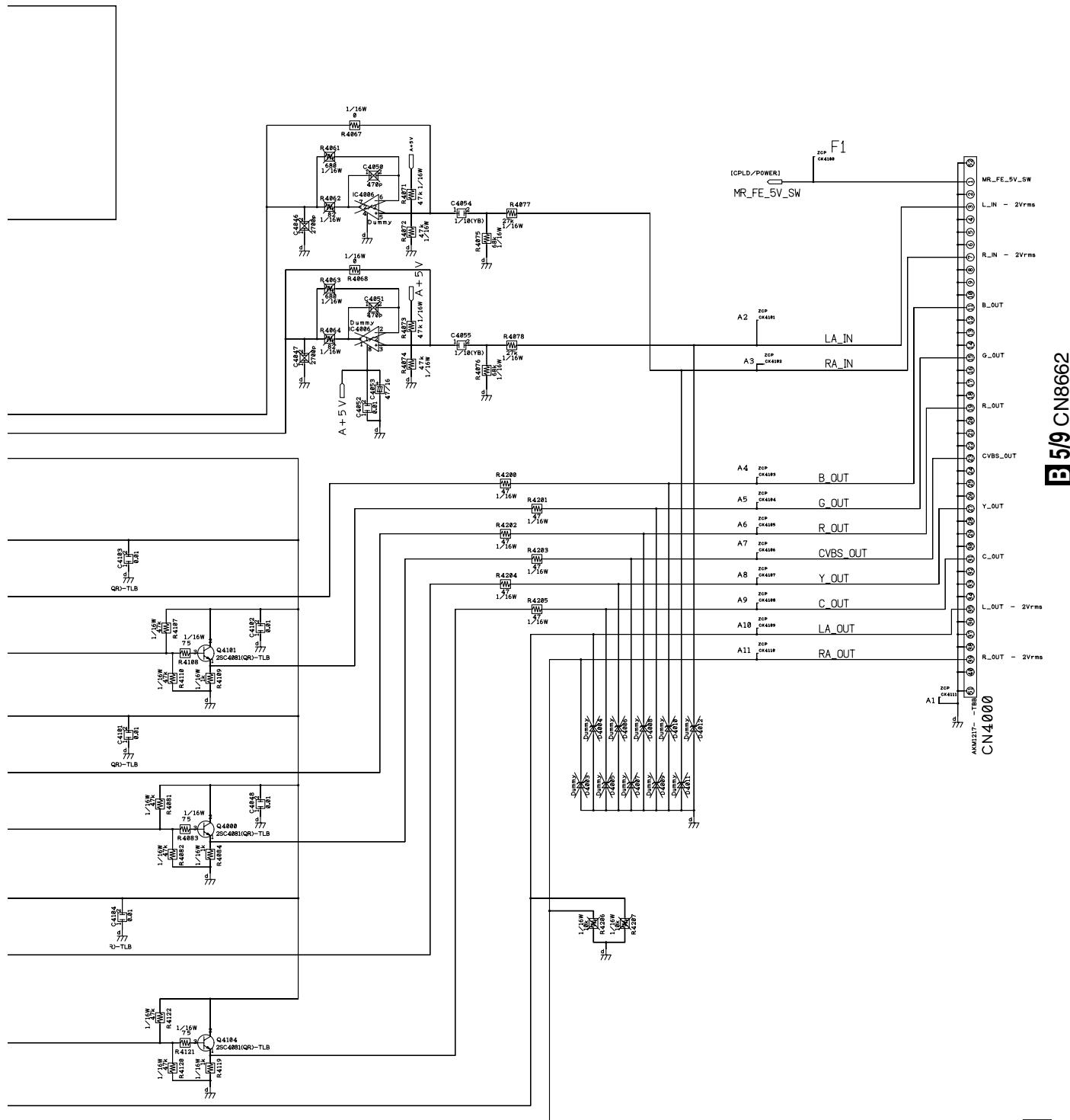
□

| 4/6

A



B



C

D

E

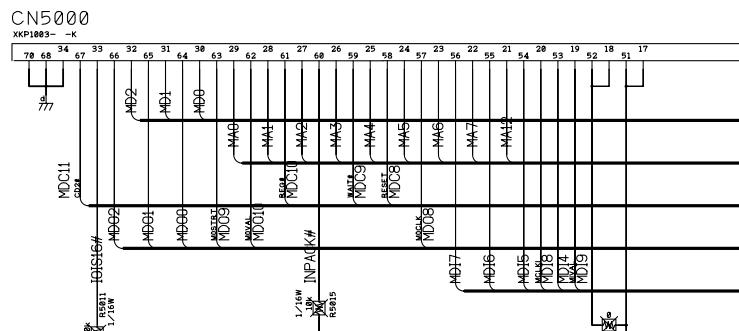
F

**B 5/9 CN8662**

# 3.32 TUNER BOARD ASSY (5/6)

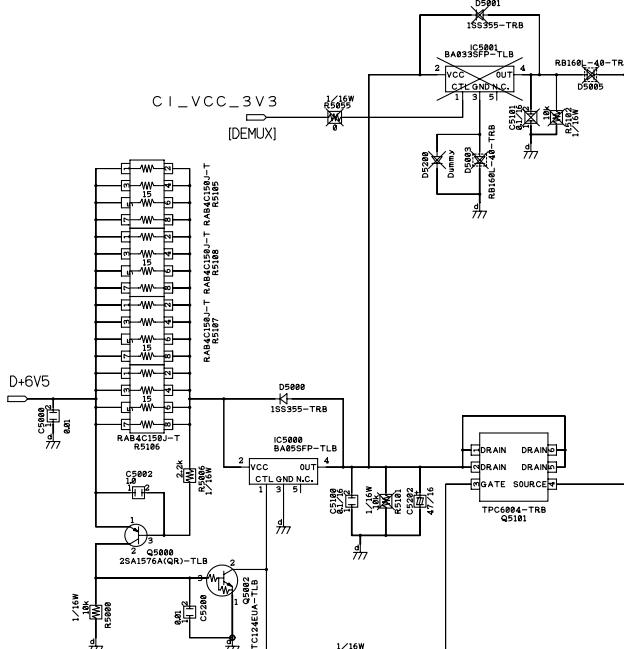
## I 5/6 TUNER BOARD ASSY (AWE1301)

A



B

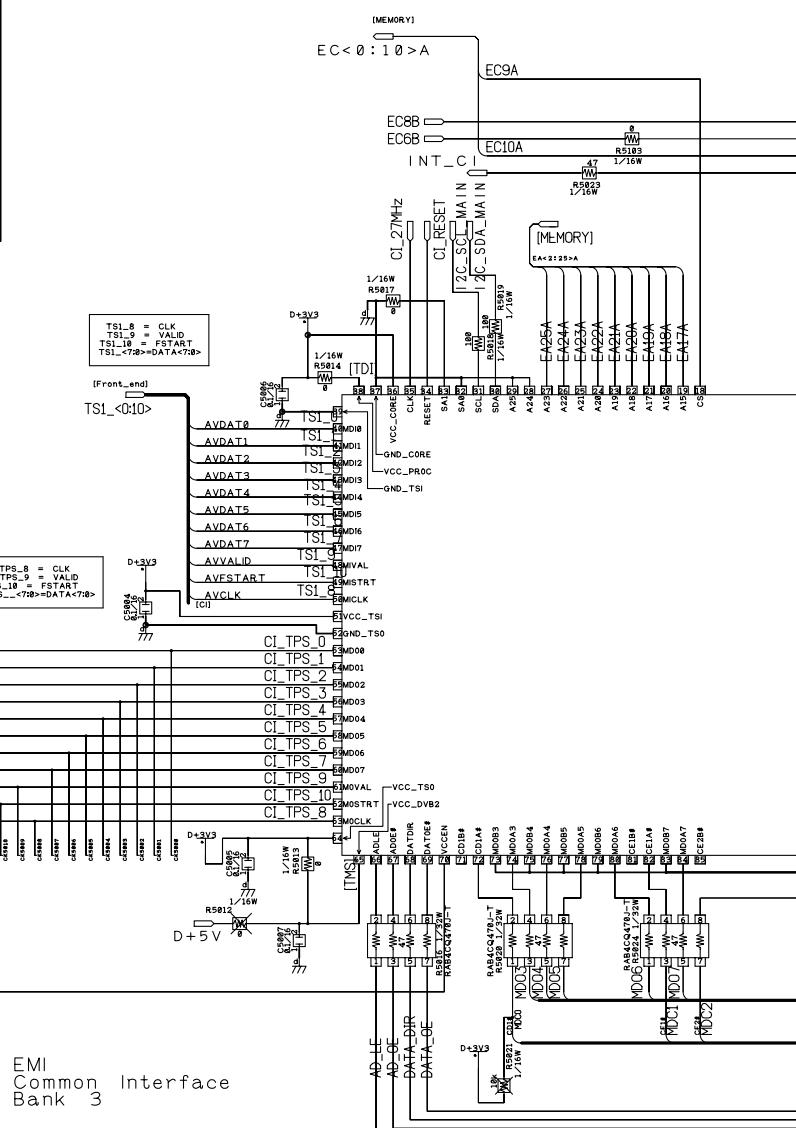
C



D

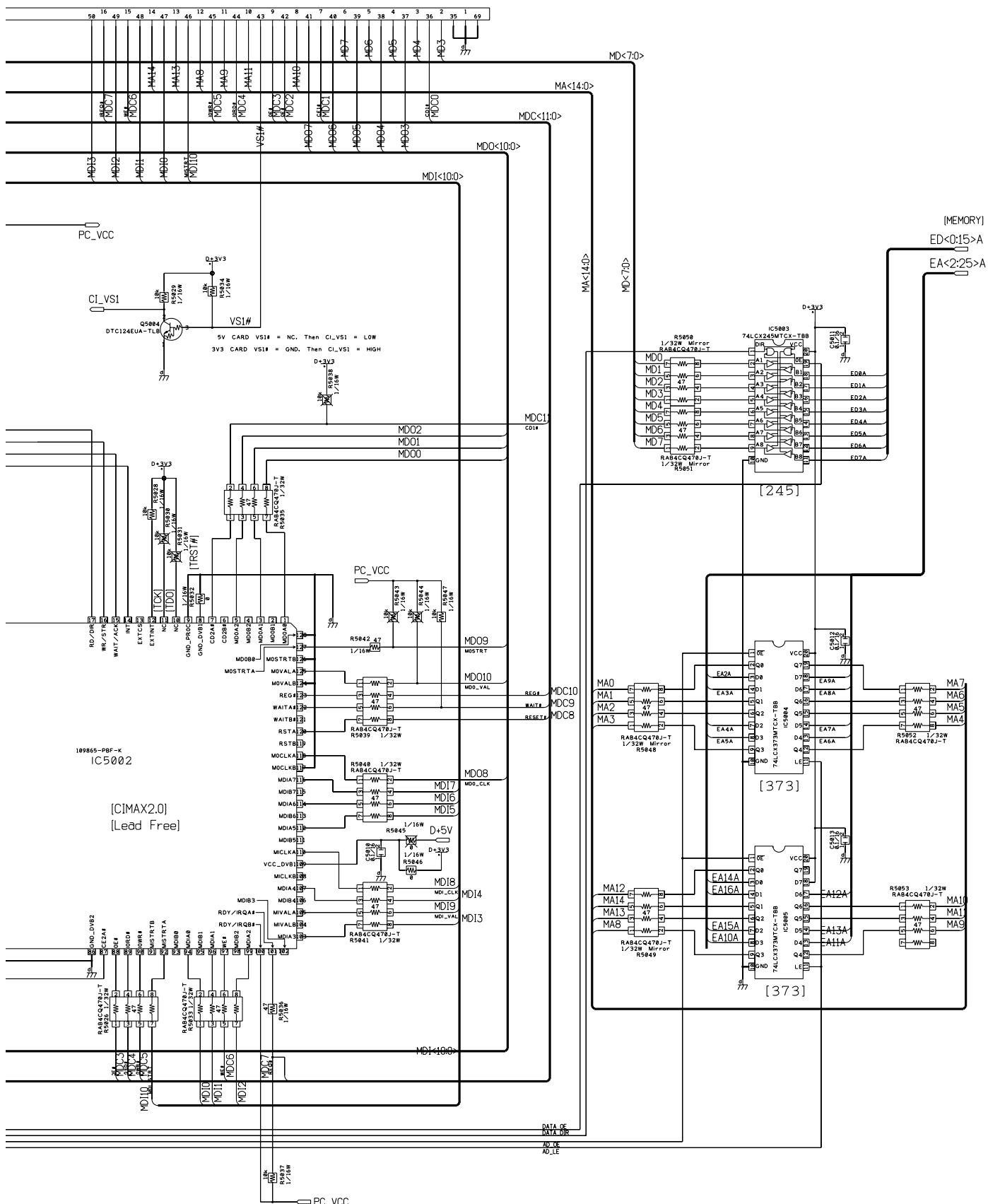
E

F



## I 5/6

A



B

C

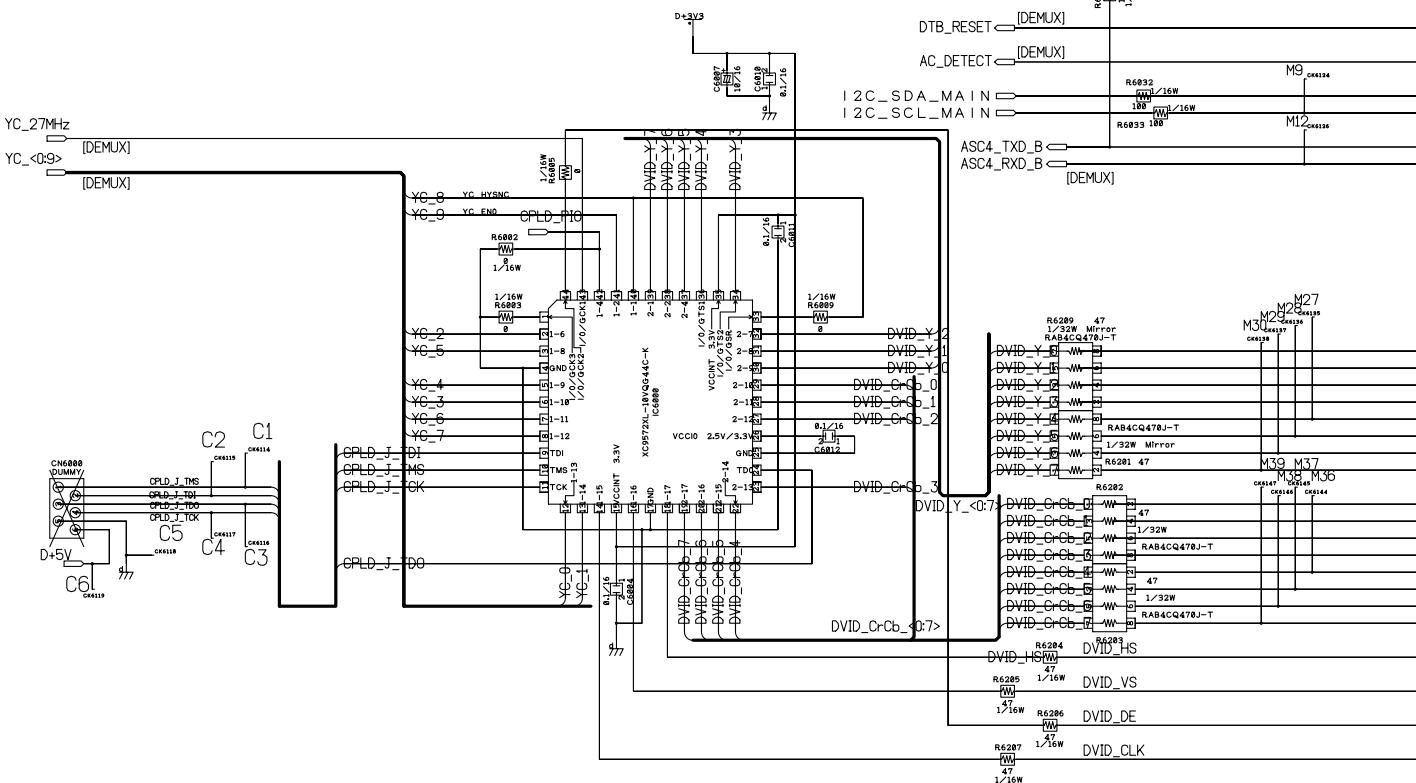
D

F

F

1 2 3 4  
3.33 TUNER BOARD ASSY (6/6)

A | 6/6 TUNER BOARD ASSY (AWE1301)



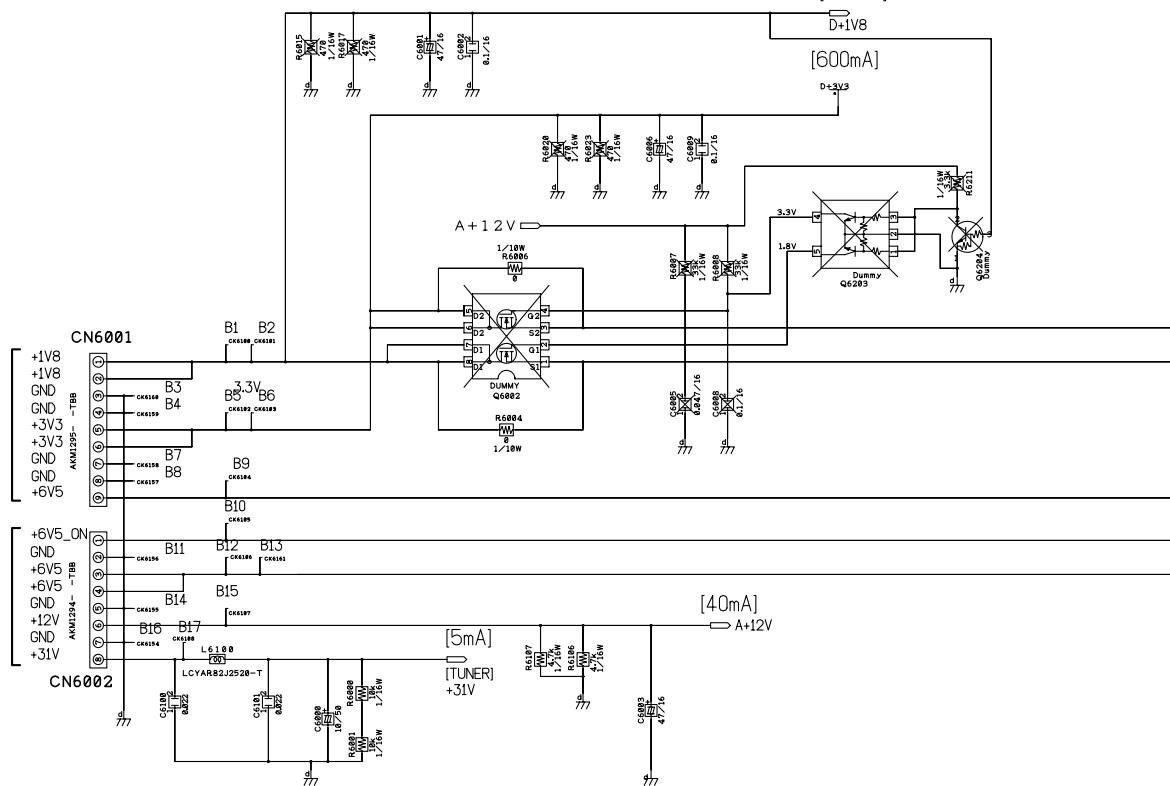
C

D

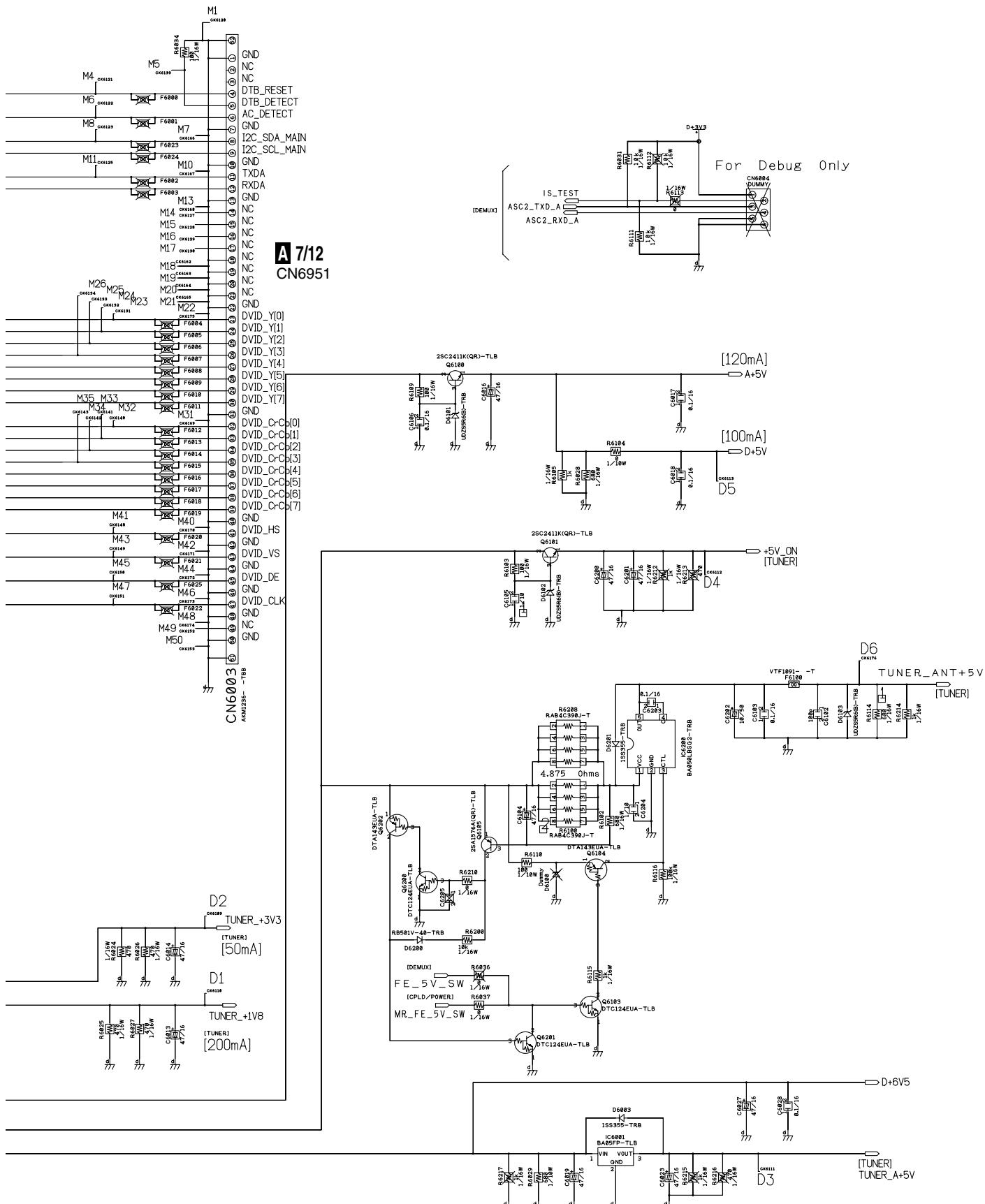
E

F

B 9/9  
CN8509

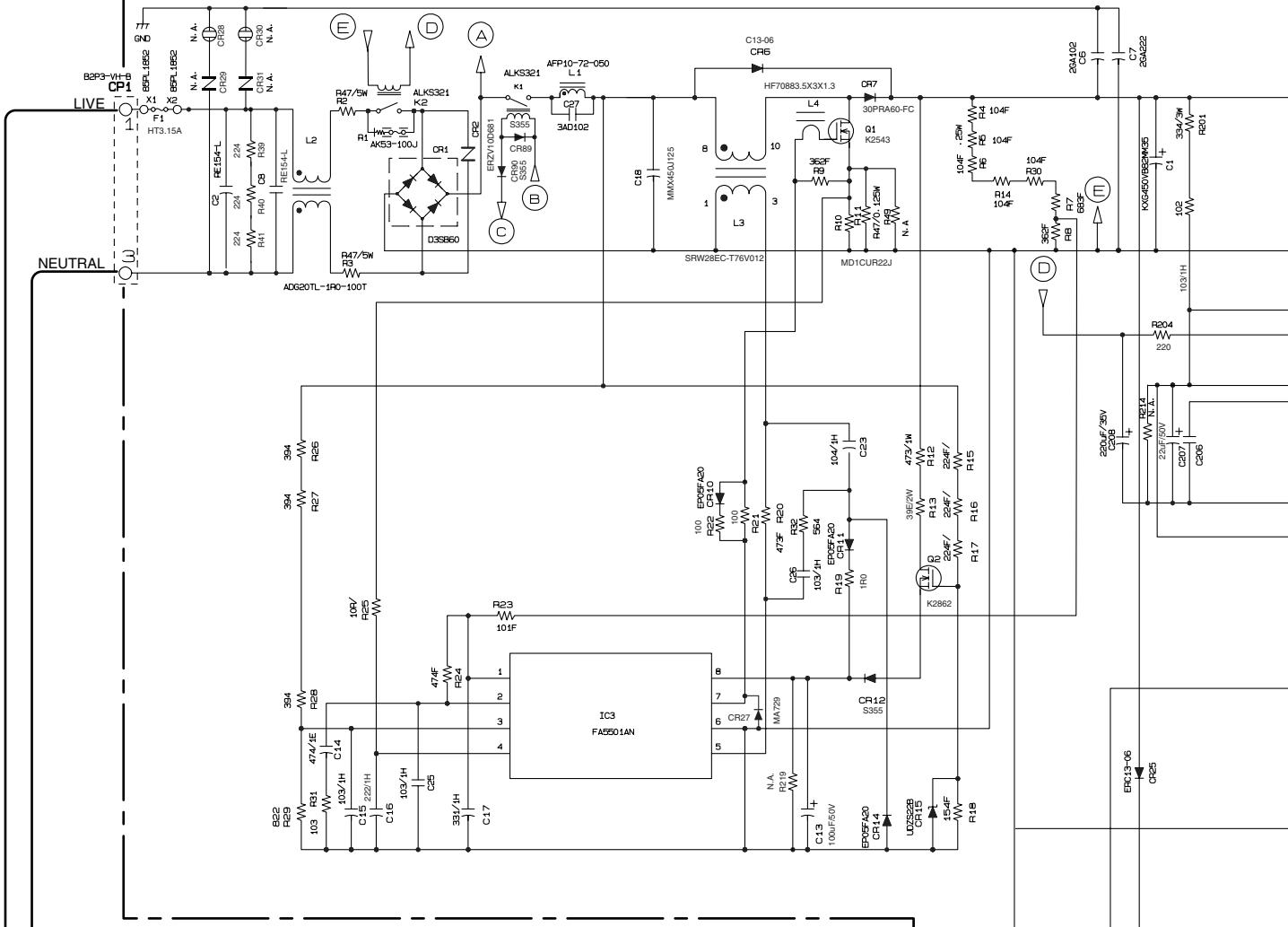


B 9/9  
CN8508

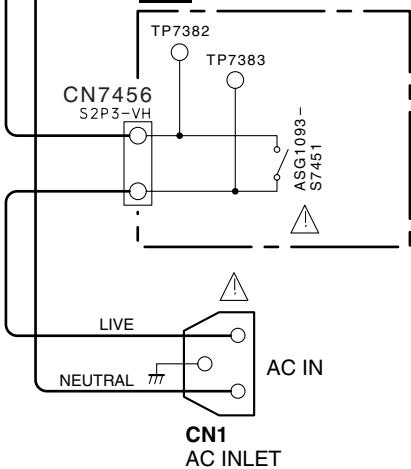


1 2 3 4  
3.34 POWER SUPPLY UNIT

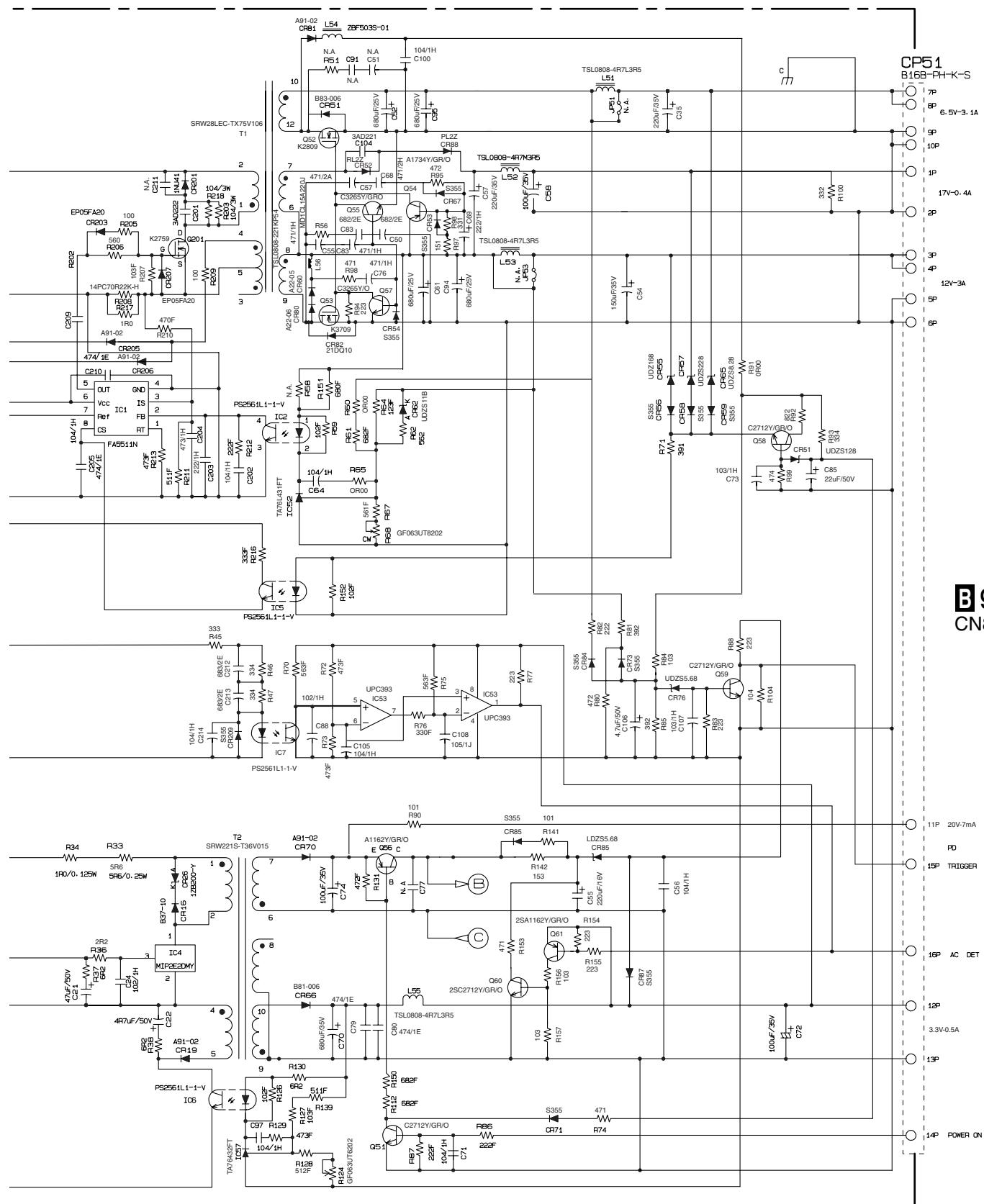
**K** POWER SUPPLY UNIT (AXY1091)



**J** AC SW ASSY (AWZ6920)



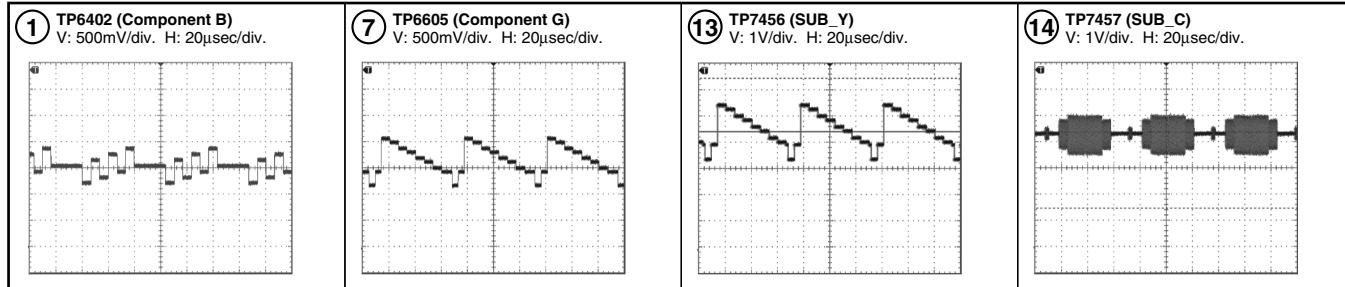
**J** **K**



## 3.35 WAVEFORMS

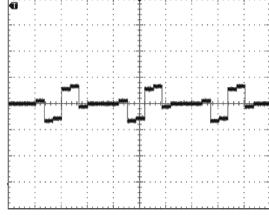
Note : The encircled numbers denote measuring point in the schematic diagram.

### A MR MAIN BOARD ASSY



### B

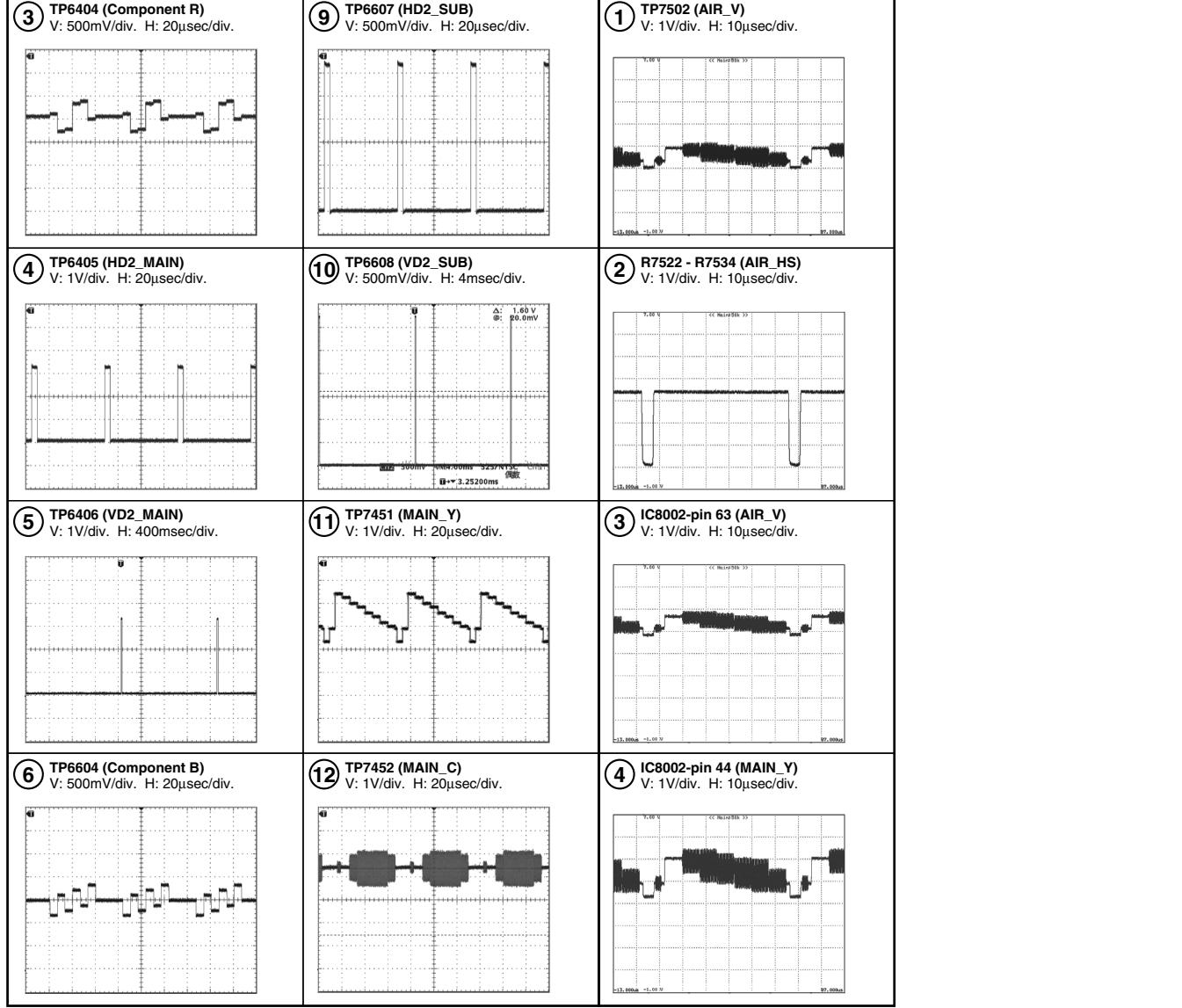
### TP6403 (Component G) V: 500mV/div. H: 20 $\mu$ sec/div.



### TP6606 (Component R) V: 500mV/div. H: 20 $\mu$ sec/div.



### B AV BOARD ASSY



## 3.36 VOLTAGES

**B** AV BOARD ASSY

CN8654 (AKM1201)		Voltage (V)	CN7455 (AKM1201)	
No.	Name		Name	No.
1	RAPID_DT_3		RAPID_DT_3	50
2	RAPID_DT_1		RAPID_DT_1	49
3	AUDIO_R	0	AUDIO_R	48
4	GND	0	GND	47
5	AUDIO_L	0	AUDIO_L	46
6	GND	0	GND	45
7	HDMI_RCH	0	HDMI_RCH	44
8	GND	0	GND	43
9	HDMI_LCH	0	HDMI_LCH	42
10	GND	0	GND	41
11	PIXEL_CLK_IN		PIXEL_CLK_IN	40
12	TTX_RGB_DIG15		TTX_RGB_DIG15	39
13	TTX_RGB_DIG14		TTX_RGB_DIG14	38
14	TTX_RGB_DIG13		TTX_RGB_DIG13	37
15	TTX_RGB_DIG12		TTX_RGB_DIG12	36
16	TTX_RGB_DIG11		TTX_RGB_DIG11	35
17	TTX_RGB_DIG10		TTX_RGB_DIG10	34
18	TTX_RGB_DIG9		TTX_RGB_DIG9	33
19	TTX_RGB_DIG8		TTX_RGB_DIG8	32
20	TTX_RGB_DIG7		TTX_RGB_DIG7	31
21	TTX_RGB_DIG6		TTX_RGB_DIG6	30
22	TTX_RGB_DIG5		TTX_RGB_DIG5	29
23	TTX_RGB_DIG4		TTX_RGB_DIG4	28
24	TTX_RGB_DIG3		TTX_RGB_DIG3	27
25	TTX_RGB_DIG2		TTX_RGB_DIG2	26
26	TTX_RGB_DIG1		TTX_RGB_DIG1	25
27	TTX_RGB_DIG0		TTX_RGB_DIG0	24
28	AIR_AFT	1.8	AIR_AFT	23
29	AIR_HS	0.5	AIR_HS	22
30	RST_IF	3.3	RST_IF	21
31	TXD_WR	3.3	TXD_WR	20
32	RXD_WR	3.3	RXD_WR	19
33	SDA_AV	5	SDA_AV	18
34	SCL_AV	5	SCL_AV	17
35	RXD_IF	3.3	RXD_IF	16
36	TXD_IF	3.3	TXD_IF	15
37	CLK_IF	3.3	CLK_IF	14
38	REQ_IF	0	REQ_IF	13
39	BUSY_IF	0	BUSY_IF	12
40	CE_IF	3.3	CE_IF	11
41	RESET_TXT	3.3	RESET_TXT	10
42	RELAY	2.4	RELAY	9
43	REM_B	3.3	REM_B	8
44	PSW1	0	PSW1	7
45	PD_MAIN	0	PD_MAIN	6
46	WE_ROM	0	WE_ROM	5
47	AM_MUTE	0	AM_MUTE	4
48	HP_VOL		HP_VOL	3
49	HP_MUTE		HP_MUTE	2
50	ELITE_DET		ELITE_DET	1

**A** MR MAIN BOARD ASSY

**B** AV BOARD ASSY

**A** MR MAIN BOARD ASSY

CN8651 (KM200NA15)		Voltage (V)	CN7451 (AKM1301)	
No.	Name		Name	No.
1	GND	0.0	GND	15
2	V+3V_STB	3.3	V+3V_STB	14
3	GND	0.0	GND	13
4	V+3V_UCOM	3.3	V+3V_UCOM	12
5	GND	0.0	GND	11
6	V+12V_16V	16.9	V+12V_16V	10
7	GND	0.0	GND	9
8	V+6V	6.7	V+6V	8
9	GND_D	0.0	GND_D	7
10	V+1V_DD	1.5	V+1V_DD	6
11	V+1V_DD	1.5	V+1V_DD	5
12	GND_D	0.0	GND_D	4
13	V+3V_DD	3.3	V+3V_DD	3
14	V+3V_DD	3.3	V+3V_DD	2
15	GND_D	0.0	GND_D	1

**B** AV BOARD ASSY

**L** PC CARD MODULE

CN8660 (AKM1233)		Voltage (V)	CN501	
No.	Name		Name	No.
1	RXD_CARD	3.32	RXD_CARD	12
2	TXD_CARD	3.33	TXD_CARD	11
3	NC		NC	10
4	CARD_V	3.31	CARD_V	9
5	CARD_H	3.31	CARD_H	8
6	GND	0.00	GND	7
7	GND	0.00	GND	6
8	YUV1_B	0.51	YUV1_B	5
9	GND	0.00	GND	4
10	YUV1_G	0.56	YUV1_G	3
11	GND	0.00	GND	2
12	YUV1_R	0.52	YUV1_R	1

**B** AV BOARD ASSY

**L** PC CARD MODULE

CN8502 (KM200NA6)		Voltage (V)	CN1	
No.	Name		Name	No.
1	V+3V_CARD	3.35	V+3V_CARD	1
2	V+3V_CARD	3.35	V+3V_CARD	2
3	GND	0.00	GND	3
4	GND	0.00	GND	4
5	V+5V_CARD	5.00	V+5V_CARD	5
6	GND	0.00	GND	6

**B** AV BOARD ASSY**A** MR MAIN BOARD ASSY

CN8652 (AKM1201)		Voltage (V)	CN7454 (AKM1201)	
No.	Name		Name	No.
1	AC_DET	2.7	AC_DET	50
2	KEY_B	3.3	KEY_B	49
3	STB_MT	0	STB_MT	48
4	AC_OFF	0	AC_OFF	47
5	SDA_EP2	3.3	SDA_EP2	46
6	SCL_EP2	3.3	SCL_EP2	45
7	VCC_EP	3.3	VCC_EP	44
8	SDA_HDMI/TXT		SDA_HDMI/TXT	43
9	SCL_HDMI/TXT		SCL_HDMI/TXT	42
10	WE_TXT	0	WE_TXT	41
11	RXD_CARD		RXD_CARD	40
12	TXD_CARD		TXD_CARD	39
13	DSUB_DET	0	DSUB_DET	38
14	PN2	0	PN2	37
15	VD_TXT	0	VD_TXT	36
16	HD_TXT	0	HD_TXT	35
17	PCA_V_SUB	0	PCA_V_SUB	34
18	PCA_H_SUB	0	PCA_H_SUB	33
19	PCA_V	0	PCA_V	32
20	PCA_H	0	PCA_H	31
21	BLK	0	BLK	30
22	FBLK_SUB		FBLK_SUB	29
23	FBLK_MAIN		FBLK_MAIN	28
24	GND	0	GND	27
25	SUBC_Y	4.5	SUBC_Y	26
26	GND	0	GND	25
27	SUBC_PR	4.5	SUBC_PR	24
28	GND	0	GND	23
29	SUBC_PB	4.5	SUBC_PB	22
30	GND	0	GND	21
31	SUB_C	4.3	SUB_C	20
32	GND	0	GND	19
33	SUB_Y	3.7	SUB_Y	18
34	GND	0	GND	17
35	G_CCTXT	1.3	G_CCTXT	16
36	GND	0	GND	15
37	R_CCTXT	1.3	R_CCTXT	14
38	GND	0	GND	13
39	B_CCTXT	1.3	B_CCTXT	12
40	GND	0	GND	11
41	MAINC_Y	4.5	MAINC_Y	10
42	GND	0	GND	9
43	MAINC_PR	4.5	MAINC_PR	8
44	GND	0	GND	7
45	MAINC_PB	4.5	MAINC_PB	6
46	GND	0	GND	5
47	MAIN_C	4.4	MAIN_C	4
48	GND	0	GND	3
49	MAIN_Y	4.4	MAIN_Y	2
50	GND	0	GND	1

**I** TUNER BOARD ASSY**A** MR MAIN BOARD ASSY

CN6003 (AKM1236)		Voltage (V)	CN6951 (AKM1201)	
No.	Name		Name	No.
1	GND	0	GND	50
2	N.C.	-	N.C.	49
3	N.C.	-	N.C.	48
4	RESET	3.37	RST_DT	47
5	DTB_DET	0	DT_DET	46
6	AC_DETECT		AC_DETECT	45
7	GND	0	GND	44
8	SDA_MAIN		SDA_MAIN	43
9	SCL_MAIN		SCL_MAIN	42
10	GND	0	GND	41
11	TXDA	3.3	RXDA	40
12	RXDA	3.3	TXDA	39
13	N.C.	-	N.C.	38
14	N.C.	-	N.C.	37
15	N.C.	-	N.C.	36
16	N.C.	-	N.C.	35
17	N.C.	-	N.C.	34
18	N.C.	-	N.C.	33
19	N.C.	-	N.C.	32
20	N.C.	-	N.C.	31
21	N.C.	-	N.C.	30
22	GND	0	GND	29
23	DVID_Y0	0/3.3	DVID_Y0	28
24	DVID_Y1	0/3.3	DVID_Y1	27
25	DVID_Y2	0/3.3	DVID_Y2	26
26	DVID_Y3	0/3.3	DVID_Y3	25
27	DVID_Y4	0/3.3	DVID_Y4	24
28	DVID_Y5	0/3.3	DVID_Y5	23
29	DVID_Y6	0/3.3	DVID_Y6	22
30	DVID_Y7	0/3.3	DVID_Y7	21
31	GND	0	GND	20
32	DVID_PbPr0	0/3.3	DVID_PbPr0	19
33	DVID_PbPr1	0/3.3	DVID_PbPr1	18
34	DVID_PbPr2	0/3.3	DVID_PbPr2	17
35	DVID_PbPr3	0/3.3	DVID_PbPr3	16
36	DVID_PbPr4	0/3.3	DVID_PbPr4	15
37	DVID_PbPr5	0/3.3	DVID_PbPr5	14
38	DVID_PbPr6	0/3.3	DVID_PbPr6	13
39	DVID_PbPr7	0/3.3	DVID_PbPr7	12
40	GND	0	GND	11
41	DVID_HS	3.1	DVID_HS	10
42	GND	0	GND	9
43	DVID_VS	3.2	DVID_VS	8
44	GND	0	GND	7
45	DVID_DE	2.6	DVID_DE	6
46	GND	0	GND	5
47	DVID_CLK	1.6	DVID_CLK	4
48	GND	0	GND	3
49	SPDIF		SPDIF	2
50	GND	0	GND	1

**A** MR MAIN BOARD ASSY

## FAN MOTOR

CN7202 , CN7204 (AKM1274)		Voltage (V)	CN6951 (AKM1201)	
No.	Name		Name	No.
1	FAN_12V	6.9		
2	FAN_NG	0		
3	GND	0		

**B** AV BOARD ASSY

CN8656 (KM200NA7)		Voltage (V)	CN7651 (AKM1293-A-TBB)	
No.	Name		Name	No.
1	V+3V_STB	3.3	V+3V_STB	1
2	LED_G	0	LED_G	2
3	LED_R	3.3	LED_R	3
4	GND	0	GND	4
5	LED_MDM	0	LED_MDM	5
6	LED_FCT	3.3	LED_FCT	6
7	GND	0.0	GND	7

**H** LED ASSY**K** POWER SUPPLY UNIT

CN8501 (KM200NA16)		Voltage (V)	CP51 (KM200NA16)	
No.	Name		Name	No.
1	V+16.5V	17.6	V+16.5V	1
2	GND	0	GND	2
3	V+12V	12	V+12V	3
4	V+12V	12	V+12V	4
5	GND	0	GND	5
6	GND	0	GND	6
7	V+6.5V	6.8	V+6.5V	7
8	V+6.5V	6.8	V+6.5V	8
9	GND	0	GND	9
10	GND	0	GND	10
11	V+12V_STB	14.9	V+12V_STB	11
12	V+3V_STB	3.3	V+3V_STB	12
13	GND	0	GND	13
14	RELAY	2.4	RELAY	14
15	PD_TRIGGER	0	PD_TRIGGER	15
16	AC_DET	2.7	AC_DET	16

**B** AV BOARD ASSY**F** SR ASSY

CN8658 (AKM1233)		Voltage (V)	CN9452 (CKS3826)	
No.	Name		Name	No.
1	V+5V_STB	5.0	V+5V_STB	12
2	V+3V_STB	3.3	V+3V_STB	11
3	TXD	3.3	TXD	10
4	RXD	3.3	RXD	9
5	232C_DET	0.0	232C_DET	8
6	SR_EN_B	3.3	SR_EN_B	7
7	GND	0.0	GND	6
8	SR_OUT	3.3	SR_OUT	5
9	SR_IN	3.3	SR_IN	4
10	GND	0.0	GND	3
11	IR	0.0	IR	2
12	GND	0.0	GND	1

**A** MR MAIN BOARD ASSY

## TRAP SW

CN7203 (AKM1213)		Voltage (V)		
No.	Name		Name	No.
1	TRAP_SW	0.7		
2	NC			
3	V+3V_UCOM	3.3		

**B** AV BOARD ASSY**H** LED ASSY

CN8509 (KM200NA9)		Voltage (V)	CN6001 (KM200NA9)	
No.	Name		Name	No.
1	V+1.8V_DD	1.8	V+1.8V_DD	1
2	V+1.8V_DD	1.8	V+1.8V_DD	2
3	GND	0	GND	3
4	GND	0	GND	4
5	V+3V_DD	3	V+3V_DD	5
6	V+3V_DD	3	V+3V_DD	6
7	GND	0	GND	7
8	GND	0	GND	8
9	V+6V_EU	6	V+6V_EU	9

**I** TUNER BOARD ASSY**J** TUNER BOARD ASSY**B** AV BOARD ASSY**I** TUNER BOARD ASSY

CN8508 (KM200NA8)		Voltage (V)	CN6002 (KM200NA8)	
No.	Name		Name	No.
1	V+6V_ON	6	V+6V_ON	1
2	GND	0	GND	2
3	V+6V	6	V+6V	3
4	V+6V	6	V+6V	4
5	GND	0	GND	5
6	V+12V	12	V+12V	6
7	GND	0	GND	7
8	V+30V_EU	30	V+30V_EU	8

**A** MR MAIN BOARD ASSY

CN7402 (AKM1234)		Voltage (V)	CN9302 (CKS3830)	
No.	Name		Name	No.
16	GND_D	0	GND_D	1
15	AUDIO_L	0	AUDIO_L	2
14	ACT3V	3.3	ACT3V	3
13	AUDIO_R	0	AUDIO_R	4
12	V+3V_UCOM	3.3	V+3V_UCOM	5
11	STB3V	3.3	STB3V	6
10	SP_MUTE	3.3	SP_MUTE	7
9	MTXD	3.3	MTXD	8
8	FIELD	0	FIELD	9
7	MRXD	3.3	MRXD	10
6	REM_B	3.3	REM_B	11
5	P_ST_B	0	P_ST_B	12
4	AC_OFF	0	AC_OFF	13
3	REQ	0	REQ	14
2	KEY_B	3.3	KEY_B	15
1	STB_MT	0	STB_MT	16

**E** MDR ASSY

A

B

C

F

G

**B** AV BOARD ASSY**G** FRONT ASSY

CN8653 (AKM1201)		Voltage (V)	CN9502 (AKM1201)	
No.	Name		Name	No.
50	V+9V_A	9.0	V+9V_A	1
49	V+5V_A	5.0	V+5V_A	2
48	V+3VCOM	3.3	V+3VCOM	3
47	WE_ROM	0.0	WE_ROM	4
46	PC_V	0.0	PC_V	5
45	GND	0.0	GND	6
44	PC_H	0.0	PC_H	7
43	GND	0.0	GND	8
42	PC_B	4.6	PC_B	9
41	GND	0.0	GND	10
40	PC_G	4.7	PC_G	11
39	GND	0.0	GND	12
38	PC_R	4.7	PC_R	13
37	GND	0.0	GND	14
36	GND	4.7	GND	15
35	PC_RCH	4.4	PC_RCH	16
34	GND	0.0	GND	17
33	PC_LCH	4.4	PC_LCH	18
32	GND	0.0	GND	19
31	V4_R	4.4	V4_R	20
30	GND	0.0	GND	21
29	V4_L	4.4	V4_L	22
28	GND	0.0	GND	23
27	GND	0.0	GND	24
26	V4_V	3.9	V4_V	25
25	GND	0.0	GND	26
24	V4_S2	0.1	V4_S2	27
23	V4_SPLUG	4.9	V4_SPLUG	28
22	GND	0.0	GND	29
21	V4_C	4.4	V4_C	30
20	GND	0.0	GND	31
19	V4_Y	3.9	V4_Y	32
18	GND	0.0	GND	33
17	GND	0.0	GND	34
16	HP_PLUG	0.0	HP_PLUG	35
15	HP_R	2.1	HP_R	36
14	GND	0.0	GND	37
13	HP_L	2.1	HP_L	38
12	GND	0.0	GND	39
11	GND	0.0	GND	40
10	NO_USE	-	NO_USE	41
9	GND	0.0	GND	42
8	GND	0.0	GND	43
7	NO_USE	-	NO_USE	44
6	GND	0.0	GND	45
5	GND	0.0	GND	46
4	NO_USE	-	NO_USE	47
3	GND	0.0	GND	48
2	GND	0.0	GND	49
1	NO_USE	-	NO_USE	50

# 4. PCB CONNECTION DIAGRAM

## NOTE FOR PCB DIAGRAMS :

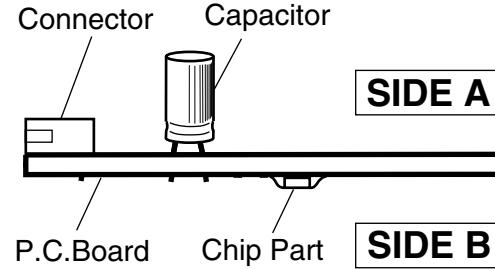
- Part numbers in PCB diagrams match those in the schematic diagrams.
- A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol In PCB Diagrams	Symbol In Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3-terminal regulator

- The parts mounted on this PCB include all necessary parts for several destinations.

For further information for respective destinations, be sure to check with the schematic diagram.

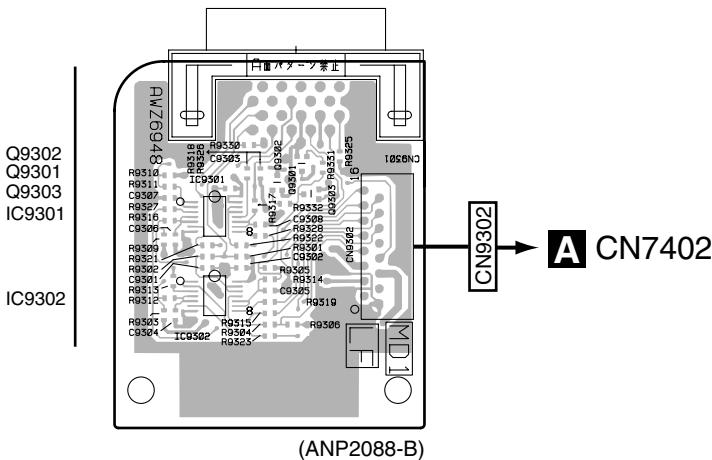
- View point of PCB diagrams.



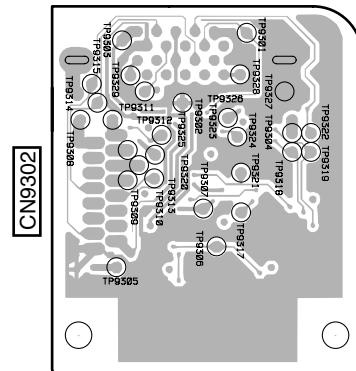
## 4.1 SW and MDR ASSYS

**SIDE A**

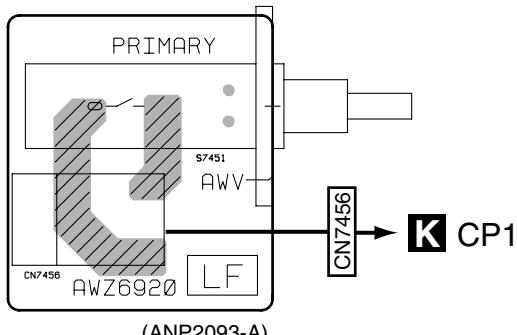
### E MDR ASSY



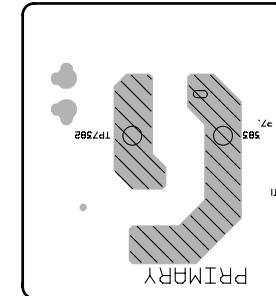
### E MDR ASSY



### J SW ASSY



### J SW ASSY



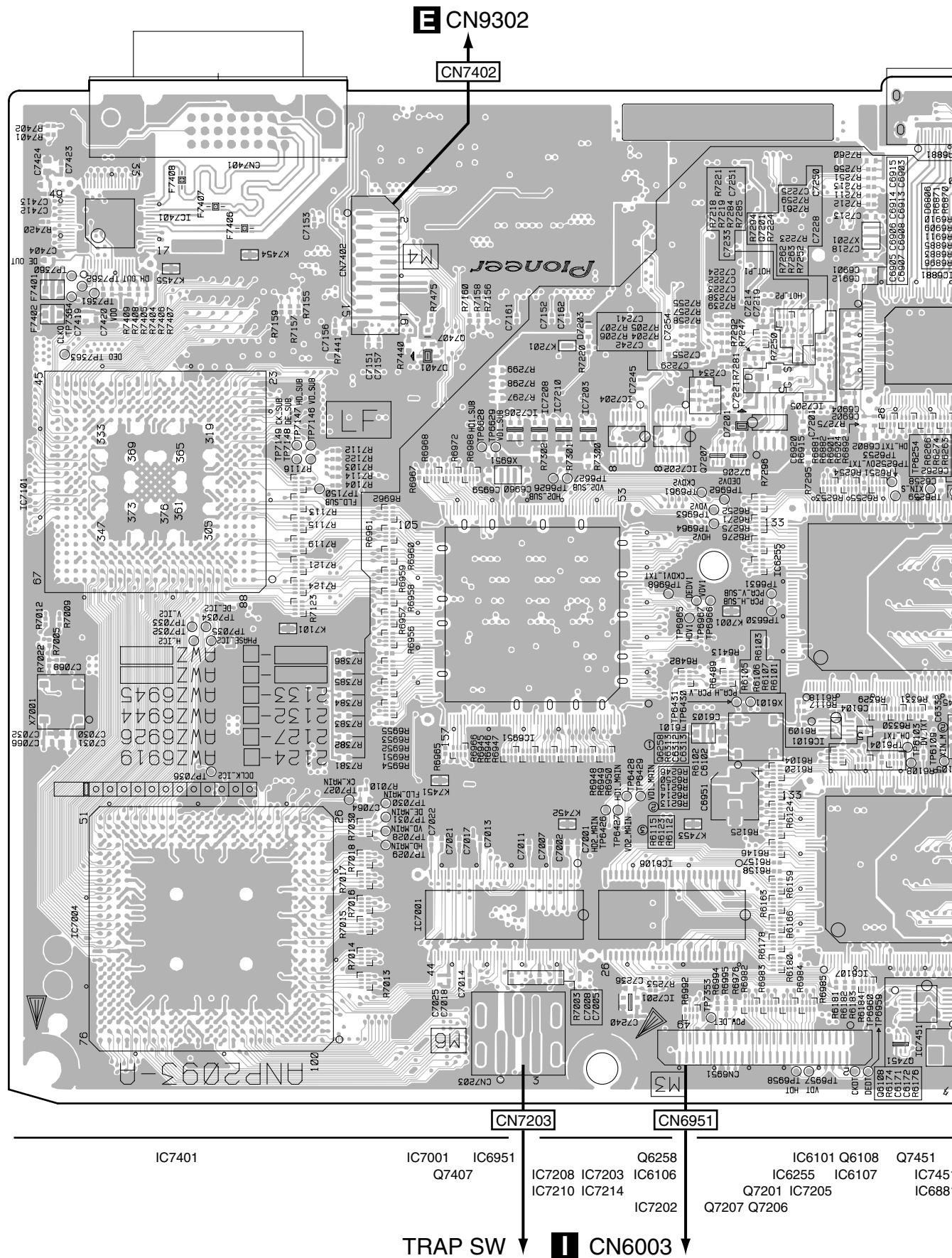
**E J**

**E J**

## 4.2 MR MAIN BOARD ASSY

**SIDE A**

### A MR MAIN BOARD ASSY



**A**

100

PDP-R05E

1

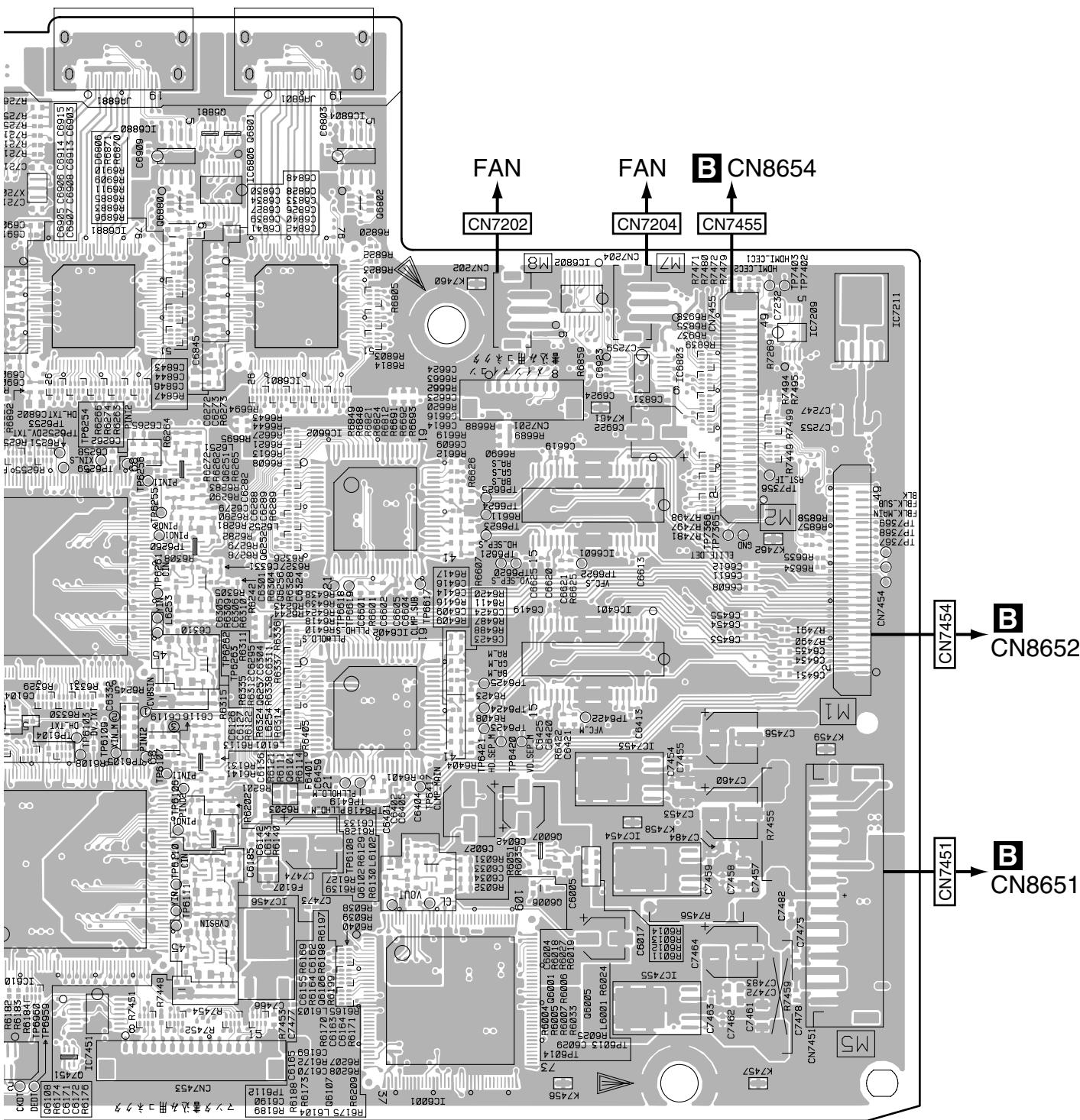
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4

SIDE A

A



(ANP2093-A)

Q6108	Q7451	Q6880	Q6251	IC7458	Q6106	IC6001
C6107	IC7451	IC6880	Q6252	Q6101	Q6107	
	IC6881	Q6881	Q6257	IC6062	Q6102	
		IC6801	Q6256	Q6802	IC6402	
		Q6801	Q6806	IC6804		

Q6001 Q6005 IC7455  
Q6006 IC6601 IC7454 IC6803  
Q6007 IC6401 IC7453  
IC6802

IC7209 IC7211

IC7211

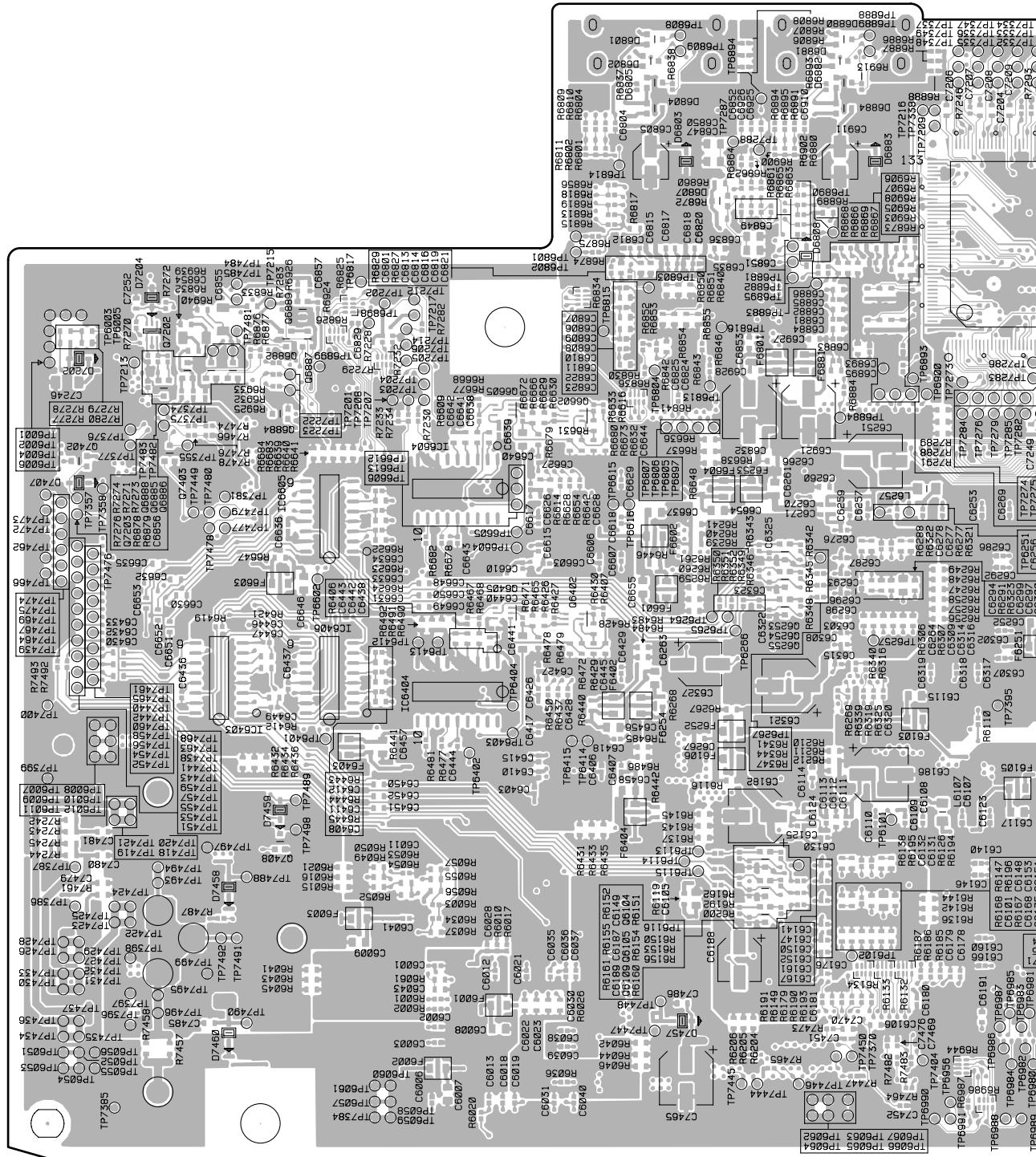
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PDP-R05E

101

**SIDE B**

A

**A MR MAIN BOARD ASSY**

Q7402 Q6886  
 Q7203 Q7202 IC6403 Q6884 Q6887  
 Q7403 Q6889 IC6605  
 IC6404 IC6604 Q6405 Q6605  
 Q6402 Q6109 Q6602 Q6105  
 Q6104 Q6255 Q6254 Q6253  
 Q6882

**A**

B

C

D

E

F

SIDE B

A

(ANP2093-A)

IC6408 Q6103  
IC6405 IC7452  
IC7207 Q6601 Q6401

IC6603 IC6607 IC7002  
IC7152  
Q7405 Q7409 Q7404

IC7151 Q7406

IC7403 IC7003  
IC7404  
Q7401

6

PDP-R05E

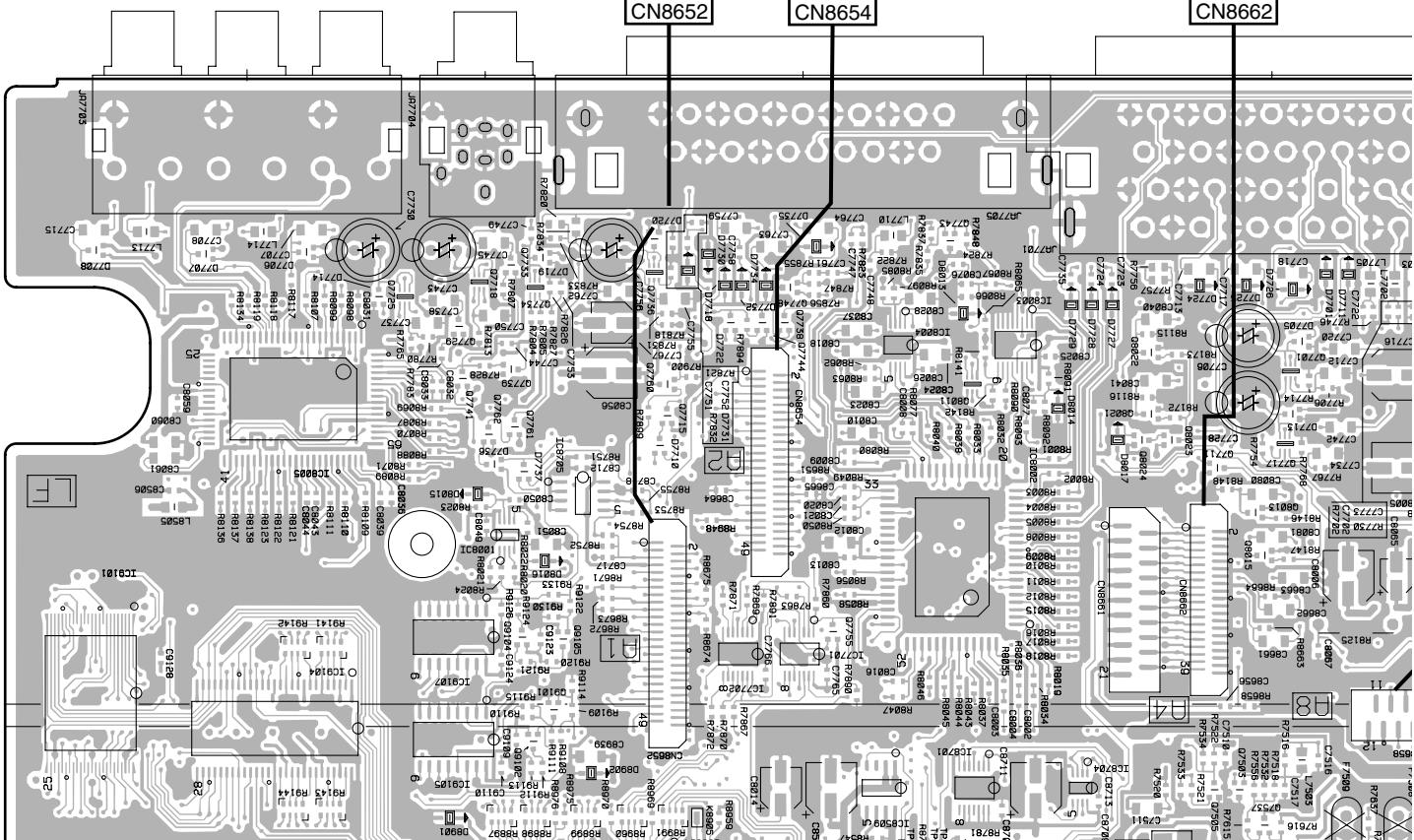
## 4.3 AV BOARD and SR ASSY

**SIDE A**

**B AV BOARD ASSY**

**A CN7454** **A CN7455**

**I CN4000**



(ANP2088-B)

**A CN7451**

**CN8651**

**H CN9651**

**CN8569**

PC CARD  
MODULE

**CN8602**

**K CP51**

**CN8501**

PC CARD  
MODULE

**CN8660**

**B**

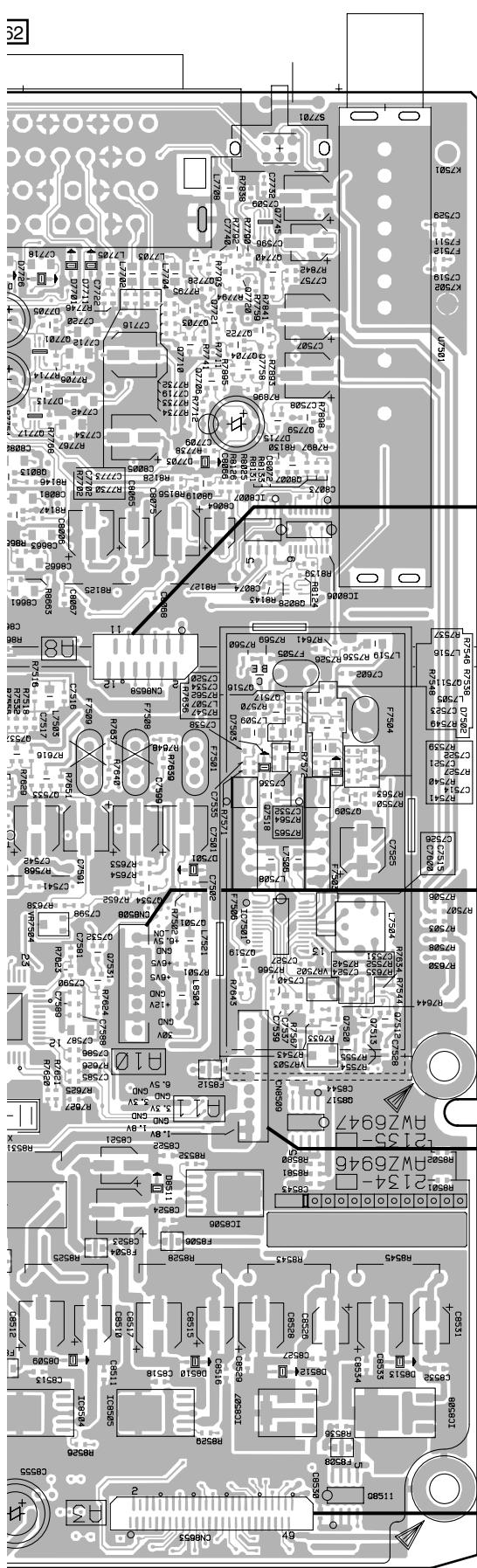
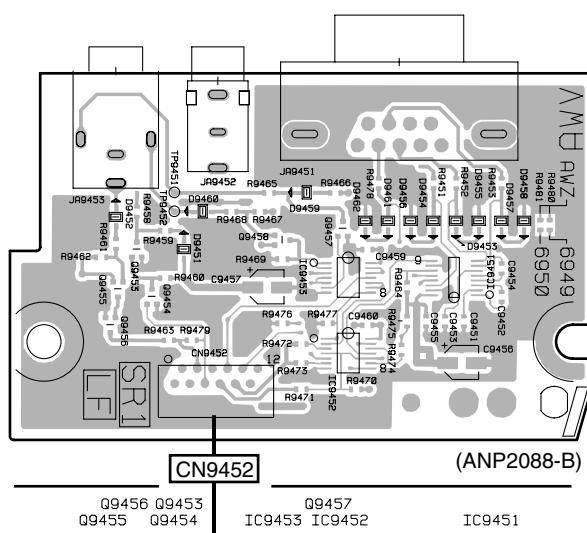
1

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SIDE A

**F SR ASSY****I CN6002**

Q7522 Q7534  
Q7501 IC7501  
Q7552  
Q7519 IC7502  
Q7531 IC8901  
Q8911  
Q7520 Q7512 Q7513  
IC8907 IC8902 Q8908  
Q8907  
Q8912 VR7503

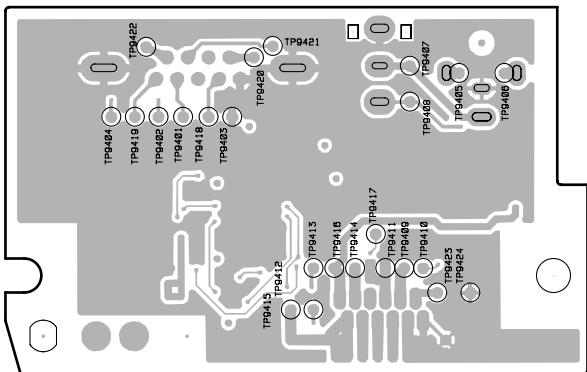
**I CN6001**

IC8506  
Q8516  
Q8550  
  
IC8503  
IC8507 IC8505 Q8507  
IC8508 IC8504  
  
IC8502  
Q8518  
Q8508

**G CN9502****B F**

SIDE B

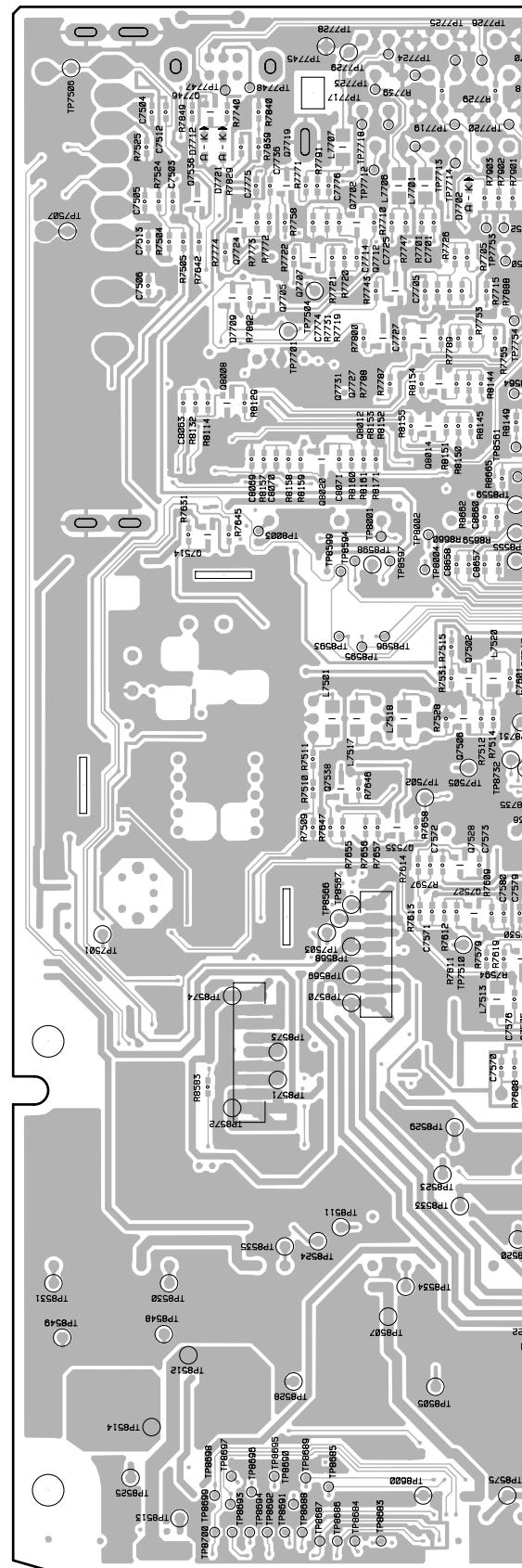
F SR ASSY



(ANP2088-B)

Q7727 Q7731  
Q8012 Q8014  
Q9116 Q8020  
  
Q7514 Q7757  
Q9107 Q9108  
  
Q7502  
Q7504 Q9103  
Q8909  
Q8702  
Q7506  
Q8913  
Q8914 Q7558  
  
Q7535 Q7528  
Q8906  
Q7524  
Q7537  
Q7530  
  
Q8910 Q7526  
  
Q8514  
Q8509  
  
Q8515  
Q8503

## B AV BOARD ASSY



SIDE B

A

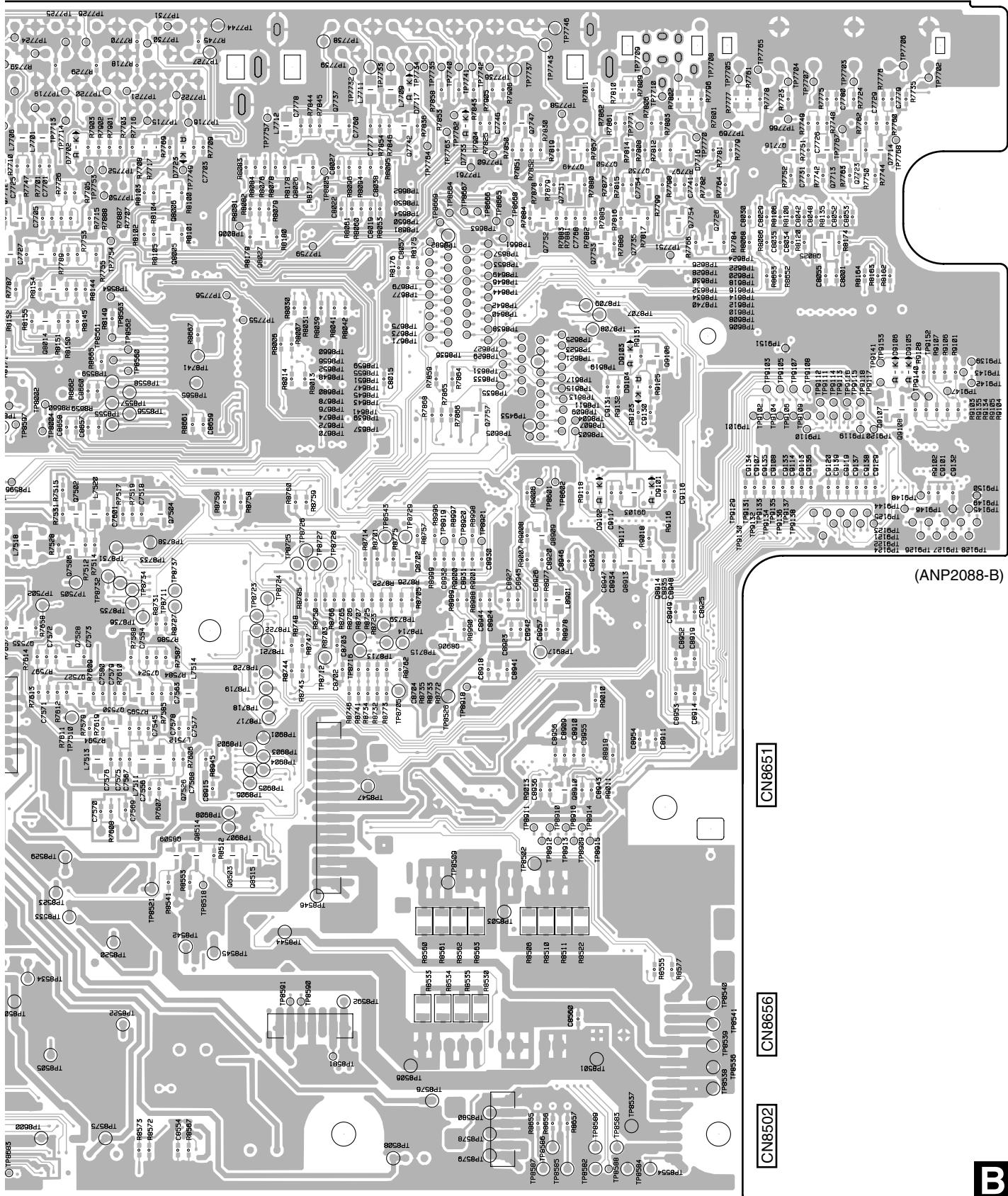
B

C

D

E

F



PDP-R05E

5

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7

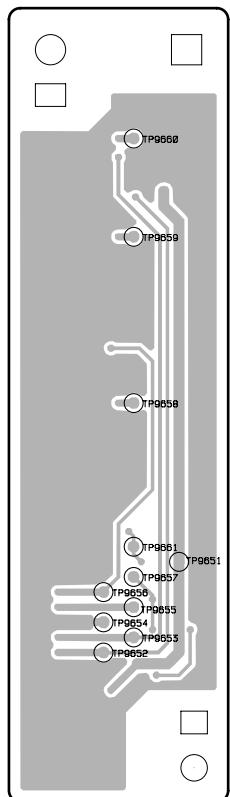
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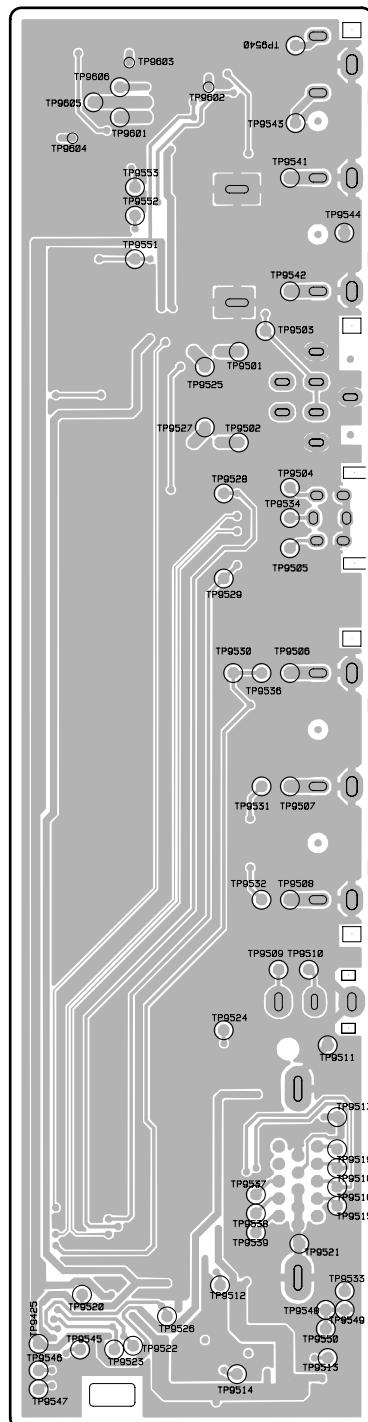


**SIDE B****SIDE B**

A

**H LED ASSY**

(ANP2083-A)

**G FRONT ASSY**

(ANP2083-A)

B

C

D

E

F

**G H****G H**

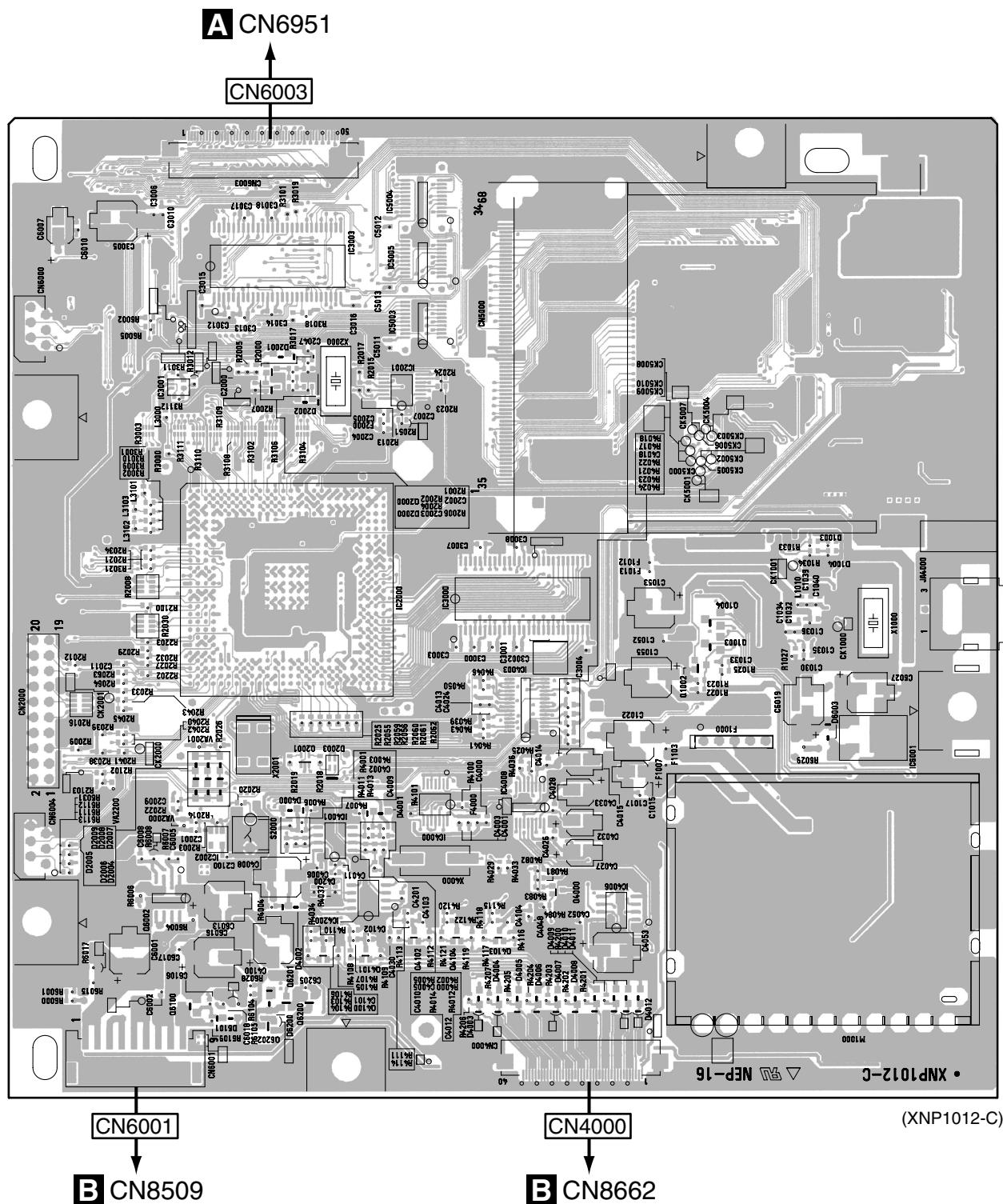
109

## 4.5 TUNER BOARD ASSY

**SIDE A**

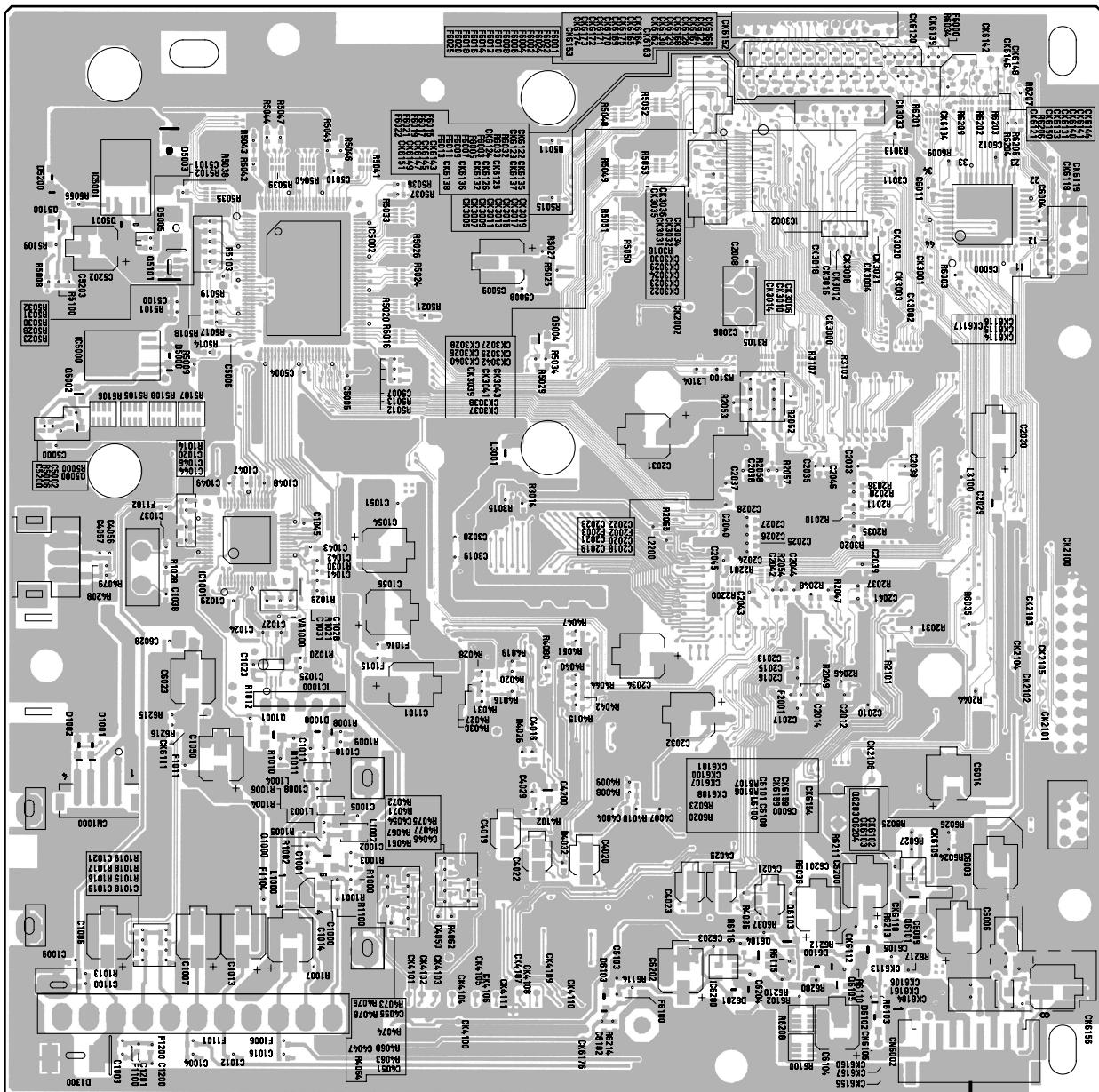
**SIDE A**

### I TUNER BOARD ASSY



**SIDE B****SIDE B**

# I TUNER BOARD ASSY



(XNP1012-C)

**CN6002****B CN8508**

Q5100 IC5001 Q5101 IC1001  
Q5000 IC5000  
IC5002  
Q1001 IC1000 IC5002  
Q1000

Q4200  
Q5004

IC6200 Q6104 Q6103  
IC3002 Q6105 Q6101  
Q6203 Q6204 IC6000

## 4.6 POWER SUPPLY UNIT

SIDE A

# K POWER SUPPLY UNIT

SIDE A

A

B

0

1

6

B

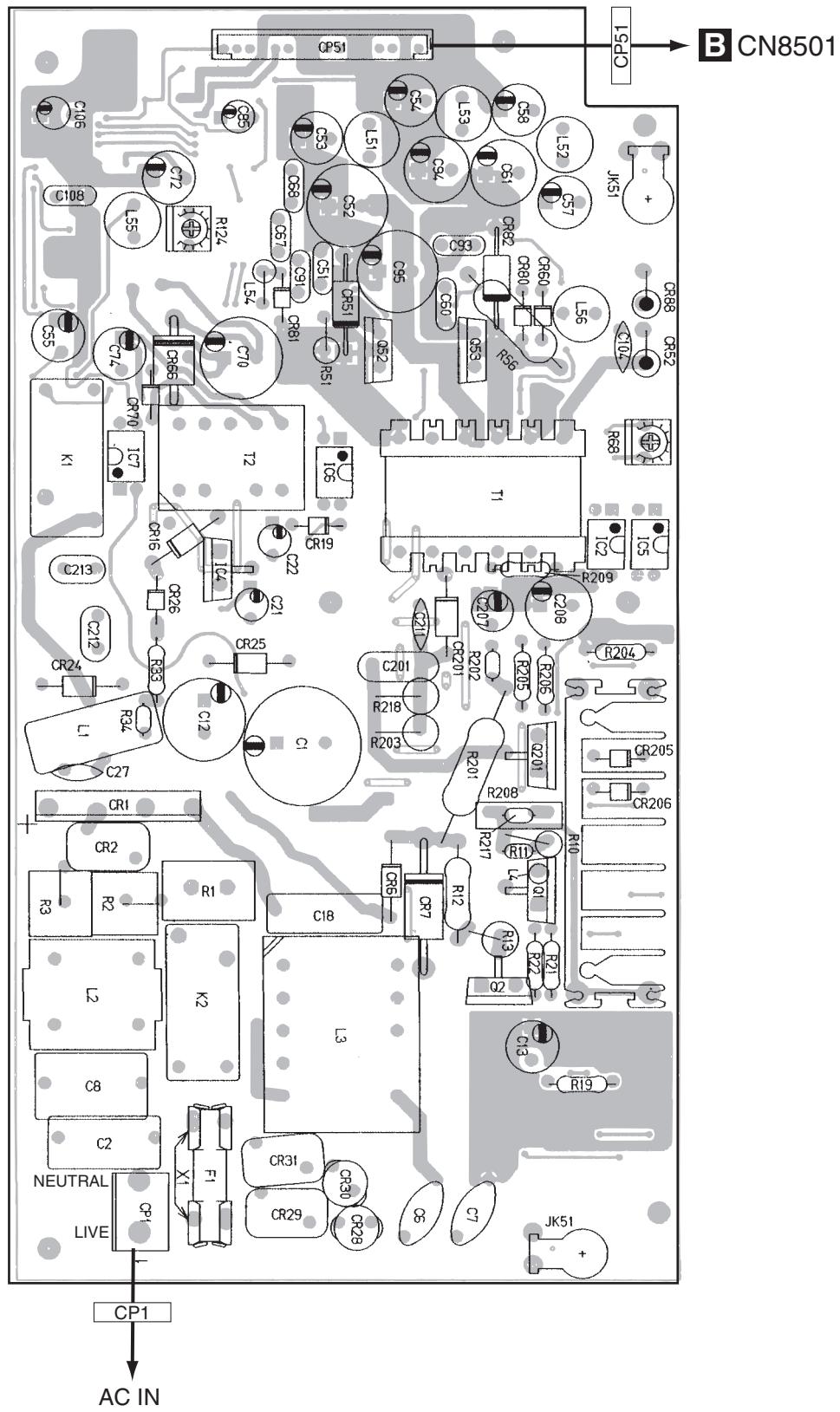
Q52

Q53

IC2  
IC5

Q201

Q2



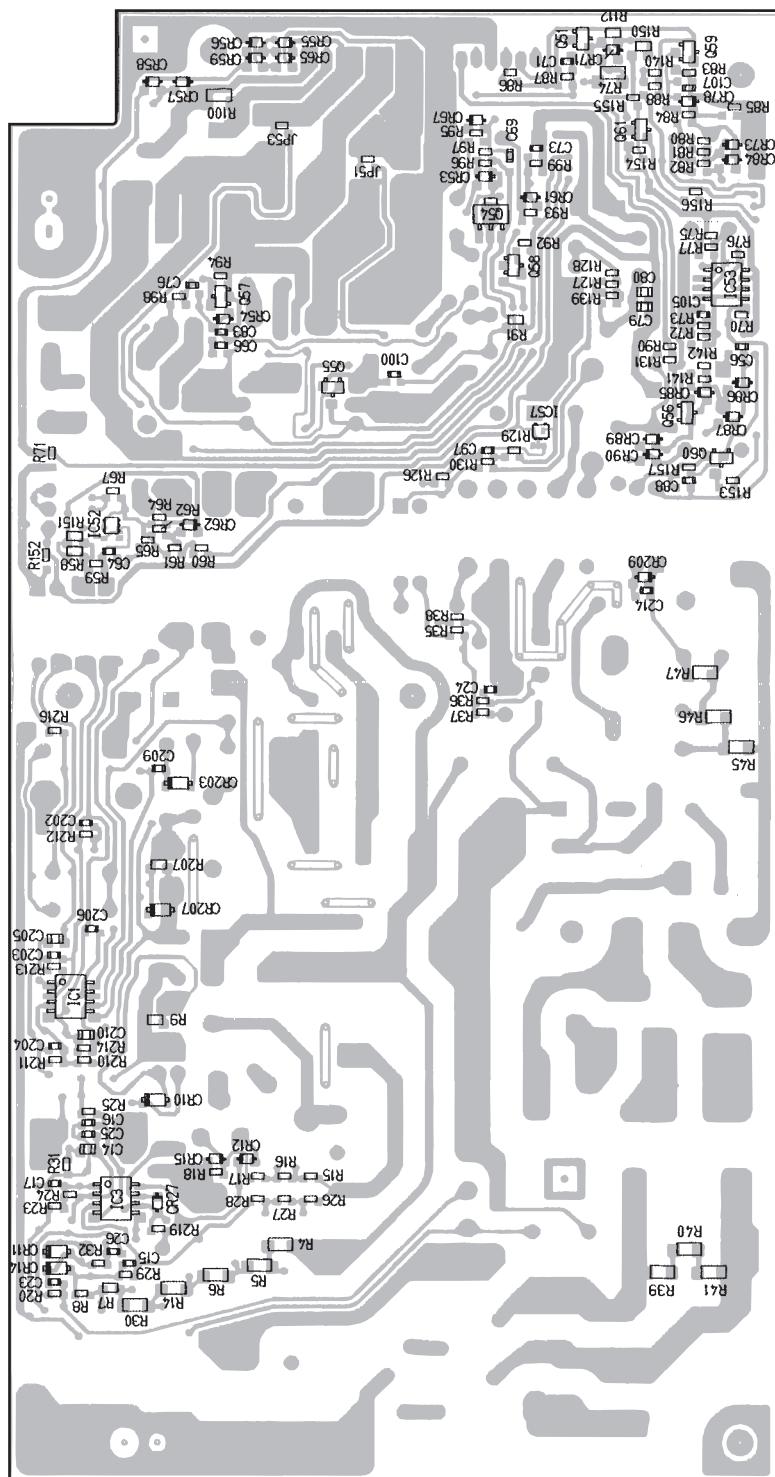
112

K

**SIDE B****K POWER SUPPLY UNIT****SIDE B**

A

CP51



CP1

F

**K****K**

# 5. PCB PARTS LIST

- A**
- NOTES:
- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
  - The  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
  - When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

560 Ω	→ 56 × 10 <sup>1</sup> → 561	..... RD1/4PU[5 6 1]J
47k Ω	→ 47 × 10 <sup>3</sup> → 473	..... RD1/4PU[4 7 3]J
0.5 Ω	→ R50	..... RN2H[R 5 0]K
1 Ω	→ 1R0	..... RS1P[1 R 0]K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k Ω	→ 562 × 10 <sup>1</sup> → 5621	..... RN1/4PC[5 6 2 1]F
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## B • LIST OF ASSEMBLIES

Mark	Symbol and Description	PDP-R05E/ WYVI	PDP-R05E/ WYVIXK	PRO-R05XE/ WYVIXK	PDP-R05FE/ WYVI	PDP-R05FE/ WYVIXK
NSP	1..MR AV BOARD ASSY 2..AV BOARD ASSY 2..MDR ASSY 2..SR ASSY	AWV2134 AWZ6946 AWZ6948 AWZ6949	AWV2134 AWZ6946 AWZ6948 AWZ6949	AWV2168 AWZ6986 AWZ6948 AWZ6949	AWV2135 AWZ6947 AWZ6948 AWZ6950	AWV2135 AWZ6947 AWZ6948 AWZ6950
NSP	1..MR FUKUGOU BOARD ASSY 2..FRONT ASSY 2..LED ASSY	AWV2136 AWZ6951 AWZ6953	AWV2136 AWZ6951 AWZ6953	AWV2136 AWZ6951 AWZ6953	AWV2137 AWZ6952 AWZ6954	AWV2137 AWZ6952 AWZ6954
NSP	1..MR MAIN BOARD ASSY 2..MAIN BOARD ASSY 2..SW ASSY	AWV2132 AWZ6944 AWZ6920	AWV2132 AWZ6944 AWZ6920	AWV2167 AWZ6990 AWZ6920	AWV2133 AWZ6945 AWZ6920	AWV2133 AWZ6945 AWZ6920
	1..TUNER BOARD ASSY	Not used	Not used	AWE1301	Not used	Not used
	1..PC CARD MODULE	AXY1073	AXY1073	AXY1073	Not used	Not used
	1..POWER SUPPLY UNIT	AXY1091	AXY1091	AXY1091	AXY1091	AXY1091

## • PCB PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.
<b>A MR MAIN BOARD ASSY (AWZ6944/AWZ6990)</b>					
E	[GCR BLOCK]			<b>CAPACITORS</b>	
	<b>RESISTORS</b>			C6102 (10/6.3) C6126,C6142,C6163,C6164 C6171,C6172 C6127,C6143 C6182,C6186	ACG7046 CCSRCH330J50 CCSRCH330J50 CCSRCH680J50 CEHVKW101M6R3
	R6011-R6016,R6021,R6041,R6043 R6045	RS1/16S0R0J RS1/16S0R0J		C6188 C6151 C6112,C6114 C6119,C6136,C6153,C6154 C6168,C6169,C6177,C6185	CEHVKW470M6R3 CKSQYB225K10 CKSRYB102K50 CKSRYB104K16 CKSRYB104K16
	[MICHEL MAIN BLOCK]				
<b>SEMICONDUCTORS</b>					
	IC6107 IC6101 Q6108 Q6101,Q6102 Q6106,Q6107	PD0278A TC7W126FU 2SA1586 HN1A01FU HN1B04FU		C6101,C6155,C6175,C6190 C6103,C6104,C6107-C6111,C6113 C6116,C6123-C6125,C6130-C6133 C6140,C6141,C6146-C6148,C6150 C6152,C6160-C6162,C6165-C6167	CKSRYB105K6R3 CKSSYF104Z16 CKSSYF104Z16 CKSSYF104Z16 CKSSYF104Z16
<b>COILS AND FILTERS</b>					
F	F6101,F6103,F6105-F6107 EMI FILTER L6107 L6101-L6104	CCG1162 LCTAW220J2520 LCYC6R8K2125		C6170,C6176,C6178-C6181 <b>RESISTORS</b>	CKSSYF104Z16 R6101,R6104-R6106,R6120 R6124,R6125
					RAB4CQ100J RAB4CQ100J

<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>
R6136,R6137,R6142-R6145		RS1/16S0R0J	R6329-R6331		RAB4CQ103J
R6194-R6196		RS1/16S1000F	R6256-R6261		RS1/16S0R0J
R6115,R6131		RS1/16S100J	R6321-R6323		RS1/16S1000F
R6197,R6207		RS1/16S103J	R6266,R6283		RS1/16S100J
R6147		RS1/16S1301F	R6326,R6336		A RS1/16S103J
R6198,R6208		RS1/16S183J	R6291		RS1/16S1301F
R6113,R6129		RS1/16S221J	R6327,R6337		RS1/16S183J
R6126,R6138		RS1/16S2701F	R6264,R6281		RS1/16S221J
R6112,R6123,R6128,R6141,R6165		RS1/16S271J	R6277,R6288		RS1/16S2701F
R6175		RS1/16S271J	R6263,R6274,R6280,R6290,R6305		RS1/16S271J
R6170,R6171,R6174,R6176		RS1/16S331J	R6314		RS1/16S271J
R6169,R6172,R6189		RS1/16S471J	R6309,R6310,R6313,R6315		RS1/16S331J
R6122,R6140		RS1/16S473J	R6308,R6311,R6335		RS1/16S471J
R6167,R6168		RS1/16S8201F	R6273,R6289		RS1/16S473J
Other Resistors		RS1/16SS###J	R6306,R6307		B RS1/16S8201F
			Other Resistors		RS1/16SS###J
<b>OTHERS</b>					
X6101 CRYSTAL OSCILLATOR (27MHz)		ASS1175	[AD MAIN BLOCK] <b>SEMICONDUCTORS</b>		
<b>SEMICONDUCTORS</b>			IC6402		AD80058
Q6104,Q6105,Q6109,Q6253-Q6255		2SA1586	IC6404		BA7078AF
<b>CAPACITORS</b>			IC6401		SM5301BS
C6266,C6267		CCSRCH470J50	IC6405,IC6408		TC74VHC126FT
C6149,C6187,C6189,C6322,C6323		CKSSYF104Z16	Q6405		HN1B04FU
C6325		CKSSYF104Z16	Q6401		C RN1303
<b>RESISTORS</b>			<b>COILS AND FILTERS</b>		
R6132-R6134		RAB4CQ103J	F6401-F6404 EMI FILTER		CCG1162
Other Resistors		RS1/16SS###J			
<b>[MICHEL SUB BLOCK]</b>					
<b>SEMICONDUCTORS</b>			<b>CAPACITORS</b>		
IC6255		PD0278A	C6422,C6441 (10/6.3)		ACG7046
Q6258		2SA1586	C6445		CCSRCH151J50
Q6251,Q6252		HN1A01FU	C6438		CKSRYB103K50
Q6256,Q6257		HN1B04FU	C6404,C6424		CKSRYB104K16
<b>COILS AND FILTERS</b>			C6408,C6411,C6412,C6421,C6431		CKSRYB105K6R3
F6251-F6254 EMI FILTER		CCG1162	C6434,C6435		D CKSRYB105K6R3
L6257		LCTAW220J2520	C6409,C6414,C6423		CKSRYB473K16
L6251-L6254		LCYC6R8K2125	C6443		CKSRYB474K10
<b>CAPACITORS</b>			C6442		CKSRYB562K50
C6272,C6288,C6305,C6306		CCSRCH330J50	C6402		CKSRYB822K50
C6312,C6313		CCSRCH330J50			
C6273,C6289		CCSRCH680J50			
C6251,C6321		CEHVKW101M6R3			
C6327		CEHVKW470M6R3			
C6297		CKSQYB225K10			
C6258,C6260		CKSRYB102K50			
C6265,C6282,C6299,C6300		CKSRYB104K16			
C6309,C6310,C6316,C6324		CKSRYB104K16			
C6264,C6295,C6301,C6314		CKSRYB105K6R3			
C6253-C6257,C6259,C6262		CKSSYF104Z16			
C6269-C6271,C6276-C6279		CKSSYF104Z16			
C6286,C6287,C6292-C6294,C6296		CKSSYF104Z16			
C6298,C6302-C6304,C6307,C6308		CKSSYF104Z16			
C6311,C6315,C6317-C6320,C6331		CKSSYF104Z16			
<b>RESISTORS</b>					
R6251-R6254,R6271,R6275,R6276		RAB4CQ100J	R6479		F RS1/16S222J
			R6414		RS1/16S224J
			R6401		RS1/16S2701F
			R6413		RS1/16S472J
			R6465		RS1/16S682J

	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>
	Other Resistors		RS1/16SS###J		<b>SEMICONDUCTORS</b>	
A	<b>SEMICONDUCTORS</b>		MM1389XFBE	IC6880 IC6803 IC6881 IC6806 Q6888,Q6889	BR24L02FJ-W PCM1742KE SII9993CTG100 TC74HC4538AFT 2SA1586	
	IC6403,IC6406,IC6605					
	<b>CAPACITORS</b>			Q6885,Q6886 Q6884,Q6887 Q6881 Q6882 Q6880	2SC4116 RN1303 RN1902 RN2303 SM6K2	
	C6430,C6432,C6433,C6446,C6447 C6449-C6455,C6630,C6632,C6635 C6648-C6650 C6436,C6437,C6636		CKSRYB105K6R3 CKSRYB105K6R3 CKSRYB105K6R3 CKSSYF104Z16			
	<b>RESISTORS</b>			D6880,D6881 D6808 D6806,D6807,D6884 D6883	1SS302 1SS355 DAN202U UDZS6R8(B)	
	Other Resistors		RS1/16SS###J			
B	[AD SUB BLOCK]				<b>COILS AND FILTERS</b>	
	<b>SEMICONDUCTORS</b>			F6881 EMI FILTER	CCG1162	
	IC6602 IC6604 IC6601 IC6603,IC6607 Q6605		AD80058 BA7078AF SM5301BS TC74VHC126FT HN1B04FU			
	Q6601		RN1303		<b>CAPACITORS</b>	
				C6802,C6849,C6851 (10/6.3) C6880,C6882,C6884,C6886 C6888,C6889,C6892,C6895,C6896 C6899-C6902,C6905,C6906,C6915 C6917	ACG7046 CCSRCH101J50 CCSRCH101J50 CCSRCH101J50 CCSRCH101J50	
	<b>COILS AND FILTERS</b>					
C	F6601-F6604 EMI FILTER		CCG1162	C6927,C6928 C6921,C6922 C6911 C6913 C6920	CCSRCH221J50 CEHVKW101M6R3 CEHVKW220M6R3 CKSRYB104K16 CKSRYB473K16	
	<b>CAPACITORS</b>			C6831,C6848,C6856,C6857,C6881 C6883,C6885,C6887,C6890,C6891 C6893,C6894,C6897,C6898 C6903,C6904,C6907-C6910,C6912 C6916,C6923-C6926	CKSSYF104Z16 CKSSYF104Z16 CKSSYF104Z16 CKSSYF104Z16 CKSSYF104Z16	
	C6622,C6640 (10/6.3) C6644 C6638 C6604,C6624 C6608,C6611,C6612,C6621,C6631			C6854,C6855 (10uF/16V)	DCH1165	
	C6633,C6634 C6609,C6614,C6623 C6642 C6641 C6602		CKSRYB105K6R3 CKSRYB473K16 CKSRYB474K10 CKSRYB562K50 CKSRYB822K50			
D	C6601 C6603,C6605-C6607,C6610,C6613 C6615-C6620,C6625-C6629,C6639 C6643,C6645,C6647		CKSRYB823K16 CKSSYF104Z16 CKSSYF104Z16 CKSSYF104Z16	<b>RESISTORS</b>		
	<b>RESISTORS</b>			R6881-R6883,R6885,R6892,R6896 R6901,R6904 R6859 R6939,R6940 R6832,R6833	RAB4CQ101J RAB4CQ101J RS1/16S0R0J RS1/16S104J RS1/16S222J	
E	R6681,R6685 R6608,R6613,R6621,R6627 R6643,R6644 R6628,R6636-R6641 R6607,R6611,R6612,R6619,R6620		RAB4CQ101J RAB4CQ330J RAB4CQ330J RS1/16S0R0J RS1/16S1000F	R6889 R6915 R6872 Other Resistors	RS1/16S3900F RS1/16S3901F RS1/16S473J RS1/16SS###J	
	R6626 R6609 R6625 R6679 R6673		RS1/16S1000F RS1/16S104J RS1/16S1101F RS1/16S153J RS1/16S221J	<b>OTHERS</b>	JA6881 HDMI CONNECTOR	AKP1232
	R6680 R6617 R6601 R6610 R6666		RS1/16S222J RS1/16S224J RS1/16S2701F RS1/16S472J RS1/16S682J	<b>CAPACITORS</b>	C6853	CCSRCH470J50
	<b>RESISTORS</b>			R6826 R6834,R6836,R6944,R6947-R6950 R6835,R6839,R6937,R6938 Other Resistors	RAB4CQ101J RAB4CQ103J RAB4CQ470J RS1/16SS###J	
F	Other Resistors		RS1/16SS###J			

[ROZ BLOCK]  
**SEMICONDUCTORS**

[HDMI RX BLOCK]

<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>
IC6951		PD6435A	R7113,R7115,R7116,R7119,R7121		RAB4CQ101J
Q6951		RN1303	R7123,R7124		RAB4CQ101J
<b>CAPACITORS</b>			R7102,R7105-R7108,R7110,R7111		RAB4CQ330J
C6959,C6960		CCSRCH150J50	Other Resistors		RS1/16SS###J
C6951		CEHVKW101M6R3			A
C6952-C6954,C6956-C6958		CKSSYF104Z16			
C6961,C6962,C6964-C6968		CKSSYF104Z16			
<b>RESISTORS</b>				<b>SEMICONDUCTORS</b>	
R6951-R6953,R6956-R6962,R6966		RAB4CQ100J	IC7151		MBM29PL3200BE70PFV
R6968,R6972		RAB4CQ100J			
R6945,R6946,R6988		RAB4CQ103J			
Other Resistors		RS1/16SS###J			
<b>OTHERS</b>				<b>CAPACITORS</b>	
X6951 CERAMIC RESONATOR		ASS1169	C7151,C7153-C7157		CKSSYF104Z16
<b>RESISTORS</b>				<b>RESISTORS</b>	
R6982-R6986,R6992		RAB4CQ101J	Other Resistors		RS1/16SS###J
Other Resistors		RS1/16SS###J			
<b>OTHERS</b>					B
CN6951 50P CONNECTER		AKM1201			
[CELIA BLOCK]					
<b>SEMICONDUCTORS</b>					
IC7001,IC7002		HY57V643220CT-7			
IC7004		PE5362A			
IC7003		TC74LCX125FT			
<b>COILS AND FILTERS</b>					
F7001,F7002 EMI FILTER		CCG1162			
<b>CAPACITORS</b>				<b>CAPACITORS</b>	
C7031 (10/6.3)		ACG7046	C7244		CCSRCH100D50
C7029,C7041		ACH1365	C7231		CCSRCH102J50
C7064		CCSRCH100D50	C7243,C7245		CCSRCH221J50
C7025,C7066,C7067		CCSRCH221J50	C7241,C7242,C7248,C7249		CCSRCH470J50
C7001-C7024,C7026-C7028		CKSSYF104Z16	C7213,C7218		CCSRCH7R0D50
C7032-C7040,C7042-C7063		CKSSYF104Z16			D
<b>RESISTORS</b>			C7205		CEHVKW101M6R3
R7013-R7018,R7030		RAB4CQ220J	C7201,C7217,C7236,C7239,C7252		CKSRYB103K50
R7007		RS1/16S220J	C7226,C7237		CKSRYB104K16
Other Resistors		RS1/16SS###J	C7216		CKSRYB472K50
<b>OTHERS</b>			C7209-C7212,C7214,C7215,C7219		CKSSYF104Z16
X7001 CRYSTAL OSCILLATOR (85MHz)		ASS1174	C7221-C7225,C7227-C7229		CKSSYF104Z16
[MIKE BLOCK]			C7232-C7234,C7238,C7240		CKSSYF104Z16
<b>SEMICONDUCTORS</b>			C7246,C7247,C7253 (10uF/16V)		DCH1165
IC7152		MBM29PL3200BE70PFV	<b>RESISTORS</b>		E
IC7101		PD5855A	R7221,R7229,R7241,R7248-R7250		RAB4CQ101J
<b>COILS AND FILTERS</b>			R7201		RAB4CQ472J
F7101,F7102		CCG1162	R7244,R7245,R7275,R7286,R7287		RS1/16S0R0J
<b>CAPACITORS</b>			R7290,R7295-R7306		RS1/16S0R0J
C7103,C7120 (330uF/6.3V)		ACH1365	R7269		RS1/16S101J
C7101,C7102,C7104-C7119		CKSSYF104Z16			
C7121-C7135,C7152,C7158-C7162		CKSSYF104Z16	R7278		RS1/16S2201F
<b>RESISTORS</b>			R7215		RS1/16S223J
			R7279		RS1/16S4700F
			R7227,R7260		RS1/16S473J
			R7224		RS1/16S682J
					F
			R7280		RS1/16S7500F
			R7277		RS1/16S8201F
			Other Resistors		RS1/16SS###J

	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>
	<b>OTHERS</b>			R7410		RS1/16S5100F
A	CN7203	3P CONNECTOR	AKM1213	R7456		RS1LMF1R5J
	CN7201	PLUG 8-P	AKM1225	R7455		RS2LMF4R7J
	CN7202	3P PH CONNECTOR	AKM1274	Other Resistors		RS1/16SS###J
	X7201	CERAMIC RESONATOR	ASS1170			
	<b>SEMICONDUCTORS</b>			<b>OTHERS</b>		
	IC7204		TC74VHC125FT	CN7454,CN7455	50P CONNECTER	AKM1201
				CN7453	PLUG 15-P	AKM1232
				CN7402	16P FFC CONNECTOR	AKM1234
				CN7451	PH 15P CONNECTOR	AKM1301
				CN7401	DVI SOCKET (24P)	AKP1250
	<b>CAPACITORS</b>			<b>SEMICONDUCTORS</b>		
	C7258-C7261		CCSRCH470J50	IC7452		TC74VHC126FT
	C7256,C7257		CKSRYB103K50			
	C7220		CKSSYF104Z16	<b>CAPACITORS</b>		
B	<b>RESISTORS</b>			C7137,C7485,C7486		CCSRCH470J50
	Other Resistors		RS1/16SS###J	C7068,C7471		CKSSYF104Z16
	<b>OTHERS</b>			<b>RESISTORS</b>		
	CN7204	3P PH CONNECTOR	AKM1274	R7477		RAB4CQ101J
	[MR IF BLOCK] [REGLATORBLOCK]			R7383 (AWZ6944 only)		RS1/16S222J
	<b>SEMICONDUCTORS</b>			R7385 (AWZ6990 only)		RS1/16S222J
	IC7453		BA33BC0WFP	Other Resistors		RS1/16SS###J
	IC7454		BA50BC0WFP			
	IC7456		NCP1117DT15			
C	IC7401		SII170BCLG64			
	IC7404		TC74VCX08FT			
	IC7403		TC74VCX574FT	<b>SEMICONDUCTORS</b>		
	IC7451		TC74VHC08FT	IC7502		MSP3417G
	Q7406		2SA1586	IC7501		TDA9818TS
	Q7405		HN1C01FU	Q7503,Q7504,Q7506,Q7513,Q7522		2SA1586
	Q7403,Q7407,Q7408		RN1303	Q7524,Q7527,Q7528,Q7537		2SA1586
	Q7451		RN1901	Q7511,Q7517		2SC4082
	Q7401		RN1902			
	Q7402,Q7404,Q7409		RN2303	Q7501,Q7502,Q7505,Q7509,Q7512		2SC4116
	D7401-D7407,D7457-D7459		1SS355	Q7514,Q7518-Q7520,Q7526,Q7530		2SC4116
D	<b>COILS AND FILTERS</b>			Q7533-Q7536,Q7538		2SC4116
	F7405-F7408	EMI FILTER	ATF1209	Q7516		2SC4213
	L7401 (3.3uH)		ATH1162	Q7532		DTA124EUA
	F7401-F7404	EMI FILTER	CCG1162			
	<b>CAPACITORS</b>			Q7531		DTC124EUA
	C7416,C7421,C7424,C7484 (10/6.3)		ACG7046	D7504		1SS355
	C7474 (330uF/6.3V)		ACH1365	D7502,D7503		1SS356
	C7401,C7402		CCSRCH100D50	D7501		UDZS33(B)
	C7475,C7477-C7482		CCSRCH221J50			
	C7403,C7404,C7406,C7407		CCSRCH820J50			
E	C7410,C7411,C7413,C7414,C7419		CCSRCH820J50	<b>COILS AND FILTERS</b>		
	C7456,C7460,C7465		CEHVWK101M6R3	L7501		LCTAW100J2520
	C7405,C7412,C7415,C7417,C7418		CKSSYF104Z16	L7512,L7513		LCTAW150J2520
	C7420,C7423,C7451,C7452		CKSSYF104Z16	L7520		LCTAW270J2520
	C7454,C7455,C7458,C7459,C7466		CKSSYF104Z16	L7514		LCTAW4R7J2520
	C7469,C7473,C7476			L7511		LCTAW8R2J2520
	C7453,C7457 (10uF/16V)		CKSSYF104Z16			
			DCH1165	L7519		LCTAWR22J2520
				L7516		LCTAWR27J2520
				L7505,L7507		LCTAWR68J2520
				F7511,F7512		VTF1080
				F7506 SAW FILTER		VTF1177
	<b>RESISTORS</b>			F7503 SAW FILTER		VTF1179
	R7425,R7449,R7451,R7452,R7454		RAB4CQ101J	F7504 IF TRAP FILTER		VTF1180
	R7481,R7497-R7499		RAB4CQ101J	F7505 IF TRAP FILTER		VTF1181
	R7453		RAB4CQ103J	F7501 TRAP FILTER		VTF1183
F	R7440,R7441,R7443		RS1/16S0R0J	L7504 VCO COIL		VTI1164
	R7417,R7418,R7429,R7431		RS1/16S111J			
	R7428,R7430		RS1/16S272J	<b>CAPACITORS</b>		
				C7507 (220uF/10V)		ACH1368
				C7552 (3.3uF/50V)		ACH1385

<b>Mark No.</b>	<b>Description</b>	<b>Part No.</b>	<b>Mark No.</b>	<b>Description</b>	<b>Part No.</b>
C7509,C7525,C7549,C7591,C7599 (100uF/16V)	ACH1394		Q7729-Q7731,Q7733,Q7735,Q7737	2SC4116	A
C7564,C7573	CCSRCH102J50		Q7739,Q7742,Q7744,Q7746,Q7747	2SC4116	
C7515	CCSRCH120J50		Q7749,Q7758-Q7760	2SC4116	
C7568	CCSRCH121J50		Q7704,Q7721,Q7738,Q7741	DTA124EUA	
C7578	CCSRCH181J50		Q7754,Q7755,Q7757	DTA124EUA	
C7601	CCSRCH220J50		Q7715	DTC124EUA	
C7567	CCSRCH470J50		Q7717,Q7718,Q7725,Q7734,Q7736	HN1A01FU	
C7556,C7558	CCSRCH560J50		Q7701,Q7745	HN1C01FU	
C7569	CCSRCH5R0C50		D7709,D7710,D7715,D7722	1SS301	
C7576	CCSRCH680J50		D7705-D7708,D7713,D7714,D7716	1SS302	
C7602	CCSRCH820J50		D7719,D7720	1SS302	B
C7570	CCSRCJ3R0C50		D7703,D7721	1SS355	
C7501	CEHVKW100M50		D7701,D7711,D7717	UDZS12(B)	
C7596	CEHVKW330M10		D7702,D7712,D7718,D7723-D7735	UDZS9R1(B)	
C7542	CEHVKW470M16				
C7537,C7539	CKSQYB225K10				
C7502,C7520,C7522,C7523	CKSRYB102K50				
C7534,C7535,C7579,C7580	CKSRYB102K50				
C7514,C7524,C7528,C7536,C7545	CKSRYB103K50		L7701,L7702,L7705,L7706	LCTAW1R0J2520	
C7554,C7572	CKSRYB103K50		L7709,L7710	LCTAW1R0J2520	
C7541	CKSRYB104K16		L7703,L7704,L7707,L7708	LCTAW560J2520	
C7503	CKSRYB105K10		L7711-L7714	LCTAW560J2520	
C7559,C7561,C7588	CKSRYB152K50				
C7590	CKSRYB221K50				
C7504,C7505,C7526	CKSRYB222K50				
C7540	CKSRYB224K10				
C7518	CKSRYB332K50				
C7557,C7560,C7589	CKSRYB471K50				
C7563,C7571	CKSRYB472K50		C7773-C7780	CKSRYB102K50	
C7575	CKSRYF104Z16		C7757	CKSRYB103K50	
C7506,C7510,C7513,C7527,C7531	CKSRYF104Z50		C7701-C7703,C7722-C7725,C7735	CKSRYB105K10	
C7547,C7550,C7551,C7555,C7577	CKSRYF104Z50		C7746-C7749,C7752-C7754,C7758	CKSRYB105K10	
C7511,C7546,C7548,C7553,C7562	DCH1165		C7705,C7727,C7731,C7741,C7744	CKSRYF104Z50	
C7587 (10uF/16V)	DCH1165				
<b>RESISTORS</b>					
R7568	RD1/2LMF100J		C7751	CKSRYF104Z50	
R7633	RS1/16S1201F		C7707,C7708,C7712,C7713,C7715	DCH1165	
R7524	RS1/16S2203F		C7717,C7718,C7720,C7734	DCH1165	
R7554	RS1/16S2700F		C7737,C7738,C7742,C7745,C7750	DCH1165	
R7544,R7552	RS1/16S2702F		C7755,C7759,C7762-C7764	DCH1165	
R7504	RS1/16S3302F				
R7655,R7656	RS1/16S5600F				
R7555	RS1/16S6800F				
VR7504	CCP1390				
VR7502	CCP1398				
Other Resistors	RS1/16S###J				
<b>OTHERS</b>					
X7501 CERAMIC RESONATOR (18.432 MHz)	VSS1189		R7708,R7717,R7756,R7757,R7761	RS1/10S151J	
⚠ U7501 TV FRONTEND	AXF1133		R7777,R7801,R7802,R7809,R7810	RS1/10S151J	
			R7820,R7834	RS1/10S151J	
			R7841	RS1/16S1001F	
			R7842	RS1/16S1501F	
			R7709,R7718,R7723,R7724,R7729	RS1/16S75R0F	
			R7735,R7739,R7745,R7770,R7821	RS1/16S75R0F	
			R7843,R7853,R7858	RS1/16S75R0F	
			Other Resistors	RS1/16S###J	
<b>SEMICONDUCTORS</b>					
Q7706,Q7707,Q7710,Q7716	2SA1586				
Q7723,Q7724,Q7728,Q7740,Q7743	2SA1586				
Q7748	2SA1586				
Q7702,Q7703,Q7705,Q7712-Q7714	2SC4116				
Q7719,Q7720,Q7722,Q7726,Q7727	2SC4116				
<b>[AV IO BLOCK]</b>					
<b>SEMICONDUCTORS</b>					
Q7706,Q7707,Q7710,Q7716	2SA1586				
Q7723,Q7724,Q7728,Q7740,Q7743	2SA1586				
Q7748	2SA1586				
Q7702,Q7703,Q7705,Q7712-Q7714	2SC4116				
Q7719,Q7720,Q7722,Q7726,Q7727	2SC4116				
<b>MARKS</b>					
⚠ U7501	TV FRONTEND				
<b>COILS AND FILTERS</b>					
			L7701,L7702,L7705,L7706	LCTAW1R0J2520	
			L7709,L7710	LCTAW1R0J2520	
			L7703,L7704,L7707,L7708	LCTAW560J2520	
			L7711-L7714	LCTAW560J2520	
<b>SWITCHES AND RELAYS</b>					
		S7701		ASH1029	
<b>CAPACITORS</b>					
			C7714,C7719,C7726,C7729,C7736	CCG1205	
			C7740,C7760,C7761 (2.2/10)	CCG1205	
			C7706,C7709,C7728,C7730,C7743	CEHAT471M10	
			C7756	CEHAT471M10	
			C7716	CEVWNP470M10	
<b>RESISTORS</b>					
			C7773-C7780	CKSRYB102K50	
			C7757	CKSRYB103K50	
			C7701-C7703,C7722-C7725,C7735	CKSRYB105K10	
			C7746-C7749,C7752-C7754,C7758	CKSRYB105K10	
			C7705,C7727,C7731,C7741,C7744	CKSRYF104Z50	
			C7751	CKSRYF104Z50	
			C7707,C7708,C7712,C7713,C7715	DCH1165	
			C7717,C7718,C7720,C7734	DCH1165	
			C7737,C7738,C7742,C7745,C7750	DCH1165	
			C7755,C7759,C7762-C7764	DCH1165	
<b>RESISTORS</b>					
			R7708,R7717,R7756,R7757,R7761	RS1/10S151J	
			R7777,R7801,R7802,R7809,R7810	RS1/10S151J	
			R7820,R7834	RS1/10S151J	
			R7841	RS1/16S1001F	
			R7842	RS1/16S1501F	
			R7709,R7718,R7723,R7724,R7729	RS1/16S75R0F	
			R7735,R7739,R7745,R7770,R7821	RS1/16S75R0F	
			R7843,R7853,R7858	RS1/16S75R0F	
			Other Resistors	RS1/16S###J	
<b>OTHERS</b>					
			J7703 6P PIN JACK	AKB1300	
			⚠ J7701 RGB CONNECTOR	AKP1265	
			⚠ J7705 RGB CONNECTOR	AKP1266	
<b>SEMICONDUCTORS</b>					
			IC7701,IC7702	TC74VHC125FT	
			Q7752,Q7753	2SA1586	
			Q7750,Q7751	2SC4116	
			Q7711,Q7761	DTA124EUA	

	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>
	Q7762 D7736,D7737		DTC124EUA 1SS301	Q8028		HN1B04FU
A	<b>CAPACITORS</b> C7767 C7768 C7765,C7766		ACH1400 CKSRYB224K10 CKSRYF104Z50	<b>CAPACITORS</b> C8064,C8065 C8075 C8063,C8066,C8069,C8070 C8072-C8074 C8071		CEHVKW100M16 CEHVKW470M16 CKSRYB105K10 CKSRYB105K10 CKSRYB471K50
	<b>RESISTORS</b> Other Resistors		RS1/16S###J	C8080,C8081		DCH1165
	<b>OTHERS</b> JA7704 PINJACK+MINI DIN 4P		AKB1307	<b>RESISTORS</b> R8125,R8127 Other Resistors		RD1/2LMF120J RS1/16S###J
B	[AV SW BLOCK] <b>SEMICONDUCTORS</b> IC8005 IC8002 IC8004 IC8003 Q8005,Q8006  Q8021,Q8022,Q8025 Q8023 Q8024 Q8011 D8017		AN15852A CXA2069Q NJM12904V TC4052BFT 2SA1586  2SC4116 DTA124EUA DTC124EUA HN1C01FU 1SS355	[AV REG BLOCK] <b>SEMICONDUCTORS</b> IC8505,IC8506 IC8504 IC8509 IC8503 IC8508  IC8507 Q8507,Q8550 Q8515 Q8511 D8506,D8509-D8513		BA50BC0WFP BA90BC0WFP BD6522F M5291FP NCP1117DT25  NCP1117ST33 2SC4116 DTC124EUA TPC8003 1SS355
C	<b>CAPACITORS</b> C8005,C8006,C8056 (100uF/16V) C8014 (22uF/16V) C8022,C8027 C8057 C8019,C8038  C8002-C8004,C8008,C8009,C8016 C8001,C8013,C8015,C8025,C8026 C8031-C8036,C8039,C8042-C8044 C8048,C8052,C8053,C8055,C8059 C8010,C8012,C8018,C8023,C8024		ACH1394 ACH1400 CCSRCH181J50 CCSRCH270J50 CCSRCH681J50  CKSRYB105K10 CKSRYF104Z50 CKSRYF104Z50 CKSRYF104Z50 DCH1165	D8550	<b>COILS AND FILTERS</b> L8502 INDUCTOR F8501-F8504,F8506,F8508,F8510 EMI FILTER △ L8505-L8507	UDZS5R6(B)  ATH1126 CCG1162  LCTAWR22J2520
D	<b>RESISTORS</b> Other Resistors		RS1/16S###J	<b>CAPACITORS</b> C8536 (47uF/16V) C8512 (100uF/16V) C8519 C8506 C8520		ACH1371 ACH1394 CCSRCH221J50 CCSRCH560J50 CEHAT101M50
	<b>SEMICONDUCTORS</b> IC8001 Q8026,Q8027 D8015,D8016 D8013,D8014		TC7WH123FU 2SC4116 1SS355 UDZS9R1(B)	C8545,C8559 C8563 C8561 C8517,C8523,C8528,C8533 C8510,C8515,C8521,C8526,C8531		CEHAZL471M16 CEHVKW100M16 CEHVKW100M50 CEHVKW101M6R3 CEHVKW220M16
E	<b>CAPACITORS</b> C8050 C8076,C8077 C8049 C8051 (10uF/16V)		CKSRYB105K10 CKSRYB471K50 CKSRYF104Z50 DCH1165	C8565 C8511,C8513,C8516,C8518,C8522 C8524,C8527,C8529,C8530,C8532 C8534,C8540,C8542,C8551,C8560 C8562,C8564		CEHVKW220M16 CKSRYB103K50 CKSRYB103K50 CKSRYB103K50 CKSRYB103K50
	<b>RESISTORS</b> Other Resistors		RS1/16S###J	C8514 C8505,C8539,C8541,C8550 (10uF/16V)		CKSRYB821K50 DCH1165
F	<b>SEMICONDUCTORS</b> IC8006 IC8007 Q8007,Q8008,Q8012,Q8014 Q8013,Q8015,Q8019,Q8020		BH3540AFS BH3544F 2SA1586 2SC4116	<b>RESISTORS</b> R8508 R8506,R8510,R8511,R8522,R8530 R8533-R8535,R8560-R8563 R8551 R8550		ACN1164 ACN1188 ACN1188 ACN1199 RD1/2LMF181J
				R8509 R8520		RS1/16S1101F RS1/16S3302F

<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>
R8528,R8531,R8543,R8545		RS1LMF1R0J	IC8704		TC7W126FU
R8525		RS1LMF3R3J	Q8703		DTA124EUA
R8554		RS3LMF121J	Q8702		DTC124EUA
Other Resistors		RS1/16S###J			A
<b>OTHERS</b>					
CN8651 PLUG(15P)		KM200NA15			
<b>SEMICONDUCTORS</b>					
IC8502		M5291FP			
Q8508		2SD1664			
Q8509,Q8514		DTC124EUA			
D8516		RB160M-30			
<b>COILS AND FILTERS</b>					
F8512-F8514		CCG1162			
L8504		LCTAW560J2520			
<b>CAPACITORS</b>					
C8556		CCSRCH221J50			
C8554		CCSRCH681J50			
C8555		CEHAZL471M16			
C8553		CEHVKW101M6R3			
<b>RESISTORS</b>					
R8568,R8569,R8571		ACN1163			
R8572		RS1/16S1501F			
R8573		RS1/16S6801F			
Other Resistors		RS1/16S###J			
<b>OTHERS</b>					
CN8502		KM200NA6			
U8502 DD CON UNIT		AXY1090			
<b>COILS AND FILTERS</b>					
L8503		ATH1185			
<b>[TELETEXT BLOCK]</b>					
<b>SEMICONDUCTORS</b>					
IC8901					
IC8904					
IC8907					
IC8902					
Q8904-Q8906					
<b>CAPACITORS</b>					
C8909					
Q8911					
Q8913					
Q8910,Q8914					
Q8907,Q8908					
<b>RESISTORS</b>					
Other Resistors		RS1/16S###J			
<b>OTHERS</b>					
CN8652-CN8654 50P CONNECTER		AKM1201			
CN8658 12P FFCONNECTOR		AKM1233			
<b>OTHERS</b>					
CN8662 40P CONNECTER		AKM1303			
<b>OTHERS</b>					
CN8660 12P FFCONNECTOR		AKM1233			
<b>[UIF UCOM BLOCK]</b>					
<b>SEMICONDUCTORS</b>					
IC8705		BR24L01AFJ-W			
IC8702		HD64F3687FP			
IC8703		PST9231N			
IC8701		TC74VHC08FT			
<b>RESISTORS</b>					
R8891,R8893,R8894					
R8905-R8907,R8922,R8960,R8991					
R8896-R8899					
R8999-R9001					
R8996-R8998					
Other Resistors					
<b>OTHERS</b>					
CN8901 PLUG 8-P					

**Mark No.**      **Description**

K 8905 TEST PIN  
 X8901 CRYSTAL OSCILLATOR

**Part No.**

AKX9002  
 ASS1187

**Mark No.**      **Description**

CN9452 CONNECTOR

**Part No.**

CKS3826

A [MEMORY SW BLOCK]

**SEMICONDUCTORS**

IC9104  
 IC9105  
 Q9102-Q9104,Q9106  
 Q9101,Q9105  
 Q9108  
 Q9107  
 D9101-D9104,D9106  
 D9105

K4S641632H-TC75  
 TC4051BF  
 2SA1586  
 2SC5729  
 DTA124EUA  
 DTC124EUA  
 1SS355  
 UDZS12(B)

**SEMICONDUCTORS**

IC9453  
 Q9455,Q9458  
 Q9453  
 Q9454,Q9456,Q9457  
 D9451,D9452,D9459,D9460

TC74VHC00FT  
 2SA1586  
 2SC4116  
 DTC124EUA  
 1SS355

**B CAPACITORS**

C9128,C9132-C9139  
 C9117,C9131  
 C9101,C9107-C9110,C9113,C9114  
 C9116,C9119,C9120,C9123  
 C9129,C9130

CCSRCH560J50  
 CKSRYB474K10  
 CKSRYF104Z50  
 CKSRYF104Z50  
 CKSRYF104Z50

**RESISTORS**

R9141-R9144  
 Other Resistors

RAB4C470J  
 RS1/16S###J

**CAPACITORS**

C9459

CKSRYF104Z16

**RESISTORS**

Other Resistors

RS1/16S###J

**OTHERS**

JA9453 MINI JACK(4P)  
 JA9452 JACK

AKN1073  
 RKN1004

**G FRONT ASSY (AWZ6951)****SEMICONDUCTORS**

D9509-D9511,D9517,D9518

UDZS9R1(B)

**COILS AND FILTERS**

L9503,L9504

LCTAW1R0J2520

**CAPACITORS**

C9505,C9506  
 C9504  
 C9507-C9510  
 C9503  
 C9516

CKSRYB103K50  
 CKSRYB104K16  
 CKSRYB105K10  
 CKSRYB473K16  
 CKSRYF104Z16

C9515,C9523,C9534-C9536

DCH1165

**RESISTORS**

R9504,R9507,R9508  
 Other Resistors

RS1/16S75R0F  
 RS1/16S###J

**SEMICONDUCTORS**

IC9501  
 IC9502  
 Q9503-Q9505  
 Q9501,Q9502  
 D9503

BR24C21FJ  
 TC74VHC08FT  
 2SC4116  
 DTC124EUA  
 1SS301

**D CAPACITORS**

C9304  
 C9301,C9305-C9308  
 C9302,C9303

CCSRCH101J50  
 CCSRCH471J50  
 CKSRYF104Z50

**RESISTORS**

Other Resistors

RS1/16S###J

**OTHERS**

CN9301 SOCKET (20P)  
 CN9302 CONNECTOR

AKP1226  
 CKS3830

D9506-D9508  
 D9501,D9502,D9504,D9505  
 D9512,D9513

1SS302  
 UDZS5R6(B)  
 UDZS5R6(B)

**E F SR ASSY (AWZ6949)****SEMICONDUCTORS**

IC9451  
 IC9452

SP3232ECY  
 TC74VHC125FT

**COILS AND FILTERS**

L9505,L9506  
 L9501,L9502

LCTAW1R0J2520  
 LCTAW560J2520

**CAPACITORS**

C9456,C9457  
 C9451-C9455,C9460

CEHVKW100M16  
 CKSRYF104Z16

**CAPACITORS**

C9517,C9518  
 C9501,C9502  
 C9520-C9522  
 C9531-C9533  
 C9514

CCSRCH220J50  
 CEHAT471M10  
 CEHVKW470M6R3  
 CKSRYB103K50  
 CKSRYB104K16

**F RESISTORS**

Other Resistors

RS1/16S###J

C9511,C9512  
 C9519  
 C9513

CKSRYB105K10  
 CKSRYF104Z16  
 DCH1165

**OTHERS**

JA9451 9P D-SUB SOCKET

AKP1240

**Mark No.**      **Description****Part No.****RESISTORS**

R9534-R9536  
Other Resistors

RS1/16S75R0F  
RS1/16S###J

**OTHERS**

CN9503 MINI JACK  
JA9505 15P D-SUB SOCKET  
JA9503 JACK

AKN1028  
AKP1241  
RKN1026

**Mark No.**      **Description****Part No.****CAPACITORS**

C1018,C1019  
C1037,C1038  
C1015  
C1014  
C1006,C1007,C1013,C1022,C1050

XTX1005

CCSRCH101J50  
CCSRCH5R0C50  
CEHVW100M16  
CEHVW100M50  
CEHVW470M16

**OTHERS**

JA9501 PIN JACK(3P)  
CN9502 50P CONNECTER  
JA9502 4P MINIDIN SOCKET(S)

AKB1303  
AKM1201  
AKP1238

C1053-C1056,C1101  
C1009  
C1000,C1001,C1010,C1016  
C1034,C1035,C1039  
C1003-C1005,C1012,C1017

CEHVW470M16  
CKSRYB102K50  
CKSRYB103K50  
CKSRYB103K50  
CKSRYB104K16

**OTHERS**

▲ 9501 F GROUNDING PLATE

ANG2657

C1020,C1021,C1023-C1025  
C1027-C1029,C1031-C1033,C1036  
C1040,C1043-C1049,C1200,C1201  
C1030

CKSRYB104K16  
CKSRYB104K16  
CKSRYB104K16  
CKSRYB105K10

## H LED ASSY (AWZ6953)

**SEMICONDUCTORS**

Q9651  
Q9652  
D9652  
D9654  
D9653

DTA124EUA  
RN2902  
SML-310DT  
SML-310MT  
SML-311UT

**RESISTORS**

Other Resistors

RS1/16S###J

**OTHERS**

X1000 CRYSTAL RESONATOR  
(27MHz)  
M1000 FRONT END

XSS1004

XXF1006

**CAPACITORS**

C9651

CKSRYB103K50

**[DEMUX BLOCK]****SEMICONDUCTORS**

IC2001  
IC2000  
Q2000  
D2000  
D2002  
  
D2001  
D2005,D2009  
VA2001

SN74LVU04APW  
ST15517PWAL  
2SC4081  
DA204U  
HVU307

PDZ8.2B  
RB501V-40  
AVR-M1608C120MT2AB

**RESISTORS**

Other Resistors

RS1/16S###J

**OTHERS**

CN9651 7P PH CONNECTOR

AKM1293

**COILS AND FILTERS**

F2000-F2003 FERRITE CORE  
L2200 CHIP FERRITE BEADS

VTF1091

XTX1003

## I TUNER BOARD ASSY

**SEMICONDUCTORS**

IC9013  
  
9012 PCMCIA EJECTOR  
9005-9007 SCREW  
9008-9011 SCREW  
9003 TOP CAN  
9004 HEAT SINK

XYW1004  
  
ANG2673  
BBZ30P060FTB  
PMZ20P100FNI  
XNG1001  
XNH1004

**CAPACITORS**

C2012,C2014  
C2024,C2028,C2047  
C2008  
C2009,C2010  
C2006

CCSRCH100D50  
CCSRCH101J50  
CCSRCH330J50  
CCSRCH390J50  
CCSRCH471J50

[TUNER BLOCK]  
**SEMICONDUCTORS**

IC1001  
IC1000  
Q1001  
Q1002  
Q1003,Q1004  
  
D1000  
D1300  
D1001,D1002

STV0361L  
UPC3221GV  
2SC2412K  
DTC124EUA  
RK7002  
  
1SS355  
SM15T6V8A  
UDZS3R6(B)

C2030-C2032,C2034  
C2007,C2015,C2018,C2019  
C2011  
C2000  
C2001,C2002,C2004,C2005  
  
C2016,C2017,C2020-C2023,C2026  
C2033,C2035-C2039,C2041-C2043  
C2045,C2046  
C2013  
C2025,C2027,C2040,C2044

CEHVW470M16  
CKSRYB102K50  
CKSRYB105K10  
CKSRYB471K50  
CKSRYF104Z16  
  
CKSRYF104Z16  
CKSRYF104Z16  
CKSRYF104Z16  
CKSRYF105Z10  
CKSRYF223Z50

**COILS AND FILTERS**

L1003  
F1006,F1007,F1011-F1015  
F1100-F1104,F1200 FERRITE CORE  
F1000 SAW FILTER  
L1010 CHIP FERRITE BEADS

LCYAR82J2520  
VTF1091  
VTF1091  
XTF1002  
XTX1003

**RESISTORS**

R2008,R2016,R2030  
R2200,R2201

RAB4C103J  
RAB4CQ470J

A

C

D

E

F

	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>
	Other Resistors		RS1/16S###J		<b>SEMICONDUCTORS</b>	
<b>OTHERS</b>				IC5002		109865-PBF
A	X2001 CRYSTAL RESONATOR	ASS1172		IC5003		74LCX245MTCX
	X2000 CRYSTAL RESONATOR (27MHz)	BSS1112		IC5004,IC5005		74LCX373MTCX
				IC5000		BA05SFP
				Q5000		2SA1576A
				Q5002,Q5004,Q5100		DTC124EUA
				Q5101		TPC6004
				D5000		1SS355
	[MEMORY BLOCK]					
	<b>SEMICONDUCTORS</b>					
	IC3000,IC3003		K4S281632F-UC75		<b>CAPACITORS</b>	
				C5009,C5202		CEHVKW470M16
				C5000,C5002,C5200		CKSRYB103K50
				C5004-C5008,C5010-C5013,C5100		CKSRYF104Z16
B	<b>CAPACITORS</b>					
	C3005	CEHVKW470M16			<b>RESISTORS</b>	
	C3002-C3004,C3006,C3011	CKSRYF104Z16		R5105-R5108		RAB4C150J
	C3014-C3016,C3020	CKSRYF104Z16		R5016,R5020,R5024,R5026,R5033		RAB4CQ470J
	C3000,C3001,C3007,C3008	CKSRYF223Z50		R5035,R5039-R5041,R5048-R5053		RAB4CQ470J
	C3012,C3013,C3017-C3019	CKSRYF223Z50		Other Resistors		RS1/16S###J
	<b>RESISTORS</b>					
	R3003,R3102-R3111	RAB4CQ470J			<b>OTHERS</b>	
	Other Resistors	RS1/16S###J		CN5000 PCMCIA CONNECTOR		XKP1003
C	[A/V BLOCK]					
	<b>SEMICONDUCTORS</b>					
	IC4008	CS5340CZZ				
	IC4003	CS8406CZZ				
	IC4000	SN74LNU04APW				
	IC4001	TSH72CDT				
	Q4000,Q4100-Q4104	2SC4081				
				Q6104,Q6202		DTA143EUA
				Q6103,Q6200,Q6201		DTC124EUA
	Q4200	DTC124EUA				1SS355
	D4002	PDZ10B				RB501V-40
				D6003,D6201		UDZS5R6(B)
				D6200		
				D6101-D6103		
	<b>COILS AND FILTERS</b>					
D	F4000 FERRITE CORE	VTF1091			<b>COILS AND FILTERS</b>	
				L6100		LCYAR82J2520
				F6100		VTF1091
	<b>CAPACITORS</b>					
	C4056	CCSRCH101J50			<b>CAPACITORS</b>	
	C4004,C4007	CCSRCH220J50			C6102	CCSRCH101J50
	C4019-C4023,C4025	CEHVKW100M16			C6007	CEHVKW100M16
	C4015,C4027,C4032,C4033	CEHVKW2R2M50			C6000,C6202	CEHVKW100M50
	C4008,C4053,C4100	CEHVKW470M16			C6001,C6003,C6006,C6013,C6014	CEHVKW470M16
					C6016,C6019,C6023,C6027,C6104	CEHVKW470M16
	C4003	CKSRYB102K50				
	C4006,C4030,C4048,C4052	CKSRYB103K50			C6200,C6201	CEHVKW470M16
	C4101-C4104	CKSRYB103K50			C6105	CKSRYB105K10
	C4011,C4012,C4054,C4055	CKSRYB105K10			C6002,C6004,C6009-C6012	CKSRYF104Z16
E	C4002,C4005,C4009,C4010	CKSRYB332K50			C6017,C6018,C6028,C6103,C6106	CKSRYF104Z16
					C6203	CKSRYF104Z16
	C4000,C4001,C4013,C4014,C4018	CKSRYF104Z16				
	C4024,C4026,C4028,C4029,C4057	CKSRYF104Z16			C6204	CKSRYF105Z10
					C6100,C6101	CKSRYF223Z50
	<b>RESISTORS</b>					
	R4029,R4032-R4035,R4037	RS1/16S2000F			<b>RESISTORS</b>	
	Other Resistors	RS1/16S###J			R6100,R6208	RAB4C390J
					R6201-R6203,R6209	RAB4CQ470J
	<b>OTHERS</b>				R6004,R6006,R6104	RS1/10S0R0J
	CN4000 40P CONNECTER	AKM1217			R6110	RS1/10S101J
	JA4000 OPTICAL OUT MOD.	GP1FM513TZ			R6029	RS1/10S681J
F	X4000 CRYSTAL (12.288MHz)	XSS1006			Other Resistors	RS1/16S###J
	[CI BLOCK]					
					<b>OTHERS</b>	

**Mark No.****Description****Part No.**

CN6003 50P CONNECTER  
 CN6002 PH 8P CONNECTOR  
 CN6001 PH 9P CONNECTOR

AKM1236  
 AKM1294  
 AKM1295

**J SW ASSY**  
**SWITCHES AND RELAYS**

△ S7451

ASG1093

**OTHERS**

CN7456 2P-SIDE VA-CONNECTOR S2P3-VH

**K POWER SUPPLY UNIT**

POWER SUPPLY UNIT has no service part.

**L PC CARD MODULE**

PC CARD MODULE has no service part.

**• PCB PARTS LIST (PDP-R05FE)**
**A MR MAIN BOARD ASSY (AWZ6945)**

[GCR BLOCK]

**RESISTORS**

R6011-R6016,R6021,R6041,R6043  
 R6045 RS1/16S0R0J  
 RS1/16S0R0J

[MICHEL MAIN BLOCK]

**SEMICONDUCTORS**

IC6107	PD0278A
IC6101	TC7W126FU
Q6108	2SA1586
Q6101,Q6102	HN1A01FU
Q6106,Q6107	HN1B04FU

**COILS AND FILTERS**

F6101,F6103,F6105-F6107	CCG1162 EMI FILTER
L6107	LCTAW220J2520
L6101-L6104	LCYC6R8K2125

**CAPACITORS**

C6102 (10/6.3)	ACG7046
C6126,C6142,C6163,C6164	CCSRCH330J50
C6171,C6172	CCSRCH330J50
C6127,C6143	CCSRCH680J50
C6182,C6186	CEHVKW101M6R3
C6188	CEHVKW470M6R3
C6151	CKSQYB225K10
C6112,C6114	CKSRYB102K50
C6119,C6136,C6153,C6154	CKSRYB104K16
C6168,C6169,C6177,C6185	CKSRYB104K16
C6101,C6155,C6175,C6190	CKSRYB105K6R3
C6103,C6104,C6107-C6111,C6113	CKSSYF104Z16
C6116,C6123-C6125,C6130-C6133	CKSSYF104Z16
C6140,C6141,C6146-C6148,C6150	CKSSYF104Z16
C6152,C6160-C6162,C6165-C6167	CKSSYF104Z16

**Mark No.****Description****Part No.**

C6170,C6176,C6178-C6181

CKSSYF104Z16

**RESISTORS**

R6101,R6104-R6106,R6120	RAB4CQ100J
R6124,R6125	RAB4CQ100J
R6136,R6137,R6142-R6145	RS1/16S0R0J
R6194-R6196	RS1/16S1000F
R6115,R6131	RS1/16S100J

R6197,R6207	RS1/16S103J
R6147	RS1/16S1301F
R6198,R6208	RS1/16S183J
R6113,R6129	RS1/16S221J
R6126,R6138	RS1/16S2701F

R6112,R6123,R6128,R6141,R6165	RS1/16S271J
R6175	RS1/16S271J
R6170,R6171,R6174,R6176	RS1/16S331J
R6169,R6172,R6189	RS1/16S471J
R6122,R6140	RS1/16S473J

R6167,R6168	RS1/16S8201F
Other Resistors	RS1/16SS###J

**OTHERS**

X6101 CRYSTAL OSCILLATOR (27MHz)	ASS1175
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**SEMICONDUCTORS**

Q6104,Q6105,Q6109

2SA1586

**CAPACITORS**

C6266,C6267	CCSRCH470J50
C6149,C6187,C6189	CKSSYF104Z16

**RESISTORS**

R6132-R6134	RAB4CQ103J
R6256-R6261	RS1/16S0R0J
Other Resistors	RS1/16SS###J

## [AD MAIN BLOCK]

**SEMICONDUCTORS**

IC6402	AD80058
IC6404	BA7078AF
IC6401	SM5301BS
IC6405,IC6408	TC74VHC126FT
Q6405	HN1B04FU
Q6401	RN1303

**COILS AND FILTERS**

F6401-F6404 EMI FILTER

CCG1162

**CAPACITORS**

C6422,C6441 (10/6.3)	ACG7046
C6445	CCSRCH151J50
C6438	CKSRYB103K50
C6404,C6424	CKSRYB104K16
C6408,C6411,C6412,C6421,C6431	CKSRYB105K6R3
C6434,C6435	CKSRYB105K6R3
C6409,C6414,C6423	CKSRYB473K16
C6443	CKSRYB474K10
C6442	CKSRYB562K50
C6402	CKSRYB822K50
C6401	CKSRYB823K16
C6403,C6405-C6407,C6410,C6413	CKSSYF104Z16

	<b>Mark No.</b>	<b>Description</b>	<b>Part No.</b>	<b>Mark No.</b>	<b>Description</b>	<b>Part No.</b>
	C6415-C6420,C6425-C6429 C6439,C6440,C6444,C6448		CKSSYF104Z16 CKSSYF104Z16	C6913 C6920		CKSRYB104K16 CKSRYB473K16
A	<b>RESISTORS</b> R6482,R6489 R6405,R6410,R6418,R6424 R6438,R6439 R6420,R6431-R6436 R6404,R6408,R6409,R6416,R6417		RAB4CQ101J RAB4CQ330J RAB4CQ330J RS1/16S0R0J RS1/16S1000F	C6831,C6848,C6856,C6857,C6881 C6883,C6885,C6887,C6890,C6891 C6893,C6894,C6897,C6898 C6903,C6904,C6907-C6910,C6912 C6916,C6923-C6926 C6854,C6855 (10uF/16V)		CKSSYF104Z16 CKSSYF104Z16 CKSSYF104Z16 CKSSYF104Z16 CKSSYF104Z16 DCH1165
	R6423 R6406 R6422 R6478 R6472		RS1/16S1000F RS1/16S104J RS1/16S1101F RS1/16S153J RS1/16S221J			
B	R6479 R6414 R6401 R6413 R6465		RS1/16S222J RS1/16S224J RS1/16S2701F RS1/16S472J RS1/16S682J	R6881-R6883,R6885,R6892,R6896 R6901,R6904 R6859 R6939,R6940 R6832,R6833	R6889 R6915 R6872 Other Resistors	RS1/16S3900F RS1/16S3901F RS1/16S473J RS1/16SS###J
	Other Resistors		RS1/16SS###J			
	<b>SEMICONDUCTORS</b> IC6403,IC6406		MM1389XFBE		<b>OTHERS</b> JA6881 HDMI CONNECTOR	AKP1232
C	<b>CAPACITORS</b> C6430,C6432,C6433,C6446,C6447 C6449-C6455 C6436,C6437		CKSRYB105K6R3 CKSRYB105K6R3 CKSSYF104Z16	C6853	<b>CAPACITORS</b> C6853	CCSRCH470J50
	<b>RESISTORS</b> R6636-R6641 Other Resistors		RS1/16S0R0J RS1/16SS###J		<b>RESISTORS</b> R6826 R6834,R6836,R6944,R6947-R6950 R6835,R6839,R6937,R6938 Other Resistors	RAB4CQ101J RAB4CQ103J RAB4CQ470J RS1/16SS###J
	[HDMI RX BLOCK] <b>SEMICONDUCTORS</b>				<b>[ROZ BLOCK] SEMICONDUCTORS</b> IC6951 Q6951	PD6435A RN1303
D	IC6880 IC6803 IC6881 IC6806 Q6888,Q6889		BR24L02FJ-W PCM1742KE SII9993CTG100 TC74HC4538AFT 2SA1586		<b>CAPACITORS</b> C6959,C6960 C6951 C6952-C6954,C6956-C6958 C6961,C6962,C6964-C6968	CCSRCH150J50 CEHVKW101M6R3 CKSSYF104Z16 CKSSYF104Z16
	Q6885,Q6886 Q6884,Q6887 Q6881 Q6882 Q6880		2SC4116 RN1303 RN1902 RN2303 SM6K2		<b>RESISTORS</b> R6951-R6953,R6956-R6962,R6966 R6968,R6972 R6945,R6946,R6988 Other Resistors	RAB4CQ100J RAB4CQ100J RAB4CQ103J RS1/16SS###J
E	D6880,D6881 D6808 D6806,D6807,D6884 D6883		1SS302 1SS355 DAN202U UDZS6R8(B)		<b>OTHERS</b> X6951 CERAMIC RESONATOR	ASS1169
	<b>COILS AND FILTERS</b> F6881 EMI FILTER		CCG1162		<b>RESISTORS</b> Other Resistors	RS1/16SS###J
F	<b>CAPACITORS</b> C6802,C6849,C6851 (10/6.3) C6880,C6882,C6884,C6886 C6888,C6889,C6892,C6895,C6896 C6899-C6902,C6905,C6906,C6915 C6917		ACG7046 CCSRCH101J50 CCSRCH101J50 CCSRCH101J50 CCSRCH101J50		<b>[CELIA BLOCK] SEMICONDUCTORS</b> IC7001,IC7002 IC7004 IC7003	HY57V643220CT-7 PE5362A TC74LCX125FT
	C6927,C6928 C6921,C6922 C6911		CCSRCH221J50 CEHVKW101M6R3 CEHVKW220M6R3		<b>COILS AND FILTERS</b> F7001,F7002 EMI FILTER	CCG1162

<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>
<b>CAPACITORS</b>					
C7031 (10/6.3)		ACG7046	C7244		CCSRCH100D50
C7029,C7041 (330uF/6.3V)		ACH1365	C7231		CCSRCH102J50
C7064		CCSRCH100D50	C7243,C7245		CCSRCH221J50
C7025,C7066,C7067		CCSRCH221J50	C7241,C7242,C7248,C7249		CCSRCH470J50
C7001-C7024,C7026-C7028		CKSSYF104Z16	C7213,C7218		CCSRCH7R0D50
C7032-C7040,C7042-C7063		CKSSYF104Z16	C7205		CEHVKW101M6R3
<b>RESISTORS</b>					
R7013-R7018,R7030		RAB4CQ220J	C7201,C7217,C7236,C7239,C7252		CKSRYB103K50
R7007		RS1/16S220J	C7226,C7237		CKSRYB104K16
Other Resistors		RS1/16SS###J	C7216		CKSRYB472K50
<b>OTHERS</b>					
X7001 CRYSTAL OSCILLATOR (85MHz)		ASS1174	C7209-C7212,C7214,C7215,C7219		CKSSYF104Z16
[MIKE BLOCK]			C7221-C7225,C7227-C7229		CKSSYF104Z16
<b>SEMICONDUCTORS</b>					
IC7152		MBM29PL3200BE70PFV	C7232-C7234,C7238,C7240		DCH1165
IC7101		PD5855A	C7246,C7247,C7253 (10uF/16V)		
<b>COILS AND FILTERS</b>					
F7101,F7102 EMI FILTER		CCG1162	R7278		RS1/16S2201F
<b>CAPACITORS</b>					
C7103,C7120 (330uF/6.3V)		ACH1365	R7215		RS1/16S223J
C7101,C7102,C7104-C7119		CKSSYF104Z16	R7279		RS1/16S4700F
C7121-C7135,C7152,C7158-C7162		CKSSYF104Z16	R7227,R7260		RS1/16S473J
<b>RESISTORS</b>					
R7113,R7115,R7116,R7119,R7121		RAB4CQ101J	R7224		RS1/16S682J
R7123,R7124		RAB4CQ101J	R7280		RS1/16S7500F
R7102,R7105-R7108,R7110,R7111		RAB4CQ330J	R7277		RS1/16S8201F
Other Resistors		RS1/16SS###J	Other Resistors		RS1/16SS###J
<b>SEMICONDUCTORS</b>					
IC7151		MBM29PL3200BE70PFV	<b>OTHERS</b>		
<b>CAPACITORS</b>					
C7151,C7153-C7157		CKSSYF104Z16	CN7203 3P CONNECTOR		AKM1213
<b>RESISTORS</b>					
Other Resistors		RS1/16SS###J	CN7201 PLUG 8-P		AKM1225
<b>[MAIN UCOM BLOCK] SEMICONDUCTORS</b>					
IC7205		BR24L64F-W	CN7202 3P PH CONNECTOR		AKM1274
IC7207		MB91F355APMTGE1	X7201 CERAMIC RESONATOR		ASS1170
IC7201		MM1522XU			
IC7209		NJM12904V			
IC7211		PQ20WZ11			
IC7210		PST3612UR			
IC7203,IC7206		PST3628UR			
IC7202		TC74VHC125FT			
Q7203		2SA1586			
Q7201		2SJ461A			
Q7202		HN1C01FU			
Q7206,Q7207		RN1902			
D7201,D7202		1SS355			
D7203		SML-311UT			
D7204		UDZS2R7(B)			
<b>CAPACITORS</b>					
C7244					
C7231					
C7243,C7245					
C7241,C7242,C7248,C7249					
C7213,C7218					
<b>RESISTORS</b>					
R7221,R7229,R7241,R7248-R7250					
R7201					
R7244,R7245,R7275,R7286,R7287					
R7290,R7295-R7306					
R7269					
<b>OTHERS</b>					
CN7203 3P CONNECTOR					
CN7201 PLUG 8-P					
CN7202 3P PH CONNECTOR					
X7201 CERAMIC RESONATOR					
<b>CAPACITORS</b>					
C7258-C7261					CCSRCH470J50
C7256,C7257					CKSRYB103K50
<b>RESISTORS</b>					
Other Resistors					RS1/16SS###J
<b>[MR IFBLOCK] [REGLATORBLOCK] SEMICONDUCTORS</b>					
IC7453					BA33BC0WFP
IC7454					BA50BC0WFP
IC7456					NCP1117DT15
IC7401					SIH170BCLG64
IC7404					TC74VCX08FT
IC7403					TC74VCX574FT
IC7451					TC74VHC08FT
Q7406					2SA1586
Q7405					HN1C01FU
Q7403,Q7407,Q7408					RN1303
Q7451					RN1901
Q7401					RN1902
Q7402,Q7404,Q7409					RN2303
D7401-D7407,D7457-D7459					1SS355
<b>COILS AND FILTERS</b>					

**Mark No.**      **Description****Part No.****Mark No.**      **Description****Part No.**

F7405-F7408 EMI FILTER  
 L7401 (3.3uH)  
 F7401-F7404 EMI FILTER

ATF1209  
 ATH1162  
 CCG1162

Q7531  
 D7504  
 D7502,D7503  
 D7501

DTC124EUA  
 1SS355  
 1SS356  
 UDZS33(B)

**CAPACITORS**

C7416,C7421,C7424,C7484 (10/6.3)  
 C7474 (330uF/6.3V)  
 C7401,C7402  
 C7475,C7477-C7482  
 C7403,C7404,C7406,C7407

ACG7046  
 ACH1365  
 CCSRCH100D50  
 CCSRCH221J50  
 CCSRCH820J50

L7501  
 L7512,L7513  
 L7520  
 L7514  
 L7511

LCTAW100J2520  
 LCTAW150J2520  
 LCTAW270J2520  
 LCTAW4R7J2520  
 LCTAW8R2J2520

**B**  
**RESISTORS**

R7425,R7449,R7451,R7452,R7454  
 R7481,R7497-R7499  
 R7453  
 R7440,R7441,R7443  
 R7417,R7418,R7429,R7431

RAB4CQ101J  
 RAB4CQ101J  
 RAB4CQ103J  
 RS1/16S0R0J  
 RS1/16S111J

F7501 SAW FILTER  
 F7504 IFTRAP FILTER  
 F7505 IFTRAP FILTER  
 F7501 TRAP FILTER  
 L7504 VCO COIL

VTF1179  
 VTF1180  
 VTF1181  
 VTF1183  
 VTL1164

**CAPACITORS**

C7507 (220uF/10V)  
 C7552 (3.3uF/50V)  
 C7509,C7525,C7549,C7591,C7599  
 (100uF/16V)  
 C7564,C7573

ACH1368  
 ACH1385  
 ACH1394  
 CCSRCH102J50

**OTHERS**

CN7454,CN7455 50P CONNECTER  
 CN7453 PLUG 15-P  
 CN7402 16P FFC CONNECTOR  
 CN7451 PH 15P CONNECTOR  
 CN7401 DVI SOCKET (24P)

AKM1201  
 AKM1232  
 AKM1234  
 AKM1301  
 AKP1250

C7515  
 C7568  
 C7578  
 C7601  
 C7567  
 C7556,C7558  
 C7569  
 C7576  
 C7602  
 C7570

CCSRCH120J50  
 CCSRCH121J50  
 CCSRCH181J50  
 CCSRCH220J50  
 CCSRCH470J50  
 CCSRCH560J50  
 CCSRCH5ROC50  
 CCSRCH680J50  
 CCSRCH820J50  
 CCSRCJ3R0C50

**D SEMICONDUCTORS**

IC7452

TC74VHC126FT

C7501  
 C7596  
 C7542  
 C7537,C7539  
 C7502,C7520,C7522,C7523

CEHVKW100M50  
 CEHVKW330M10  
 CEHVKW470M16  
 CKSQYB225K10  
 CKSRYB102K50

**CAPACITORS**

C7137,C7485,C7486  
 C7068,C7471

CCSRCH470J50  
 CKSSYF104Z16

C7534,C7535,C7579,C7580  
 C7514,C7524,C7528,C7536,C7545  
 C7554,C7572  
 C7541  
 C7503

CKSRYB102K50  
 CKSRYB103K50  
 CKSRYB103K50  
 CKSRYB104K16  
 CKSRYB105K10

**E RESISTORS**

R7477  
 R7384  
 Other Resistors

RAB4CQ101J  
 RS1/16S332J  
 RS1/16S###J

C7559,C7561,C7588

CKSRYB152K50

**AV BOARD ASSY (AWZ6947)**

[TUNER BLOCK]

**SEMICONDUCTORS**

IC7502  
 IC7501  
 Q7503,Q7504,Q7506,Q7513,Q7522  
 Q7524,Q7527,Q7528,Q7537  
 Q7511,Q7517

MSP3417G  
 TDA9818TS  
 2SA1586  
 2SA1586  
 2SC4082

C7557,C7560,C7589  
 C7563,C7571  
 C7575  
 C7506,C7510,C7513,C7527,C7531  
 C7547,C7550,C7551,C7555,C7577

CKSRYB471K50  
 CKSRYB472K50  
 CKSRYF104Z16  
 CKSRYF104Z50  
 CKSRYF104Z50

**F**  
**SEMICONDUCTORS**

Q7501,Q7502,Q7505,Q7509,Q7512  
 Q7514,Q7518-Q7520,Q7526,Q7530  
 Q7533-Q7536,Q7538  
 Q7516  
 Q7532

2SC4116  
 2SC4116  
 2SC4116  
 2SC4213  
 DTA124EUA

C7511,C7546,C7548,C7553,C7562  
 C7587 (10uF/16V)

DCH1165  
 DCH1165

**RESISTORS**

**Mark No.****Description****Part No.**

R7568		RD1/2LMF100J
R7633		RS1/16S1201F
R7524		RS1/16S2203F
R7554		RS1/16S2700F
R7544,R7552		RS1/16S2702F
R7504		RS1/16S3302F
R7655,R7656		RS1/16S5600F
R7555		RS1/16S6800F
VR7504		CCP1390
VR7502		CCP1398
Other Resistors		RS1/16S###J

**OTHERS**

X7501	CERAMIC RESONATOR (18.432 MHz)	VSS1189
△ U7501	TV FRONTEND	AXF1133

## [AV IO BLOCK]

**SEMICONDUCTORS**

Q7706,Q7707,Q7710,Q7716	2SA1586
Q7723,Q7724,Q7728,Q7740,Q7743	2SA1586
Q7748	2SA1586
Q7702,Q7703,Q7705,Q7712-Q7714	2SC4116
Q7719,Q7720,Q7722,Q7726,Q7727	2SC4116
Q7729-Q7731,Q7733,Q7735,Q7737	2SC4116
Q7739,Q7742,Q7744,Q7746,Q7747	2SC4116
Q7749,Q7758-Q7760	2SC4116
Q7704,Q7721,Q7738,Q7741	DTA124EUA
Q7754,Q7755,Q7757	DTA124EUA
Q7715	DTC124EUA
Q7717,Q7718,Q7725,Q7734,Q7736	HN1A01FU
Q7701,Q7745	HN1C01FU
D7709,D7710,D7715,D7722	1SS301
D7705-D7708,D7713,D7714,D7716	1SS302
D7719,D7720	1SS302
D7703,D7721	1SS355
D7701,D7711,D7717	UDZS12(B)
D7702,D7712,D7718,D7723-D7735	UDZS9R1(B)

**COILS AND FILTERS**

L7701,L7702,L7705,L7706	LCTAW1R0J2520
L7709,L7710	LCTAW1R0J2520
L7703,L7704,L7707,L7708	LCTAW560J2520
L7711-L7714	LCTAW560J2520

**SWITCHES AND RELAYS**

S7701	ASH1029
-------	---------

**CAPACITORS**

C7706,C7709,C7728,C7730,C7743	CEHAT471M10
C7756	CEHAT471M10
C7716	CEVWNP470M10
C7757	CKSRYB103K50
C7701-C7703,C7714,C7719	CKSRYB105K10
C7722-C7726,C7729,C7735,C7736	CKSRYB105K10
C7740,C7746-C7749,C7752-C7754	CKSRYB105K10
C7758,C7760,C7761	CKSRYB105K10
C7773-C7780	CKSRYB222K50
C7705,C7727,C7731,C7741,C7744	CKSRYF104Z50
C7751	CKSRYF104Z50
C7707,C7708,C7712,C7713,C7715	DCH1165
C7717,C7718,C7720,C7734	DCH1165
C7737,C7738,C7742,C7745,C7750	DCH1165

**Mark No.****Description****Part No.**C7755,C7759,C7762-C7764  
(10uF/16V)

DCH1165

**RESISTORS**

R7708,R7717,R7756,R7757,R7761	RS1/10S151J
R7777,R7801,R7802,R7809,R7810	RS1/10S151J
R7820,R7834	RS1/10S151J
R7841	RS1/16S1001F
R7842	RS1/16S1501F
R7709,R7718,R7723,R7724,R7729	RS1/16S75R0F
R7735,R7739,R7745,R7770,R7821	RS1/16S75R0F
R7843,R7853,R7858	RS1/16S75R0F
Other Resistors	RS1/16S###J

**OTHERS**

JA7703 6P PIN JACK	AKB1300
△ JA7701 RGB CONNECTOR	AKP1265
△ JA7705 RGB CONNECTOR	AKP1266

## [AV SW BLOCK]

**SEMICONDUCTORS**

IC8005	AN15852A
IC8002	CXA2069Q
IC8004	NJM12904V
IC8003	TC4052BFT
Q8005,Q8006	2SA1586
Q8021,Q8022,Q8025	2SC4116
Q8023	DTA124EUA
Q8024	DTC124EUA
Q8011	HN1C01FU
D8017	1SS355

**CAPACITORS**

C8005,C8006,C8056 (100uF/16V)	ACH1394
C8014 (22uF/16V)	ACH1400
C8022,C8027	CCSRCH181J50
C8057	CCSRCH270J50
C8019,C8038	CCSRCH681J50
C8002-C8004,C8008,C8009,C8016	CKSRYB105K10
C8001,C8013,C8015,C8025,C8026	CKSRYF104Z50
C8031-C8036,C8039,C8042-C8044	CKSRYF104Z50
C8048,C8052,C8053,C8055,C8059	CKSRYF104Z50
C8010,C8012,C8018,C8023,C8024	DCH1165
C8028,C8037,C8040,C8041	DCH1165
C8060,C8061 (10uF/16V)	DCH1165

**RESISTORS**

Other Resistors RS1/16S###J

## [AV REG BLOCK]

**SEMICONDUCTORS**

IC8505,IC8506	BA50BC0WFP
IC8504	BA90BC0WFP
IC8509	BD6522F
IC8503	M5291FP
IC8508	NCP1117DT25
IC8507	NCP1117ST33
Q8507,Q8550	2SC4116
Q8515	DTC124EUA
Q8511	TPC8003
D8506,D8509-D8513	1SS355
D8550	UDZS5R6(B)

<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>
	<b>COILS AND FILTERS</b>				
A	L8502 INDUCTOR F8501-F8504,F8506,F8508,F8510 EMI FILTER ⚠ L8505-L8507	ATH1126 CCG1162 LCTAWR22J2520	Q8703 Q8702		TC7W126FU DTA124EUA DTC124EUA
	<b>CAPACITORS</b>		<b>CAPACITORS</b>		
	C8536 (47uF/16V) C8512 (100uF/16V) C8519 C8506 C8520	ACH1371 ACH1394 CCSRCH221J50 CCSRCH560J50 CEHAT101M50	C8711 (100uF/16V) C8706,C8707 C8717,C8718 C8709 C8701-C8705,C8708,C8712,C8713		ACH1394 CCSRCH180J50 CCSRCH470J50 CKSRYB472K50 CKSRYF104Z50
B	C8545,C8559 C8563 C8561 C8517,C8523,C8528,C8533 C8510,C8515,C8521,C8526,C8531	CEHAZL471M16 CEHVKW100M16 CEHVKW100M50 CEHVKW101M6R3 CEHVKW220M16	C8716 (10uF/16V)		DCH1165
	C8565 C8511,C8513,C8516,C8518,C8522 C8524,C8527,C8529,C8530,C8532 C8534,C8540,C8542,C8551,C8560 C8562,C8564	CEHVKW220M16 CKSRYB103K50 CKSRYB103K50 CKSRYB103K50 CKSRYB103K50 CKSRYB103K50	<b>RESISTORS</b>	R8719 R8702,R8704,R8720,R8745 Other Resistors	RAB4C101J RAB4C103J RS1/16S###J
C	C8514 C8505,C8539,C8541,C8550 (10uF/16V)	CKSRYB821K50 DCH1165	<b>OTHERS</b>	CN8701 PLUG 8-P X8702 CERAMIC RESONATOR X8701 CRYSTAL OSCILLATOR (32.768kHz)	AKM1225 ASS1168 ASS1172
	<b>RESISTORS</b>		<b>[TELETEXT BLOCK] SEMICONDUCTORS</b>		
	R8508 R8506,R8510,R8511,R8522,R8530 R8533-R8535,R8560-R8563	ACN1164 ACN1188 ACN1188	IC8901 IC8904 IC8907 IC8902 Q8904-Q8906	PST9230N SDA6000 TC7SH04FU TC7W126FU 2SA1586	
	R8551 R8550	ACN1199 RD1/2LMF181J	Q8909 Q8911 Q8913	2SC4116 2SC5729	
	R8509 R8520 R8528,R8531,R8543,R8545	RS1/16S1101F RS1/16S3302F RS1LMF1R0J	Q8910,Q8914 Q8907,Q8908	DTA124EUA DTC124EUA RN1902	
D	R8525 R8554	RS1LMF3R3J RS3LMF121J	D8902 D8901	UDZS3R0(B) UDZS3R9(B)	
	Other Resistors	RS1/16S###J	<b>CAPACITORS</b>		
	<b>OTHERS</b>		C8916 C8917 C8941,C8942,C8944-C8949 C8952-C8956 C8904,C8940	CCSRCH180J50 CCSRCH220J50 CCSRCH560J50 CCSRCH560J50 CKSRYB102K50	
E	CN8651 PLUG(15P) U8502 DD CON UNIT	KM200NA15 AXY1090	C8903 C8926 C8901 C8902,C8909-C8911,C8914,C8915 C8918-C8920,C8923-C8925	CKSRYB103K50 CKSRYB104K16 CKSRYB471K50 CKSRYF104Z50 CKSRYF104Z50	
	<b>[BOARD IF BLOCK] CAPACITORS</b>		C8927,C8928,C8930-C8936 C8937-C8939 (10uF/16V)	CKSRYF104Z50 DCH1165	
	C8656-C8660 C8653-C8655,C8661-C8663 (10uF/16V)	CKSRYB105K10 DCH1165	<b>RESISTORS</b>		
	<b>RESISTORS</b>		R8891,R8893,R8894 R8905-R8907,R8922,R8960,R8991 R8896-R8899 R8999-R9001 R8996-R8998	RAB4C100J RAB4C101J RAB4C150J RS1/16S1801F RS1/16S9101F	
	Other Resistors	RS1/16S###J	Other Resistors	RS1/16S###J	
	<b>OTHERS</b>		<b>RESISTORS</b>		
	CN8652-CN8654 50P CONNECTER CN8658 12P FFCONNECTOR	AKM1201 AKM1233	R8891,R8893,R8894 R8905-R8907,R8922,R8960,R8991 R8896-R8899 R8999-R9001 R8996-R8998	RAB4C100J RAB4C101J RAB4C150J RS1/16S1801F RS1/16S9101F	
F	<b>[UIF UCOM BLOCK] SEMICONDUCTORS</b>		Other Resistors	RS1/16S###J	
	IC8705 IC8702 IC8703 IC8701	BR24L01AFJ-W HD64F3687FP PST9231N TC74VHC08FT	<b>OTHERS</b>		
			CN8901 PLUG 8-P	AKM1225	

**Mark No.****Description****Part No.**

K 8905 TEST PIN  
X8901 CRYSTAL OSCILLATOR

AKX9002  
ASS1187

[MEMORY SW BLOCK]

**SEMICONDUCTORS**

IC9104	K4S641632H-TC75
IC9105	TC4051BF
Q9102-Q9104,Q9106	2SA1586
Q9101,Q9105	2SC5729
Q9108	DTA124EUA
Q9107	DTC124EUA
D9101-D9104,D9106	1SS355
D9105	UDZS12(B)

**CAPACITORS**

C9128,C9132-C9139	CCSRCH560J50
C9117,C9131	CKSRYB474K10
C9101,C9107-C9110,C9113,C9114	CKSRYF104Z50
C9116,C9119,C9120,C9123	CKSRYF104Z50
C9129,C9130	CKSRYF104Z50

**RESISTORS**

R9141-R9144	RAB4C470J
Other Resistors	RS1/16S###J

## F SR ASSY (AWZ6950)

**SEMICONDUCTORS**

IC9451	SP3232ECY
IC9452	TC74VHC125FT

**CAPACITORS**

C9456,C9457	CEHVKW100M16
C9451-C9455,C9460	CKSRYF104Z16

**RESISTORS**

Other Resistors	RS1/16S###J
-----------------	-------------

**OTHERS**

JA9451 9P D-SUB SOCKET	AKP1240
CN9452 CONNECTOR	CKS3826

## G FRONT ASSY (AWZ6952)

**SEMICONDUCTORS**

D9509-D9511,D9517,D9518	UDZS9R1(B)
-------------------------	------------

**COILS AND FILTERS**

L9503,L9504	LCTAW1R0J2520
-------------	---------------

**CAPACITORS**

C9505,C9506	CKSRYB103K50
C9504	CKSRYB104K16
C9507-C9510	CKSRYB105K10
C9503	CKSRYB473K16
C9516	CKSRYF104Z16
C9515,C9523,C9534-C9536	DCH1165

**RESISTORS**

R9504,R9507,R9508	RS1/16S75R0F
Other Resistors	RS1/16S###J

**OTHERS**

JA9501 PIN JACK(3P)	AKB1303
---------------------	---------

**Mark No.****Description****Part No.**

**H LED ASSY (AWZ6954)**  
**SEMICONDUCTORS**

Q9652	RN2902
D9654	SML-310MT
D9653	SML-311UT

**CAPACITORS**

C9651	CKSRYB103K50
-------	--------------

**RESISTORS**

Other Resistors	RS1/16S###J
-----------------	-------------

**OTHERS**

CN9651 7P PH CONNECTOR	AKM1293
------------------------	---------

A

B

C

D

E

F

# 6. ADJUSTMENT

- A 1. At shipment, the unit is adjusted to its best conditions. Normally, it is not necessary to readjust even if an assembly is replaced. If the adjustment is shifted or if it becomes necessary to readjust because of part replacement, etc., perform the adjustment as described below.
2. Any value changed in Service/Factory mode will be stored in memory as soon as it is changed. Before readjustment, take note of the original values for reference in case you need to restore the original settings.
3. Use a stable AC power supply.

## ■ 6.1 HOW TO ENTER SERVICE FACTORY MODE

■ Refer to the technical document (Service Know-How).

B

## 6.2 POSSIBLE CASES WHERE READJUSTMENT IS REQUIRED

■ When any of the following assemblies is replaced

POWER SUPPLY Unit	→	No adjustment required
AV BOARD Assy	→	No adjustment required
MR MAIN BOARD Assy	→	No adjustment required
PC Card Unit	→	No adjustment required
TUNER Board Assy	→	No adjustment required
Other assemblies	→	No adjustment required

■ When any part in the following assemblies is replaced

D POWER SUPPLY Unit	→	The assembly must be replaced as a unit, and no part replacement is allowed.
AV BOARD Assy	→	If the front end (U7501) is replaced, adjustment is required.
MR MAIN BOARD Assy	→	The assembly must be replaced as a unit, and no part replacement is allowed.
PC CARD Unit	→	The assembly must be replaced as a unit, and no part replacement is allowed.
E TUNER Board Assy	→	The assembly must be replaced as a unit, and no part replacement is allowed.
Other assemblies	→	No adjustment required

■ Adjustment items

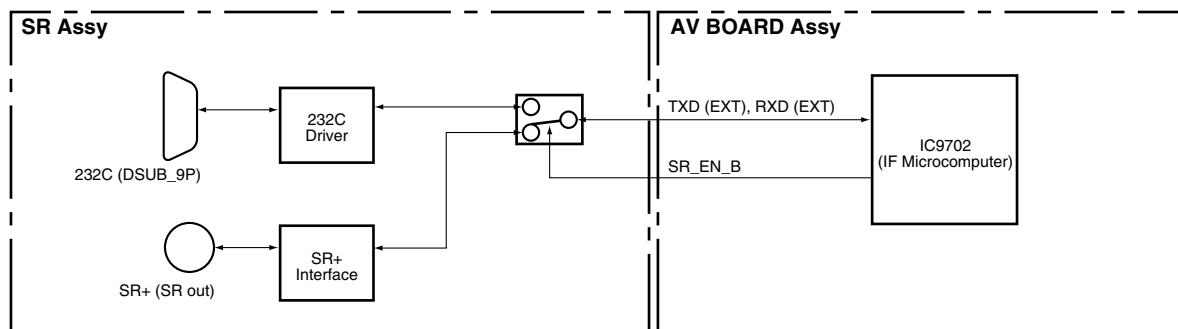
- ① AFC Adjustment
- ② RF-AGC Adjustment
- ③ Video Level Adjustment

F

## 6.3 USING RS-232C COMMANDS

For the PDP-435HD and PDP-505HD series Plasma Displays, the circuitry is structured as shown in the diagram below to support the SR+ system. Controlling with either the SR+ system or RS-232C commands can be selected. As the SR+ system is selected at shipment, to control with RS-232C commands in servicing it is necessary to switch the paths. After servicing, be sure to return the setting to the SR+ system.

### ● Rough diagram of switching between SR+ and RS-232C



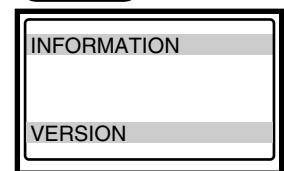
### ● How to switch from SR+ to RS-232C

#### Remote control unit

SR+ → 232C / 232C → SR+

Enter the Service Factory mode

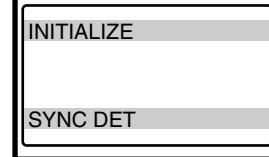
**START**



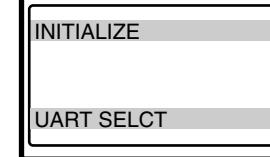
MUTE



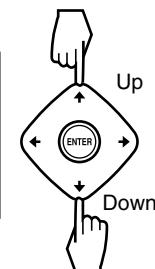
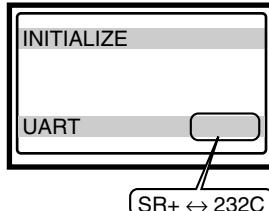
Select INITIALIZE mode



Select UART



Select SR+ / 232C



#### Tips: How to change the SR+/RS-232C setting without entering Service Factory mode

Hold the **VOLUME**  $\triangle +$  or  $\triangle -$  key on the remote control unit pressed for 3-10 seconds during Standby mode.

Then within 3 seconds after the key is released, hold the **2-screen**  $\blacksquare$  key on the remote control unit pressed for 3-10 seconds. Then within 3 seconds after the key is released, use the **SET** key on the remote control unit to set to RS-232C (the baud rate last selected is chosen) or the **HOME MENU** key to set to SR+.

## 6.4 ADJUSTMENT ITEMS

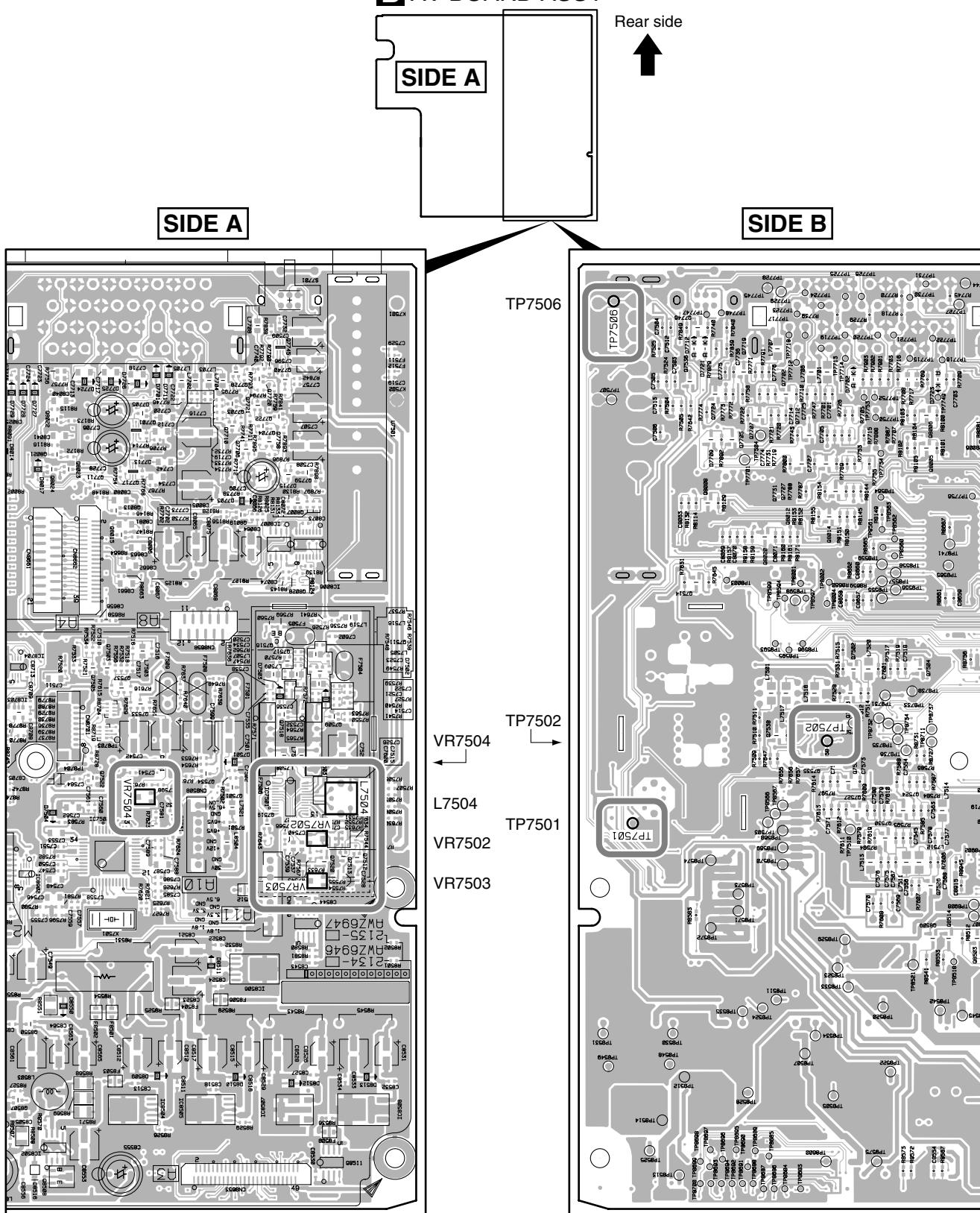


If readjustment is necessary because of adjustment error at shipment, perform adjustments as shown below.

### ● Adjustment Points

**B AV BOARD ASSY**

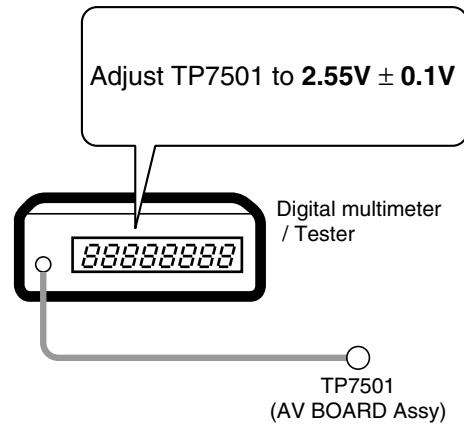
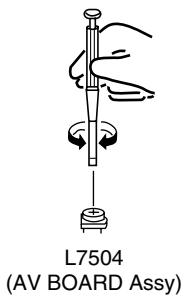
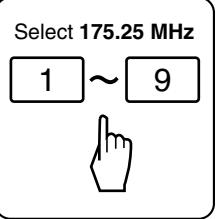
Rear side



## ① AFC Adjustment

**Equipment :** SG, Digital multimeter / Tester  
**Condition :** Input RF level  $75\text{dB}\mu\text{V}$   
 PAL-B/G  
 White bar 100%

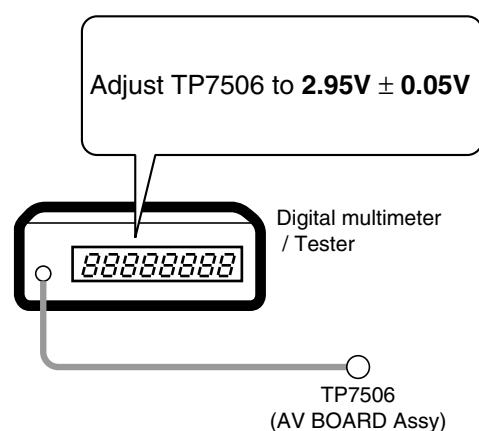
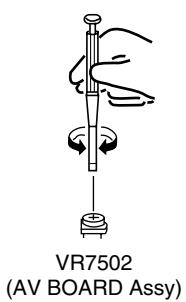
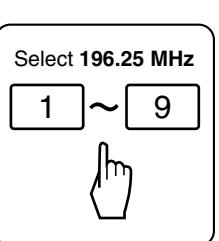
**START**



## ② RF-AGC Adjustment

**Equipment :** SG, Digital multimeter / Tester  
**Condition :** Input RF level  $64\text{dB}\mu\text{V} \pm 1\text{dB}$   
 PAL-B/G  
 Multiburst

**START**

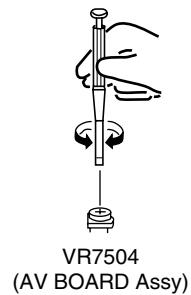
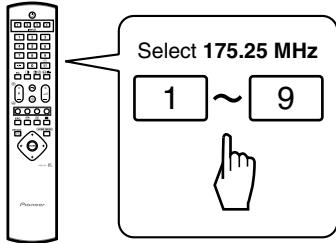


### (3) Video Level Adjustment

**Equipment :** SG

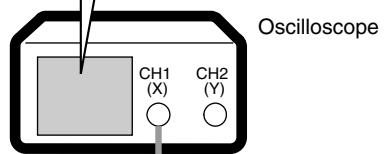
**Condition :** Input RF level 75dB $\mu$ V  
PAL-B/G  
White bar 100%

**START**



Adjust TP7502 to  $1.0 \pm 0.05\text{Vp-p}$

$1.0 \pm 0.05\text{Vp-p}$



Oscilloscope

TP7502  
(AV BOARD Assy)

A

B

C

D

E

F

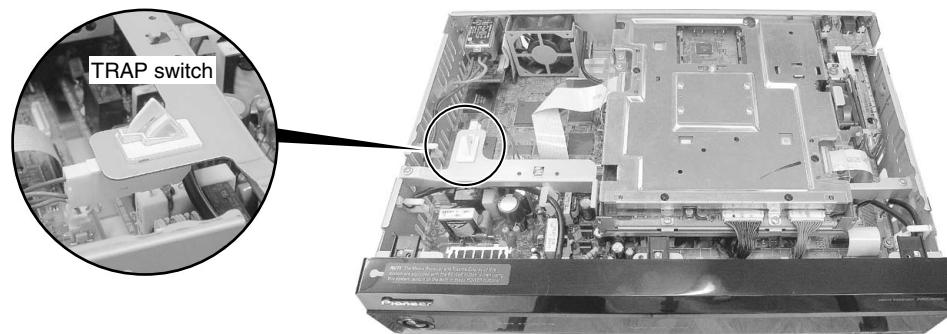
## 6.5 TRAP SWITCH

### ● Outline and Notes

For video data transmission from the Media Receiver to the PDP-435HD and PDP-505HD-series Plasma Displays, digital signals are used. Therefore, this unit adopts the HDCP (High-bandwidth Digital Content Protection) system for copyright protection. This unit is also provided with a detection switch (TRAP switch) that will prohibit the unit from being turned on again "if the upper plate of the unit is accidentally opened," in order to prevent the panel technology from being leaked out.

The TRAP switch is disabled while the unit is turned off.

When performing internal diagnosis of the PDP, fix the switch to the OFF position using adhesive tape before turning on the unit. After servicing, be sure to remove the adhesive tape.



A

B

C

D

E

F

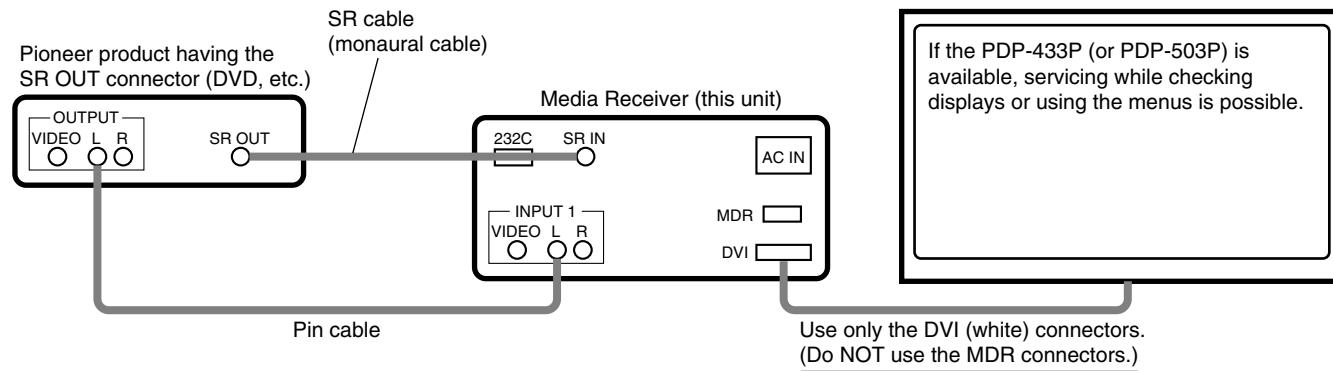
## 6.6 SERVICING USING ONLY THE MEDIA RECEIVER

For servicing of the PDP-435HD and PDP-505HD-series Plasma Display using only the Media Receiver, the following two methods can be used:

### ● Remote controlling using SR connections (Except PDP-R05FE)

#### About connections

- Connect the SR OUT connector of a Pioneer product having that connector (a DVD in the following example) and the SR IN connector of the Media Receiver, using the SR cable. As the remote control sensor is not provided with the Media Receiver, this connection is required for using the remote control unit if the panel is not available. In this case, aim the remote control unit at the remote control sensor of the device (DVD in this case).
- Connect either the audio or the video output of the device (DVD in the example) and the corresponding audio or video input of the Media Receiver, using a cable with phono plugs. This connection is required in order to use ground in common with the SR cable, because with the SR cable connection the ground connection for signal reference is not available. In the example, the audio L channel is used, but the audio R channel or video can be used instead.
- If the plasma display for a previous model, such as the PDP-433P or PDP-503P, is available, servicing while checking displays or using the menus is possible. For this, connect only the DVI connectors (white) of the Media Receiver and the plasma display. The MDR connector of the Media Receiver must not be used, even though it has the same shape and number of pins, because signals assigned to the connectors differ. Using the MDR connector may damage the unit.

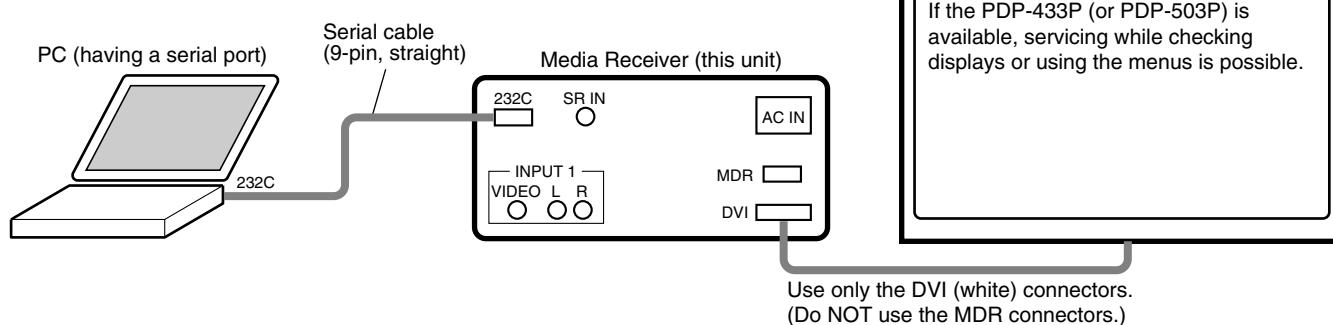


### ● RS-232C control using a PC

In this case the setting is RS-232C 38400bps, and the setting of "6.3. USING RS-232C COMMANDS" is not related.

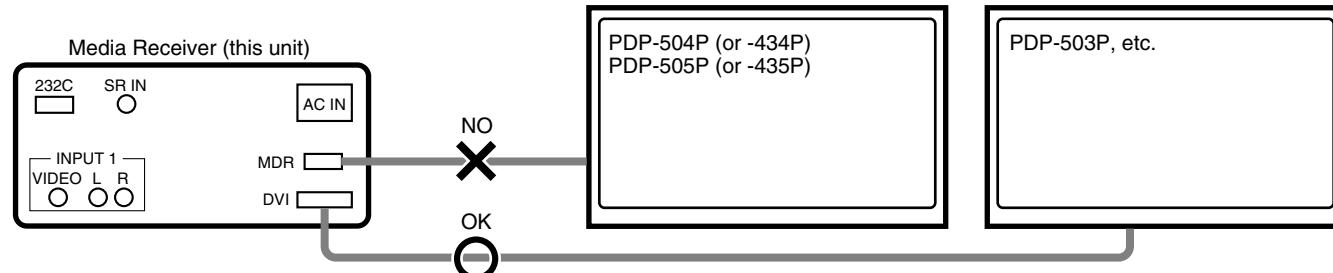
Please set baud rate of PC in 38400bps.

For connection with the PC, use a straight cable.



### ● Note on connection

If the MDR connector of the PDP-434HD or -504HD-series is used, it is considered that the PDP-434P (or -504P) is connected, and the Media Receiver operates on such precondition, **which may result in a failure of the Media Receiver. Be sure not to connect to the MDR connector.** (Do NOT use the MDR connector when servicing the Media Receiver alone.)



## 6.7 SERVICE FACTORY MODE

To operate in Service Factory mode, use the supplied remote control unit.

### ■ How to enter Service Factory Mode

Please refer to the technical documentation (Service Know-How). same as

### ■ Operation in Service Factory mode

#### ● Functions whose settings are set to OFF

The settings for the following functions are set to OFF when Service Factory mode is entered (including when the "FAY" command is received):

- Two-screen operations (input function set on the main side is selected)
- P ZOOM
- STILL
- Detection of the TRAP switch (The log in the EEPROM is retained.)

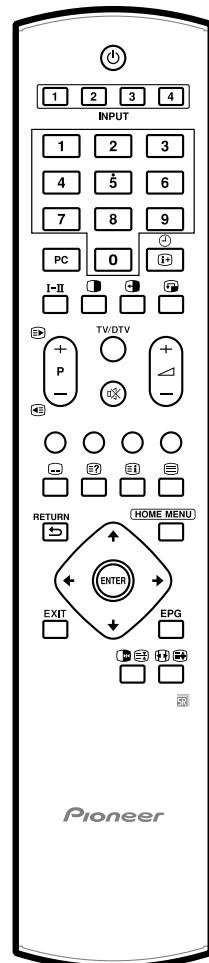
#### ● User data

User data will be treated as follows:

- User data on picture- and audio-quality adjustments are not reflected (data stored in memory will be retained).
- Data on screen position are reset to the default values (data stored in memory will be retained).

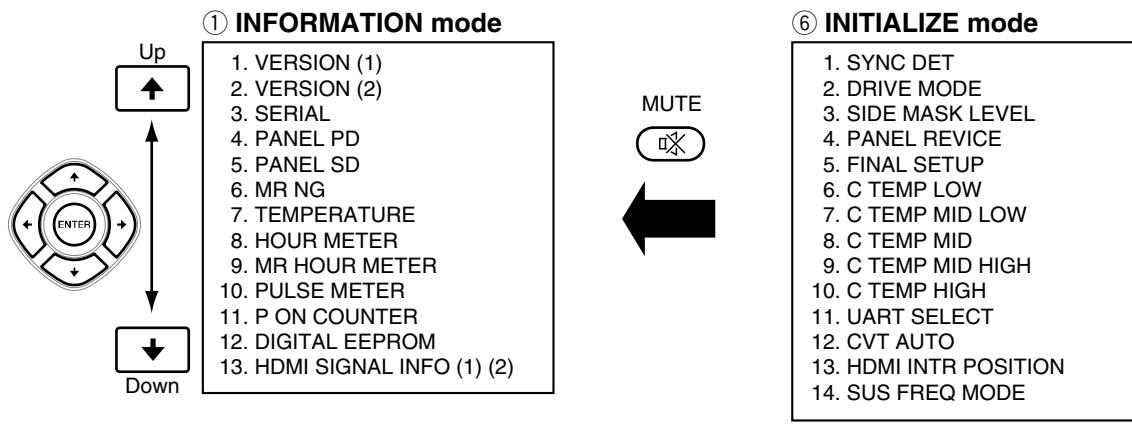
### ■ Remote control codes in Service Factory mode

SR Function	Main Function	Remarks
Muting	Switching the main items	Shifting to the next main item
DOWN	Switching the subtitled items	Shifting downward to the next subtitled item
UP	Switching the subtitled items	Shifting upward to the next upper layer
LEFT	Increasing the adjustment value	Increasing the adjustment value
RIGHT	Decreasing the adjustment value	Decreasing the adjustment value
SET	Switching layers	Shifting downward or upward to the next lower or upper layer
INPUT	Selecting input	Shifting the input to the next function
INPUTxx	Selecting input	Switching the input to xx
CH+	Increasing the channel number	Advancing a preset channel (effective when Function is set to TV)
CH-	Decreasing the channel number	Turning a preset channel backward (effective when Function is set to TV)
Numeric keys	Function: TV	Function: TV (previously selected channel number is selected)
POWER	Power OFF	Turning the power off
FACTORY	Factory OFF	Turning Service Factory mode off
MENU	Menu ON	Turning Service Factory mode off and Menu mode on



## ■ Changes of the Service Factory menus

A



B



C



D

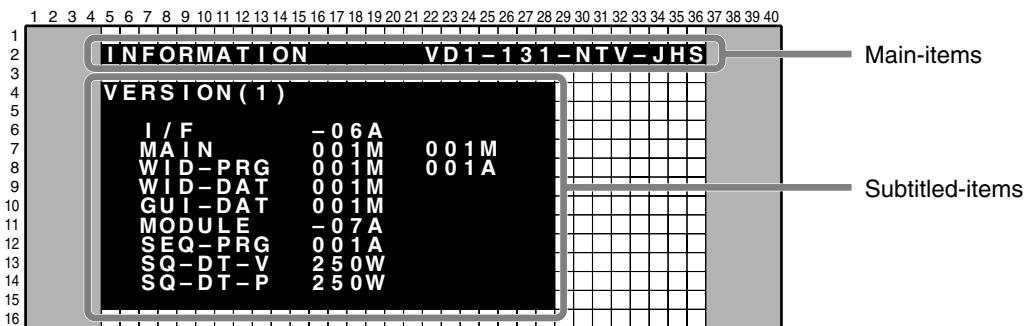


E



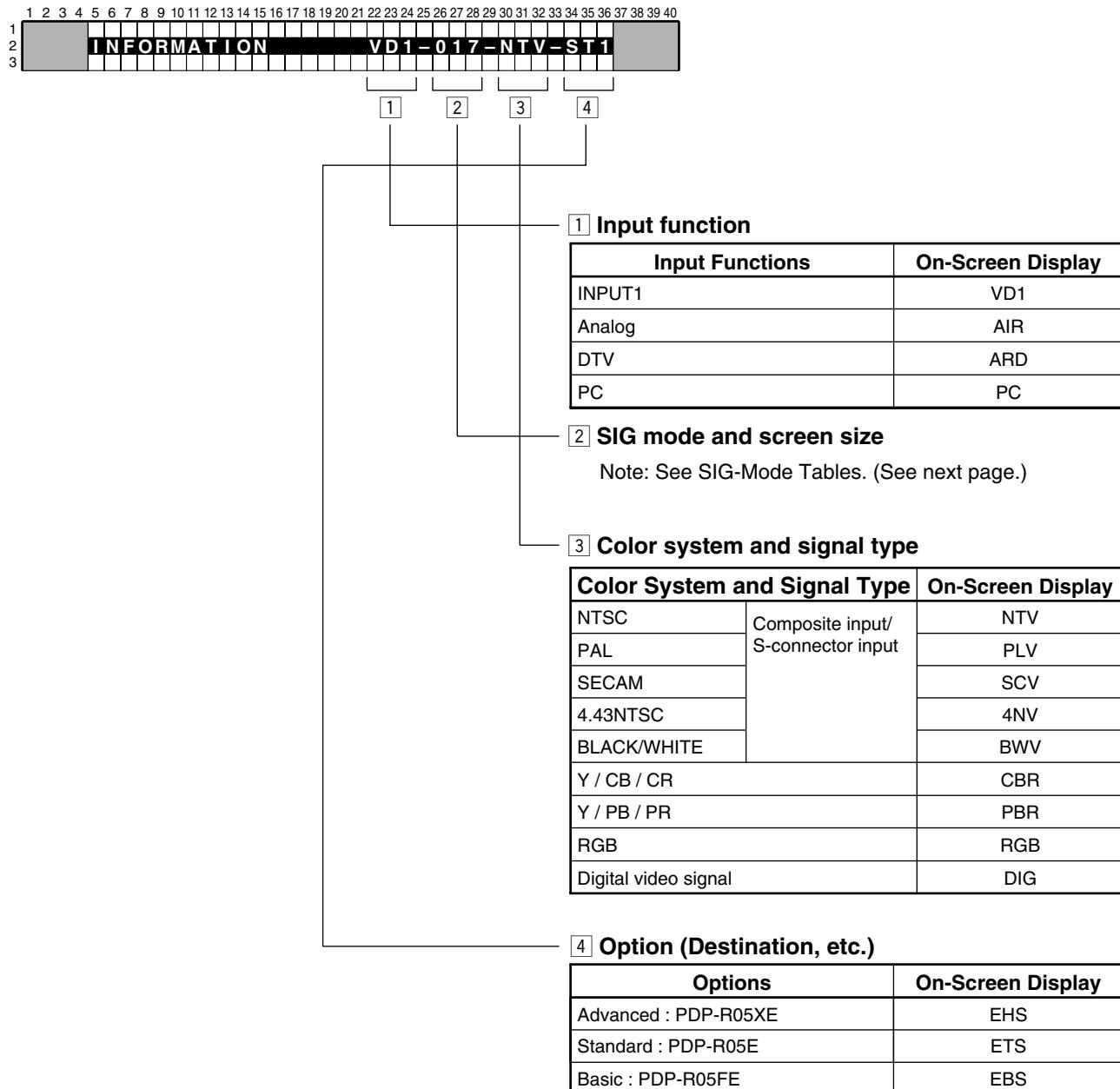
F

## ■ Indications in Service Factory mode



## ■ Main-item indications

Four parameters are displayed:



## ● SIG-Mode Table

A The signal mode is displayed in three characters:

**First character:** Resolution of the input signal (numerics for the video signals, and alphabetics for the PC signals)

**Second character:** Grouping of the V frequencies

### SIG-Mode table for video signals (resolutions and V frequencies)

SIG-Mode	Signal Type	Vertical Frequency fv (Hz)	Horizontal Frequency fh (kHz)
13*	SDTV • 525i	60.000	15.750
21*	SDTV • 625i	50.000	15.625
33*	SDTV • 525p	60.000	31.500
B 41*	HDTV • 1125i	50.000	28.125
43*		60.000	33.750
51*	SDTV • 625p	50.000	31.250
61*	HDTV • 750p	50.000	37.500
63*		60.000	45.000

### SIG-Mode table for PC signals (resolutions and V frequencies)

SIG-Mode	Signal Type	Vertical Frequency fv (Hz)	Horizontal Frequency fh (kHz)
C A2*	720 × 400	56.000	24.825
A5*		70.087	31.469
A8*		85.050	37.861
B3*	640 × 480	59.940	31.469
B4*		66.666	35.000
B6*		72.809	37.861
B7*		75.000	37.500
B8*		85.000	43.300
C3*	852 × 480	60.000	31.680
D2*	800 × 600	56.250	35.1556
D3*		60.317	37.879
D6*		72.188	48.077
D7*		75.000	46.875
D8*		85.061	53.674
E7*	832 × 624	74.550	49.725
F3*	1024 × 768	60.004	48.363
F5*		70.069	56.476
F7*		75.029	60.023
F8*		84.997	68.677
G2*	1280 × 768	56.250	45.113
G3*		59.833	47.986
E G5*		70.000	56.137

2nd Character	Reference V Frequency	Remarks
-	-	No signal
1	50	
2	56	
3	60	
4	66	
5	70	
6	For interpolation of 72-Hz area	For distinguishing between 70-Hz or 75-Hz area
7	75	
8	85	
9 (spare)	-	
?	-	Out of range

A

**Third character: Selection of the screen size by the user is displayed.**  
 (○: available, ×: not available)

3rd Character	Description on GUI	VIDEO	PC	Remarks
0	DOT BY DOT	×	○	
1	4 : 3	○	○	
2	FULL (FULL1)	○	○	
3	ZOOM	○	×	
4	CINEMA	○	×	
5	WIDE	○	×	Indude WIDE-HD
6	FULL 14 : 9	○	×	
7	CINEMA 14 : 9	○	×	
8	FULL2	○	○	HDTV1035i
9	OVERSCAN	○	×	

C

D

E

F

## ① INFORMATION mode

### A ● Operation items

No.	Function / Display	Content
1	VERSION (1)	The flash memory versions for each device are displayed. (common part)
2	VERSION (2)	The flash memory versions for each device are displayed. (individual part)
3	SERIAL	For displaying the serial number of the product (not used)
4	PANEL PD	Power-down generated on the panel side and its time of occurrence are displayed.
5	PANEL SD	Shutdown generated on the panel side and its time of occurrence are displayed.
6	MR NG	Power-down and/or shutdown generated on the Media Receiver side and their/its time of occurrence are displayed.
7	TEMPERATURE	Information on temperature is displayed.
8	HOUR METER	Cumulative power-on time to the panel is displayed.
9	MR HOUR METER	Cumulative power-on time to the Media Receiver is displayed.
10	PULSE METER	The pulse meter value on the panel side is displayed.
11	P ON COUNTER	The number of times the power to the panel was turned on is displayed.
12	DIGITAL EEPROM	The status of the backup data for the module microcomputer is displayed.
13	HDMI SIGNAL INFO. (1) (2)	The file information of HDMI series are displayed.

### B 1. VERSION (1)

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#### 4. PANEL PD

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Power-down information only on the panel side is displayed.

#### • Panel power-down information

No.	Type of Power-down	On-Screen Display	No.	Type of Power-down	On-Screen Display
1	No corresponding item	-----	8	Power-down of the address system	ADRS
2	Power-down of the main power supply system	POWER	9	Power-down of the X-DRIVE circuitry	X-DRV
3	Power-down of the scanning system	SCAN	A	Power-down of the X-DC/DC converter	X-DCDC
4	Power-down in the path between the scanning system and 5-V power supply	SCN-5V	B	Power-down of the X-SUS system	X-SUS
5	Power-down of the Y-Drive system	Y-DRV	C	Power-down of the driving IC power supply system	D-DCDC
6	Power-down of the Y-DC/DC converter	Y-DCDC	D	Power-down of the driving stopped	IC4 (IC5401)
7	Power-down of the Y-SUS system	Y-SUS	F	Power-down point unidentified	UNKNOWN

#### 5. PANEL SD

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
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The shutdown log only on the panel side is displayed.

#### • Panel shutdown information

No.	Type of Shutdown	On-Screen Display (MAIN)	Remarks
1	Abnormality in IC 4 communication	IC4	
2	Abnormality in module microcomputer IIC communication	MD-IIC	Subcategories exist. (EROM4K : IC5206, EROM2K : IC402, VOLIC : IC3502)
3	Abnormality in RST2	RST2	
4	Abnormality in panel temperature	TEMP1	
5	Short-circuiting of the speakers	AUDIO	

## 6. MR NG

A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40		
1	INFORMATION	VD1-013-NTV-ST1																																							
2	MR NG	MAIN	SUB																																						
3																																									
4	1	MR-PWR	-----	00151H21M																																					
5	2	MODULE	-----	00073H45M																																					
6	3	MA-IIC	FE2	00031H50M																																					
7	4	MA-IIC	AV-SW2	00013H03M																																					
8	5	MA-SRL	IC3	00002H52M																																					
9	6	MAIN	-----	00001H58M																																					
10	7	TEMP2	-----	00000H07M																																					
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Information on power-down and shutdown of the Media Receiver side is displayed.

B

- Media Receiver NG information

No.	Type of Failure	On-Screen Display (MAIN)	Remarks
1	Abnormality in module microcomputer communication	MODULE	
2	Abnormality in 3-wire serial communication of the main microcomputer	MA-SRL	Subcategories exist.
3	Abnormality in main microcomputer IIC communication	MA-IIC	Subcategories exist.
4	Abnormality in main microcomputer communication	MAIN	
5	Abnormality in temperature of the Media Receiver	TEMP2	
6	Fan stopped.	FAN	
7	Abnormality in communication of the digital tuner	UART	Subcategories exist.
8	Abnormality in the ASIC power supply on the MR side	M-DCDC	

- Subcategory information

Type of Shutdown	Subcategory	Remarks
MA-SRL	IF microcomputer (IC8702), IC2 (IC7004), IC3 (IC7101)	
MA-IIC	MA-EEP (IC7205), IC1-M (IC6107), IC1-S (IC6255), HDMI1 (IC6801), HDMI2 (IC6881)*2, AD-M (IC6402), AD-S (IC6602), IC6 (IC6951), CCD (IC8903)*2, FE1 (U7501), FE2 (U7502)*2, AV-SW1 (IC8002), AV-SW2 (IC8005), TX-COM (IC8904)*3, MPX (IC7502)*3, TX-BSY(IC8904)*3, AV-EEP	*2 : U.S. model only *3 : Europe model and General area model
Interval UART Communication	PS/RST	No power, or reset status continued
	RETRY	The signal 0x02 (ready) has not been received.
	CD-COM	PC Card Module Communication
	CD-DEV	PC Card Module
	CD-RST	PC Card Reset NG

## 7. TEMPERATURE

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40			
1	INFORMATION	VD1-013-NTV-ST1																																								
2	TEMPERATURE																																									
3	TEMP 1	:	128																																							
4	TEMP 2	:	149																																							
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6	FAN	:	125																																							
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**TEMP1:** The value read from the temperature sensor built into the panel is displayed in the range of 000-255.

**Note:** Refer to the service manual of the panel.

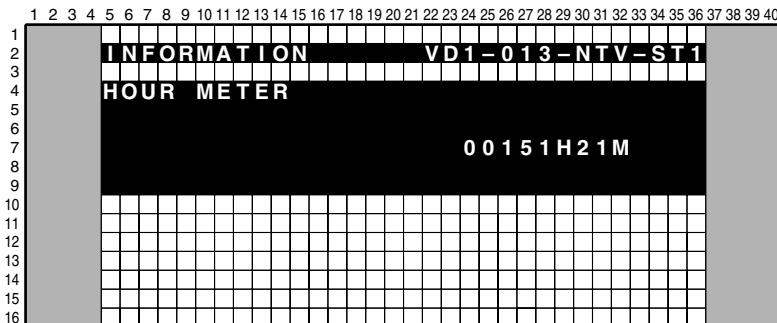
**TEMP2:** The value read from the temperature sensor built into the Media Receiver is displayed in the range of 000-255.

For reference, the approximate value for 60°C is 86 and for 35°C is 67.

**Reference:** When TEMP2 exceeds 100 (about 78°C), SD LED flash 11 times.

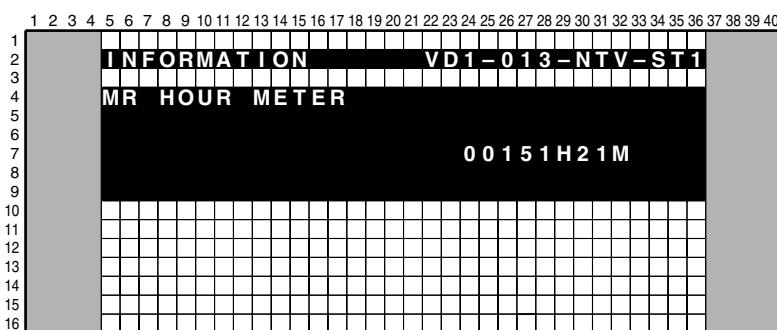
**FAN:** The value of the Fan output is displayed. At shipment, the output is controlled in 2 steps, and the value for strong output is set to about 131, and the value for weak output is set to about 93.

## 8. HOUR METER



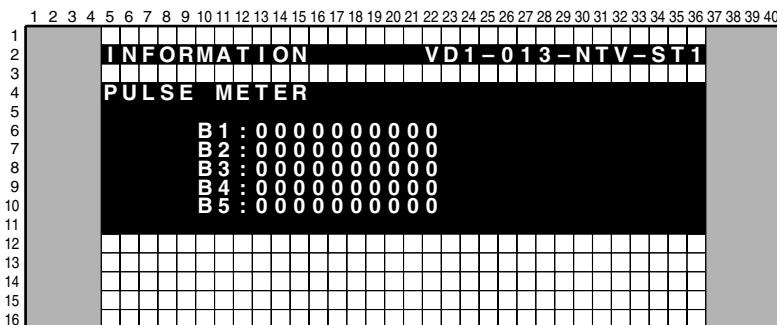
The cumulative power-on time of the panel is displayed.

## 9. MR HOUR METER



The cumulative power-on time of the Media Receiver is displayed.

## 10. PULSE METER

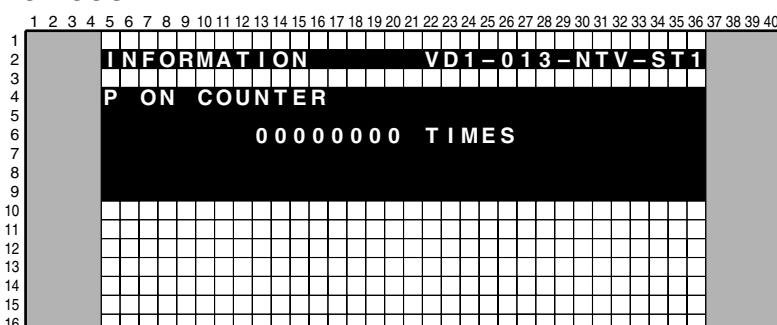


The cumulative number of pulses of the panel is displayed.

**Note :** Dividing screen into sixteen times sixteen and counting five different locations on a screen.

Each item, it's counted total 3840 pixels (for 50 inch) or 3072 pixels (for 43 inch) discharging.  
( $1280/16 \times 768/16 = 3840$ ,  $1204/16 \times 768/16 = 3072$ )

## 11. P ON COUNTER

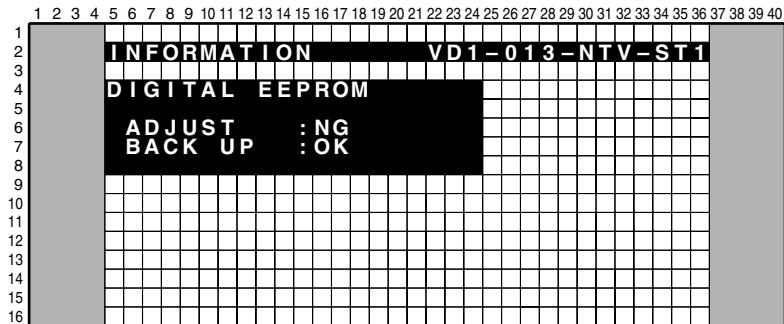


The cumulative number of times the panel was turned on is displayed.

## 12. DIGITAL EEPROM

- A When the DIGITAL Assy of the PDP is to be replaced, the adjustment values in it can be temporarily stored in the ROM then be written on the new Assy after replacement.

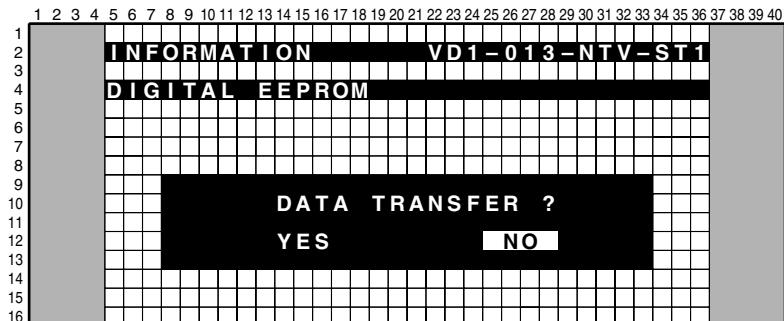
Whether adjustment has been made on the DIGITAL Assy of the PDP or not (i.e., in the state of a new service part), and whether the data on any adjustment values are retained in the backup ROM or not are displayed.



### • Downloading the data from the backup ROM

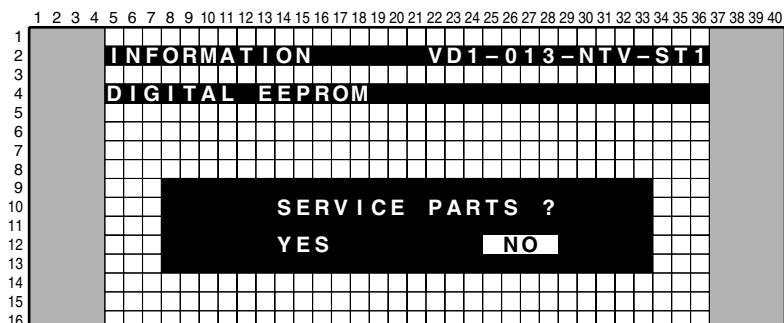
(This must be performed after the DIGITAL Assy is replaced.)

- C To download the data from the backup ROM, press the ENTER key while the above screen is displayed. The display changes as shown below. Move the cursor to YES then press the ENTER key. The data in the backup ROM are downloaded into the new Assy.



### • Clearing the data in the ROM of the DIGITAL Assy

The display below is automatically displayed after either YES or NO is selected on the display shown above. Move the cursor to YES then press the ENTER key. Then all data on adjustment values in the ROM of the DIGITAL Assy are cleared.



### 13. HDMI SIGNAL INFO

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Technical examination display

(Reading status registers in HDMI receiver and displaying them by HEX value.)

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For technical discussion

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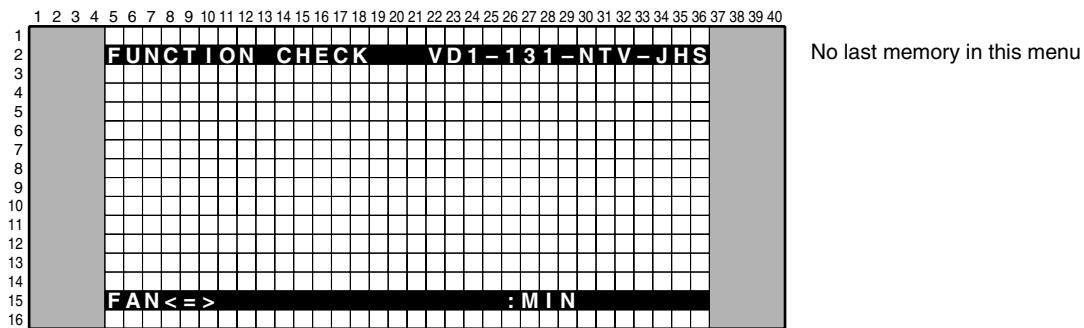
D

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F

## (2) FUNCTION CHECK

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No.	Display	Detail	Remarks	232C Command
1	FAN <=>	MIN ⇔ CNT ⇔ MAX		*1
2	DTB ANT VOLT <=>	OV ⇔ 5V		BAV + S00:0V S02:5V
3	AUTO PRESET <=>	NO ⇔ YES		

### 2.1 FAN

Controls FAN speed by force. (MIN : STOP, CNT : Follows movement specifications, MAX : High)

Temp sensor is working only displaying data value in service factory mode.

C After getting off service factory mode, this function is set to normal automatically.

### 2.2 DTB ANT VOLT (PDP-R05XE only)

Change the power supply voltage for the digital tuner antenna.

This setting item is not recorded in the memory. Return in the user setting when finish the factory mode.

### 2.3 AUTO PRESET

Make the frequency range narrow for shipment check, and auto preset.

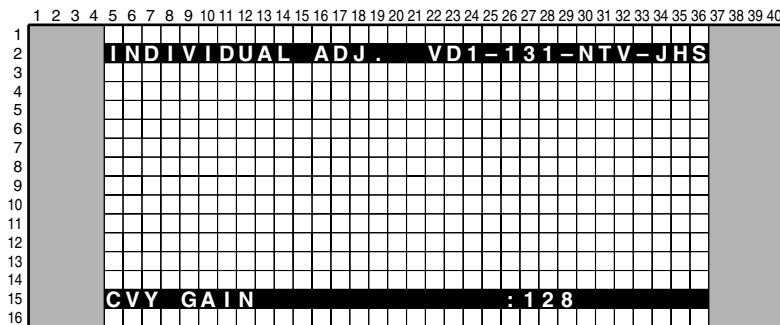
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### (3) INDIVIDUAL ADJ. mode

#### AV Board



- Each signal course output from AV Board is revised to become equally.
- The main course and the assistant course are managed individually.
- At the time of signal input to go through IC1 side, AD side menu is done graydown by the kind of the signal.  
At the time of signal input to go through AD side, IC1 side menu is done graydown of alike.  
And at the time of digital signal input, all menu is done graydown.

No.	OSD Display	Function	Adjustment range	Initial value	Control device
1	CVY GAIN <=>	Input GAIN adjustment of CV/YC series	064-191	128	IC1 0x08B D6-D0
2	RY GAIN <=>	Input GAIN adjustment of component (Cr)/RGB(R) series	000-255	128	AD 0x08B D7-D0
3	GY GAIN <=>	Input AIN adjustment of component (Y)/RGB(G) series	000-255	128	AD 0x08B D7-D0
4	BY GAIN <=>	Input GAIN adjustment of component (Cb)/RGB(B) series	000-255	128	AD 0x08B D7-D0

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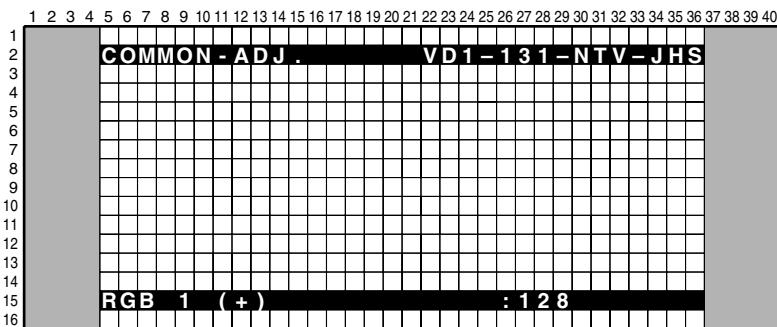
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#### (4) COMMON ADJ. mode

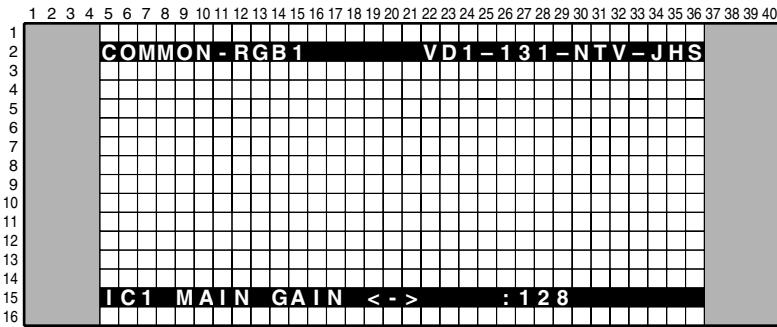
A

##### RGB1



- Adjustment of the course dispersion
- Adjustment the input every course so that IC1 and the AD-PLL output make it equal in Main Board.

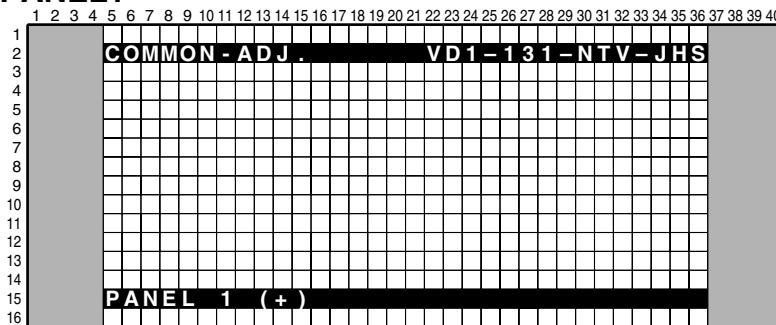
B



C

No.	OSD Display	Function	Adjustment range	Initial value	Control device
1	IC1 MAIN GAIN <=>	MAIN side IC1 input-GAIN adjustment	064-191	128	IC1(M) 0x08B D6-D0
2	IC1 MAIN OFFSET <=>	MAIN side IC1 input-OFFSET adjustment	064-191	128	IC1(M) 0x08C D6-D0
3	AD MAIN R GAIN <=>	MAIN side AD/PLL input-R GAIN adjustment	000-255	128	A/D(M) 0x08 D7-D0
4	AD MAIN G GAIN <=>	MAIN side AD/PLL input-G GAIN adjustment	000-255	128	A/D(M) 0x09 D7-D0
5	AD MAIN B GAIN <=>	MAIN side AD/PLL input-B GAIN adjustment	000-255	128	A/D(M) 0x0A D7-D0
6	AD MAIN R OFFSET <=>	MAIN side AD/PLL input-R OFFSET adjustment	064-191	128	A/D(M) 0x0B D7-D1
7	AD MAIN G OFFSET <=>	MAIN side AD/PLL input-G OFFSET adjustment	064-191	128	A/D(M) 0x0C D7-D1
8	AD MAIN B OFFSET <=>	MAIN side AD/PLL input-B OFFSET adjustment	064-191	128	A/D(M) 0x0D D7-D1
9	IC1 SUB GAIN <=>	SUB side IC1 input-GAIN adjustment	064-191	128	IC1(S) 0x08B D6-D0
10	IC1 SUB OFFSET <=>	SUB side IC1 input-OFFSET adjustment	064-191	128	IC1(S) 0x08C D6-D0
11	AD SUB R GAIN <=>	SUB side AD/PLL input-R GAIN adjustment	000-255	128	A/D(S) 0x08 D7-D0
12	AD SUB G GAIN <=>	SUB side AD/PLL input-G GAIN adjustment	000-255	128	A/D(S) 0x09 D7-D0
13	AD SUB B GAIN <=>	SUB side AD/PLL input-B GAIN adjustment	000-255	128	A/D(S) 0x0A D7-D0
14	AD SUB R OFFSET <=>	SUB side AD/PLL input-R OFFSET adjustment	064-191	128	A/D(S) 0x0B D7-D1
15	AD SUB G OFFSET <=>	SUB side AD/PLL input-G OFFSET adjustment	064-191	128	A/D(S) 0x0C D7-D1
16	AD SUB B OFFSET <=>	SUB side AD/PLL input-B OFFSET adjustment	064-191	128	A/D(S) 0x0D D7-D1

F

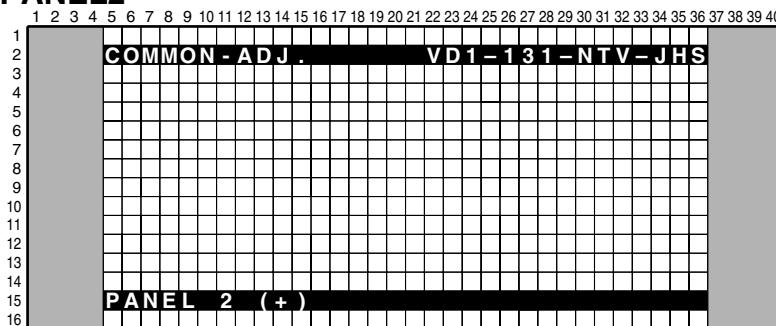
**PANEL1**

## • related 232C command

XU1/XU2/XD1/XD2  
 YU1/YU2/YD1/YD2/YD3/YD4  
 VSU/VOF  
 GAJ/GA2

- Adjust Drive/Power supply series

No.	OSD Display	Function	Adjustment range	Corresponding RS-232C Command
1	X-SUS U1 <=>	X-SUS wave form Adjustment U1	124-132	XU1***
2	X-SUS U2 <=>	X-SUS wave form Adjustment U2	124-132	XU2***
3	X-SUS D1 <=>	X-SUS wave form Adjustment D1	124-132	XD1***
4	X-SUS D2 <=>	X-SUS wave form Adjustment D2	124-132	XD2***
5	Y-SUS U1 <=>	Y-SUS wave form Adjustment U1	124-132	YU1***
6	Y-SUS U2 <=>	Y-SUS wave form Adjustment U2	124-132	YU2***
7	Y-SUS D1 <=>	Y-SUS wave form Adjustment D1	124-132	YD1***
8	Y-SUS D2 <=>	Y-SUS wave form Adjustment D2	124-132	YD2***
9	Y-SUS D3 <=>	Y-SUS wave form Adjustment D3	124-132	YD3***
10	Y-SUS D4 <=>	Y-SUS wave form Adjustment D4	124-132	YD4***
11	VLT-SUS <=>	Vsus voltage adjustment	000-255	VSU***
12	VLT-OFS <=>	Vofs voltage adjustment	000-255	VOF***

**PANEL2**

## • related 232C command

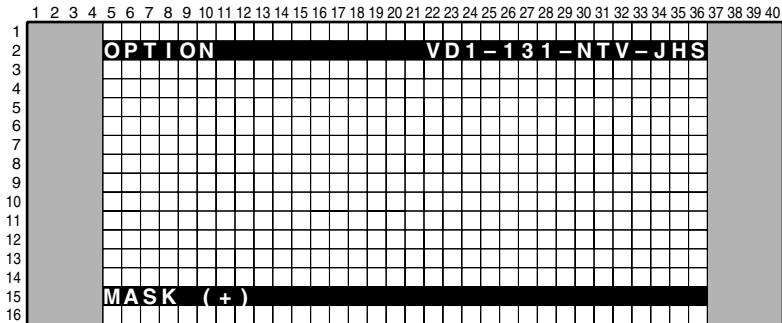
PMC/PRH/PGH/PBH  
 PMB/PRL/PGL/PBL  
 ABL  
 GPW  
 GAJ

- Panel white balance, indication of ABL value and adjustment
- About < PANEL CONTRAST > and < PANEL BRIGHTNESS >, it is assumed that can adjust it when connected the fifth generation panel. It is done graydown when connected the fourth generation panel, and only indication of a value.

No.	OSD Display	Function	Adjustment range	Table indication	Corresponding RS-232C Command
1	PANEL CONTRAST <=>	Panel WB Adjustment - Main contrast	000-511	---	PMC***
2	PANEL R HIGH <=>	Panel WB Adjustment - R highlight	000-511	PT1/PT2/PT3	PRH***
3	PANEL G HIGH <=>	Panel WB Adjustment - G highlight	000-511	PT1/PT2/PT3	PGH***
4	PANEL B HIGH <=>	Panel WB Adjustment - B highlight	000-511	PT1/PT2/PT3	PBH***
5	PANEL BRIGHTNESS <=>	Panel WB Adjustment - Main Brightness	000-999	---	PMB***
6	PANEL R LOW <=>	Panel WB Adjustment - R low light	000-999	PT1/PT2/PT3	PRL***
7	PANEL G LOW <=>	Panel WB Adjustment - G low light	000-999	PT1/PT2/PT3	PGL***
8	PANEL B LOW <=>	Panel WB Adjustment - B low light	000-999	PT1/PT2/PT3	PBL***
9	ABL LEVEL <=>	ABL Adjustment	000-255	AB1/AB2/AB3	ABL***

## (5) OPTION mode

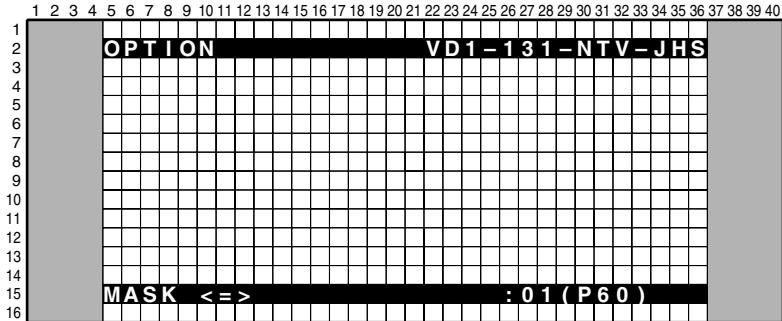
A



B

No.	Function/Display	Content	Corresponding RS-232C Command
1	MASK (+)	Selecting the pattern mask of IC4	MSK
2	PEAK LIMITTER	ON ⇄ OFF	PLT
3	DYNAMIC RANGE	ON ⇄ OFF	DYR
4	EDID WRITE MODE	DISABLE ⇄ ENABLE	EPA
5	CH PRESET	FACTORY ⇄ USER	

C



D

The mask frequency can be cyclically changed (see the table below) by pressing the left or right cursor key. The mask pattern can be cyclically changed by pressing the up or down cursor key. Approximately 2 seconds after either the up or down cursor key is pressed, the mask screen will appear.

- Frequency selection while the mask is displayed

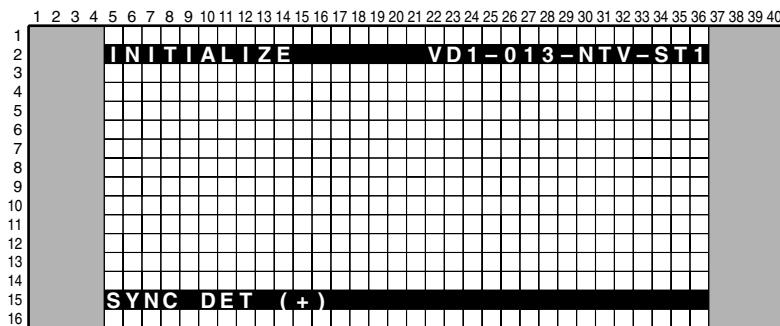
E

No.	Function/Display	Content	Corresponding RS-232C Command
0	V50	Video 50-Hz sequence	F50
1	V60 (initial value)	Video 60-Hz sequence	F60
2	P60	PC 60-Hz sequence	F61
3	P70	PC 70-Hz sequence	F70
4	V72	Video 72-Hz sequence	F72
5	V75	Video 75-Hz sequence	F75

F

## ⑥ INITIALIZE mode

(For managing switching of the initial settings and destination setting)



No.	Function/Display	Content
1	SYNC DET (+)	
2	DRIVE MODE (+)	
3	SIDE MASK LEVEL (+)	
4	PANEL REVICE (+)	
5	FINAL SETUP (+)	
6	C TEMP LOW (+)	
7	C TEMP MID LOW (+)	
8	C TEMP MID (+)	
9	C TEMP MID HIGH (+)	
10	C TEMP HIGH (+)	
11	UART SELECT <=>	1200-232C ⇔ ●● ⇔ 38400-232C ⇔ 9600-SR+
12	CVT AUTO <=>	DISABLE ⇔ ENABLE (For Factory use)
13	HDMI INTR POSITION(+)	
14	SUS FREQ MODE<=>	000 ⇔ ●● ⇔ 007

- When there is a modification log, if the "Display" key is held pressed for at least 3 seconds while the above display is displayed, the modification log will be cleared.

### • UART SELCT

Option No.	Function / Display	Operation / Control	Remarks
1 (initial setting)	9600-SR+	To set to SR+ (9600 BPS)	For switching external communication between RS-232C and SR+
2	1200-232C	To set to RS-232C (1200 BPS)	
3	2400-232C	To set to RS-232C (2400 BPS)	
4	4800-232C	To set to RS-232C (4800 BPS)	
5	9600-232C	To set to RS-232C (9600 BPS)	
6	19200-232C	To set to RS-232C (19200 BPS)	
7	38400-232C	To set to RS-232C (38400 BPS)	

**Tips: How to change the SR+/RS-232C setting without entering Service Factory mode**  
Refer to "6.3 USING RS-232C COMMANDS".

## 6.8 LIST OF RS-232C COMMANDS

RS-232C commands can be used in Service Factory mode.

Before using RS-232C commands, it is necessary to change the factory presetting. See "6.3. USING RS-232C COMMANDS."

A

Command	Operation	Remarks
<b>A</b>		
ABL	Adjusting power consumption	
<b>B</b>		
BCP	Transmitting the backup data to the DIGITAL Assy	
BAVS00	Setting the power supply for the DTB antenna to 0 V	PDP-R05XE only
BAVS02	Setting the power supply for the DTB antenna to 5 V	PDP-R05XE only
BSL	Adjusting side mask B	
BYG	BY GAIN	
<b>C</b>		
CHM	Clearing the hour meter	
CNG	Clearing MR NG information	
CPC	Clearing the power-on counter	
CPD	Clearing power-down information	
CPM	Clearing the pulse meter	
CSD	Clearing shutdown information	
CTM	Clearing the modification log	This command is effective even during Standby mode.
<b>D</b>		
OSDS01	Turning on the on-screen display	While the OSDSOI command is in force, the duration of on-screen display is unlimited.
OSDS00	Turning off the on-screen display	On-screen display is prohibited.
DRF	Turning off the power for the drive system	
DRN	Turning on the power for the drive system	
DW*	Decreasing the adjustment value by *	*: 1-9, 0 (0 means 10), or F (making the adjustment value the minimum)
<b>E</b>		
EDWS00	Prohibiting writing of EDID data	
EDWS01	Permitting writing of EDID data	
<b>F</b>		
F50	Video 50-Hz sequence	
F60	Video 60-Hz sequence	
F61	PC 60-Hz sequence	
F70	PC 70-Hz sequence	
F72	Video 72-Hz sequence	
F75	Video 75-Hz sequence	
FAJ	Determining the adjustment values for the unit	
FAY	Turning Service Factory mode on	
FAN	Turning Service Factory mode off	The GUI equivalent to that usually displayed when the power is turned on is displayed.
FCSS00	Focus OFF	
FCSS01	Focus ON	
FST	Final set up	
<b>G</b>		The GET-group commands are effective at any time, including during Standby mode.
GA2	Obtaining the various adjustment values (Add Vrn to GAJ)	
GAJ	Obtaining the adjustment values for the panel	
GDI	Command to obtain Status	
GMM	Switching the gamma levels	Setting value: 000-007
GNG	Obtaining NG data of the MR	
GNM	Obtaining the serial No. of the MR	
GNP	Obtaining the serial No. of the panel	
GPC	Obtaining the P ON COUNTER value	
GPD	Obtaining power-down information	
GPR	Obtaining the PANEL REVISE data	
GPM	Obtaining the PULSE METER data	
GPW	Obtaining the PANEL W/B data	
GS1	Obtaining the version data for each device	
GS2	Obtaining data on various operations	
GS6	Obtaining the any version	
GSD	Obtaining shutdown information	
GSL	Adjusting side mask G	
GYG	GY GAIN	

F

Command	Operation	Remarks
<b>I</b>		
INC***	Selection of the tuner for terrestrial digital signals	PDP-R05XE only
INH	Selection of SD card/PCMCIA card	PDP-R05XE and PDP-R05E only
INPS01	Input selection: Input 1	
INPS02	Input selection: Input 2	
INPS03	Input selection: Input 3	
INPS04	Input selection: Input 4	
INPS05	Input selection: Input 5	PDP-R05XE and PDP-R05E only
INA	Selection of the tuner for terrestrial analog signals	
<b>L</b>		
LCD	Liquid crystal mode of MR alone	
<b>M</b>		
MSKS00	Mask mode: OFF	
MSKS01	White: 0-100%	
MSKS02	Aging mask	
MSKS03	Aging mask (detection of still picture: OFF)	
MSKS10	RAMP slant 1	
MSKS11	RAMP slant 4	
MSKS12	RAMP slant 1 shifting	
MSKS13	RAMP slant 4 shifting	
MSKS14	V RAMP	
MSKS15	H/V RAMP	
M1G	IC1 MAIN GAIN	
M1O	IC1 MAIN OFFSET	
MSKS20	WINDOW-Low: 102 / High: 870	
MSKS21	WINDOW-Low: 102 / High: 1023	
MSKS22	WINDOW-Low: 0 / High: 1023	
MSKS23	WINDOW-High: 1023 (CENTER)	
MSKS24	WINDOW-PEAK WINDOW	Area 1.25%
MSKS25	WINDOW-1/7 vertical window	
MSKS26	WINDOW-magenta/green stripe	
MSKS27	WINDOW-green/magenta stripe	
MSKS28	Window (black & white [1 x 8], checkered pattern [for EMG check])	
MSKS29	Window (for W/B adjustment, magenta, yellow)	
MSKS40	Wiper to prevent phosphor burn	
MSKS30	COLOR BAR	
MSKS31	Slanted lines	
MSKS51	Raster-white	
MSKS52	Raster-red	
MSKS53	Raster-green	
MSKS54	Raster-blue	
MSKS55	Raster-black	
MSKS56	Raster-cyan	
MSKS57	Raster-magenta	
MSKS58	Raster-yellow	
MSKS59	Raster-cyan 274	
MSKS60	Raster-50 flesh color	
MSKS61	Raster-50 light purple	
MSKS62	Raster-50 sky blue	
MSKS63	Raster-red 779	
MSKS64	Raster-cyan 218	
MSKS65	Raster-cyan 448	
MSKS66	Raster-43 flesh color	
MSKS67	Raster-red 640	
MSKS68	Raster-magenta 98	
MSKS69	Raster-43 sky blue 1	
MSKS70	Raster-43 sky blue 2	
MSKS71	Raster-43 light purple	
MSKS72	Raster-blue 960	
MSKS73	Raster-gray 511 (spare)	
MSKS74	Raster-gray 511 (spare)	

A

B

C

D

E

F

A	Command	Operation	Remarks
	<b>M</b>		
	MRG	AD MAIN R GAIN	
	MRO	AD MAIN R OFFSET	
	MGG	AD MAIN G GAIN	
	MGO	AD MAIN G OFFSET	
	MBG	AD MAIN B GAIN	
	MBO	AD MAIN B OFFSET	
	<b>P</b>		
	PBH	Panel W/B B-HIGH adjustment	
	PBL	Panel W/B B-LOW adjustment	
	PGH	Panel W/B G-HIGH adjustment	
	PGL	Panel W/B G-LOW adjustment	
B	POF	Turning the power OFF	
	PON	Turning the power ON	
	PRH	Panel W/B R-HIGH adjustment	
	PRL	Panel W/B R-LOW adjustment	
	<b>R</b>		
	RYG	RY GAIN	
	RSL	Adjustment of side mask R	
	<b>S</b>		
	S1G	IC1 SUB GAIN	
	S1O	IC1 SUB OFFSET	
	SBG	AD SUB B GAIN	
	SBO	AD SUB B OFFSET	
C	SFI	Initialization of the full mask table	
	SGG	AD SUB G GAIN	
	SGO	AD SUB G OFFSET	
	SRG	AD SUB R GAIN	
	SRO	AD SUB R OFFSET	
	<b>T</b>		
	TSN	Not enabling the TRAP switch	
	TSY	Enabling the TRAP switch	The command is effective even during Standby mode.
	<b>U</b>		
	UP*	Increasing the adjustment value by *	*: 1-9, 0 (0 means 10), or F (making the adjustment value the maximum)
	UAJ	Resetting all data in the DIGITAL Assy to those of a new service part	
	<b>V</b>		
D	VMTS00	Panel Mute OFF	
	VMTS01	Panel Mute ON	
	VOF	Offset voltage adjustment	
	VSG	CVY GAIN	
	VSU	SUS voltage adjustment	
	<b>X</b>		
	XD1	D1 trailing-edge pulse of X-SUS	
	XD2	D2 trailing-edge pulse of X-SUS	
	XU1	U1 leading-edge pulse of X-SUS	
	XU2	U2 leading-edge pulse of X-SUS	
	<b>Y</b>		
E	YD1	D1 trailing-edge pulse of Y-SUS	
	YD2	D2 trailing-edge pulse of Y-SUS	
	YD3	D3 trailing-edge pulse of Y-SUS	
	YD4	D4 trailing-edge pulse of Y-SUS	
	YU1	U1 leading-edge pulse of Y-SUS	
	YU2	U2 leading-edge pulse of Y-SUS	

## 6.9 OUTLINE OF COMMANDS

### ■ GET Commands

**GS1:** Returning information on the model and the version of the software

Order	Data	Size
1	Data on the display	3 bytes
2	Version of the module microcomputer	4 bytes
3	Version of the IC4-MANTA	4 bytes
4	Sequence version (50VIDEO)	4 bytes
5	Sequence version (50PC)	4 bytes
6	Sequence version (43VIDEO)	4 bytes
7	Sequence version (43PC)	4 bytes
8	Version of the IF microcomputer	4 bytes
9	Version of the main microcomputer boot Software	4 bytes
10	Version of the main microcomputer	4 bytes
11	Version of the IC3 boot Software	4 bytes
12	Version of the IC3 Program	4 bytes
13	Version of the IC3 Enhanced	4 bytes
14	Version of the IC3 GUI	4 bytes

#### Breakdown of the data on the display

Data	Model
HD5	PDP-505HD series
HD4	PDP-435HD series

**GPM:** Returning the data of the PDP pulse meter

Order	Data	Size
1	Pulse meter (Block area 1)	10 bytes
2	Pulse meter (Block area 2)	10 bytes
3	Pulse meter (Block area 3)	10 bytes
4	Pulse meter (Block area 4)	10 bytes
5	Pulse meter (Block area 5)	10 bytes

**Note:** Refer to the service manual of the panel.

**GPC:** Returning the cumulative number of times the power to the PDP was turned on

Order	Data	Size
1	Power-on counter	8 bytes

#### • Commands for clearing the logs

Parameter	Corresponding RS-232C Command
PD INFO	CPD
SD INFO	CSD
NG INFO	CNG
HOUR METER	CHM
MR HOUR METER (Only for the system model)	CHR
PULSE METER	CPM
P ON COUNTER	CPC

A **GPD: Returning the power-down data (log) of the PDP**

Order	Data	Size	Order	Data	Size
1	Latest "1st PD" data	1 byte	17	Fifth latest "1st PD" data	1 byte
2	Latest "2nd PD" data	1 byte	18	Fifth latest "2nd PD" data	1 byte
3	Data of hour meter for the latest PD	7 bytes	19	Data of hour meter for the fifth latest PD	7 bytes
4	Data on temperature for the latest PD (TEMP1)	3 bytes	20	Data on temperature for the fifth latest PD (TEMP1)	3 bytes
5	Second latest "1st PD" data	1 byte	21	Sixth latest "1st PD" data	1 byte
6	Second latest "2nd PD" data	1 byte	22	Sixth latest "2nd PD" data	1 byte
7	Data of hour meter for the second latest PD	7 bytes	23	Data of hour meter for the sixth latest PD	7 bytes
8	Data on temperature for the second latest PD (TEMP1)	3 bytes	24	Data on temperature for the sixth latest PD (TEMP1)	3 bytes
9	Third latest "1st PD" data	1 byte	25	Seventh latest "1st PD" data	1 byte
10	Third latest "2nd PD" data	1 byte	26	Seventh latest "2nd PD" data	1 byte
11	Data of hour meter for the third latest PD	7 bytes	27	Data of hour meter for the seventh latest PD	7 bytes
12	Data on temperature for the third latest PD (TEMP1)	3 bytes	28	Data on temperature for the seventh latest PD (TEMP1)	3 bytes
13	Fourth latest "1st PD" data	1 byte	29	Eighth latest "1st PD" data	1 byte
14	Fourth latest "2nd PD" data	1 byte	30	Eighth latest "2nd PD" data	1 byte
15	Data of hour meter for the fourth latest PD	7 bytes	31	Data of hour meter for the eighth latest PD	7 bytes
16	Data on temperature for the fourth latest PD (TEMP1)	3 bytes	32	Data on temperature for the eighth latest PD (TEMP1)	3 bytes

C

- Details on "1st/2nd PD" data

Data	Power-down Point
0	No power-down
1	Not used (for MR-POWER)
2	P-POWER
3	SCAN
4	SCN-5V
5	Y-DRIVE
6	Y-DCDC
7	Y-SUS
8	ADRS
9	X-DRIVE
A	X-DCDC
B	X-SUS
C	DIG-DCDC
D	IC4
F	Power-down point not identified

E

F

## GSD: Returning the shutdown data (log) of the PDP

Order	Data	Size	Order	Data	Size
1	Latest SD data	1 byte	17	Fifth latest SD data	1 byte
2	Data of subcategory for the latest SD	1 byte	18	Data of subcategory for the fifth latest SD	1 byte
3	Data of hour meter for the latest SD	7 bytes	19	Data of hour meter for the fifth latest SD	7 bytes
4	Data on temperature for the latest SD (TEMP1)	3 bytes	20	Data on temperature for the fifth latest SD (TEMP1)	3 bytes
5	Second latest SD data	1 byte	21	Sixth latest SD data	1 byte
6	Data of subcategory for the second latest SD	1 byte	22	Data of subcategory for the sixth latest SD	1 byte
7	Data of hour meter for the second latest SD	7 bytes	23	Data of hour meter for the sixth latest SD	7 bytes
8	Data on temperature for the second latest SD (TEMP1)	3 bytes	24	Data on temperature for the sixth latest SD (TEMP1)	3 bytes
9	Third latest SD data	1 byte	25	Seventh latest SD data	1 byte
10	Data of subcategory for the third latest SD	1 byte	26	Data of subcategory for the seventh latest SD	1 byte
11	Data of hour meter for the third latest SD	7 bytes	27	Data of hour meter for the seventh latest SD	7 bytes
12	Data on temperature for the third latest SD (TEMP1)	3 bytes	28	Data on temperature for the seventh latest SD (TEMP1)	3 bytes
13	Fourth latest SD data	1 byte	29	Eighth latest SD data	1 byte
14	Data of subcategory for the fourth latest SD	1 byte	30	Data of subcategory for the eighth latest SD	1 byte
15	Data of hour meter for the fourth latest SD	7 bytes	31	Data of hour meter for the eighth latest SD	7 bytes
16	Data on temperature for the fourth latest SD (TEMP1)	3 bytes	32	Data on temperature for the eighth latest SD (TEMP1)	3 bytes

### • Details on the shutdown data

Data	Cause of Shutdown
0	No abnormality
1	IC4 (IC5401)
2	Module microcomputer IIC
3	Abnormality in RST2 (power decrease of DC-DC converter)
4	Panel having abnormally high temperature
5	Audio failure (short-circuiting of the speakers)
6 - F	Spares

### • Data on the shutdown subcategories for the module microcomputer IIC

Data	Cause of Shutdown
0	No subcategory
1	EEPROM (4k) (IC5206)
2	EEPROM (2k) (IC4002)
3	Volume IC (IC3502)

A

B

C

D

E

F

**A GNG: Returning the data (logs) on power-down and shutdown of the Media Receiver**

Order	Data	Size	Order	Data	Size
1	Latest NG data	1 byte	17	Fifth latest NG data	1 byte
2	Data of subcategory for the latest NG	1 byte	18	Data of subcategory for the fifth latest NG	1 byte
3	Data of MR hour meter for the latest NG	7 bytes	19	Data of MR hour meter for the fifth latest NG	7 bytes
4	Data on temperature for the latest NG (TEMP2)	3 bytes	20	Data on temperature for the fifth latest NG (TEMP2)	3 bytes
5	Second latest NG data	1 byte	21	Sixth latest NG data	1 byte
6	Data of subcategory for the second latest NG	1 byte	22	Data of subcategory for the sixth latest NG	1 byte
7	Data of MR hour meter for the second latest NG	7 bytes	23	Data of MR hour meter for the sixth latest NG	7 bytes
8	Data on temperature for the second latest NG (TEMP2)	3 bytes	24	Data on temperature for the sixth latest NG (TEMP2)	3 bytes
9	Third latest NG data	1 byte	25	Seventh latest NG data	1 byte
10	Data of subcategory for the third latest NG	1 byte	26	Data of subcategory for the seventh latest NG	1 byte
11	Data of MR hour meter for the third latest NG	7 bytes	27	Data of MR hour meter for the seventh latest NG	7 bytes
12	Data on temperature for the third latest NG (TEMP2)	3 bytes	28	Data on temperature for the seventh latest NG (TEMP2)	3 bytes
13	Fourth latest NG data	1 byte	29	Eighth latest NG data	1 byte
14	Data of subcategory for the fourth latest NG	1 byte	30	Data of subcategory for the eighth latest NG	1 byte
15	Data of MR hour meter for the fourth latest NG	7 bytes	31	Data of MR hour meter for the eighth latest NG	7 bytes
16	Data on temperature for the fourth latest NG (TEMP2)	3 bytes	32	Data on temperature for the eighth latest NG (TEMP2)	3 bytes

**• Details on the NG data**

Data	Cause of Shutdown
0	No abnormality
1	Power-down of the MR power supply
2	Communication failure of the module microcomputer
3	Three-wire serial communication failure of the main microcomputer
4	IIC communication failure of the main microcomputer
5	Communication failure of the main microcomputer
6	MR having abnormally high temperature
7	Fan stopped
8	Failure of the UART communication
9	Abnormality in RST2 of the MR (power decrease of DC-DC converter)

**• Data on the subcategories for failure in 3-wire serial communication of the main microcomputer**

Data	Cause of Shutdown
0	No subcategory
1	Communication failure of the IF microcomputer
2	IC2 communication failure
3	IC3 communication failure

**• Data on the subcategories for failure in the digital tuner**

Data	Cause of Shutdown
0	No subcategory (DTV for North America)
1	Communication failure of the DTV microcomputer (PS/RST)
2	DTV NG (DEVICE)
3	DTV microcomputer (CMD)
4	DTV microcomputer communication (RETRY)
5	PC CARD Communication NG (CD-COM)
6	PC CARD Mdule (CD-DEV)
7	PC CARD Reset NG (CD-RST)

**• Data on the subcategories for failure in IIC communication of the main microcomputer**

Data	Cause of Shutdown
0	No subcategory
1	EEPROM (128k) (IC7205)
2	GCR (Only domestic model)
3	IC1 main (IC6107)
4	IC1 sub (IC6255)
5	AD-PLL main (IC6402)
6	AD-PLL sub (IC6602)
7	IC6 (IC6951)
8	Not used
9	HDMI2(IC6881)
A	7-3VIDEO SW (IC8002)
B	6-2RGB SW (IC8005)
C	Front end 1 (U7501)
D	Not used
E	TX-COM (2C8904)
F	PANEL LINK TX (IC7401)
G	PANEL LINK RX
H	Not used
I	Not used
K	AV-EEP ROM

**GAJ:** Returning drive-related adjustment values of the PDP

Order	Data	Size
1	Currently used ABL table	3 bytes
2	Upper limit of the electric power	3 bytes
3	Vsus adjustment value	3 bytes
4	Vofs adjustment value	3 bytes
5	X-SUS-U1 adjustment value (XU1)	3 bytes
6	X-SUS-U2 adjustment value (XU2)	3 bytes
7	X-SUS-D2 adjustment value (XD2)	3 bytes
8	X-SUS-D1 adjustment value (XD1)	3 bytes
9	Y-SUS-U1 adjustment value (YU1)	3 bytes
10	Y-SUS-U2 adjustment value (YU2)	3 bytes
11	Y-SUS-D1-2 adjustment value (YD2)	3 bytes
12	Y-SUS-D1-1 adjustment value (YD1)	3 bytes
13	Y-SUS-D2-2 adjustment value (YD4)	3 bytes
14	Y-SUS-D2-1 adjustment value (YD3)	3 bytes

Data	Table
AB1	ABL table for NTSC
AB2	ABL table for PAL
AB3	ABL table for PC

**GPW:** Returning RGB-level-related adjustment values of the PDP

Order	Data	Size
1	Panel W/B table currently used	3 bytes
2	Main contrast	4 bytes
3	Red contrast of the W/B adjustment value	4 bytes
4	Green contrast of the W/B adjustment value	4 bytes
5	Blue contrast of the W/B adjustment value	4 bytes
6	Main brightness	4 bytes
7	Red brightness of the W/B adjustment value	4 bytes
8	Green brightness of the W/B adjustment value	4 bytes
9	Blue brightness of the W/B adjustment value	4 bytes

Data	Table
PT1	ABL table for NTSC
PT2	ABL table for PAL
PT3	Reserved table

**GS6:** Returning information of the Flash Device

Order	Data	Size
1	Display Information	3 bytes
2	Version of the DTB (PDP-R05XE only)	4 bytes
3	Version of the PC Card (Except PDP-R05FE)	8 bytes
4	Version of the Text	60 bytes
5	User Password	4 bytes

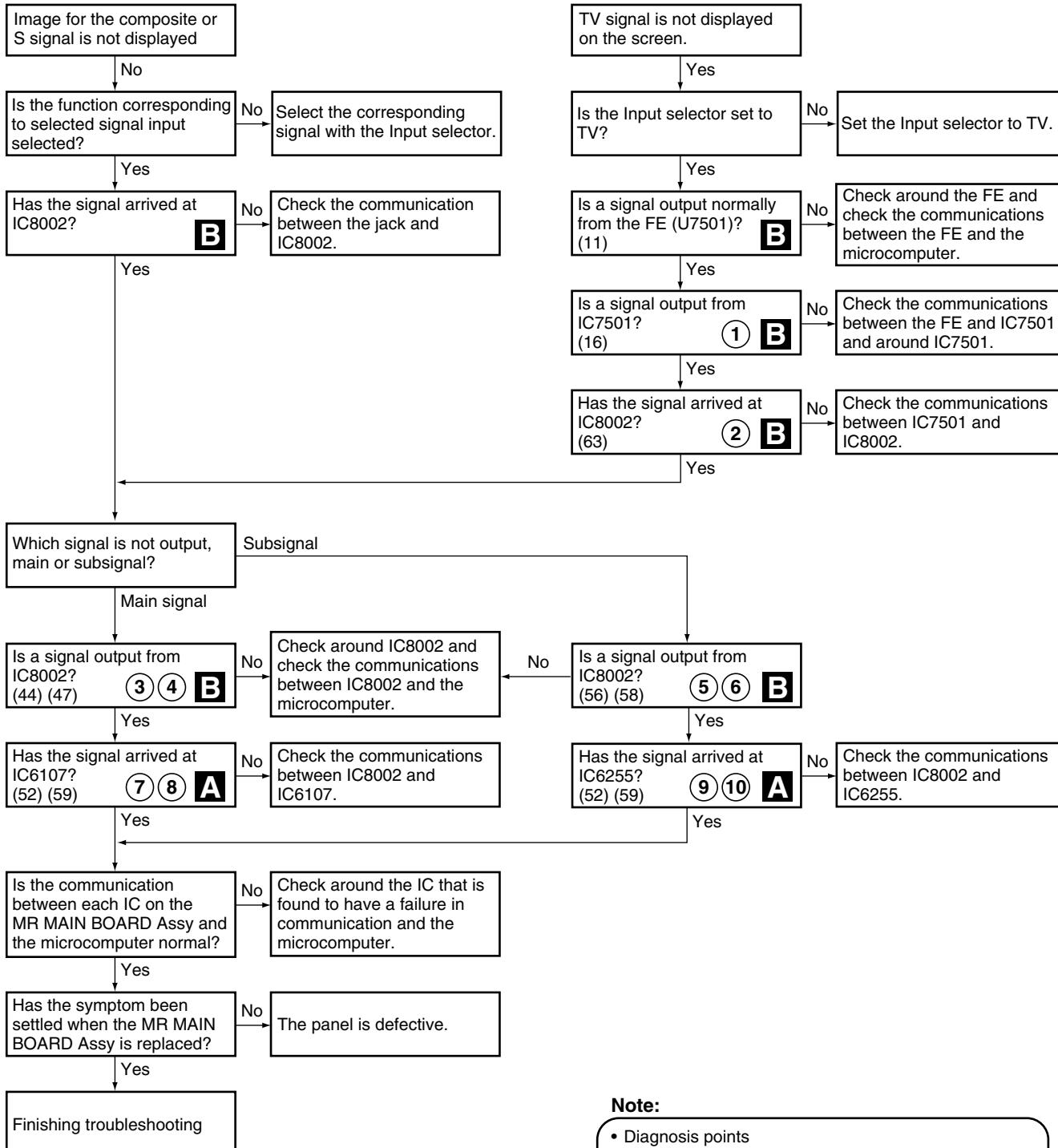
# 7. GENERAL INFORMATION

## 7.1 DIAGNOSIS

### 7.1.1 TROUBLESHOOTING

A

- Image for the composite or S signal is not displayed



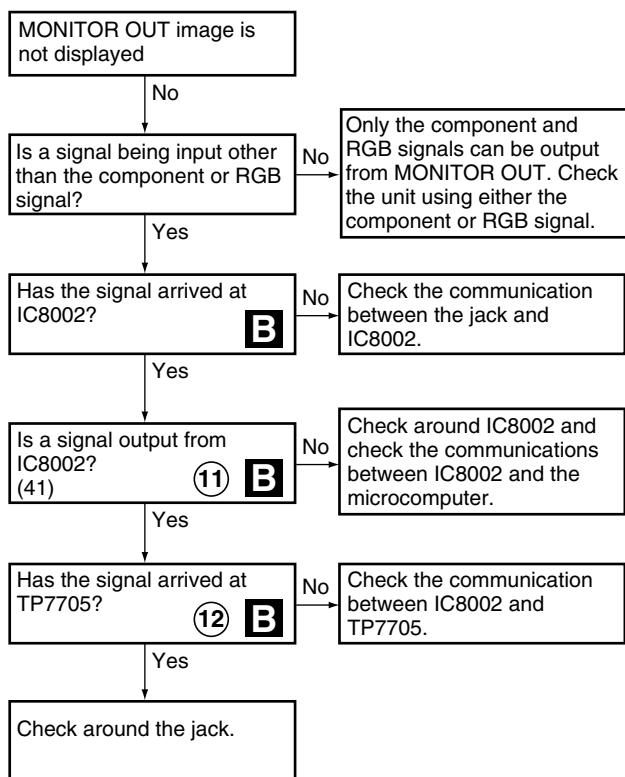
#### Note:

- Diagnosis points

**A** MR MAIN BOARD ASSY  
**B** AV BOARD ASSY

- For check the communication with the microcomputer, refer to the section 6.7 SERVICE FACTORY MODE.
- The encircled numbers denote measuring point in the Waveforms for Troubleshooting.

● MONITOR OUT image is not displayed



A

B

C

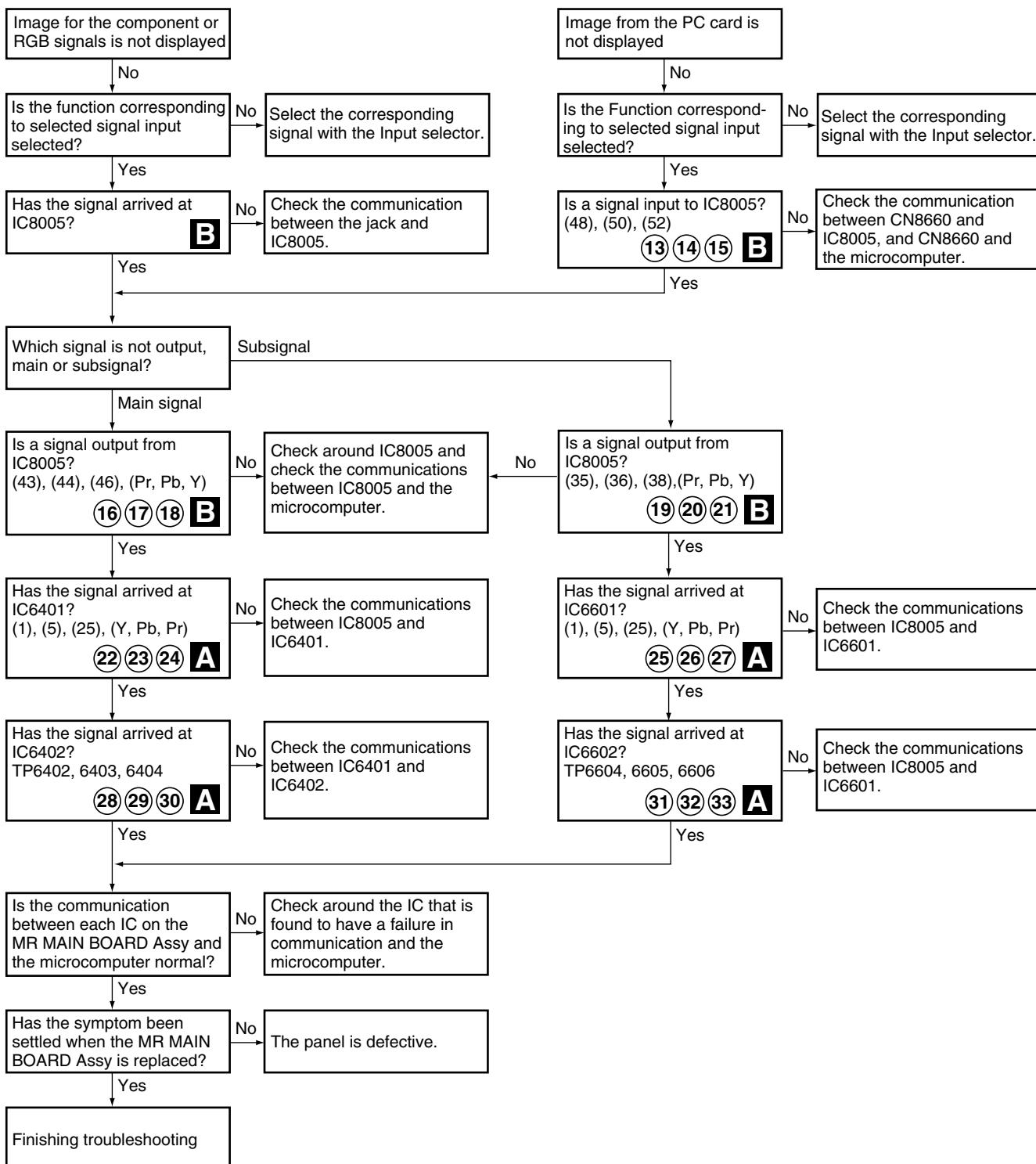
D

E

F

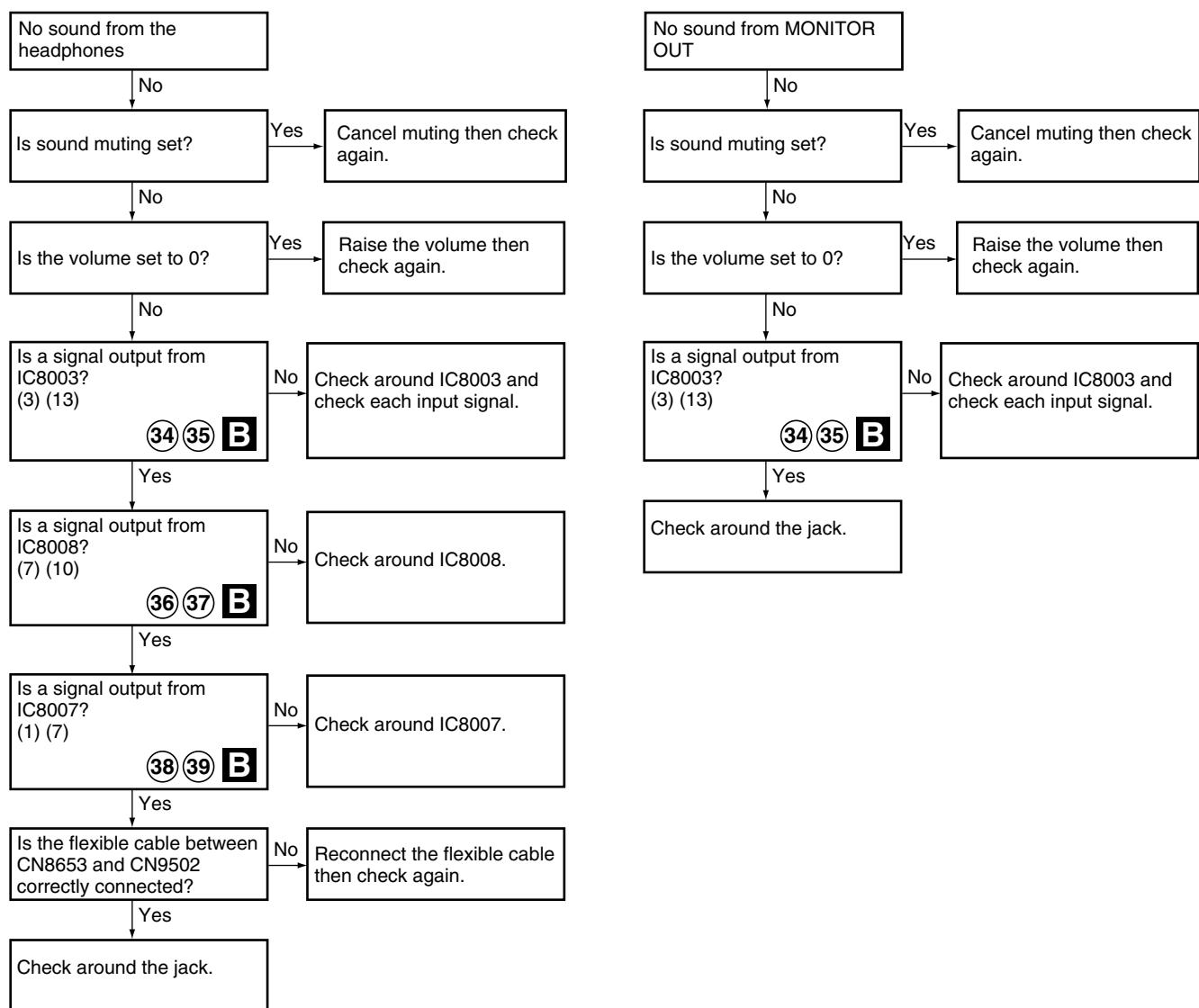
● Image for the component or RGB signals is not displayed

A

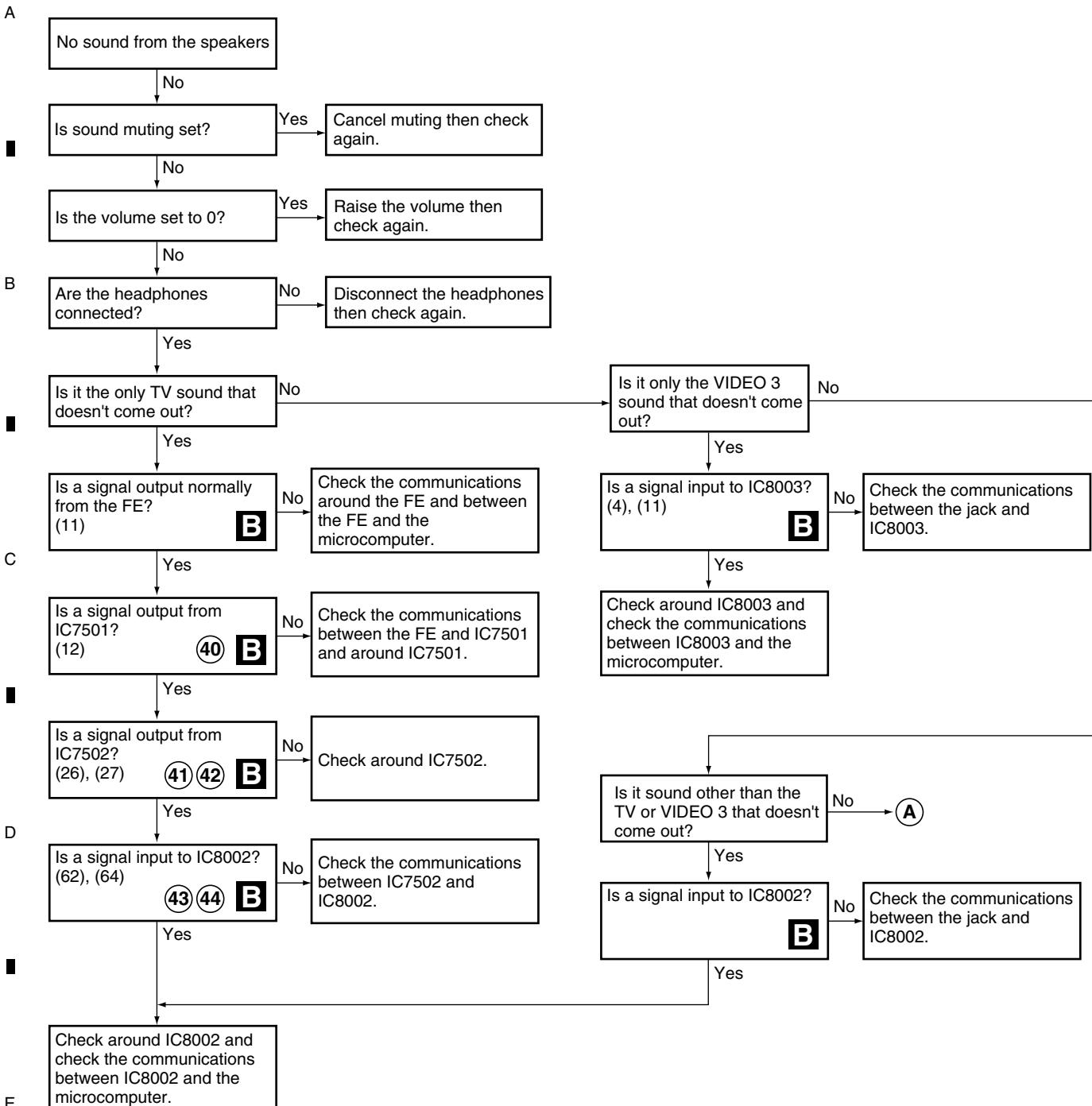


F

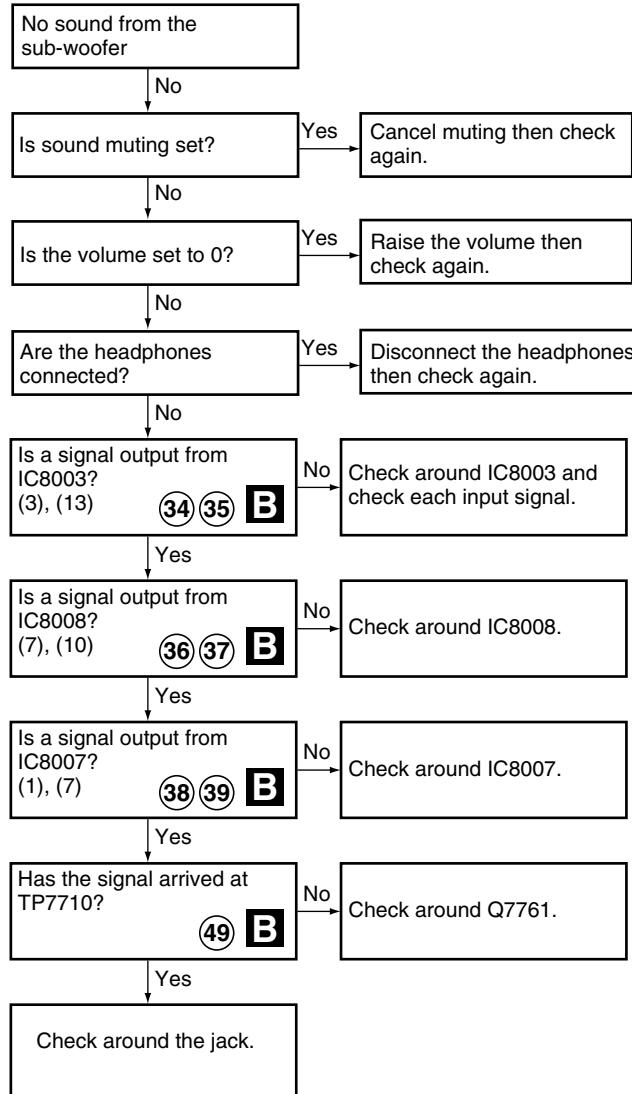
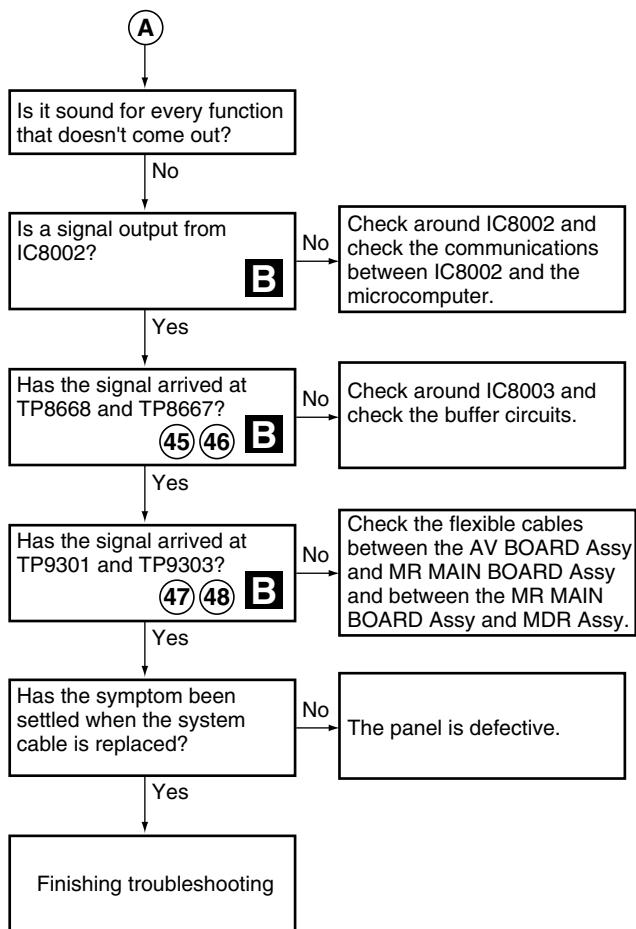
## ● No sound from the headphones



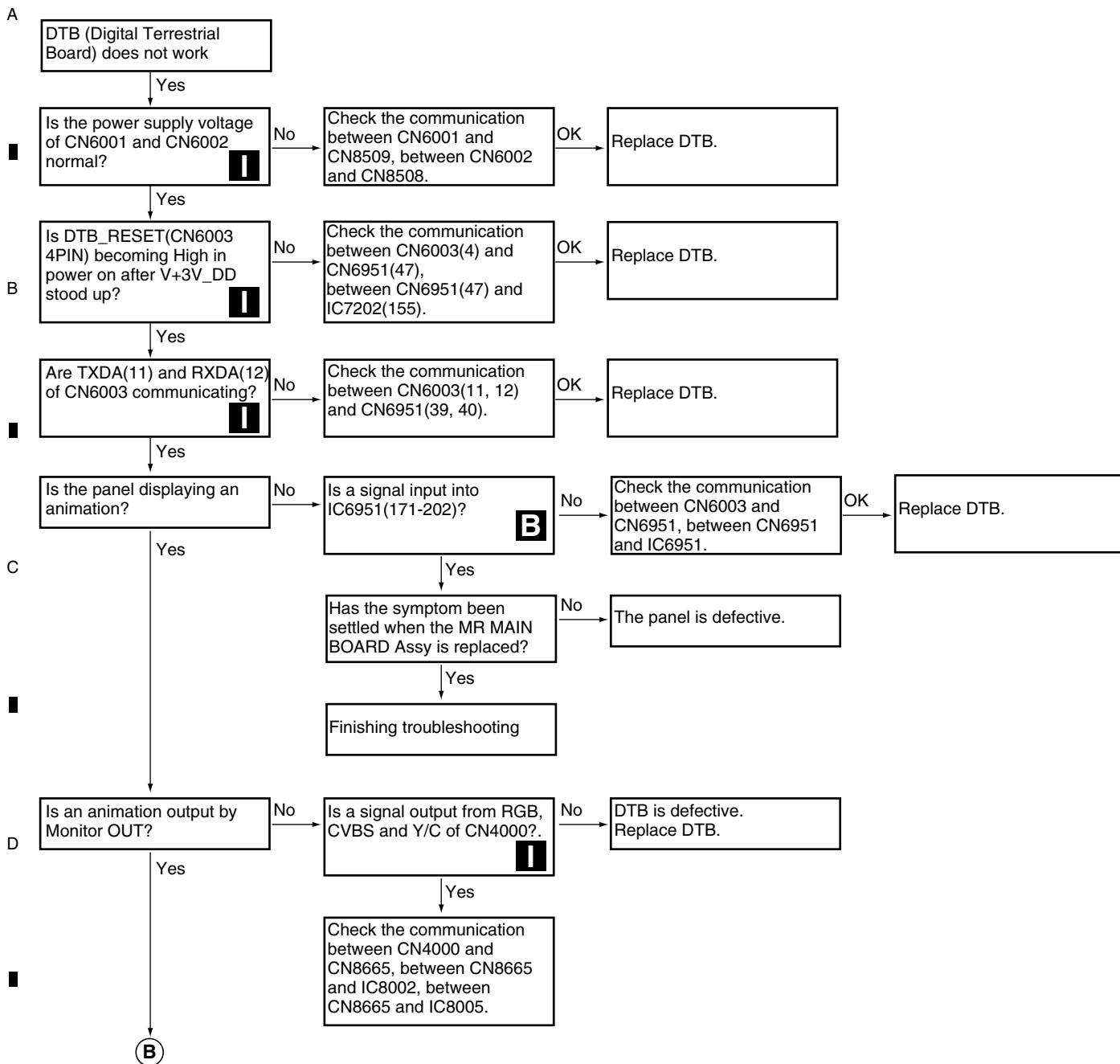
## ● No sound from the speakers (1/2)



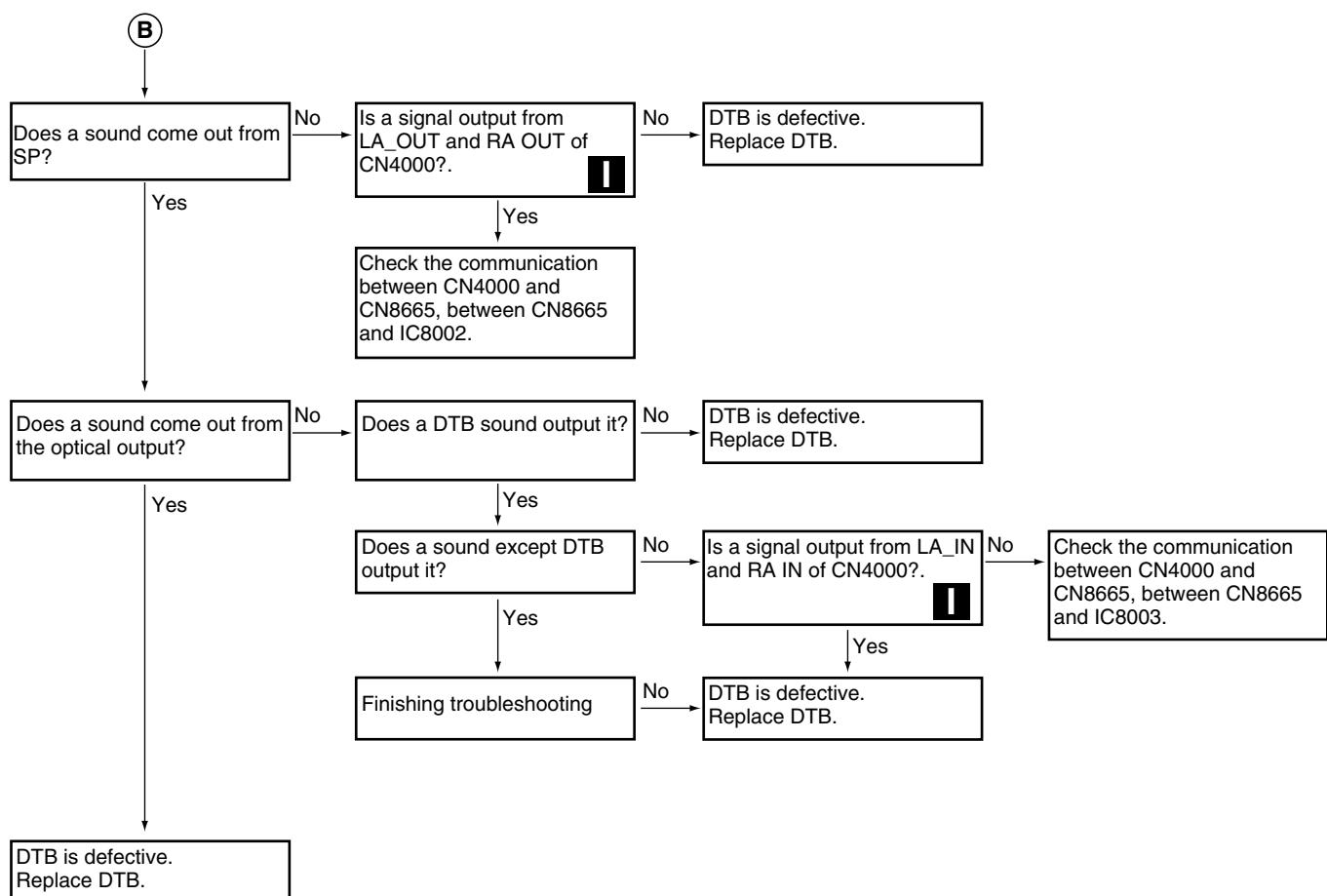
● No sound from the speakers (2/2)



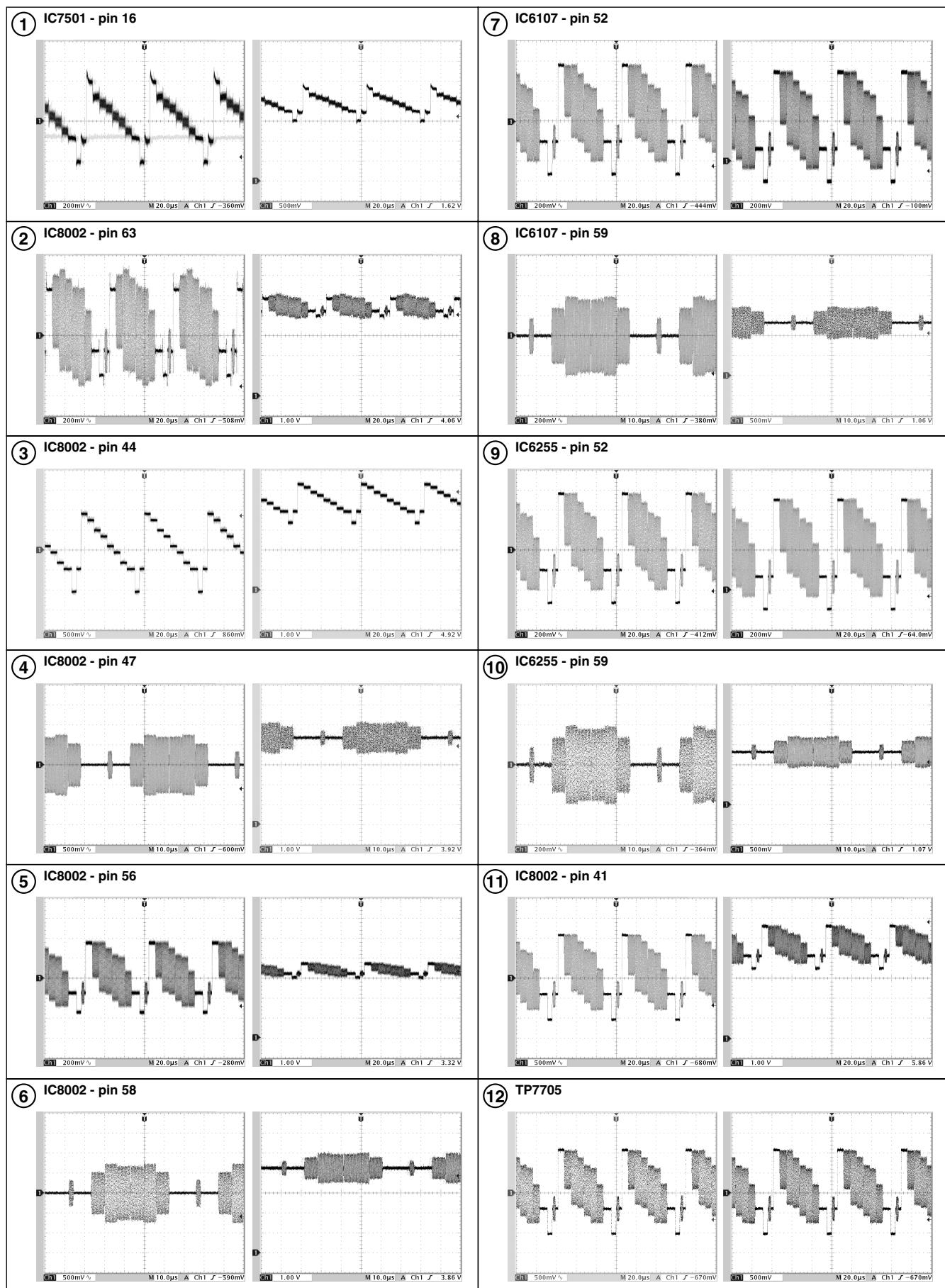
## ● DTB (Digital Terrestrial Board)(1/2)



## ● DTB (Digital Terrestrial Board)(2/2)

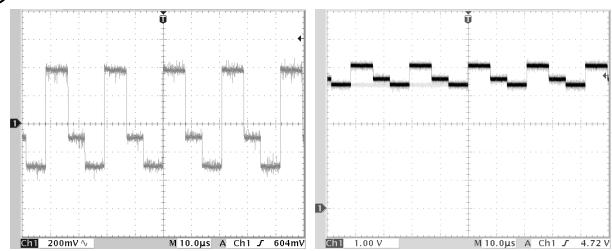


A

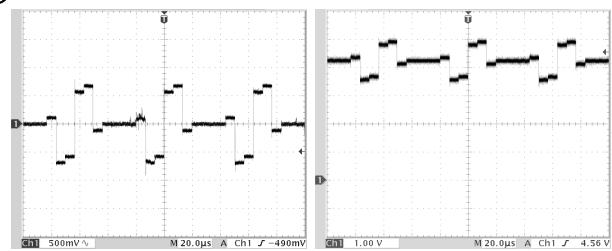


A

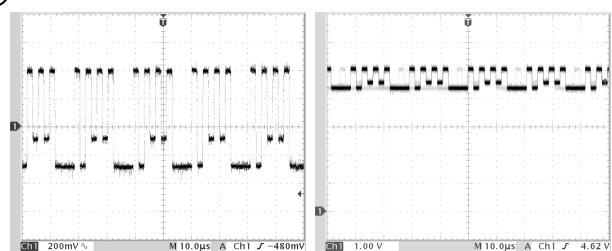
(13) IC8005 - pin 48



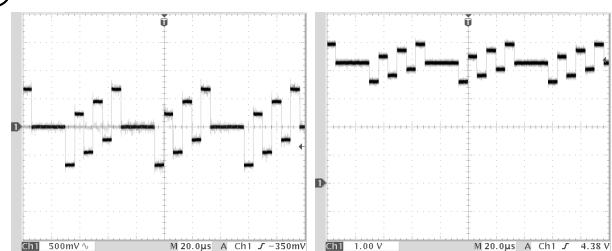
(19) IC8005 - pin 35



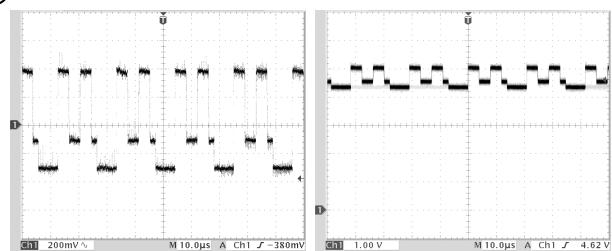
(14) IC8005 - pin 50



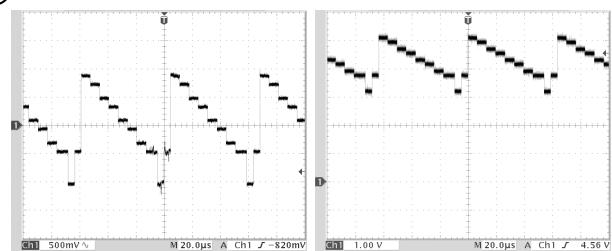
(20) IC8005 - pin 36



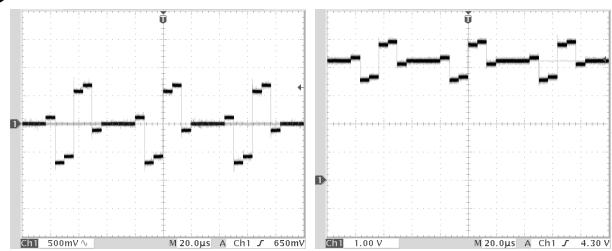
(15) IC8005 - pin 52



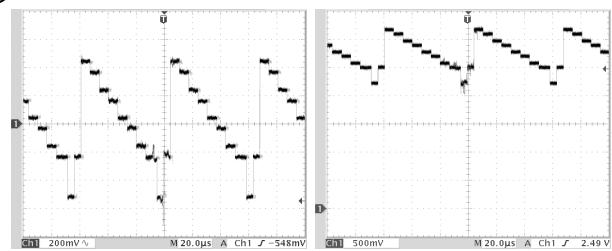
(21) IC8005 - pin 38



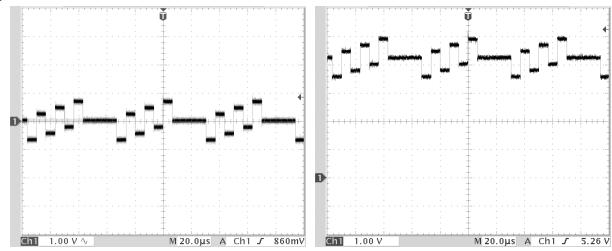
(16) IC8005 - pin 43



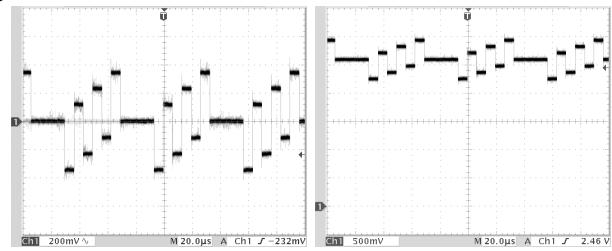
(22) IC6401 - pin 1



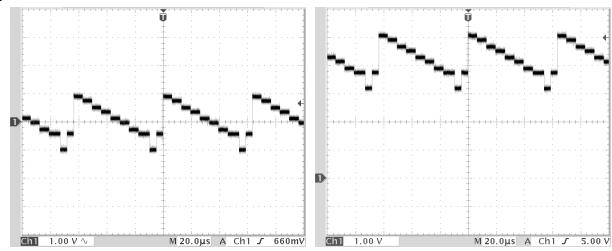
(17) IC8005 - pin 44



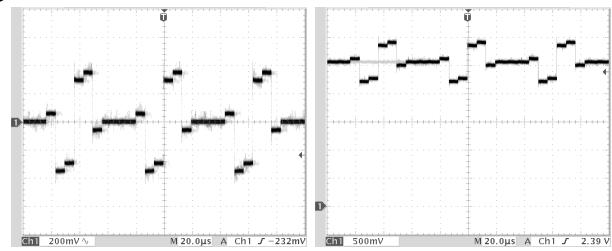
(23) IC6401 - pin 5



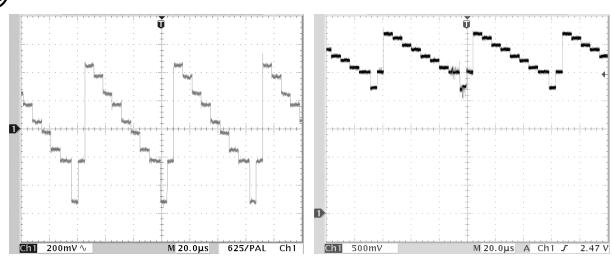
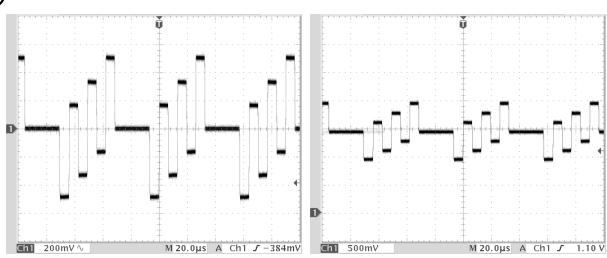
(18) IC8005 - pin 46



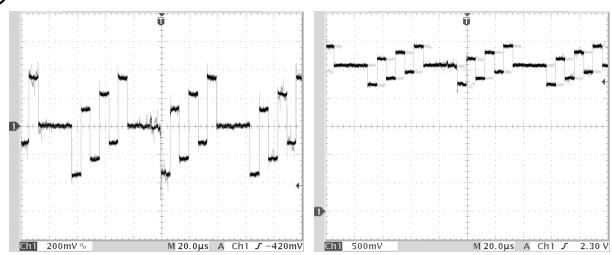
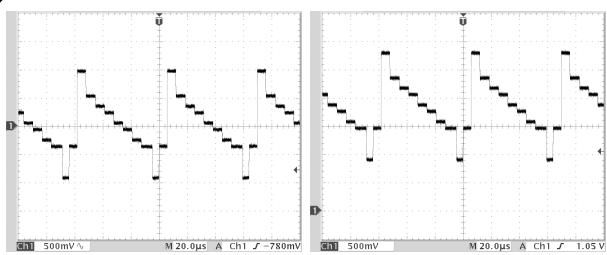
(24) IC6401 - pin 25



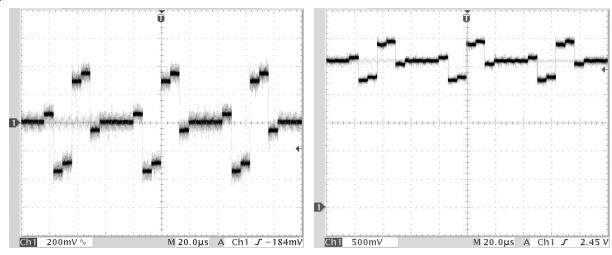
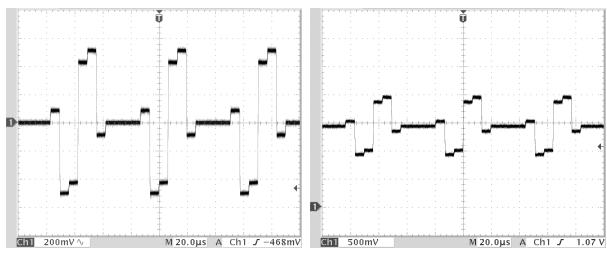
A

**(25) IC6601 - pin 1****(31) TP6604**

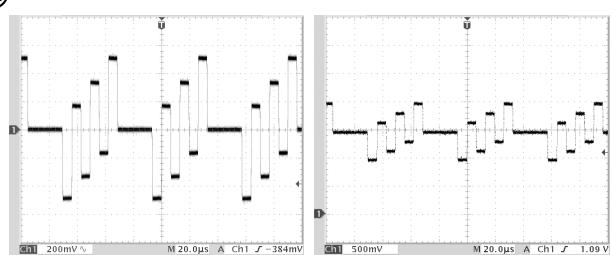
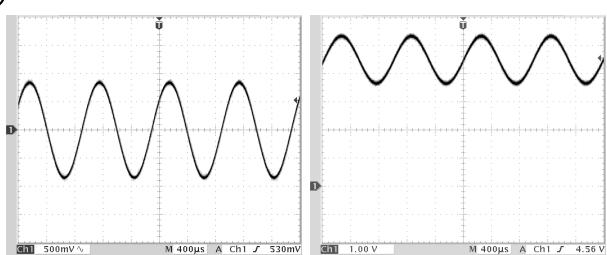
B

**(26) IC6601 - pin 5****(32) TP6605**

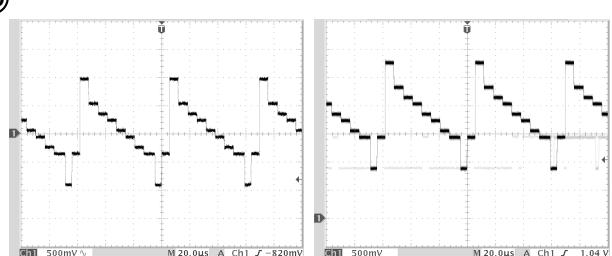
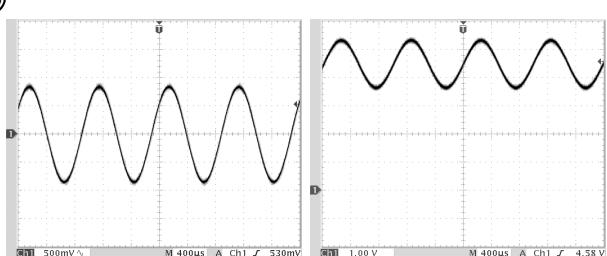
C

**(27) IC6601 - pin 25****(33) TP6606**

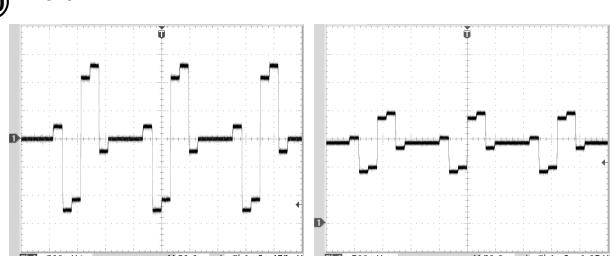
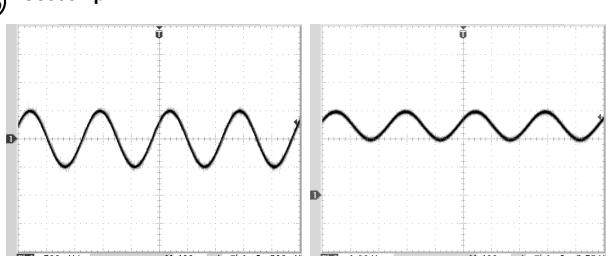
D

**(28) TP6402****(34) IC8003 - pin 3**

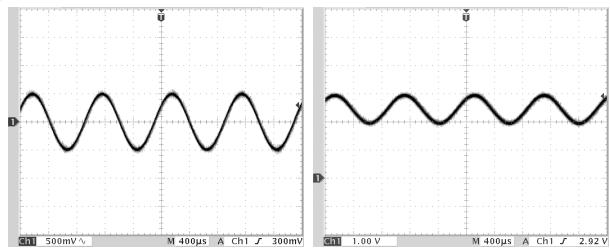
E

**(29) TP6403****(35) IC8003 - pin 13**

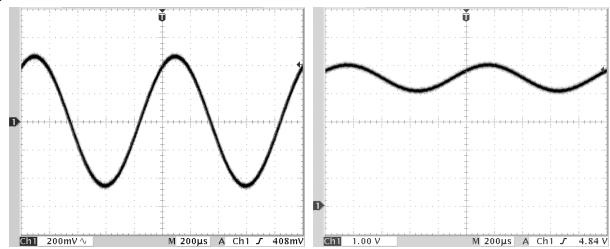
F

**(30) TP6404****(36) IC8006 - pin 7**

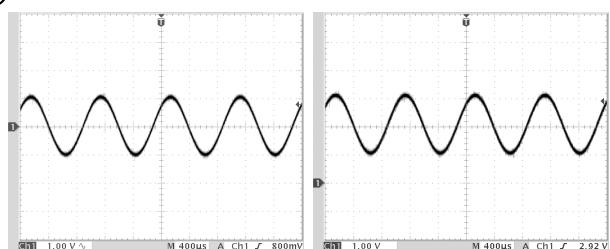
(37) IC8006 - pin 10



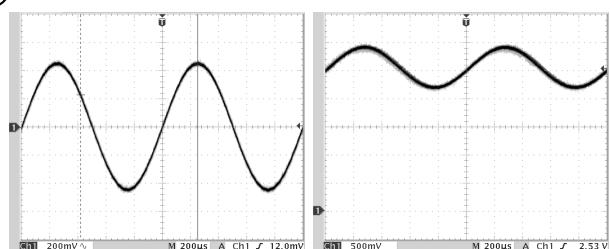
(43) IC8002 - pin 62



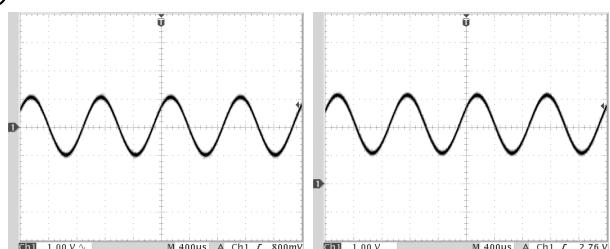
(38) IC8007 - pin 1



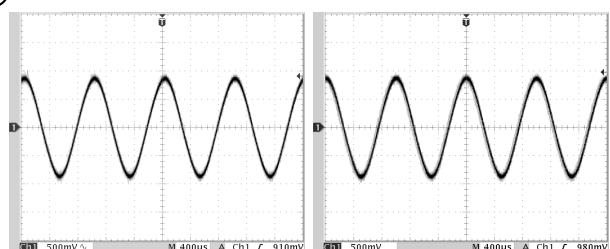
(44) IC8002 - pin 64



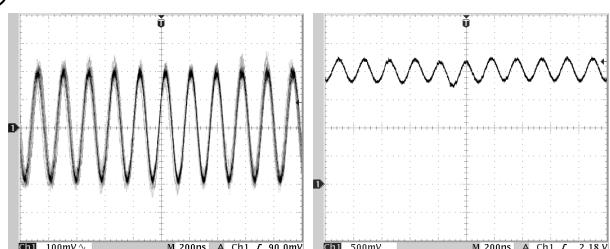
(39) IC8007 - pin 7



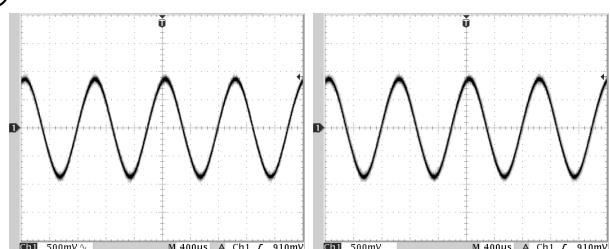
(45) TP8667



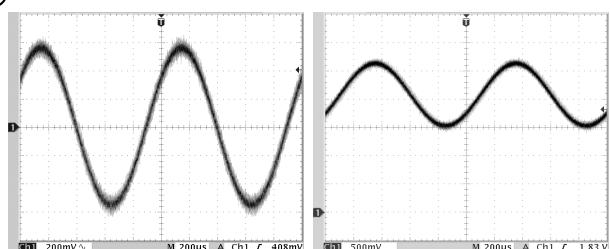
(40) IC7501 - pin 12



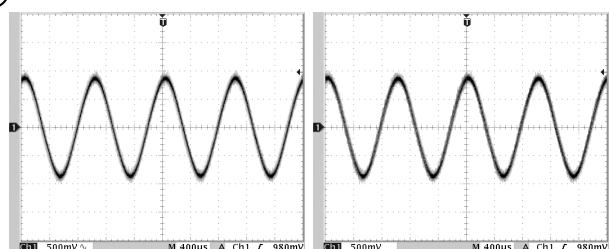
(46) TP8668



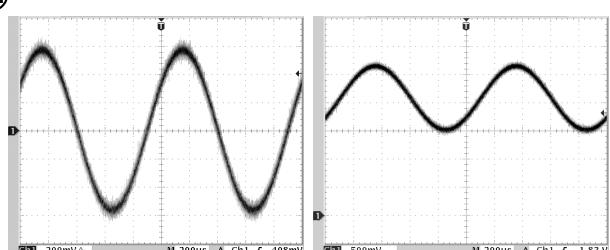
(41) IC7502 - pin 26



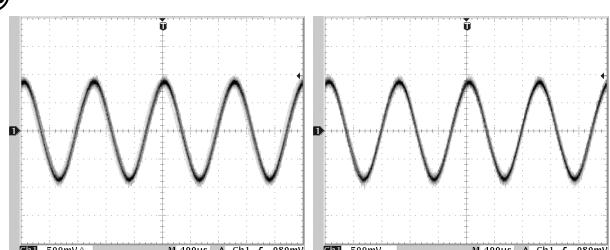
(47) TP9301



(42) IC7502 - pin 27



(48) TP9303



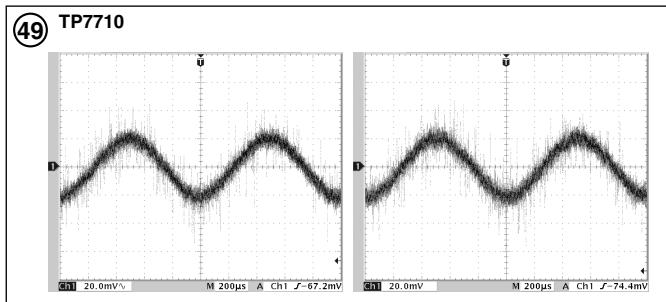
1

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176

PDP-R05E

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4

## 7.1.2 DISASSEMBLY

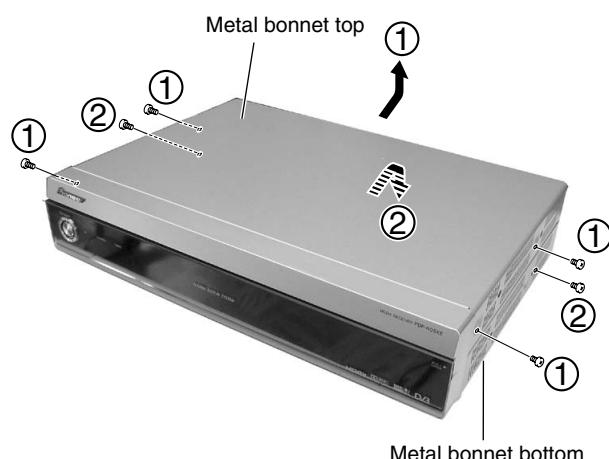
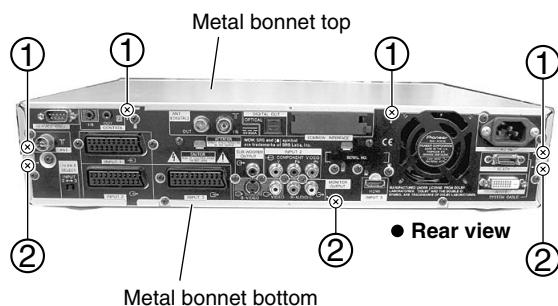
**Note:** Even if the unit shown in the photos and illustrations in this manual may differ from your product, the procedures described here are common.

### 1 Metal bonnet top and metal bonnet bottom

- ① Remove the metal bonnet top by removing the eight screws.
- ② Remove the metal bonnet bottom by removing the five screws.

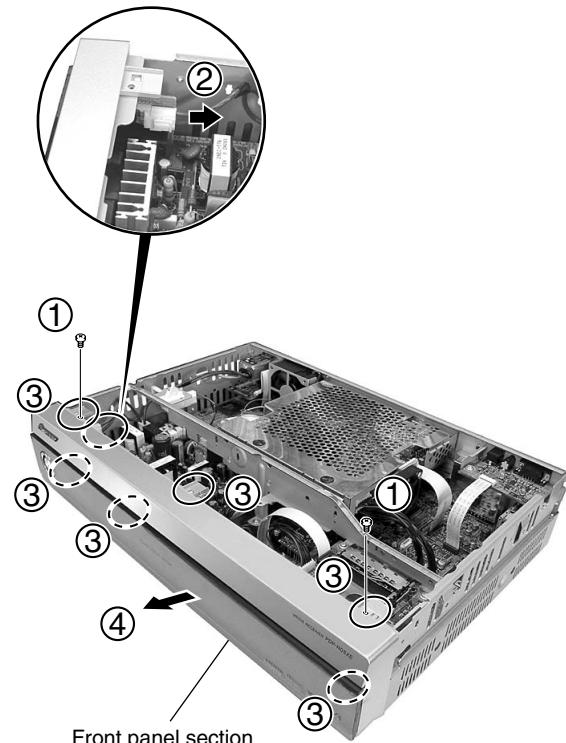
**Caution :**

Please remove it after pulling it in a rear direction because bonnet top and metal bonnet bottom are hard to reduce.



### 2 Front panel section

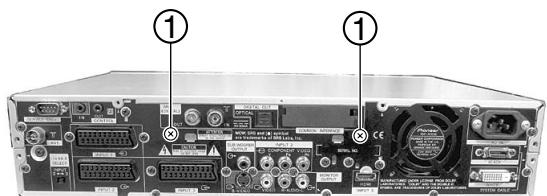
- ① Remove the two screws.
- ② Disconnect the one connector.
- ③ Unhook the six hooks.
- ④ Remove the front panel section.



### 3 TUNER BOARD Assy

A

- ① Remove the two screws.

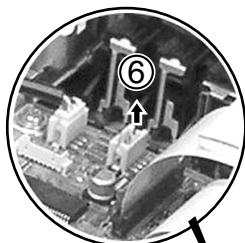


● Rear view

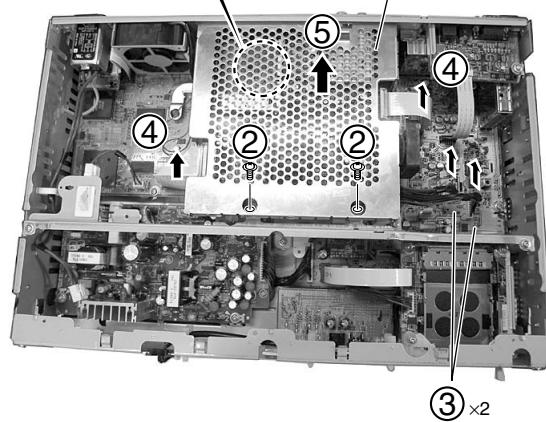


B

- ② Remove the two screws.
- ③ Disconnect the two connectors.
- ④ Disconnect the two flexible cables.
- ⑤ Remove the TUNER BOARD Assy.
- ⑥ Disconnect the one connector.

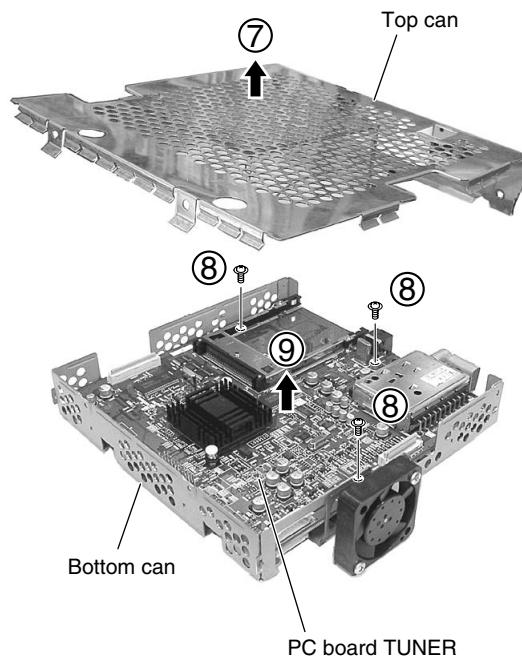


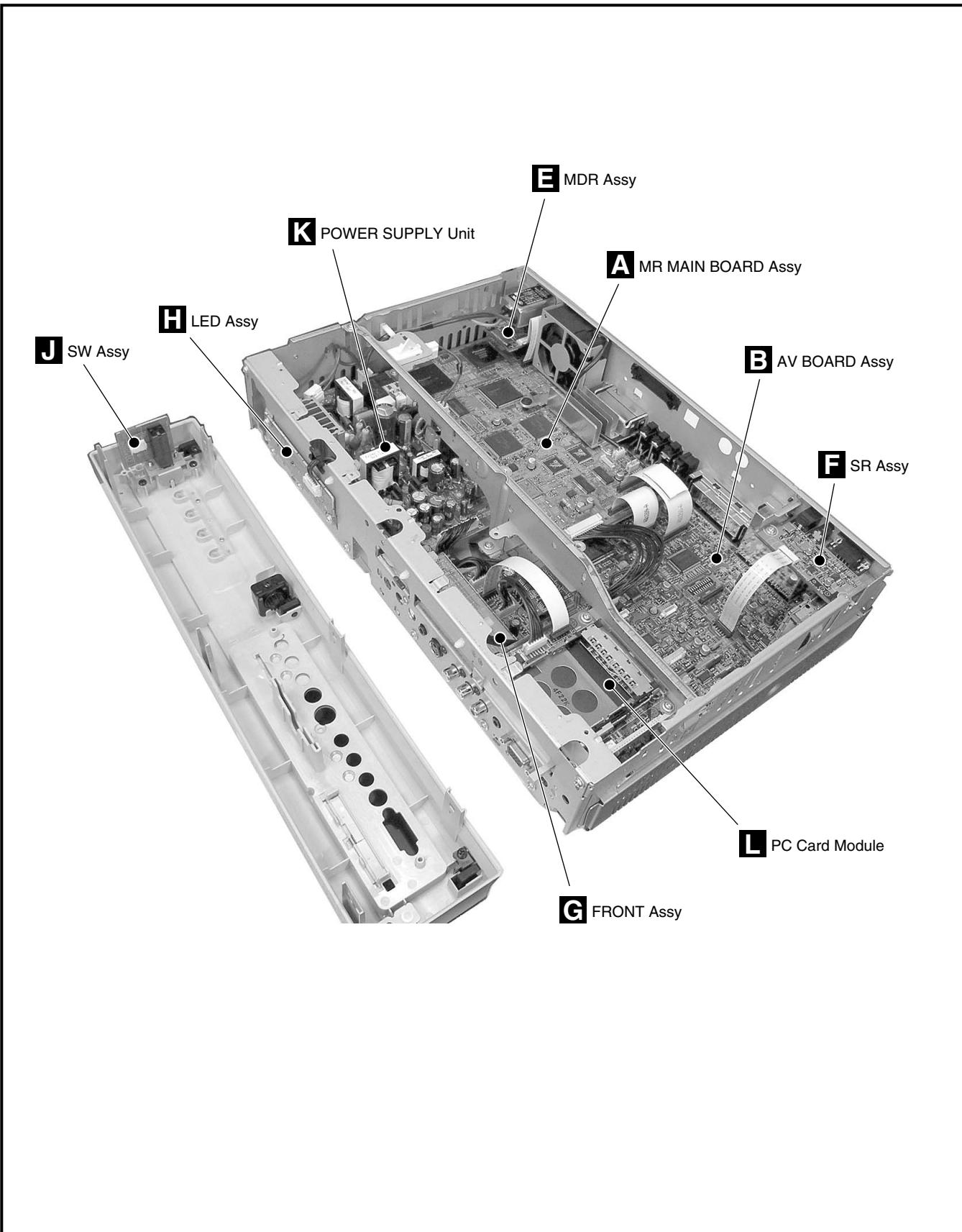
TUNER BOARD Assy



C

- ⑦ Remove the top can.
- ⑧ Remove the three screws.
- ⑨ Remove the PC board TUNER.



**PCB Location**

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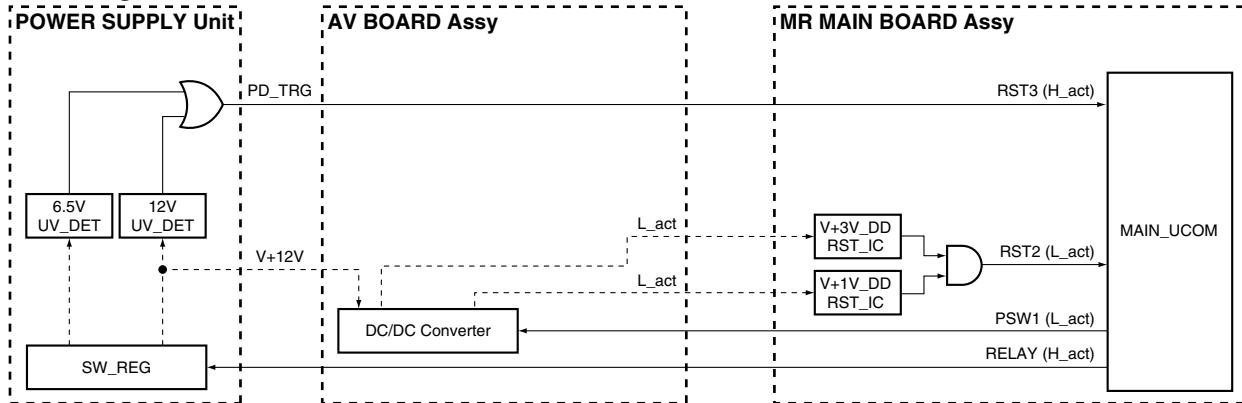
## 7.2 EXPLANATION

### 7.2.1 PROCESSING IN ABNORMALITY

A

#### Power supply and DC-DC converter

- Circuit diagram



B

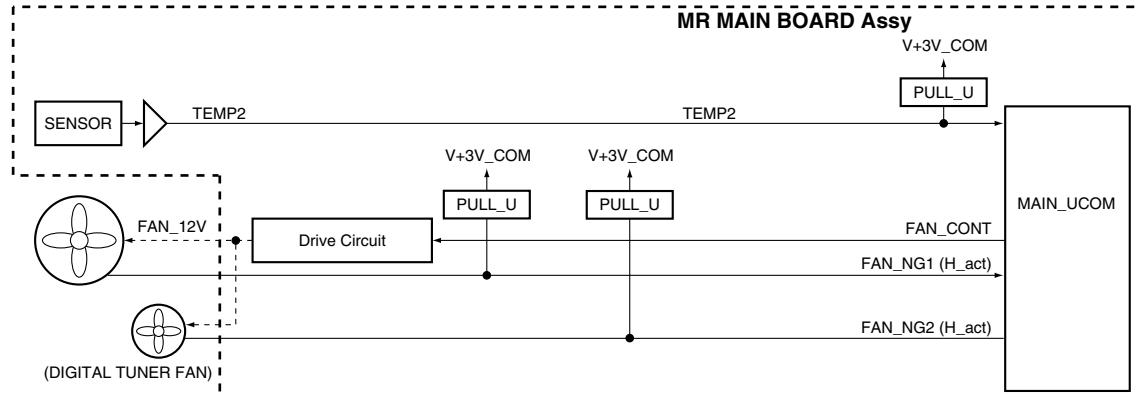
- Specifications for port monitoring

Port Name	SD/PD Indication	Assigned Pin	Active
PD_MAIN (PD_TRG)	MR_PWR	41	Power-down with H
RST2	ASIC power supply	98	Shutdown with L

C

#### Fan and temperature sensor

- Circuit diagram



D

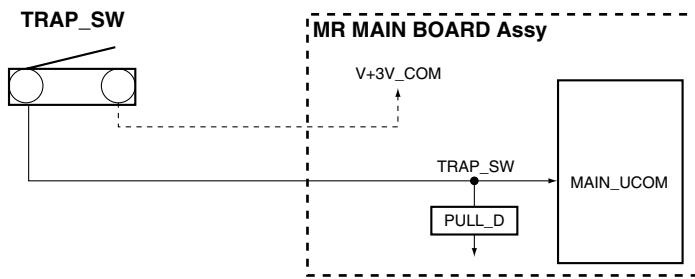
- Specifications for port monitoring

Port Name	SD/PD Indication	Assigned Pin	Active
FAN_NG 1	FAN	31	Shutdown with H
FAN_NG 2	FAN	32	Shutdown with H
TEMP2	Abnormally high temperature in the MR	50	Shutdown when the value exceeds the predetermined value

E

## TRAP\_SW

### ● Circuit diagram



### ● Specifications for port monitoring

Port Name	SD/PD Indication	Assigned Pin	Active
TRAP_SW	Modification tried	30	OFF with L

A

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F

## ■ LED-lighting patterns

	Status of the Unit	LED-lighting Pattern
Standby, power management	Lit in red	G R
Power on	Lit in green	G R
PDP's power not on	Flashing in red (at 1-sec intervals)	G R 1sec
System cable disconnected *	Flashing alternately in red and green (at 1-sec intervals)	G R
Waiting for start of rewriting by the microcomputer		G 100msec R 100msec
Waiting for finish of rewriting by the microcomputer		G 50nsec R 50nsec
Shutdown (circuit protection)	Flashing in green n times (initially at 0.5-sec intervals then 2.5-sec intervals)	G 0.5sec R 2.5sec
Power-down (circuit protection)	Flashing in red for n times (initially at 0.5-sec intervals then 2.5-sec intervals)	G 0.5sec R 2.5sec
TRAP switch operation		G R

\* In this case, the red and green areas on the screen of the panel flash alternately.

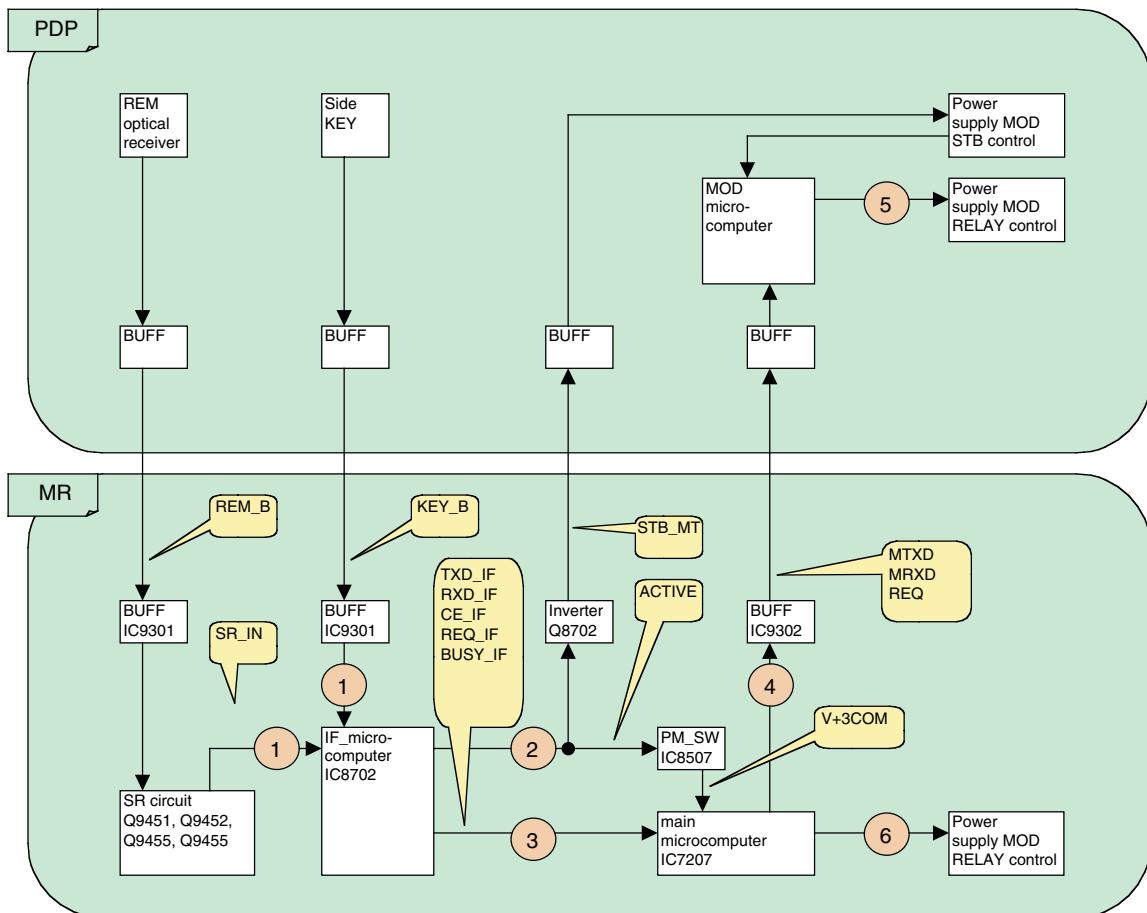
## Defective points assumed from the number of times of LED flashing

No. of times of LED flashing LEDs on the panel				Category	Site detected as defective	Possible defective points (representative examples)	OSD when detected (warning message)
RED	GRN	RED	GRN	*1			
5	Green 1	Red			Panel drive IC	*2	None
	Green 2	Red			Module section IIC	*2	None
	Green 3	Red			Power decrease of DIGITAL-DC-DC	*2	None
	Green 4	Red			Panel having abnormally high temperature	*2	The power is shut down, because the internal temperature has risen. Check the temperature surrounding the PDP. (SD04)
	Green 5	Red			Short-circuiting of the speakers	*2	The power is shut down, because the protection circuit inside the unit is activated. Check if the speaker cables are short-circuited. (SD05)
	Red				Disconnection of the system cable. Defective module microcomputer or its peripheral circuits of the panel (Refer to the service manual of the PDP-434PU or PDP-504PU.)		
6	Green 6				Module microcomputer		Defective main microcomputer (IC7207) in communication (TXD_MD, RXD_MD, REQ_MD) between the panel's module microcomputer and IC7207 (main microcomputer)
	Red				3-wire serial connection of the main section		Defective IC7004 or its peripheral circuits. Failure in communication (TXD_IC, XD_IC2, CLK_IC2, IC2_CE, IC2_EMG) between IC7004 and IC7207 (main microcomputer)
	Green 7				IIC of the main section		Defective IC7101 or its peripheral circuits. Failure in communication (TXD_IC3, RXD_IC3, CLK_IC3, IC3_CE, IC3_REQ, IC3_BUSY) between IC7101 and IC7207 (main microcomputer)
	Red				SD		Defective IC6107 (CD_MAIN) or its peripheral circuits. Defective IC8255 (CD_SUB) or its peripheral circuits. Defective IC6402 (AD_MAIN) or its peripheral circuits. Defective IC8602 (AD_SUB) or its peripheral circuits. Defective IC6881 (HDMI_2) or its peripheral circuits. Defective IC6951 (BUS_SW) or its peripheral circuits. Defective IC7401 (TX) or its peripheral circuits. Defective U7501 (TU) or its peripheral circuits. Defective U7502 (TU) or its peripheral circuits. Defective IC8005 (RGB_SW) or its peripheral circuits. Defective IC7205 (E2P) or its peripheral circuits. Failure in communication (SCL_AV, SDA_AV, SCL_MAIN, SDA_MAIN, SCL_HDMI, SDA_HDMI, SCL_EP, SDA_EP) between one of the above devices and IC7207 (main microcomputer)
	Red				Fan		Defective IC7207 (main microcomputer). Failure in communication (TXD_IF, RXD_IF, CLK_IF, IF_CE, IF_BUSY) between IC7207 (main microcomputer) and IC8702
	Red				Main microcomputer		Failure in the fan motor, or the fan stopped because of dust attached to the fan
7	Green 9				MR or unit having abnormally high temperature		The Media Receiver or the unit being used at high temperature
	Green 10				Digital tuner (U.S. model)		Defective DTV tuner
	Green 11				ASIC power supply (DC-DC)		Failure in communication (TXD_DT, RXD_DT) between the digital tuner and IC8202 (main microcomputer)
	Red				IF-E2P		Defective U8502 (DD CON) or short-circuiting elsewhere
	Red				Red		Defective IC8705 (IF_E2P) or its peripheral circuits
	Red				Red 1	MR_PWR	Defective Power Supply Assy of the Media Receiver, or power short-circuiting in another Assy
	Red 2	Red			POWER	*2	None
	Red 3	Red			SCAN	*2	None
	Red 4	Red			SCN-5V	*2	None
	Red 5	Red			Y-DRIVE	*2	None
	Red 6	Red			Y-DCDC	*2	None
	Red 7	Red			Y-SUS	*2	None
	Red 8	Red			ADRS	*2	None
8	Red 9	Red			X-DRIVE	*2	None
	Red 10	Red			X-DCDC	*2	None
	Red 11	Red			X-SUS	*2	None
	Red 12	Red			D-DCDC	*2	*2: Refer to the service manual of the PDP-435PE or PDP-505PE.
	Red 13	Red			IC4	*2	None
							A

## 7.2.2 SEQUENCE

A

### R05 series Power-on sequence

**REM\_B**

Comment in the balloon is the reference signal name.

Please confirm the wiring number of PDP side with the service manual of PDP side.

- ① : Remote controller signal (or, KEY signal) is input into IF microcomputer.
- ② : IF microcomputer supplies the power supply to Main microcomputer and MOD microcomputer.
- ③ : IF microcomputer communicates the operation information of Remote controller (or KEY) to Main microcomputer.
- ④ : Main microcomputer sends in the activation order to MOD microcomputer.
- ⑤ : MOD microcomputer controls the relay of PDP power supply MOD, and activate the power supply of PDP side.
- ⑥ : Main microcomputer controls the relay of MR power supply MOD, and activate the power supply of MR side.

E

F

## 7.3 PARTS

### 7.3.1 IC

- The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

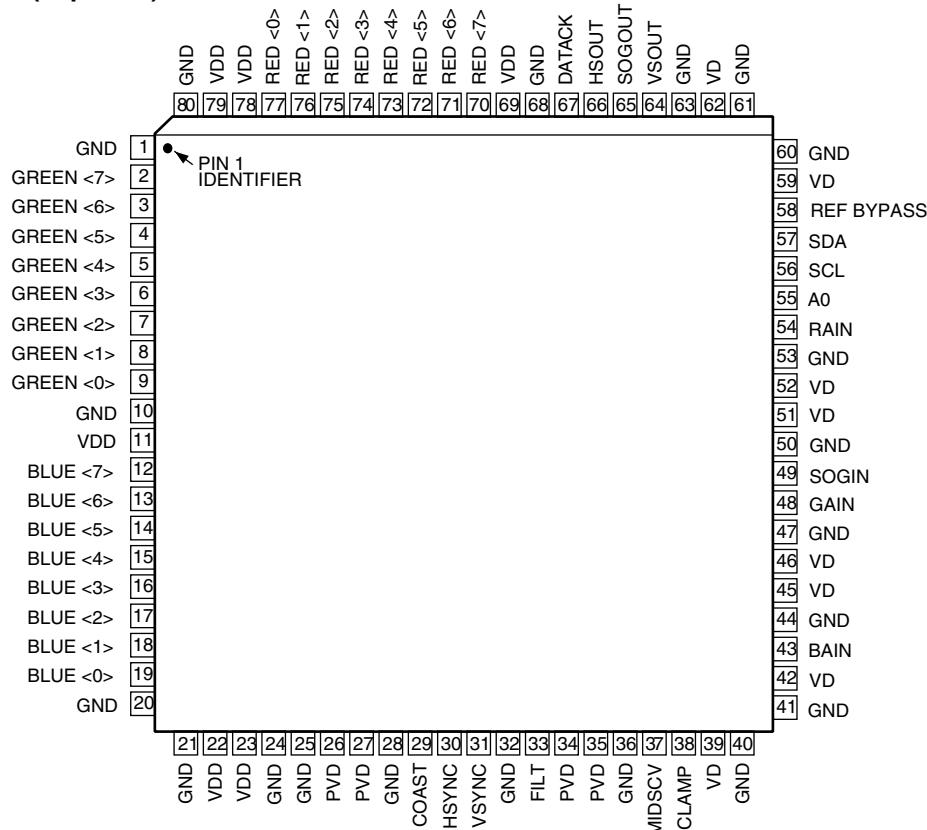
- List of IC

AD80058-K, SM5301BS, BA7078AF, SII9993CTG100, HY57V643220CT-7 (or K4S643232H-TC60-K), MBM29PL3200BE70PFV, SII170BCLG64, CXA2069Q, MSP3417G, TDA9818TS, SDA6000

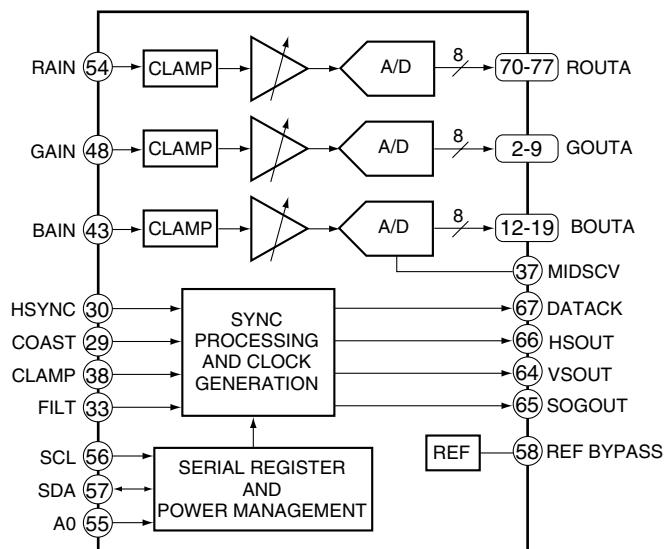
## ■ AD80058-K (MR MAIN BOARD ASSY : IC6402, IC6602)

- 110 MSPS Analog Interface

### ● Pin Arrangement (Top view)



- **Block Diagram**



● Pin Function

A      B      C      D      E      F

No.	Pin Name	I/O	Pin Function
1	GND	-	Ground
2	GREEN 7	O	Converter Green output (MSB)
3	GREEN 6	O	Converter Green output
4	GREEN 5	O	Converter Green output
5	GREEN 4	O	Converter Green output
6	GREEN 3	O	Converter Green output
7	GREEN 2	O	Converter Green output
8	GREEN 1	O	Converter Green output
9	GREEN 0	O	Converter Green output
10	GND	-	Ground
11	VDD	-	Power supply (3.3V)
12	BLUE 7	O	Converter Blue output (MSB)
13	BLUE 6	O	Converter Blue output
14	BLUE 5	O	Converter Blue output
15	BLUE 4	O	Converter Blue output
16	BLUE 3	O	Converter Blue output
17	BLUE 2	O	Converter Blue output
18	BLUE 1	O	Converter Blue output
19	BLUE 0	O	Converter Blue output
20	GND	-	Ground
21	GND	-	Ground
22	VDD	-	Power supply (3.3V)
23	VDD	-	Power supply (3.3V)
24	GND	-	Ground
25	GND	-	Ground
26	PVD	-	PLL power supply (3.3V)
27	PVD	-	PLL power supply (3.3V)
28	GND	-	Ground
29	COAST	I	PLL COAST signal input
30	HSYNC	I	Horizontal sync. input
31	VSYNC	I	Vertical sync. input
32	GND	-	Ground
33	FILT	-	External filter connection pin for built-in PLL
34	PVD	-	PLL power supply (3.3V)
35	PVD	-	PLL power supply (3.3V)
36	GND	-	Ground
37	MIDSCV	-	Internal middle scale voltage bias
38	CLAMP	I	Clamp input (External clamp signal)
39	VD	-	Analog power supply (3.3V)
40	GND	-	Ground
41	GND	-	Ground
42	VD	-	Analog power supply (3.3V)
43	BAIN	I	Analog input for converter B
44	GND	-	Ground
45	VD	-	Analog power supply (3.3V)

No.	Pin Name	I/O	Pin Function
46	VD	-	Analog power supply (3.3V)
47	GND	-	Ground
48	GAIN	I	Analog input for converter G
49	SOGIN	I	Input for Sync-on Green
50	GND	-	Ground
51	VD	-	Analog power supply (3.3V)
52	VD	-	Analog power supply (3.3V)
53	GND	-	Ground
54	RAIN	I	Analog input for converter R
55	A0	I	Address input 1 of serial port
56	SCL	I	Data clock (max. 100kHz) of serial port
57	SDA	I/O	Data input/output of serial port
58	REF BYPASS	-	Internal reference bypass
59	VD	-	Analog power supply (3.3V)
60	GND	-	Ground
61	GND	-	Ground
62	VD	-	Analog power supply (3.3V)
63	GND	-	Ground
64	VSOUT	O	VSYNC output (phasing with DATACLK)
65	SOGOUT	O	Sync-on-Green slicer output
66	HSOUT	O	HSYNC output (phasing with DATACLK)
67	DATACLK	O	Data input/output clock
68	GND	-	Ground
69	VDD	-	Power supply (3.3V)
70	RED 7	O	Converter Red output (MSB)
71	RED 6	O	Converter Red output
72	RED 5	O	Converter Red output
73	RED 4	O	Converter Red output
74	RED 3	O	Converter Red output
75	RED 2	O	Converter Red output
76	RED 1	O	Converter Red output
77	RED 0	O	Converter Red output
78	VDD	-	Power supply (3.3V)
79	VDD	-	Power supply (3.3V)
80	GND	-	Ground

A

B

C

D

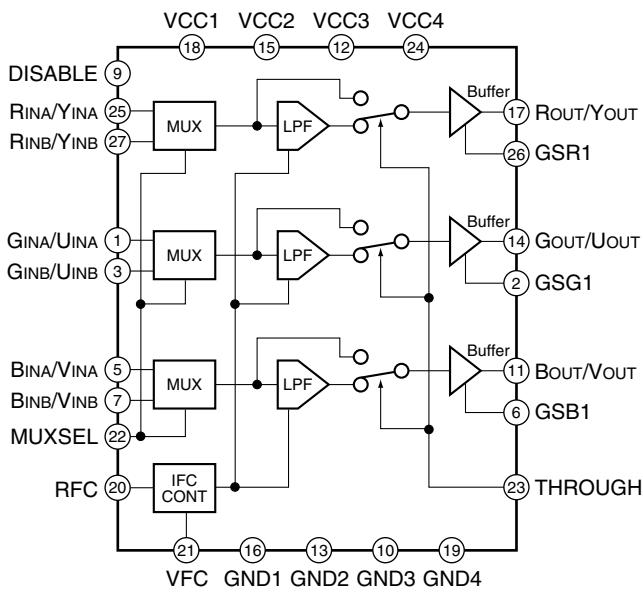
E

F

## ■ SM5301BS (MR MAIN BOARD ASSY : IC6401, IC6601)

- A • Video Filter

• Block Diagram



• Pin Arrangement (Top view)

GINA/UINA	1	28	NC
GSG1	2	27	RINB/YINB
GINB/UINB	3	26	GSR1
NC	4	25	RINA/YINA
BINA/VINA	5	24	VCC4
GSB1	6	23	THROUGH
BINB/VINB	7	22	MUXSEL
(GND)			(GND)
NC	8	21	VFC
DISABLE	9	20	RFC
GND3	10	19	GND4
BOUT/VOUT	11	18	VCC1
VCC3	12	17	ROUT/YOUT
GND2	13	16	GND1
GOUT/UOUT	14	15	VCC2

### ● Pin Function

No.	Pin Name	I/O	Pin Function
1	GINA/UINA	I	Analog GINA or UINA signal input. Sync signal is input on SYNCIN pin.
2	GSG1	I	GOUT/UOUT output buffer gain set input
3	GINB/UINB	I	Analog GINB or UINB signal input. Sync signal is input on SYNCIN pin.
4	(NC)	-	No connection
5	BINA/VINA	I	Analog BINA or VINA signal input. Sync signal is input on SYNCIN pin.
6	GSB1	I	BOUT/VOUT output buffer gain set input
7	BINB/VINB	I	Analog BINB or VINB signal input. Sync signal is input on SYNCIN pin.
8	(NC)	-	No connection
9	DISABLE	I	Power save function. Built-in pull-down resistor. L : Enable H : Disable (Output pins: ROUT/YOUT, GOUT/UOUT, and BOUT/VOUT are high impedance.)
10	GND3	-	Analog ground
11	Bout/Vout	O	B/V signal output
12	VCC3	-	Analog 5V supply
13	GND2	-	Analog ground
14	GOUT/UOUT	O	G/U signal output
15	VCC2	-	Analog 5V supply
16	GND1	-	Analog ground
17	ROUT/YOUT	O	R/Y signal output
18	VCC1	-	Analog 5V supply
19	GND4	-	Analog ground
20	RFC	-	LPF (lowpass filter) cutoff frequency setting resistor connection
21	VFC	I	LPF (lowpass filter) cutoff frequency setting voltage input
22	MUXSEL	I	Input select signal. Built-in pull-down resistor. L : XINA pin select H : XINB pin select
23	THROUGH	I	Filter through Built-in pull-down resistor. L : Filter function H : Filter through (buffer only)
24	VCC4	-	Analog 5V supply
25	RINA/YINA	I	Analog RINA or YINA signal input. Sync signal is input on SYNCIN pin.
26	GSR1	I	ROUT/YOUT output buffer gain set input
27	RINB/YINB	I	Analog RINB or YINB signal input. Sync signal is input on SYNCIN pin.
28	(NC)	-	No connection

A

B

C

D

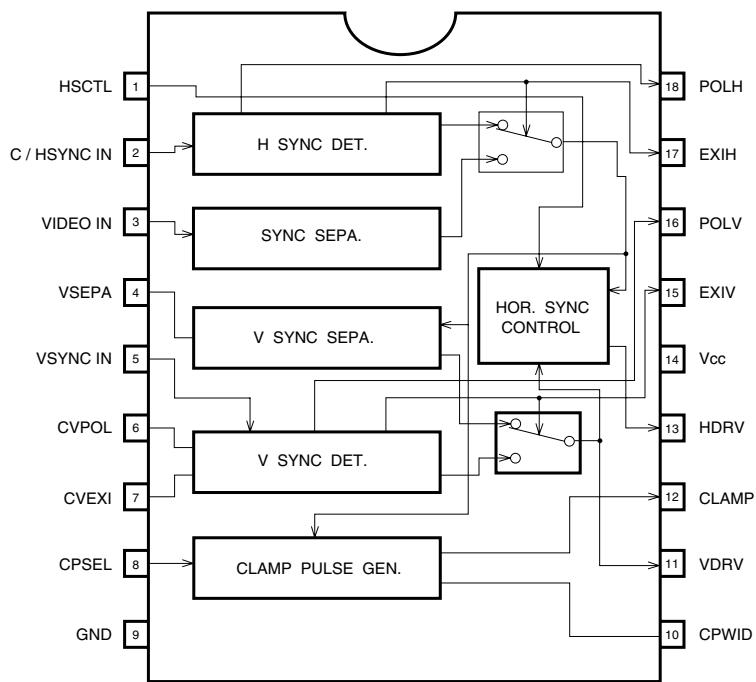
E

F

## ■ BA7078AF (MR MAIN BOARD ASSY : IC6404, IC6604)

- A • Multi Sync Separation IC

● Block Diagram



B

C

D

E

F

### ● Pin Function

No.	Pin Name	Pin Function
1	HSCTL	HDRV output Used to select whether to output the VDRV section of the HDRV output signal. High : VDRV section of HDRV is output Low : VDRV section of HDRV is not output
2	C/HSYNC IN	Composite sync / H SYNC input Input either the composite synchronization signal or the horizontal synchronization signal. Input is clamped, and is initiated by capacitor coupling.
3	VIDEO IN	SYNC ON VIDEO input Inputs the SYNC ON VIDEO signal(green). Input is sink chip clamped. Input is initiated by capacitor coupling.
4	VSEPA	f-V conversion Converts the horizontal synchronization signal frequency into a voltage. The voltage generated is proportional to the frequency of the horizontal synchronization signal. Attach a 0.56 $\mu$ F capacitor between the ground pins.
5	VSYNC IN	V SYNC input Inputs the vertical synchronization signal.
6	CVPOL	Vertical polarity integration Integrates the vertical synchronization signal polarity detection circuit. Attach a 1.5 $\mu$ F capacitor between this pin and the ground.
7	CVEXI	Vertical existence integration Integrates the vertical synchronization signal existence detection circuit. Attach a 1 $\mu$ F capacitor between this pin and the ground.
8	CPSEL	Setting the clamp position Used to set the clamp pulse generation position to either the front or back edge of HSYNC High : The front edge is the generation position Open : Composite / H SYNC IN : The front edge is the generation position VIDEO IN : The back edge is the generation position Low : The back edge is the generation position
9	GND	Ground
10	CPWID	Setting the clamp pulse width Sets the clamp pulse width according to the attached time constant. Attach a resistor between this pin and VCC and, a capacitor between this pin and GND. When R = 3.9k $\Omega$ and C = 100pF, pulse width is approximately 400 ns. Set the resistor to register an abnormality at 1k $\Omega$ .
11	VDRV	VDRV output Outputs the vertical synchronization signal. The output signal has positive polarity.
12	CLAMP	Clamp output Outputs the clamp pulse generated from the vertical synchronization signal. The output signal has a positive polarity.
13	HDRV	HDRV output Outputs the clamp pulse generated from the horizontal synchronization signal. The output signal has positive polarity.
14	Vcc	Power supply
15	EXIV	Vertical existence output Indicates whether the vertical synchronization signal exists.
16	POLV	Vertical polarity output Indicates the polarity of the vertical synchronization signal.
17	EXIH	Horizontal existence output Indicates whether the horizontal synchronization signal exists.
18	POLH	Horizontal polarity output Indicates the polarity of the horizontal synchronization signal.

A

B

C

D

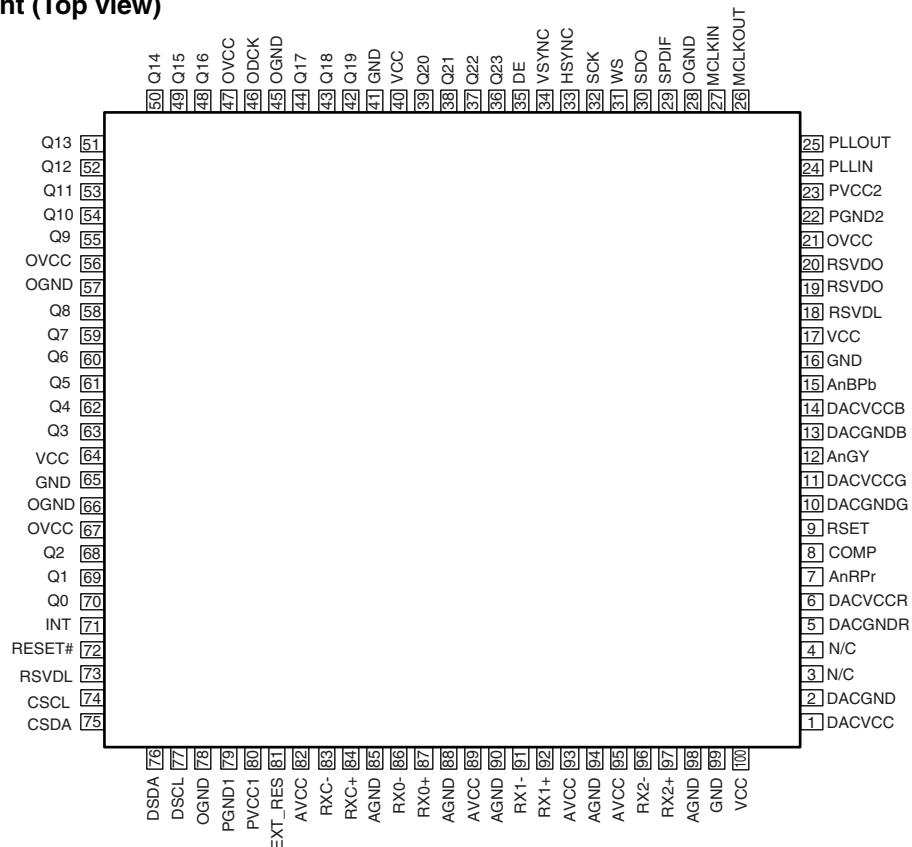
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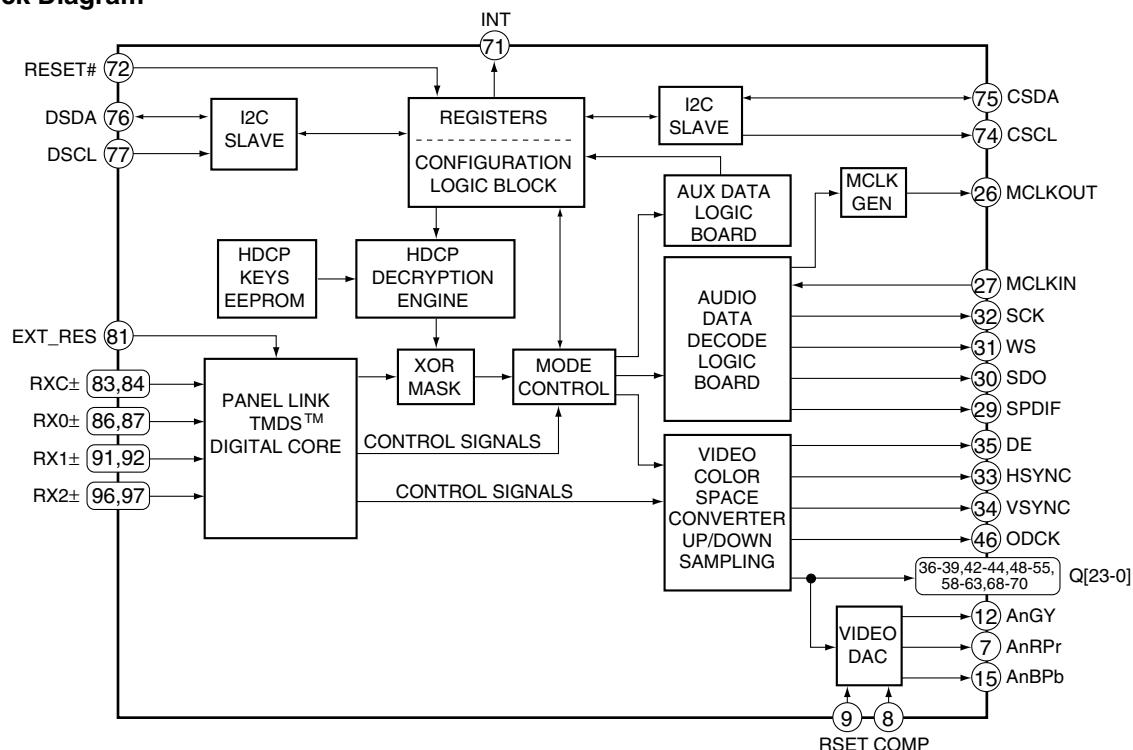
## ■ SII9993CTG100 (MR MAIN BOARD ASSY : IC6881, IC6801)

- A • HDCP Panel Link Receiver

• Pin Arrangement (Top view)



• Block Diagram



### ● Pin Function

No.	Pin Name	I/O	Pin Function	No.	Pin Name	I/O	Pin Function
1	DACVCC	-	DAC power supply (3.3V)	51	Q13	O	24-bit output pixel data bus
2	DACGND	-	DAC ground	52	Q12	O	24-bit output pixel data bus
3	N/C	-	No connection	53	Q11	O	24-bit output pixel data bus
4	N/C	-	No connection	54	Q10	O	24-bit output pixel data bus
5	DACGNDR	-	DAC Red ground	55	Q9	O	24-bit output pixel data bus
6	DACVCCR	-	DAC Red power supply (3.3V)	56	OVCC	-	Output bus power supply (3.3V)
7	AnRPr	O	Red, Pr output of analog video	57	OGND	-	Output bus ground
8	COMP	I	For reference amp. correction of DAC inside	58	Q8	O	24-bit output pixel data bus
9	RSET	I	Full scale adjustment resistor input	59	Q7	O	24-bit output pixel data bus
10	DACGNDR	-	DAC Green ground	60	Q6	O	24-bit output pixel data bus
11	DACVCCG	-	DAC Green power supply (3.3V)	61	Q5	O	24-bit output pixel data bus
12	AnGY	O	Green, Y output of analog video	62	Q4	O	24-bit output pixel data bus
13	DACGNDB	-	DAC Blue ground	63	Q3	O	24-bit output pixel data bus
14	DACVCCB	-	DAC Blue power supply (3.3V)	64	VCC	-	Digital power supply (3.3V)
15	AnBPb	O	Blue, Pb output of analog video	65	GND	-	Digital ground
16	GND	-	Digital ground	66	OGND	-	Output bus ground
17	VCC	-	Digital power supply (3.3V)	67	OVCC	-	Output bus power supply (3.3V)
18	RSVDL	I	Reserved Fixed to low.	68	Q2	O	24-bit output pixel data bus
19	RSVDD	O	Reserved No connection	69	Q1	O	24-bit output pixel data bus
20	RSVDD	O	Reserved No connection	70	Q0	O	24-bit output pixel data bus
21	OVCC	-	Output bus power supply (3.3V)	71	INT	O	Interrupt output
22	PGND2	-	Audio PLL ground	72	RESET#	I	Reset Activ low.
23	PVCC2	-	Audio PLL power supply (3.3V)	73	RSVDL	I	Reserved Fixed to low.
24	PLLIN	I/O	PLL filter input	74	CSCL	I	Configuration I2C clock
25	PLLOUT	I/O	PLL filter output	75	CSDA	I/O	Configuration I2C data
26	MCCLKOUT	O	Audio master clock output	76	DSDA	I/O	DDC I2C data
27	MCCLKIN	I	Reference audio master clock input	77	DSCL	I	DDC I2C clock
28	OGND	-	Output bus ground	78	OGND	-	Output bus ground
29	SPDIF	O	SPDIF audio output	79	PGND1	-	PLL ground
30	SDO	O	I2S serial data output	80	PVCC1	-	PLL power supply (3.3V)
31	WS	O	I2S word selecting output	81	EXT_RES	I	Input impedance adjustment
32	SCK	O	I2S serial clock output	82	AVCC	-	Analog power supply (3.3V)
33	HSYNC	O	Horizontal sync. control signal output	83	RXC-	I	TMDS data input
34	VSYNC	O	Vertical sync. control signal output	84	RXC+	I	TMDS data input
35	DE	O	Data enable	85	AGND	-	Analog ground
36	Q23	O	24-bit output pixel data bus	86	RX0-	I	TMDS data input
37	Q22	O	24-bit output pixel data bus	87	RX0+	I	TMDS data input
38	Q21	O	24-bit output pixel data bus	88	AGND	-	Analog ground
39	Q20	O	24-bit output pixel data bus	89	AVCC	-	Analog power supply (3.3V)
40	VCC	-	Digital power supply (3.3V)	90	AGND	-	Analog ground
41	GND	-	Digital ground	91	RX1-	I	TMDS data input
42	Q19	O	24-bit output pixel data bus	92	RX1+	I	TMDS data input
43	Q18	O	24-bit output pixel data bus	93	AVCC	-	Analog power supply (3.3V)
44	Q17	O	24-bit output pixel data bus	94	AGND	-	Analog ground
45	OGND	-	Output bus ground	95	AVCC	-	Analog power supply (3.3V)
46	ODCK	O	Data clock output	96	RX2-	I	TMDS data input
47	OVCC	-	Output bus power supply (3.3V)	97	RX2+	I	TMDS data input
48	Q16	O	24-bit output pixel data bus	98	AGND	-	Analog ground
49	Q15	O	24-bit output pixel data bus	99	GND	-	Digital ground
50	Q14	O	24-bit output pixel data bus	100	VCC	-	Digital power supply (3.3V)

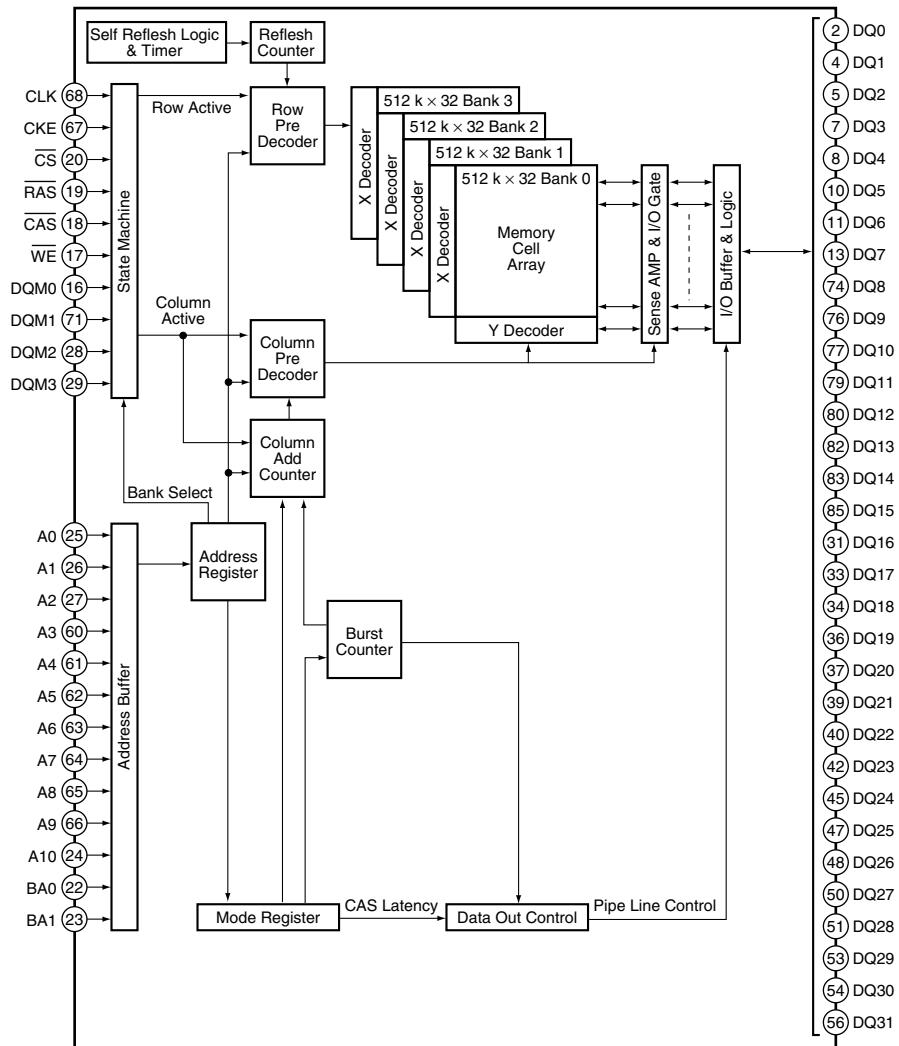
A  
B  
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D  
E  
F

## ■ HY57V643220CT-7 (MR MAIN BOARD ASSY : IC7001, IC7002)

A (or K4S643232H-TC60-K)

- Synchronous DRAM

● Block Diagram



### ● Pin Function

No.	Pin Name	I/O	Pin Function	No.	Pin Name	I/O	Pin Function
1	VDD	-	Power supply	44	VSS	-	Ground
2	DQ0	I/O	Data input/output	45	DQ24	I/O	Data input/output
3	VDDQ	-	Power supply for output buffer	46	VSSQ	-	Ground for output buffer
4	DQ1	I/O	Data input/output	47	DQ25	I/O	Data input/output
5	DQ2	I/O	Data input/output	48	DQ26	I/O	Data input/output
6	VSSQ	-	Ground for output buffer	49	VDDQ	-	Power supply for output buffer
7	DQ3	I/O	Data input/output	50	DQ27	I/O	Data input/output
8	DQ4	I/O	Data input/output	51	DQ28	I/O	Data input/output
9	VDDQ	-	Power supply for output buffer	52	VSSQ	-	Ground for output buffer
10	DQ5	I/O	Data input/output	53	DQ29	I/O	Data input/output
11	DQ6	I/O	Data input/output	54	DQ30	I/O	Data input/output
12	VSSQ	-	Ground for output buffer	55	VDDQ	-	Power supply for output buffer
13	DQ7	I/O	Data input/output	56	DQ31	I/O	Data input/output
14	NC	-	No connection	57	NC	-	No connection
15	VDD	-	Power supply	58	VSS	-	Ground
16	DQM0	I	Data input/output mask	59	DQM3	I	Data input/output mask
17	/WE	I	Write enable	60	A3	I	Address input
18	/CAS	I	Column address strobe	61	A4	I	Address input
19	/RAS	I	Row address strobe	62	A5	I	Address input
20	/CS	I	Chip select input	63	A6	I	Address input
21	NC	-	No connection	64	A7	I	Address input
22	BA0	I	Bank address input	65	A8	I	Address input
23	BA1	I	Bank address input	66	A9	I	Address input
24	A10/AP	I	Address input	67	CKE	I	Clock enable
25	A0	I	Address input	68	CLK	I	System clock input
26	A1	I	Address input	69	NC	-	No connection
27	A2	I	Address input	70	NC	-	No connection
28	DQM2	I	Data input/output mask	71	DQM1	I	Data input/output mask
29	VDD	-	Power supply	72	VSS	-	Ground
30	NC	-	No connection	73	NC	-	No connection
31	DQ16	I/O	Data input/output	74	DQ8	I/O	Data input/output
32	VSSQ	-	Ground for output buffer	75	VDDQ	-	Power supply for output buffer
33	DQ17	I/O	Data input/output	76	DQ9	I/O	Data input/output
34	DQ18	I/O	Data input/output	77	DQ10	I/O	Data input/output
35	VDDQ	-	Power supply for output buffer	78	VSSQ	-	Ground for output buffer
36	DQ19	I/O	Data input/output	79	DQ11	I/O	Data input/output
37	DQ20	I/O	Data input/output	80	DQ12	I/O	Data input/output
38	VSSQ	-	Ground for output buffer	81	VDDQ	-	Power supply for output buffer
39	DQ21	I/O	Data input/output	82	DQ13	I/O	Data input/output
40	DQ22	I/O	Data input/output	83	DQ14	I/O	Data input/output
41	VDDQ	-	Power supply for output buffer	84	VSSQ	-	Ground for output buffer
42	DQ23	I/O	Data input/output	85	DQ15	I/O	Data input/output
43	VDD	-	Power supply	86	VSS	-	Ground

A

B

C

D

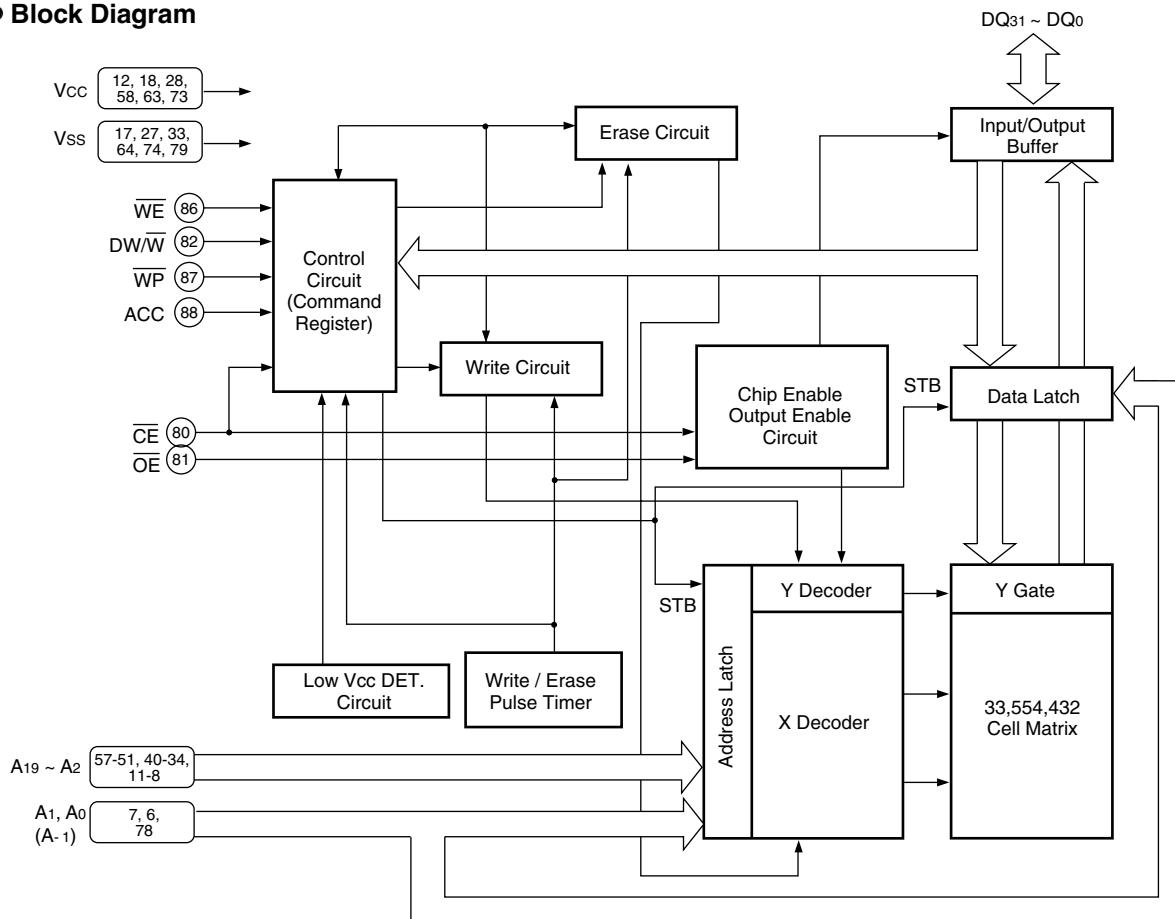
E

F

## ■ MBM29PL3200BE70PFV (MR MAIN BOARD ASSY : IC7151, IC7152)

- A • Page Mode Flash Memory

### ● Block Diagram



### ● Pin Function

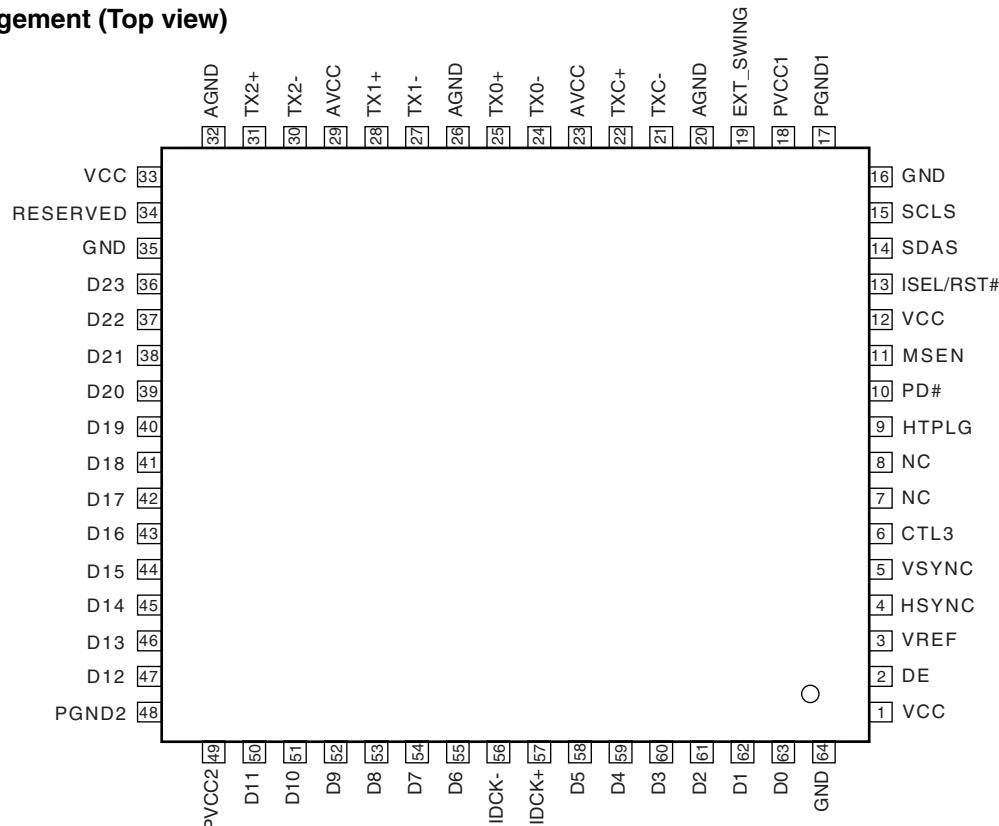
No.	Pin Name	I/O	Pin Function
57-51, 40-34, 11-6, 78	A19 ~ A0, A-1	I	Address input
78-75, 72-65, 62-59, 32-19, 26-19, 16-13	DQ31 ~ DQ0	I/O	Data input/output
80	CE	I	Chip enable
81	OE	I	Output enable
86	WE	I	Write enable
82	DW/W	I	16 bit, 32 bit mode switch
87	WP	I	Write protect
88	ACC	I	Acceleration
17, 27, 33, 64, 74, 79	Vss	-	Ground
12, 18, 28, 58, 63, 73	Vcc	-	Power supply
1-5, 41-50, 83-85, 89, 90	N.C.	-	No connection

## SII170BCLG64 (MR MAIN BOARD ASSY : IC7401)

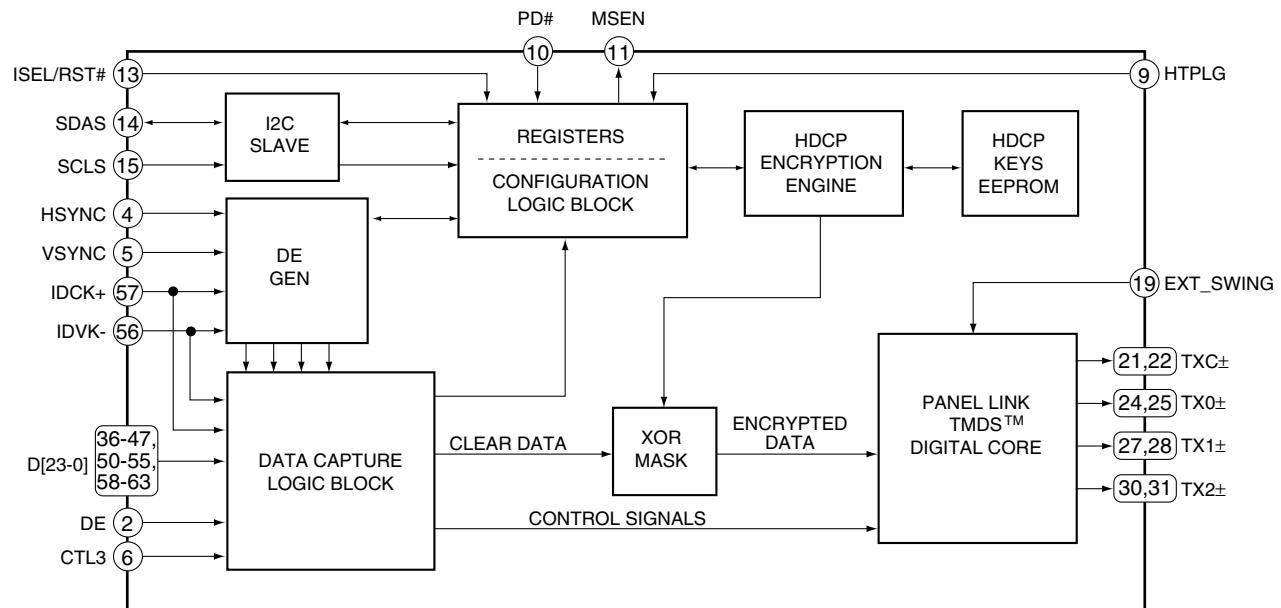
- HDCP Panel Link Transmitter

A

### Pin Arrangement (Top view)



### Block Diagram



D

B

C

E

F

### ● Pin Function

A	No.	Pin Name	I/O	Pin Function
	1	VCC	-	Digital power supply (3.3V)
	2	DE	I	Data enable
	3	VREF	I	3.3V fixed
	4	H SYNC	I	Horizontal sync. control signal input
	5	V SYNC	I	Vertical sync. control signal input
	6	CTL3	I	External CTL3 input
	7	NC	-	No connection
	8	NC	-	No connection
B	9	HTPLG	I	Monitor charge input
	10	PD#	I	Power down input (Active low)
	11	MSEN	O	Monitor sense output (open-collector output)
	12	VCC	-	Digital power supply (3.3V)
	13	ISEL/RST#	I	I2C interface selecting input High: I2C interface is active
	14	SDAS	I/O	DDC I2C data input/output
	15	SCLS	I	DDC I2C clock input
	16	GND	-	Digital ground
C	17	PGND1	-	PLL analog ground
	18	PVCC1	-	Analog power supply for PLL of primary side (3.3V)
	19	EXT_SWING	I	Voltage regulation adjustment
	20	AGND	-	Analog ground
	21	TXC-	O	Differential signal clock output of TMDS Low voltage
	22	TXC+	O	Differential signal clock output of TMDS Low voltage
	23	AVCC	-	Analog power supply (3.3V)
	24	TX0-	O	Differential signal clock output of TMDS Low voltage
	25	TX0+	O	Differential signal clock output of TMDS Low voltage
D	26	AGND	-	Analog ground
	27	TX1-	O	Differential signal clock output of TMDS Low voltage
	28	TX1+	O	Differential signal clock output of TMDS Low voltage
	29	AVCC	-	Analog power supply (3.3V)
	30	TX2-	O	Differential signal clock output of TMDS Low voltage
	31	TX2+	O	Differential signal clock output of TMDS Low voltage
E	32	AGND	-	Analog ground
	33	VCC	-	Digital power supply (3.3V)
	34	RESERVED	I	Reserved pin for Silicon Image Normally, fixed to low.
	35	GND	-	Digital ground
	36	D23	I	24-bit pixel bus input
	37	D22	I	24-bit pixel bus input
	38	D21	I	24-bit pixel bus input
	39	D20	I	24-bit pixel bus input
	40	D19	I	24-bit pixel bus input
	41	D18	I	24-bit pixel bus input
	42	D17	I	24-bit pixel bus input
	43	D16	I	24-bit pixel bus input
F	44	D15	I	24-bit pixel bus input
	45	D14	I	24-bit pixel bus input

No.	Pin Name	I/O	Pin Function
46	D13	I	24-bit pixel bus input
47	D12	I	24-bit pixel bus input
48	PGND2	-	PLL analog ground
49	PVCC2	-	Analog power supply for filter PLL (3.3V)
50	D11	I	24-bit / 12-bit pixel bus input
51	D10	I	24-bit / 12-bit pixel bus input
52	D9	I	24-bit / 12-bit pixel bus input
53	D8	I	24-bit / 12-bit pixel bus input
54	D7	I	24-bit / 12-bit pixel bus input
55	D6	I	24-bit / 12-bit pixel bus input
56	IDCK-	I	Data clock - input
57	IDCK+	I	Data clock + input
58	D5	I	24-bit / 12-bit pixel bus input
59	D4	I	24-bit / 12-bit pixel bus input
60	D3	I	24-bit / 12-bit pixel bus input
61	D2	I	24-bit / 12-bit pixel bus input
62	D1	I	24-bit / 12-bit pixel bus input
63	D0	I	24-bit / 12-bit pixel bus input
64	GND	-	Digital ground

A

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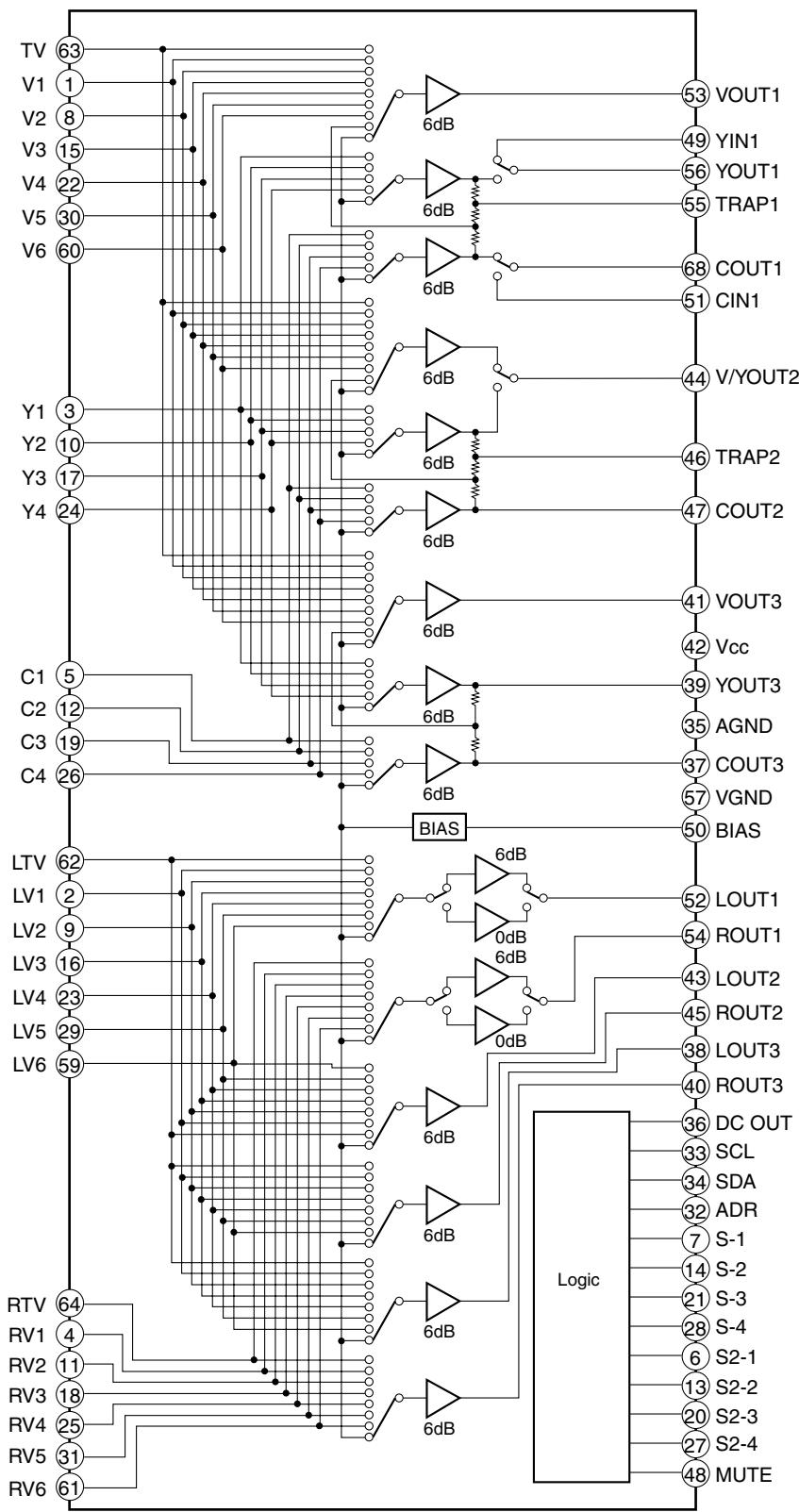
E

F

## ■ CXA2069Q (AV BOARD ASSY : IC8002)

A • 7-Input 3-Output Audio/Video Switch

### ● Block Diagram



### ● Pin Function

No.	Pin Name	I/O	Pin Function
63 1 8 15 22 30 60	TV V1 V2 V3 V4 V5 V6	I	Video signal inputs. Input composite video signals.
3 10 17 24 49	Y1 Y2 Y3 Y4 YIN1	I	Y/C separation signal inputs. Input luminance signals. The YIN1 pin inputs the signal obtained by Y/C separating the VOUT1 pin output.
5 12 19 26 51	C1 C2 C3 C4 CIN1	I	Y/C separation signal inputs. Input chrominance signals. The CIN1 pin inputs the signal obtained by Y/C separating the VOUT1 pin output.
62, 2 9, 16 23, 29 59, 64 4, 11 18, 25 31, 61	LTV, LV1 LV2, LV3 LV4, LV5 LV6, RTV RV1, RV2 RV3, RV4 RV5, RV6	I	Audio signal inputs.
53 41	VOUT1 VOUT3	O	Video signal outputs. Output composite video signals.
44	V/YOUT2	O	Video signal output. Either composite video signal output or luminance signal output can be selected by I2C bus control.
56 39	YOUT1 YOUT3	O	Video signal outputs. Output luminance signals.
58 47 37	COUT1 COUT2 COUT3	O	Video signal outputs. Output chrominance signals.
52 43 38 54 45 40	LOUT1 LOUT2 LOUT3 ROUT1 ROUT2 ROUT3	O	Audio signal outputs. $Z_o=50\text{ ohm}$ (within DC $\pm 2\text{mA}$ )
6 13 20 27	S2-1 S2-2 S2-3 S2-4	-	Detects the S2-compatible DC superimposed onto the C signal. 4 : 3 video signal at 1.3 V or less 4 : 3 letter-box signal at 1.3 V or more to 2.5 V or less 16 : 9 picture squeezed signal at 2.5 V or more This pin is pulled down to GND by a 100 k ohm resistor, so the 4 : 3 video signal is selected when open.

A

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No.	Pin Name	I/O	Pin Function
A 7 14 21 28	S-1 S-2 S-3 S-4	–	Composite video/S selector. The detection results are written to the status register. S signal at 3.5 V or less. Composite video signal at 3.5 V or more. This pin is pulled up to 5 V by a 100 k ohm resistor, so the composite video signal is selected when open.
	32		ADR Selects the slave address for the I2C bus. 90H at 1.5 V or less 92H at 2.5 V or more 90H when open.
	33		SCL I2C bus signal input VILmax=1.5 V VIHmin=3.0 V
	34		SDA I2C bus signal input VILmax=1.5 V VIHmin=3.0 V VOLmax=0.4 V
B 36	DC_OUT	O	Outputs the S2-compatible DC superimposed onto the COUT3 output. The DC is superimposed by connecting this pin to the COUT3 output via a capacitor. Control is performed by the I2C bus. When 0 V is output, Q1 is ON and the impedance is 5 k ohm. S2 protocol output impedance of $10 \pm 3$ k ohm is realized by attaching external resistance of 4.7 k ohm.
			DC_OUT (bus) Output DC 0 4.5 V 1 0 V 2 1.9 V 3 4.5 V
C 55 46	TRAP1 TRAP2	–	Connects trap circuit for subcarrier.
	48		MUTE Audio signal output mute. Mute OFF at 1.5 V or less Mute ON at 2.5 V or more Mute OFF when open.
C 50	BIAS	–	Internal reference bias (VCC/2). Connect to GND via a capacitor.

D

E

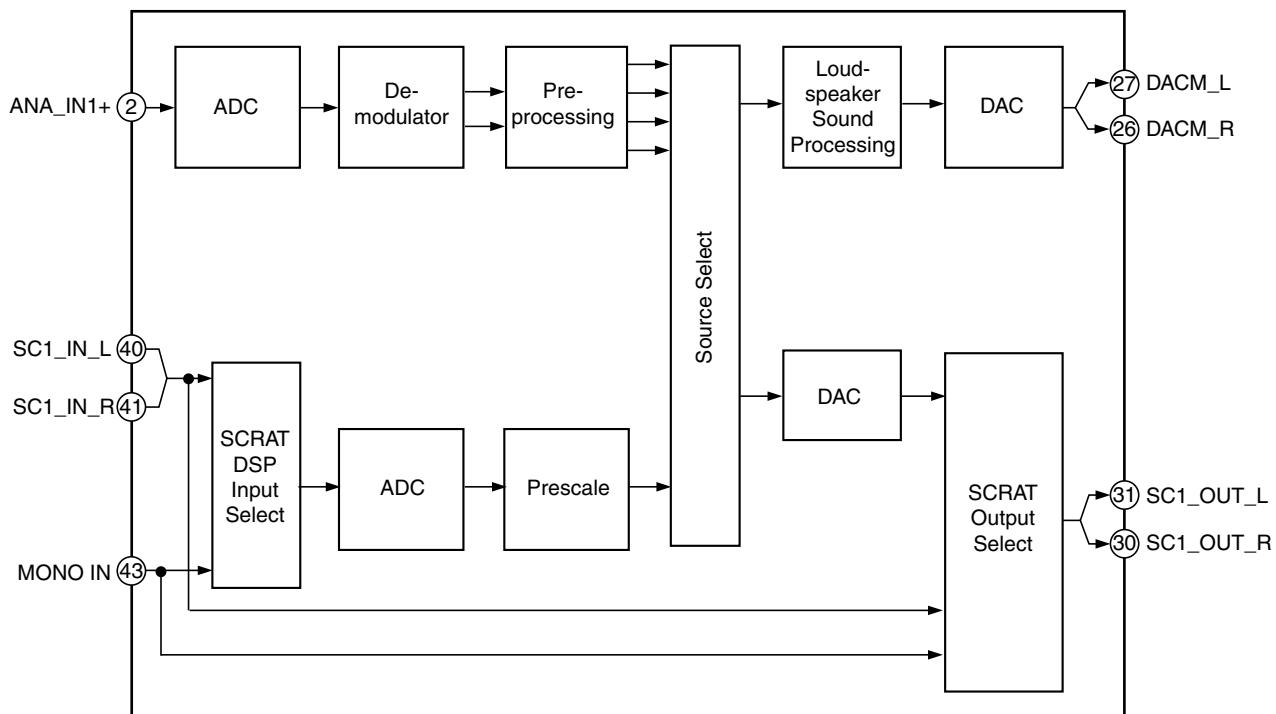
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## ■ MSP3417G (AV BOARD ASSY : IC7502)

- Multisound Processor

A

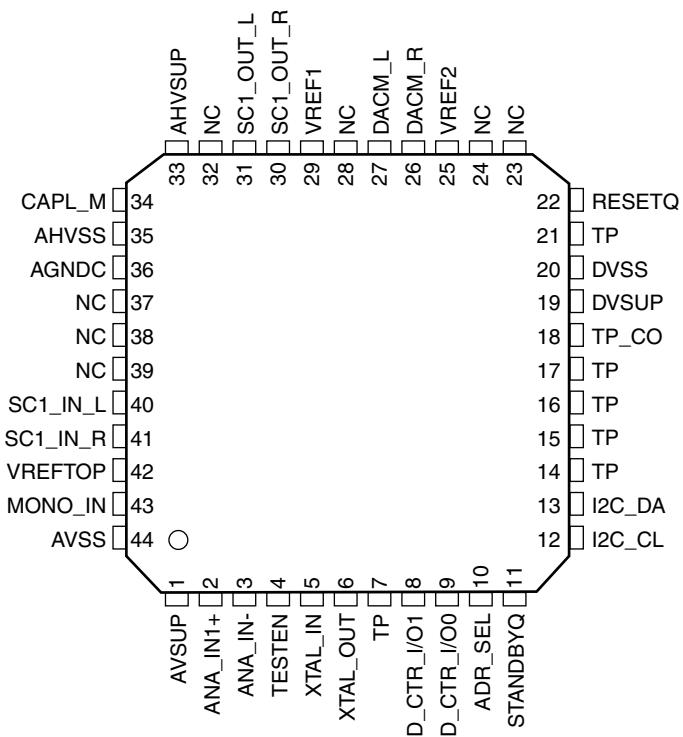
### ● Block Diagram



B

C

### ● Pin Arrangement (Top view)



D

E

F

## ● Pin Function

A

NC = Not connected; leave vacant  
 LV = if not used, leave vacant  
 DVSS: if not used, connect to DVSS

X = obligatory; connect as described in circuit diagram  
 AHVSS: connect to AHVSS

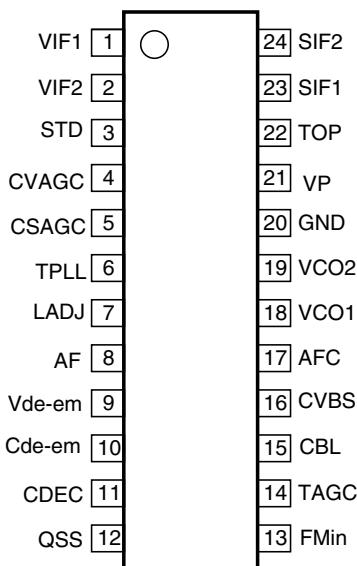
No.	Pin Name	Type	Connection (it not used)	Description
1	AVSUP		X	Analog power supply +5V
2	ANA_IN1+	IN	LV	IF input1
3	ANA_IN-	IN	LV	IF common
4	TESTEN	IN	X	Test pin
5	XTAL_IN	IN	X	Crystal oscillator
6	XTAL_OUT	OUT	X	Crystal oscillator
7	TP		LV	Test pin
8	D_CTR_I/O_1	IN/OUT	LV	D_CTR_I/O_1
9	D_CTR_I/O_0	IN/OUT	LV	D_CTR_I/O_0
10	ADR_SEL	IN	X	I2C Bus address select
11	STANDBYQ	IN	X	Standby (low-active)
12	I2C_CL	IN/OUT	X	I2C clock
13	I2C_DA	IN/OUT	X	I2C data
14	TP		LV	Test pin
15	TP		LV	Test pin
16	TP		LV	Test pin
17	TP		LV	Test pin
18	TP_CO	OUT	LV	Test pin
19	DVSUP		X	Digital power supply +5V
20	DVSS		X	Digital ground
21	TP		LV	Test pin
22	RESETQ	IN	X	Power-on-reset
23	NC		LV	Not connected
24	NC		LV	Not connected
25	VREF2		X	Reference ground 2 high-voltage part
26	DACM_R	OUT	LV	Loudspeaker out, right
27	DACM_L	OUT	LV	Loudspeaker out, left
28	NC		LV	Not connected
29	VREF1		X	Reference ground 1 high-voltage part
30	SC1_OUT_R	OUT	LV	SCRAT 1 output, right
31	SC1_OUT_L	OUT	LV	SCRAT 1 output, left
32	NC		LV	Not connected
33	AHVSUP		X	Analog power supply + 8.0 V
34	CAPL_M		X	Volume capacitor MAIN
35	AHVSS		X	Analog ground
36	AGNDC		X	Analog reference voltage high-voltage part
37	NC		LV	Not connected
38	NC		LV	Not connected
39	NC		LV	Not connected
40	SC1_IN_L	IN	LV	SCRAT 1 input, left
41	SC1_IN_R	IN	LV	SCRAT 1 input, right
42	VREFTOP		X	Reference voltage IF A/D converter
43	MONO_IN	IN	LV	Mono input
44	AVSS		X	Analog ground

F

## ■ TDA9818TS (AV BOARD ASSY : IC7501)

- Single/multistandard VIF/SIF-PLL and FM-PLL/AM Demodulators

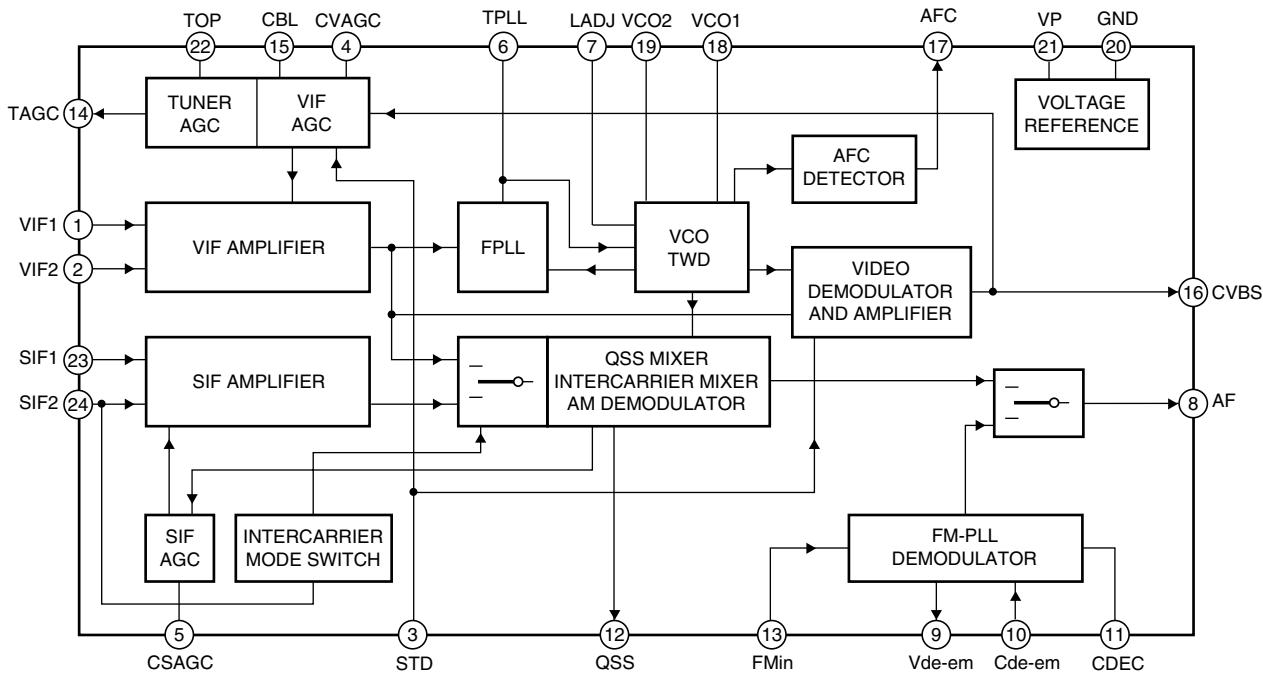
### ● Pin Arrangement (Top view)



### ● Pin Function

No.	Pin Name	Pin Function
1	VIF1	VIF differential input signal voltage 1
2	VIF2	VIF differential input signal voltage 2
3	STD	Standard selection switch
4	CVAGC	VIF AGC capacitor
5	CSAGC	SIF AGC capacitor
6	TPLL	PLL filter
7	LADJ	L/L accent switch and adjust
8	AF	Audio output
9	Vde-em	De-emphasis output
10	Cde-em	De-emphasis input
11	CDEC	Decoupling capacitor
12	QSS	Single reference QSS/intercarrier output voltage
13	FMin	Sound intercarrier input voltage
14	TAGC	Tuner AGC output
15	CBL	Black level detector
16	CVBS	Composite video output voltage
17	AFC	AFC output
18	VCO1	VCO1 resonance circuit
19	VCO2	VCO2 resonance circuit
20	GND	Ground
21	VP	Supply voltage
22	TOP	Tuner AGC takeover point adjust
23	SIF1	SIF differential input signal voltage 1
24	SIF2	SIF differential input signal voltage 2

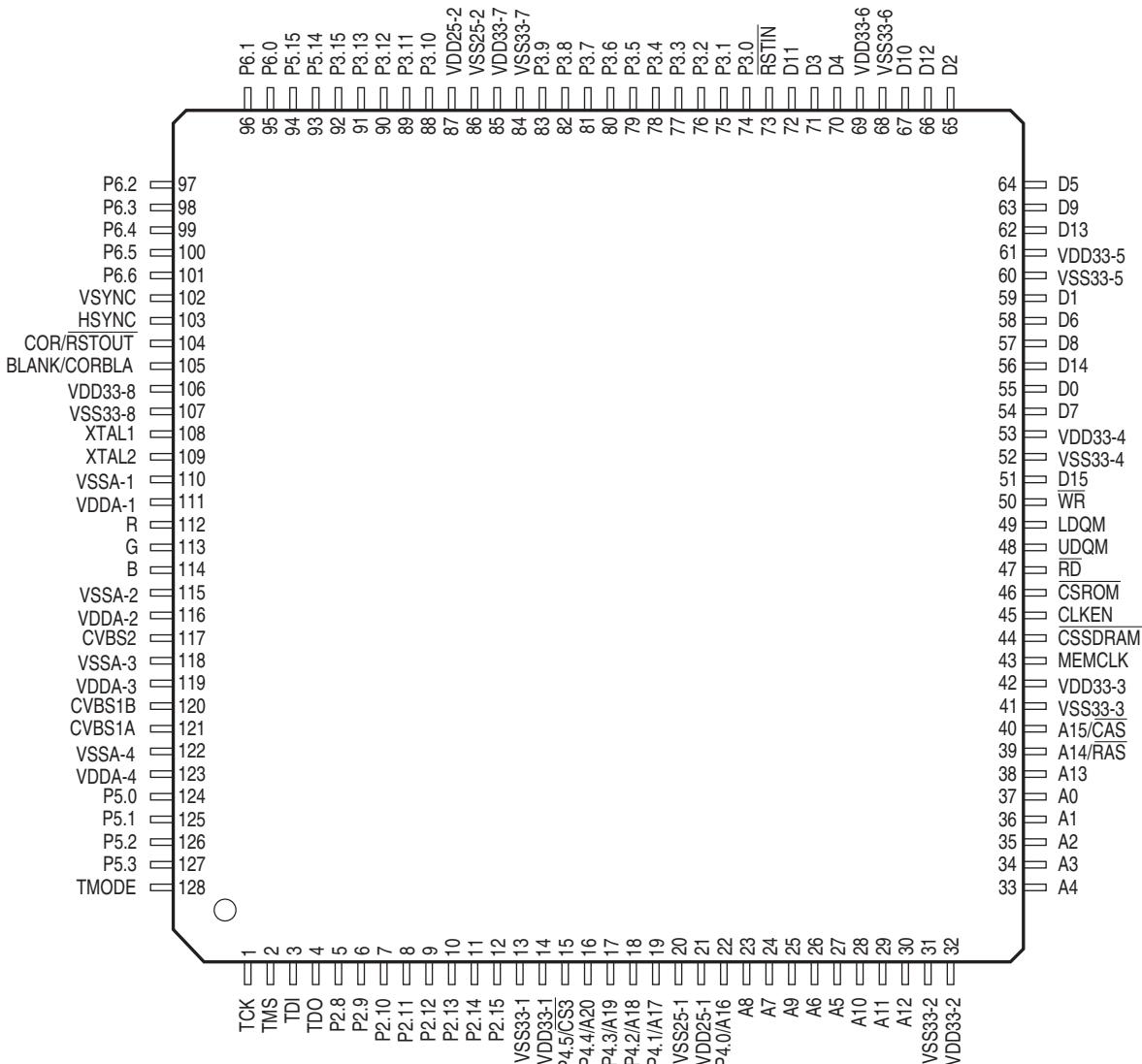
### ● Block Diagram



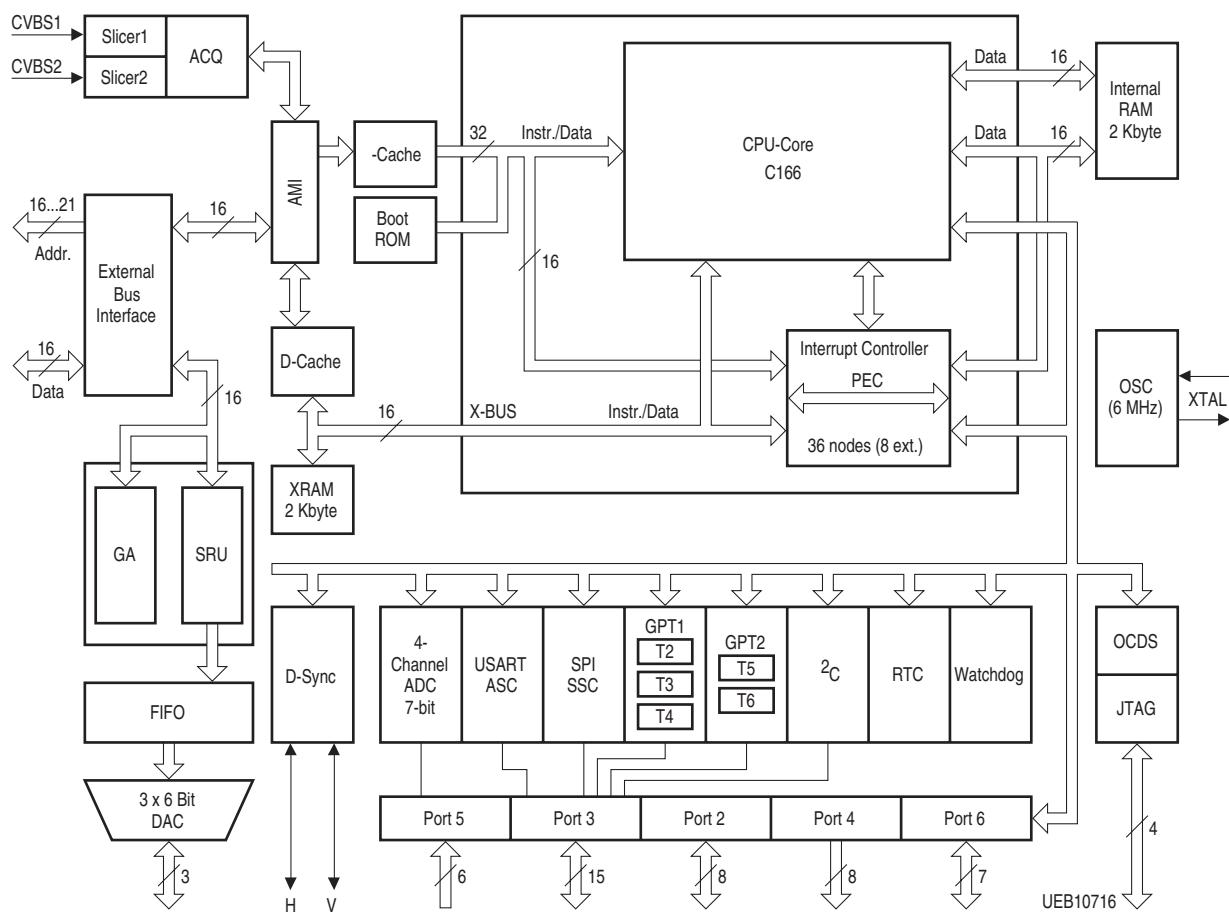
## ■ SDA6000 (AV BOARD ASSY : IC8904)

- Teletext Decoder

- **Pin Arrangement (Top view)**



## ● Block Diagram



## ● Pin Function

A	No.	Pin Name	Second Function	I/O	Pin Function
	1	TCK	—	I	Clock for JTAG interface
	2	TMS	—	I	Control signal for JTAG interface
	3	TDI	—	I	Data input for JTAG interface
	4	TDO	—	O	Data output for JTAG interface
	5	P2.8	EX0IN	I/O	General purpose I/O port/External interrupt 0
	6	P2.9	EX1IN	I/O	General purpose I/O port/External interrupt 1
	7	P2.10	EX2IN	I/O	General purpose I/O port/External interrupt 2
	8	P2.11	EX3IN	I/O	General purpose I/O port/External interrupt 3
	9	P2.12	EX4IN	I/O	General purpose I/O port/External interrupt 4
	10	P2.13	EX5IN	I/O	General purpose I/O port/External interrupt 5
	11	P2.14	EX6IN	I/O	General purpose I/O port/External interrupt 6
	12	P2.15	EX7IN	I/O	General purpose I/O port/External interrupt 7
	13	VSS33-1	—	—	Digital ground for pads
	14	VDD33-1	—	—	Digital power (for pads) (3.3 V)
	15	P4.5	CS3	O	General purpose output port/Chip select signal for second external static memory
	16	P4.4	A20	O	General purpose output port/Address bit
	17	P4.3	A19	O	General purpose output port/Address bit
	18	P4.2	A18	O	General purpose output port/Address bit
	19	P4.1	A17	O	General purpose output port/Address bit
	20	VSS25-1	—	—	Digital ground (for digital core)
	21	VDD25-1	—	—	Digital power (for digital core) (2.5 V)
	22	P4.0	A16	O	General purpose output port/Address bit
	23	A8	R8	O	Address bit/SDRAM address bit
	24	A7	R7/C7	O	Address bit/SDRAM address bit
	25	A9	R9	O	Address bit/SDRAM address bit
	26	A6	R6/C6	O	Address bit/SDRAM address bit
	27	A5	R5/C5	O	Address bit/SDRAM address bit
	28	A10	R10	O	Address bit/SDRAM address bit
	29	A11	R11	O	Address bit/SDRAM address bit
	30	A12	R12	O	Address bit/SDRAM address bit
	31	VSS33-2	—	—	Digital ground for pads
	32	VDD33-2	—	—	Digital power (for pads) (3.3 V)
	33	A4	R4/C4	O	Address bit/SDRAM address bit
	34	A3	R3/C3	O	Address bit/SDRAM address bit
	35	A2	R2/C2	O	Address bit/SDRAM address bit
	36	A1	R1/C1	O	Address bit/SDRAM address bit
	37	A0	R0/C0	O	Address bit (All addresses are word addresses)/SDRAM Address bit
	38	A13	R13	O	Address bit/SDRAM address bit
	39	A14	RAS	O	Address bit/Row address strobe for SDRAM access
	40	A15	̄CAS	O	Address bit/Column address strobe for SDRAM access
	41	VSS33-3	—	—	Digital ground for pads
	42	VDD33-3	—	—	Digital power (for pads) (3.3 V)
	43	MEMCLK	—	O	Clock for SDRAM
	44	CSSDRAM	—	O	Chip select signal for SDRAM device
	45	CLKEN	—	O	Enable for memory clock
	46	CSROM	—	O	Chip select signal for ROM device
	47	RD	—	O	External memory read strobe for ROM. RD is activated for every external instruction or data read access.
	48	UDQM	—	O	Write disable for high byte
	49	LDQM	—	O	Write disable for low byte
F	50	WR	—	O	Memory write strobe

No.	Pin Name	Second Function	I/O	Pin Function
51	D15	—	I/O	Data bit
52	VSS33-4	—	—	Digital ground for pads
53	VDD33-4	—	—	Digital power (for pads) (3.3 V)
54	D7	—	I/O	Data bit
55	D0	—	I/O	Data bit
56	D14	—	I/O	Data bit
57	D8	—	I/O	Data bit
58	D6	—	I/O	Data bit
59	D1	—	I/O	Data bit
60	VSS33-5	—	—	Digital ground for pads
61	VDD33-5	—	—	Digital power (for pads) (3.3 V)
62	D13	—	I/O	Data bit
63	D9	—	I/O	Data bit
64	D5	—	I/O	Data bit
65	D2	—	I/O	Data bit
66	D12	—	I/O	Data bit
67	D10	—	I/O	Data bit
68	VSS33-6	—	—	Digital ground for pads
69	VDD33-6	—	—	Digital power (for pads) (3.3 V)
70	D4	—	I/O	Data bit
71	D3	—	I/O	Data bit
72	D11	—	I/O	Data bit
73	RSTIN	—	I	Reset input pin
74	P3.0	SCL0	I/O	General purpose I/O port/I2C Bus clock line 0
75	P3.1	SDA0	I/O	General purpose I/O port/I2C Bus data line 0
76	P3.2	CAPIN	I/O	General purpose I/O port/GPT2 register CAPREL
77	P3.3	T3OUT	I/O	General purpose I/O port/GPT1 timer T3 toggle
78	P3.4	T3EUD	I/O	General purpose I/O port/GPT1 timer T3 ext. up/down
79	P3.5	T4IN	I/O	General purpose I/O port/GPT1 timer T4 input for count/gate/reload/capture
80	P3.6	T3IN	I/O	General purpose I/O port/GPT1 timer T3 count/gate input
81	P3.7	T2IN	I/O	General purpose I/O port/GPT1 timer T2 input for count/gate/reload/capture
82	P3.8	MRST	I/O	General purpose I/O port/SSC masterreceiver/slave-transmit I/O
83	P3.9	MTSR	I/O	General purpose I/O port/SSC mastertransmit/slave-receiver O/I
84	VSS33-7	—	—	Digital ground for pads
85	VDD33-7	—	—	Digital power (for pads) (3.3 V)
86	VSS25-2	—	—	Digital ground (for digital core)
87	VDD25-2	—	—	Digital power (for digital core) (2.5 V)
88	P3.10	TxD0	I/O	General purpose I/O port/ASC0 clock/data output
89	P3.11	RxD0	I/O	General purpose I/O port/ASC0 data input (asynchronous) or I/O (synchronous).
90	P3.12	—	I/O	General purpose I/O port
91	P3.13	SCLK	I/O	General purpose I/O port/SSC master clock output/slave clock input
92	P3.15	—	I/O	General purpose I/O port
93	P5.14	T4EUD	I/O	General purpose Input port/GPT1 timer T4 ext.up/down ctrl. input
94	P5.15	T2EUD	I/O	General purpose Input port/GPT1 timer T2 ext.up/down ctrl. input
95	P6.0	TRIG_IN	I/O	General purpose I/O port/Trigger input-signal for 'On Chip Debug System' (OCDS)
96	P6.1	TRIG_OUT	I/O	General purpose I/O port/Trigger outputsignal for 'On Chip Debug System' (OCDS)
97	P6.2	FIELD	I/O	General purpose I/O port/Field signal of field detection
98	P6.3	SCL1	I/O	General purpose I/O port/I2C bus clock line 1
99	P6.4	SDA1	I/O	General purpose I/O port/I2C bus data line 1
100	P6.5	—	I/O	General purpose I/O port

A  
B  
C  
D  
E  
F

No.	Pin Name	Second Function	I/O	Pin Function
101	P6.6	SDA2	I/O	General purpose I/O port/I2C bus data line 2
102	VSYNC	VCS	I/O	Vertical sync In/output/Composite sync output
103	Hsync	—	I/O	Horizontal sync In/output
104	COR	RSTOUT	O	Output for contrast reduction/Reset output
105	BLANK	CORBLA	O	Fast blanking signal/Three-level signal for contrast reduction + fast blanking
106	VDD33-8	—	—	Digital power (for pads) (3.3 V)
107	VSS33-8	—	—	Digital ground for pads
108	XTAL1	—	I	Input of the oscillator amplifier circuit
109	XTAL2	—	O	Output of the oscillator amplifier circuit
110	VSSA-1	—	—	Analog ground
111	VDDA-1	—	—	Analog power (for PLL and DAC) (2.5 V)
112	R	—	O	Analog output for red channel
113	G	—	O	Analog output for green channel
114	B	—	O	Analog output for blue channel
115	VSSA-2	—	—	Analog ground
116	VDDA-2	—	—	Analog power (for ADCs) (2.5 V)
117	CVBS2	—	I	CVBS signal inputs for WSS data slicing
118	VSSA-3	—	—	Analog ground
119	VDDA-3	—	—	Analog power (for ADCs) (2.5 V)
120	CVBS1B	—	I	Ground for CVBS1A (differential input)
121	CVBS1A	—	I	CVBS signal inputs for full service data slicing
122	VSSA-4	—	—	Analog ground
123	VDDA-4	—	—	Analog power (for ADCs) (2.5 V)
124	P5.0	AN.0	I	General purpose Input port/Analog input for A/D-converter
125	P5.1	AN.1	I	General purpose Input port/Analog input for A/D-converter
126	P5.2	AN.2	I	General purpose Input port/Analog input for A/D-converter
127	P5.3	AN.3	I	General purpose Input port/Analog input for A/D-converter
128	TMODE	—	I	Test mode pin

D

## E 7.4 CLEANING



Before shipping out the product, be sure to clean the following positions by using the prescribed cleaning tools:

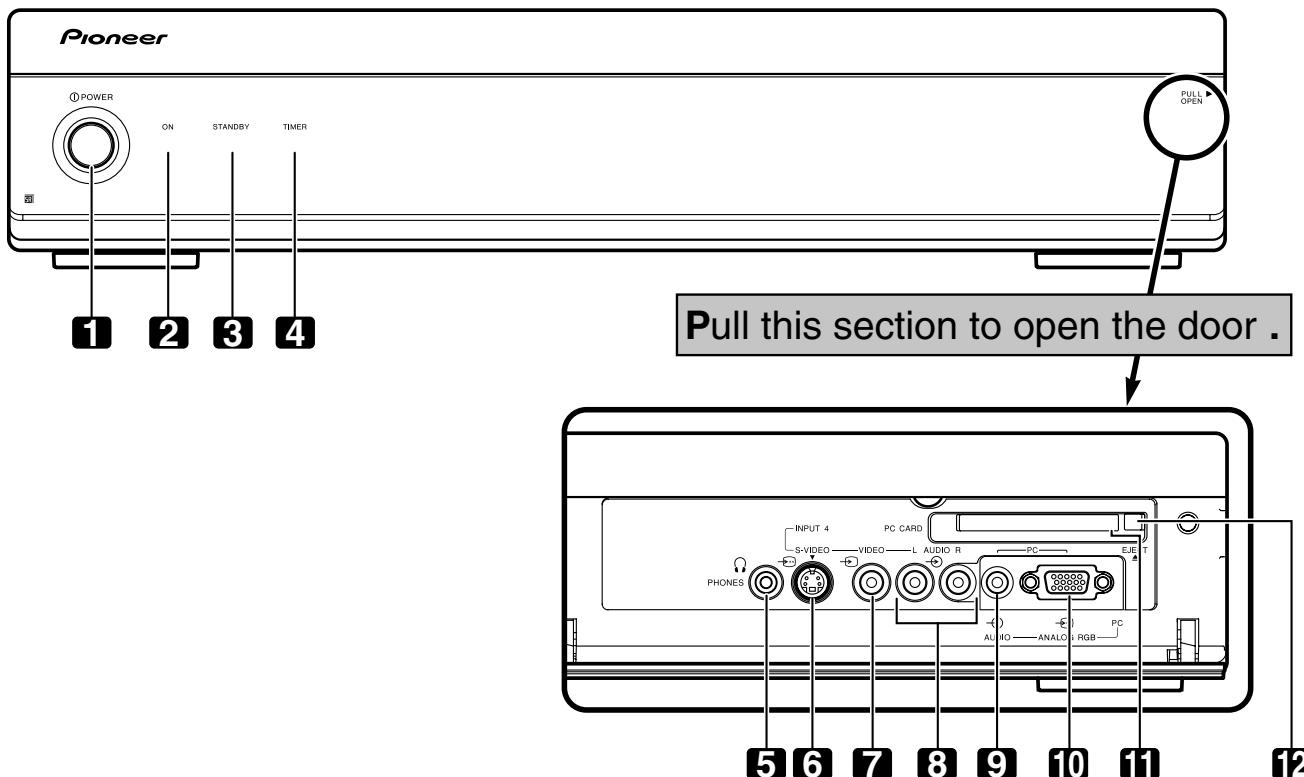
Position to be cleaned	Cleaning tools
Fans	Cleaning paper : GED-008

F

## 8. PANEL FACILITIES

### Media Receiver (PDP-505XDE/435XDE)

#### Front view



**1** POWER button

**2** POWER ON indicator

**3** STANDBY indicator

**4** TIMER indicator

PDP-505XDE/435XDE only

**5** PHONES output terminal

PDP-505XDE/435XDE only

**6** INPUT 4 terminal (S-VIDEO)

**7** INPUT 4 terminal (VIDEO)

**8** INPUT 4 terminals (AUDIO)

**9** PC INPUT terminal (AUDIO)

PDP-505XDE/435XDE only

**10** PC INPUT terminal (ANALOG RGB)

PDP-505XDE/435XDE only

**11** PC CARD slot

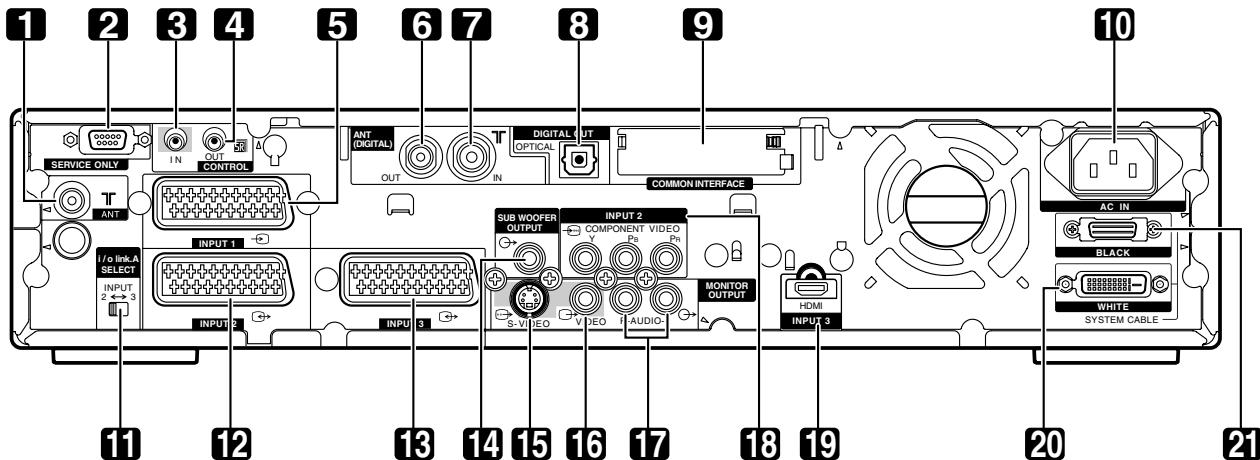
PDP-505XDE/435XDE only

**12** PC CARD EJECT button

PDP-505XDE/435XDE only

## Rear view

A



B

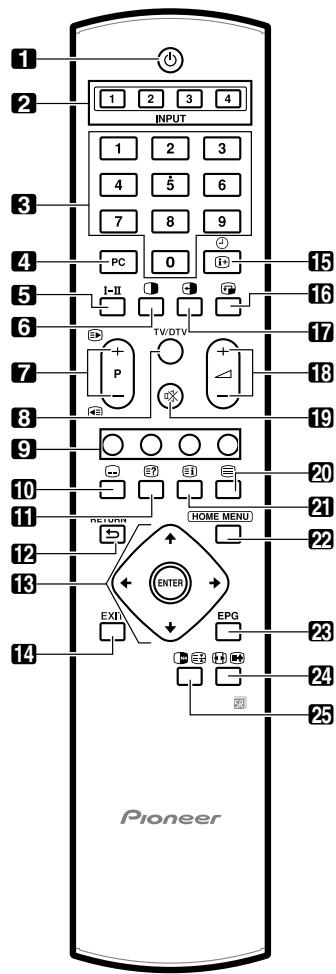
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## Remote control unit (PDP-505XDE/435XDE)



### 1 ⏹

Turns on the power to the Plasma Display or places into the standby mode.

### 2 INPUT

Selects an input source of the Plasma Display. (INPUT 1, INPUT 2, INPUT 3, INPUT 4)

### 3 0 - 9

TV/External input mode: Selects a channel.  
TELETEXT mode: Selects a page.

### 4 PC

Selects the PC terminal as an input source.

### 5 I-II

Sets the sound multiplex mode.

### 6 ⏹

Switches the screen mode among 2-screen, picture-in-picture, and single-screen.

### 7 P+/P-

TV/External input mode: Selects a channel.



TELETEXT mode: Selects a page.

### 8 TV/DTV (PDP-505XDE/435XDE only)

Switches between the TV and DTV input mode.

### 9 Colour (RED/GREEN/YELLOW/BLUE)

TELETEXT mode: Selects a page.

### 10 ⏹

TV/External input mode: Jumps to the teletext subtitle page.

DTV input mode: Turns subtitle on and off.

### 11 ⏹?

TELETEXT mode: Displays hidden characters.

### 12 ⏵ RETURN

Restores the previous menu screen.

### 13 ⏵/⬑/⬑/⬑/⬑

Selects a desired item on the setting screen.

### ENTER

Executes a command.

### 14 EXIT (PDP-505XDE/435XDE only)

Returns to the normal screen in one step.

### 15 ⏹ ⓘ

TV/External input mode: Displays the channel information.

DTV input mode: Displays the banner information.

### 16 ⏹

Moves the location of the small screen when in the picture-in-picture mode.

### 17 ⏹

Switches between the two screens when in the 2-screen or picture-in-picture mode.

### 18 ⏵+/⬑-

Sets the volume.

### 19 ⏹

Mutes the sound.

### 20 ⏹

Selects the TELETEXT mode.  
(all TV image, all TEXT image, TV/TEXT image)

### 21 ⏹

TELETEXT mode: Displays an Index page for the CEEFAX/FLOF format. Displays a TOP Over View page for the TOP format.

### 22 HOME MENU

TV/External Input mode: Displays the Menu screen.

### 23 EPG

Display the Electronic Programme Guide.

### 24 ⏹

TV/External input mode: Selects the screen size.

### ⠀

TELETEXT mode: Switches Teletext images.  
(full/upperhalf/lower half)

### 25 ⏹

TV/External input mode: Freezes a frame from a moving image. Press again to cancel the function.

### ⠀

TELETEXT mode: Stops updating Teletext pages.  
Press again to release the hold mode.

### NOTE

- When using the remote control unit, point it at the Plasma Display.