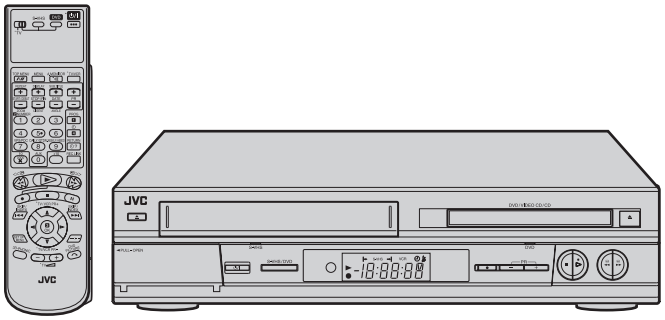
JVC

SCHEMATIC DIAGRAMS

DVD PLAYER & VIDEO CASSETTE RECORDER

HR-XVS20AA,HR-XVS20AG

CD-ROM No.SML200307



For disassembling and assembling of MECHANISM ASSEMBLY, refer to the SERVICE MANUAL No.86700 (MECHANISM ASSEMBLY).

SPECIFICATION *(The specifications shown pertain specifically to the model HR-XVS20AA)*

GENERAL

Power requirement	AC 110 V - 240 V~, 50 Hz/60 Hz
Power consumption	
Power on	28 W
Power off	5.0 W
Temperature	
Operating	5°C to 40°C
Storage	-20°C to 60°C
Operating position	Horizontal only
Dimensions (W x H x D)	435 mm x 98 mm x 357 mm
Weight	4.8 kg
Format	S-VHS/VHS standard
Maximum recording time	
(SP)	240 min. with E-240 video cassette (PAL/MESECAM) 160 min. with T-160 video cassette (NTSC)
(LP)	480 min. with E-240 video cassette (PAL/MESECAM)
(EP)	480 min. with T-160 video cassette (NTSC)

VIDEO/AUDIO (S-VHS deck)

Signal system	PAL-type colour signal and CCIR monochrome signal, 625 lines 50 fields NTSC colour and EIA monochrome signal, 525 lines/60 fields
Recording system	DA4 (Double Azimuth) head helical scan system
Signal-to-noise ratio	45 dB
Horizontal resolution	250 lines (PAL/MESECAM) 220 lines (NTSC)
Frequency range	
	70 Hz to 10,000 Hz (Normal audio) 20 Hz to 20,000 Hz (Hi-Fi audio)
Input/Output	RCA connectors: IN x 2, OUT x 1 S-Video connector: IN x 2, OUT x 1

VIDEO/AUDIO (DVD deck)

Signal system	PAL
Applicable disc	DVD (12 cm, 8 cm) CD (12 cm, 8 cm)
Audio characteristics	DVD (4 Hz-22 KHz)
Frequency responce	CD (4 Hz-20 KHz)
S/N Ratio	90 dB
Harmonic distortion	0.1%
Wow and flutter	Below Measurable Level
Dynamic range	90 dB
Output	
Component-Y	(RCA) 1.0 Vp-p/75 ohm
Component-PB/PR	(RCA) 0.7 Vp-p/75 ohm
Audio	(RCA) 2Vrms, 1 Kohm
Digital Audio	0.5Vp-p/75 ohm
Pickup	
CD	
Wavelength	775-805 nm
Maximum output power	0.5 mW
DVD	
Wavelength	640-660 nm
Maximum output power	1.0 mW

TUNER/TIMER (S-VHS deck)

TV channel storage capacity	99 positions (+AUX position)
Tuning system	Frequency synthesized tuner
Channel coverage	
VHF	(low) 42 MHz - 175 MHz (high) 175MHz - 470 MHz
UHF	470 MHz - 870 MHz
Aerial output	UHF channels E28 - E60 (Adjustable)
Memory backup time	Approx. 10 min.

ACCESSORIES

Provided accessories : RF cable, S-Video cable, Infrared remote control unit, “R6” battery x 2

Specifications shown are for SP mode unless otherwise specified.
E.& O.E. Design and specifications subject to change without notice.

HR-XVS20AA,HR-XVS20AG D2SP11

No.82973SCH
2003/6

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: 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).

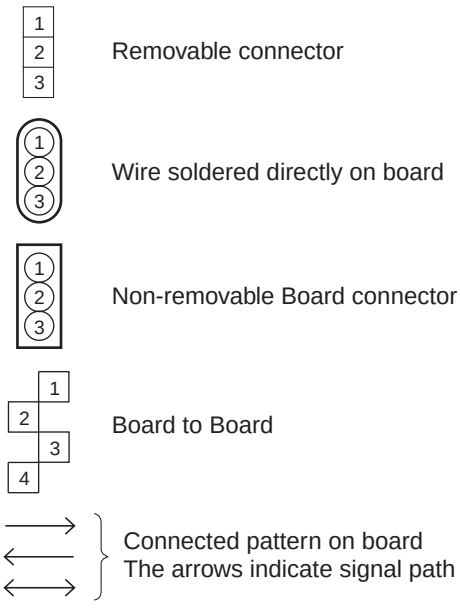
Note: The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.

2. Indications of control voltage

AUX : Active at high.

$\overline{\text{AUX}}$ or AUX(L) : Active at low.

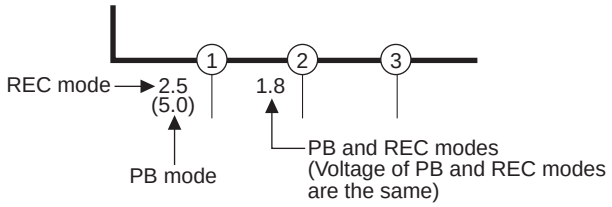
3. Interpreting Connector indications



Note: For the destination of each signal and further line connections that are cut off from the diagram, refer to "BOARD INTERCONNECTIONS"

4. Voltage measurement

1) Regulator (DC/DC CONV) circuits
   REC : Colour bar signal.
   PB : Alignment tape (Colour bar).
   — : Unmeasurable or unnecessary to measure.
4) Indication on schematic diagram
   Voltage Indications for REC and PB mode on the schematic diagram are as shown below.

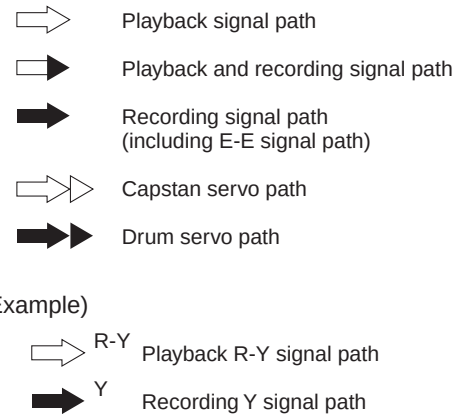


Note: If the voltages are not indicated on the schematic diagram, refer to the voltage charts.

5. Signal path Symbols

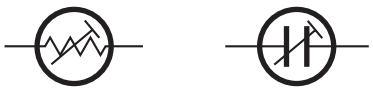
The arrows indicate the signal path as follows.

NOTE : The arrow is DVC unique object.



6. Indication of the parts for adjustments

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



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

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

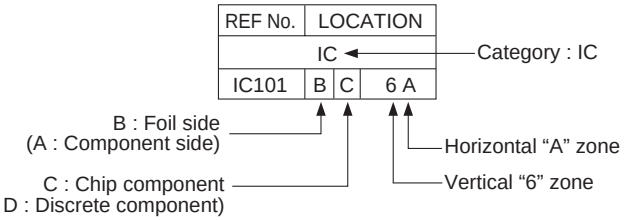
CIRCUIT BOARD NOTES

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.

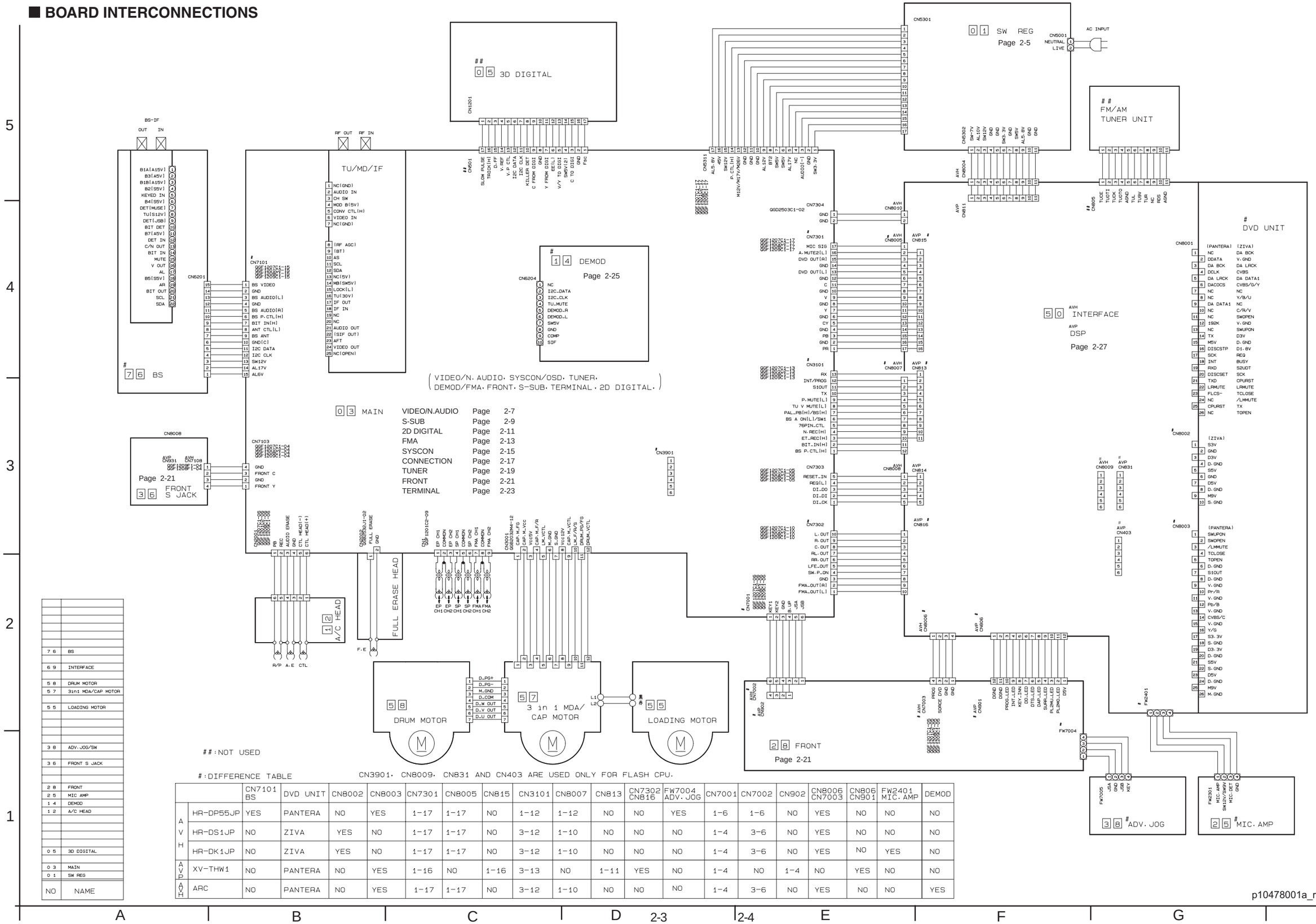
2. Parts location guides

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).

■ BOARD INTERCONNECTIONS



		CN7101 BS	DVD UNIT	CN8002	CN8003	CN7301	CN8005	CN815	CN3101	CN8007	CN813	CN7302 CN816	FW7004 ADV.JOG	CN7001	CN7002	CN902	CN8006 CN7003	CN806 CN901	FW2401 MIC.AMP	DEMOD
AVH	HR-DP55JP	YES	PANTERA	NO	YES	1-17	1-17	NO	1-12	1-12	NO	NO	YES	1-6	1-6	NO	YES	NO	NO	NO
AVH	HR-DS1JP	NO	ZIVA	YES	NO	1-17	1-17	NO	3-12	1-10	NO	NO	NO	1-4	3-6	NO	YES	NO	NO	NO
AVH	HR-DK1JP	NO	ZIVA	YES	NO	1-17	1-17	NO	3-12	1-10	NO	NO	NO	1-4	3-6	NO	YES	NO	YES	NO
AVP	XV-THW1	NO	PANTERA	NO	YES	1-16	NO	1-16	3-13	NO	1-11	YES	NO	1-4	NO	1-4	NO	YES	NO	NO
AVH	ARC	NO	PANTERA	NO	YES	1-17	1-17	NO	3-12	1-10	NO	NO	NO	1-4	3-6	NO	YES	NO	NO	YES

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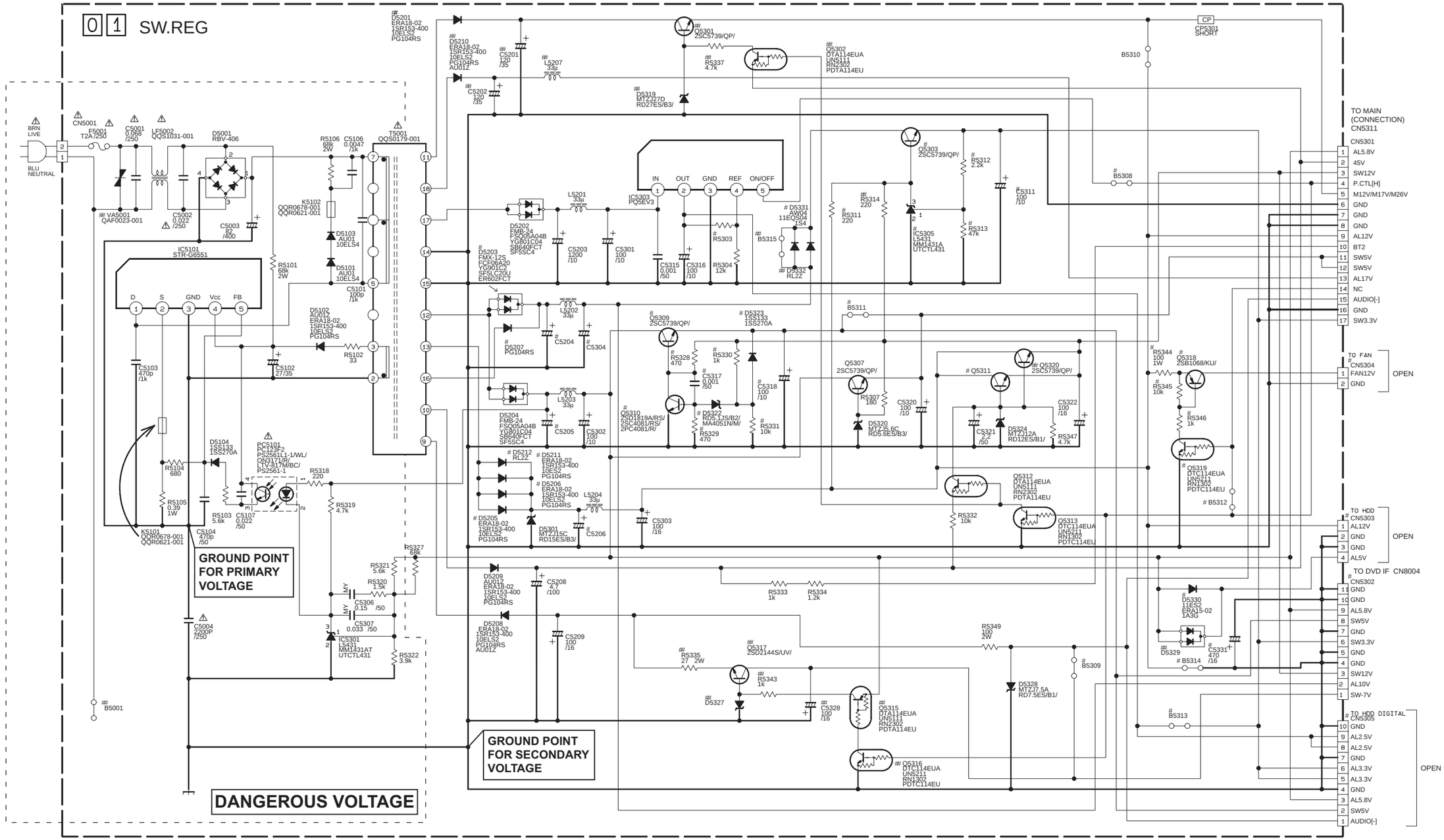
■ SWITCHING REGULATOR SCHEMATIC DIAGRAM



##MARK ELEMENTS ARE NOT MOUNTED
#DIFFERENCE TABLE 1

	HDD D5203 D5330 CN5303 CN5305	DVD D5207 CN5302	FAN Q5318 Q5319 R5344 R5345 R5346 CN5304 B5312	B5308	AL3.3V IC5305 Q5303 R5311 R5312 R4313 C2311 D5331	B5314 C5331	R5303	C5204	C5205	C5206	C5304	CN5301	B5309	B5313	SW5V Q5309 R5330 Q5310 R5331 Q5322 C5317 Q5323 R5318 R5328 R5329	B5311	D5212	D5205 D5206 D5211	Q5311	D5331
HDS4	YES	NO	YES	NO	YES	YES	13k	1000/10	1500/10	680/16	100/10	1-15	NO	NO	NO	YES	YES	NO	2SD2144S/UV/	YES
XVS20	NO	YES	NO	YES	NO	NO	22k	1000/16	1200/10	1000/16	100/16	1-17	YES	YES	YES	NO	NO	YES	2SD1856/QR/	NO

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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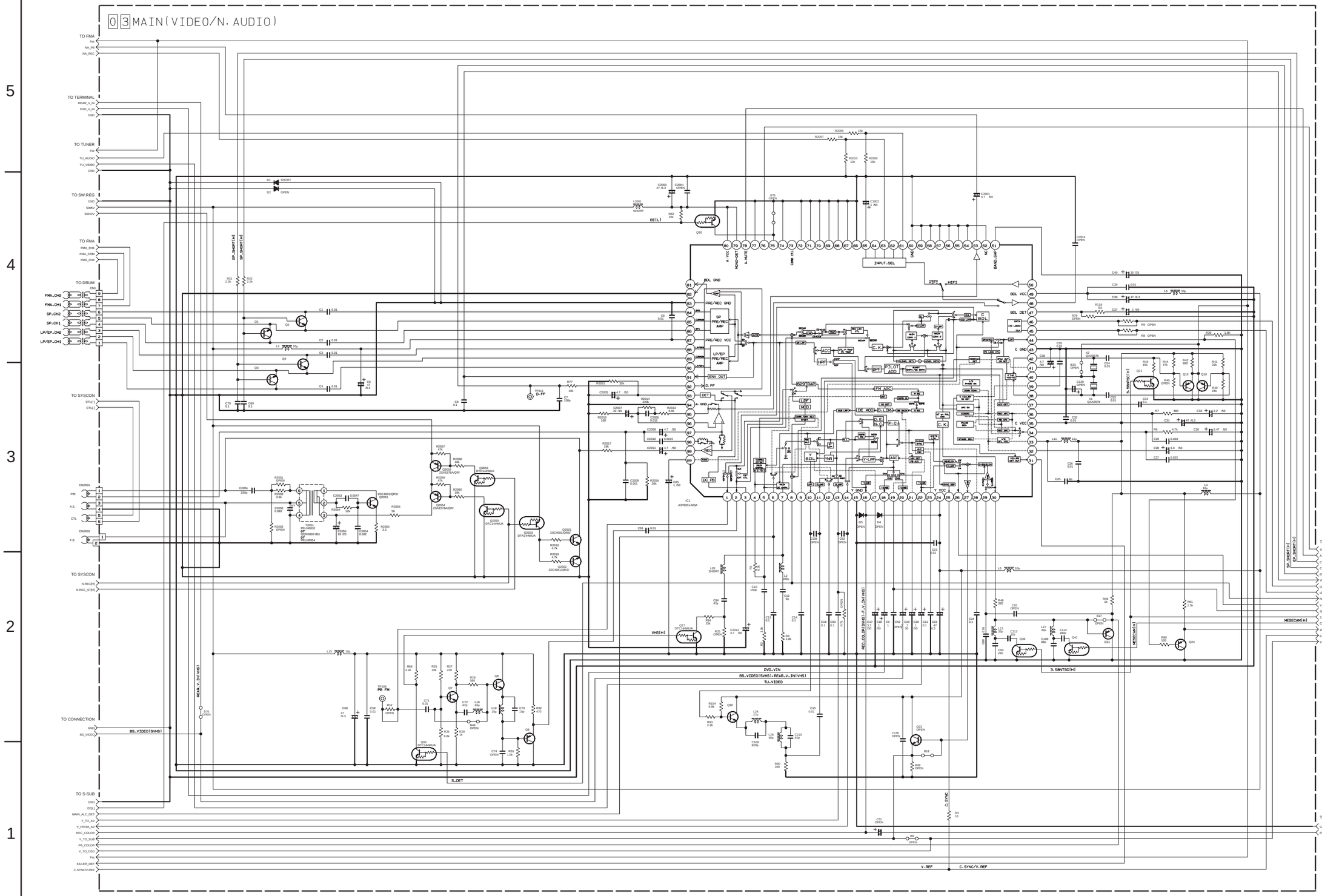
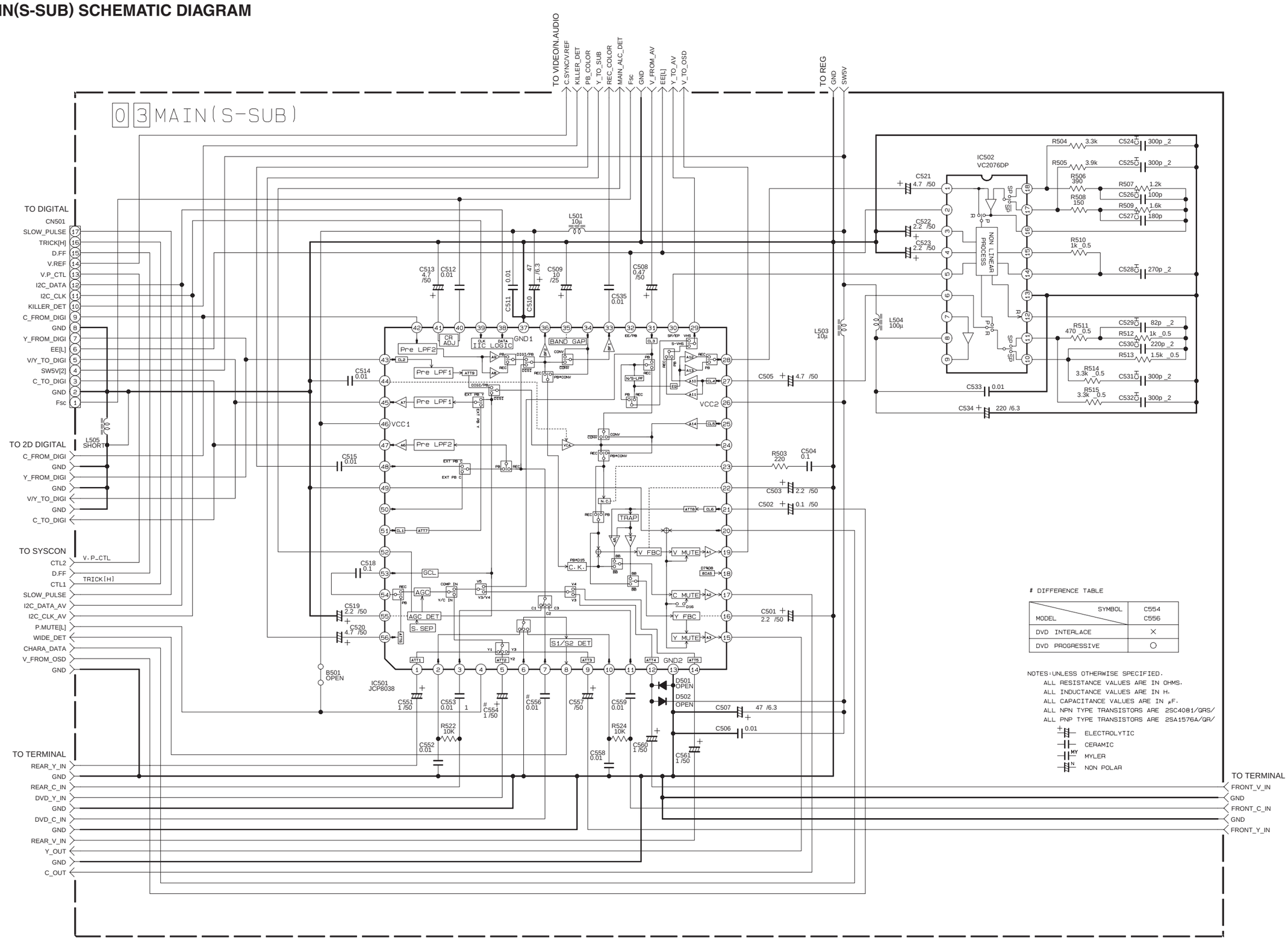
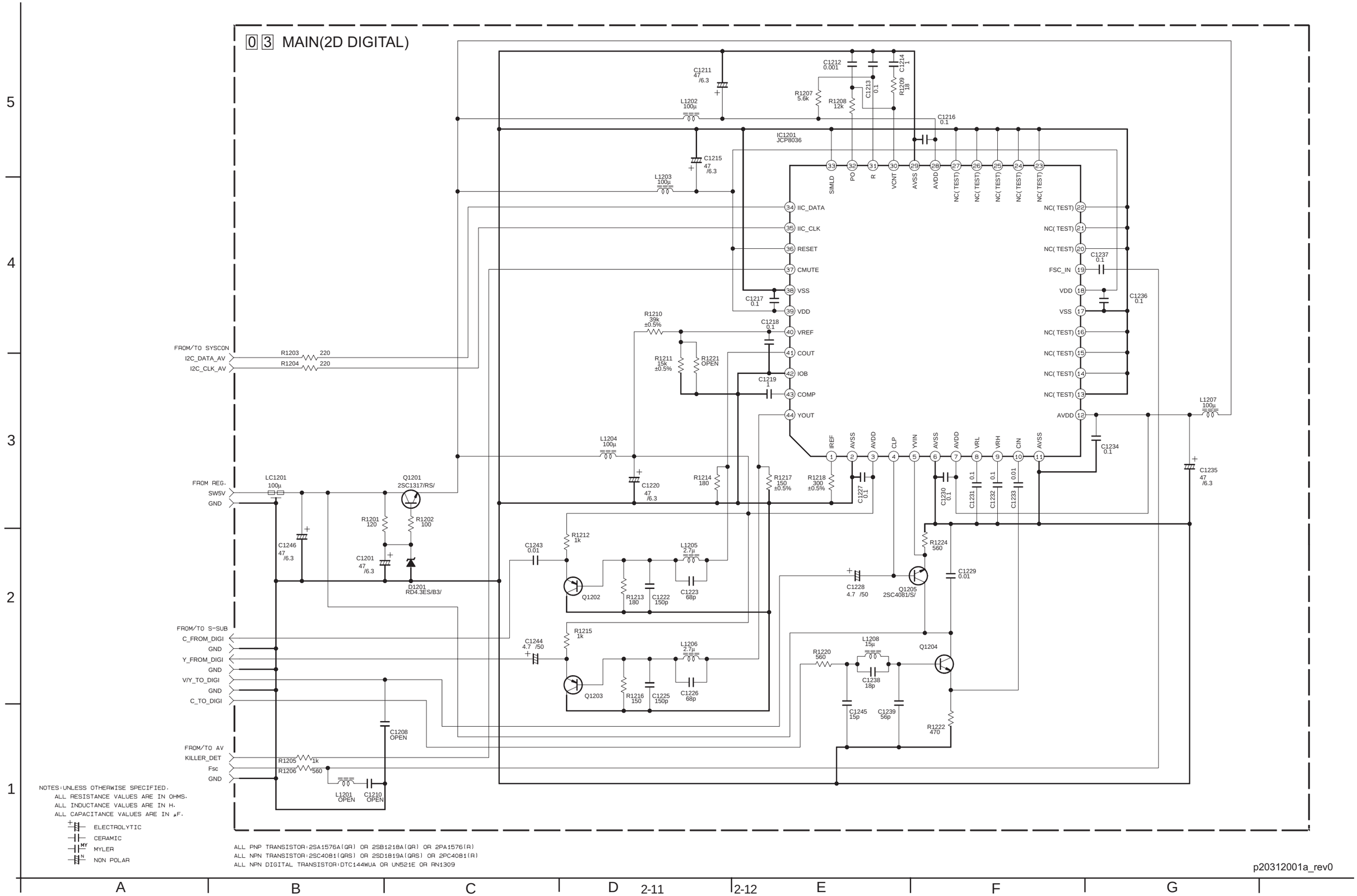
■ MAIN(VIDEO/N.AUDIO) SCHEMATIC DIAGRAM



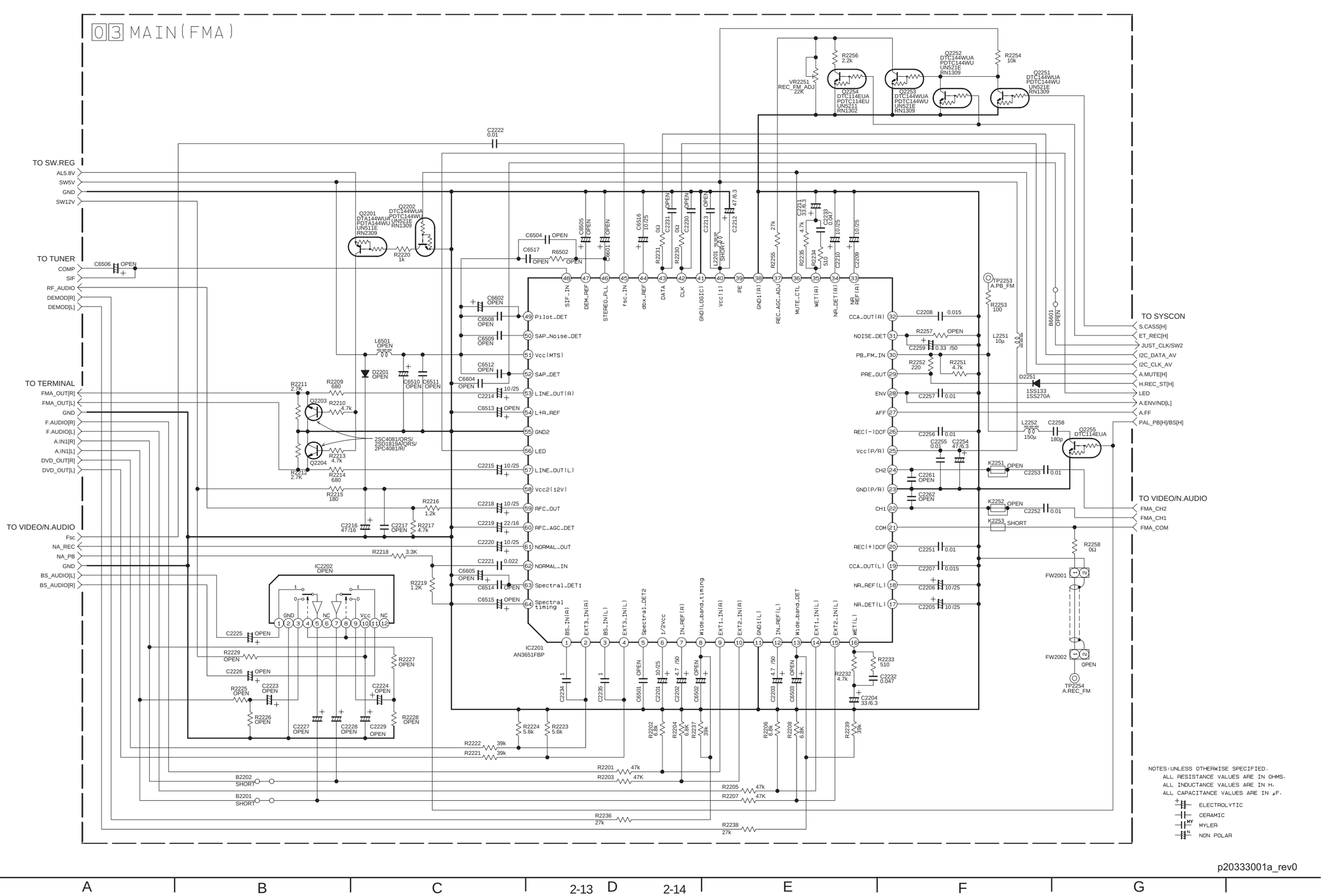
■ MAIN(S-SUB) SCHEMATIC DIAGRAM



■ MAIN(2D DIGITAL) SCHEMATIC DIAGRAM



■ MAIN(FMA) SCHEMATIC DIAGRAM



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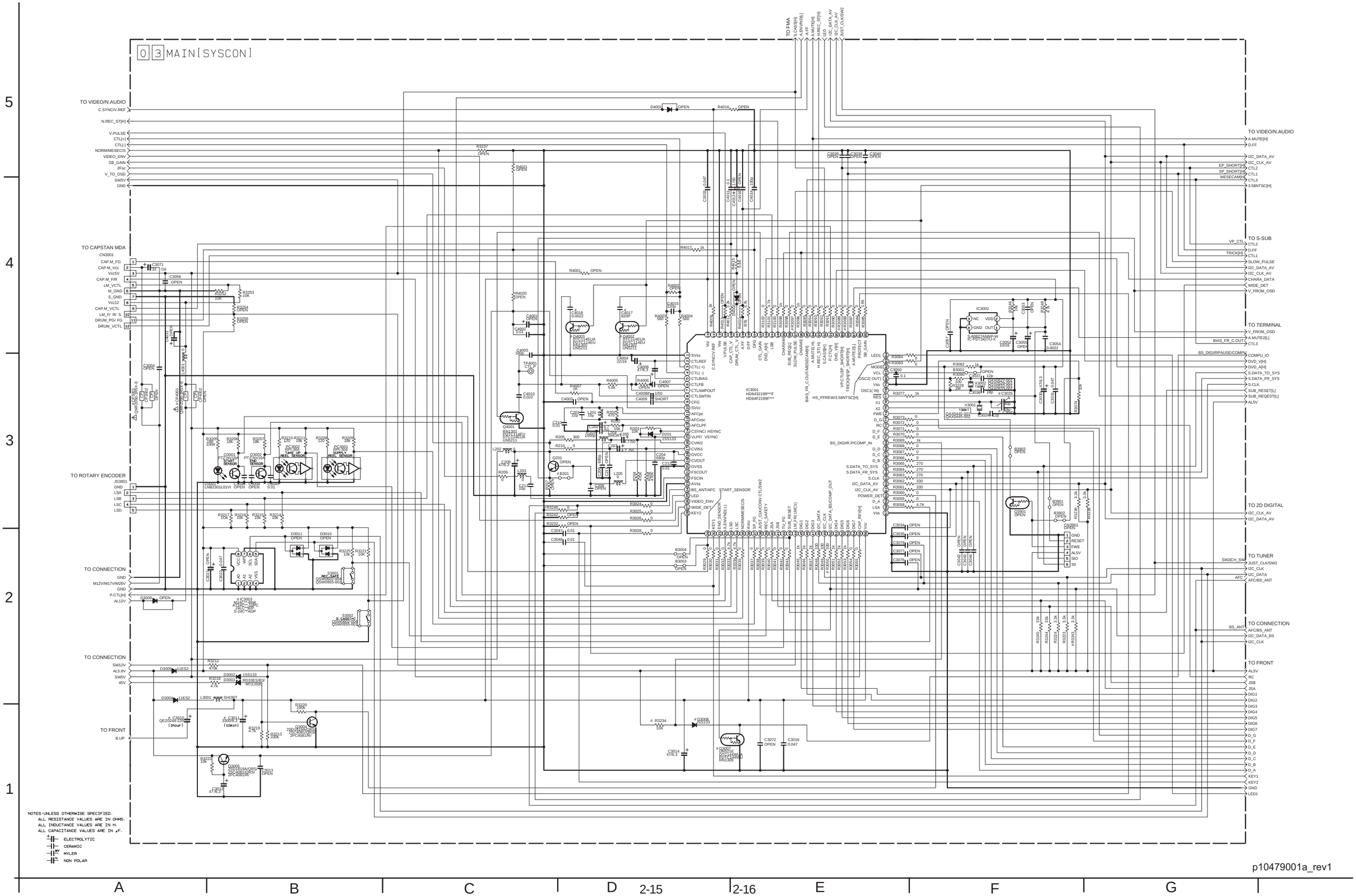
5 4 3 2 1

A B C 2-13 D 2-14 E F G

■ MAIN(SYSCON) SCHEMATIC DIAGRAM



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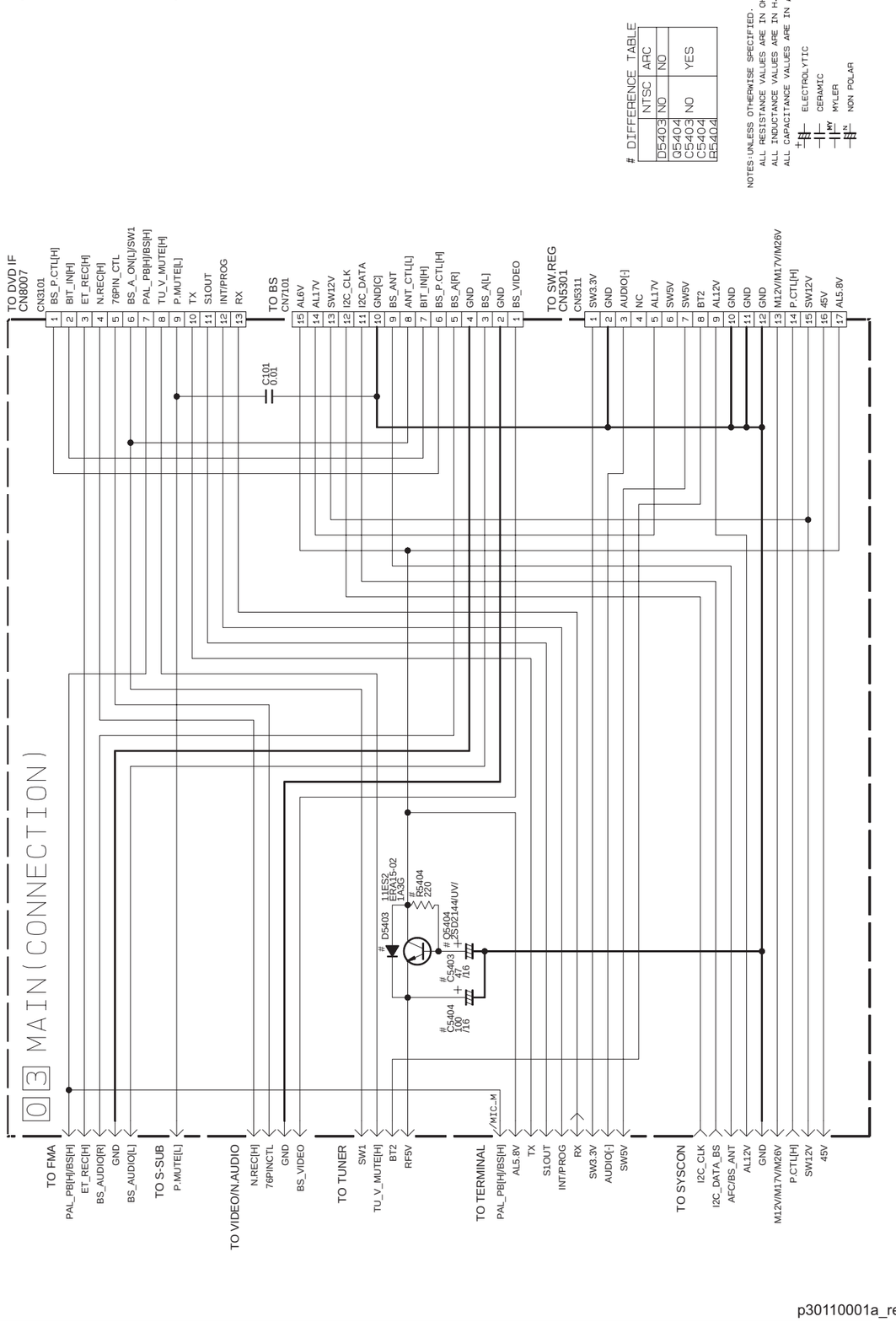
■ MAIN(CONNECTION) SCHEMATIC DIAGRAM



#	DIFFERENCE TABLE	NTSC	APC
	D5403	NO	NO
	Q5404	NO	YES
	C5403	NO	
	C5404	NO	
	R5404	NO	

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ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

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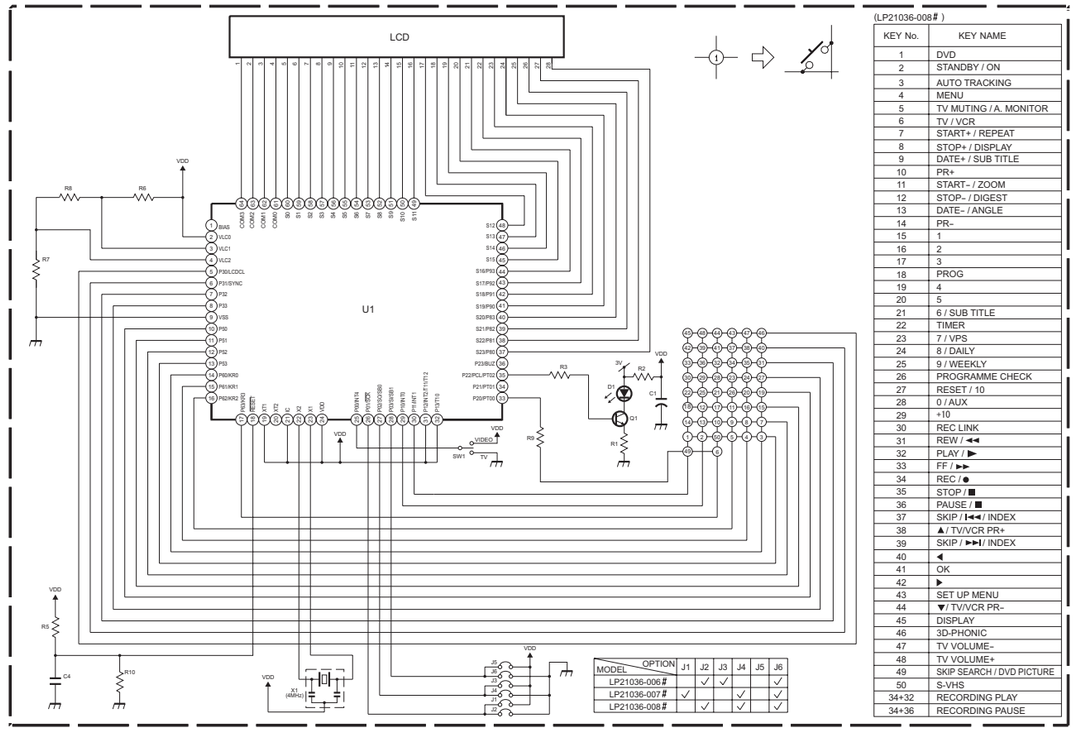
■ REMOTE CONTROLLER SCHEMATIC DIAGRAM

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.



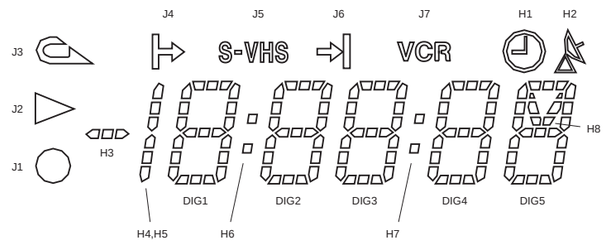
MODEL \ OPTION	J1	J2	J3	J4	J5	J6
LP21036-006#		✓	✓			✓
LP21036-007#	✓			✓		✓
LP21036-008#		✓		✓		✓

(LP21036-008#)

KEY No.	KEY NAME
1	DVD
2	STANDBY / ON
3	AUTO TRACKING
4	MENU
5	TV MUTING / A. MONITOR
6	TV / VCR
7	START+ / REPEAT
8	STOP+ / DISPLAY
9	DATE+ / SUB TITLE
10	PR+
11	START- / ZOOM
12	STOP- / DIGEST
13	DATE- / ANGLE
14	PR-
15	1
16	2
17	3
18	PROG
19	4
20	5
21	6 / SUB TITLE
22	TIMER
23	7 / VPS
24	8 / DAILY
25	9 / WEEKLY
26	PROGRAMME CHECK
27	RESET / 10
28	0 / AUX
29	+10
30	REC LINK
31	REW / ◄◄
32	PLAY / ►
33	FF / ►►
34	REC / ●
35	STOP / ■
36	PAUSE / ■
37	SKIP / I◄◄/ INDEX
38	▲/ TV/VCR PR+
39	SKIP / ►►I/ INDEX
40	◄
41	OK
42	►
43	SET UP MENU
44	▼/ TV/VCR PR-
45	DISPLAY
46	3D-PHONIC
47	TV VOLUME-
48	TV VOLUME+
49	SKIP SEARCH / DVD PICTURE
50	S-VHS
34+32	RECORDING PLAY
34+36	RECORDING PAUSE

■ FDP GRID ASSIGNMENT AND ANODE CONNECTION

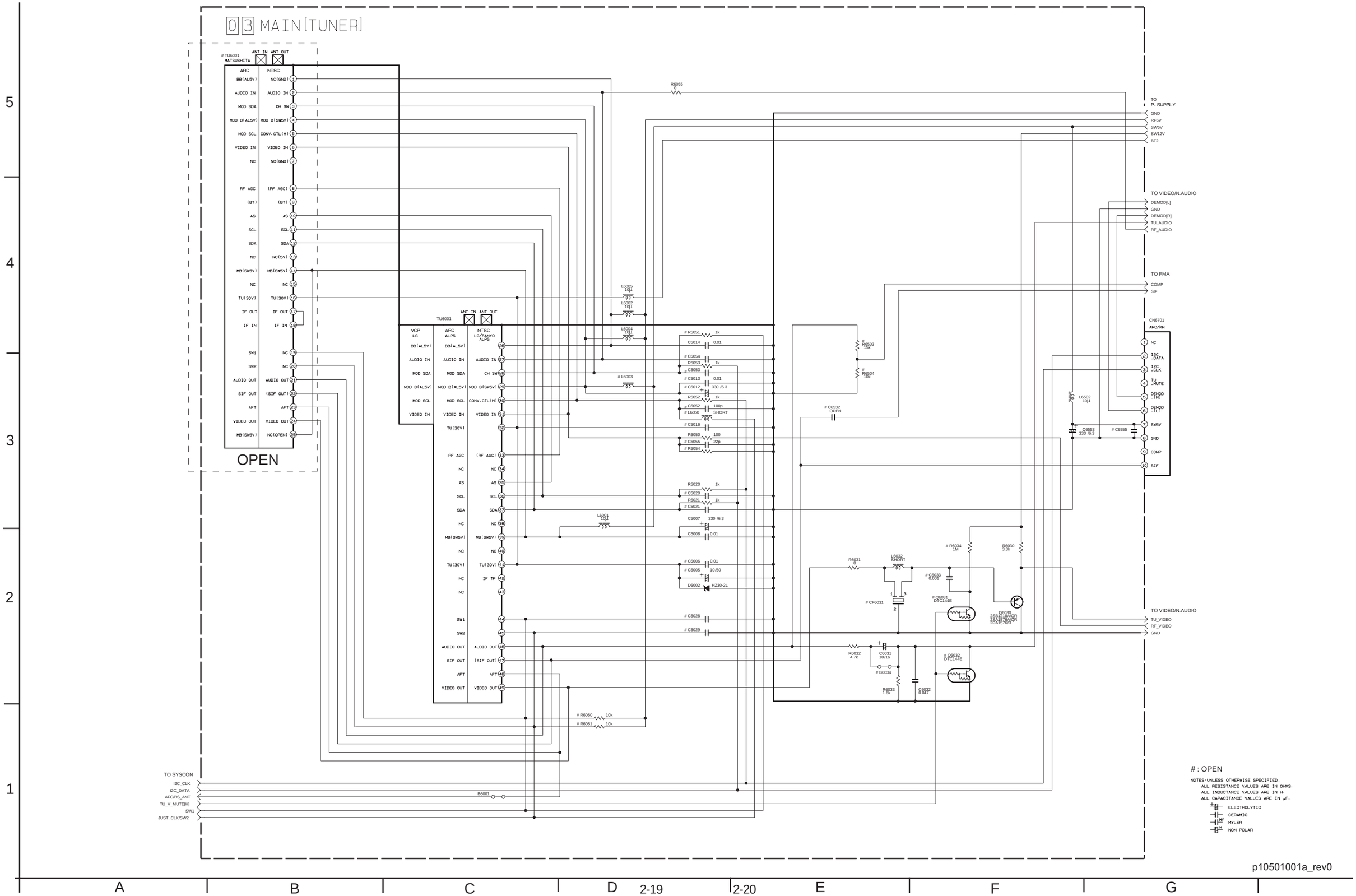
GRID ASSIGNMENT



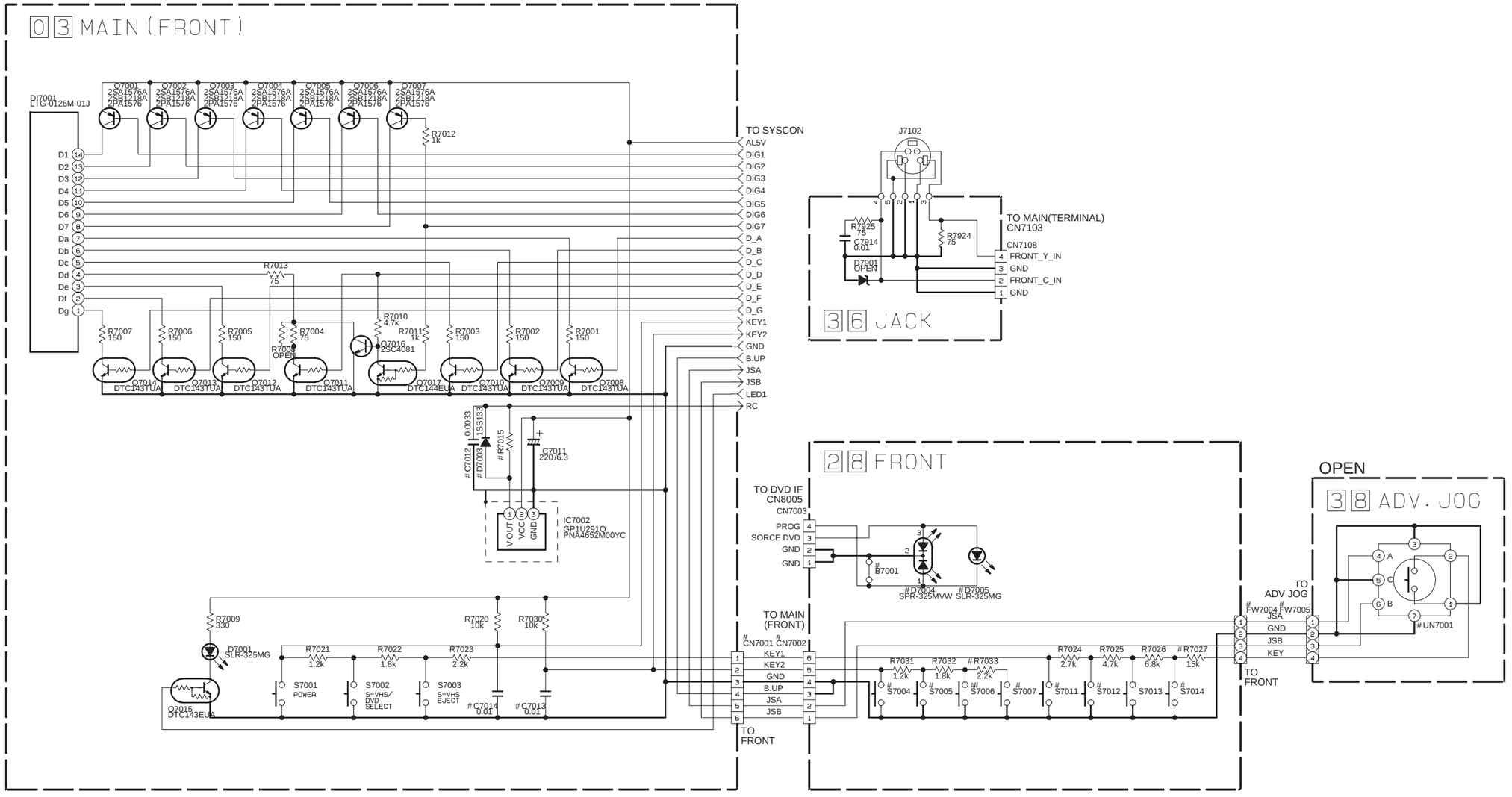
ANODE CONNECTION

No.	CONNECTION
1	CATHODE G, J7, H8
2	CATHODE F, J6, H7
3	CATHODE E, J5, H6
4	CATHODE D, J4, H4, H5
5	CATHODE C, J3, H3
6	CATHODE B, J2, H2
7	CATHODE A, J1, H1
8	COMMON ANODE H1-H8
9	COMMON ANODE J1-J7
10	COMMON ANODE (DIGIT 5)
11	COMMON ANODE (DIGIT 4)
12	COMMON ANODE (DIGIT 3)
13	COMMON ANODE (DIGIT 2)
14	COMMON ANODE (DIGIT 1)

■ MAIN(TUNER) SCHEMATIC DIAGRAM



■ MAIN(FRONT), FRONT, JACK AND ADV.JOG SCHEMATIC DIAGRAMS



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

- ELECTROLYTIC
- CERAMIC
- MYLER
- NON POLAR

DIFFERENCE TABLE

	C7012 D7003	R7015	C7013 C7014	B7001 D7005	D7004	S7007 R7033	S7014	CN7001	CN7002	R7027	FW7004 FW7005	UN7001	S7004	S7005	S7006	S7007	S7011	S7012	S7013	S7014
W ADV. JOG	X	0Ω	X	X	O	X	X	1-6pin	1-6pin	O	O	O	OP/CL	24H TI	PLAY		REC	SPEED	STOP	
W/O ADV. JOG	X	0Ω	X	O	X	O	O	1-3pin	4-6pin	X	X	X	OP/CL	CH +	PLAY	FF	REC	CH −	STOP	REW

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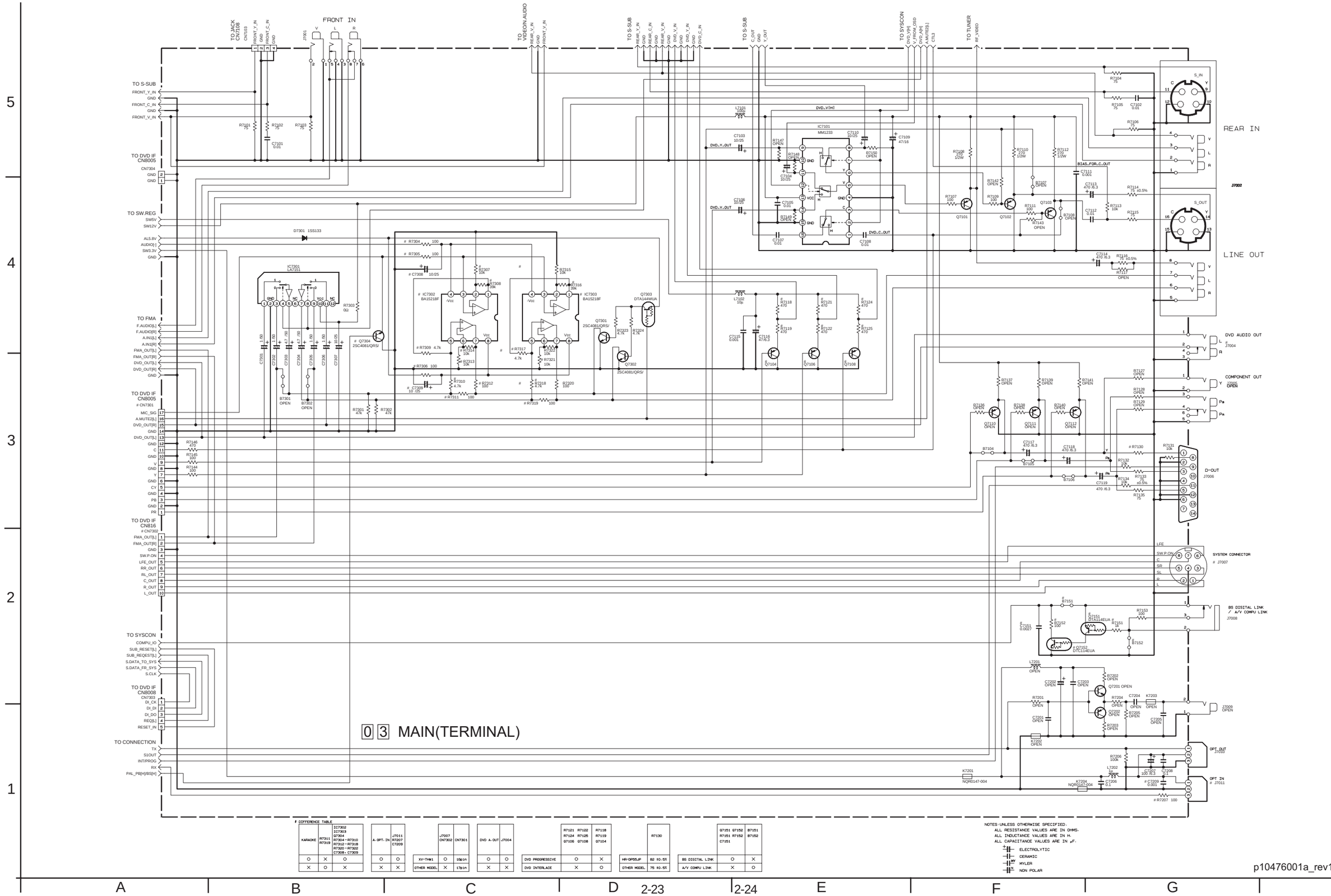
■ MAIN(TERMINAL) SCHEMATIC DIAGRAM



DIFFERENCE TABLE

KARAOKE	R7311 R7319	IC7302 IC7303 Q7304 R7304 ~ R7310 R7312 ~ R7318 R7320 ~ R7302 C7308 ~ C7309
○	×	○
×	○	×

A.OPT.IN	J7011 R7207 C7209
○	○
×	×

	J7007 CN7302	CN7301
XV-THW1	○	16pin
OTHER MODEL	×	17pin

DVD A.OUT	J7004
○	○
×	×

	R7121 R7122 R7124 Q7106 Q7108	R7118 R7119 Q7104
DVD PROGRESSIVE	○	×
DVD INTERLACE	×	○

	R7130
HR-DP95JP	82 Ω-5%
OTHER MODEL	75 Ω-5%

	Q7151 Q7152 C7151	B7151 B7152
BS DISITAL LINK	○	×
A/V COMPU LINK	×	○

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ALL INDUCTANCE VALUES ARE IN H.
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ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

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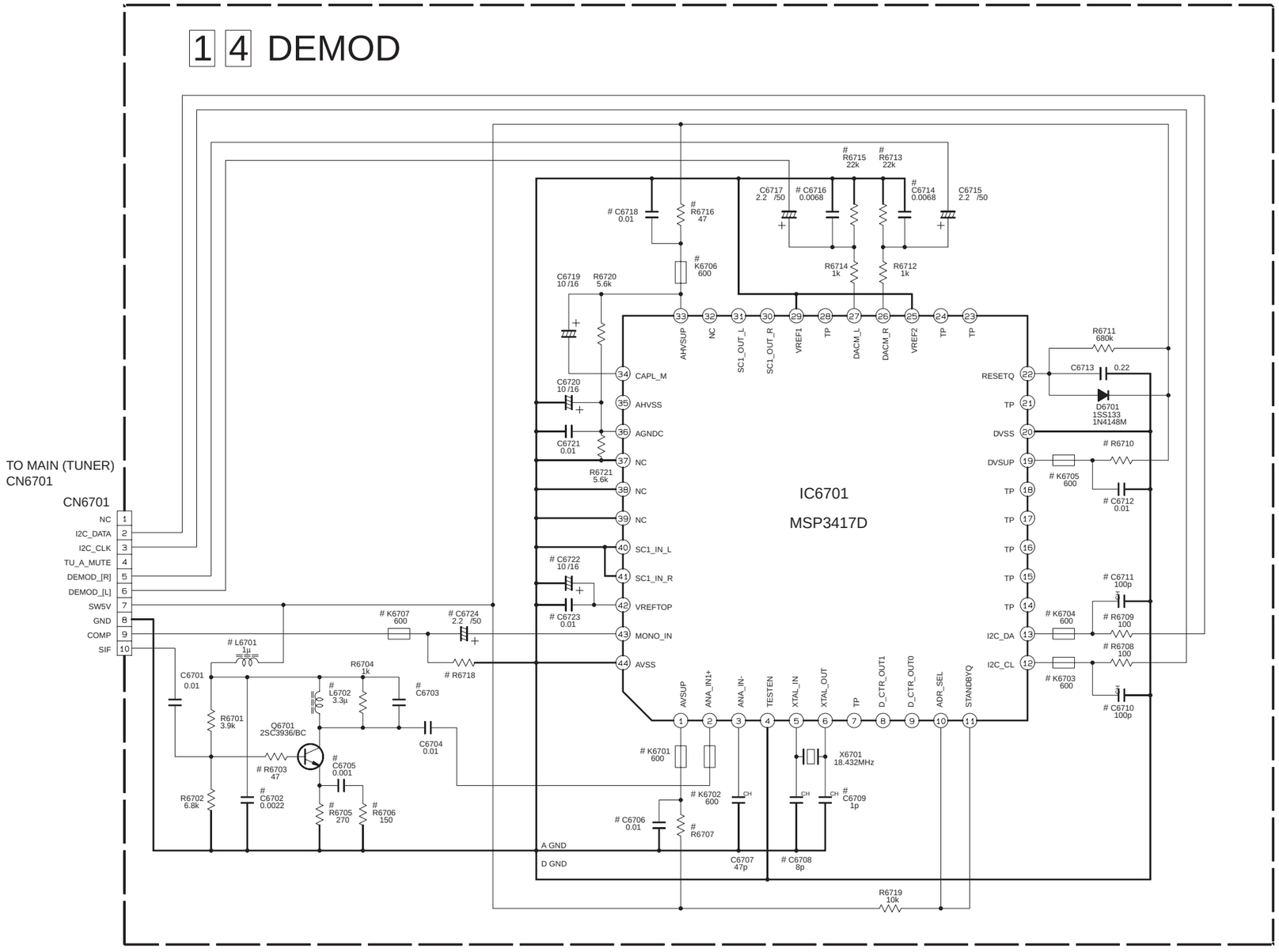
2-23 2-24

■ DEMODULATOR SCHEMATIC DIAGRAM



DIFFERENCE TABLE ○ : Used × : Not used

		EU/EK	MS	KR	MS	EX/EK	AA/AG
DEMOD PWB ASSY		LPA10094-09*	LPA10094-10*	LPA10094-11*	LPA10094-12*	LPA10094-13*	LPA10094-14*
PRE AMP	R6703	0	0	47	0	0	0
	R6705	270	270	270	270	270	270
	R6706	×	×	100	×	×	×
	C6702	×	×	×	×	×	×
	C6703	×	×	×	×	×	180p
	C6705	×	×	0.001	×	×	×
	L6701	SHORT	SHORT	SHORT	SHORT	SHORT	SHORT
	L6702	×	×	3.3µ	×	×	3.3µ
MONO IN	K6707	×	FE 600	×	FE 600	×	×
	C6724	×	0.22/50	×	0.22/50	×	×
	R6718	×	×	×	×	×	×
I2C-BUS	R6708	FE 600	FE 600	FE 600	FE 600	10k	10k
	R6709	FE 600	FE 600	FE 600	FE 600	1k	1k
	K6703	10k	0	1k	1k	FE 600	FE 600
	K6704	0	0	1k	1k	FE 600	FE 600
	C6710,C6711	×	×	×	×	×	×
ANALOG Vcc	R6707	FE 600	FE 600	FE 600	39	0	0
	K6701	33	33	39	FE 600	FE 600	FE 600
	C6706	×	×	×	×	×	×
DIGITAL Vcc	R6710	FE 600	FE 600	FE 600	12	0	0
	K6705	0	10	12	FE 600	FE 600	FE 600
	C6712	×	×	×	×	×	×
DAC Vcc	R6716	FE 600	FE 600	FE 600	47	47	47
	K6706	47	47	47	FE 600	FE 600	FE 600
	C6718	×	×	×	×	×	×
X'TAL	C6708	7p	7p	7p	8p	7p	7p
	C6709	3p	3p	3p	2p	3p	3p
DAC OUT	R6713,R6715	12k	12k	×	×	○	○
	C6714,C6716	0.0022	0.0068	0.0022	0.0068	0.0022	0.0022
VREFTOP	C6722	×	×	×	×	×	×
	C6723	0.01	0.01	0.001	0.01	0.01	0.01

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ALL CAPACITANCE VALUES ARE IN µF.

ELECTROLYTIC
CERAMIC
MYLER
NON POLAR

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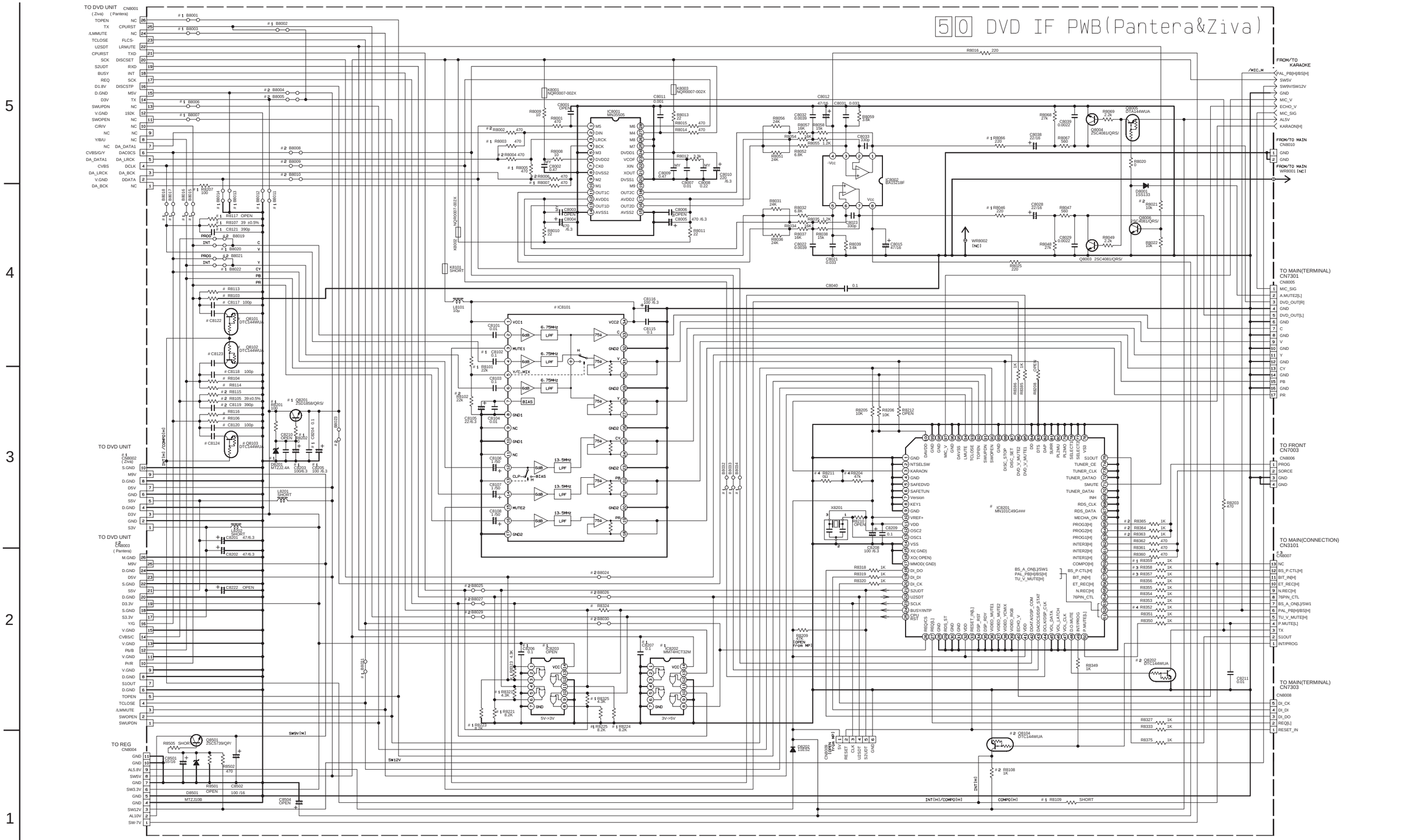
■ DVD IF SCHEMATIC DIAGRAM

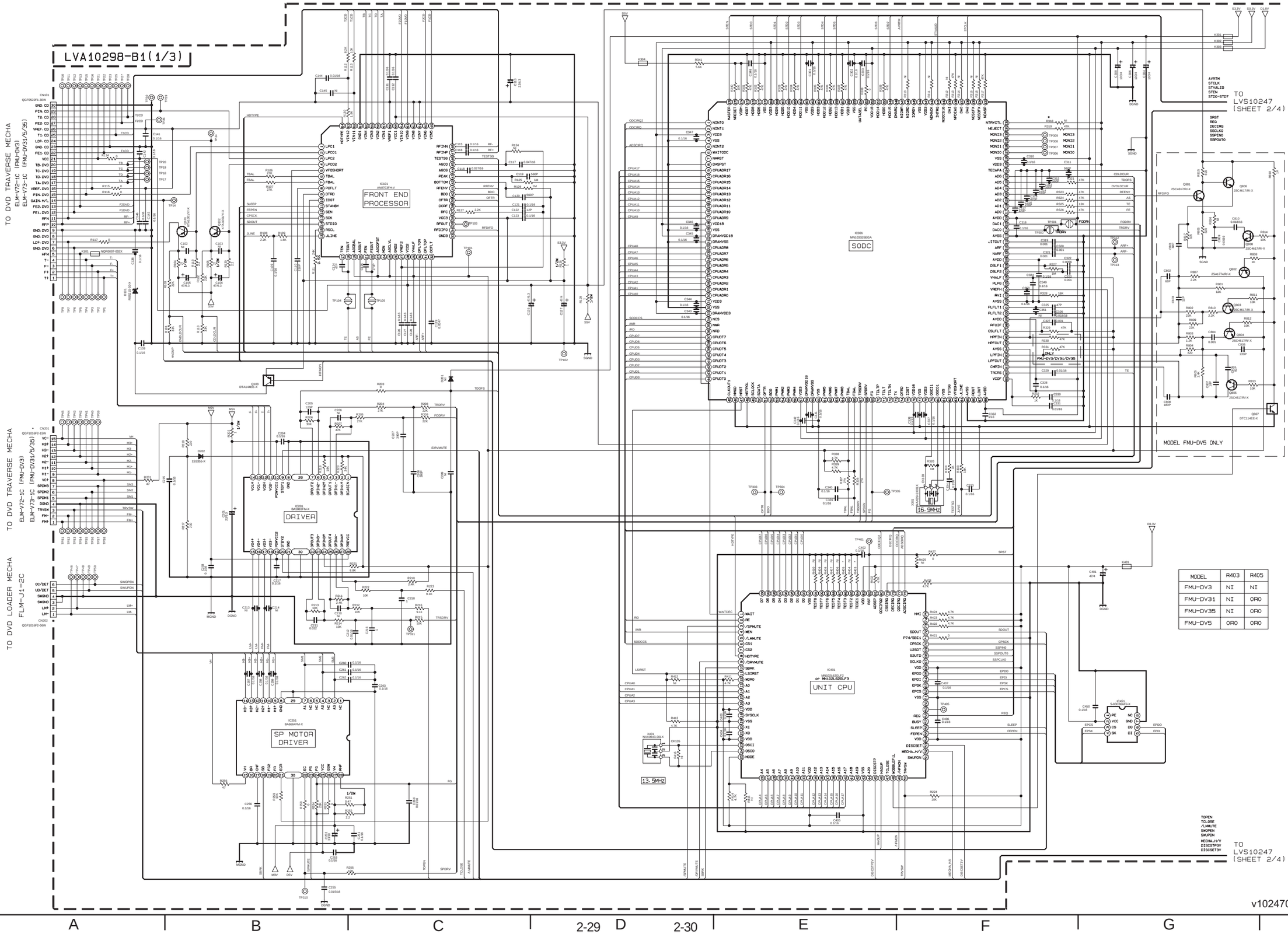


	#1 [INT]	#2 [PROG]	# [PROG/INT]												
	R8103	R8113	C8122	Q8101	R8104	R8114	C8123	Q8102	R8105	R8116	C8124	Q8103	R8324	C8117	C8118	C8120	IC8101	IC8201
PROGRESSIVE	×	○	39 (0.5%)	270p	○	39 (0.5%)	330	270p	○	39 (0.5%)	560	270p	○	SHORT	100p	100p	100p	MN1568CJ-X	MN101C490CZ
INTERLACE	○	×	39 (0.5%)	470	240Ω	39 (0.5%)	×	130Ω	○	39 (0.5%)	1.3k	×	×	4.3k	390p	390p	390p	MN1567CJ-X	MN101C490CA

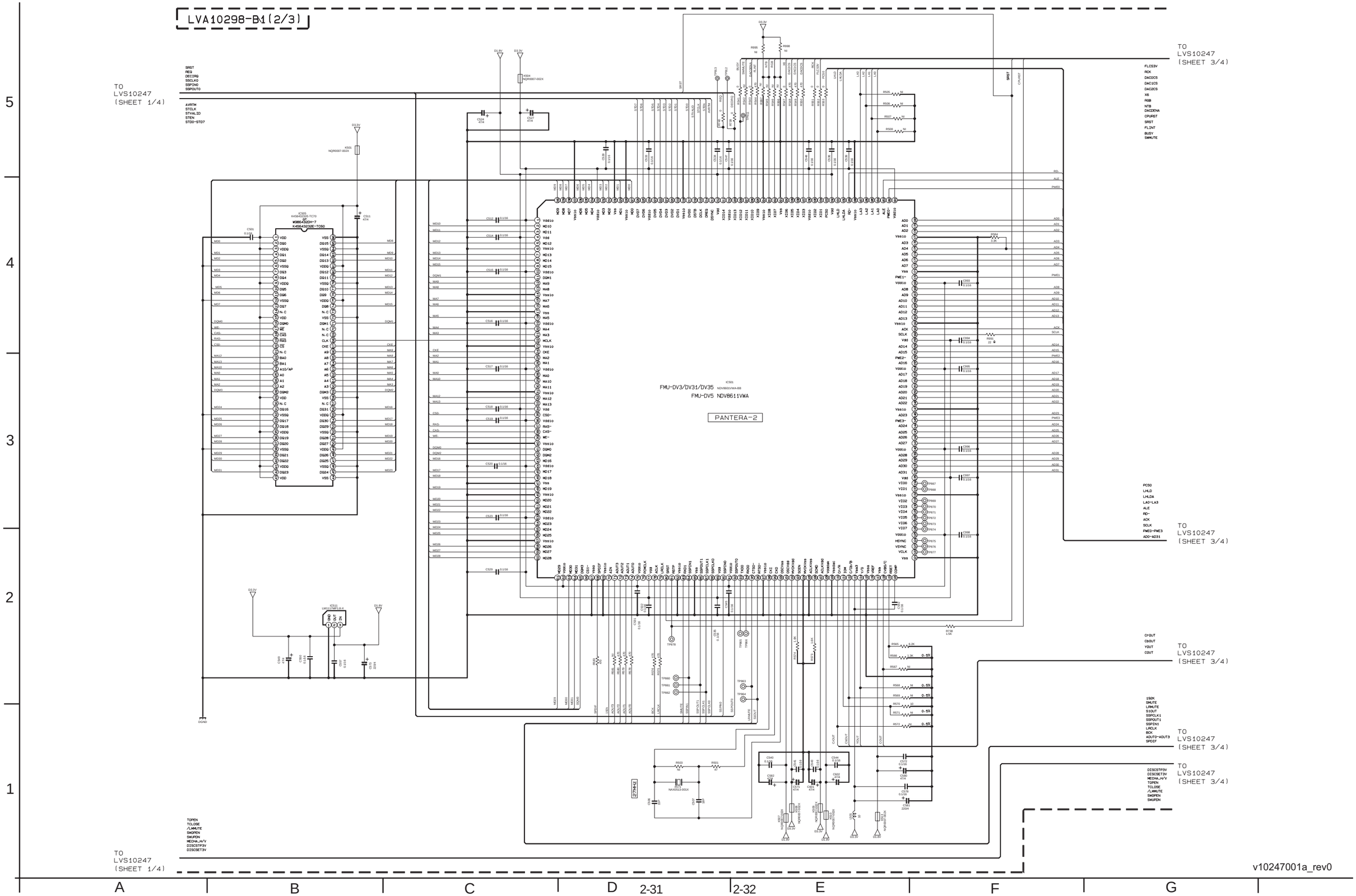
	CN8007	R8357-R8358
With BS	1-10pin	○
W/O BS	1-10pin	×

	R8204	R8211	R8352
WITH KARAOKE	○	×	×
W/O KARAOKE	×	○	○

■ DVD SERVO CONTROL SCHEMATIC DIAGRAM



■ DVD AV DECODER SCHEMATIC DIAGRAM



■ DVD FLASH ROM SCHEMATIC DIAGRAM

LVA10298-B1(3/3)

TO LVS10247 (SHEET 2/4)

FLCS3V
RCK
DAC0CS
DAC1CS
DAC2CS
X6
RGB
NTB
DACDENA
CPURST
SRST
FLINT
SMUTE
BUSY

FLASH ROM

IC509 SST39VF160-70-4C-EK 16M ROM LOW

IC508 16M ROM HIGH

IC512 74LCX373MTC-X

IC513 74LCX373MTC-X

IC521 MM74HCT32MTC-X

IC523 NC7SZ126P5-X

IC522 74LCX32MTC-X

IC510 AK93C65AF-X

Q501 2SB1424QRG-X

Q502 2SC2412KRSG-X

CN501 NI

CN502 QGR20271-26X

CN503 QGR20271-26X

TO SYSTEM PWB

TO LVS10247 (SHEET 2/4)

CrOUT
CbOUT
YOUT
COUT

192K
SMUTE
LRMUTE
SIOUT
SSPCLK1
SSPOUT1
SSPIN1
LRCLK
BCK
AOUT0-AOUT3
SPDIF

DISCSTP3V
DISCSET3V
MECHA_HV
TOPEN
TCLOSE
/LMMUTE
SWOPEN
SWUPDN

TO SYSTEM PWB

DDATA
BCK
DCLK
LRCLK
AOUT0
AOUT1
AOUT2
192k
AOUT3
SPDIF
DISCSTP
SSPCLK1B
SSPOUT1B
SSPIN1A
LRMUTE
FLCS-
SMUTE
CPURST

v10247001a_rev0

2-33 2-34

■ VOLTAGE CHARTS

<SW.REG>

MODE PIN NO.	REC	PLAY
IC5101		
1	157.7	159.2
2	0	0
3	0	0
4	16.1	16.1
5	0.2	0.2
IC5301		
1	-1.0	-1.0
2	-2.3	-2.3
3	0.3	0.3
IC5303		
1	3.8	3.8
2	3.5	3.5
3	0	0
4	1.2	1.2
5	4.9	4.9
Q5307		
E	5.1	5.1
C	5.7	5.7
B	5.7	5.7
Q5309		
E	5.1	5.1
C	5.7	5.7
B	5.7	5.7
Q5310		
E	0	0
C	5.7	5.7
B	0.6	0.6
Q5311		
E	11.0	11.0
C	12.2	12.2
B	11.6	11.6
Q5312		
E	11.6	11.6
C	11.6	11.6
B	0	0
Q5313		
E	0	0
C	0	0
B	4.9	4.9
CN5001		
1	59.0	59.2
2	59.1	59.4
CN5301		
1	5.7	5.7
2	45.1	45.1
3	11.0	11.0
4	4.9	4.9
5	12.2	12.2
6	0	0
7	0	0
8	0	0
9	12.2	12.2
10	32.0	32.5
11	5.1	5.1
12	5.1	5.1
13	0	0
14	0	0
15	-7.1	-7.1
16	0	0
17	3.5	3.5
CN5302		
1	-7.1	-7.1
2	10.5	10.5
3	10.9	10.9
4	0	0
5	0	0
6	3.4	3.4
7	0	0
8	3.0	5.1
9	3.4	5.7
10	0	0
11	0	0

<MAIN>

MODE PIN NO.	REC	PLAY
IC1		
1	1.4	2.1
2	2.8	2.8
3	0	2.6
4	1.8	1.4
5	1.9	1.4
6	2.4	2.1
7	2.0	0.7
8	0	0
9	0	3.0
10	2.2	2.1
11	3.1	3.0
12	2.8	2.4
13	3.1	3.1
14	3.5	2.4
15	0	0
16	0	2.8
17	1.5	1.5
18	0	2.8
19	0	3.9
20	2.7	2.8
21	1.5	0
22	2.8	2.9
23	3.0	0
24	5.0	5.0
25	0	0.3
26	0	0
27	0	2.3
28	0	0
29	0	1.9
30	2.1	2.1
31	0	0
32	2.3	2.4
33	5.0	5.0
34	2.6	2.3
35	5.0	5.0
36	2.3	2.4
37	2.3	2.2
38	2.1	2.1
39	1.4	1.2
40	1.7	0
41	2.8	2.6
42	2.0	2.1
43	0	0
44	2.1	2.1
45	4.7	4.7
46	4.7	4.7
47	2.9	2.9
48	2.5	2.6
49	5.0	5.1
50	2.5	2.5
51	0	0
52	0	0
53	2.6	2.6
54	0	0
55	0	0
56	0	0
57	0	0
58	0	0
59	0	0
60	0	0
61	0	0
62	0	0
63	0	0
64	0	0
65	2.2	2.0
66	0	0
67	0	0
68	0	0
69	0	0
70	0	0
71	0	0
72	0	0
73	3.1	0
74	0	0
75	3.1	0
76	0	0
77	0	0
78	0	0
79	5.0	5.0
80	2.0	5.0
81	0	0
82	0	0
83	0	0
84	2.4	2.3
85	2.3	2.3
86	2.3	2.3
87	5.0	5.0
88	0	0
89	0	0
90	0	0
91	0	2.1
92	2.6	2.6
93	0.2	0.2
94	0	0
95	2.5	2.5
96	2.5	2.5
97	2.5	2.5

MODE PIN NO.	REC	PLAY
98	0	0
99	2.4	2.5
100	4.7	4.6
IC501		
1	2.8	2.8
2	0	0
3	2.1	2.1
4	5.0	5.0
5	2.8	2.8
6	0	0
7	2.1	2.1
8	0	0
9	2.8	2.8
10	0	0
11	2.1	2.1
12	2.8	2.8
13	0	0
14	2.4	2.8
15	2.3	0
16	2.7	3.1
17	2.4	0
18	0	0
19	2.3	2.4
20	0	0
21	3.5	3.5
22	3.7	2.7
23	3.0	2.1
24	2.9	2.9
25	2.9	2.9
26	5.0	0
27	2.9	3.0
28	2.4	2.3
29	2.5	2.3
30	5.0	5.0
31	2.7	3.0
32	0.2	4.4
33	2.8	2.9
34	0	2.8
35	2.8	2.8
36	2.8	2.8
37	0	0
38	4.7	4.7
39	4.7	4.7
40	0	2.8
41	2.5	2.6
42	0	2.8
43	0	0
44	1.9	1.9
45	2.3	2.4
46	5.0	5.0
47	0.5	2.5
48	2.8	2.8
49	0	0
50	2.8	2.8
51	2.8	2.8
52	2.4	2.1
53	3.2	3.2
54	2.3	2.4
55	1.9	1.1
56	2.5	3.5
IC502		
1	2.0	2.0
2	0.3	4.4
3	3.3	3.4
4	3.4	3.4
5	5.0	5.0
6	2.2	2.2
7	2.0	2.1
8	5.0	5.0
9	1.4	1.5
10	2.8	2.8
11	2.8	2.8
12	2.9	2.8
13	0	0
14	2.8	2.9
15	2.8	2.9
16	0	2.0
17	1.9	2.0
18	1.9	2.0
IC1201		
1	0.9	0.9
2	0	0
3	3.5	3.4
4	2.1	2.2
5	1.5	1.5
6	0	0
7	3.4	3.4
8	0.6	0.6
9	2.7	2.7
10	1.6	1.7
11	0	0
12	0	3.4
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	3.5	3.5

MODE PIN NO.	REC	PLAY
19	1.7	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	3.5	3.5
29	0	0
30	1.0	1.1
31	1.5	1.5
32	1.0	1.0
33	0	0
34	4.7	4.7
35	4.7	4.7
36	3.4	3.5
37	0	0
38	0	0
39	3.5	3.4
40	0.9	0.9
41	0.4	0
42	0	0
43	0	0
44	0.4	0.4
IC2201		
1	2.4	2.4
2	0	0
3	2.4	2.4
4	0	0
5	0	0
6	2.4	2.4
7	2.0	2.0
8	0	0
9	0	0
10	0	0
11	0	0
12	2.0	2.0
13	0	0
14	0	0
15	0	0
16	2.5	2.5
17	0.5	0.7
18	2.5	2.5
19	0	2.5
20	0	0.9
21	0	0
22	0	0
23	0	0
24	2.6	0
25	5.0	5.0
26	0	0
27	0	2.7
28	4.3	2.5
29	4.3	0
30	3.9	1.7
31	1.0	2.1
32	2.5	2.5
33	2.5	2.5
34	0.7	0.7
35	2.5	2.5
36	0	0
37	1.6	1.7
38	0	0
39	0	0
40	5.0	5.0
41	0	0
42	4.6	4.7
43	4.6	4.7
44	3.3	3.3
45	0	0
46	4.9	4.9
47	2.5	2.5
48	2.5	2.5
49	0.2	0.4
50	0.2	0.3
51	0	0
52	0	0
53	4.5	4.5
54	0	0
55	0	0
56	0	0
57	4.5	0
58	8.7	0
59	0	0
60	0	0.8
61	0	0
62	2.4	0
63	4.6	4.6
64	4.6	4.6
IC3001		
1	0	0
2	2.5	2.5
3	2.9	2.5
4	1.9	2.5
5	2.5	2.5
6	1.0	1.1

MODE PIN NO.	REC	PLAY
7	0	0
8	2.5	2.5
9	2.2	2.5
10	5.0	0
11	1.8	5.0
12	1.8	0
13	2.4	2.5
14	0.4	0.4
15	0.8	0.8
16	2.9	3.0
17	2.4	2.4
18	5.0	0
19	2.4	0
20	0	0
21	0	0
22	2.5	2.4
23	0	0
24	4.6	4.6
25	0	0
26	0	2.1
27	0	0
28	0	4.9
29	0	4.5
30	5.0	5.0
31	4.5	4.7
32	4.3	2.4
33	5.0	5.0
34	0	0
35	0	0
36	5.0	5.0
37	4.9	-
38	0	0
39	5.0	5.0
40	0	0
41	0	0
42	-	0
43	5.0	5.0
44	2.5	2.6
45	4.4	4.4
46	4.4	4.5
47	4.4	4.5
48	4.3	4.3
49	4.4	4.3
50	0	0
51	0	4.4
52	4.4	4.5
53	4.5	4.5
54	4.3	4.3
55	0	0
56	5.0	5.0
57	0	0
58	0	0
59	0.7	2.1
60	0	0
61	4.7	4.7
62	4.7	4.7
63	4.8	4.7
64	0	0.3
65	4.7	4.7
66	0.7	4.2
67	0.7	4.2
68	0.7	2.8
69	5.0	5.0
70	0.7	2.1
71	0.7	3.5
72	5.0	4.9
73	0.7	1.4
74	0	0
75	1.5	1.5
76	1.2	1.1
77	-	-
78	2.4	2.4
79	0	0
80	2.5	2.4
81	3.2	3.2
82	5.0	5.0
83	0	0
84	4.9	4.9
85	0	4.0
86	4.4	4.5
87	5.0	0
88	0	0
89	4.8	4.8
90	0	0
91	4.9	5.0
92	0	0
93	4.9	0
94	0	0
95	0	0
96	0	0
97	0	0
98	3.7	3.9
99	0	0
100	5.0	0
101	5.0	5.0
102	0	0
103	4.9	4.9
104	1.4	1.3

MODE PIN NO.	REC	PLAY
105	2.4	2.4
106	0	2.6
107	2.6	2.6
108	2.7	2.7
109	0	0
110	0	0
111	0.4	0.3
112	5.0	5.0
IC3002		
1	5.0	5.0
2	5.0	5.0
3	0	0
4	0	0
IC3003		
1	0	0
2	0	0
3	0	0
4	0	0
5	4.4	0
6	0	4.4
7	0	0
8	4.9	4.9
IC7002		
1	4.9	5.0
2	4.9	5.0
3	0	0
IC7101		
1	6.1	0
2	0	0
3	5.4	5.4
4	0	0
5	0	0
6	3.1	3.2
7	0	0
8	3.8	3.9
9	0	4.0
10	0	0
11	3.9	3.9
12	0	0
13	10.9	11.0
14	4.1	0
15	0	0
16	6.1	6.1
IC7301		
1	7.2	7.2
2	0	0
3	7.2	7.2
4	0	0
5	6.5	6.5
6	0	0
7	6.5	0
8	0	0
9	7.2	7.2
10	0	11.0
11	7.2	7.2
12	0	0
Q1		
E	2.4	2.3
C	2.4	2.3
B	0	0
Q2		
E	2.4	2.3
B	2.4	2.2
C	0	0
Q3		
E	0	0
C	0	0
B	0.7	0.7
Q4		
E	0	0
C	0	0
B	0.8	0.8
Q7		
E	1.3	1.3
C	0	0
B	0	2.0
Q8		
E	3.1	3.1
C	5.0	5.0
B	3.7	3.7
Q9		
E	3.7	3.7
C	0	0
B	3.1	3.1
Q10		
E	2.7	2.8
C	0	0
B	2.1	0
Q11		
E	0	0
C	5.0	5.0
B	0	0
Q12		
E	2.8	2.8
C	0	0
B	5.0	5.0
Q17		
E	0	0

MODE PIN NO.	REC	PLAY
C	0	0
B	4.8	4.8
Q21		
E	2.8	2.7
C	0	0
B	2.1	2.1
Q24		
E	0	0
C	0	0
B	2.1	2.1
Q33		
E	0	0
C	4.8	4.8
B	0	0
Q38		
E	2.2	2.2
C	5.0	5.0
B	2.8	2.9
Q39		
E	0	0
C	1.3	1.2
B	0	0
Q41		
E	0	0
C	1.2	1.0
B	0	0
Q50		
E	0	0
C	3.1	0
B	0.2	4.4
Q1201		
E	3.5	3.5
C	4.8	4.8
B	4.2	4.2
Q1202		
E	1.2	1.2
C	0	0
B	0.6	0.6
Q1203		
E	1.0	1.0
C	0	0
B	0.4	0.4
Q1204		
E	0	1.9
C	4.8	4.8
B	0.5	2.5
Q1205		
E	1.5	1.5
C	4.8	4.8
B	2.1	2.2
Q2001		
E	-14.5	0
C	0	0
B	0	0.7
Q2002		
E	-14.5	0
C	0	0
B	-20.6	0.7
Q2003		
E	5.0	0
C	0	5.0
B	4.9	0
Q2051		
E	0	0
C	8.5	0
B	0.5	0.2
Q2052		
E	11.0	11.0
C	10.8	1.4
B	10.2	10.9
Q2053		
E	0	0
C	0	10.9
B	4.9	0
Q2054		
E	10.8	1.4
C	10.7	0
B	10.0	1.4
Q2055	.	
E	0	0
C	0	1.4
B	4.9	0
Q2201		
E	5.7	5.8
C	-1.2	-1.2
B	5.7	5.7
Q2202		
E	0	0
C	5.7	5.7
B	0	0
Q2203		
E	0	0
C	0	0
B	-1.2	-1.2
Q2204		
E	0	0
C	0	0
B	-1.2	-1.1

MODE PIN NO.	REC	PLAY
Q2251		
E	0	0
C	4.2	4.2
B	0	0
Q2252		
E	0	0
C	4.2	4.2
B	0	0
Q2253		
E	0	0
C	0	0
B	4.2	4.2
Q2254		
E	0	0
C	0	0
B	0	0
Q2255		
E	0	0
C	0	0
B	-	-
Q3002		
E	0	0
C	4.4	4.7
B	-	-
Q3003		
E	0	0
C	4.5	4.9
B	-	-
Q3004		
E	0	0
C	0	0
B	0.7	0.7
Q3005		
E	5.0	5.0
C	5.7	5.7
B	5.6	5.6
Q3007		
E	0	0
C	4.8	4.8
B	0	0
Q3901		
E	0	0
C	4.9	5.0
B	0	0
Q4001		
E	0	0
C	0	0
B	4.8	5.0
Q5404		
E	5.0	5.0
C	5.7	5.7
B	5.7	5.7
Q6030		
E	4.8	4.8
C	0	0
B	4.1	4.2
Q7001		
E	4.9	5.0
C	0.6	0.6
B	4.9	4.9
Q7002		
E	5.0	5.0
C	0.5	0.6
B	4.9	4.9
Q7003		
E	4.9	5.0
C	0.6	0.6
B	4.9	4.9
Q7004		
E	4.9	4.9
C	0.6	0.6
B	4.8	4.8
Q7005		
E	4.9	5.0
C	0.7	0.7
B	4.8	4.9
Q7006		
E	4.9	0
C	0.7	0.6
B	4.8	4.9
Q7007		
E	4.9	0
C	0.9	0
B	4.8	0
Q7008		
E	0	0
C	1.0	1.9
B	4.2	2.8
Q7009		
E	0	0
C	1.0	0.5
B	3.5	4.2
Q7010		
E	0	0

MODE PIN NO.	REC	PLAY
C	1.8	0.5
B	2.1	4.2
Q7011		
E	0	0
C	1.0	2.3
B	3.4	0
Q7012		
E	0	0
C	0	1.8
B	2.7	2.1
Q7013		
E	0	0
C	0.9	1.3
B	3.5	2.8
Q7014		
E	0	0
C	2.2	1.8
B	1.4	1.4
Q7015		
E	0	0
C	0	0
B	4.9	4.9
Q7016		
E	0	0
C	2.3	2.3
B	0	0
Q7017		
E	0	0
C	0	0
B	3.6	3.6
Q7101		
E	3.8	0
C	0	0
B	3.2	3.2
Q7102		
E	0	3.9
C	0	0
B	3.1	3.2
Q7103		
E	6.0	6.0
C	0	0
B	5.4	5.4
Q7106		
E	2.5	2.4
C	0	0
B	1.9	1.9
Q7108		
E	2.9	3.0
C	0	0
B	2.2	2.3
Q7301		
E	0	0
C	0	0
B	-1.1	-1.0
Q7302		
E	0	0
C	0	0
B	0	-0.8
Q7303		
E	5.4	5.4
C	-1.1	-0.9
B	5.0	5.0
CN1		
1	0	0
2	0	0
3	0	0
4	2.4	2.3
5	2.4	2.3
6	2.4	2.3
7	2.5	0
8	2.5	0
9	2.5	0
CN2001		
1	0	0
2	0	0
3	0	0
4	0	0
5	2.3	2.5
6	2.6	2.5
CN2002		
1	0	0
2	0	0
CN3001		
1	2.3	2.3
2	12.2	12.2
3	5.1	5.0
4	0	0
5	6.6	6.6
6	0	0
7	0	0
8	12.2	12.2
9	2.7	2.7
10	2.5	2.5
11	1.4	1.3
12	2.6	2.6
CN3101		
1	-	-
2	-	-

MODE PIN NO.	REC	PLAY
3	0	5.0
4	4.9	0
5	0	0
6	0	0
7	4.5	4.5
8	5.0	5.0
9	5.0	0
10	1.7	1.7
11	0	0
12	0	0
13	-	
CN3901		
1	0	0
2	4.9	4.9
3	0	0
4	4.9	4.9
5	0	0
6	4.6	4.7
CN5311		
1	3.3	3.5
2	0	0
3	-7.3	-7.4
4	0	0
5	0	0
6	0	0
7	5.1	5.1
8	31.6	32.0
9	12.2	12.2
10	0	0
11	0	0
12	0	0
13	12.2	12.2
14	4.8	4.9
15	11.0	11.0
16	46.0	45.8
17	5.7	5.7
CN6701		
1	0	0
2	4.4	4.3
3	4.5	4.5
4	0	0
5	0	0
6	0	0
7	5.0	5.0
8	0	0
9	0	0
10	0	0
CN7001		
1	5.0	5.0
2	5.0	5.0
3	0	0
4	0	0
CN7103		
1	0	0
2	0	0
3	0	0
4	0	0
CN7301		
1	2.4	2.4
2	0	0
3	2.4	2.4
4	0	0
5	1.8	1.9
6	0	0
7	1.7	1.9
8	0	0
9	2.0	1.9
10	0	0
11	2.3	2.4
12	0	0
13	0	0
14	0	0
15	3.9	0
16	5.0	5.0
17	0	0
CN7303		
1	4.7	4.8
2	0	0.2
3	4.7	4.7
4	3.8	0
5	5.0	5.0
CN7304		
1	0	0
2	0	0

<DVD IF>

MODE PIN NO.	REC	PLAY
IC8001		
1	5.0	5.0
2	0	0
3	1.6	1.7
4	1.6	1.6
5	0	0
6	4.9	5.0
7	0	0
8	0	0
9	4.9	4.9
10	4.9	4.9
11	2.4	2.5
12	5.0	5.0
13	0	2.5
14	0	0
15	0	0
16	2.5	2.5
17	5.0	5.0
18	2.4	2.5
19	4.9	0
20	0	0
21	0	0
22	4.9	4.9
23	1.8	1.8
24	4.9	4.9
25	0	0
26	0	0
27	5.0	5.0
28	5.0	5.0
IC8002		
1	0	0.3
2	1.7	1.9
3	1.7	|
4	-6.5	-6.5
5	0	|
6	1.7	0
7	0	0.4
8	4.4	4.4
IC8101		
1	5.0	5.0
2	2.2	0
3	4.8	0
4	1.7	1.7
5	3.4	3.4
6	1.5	1.5
7	2.5	0
8	0	0
9	0	0
10	0	0
11	0	0
12	1.4	1.4
13	0	0
14	2.3	2.3
15	4.7	0
16	0	0
17	0	0
18	0	2.4
19	0	2.4
20	0	0
21	2.4	2.4
22	2.3	2.3
23	0	0
24	1.2	1.3
25	0	1.3
26	0	0
27	0	1.4
28	1.3	1.4
29	0	0
30	1.8	1.8
31	1.8	1.8
32	0	0
33	2.3	2.3
34	5.0	5.0
IC8201		
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	5.0	5.0
11	5.0	5.0
12	2.4	2.5
13	2.3	2.3
14	0	0
15	0	0
16	5.0	5.0
17	0	0
18	4.5	4.6
19	|	0
20	4.7	4.7
21	4.5	4.6
22	4.0	4.0
23	4.6	4.6
24	0	0

MODE PIN NO.	REC	PLAY
25	4.6	4.6
26	0	0
27	3.3	0
28	0	0
29	0	0
30	0	0
31	0	0
32	5.0	5.0
33	4.9	4.9
34	0	0
35	0	0
36	0	0
37	0	0
38	0	0
39	0	0
40	0	0
41	0	5.0
42	5.0	5.0
43	5.0	0
44	5.0	5.0
45	0	0
46	0	0
47	0	0
48	0	0
49	0	0
50	0	0
51	0	0
52	0	0
53	5.0	0
54	0	0
55	0	0
56	0	0
57	0	0
58	0	0
59	5.0	0
60	0	0
61	0	0
62	0	0
63	0	0
64	0	0
65	0	0
66	0	0
67	0	0
68	0	0
69	0	0
70	0	0
71	0	0
72	0	0
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	0	0
82	0	0
83	0	0
84	0	0
85	5.0	5.0
86	5.0	5.0
87	0	0
88	0	0
89	0	0
90	0	0
91	5.0	5.0
92	0	0
93	0	0
94	0	0
95	0	0
96	0	0
97	0	2.6
98	0	0
99	0	0
100	0	5.0
IC8202		
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	4.0	4.0
12	0	0
13	0	0
14	5.0	0
Q8003		
E	0	0
C	0	0
B	0	0
Q8004		
E	0	0
C	0	0

MODE PIN NO.	REC	PLAY
B	-0.6	-0.5
Q8005		
E	5.0	5.0
C	-0.6	-0.5
B	5.0	5.0
Q8006		
E	0	0
C	5.0	5.0
B	0	0
Q8201		
E	1.8	1.8
C	3.4	3.4
B	2.4	2.5
Q8202		
E	0	0
C	1.7	0
B	0	0
Q8501		
E	9.1	9.1
C	10.5	10.5
B	9.7	9.7
CN8001		
1	1.6	1.6
2	0	0
3	0	1.7
4	0	0.3
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	5.0	5.0
14	3.4	3.4
15	0	0
16	1.8	1.8
17	0	0
18	0	0
19	2.9	2.9
20	2.9	2.9
21	3.0	3.0
22	2.6	2.6
23	0	0
24	0	0
25	1.6	1.6
26	0	0
CN8002		
1	3.4	3.4
2	0	0
3	0	3.4
4	0	0
5	5.0	5.0
6	0	0
7	5.0	5.0
8	0	0
9	9.1	9.1
10	0	0
CN8004		
1	-7.2	-7.2
2	10.5	10.5
3	11.0	11.0
4	0	0
5	0	0
6	3.4	3.4
7	0	0
8	5.0	5.0
9	5.7	5.7
10	0	0
11	0	0
CN8005		
1	0	0
2	5.0	5.0
3	0	0
4	0	0
5	0	0
6	0	0
7	2.3	2.4
8	0	0
9	1.8	1.8
10	0	0
11	1.4	1.4
12	0	0
13	1.2	1.2
14	0	0
15	2.3	2.4
16	0	0
17	2.3	2.4
CN8006		
1	0	0
2	0	0
3	0	0
4	0	0
CN8007		
1	0	0
2	0	0
3	1.6	1.7

MODE PIN NO.	REC	PLAY
4	0	0
5	0	0
6	0	0
7	5.0	5.0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	5.0	5.0
CN8008		
1	5.0	5.0
2	3.0	3.2
3	4.6	4.6
4	0.3	0.3
5	4.6	4.7
CN8009		
1	5.0	5.0
2	4.9	5.0
3	4.6	4.6
4	3.9	4.0
5	4.5	4.5
6	0	0
CN8010		
1	0	0
2	0	0

VOLTAGE CHARTS

<DVD SERVO CONTROL>

MODE PIN NO.	DC (V)
IC101	
1	0
2	4.4
3	3.7
4	4.4
5	0
6	1.7
7	1.7
8	1.9
9	3.3
10	0
11	3.3
12	3.3
13	3.3
14	3.3
15	0
16	1.7
17	1.5
18	1.7
19	1.7
20	0
21	1.7
22	0
23	1.7
24	0.9
25	1.7
26	0
27	0
28	4.9
29	1.7
30	0
31	0
32	0
33	0
34	0
35	0.9
36	3.3
37	1.3
38	0.9
39	3.3
40	3.3
41	1.7
42	1.7
43	1.7
44	1.0
45	1.7
46	2.1
47	2.1
48	2.1
49	2.1
50	2.1
51	2.1
52	2.1
53	2.1
54	2.1
55	4.9
56	2.1
57	2.1
58	2.1
59	2.1
60	2.1
61	0
62	2.1
63	2.1
64	0
IC201	
1	1.7
2	1.7
3	1.7
4	1.7
5	1.7
6	1.7
7	1.7
8	0
9	3.2
10	5.0
11	2.5
12	2.5
13	2.5
14	2.5
15	4.3
16	4.3
17	4.3
18	4.3
19	9.2
20	0
21	0
22	1.7
23	1.7
24	1.7
25	0
26	0
27	1.7
28	9.2
29	1.7
30	9.2
IC251	
1	0.8
2	0.8
3	0.8
4	0.8
5	0
6	0
7	0.8
8	0
9	5.0
10	5.0
11	5.0
12	5.0
13	5.0
14	5.0
15	0
16	0
17	0
18	0
19	5.0
20	5.0
21	1.67
22	1.67
23	0
24	3.3
25	5.0
26	0
27	9.2
28	9.2
29	0
30	0
IC301	
1	0
2	2.9
3	3.3
4	0
5	3.3
6	3.3
7	-
8	0
9	0
10	0
11	3.3
12	3.3
13	3.3
14	0
15	1.4
16	0.3
17	1.4
18	1.7
19	0
20	1.7
21	0
22	2.2
23	2.2
24	1.7
25	1.5
26	1.5
27	1.5
28	1.5
29	1.5
30	0.5
31	3.3
32	0
33	3.3
34	3.3
35	3.3
36	3.3
37	0
38	0
39	0
40	0
41	0
42	0
43	1.0
44	0
45	-
46	0
47	3.3
48	0
49	-
50	-
51	3.3
52	3.3
53	-
54	-
55	-
56	-
57	3.3
58	1.7
59	0
60	0
61	-
62	-
63	-
64	-
65	1.7
66	1.7
67	1.7
68	1.7
69	3.3
70	-
71	-
72	-
73	-
74	-
75	-
76	1.7
77	0
78	3.3
79	1.7
80	-
81	0
82	0.8
83	2.1
84	1.7
85	0
86	-
87	-
88	3.3
89	0
90	1.7
91	-
92	-
93	1.7
94	0
95	-
96	1.7
97	1.7
98	-
99	3.3
100	0.7
101	0.7
102	0
103	1.4
104	2.1
105	-
106	1.7
107	0.7
108	0.7
109	3.3
110	1.7
111	1.7
112	0
113	0
114	1.7
115	1.7
116	3.3
117	1.7
118	1.7
119	1.7
120	1.7
121	2.1
122	1.7
123	2.1
124	-
125	3.3
126	0
127	0
128	0
129	0
130	0
131	3.3
132	0
133	0
134	0
135	0
136	1.7
137	3.3
138	0
139	3.3
140	0
141	0
142	0
143	3.3
144	0
145	-
146	1.7
147	3.3
148	-
149	0
150	0
151	0
152	1.7
153	0
154	1.7
155	0
156	3.3
157	0
158	0
159	0
160	0
161	0
162	3.3
163	0
164	0
165	0
166	0
167	0
168	0
169	3.3
170	0
171	0
172	3.3
173	0
174	4.9
175	4.9
176	3.3
IC401	
1	3.3
2	3.3
3	0
4	3.3
5	-
6	3.3
7	-
8	0
9	3.3
10	0
11	3.3
12	3.3
13	1.5
14	1.5
15	1.5
16	1.5
17	3.3
18	-
19	0
20	0
21	-
22	3.3
23	1.7
24	1.7
25	5.0
26	3.3
27	0
28	3.3
29	3.3
30	3.3
31	3.3
32	0
33	3.3
34	3.3
35	0
36	3.3
37	3.3
38	3.3
39	0
40	0
41	-
42	-
43	0
44	-
45	3.3
46	0
47	0
48	3.3
49	3.3
50	3.3
51	-
52	0
53	3.3
54	3.3
55	3.3
56	3.3
57	-
58	3.3
59	0
60	-
61	0
62	0
63	0
64	0
65	0
66	3.3
67	3.3
68	0
69	3.3
70	3.3
71	0
72	3.3
73	3.3
74	3.3
75	3.3
76	3.3
77	0
78	0
79	0
80	0
81	3.3
82	3.3
83	3.3
84	3.3
85	3.3
86	3.3
87	3.3
88	3.3
89	3.3
90	3.3
91	3.3
92	0
93	0
94	0
95	0
96	0
97	0
98	0
99	0
100	0
IC451	
1	0
2	3.2
3	0
4	0
5	0
6	0
7	0
8	0

<DVD AV DECODER>

MODE PIN NO.	DC (V)
IC501	
1	3.2
2	0.5
3	0.4
4	1.8
5	0.4
6	0
7	0.4
8	0.4
9	0
10	3.2
11	0
12	0
13	0
14	0
15	2.0
16	1.3
17	0
18	0.4
19	3.2
20	1.4
21	1.7
22	1.7
23	0
24	3.2
25	0.5
26	2.5
27	3.2
28	1.2
29	0
30	0
31	0
32	2.0
33	1.3
34	1.7
35	2.2
36	3.1
37	3.2
38	0
39	3.2
40	0
41	0
42	0
43	0.7
44	3.2
45	0.7
46	0.5
47	0
48	0.5
49	0
50	0.4
51	0.4
52	0.4
53	3.2
54	0.4
55	0.4
56	0.4
57	0
58	0.4
59	0.4
60	0.4
61	0.5
62	3.2
63	0.5
64	3.2
65	1.0
66	-
67	0
68	1.7
69	0
70	3.2
71	0
72	0
73	0
74	0
75	3.2
76	-
77	1.7
78	1.7
79	1.7
80	0
81	0
82	0
83	3.2
84	0.4
85	0
86	3.2
87	0
88	1.7
89	0
90	0
91	1.2
92	0
93	0
94	0.6
95	0
96	0
97	0
98	1.7
99	-
100	-
101	1.7
102	3.2
103	0
104	0
105	0
106	0
107	3.2
108	1.7
109	0
110	0
111	1.0
112	1.0
113	3.1
114	0.4
115	0.4
116	-
117	3.1
118	0.8
119	1.3
120	1.8
121	0
122	0
123	0
124	0
125	3.2
126	0
127	0
128	0
129	0
130	0
131	0
132	0
133	0
134	0
135	1.8
136	0
137	0
138	0
139	0
140	3.2
141	0
142	0
143	0
144	0
145	3.2
146	0
147	0
148	0
149	0
150	0
151	0
152	0
153	0
154	3.2
155	0
156	3.2
157	0
158	0
159	1.7
160	1.7
161	3.2
162	0
163	0
164	0
165	0
166	0
167	0
168	0
169	3.2
170	3.2
171	0
172	0
173	0
174	0
175	0
176	0
177	0
178	0
179	0
180	0
181	3.2
182	3.2
183	0
184	0
185	3.2
186	0
187	0
188	0
189	3.2
190	0
191	0
192	1.7
193	3.2
194	3.2
195	0
196	3.2
197	3.2
198	3.2
199	3.2
200	3.2
201	0
202	3.2
203	3.2
204	0
205	4.9
206	3.2
207	0
208	3.2
209	0
210	3.2
211	0
212	1.7
213	3.2
214	3.2
215	0
216	0
217	3.2
218	0
219	3.2
220	3.2
221	0
222	3.2
223	3.2
224	3.2
225	0
226	0
227	0.8
228	0
229	0.8
230	0
231	0.8
232	0.6
233	3.2
234	0.6
235	0.8
236	1.0
237	0
238	0.4
239	0.8
240	0.8
IC502	
1	1.5
2	3.3
3	1.7
4	0
5	1.7
6	1.7
7	1.7
8	1.7
IC505	
1	3.2
2	0.8
3	3.2
4	0.8
5	0.8
6	0
7	0.6
8	0.6
9	3.2
10	0.8
11	1.0
12	0
13	0.4
14	-
15	3.2
16	0
17	3.2
18	0
19	3.2
20	2.2
21	-
22	2.0
23	1.3
24	0
25	1.2
26	2.5
27	0.5
28	1.0
29	3.2
30	-
31	0.4
32	0
33	0.4
34	0.4
35	3.2
36	0.4
37	0.4
38	0
39	0.5
40	0.5
41	3.2
42	3.2
43	3.2
44	0
45	0.4
46	0
47	0.4
48	0.4
49	3.2
50	0.4
51	0.5
52	0
53	0.5
54	0.7
55	3.2
56	0.7
57	0.5
58	0
59	0
60	1.7
61	1.4
62	0.4
63	1.3
64	1.3
65	2.0
66	0
67	3.2
68	1.7
69	-
70	-
71	0
72	0
73	-
74	0
75	3.2
76	0.4
77	0.4
78	0
79	0
80	0.4
81	3.2
82	0.5
83	0.8
84	0
85	0.8
86	0
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	
IC511	
1	0
2	1.8
3	3.2

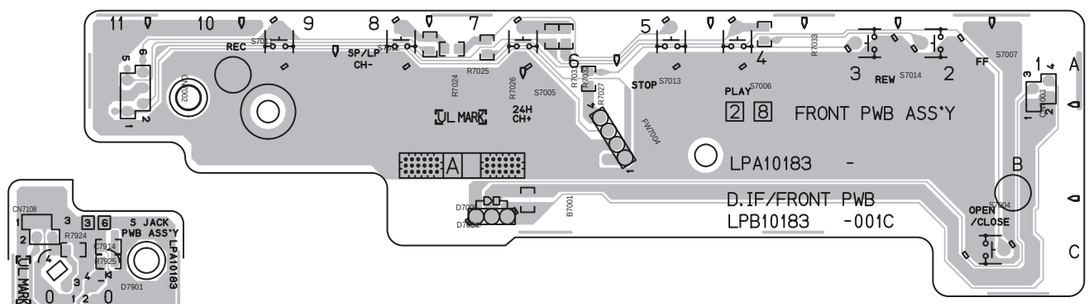
<DVD FLASH ROM>

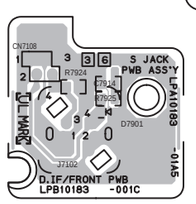
MODE PIN NO.	DC (V)
IC509	
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	-
11	3.2
12	0
13	-
14	-
15	0
16	0
17	0
18	0
19	0
20	0
21	0
22	0
23	0
24	3.2
25	0
26	3.2
27	0
28	3.2
29	0
30	0
31	0
32	0
33	0
34	0
35	0
36	0
37	3.2
38	0
39	0
40	0
41	0
42	0
43	0
44	0
45	0
46	0
47	0
48	0
IC510	
1	0
2	3.2
3	0
4	3.2
5	3.2
6	3.2
7	0
8	0
IC512	
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0
15	0
16	0
17	0
18	0
19	0
20	3.2
IC513	
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0
15	0
16	0
17	0
18	0
19	0
20	3.2
IC521	
1	3.2
2	0
3	5.0
4	3.2
5	0
6	5.0
7	0
8	5.0
9	0
10	3.2
11	5.0
12	0
13	3.2
14	5.0
IC522	
1	3.2
2	3.2
3	3.2
4	3.2
5	3.2
6	3.2
7	0
8	0
9	3.2
10	3.2
11	3.2
12	0
13	5.0
14	3.2

NOTES
1. VOLTAGES ARE DC - MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
CONDITION --- POWER ON DVD STOP

FRONT AND JACK CIRCUIT BOARDS

<28> FRONT
LPB10183-001C

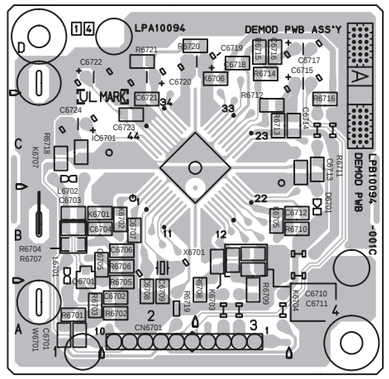




<36> JACK
LPB10183-001C

SWITCHING REGULATOR AND DEMODULATOR CIRCUIT BOARDS

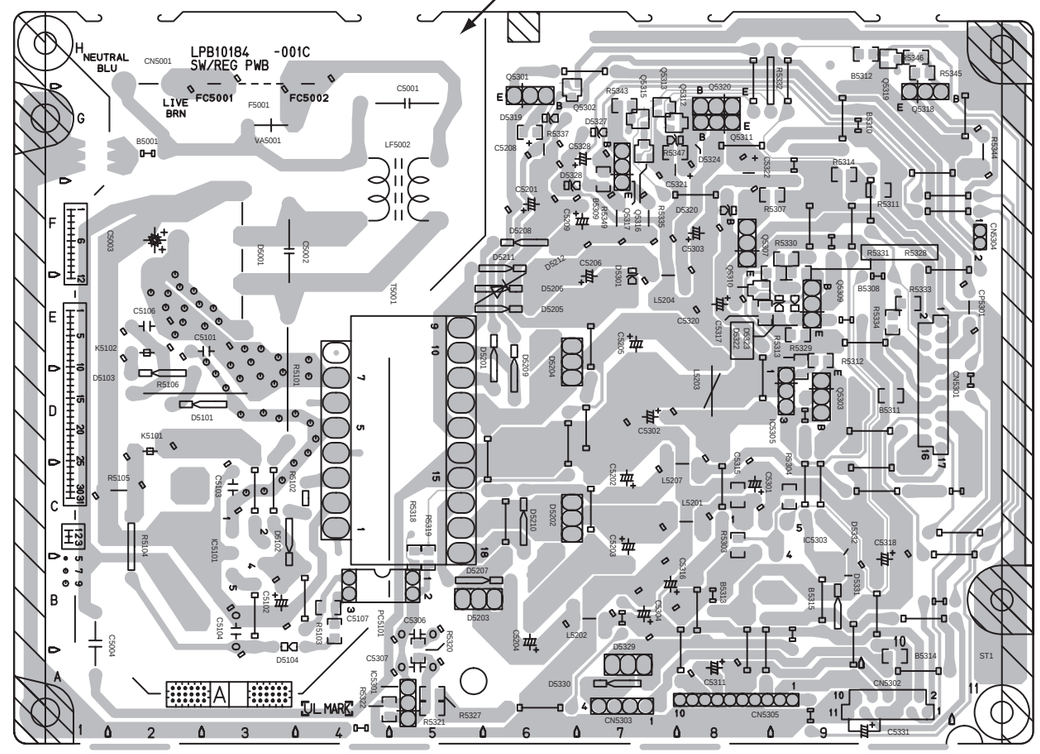
<14> DEMODULATOR
LPB10094-000C



COMPONENT PARTS LOCATION GUIDE <DEMODULATOR> LPB10094-001C

REF.NO.	LOCATION
CAPACITOR	
C6701	B C 1A
C6702	B C 2A
C6703	B C 1B
C6704	B C 1B
C6705	B C 1B
C6706	B C 2B
C6707	B C 2B
C6708	B C 2A
C6709	B C 2A
C6710	B C 3B
C6711	B C 3B
C6712	B C 4B
C6713	B C 4C
C6714	B C 3C
C6715	A D 4D
C6716	B C 3D
C6717	A D 4D
C6718	B C 3D
C6719	A D 3D
C6720	A D 2D
C6721	B C 2C
C6722	A D 1D
C6723	B C 2C
C6724	A D 1C
CONNECTOR	
CN6701	A D 3A
DIODE	
D6701	A D 4B
IC	
IC6701	B C 2C
COIL	
L6701	A D 1A
L6702	A D 1C
TRANSISTOR	
Q6701	B C 1B
RESISTOR	
R6701	B C 1A
R6702	B C 2A
R6703	B C 1A
R6704	B C 1B
R6705	B C 2A
R6706	B C 2B
R6707	B C 1B
R6708	B C 2A
R6709	B C 3A
R6710	B C 4B
R6711	B C 4C
R6712	B C 3C
R6713	B C 3C
R6714	B C 3D
R6715	B C 3D
R6716	B C 4C
R6718	B C 1C
R6719	A D 2A
R6720	B C 2D
R6721	B C 2D
OTHER	
K6701	B C 1B
K6702	B C 2B
K6703	B C 3B
K6704	B C 3B
K6705	B C 3B
K6706	B C 3D
K6707	B C 1C
X6701	A D 2B

<01> SWITCHING REGULATOR
LPB10184-001C

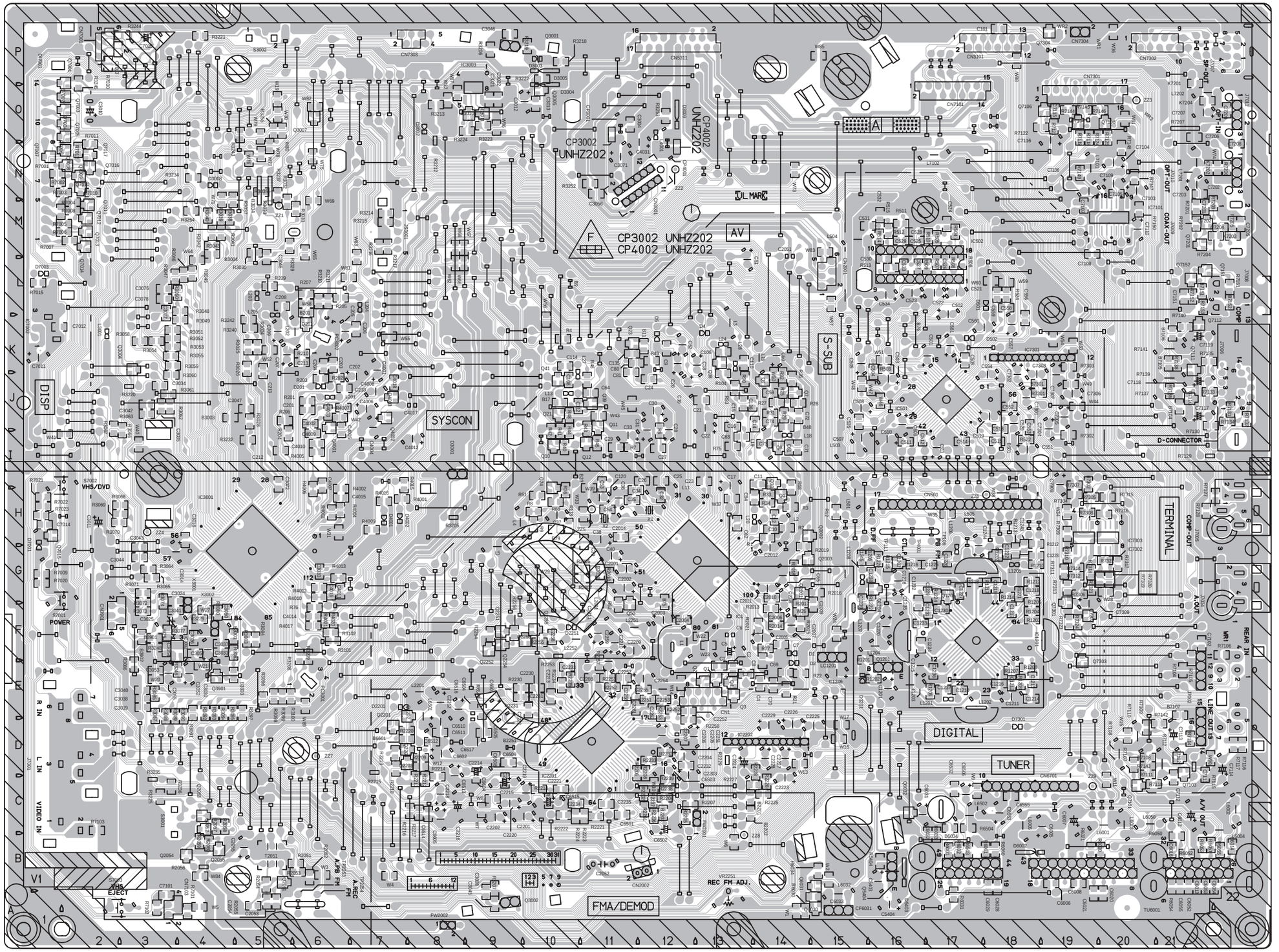


COMPONENT PARTS LOCATION GUIDE <SWITCHING REGULATOR> LPB10184-001C

REF.NO.	LOCATION
CAPACITOR	
C5001	A D 5G
C5002	A D 3E
C5003	A D 2F
C5004	A D 1A
C5101	A D 3E
C5102	A D 3B
C5103	A D 3C
C5104	A D 3B
C5106	A D 2E
C5107	B C 4B
C5201	A D 6F
C5202	A D 7C
C5203	A D 7C
C5204	A D 6A
C5205	A D 7E
C5206	A D 6F
C5208	A D 6G
C5209	A D 7F
C5301	A D 8C
C5302	A D 7D
C5303	A D 8F
C5304	A D 7B
C5306	A D 5B
C5307	A D 5A
C5311	A D 8A
C5315	B C 8C
C5316	A D 8B
C5317	B C 9E
C5318	A D 10C
C5320	A D 8E
C5321	A D 8G
C5322	A D 8G
C5328	A D 6G
C5331	A D 10A
CONNECTOR	
CN5001	A D 2H
CN5301	A D 10E
CN5302	A D 10A
CN5303	A D 7A
CN5304	A D 11F
CN5305	A D 9A
CP5301	A D 11E
DIODE	
D5001	A D 3E
D5101	A D 3D
D5102	A D 3C
D5103	A D 2E
D5104	A D 4B
D5201	A D 6D
D5202	A D 6C
D5203	A D 5B
D5204	A D 6D
D5205	A D 5E
D5206	A D 5E
D5207	A D 5B
D5208	A D 6F
D5209	A D 6D
D5210	A D 6C
D5211	A D 5F
D5212	A D 5E
D5301	A D 7E
D5319	A D 6G
D5320	A D 8F
D5322	A D 9E
D5323	A D 9E
D5324	A D 7G
D5327	A D 7G
D5328	A D 7G
D5329	A D 7A
D5330	A D 7A
D5331	A D 9B
D5332	A D 9B
FUSE	
F5001	A D 4H
IC	
IC5101	A D 3C
IC5301	A D 5A
IC5303	A D 8C
IC5305	A D 9D
COIL	
L5201	A D 8C
L5202	A D 7B
L5203	A D 8D
L5204	A D 7F
L5207	A D 7D
TRANSISTOR	
Q5301	A D 6G
Q5302	B C 6H
Q5303	A D 9D
Q5307	A D 8F
Q5309	A D 9E
Q5310	B C 8E
Q5311	A D 8G
Q5312	B C 8G
Q5313	B C 7G
Q5315	B C 7G
Q5316	B C 7G
Q5317	A D 7G
Q5318	A D 10H
Q5319	B C 10H
Q5320	A D 8G
RESISTOR	
R5101	A D 3D
R5102	A D 4C
R5103	B C 4B
R5104	A D 2B
R5105	A D 1C
R5106	A D 2D
R5303	B C 8C
R5304	B C 9C
R5307	B C 9F
R5311	B C 10F
R5312	B C 9E
R5313	B C 9E
R5314	B C 9G
R5318	B C 5C
R5319	B C 5C
R5320	B C 5B
R5321	B C 5A
R5322	B C 5A
R5327	B C 5A
R5328	B C 9F
R5329	B C 9E
R5330	B C 9F
R5331	B C 9F
R5332	A D 9G
R5333	B C 10E
R5334	B C 10E
R5335	A D 7F
R5337	B C 6G
R5343	B C 7G
R5344	A D 11G
R5345	B C 10H
R5346	B C 10H
R5347	B C 8G
R5349	A D 7F
OTHER	
K5101	A D 2D
K5102	A D 2E
LF5002	A D 4F
PC5101	A D 5B
T5001	A D 4C
VA5001	A D 3G

■ MAIN CIRCUIT BOARD

<03> MAIN
LPB10186-001B



COMPONENT PARTS LOCATION GUIDE <MAIN> LPB10186-001B

REF.NO.	LOCATION
CAPACITOR	
C1	B C 13E
C2	B C 13E
C3	B C 13E
C4	B C 14E
C5	A D 13F
C6	A D 13F
C7	B C 14F
C8	B C 14E
C9	B C 12K
C10	B C 14H
C11	B C 14I
C12	B C 14H
C14	B C 14J
C15	B C 13J
C16	B C 13J
C17	A D 13I
C18	A D 13K
C19	A D 12J
C20	A D 12K
C21	B C 13J
C22	A D 13J
C23	B C 13I
C24	B C 12J
C25	B C 12I
C26	B C 12I
C27	B C 12I
C28	A D 12I
C29	B C 11I
C30	A D 12J
C31	A D 12I
C32	B C 12H
C33	A D 11I
C34	B C 11H
C35	B C 11H
C36	A D 11H
C37	A D 10H
C38	A D 11H
C39	B C 11H
C40	A D 11G
C51	A D 13M
C52	A D 12K
C53	B C 11I
C54	B C 11H
C59	B C 14J
C60	A D 14K
C61	B C 14I
C62	B C 13H
C63	B C 13I
C64	B C 11J
C65	A D 14G
C69	B C 14E
C70	B C 14E
C71	B C 14I
C72	B C 14J
C73	B C 14I
C74	B C 14J
C80	B C 11K
C81	B C 11K
C84	B C 14H
C101	B C 18P
C106	B C 13K
C108	B C 10J
C110	B C 13K
C112	B C 10J
C114	B C 10K
C120	A D 11H
C135	B C 11K
C136	B C 13J
C201	B C 6J
C202	A D 7J
C203	B C 6K
C204	B C 6K
C205	A D 6K
C206	B C 7K
C207	A D 5K
C208	B C 5L
C209	A D 5K
C210	B C 6J
C211	B C 6K
C212	B C 5I
C213	B C 5K
C501	A D 17K
C502	A D 17L
C503	A D 16J
C504	B C 16K
C505	A D 15K
C506	B C 17K
C507	A D 15I
C508	A D 15J
C509	A D 16J
C510	A D 16I
C511	B C 16I
C512	B C 16I
C513	A D 17I
C514	B C 17I
C515	B C 18I
C518	B C 18J
C519	A D 18J
C520	A D 18J
C521	A D 17L
C522	A D 17L
C523	A D 16L
C524	B C 17M
C525	B C 16M
C526	B C 17L
C527	B C 16L
C528	B C 16M
C529	B C 16M
C530	B C 16L
C531	B C 16M
C532	B C 16M
C533	B C 16L
C534	A D 16L
C535	B C 15J
C551	A D 18I
C552	B C 18J
C553	B C 18J
C554	A D 18J
C556	B C 18K
C557	A D 18K
C558	B C 18L
C559	B C 18L
C560	A D 18K
C561	A D 17K
C1201	A D 16E
C1208	B C 16G
C1210	B C 17E
C1211	A D 18E
C1212	B C 18E
C1213	B C 18E
C1214	B C 18E
C1215	A D 16E
C1216	B C 18E
C1217	B C 18F
C1218	B C 18G
C1219	B C 18G
C1220	A D 16F
C1222	B C 18G
C1223	B C 18G
C1225	B C 17G
C1226	B C 17G
C1227	B C 17G
C1228	A D 16G
C1229	B C 17G
C1230	B C 17F
C1231	B C 17F
C1232	B C 16F
C1233	B C 16F
C1234	B C 16F
C1235	A D 16G
C1236	B C 17E
C1237	B C 17E
C1238	B C 16G
C1239	B C 15G
C1243	B C 18G
C1244	A D 17G
C1245	B C 15G
C1246	A D 15E
C2001	A D 11G
C2002	A D 11G
C2003	A D 12F
C2004	B C 12F
C2005	A D 14F
C2006	B C 14F
C2007	A D 14F
C2008	A D 14F
C2009	B C 15F
C2010	B C 14G
C2011	A D 14G
C2012	A D 14G
C2014	B C 11H
C2051	A D 14M
C2052	A D 11B
C2053	B C 5A
C2054	B C 5A
C2055	A D 5B
C2201	A D 10C
C2202	A D 9C
C2203	A D 12D
C2204	A D 12D
C2205	A D 12D
C2206	A D 12D
C2207	B C 12D
C2208	B C 11E
C2209	A D 11F
C2210	A D 11F
C2211	A D 11F
C2212	A D 8E
C2213	B C 10E
C2214	A D 9D
C2215	A D 9C
C2216	A D 8C
C2217	B C 9C
C2218	A D 8C
C2219	A D 10C
C2220	A D 9C
C2221	B C 10C
C2222	B C 10E
C2223	A D 14C
C2224	A D 13D
C2225	A D 14D
C2226	A D 14D
C2227	A D 14D
C2228	A D 14D
C2229	A D 14D
C2230	B C 10E
C2231	B C 10E
C2232	B C 12D
C2233	B C 10E
C2234	B C 10C
C2235	B C 11C
C2251	A D 12D
C2252	B C 12E
C2253	B C 12E
C2254	A D 12E
C2255	B C 12E
C2256	B C 11E
C2257	B C 11E
C2258	B C 10F
C2259	A D 11E
C2261	B C 11E
C2262	B C 12E
C3004	B C 11O
C3008	B C 9A
C3010	A D 2O
C3011	A D 2H
C3012	A D 10O
C3013	B C 10O
C3014	A D 3G
C3016	B C 4H
C3021	B C 9O
C3022	B C 9O
C3024	B C 3G
C3025	A D 3F
C3030	A D 4F
C3031	B C 4F
C3033	B C 6G
C3034	B C 3J
C3035	B C 3J
C3036	B C 4F
C3037	B C 4F
C3038	B C 3E
C3039	B C 3E
C3040	B C 3E
C3041	B C 3F
C3042	B C 3J
C3043	B C 3G
C3044	B C 3G
C3045	B C 9A
C3046	B C 9P
C3047	B C 5J
C3048	B C 5M
C3050	B C 4F
C3052	A D 4E
C3053	B C 3E
C3054	B C 3F
C3055	A D 3E
C3056	B C 11N
C3057	B C 4F
C3071	A D 11N
C3072	B C 5I
C3076	B C 3L
C3077	B C 3L
C3078	B C 3L
C4001	A D 7J
C4002	B C 6J
C4003	B C 6J
C4004	A D 7J
C4005	B C 6J
C4006	A D 7J
C4007	B C 6I
C4008	A D 7J
C4009	B C 6I
C4010	B C 6I
C4011	B C 6G
C4012	A D 8I
C4014	B C 6F
C4015	B C 6H
C4016	B C 6G
C4017	A D 8J
C4018	B C 7J
C4031	A D 12N
C5403	A D 16B
C5404	A D 16A
C6005	A D 19C
C6006	B C 19B
C6007	A D 19C
C6008	B C 19B
C6012	A D 21C
C6013	B C 21B
C6014	B C 22B
C6016	B C 21B
C6020	B C 20A
C6021	B C 19A
C6028	B C 18B
C6029	B C 18B
C6031	A D 16C
C6032	B C 17B
C6033	B C 15A
C6052	B C 21B
C6053	B C 21B
C6054	B C 22B
C6055	B C 21B
C6501	B C 11C
C6502	A D 12C
C6503	A D 12D
C6504	A D 9E
C6505	A D 9D
C6506	A D 17C
C6508	B C 9D
C6509	B C 9D
C6510	A D 8D
C6511	B C 8D
C6512	B C 8D
C6513	A D 8D
C6514	B C 8C
C6515	A D 10C
C6516	A D 8E
C6517	B C 9D
C6532	B C 17C
C6553	A D 18C
C6555	B C 18C
C6601	A D 9E
C6602	A D 8D
C6604	B C 9D
C6605	A D 8C
C7011	A D 1K
C7012	B C 1K
C7013	B C 2P
C7014	B C 1H
C7015	A D 3P
C7101	B C 3A
C7102	B C 21F
C7103	A D 20N
C7104	A D 20N
C7105	B C 20N
C7106	A D 19N
C7107	B C 19M
C7108	B C 19M
C7109	A D 20N
C7110	A D 20M
C7111	B C 21D
C7112	B C 21C
C7113	A D 21D
C7114	A D 22C
C7115	B C 19O
C7116	A D 19O
C7117	A D 21J
C7118	A D 21J
C7119	A D 21K
C7151	B C 21L
C7201	B C 21M
C7202	A D 21N
C7203	B C 21N
C7204	B C 22M
C7205	B C 22M
C7206	B C 21O
C7207	A D 21O
C7208	B C 22N
C7209	B C 22O
C7301	A D 18J
C7302	A D 18K
C7303	A D 18J
C7304	A D 19J
C7305	A D 19J
C7306	A D 19J
C7307	A D 19K
C7308	A D 19I
C7309	A D 19F
CF6031	A D 15A
CONNECTOR	
CN1	A D 13E
CN501	A D 18H
CN2001	A D 15L
CN2002	A D 12B
CN3001	A D 12N
CN3101	A D 17P
CN3901	A D 3G
CN5311	A D 13P
CN6701	A D 19C
CN7001	A D 2P
CN7101	A D 16O
CN7103	A D 3A
CN7301	A D 19O
CN7302	A D 20P
CN7303	A D 7P
CN7304	A D 19P
DIODE	
D1	A D 14F
D2	A D 14E
D4	A D 12K
D5	A D 12K
D201	A D 6J
D501	A D 18L
D502	A D 17K
D1201	A D 15E
D2201	A D 8E
D2251	A D 10F
D3001	A D 8I
D3002	A D 8O
D3003	A D 10P
D3004	A D 10O
D3005	A D 10P
D3008	A D 4N
D3009	A D 12O
D3010	B C 9O
D3011	B C 9O
D4001	A D 7H
D4002	A D 7H
D5403	A D 16B
D6002	A D 18B
D7001	A D 1H
D7003	A D 1L
D7301	A D 18D
DI7001	A D 1N
IC	
IC1	B C 13G
IC501	B C 17J
IC502	A D 17L
IC1201	B C 17F
IC2201	B C 11D
IC2202	A D 14D
IC3001	B C 5G
IC3002	B C 4F
IC3003	B C 9O
IC7002	A D 1K
IC7101	B C 20M
IC7301	A D 18K
IC7302	B C 19H
IC7303	B C 20H
COIL	
L1	A D 12F
L2	A D 14H
L3	A D 13K
L4	A D 9H
L5	A D 9G
L11	A D 12H
L13	A D 10J
L15	A D 14K
L18	A D 14I
L19	A D 14I
L20	A D 14H
L24	A D 13K
L27	A D 10K
L28	A D 13J
L201	A D 6J
L202	A D 6K
L203	A D 5L
L204	A D 7L
L205	A D 5K
L501	A D 15I
L503	A D 15I
L504	A D 15M
L505	A D 17H
L1201	A D 17E
L1202	A D 17E
L1203	A D 16E
L1204	A D 15F
L1205	A D 18G
L1206	A D 17H
L1207	A D 16F
L1208	A D 15G
L2001	A D 11F
L2201	A D 8E
L2251	A D 12F
L2252	A D 11F
L3001	A D 2K
L4001	A D 12N
L6001	A D 19C
L6002	A D 22C
L6003	A D 20B
L6004	A D 21C
L6005	A D 18B
L6032	A D 15A
L6050	A D 21C
L6501	A D 8E
L6502	A D 17C
L7101	A D 19N
L7102	A D 16N
L7201	A D 21N
L7202	A D 21O
LC1201	A D 15F
TRANSISTOR	
Q1	B C 13E
Q2	B C 13E
Q3	B C 13E
Q4	B C 13E
Q7	B C 14J
Q8	B C 14I
Q9	B C 14J
Q10	B C 10I
Q11	B C 11J
Q12	B C 11I
Q17	B C 14H
Q21	B C 10J
Q23	B C 11K
Q24	B C 10H
Q33	B C 14I
Q38	B C 13K
Q39	B C 11J
Q41	B C 10J
Q50	B C 11F
Q201	B C 6K
Q1201	A D 16E
Q1202	B C 18G
Q1203	B C 16G
Q1204	B C 16G
Q1205	B C 17G
Q2001	B C 14G
Q2002	B C 14H
Q2003	B C 14G
Q2051	B C 5B
Q2052	B C 4C
Q2053	B C 4C
Q2054	B C 4B
Q2055	B C 4B
Q2201	B C 7D
Q2202	B C 8E
Q2203	B C 7D
Q2204	B C 8D
Q2251	B C 9F
Q2252	B C 9F
Q2253	B C 10F
Q2254	B C 9F
Q2255	B C 10F
Q3001	A D 9P
Q3002	A D 9B
Q3004	B C 3K
Q3005	B C 10O
Q3007	B C 6O
Q3901	B C 4E
Q4001	B C 6J
Q4002	B C 7J
Q4003	B C 7J
Q5404	A D 16B
Q6030	B C 15A
Q6031	B C 15B
Q6032	B C 16C
Q7001	B C 2P
Q7002	B C 2O
Q7003	B C 2O
Q7004	B C 2O
Q7005	B C 2O
Q7006	B C 2N
Q7007	B C 1N
Q7008	B C 2N
Q7009	B C 2N
Q7010	B C 2N
Q7011	B C 2M
Q7012	B C 2M
Q7013	B C 2M
Q7014	B C 2M
Q7015	B C 1H
Q7016	B C 2N
Q7017	B C 2N
Q7101	B C 20C
Q7102	B C 21D
Q7103	B C 21D
Q7104	B C 19O
Q7106	B C 19O
Q7108	B C 20O
Q7110	B C 21J
Q7111	B C 21K
Q7112	B C 21K
Q7151	B C 21L
Q7152	B C 21L
Q7201	B C 21M
Q7202	B C 21M
Q7301	B C 19G
Q7302	B C 19F
Q7303	B C 19E
Q7304	B C 19P
RESISTOR	
R1	B C 14H
R2	B C 14H
R3	B C 14H
R4	B C 10K
R6	B C 12I
R7	B C 11I
R8	B C 10H
R9	B C 10H
R12	B C 15H
R21	B C 14E
R22	B C 14E
R25	B C 14J
R26	B C 14J
R27	B C 14J
R28	B C 14J
R29	B C 14J
R31	B C 14J
R32	B C 14J
R33	B C 14H
R34	B C 14H
R36	B C 10H
R40	B C 10I
R41	B C 10I
R42	B C 10I
R43	B C 11J
R44	B C 10I
R45	B C 11I
R46	B C 11J
R48	B C 10J
R49	B C 12K
R51	B C 10H
R68	B C 14I
R75	B C 13I
R76	B C 6F
R77	B C 14F
R79	B C 10H
R82	B C 11F
R88	B C 10H
R90	B C 13J
R93	B C 13J
R104	B C 13J
R118	B C 10H
R201	B C 6J
R202	B C 6J
R203	B C 6J
R204	B C 5I
R205	B C 6L
R206	B C 5J
R207	B C 6L
R209	B C 5L
R210	B C 6K
R503	B C 16K
R504	B C 17M
R505	B C 17M
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R507	B C 17L
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R510	B C 17M
R511	B C 16M
R512	B C 16M
R513	B C 16L
R514	B C 16M
R515	B C 16M
R522	B C 18I
R524	B C 18L
R1201	B C 15F
R1202	B C 16E
R1203	B C 18F
R1204	B C 18F
R1205	B C 18G
R1206	B C 17E
R1207	B C 18E
R1208	B C 18E
R1209	B C 18E
R1210	B C 18G
R1211	B C 18G
R1212	B C 18H
R1213	B C 18G
R1214	B C 18G
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R1221	B C 18G
R1222	B C 16F
R1224	B C 17G
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R2007	B C 11G
R2008	B C 11G
R2010	B C 11G
R2013	B C 14F
R2014	B C 14F
R2015	B C 14F
R2016	B C 15G
R2017	B C 14F
R2018	B C 14G
R2019	B C 14G
R2021	B C 14F
R2051	B C 6B
R2052	B C 6B
R2053	B C 6B
R2054	B C 5B
R2055	B C 5A
R2056	A D 4B
R2057	B C 4C
R2058	B C 4C
R2059	B C 4B
R2060	B C 4B
R2201	B C 12C
R2202	B C 12C
R2203	B C 12C
R2204	B C 12C
R2205	B C 12C
R2206	B C 11D
R2207	B C 12C
R2208	B C 12D
R2209	B C 8D
R2210	B C 7D
R2211	B C 8C
R2212	B C 8C
R2213	B C 7D
R2214	B C 8C
R2215	A D 7D
R2216	B C 8C
R2217	B C 8C
R2218	B C 10C
R2219	B C 10C
R2220	B C 7D
R2221	B C 11C
R2222	B C 10C
R2223	B C 11C
R2224	B C 10C
R2225	B C 14C
R2226	B C 14C
R2227	B C 14C
R2228	B C 14D
R2229	A D 13D
R2230	B C 9E
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R2237	B C 12C
R2238	B C 12C
R2239	B C 12C
R2251	B C 11E
R2252	B C 11E
R2253	A D 10F
R2254	B C 9F
R2255	B C 10F
R2256	B C 9F
R2257	B C 11E
R2258	B C 12D
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R3025	B C 5K
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R3029	B C 5M
R3030	B C 5M
R3031	B C 6M
R3032	B C 5M
R3033	A D 5M
R3034	A D 5N
R3035	B C 5N
R3037	B C 4M
R3038	B C 4M
R3039	B C 4M
R3040	B C 4M
R3041	B C 4M
R3042	B C 4M
R3043	B C 4M
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R3061	B C 3J
R3062	B C 3J
R3063	B C 3J
R3064	B C 3G
R3065	B C 3G
R3066	B C 3I
R3067	B C 2J
R3068	B C 3H
R3069	B C 3H
R3070	B C 2H
R3071	B C 3G
R3072	B C 3G
R3073	B C 3F
R3074	B C 3G
R3077	B C 4F
R3080	B C 4F
R3082	B C 4F
R3083	B C 5F
R3084	B C 5F
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R3217	B C 7M
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R3220	A D 3J
R3221	B C 4P
R3222	B C 10P
R3223	B C 9O
R3224	B C 9O
R3225	B C 3C
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R3235	A D 3C
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R3246	B C 4E
R3248	B C 3F
R3252	B C 11N
R3253	B C 12O
R3254	B C 4M
R3255	B C 5O
R4001	B C 7H
R4002	B C 6H
R4003	B C 6H
R4004	B C 6H
R4005	B C 6I
R4006	B C 6H
R4007	B C 6J
R4009	B C 7H
R4010	B C 6G
R4012	B C 6G
R4013	B C 6G
R4015	B C 7I
R4016	B C 7H
R4017	B C 6F
R4020	B C 6F
R4021	B C 6F
R5404	B C 16B
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R6021	B C 19B
R6030	B C 14A
R6031	B C 17A
R6032	B C 17B
R6033	B C 17B
R6034	B C 15B
R6050	B C 21B
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R6061	B C 18B
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R6503	B C 17B
R6504	B C 17C
R7001	B C 1N
R7002	B C 1N
R7003	B C 2N
R7004	B C 2M
R7005	B C 2M
R7006	B C 2M
R7007	B C 2M
R7008	B C 2M
R7009	B C 1G
R7010	B C 2N
R7011	B C 2N
R7012	B C 2N
R7013	B C 1M
R7015	B C 1L
R7020	B C 1G
R7021	B C 1H
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R7023	B C 1H
R7030	B C 2P
R7101	B C 4A
R7102	B C 3A
R7103	B C 2C
R7104	B C 21E
R7105	B C 21F
R7106	B C 22F
R7107	B C 20D
R7108	A D 20D
R7109	B C 20D
R7110	A D 20D
R7111	B C 20D
R7112	A D 21D
R7113	B C 20C
R7114	B C 21D
R7115	A D 21C
R7116	B C 22D
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R7118	B C 19O
R7119	B C 19O
R7121	B C 19O
R7122	B C 19O
R7124	B C 20O
R7125	B C 20O
R7127	B C 22H
R7128	B C 21H
R7129	A D 22I
R7130	B C 21J
R7131	B C 22J
R7132	B C 22J
R7133	B C 21J
R7134	B C 22J
R7135	B C 21K
R7136	B C 21J
R7137	A D 21J
R7138	B C 21K
R7139	A D 21J
R7140	B C 21K
R7141	A D 21K
R7142	B C 21D
R7143	B C 20D
R7144	B C 19O
R7145	B C 19O
R7146	B C 20O
R7147	B C 20N
R7148	B C 20N
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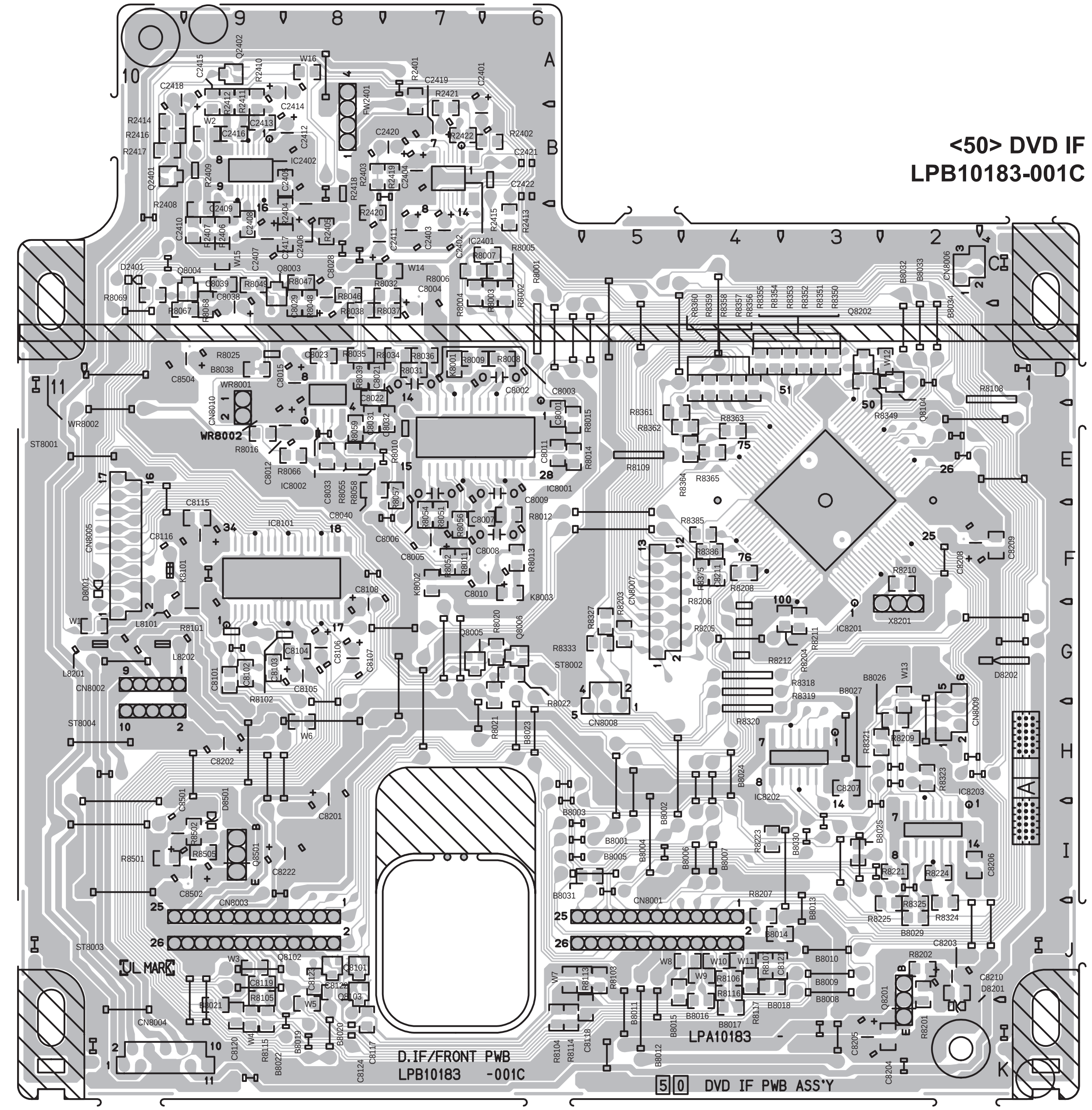
R7202	B C 21M
R7203	B C 21M
R7204	B C 22M
R7205	B C 22M
R7206	B C 22N
R7207	A D 21O
R7301	B C 18J
R7302	B C 19I
R7303	B C 19K
R7304	B C 19H
R7305	B C 19H
R7306	B C 19G
R7307	B C 19I
R7308	B C 19H
R7309	B C 19H
R7310	B C 19G
R7311	B C 19G
R7312	B C 19G
R7313	B C 19G
R7314	B C 19G
R7315	B C 20H
R7316	B C 20H
R7317	B C 20G
R7318	B C 19G
R7319	B C 20G
R7320	B C 20G
R7321	B C 19G
R7322	B C 20G
R7323	B C 19F
R7324	B C 19F
OTHER	
CP3001	A D 11O
CP3002	B C 11O
CP4001	A D 12O
CP4002	B C 12N
FW2001	A D 13C
FW2002	A D 8A
J7001	A D 1D
J7002	A D 22E
J7004	A D 22G
J7005	A D 22H
J7006	A D 22J
J7007	A D 22P
J7008	A D 22L
J7009	A D 22M
J7010	A D 22N
J7011	A D 22O
JS3001	A D 7M
K2251	B C 12E
K2252	B C 12E
K2253	B C 12E
K7201	B C 21P
K7202	B C 21N
K7203	B C 22M
K7204	B C 21O
PC3001	A D 6E
PC3002	A D 6K
S3001	A D 3C
S3002	A D 5P
S7001	A D 2G
S7002	A D 2I
S7003	A D 3A
T2051	A D 5B
TP106	A D 17H
TP111	A D 16H
TP2253	A D 6A
TP2254	A D 6A
TP4001	A D 16H
TU6001	A D 22B
VR2251	A D 13A
WR1	A D 20P
WR2	A D 20O
X1	A D 12H
X2	A D 11H
X3001	A D 4G
X3002	A D 4F

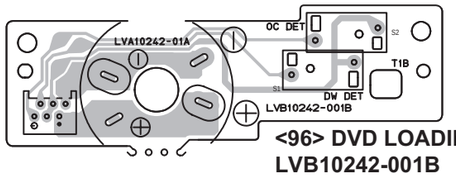
■ DVD IF CIRCUIT BOARD



COMPONENT PARTS LOCATION GUIDE <DVD IF> LPB10183-001C

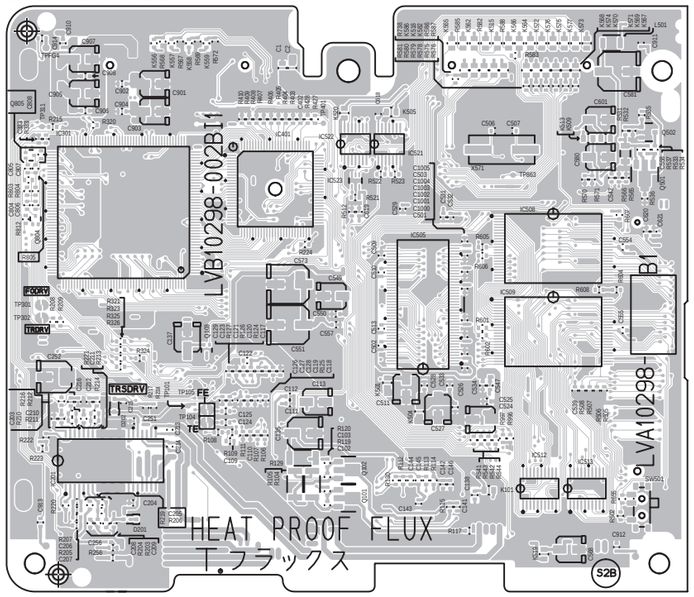
REF.NO.	LOCATION
CAPACITOR	
C2301	B C 4A
C2302	B C 2B
C2303	A D 1?
C2304	A D 1A
C2305	A D 1A
C2306	A D 1B
C2307	B C 2A
C2401	A D 7A
C2402	A D 7B
C2403	A D 7B
C2404	A D 7B
C2405	B C 8B
C2406	A D 8B
C2407	A D 9C
C2408	B C 9B
C2409	B C 9B
C2410	B C 9C
C2411	A D 8C
C2412	A D 8A
C2413	B C 9A
C2414	A D 9A
C2415	B C 9A
C2416	B C 9B
C2417	B C 8C
C2418	A D 9A
C2419	A D 7A
C2420	A D 7B
C2421	A D 6B
C2422	A D 6B
C7914	B C 8?
C8001	B C 6D
C8002	A D 6D
C8003	A D 7D
C8004	A D 7C
C8005	A D 7F
C8006	A D 7E
C8007	B C 7E
C8008	A D 6F
C8009	A D 6E
C8010	A D 6F
C8011	B C 6E
C8012	A D 8D
C8015	A D 8D
C8021	B C 8D
C8022	B C 8D
C8023	B C 8D
C8028	A D 8C
C8029	B C 8C
C8031	B C 8D
C8032	B C 7D
C8033	B C 8E
C8038	A D 9C
C8039	B C 9C
C8040	B C 8E
C8101	B C 9G
C8102	B C 9G
C8103	B C 9G
C8104	B C 8G
C8105	A D 8G
C8106	A D 8G
C8107	A D 8G
C8108	A D 8F
C8115	B C 9E
C8116	A D 9F
C8117	B C 8J
C8118	B C 5J
C8119	B C 9J
C8120	B C 9J
C8121	B C 4J
C8122	B C 8J
C8123	B C 8J
C8124	A D 8K
C8201	A D 8H
C8202	A D 9H
C8203	A D 2J
C8204	B C 2K
C8205	A D 3K
C8206	B C 2I
C8207	B C 3H
C8208	A D 2F
C8209	B C 1F
C8210	B C 2J
C8211	B C 4F
C8222	A D 9I
C8501	A D 10I
C8502	A D 9I
C8504	A D 9D
CONNECTOR	
CN7002	A D 11?
CN7003	A D 1?
CN7108	A D 8?
CN8001	A D 4I
CN8002	A D 10G
CN8003	A D 8I
CN8004	A D 10K
CN8005	A D 10F
CN8006	A D 2C
CN8007	A D 5G
CN8008	A D 5G
CN8009	A D 2H
CN8010	A D 9D
DIODE	
D2301	A D 4B
D2302	A D 4B
D2401	A D 10C
D7004	A D 7?
D7005	A D 7?
D7901	B C 8?
D8001	A D 10F
D8201	A D 2J
D8202	A D 1G
D8501	A D 9H
IC	
IC2301	A D 1A
IC2401	B C 7B
IC2402	B C 9B
IC8001	B C 7E
IC8002	B C 8D
IC8101	B C 9F
IC8201	B C 3E
IC8202	B C 3H
IC8203	B C 2I
TRANSISTOR	
Q2401	B C 10B
Q2402	B C 9A
Q8003	B C 9C
Q8004	B C 9C
Q8005	B C 7G
Q8006	B C 6G
Q8101	B C 8J
Q8102	B C 8J
Q8103	B C 8J
Q8104	B C 2D
Q8201	A D 2J
Q8202	B C 3D
Q8501	A D 9I
RESISTOR	
R2301	B C 4A
R2302	B C 2B
R2303	B C 2A
R2304	B C 2B
R2305	B C 2A
R2306	B C 1?
R2307	B C 1A
R2308	B C 1B
R2309	B C 1B
R2311	B C 2A
R2312	B C 2B
R2401	B C 7A
R2402	B C 6B
R2403	B C 8B
R2404	B C 8B
R2405	B C 8C
R2406	B C 9C
R2407	B C 9C
R2408	B C 9B
R2409	A D 9B
R2410	B C 9A
R2411	B C 9A
R2412	B C 9A
R2413	B C 6B
R2414	B C 10A
R2415	A D 6B
R2416	B C 10B
R2417	B C 10B
R2418	A D 8B
R2419	B C 7B
R2420	B C 8B
R2421	B C 7A
R2422	B C 7B
R7024	B C 7?
R7025	B C 7?
R7026	B C 7?
R7027	B C 6?
R7031	B C 6?
R7032	B C 6?
R7033	B C 4?
R7924	B C 8?
R7925	B C 8?
R8001	A D 6C
R8002	B C 6C
R8003	B C 6C
R8004	B C 7C
R8005	B C 6C
R8006	B C 7C
R8007	B C 6C
R8008	B C 6D
R8009	B C 7D
R8010	A D 7D
R8011	B C 7F
R8012	B C 6E
R8013	B C 6F
R8014	B C 6E
R8015	B C 6D
R8016	B C 9E
R8020	B C 6G
R8021	B C 6G
R8022	B C 6G
R8025	A D 8D
R8031	B C 7D
R8032	B C 7C
R8034	B C 7D
R8035	B C 8D
R8036	B C 7D
R8037	B C 7C
R8038	B C 8C
R8039	B C 8D
R8046	B C 8C
R8047	B C 8C
R8048	B C 8C
R8049	B C 9C
R8051	B C 7E
R8052	B C 7F
R8054	B C 7E
R8055	B C 8E
R8056	B C 7E
R8057	B C 7E
R8058	B C 8E
R8059	B C 8D
R8066	B C 8E
R8067	B C 9C
R8068	B C 9C
R8069	B C 10C
R8101	A D 9G
R8102	A D 8G
R8103	B C 5J
R8104	B C 6J
R8105	B C 9J
R8106	B C 4J
R8107	B C 4J
R8108	A D 2D
R8109	A D 5E
R8113	B C 5J
R8114	B C 6J
R8115	B C 9J
R8116	B C 4J
R8117	B C 4J
R8201	B C 2J
R8202	B C 2J
R8203	B C 5G
R8204	B C 3F
R8205	A D 4F
R8206	A D 4F
R8207	B C 4I
R8208	B C 4F
R8209	B C 2H
R8210	B C 2F
R8211	B C 3F
R8212	A D 4G
R8221	B C 2I
R8223	B C 4I
R8224	B C 2I
R8225	B C 2I
R8318	A D 4G
R8319	A D 4G
R8320	A D 4G
R8321	B C 2H
R8323	B C 2H
R8324	B C 2I
R8325	B C 2I
R8327	B C 5F
R8333	B C 5G
R8349	B C 3D
R8350	B C 3D
R8351	B C 3D
R8352	B C 3D
R8353	B C 3D
R8354	B C 4D
R8355	B C 4D
R8356	B C 4D
R8357	B C 4D
R8358	B C 4D
R8359	B C 4D
R8360	B C 4D
R8361	B C 5D
R8362	B C 4D
R8363	B C 4E
R8364	B C 4E
R8365	B C 4E
R8375	B C 4F
R8385	B C 4F
R8386	B C 4F
R8501	B C 10I
R8502	B C 9I
R8505	B C 9I
OTHER	
FW2301	A D 2B
FW2401	A D 8B
FW7004	A D 5?
FW7005	A D 9?
J2301	A D 4?
J2302	A D 3?
J7102	A D 8?
K8001	B C 7D
K8002	B C 7F
K8003	B C 6F
K8101	A D 10F
L8101	A D 10F
L8201	A D 10G
L8202	A D 10G
S7004	A D 2?
S7005	A D 7?
S7006	A D 4?
S7007	A D 2?
S7011	A D 9?
S7012	A D 8?
S7013	A D 5?
S7014	A D 3?
UN7001	A D 10?
WR8002	A D 11D
X8201	A D 2F

■ DVD SERVO CONTROL AND DVD LOADING MOTOR CIRCUIT BOARDS

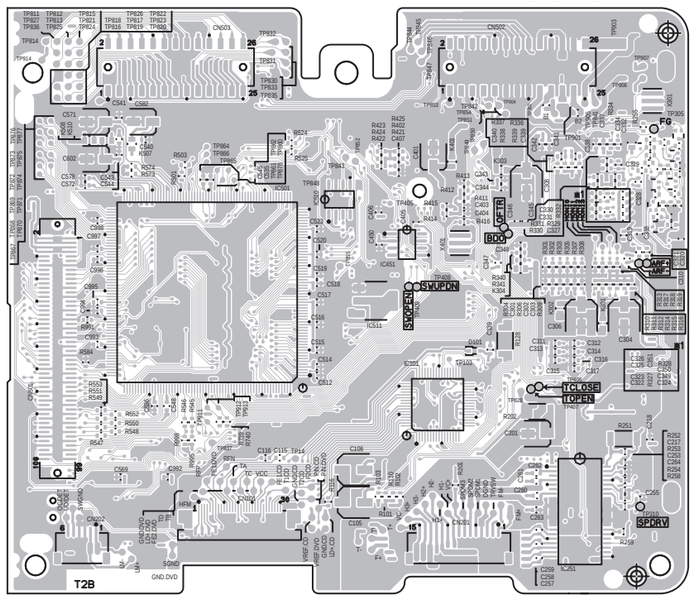


<96> DVD LOADING MOTOR
LVB10242-001B

<95> DVD SERVO CONTROL
LVB10298-002B



<95> DVD SERVO CONTROL
LVB10298-002B

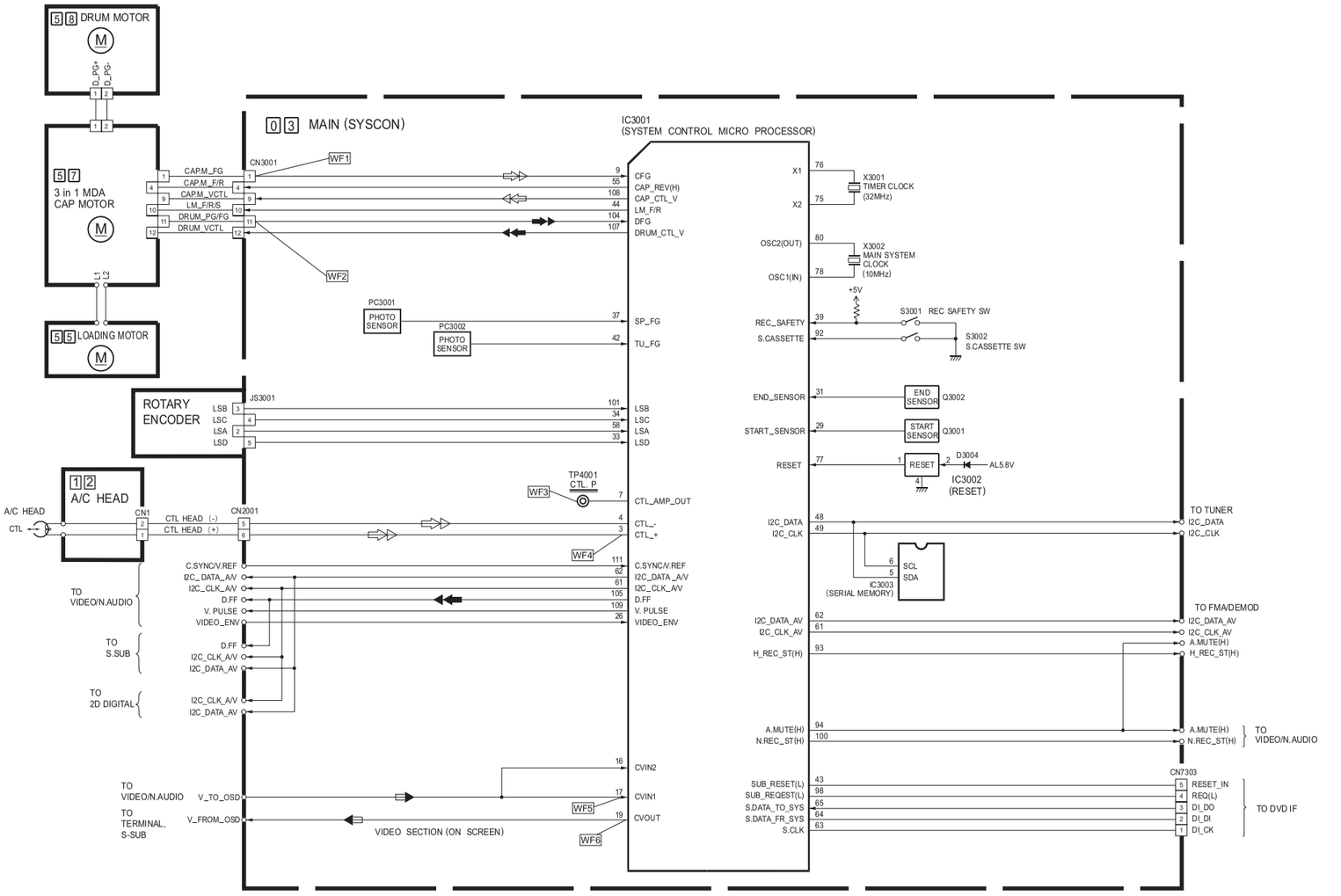


■ CPU PIN FUNCTION

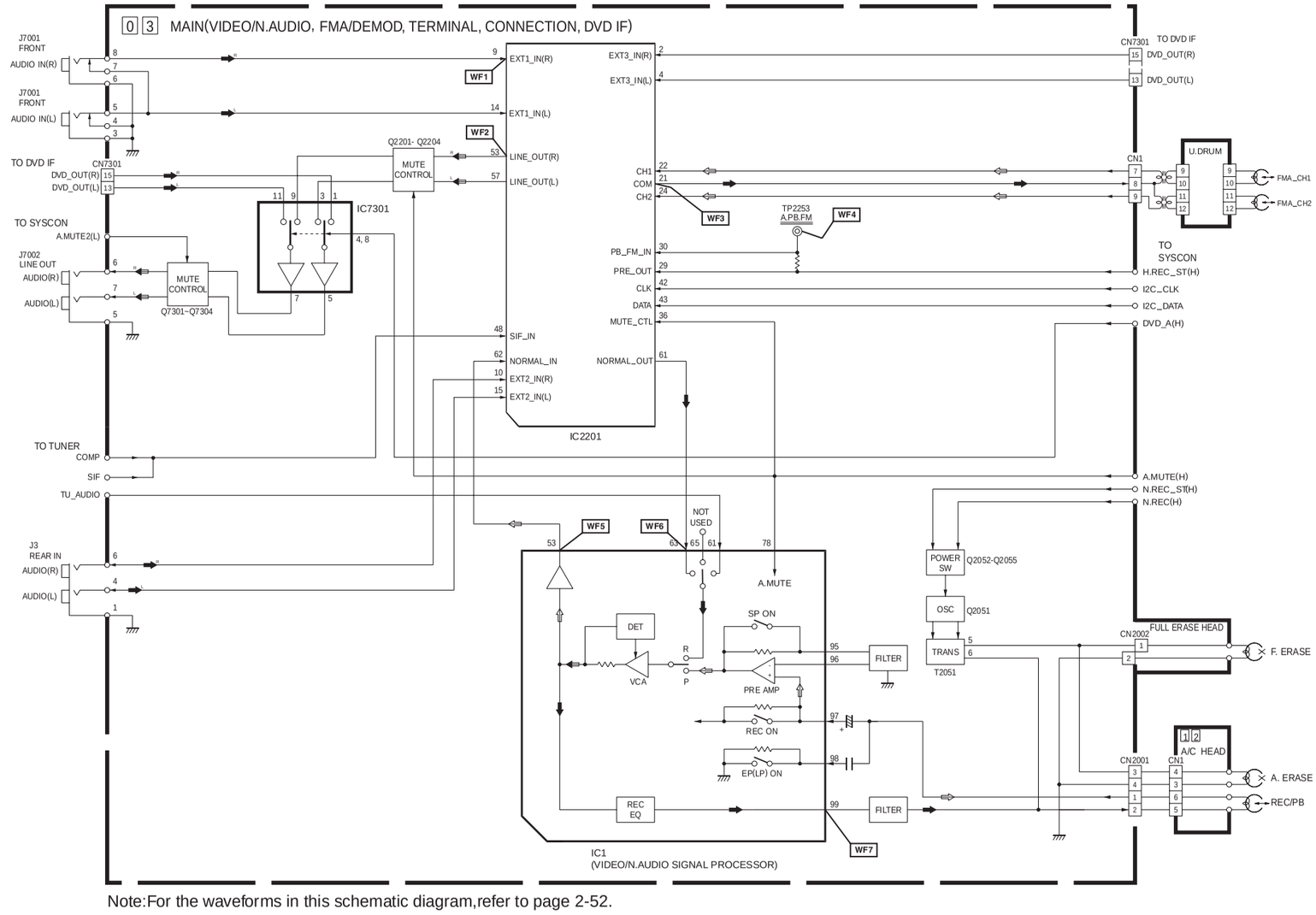
<SYSCON IC3001>

PIN NO.	LABEL	IN/OUT	FUNCTION
1	SVss	-	GND
2	CTLREF	-	CTL REFERENCE VOLTAGE
3	CTL(+)	IN/OUT	CTL(+) SIGNAL
4	CTL(-)	IN/OUT	CTL(-) SIGNAL
5	CTLBIAS	-	CTL BIAS VOLTAGE
6	CTLFB	IN	CTL PULSE FEEDBACK
7	CTLAMPOU	OUT	CTL PULSE OUTPU
8	CTLSMTIN	IN	CTL PULSE INPUT
9	CFG	IN	CAPSTAN FG PULSE INPUT
10	SVcc	-	SYSTEM POWER
11	AFCpp	OUT	AFC CLOCK (SYNC SEPARATOR FOR OSD / EXTERNAL CIRCUIT FOR AFC)
12	AFCosc	OUT	AFC CLOCK (SYNC SEPARATOR FOR OSD / EXTERNAL CIRCUIT FOR AFC)
13	AFCLPF	IN	FILTER OUTPUT FOR HORIZONTAL SYNCHRONIZING OF OSD CHARACTER
14	CSYNC/HSYNC	-	NC
15	VLPF/VSYNC	-	NC
16	CVIN2	IN	COMPOSITE VIDEO SIGNAL INPUT(2)
17	CVIN1	IN	COMPOSITE VIDEO SIGNAL INPUT(1)
18	OVCC	-	SYSTEM POWER
19	CVOUT	OUT	COMPOSITE VIDEO SIGNAL OUTPUT
20	OVSS	-	GND
21	FSCOUT	OUT	FSC OUTPUT FOR OSD
22	FSCIN	IN	FSC INPUT FOR OSD
23	AVss	-	GND
24	BS_ANT/AFC	IN	TUNING CHECK
25	LED	IN	LED CONTROL OF STEREO BROADCASTING MODE
26	VIDEO_ENV	IN	AUTO TRACKING DETECT/ INPUT THE AVERAGE OF PLAYBACK VIDEO SIGNAL
27	WIDE_DET	IN	S1/S2 DETECT
28	KEY2	IN	OPERATION CONTROL SIGNAL
29	START_SENSOR	IN	START SENSOR
30	KEY1	IN	OPERATION CONTROL SIGNAL
31	END_SENSOR	IN	END SENSOR
32	A.ENV/ND(L)	IN	AUDIO PB FM ENV.INPUT/NON HiFi MODE:L
33	LSD	IN	MECHANISM MODE DETECT (D)
34	LSC	IN	MECHANISM MODE DETECT (C)
35	NORM/MESECAM/S	IN	SQPB:H/MESECAM:M/NORMAL:L
36	Avcc	-	SYSTEM POWER
37	SP_FG	IN	DETECTION SIGNAL FOR SUPPLY REEL ROTATION/TAPE REMAIN
38	JUST_CLK/CONV.CTL/SW2	OUT	RF CONVERTER ON/OFF CONTROL/AV2 OUTPUT SWITCH CONTROL /
39	REC_SAFETY	IN	REC SAFETY SWITCH DETECT (SW ON:L)
40	JSA	IN	INPUT FOR THE JOG SHUTTLE(A)
41	JSB	IN	INPUT FOR THE JOG SHUTTLE(B)
42	TU_FG	IN	DETECTION SIGNAL FOR TAKE-UP REEL ROTATION/TAPE REMAIN
43	SUB_RESET	OUT	DVD CPU RESE
44	LM_FR(LMC1)	OUT	LOADING MOTOR DRIV
45	DIG1	OUT	LED DRIVE
46	DIG2	OUT	LED DRIVE
47	DGI3	OUT	LED DRIVE
48	12C_DATA	IN/OUT	SERIAL DATA TRANSFER CLOCK FOR TUNER
49	12C_CLK	OUT	SERIAL DATA TRANSFER OUTPUT FOR TUNER
50	I2C_DATA_BS/COMP_OUT	-	NC
51	DIG4	OUT	LED DRIVE
52	DIG5	OUT	LED DRIVE
53	DIG6	OUT	LED DRIVE
54	DIG7	OUT	LED DRIVE
55	CAP_REV[H]	OUT	CAPSTAN MOTOR REVERSE CONTROL (FWD:L/REV:H
56	Vcc	-	SYSTEM POWER

PIN NO.	LABEL	IN/OUT	FUNCTION
57	Vss	-	GND
58	LSA	IN	MECHANISM MODE DETECT (A)
59	D_A	OUT	LED DRIVE
60	POWER_DET	IN	DETECTION SIGNAL FOR POWER DOWN OF AC POWER SUPPLY
61	12C_CLK_AV	OUT	SERIAL DATA TRANSFER CLOCK FOR THE VIDEO/AUDIO IC
62	12C_DATA_AV	IN/OUT	SERIAL DATA TRANSFER OUTPUT FOR THE VIDEO/AUDIO IC
63	S. CLK	OUT	SERIAL DATA TRANSFERMER CLOCK FOR ONSCREEN IC
64	S. DATA_FR_SYS	OUT	SERIAL DATA TRANSFERMER OUTPUT FOR DVD CPU
65	S. DATA_TO_SYS	IN	SERIAL DATA TRANSFERMER OUTPUT FOR DVD CPU
66	D_B	OUT	LED DRIVE
67	D_C	OUT	LED DRIVE
68	D_D	OUT	LED DRIVE
69	BS_DIGI/R. P/COMPU_IN	IN	NC/AV COMPULINK INPUT
70	D_E	OUT	LED DRIVE
71	D_F	OUT	LED DRIVE
72	RC	IN	REMOTE CONTROL DATA INPUT
73	D_G	OUT	LED DRIVE
74	FWE	OUT	FLASH WRITE ENABLE
75	X2	-	TIMER CLOCK (32.768KHz)
76	X1	-	TIMER CLOCK (32.768KHz)
77	RES(L)	-	RESET TERMINAL (RESET ON:L)
78	OSC1(IN)	-	MAIN SYSTEM CLOCK(10MHz)
79	Vss	-	GND
80	OSC2(OUT)	-	MAIN SYSTEM CLOCK(10MHz)
81	VCL	-	SYSTEM POWER
82	MODE	-	NC
83	HS_FFREW/3.58NTSC(H)	OUT	3.58 NTSC COLOR MODE:H
84	LED1	OUT	LED DRIVE
85	SB_GAIN	OUT	VOLTAGE CONTROL SIGNAL FOR VIDEO FREQUENCY RESPONSE
86	PROTECT	IN	CONTROL SIGNAL FOR SWITCHING POWER SUPPLY
87	A.MUTE2(L)	OUT	AUDIO MUTE CONTROL FOR DVD AUDIO (MUTE:L)
88	TRICK[H]/SP_SHORT(H)	OUT	SLOW/STILL(H)/MODE SELECT
89	VP.CTL/EP_SHORT(H)	OUT	V.PULSE ADDITION TIMING CONTROL/MODE SELECT
90	DVD_V(H)	OUT	SELECT DVD VIDEO:
91	P.CTL(H)	OUT	POWER ON /OFF PULSE (POWER ON:H)
92	S.CASS(H)	IN	DETECTION SIGNAL FOR SVHS CASSETTE (SVHS:H)
93	H.REC_ST(H)	OUT	HiFi AUDIO SOUND RECORDING START
94	A.MUTE(H)	OUT	AUDIO MUTE CONTROL (MUTE:H)
95	BIAS_FR_C.OUT/MESECAM(H)	OUT	ADD THE DC BIAS TO C_OUT/MESECAM MODE:H
96	CHARAE	OUT	CHARACTER DATA OUTPUT OF OSD
97	SLOW_PULSE	-	NC
98	SUB_REQ(L)	OUT	DVD CPU REQUEST:
99	CHARAM	OUT	CHARACTER DATA OUTPUT OF OSD
100	N.REC_ST(H)	OUT	NORMAL AUDIO SOUND RECORDING START
101	LSB	IN	MECHANISM MODE DETECT (B)
102	DVD_A(H)	OUT	SELECT DVD AUDIO:
103	CTL_GAIN	OUT	CONTROL AMP OUT FREQUENCY RESPONSE SWITCHIN
104	DFG	IN	DRUM FG PULSE INPUT
105	D.FF	OUT	ROTATION DETECTION SIGNAL FOR DRUM MOTOR/ TIMING CONTROL SIGNAL FOR REC
106	A.FF	OUT	AUDIO FF OUTPUT
107	DRUM_CTL_V	OUT	DRUM MOTOR CONTRO
108	CAP_CTL_V	OUT	CAPSTAN MOTOR CONTRO
109	V.PULSE	OUT	V.PULSE ADDITION TIMING CONTROL
110	Vss	-	GND
111	C.SYNC/V.REF	IN	DETECTION OF VIDEO SYNC SIGNAL
112	Vcc	-	SYSTEM POWER

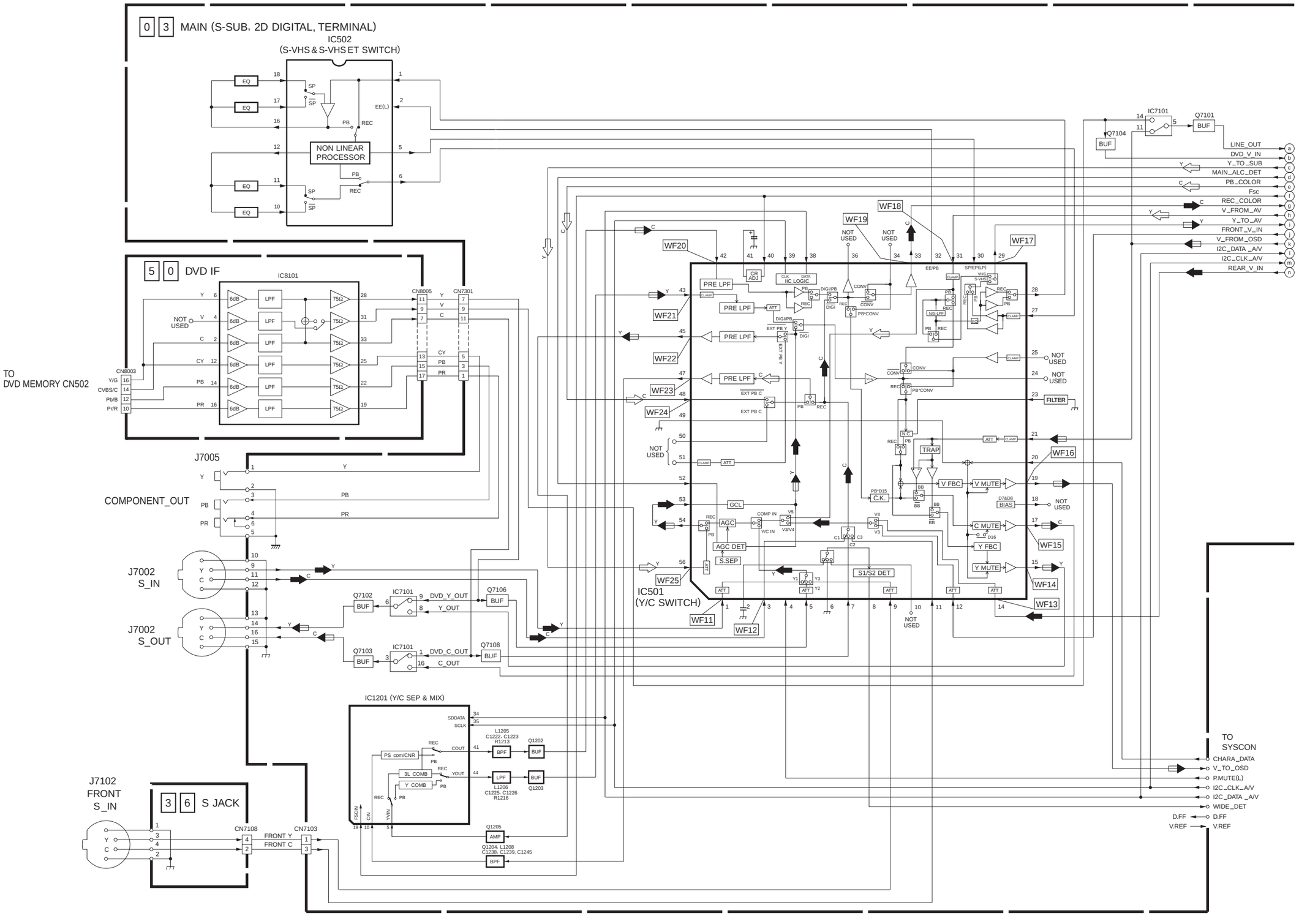


Note:For the waveforms in this schematic diagram,refer to page 2-52



Note:For the waveforms in this schematic diagram,refer to page 2-52.

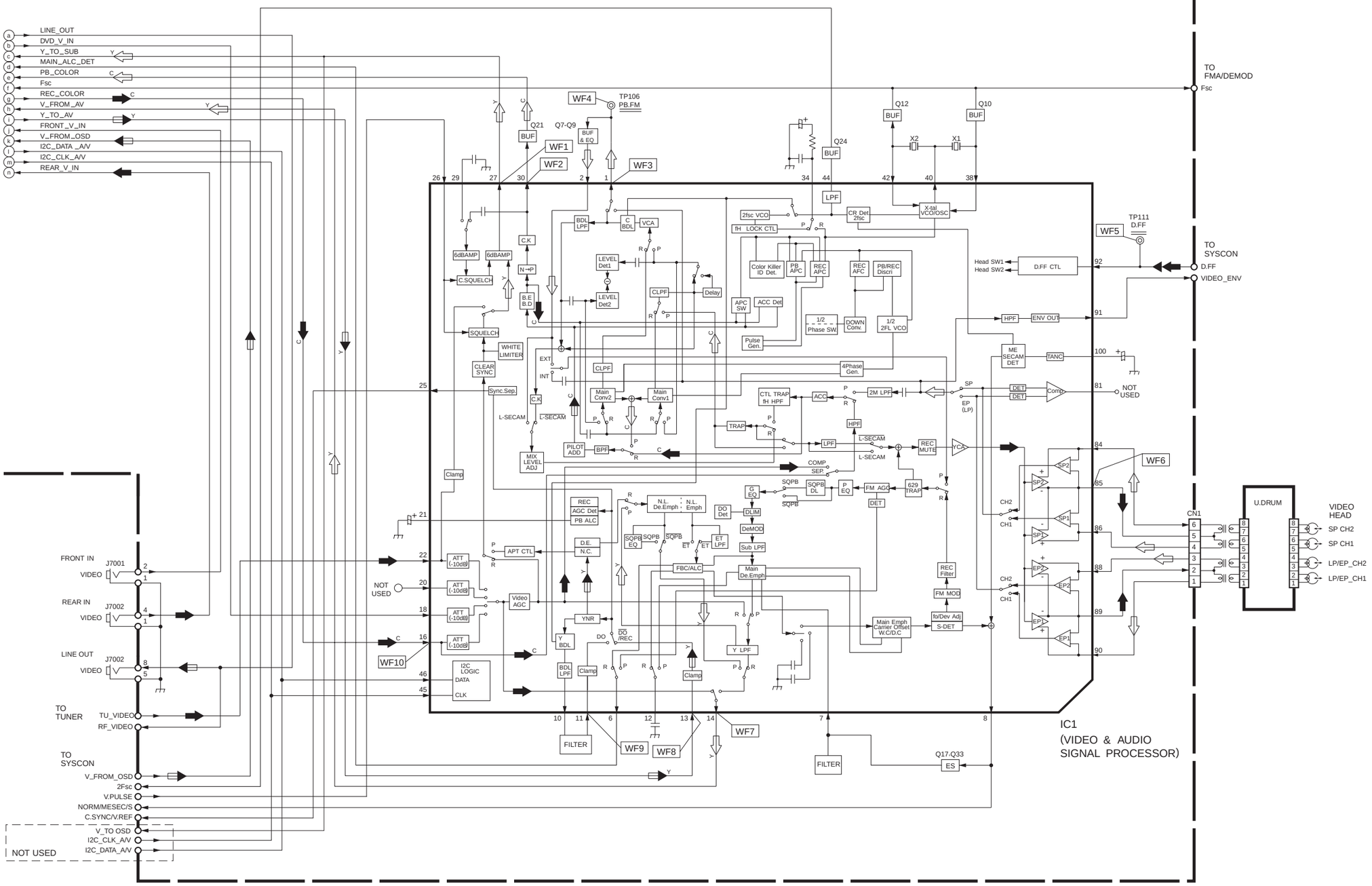
■ VIDEO BLOCK DIAGRAM(1)



Note:For the waveforms inthis schematic diagram,refer to page 2-52.

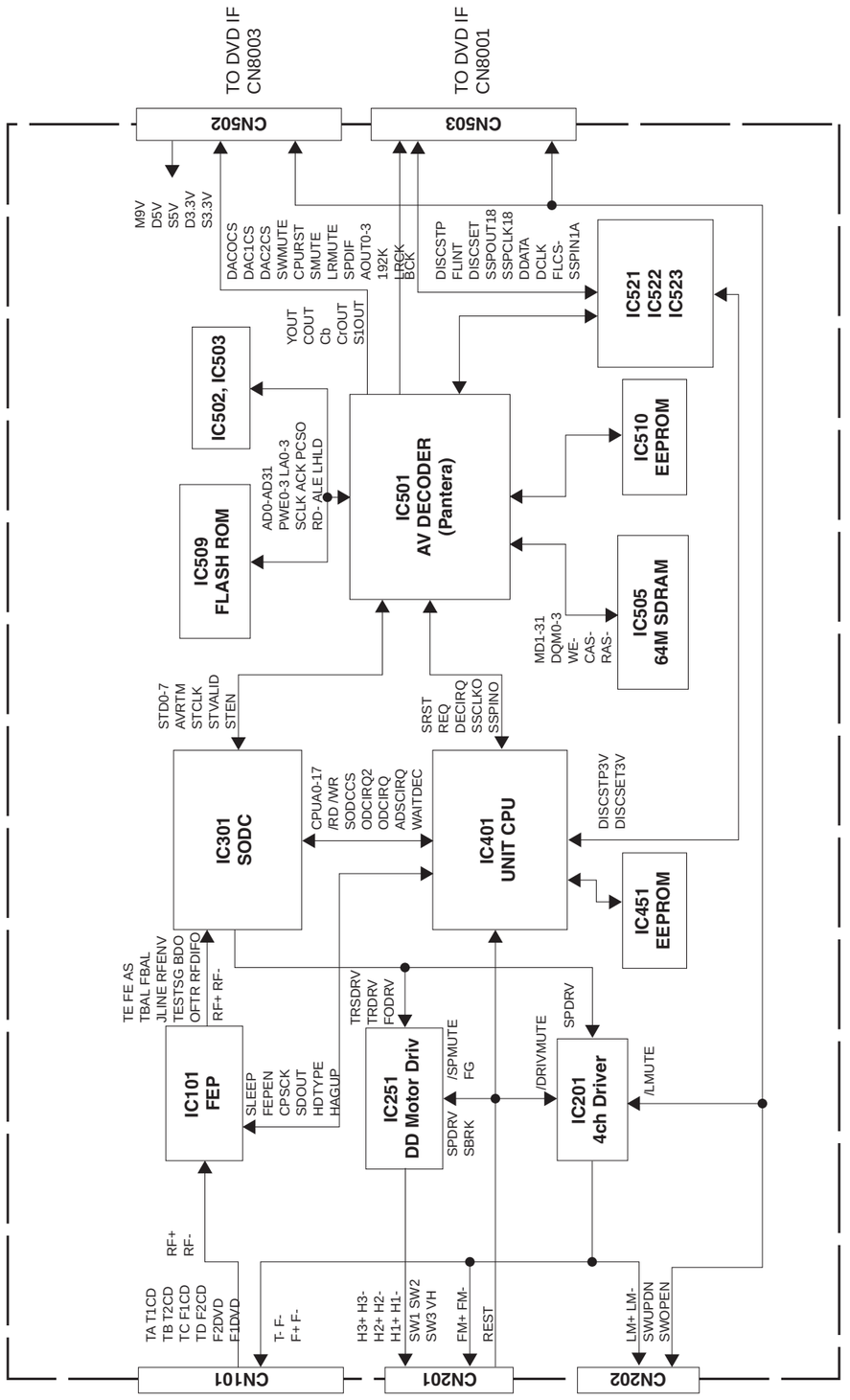
■ VIDEO BLOCK DIAGRAM(2)

0 3 MAIN (VIDEO/N.AUDIO, TERMINAL)



Note:For the waveforms in this schematic diagram,refer to page 2-52.

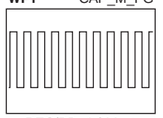
■ DVD BLOCK DIAGRAM



■ WAVE FORMS

< SYSTEM CONTROL >

WF1 CN3001-1 CAP_M_FG



REC/PB 4.6 Vp-p
1 V/0.5 msec/DIV

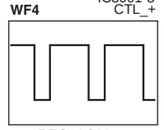
WF2 CN3001-11 D. PG/FG

REC/PB 4.5 Vp-p
1 V/5 msec/DIV

WF3 TP4001 CTL.P

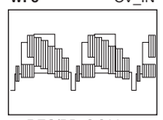
PB 2.7 Vp-p
50 mV/5 msec/DIV

WF4 IC3001-3 CTL_+



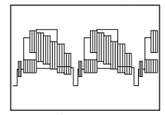
REC 4.0 Vp-p
0.1 V/10 msec/DIV

WF5 IC3001-17 CV_IN



REC/PB 2.2 Vp-p
50 mV/10 µsec/DIV

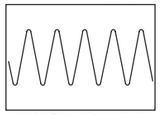
WF6 IC3001-19 CVOUT



REC/PB 2.2 Vp-p
50 mV/10 µsec/DIV

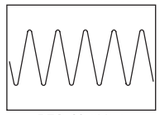
< AUDIO >

WF1 IC2201-53



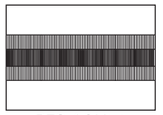
REC/PB 0.34 Vp-p
10 mV/0.5 msec/DIV

WF2 IC2201-10



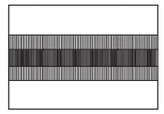
REC 32 mVp-p
10 mV/0.5 msec/DIV

WF3 IC2201-21



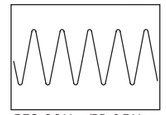
REC 1.2 Vp-p
50 mV/2 msec/DIV

WF4 TP2253 A.PB.FM



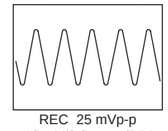
PB 0.7 Vp-p
50 mV/0.5 msec/DIV

WF5 IC1-53



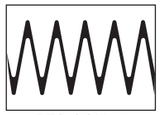
REC 0.3 Vp-p/PB 0.7 Vp-p
0.1 V/0.5 msec/DIV

WF6 IC1-63



REC 25 mVp-p
10 mV/0.2 msec/DIV

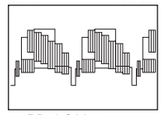
WF7 IC1-99



REC 0.6 Vp-p
0.1 V/0.2 msec/DIV

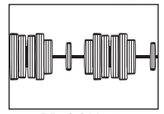
< VIDEO >

WF1 IC1-27



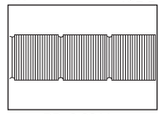
PB 1.8 Vp-p
50 mV/10 µsec/DIV

WF2 IC1-30



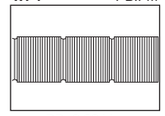
PB 0.6 Vp-p
20 mV/10 µsec/DIV

WF3 IC1-1



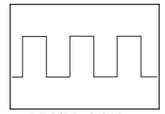
PB 0.28 Vp-p
20 mV/5 msec/DIV

WF4 TP106 PB.FM



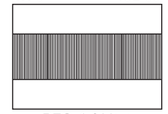
PB 0.28 Vp-p
20 mV/5 msec/DIV

WF5 TP111 D.FF



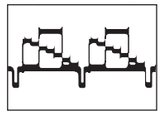
REC/PB 3.6 Vp-p
0.1 V/10 msec/DIV

WF6 IC1-85



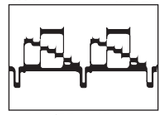
REC 1.6 Vp-p
0.1V/2 msec/DIV

WF7 IC1-14



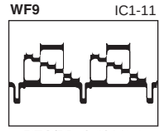
PB 0.42 Vp-p
20 mV/10 µsec/DIV

WF8 IC1-13



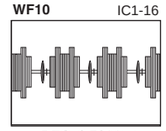
REC/PB 0.46 Vp-p
20 mV/10 µsec/DIV

WF9 IC1-11



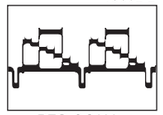
REC/PB 0.42 Vp-p
20 mV/10 µsec/DIV

WF10 IC1-16



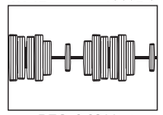
REC 0.76 Vp-p
20 mV/10 µsec/DIV

WF11 IC501-1



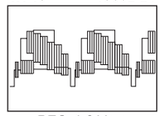
REC 0.84 Vp-p
20 mV/20 µsec/DIV

WF12 IC501-3



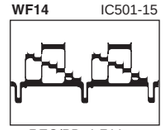
REC 0.68 Vp-p
20 mV/20 µsec/DIV

WF13 IC501-14



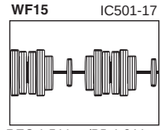
REC 1.0 Vp-p
20 mV/20 µsec/DIV

WF14 IC501-15



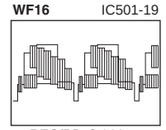
REC/PB 1.7 Vp-p
50 mV/20 µsec/DIV

WF15 IC501-17



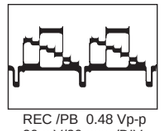
REC 1.5 Vp-p/PB 1.2 Vp-p
50 mV/20 µsec/DIV

WF16 IC501-19



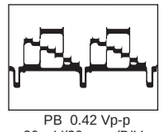
REC/PB 2.1 Vp-p
50 mV/20 µsec/DIV

WF17 IC501-29



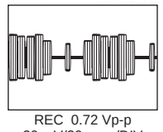
REC /PB 0.48 Vp-p
20 mV/20 µsec/DIV

WF18 IC501-31



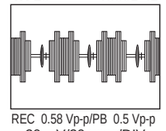
PB 0.42 Vp-p
20 mV/20 µsec/DIV

WF19 IC501-33



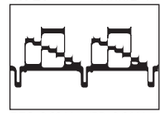
REC 0.72 Vp-p
20 mV/20 µsec/DIV

WF20 IC501-42



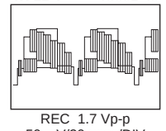
REC 0.58 Vp-p/PB 0.5 Vp-p
20 mV/20 µsec/DIV

WF21 IC501-43



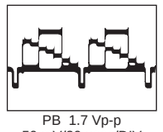
REC 0.62 Vp-p/PB 0.64 Vp-p
20 mV/20 µsec/DIV

WF22-1 IC501-45



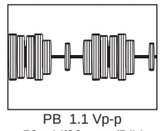
REC 1.7 Vp-p
50 mV/20 µsec/DIV

WF22-2 IC501-45



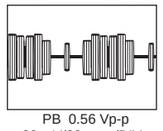
PB 1.7 Vp-p
50 mV/20 µsec/DIV

WF23 IC501-47



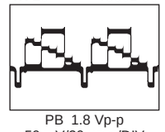
PB 1.1 Vp-p
50 mV/20 µsec/DIV

WF24 IC501-48



PB 0.56 Vp-p
20 mV/20 µsec/DIV

WF25 IC501-56



PB 1.8 Vp-p
50 mV/20 µsec/DIV

JVC

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