


SECTION 4 CHARTS AND DIAGRAMS

NOTES OF SCHEMATIC DIAGRAM

Safety precautions

The Components identified by the symbol  are critical for safety. For continued safety, replace safety critical components only with manufacturer's recommended parts.

1. Units of components on the schematic diagram

Unless otherwise specified.

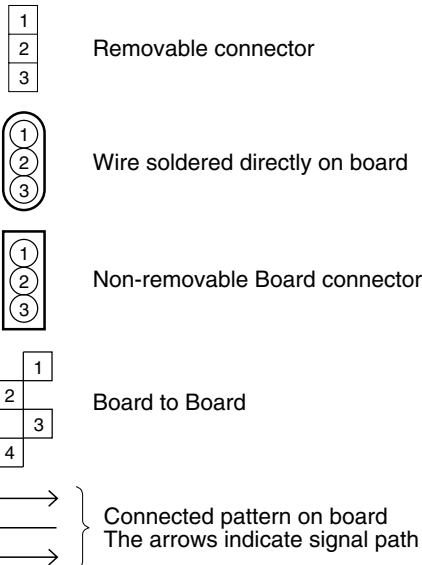
- 1) All resistance values are in ohm, 1/6 W, 1/8 W (refer to parts list).
Chip resistors are 1/16 W.
K or k: k Ω (1000 Ω), M: M Ω (1000k Ω)
- 2) All capacitance values are in μ F, (P: PF).
- 3) All inductance values are in μ H, (m: mH).
- 4) All diodes are 1SS133, MA165 or 1N4148M (refer to parts list).

2. Indications of control voltage

AUX : Active at high

AUX or AUX(L) : Active at low

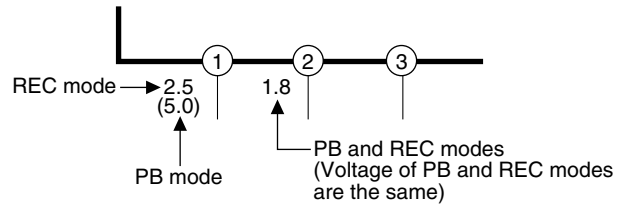
3. Interpreting Connector indications



4. Voltage measurement

- 1) Video circuits
REC : Colour bar signal in SP mode, normal VHS mode
PB : Alignment tape, colour bar SP mode, normal VHS mode
— : Unmeasurable or unnecessary to measure
- 2) Audio circuits
REC : 1KHz, -8 dBs sine wave signal in SP mode, Normal VHS mode
PB : REC then playback it
- 3) Movie Camera circuits
Measured using a correctly illuminated gray scale or colour bar test charts in the E-E mode

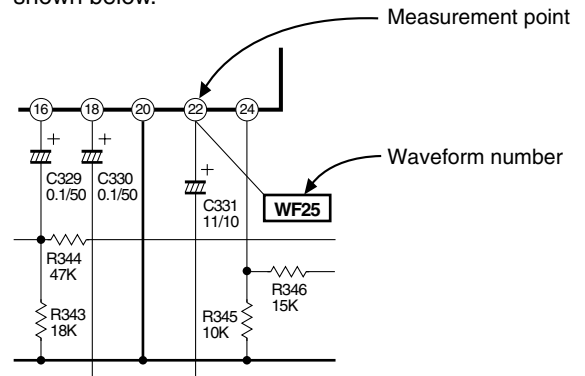
- 4) Indication on schematic diagram
Voltage Indications for REC and PB mode on the schematic diagram are as shown below.



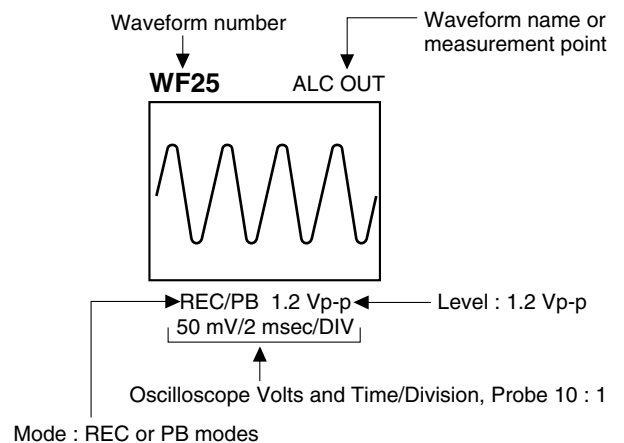
Note: If the voltages are not indicated on the schematic diagram, refer to the voltage charts.

5. Waveform measurement

- 1) Video circuits
REC : Colour bar signal in SP mode, normal VHS mode
PB : Alignment tape, colour bar SP mode, normal VHS mode
- 2) Audio circuits
REC : 1KHz, -8 dBs sine wave signal in SP mode, normal VHS mode
PB : REC then playback it
- 3) Movie Camera circuits
Measured using a correctly illuminated gray scale or colour bar test charts in the E-E mode
- 4) Indication on schematic diagram
Waveform indications on the schematic diagram are as shown below.

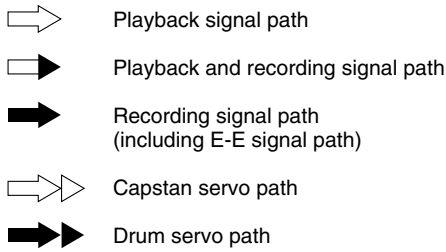


5) Waveform indications

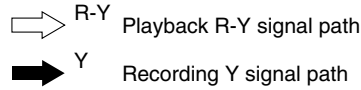


6. Signal path Symbols

The arrows indicate the signal path as follows.

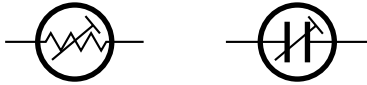


(Example)



7. Indication of the parts for adjustments

The parts for the adjustments are surrounded with the circle as shown below.



8. Indication of the parts not mounted on the circuit board

"OPEN" is indicated by the parts not mounted on the circuit board.



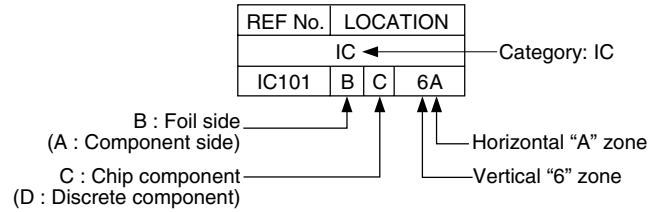
CIRCUIT BOARD NOTES

1. Foil and Component sides

- 1) Foil side (B side) :
Parts on the foil side seen from foil face (pattern face) are indicated.
- 2) Component side (A side) :
Parts on the component side seen from component face (parts face) indicated.

2. Parts location guides

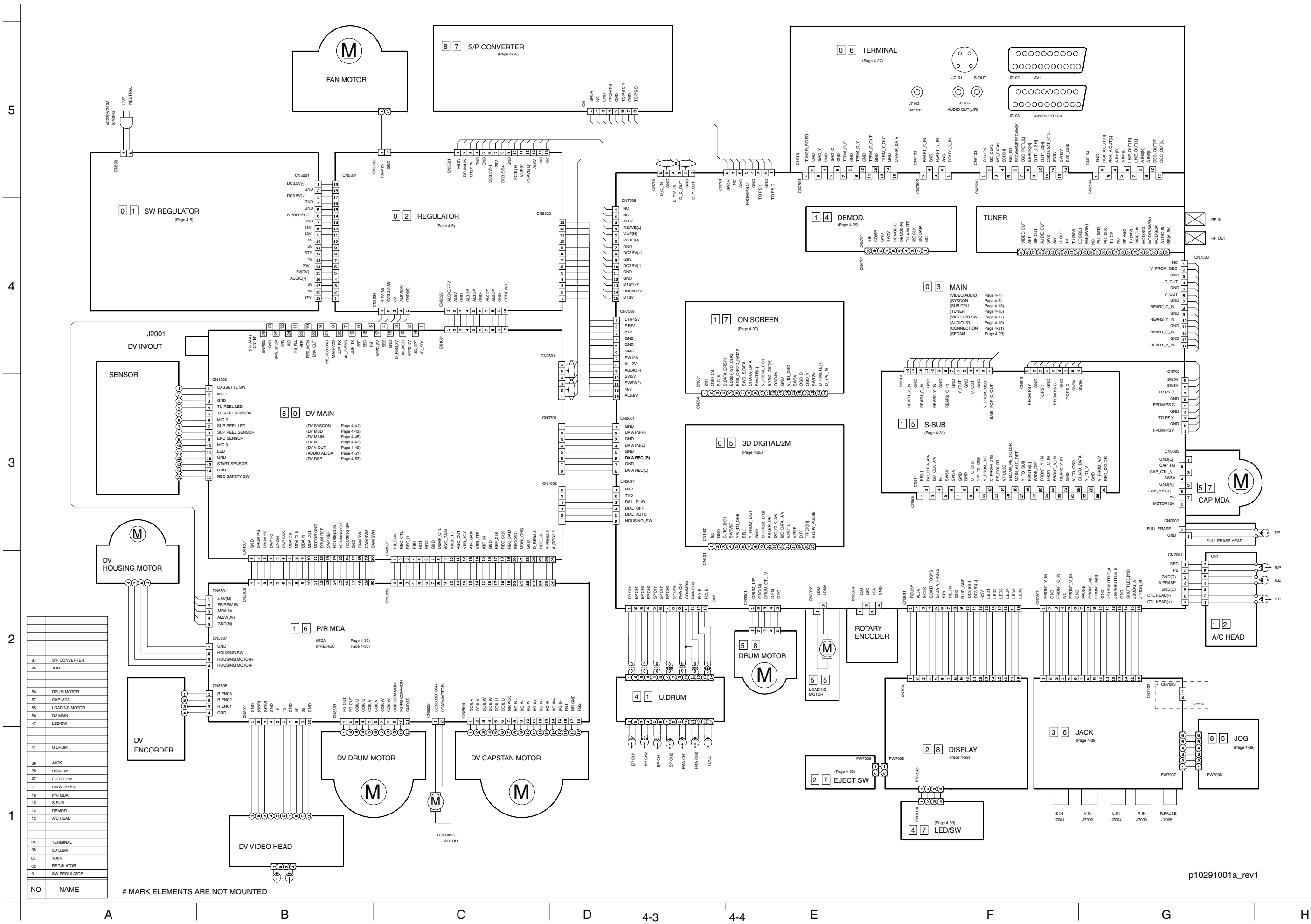
Parts location are indicated by guide scale on the circuit board.



Note:

For general information in service manual, please refer to the Service Manual of GENERAL INFORMATION Edition 4 No. 82054D (January 1994).

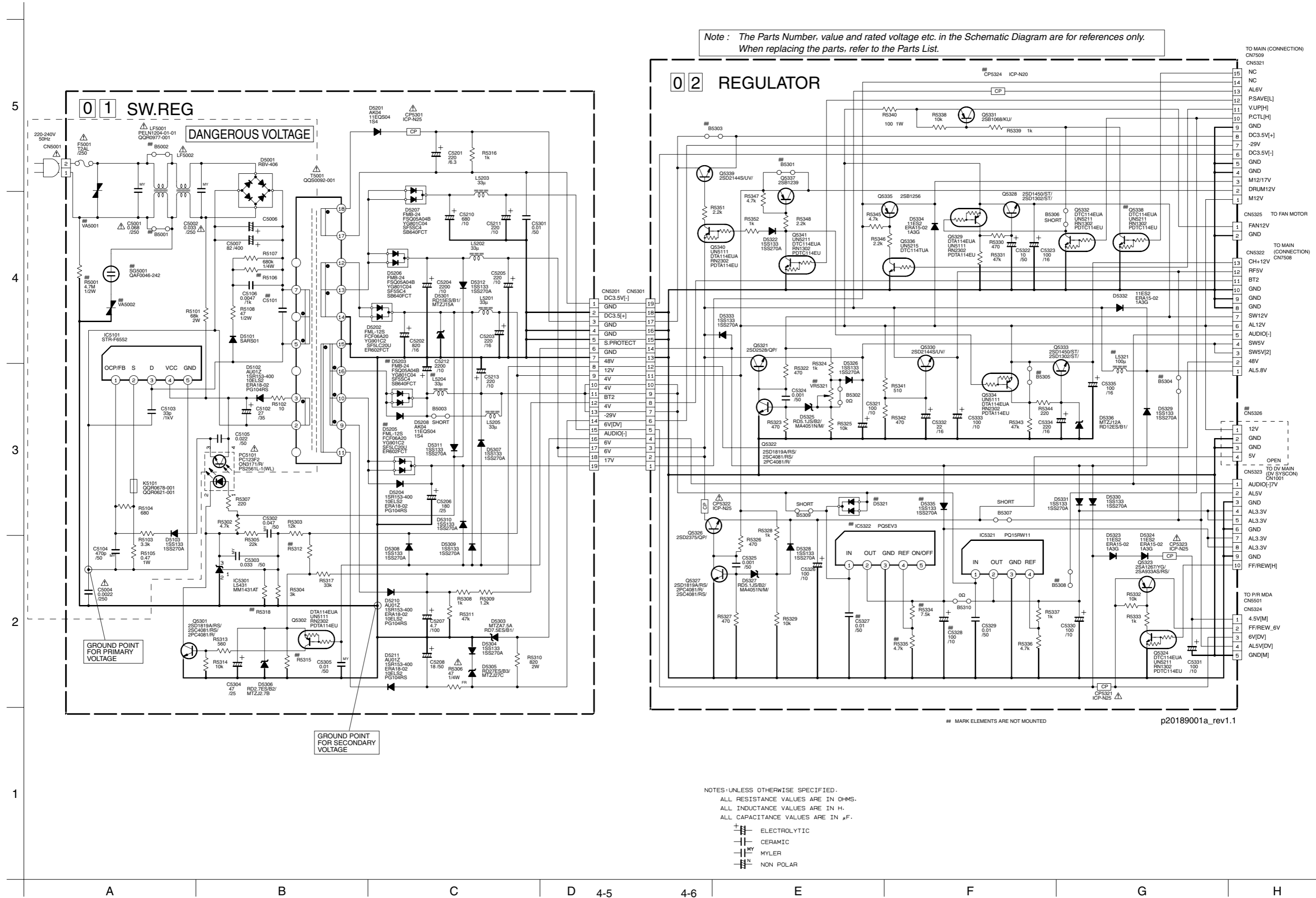
4.1 BOARD INTERCONNECTIONS



NO	NAME
87	S/P CONVERTER
85	JOG
58	DRUM MOTOR
57	CAP MDA
55	LOADING MOTOR
50	DV MAIN
47	LED/SW
41	U.DRUM
36	JACK
28	DISPLAY
27	EJECT SW
17	ON SCREEN
16	P/R MDA
15	S-SUB
14	DEMODO.
12	A/C HEAD
06	TERMINAL
05	3D D/2M
03	MAIN
02	REGULATOR
01	SW REGULATOR

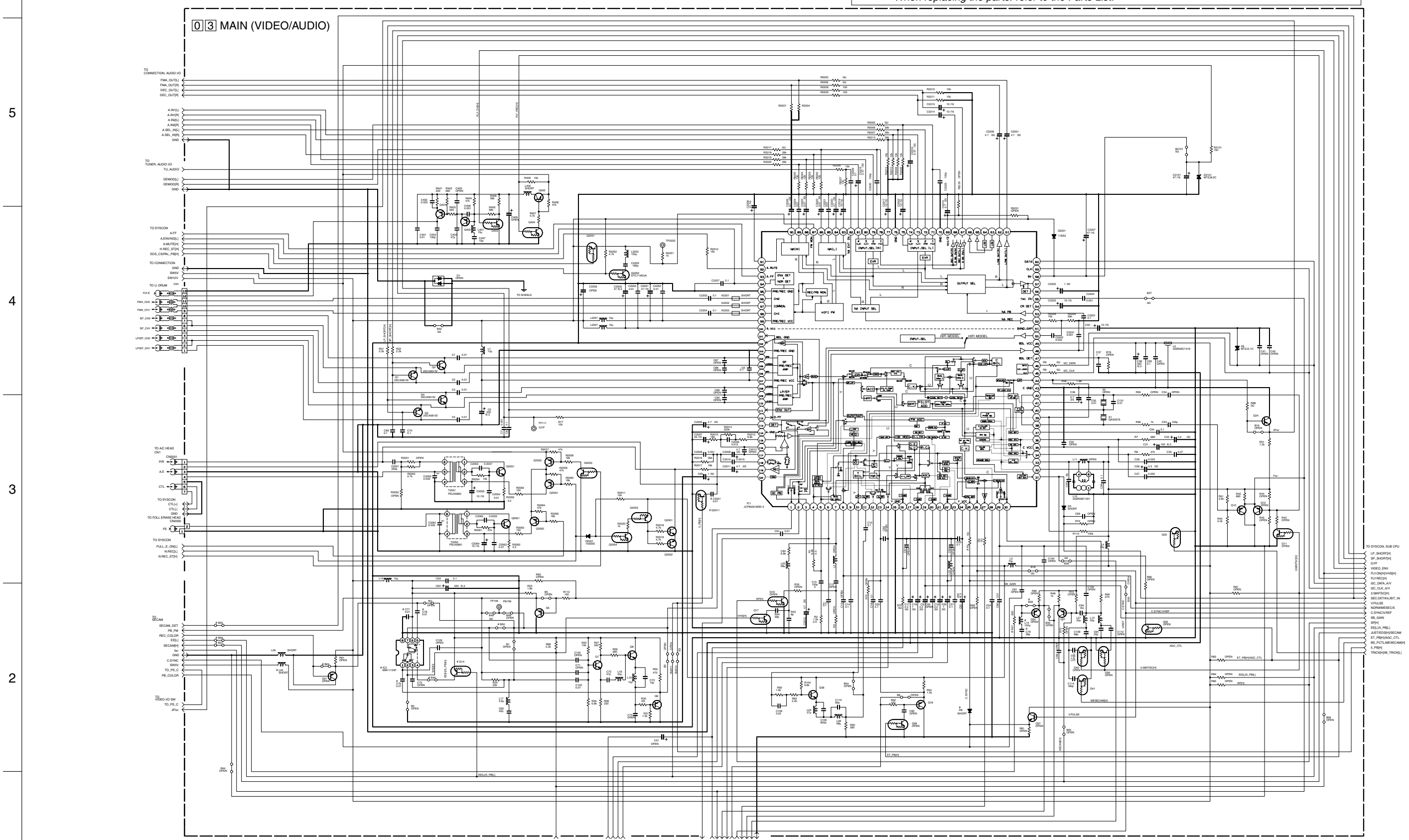
MARK ELEMENTS ARE NOT MOUNTED

4.2 SWITCHING REGULATOR AND REGULATOR SCHEMATIC DIAGRAMS



4.3 VIDEO/AUDIO SCHEMATIC DIAGRAM

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.



DIFFERENCE TABLE

SYMBOL	IC2 Q14 D8	Used
	R4 R47	X Not used
	C76 C79	
	L14 L25	
	822 826 846 850 855-857	
MODEL		
HR-DV52EU		X
HR-DV52EK		
HR-DV52MS		O

NOTES: UNLESS OTHERWISE SPECIFIED:
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL INDUCTANCE VALUES ARE IN H.
 ALL CAPACITANCE VALUES ARE IN μ F.
 ALL NPN TYPE TRANSISTORS ARE 2SC4081ORS/
 ALL PNP TYPE TRANSISTORS ARE 2SA1576AORS/
 ALL NPN TYPE DIGITAL TRANSISTORS ARE DT144WUA.
 ALL PNP TYPE DIGITAL TRANSISTORS ARE DT144WUA.

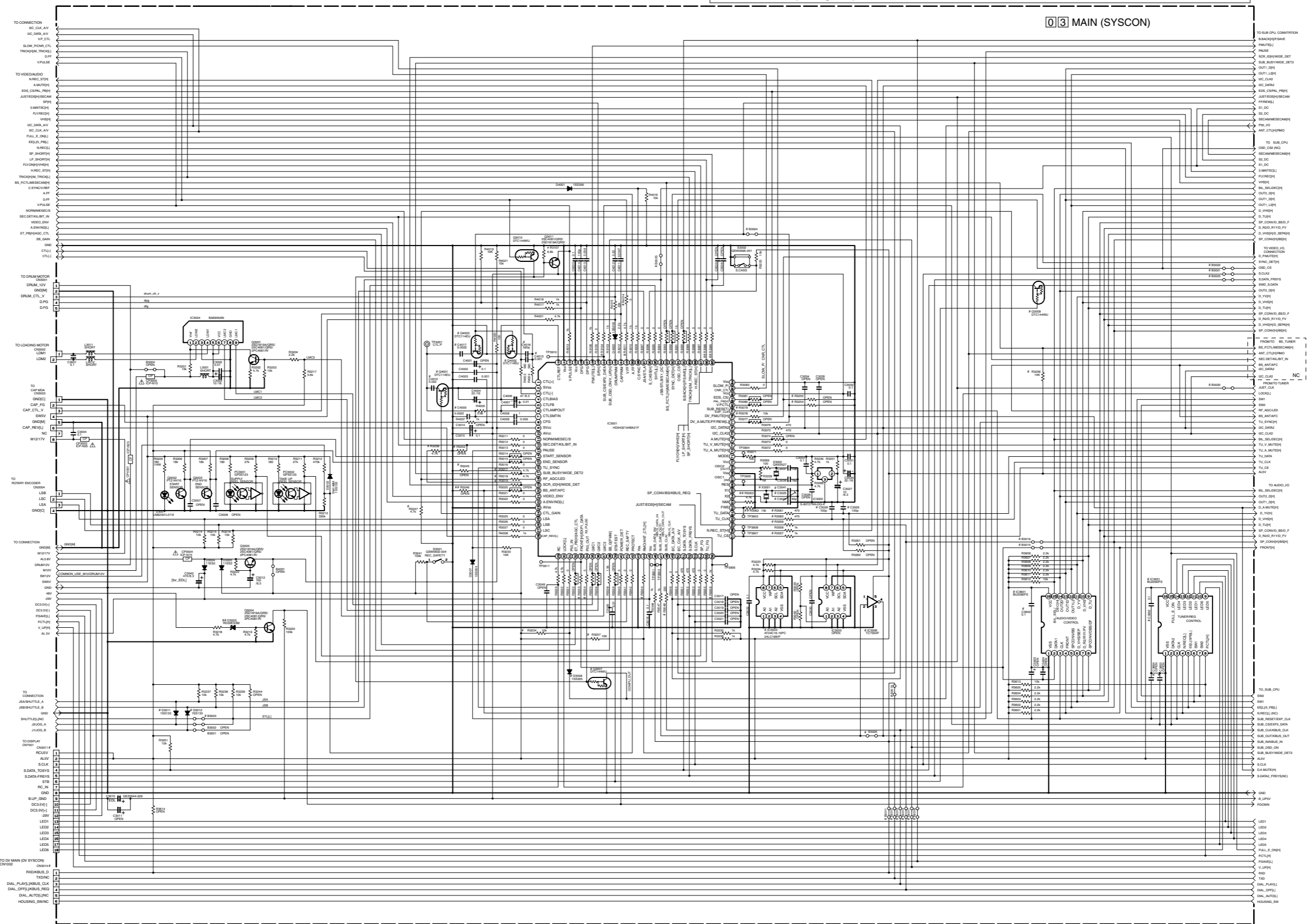
ELECTROLYTIC
 CERAMIC
 MYLAR
 NON POLAR

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4.4 SYSTEM CONTROL SCHEMATIC DIAGRAM

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.

03 MAIN (SYSCON)



NOTES UNLESS OTHERWISE SPECIFIED:
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL INDUCTANCE VALUES ARE IN H.
 ALL CAPACITANCE VALUES ARE IN µF.

ELECTROLYTIC
 CERAMIC
 MYLAR
 NON POLAR

Marked elements may differ depending on the model. Be sure to check the Parts List.

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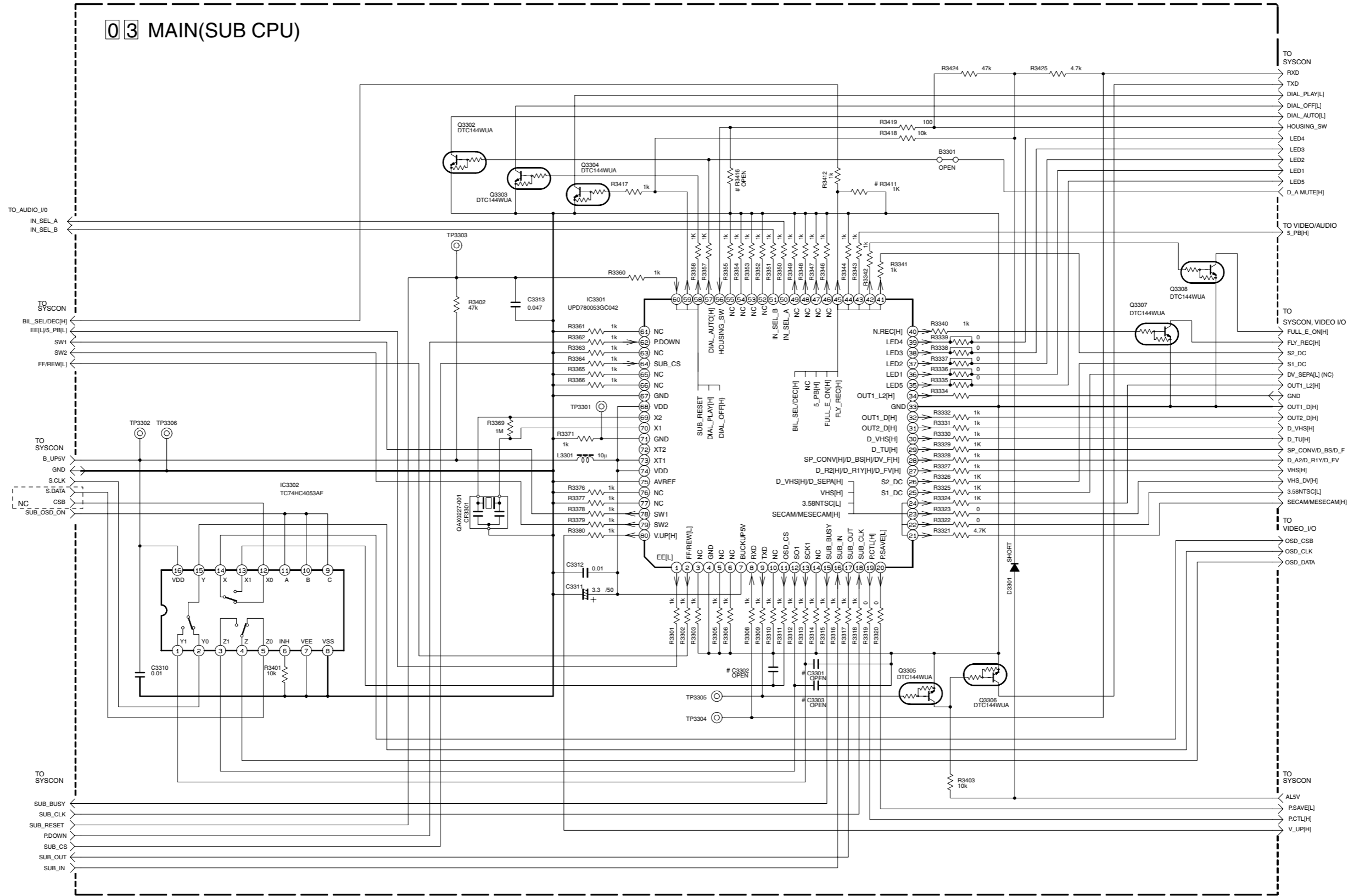
#DIFFERENCE TABLE
 ○ : Used
 X : Not used

ITEM		HR-DVS2 /SR-VS20 EU/EK	MS	US	DOM	HM-HDS1 DOM	PAL	MS	US
JOG/S	B3003 D3011 D3012	○	○	○	○	X	X	X	X
CTL_GAIN	C4010 Q4001	○	○	○	○	○	○	○	○
SEC.DET/KIL/BIT_IN	R3252	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
SUB_BUSY/W.DET2	R3245	X	X	X	X	X	X	X	X
	R3017	4.7k	4.7k	4.7k	4.7k	4.7k	4.7k	4.7k	4.7k
RF_AGC/LED	R3018	4.7k	4.7k	4.7k	4.7k	4.7k	4.7k	4.7k	4.7k
	R3247	X	X	4.7k	X	X	X	X	4.7k
SCR_ID/WIDE	R3019	6.8k	6.8k	X	4.7k	4.7k	6.8k	6.8k	X
	R3258	4.7k	4.7k	X	X	X	4.7k	4.7k	X
P50_IN	R3234	10k	10k	X	X	X	10k	10k	X
	Q3007 D3008	○	○	X	X	X	○	○	X
RMO/ANT_CTL	R3257	X	X	X	X	X	X	X	X
	R3044	0Ω	0Ω	X	1k	1k	0Ω	0Ω	X
JUST/EDS/SECAM	R3056	1k	1k	1k	1k	1k	1k	1k	1k
EEPROM	IC3003	16k	16k	8k	8k	8k	8k	8k	8k
TU_CE/CLK/DATA	R3057 R3060 R3061	○	○	○	○	○	○	○	X
	R3059	1k	1k	1k	1k	470	470	470	470
TU_CLK	C3028	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
TU_DATA	C3029	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
CRYSTAL	X3001	QAX0445	QAX0444	QAX0444	QAX0444	QAX0444	QAX0445	QAX0444	QAX0444
	C3025	○	X	X	X	X	○	X	X
	C3041	X	10p	10p	10p	10p	X	10p	10p
	C3024	22p	12p	12p	12p	12p	22p	12p	12p
EXPANDA	IC3601 IC3651 C3602 C3603 C3604 C3652 C3653 C3654	X	X	X	X	○	○	○	○
	FRONT[H]/EXP1_DATA	B3015	○	○	○	○	X	X	X
	SP_CONV/BS/KBUS_REQ	B3016	○	○	○	○	X	X	X
	JUST_CLK	B3020	X	X	X	○	○	X	X
	BS_PCTL	R3256	X	X	X	X	X	X	X
	SUB_D.IN/KBUS D.IN/RXD	B3011	X	X	X	X	○	○	○
B3019		X	X	X	X	1k	1k	1k	1k
SUB_D.OUT/KBUS D.OUT/TXD	B3012	X	X	X	X	X	X	X	X
SUB_CLK/KBUS CLK/DIAL_PLAY	B3013	X	X	X	X	○	○	○	○
SP_CONV/BS/KBUS_REQ /DIAL_OFF	B3014	X	X	X	X	○	○	○	○
CN3014	CN3014	1-6pin	1-6pin	1-6pin	1-6pin	1-6pin	1-6pin	1-6pin	1-6pin
KBUS_DATA	IC3006	X	X	X	X	○	○	○	○
	B3026	○	○	○	○	X	X	X	X
SUB_OSD_ONV/UP	B3017	X	X	X	X	○	○	○	○
D_P.MUTE	R3078	1k (10kΩ)	1k	1k	1k	1k	1k	1k	1k
	R3255	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
D_A.MUTE/FF/REW	R3254	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
	B3024	X	X	X	X	○	○	○	○
EDS	Q3009	X	X	○	X	X	X	X	○
OSD	B3021								
	B3022	X	X	X	X	○	○	○	○
	B3023								
JBS/STLB/S1_DC	B3025	X	X	X	X	○	X	X	X
CN3011	CN3011	1-18pin	1-18pin	1-18pin	1-18pin	1-18pin	1-18pin	1-18pin	1-18pin
SUB_RESET/EXP.CLK	R3079	1k	1k	1k	1k	1k	1k	1k	1k
FF/REW	C4015	680p (330p)	680p	0.001	680p	680p	680p	680p	0.001
	Q4002 C4016	○	○	X	○	○	○	○	X
	Q4003 C4017	○	○	○	○	○	○	○	○
	C4005	X	X	X	X	X	X	X	X
	SUB_CLK/KBUS_CLK	R3048	220	220	220	220	220	220	220
B.BACK/P.SAVE	B3018	X	X	X	X	○	○	○	
IN_SELA/EXP1_DATA	R3033	0Ω	0Ω	0Ω	0Ω	1k	1k	1k	1k
SUB_CS/EXP2_DATA	R3104	4.7k	4.7k	4.7k	4.7k	1k	1k	1k	1k
M_PULSE	Q3010 Q3011 R3107	X	X	○	○	○	X	X	○
	P50_OUT/M_PULSE	R3034	0Ω	0Ω	4.7k	4.7k	4.7k	0Ω	0Ω
V.FF	R4011	4.7k (2.2k)	4.7k	1k	1k	2.7k	2.7k	2.7k	2.7k
	R4014	0Ω (2.2k)	0Ω	1.8k	1.8k	0Ω	0Ω	0Ω	0Ω

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only.
 When replacing the parts, refer to the Parts List.

4.5 SUB CPU SCHEMATIC DIAGRAM

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.



MARK ELEMENTS ARE NOT MOUNTED.
 NOTES: UNLESS OTHERWISE SPECIFIED.
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL INDUCTANCE VALUES ARE IN H.
 ALL CAPACITANCE VALUES ARE IN μF.

ELECTROLYTIC
 CERAMIC
 MYLER
 NON POLAR

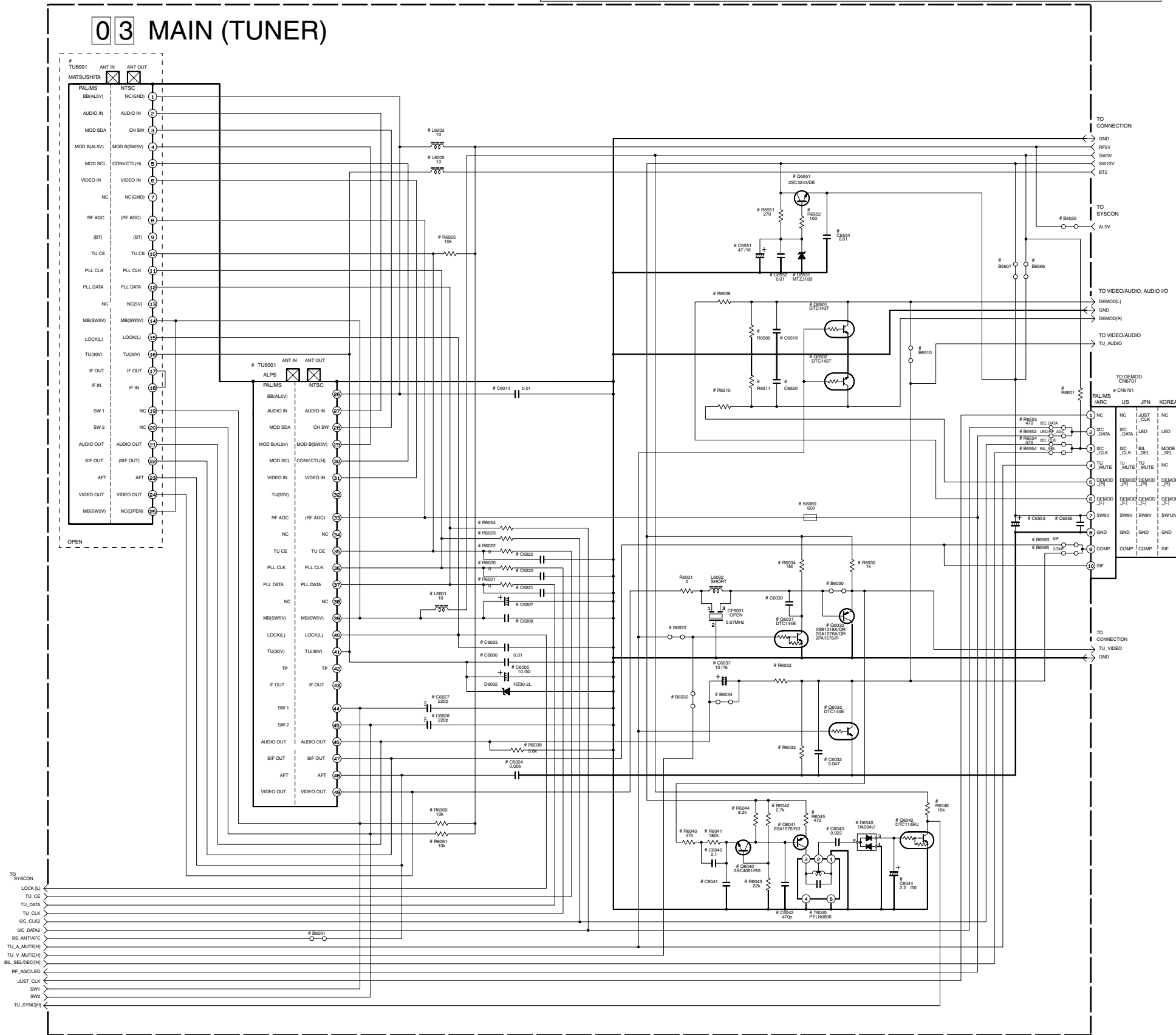
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5
4
3
2
1

A B C D 4-13 4-14 E F G H

4.6 TUNER SCHEMATIC DIAGRAM

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.



DIFFERENCE TABLE
 O Used
 X Not Used

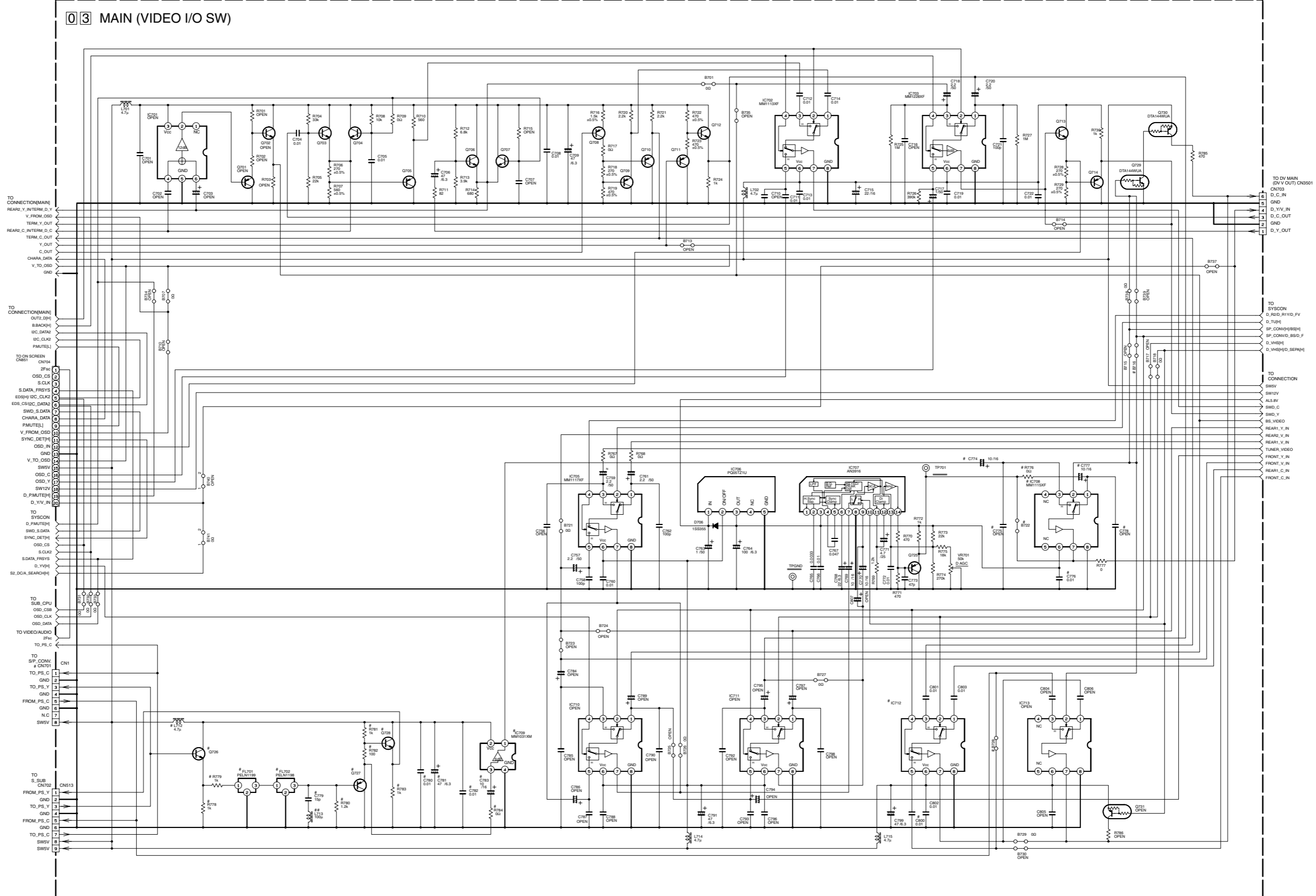
TUNER	SYMBOL	EU/EK	FRANCE	JAPAN		US	
				MS	DVS2	HDS1	DVS2/VS20
TUNER	TU6001		ALPS	ALPS	MATSUSHITA	MATSUSHITA	ALPS
			QAU151	QAU152	QAU198	QAU198	QAU163
AT5	R6025,R6026	X	X	X	X	X	X
VIDEO BUFFER	B6030	X	X	X	X	X	X
TU_V_MUTE	C6031	O	O	O	X	X	X
TU_A_MUTE	B6033	X	X	O	X	X	X
AUDIO OUT	R6032	3.9k	3.9k	0	0	12k	12k
	R6033	1.8k	1.8k	X	X	X	X
AFC	C6024	X	X	X	X	X	X
CENELEC	C6027,C6028	X	O	X	X	X	X
TU(30V)	C6005	X	X	X	X	X	X
	C6006	X	X	X	X	X	X
	L6005	10	10	SHORT	SHORT	SHORT	SHORT
MB(SWSV)	C6007	33010	33010	X	X	X	X
	C6008	X	X	X	X	X	X
	L6001	O	O	SHORT	SHORT	SHORT	SHORT
BB(ALSV)	C6044,C6045	O	O	X	X	X	X
PLL CLK	R6020	470	470	1k	1k	1k	1k
	R6023	X	X	X	X	X	X
	C6020	X	X	X	X	X	X
PLL DATA	R6021	470	470	1k	1k	1k	1k
	R6024	X	X	X	X	X	X
	C6021	X	X	X	X	X	X
TU CE	R6022	470	470	1k	1k	1k	1k
	C6022	X	X	X	X	X	X
LOCK	C6023	O	O	X	X	X	X
SYSTEM SW	R6030,R6031	O	O	X	X	X	X
SYNC DET	R6040-R6046, C6040-C6044, D6040-D6042, D6040,T6040	X	X	X	X	O	O

DEMOC	SYMBOL	EU/EK	FRANCE	JAPAN		US	
				MS	DVS2	HDS1	DVS2/VS20
DEMOC PWB ASSY	CN6701	LPH10994*	LPH10994*	PB11087*	PB11087*	PB11078*	PB11078*
SV REG	R6551,R6552, C6551,C6552	X	X	O	O	O	O
DEMOC REG	C6553	33/16	33/16	X	X	X	X
PASS CON	C6554	X	X	X	X	X	X
SW12V	B6607	X	X	X	X	X	X
DEMOC OUT	R6508,R6510 R6509,R6511 C6519,C6520	X	X	X	X	X	X
MUTE	C6501,C6502	X	X	X	X	O	O
TUNER MONO	B6510	X	X	X	X	X	X
DEMOC SELECTION	R6553,R6554 B6552,B6554 B6553 B6555 B6556 R6601	O X X X O X X	O X X X O X X	X X X X X X X	X X X X X X X	O O X O X X X	O O X O X X X

NOTES: UNLESS OTHERWISE SPECIFIED.
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL INDUCTANCE VALUES ARE IN H.
 ALL CAPACITANCE VALUES ARE IN μF.
 E ELECTROLYTIC
 C CERAMIC
 M MYLER
 NP NON POLAR

4.7 VIDEO I/O SWITCH SCHEMATIC DIAGRAM

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.



DIFFERENCE TABLE

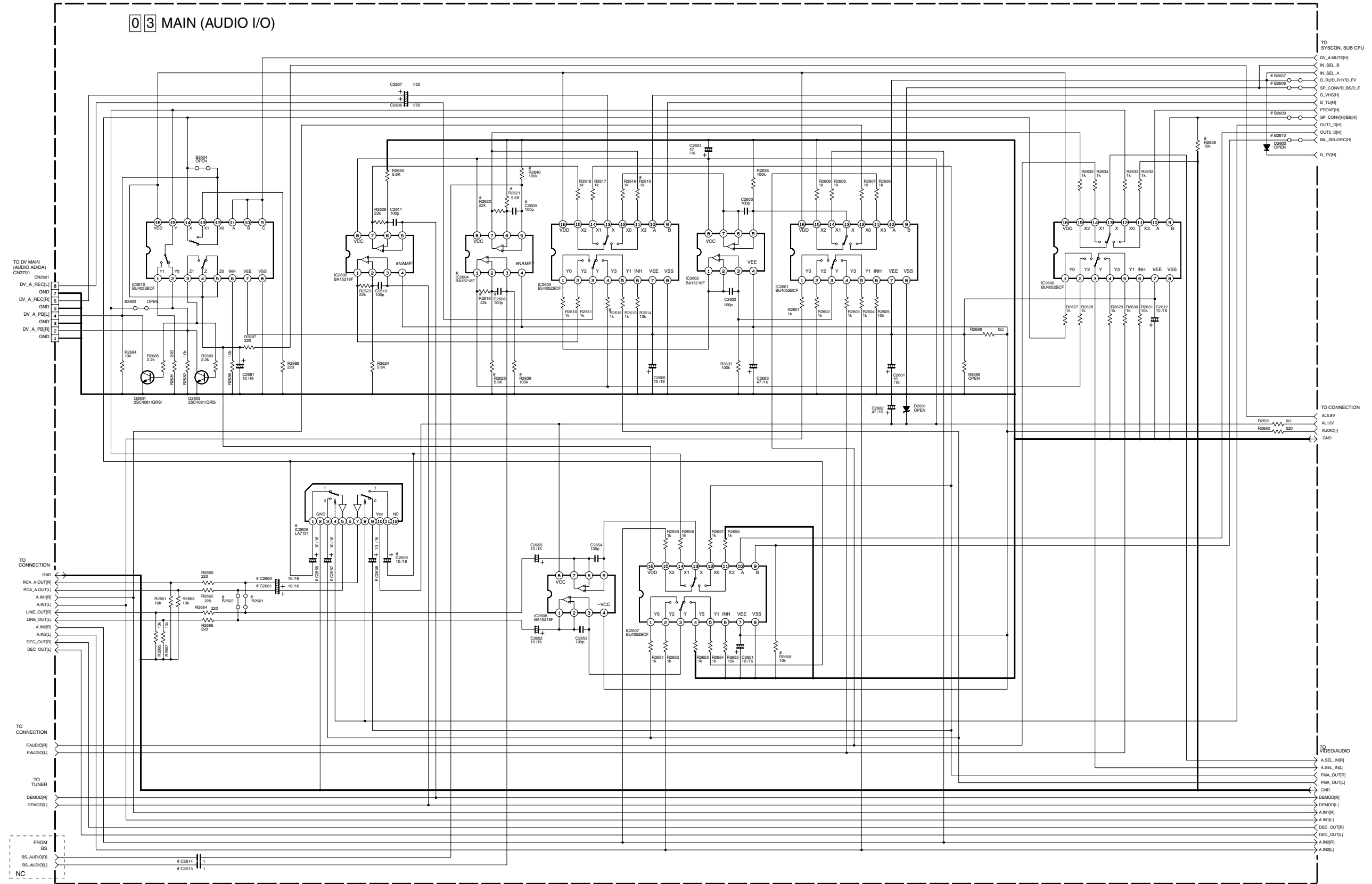
S.NO	IC708, IC709	IC710	IC712
Q726-Q728			
R716, R718, R784			
C774-C778, C779-C783, C800			
L712			
B716, B728			
FL701, FL702			
CN701			
HR-DV52EUEK	X	O	MM1113XF
HR-DV52MS	O	X	MM1113XF

Marked elements may differ depending on the model. Be sure to check the Parts List.
 NOTES-UNLESS OTHERWISE SPECIFIED:
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL CAPACITANCE VALUES ARE IN pF.
 ALL INDUCTANCE VALUES ARE IN uH.
 ALL NPN TYPE TRANSISTORS ARE 2SC4081/ORS1.
 ALL PNP TYPE TRANSISTORS ARE 2SA1576A/DRV.
 ELECTROLYTIC
 CERAMIC
 MYLER
 NON POLAR

p10305001a_rev1

4.8 AUDIO I/O SCHEMATIC DIAGRAM

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only.
When replacing the parts, refer to the Parts List.



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DIFFERENCE TABLE

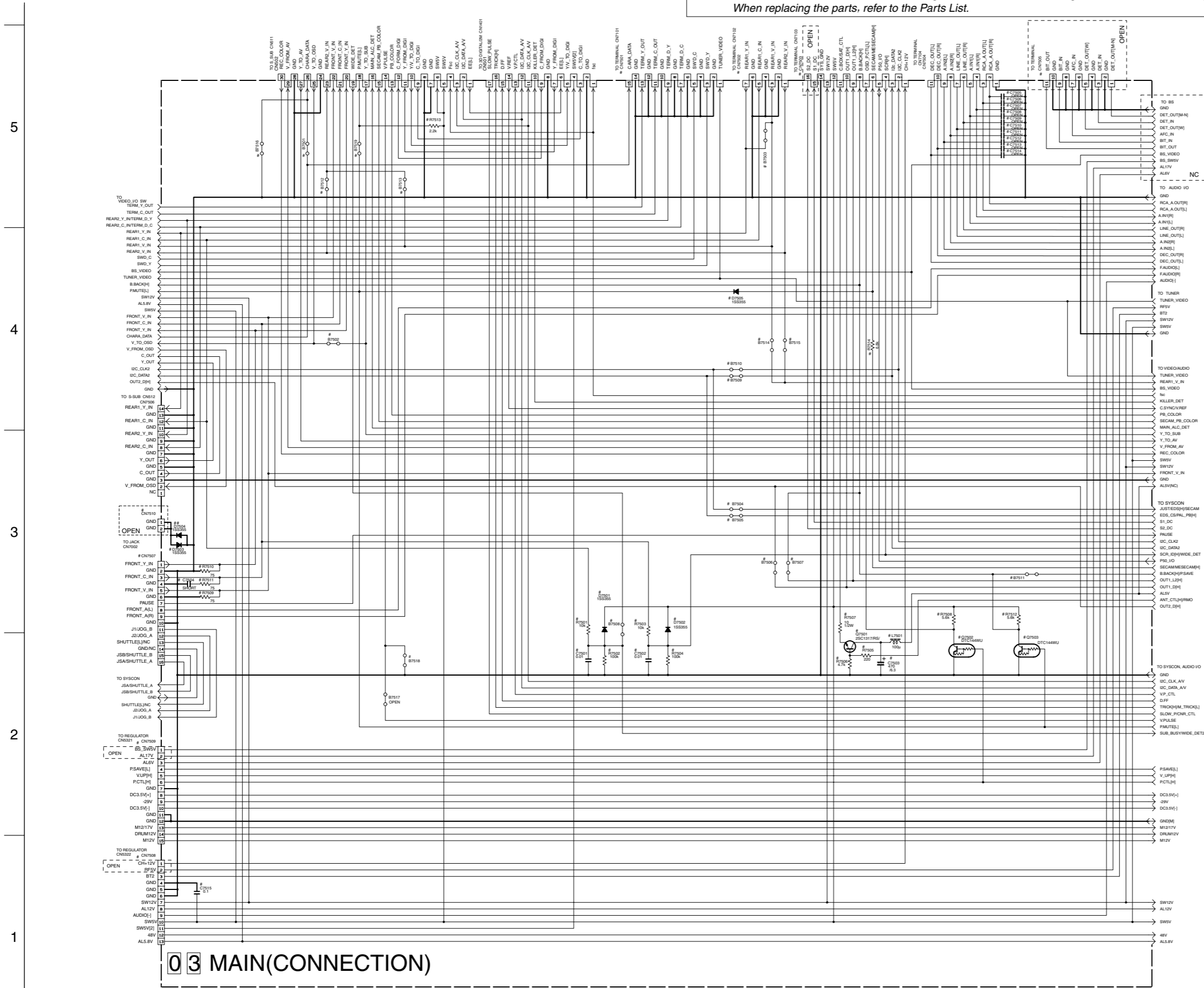
SYMBOL	MODEL	SYMBOL	MODEL	SYMBOL	MODEL
B2601, B2602	X	B2609	X	IC2604	X
B2607, B2608	O	B2610	O	IC2604	O
B2610	X	B2611	X	IC2605	X
B2611	O	B2612	O	IC2605	O
B2612	X	B2613	X	IC2606	X
B2613	O	B2614	O	IC2606	O
B2614	X	B2615	X	IC2607	X
B2615	O	B2616	O	IC2607	O
B2616	X	B2617	X	IC2608	X
B2617	O	B2618	O	IC2608	O
B2618	X	B2619	X	IC2609	X
B2619	O	B2620	O	IC2609	O
B2620	X	B2621	X	IC2610	X
B2621	O	B2622	O	IC2610	O
B2622	X	B2623	X	IC2611	X
B2623	O	B2624	O	IC2611	O
B2624	X	B2625	X	IC2612	X
B2625	O	B2626	O	IC2612	O
B2626	X	B2627	X	IC2613	X
B2627	O	B2628	O	IC2613	O
B2628	X	B2629	X	IC2614	X
B2629	O	B2630	O	IC2614	O
B2630	X	B2631	X	IC2615	X
B2631	O	B2632	O	IC2615	O
B2632	X	B2633	X	IC2616	X
B2633	O	B2634	O	IC2616	O
B2634	X	B2635	X	IC2617	X
B2635	O	B2636	O	IC2617	O
B2636	X	B2637	X	IC2618	X
B2637	O	B2638	O	IC2618	O
B2638	X	B2639	X	IC2619	X
B2639	O	B2640	O	IC2619	O
B2640	X	B2641	X	IC2620	X
B2641	O	B2642	O	IC2620	O
B2642	X	B2643	X	IC2621	X
B2643	O	B2644	O	IC2621	O
B2644	X	B2645	X	IC2622	X
B2645	O	B2646	O	IC2622	O
B2646	X	B2647	X	IC2623	X
B2647	O	B2648	O	IC2623	O
B2648	X	B2649	X	IC2624	X
B2649	O	B2650	O	IC2624	O
B2650	X	B2651	X	IC2625	X
B2651	O	B2652	O	IC2625	O
B2652	X	B2653	X	IC2626	X
B2653	O	B2654	O	IC2626	O
B2654	X	B2655	X	IC2627	X
B2655	O	B2656	O	IC2627	O
B2656	X	B2657	X	IC2628	X
B2657	O	B2658	O	IC2628	O
B2658	X	B2659	X	IC2629	X
B2659	O	B2660	O	IC2629	O
B2660	X	B2661	X	IC2630	X
B2661	O	B2662	O	IC2630	O
B2662	X	B2663	X	IC2631	X
B2663	O	B2664	O	IC2631	O
B2664	X	B2665	X	IC2632	X
B2665	O	B2666	O	IC2632	O
B2666	X	B2667	X	IC2633	X
B2667	O	B2668	O	IC2633	O
B2668	X	B2669	X	IC2634	X
B2669	O	B2670	O	IC2634	O
B2670	X	B2671	X	IC2635	X
B2671	O	B2672	O	IC2635	O
B2672	X	B2673	X	IC2636	X
B2673	O	B2674	O	IC2636	O
B2674	X	B2675	X	IC2637	X
B2675	O	B2676	O	IC2637	O
B2676	X	B2677	X	IC2638	X
B2677	O	B2678	O	IC2638	O
B2678	X	B2679	X	IC2639	X
B2679	O	B2680	O	IC2639	O
B2680	X	B2681	X	IC2640	X
B2681	O	B2682	O	IC2640	O
B2682	X	B2683	X	IC2641	X
B2683	O	B2684	O	IC2641	O
B2684	X	B2685	X	IC2642	X
B2685	O	B2686	O	IC2642	O
B2686	X	B2687	X	IC2643	X
B2687	O	B2688	O	IC2643	O
B2688	X	B2689	X	IC2644	X
B2689	O	B2690	O	IC2644	O
B2690	X	B2691	X	IC2645	X
B2691	O	B2692	O	IC2645	O
B2692	X	B2693	X	IC2646	X
B2693	O	B2694	O	IC2646	O
B2694	X	B2695	X	IC2647	X
B2695	O	B2696	O	IC2647	O
B2696	X	B2697	X	IC2648	X
B2697	O	B2698	O	IC2648	O
B2698	X	B2699	X	IC2649	X
B2699	O	B2700	O	IC2649	O

NOTES-UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN µF.

- [Symbol] ELECTROLYTIC
- [Symbol] CERAMIC
- [Symbol] MYLER
- [Symbol] NON POLAR

4.9 CONNECTION SCHEMATIC DIAGRAM

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.



03 MAIN(CONNECTION)

p10308001a_rev0

DIFFERENCE TABLE

Q Used
X Not used

	ONS2V520	EU	EK	MS	DOM	US	HM-HDS1	DOM	US
B7501	X	X	X	X	X	X	O		
B7502	X	X	X	X	X	X	X		
B7503	O	O	X	X	X	X	X		
B7504	X	X	X	X	X	O	X		
B7505	X	X	X	X	X	O	X		
B7506	X	X	X	X	X	X	X		
B7507	X	X	X	X	X	X	X		
B7508	X	X	X	X	X	X	X		
B7509	O	O	O	X	X	X	X		
B7510	O	O	O	X	X	X	X		
B7511	O	O	O	O	O	O	X		
B7512	O	O	O	X	X	X	X		
B7513	X	X	X	X	O	O	O		
B7514	O	O	O	X	X	X	X		
B7515	X	X	X	X	O	O	O		
B7516	O	O	O	O	X	X	X		
B7517	X	X	X	X	X	X	X		
B7518	O	O	O	O	O	O	O		
B7519	X	X	X	X	O	O	O		
B7513	O	O	O	X	X	X	X		
R7501									
R7502									
R7503									
R7504									
C7501	X	X	X	X	X	X	O		
C7502									
D7501									
D7502									
C7505	X	X	X	X	X	X	X		
C7514	X	X	X	X	X	X	X		
C7515	X	X	X	X	O	O	O		
Q7501									
R7505									
R7506	O	O	O	X	O	O	X		
R7507									
L7501									
C7503									
R7508									
Q7502	O	O	O	O	O	O	X		
R7512	X	X	X	X	X	X	O		
Q7503									
R7509									
R7510	O	O	O	X	X	X	X		
R7511	X	X	X	X	X	X	X		
C7504									
CN7510	X	X	X	X	X	X	X		
D7503	1-15	1-15	1-15	3-15	3-15	3-8			
CN7501	1-15	1-15	1-15	1-7	1-7	1-7			
CN7502	1-14	1-14	1-14	7-16	7-16	8-15			
CN7503	1-14	1-14	1-14	1-11	X	1-11			
CN7505	X	X	X	1-16	1-16	1-10			
CN7507	1-16	1-16	1-16	1-16	1-16	1-10			
CN7508	1-13	1-13	1-13	3-13	3-13	3-13			
CN7509	3-15	3-15	3-15	1-15	3-15	1-15			
D7505	O	O	O	O	X	X			
R7514	O	O	O	X	X	X			

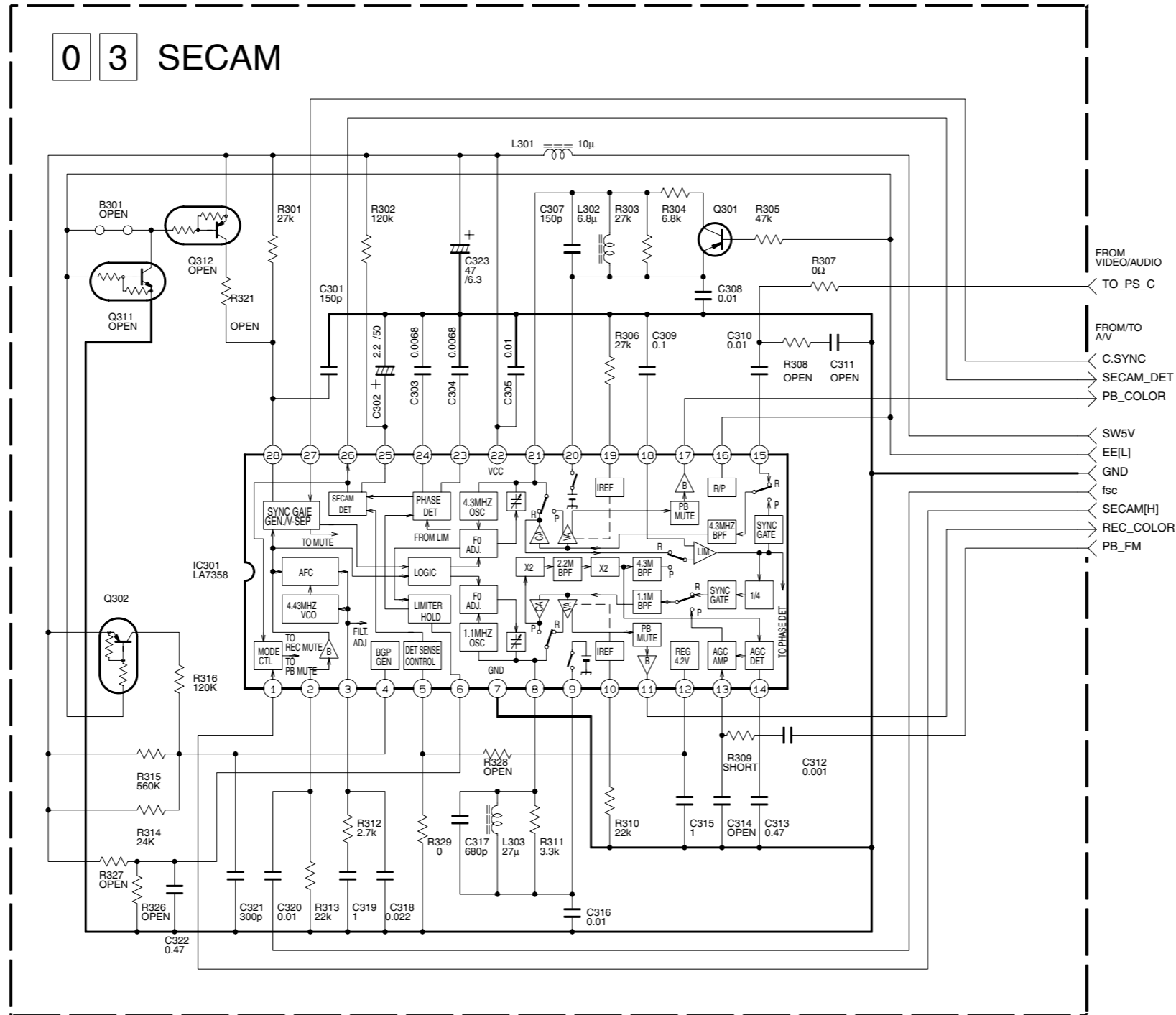
Marked elements may differ depending on the model. Be sure to check the Parts List.

NOTES: UNLESS OTHERWISE SPECIFIED:
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN µF.

ELECTROLYTIC
 CERAMIC
 MYLER
 NON POLAR

4.10 SECAM SCHEMATIC DIAGRAM

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.



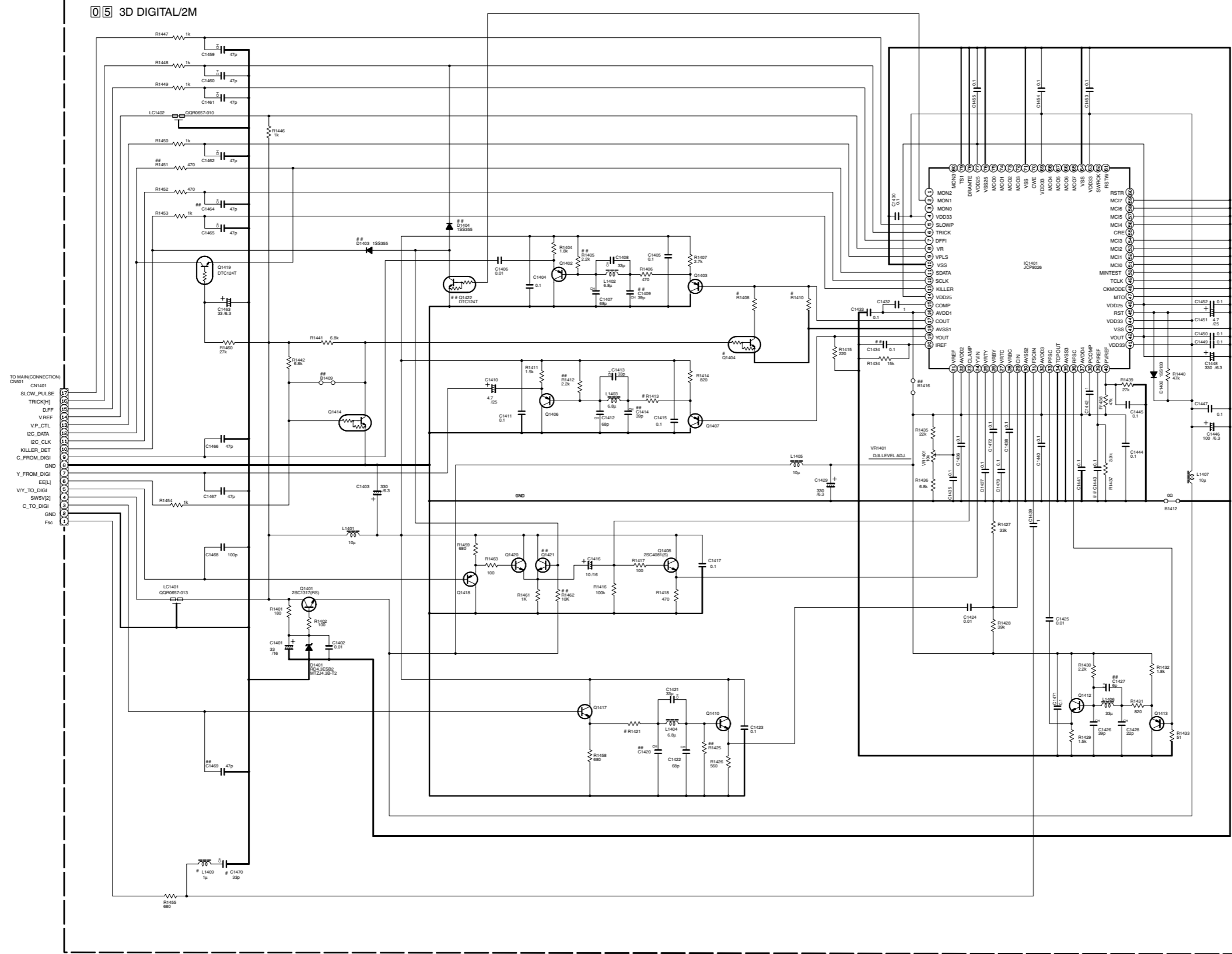
p30067001a_rev0

NOTES: UNLESS OTHERWISE SPECIFIED.
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL INDUCTANCE VALUES ARE IN H.
 ALL CAPACITANCE VALUES ARE IN μF.

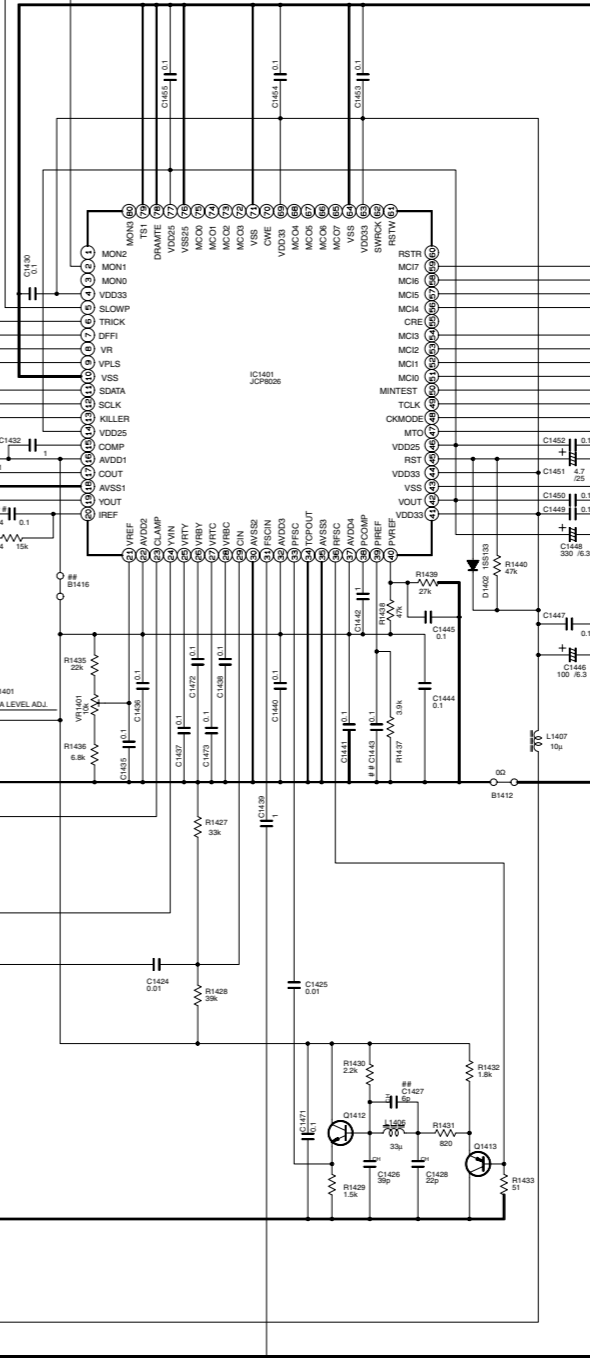
- ELECTROLYTIC
- CERAMIC
- MYLER
- NON POLAR

4.11 3D DIGITAL/2M SCHEMATIC DIAGRAM

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only.
When replacing the parts, refer to the Parts List.



TO MAIN CONNECTION
 CN01 CN401
 SLOW_PULSE
 TRICK(H)
 D_FF
 V_REF
 VP_CTL
 IC_DATA
 IC_CLK
 KILLER_DET
 C_FROM_DIGI
 GND
 Y_FROM_DIGI
 EQ1
 VY_TO_DIGI
 SW5V[2]
 C_TO_DIGI
 GND
 Fsc



NOTES UNLESS OTHERWISE SPECIFIED:
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL INDUCTANCE VALUES ARE IN H.
 ALL CAPACITANCE VALUES ARE IN μF.
 + ELECTROLYTIC
 - CERAMIC
 - MYLER
 - NON POLAR

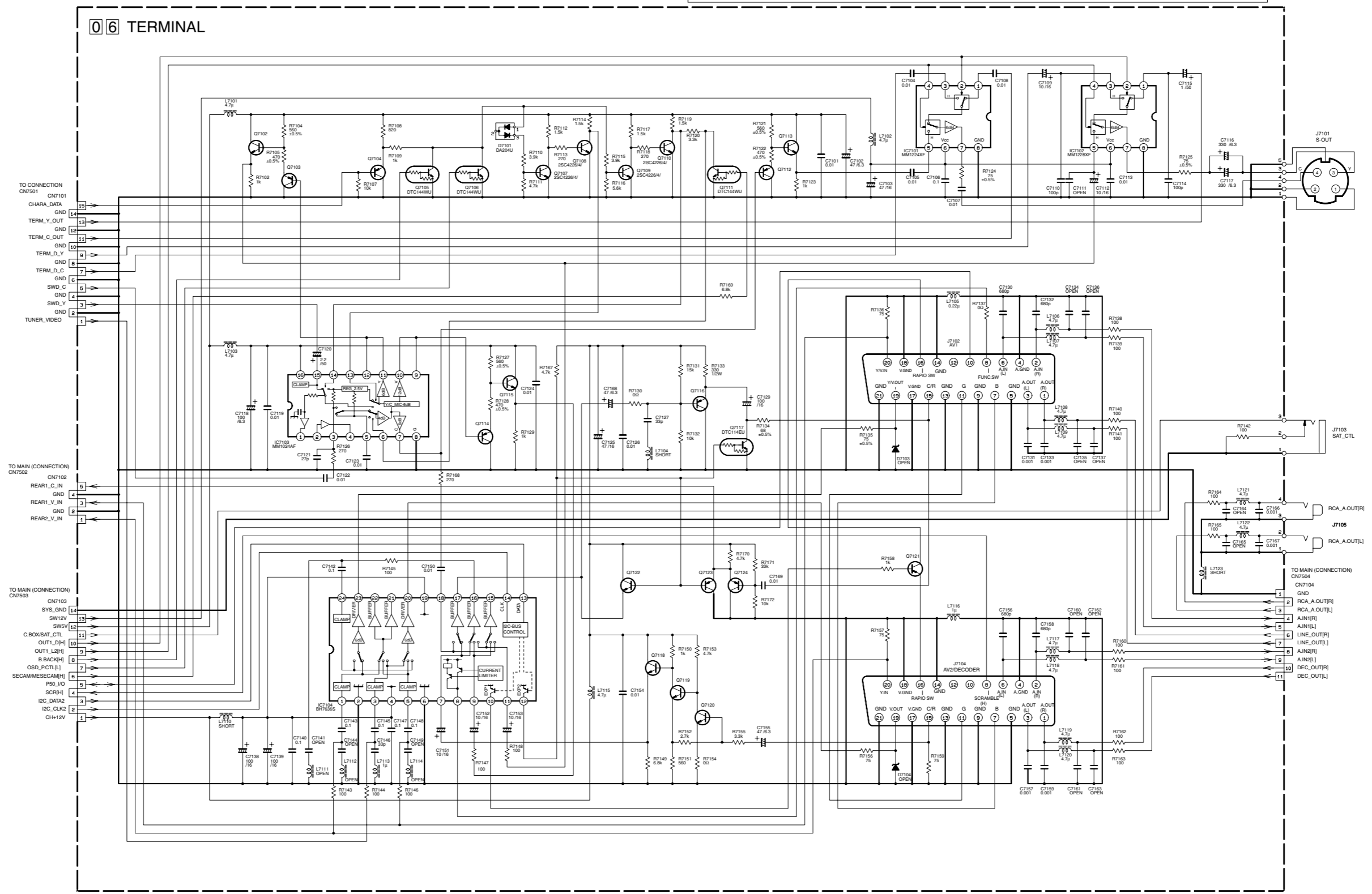
MARK ELEMENTS ARE NOT MOUNTED.
 ALL SINGLE DIODE: 1SS133 OR 1N4148.
 ALL PNP TRANSISTOR: 2SA1576A(QRS) OR 2SB1218A(QRS) OR 2PA1576(R)
 ALL NPN TRANSISTOR: 2SC4081(QRS) OR 2SD1819A(QRS) OR 2PC4081(R)
 ALL NPN DIGITAL TRANSISTOR: DTC144WUA OR UMS21E OR RNI309

* DIFFERENCE TABLE

	Q1404	R1408	R1410	R1413	R1421	C1470	L1409
PLMS	○	1.2k	390	330	330	33p	1u
NTSC	×	OPEN	240	470	330	OPEN	OPEN

4.12 TERMINAL SCHEMATIC DIAGRAM

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.



p10293001a_rev0

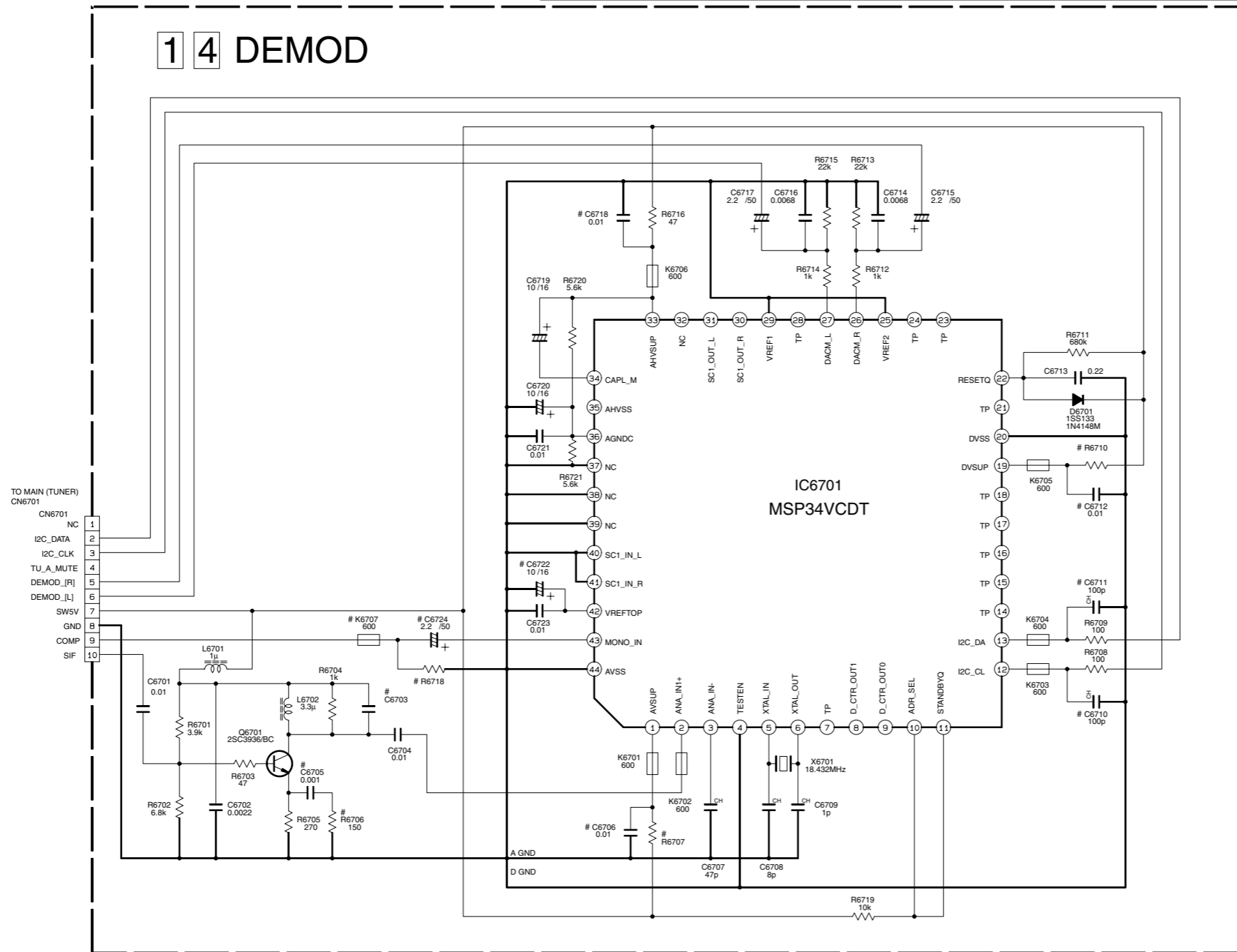
NOTES-UNLESS OTHERWISE SPECIFIED.
 ALL NPN TYPE TRANSISTORS ARE 2SC4081/ORS.
 ALL PNP TYPE TRANSISTORS ARE 2SA1576A/ORS.
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL INDUCTANCE VALUES ARE IN H.
 ALL CAPACITANCE VALUES ARE IN μF.
 — ELECTROLYTIC
 — CERAMIC
 — MYLER
 — NON POLAR

LAST NO	VACANT NO
I 7101	
R 7122	7101, 7103, 7106, 7166
C 7169	7128
L 7123	
D 7104	7102
Q 7124	7101
IC 7104	
J 7105	

4.13 DEMODULATOR SCHEMATIC DIAGRAM

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.

1 4 DEMOD



p20162001a_rev2

DIFFERENCE TABLE
 ○ Used
 × Not used

SYMBOL	FRANCE MS	BASIC	ARC	
	STEP UP EU/EK	EU/EK	3SYSTEM	4SYSTEM
PRE AMP R6706 C6705	○	○	×	×
C6703	×	×	180p	220p
MONO IN C6724 K6707	○	×	×	×
R6718	×	×	×	×
ANALOG Vcc R6707 C6706	×	×	×	×
I2C_bus C6710 C6711	×	×	×	×
DIGITAL Vcc R6710 C6712	×	×	×	×
DAC Vcc C6718 C6722	×	×	×	×

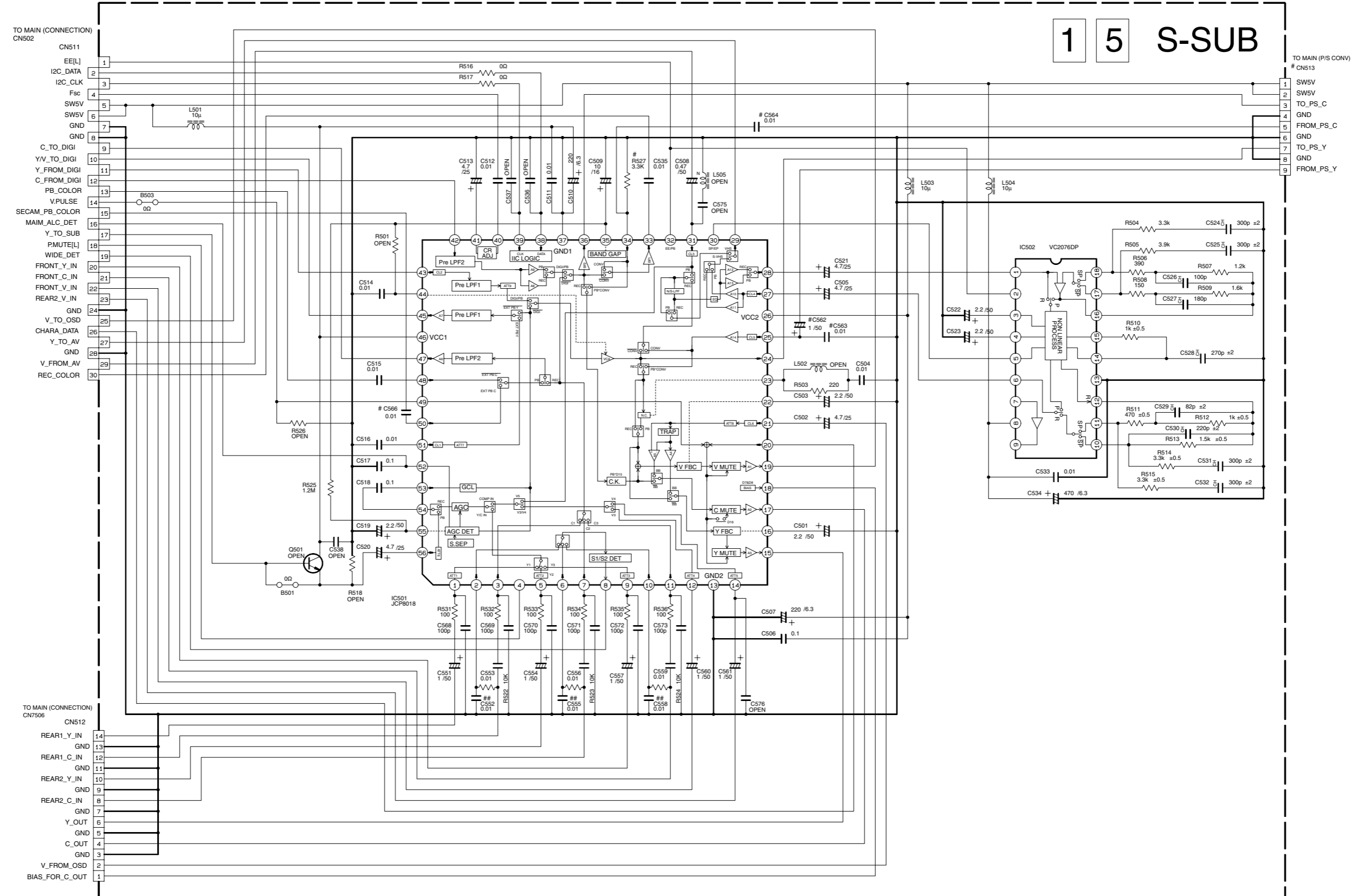
NOTES: UNLESS OTHERWISE SPECIFIED.
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL INDUCTANCE VALUES ARE IN H.
 ALL CAPACITANCE VALUES ARE IN μF.

- ELECTROLYTIC
- CERAMIC
- MYLER
- NON POLAR

4.14 S-SUB SCHEMATIC DIAGRAM

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.

1 5 S-SUB



p20168001a_rev0

DIFFERENCE TABLE

	Used	Not used
CN513	○	×
C562	○	×
C564	○	×
C566	○	×
C563	×	○
R527	×	○
MS	○	×
OTHERS	×	○

Marked elements may differ depending on the model. Be sure to check the Parts List.

NOTES: UNLESS OTHERWISE SPECIFIED.
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL INDUCTANCE VALUES ARE IN H.
 ALL CAPACITANCE VALUES ARE IN μF.

ELECTROLYTIC
 CERAMIC
 MYLER
 NON POLAR

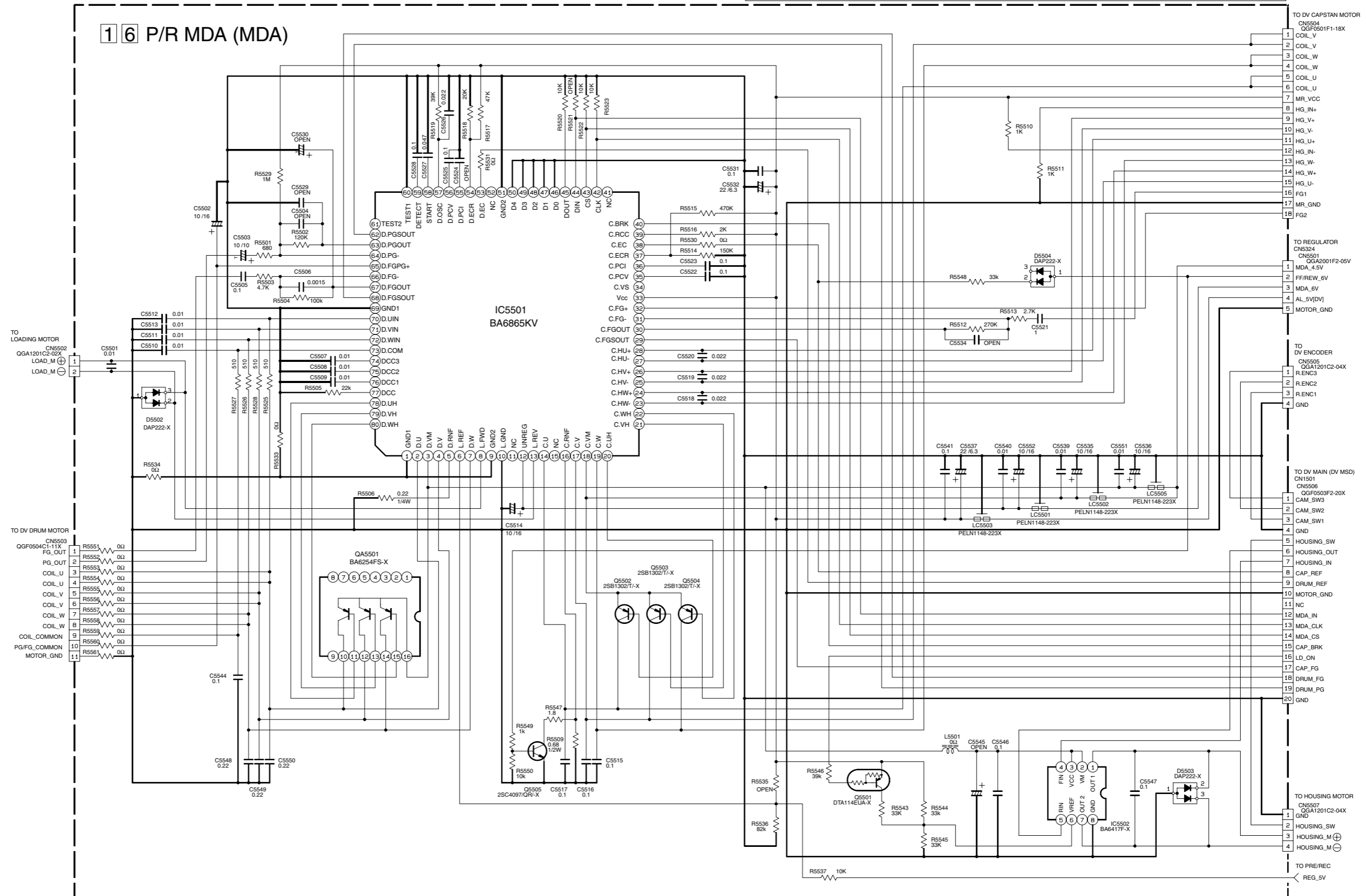
5
4
3
2
1

A B C D 4-31 4-32 E F G H

4.15 MDA SCHEMATIC DIAGRAM

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.

1 6 P/R MDA (MDA)

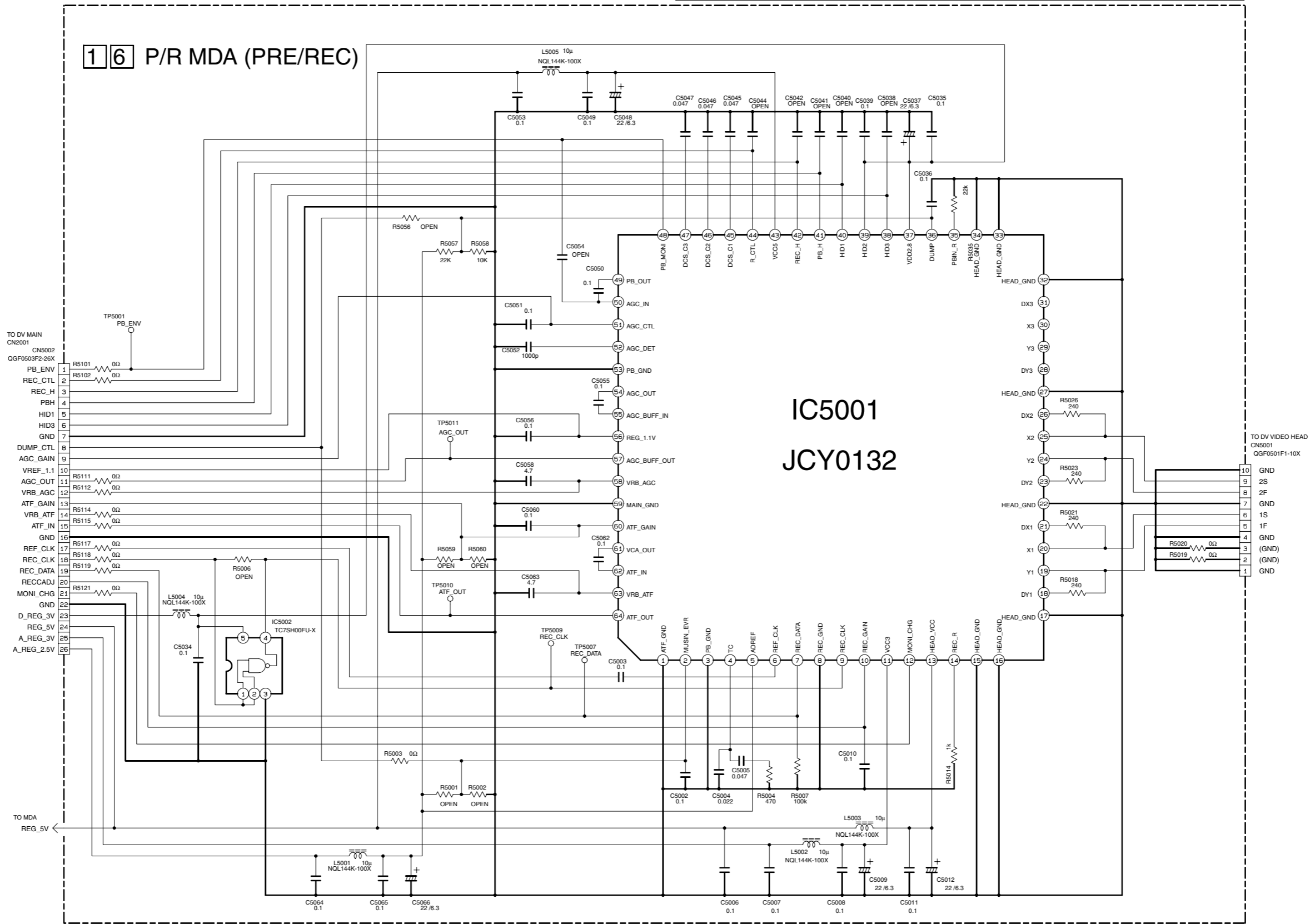


NOTES: UNLESS OTHERWISE SPECIFIED.
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL INDUCTANCE VALUES ARE IN H.
 ALL CAPACITANCE VALUES ARE IN μF.

ELECTROLYTIC
 CERAMIC
 MYLAR
 NON POLAR

4.16 PRE/REC SCHEMATIC DIAGRAM

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.



p20171001a_rev0

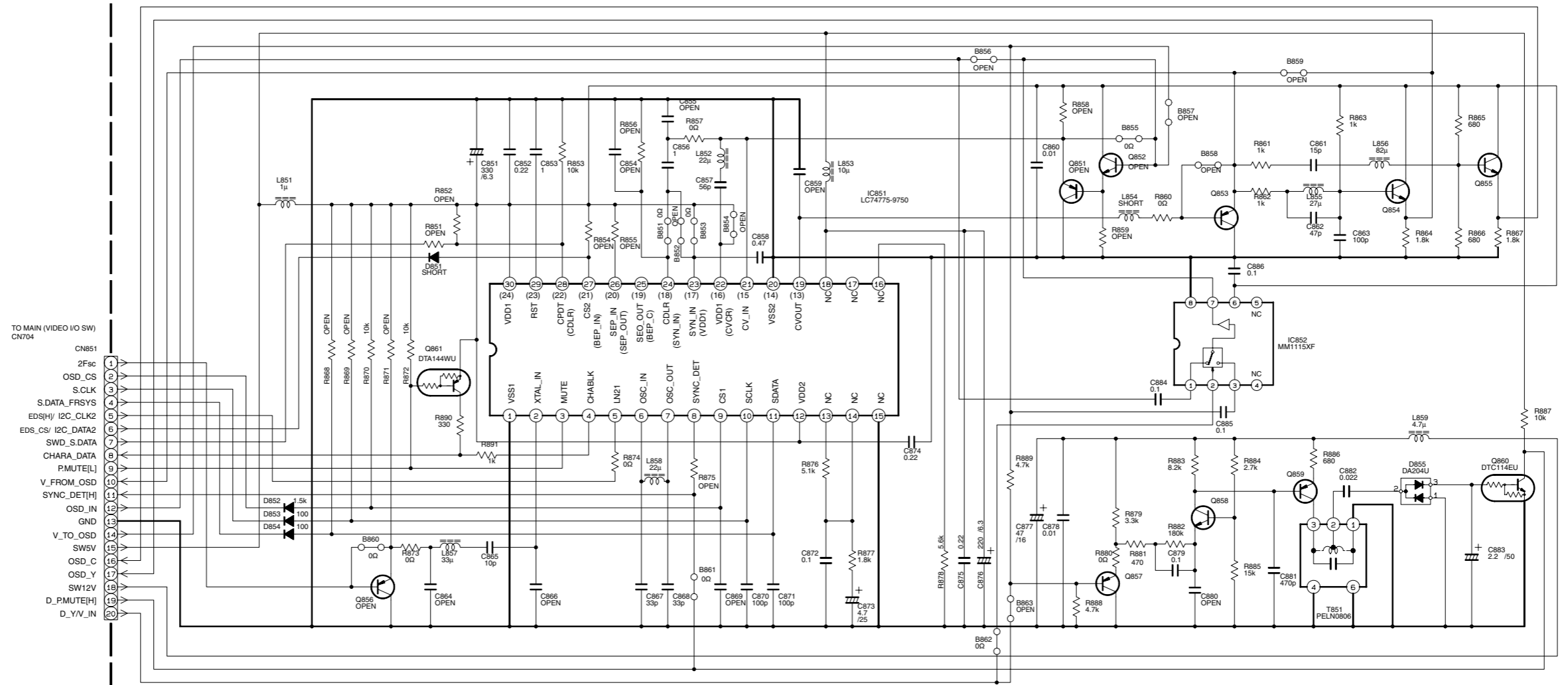
5
4
3
2
1

A B C D 4-35 4-36 E F G H

4.17 ON SCREEN SCHEMATIC DIAGRAM

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.

17 ON SCREEN



TO MAIN (VIDEO I/O SW)
CN704

CN851
2Fsc
OSD_CS
S.CLK
S.DATA_FRSYS
EDS[H]/ I2C_CLK2
EDS_CS/ I2C_DATA2
SWD_S.DATA
CHARA_DATA
P.MUTE[L]
V_FROM_OSD
SYNC_DET[H]
OSD_IN
GND
V_TO_OSD
SW5V
OSD_C
OSD_Y
SW12V
D_P.MUTE[H]
D_Y/V_IN

p20192001a_rev0

NOTES: UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.

ALL NPN TYPE TRANSISTORS ARE 2SC4081/QR5.
ALL PNP TYPE TRANSISTORS ARE 2SA1576A/QR1.

ELECTROLYTIC
 CERAMIC
 MYLER
 NON POLAR

A

B

C

D 4-37

4-38

E

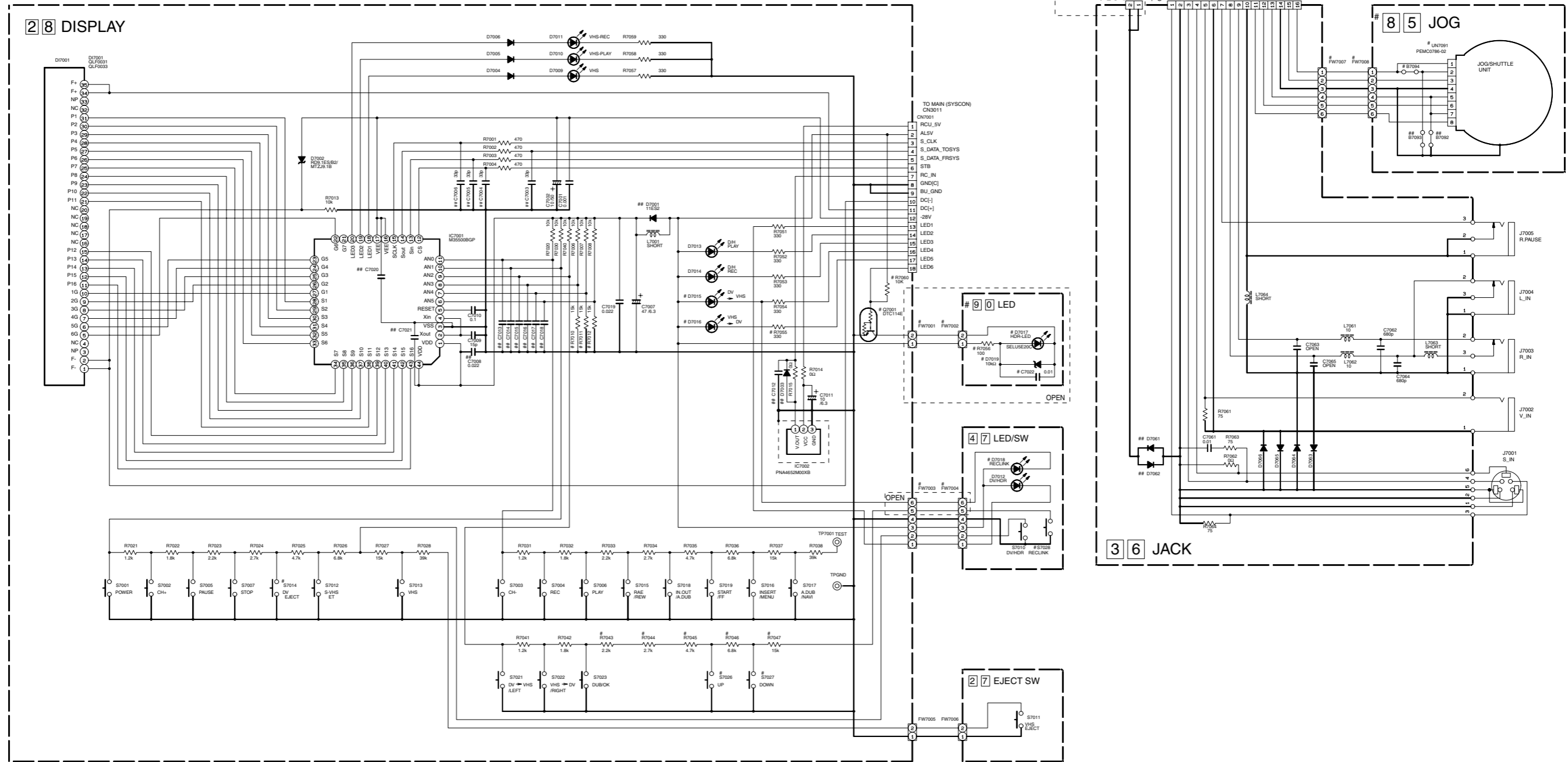
F

G

H

4.18 DISPLAY, EJECT SW, LED/SW, JACK, AND JOG SCHEMATIC DIAGRAMS

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.



p10309001a_rev1

# DIFFERENCE TABLE					
		○ Used	X Not used		
	# [5] JOG	CN7002	[8] [0] LED	S7014	FW7003
	UN7091		D7018	D7014	FW7004
	S7094		FW7001	S7026	
	FW7007		FW7002	R7044	
	FW7008		R7027	R7045	
			R7060	R7046	
			C7001	R7047	
HR-DVS2	○	1-16	X	○	1-4
HM-HDS1	X	1-10	○	X	1-6

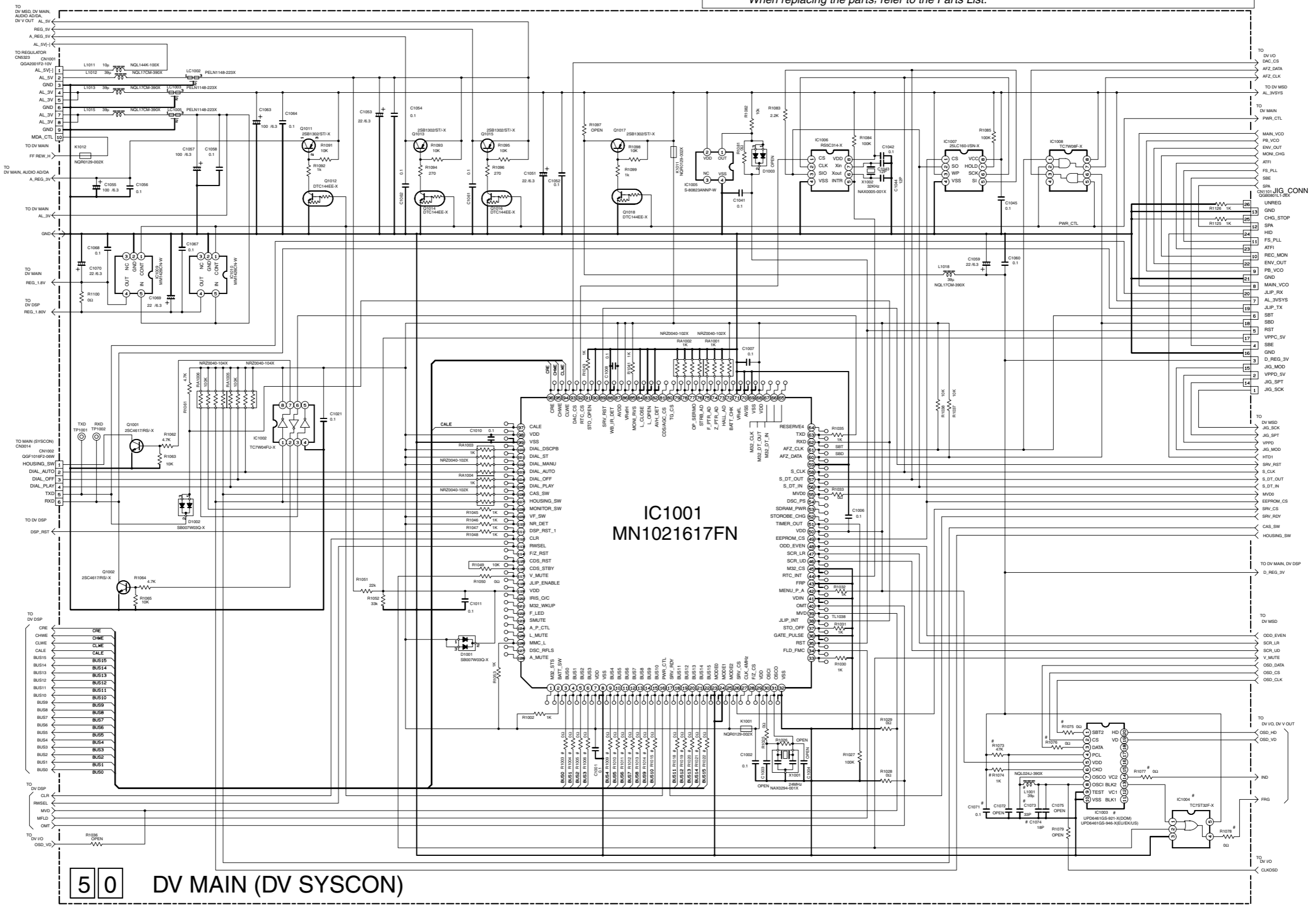
NOTES-UNLESS OTHERWISE SPECIFIED-
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL INDUCTANCE VALUES ARE IN H.
 ALL DIODES ARE 1N4148M OR 1SS133
 ALL CAPACITANCE VALUES ARE IN μF.

ELECTROLYTIC
 CERAMIC
 MYLAR
 NON POLAR
 ##NOT USED

5
4
3
2
1

4.19 DV SYSTEM CONTROL SCHEMATIC DIAGRAMS

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.



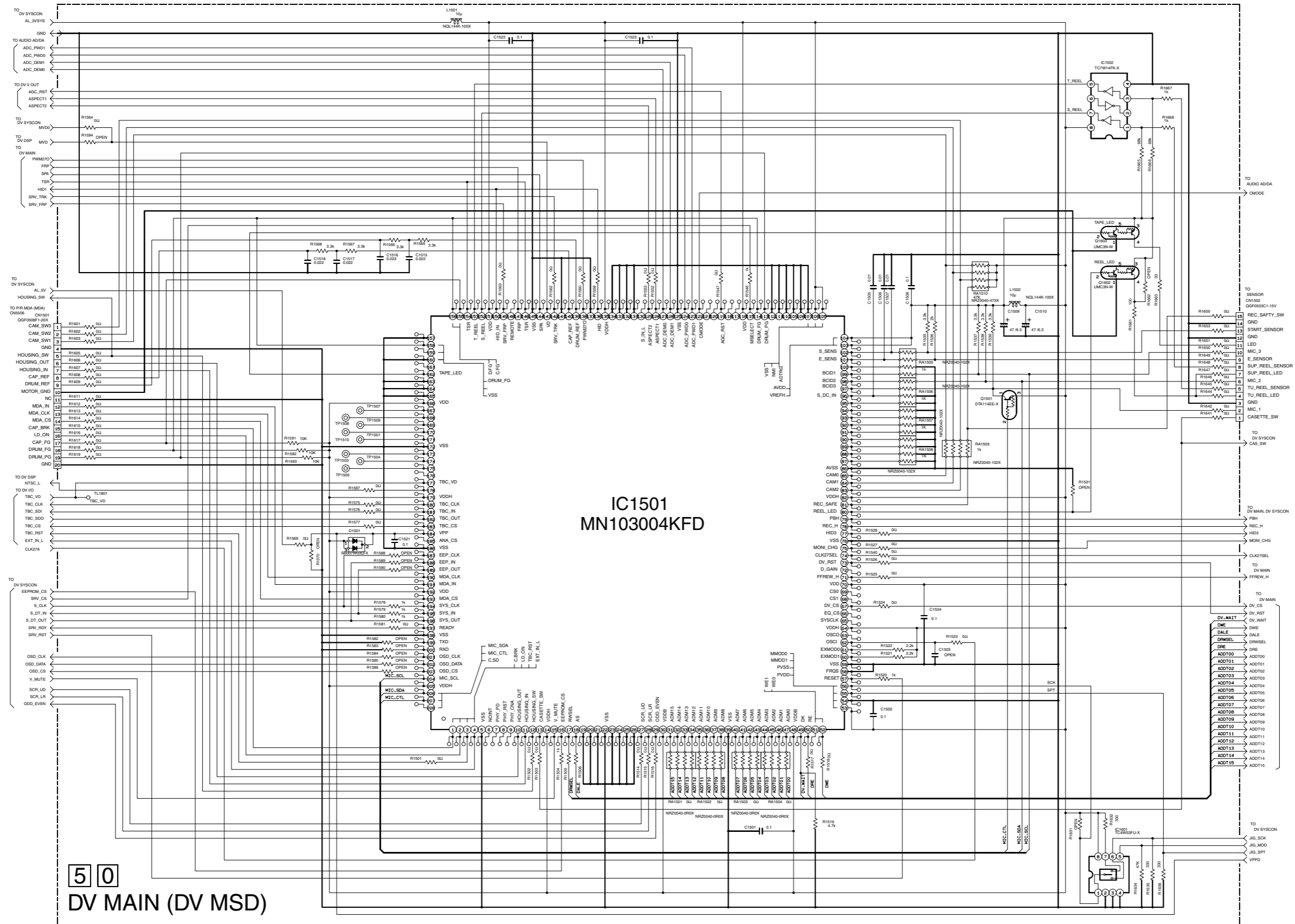
50 DV MAIN (DV SYSCON)

p10285001a_rev0

NOTES-UNLESS OTHERWISE SPECIFIED.
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL INDUCTANCE VALUES ARE IN H.
 ALL CAPACITANCE VALUES ARE IN µF.
 ± ELECTROLYTIC
 C CERAMIC
 M MYLER
 NP NON POLAR

4.20 DV MSD SCHEMATIC DIAGRAM

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.



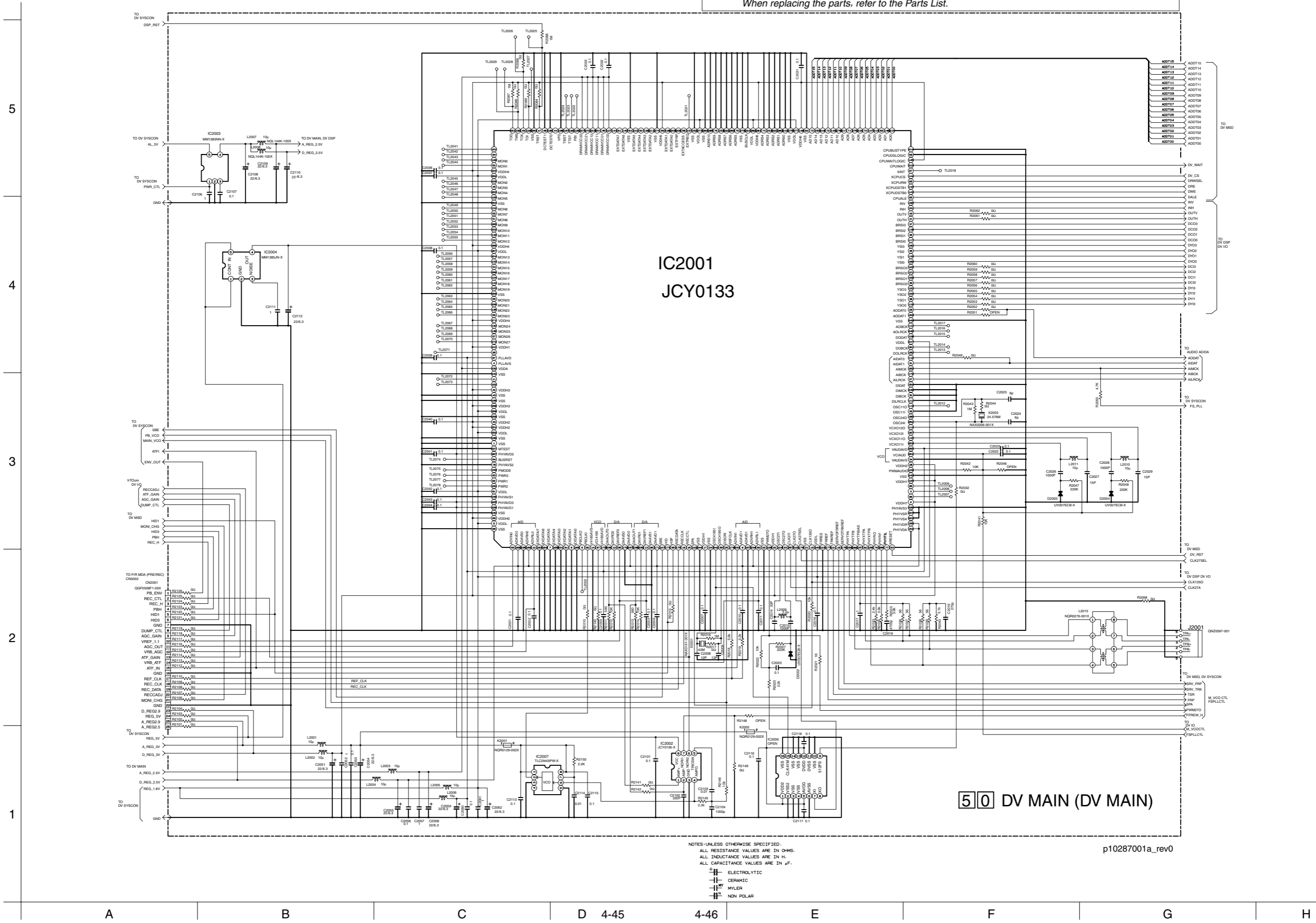
50
DV MAIN (DV MSD)

p10286001a_rev0

NOTES-UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μ F.
ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

4.21 DV MAIN SCHEMATIC DIAGRAM

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.



50 DV MAIN (DV MAIN)

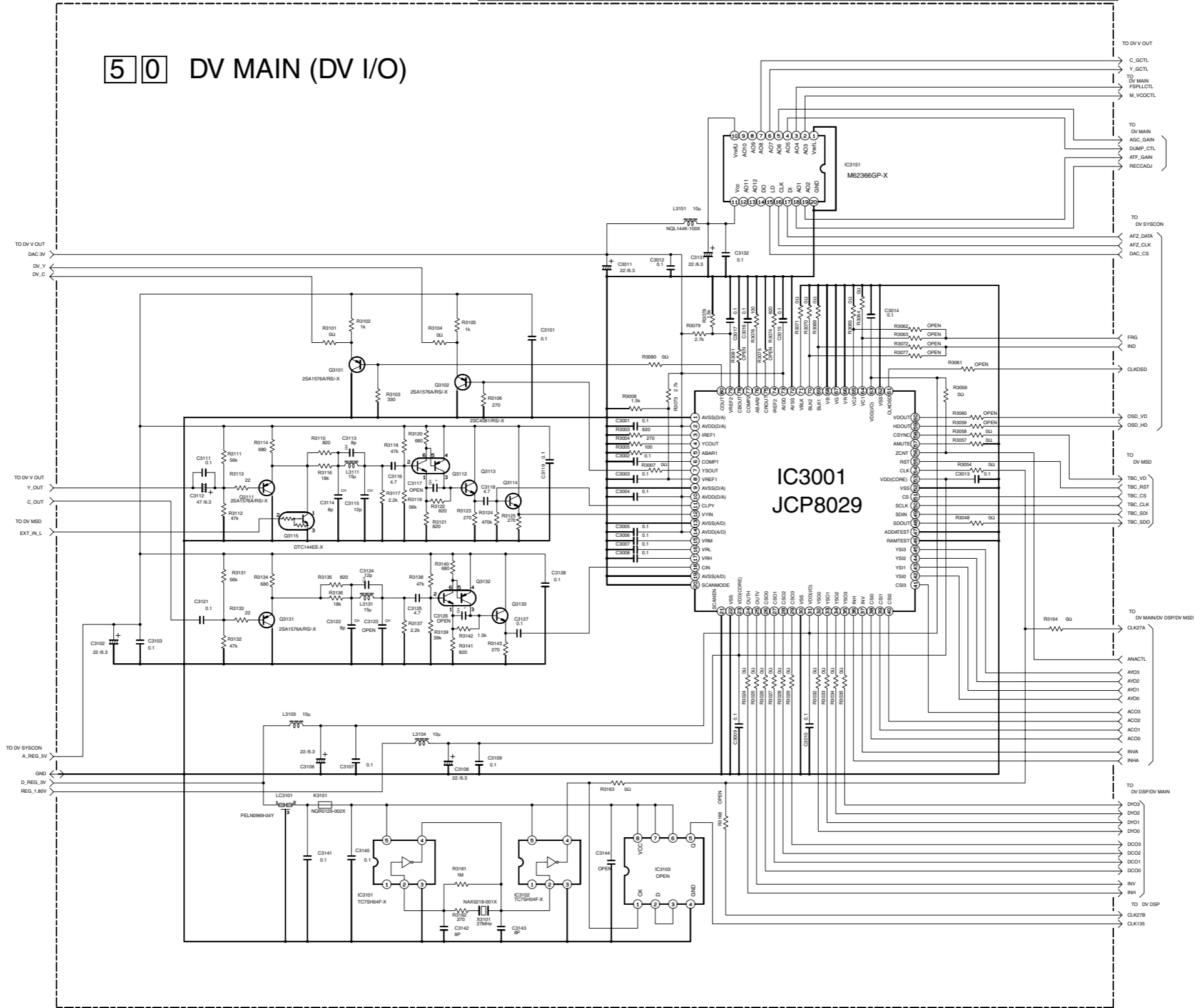
p10287001a_rev0

NOTES: UNLESS OTHERWISE SPECIFIED:
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL INDUCTANCE VALUES ARE IN H.
 ALL CAPACITANCE VALUES ARE IN μ F.
 + ELECTROLYTIC
 - CERAMIC
 - MYLAR
 - NON POLAR

4.22 DV I/O SCHEMATIC DIAGRAM

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.

50 DV MAIN (DV I/O)



p10288001a_rev0

NOTES UNLESS OTHERWISE SPECIFIED.
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL INDUCTANCE VALUES ARE IN H.
 ALL CAPACITANCE VALUES ARE IN µF.
 [Symbol] ELECTROLYTIC
 [Symbol] CERAMIC
 [Symbol] MYLER
 [Symbol] NON POLAR

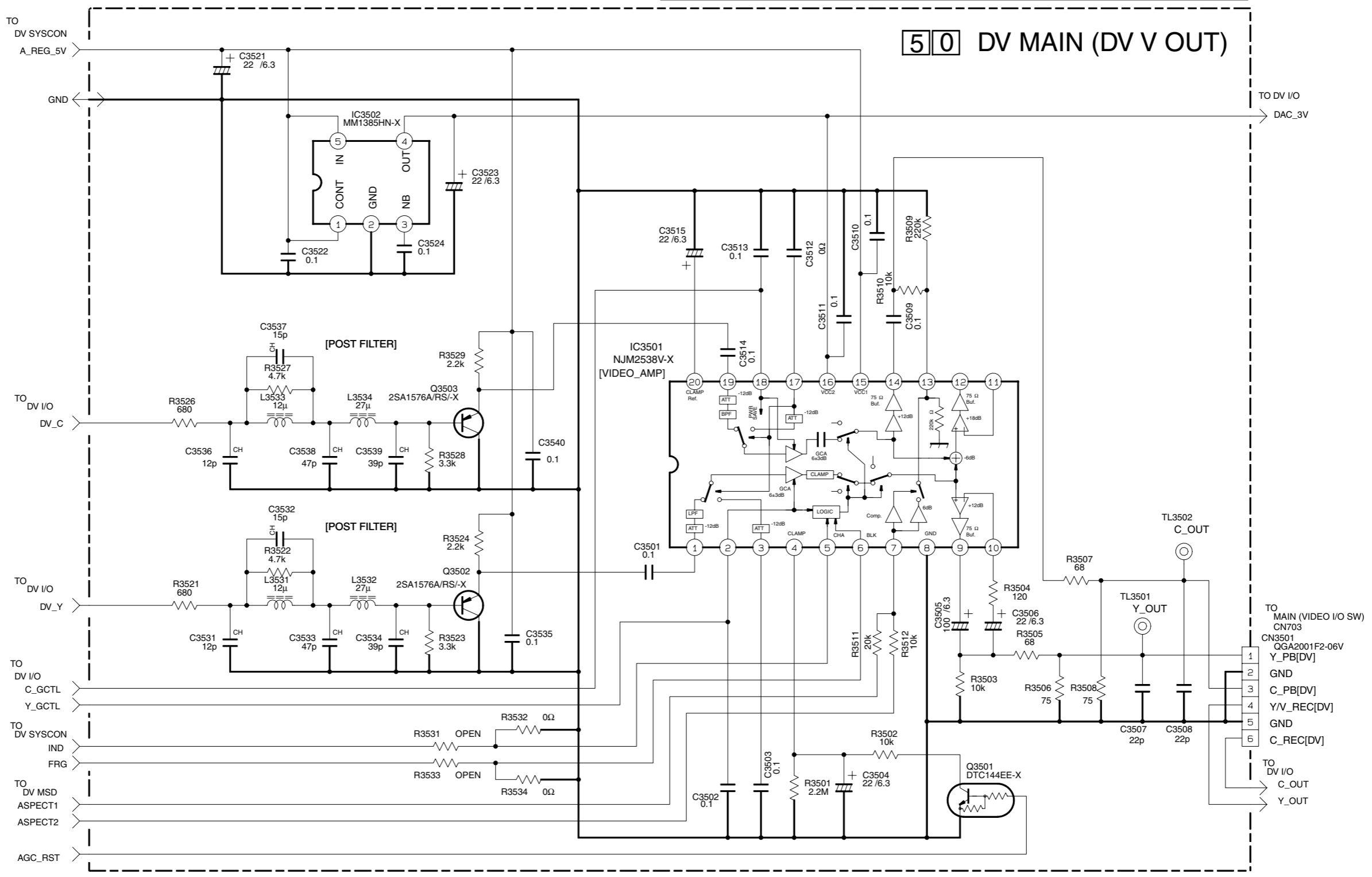
5
4
3
2
1

A B C D 4-47 4-48 E F G H

4.23 DV V OUT SCHEMATIC DIAGRAM

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.

50 DV MAIN (DV V OUT)



NOTES: UNLESS OTHERWISE SPECIFIED.
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL INDUCTANCE VALUES ARE IN H.
 ALL CAPACITANCE VALUES ARE IN μF.

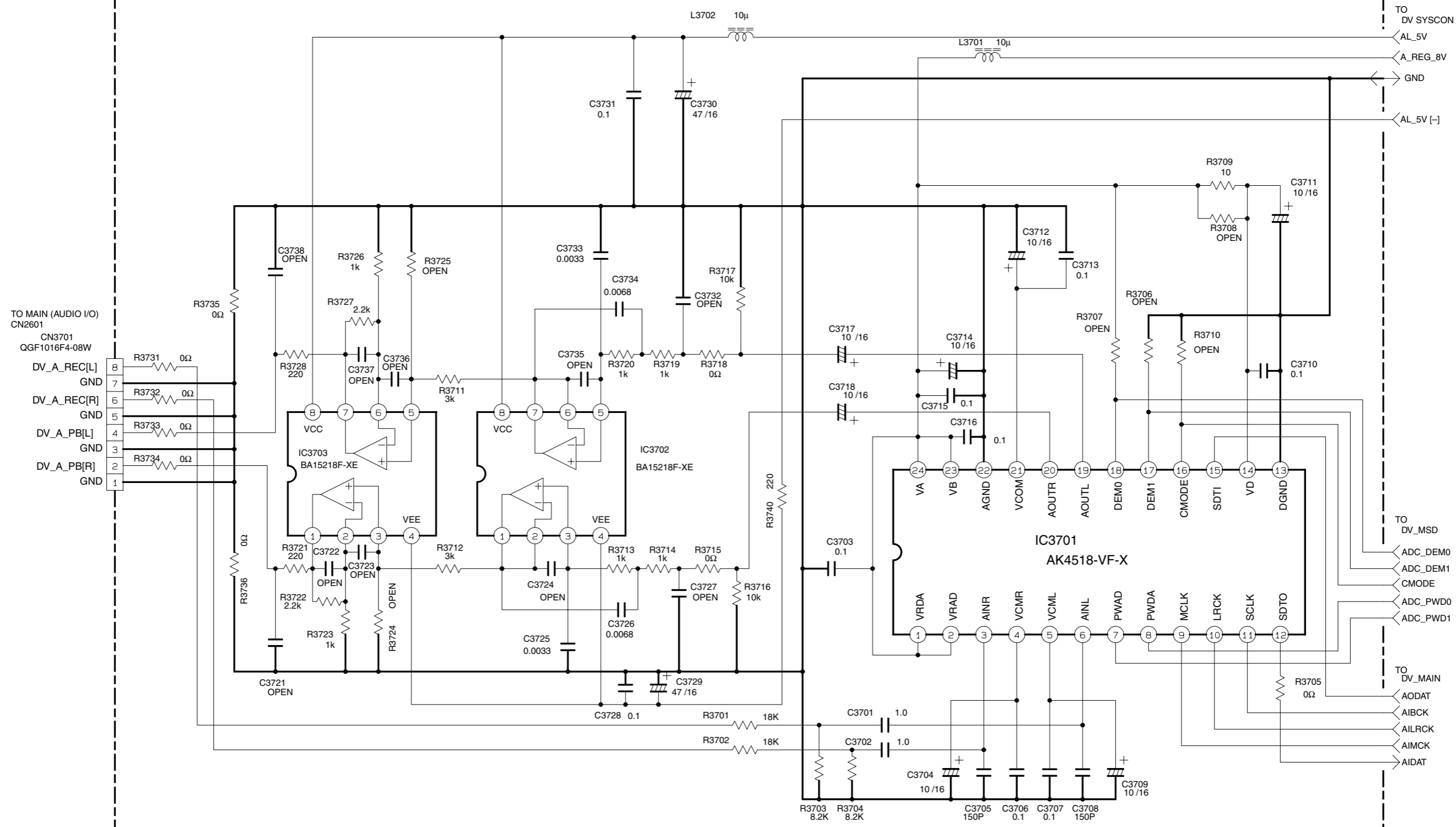
- ELECTROLYTIC
- CERAMIC
- MYLER
- NON POLAR

p30073001a_rev0

4.24 AUDIO AD/DA SCHEMATIC DIAGRAM

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.

50 DV MAIN (AUDIO AD/DA)



NOTES: UNLESS OTHERWISE SPECIFIED.

ALL RESISTANCE VALUES ARE IN OHMS.

ALL INDUCTANCE VALUES ARE IN H.

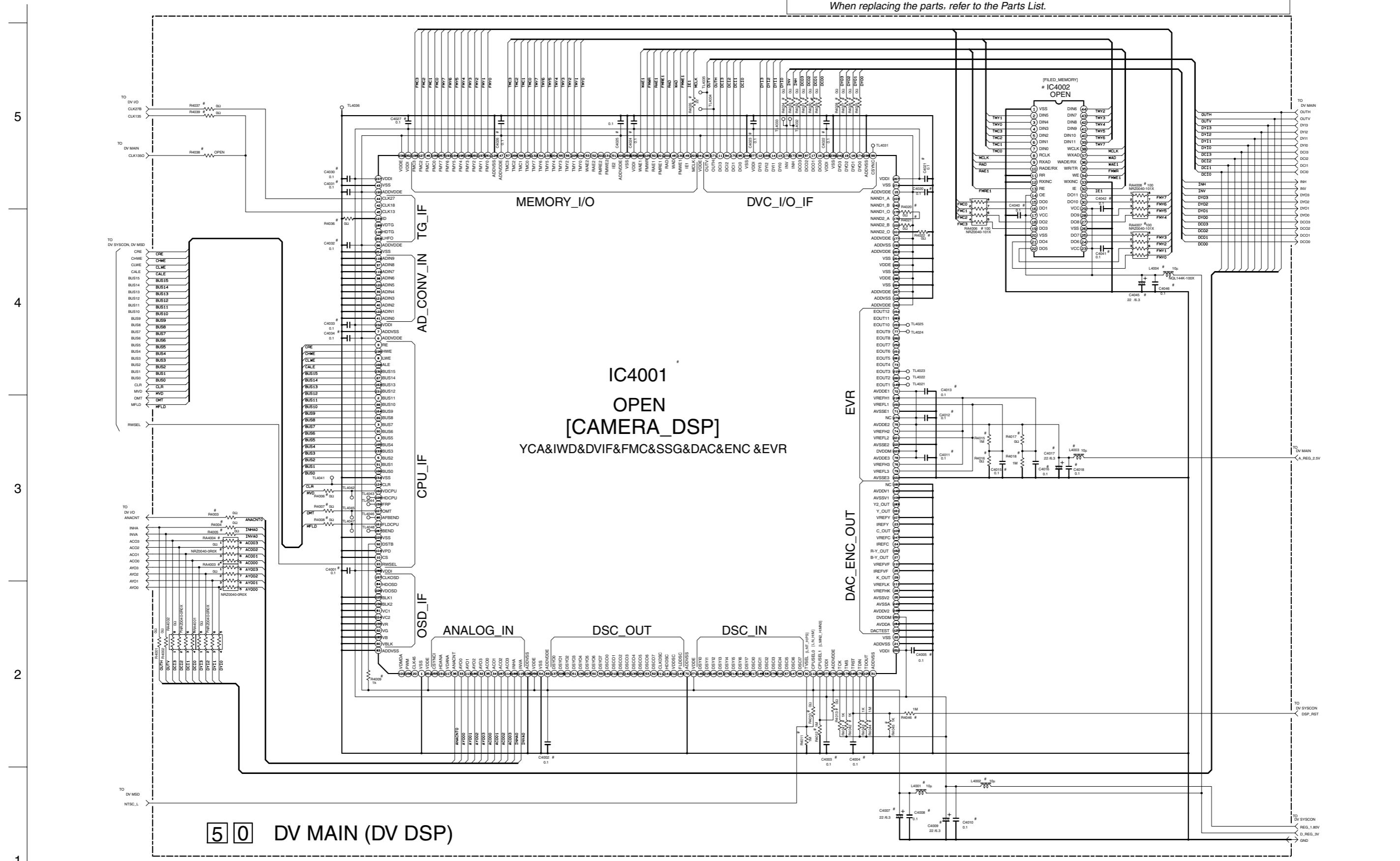
ALL CAPACITANCE VALUES ARE IN μ F.

- ELECTROLYTIC
- CERAMIC
- MYLER
- NON POLAR

p30074001a_rev0

4.25 DV DSP SCHEMATIC DIAGRAM

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.



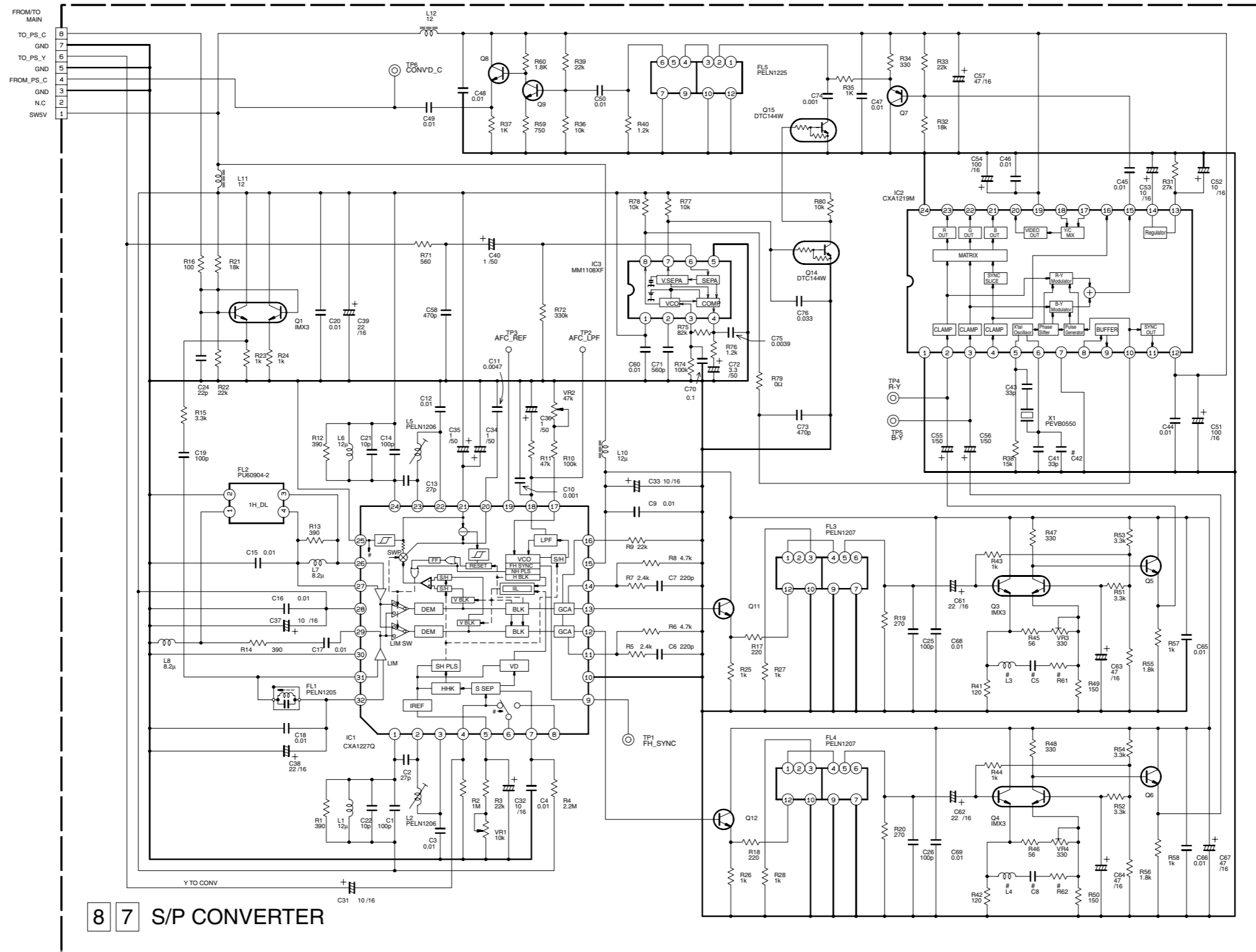
50 DV MAIN (DV DSP)

p10289001a_rev0

NOTES: UNLESS OTHERWISE SPECIFIED:
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL INDUCTANCE VALUES ARE IN H.
 ALL CAPACITANCE VALUES ARE IN µF.
 + ELECTROLYTIC
 - CERAMIC
 M MYLER
 N NON POLAR

4.26 S/P CONVERTER SCHEMATIC DIAGRAM

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.



8 7 S/P CONVERTER

p20106001a_rev0

NOTES: UNLESS OTHERWISE SPECIFIED.
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL INDUCTANCE VALUES ARE IN H.
 ALL CAPACITANCE VALUES ARE IN μ F.
 # MARK ELEMENTS ARE NOT MOUNTED.

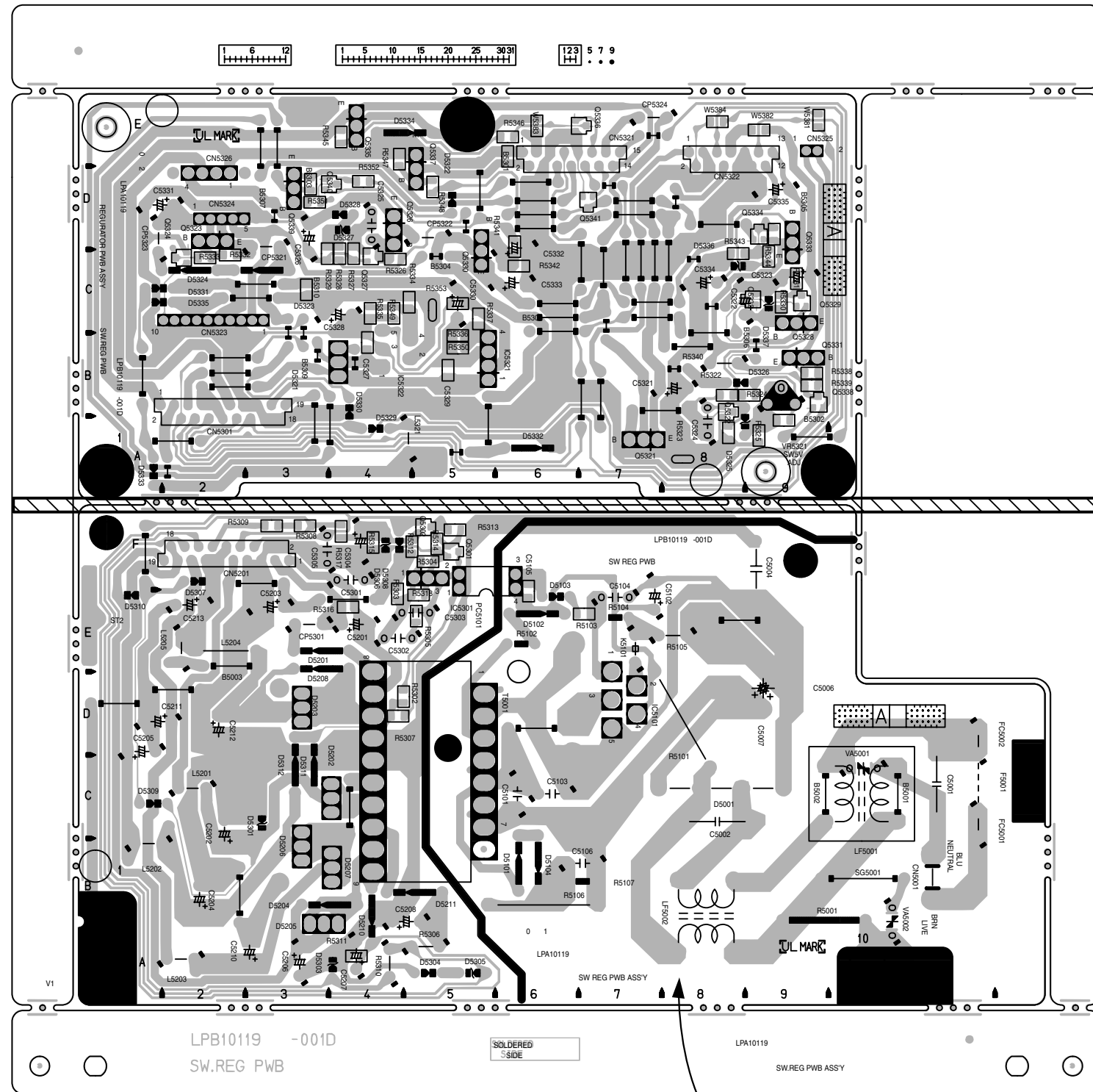
ELECTROLYTIC
 CERAMIC
 MYLER
 NON POLAR

5
4
3
2
1

A B C D 4-55 4-56 E F G H

4.27 SWITCHING REGULATOR AND REGULATOR CIRCUIT BOARDS

<01> SW REG, <02> REGULATOR
LPB10119-001D



COMPONENT PARTS LOCATION GUIDE <SWITCHING REGULATOR>

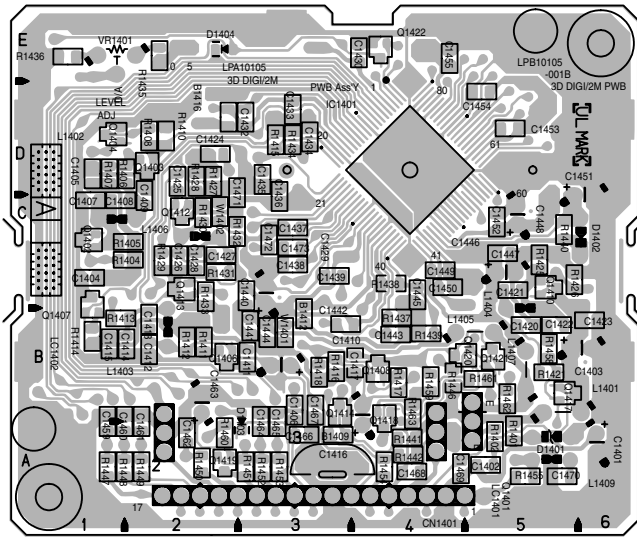
REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION
CAPACITOR		CONNECTOR		D5311	A D 3C	R5306	A D 5A
C5001	A D 11D	CN5001	A D 11B	D5312	A D 3C	R5307	B C 4D
C5002	A D 8C	CN5201	A D 3F	IC			
C5004	A D 9E	DIODE				R5308	B C 3F
C5006	A D 8D	D5001	A D 7C	IC5101	A D 7E	R5309	B C 3F
C5007	A D 9D	D5101	A D 6B	IC5301	A D 5F	R5310	A D 4A
C5101	A D 6C	D5102	A D 6E	COIL			
C5102	A D 7E	D5103	A D 6E	L5201	A D 2C	R5311	B C 4A
C5103	A D 6C	D5104	A D 6C	L5202	A D 2B	R5312	B C 5F
C5104	A D 7E	D5201	A D 4E	L5203	A D 2A	R5313	B C 5F
C5105	B C 6E	D5202	A D 4C	L5204	A D 3E	R5314	B C 5F
C5106	A D 6B	D5203	A D 3D	L5205	A D 2E	R5315	B C 4F
C5201	A D 4E	D5204	A D 3A	TRANSISTOR			
C5202	A D 2B	D5205	A D 4B	Q5301	B C 5F	OTHER	
C5203	A D 3E	D5206	A D 3B	Q5302	B C 5F	CP5301	A D 3E
C5204	A D 2B	D5207	A D 4B	RESISTOR			
C5205	A D 1D	D5208	A D 4E	R5001	A D 9B	F5001	A D 11C
C5206	A D 3A	D5210	A D 4B	R5101	A D 8C	FC5001	A D 11C
C5207	A D 4A	D5211	A D 5B	R5102	A D 6E	K5101	A D 7E
C5208	A D 4B	D5301	A D 3C	R5103	B C 7E	LF5001	A D 10C
C5210	A D 3A	D5303	A D 4A	R5104	A D 7E	PC5101	A D 5F
C5211	A D 2D	D5304	A D 5A	R5105	A D 7E	SG5001	A D 9B
C5212	A D 2D	D5305	A D 5A	R5106	A D 5B	T5001	A D 5D
C5213	A D 2E	D5306	A D 4F	R5107	A D 7B	VA5001	A D 10C
C5301	A D 4F	D5307	A D 2F	R5302	B C 4D	VA5002	A D 10A
C5302	A D 5E	D5308	A D 4F	R5303	B C 4E		
C5303	A D 5E	D5309	A D 1C	R5304	B C 5F		
C5304	A D 4F	D5310	A D 1E	R5305	B C 5E		
C5305	A D 3F						

COMPONENT PARTS LOCATION GUIDE <REGULATOR>

REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION
CAPACITOR		D5323	A D 3C	Q5328	A D 9C	R5335	B C 4C
C5321	A D 7B	D5324	A D 2C	Q5329	B C 9C	R5336	B C 5B
C5322	A D 9C	D5325	A D 9B	Q5330	A D 5C	R5337	B C 5C
C5323	A D 9C	D5326	A D 9B	Q5331	A D 9B	R5338	B C 9B
C5324	A D 8A	D5327	A D 4D	Q5332	B C 9C	R5339	B C 9B
C5325	A D 4D	D5328	A D 4D	Q5333	A D 9C	R5340	A D 8B
C5326	A D 3D	D5329	A D 4A	Q5334	B C 9D	R5341	B C 6D
C5327	B C 4B	D5330	A D 4A	Q5335	A D 4E	R5342	B C 6C
C5328	A D 3C	D5331	A D 1C	Q5336	A D 5E	R5343	B C 8C
C5329	B C 5B	D5332	A D 6A	Q5337	A D 5E	R5344	B C 9C
C5330	A D 5C	D5333	A D 1A	Q5338	B C 9B	R5345	B C 4E
C5331	A D 2D	D5334	A D 4E	Q5339	A D 3D	R5346	B C 6E
C5332	A D 6D	D5335	A D 1C	Q5340	B C 4D	R5347	B C 4E
C5333	A D 6C	D5336	A D 8C	Q5341	B C 7D	R5348	B C 5D
C5334	A D 8C	D5337	A D 9C	RESISTOR			
C5335	A D 9D	IC				R5349	B C 4C
CONNECTOR		IC5321	A D 5B	R5322	B C 8B	R5350	B C 5B
CN5301	A D 1B	IC5322	A D 4B	R5323	B C 8A	R5351	B C 3D
CN5321	A D 6E	COIL				R5324	B C 9B
CN5322	A D 8E	L5321	A D 4A	R5325	B C 9A	R5352	B C 4D
CN5323	A D 3C	TRANSISTOR				R5326	B C 4C
CN5324	A D 2D	Q5321	A D 7A	R5327	B C 4C	OTHER	
CN5325	A D 9E	Q5322	B C 8B	R5328	B C 4C	CP5321	A D 3D
CN5326	A D 2D	Q5323	A D 2D	R5329	B C 3C	CP5322	A D 5D
DIODE		Q5324	B C 2C	R5330	B C 9C	CP5323	A D 1C
D5321	A D 4B	Q5326	A D 4D	R5331	B C 9C	CP5324	A D 8E
D5322	A D 5D	Q5327	B C 4C	R5332	B C 2C		
				R5333	B C 2C		
				R5334	B C 4C		

4.28 3D DIGITAL/2M AND S-SUB CIRCUIT BOARDS

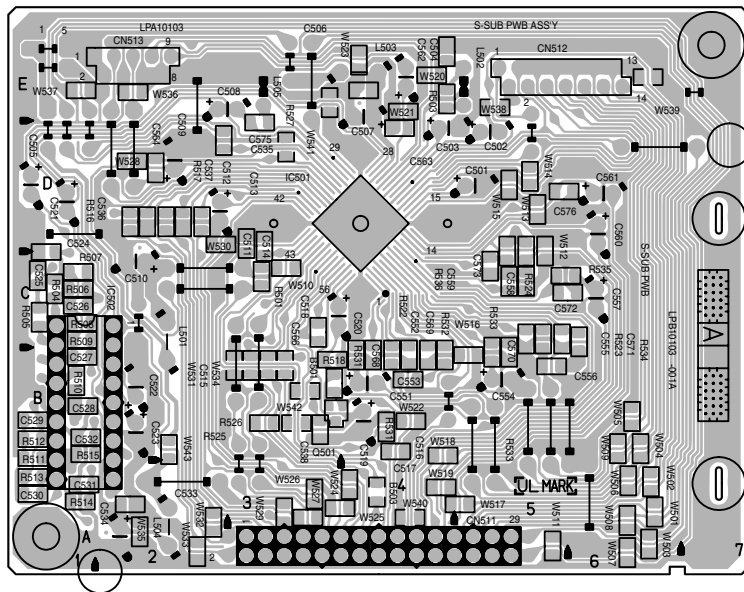
<05> 3D DIGITAL/2M LPB10105-001B



COMPONENT PARTS LOCATION GUIDE <05> 3D DIGITAL/2M

REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION
CAPACITOR					
C1401	A D	C1465	A C	R1414	A C
C1402	B C	C1466	B C	R1415	B C
C1403	A D	C1467	B C	R1416	B C
C1404	B C	C1468	B C	R1417	B C
C1405	A C	C1469	B C	R1418	A C
C1406	B C	C1470	B C	R1421	A C
C1407	B C	C1471	B C	R1425	A C
C1408	B C	C1472	A C	R1426	B C
C1409	B C	C1473	A C	R1427	B C
C1410	A C	CONNECTOR			
C1411	A C	CN1401	A D	R1428	A C
C1412	B C	DIODE			
C1413	A C	D1401	A D	R1430	A C
C1414	A C	D1402	A D	R1431	A C
C1415	B C	D1403	A C	R1432	A C
C1416	A D	IC			
C1417	A C	IC1401	B C	R1433	B C
C1420	A C	IC1402	C D	R1434	A C
C1421	A C	COIL			
C1422	A C	L1401	A D	R1435	B C
C1423	B C	L1402	A D	R1436	B C
C1424	B C	L1403	A D	R1437	B C
C1425	A C	L1404	A D	R1438	A C
C1426	A C	L1405	A D	R1439	A C
C1427	B C	L1406	A D	R1440	B C
C1428	A C	L1407	A D	R1441	B C
C1429	A D	L1408	A D	R1442	A C
C1430	A C	L1409	A D	R1446	A C
C1431	A C	TRANSISTOR			
C1432	B C	Q1401	A D	R1447	B C
C1433	A C	Q1402	B C	R1448	B C
C1434	B C	Q1403	A C	R1449	B C
C1435	B C	Q1404	A C	R1450	A C
C1436	B C	Q1406	A C	R1451	B C
C1437	A C	Q1407	A C	R1452	B C
C1438	A C	Q1408	A C	R1453	B C
C1439	A C	Q1410	B C	R1454	B C
C1440	A C	Q1412	A C	R1455	B C
C1441	A C	Q1413	A C	R1456	B C
C1442	B C	Q1414	A C	R1457	A C
C1443	B C	Q1415	A C	R1458	A C
C1444	B C	Q1416	A C	R1459	A C
C1445	A C	Q1417	A C	R1460	A C
C1446	A D	Q1418	B C	R1461	A C
C1447	B C	Q1419	A C	R1462	A C
C1448	A D	Q1420	A C	VR1401	A D
C1449	A C	Q1421	A C	OTHER	
C1450	A C	Q1422	A C	LC1401	A D
C1451	A D	RESISTOR			
C1452	A C	R1401	B C	LC1402	D 2A
C1453	A C	R1402	B C		
C1454	A C	R1403	B C		
C1455	B C	R1404	B C		
C1456	B C	R1405	B C		
C1457	A C	R1406	B C		
C1458	A C	R1407	A C		
C1459	A C	R1408	A C		
C1460	A C	R1410	A C		
C1461	A C	R1411	A C		
C1462	A C	R1412	A C		
C1463	A D	R1413	A C		
C1464	A C				

<15> S-SUB LPB10103-001A

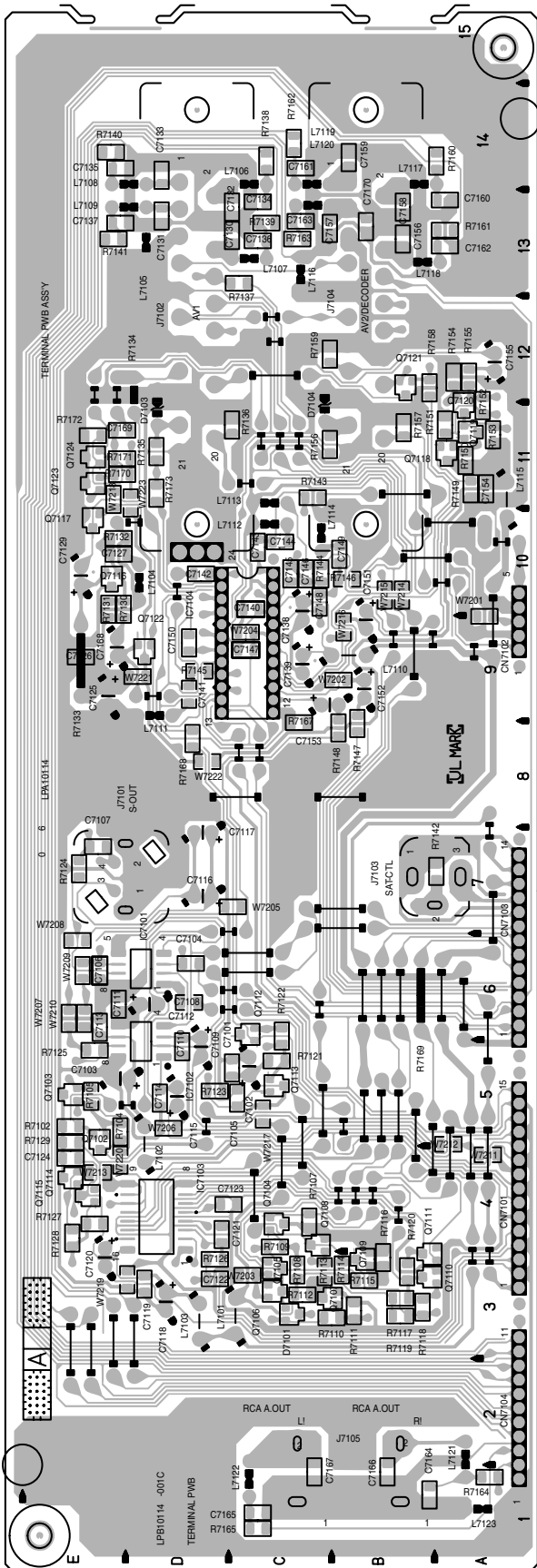


COMPONENT PARTS LOCATION GUIDE <S-SUB>

REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION
CAPACITOR					
C501	A D	C555	B C	R508	B C
C502	A D	C556	B C	R509	B C
C503	A D	C557	A D	R510	B C
C504	B C	C558	B C	R511	B C
C505	A D	C559	B C	R512	B C
C506	B C	C560	A D	R513	B C
C507	A D	C561	A D	R514	B C
C508	A D	C562	A D	R515	B C
C509	A D	C563	B C	R516	B C
C510	A D	C564	B C	R517	B C
C511	B C	C565	B C	R518	B C
C512	B C	C566	B C	R522	B C
C513	A D	C567	B C	R523	B C
C514	B C	C568	B C	R524	B C
C515	B C	C569	B C	R525	B C
C516	B C	C570	B C	R526	B C
C517	B C	C571	B C	R527	B C
C518	B C	C572	B C	R528	B C
C519	A D	C573	B C	R531	B C
C520	A D	C574	B C	R532	B C
C521	A D	C575	B C	R533	B C
C522	A D	C576	B C	R534	B C
C523	A D	CONNECTOR			
C524	B C	CN511	A D	R535	B C
C525	B C	CN512	A D	R536	B C
C526	B C	CN513	A D		
C527	B C	IC			
C528	B C	IC501	A C		
C529	B C	IC502	A D		
C530	B C	COIL			
C531	B C	L501	A D		
C532	B C	L502	A D		
C533	B C	L503	A D		
C534	A D	L504	A D		
C535	B C	L505	A D		
C536	B C	TRANSISTOR			
C537	B C	Q501	B C		
C538	B C	RESISTOR			
C551	A D	R501	B C		
C552	A D	R503	B C		
C553	B C	R504	B C		
C554	A D	R505	B C		
		R506	B C		
		R507	B C		

4.29 TERMINAL CIRCUIT BOARD

<06> TERMINAL LPB10114-001C



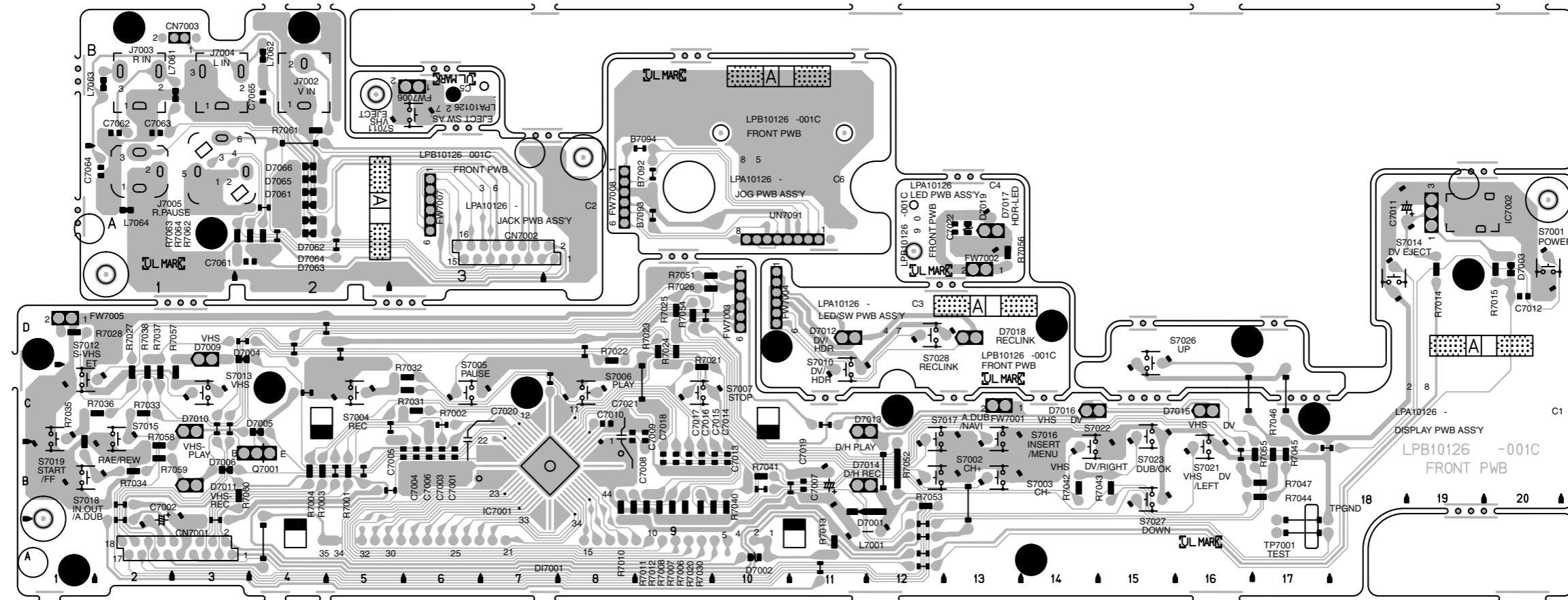
COMPONENT PARTS LOCATION GUIDE

<TERMINAL>

REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION
CAPACITOR		CONNECTOR		R7111	B C 6E
C7101	B C 10E	CN7101	A D 4A	R7112	B C 6E
C7102	A D 8C	CN7102	A D 10A	R7113	B C 5E
C7103	A D 8B	CN7103	A D 7A	R7114	B C 5D
C7104	A D 10C	CN7104	A D 1A	R7115	B C 5D
C7105	B C 9C	CN7105	A D 11A	R7116	B C 5E
C7106	B C 9C	DIODE		R7117	B C 6A
C7107	B C 9C	D7101	B C 7A	R7118	B C 7A
C7108	B C 9D	D7103	B C 3E	R7119	B C 7A
C7109	B C 9D	D7104	B C 1E	R7120	B C 8A
C7110	A D 10C	IC		R7121	B C 7B
C7111	A D 4D	IC7101	B C 9C	R7122	B C 7B
C7112	A D 4E	IC7102	B C 9C	R7123	B C 7B
C7113	B C 5E	IC7103	B C 4E	R7124	B C 7B
C7114	A D 5E	IC7104	B C 6C	R7125	B C 7A
C7115	B C 4E	IC7106	B C 4B	R7126	B C 7B
C7116	A D 4E	JACK		R7127	B C 6A
C7117	B C 5E	J7101	A D 10E	R7128	B C 6A
C7118	A D 5E	J7102	A D 8E	R7129	B C 6A
C7119	B C 7A	J7103	A D 7E	R7130	B C 6B
C7120	A D 7A	J7104	A D 2E	R7131	B C 8E
C7121	A D 10E	J7105	A D 2C	R7132	B C 7E
C7122	A D 10E	J7106	A D 2B	R7139	B C 4C
C7123	B C 8E	J7107	A D 12E	R7140	B C 4C
C7124	A D 8D	J7108	A D 12C	R7141	B C 4C
C7125	A D 8C	J7109	A D 12B	R7142	B C 5A
C7126	A D 5D	J7110	A D 8B	R7143	B C 5A
C7127	A D 4D	COIL		R7144	B C 5A
C7128	B C 7E	L7101	A D 10D	R7145	B C 4A
C7129	A D 7D	L7102	A D 6E	R7146	B C 10A
C7130	B C 6D	L7103	A D 8A	R7147	B C 9A
C7131	A D 7C	L7104	A D 5B	R7148	B C 9B
C7132	B C 7C	TRANSISTOR		R7149	B C 10A
C7133	A D 6D	R7150	B C 9A	R7150	B C 9A
C7134	A D 4D	Q7101	B C 5D	R7151	B C 9A
C7135	A D 6D	Q7102	B C 5E	R7154	B C 13D
C7136	A D 5C	Q7103	B C 6E	R7155	B C 12E
C7137	B C 4A	Q7104	B C 6E	R7156	B C 12C
C7138	B C 4A	Q7105	B C 6A	R7157	B C 12B
C7139	B C 4A	Q7106	B C 6B	R7158	B C 8B
C7141	A D 5B	Q7107	B C 7B	R7159	B C 2C
C7142	A D 5B	Q7108	B C 7B	R7160	B C 1C
C7145	A D 4B	Q7109	B C 7A	R7161	B C 2B
C7146	B C 4A	Q7110	B C 7A	R7162	B C 1B
C7147	A D 4A	Q7111	B C 6A	R7163	B C 2E
C7149	B C 2C	Q7112	B C 6A	R7164	B C 2E
C7150	B C 1D	Q7114	B C 4C	R7166	B C 12E
C7151	B C 2C	Q7115	B C 4C	R7167	B C 11E
C7152	B C 2C	Q7116	B C 5A	R7170	B C 7C
C7153	B C 2B	Q7117	B C 5A	R7171	B C 7D
C7154	B C 1B	Q7118	B C 9B	R7172	B C 7D
C7155	B C 2B	Q7119	B C 10A	R7173	B C 6D
C7156	B C 1B	Q7120	B C 9A	R7174	B C 6D
C7157	B C 9C	Q7121	B C 9A	R7175	B C 5D
C7158	B C 9B	Q7122	B C 8C	R7176	B C 6D
C7159	B C 2D	RESISTOR		R7177	B C 5D
C7160	B C 2E	R7101	B C 10D	R7178	B C 6C
C7161	B C 2D	R7102	B C 10E	R7179	B C 6C
C7162	B C 2E	R7103	B C 8E	R7180	B C 8D
C7163	B C 12E	R7104	B C 8E	R7181	A D 9E
C7164	B C 12D	R7105	B C 7D	R7182	B C 7C
C7165	B C 11E	R7106	B C 7E		
C7166	B C 11D	R7107	B C 3D		
C7167	B C 9C	R7108	B C 2D		
C7168	A D 4C	R7109	B C 4C		
C7169	A D 5C	R7110	B C 3B		
C7170	A D 5E				

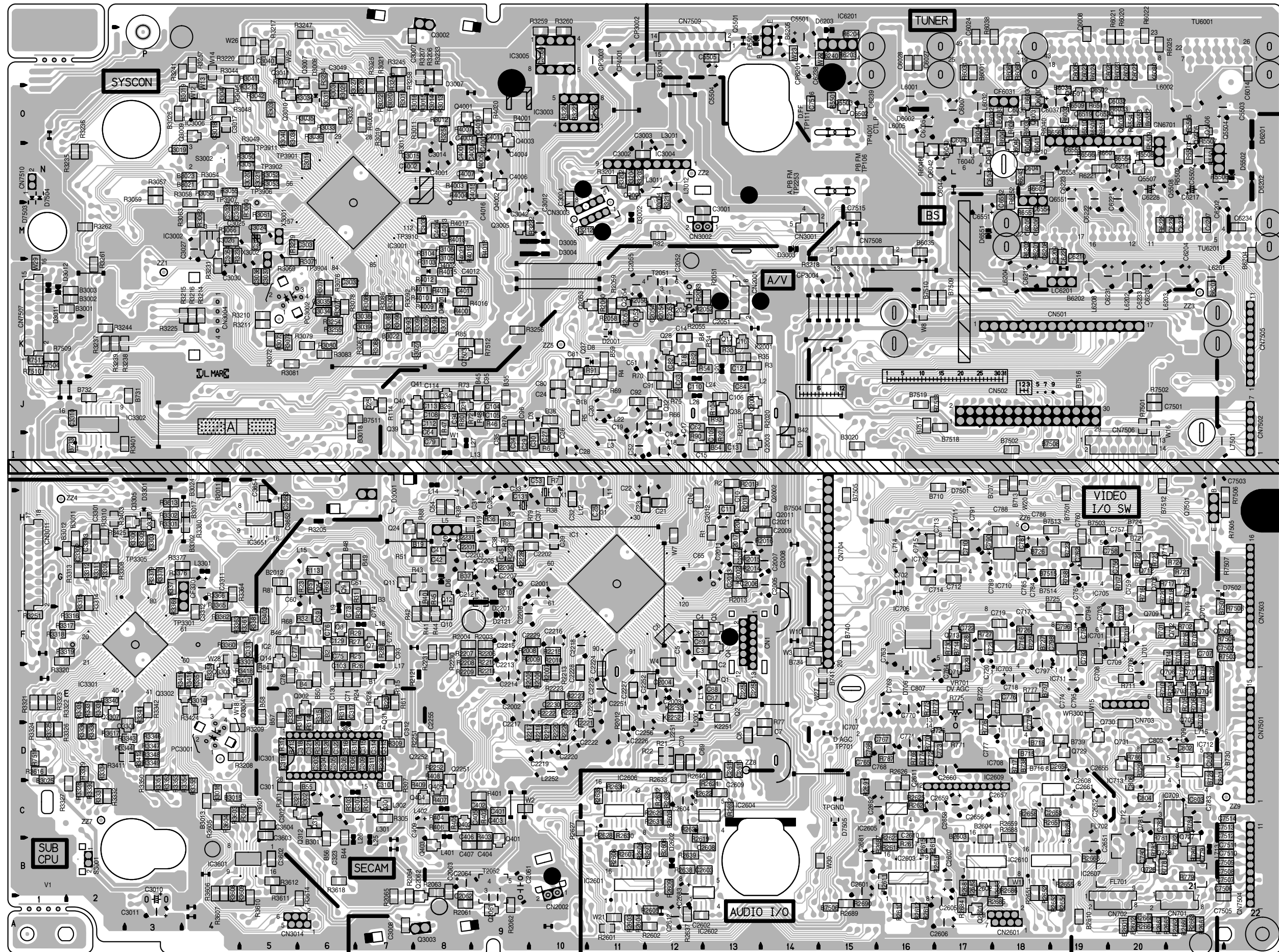
4.30 DISPLAY, EJECT SW, JACK, LED/SW AND JOG CIRCUIT BOARDS

<27> EJECT SW, <28> DISPLAY, <36> JACK, <47> LED/SW, <85> JOG
LPB10126-001C



4.31 MAIN CIRCUIT BOARD

<03> MAIN
LPB10113-001D

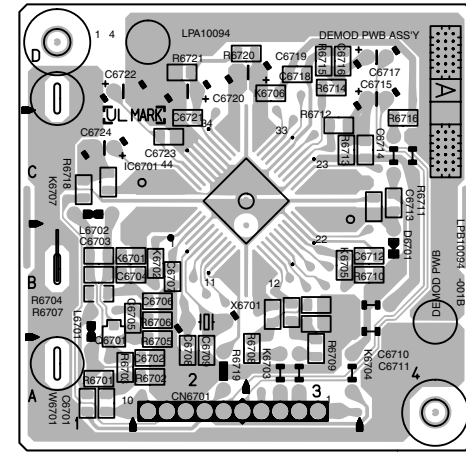


COMPONENT PARTS LOCATION GUIDE <MAIN>

Main component parts location guide table with columns for REF.NO., LOCATION, and component types like CAPACITOR, RESISTOR, TRANSISTOR, DIODE, SWITCH, TEST POINT, and OTHER.

4.32 DEMODULATOR AND ON SCREEN CIRCUIT BOARDS

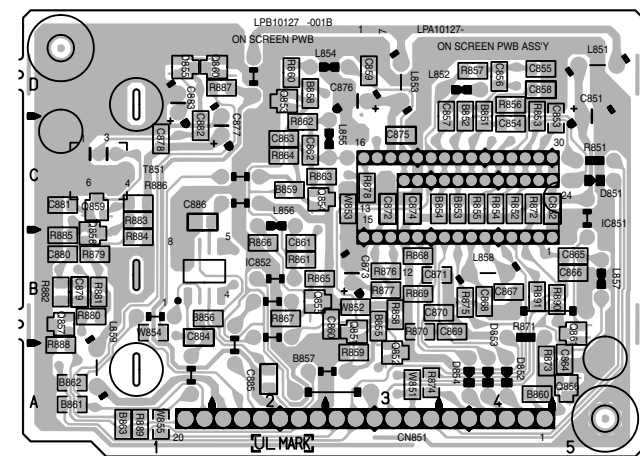
<14> DEMODULATOR LPB10094-001B



COMPONENT PARTS LOCATION GUIDE <DEMOMULATOR>

Component parts location guide for the demodulator circuit board, including capacitor, connector, IC, resistor, and transistor locations.

<17> ON SCREEN LPB10127-001B



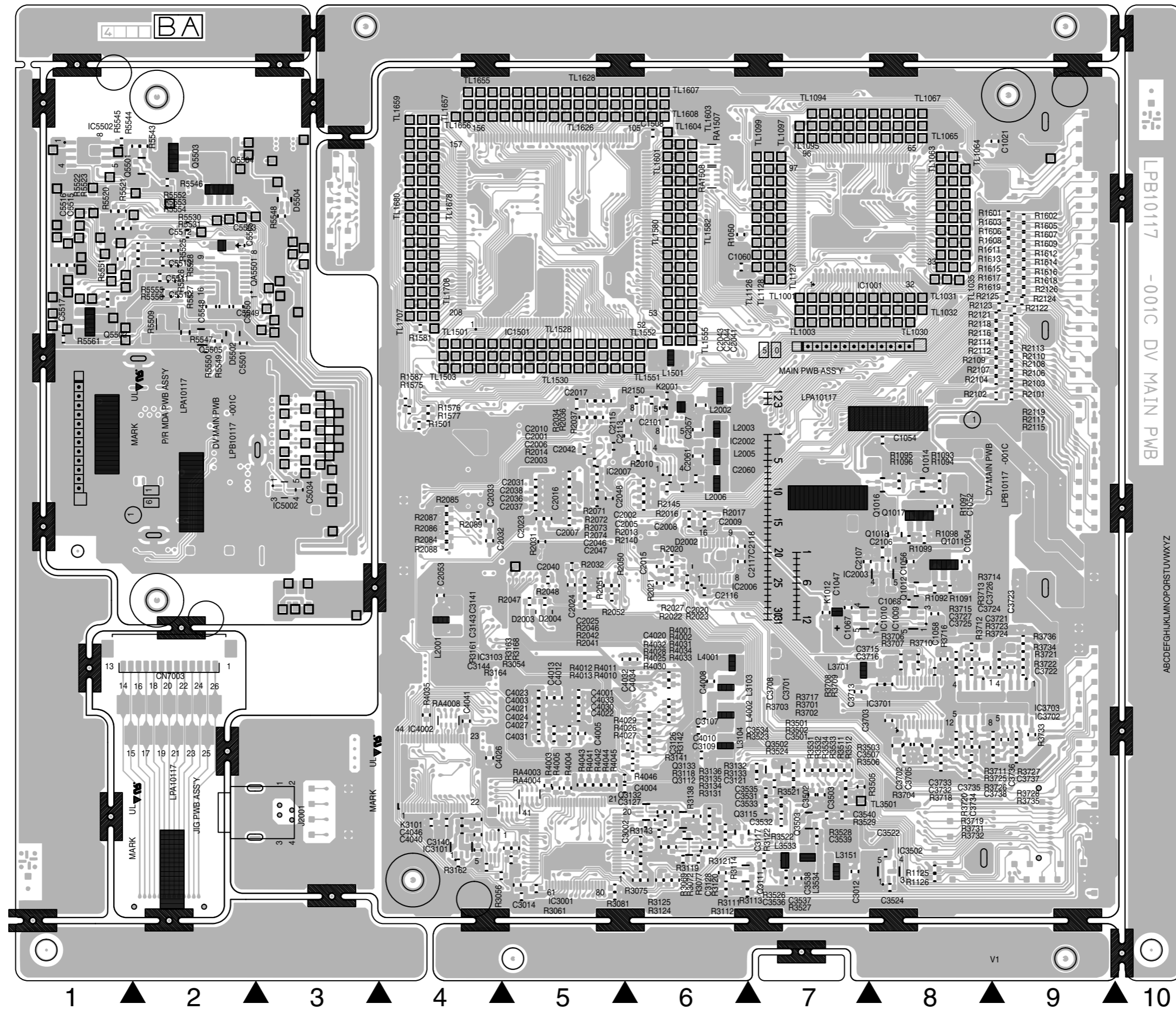
COMPONENT PARTS LOCATION GUIDE <ON SCREEN>

Component parts location guide for the on-screen circuit board, including capacitor, connector, diode, resistor, transistor, and coil locations.

4.33 PR/MDA, DV MAIN CIRCUIT BOARDS

<16> P/R MDA, <50> DV MAIN
LPB10117-001C

— FOIL SIDE(B) —



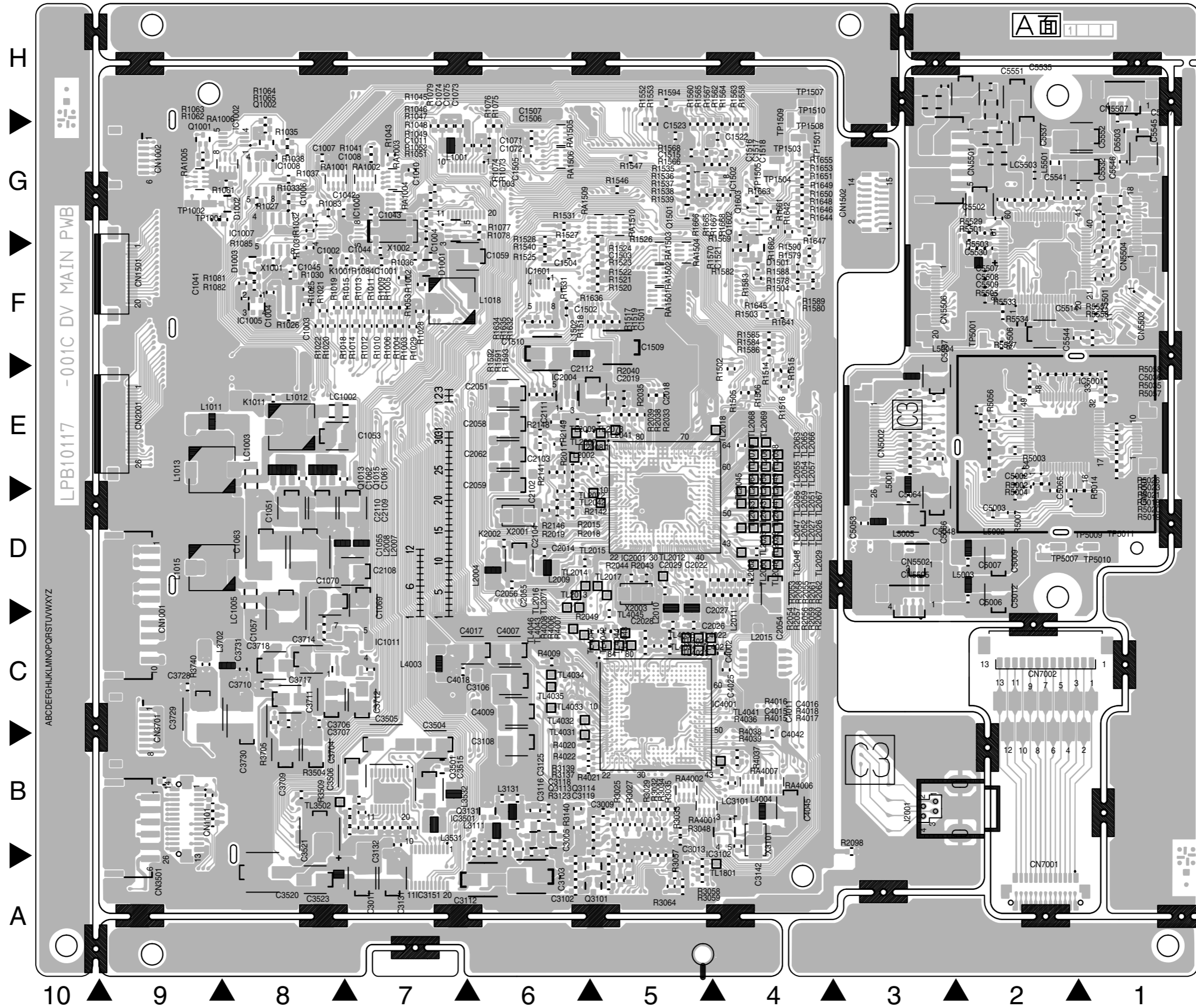
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COMPONENT PARTS LOCATION GUIDE <DV MAIN>

REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION				
CAPACITOR																											
C1001	A C	7H	C2041	B C	5G	C3508	A C	7B	C4046	B C	3B	Q1002	A C	8J	R1100	A C	8D	R1647	A C	2I	R2126	B C	9H	R3502	B C	7C	
C1002	A C	8H	C2042	B C	4F	C3509	A C	7B	C5053	A C	2E	Q1011	B C	8E	R1125	B C	8B	R1648	A C	2I	R2138	B C	5G	R3503	A C	7C	
C1003	A C	8H	C2043	B C	4G	C3510	A C	7B	CONNECTOR				Q1012	B C	8E	R1126	B C	8B	R1649	A C	2I	R2139	B C	5F	R3504	A C	7B
C1004	A C	8H	C2044	B C	5G	C3511	A C	7B	CN1001	A C	10E	Q1013	A C	8F	R1501	B C	3G	R1650	A C	2I	R2140	B C	5F	R3505	B C	7C	
C1005	A C	8H	C2046	B C	4F	C3512	A C	7B	CN1002	A C	10I	Q1014	B C	8F	R1502	A C	3G	R1651	A C	2I	R2141	A C	5F	R3506	A C	7B	
C1006	A C	8I	C2047	B C	4F	C3513	A C	7B	CN1101	A C	9C	Q1015	A C	8F	R1503	A C	3H	R1653	A C	2I	R2142	A C	5F	R3507	A C	7B	
C1007	A C	8I	C2048	B C	5F	C3514	A C	7B	CN1501	A C	10H	Q1016	B C	8F	R1504	A C	3H	R1655	A C	2I	R2143	A C	5F	R3508	A C	7B	
C1008	A C	7I	C2051	A C	6G	C3515	A C	7C	CN1502	A C	2I	Q1017	B C	8F	R1505	A C	3G	R1661	A C	3I	R2144	A C	5E	R3509	A C	7B	
C1010	A C	7I	C2052	B C	6G	C3520	A C	8B	CN2001	A C	10G	Q1018	B C	8E	R1506	A C	3G	R1662	A C	3I	R2145	B C	5F	R3510	A C	7B	
C1011	A C	7I	C2053	B C	3E	C3521	A C	8B	CN3501	A C	10B	Q1501	A C	4I	R1514	A C	3G	R1663	A C	3I	R2146	A C	5F	R3511	B C	7C	
C1021	B C	9J	C2054	A C	3E	C3522	B C	8B	CN3701	A C	10C	Q1602	A C	3I	R1515	A C	3G	R1665	A C	3I	R2148	A C	5F	R3512	B C	7C	
C1041	A C	9H	C2055	A C	6E	C3523	A C	8B	DIODE				Q1603	A C	3I	R1516	A C	3G	R1666	A C	4I	R2149	A C	5F	R3521	B C	6B
C1042	A C	7I	C2056	A C	6E	C3524	B C	8B	D1001	A C	7H	Q3101	A C	5A	R1517	A C	5H	R1667	A C	3I	R2150	B C	5G	R3522	B C	6B	
C1043	A C	7I	C2057	B C	6F	C3525	A C	8B	D1002	A C	9I	Q3102	A C	5B	R1518	A C	5H	R1668	A C	3I	R3003	B C	5B	R3523	B C	6C	
C1044	A C	7H	C2058	A C	6G	C3531	B C	6B	D1003	A C	8H	Q3111	B C	6B	R1519	A C	5H	R2009	A C	5F	R3004	B C	5B	R3524	B C	6C	
C1045	A C	8H	C2059	A C	6F	C3532	B C	6B	D1501	A C	3H	Q3112	B C	5B	R1520	A C	5H	R2010	A C	5F	R3005	B C	5B	R3525	B C	6B	
C1047	B C	7E	C2060	A C	6F	C3533	B C	6B	D2002	B C	5E	Q3113	A C	5B	R1521	A C	5H	R2011	A C	5F	R3007	A C	5B	R3527	B C	7B	
C1048	A C	8D	C2061	B C	6F	C3534	B C	6C	D2003	B C	4E	Q3114	A C	5B	R1522	A C	5H	R2012	A C	5F	R3008	A C	4B	R3528	B C	7B	
C1049	A C	8D	C2062	A C	6F	C3535	B C	6C	D2004	B C	4E	Q3115	B C	6B	R1523	A C	5H	R2013	B C	5F	R3024	A C	5B	R3529	B C	7B	
C1050	A C	7D	C2101	B C	5G	C3536	B C	6B	IC				Q3132	B C	5B	R1524	A C	5H	R2014	B C	4F	R3025	A C	4B	R3531	B C	7C
C1051	A C	8F	C2102	A C	5F	C3537	B C	7B	IC1001	B C	7I	Q3133	B C	5B	R1525	A C	5H	R2015	A C	5F	R3026	A C	4B	R3532	B C	7C	
C1052	B C	8F	C2103	A C	5F	C3538	B C	7B	IC1002	A C	9J	Q3134	B C	5B	R1526	A C	5I	R2016	B C	5F	R3027	A C	4B	R3533	B C	7C	
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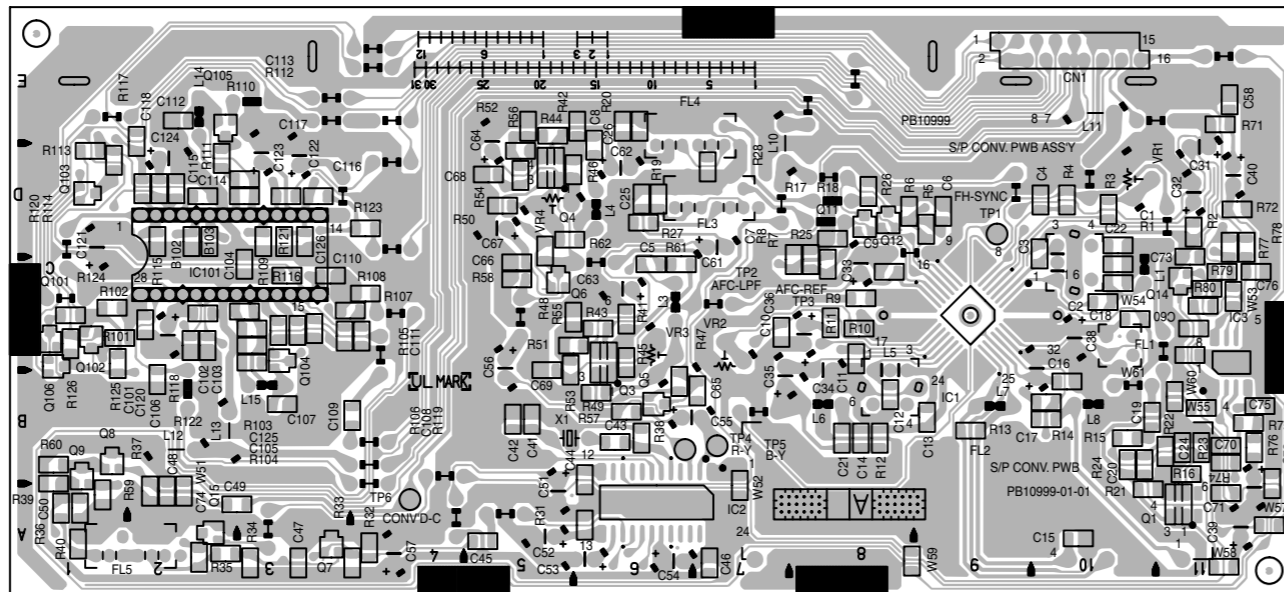
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TL1032	B C	8H	TL1124	B C	6H	TL1589	B C	5I	TL1682	B C	3I	TL4031	A C	5C			
TL1033	B C	8H	TL1125	B C	6H	TL1590	B C	5I	TL1683	B C	2I	TL4032	A C	5C			
TL1034	B C	8H	TL1126	B C	6H	TL1591	B C	6I	TL1684	B C	3I	TL4033	A C	5C			
TL1035	B C	8H	TL1127	B C	6H	TL1592	B C	5I	TL1685	B C	3I	TL4034	A C	5D			
TL1036	B C	8H	TL1128	B C	6H	TL1593	B C	5I	TL1686	B C	2I	TL4035	A C	5D			
TL1037	B C	8H	TL1501	B C	3G	TL1594	B C	6I	TL1687	B C	3I	TL4036	A C	4D			
TL1038	B C	8H	TL1502	B C	3G	TL1595	B C	5I	TL1688	B C	3I	TL4041	A C	3C			
TL1039	B C	8H	TL1503	B C	3G	TL1596	B C	5I	TL1689	B C	2I	TL4042	A C	5D			
TL1040	B C	8H	TL1504	B C	3G	TL1597	B C	6I	TL1690	B C	3H	TL4043	A C	5D			
			TL150														

— COMPONENT SIDE(A) —



4.34 S/P CONVERTER CIRCUIT BOARD

<87> S/P CONVERTER
PB10999-01-01

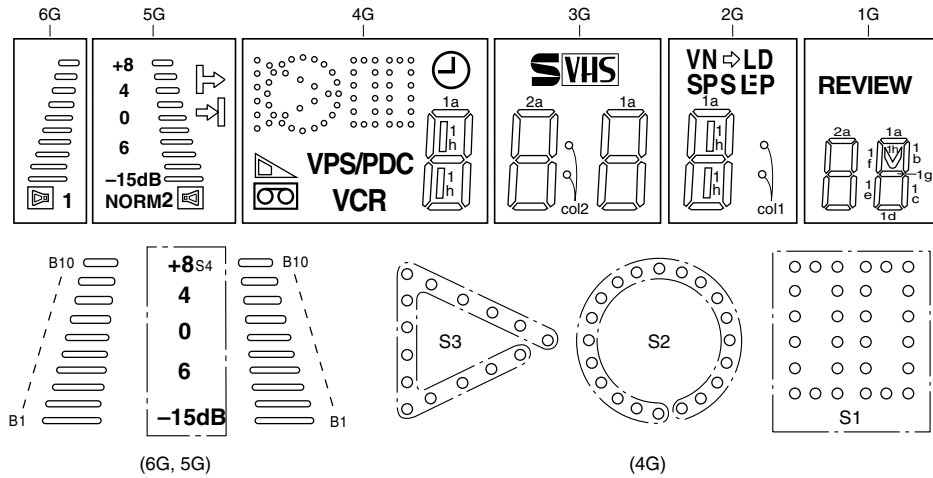


COMPONENT PARTS LOCATION GUIDE <S/P CONVERTER>

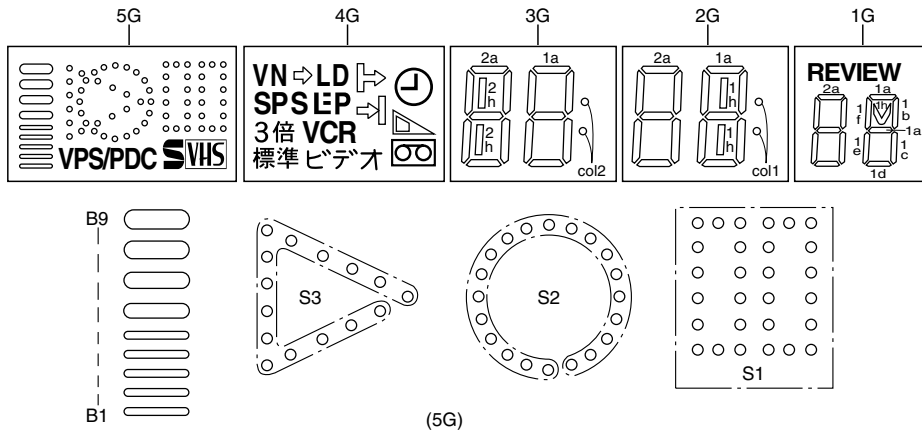
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CAPACITOR																					
C1	B C 10C	C25	B C 6D	C53	A D 6A	C102	B C 2C	CONNECTOR		TRANSISTOR		R4	B C 10D	R28	B C 7D	R54	B C 5D	R107	B C 3C	TP4	A D 7B
C2	B C 10C	C26	B C 6E	C54	A D 6A	C103	B C 2C	CN1	A D 10E	Q1	B C 11A	R5	B C 9D	R31	B C 6A	R55	B C 5C	R108	B C 4C	TP5	A D 6B
C3	B C 10D	C31	A D 11D	C55	A D 7B	C104	B C 3C	IC		Q3	B C 6C	R6	B C 8D	R32	B C 4A	R56	B C 5E	R109	B C 3D	TP6	A D 4A
C4	B C 10D	C32	A D 11D	C56	A D 5C	C105	B C 3C	IC1	B C 9C	Q4	B C 5D	R7	B C 8C	R33	B C 4A	R57	B C 6B	R110	A D 3E	OTHERS	
C5	B C 6C	C33	A D 8C	C57	A D 4A	C106	B C 2B	IC2	B C 7A	Q5	B C 6B	R8	B C 8C	R34	B C 3A	R58	B C 5C	R111	B C 2D	FL1	A D 10C
C6	B C 9D	C34	A D 8C	C58	B C 11E	C107	B C 3B	IC3	B C 11C	Q6	B C 5C	R9	B C 8C	R35	B C 2A	R59	B C 1A	R112	B C 3D	FL2	A D 9A
C7	B C 7C	C35	A D 8B	C60	B C 11C	C108	B C 3C	IC101	A D 3D	Q7	B C 3A	R10	B C 8C	R36	B C 1A	R60	B C 1B	R113	B C 1D	FL3	A D 7D
C8	B C 6D	C36	A D 8C	C61	A D 7D	C109	B C 4B	COIL		Q8	B C 1B	R11	B C 8C	R37	B C 2A	R61	B C 6C	R114	B C 2D	FL4	A D 7D
C9	B C 8C	C37	A D 10B	C62	A D 6D	C110	B C 3C	L1	A D 11C	Q9	B C 1B	R12	B C 8B	R38	B C 6B	R62	B C 5D	R115	B C 2D	FL5	A D 2A
C10	B C 7C	C38	A D 10C	C63	A D 6C	C111	B C 4C	L2	A D 11C	Q11	B C 8D	R13	B C 9B	R39	B C 1B	R71	B C 11E	R116	B C 3C	VR1	A D 10D
C11	B C 8C	C39	A D 11A	C64	A D 5D	C112	B C 2E	L3	A D 6C	Q12	B C 8D	R14	B C 10B	R40	B C 1A	R72	B C 11D	R117	B C 1D	VR2	A D 7C
C12	B C 8B	C40	A D 11D	C65	B C 7B	C113	B C 3D	L4	A D 6D	Q14	B C 11C	R15	B C 10B	R41	B C 6C	R74	B C 11B	R118	A D 2B	VR3	A D 6C
C13	B C 9B	C41	B C 5B	C66	B C 5C	C114	B C 2D	L5	A D 8C	Q15	B C 2A	R16	B C 11B	R42	B C 5E	R75	B C 11B	R119	B C 3C	VR4	A D 5D
C14	B C 8B	C42	B C 5B	C67	A D 5D	C115	B C 2D	L6	A D 8B	Q101	B C 1C	R17	A D 8D	R43	B C 6C	R76	B C 11B	R120	B C 2D	X1	A D 5B
C15	B C 10A	C43	B C 6B	C68	B C 5D	C116	B C 3D	L7	A D 9B	Q102	B C 1C	R18	A D 8D	R44	B C 5E	R77	B C 11D	R121	B C 3D		
C16	B C 10B	C44	B C 6B	C69	B C 5C	C117	B C 3D	L8	A D 10B	Q103	B C 1D	R19	B C 6D	R45	B C 6C	R78	B C 11D	R122	B C 2C		
C17	B C 10B	C45	B C 5A	C70	B C 11B	C118	B C 2E	L9	A D 7D	Q104	B C 3C	R20	B C 6E	R46	B C 5D	R79	B C 11C	R123	B C 4D		
C18	B C 10C	C46	B C 7A	C71	B C 11A	C120	A D 2C	L10	A D 7D	Q105	B C 2E	R21	B C 10A	R47	B C 6B	R80	B C 11C	R124	B C 1C		
C19	B C 10B	C47	B C 3A	C72	A D 11B	C121	A D 1D	L11	A D 10E	Q106	B C 1C	R22	B C 11B	R48	B C 5D	R101	B C 1C	R125	B C 1C		
C20	B C 10B	C48	B C 2A	C73	B C 11D	C122	A D 3D	L12	A D 2B	RESISTOR		R23	B C 11B	R49	B C 6B	R102	B C 1C	R126	B C 1C		
C21	B C 8B	C49	B C 3A	C74	B C 2A	C123	A D 3D	L13	A D 2B	R1	B C 10C	R24	B C 10B	R50	B C 5D	R103	B C 3C	TEST POINT			
C22	B C 10D	C50	B C 1A	C75	B C 11B	C124	A D 2D	L14	A D 2E	R2	B C 11D	R25	B C 8D	R51	B C 5C	R104	B C 3C	TP1	A D 9D		
C24	B C 11B	C52	A D 5A	C101	B C 2C	C126	B C 3D	L15	A D 3B	R3	B C 10D	R26	B C 8D	R52	B C 5D	R105	B C 3C	TP2	B C 7C		
												R27	B C 6D	R53	B C 5C	R106	B C 3C	TP3	B C 8C		

4.35 FDP GRID ASSIGNMENT AND ANODE CONNECTION

[A] (FDP with audio level indicator)



[B] (FDP without audio level indicator)



ANODE CONNECTION

[A]

	6G	5G	4G	3G	2G	1G
P 1	—	→	S2	1a	1a	1a
P 2	—	→	S1	1b	1b	1b
P 3	—	S4	S3	1f	1f	1f
P 4	—	NORM	VPS/PDC	1g	1g	1g
P 5	1	2	⊙	1c	1c	1c
P 6	▶	▶	▶	1e	1e	1e
P 7	B10	B10	⊙	1d	1d	1d
P 8	B9	B9	VCR	col2	1h	1h
P 9	B8	B8	1a	2a	col1	2a
P10	B7	B7	1b	2b	→	2b
P11	B6	B6	1f	2f	VN	2f
P12	B5	B5	1g	2g	LD	2g
P13	B4	B4	1c	2c	SP	2c
P14	B3	B3	1e	2e	S _(SEP)	2e
P15	B2	B2	1d	2d	= _(SEP)	2d
P16	B1	B1	1h	SVHS	LP _(SEP)	REVIEW

ANODE CONNECTION

[B]

	5G	4G	3G	2G	1G
P 1	S2	→	1a	1a	1a
P 2	S1	→	1b	1b	1b
P 3	S3	3倍	1f	1f	1f
P 4	VPS/PDC	標準	1g	1g	1g
P 5	SVHS	⊙	1c	1c	1c
P 6	—	▶	1e	1e	1e
P 7	—	⊙	1d	1d	1d
P 8	B9	VCR	col2	1h	1h
P 9	B8	ビデオ	2a	2a	2a
P10	B7	→	2b	2b	2b
P11	B6	VN	2f	2f	2f
P12	B5	LD	2g	2g	2g
P13	B4	SP	2c	2c	2c
P14	B3	S _(SEP)	2e	2e	2e
P15	B2	= _(SEP)	2d	2d	2d
P16	B1	LP _(SEP)	2h	col1	REVIEW

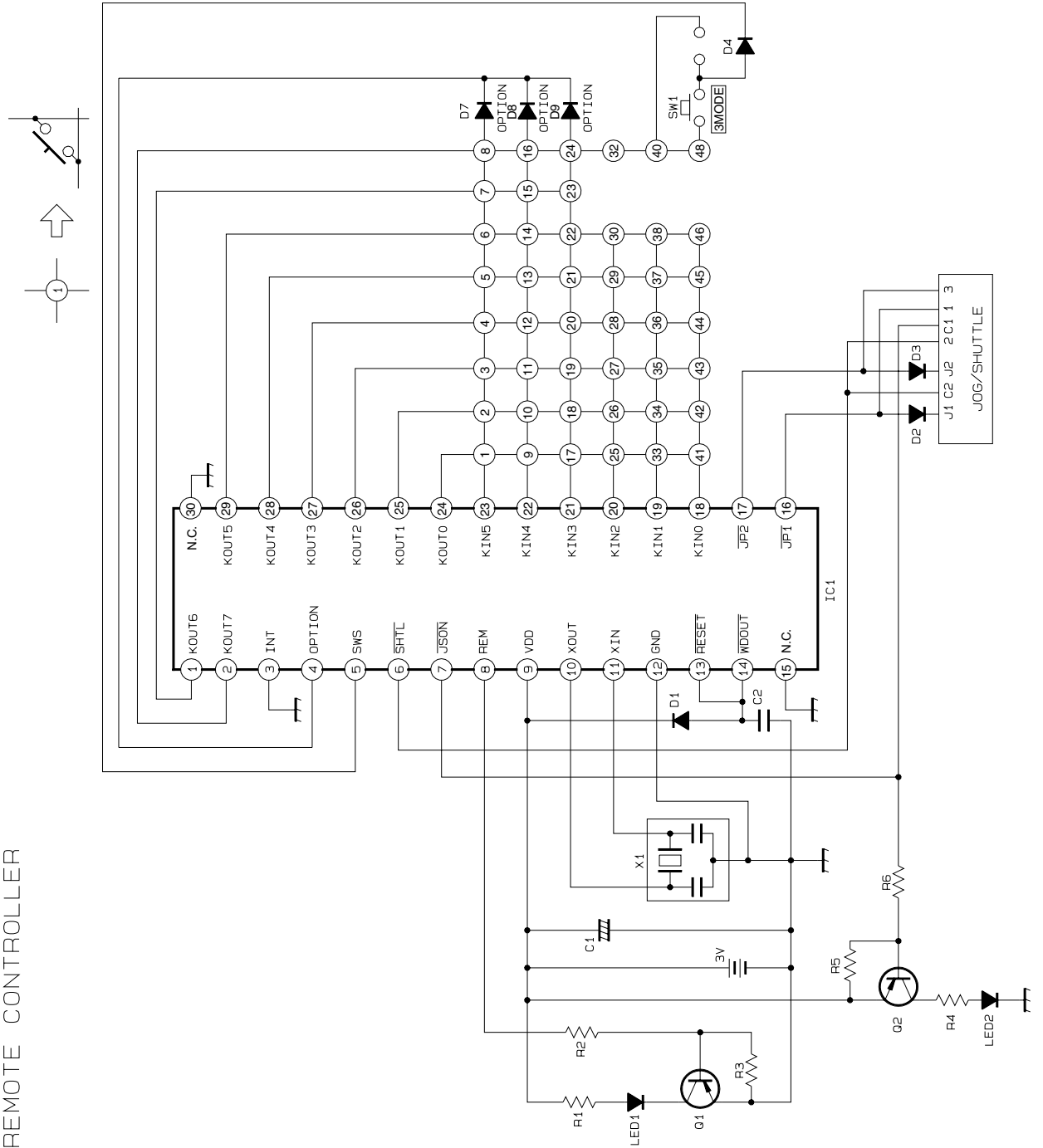
4.36 REMOTE CONTROL SCHEMATIC DIAGRAM

- NOTES:
 1. All parts shown in this schematic are critical for safety.
 2. This schematic is only for reference.
 Avoid replacing individual parts.
 Replace the entire unit only.

5

Key No.	Key Name
1	POWER
2	
3	9 (WEEKLY)
4	DATE +
5	CH -
6	DV
7	PAUSE
8	▷/TV VOL +
9	DISPLAY(ENTER/OSD)
10	6
11	TIMER
12	CH +
13	VHS
14	FF
15	JOG SHUTTLE
16	R.A.EDIT
17	PROG.CHECK
18	5
19	0 (AUX)
20	STOP -
21	DATE -
22	PLAY
23	Δ/TV CH +
24	IN/OUT
25	A.MONITOR (□/⊗)
26	2 (W)
27	8 (DAILY(M-F))
28	STOP +
29	SP/EP (//)
30	STOP
32	▽/TV CH -
33	TV/CR
34	1 (T)
35	7 (DBS)
36	START +
37	PROG.
38	REC
40	OK
41	A/B
42	4
43	CANCEL(C.RESET)
44	START -
45	REW
46	MENU
48	◁/TV VOL -
38+22	REC START
38+7	REC PAUSE

4



3

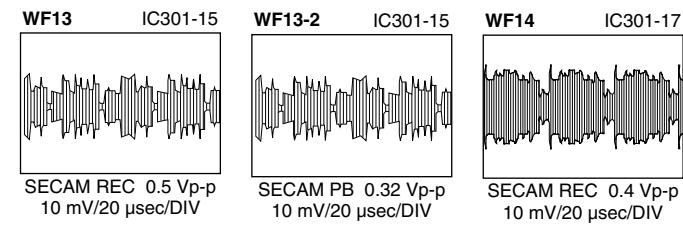
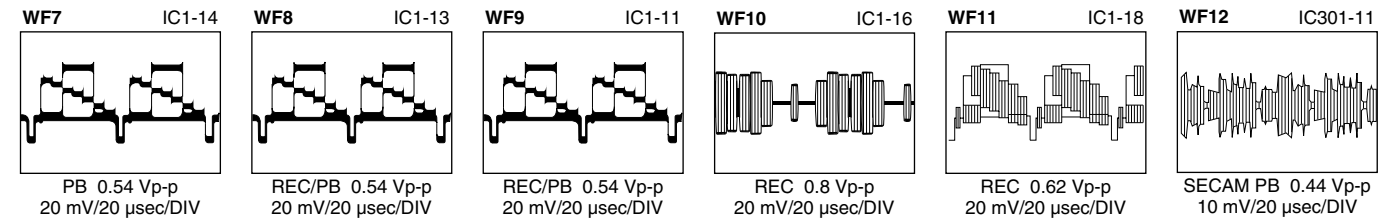
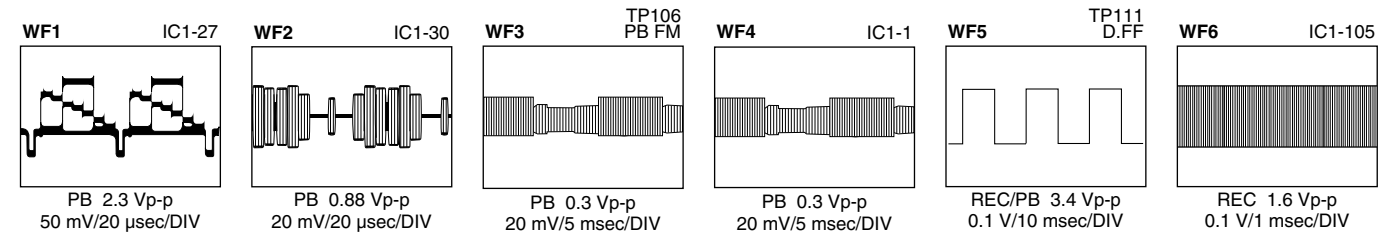
2

1

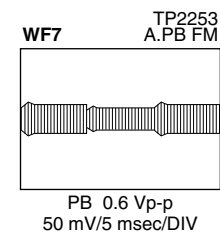
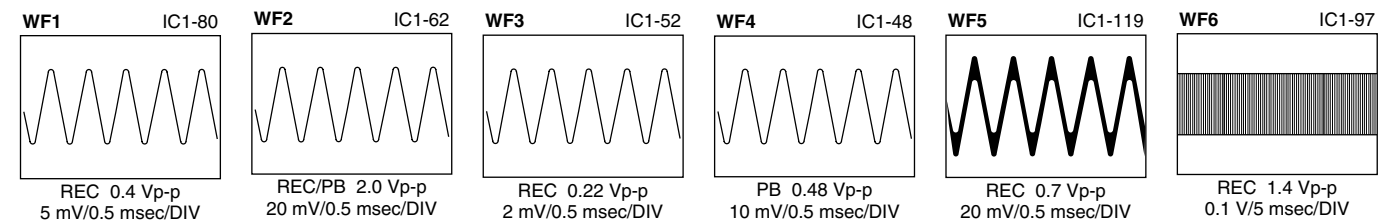
REMOTE CONTROLLER

4.37 WAVEFORMS

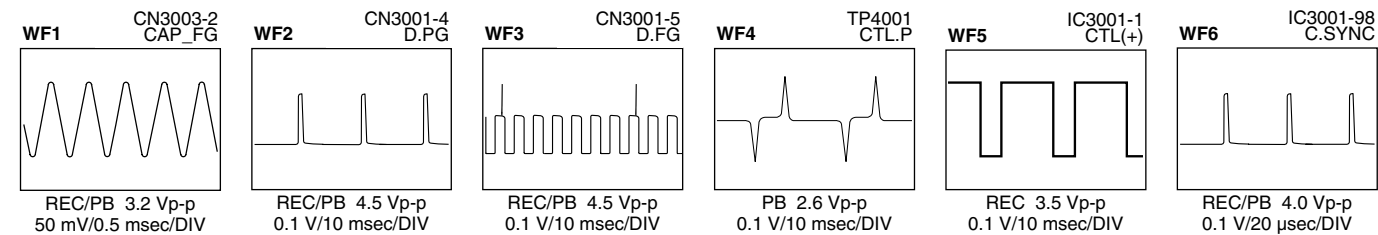
< VIDEO >



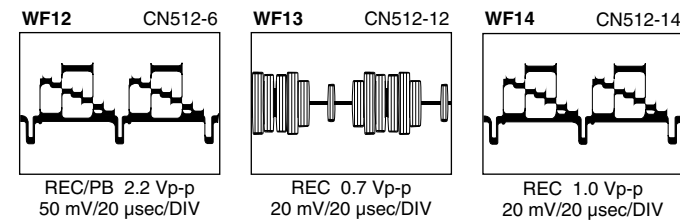
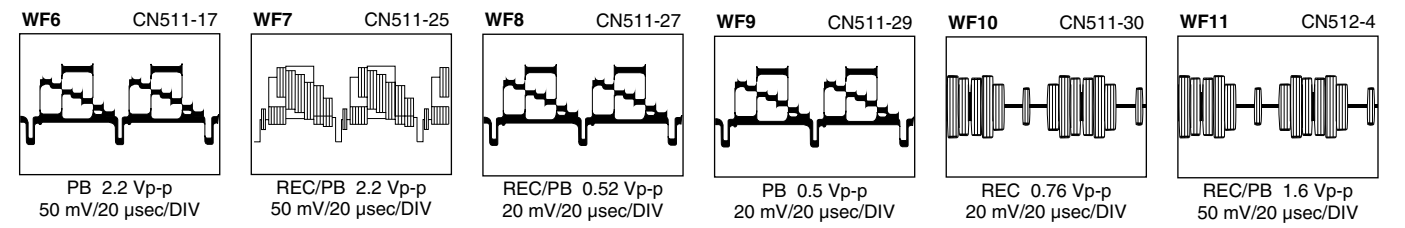
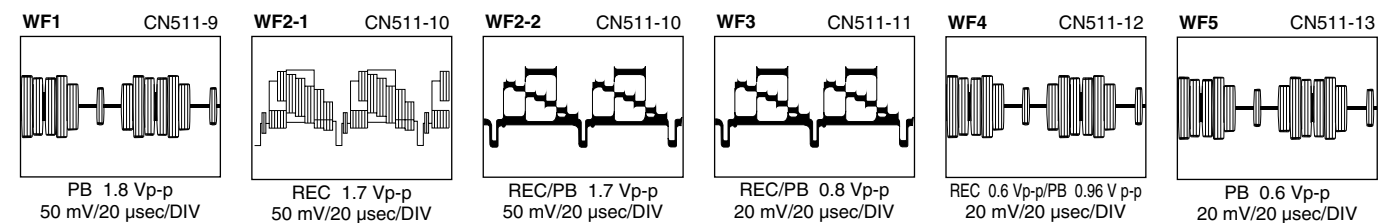
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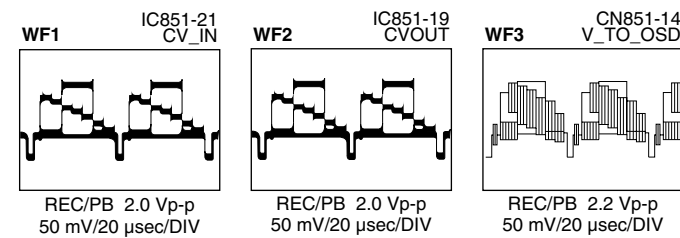
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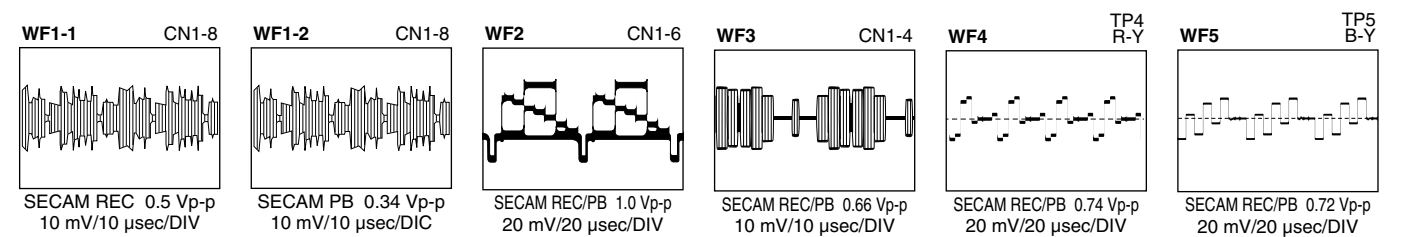
< S-SUB >



< ON SCREEN >



< SP CONV. >



4.38 VOLTAGE CHARTS

<SW REGULATOR>

MODE PIN NO.	REC	PLAY
IC5101		
1	0.3	0.3
2	0	0
3	302.2	302.2
4	14.6	14.6
5	0	0
IC5301		
1	2.4	2.4
2	0	0
3	10.6	10.6
CN5201		
1	-19.3	-19.3
2	0	0
3	-15.6	-15.6
4	0	0
5	0	0
6	2.2	2.2
7	0	0
8	43.3	43.3
9	12.3	12.3
10	4.3	4.3
11	4.3	4.3
12	31.7	31.7
13	4.3	4.3
14	-28.3	-28.3
15	7.2	7.2
16	-7.2	-7.2
17	6.4	6.4
18	6.4	6.4
19	21.4	21.4

<REGULATOR>

MODE PIN NO.	REC	PLAY
IC5321		
1	4.3	4.3
2	3.2	3.2
3	0	0
4	2.6	2.6
CN5301		
1	21.4	21.4
2	6.4	6.4
3	6.4	6.4
4	-7.2	-7.2
5	7.2	7.2
6	-28.3	-28.3
7	4.3	4.3
8	31.7	31.7
9	4.3	4.3
10	4.3	4.3
11	12.3	12.3
12	43.3	43.3
13	0	0
14	2.2	2.2
15	0	0
16	0	0
17	-15.6	-15.6
18	0	0
19	-19.3	-19.3
CN5321		
1	12.2	12.2
2	11.6	11.6
3	11.5	11.5
4	0	0
5	0	0
6	-19.3	-19.3
7	-28.4	-28.4
8	-15.8	-15.8
9	0	0
10	4.8	4.8
11	0	0
12	4.8	4.8
13	0	0
14	22.6	22.6
15	0	0
CN5322		
1	5.6	5.6
2	43.3	43.3
3	5.0	5.0
4	4.9	4.9
5	-7.3	-7.3
6	12.2	12.2
7	11.4	11.4
8	0	0
9	0	0
10	0	0
11	31.9	31.9
12	5.2	5.2
13	10.9	10.9
CN5323		
1	-7.2	-7.2
2	5.1	5.1
3	0	0
4	3.2	3.2
5	3.2	3.2
6	0	0
7	3.2	3.2
8	3.2	3.2
9	0	0
10	0	0

MODE PIN NO.	REC	PLAY
CN5324		
1	6.7	5.8
2	0	0
3	7.1	7.1
4	5.1	5.1
5	0	0
CN5325		
1	11.2	11.2
2	0	0

<VIDEO/AUDIO>

MODE PIN NO.	REC	PLAY
IC1		
1	4.2	2.1
2	2.8	2.8
3	2.6	2.6
4	1.9	1.4
5	1.9	1.4
6	2.4	2.4
7	2.1	0.7
8	0	0
9	2.7	2.7
10	2.2	2.2
11	3.1	3.1
12	2.8	2.8
13	3.1	3.1
14	3.5	2.4
15	0	0
16	2.8	2.8
17	1.5	1.5
18	2.8	2.8
19	2.9	4.7
20	0	2.8
21	0	1.9
22	2.8	2.8
23	0	2.9
24	4.8	4.8
25	0.3	0.3
26	0	0
27	1.3	2.3
28	2.3	2.3
29	0	1.9
30	2.1	2.1
31	0	0
32	2.6	2.6
33	4.9	4.9
34	2.7	2.2
35	4.8	4.8
36	2.6	2.6
37	2.3	2.3
38	-	-
39	1.2	1.2
40	-	-
41	2.5	2.5
42	-	-
43	0	0
44	2.1	2.1
45	4.6	4.6
46	4.2	4.2
47	2.9	2.9
48	2.6	2.6
49	4.9	4.9
50	2.5	2.5
51	2.8	2.8
52	2.3	2.3
53	2.3	2.3
54	2.5	2.5
55	2.1	2.1
56	0.6	0.6
57	2.5	2.5
58	2.4	2.4
59	4.6	4.6
60	4.2	4.2
61	4.2	4.2
62	4.2	4.2
63	2.3	2.3
64	2.3	2.3
65	1.4	1.7
66	2.8	2.7
67	4.2	4.2
68	4.2	4.2
69	2.3	2.3
70	0	0
71	0.3	0.3
72	0.2	0.2
73	0.2	0.2
74	2.2	2.2
75	2.4	2.4
76	0	0
77	2.5	2.5
78	0.3	0.3
79	0.2	0.2
80	0.2	0.2
81	2.2	2.2
82	0.7	0.7
83	0	0
84	2.3	2.3
85	2.3	2.3
86	2.2	2.2
87	1.5	1.5

MODE PIN NO.	REC	PLAY
88	2.2	2.2
89	2.2	2.2
90	2.3	2.3
91	0.1	0.1
92	0	0
93	0	2.6
94	0	1.4
95	0	0
96	2.4	2.4
97	2.7	2.3
98	2.4	2.4
99	4.9	4.9
100	4.9	4.9
101	0	0
102	0	0
103	0	0
104	2.4	2.4
105	2.3	2.3
106	2.3	2.3
107	4.9	4.9
108	0	0
109	0	0
110	0	0
111	0	2.5
112	2.6	2.6
113	0.5	0.5
114	0	0
115	2.5	2.5
116	2.5	2.5
117	2.5	2.5
118	0	0
119	2.4	2.4
120	4.6	4.6
CN1		
1	0	0
2	0	0
3	0	0
4	0	0
5	2.3	2.3
6	2.3	2.3
7	2.3	2.3
8	2.3	2.3
9	2.7	2.3
10	2.7	2.3
11	2.7	2.3
12	0	0
13	0	0
CN2001		
1	0	0
2	0	0
3	0	0
4	0	0
5	2.3	2.3
6	2.3	2.3
7	2.3	2.3
8	2.3	2.3
9	2.7	2.3
10	2.7	2.3
11	2.7	2.3
12	0	0
13	0	0
CN2002		
1	0	0
2	0	0

<SYS CON>

MODE PIN NO.	REC	PLAY
IC3001		
1	2.7	2.7
2	0	0
3	1.8	2.4
4	2.4	2.4
5	0	0.6
6	2.5	2.5
7	2.4	2.4
8	2.4	2.4
9	4.9	4.9
10	4.8	4.8
11	0	0
12	0	0
13	0	0
14	4.3	4.3
15	4.4	4.4
16	0.6	0.6
17	2.7	2.7
18	3.9	3.9
19	0	0
20	4.5	4.5
21	0	2.5
22	0	1.4
23	0	0
24	4.8	4.8
25	0	0
26	4.9	4.9
27	4.9	4.9
28	4.8	4.8
29	4.8	4.8
30	4.8	4.8
31	12.2	12.2
32	0	0
33	0	0
34	0	0
35	0	0
36	0	0
37	0	0
38	0	4.8

MODE PIN NO.	REC	PLAY
39	4.2	4.2
40	0	0
41	4.7	4.7
42	4.5	4.5
43	0	0
44	0	0
45	4.8	4.8
46	4.7	4.7
47	0	0
48	4.8	4.8
49	4.2	4.2
50	4.6	4.6
51	4.8	4.8
52	4.4	3.8
53	4.3	4.3
54	-	-
55	-	-
56	0	0
57	0	0
58	4.8	0
59	4.8	4.8
60	0	0
61	0	0
62	0	0
63	0	0
64	-	-
65	-	-
66	-	-
67	-	-
68	0	0
69	-	-
70	4.8	4.8
71	4.8	4.8
72	4.8	4.8
73	4.8	4.8
74	0	0
75	4.5	4.5
76	4.5	4.5
77	0	0
78	0	0
79	4.8	4.8
80	0	0
81	4.8	4.8
82	4.8	4.8
83	2.5	2.5
84	0	0
85	0	0
86	4.5	4.5
87	4.8	4.8
88	4.8	4.8
89	0	0
90	0	0
91	2.7	2.8
92	0	0
93	0	0
94	4.8	4.8
95	0	0
96	0	0
97	4.9	4.9
98	0.4	0.4
99	0	2.7
100	2.5	2.5
101	2.5	2.5
102	1.2	1.2
103	0	0
104	0	0
105	4.8	4.8
106	4.8	4.8
107	0.1	0.1
108	1.5	1.5
109	4.8	4.8
110	1.5	1.5
111	0	0
112	0	0
113	4.8	4.8
114	0	0
115	0	0
116	0	0
117	4.8	4.8
118	0	0
119	0	0
120	4.8	4.8
121	0	0
122	0	0
123	0	0
124	0	0
125	0	0
126	0	0
127	0	0
128	0	0
129	0	0
130	0	0
131	0	0
132	0	0
133	0	0
134	0	0
135	0	0
136	0	0
137	0	0
138	0	0
139	0	0
140	0	0
141	0	0
142	0	0
143	0	0
144	0	0
145	0	0
146	0	0
147	0	0
148	0	0
149	0	0
150	0	0
151	0	0

MODE PIN NO.	REC	PLAY
4	0.1	0.1
5	1.5	1.5
CN3002		
1	0	0
2	0	0
CN3003		
1	0	0
2	2.4	2.4
3	2.5	2.4
4	4.9	4.9
5	0	0
6	4.8	4.8
7	-	-
8	11.4	11.4
CN3004		
1	4.9	4.9
2	4.9	4.9
3	0	0
4	0	0
CN3011		
1	4.9	4.9
2	4.9	4.9
3	4.3	4.3
4	4.8	4.8
5	4.4	3.7
6	4.2	4.2
7	4.8	4.8
8	0	0
9		

MODE PIN NO.	REC	PLAY
48	3.1	3.1
49	3.1	3.1
50	3.1	3.1
51	1.4	1.4
52	0	0
53	0	0
54	3.1	3.1
55	0	0
56	2.6	2.6
57	3.1	3.1
58	3.0	3.0
59	0	0
60	3.1	3.1
61	3.1	3.1
62	2.7	2.7
63	2.7	2.7
64	0	0
65	0	0
66	3.1	3.1
67	3.1	3.1
68	3.1	3.1
69	0	0
70	0	0
71	0	0
72	3.1	3.1
73	0	0
74	0	0
75	0	0
76	0	0
77	0	0
78	0	0
79	0	0
80	0	0
81	3.1	3.1
82	0	0
83	0	0
84	0	0
85	0	0
86	3.1	3.1
87	3.1	3.1
88	0	0
89	3.1	3.1
90	0	0
91	0	0
92	0	0
93	0	0
94	3.1	3.1
95	3.1	3.1
96	3.1	3.1
97	0	0
98	3.1	3.1
99	0	0
100	3.1	3.1
101	3.1	3.1
102	3.1	3.1
103	3.1	3.1
104	3.1	3.1
105	0	0
106	0	0
107	0	0
108	3.1	3.1
109	3.1	3.1
110	3.1	3.1
111	0	0
112	3.1	3.1
113	3.1	3.1
114	3.1	3.1
115	3.1	3.1
116	0	0
117	0	0
118	0	0
119	3.0	3.0
120	0.2	0.2
121	3.1	3.1
122	0	0
123	3.1	3.1
124	3.1	3.1
125	0.2	0.2
126	3.1	3.1
127	0	0
128	0	0
129	0	0
130	0	0
131	0	0
132	0	0
133	0	0
134	0	0
135	0	0
136	0	0
137	0	0
138	0	0
139	0	0
140	0	0
141	0	0
142	0	0
143	0	0
144	0	0
145	0	0
146	0	0
147	0	0
148	0	0
149	0	0
150	0	0
151	0	0
152	0	0
153	0	0
154	0	0
155	0	0
156	0	0
157	0	0
158	0	0
159	0	0
160	0	0
161	0	0
162	0	0
163	0	0
164	0	0
165	0	0
166	0	0
167	0	0
168	0	0
169	0	0
170	0	0
171	0	0
172	0	0
173	0	0
174	0	0
175	0	0
176	0	0
177	0	0
178	0	0
179	0	0
180	0	0
181	0	0
182	0	0
183	0	0
184	0	0
185	0	0
186	0	0
187	0	0
188	0	0
189	0	0
190	0	0
191	0	0
192	0	0
193	0	0
194	0	0
195	0	0
196	0	0
197	0	0
198	0	0
199	0	0
200	0	0
201	0	0
202	0	0
203	0	0
204	0	0
205	0	0
206	0	0
207	0	0
208	0	0
209	0	0
210	0	0
211	0	0
212	0	0
213	0	0
214	0	0
215	0	0
216	0	0
217	0	0
218	0	0
219	0	0
220	0	0

MODE PIN NO.	REC	PLAY
6	0.5	0.5
7	0.4	0.4
8	3.1	3.1
IC1007		
1	3.1	3.1
2	2.6	2.6
3	3.1	3.1
4	0	0
5	3.1	3.1
6	3.1	3.1
7	3.1	3.1
8	3.1	3.1
IC1008		
1	3.1	3.1
2	3.1	3.1
3	3.1	3.1
4	0	0
5	3.1	3.1
6	3.1	3.1
7	3.1	3.1
8	3.1	3.1
IC1009		
1	3.1	3.1
2	0	0
3	0	0
4	1.8	1.8
5	3.1	3.1
IC1010		
1	3.1	3.1
2	0	0
3	0	0
4	1.8	1.8
5	3.1	3.1
CN1001		
1	-7.2	-7.2
2	5.1	5.1
3	0	0
4	3.2	3.2
5	3.2	3.2
6	0	0
7	3.2	3.2
8	3.2	3.2
9	0	0
10	0	0
CN1002		
1	0	0
2	3.0	3.0
3	3.0	3.0
4	0	0
5	2.8	2.8
6	3.8	3.8
CN1101		
1	0	0
2	5.1	5.1
3	3.1	3.1
4	0	0
5	3.1	3.1
6	3.1	3.1
7	3.1	3.1
8	0	0
9	1.3	1.3
10	0	0
11	1.5	1.5
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	3.0	3.0
18	3.1	3.1
19	3.4	3.4
20	2.7	2.7
21	0	0
22	0	0
23	2.5	1.9
24	1.6	1.6
25	0	0
26	0	0
<DV MSD>		
MODE PIN NO.	REC	PLAY
IC1501		
1	0	0
2	3.1	3.1
3	3.1	3.1
4	0	0
5	0	0
6	0.2	0.2
7	3.1	3.1
8	0	0
9	0.2	0.2
10	0	0
11	0	0
12	0	0
13	0	0
14	3.1	3.1
15	0	0
16	3.1	3.1
17	2.9	2.9
18	0	0

MODE PIN NO.	REC	PLAY
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	3.1	3.1
30	3.1	3.1
31	0.2	0.2
32	0.2	0.2
33	0.4	0.4
34	0.6	0.6
35	0.6	0.6
36	0.6	0.6
37	0.6	0.6
38	0.6	0.6
39	0	0
40	0.2	0.2
41	0.2	0.2
42	0.3	0.3
43	0.2	0.2
44	0.2	0.2
45	0.3	0.3
46	0.2	0.2
47	0.5	0.5
48	3.1	3.1
49	0.4	0.4
50	2.9	2.9
51	0	0
52	3.0	3.0
53	3.1	3.1
54	0	0
55	0	0
56	3.1	3.1
57	-	-
58	0	0
59	0	0
60	3.1	3.1
61	3.1	3.1
62	1.5	1.5
63	1.1	1.1
64	3.1	3.1
65	0	0
66	3.1	3.1
67	2.7	2.7
68	0	0
69	0	0
70	3.1	3.1
71	0	0
72	3.1	3.1
73	3.1	3.1
74	0	0
75	0	0
76	0	0
77	0	0
78	3.1	0
79	0	3.1
80	3.1	3.1
81	0	0
82	3.1	3.1
83	3.1	3.1
84	3.1	3.1
85	0	0
86	0	0
87	0	0
88	0	0
89	0	0
90	0	0
91	0	0
92	0	0
93	0	0
94	0	0
95	0	0
96	0	0
97	3.1	3.1
98	3.1	3.1
99	3.1	3.1
100	0	0
101	3.1	3.1
102	3.1	3.1
103	3.1	3.1
104	3.1	3.1
105	3.1	3.1
106	3.1	3.1
107	0	0
108	0	0
109	0	0
110	0	0
111	0	0
112	0	0
113	2.7	2.7
114	1.5	1.5
115	1.6	1.6
116	3.1	3.1
117	0	0
118	0	0
119	0	0

MODE PIN NO.	REC	PLAY
120	0.2	0.2
121	0.3	0.3
122	3.1	3.1
123	3.1	3.1
124	3.1	3.1
125	0	0
126	0	0
127	3.1	3.1
128	0	0
129	0	0
130	3.1	3.1
131	0	0
132	0	0
133	0	0
134	0	0
135	3.1	3.1
136	1.6	1.6
137	0	0
138	0	0
139	1.9	1.9
140	1.5	1.5
141	0	0
142	1.5	1.5
143	0	0
144	0	0
145	0	0
146	1.6	1.6
147	1.7	1.7
148	0.3	0.3
149	1.5	1.5
150	1.6	1.6
151	3.1	3.1
152	-	-
153	-	-
154	1.6	1.6
155	1.6	1.6
156	1.6	1.6
157	0	0
158	1.5	1.5
159	0.2	0.2
160	0	0
161	0.2	0.2
162	0	0
163	0	0
164	0	0
165	0	0
166	3.1	3.1
167	0	0
168	0	0
169	0.2	0.2
170	3.1	0
171	0	0
172	0	0
173	3.1	3.1
174	3.1	3.1
175	3.0	0.3
176	0.2	0.2
177	0	0
178	3.1	3.1
179	3.1	3.1
180	3.1	3.1
181	3.1	3.1
182	0	0
183	2.7	2.7
184	5.1	5.1
185	0	0
186	0	0
187	0.2	0.2
188	3.1	0
189	0.2	0.2
190	3.1	3.1
191	3.1	3.1
192	3.1	3.1
193	0	0
194	3.1	3.1
195	2.3	2.3
196	3.1	3.1
197	1.4	1.4
198	0	0
199	3.1	3.1
200	0	0
201	2.8	2.8
202	2.8	2.8
203	0	0
204	3.1	3.1
205	3.1	3.1
206	3.1	3.1
207	3.1	3.1
208	0	0.3
IC1502		
1	-	-
2	3.1	3.1
3	-	-
4	0	0
5	-	-
6	0.1	0.1
7	-	-
8	3.1	3.1
IC1601		
1	3.1	3.1
2	0	0

MODE PIN NO.	REC	PLAY
3	0	0
4	0	0
5	0	0
6	0	0
7	3.1	3.1
8	3.1	3.1
CN1501		
1	3.1	3.1
2</		

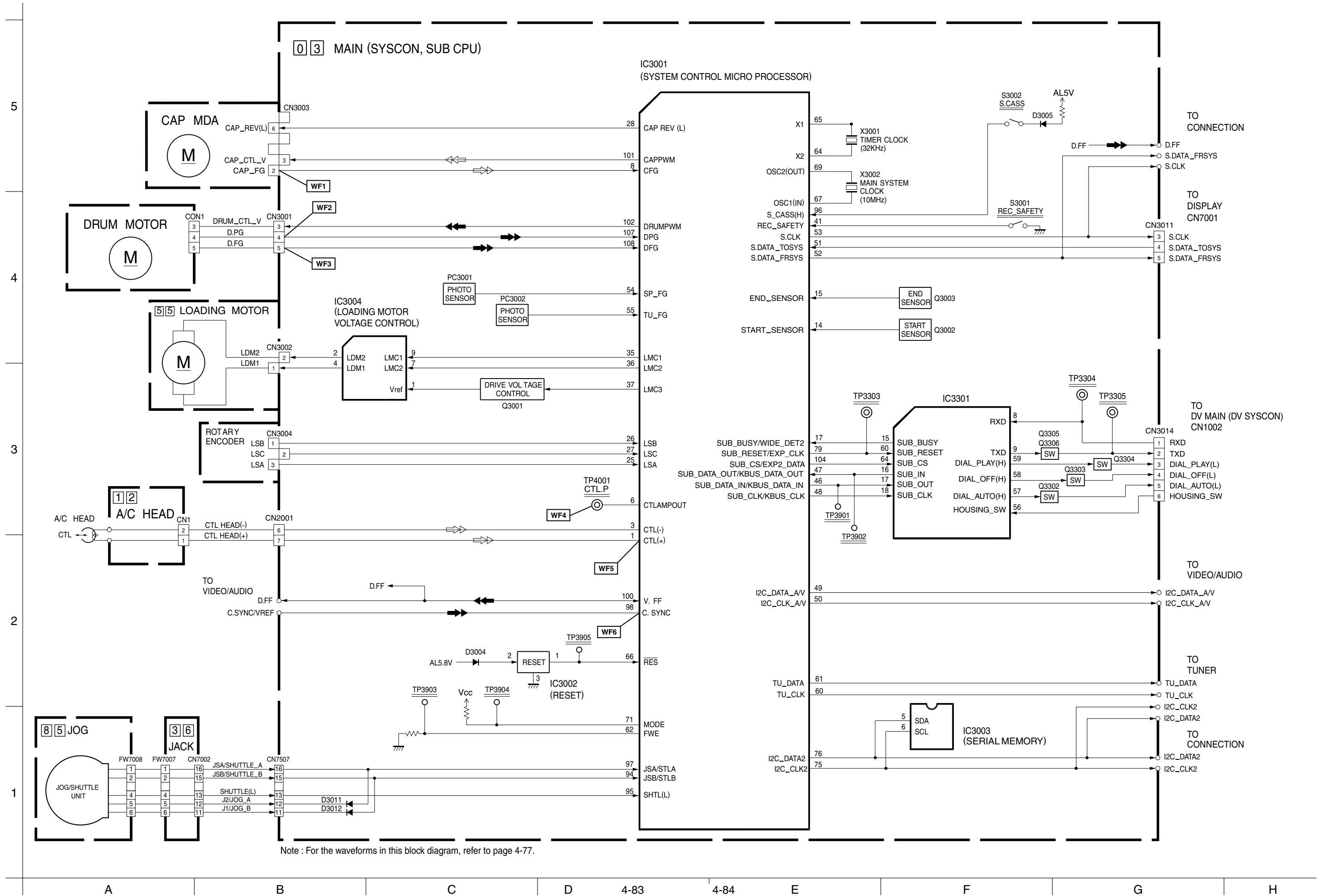
4.39 CPU PIN FUNCTION

<SYSCON IC3001>

PIN NO.	LABEL	IN/OUT	FUNCTION
1	CTL(+)	IN/OUT	CTL(+) SIGNAL
2	SVSS	-	GND
3	CTL(-)	IN/OUT	CTL(-) SIGNAL
4	CTLBIAS	-	CTL BIAS VOLTAGE
5	CTLFB	IN	CTL PULSE FEEDBACK
6	CTLAMPOUT	OUT	CTL PULSE OUTPUT
7	CTLSMTIN	IN	CTL PULSE INPUT
8	CFG	IN	CAPSTAN FG PULSE INPUT
9	SVCC	-	SYSTEM POWER
10	AVCC	-	SYSTEM POWER FOR ANALOG CIRCUIT
11	NORM/MESEC/S	IN	SVHS MODE:H
12	SECAM_DET(H)/KILLER_DET/BIT_IN(H)	IN	NC/COLOR KILLER DETECT/NC
13	VIDEO_ENV	IN	AUTO TRACKING DETECT/INPUT THE AVERAGE OF PLAYBACK VIDEO SIGNAL
14	START_SENSOR	IN	START SENSOR
15	END_SENSOR	IN	END SENSOR
16	IND(L)	IN	AUDIO INPUT (LCH) FOR THE FDP AUDIO INDICATOR
17	DD_ABS	IN	DYNAMIC DRUM POSITION DETECT
18	SCR_ID/WA_DET	IN	SCRAMBLE CONTROL INPUT (SCRAMBLE:H)/NC
19	IND(R)	IN	AUDIO INPUT (RCH) FOR THE FDP AUDIO INDICATOR
20	BS_ANT/AFC	IN	TUNING CLOCK
21	LED/RF AGC	IN	NC/CHANGES IN AT&S IC OUTPUT AS CAUSED BY CHANGES IN RECEIVER SENSITIVITY WHEN THE SAME CHANNEL IS RECEIVED MORE THAN ONCE ARE INPUT.
22	A.ENV/ND(L)	IN	AUDIO PB FM ENV.INPUT/NON HI/IFI MODE:L
23	AVSS	-	GND FOR ANALOG CIRCUIT
24	CTL_GAIN	OUT	CONTROL AMP OUT FREQUENCY RESPONSE SWITCHING
25	LSA	IN	MECHANISM MODE DETECT(A)
26	LSB	IN	MECHANISM MODE DETECT(B)
27	LSC	IN	MECHANISM MODE DETECT(C)
28	CAP_REV(L)	OUT	CAPSTAN MOTOR REVERSE CONTROL (FWD:H/REV:L)
29	RC	IN	REMOTE CONTROL DATA INPUT
30	LOCK(L)/P.SAVE[0.1]	IN	TUNING PLL LOCK DETECT:L/NC
31	P50_IN	IN	CONTROL SIGNAL FOR TV LINK
32	R.PAUSE/COMPU_IN	IN	REMOTE PAUSE CONTROL / A/V COMPULINK INPUT
33	RAE_OUT/COMPUOUT	OUT	NC / A/V COMPULINK OUTPUT
34	P50_OUT	OUT	CONTROL SIGNAL FOR TV LINK
35	LMC1	OUT	LOADING MOTOR DRIVE(1)
36	LMC2	OUT	LOADING MOTOR DRIVE(2)
37	LMC3	OUT	LOADING MOTOR DRIVE(3)
38	SB_G(PWM)	OUT	VOLTAGE CONTROL SIGNAL FOR VIDEO FREQUENCY RESPONSE
39	STB/TEST	OUT	STROBE SIGNAL (FOR FDP DRIVER)
40	POWER_DET	IN	DETECTION SIGNAL FOR POWER DOWN OF AC POWER SUPPLY
41	REC_SAFETY	IN	REC SAFETY SWITCH DETECT (SW ON:L)
42	PROTECT	IN	DETECTION SIGNAL FOR SW POWER SUPPLY
43	VSS	-	GND
44	RMO	OUT	REMOTE CONTROL OUTPUT FOR SATELLITE RECEIVER
45	VCC	-	SYSTEM POWER
46	EXP2_DATA	IN/OUT	SERIAL DATA TRANSFER OUTPUT FOR TUNER/REG CONTROL
47	EXP1_DATA	IN/OUT	SERIAL DATA TRANSFER OUTPUT FOR AUDIO/VIDEO CONTROL
48	EXP_CLK	OUT	SERIAL DATA TRANSFER CLOCK FOR AUDIO/VIDEO AND TUNER/REG CONTROL
49	I2C_DATA_A/V	IN/OUT	SERIAL DATA TRANSFER OUTPUT FOR THE VIDEO/AUDIO IC
50	I2C_CLK_A/V	OUT	SERIAL DATA TRANSFER CLOCK FOR THE VIDEO/AUDIO IC
51	S.DATA_TOSYS	IN	SERIAL DATA TRANSFER OUTPUT FROM THE ON-SCREEN IC TO THE FDP DRIVER
52	S.DATA_FRSYS	OUT	SERIAL DATA TRANSFER OUTPUT FROM THE FDP DRIVER TO THE ON-SCREEN IC
53	S.CLK	OUT	SERIAL DATA TRANSMISSION CLOCK FROM THE FDP DRIVER TO THE ON-SCREEN IC
54	SP_FG	IN	DETECTION SIGNAL FOR SUPPLY REEL ROTATION/TAPE REMAIN
55	TU_FG	IN	DETECTION SIGNAL FOR TAKE-UP REEL ROTATION/TAPE REMAIN
56	JUST_CLK/EDS(H)	-	NC

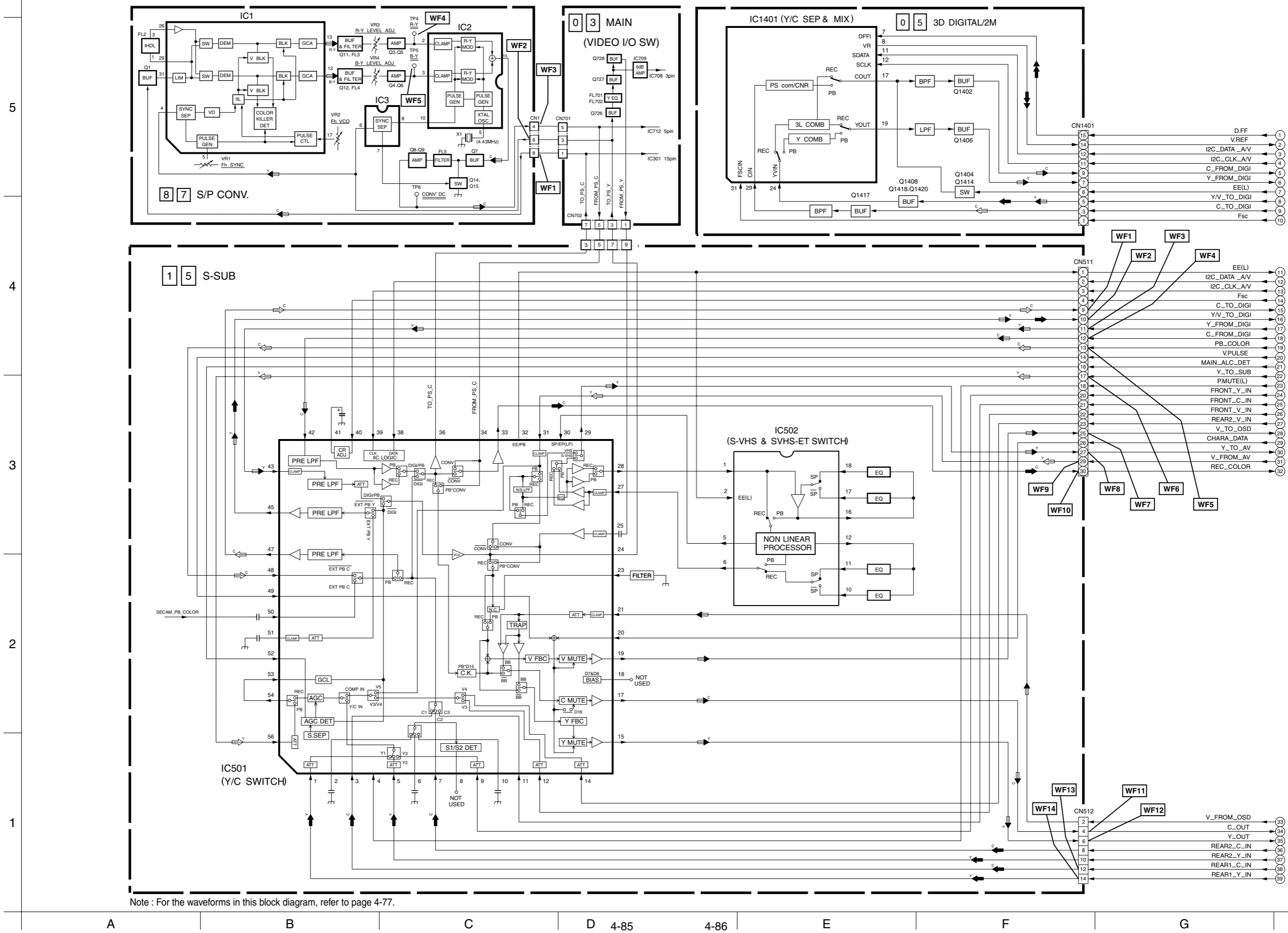
PIN NO.	LABEL	IN/OUT	FUNCTION
57	TU_CE	OUT	CHIP ENABLE OF THE TUNER UNIT
58	N.REC_ST(H)	OUT	NORMAL AUDIO SOUND RECORDING START
59	DD_FG	IN	DYNAMIC DRUM FG INPUT
60	TU_CLK	OUT	CLOCK FOR DATA TRANSFER TO THE TUNER UNIT
61	TU_DATA	OUT	TUNING DATA
62	FWE	-	NC
63	NMI(L)	-	NC
64	X2	-	TIMER CLOCK (32.768KHz)
65	X1	-	TIMER CLOCK (32.768KHz)
66	RES(L)	-	RESET TERMINAL (RESET ON:L)
67	OSC1(IN)	-	MAIN SYSTEM CLOCK(10MHz)
68	VSS	-	GND
69	OSC2(OUT)	-	MAIN SYSTEM CLOCK(10MHz)
70	VCC	-	SYSTEM POWER
71	MODE	-	NC
72	TU_A_MUTE(H)	OUT	TUNER AUDIO MUTE CONTROL (MUTE:H)
73	TU_V_MUTE(H)	OUT	TUNER VIDEO CONTROL (MUTE:H)
74	A.MUTE(H)	OUT	AUDIO MUTE CONTROL (MUTE:H)
75	I2C_CLK2	OUT	SERIAL DATA TRANSFER CLOCK FOR MEMORY IC
76	I2C_DATA2	IN/OUT	SERIAL DATA TRANSFER OUTPUT FOR MEMORY IC
77	DDCFWD	OUT	DYNAMIC DRUM CONTROL (FORWARD)
78	DDCREV	OUT	DYNAMIC DRUM CONTROL (REVERSE)
79	DDSPDCTL	OUT	DYNAMIC DRUM SPEED CONTROL
80	V.P.CTL	OUT	V.PULSE CONTROL, V COMPENSATION DURING SPECIAL PLAYBACK
81	R-Y_REV/EDS_CS/EXT(L)	OUT	PAL EP MODE CONTROL/NC/NC
82	VCC	-	SYSTEM POWER
83	SLOW_P/CNR_CTL	OUT	MEMORY TIMING CONTROL IN THE SLOW MODE / NC
84	VSS	-	GND
85	SP_SHORT(H)	OUT	MODE SELECT
86	LP_SHORT(H)	OUT	MODE SELECT
87	FLY_ON(H)	OUT	FLYING ERASE ON:H
88	H.REC_ST(H)	OUT	HIFI AUDIO SOUND RECORDING START
89	TRICK(H)/M_TRICK(L)	OUT	SPECIAL PLAYBACK: H/REC AFC FILTER, PB APC FILTER, BURST ACC FILTER, COLOR KILLER DET FILTER
90	HEAD_SEL	OUT	HEAD SELECT(LP HEAD:H, SP HEAD:L)
91	OSD_CS	OUT	CHIP SELECT FOR THE ON-SCREEN IC
92	SYNC_DET(H)	IN	DETECTION OF VIDEO SYNC SIGNAL (DETECTED:H)
93	MESECAM(H)	OUT	MESECAM:H
94	JSB/STLB	-	NC
95	SHTL(L)/JOGA	-	NC
96	JOGB/S_CASS(H)	-	NC
97	JSA/STLA	-	NC
98	C.SYNC	IN	COMPOSITE SYNC
99	A.FF	OUT	AUDIO FF OUTPUT
100	V.FF	OUT	ROTATION DETECTION SIGNAL FOR DRUM MOTOR/TIMING CONTROL SIGNAL FOR REC
101	CAPPWM	OUT	CAPSTAN MOTOR CONTROL
102	DRUMPWM	OUT	DRUM MOTOR CONTROL
103	SUB_RESET	OUT	RESET SIGNAL FOR THE SUB CPU (NAVI)
104	HI_FF/REW(L)	OUT	HIGH FF/REW:L
105	SUB_BUSY	IN	SUB CPU (NAVI) BUSY
106	SUB_CS	OUT	CHIP SELECT FOR THE SUB CPU (NAVI)
107	DPG	IN	DRUM PICKUP PULSE INPUT (SWITCHING PULSE)
108	DFG	IN	DRUM FG PULSE INPUT
109	VCC	-	SYSTEM POWER
110	V.PULSE	OUT	V.PULSE ADDITION TIMING CONTROL
111	VSS	-	GND
112	CTLREF	-	CTL REFERENCE VOLTAGE

4.40 SYSTEM CONTROL BLOCK DIAGRAM (VHS)

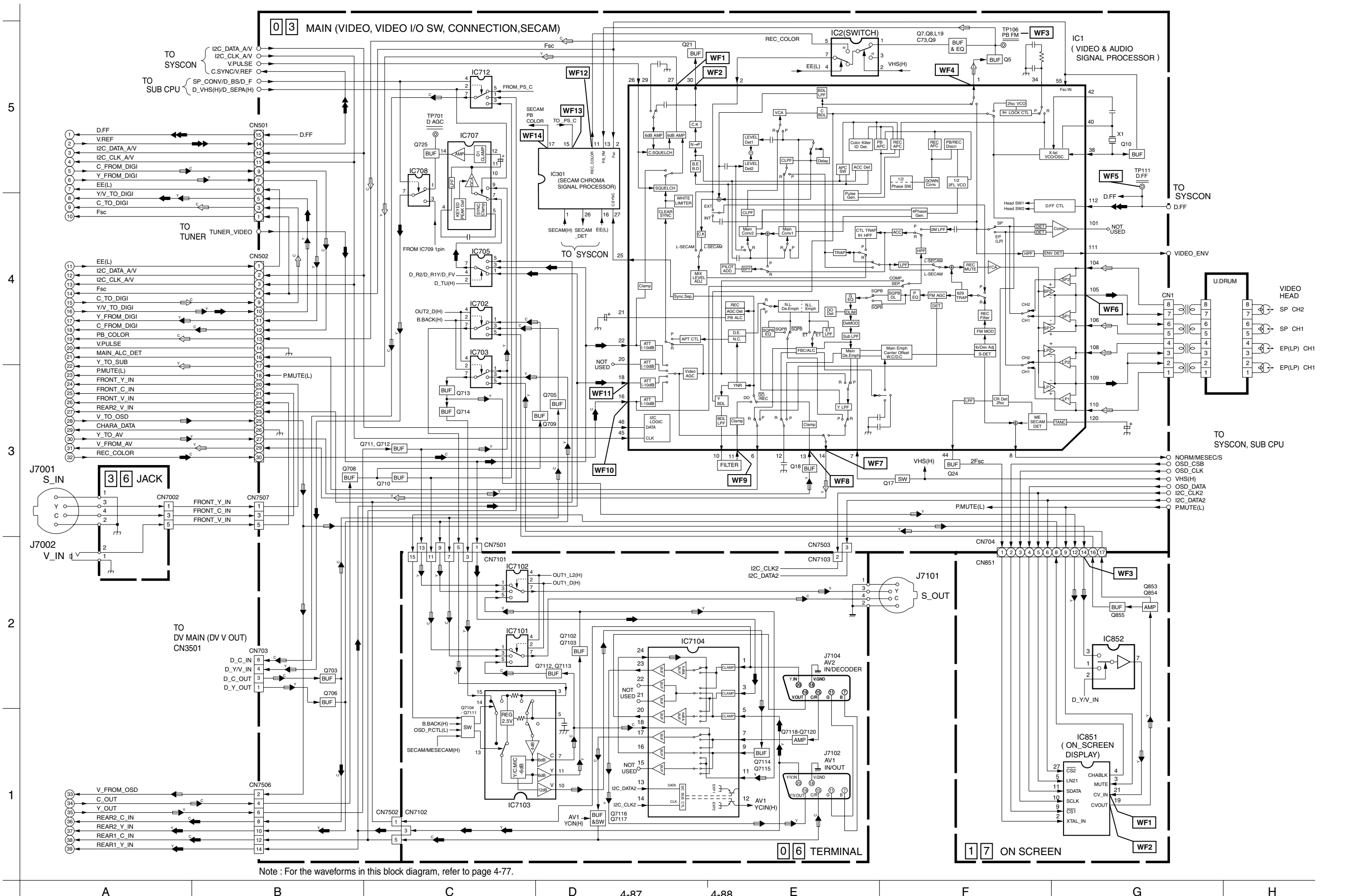


Note : For the waveforms in this block diagram, refer to page 4-77.

4.41 VIDEO BLOCK DIAGRAM (VHS)

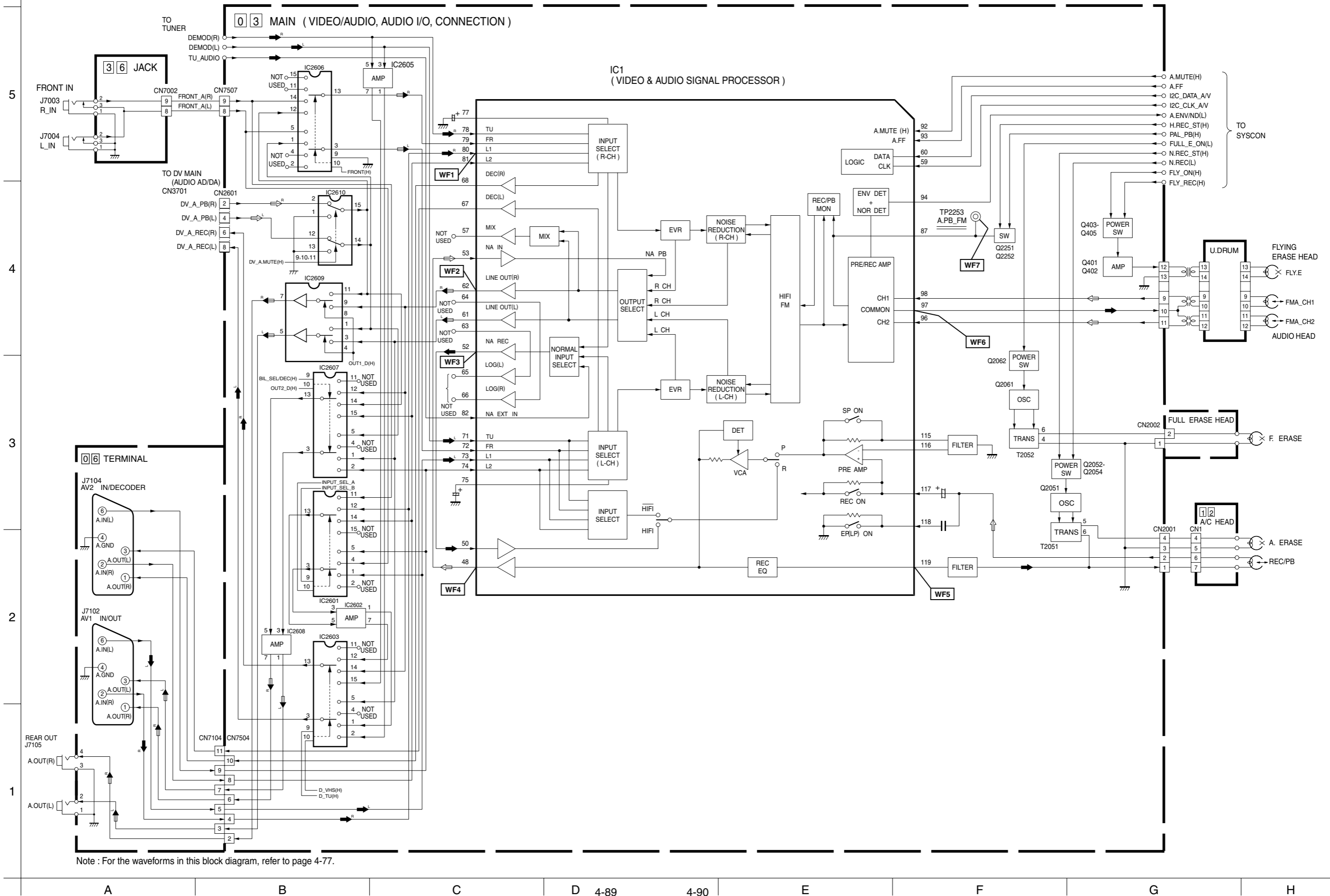


Note : For the waveforms in this block diagram, refer to page 4-77.



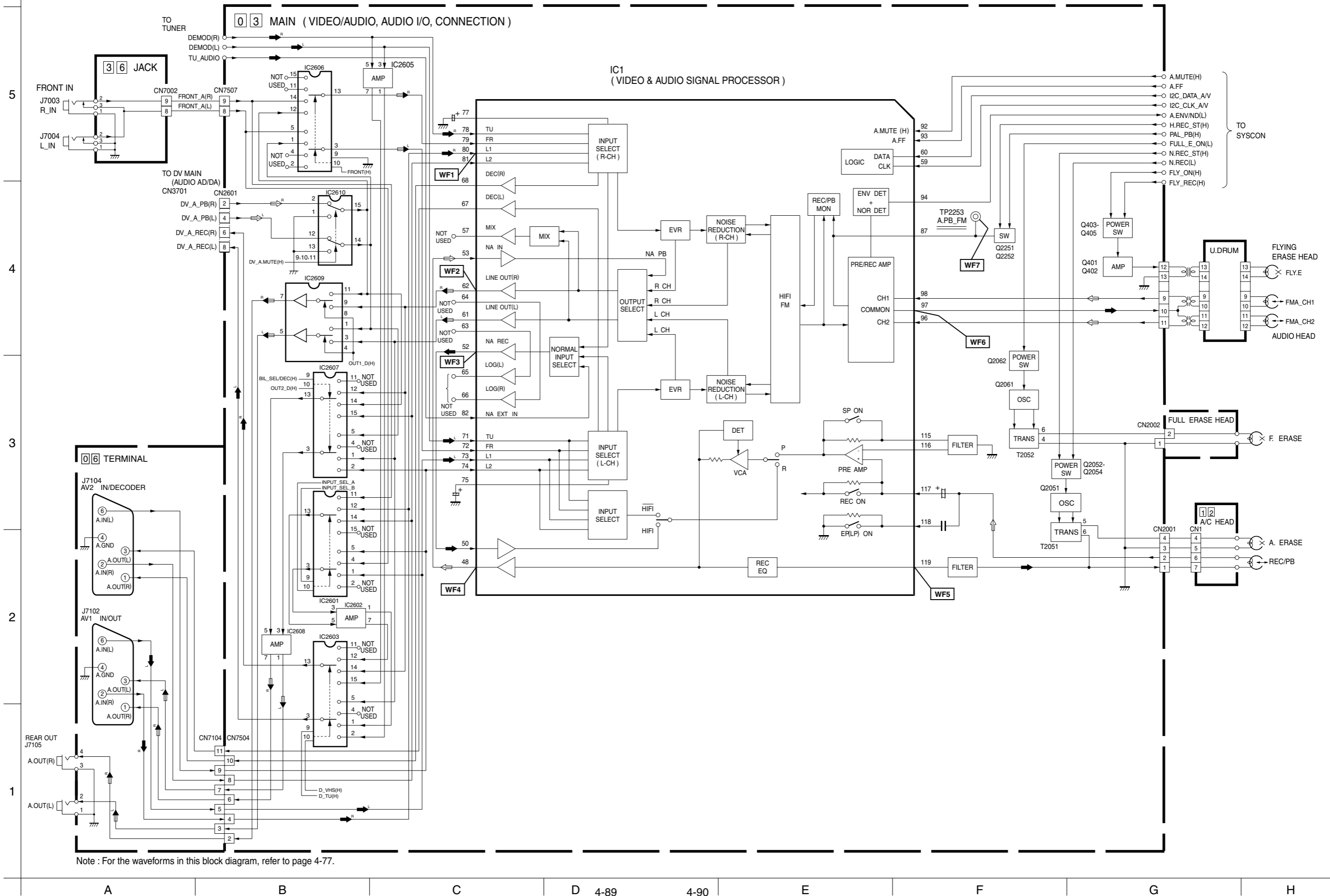
Note : For the waveforms in this block diagram, refer to page 4-77.

4.42 AUDIO BLOCK DIAGRAM (VHS)



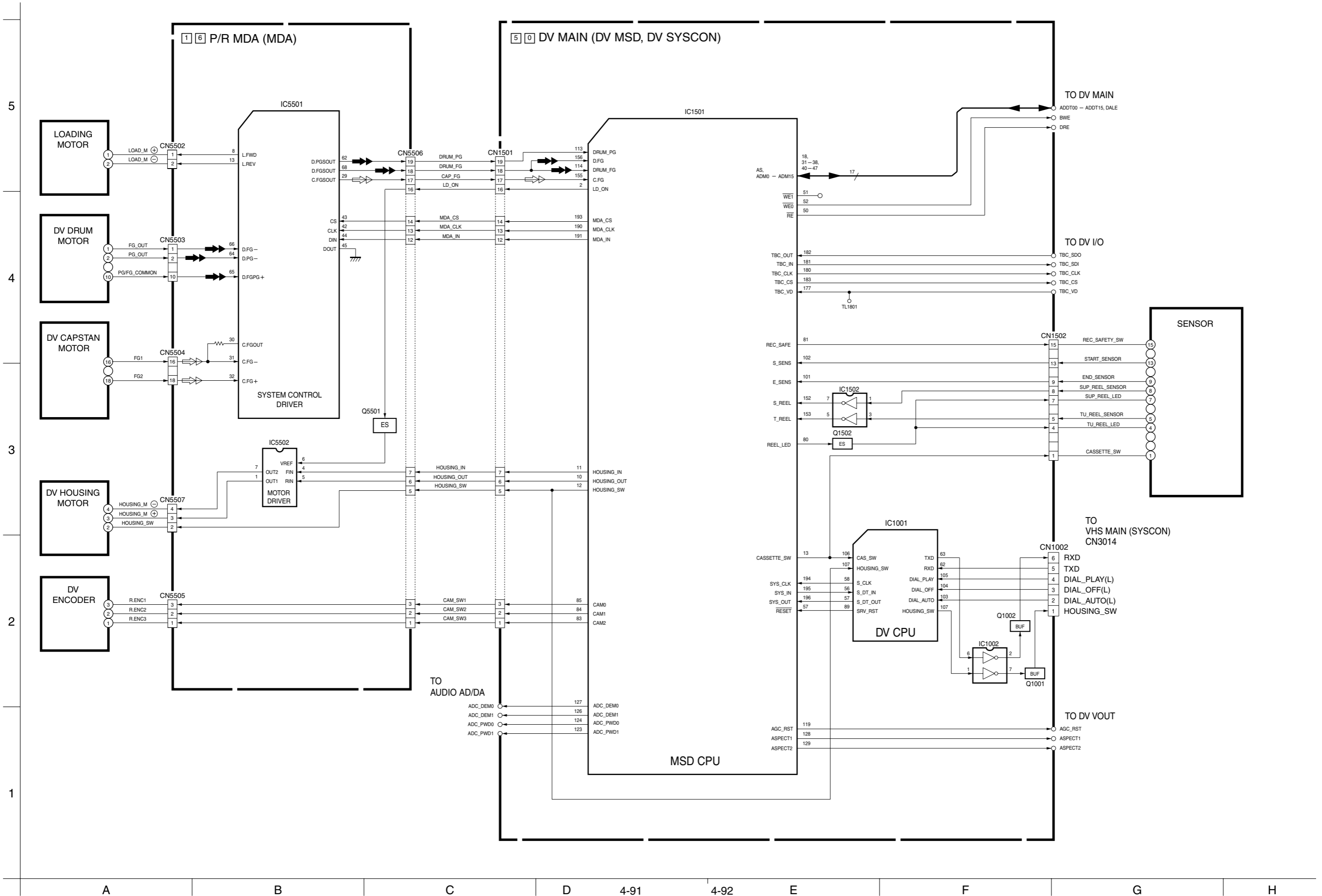
Note : For the waveforms in this block diagram, refer to page 4-77.

4.42 AUDIO BLOCK DIAGRAM (VHS)



Note : For the waveforms in this block diagram, refer to page 4-77.

4.43 SYSTEM CONTROL BLOCK DIAGRAM (DV)



4.44 VIDEO BLOCK DIAGRAM(DV)

