


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.

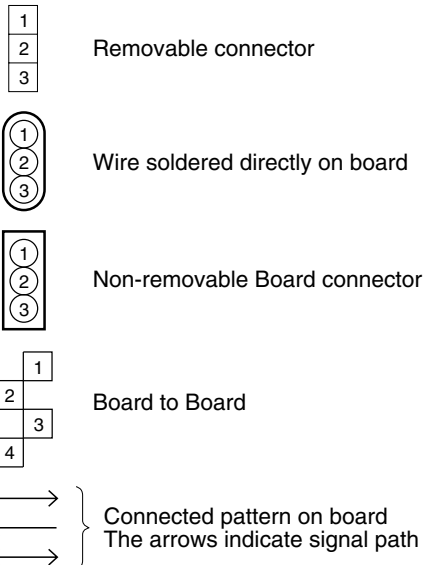
- 1) All resistance values are in ohm, 1/6 W, 1/8 W (refer to parts list).
Chip resistors are 1/16 W.
K or k: kΩ (1000Ω), M: MΩ (1000kΩ)
- 2) All capacitance values are in μF, (P: PF).
- 3) All inductance values are in μH, (m: mH).
- 4) All diodes are 1SS133, MA165 or 1N4148M (refer to parts list).

2. Indications of control voltage

AUX : Active at high

AUX or AUX(L) : Active at low

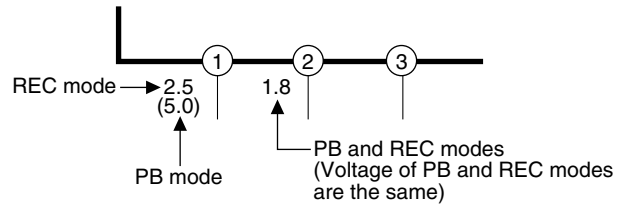
3. Interpreting Connector indications



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

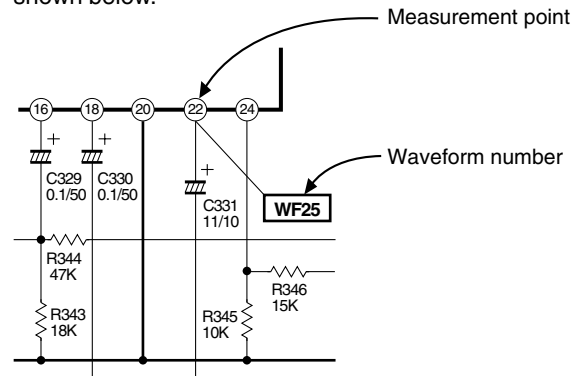
- 4) Indication on schematic diagram
Voltage Indications for REC and PB mode on the schematic diagram are as shown below.



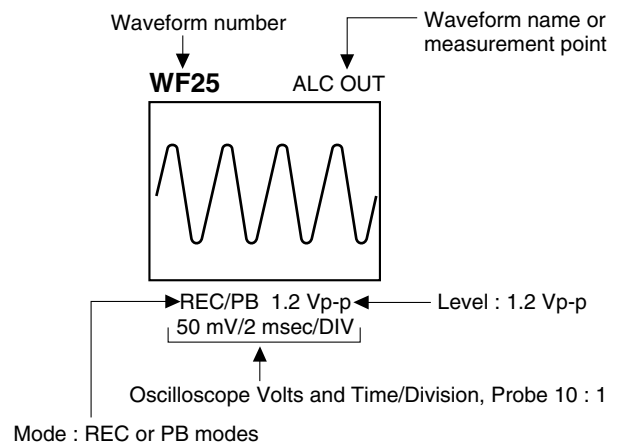
Note: If the voltages are not indicated on the schematic diagram, refer to the voltage charts.

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.

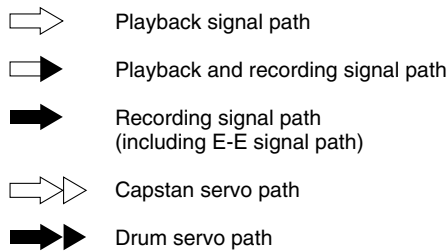


5) Waveform indications

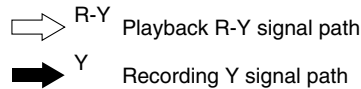


6. Signal path Symbols

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.



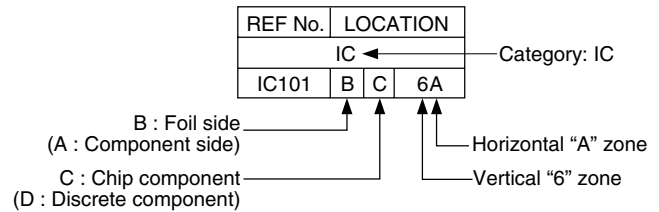
CIRCUIT BOARD NOTES

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

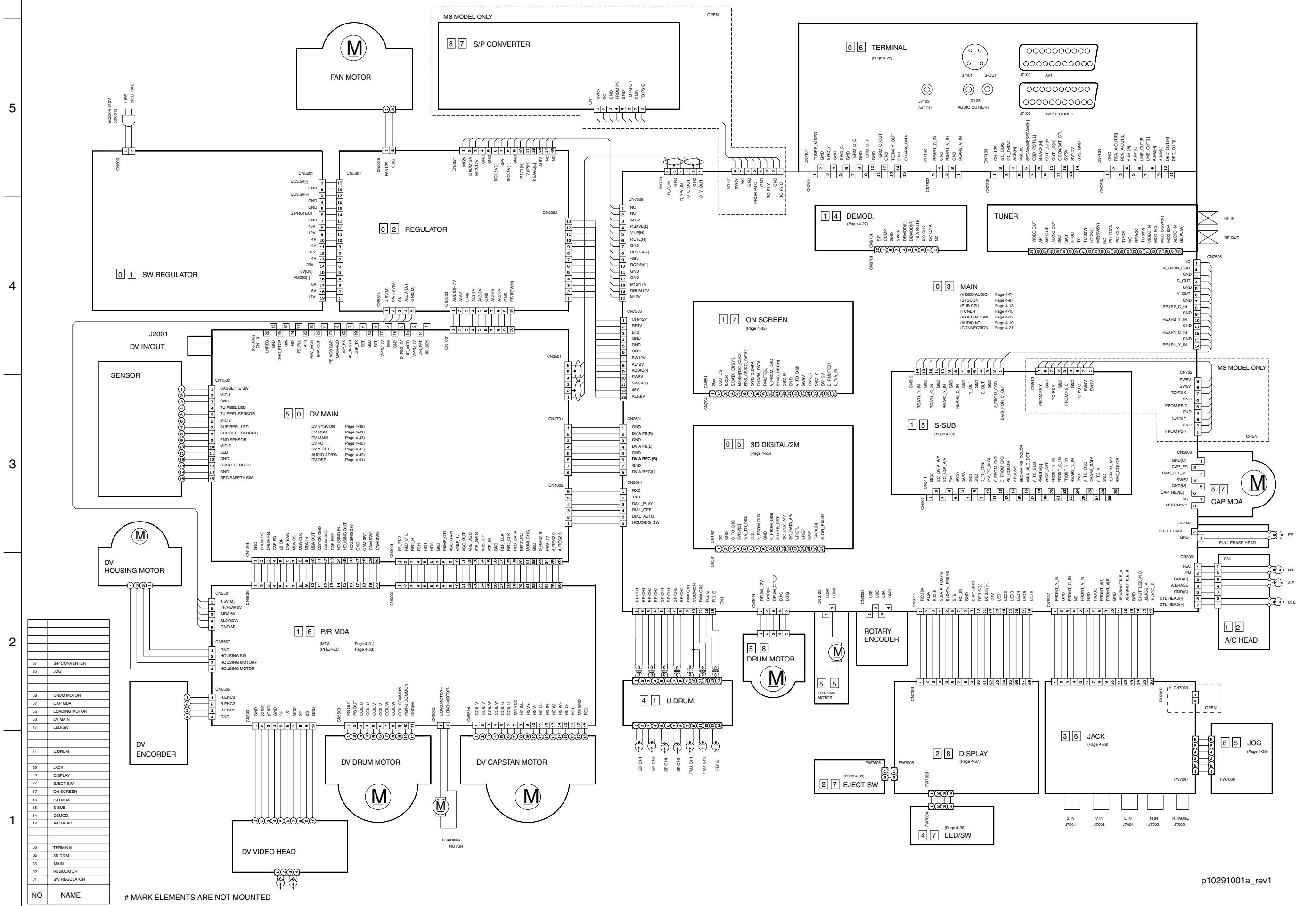
Parts location are indicated by guide scale on the circuit board.



Note:

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

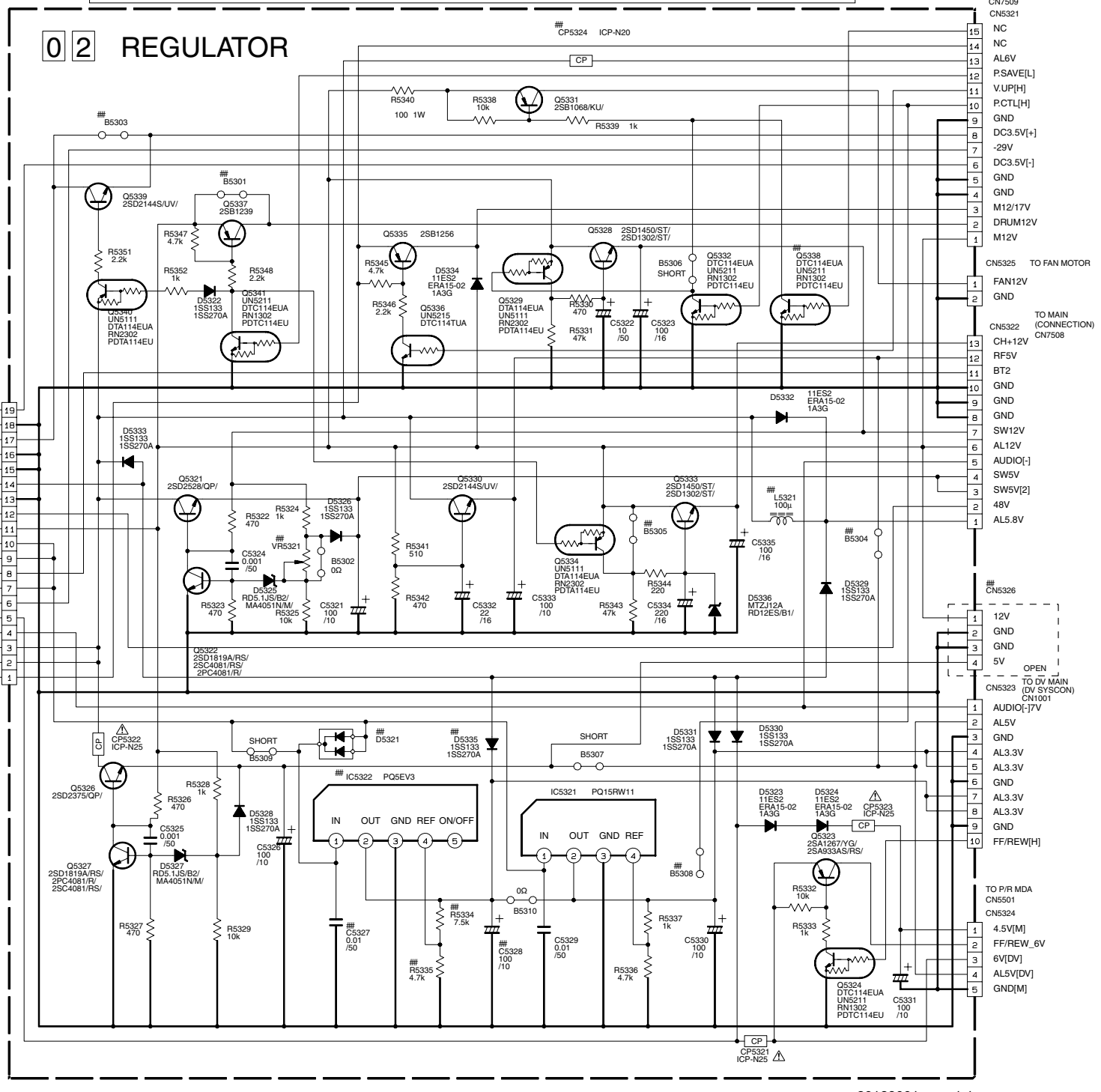
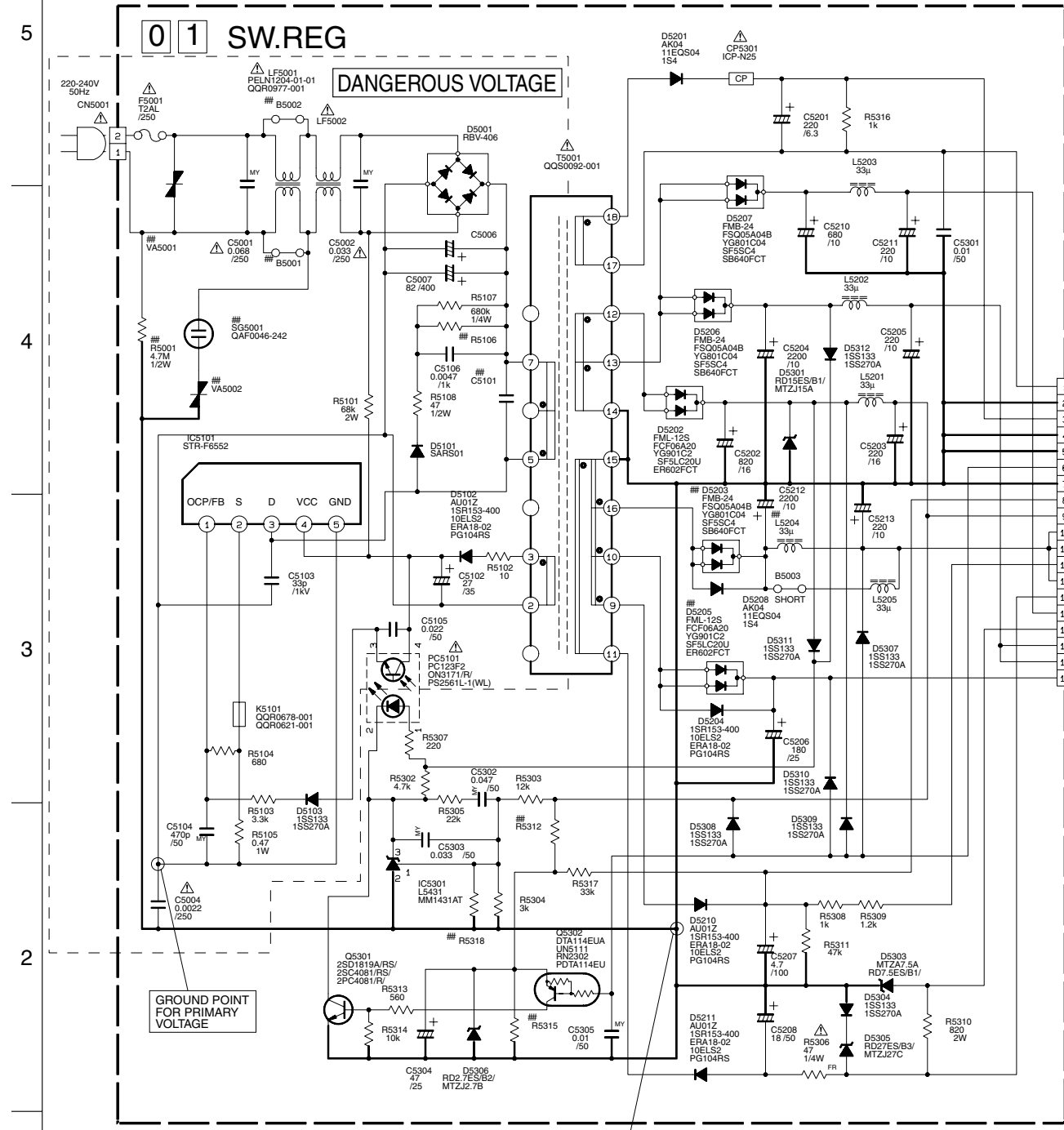
4.1 BOARD INTERCONNECTIONS



NO	NAME
01	SW REGULATOR
02	REGULATOR
03	MAIN
04	REGULATOR
05	3D DIGITAL/2M
06	TERMINAL
07	S/P CONVERTER
08	J2001 DV IN/OUT
09	DV MAIN
10	DV HOUSING MOTOR
11	P/R MDA
12	A/C HEAD
13	U.DRUM
14	DRUM MOTOR
15	ROTARY ENCODER
16	DISPLAY
17	JACK
18	JOG
19	LED/SW
20	EJECT SW

MARK ELEMENTS ARE NOT MOUNTED

4.2 SWITCHING REGULATOR AND REGULATOR SCHEMATIC DIAGRAMS



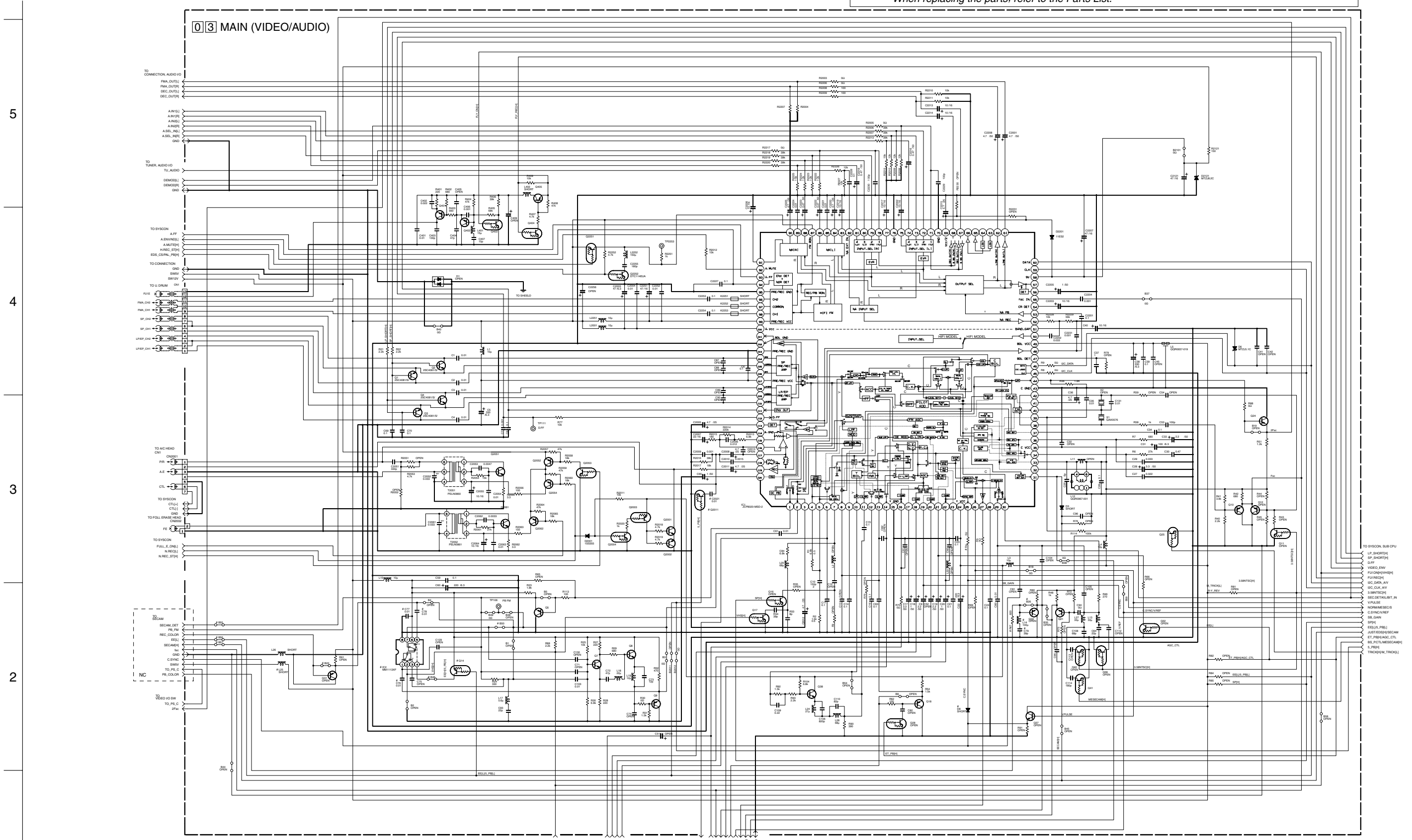
Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.

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

p20189001a_rev1.1

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 R4 B47 C76-C79 L14 L26	Used Not used
MODEL	B2C B26 B46 B50 B55-B57	
HR-DV/S2EU		X
HR-DV/S2EK		X
HR-DV/S2MS		○

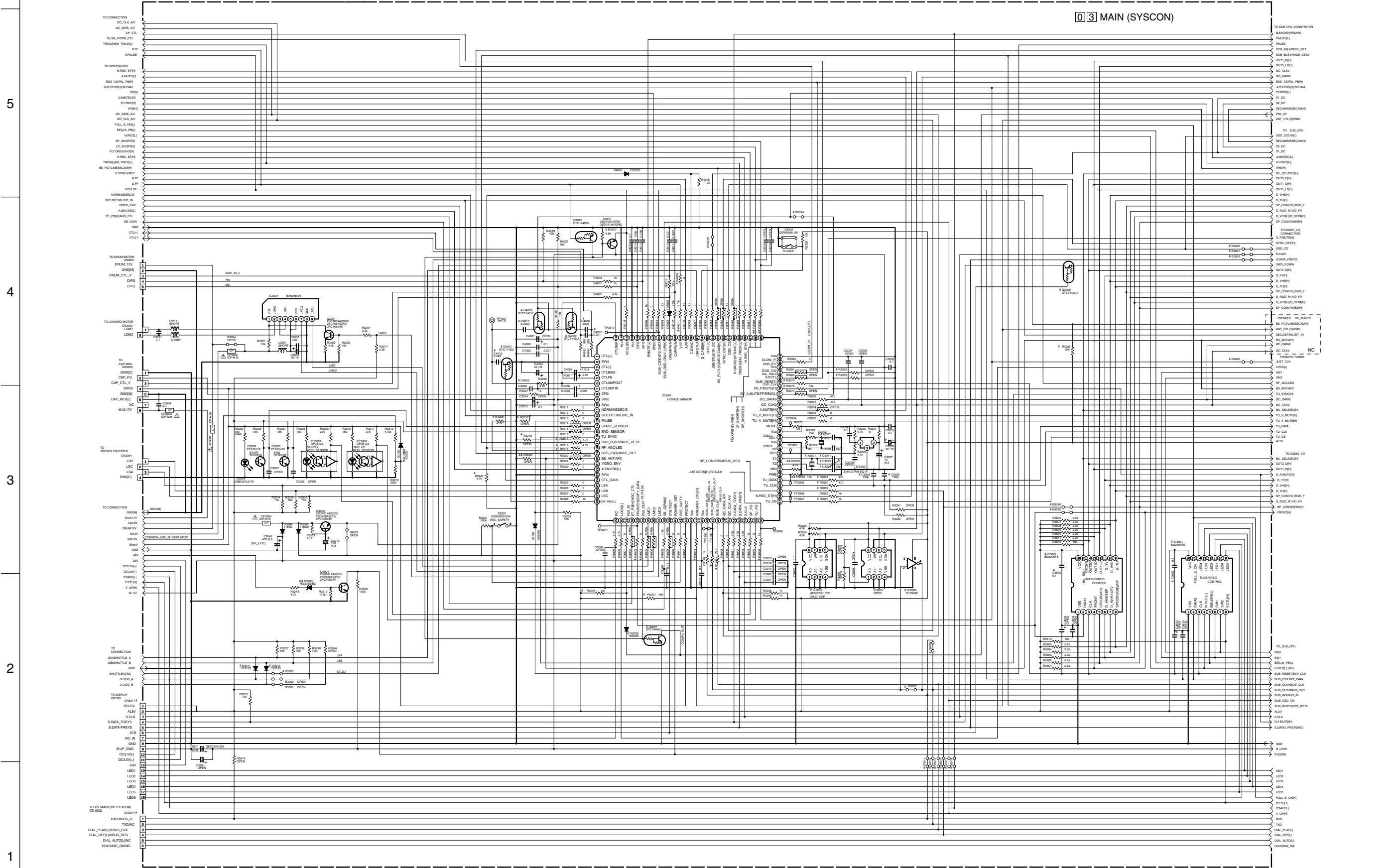
NOTES: UNLESS OTHERWISE SPECIFIED:
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL INDUCTANCE VALUES ARE IN H.
 ALL CAPACITANCE VALUES ARE IN μF.
 ALL NPN TYPE TRANSISTORS ARE 2SC4081/081S.
 ALL PNP TYPE TRANSISTORS ARE 2SA1576A/16R.
 ALL NPN TYPE DIGITAL TRANSISTORS ARE D1C144WUA.
 ALL PNP TYPE DIGITAL TRANSISTORS ARE D1A144WUA.

ELECTROLYTIC
 CERAMIC
 MYLER
 NON POLAR

p10304001a_rev0

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.



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

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

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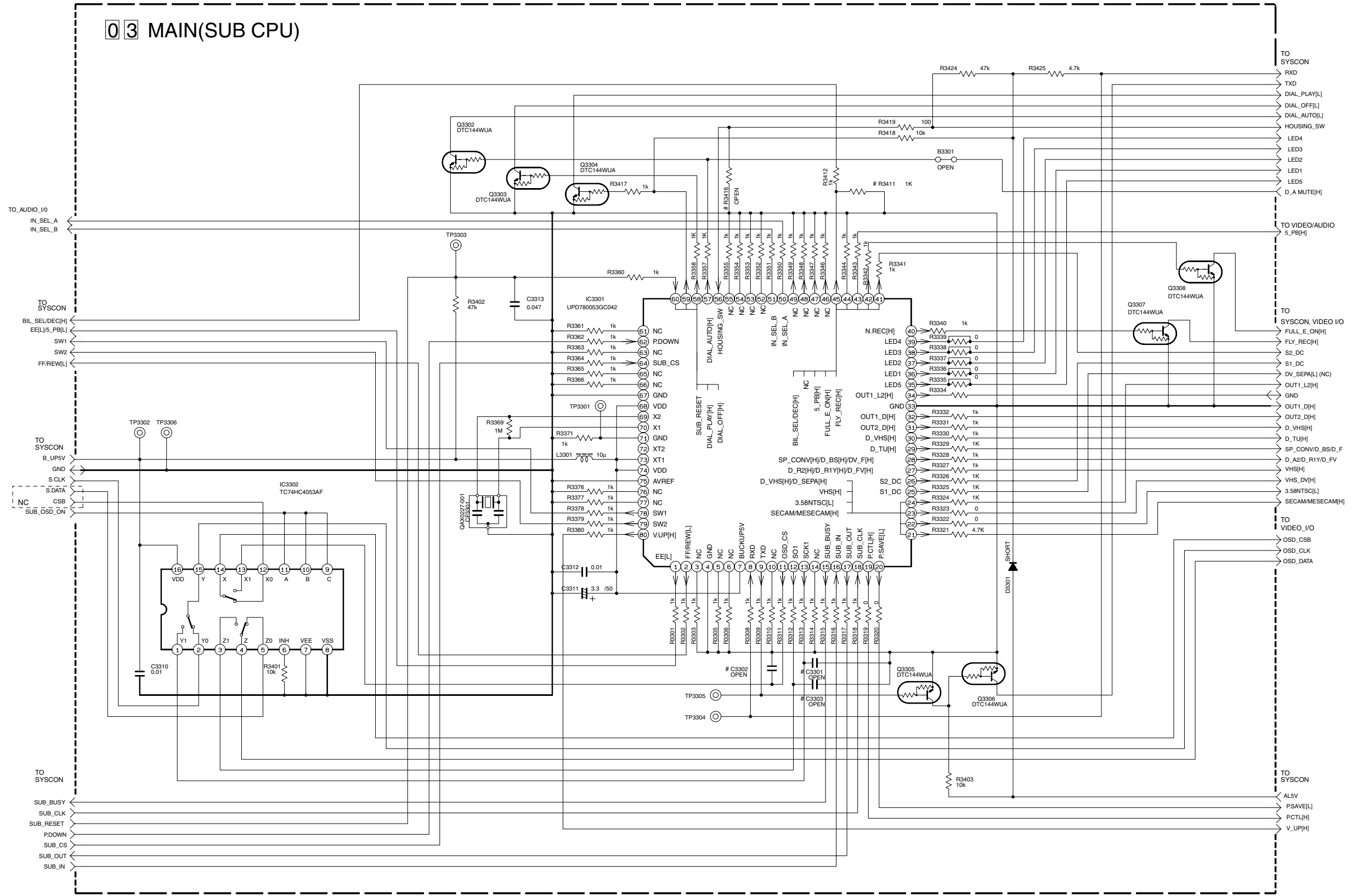
#DIFFERENCE TABLE ○ : Used
 X : Not used

ITEM		SD1EU/EK	SD1MS	SD1US	SD1DOM	HV4DOM	HV4PAL	HV4MS	HV4US
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	X	X	X	X	X	X
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	○	○	X	○	○	○	○	X
	R3061								
SP_CONV/BS/KBUS_REQ	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	X	X	X	X	○	○	○	○
	C3604								
	C3652 C3653 C3654								
FRONT[H]/EXP1_DATA	B3015	○	○	○	○	X	X	X	X
SP_CONV/BS/KBUS_REQ	B3016	○	○	○	○	X	X	X	X
JUST_CLK	B3020	X	X	X	○	○	X	X	X
BS_PCTL	R3256	X	X	X	X	X	X	X	X
SUB_D.IN/KBUS	B3011	X	X	X	X	○	○	○	○
D.IN/RXD	B3019	X	X	X	X	1k	1k	1k	1k
SUB_D.OUT/KBUS	B3012	X	X	X	X	X	X	X	X
D.OUT/TXD									
SUB_CLK/KBUS	B3013	X	X	X	X	○	○	○	○
CLK/DIAL_PLAY									
SP_CONV/BS/KBUS_REQ	B3014	X	X	X	X	○	○	○	○
/DIAL_OFF									
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	○	○	X	○	○	○	○	X
	C4016								
	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	X	X	○	○	○	X	X	○
	R3107								
P50_OUT/M_PULSE	R3034	0Ω	0Ω	4.7k	4.7k	4.7k	0Ω	0Ω	4.7k
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.



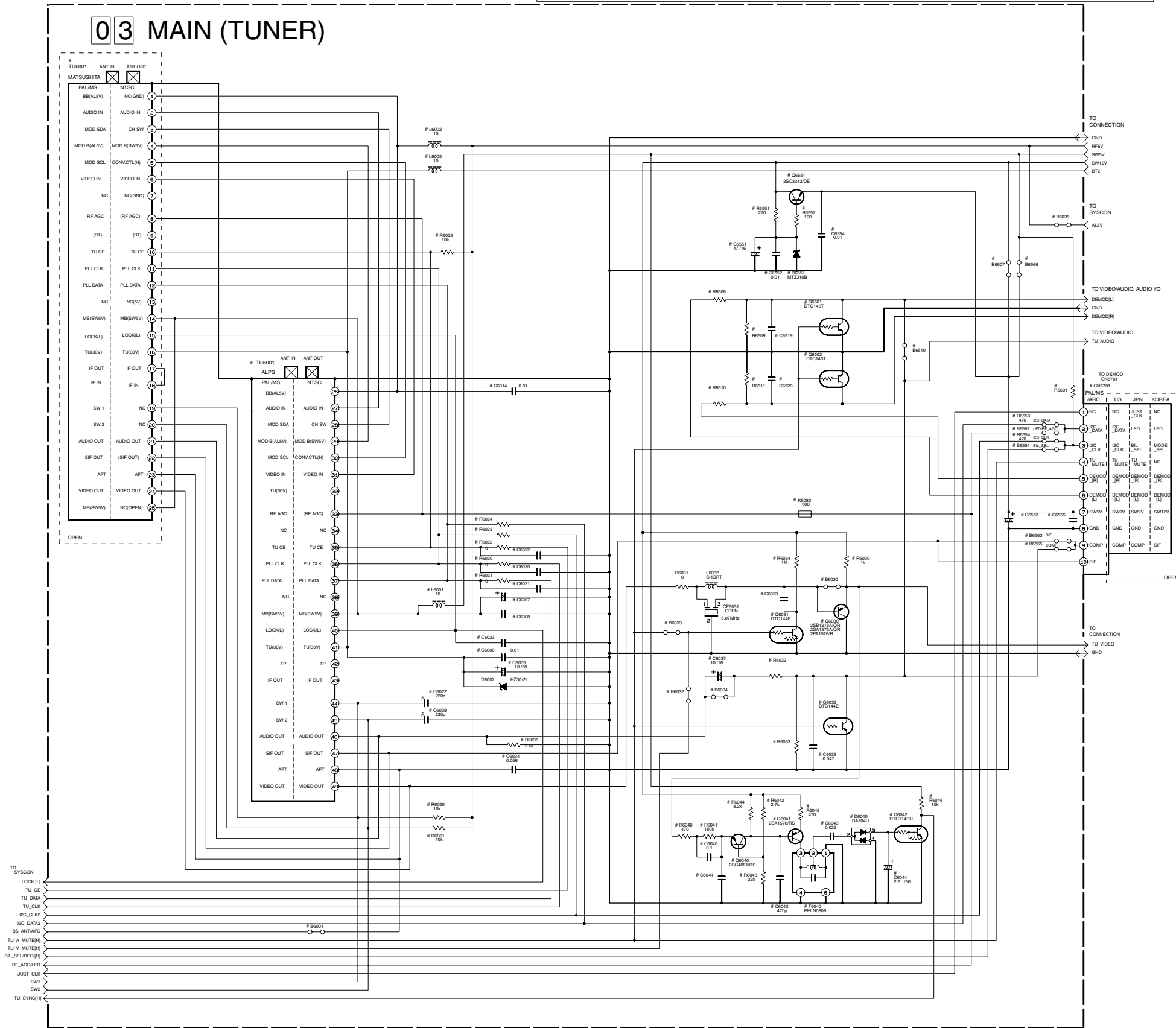
MARK ELEMENTS ARE NOT MOUNTED.
 NOTES: UNLESS OTHERWISE SPECIFIED.
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL INDUCTANCE VALUES ARE IN H.
 ALL CAPACITANCE VALUES ARE IN μF.

ELECTROLYTIC
 CERAMIC
 MYLER
 NON POLAR

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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.



p10306001a_rev0

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

DIFFERENCE TABLE

TUNER	SYMBOL	EU/EK	FRANCE MS	JAPAN		US	
				DVSZ	PVS100	DVSZ	PVS100
TUNER	TU6001						
		ALPS	ALPS	MATSUSHITA	MATSUSHITA		
		QAU0151	QAU0152	QAU0198	QAU0198	QAU0216	
VIDEO BUFFER	R6025,B6035	X	X	X	X	X	
ATS+	K6080	O	O	X	X	X	
	R6030,C6030	O	O	O	O	O	
	B6030	X	X	X	X	X	
	C6031	O	O	O	O	X	
	R6034	X	X	O	X	X	
	C6033	O	O	0.0047	X	X	
	B6032	O	O	X	X	X	
	C6032	O	O	X	X	X	
	B6033	X	X	O	X	X	
	R6032	3.9k	3.9k	0	0	12k	
	R6033	1.8k	1.8k	X	X	X	
	R6038	X	X	X	X	X	
	C6032	0.047	X	X	X	X	
	B6034	X	X	O	O	O	
	C6037	O	O	X	X	X	
AF	B6001	O	O	X	X	O	
	C6024	X	X	X	X	X	
CENELEC	C6027,C6028	X	O	X	X	X	
	C6005	X	X	X	X	X	
TU(SV)	C6006	X	X	X	X	X	
	L6005	10	10	SHORT	SHORT	SHORT	
	C6007	33010	33010	X	X	X	
	C6008	X	X	X	X	X	
	L6001	O	O	SHORT	SHORT	SHORT	
BB(ALSV)	C6014,L6002	O	O	X	X	X	
	R6020	470	470	1k	1k	1k	
	R6023	X	X	X	X	X	
	C6020	X	X	X	X	X	
PLL CLK	R6021	470	470	1k	1k	1k	
	R6024	X	X	X	X	X	
	C6021	X	X	X	X	X	
PLL DATA	R6022	470	470	1k	1k	1k	
	R6024	X	X	X	X	X	
	C6021	X	X	X	X	X	
TU CE	R6022	470	470	1k	1k	1k	
	C6022	X	X	X	X	X	
LOCK	C6023	O	O	X	X	X	
SYSTEM SW	R6060,R6061	O	O	X	X	X	
SYNC DET	R6040-R6046, C6040-C6044, D6040-D6042, D6040,T6040	X	X	X	X	O	

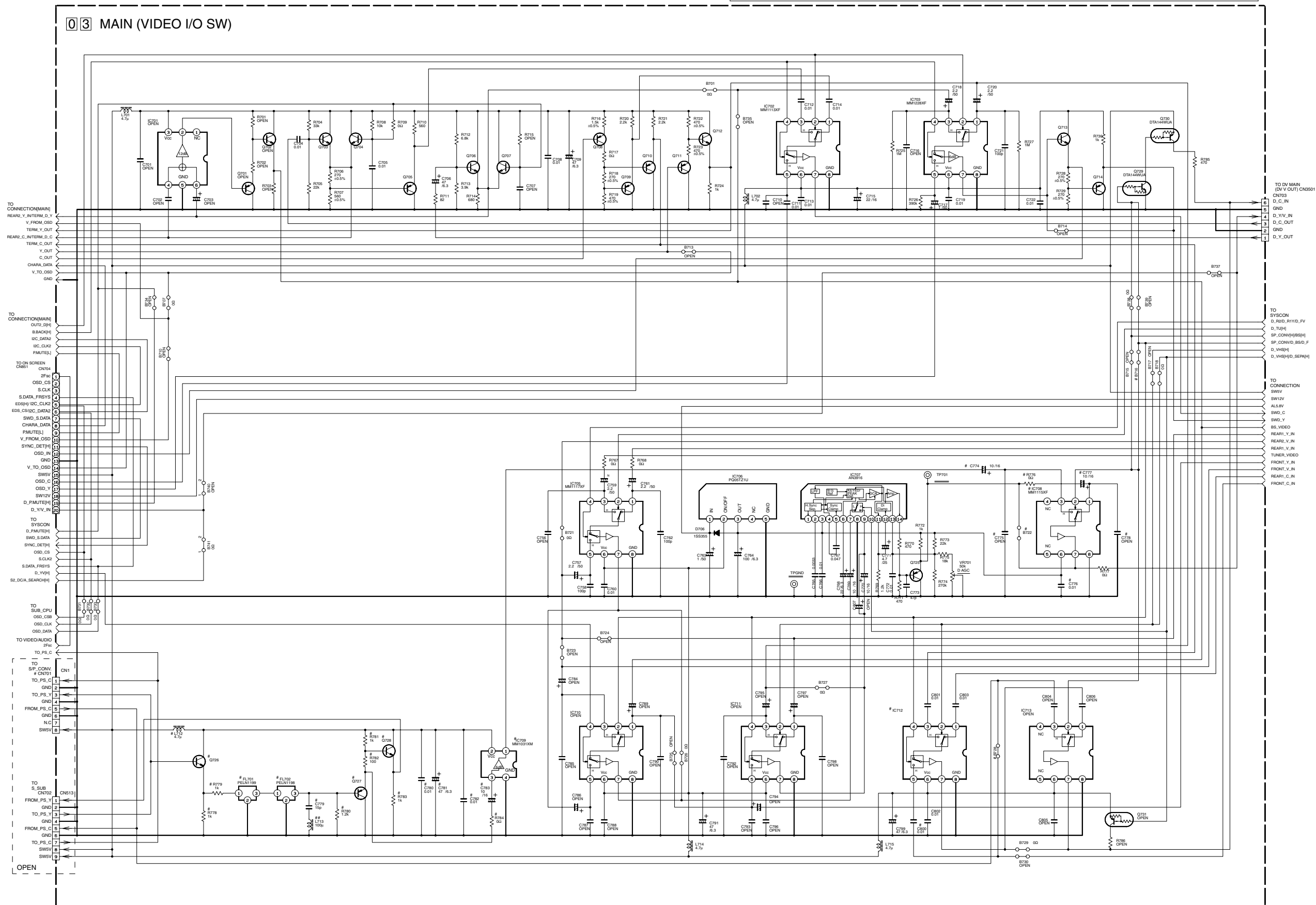
DEMODO	SYMBOL	EU/EK	FRANCE MS	JAPAN		US	
				DVSZ	PVS100	DVSZ	PVS100
DEMODO PWB ASSY	CN6701		LPA10094*	LPA10094*	PB11087*	PB11076*	PB11076*
WV REG	R6551,R6552, C6551,D6551	X	X	O	O	O	
	C6551,C6552	X	X	X	X	X	
DEMODO REG	C6553	33715	33715	X	X	X	
PASS CON	C6594	X	X	X	X	X	
	C6555	0.01	0.01	X	X	X	
SW12V	B6607	X	X	X	X	X	
DEMODO OUT	R6508,R6510	0	0	0	0	0	
	R6508,R6511	X	X	X	X	X	
	C6519,C6520	X	X	X	X	X	
MUTE	C6501,C6502	X	X	X	X	O	
TUNER MONO	B6510	X	X	X	X	X	
	R6553,R6554	0	0	X	X	O	
	B6552,B6554	X	X	O	O	X	
	B6553	X	X	X	X	X	
	B6555	X	X	O	O	O	
	B6556	O	O	X	X	X	
	R6601	X	X	X	X	X	

5
4
3
2
1

A B C D 4-15 4-16 E F G H

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	IC700, IC709 Q700-Q709 R700, R708-R784 C774-C778, C779-C783, C800 L712 B710, B720 FL701, FL702 CN701	B722	IC712
HR-DV52UEK	X	O	MM1111XF
HR-DV52SMS	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 INDUCTANCE VALUES ARE IN H.

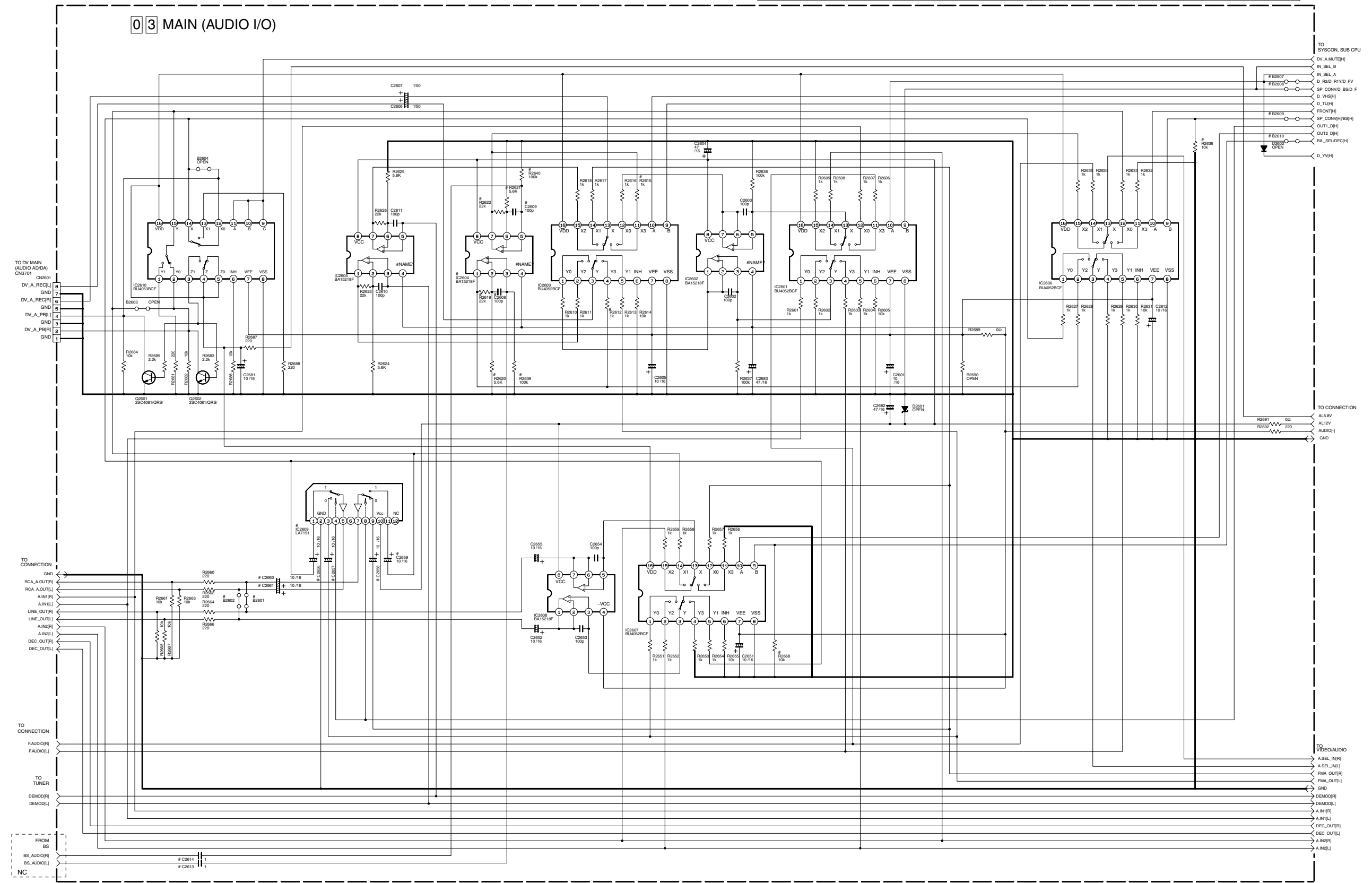
ALL CAPACITANCE VALUES ARE IN μ F.

O Used
X Not used

Electrolytic
Ceramic
Myler
Non Polar

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

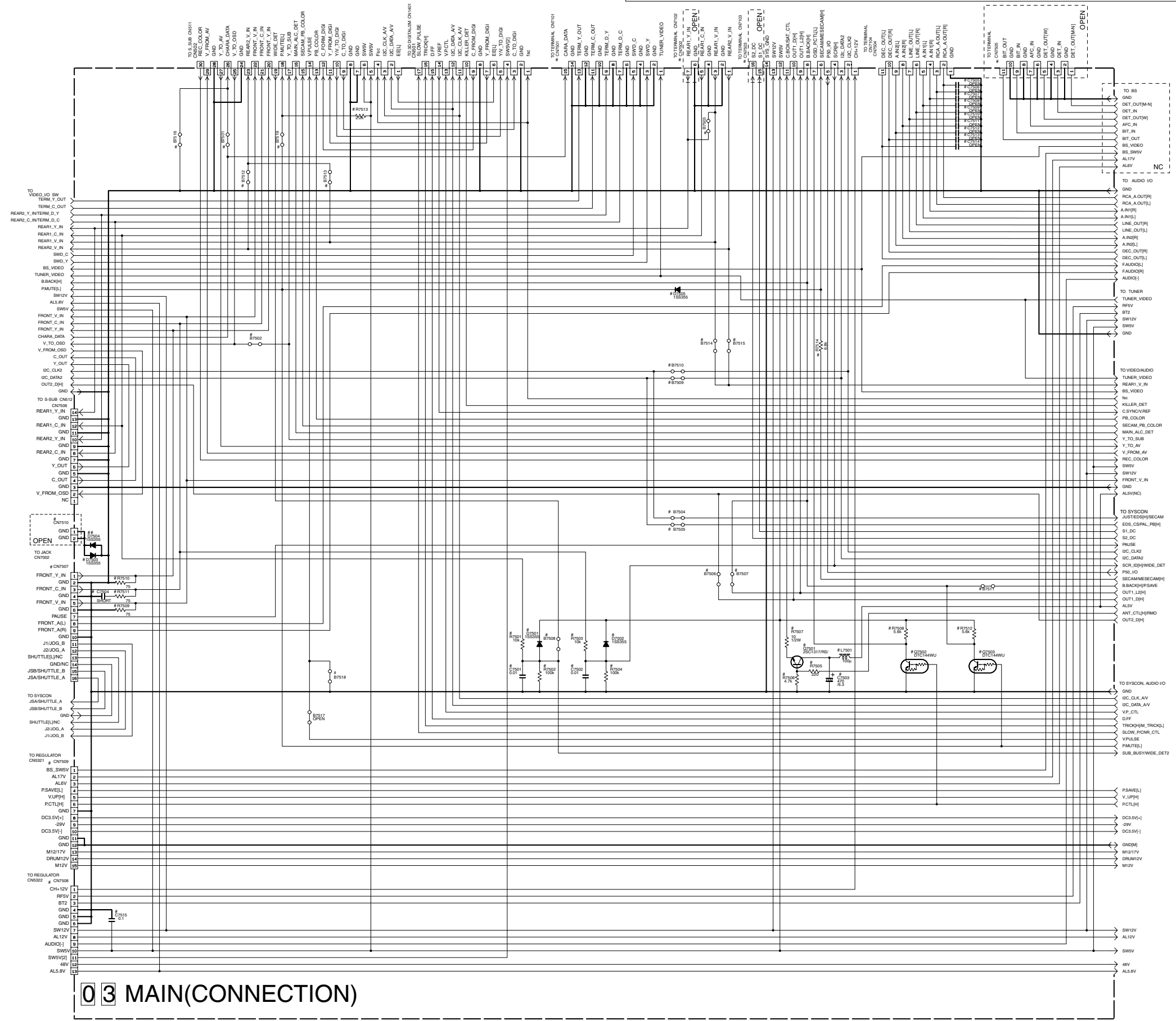
SYMBOL	B2601, B2602 MODEL: B2607, B2608	IC2609 C2609-C2611	SYMBOL	B2609 MODEL: R2609	B2610 MODEL: R2610	SYMBOL	IC2604, R2612, R2615 R2618, R2622, R2639, R2640 C2608, C2609, C2613, C2614
With DVC	X	○	NTSC	○	X	With BS	○
With HDD	○	○	PAL-MS	X	○	With BS	X

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

4.9 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.



DIFFERENCE TABLE

	O Used X Not used					
	HR-PVS2	EK	MS	DCM	US	HR-PVS100
B7501	X	X	X	X	X	O
B7502	X	X	X	X	X	X
B7503	O	O	O	X	X	X
B7504	X	X	X	X	X	X
B7505	X	X	X	X	O	X
B7506	X	X	X	X	X	X
B7507	X	X	X	X	X	X
B7508	X	X	X	O	X	X
B7509	O	O	O	X	X	X
B7510	O	O	O	X	X	X
B7511	O	O	O	O	O	X
B7512	O	O	O	X	X	X
B7513	X	X	X	O	O	O
B7514	O	O	O	X	X	X
B7515	X	X	X	O	O	O
B7516	O	O	O	O	O	X
B7517	X	X	X	X	X	X
B7518	O	O	O	O	O	O
B7519	X	X	X	O	O	O
B7520	O	O	O	X	X	X
R7501						
R7502						
R7503						
R7504						
C7501	X	X	X	X	X	O
C7502						
D7501						
D7502						
C7505	X	X	X	X	X	X
C7514						
C7515	X	X	X	O	O	O
G7501						
R7505						
R7506	O	O	O	X	O	X
R7507						
L7501						
C7503						
R7508	O	O	O	O	O	X
C7502						
R7512						
Q7503	X	X	X	X	X	O
R7509						
R7510	X	X	X	X	X	X
R7511						
C7504						
CN7510	X	X	X	X	X	X
D7503						
CN7501	1-15	1-15	1-15	3-15	3-15	3-6
CN7502	1-5	1-5	1-5	1-7	1-7	1-7
CN7503	1-14	1-14	1-14	7-16	7-16	8-16
CN7505	X	X	X	1-11	X	1-11
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	X	X	X
R7514	O	O	O	X	X	X

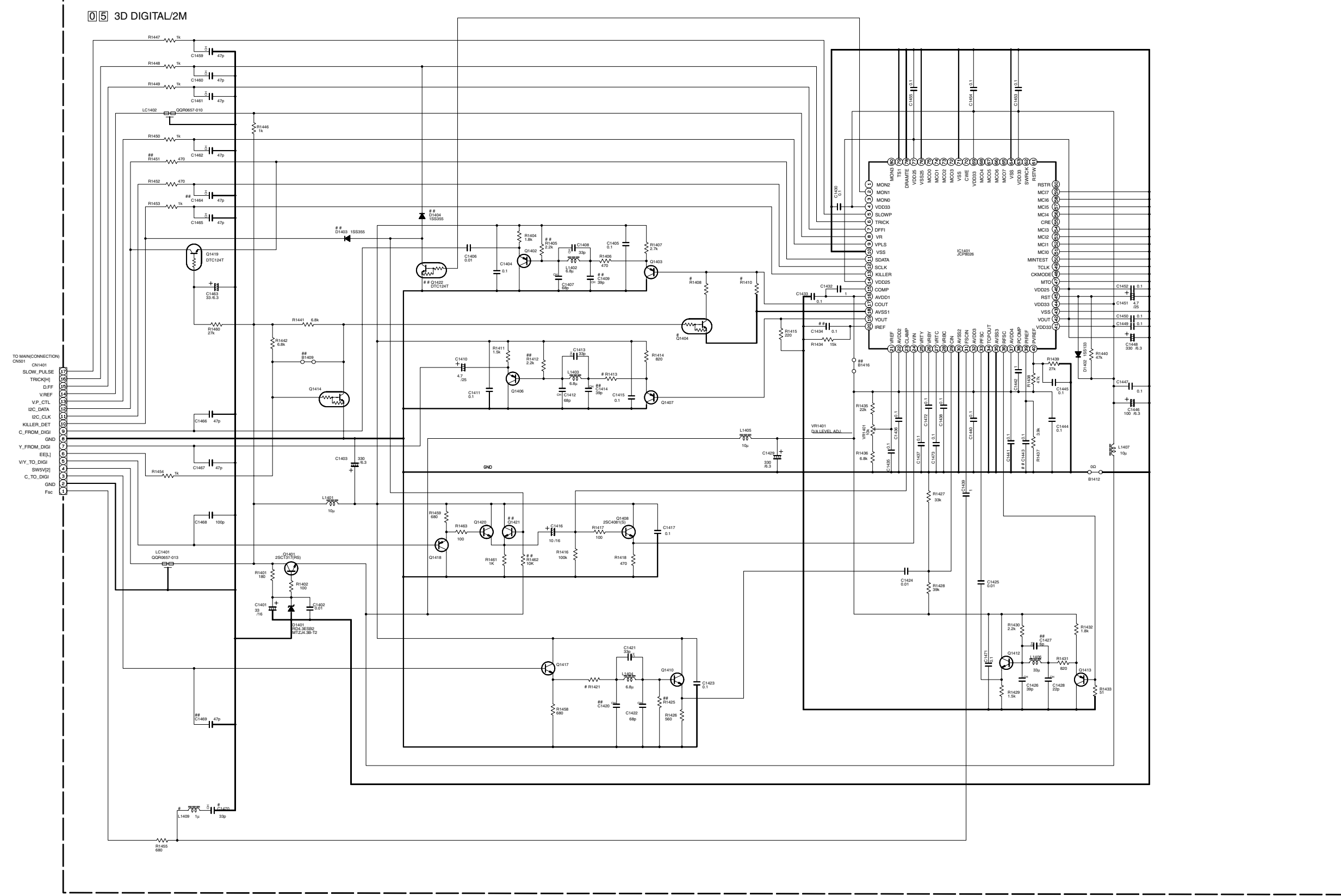
Marked elements may differ depending on the model. Be sure to check the Parts List.

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

ELECTROLYTIC
 CERAMIC
 MYLAR
 NON POLAR

4.10 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.



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

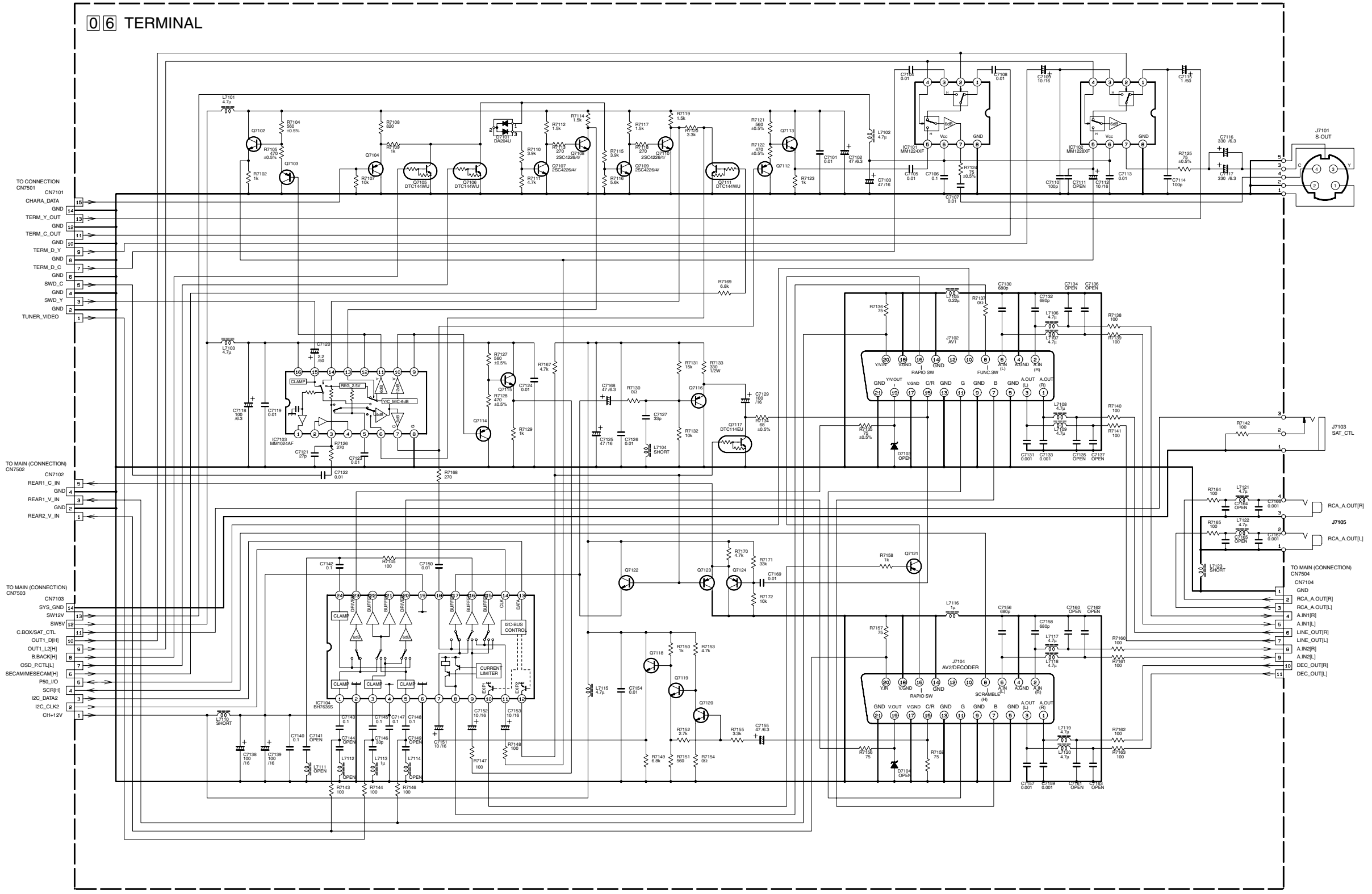
MARK ELEMENTS ARE NOT MOUNTED.
 ALL SINGLE DIODE: 1SS133 OR 1N4148.
 ALL PNP TRANSISTOR: 2SA1576(A/Q/R) OR 2SB1218(A/Q/R) OR 2PA1576(R)
 ALL NPN TRANSISTOR: 2SC4081(C/D/S) OR 2SD1618(A/C/D/S) OR 2PC4081(R)
 ALL NPN DIGITAL TRANSISTOR: DTC144W(A) OR UNS21E OR RN1309

DIFFERENCE TABLE

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

4.11 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.



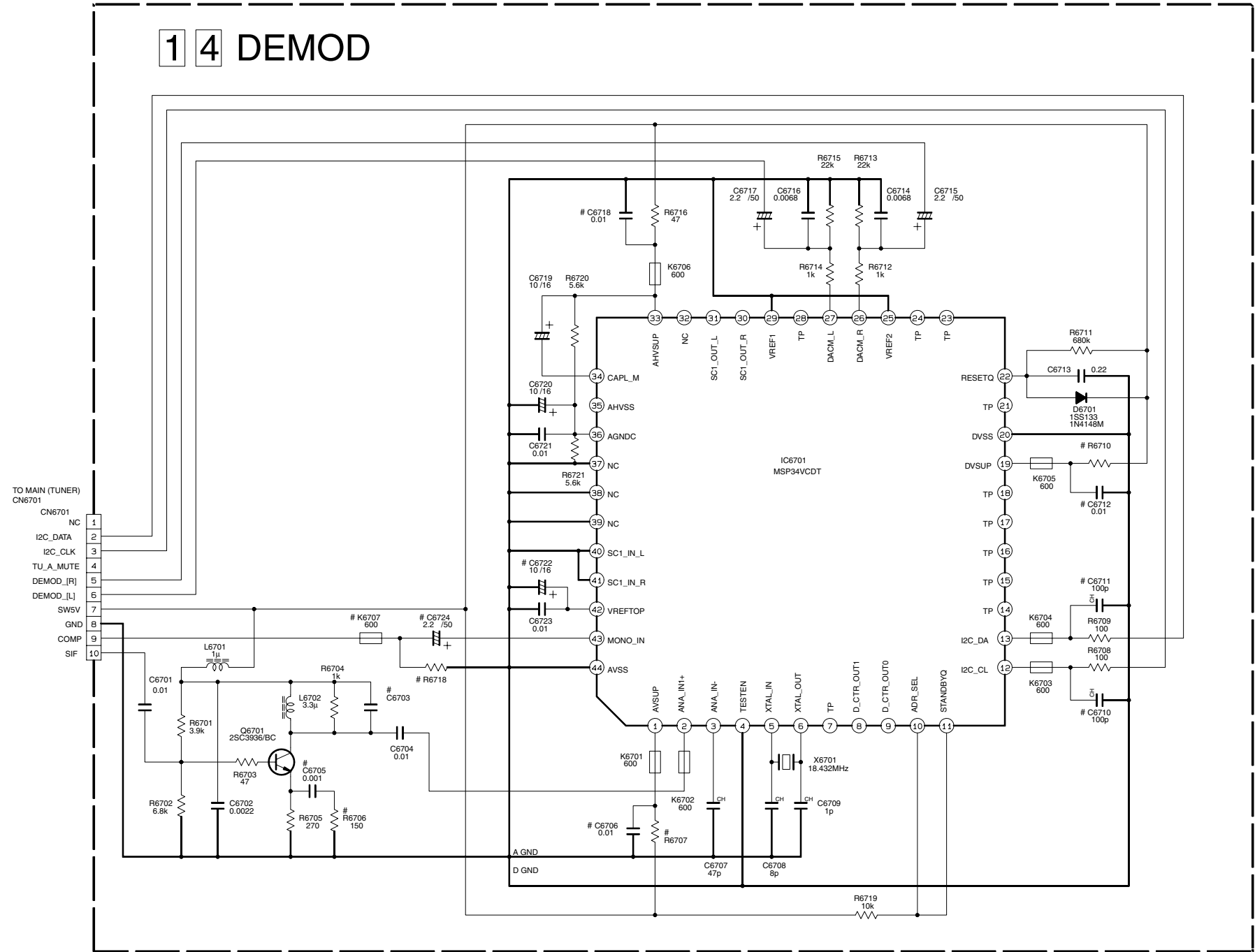
p10293001a_rev0

NOTES-UNLESS OTHERWISE SPECIFIED:
 ALL NPN TYPE TRANSISTORS ARE 2SC4081(DRV).
 ALL PNP TYPE TRANSISTORS ARE 2SA1515(AORV).
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL INDUCTANCE VALUES ARE IN H.
 ALL CAPACITANCE VALUES ARE IN μF.

LAST NO	VACANT NO
7101-	
R 7172	7101, 7103, 7106, 7166
C 7169	7128
L 7123	
D 7104	7102
Q 7124	7101
IC 7104	
J 7105	

4.12 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.



DIFFERENCE TABLE

SYMBOL	FRANCE MS	BASIC EU/EK	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	22	47	47	47
I2C_bus	C6710 C6711	×	×	×	×
DIGITAL Vcc	R6710 C6712	10	12	12	12
DAC Vcc	C6718	×	×	×	×
	C6722	×	×	×	×

○ Used
× Not used

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

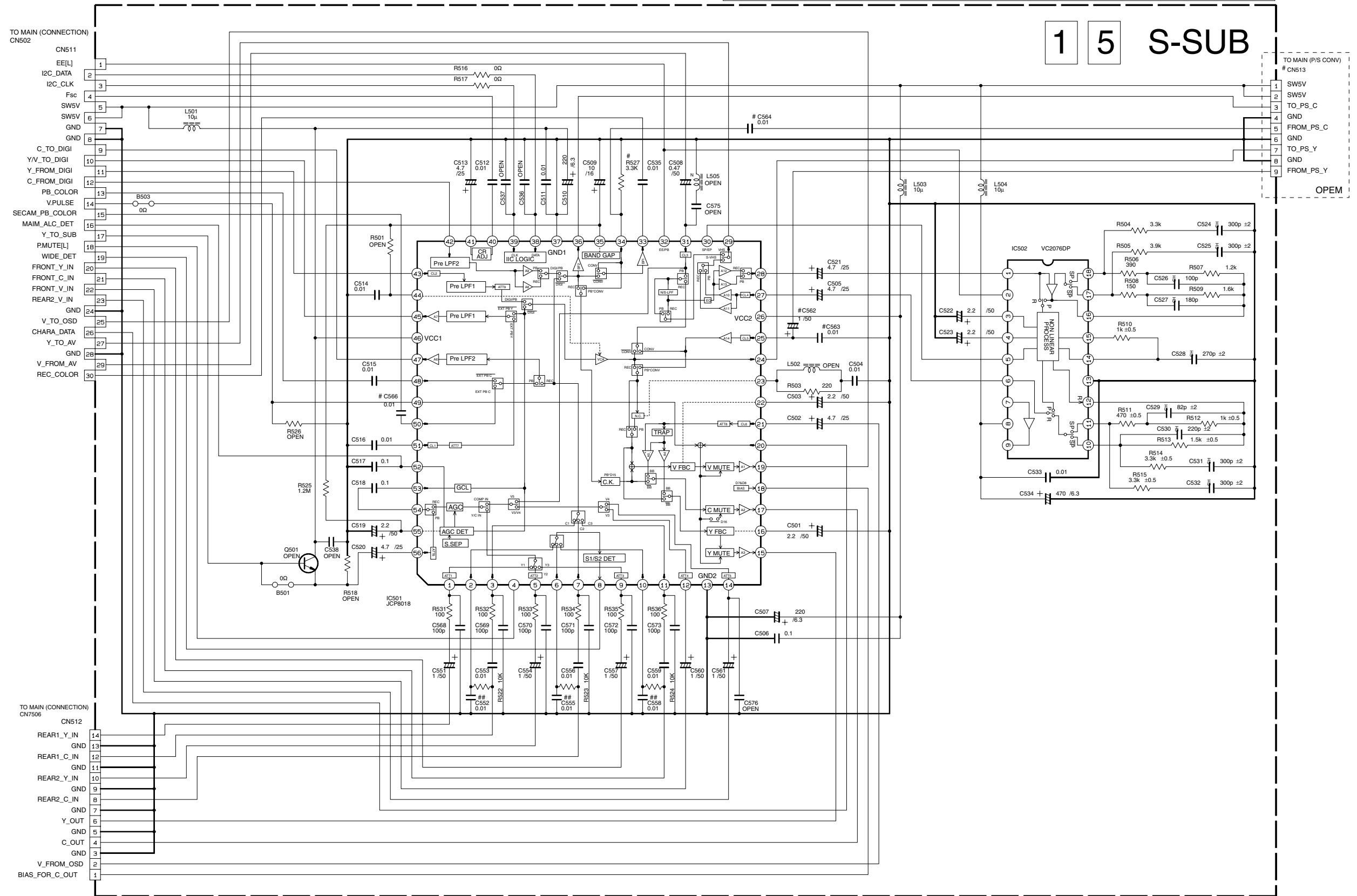
ELECTROLYTIC
 CERAMIC
 MYLER
 NON POLAR

p20162001a_rev2

4.13 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
MS	○	×
OTHERS	×	○

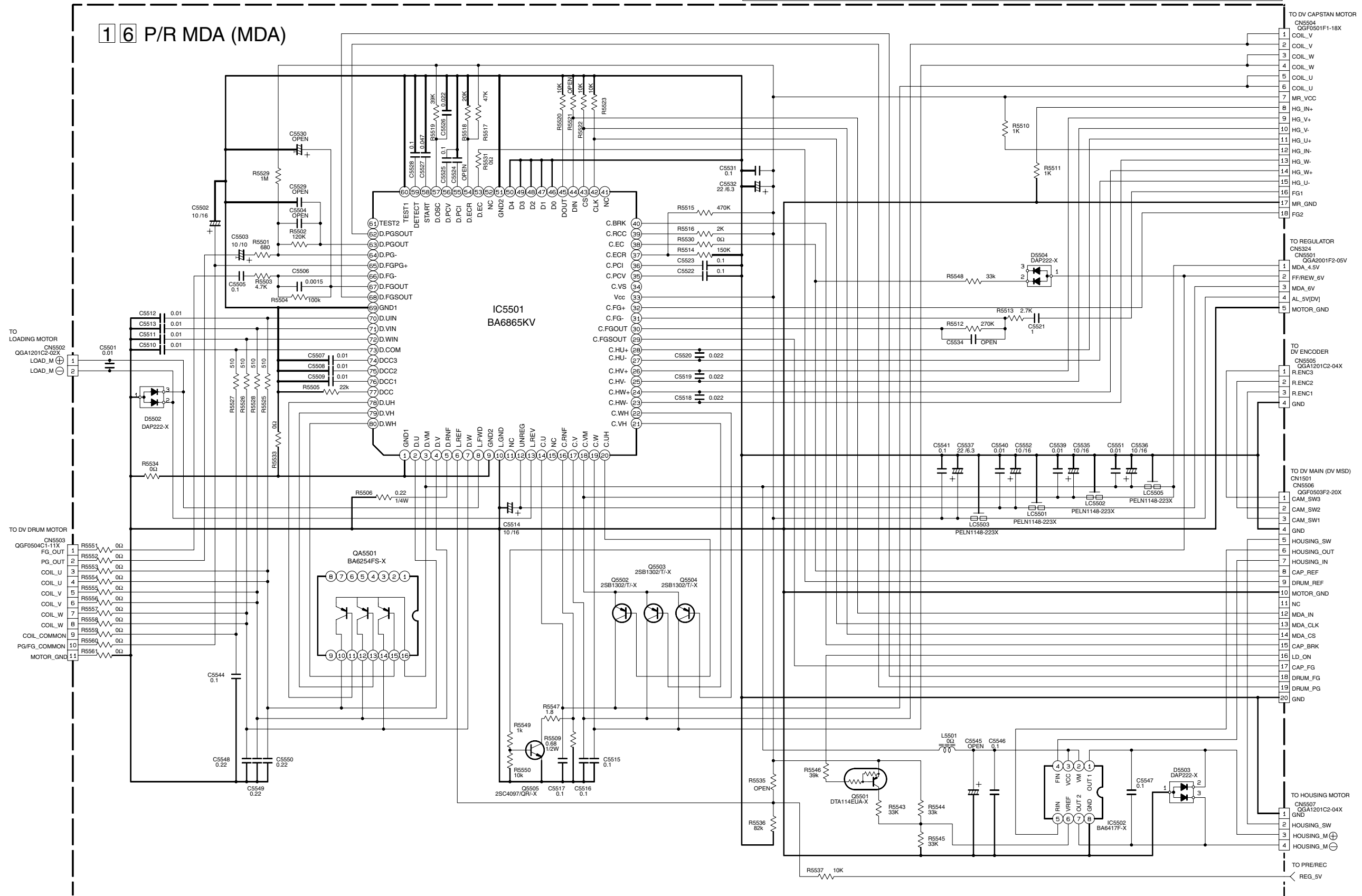
Marked elements may differ depending on the model. Be sure to check the Parts List.

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

+ ELECTROLYTIC
 - CERAMIC
 MY MYLER
 N NON POLAR

4.14 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.

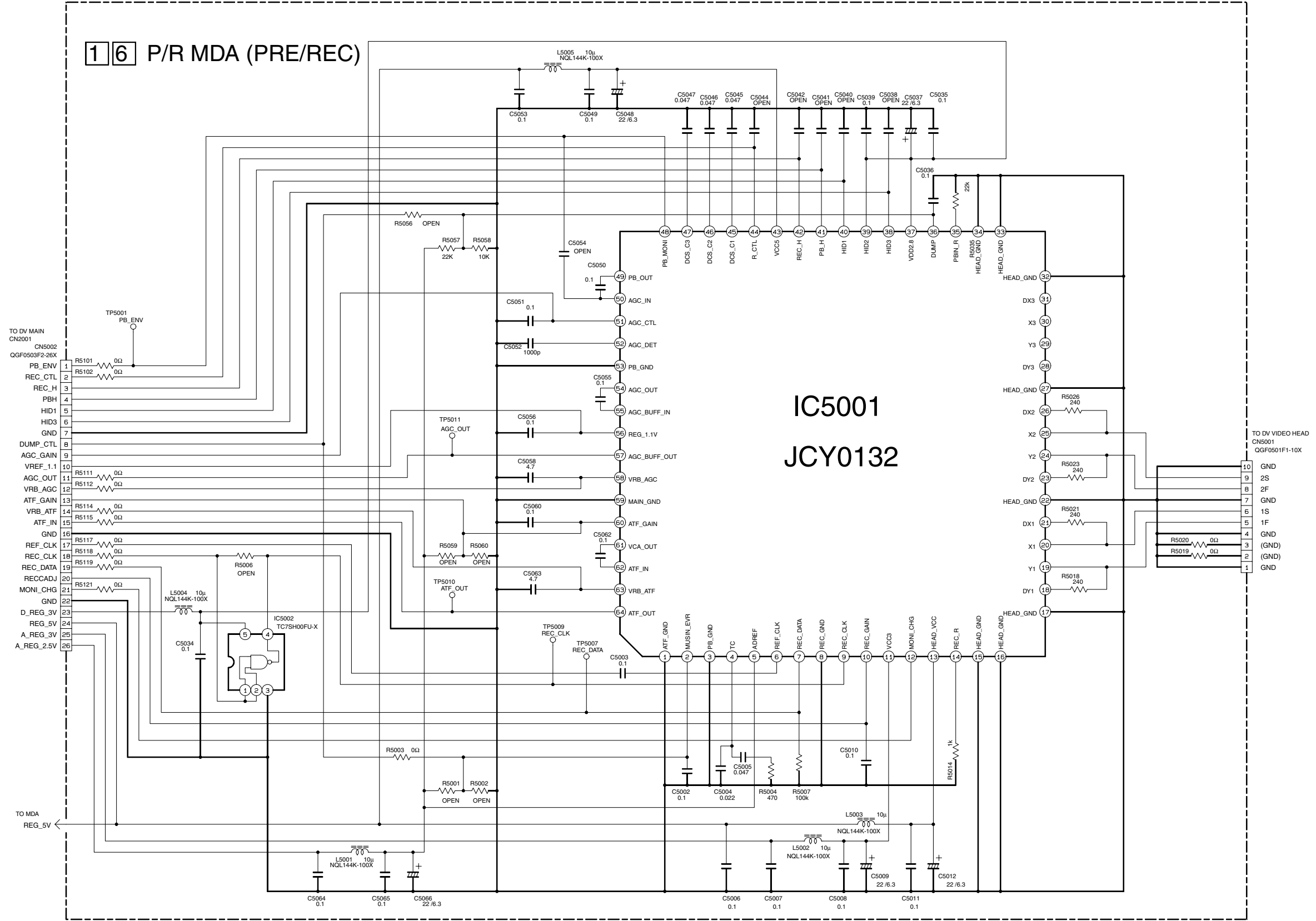


NOTES-UNLESS OTHERWISE SPECIFIED.
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL INDUCTANCE VALUES ARE IN H.
 ALL CAPACITANCE VALUES ARE IN μ F.
 + ELECTROLYTIC
 CERAMIC
 MY MYLER
 NON POLAR

p20172001a_rev0

4.15 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.

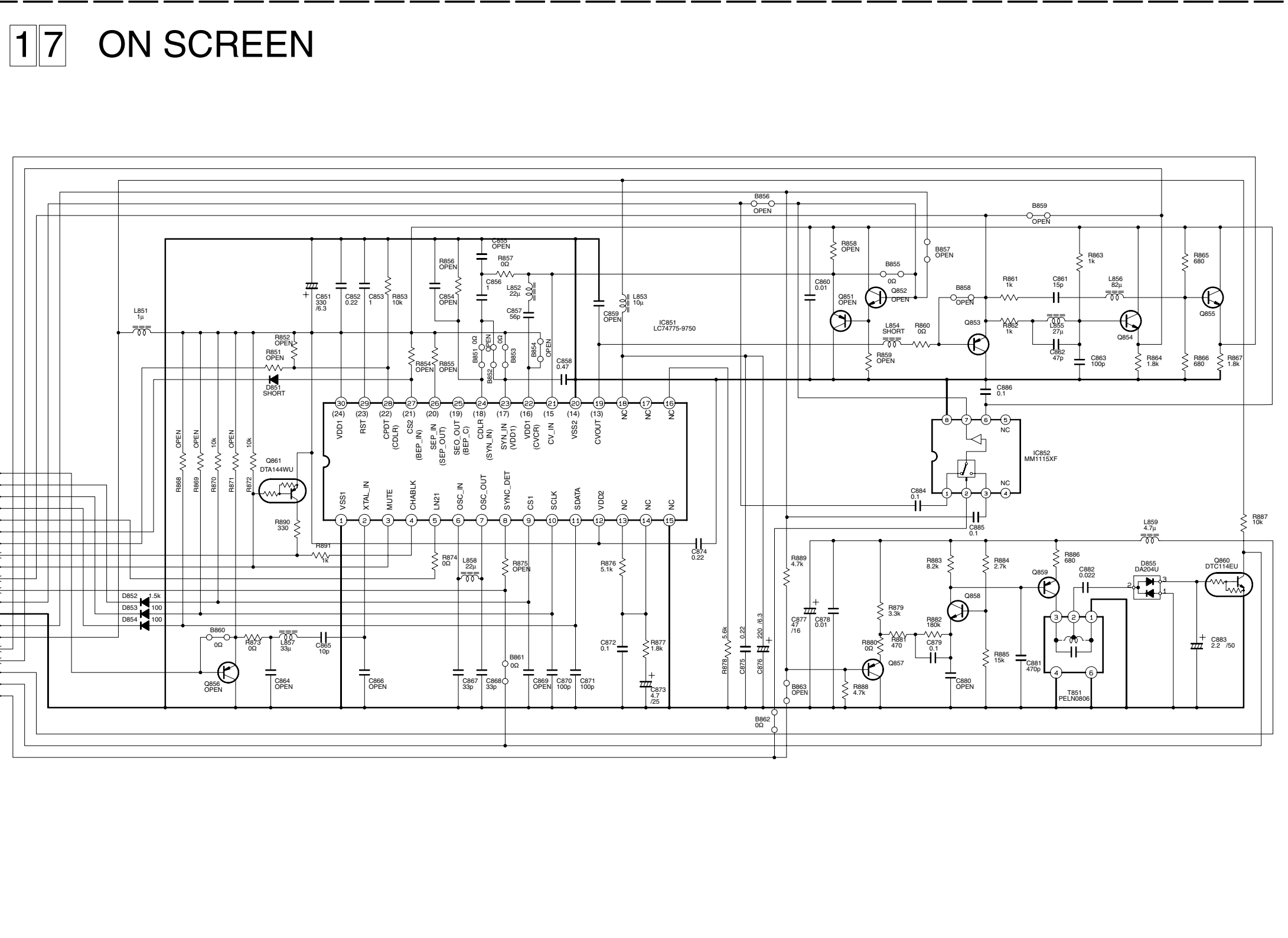


p20171001a_rev0

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

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.



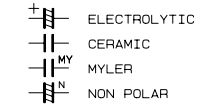
TO MAIN (VIDEO I/O SW)
CN704

1	CN851
2	2Fsc
3	OSD_CS
4	S.CLK
5	S.DATA_FRSYS
6	EDS[H] I2C_CLK2
7	EDS_CS/ I2C_DATA2
8	SWD_S.DATA
9	CHARA_DATA
10	PMUTE[L]
11	V_FROM_OSD
12	SYNC_DET[H]
13	OSD_IN
14	GND
15	V_TO_OSD
16	SW5
17	OSD_C
18	OSD_Y
19	SW12V
20	D_PMUTE[H]
	D_Y/V_IN

p20192001a_rev0

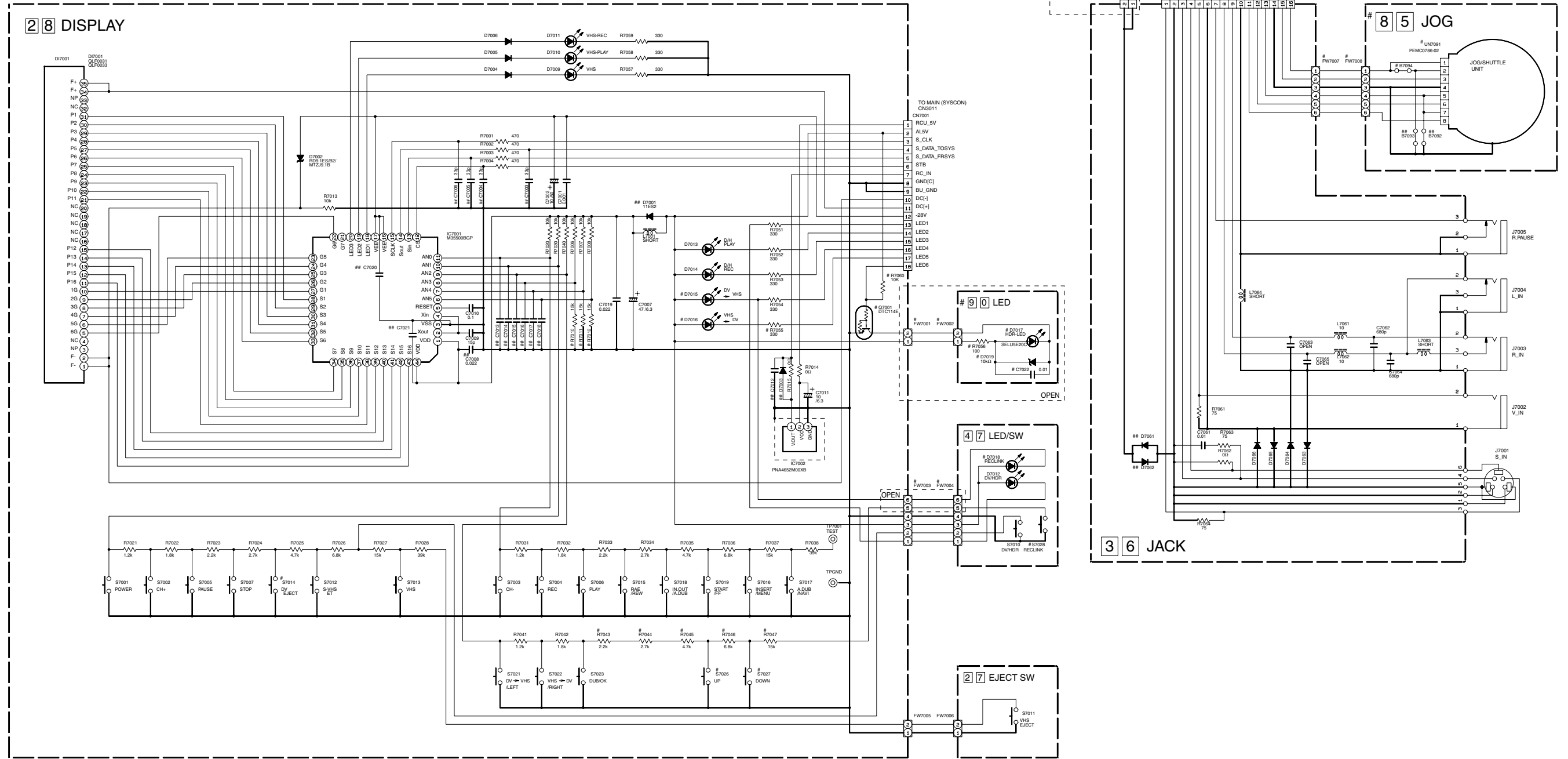
NOTES-UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μ F.

ALL NPN TYPE TRANSISTORS ARE 2SC4081/QRS/
ALL PNP TYPE TRANSISTORS ARE 2SA1576A/OR/



4.17 DISPLAY, EJECT SW, LED/SW, KACK 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

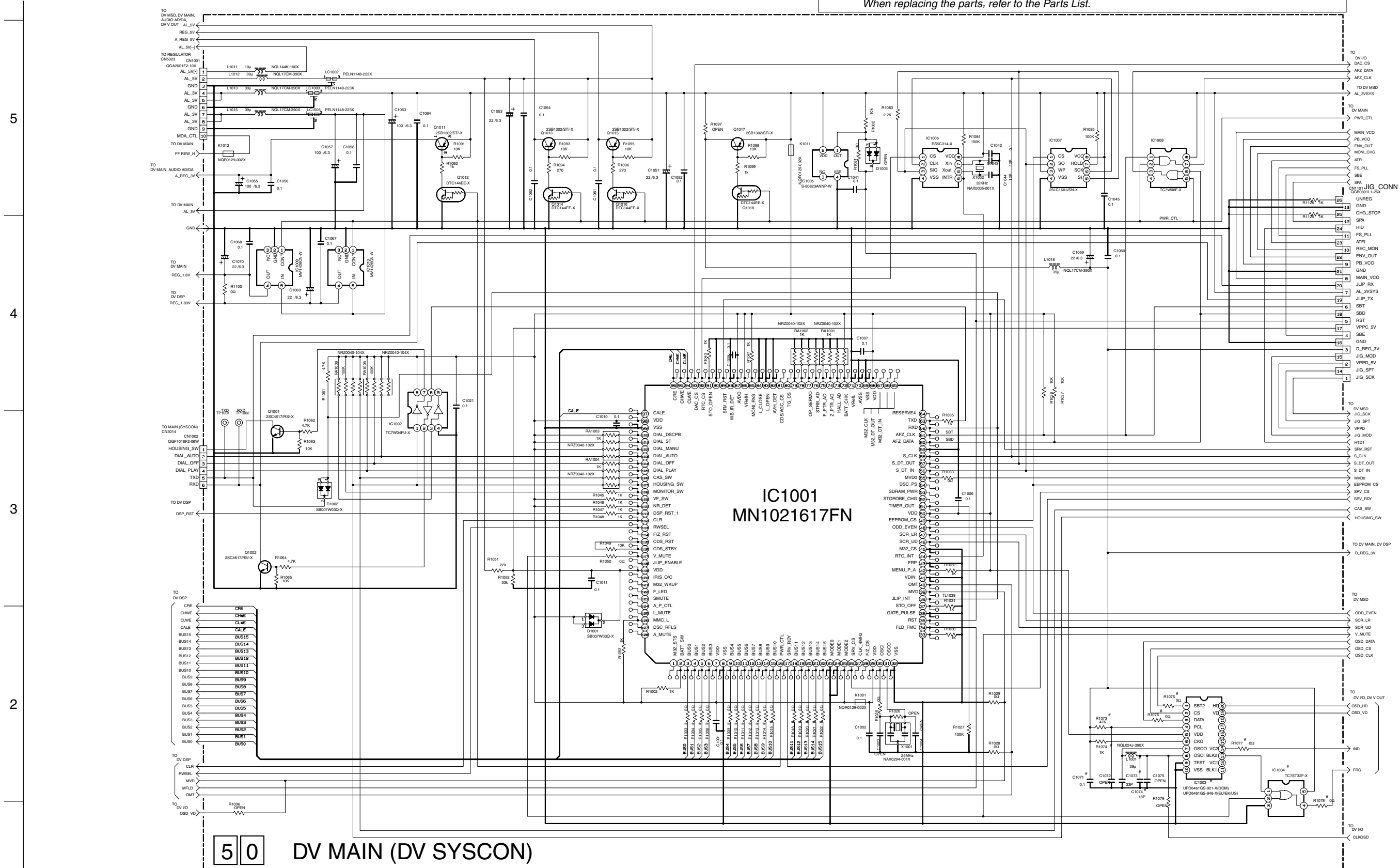
	UN7091	CN7002	D7017	D7018	R7043	S7014	FW7003
HR-DV52 (EUEKMS /DOMU)	○	1-16	X			○	1-4
HR-PV5100	X	1-10	○			X	1-6

NOTES: UNLESS OTHERWISE SPECIFIED:
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL INDUCTANCE VALUES ARE IN H.
 ALL DIODES ARE 1N4148M OR 1S5133
 ALL CAPACITANCE VALUES ARE IN μF.

ELECTROLYTIC
 CERAMIC
 MYLER
 NON POLAR
 ## NOT USED

4.18 DV 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.



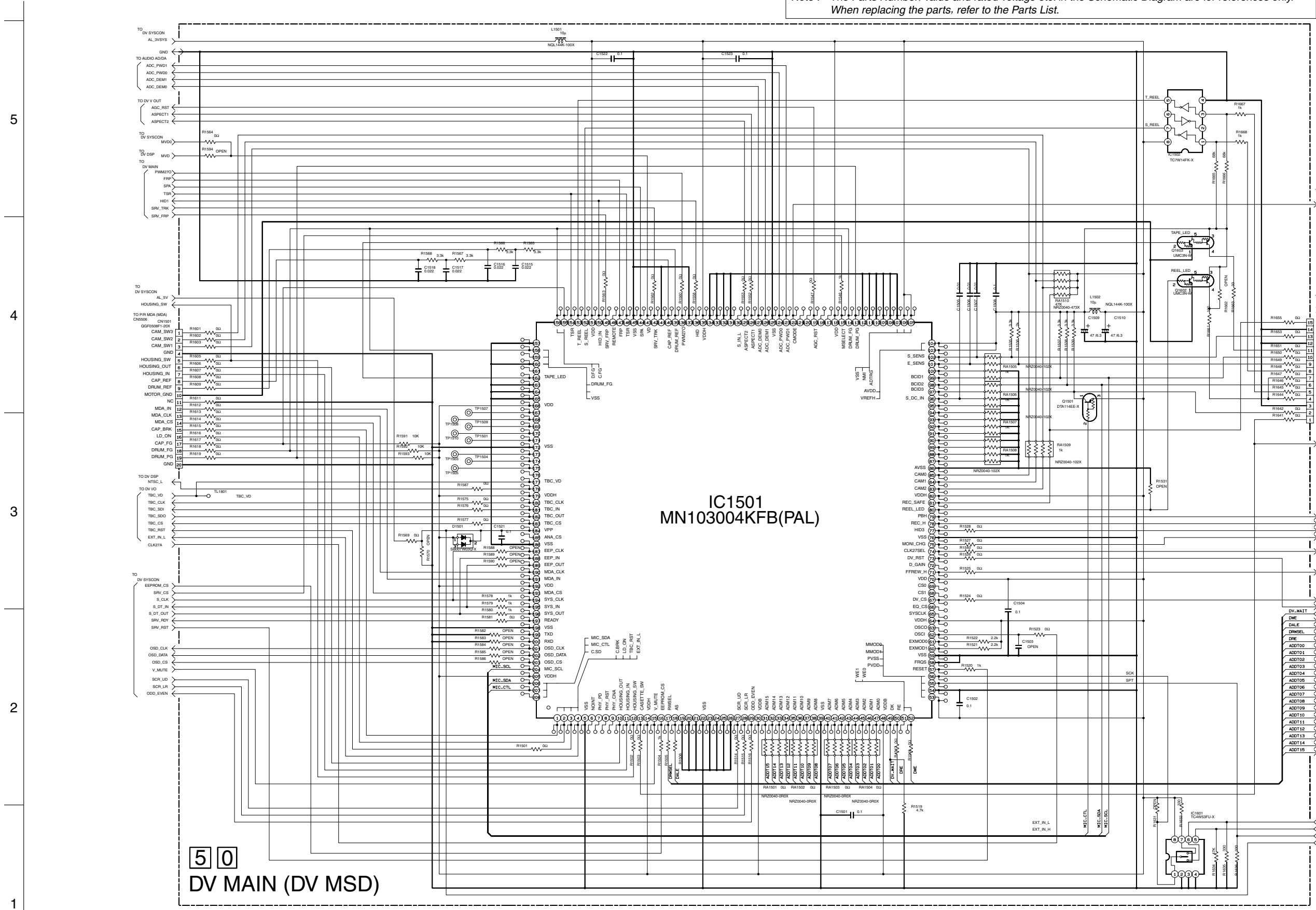
50 DV MAIN (DV SYSCON)

p10285001a_rev0

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

4.19 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.



5 0
DV MAIN (DV MSD)

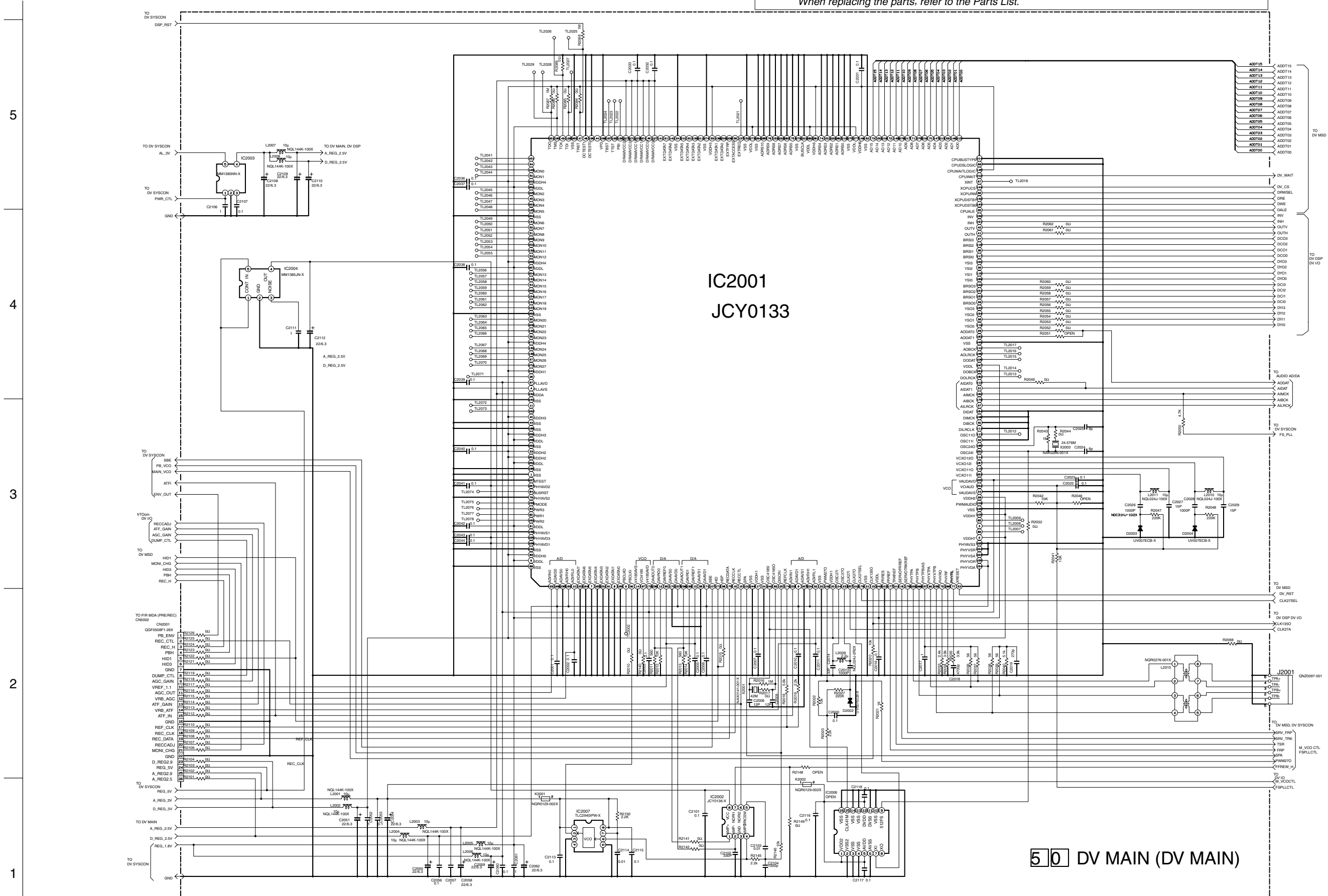
p10286001a_rev0

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

- ⊖ ELECTROLYTIC
- ⊖ CERAMIC
- ⊖ MYLER
- ⊖ NON POLAR

4.20 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.



IC2001
JCY0133

50 DV MAIN (DV MAIN)

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

p10287001a_rev0

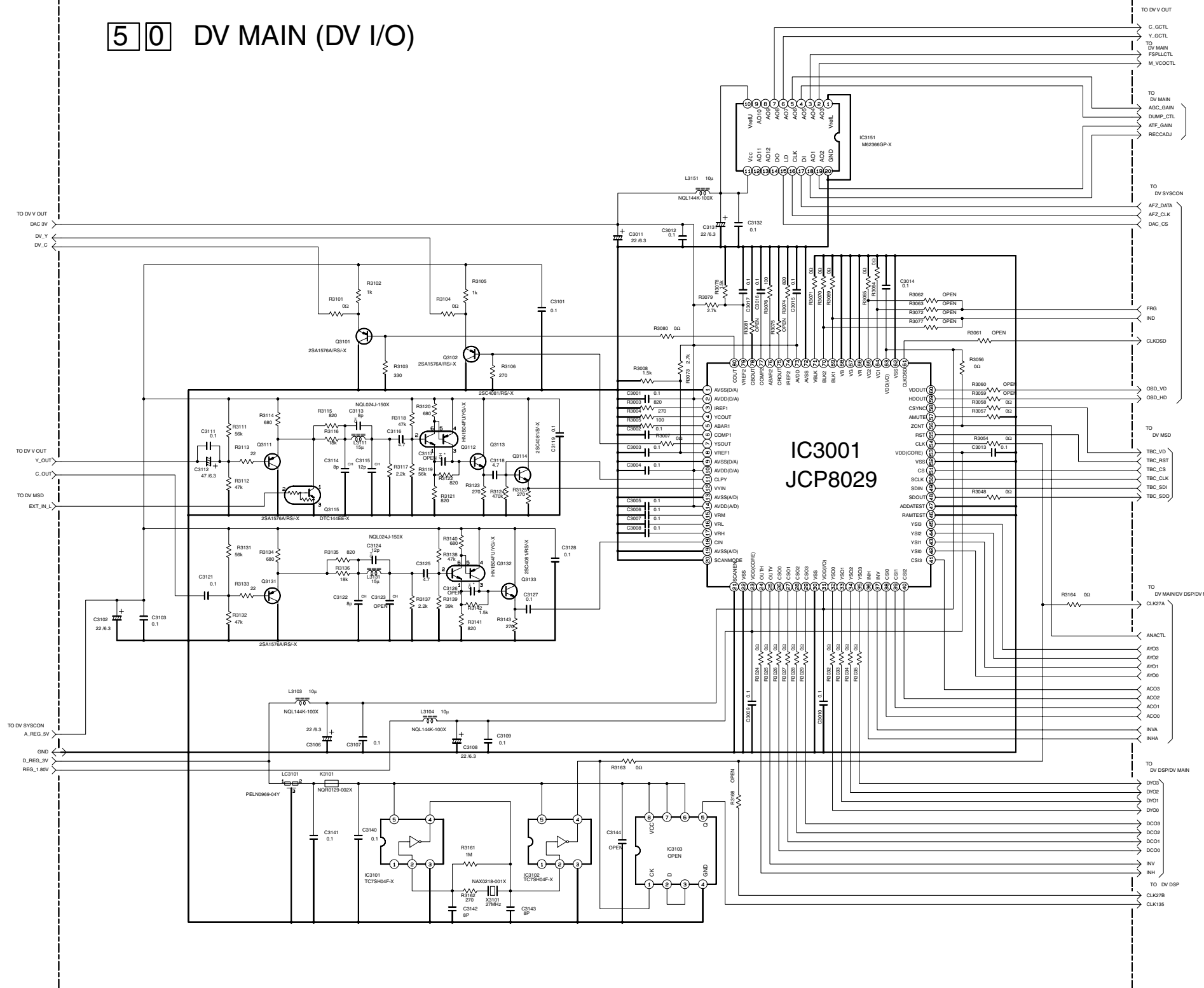
5
4
3
2
1

A B C D 4-43 E F G H

4.21 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.
 ⚡ ELECTROLYTIC
 ⚡ CERAMIC
 MY MYLER
 ⚡ NON POLAR

5

4

3

2

1

A

B

C

D 4-45

4-46

E

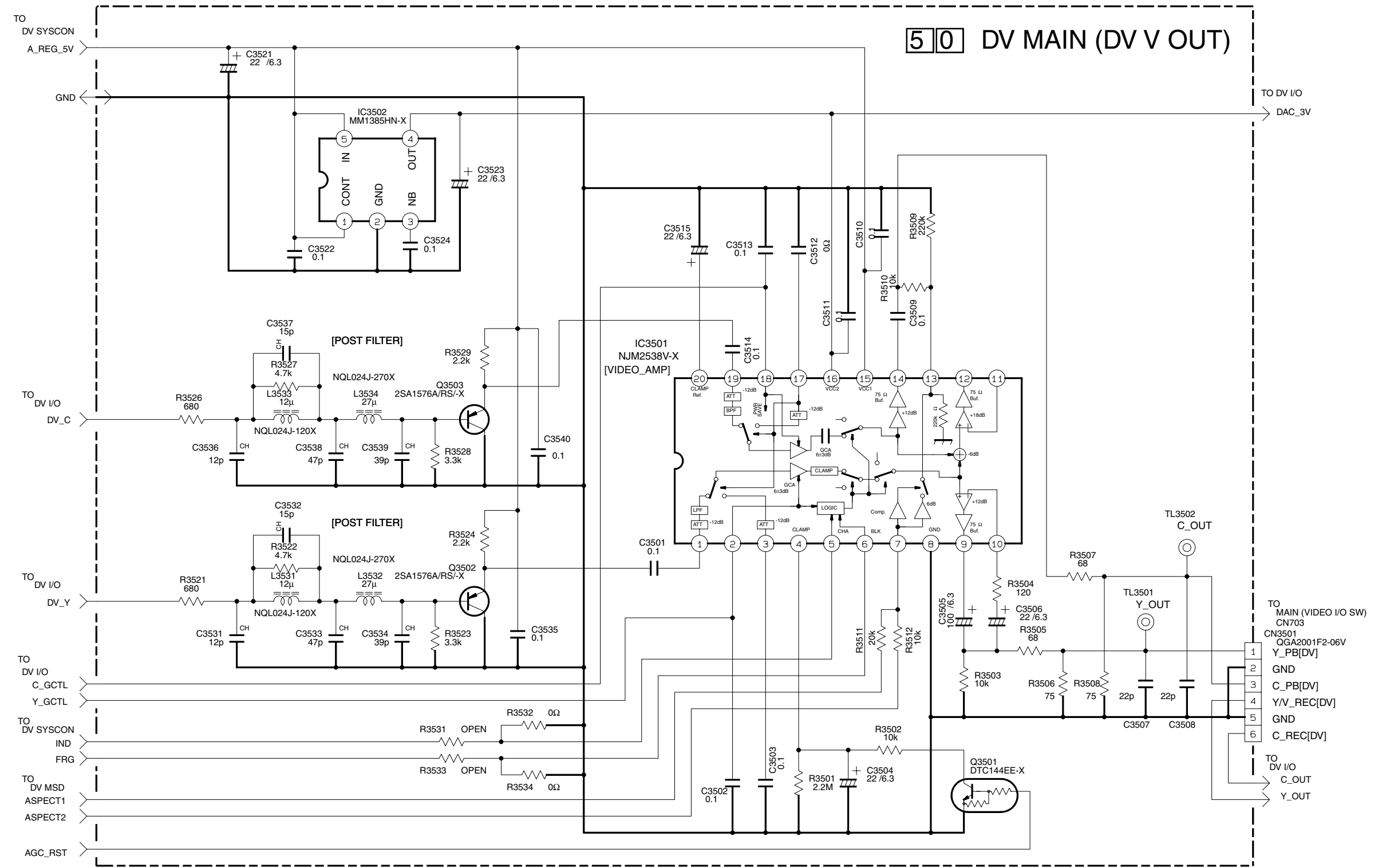
F

G

H

4.22 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.



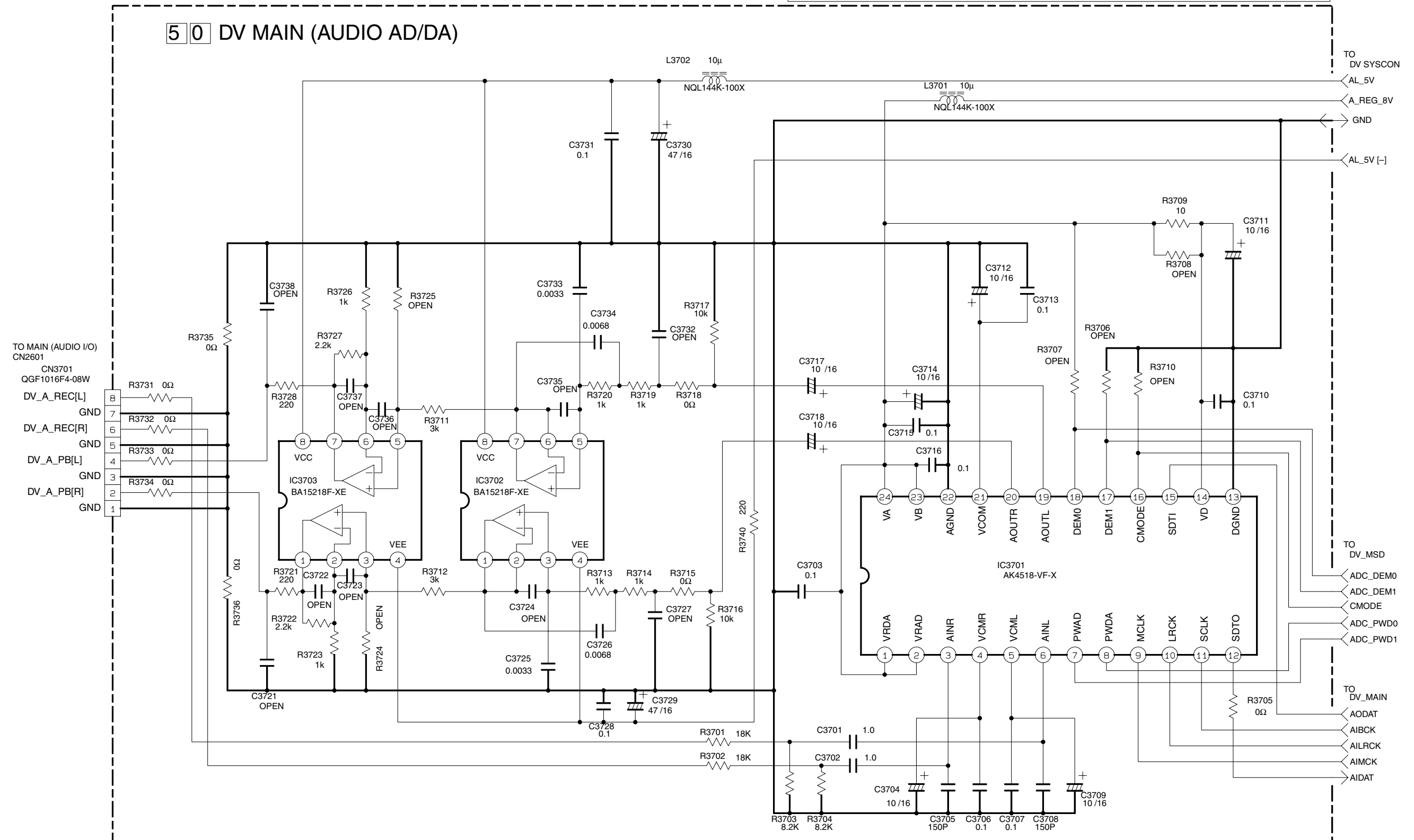
NOTES: UNLESS OTHERWISE SPECIFIED.
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL INDUCTANCE VALUES ARE IN H.
 ALL CAPACITANCE VALUES ARE IN μ F.

- ELECTROLYTIC
- CERAMIC
- MYLER
- NON POLAR

p30073001a_rev0

4.23 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.



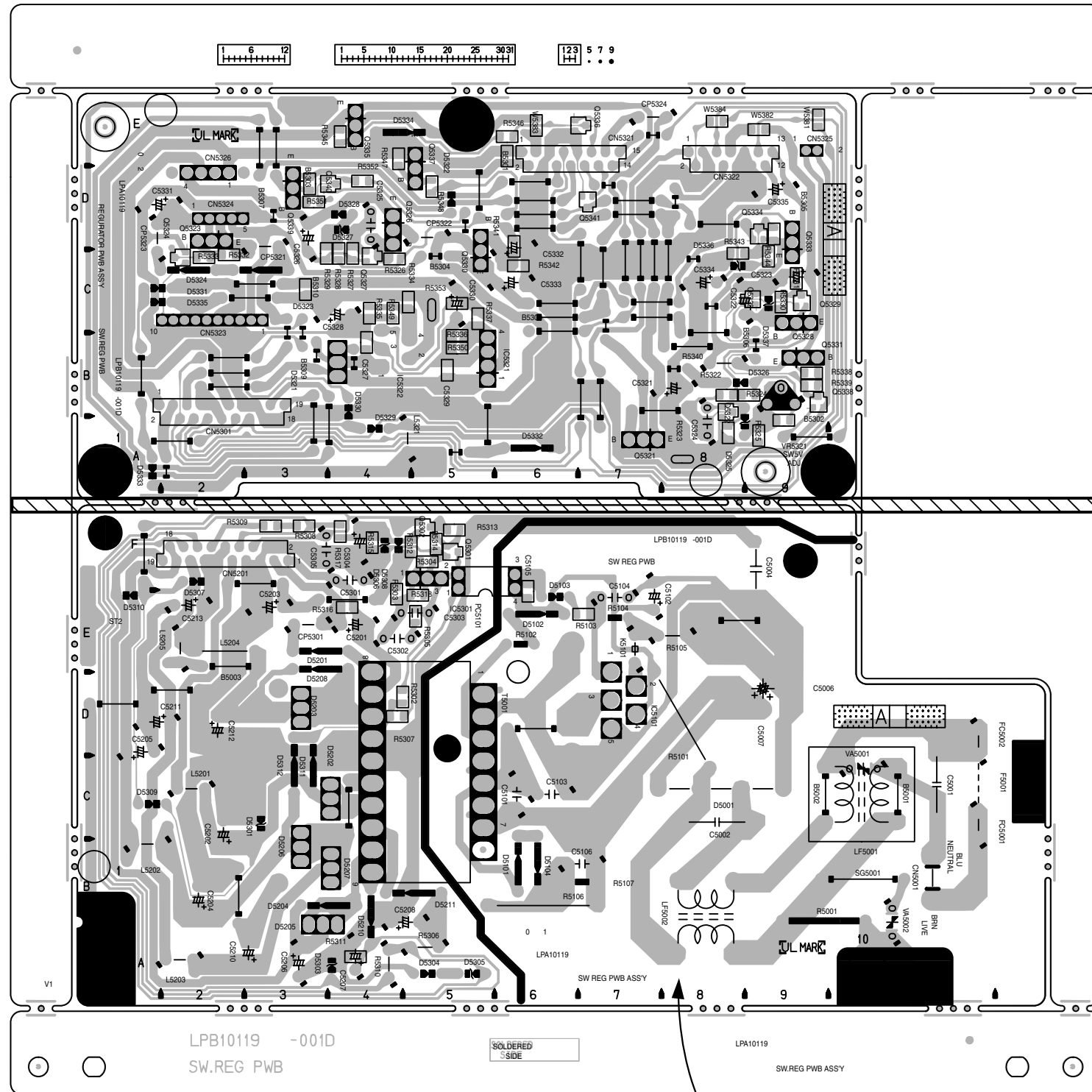
NOTES: UNLESS OTHERWISE SPECIFIED.
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL INDUCTANCE VALUES ARE IN H.
 ALL CAPACITANCE VALUES ARE IN μF.

- ELECTROLYTIC
- CERAMIC
- MYLER
- NON POLAR

p30074001a_rev0

4.25 SWITCHING REGULATOR AND REGULATOR CIRCUIT BOARDS

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



COMPONENT PARTS LOCATION GUIDE <SW REG>

REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION
CAPACITOR		CONNECTOR		IC			
C5001	A D 11D	CN5001	A D 11B	D5311	A D 3C	R5306	A D 5A
C5002	A D 8C	CN5201	A D 3F	D5312	A D 3C	R5307	B C 4D
C5004	A D 9E					R5308	B C 3F
C5006	A D 8D					R5309	B C 3F
C5007	A D 9D					R5310	A D 4A
C5101	A D 6C	DIODE				R5311	B C 4A
C5102	A D 7E	D5001	A D 7C	IC5101	A D 7E	R5312	B C 5F
C5103	A D 6C	D5101	A D 6B	IC5301	A D 5F	R5313	B C 5F
C5104	A D 7E	D5102	A D 6E			R5314	B C 5F
C5105	B C 6E	D5103	A D 6E			R5315	B C 4F
C5106	A D 6B	D5104	A D 6C			R5316	B C 4E
C5201	A D 4E	D5201	A D 4E			R5317	B C 4F
C5202	A D 2B	D5202	A D 4C			R5318	B C 5E
C5203	A D 3E	D5203	A D 3D				
C5204	A D 2B	D5204	A D 4B				
C5205	A D 1D	D5205	A D 3A				
C5206	A D 3A	D5206	A D 3B				
C5207	A D 4A	D5207	A D 4B				
C5208	A D 4B	D5208	A D 4E				
C5210	A D 3A	D5210	A D 4B				
C5211	A D 2D	D5211	A D 5B				
C5212	A D 2D	D5212	A D 3C				
C5213	A D 2E	D5213	A D 3C				
C5301	A D 4F	D5301	A D 4A				
C5302	A D 5E	D5302	A D 5A				
C5303	A D 5E	D5303	A D 5A				
C5304	A D 4F	D5304	A D 4F				
C5305	A D 3F	D5305	A D 4F				
		D5306	A D 2F				
		D5307	A D 2F				
		D5308	A D 4F				
		D5309	A D 1C				
		D5310	A D 1E				
				TRANSISTOR		OTHER	
				Q5301	B C 5F	CP5301	A D 3E
				Q5302	B C 5F	F5001	A D 11C
				RESISTOR		FC5001	A D 11C
				R5001	A D 9B	FC5002	A D 11D
				R5101	A D 8C	K5101	A D 7E
				R5102	A D 6E	LF5001	A D 10C
				R5103	B C 7E	LF5002	A D 8B
				R5104	A D 7E	PC5101	A D 5F
				R5105	A D 7E	SG5001	A D 9B
				R5106	A D 5B	T5001	A D 5D
				R5107	A D 7B	VA5001	A D 10C
				R5302	B C 4D	VA5002	A D 10A
				R5303	B C 4E		
				R5304	B C 5F		
				R5305	B C 5E		

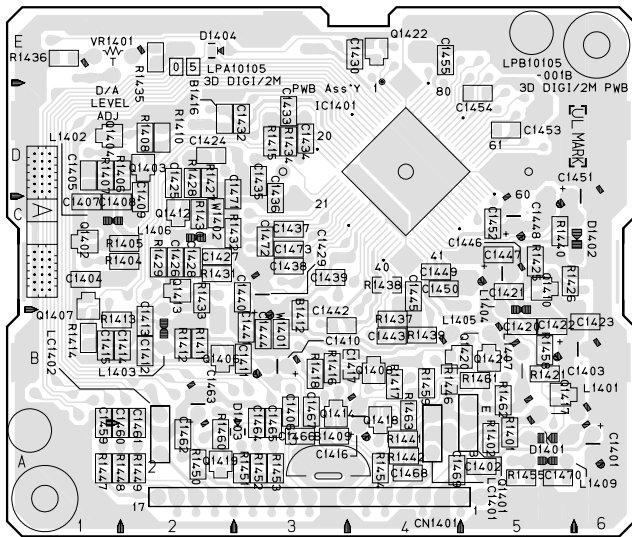
COMPONENT PARTS LOCATION GUIDE <REGULATOR>

REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION
CAPACITOR		CONNECTOR		IC			
C5321	A D 7B	CN5321	A D 5B	D5321	A D 3C	R5335	B C 4C
C5322	A D 9C	CN5322	A D 4B	D5322	A D 2C	R5336	B C 5B
C5323	A D 9C			D5323	A D 9B	R5337	B C 5C
C5324	A D 8A			D5324	A D 9B	R5338	B C 9B
C5325	A D 4D			D5325	A D 4D	R5339	B C 9B
C5326	A D 3D			D5326	A D 4A	R5340	A D 8B
C5327	B C 4B			D5327	A D 4A	R5341	B C 6D
C5328	A D 3C			D5328	A D 4A	R5342	B C 6C
C5329	B C 5B			D5329	A D 4A	R5343	B C 8C
C5330	A D 5C			D5330	A D 4A	R5344	B C 9C
C5331	A D 2D			D5331	A D 1C	R5345	B C 4E
C5332	A D 6D			D5332	A D 6A	R5346	B C 6E
C5333	A D 6C			D5333	A D 1A	R5347	B C 4E
C5334	A D 8C			D5334	A D 4E	R5348	B C 5D
C5335	A D 9D			D5335	A D 1C	R5349	B C 4C
				D5336	A D 8C	R5350	B C 5B
				D5337	A D 9C	R5351	B C 3D
				RESISTOR		R5352	B C 4C
				R5322	B C 8B	R5353	B C 5D
				R5323	B C 8A	R5354	B C 4C
				R5324	B C 9B	R5355	B C 5C
				R5325	B C 9A	VR5321	A D 9B
				R5326	B C 4C		
				R5327	B C 4C		
				R5328	B C 4C		
				R5329	B C 3C		
				R5330	B C 9C		
				R5331	B C 9C		
				R5332	B C 2C		
				R5333	B C 2C		
				R5334	B C 4C		
				TRANSISTOR		OTHER	
				Q5321	A D 7A	CP5321	A D 3D
				Q5322	B C 8B	CP5322	A D 5D
				Q5323	A D 2D	CP5323	A D 1C
				Q5324	B C 2C	CP5324	A D 8E
				Q5325	B C 4C		

DANGEROUS VOLTAGE

4.26 3D DIGITAL/2M AND S-SUB CIRCUIT BOARDS

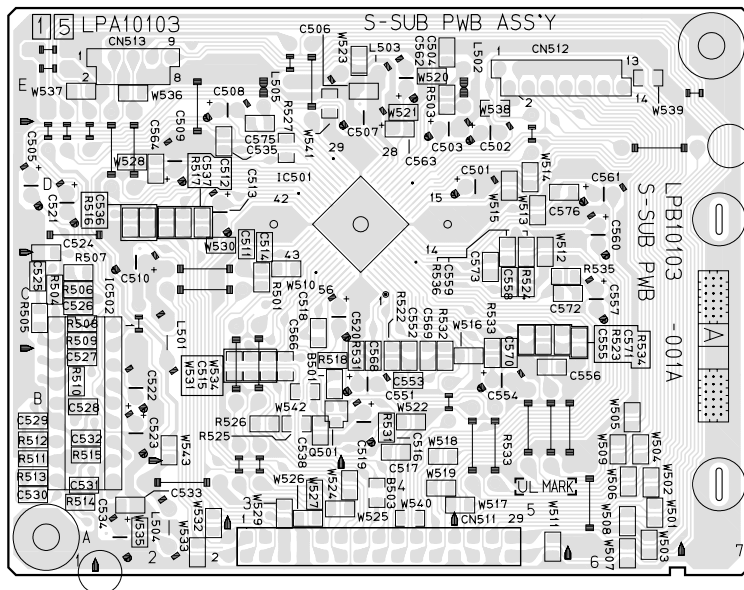
<05> 3D DIGITAL/2M LPB10105-001B



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

REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION
CAPACITOR							
C1401	A D 6A	C1446	A D 5C	L1407	A D 5B	R1429	B C 2C
C1402	B C 5A	C1447	B C 5C	L1409	A D 5A	R1430	B C 2C
C1403	A D 5B	C1448	A D 5C	TRANSISTOR			
C1404	B C 1C	C1449	B C 4C	Q1401	A D 5B	R1431	B C 2C
C1405	B C 1D	C1450	B C 4C	Q1402	B C 1C	R1432	B C 2C
C1406	B C 3B	C1451	A D 5D	Q1403	B C 2D	R1433	B C 2C
C1407	B C 1C	C1452	B C 5D	Q1404	B C 1D	R1434	B C 3D
C1408	B C 1C	C1453	B C 5D	Q1406	B C 2B	R1435	B C 2E
C1409	B C 2C	C1454	B C 5D	Q1407	B C 1C	R1436	B C 1E
C1410	A D 3B	C1455	B C 4E	Q1408	B C 4B	R1437	B C 4B
C1411	B C 3B	C1459	B C 1B	Q1410	B C 5C	R1438	B C 4C
C1412	B C 2B	C1460	B C 2B	Q1412	B C 2C	R1439	B C 4B
C1413	B C 2B	C1461	B C 2A	Q1413	B C 2C	R1440	B C 5C
C1414	B C 2B	C1462	B C 2A	Q1414	B C 3B	R1441	B C 4A
C1415	B C 1B	C1463	A D 2B	Q1417	B C 5B	R1442	B C 4A
C1416	A D 4A	C1464	B C 2B	Q1418	B C 4B	R1446	B C 4B
C1417	B C 4B	C1465	B C 3A	Q1419	B C 2A	R1447	B C 1A
C1420	B C 5B	C1466	B C 3A	Q1420	B C 5B	R1448	B C 2A
C1421	B C 5C	C1467	B C 3B	Q1421	B C 5B	R1449	B C 2A
C1422	B C 5B	C1468	B C 4A	Q1422	B C 4E	R1450	B C 2A
C1423	B C 6B	C1469	B C 5A	RESISTOR			
C1424	B C 2D	C1470	B C 4A	R1401	B C 5A	R1452	B C 3A
C1425	B C 2D	C1471	B C 2D	R1402	B C 5A	R1453	B C 3A
C1426	B C 2C	C1472	B C 3C	R1404	B C 2C	R1454	B C 4A
C1427	B C 2C	C1473	B C 3C	R1405	B C 2C	R1455	B C 5A
C1428	B C 2C	CONNECTOR				R1458	B C 5B
C1429	A D 3C	CN1401	A D 5A	R1406	B C 2D	R1459	B C 4B
C1430	B C 4E	DIODE				R1460	B C 2A
C1432	B C 3D	D1401	A D 5A	R1408	B C 2D	R1461	B C 5B
C1433	B C 3D	D1402	A D 6C	R1410	B C 2D	R1462	B C 5B
C1434	B C 3D	D1403	B C 3B	R1411	B C 2B	R1463	B C 4B
C1435	B C 3D	D1404	B C 2E	R1413	B C 2B	VR1401	A D 1E
C1436	B C 3C	IC				OTHER	
C1437	B C 3C	IC1401	B C 4D	R1414	B C 1B	LC1401	A D 4A
C1438	B C 3C	COIL				R1415	B C 3D
C1439	B C 3C	L1401	A D 5B	R1416	B C 3B	LC1402	A D 2A
C1440	B C 3B	L1402	A D 2C	R1417	B C 4B		
C1441	B C 3B	L1403	A D 2B	R1418	B C 3B		
C1442	B C 4B	L1404	A D 5C	R1421	B C 5B		
C1443	B C 3B	L1405	A D 2C	R1422	B C 2D		
C1444	B C 3B	L1406	A D 2C				
C1445	B C 4C						

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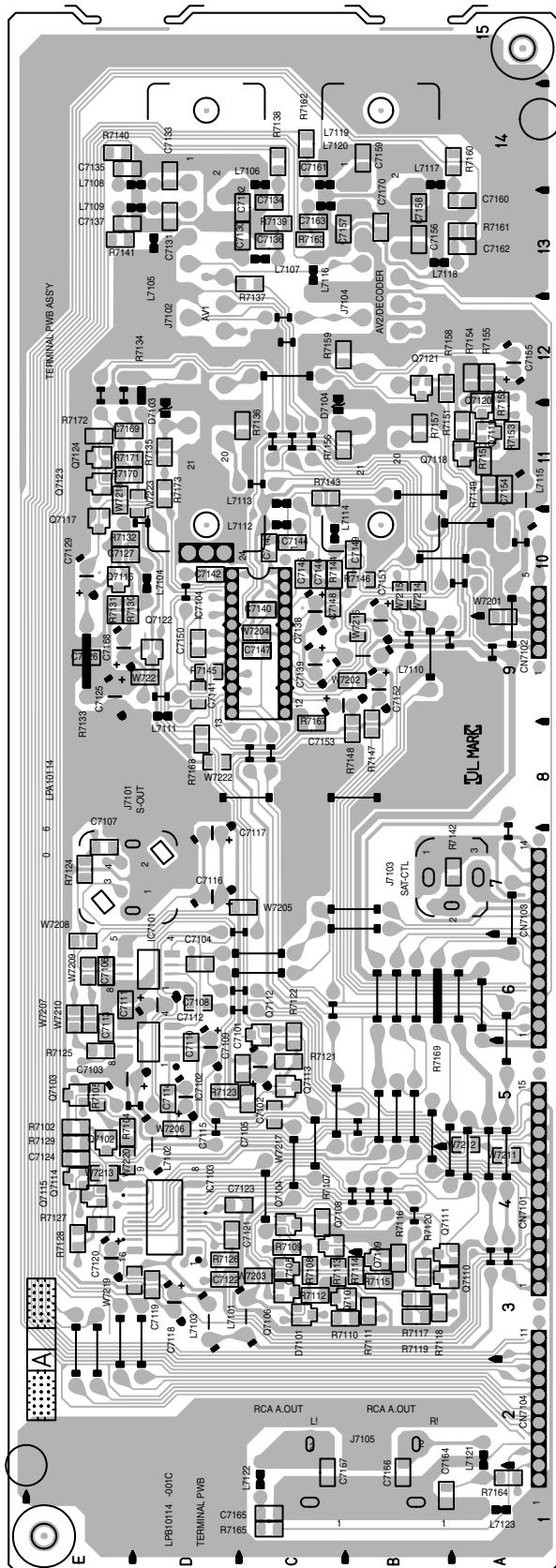


COMPONENT PARTS LOCATION GUIDE <S-SUB>

REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION		
CAPACITOR							
C501	A D 5D	C555	B C 5C	R508	B C 1C		
C502	A D 5D	C556	B C 5B	R509	B C 1C		
C503	A D 4D	C557	A D 6C	R510	B C 1B		
C504	B C 4E	C558	B C 5C	R511	B C 1B		
C505	A D 1D	C559	B C 5D	R512	B C 1A		
C506	B C 4E	C560	A D 6D	R513	B C 1A		
C507	A D 4E	C561	A D 4E	R514	B C 1A		
C508	A D 2E	C562	A D 4E	R515	B C 1B		
C509	A D 2D	C563	B C 4D	R516	B C 2D		
C510	A D 2C	C564	B C 2D	R517	B C 2D		
C511	B C 3C	C566	B C 3B	R518	B C 3B		
C512	B C 2D	C568	B C 4B	R522	B C 4B		
C513	A D 2D	C569	B C 4B	R523	B C 5C		
C514	B C 3C	C570	B C 5B	R524	B C 5C		
C515	B C 3B	C571	B C 5C	R525	B C 3B		
C516	B C 4B	C572	B C 6C	R526	B C 3B		
C517	B C 4B	C573	B C 5C	R527	B C 3D		
C518	B C 3C	C575	B C 5D	R531	B C 4B		
C519	A D 4B	C576	B C 5D	R532	B C 4B		
C520	A D 3C	CONNECTOR				R533	B C 5B
C521	A D 1D	CN511	A D 3A	R534	B C 6C		
C522	A D 2B	CN512	A D 5E	R535	B C 5C		
C523	A D 2B	CN513	A D 1E	R536	B C 5C		
C524	B C 1C	IC					
C525	B C 1C	IC501	B C 4D				
C526	B C 1C	IC502	A D 1C				
C527	B C 1B	COIL					
C528	B C 1B	L501	A D 2B				
C529	B C 1B	L502	A D 5E				
C530	B C 1A	L503	A D 3E				
C531	B C 1A	L504	A D 2A				
C532	B C 1B	L505	A D 3E				
C533	B C 2A	TRANSISTOR					
C534	A D 2A	Q501	B C 3B				
C535	B C 2D	RESISTOR					
C536	B C 2D	R501	B C 3C				
C537	B C 2D	R503	B C 4C				
C538	B C 3B	R504	B C 1C				
C551	A D 4B	R505	B C 1C				
C552	B C 4B	R506	B C 1C				
C553	B C 4B	R507	B C 1C				
C554	A D 5B						

4.27 TERMINAL CIRCUIT BOARD

<06> TERMINAL LPB10114-001C

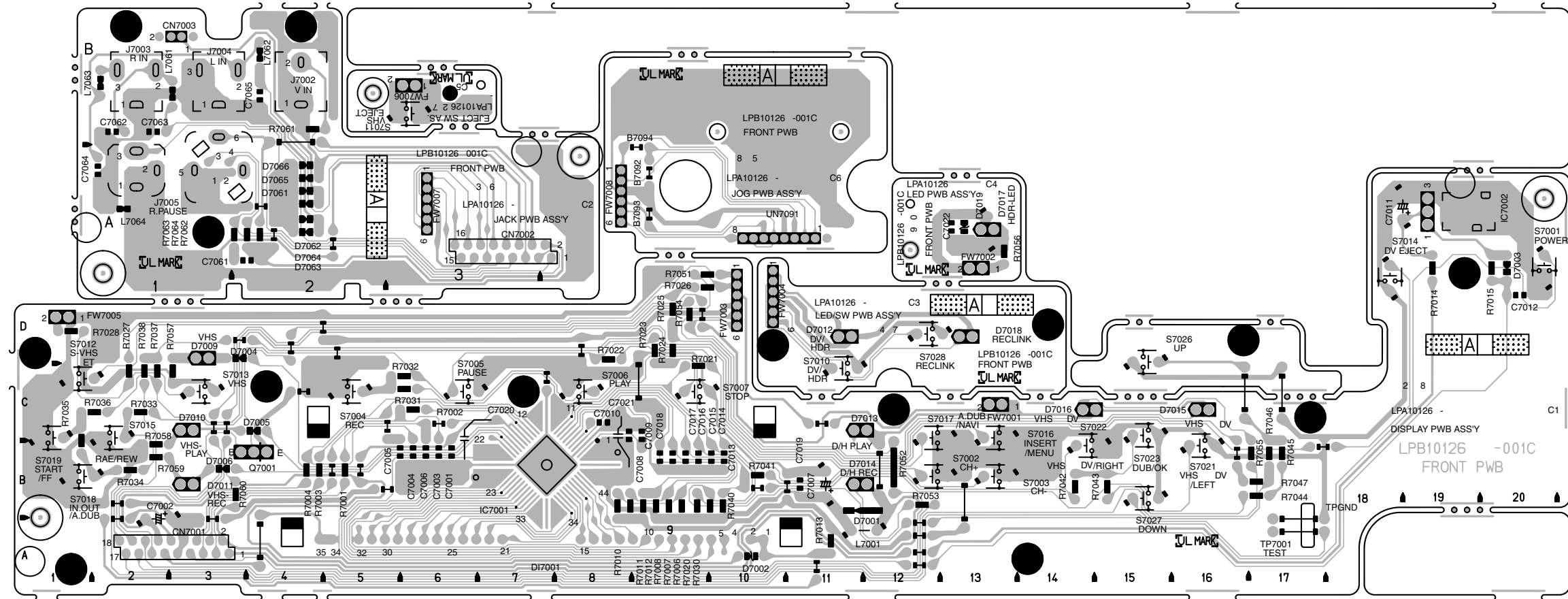


COMPONENT PARTS LOCATION GUIDE <TERMINAL>

REF.NO.	LOCATION	REF.NO.	LOCATION	
CAPACITOR				
C7101	B C C	L7121	A D 1A	
C7102	A D D	L7122	A D 1C	
C7103	A D D	L7123	A D 1A	
C7104	B C C	TRANSISTOR		
C7105	B C C	Q7102	B C C 5E	
C7106	B C C	Q7103	B C C 5E	
C7107	B C C	Q7104	B C C 3C	
C7108	B C C	Q7105	B C C 3C	
C7109	A D D	Q7106	B C C 3C	
C7110	B C C	Q7107	B C C 3C	
C7111	B C C	Q7108	B C C 4C	
C7112	A D D	Q7109	B C C 3B	
C7113	B C C	Q7110	B C C 3B	
C7114	A D D	Q7111	B C C 3B	
C7115	A D D	Q7112	B C C 6C	
C7116	A D D	Q7113	B C C 5C	
C7117	A D D	Q7114	B C C 4E	
C7118	A D D	Q7115	B C C 4E	
C7119	B C C	Q7116	B C C 10E	
C7120	A D D	Q7117	B C C 10E	
C7121	B C C	Q7118	B C C 11A	
C7122	B C C	Q7119	B C C 11A	
C7123	B C C	Q7120	B C C 11A	
C7124	A D D	Q7121	B C C 12B	
C7125	B C C	Q7122	B C C 9D	
C7126	B C C	Q7123	B C C 11E	
C7127	B C C	Q7124	B C C 11E	
C7129	A D D	RESISTOR		
C7130	B C C	R7102	B C C 5E	
C7131	B C C	R7104	B C C 5E	
C7132	B C C	R7105	B C C 5E	
C7133	B C C	R7107	B C C 4C	
C7134	B C C	R7108	B C C 3C	
C7135	B C C	R7109	B C C 4C	
C7136	B C C	R7110	B C C 3C	
C7137	A D D	R7111	B C C 3B	
C7138	A D D	R7112	B C C 3C	
C7139	A D D	R7113	B C C 3C	
C7140	B C C	R7114	B C C 3B	
C7141	B C C	R7115	B C C 3B	
C7142	B C C	R7116	B C C 3B	
C7143	B C C	R7117	B C C 3B	
C7144	B C C	R7118	B C C 3B	
C7145	B C C	R7119	B C C 3B	
C7146	B C C	R7120	B C C 3B	
C7147	B C C	R7121	B C C 5C	
C7148	B C C	R7122	B C C 6C	
C7149	B C C	R7123	B C C 5D	
C7150	B C C	R7124	B C C 7E	
C7151	A D D	R7125	B C C 5E	
C7152	A D D	R7126	B C C 3D	
C7153	A D D	R7127	B C C 4E	
C7154	B C C	R7128	B C C 4E	
C7155	A D D	R7129	B C C 5E	
C7156	B C C	R7130	B C C 10E	
C7157	B C C	R7131	B C C 10E	
C7158	B C C	R7132	B C C 10E	
C7159	B C C	R7133	A D D 9E	
C7160	B C C	R7134	A D D 12D	
C7161	B C C	R7135	B C C 11D	
C7162	B C C	R7136	B C C 11C	
C7163	B C C	R7137	B C C 13C	
C7164	B C C	R7138	B C C 14C	
C7165	B C C	R7139	B C C 13C	
C7166	B C C	R7140	B C C 14E	
C7167	B C C	R7141	B C C 13E	
C7168	A D D	R7142	B C C 7A	
C7169	B C C	R7143	B C C 11C	
C7170	B C C	R7144	B C C 10C	
CONNECTOR				
CN7101	A D D	3A	R7145	B C C 9D
CN7102	A D D	9A	R7146	B C C 10B
CN7103	A D D	6A	R7147	B C C 8B
CN7104	A D D	1A	R7148	B C C 8B
DIODE				
D7101	B C C	3C	R7149	B C C 11A
D7103	A D D	12D	R7150	B C C 11A
D7104	A D D	12C	R7151	B C C 11A
IC				
IC7101	B C C	6D	R7152	B C C 11A
IC7102	B C C	5D	R7153	B C C 12A
IC7103	B C C	4D	R7154	B C C 12A
IC7104	A D D	10C	R7155	B C C 12A
JACK				
J7101	A D D	7E	R7156	B C C 11C
J7102	A D D	7B	R7157	B C C 11B
J7103	A D D	7B	R7158	B C C 12B
J7104	A D D	12B	R7159	B C C 12C
J7105	A D D	2B	R7160	B C C 14A
COIL				
L7101	A D D	3C	R7161	B C C 13A
L7102	A D D	4D	R7162	B C C 14C
L7103	A D D	3D	R7163	B C C 13C
L7104	A D D	10D	R7164	B C C 1A
L7105	A D D	13D	R7165	B C C 1C
L7106	A D D	14C	R7167	B C C 8C
L7107	A D D	13C	R7168	B C C 8D
L7108	A D D	14D	R7169	A D D 6B
L7109	A D D	13D	R7170	B C C 11E
L7110	A D D	9B	R7171	B C C 11E
L7111	A D D	9D	R7172	B C C 11E
L7112	A D D	10C	R7173	B C C 11D
L7113	A D D	11C		
L7114	A D D	10C		
L7115	A D D	11A		
L7116	A D D	13C		
L7117	A D D	14B		
L7118	A D D	13B		
L7119	A D D	14C		
L7120	A D D	13C		

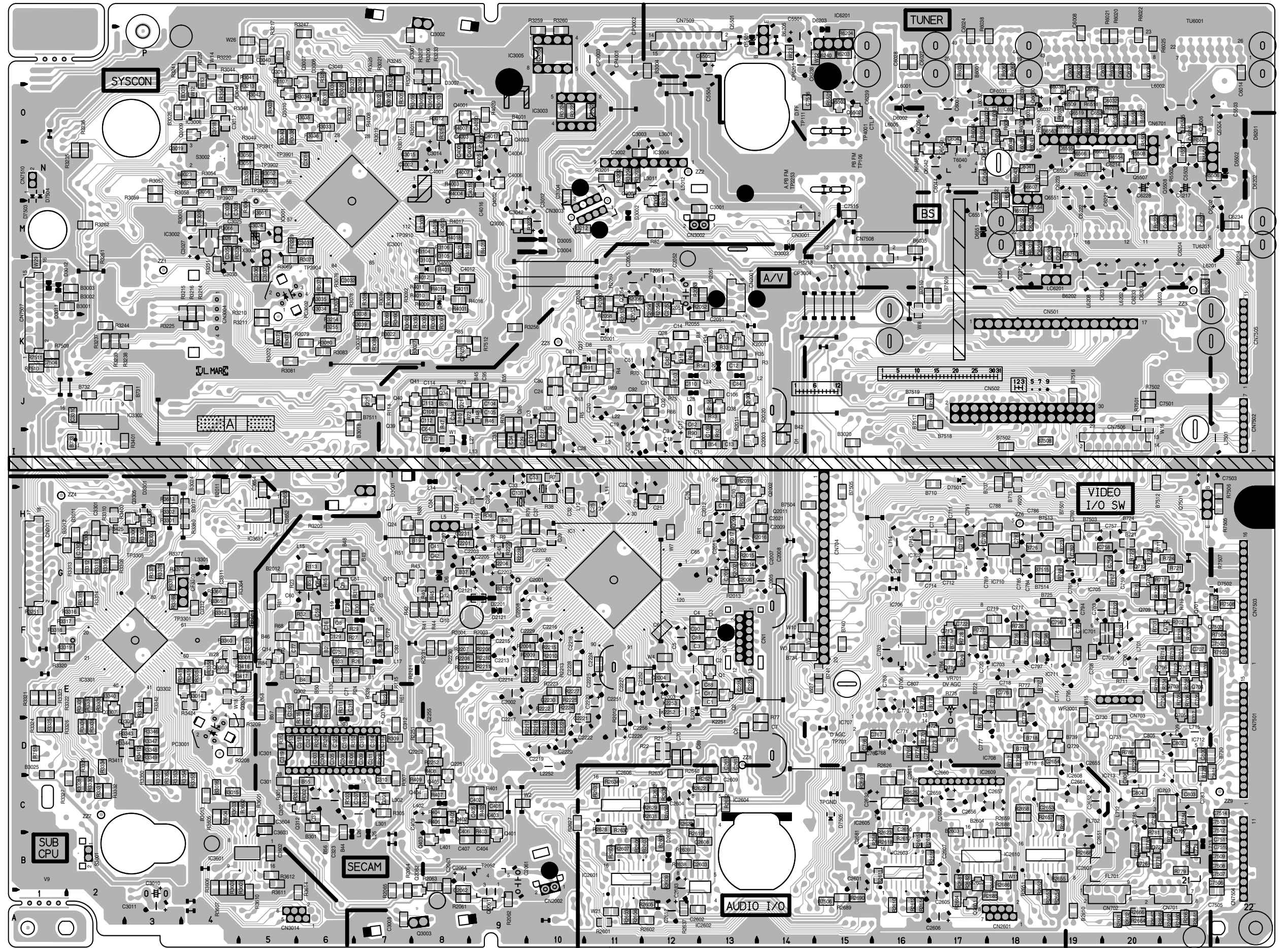
4.28 DISPLAY,EJECT SW, JACK, LED/SW AND JOG CIRCUIT BOARDS

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



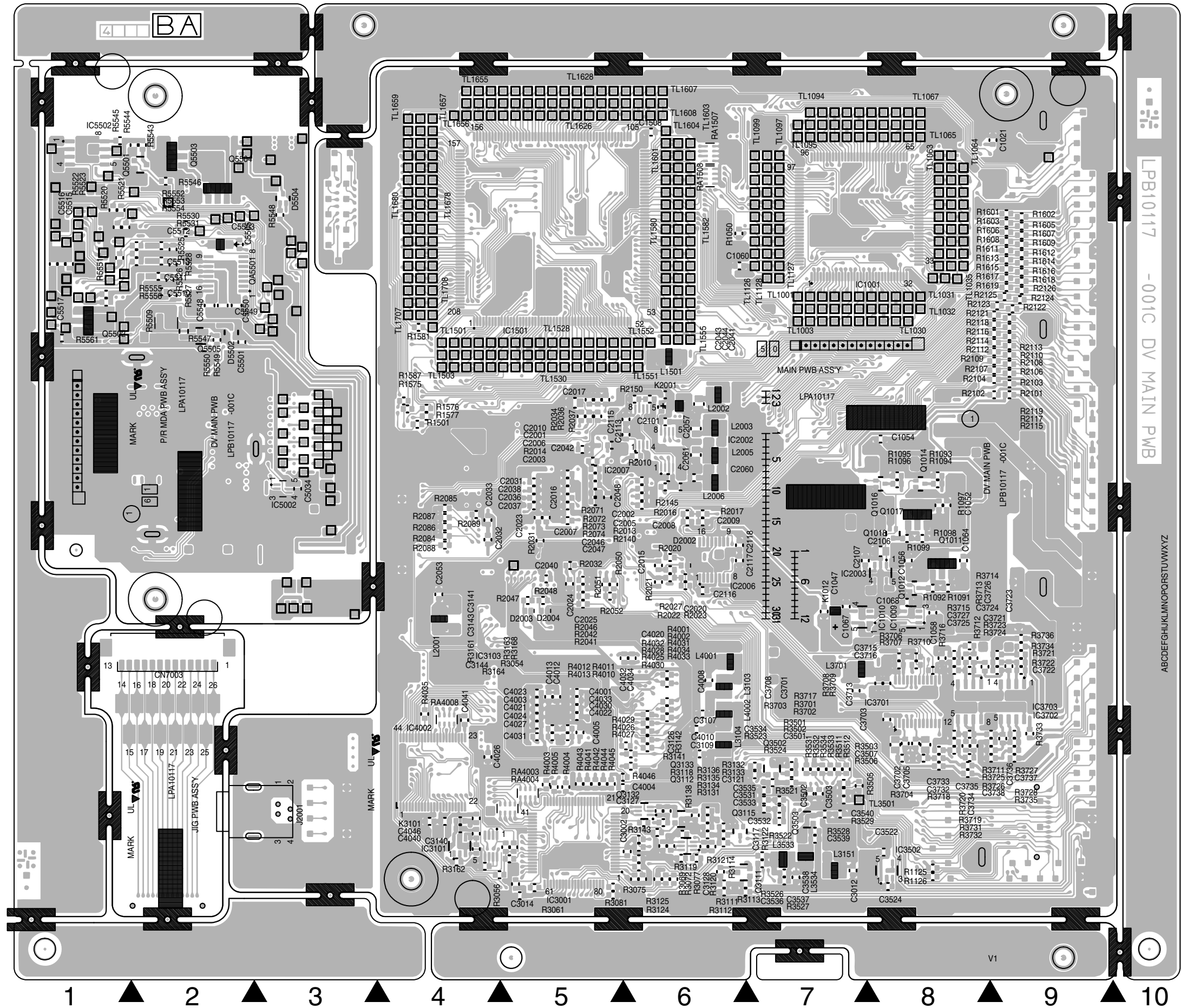
4.29 MAIN CIRCUIT BOARD

<03> MAIN
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<16> P/R MDA, <50> DV MAIN
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— FOIL SIDE(B) —



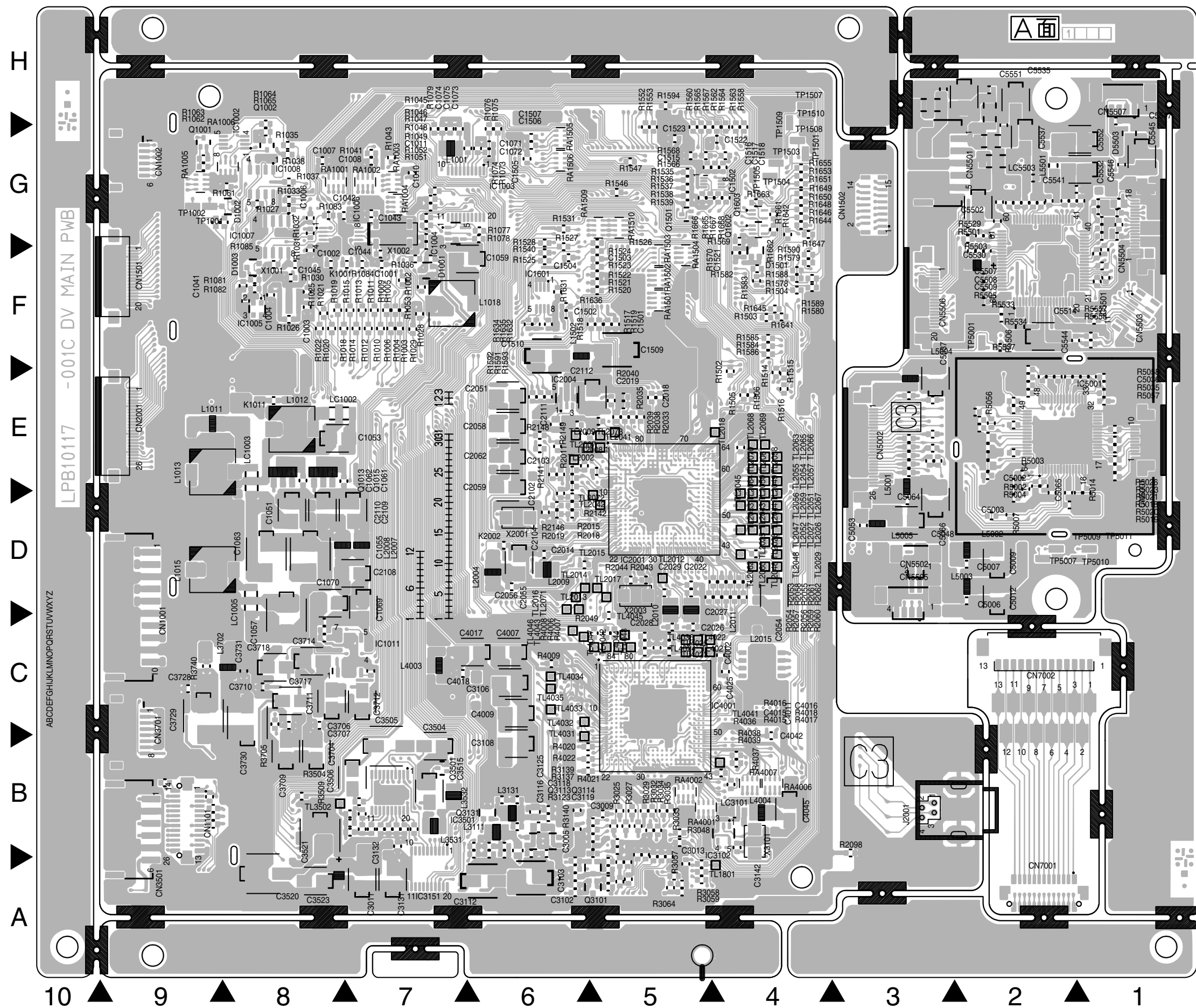
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COMPONENT PARTS LOCATION GUIDE <DV MAIN>

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		
CAPACITOR																			
C1001	A C	C2041	B C	5G	C3508	A C	7B	C4046	B C	3B	Q1002	A C	8J	R1100	A C	8D	R1647	A C	2I
C1002	A C	C2042	B C	4F	C3509	A C	7B	C5053	A C	2E	Q1011	B C	8E	R1125	B C	8B	R1648	A C	2I
C1003	A C	C2043	B C	4G	C3510	A C	7B	CONNECTOR			Q1012	B C	8E	R1126	B C	8B	R1649	A C	2I
C1004	A C	C2044	B C	5G	C3511	A C	7B	CN1001	A C	10E	Q1013	A C	8F	R1501	B C	3G	R1650	A C	2I
C1006	A C	C2046	B C	4F	C3512	A C	7B	CN1002	A C	10I	Q1014	B C	8F	R1502	A C	3G	R1651	A C	2I
C1007	A C	C2047	B C	4F	C3513	A C	7B	CN1101	A C	9C	Q1015	B C	8F	R1503	A C	3H	R1653	A C	2I
C1008	A C	C2048	B C	5F	C3514	A C	7B	CN1501	A C	10H	Q1016	B C	8F	R1504	A C	3H	R1655	A C	2I
C1010	A C	C2051	A C	6G	C3515	A C	7C	CN1502	A C	2I	Q1017	B C	8F	R1505	A C	3G	R1661	A C	3I
C1011	A C	C2052	B C	6G	C3520	A C	8B	CN2001	A C	10G	Q1018	B C	8E	R1506	A C	3G	R1662	A C	3I
C1021	B C	C2053	B C	3E	C3521	A C	8B	CN3501	A C	10B	Q1501	A C	4I	R1514	A C	3G	R1665	A C	3I
C1041	A C	C2054	A C	3E	C3522	B C	8B	CN3701	A C	10C	Q1602	A C	3I	R1515	A C	3G	R1666	A C	3I
C1042	A C	C2055	A C	6E	C3523	A C	8B	DIODE			Q1603	A C	3I	R1516	A C	3G	R1667	A C	3I
C1043	A C	C2056	A C	6E	C3524	B C	8B	D1001	A C	7H	Q3101	A C	5A	R1517	A C	5H	R1668	A C	3I
C1044	A C	C2057	B C	6F	C3525	A C	8B	D1002	A C	8I	Q3102	A C	5B	R1518	A C	5H	R2009	A C	5F
C1045	A C	C2058	A C	6G	C3531	B C	6B	D1003	A C	9H	Q3111	B C	6B	R1519	A C	5H	R2010	B C	5F
C1047	B C	C2059	A C	6F	C3532	B C	6B	D1501	A C	3H	Q3112	B C	5B	R1520	A C	5H	R2011	A C	5F
C1048	A C	C2060	B C	6F	C3533	B C	6B	D2001	B C	5E	Q3113	A C	5B	R1521	A C	5H	R2012	A C	5F
C1049	A C	C2061	A C	6F	C3534	B C	6C	D2002	B C	4E	Q3114	A C	5B	R1522	A C	5H	R2013	B C	5F
C1050	A C	C2062	A C	6F	C3535	B C	6C	D2003	B C	4E	Q3115	B C	6B	R1523	A C	5H	R2014	B C	5F
C1051	A C	C2101	B C	5G	C3536	B C	6B	D2004	B C	4E	Q3131	A C	6B	R1524	A C	5H	R2015	A C	5F
C1052	B C	C2102	A C	5F	C3537	B C	7B	IC			Q3132	B C	5B	R1525	A C	5H	R2016	B C	5F
C1053	A C	C2103	A C	5F	C3538	B C	7B	IC1001	B C	7I	Q3133	B C	5B	R1526	A C	5I	R2017	B C	6F
C1054	B C	C2104	A C	5F	C3539	B C	7B	IC1002	A C	9J	Q3501	A C	6C	R1527	A C	5H	R2018	A C	5F
C1055	A C	C2105	B C	5G	C3540	B C	7B	IC1003	A C	6I	Q3502	B C	6C	R1528	A C	5I	R2019	A C	5F
C1056	B C	C2106	B C	8E	C3701	B C	8C	IC1004	A C	6I	Q3503	B C	7B	R1531	A C	5I	R2020	B C	5E
C1057	A C	C2107	B C	7E	C3702	B C	8C	IC1005	A C	8H	RESISTOR			R1535	A C	4I	R2021	B C	5E
C1058	B C	C2108	A C	7E	C3703	B C	8C	IC1006	A C	8I	R1002	A C	7H	R1536	A C	4I	R2022	B C	5E
C1059	A C	C2109	A C	7F	C3704	A C	8C	IC1007	A C	8I	R1003	A C	7H	R1537	A C	4I	R2023	B C	5E
C1060	B C	C2110	A C	8F	C3705	B C	8C	IC1008	A C	8I	R1004	A C	7H	R1538	A C	4I	R2027	B C	5E
C1061	A C	C2111	A C	5G	C3706	A C	8C	IC1009	B C	8D	R1005	A C	7H	R1539	A C	4I	R2031	B C	4E
C1062	A C	C2112	A C	5G	C3707	A C	8C	IC1010	B C	7D	R1006	A C	7H	R1540	A C	5H	R2032	B C	4E
C1063	A C	C2113	B C	5F	C3708	B C	8C	IC1011	A C	7D	R1009	A C	7H	R1546	A C	5I	R2033	A C	4G
C1064	B C	C2114	B C	5G	C3709	A C	8C	IC1501	B C	4I	R1010	A C	7H	R1547	A C	4I	R2034	B C	4G
C1065	B C	C2115	B C	5G	C3710	A C	8D	IC1502	A C	3I	R1011	A C	7H	R1552	A C	4J	R2035	A C	4G
C1066	B C	C2116	B C	6E	C3711	A C	8D	IC1601	A C	5H	R1012	A C	7H	R1553	A C	4J	R2036	B C	4G
C1067	B C	C2117	B C	6E	C3712	A C	7D	IC2001	A C	4F	R1013	A C	7H	R1558	A C	3J	R2037	B C	4G
C1068	A C	C2118	B C	6E	C3713	B C	7D	IC2002	B C	5F	R1014	A C	7H	R1560	A C	4J	R2038	A C	4G
C1069	A C	C2119	B C	5F	C3714	A C	8D	IC2003	B C	8E	R1015	A C	7H	R1562	A C	3J	R2039	A C	4G
C1070	A C	C2120	B C	6E	C3715	B C	8D	IC2004	A C	5G	R1018	A C	7H	R1563	A C	3J	R2040	A C	5G
C1071	A C	C3001	B C	5B	C3715	B C	8D	IC2005	B C	6E	R1019	A C	8H	R1564	A C	3J	R2041	B C	4E
C1072	A C	C3002	A C	5B	C3716	B C	8D	IC2006	B C	5G	R1020	A C	8H	R1565	A C	4J	R2042	B C	4E
C1073	A C	C3003	A C	4B	C3717	A C	8D	IC2007	B C	5G	R1021	A C	8H	R1566	A C	4I	R2043	A C	4E
C1074	A C	C3004	A C	5B	C3718	A C	8D	IC3001	B C	4B	R1022	A C	8H	R1567	A C	3I	R2044	A C	4E
C1075	A C	C3005	A C	5B	C3721	B C	9D	IC3101	B C	3B	R1025	A C	8H	R1568	A C	3I	R2047	B C	4E
C1501	A C	C3006	A C	5B	C3722	B C	9D	IC3102	A C	3B	R1026	A C	8H	R1569	A C	3I	R2048	B C	4E
C1502	A C	C3007	A C	5B	C3723	B C	9D	IC3103	B C	3B	R1027	A C	8H	R1570	A C	3H	R2049	A C	5D
C1503	A C	C3008	A C	5B	C3724	B C	9D	IC3151	A C	7B	R1028	A C	8I	R1575	B C	2G	R2050	B C	5E
C1504	A C	C3009	A C	5B	C3725	B C	8D	IC3501	A C	7C	R1029	A C	7H	R1576	B C	3G	R2051	B C	5E
C1505	A C	C3010	A C	4B	C3726	B C	9D	IC3502	B C	8B	R1030	A C	8H	R1577	B C	3G	R2052	B C	5E
C1506	A C	C3011	A C	7B	C3727	B C	8D	IC3701	B C	8D	R1031	A C	8H	R1578	A C	3H	R2053	A C	3E
C1507	A C	C3012	B C	7B	C3728	A C	9D	IC3702	B C	9D	R1032	A C	8I	R1579	A C	2H	R2054	A C	3E
C1508	B C	C3013	A C	4B	C3729	A C	9C	IC4001	A C	4C	R1033	A C	8I	R1580	A C	2H	R2055	A C	3E
C1509	A C	C3014	B C	4A	C3730	A C	9C	IC4002	B C	3C	R1035	A C	8J	R1581	B C	3H	R2056	A C	3E
C1510	A C	C3015	A C	4B	C3731	A C	9D	JACK			R1036	A C	7H	R1582	A C	3H	R2057	A C	3E
C1515	A C	C3016	A C	4B	C3732	B C	8C	J2001	A D	1B	R1037	A C	8I	R1583	A C	3H	R2058	A C	3E
C1516	A C	C3017	A C	4B	C3733	B C	8C	COIL			R1038	A C	8I	R1584	A C	3G	R2059	A C	3E
C1517	A C	C3101	A C	5B	C3734	B C	9C	L1001	A C	6J	R1041	A C	7I	R1585	A C	3G	R2060	A C	3E
C1518	A C	C3102	A C	5B	C3735	B C	9C	L1011	A C	9G	R1043	A C	7I	R1586	A C	3G	R2061	A C	3E
C1521	A C	C3103	A C	5B	C3736	B C	9C	L1012	A C	9F	R1045	A C	7I	R1587	B C	2G	R2062	A C	3E
C1522	A C	C3106	A C	6D	C3737	B C	9C	L1013	A C	8F	R1046	A C	7I	R1588	A C	3H	R2071	B C	4F
C1523	A C	C3107	B C	6C	C3738	B C	9C	L1014	A C	9E	R1047	A C	7I	R1589	A C	2H	R2072	B C	4F
C2001	B C	C3108	A C	6C	C4001	B C	4D	L1015	A C	9E	R1048	A C	7I	R1590	A C	2H	R2073	B C	4F
C2002	B C	C3109	B C	6C	C4002	A C	3D	L1016	A C	6H	R1049	A C	7I	R1591	A C	5G	R2074	B C	4F
C2003	B C	C3111	B C	6A	C4003	B C	4D	L1501	B C	5G	R1050	B C	6I	R1592	A C	5G	R2075	B C	4F
C2005	B C	C3112	A C	6B	C4004	B C	5C	L2001	B C	3D	R1051	A C	7H	R1593	A C	5G	R2084	B C	3E
C2006	B C	C3113	A C	6B	C4005	B C	4C	L2002	B C	3D	R1052	A C	7H	R1594	A C	4J	R2085	B C	3E
C2007	B C	C3114	A C	6B	C4007	A C	6D	L2003	B C	6F	R1053	A C	7H	R1601	B C	9I	R2086	B C	3E
C2008	B C	C3115	A C	6B	C4008	B C	6D	L2004	A C	6E	R1061	A C	9I	R1602	B C	9I	R2087	B C	3F
C2009	B C	C3116	A C	6B	C4009	A C	6C	L2005	B C	6F	R1062	A C	9I	R1603	B C	9I	R2088	B C	3E
C2010	B C	C3117	B C	6B	C4010	B C	6C	L2006	B C	6F	R1063								

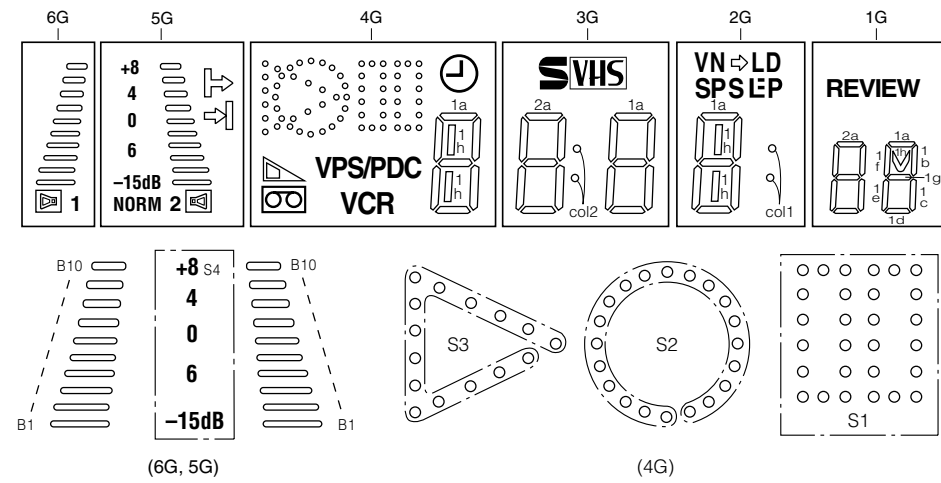
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R4042	B C	4C	TL1042	B C	8I	TL1507	B C	3G	TL1600	B C	6I	TL1693	B C	3H	TL4046	A C	5D
R4043	B C	4C	TL1043	B C	8I	TL1508	B C	3G	TL1601	B C	5J	TL1694	B C	3H	TL4047	A C	5D
R4044	B C	5C	TL1044	B C	8I	TL1509	B C	3G	TL1602	B C	5J	TL1695	B C	2H	TL4048	A C	4D
R4045	B C	5C	TL1045	B C	8I	TL1510	B C	3G	TL1603	B C	6J	TL1696	B C	3H	X1001	A C	8H
R4046	B C	5C	TL1046	B C	8I	TL1511	B C	3G	TL1604	B C	5J	TL1697	B C	3H	X1002	A C	7I
RA1001	A C	8I	TL1047	B C	8I	TL1512	B C	3G	TL1605	B C	5J	TL1698	B C	2H	X2001	A C	6F
RA1002	A C	7I	TL1048	B C	8I	TL1513	B C	3G	TL1606	B C	5J	TL1699	B C	3H	X2003	A C	4E
RA1003	A C	7I	TL1049	B C	8I	TL1514	B C	3G	TL1607	B C	5J	TL1700	B C	3H	X3101	A C	3B
RA1004	A C	7I	TL1050	B C	8I	TL1515	B C	3G	TL1608	B C	5J	TL1701	B C	2H			
RA1005	A C	9I	TL1051	B C	8I	TL1516	B C	3G	TL1609	B C	5J	TL1702	B C	3H			
RA1006	A C	9I	TL1052	B C	8I	TL1517	B C	3G	TL1610	B C	5J	TL1703	B C	3H			
RA1501	A C	4H	TL1053	B C	8I	TL1518	B C	3G	TL1611	B C	5J	TL1704	B C	2H			
RA1502	A C	4H	TL1054	B C	8I	TL1519	B C	4G	TL1612	B C	5J	TL1705	B C	3H			
RA1503	A C	4H	TL1055	B C	8I	TL1520	B C	4G	TL1613	B C	5J	TL1706	B C	3H			
RA1504	A C	4H	TL1056	B C	8I	TL1521	B C	4G	TL1614	B C	5J	TL1707	B C	2H			
RA1505	A C	5J	TL1057	B C	8I	TL1522	B C	4G	TL1615	B C	5J	TL1708	B C	3H			
RA1506	A C	5I	TL1058	B C	8I	TL1523	B C	4G	TL1616	B C	5J	TL1801	A C	3B			
RA1507	B C	6I	TL1059	B C	8I	TL1524	B C	4G	TL1617	B C	5J	TL2002	A C	5F			
RA1508	B C	6I	TL1060	B C	8I	TL1525	B C	4G	TL1618	B C	5J	TL2007	A C	5F			
RA1509	A C	5I	TL1061	B C	8I	TL1526	B C	4G	TL1619	B C	5J	TL2008	A C	5F			
RA1510	A C	4I	TL1062	B C	8I	TL1527	B C	4G	TL1620	B C	5J	TL2009	A C	5F			
RA4001	A C	4B	TL1063	B C	8I	TL1528	B C	4G	TL1621	B C	5J	TL2012	A C	4E			
RA4002	A C	4C	TL1064	B C	8I	TL1529	B C	4G	TL1622	B C	5J	TL2013	A C	5E			
RA4003	B C	4B	TL1065	B C	8J	TL1530	B C	4G	TL1623	B C	4J	TL2014	A C	5E			
RA4004	B C	4C	TL1066	B C	8J	TL1531	B C	4G	TL1624	B C	4J	TL2015	A C	5E			
RA4006	A C	3C	TL1067	B C	8J	TL1532	B C	4G	TL1625	B C	4J	TL2016	A C	5E			
RA4007	A C	3C	TL1068	B C	8J	TL1533	B C	4G	TL1626	B C	4J	TL2017	A C	5E			
RA4008	B C	3C	TL1069	B C	8J	TL1534	B C	4G	TL1627	B C	4J	TL2018	A C	3F			
TEST POINT			TL1070	B C	8J	TL1535	B C	4G	TL1628	B C	4J	TL2021	A C	3F			
TP1001	A C	9I	TL1071	B C	8J	TL1536	B C	4G	TL1629	B C	4J	TL2022	A C	3E			
TP1002	A C	9I	TL1072	B C	8J	TL1537	B C	4G	TL1630	B C	4J	TL2023	A C	3E			
TP1501	A C	2I	TL1073	B C	8J	TL1538	B C	4G	TL1631	B C	4J	TL2024	A C	3E			
TP1503	A C	3I	TL1074	B C	8J	TL1539	B C	4G	TL1632	B C	4J	TL2025	A C	3E			
TP1504	A C	3I	TL1075	B C	8J	TL1540	B C	5G	TL1633	B C	4J	TL2026	A C	3E			
TP1505	A C	3I	TL1076	B C	8J	TL1541	B C	5G	TL1634	B C	4J	TL2027	A C	3E			
TP1507	A C	2J	TL1077	B C	7J	TL1542	B C	5G	TL1635	B C	4J	TL2028	A C	3E			
TP1508	A C	3J	TL1078	B C	7J	TL1543	B C	5G	TL1636	B C	4J	TL2029	A C	3E			
TP1509	A C	3J	TL1079	B C	7J	TL1544	B C	5G	TL1637	B C	4J	TL2041	A C	5F			
TP1510	A C	3J	TL1080	B C	7J	TL1545	B C	5G	TL1638	B C	4J	TL2042	A C	5F			
TP1510	A C	2J	TL1081	B C	7J	TL1546	B C	5G	TL1639	B C	4J	TL2043	A C	3F			
OTHER			TL1082	B C	7J	TL1547	B C	5G	TL1640	B C	4J	TL2044	A C	3F			
K1001	A C	7H	TL1083	B C	7J	TL1548	B C	5G	TL1641	B C	4J	TL2045	A C	3F			
K1011	A C	8G	TL1084	B C	7J	TL1549	B C	5G	TL1642	B C	4J	TL2046	A C	3E			
K1012	B C	7E	TL1085	B C	7J	TL1550	B C	5G	TL1643	B C	4J	TL2047	A C	3E			
K2001	B C	5G	TL1086	B C	7J	TL1551	B C	5G	TL1644	B C	3J	TL2048	A C	3E			
K2002	A C	6E	TL1087	B C	7J	TL1552	B C	5G	TL1645	B C	3J	TL2049	A C	3F			
K3101	B C	3B	TL1088	B C	7J	TL1553	B C	5G	TL1646	B C	3J	TL2050	A C	3F			
LC1002	A C	8G	TL1089	B C	7J	TL1554	B C	5G	TL1647	B C	3J	TL2051	A C	3F			
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TL1005	B C	7H	TL1098	B C	6I	TL1563	B C	5H	TL1656	B C	3J	TL2060	A C	3E			
TL1006	B C	7H	TL1099	B C	6I	TL1564	B C	6H	TL1657	B C	3J	TL2061	A C	3F			
TL1007	B C	7H	TL1100	B C	6I	TL1565	B C	5H	TL1658	B C	3J	TL2062	A C	3E			
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TL1009	B C	7H	TL1102	B C	6I	TL1567	B C	6H	TL1660	B C	3J	TL2064	A C	3F			
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TL1011	B C	7H	TL1104	B C	6I	TL1569	B C	5H	TL1662	B C	2J	TL2066	A C	3F			
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TL1016	B C	7H	TL1109	B C	6I	TL1574	B C	5H	TL1667	B C	3I	TL2071	A C	5E			
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TL1027	B C	8H	TL1120	B C	6I	TL1585	B C	6I	TL1678	B C	3I	TL4022	A C	3D			
TL1028	B C	8H	TL1121	B C	6H	TL1586	B C	5I	TL1679	B C	3I	TL4023	A C	4D			
TL1029	B C	8H	TL1122	B C	6H	TL1587	B C	5I	TL1680	B C	2I	TL4024	A C	4D			
TL1030	B C	8H	TL1123	B C	6H	TL1588	B C	6I	TL1681	B C	3I	TL4025	A C	4D			
TL1031	B C	8H	TL1124	B C	6H	TL1589	B C	5I	TL1682	B C	3I	TL4031	A C	5C			
TL1032	B C	8H	TL1125	B C	6H	TL1590	B C	5I	TL1683	B C	2I	TL4032	A C	5C			
TL1033	B C	8H	TL1126	B C	6H	TL1591	B C	6I	TL1684	B C	3I	TL4033	A C	5C			
TL1034	B C	8H	TL1127	B C	6H	TL1592	B C	5I	TL1685	B C	3I	TL4034	A C	5D			
TL1035	B C	8H	TL1128	B C	6H	TL1593	B C	5I	TL1686	B C	2I	TL4035	A C	5D			
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TL1038	B C	8H	TL1503	B C	3G	TL1596	B C	5I	TL1689	B C	2I	TL4042	A C	5D			
TL1039	B C	8H	TL1504	B C	3G	TL1597	B C	6I	TL1690	B C	3H	TL4043	A C	5D			
TL1040	B C	8H	TL15														

— COMPONENT SIDE (A) —

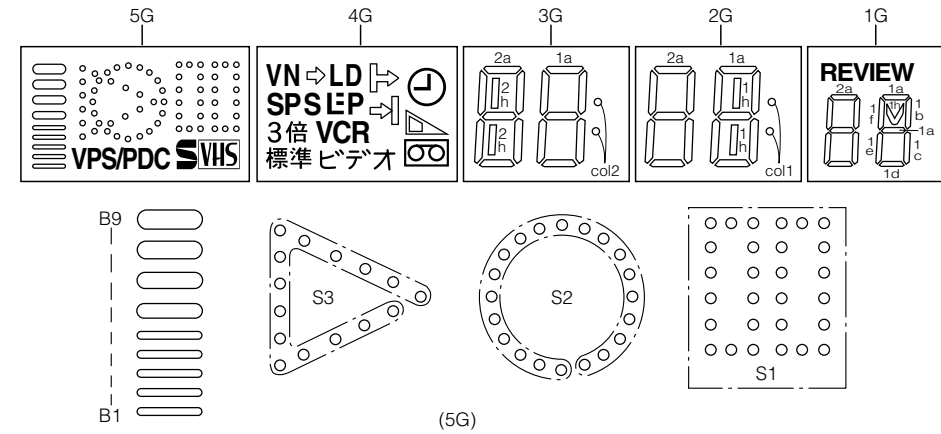


4.32 FDP GRID ASSIGNMENT AND ANODE CONNECTION

[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		LP _(SEP)	REVIEW

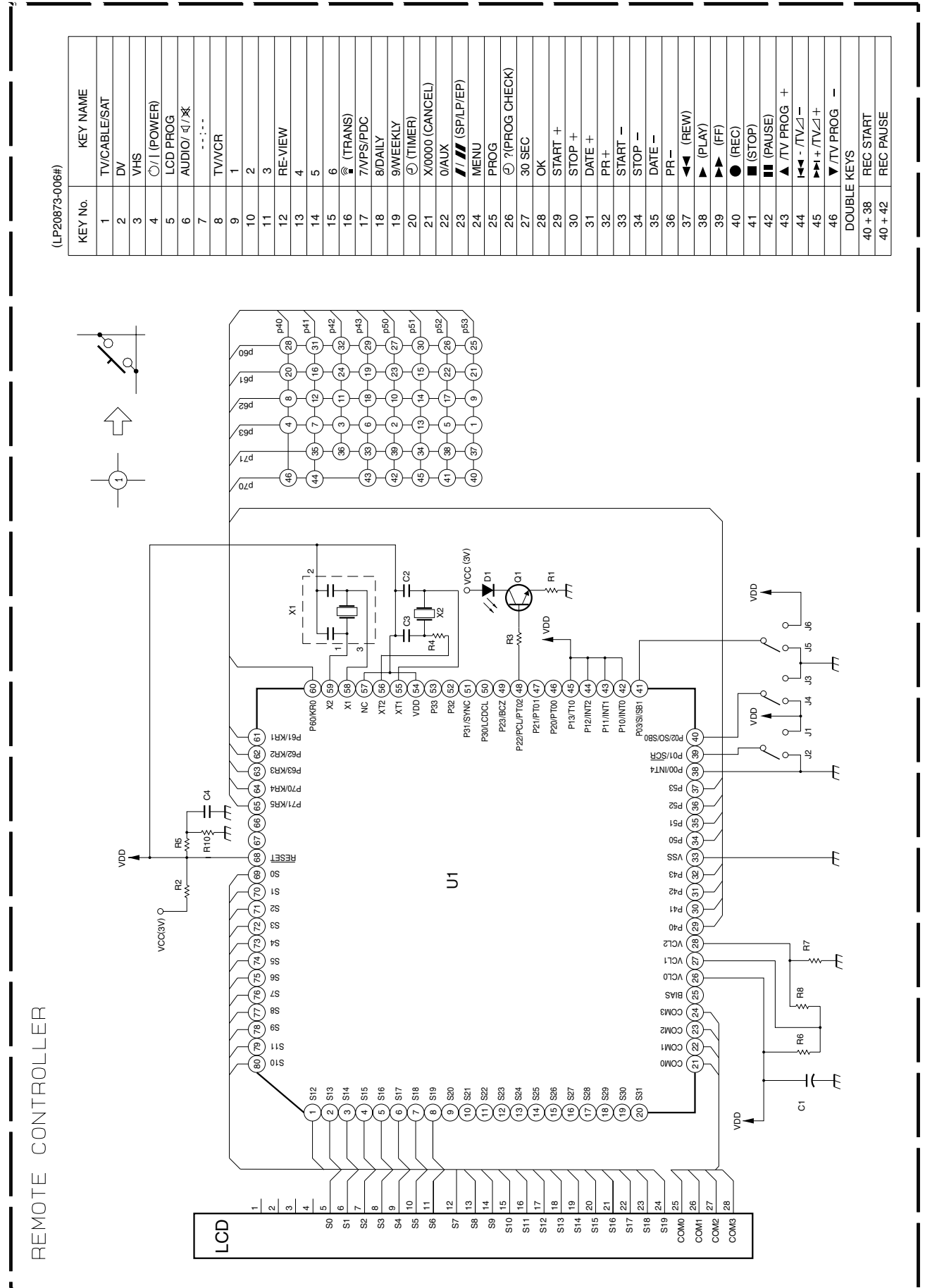
ANODE CONNECTION

[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			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

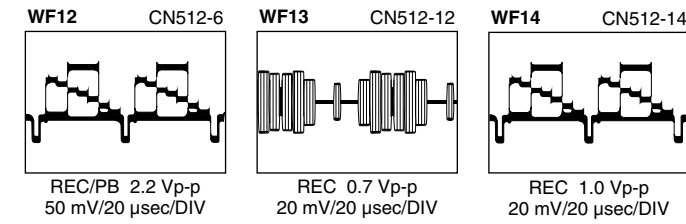
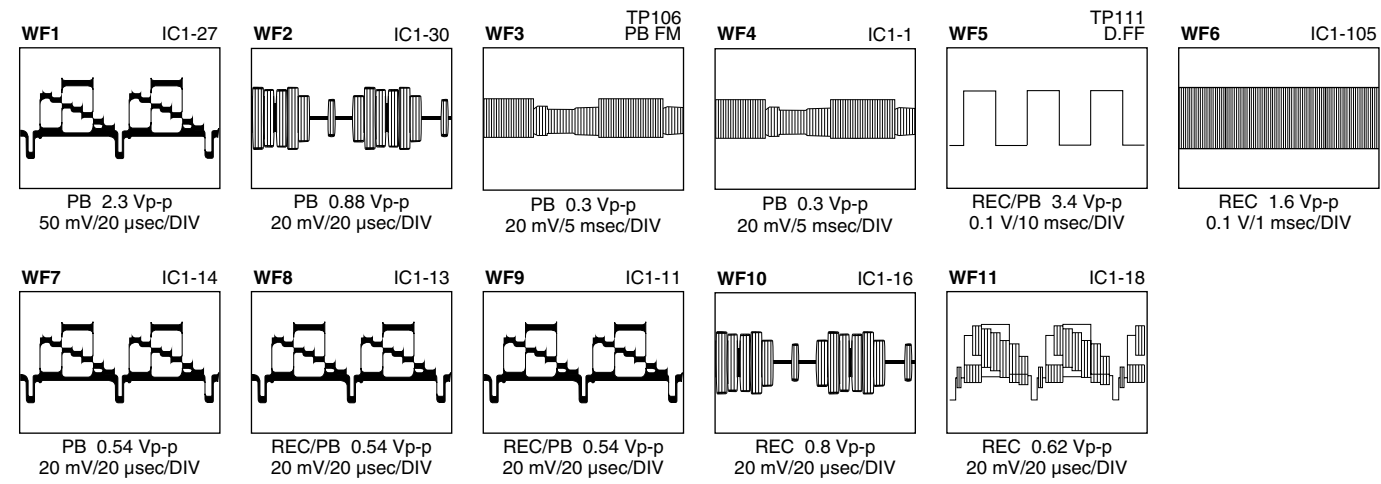
4.33 REMOTE CONTROL SCHEMATIC DIAGRAM

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.

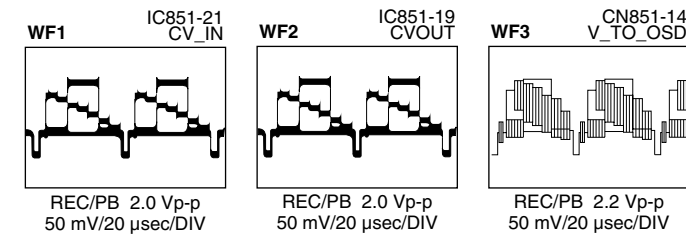


4.34 WAVEFORMS

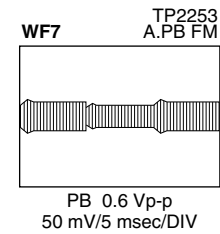
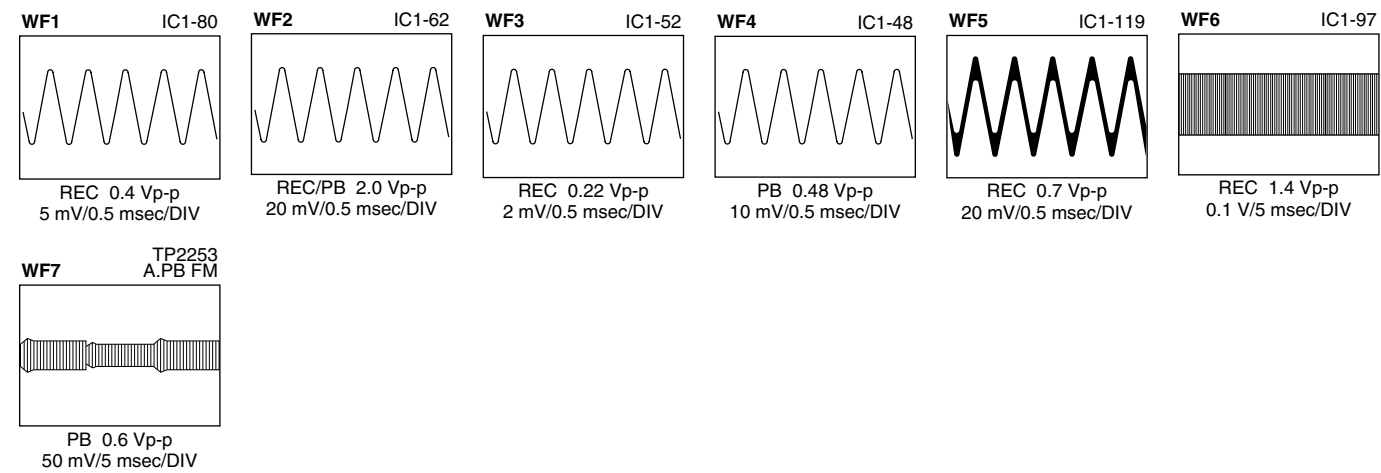
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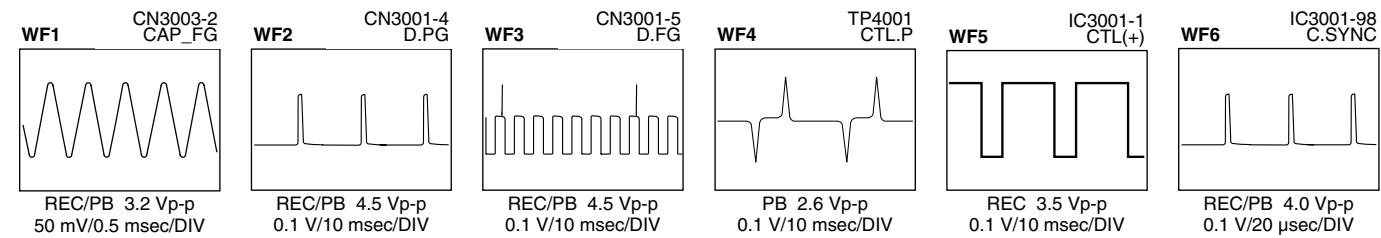
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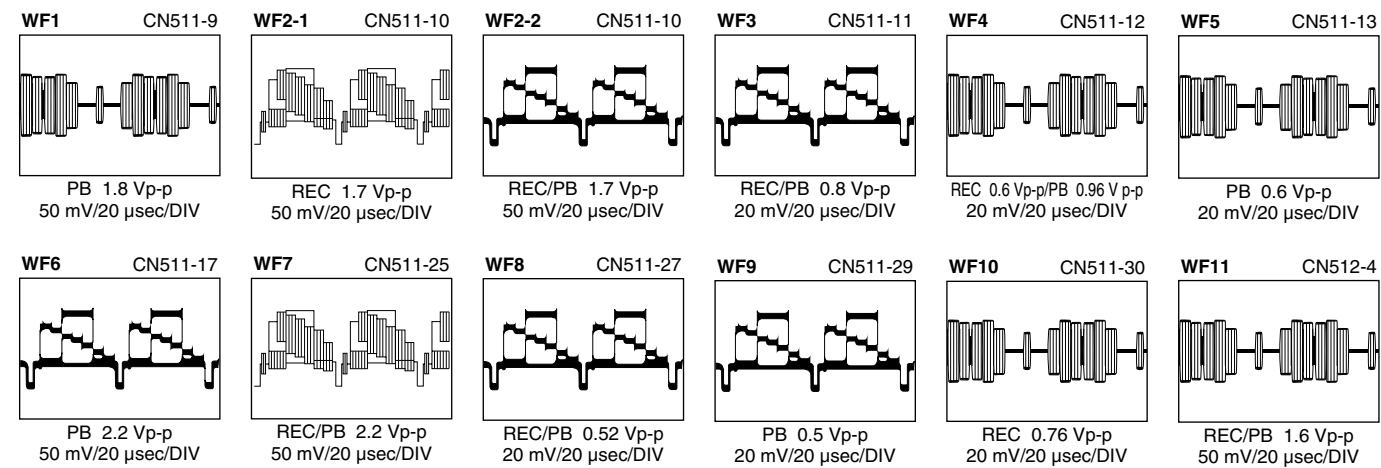
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< SYSCON >



< S-SUB >



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78	0	0
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80	0	0
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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
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104	3.1	3.1
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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	0.2	0.2
IC1002		
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2	0.5	0.5
3	3.1	3.1
4	0	0
5	0	0
6	2.6	2.6
7	3.1	3.1
8	3.1	3.1
IC1005		
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4	0	0
IC1006		
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3	2.6	2.6
4	0	0
5	3.1	3.1
6	0.5	0.5
7	0.4	0.4
8	3.1	3.1
IC1007		
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IC1008		
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8	3.1	3.1
IC1009		
1	3.1	3.1
2	0	0
3	0	0

MODE PIN NO.	REC	PLAY
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	3.1	3.1
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
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

MODE PIN NO.	REC	PLAY
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	3.1
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
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

MODE PIN NO.	REC	PLAY
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
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	3.1	3.1
9	3.1	3.1
10	0	0
11	0	0
12	3.1	3.1
13	3.1	3.1
14	0	0
15	0	0
16	3.1	3.1
17	1.6	1.6
18	1.6	1.6

MODE PIN NO.	REC	PLAY
19	2.8	2.8
20	0	0
CN1502		
1	0	0
2	3.1	3.1
3	0	0
4	1.2	1.2
5	-	-
6	3.1	3.1
7	1.2	1.2
8	-	-
9	3.1	3.1
10	3.1	3.1
11	0	0
12	0	0
13	3.1	3.1
14	0	0
15	0	0
<DV MAIN>		
MODE PIN NO.	REC	PLAY
IC2001		
1	-	-
IC2002		
1	0	0.4
2	0	0.4
3	0	0
4	1.4	1.4
5	0.1	0
6	3.1	0
7	0	0
8	2.9	2.9
IC2003		
1	3.1	3.1
2	0	0
3	1.2	1.2
4	2.5	2.5
5	3.1	3.1
IC2004		
1	5.1	5.1
2	0	0
3	1.2	1.2
4	2.9	2.9
5	5.1	5.1
IC2007		
1	3.1	3.1
2	0.9	0.9
3	0	0
4	0	0
5	0	0
6	1.4	1.4
7	2.4	2.4
8	3.1	3.1
CN2001		
1	0	0
2	3.1	0
3	3.1	0
4	0	3.1
5	1.5	1.5
6	0	3.1
7	2.4	2.4
8	3.1	3.1
<DV I/O>		
MODE PIN NO.	REC	PLAY
IC3001		
1	0	0

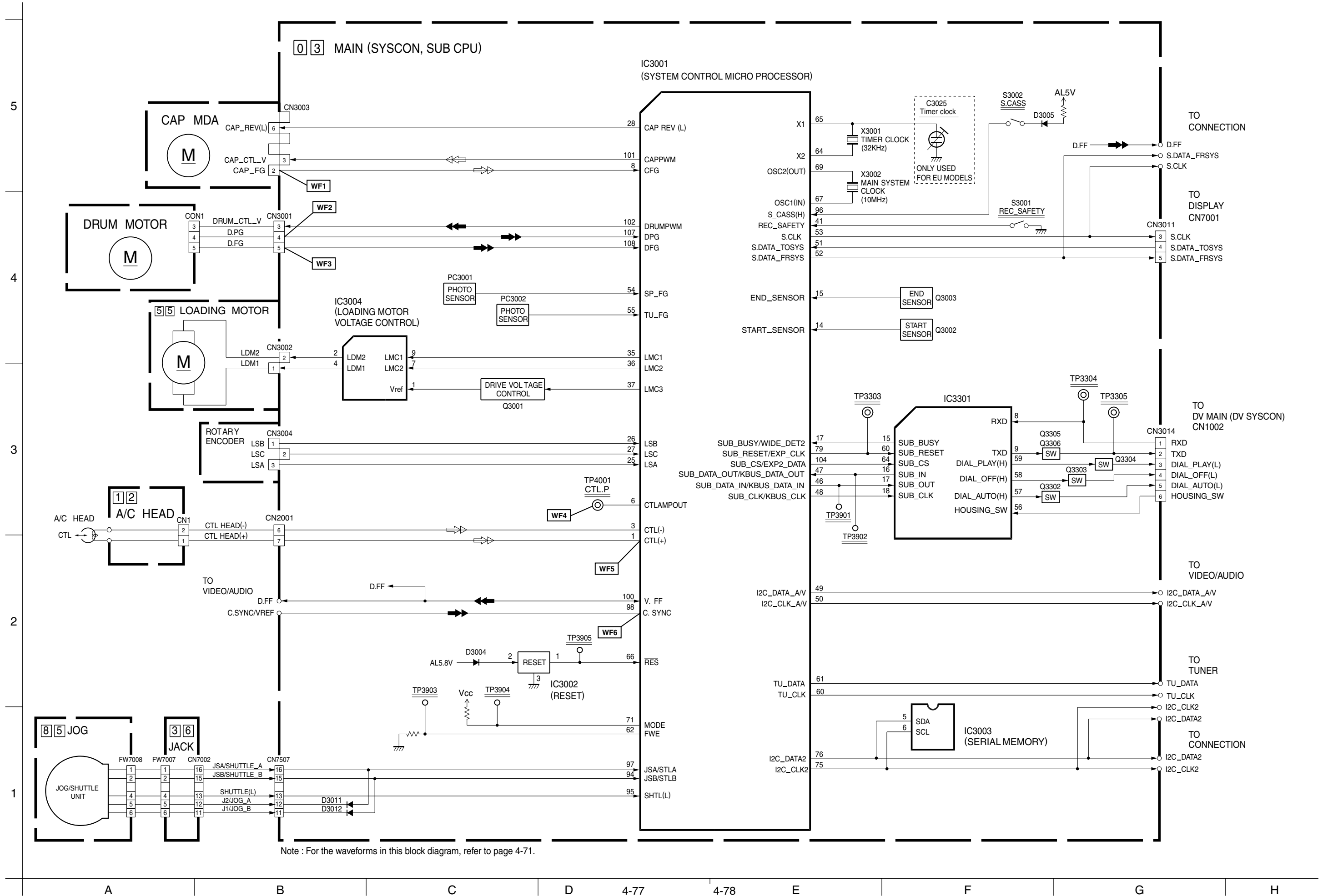
4.36 CPU PIN FUNCTION

<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	-	CTLBIAS 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	PAUSE	IN	PAUSE CONTROL
14	START_SENSOR	IN	START SENSOR
15	END_SENSOR	IN	END SENSOR
16	TU_SYNC	-	NC
17	SUB_BUSY/WIDE_DET2	IN	SERIAL TRANSMISSION SIGNAL FOR SUB CPU/NC
18	RF_AGC_LED	IN	CHANGES IN AT&S-IC OUTPUT AS CAUSED BY CHANGES IN RECEIVER SENSITIVITY WHEN THE SAME CHANNEL IS RECEIVED MORE THAN ONCE ARE INPUT. NC
19	SCR_ID(H)/WIDE_DET	IN	SCRAMBLE CONTROL INPUT (SCRAMBLE:H)/NC
20	BS_ANT/AFC	IN	NC/TUNING CLOCK
21	VIDEO_ENV	IN	AUTO TRACKING DETECT/INPUT THE AVERAGE OF PLAYBACK VIDEO SIGNAL
22	A.ENV/ND(L)	IN	AUDIO PB FM ENV.INPUT/NON HIFI 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)	IN	TUNING PLL LOCK DETECT:L
31	P50_IN	IN	CONTROL SIGNAL FOR TV LINK
32	ET_PB(H)/AGC_CTL	IN	NC
33	FRONT(H)/EXP1_DATA	OUT	FRONT INPUT:H/NC
34	P50_OUT/M_PULSE	OUT	CONTROL SIGNAL FOR TV LINK/NC
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/ANT_CTL(H)	OUT	REMOTE CONTROL OUTPUT FOR SATELLITE RECEIVER/NC
45	VCC	-	SYSTEM POWER
46	SUB_DATA_IN/KBUS_DATA_IN	IN/OUT	SERIAL DATA TRANSFER INPUT FOR SUB CPU/NC
47	SUB_DATA_OUT/KBUS_DATA_OUT	IN/OUT	SERIAL DATA TRANSFER OUTPUT FOR SUB CPU/NC
48	SUB_CLK/KBUS_CLK	OUT	SERIAL DATA TRANSFER CLOCK FOR SUB CPU/NC
49	I2C_DATA_AV	IN/OUT	SERIAL DATA TRANSFER OUTPUT FOR THE VIDEO/AUDIO IC
50	I2C_CLK_AV	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/EDS(H)/SECAM	-	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	SP_CONV/BS/KBUS_REQ	IN	AUDIO INPUT SWITCHING FOR DV
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	DV_A.MUTE/FF/REW(L)	OUT	DV AUDIO MUTE CONTROL (MUTE:H)/NC/NC
78	DV_P.MUTE(H)	OUT	DV PICTURE MUTE CONTROL (MUTE:H)
79	SUB_RESET/EXP_CLK	OUT	SUB CPU RESET/NC
80	V.PCTL	OUT	V.PULSE CONTROL, V COMPENSATION DURING SPECIAL PLAYBACK
81	EDS_CS/PAL.PB(H)	OUT	NC/PLAYBACK MODE FOR PAL:H
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)/VHS(H)	OUT	FLYING ERASE ON:H/NC
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	B.BACK(H)/P.SAVE(L)	OUT	BLUE BACK MODE:H/NC
91	OSD_CS	OUT	CHIP SELECT FOR THE ON-SCREEN IC
92	SYNC_DET(H)	IN	DETECTION OF VIDEO SYNC SIGNAL (DETECTED:H)
93	BS_P.CTL(H)/MESECAM(H)	OUT	NC/MESECAM:H
94	JSB/STLB/S1_DC	IN	INPUT FOR THE JOG SHUTTLE/NC
95	SHTL(L)/JOGA	IN	INPUT FOR THE JOG SHUTTLE
96	S_CASS(H)	IN	DETECTION SIGNAL FOR S VHS CASSETTE(S VHS:H)
97	JSA/STLA	IN	INPUT FOR THE JOG SHUTTLE
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_OSD_ON/V_UP(H)	OUT	OSD IC CONTROL FOR MULTI DUBBING DISPLAY MODE:H/NC
104	SUB_CS/EXP2_DATA	OUT	TRANSMISSION START SIGNAL TO SUB CPU/NC
105	SP(H)	-	NC
106	P.MUTE(L)	OUT	PICTURE CONTROL (MUTE:L)
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

4.37 SYSTEM CONTROL BLOCK DIAGRAM (VHS)



4.38 VIDEO BLOCK DIAGRAM (VHS)

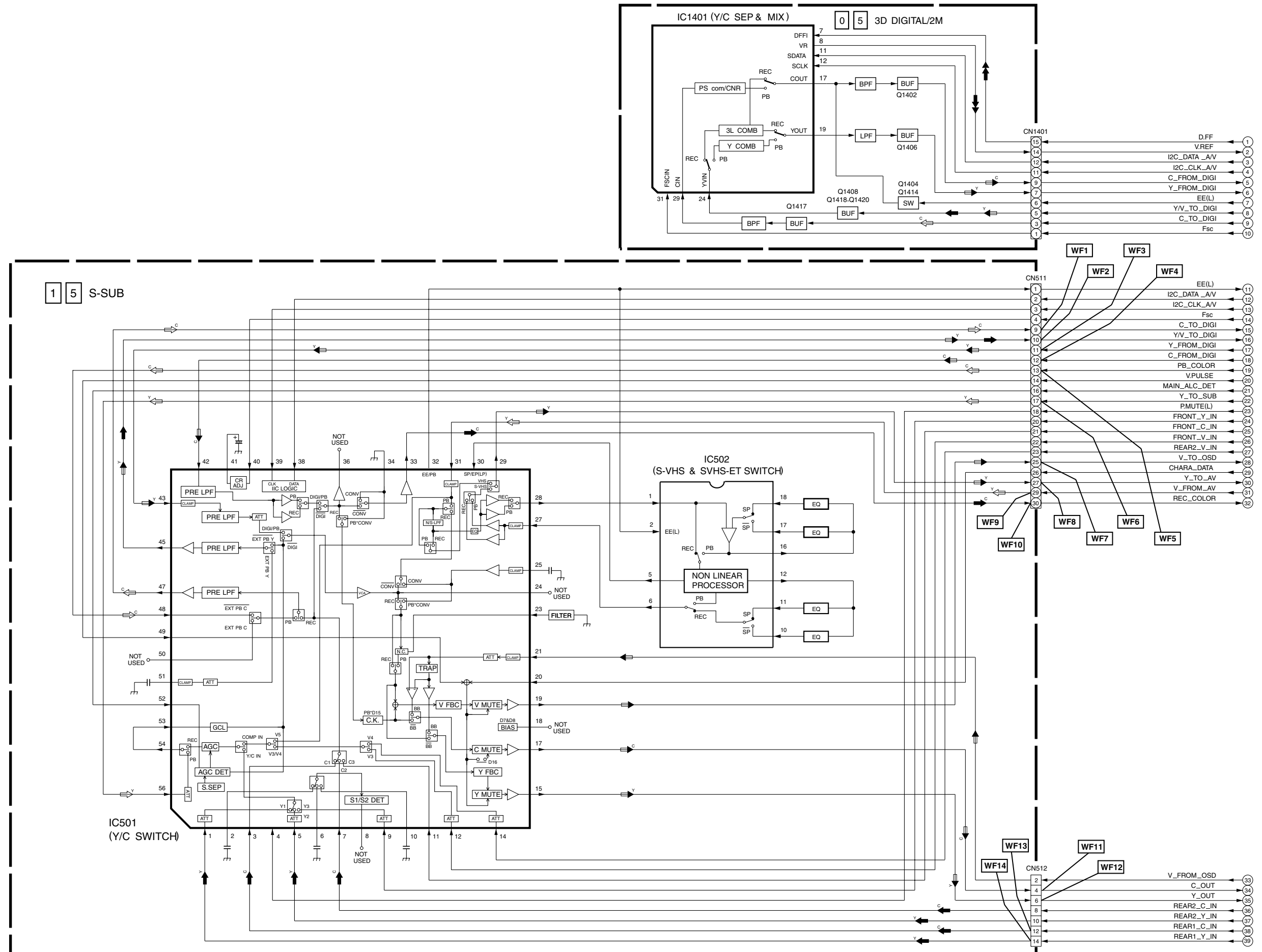
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4

3

2

1



Note : For the waveforms in this block diagram, refer to page 4-71.

A

B

C

D 4-79

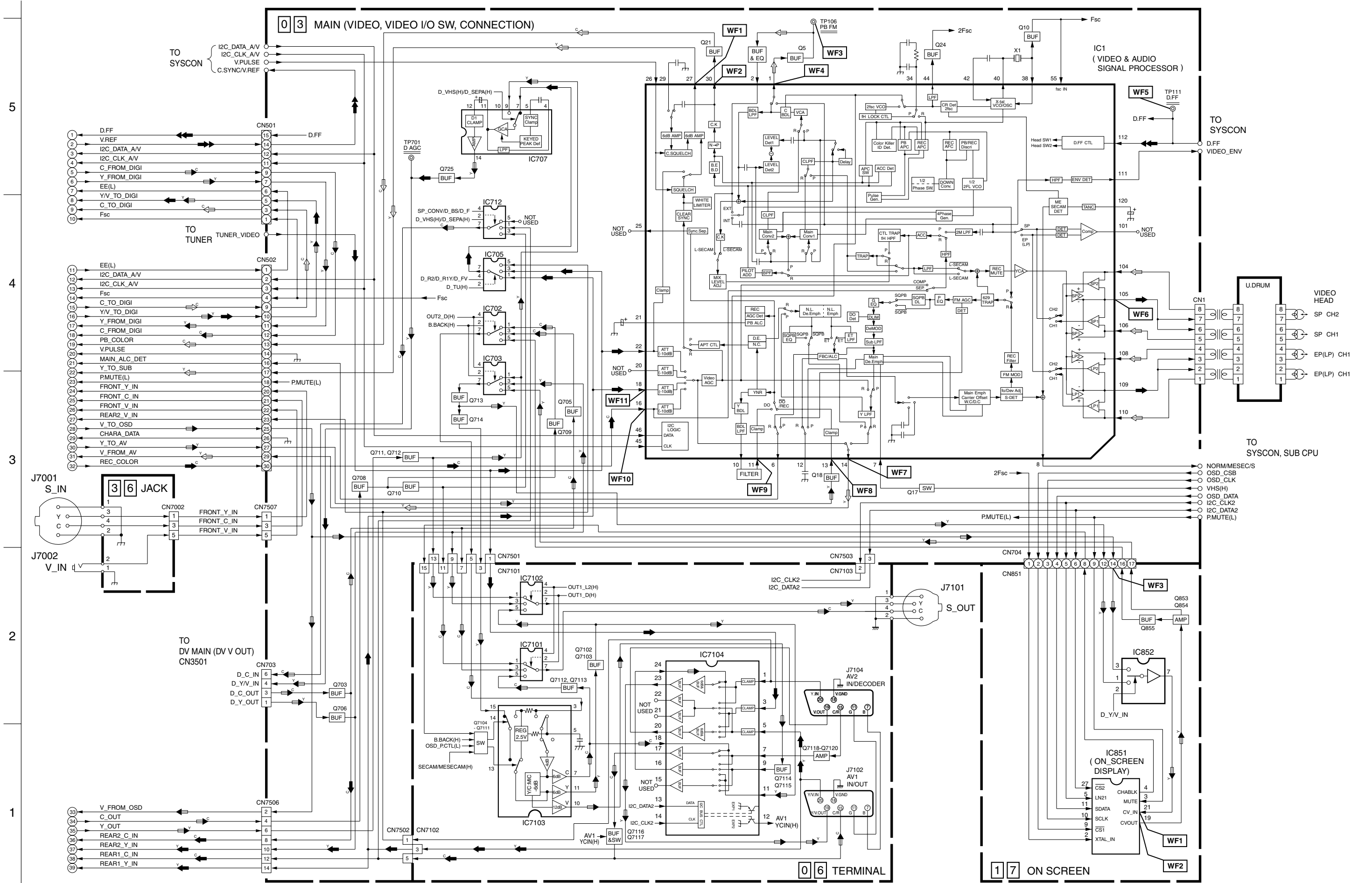
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E

F

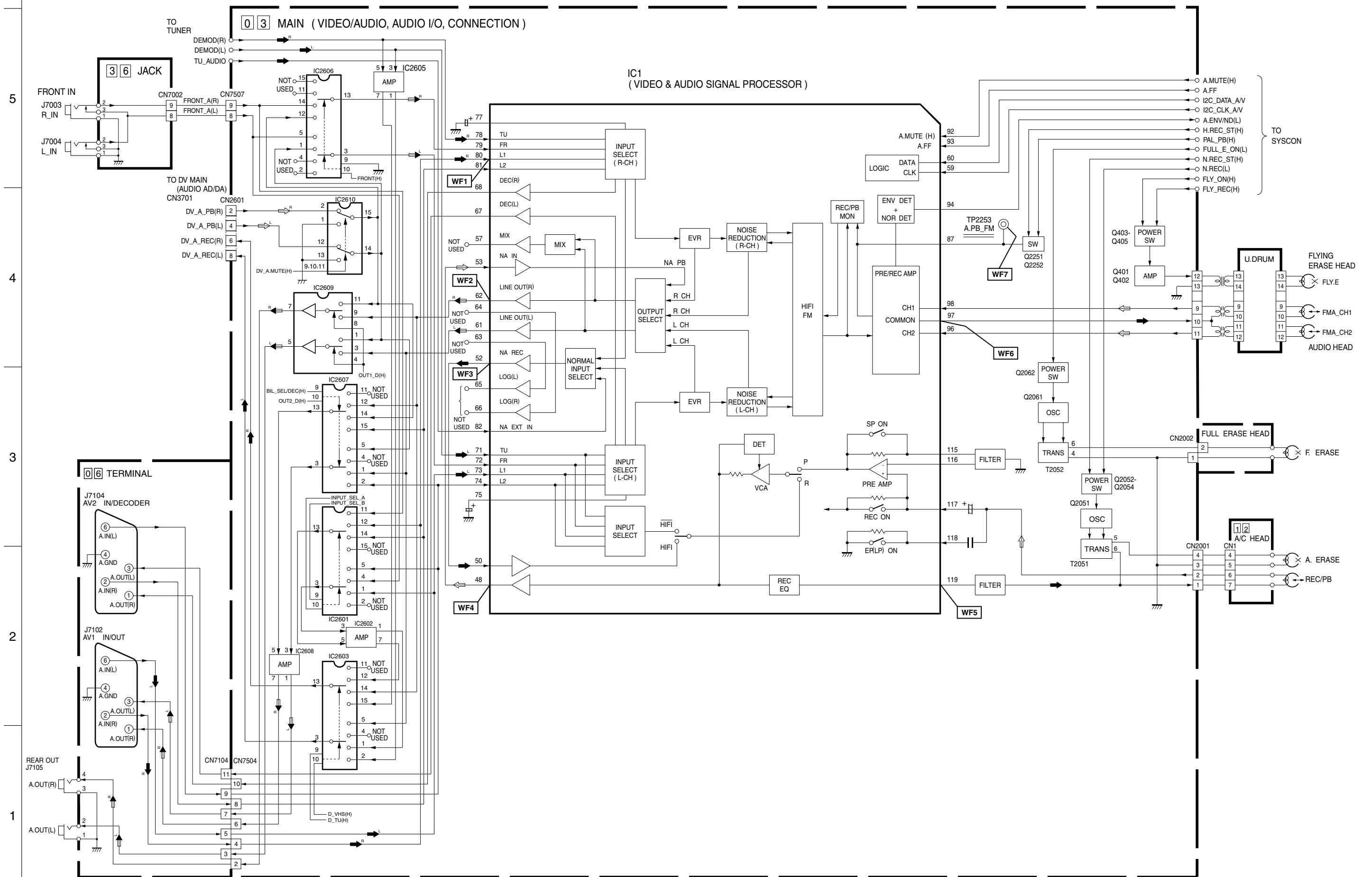
G

H



Note : For the waveforms in this block diagram, refer to page 4-71.

4.39 AUDIO BLOCK DIAGRAM (VHS)



Note : For the waveforms in this block diagram, refer to page 4-71.

A

B

C

D 4-83

4-84

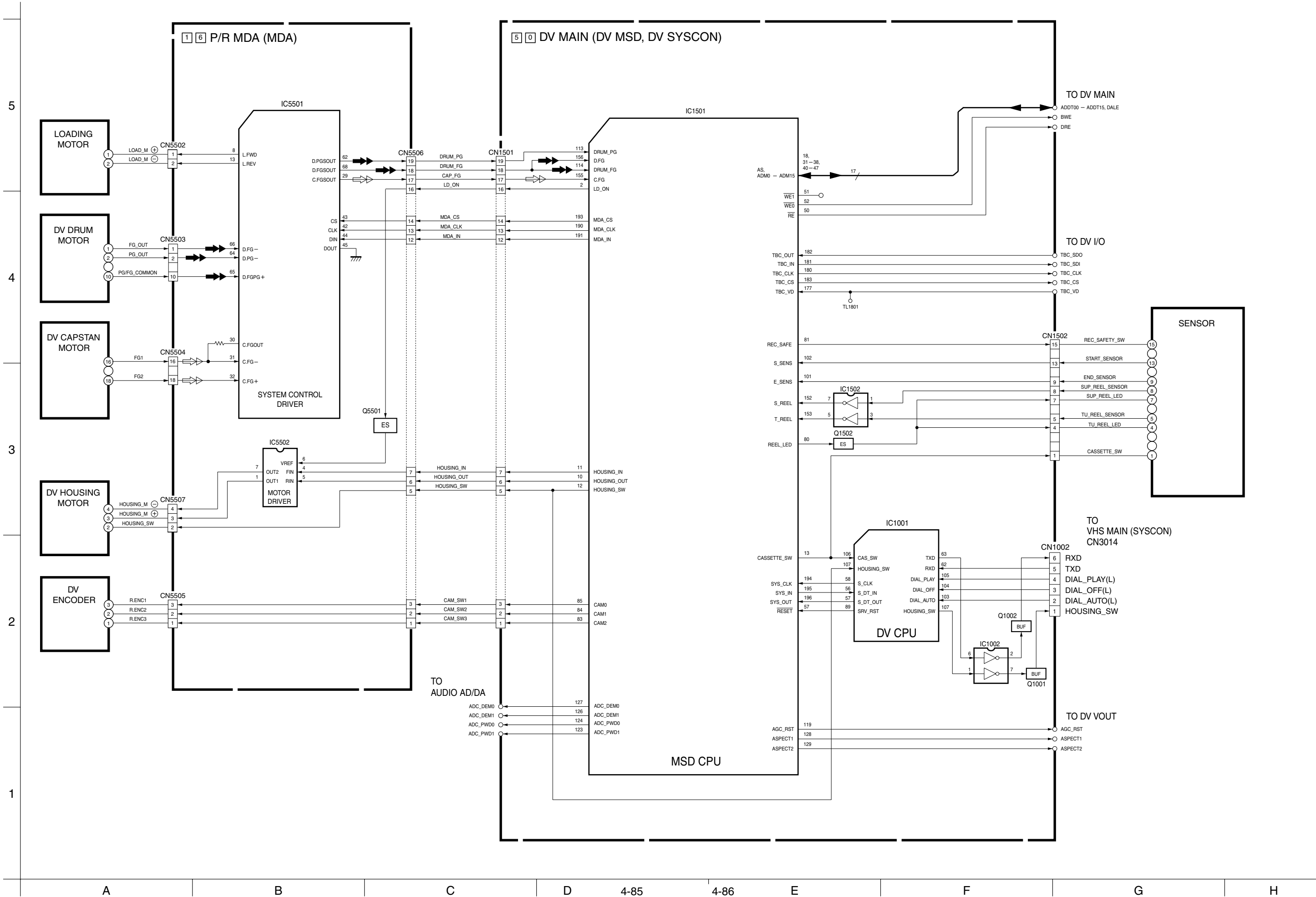
E

F

G

H

4.40 SYSTEM CONTROL BLOCK DIAGRAM (DV)



4.41 VIDEO BLOCK DIAGRAM(DV)

