


# 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.

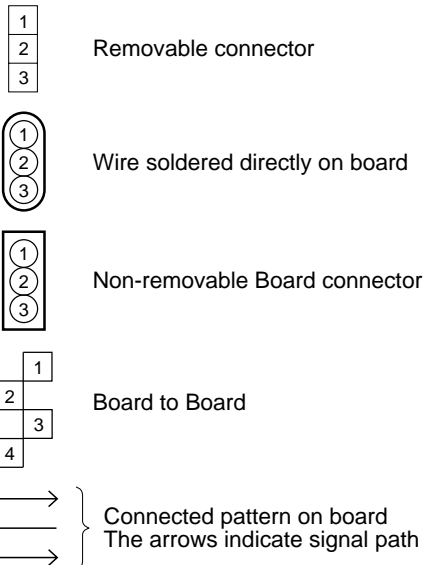
- 1) All resistance values are in ohm, 1/6 W, 1/8 W (refer to parts list).  
Chip resistors are 1/16 W.  
K: K $\Omega$  (1000 $\Omega$ ), M: M $\Omega$  (1000K $\Omega$ )
- 2) All capacitance values are in  $\mu$ F, (P: PF).
- 3) All inductance values are in  $\mu$ H, (m: mH).
- 4) All diodes are 1SS133,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

### 2. Indications of control voltage

AUX : Active at high

AUX or AUX(L) : Active at low

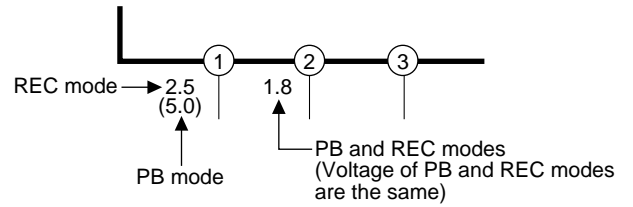
### 3. Interpreting Connector indications



### 4. Voltage measurement

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

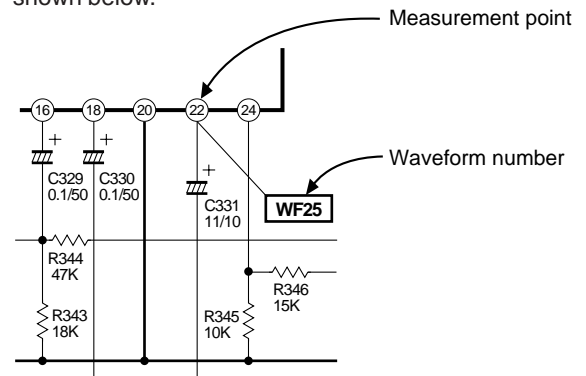
- 4) Indication on schematic diagram  
Voltage Indications for REC and PB mode on the schematic diagram are as shown below.



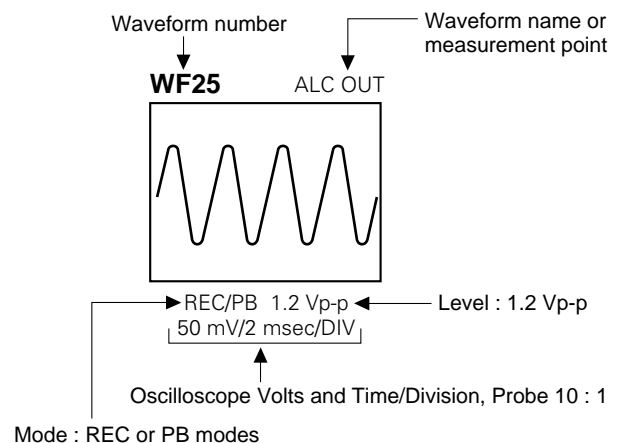
**Note: If the voltages are not indicated on the schematic diagram, refer to the voltage charts.**

### 5. Waveform measurement

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

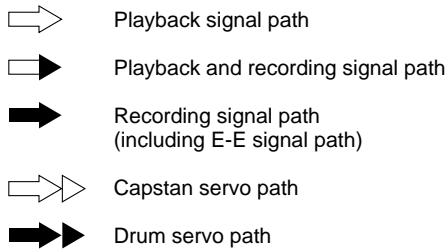


### 5) Waveform indications

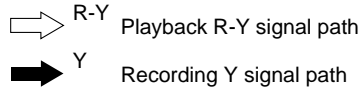


## 6. Signal path Symbols

The arrows indicate the signal path as follows.



(Example)



## 7. Indication of the parts for adjustments

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



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

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



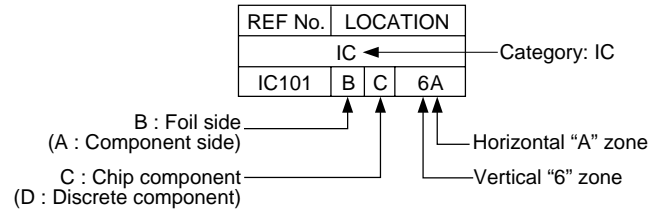
## CIRCUIT BOARD NOTES

### 1. Foil and Component sides

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

### 2. Parts location guides

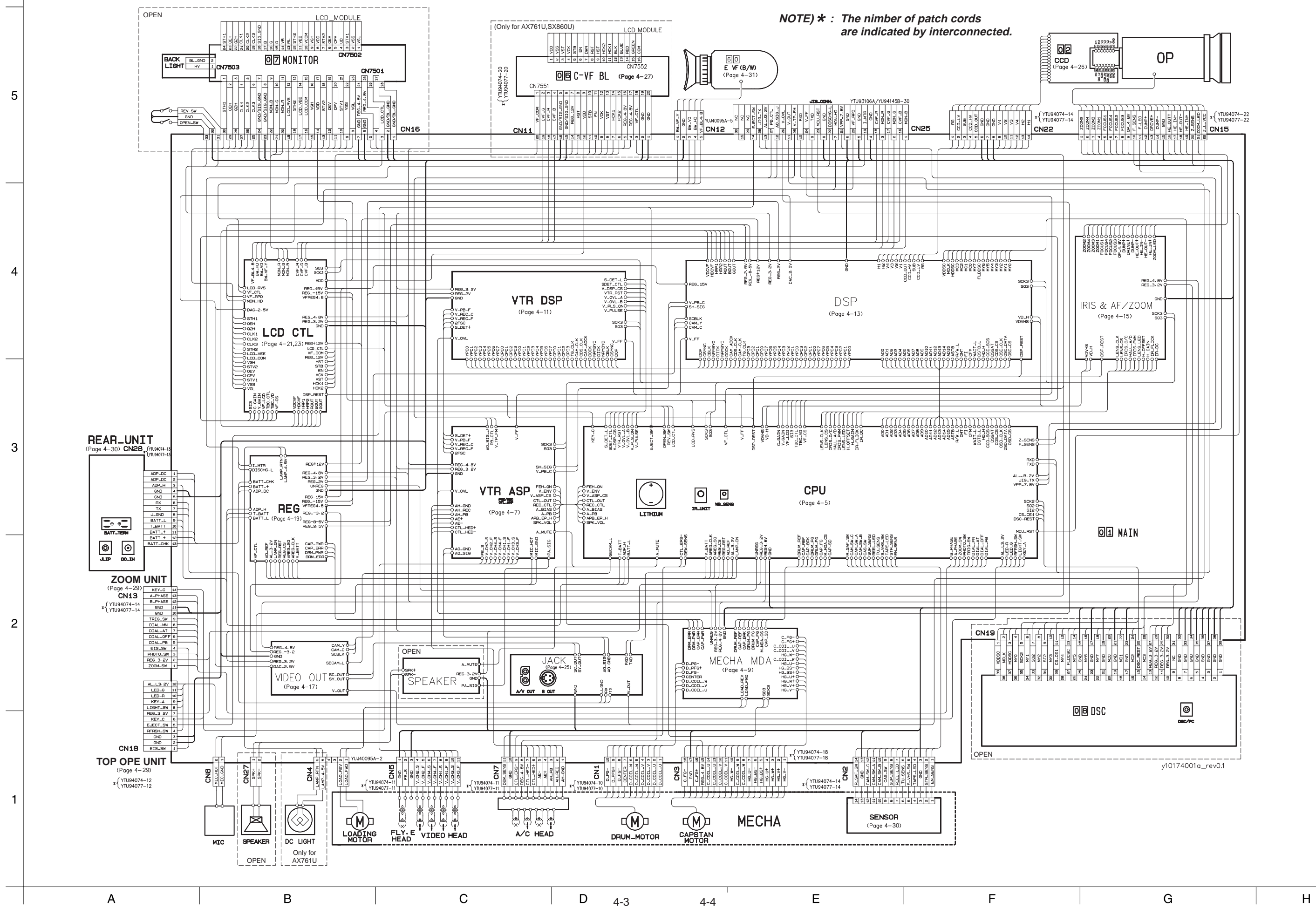
Parts location are indicated by guide scale on the circuit board.



### Note:

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

# 4.1 BOARD INTERCONNECTIONS

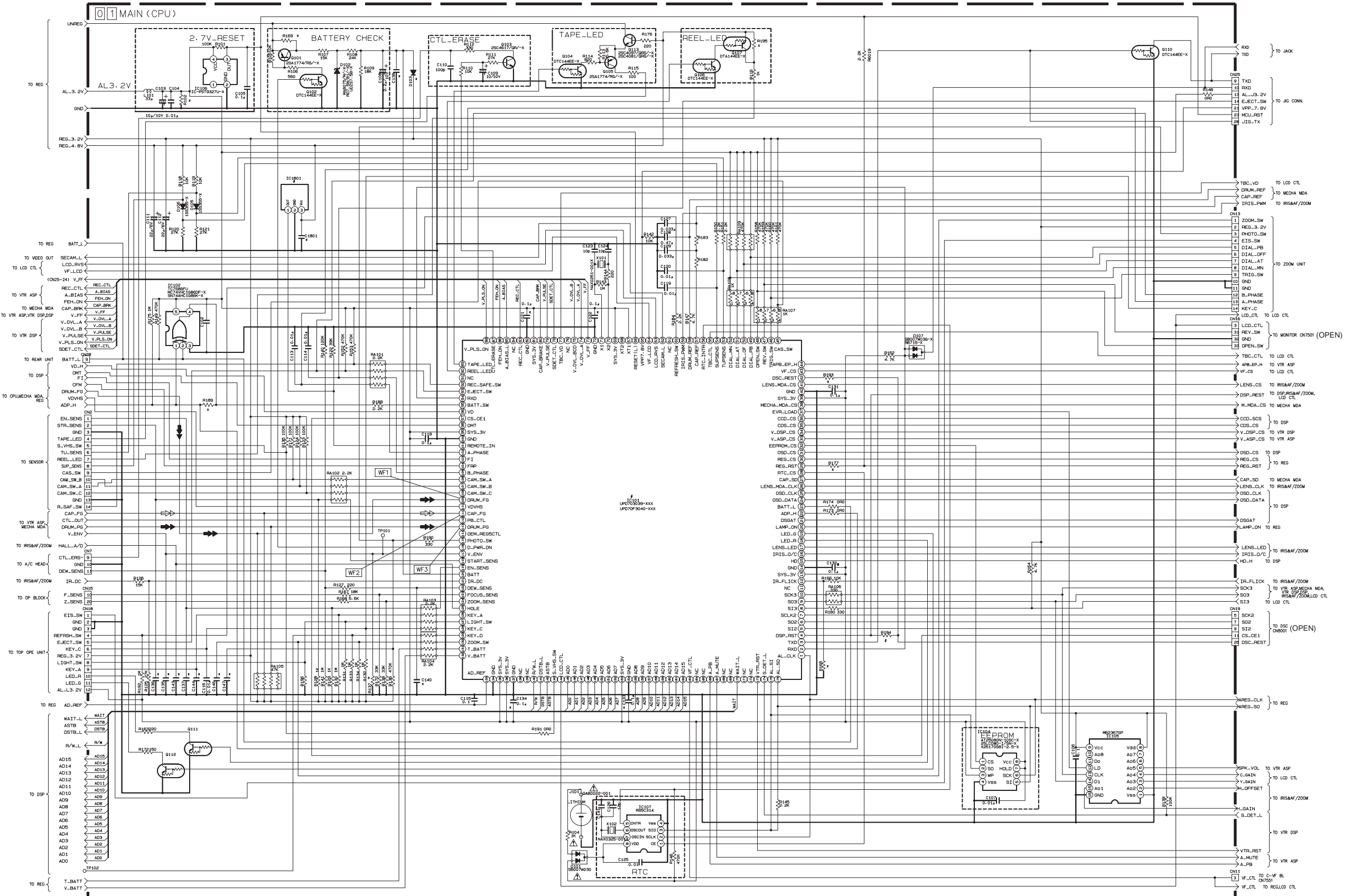


NOTE) \* : The number of patch cords are indicated by interconnected.

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## 4.2 CPU SCHEMATIC DIAGRAM

**NOTE :** • For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS"  
• When ordering parts, be sure to order according to the Part Number indicated in the Parts List.



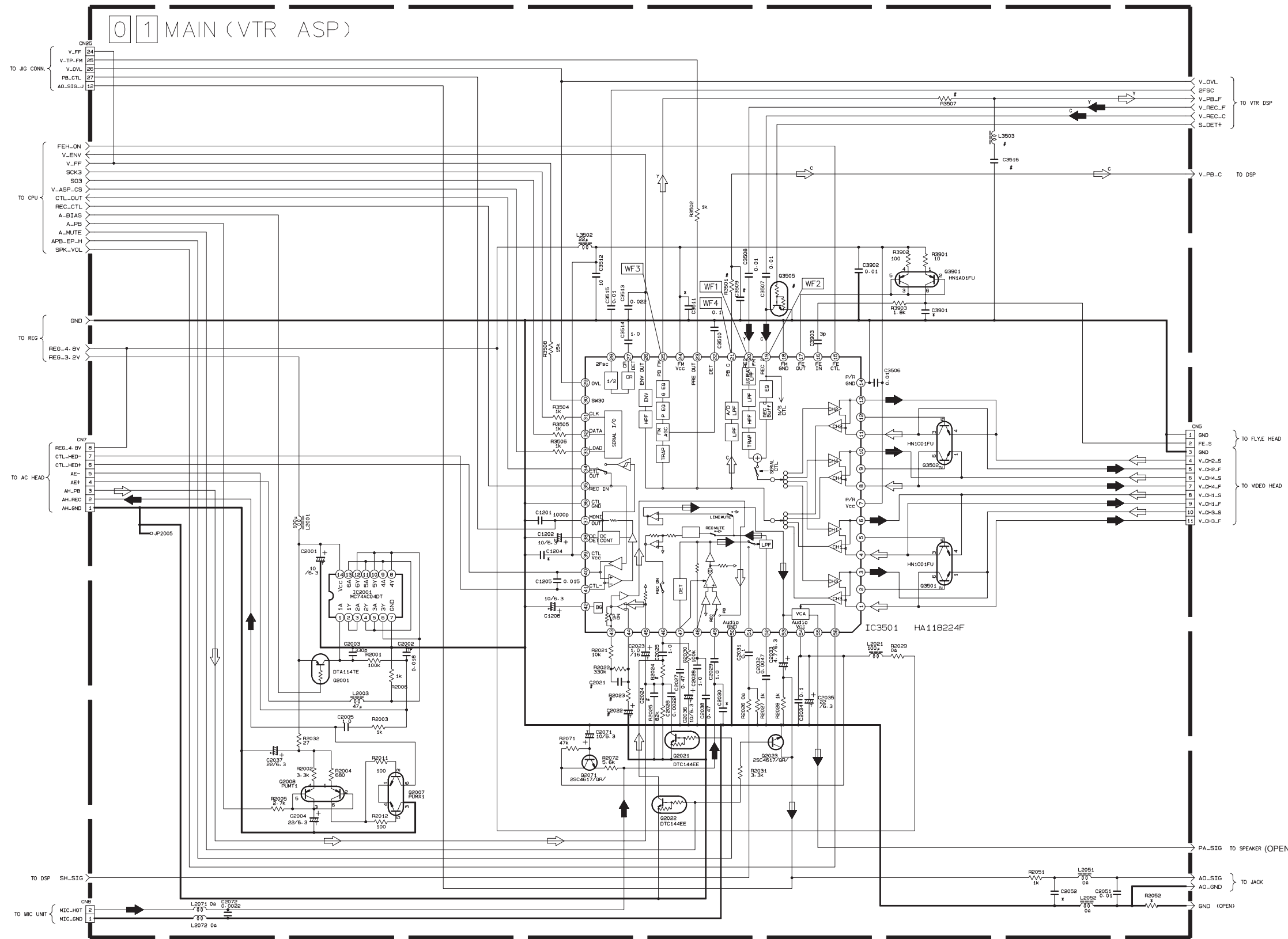
NOTES: 1. THE PARTS WITH MARKED (\*) IS NOT USED.  
2. FOR CPU WAVEFORMS, PLEASE REFER TO PAGE 4-55.

MODEL	ROM No	REVISION	YES	NO	DEC	YES	NO
PAL picture element loc	-026	IC101	PC-20435	*	R104	OR0	*
PAL others	-027						
NTSC JVC	-028						
NTSC NOK JVC	-029						

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### 4.3 VTR ASP SCHEMATIC DIAGRAM

**NOTE :** • For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS"  
 • When ordering parts, be sure to order according to the Part Number indicated in the Parts List.



NOTES : 1. THE PARTS WITH MARKED (\*) IS NOT USED.  
 2. For VTR ASP waveforms, please refer to page 4-55.

#### EXCHANGE PARTS LIST

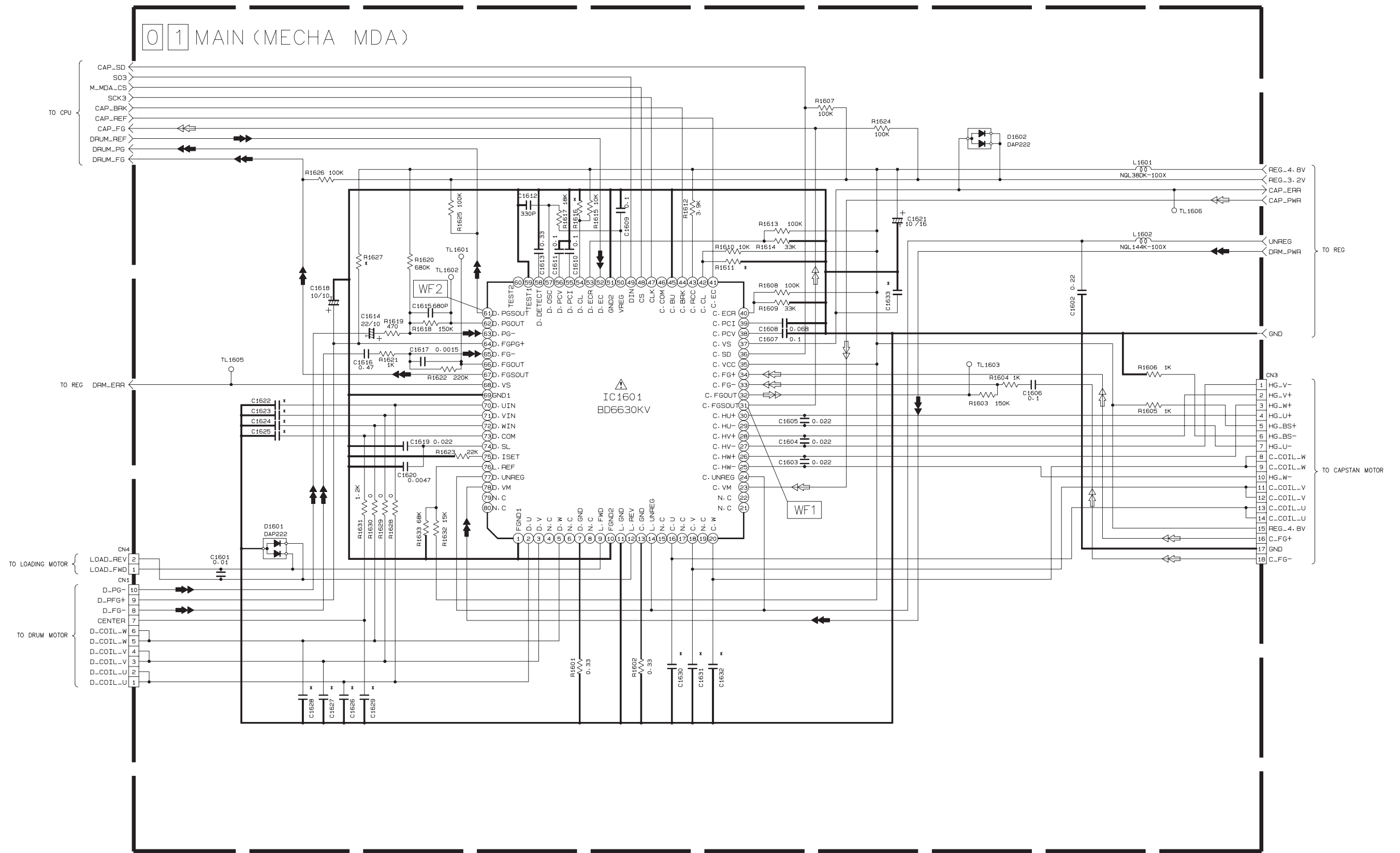
VHS MODEL	SVHS MODEL	[VIDEO]		[AUDIO]	
		NTSC	PAL	NTSC	PAL
Q3505	*	DTC144	EE	R2023	150 B2
		R3507	0 100	L3503	* 5-6
		C3516	* 10p	R2024	13k 18k
		R3501	0 220	C2021	0.0068 0.01
		C3509	* 220p	C2022	10μ/6.3 15μ/6.3
				C2024	0.0012 0.001

\*... NO WEAR

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4.4 MECHA MDA SCHEMATIC DIAGRAM

NOTE : • For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS"  
 • When ordering parts, be sure to order according to the Part Number indicated in the Parts List.



NOTES : 1. THE PARTS WITH MARKED (\*) IS NOT USED.  
 2. For MECHA MDA waveforms, please refer to page 4-55.

EXCHANGE PARTS LIST.

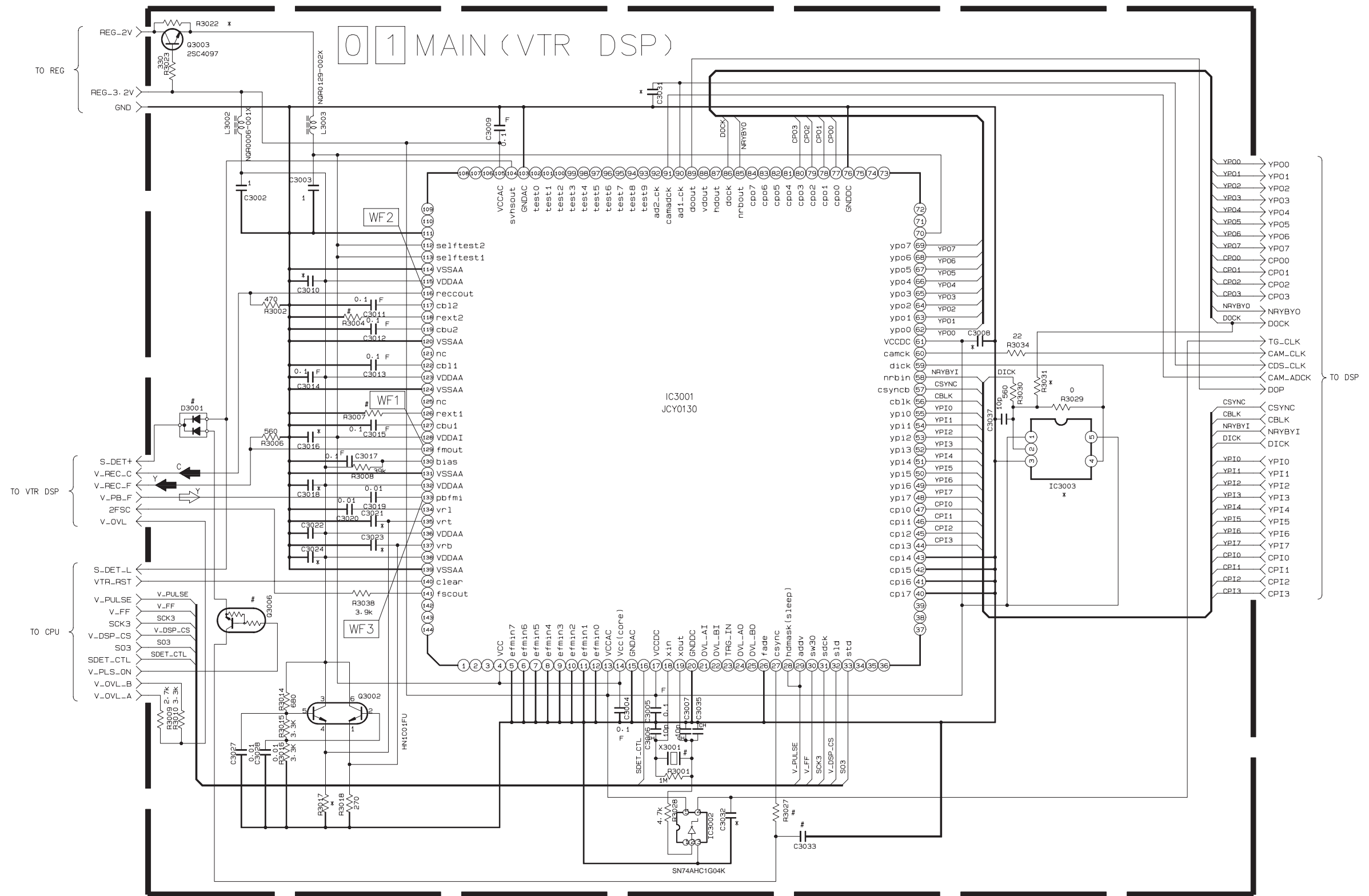
	NTSC	PAL
C1620	*	0.0047

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4.5 VTR DSP SCHEMATIC DIAGRAM

NOTE : • For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS"  
 • When ordering parts, be sure to order according to the Part Number indicated in the Parts List.



NOTES : 1. THE PARTS WITH MARKED (\*) IS NOT USED.  
 2. For VTR DSP waveforms, please refer to page 4-55.

EXCHANGE PARTS LIST

	PAL	NTSC
X3001	QAX0596-001 OR QAX0609-001	QAX0565-001 OR QAX0608-001
R3004	33k	27k
R3007	18k	15k

	VHS MODEL	SVHS MODEL
D3001	*	DAN222
Q3006	*	DTC144EE
R3027	*	10k
C3033	*	0.1

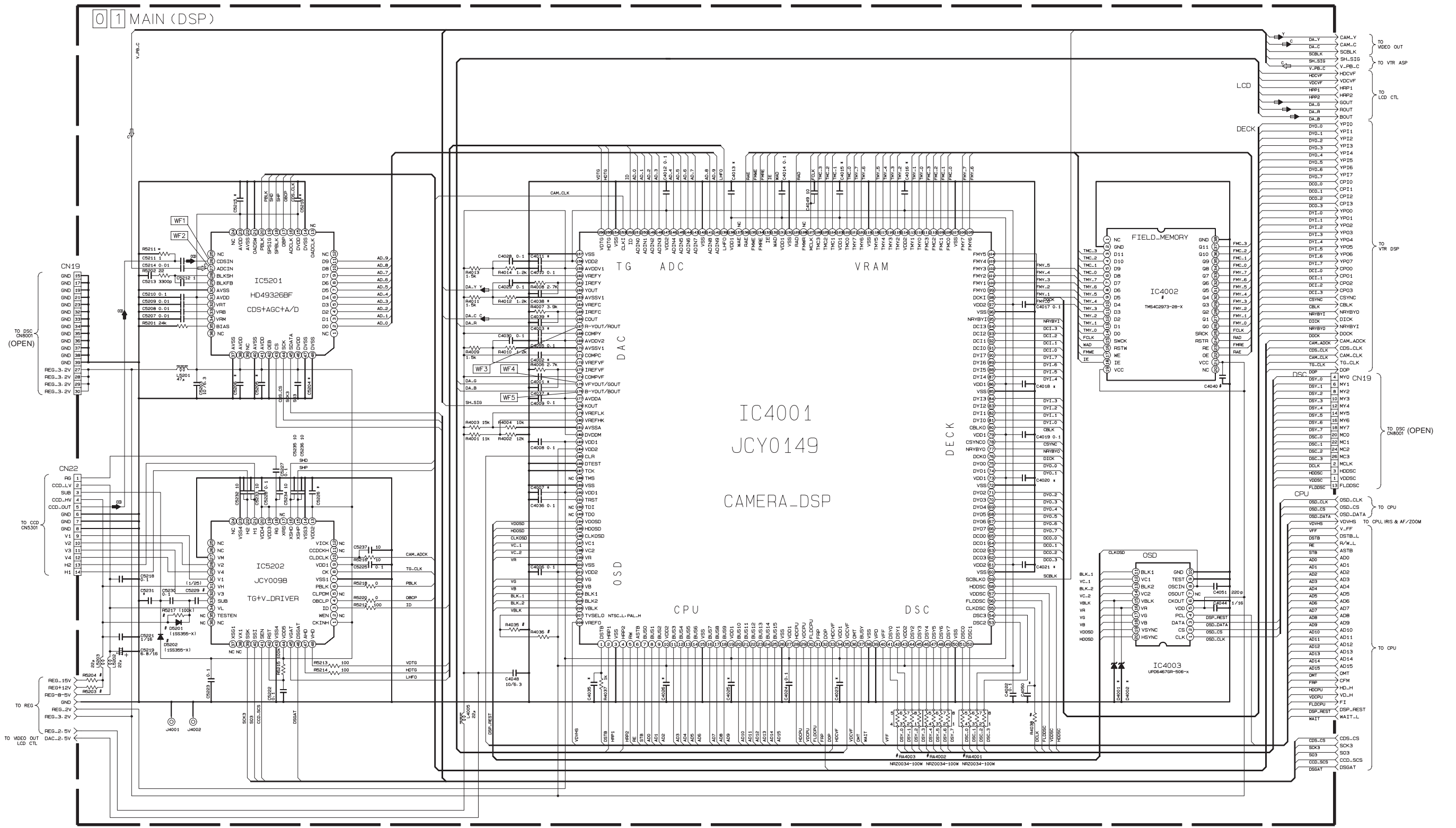
\*... NO WEAR

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A B C D 4-11 4-12 E F G H

4.6 DSP SCHEMATIC DIAGRAM

NOTE : • For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS"  
 • When ordering parts, be sure to order according to the Part Number indicated in the Parts List.



NOTES: 1. THE PARTS WITH MARKED (\*) IS NOT USED.  
 2. For DSP waveforms, please refer to page 4-55.

EXCHANGE PARTS LIST

	CCD	RA4036	RA4038	RE3023	RE3024	DR201	DS202	RE217	CS229
NTSC-L	TC05621P	0	*	0	*	0	*	1SS395-X	0
MN391133FT	0	*	*	0	0	1SS395-X	*	100K	1/25
PAL-L	MN372133FT	*	0	*	0	1SS395-X	*	100K	1/25
ICK287AK	*	0	0	0	*	1SS395-X	*	100K	1/25
PAL-H	MN39241FT	*	0	*	0	1SS395-X	*	100K	1/25
ICK229AK	*	0	0	0	*	1SS395-X	*	100K	1/25

	IC4002	C4040	RA4038	RA4001	RA4002	RA4003
M1#6	*	*	*	*	*	*
M1#7	TMS4C2973-28-X	1	*	*	*	*
M1#8	TMS4C2973-28-X	1	100	NRZ0034-100W	NRZ0034-100W	NRZ0034-100W

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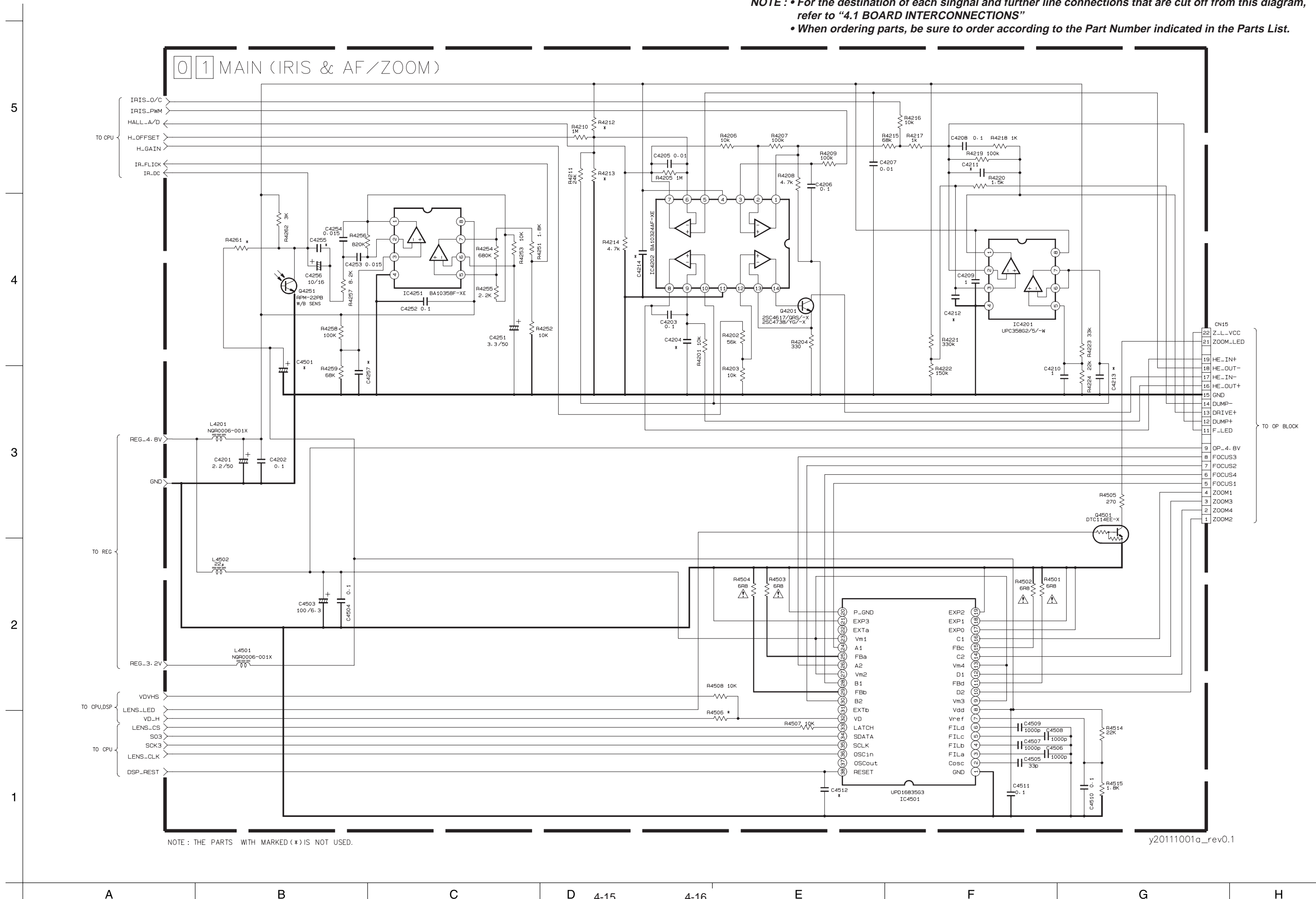
5  
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A B C D 4-13 E F G H



# 4.7 IRIS & AF/ZOOM SCHEMATIC DIAGRAM

**NOTE :** • For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS"  
 • When ordering parts, be sure to order according to the Part Number indicated in the Parts List.

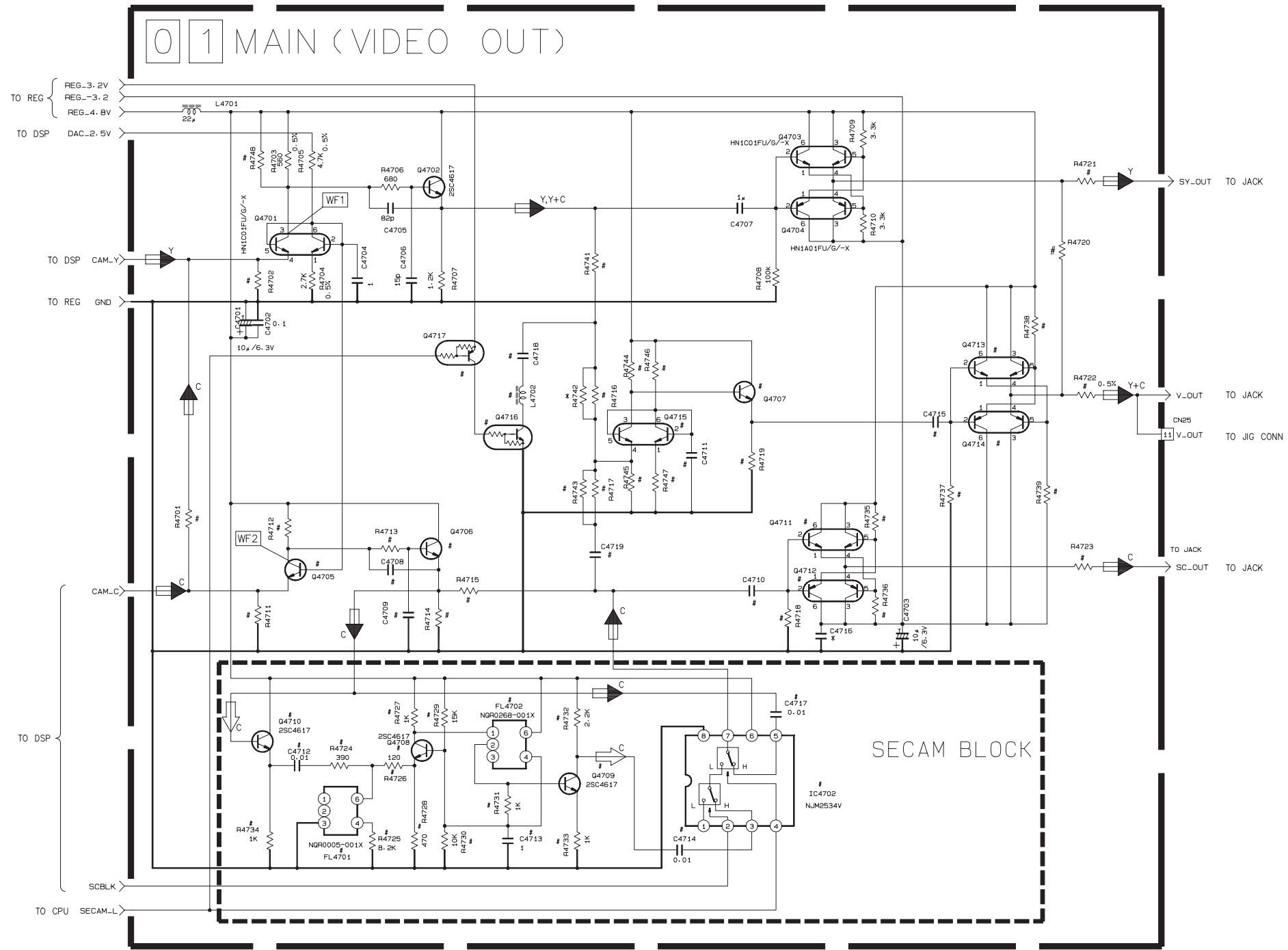


NOTE : THE PARTS WITH MARKED (\*) IS NOT USED.

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4.8 VIDEO OUT SCHEMATIC DIAGRAM

NOTE : • For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS"  
 • When ordering parts, be sure to order according to the Part Number indicated in the Parts List.



NOTES : 1. THE PARTS WITH MARKED (\*) IS NOT USED.  
 2. For VIDEO OUT waveforms, please refer to page 4-55.

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EXCHANGE PARTS LIST

	R4711	R4712	R4713	R4714	C4708	C4709	Q4705	Q4706	R4721	C4710	R4718	R4735	R4736	Q4711	Q4712	R4723	R4741	R4716	R4717	C4719	R4744	R4745	R4746	R4747	Q4715	C4711	Q4707	R4719	C4715	R4737	Q4713	Q4714	R4738	R4739		
VHS MODEL	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SVHS MODEL	150	510 0.5%	680	1.2k	82p	15p	2SC 4617	2SC 4617	75 0.5%	0.01	100k	3.3k	3.3k	HN1C 01FU	HN1A 01FU	68 0.5%	1.5k 0.5%	560 0.5%	2.2k 0.5%	0.01	2.2k 0.5%	470	2.2k 0.5%	470 0.5%	HN1C 01FU	1	2SC 4617	2.2k	1	100k	HN1C 01FU	HN1A 01FU	3.3k	3.3k		

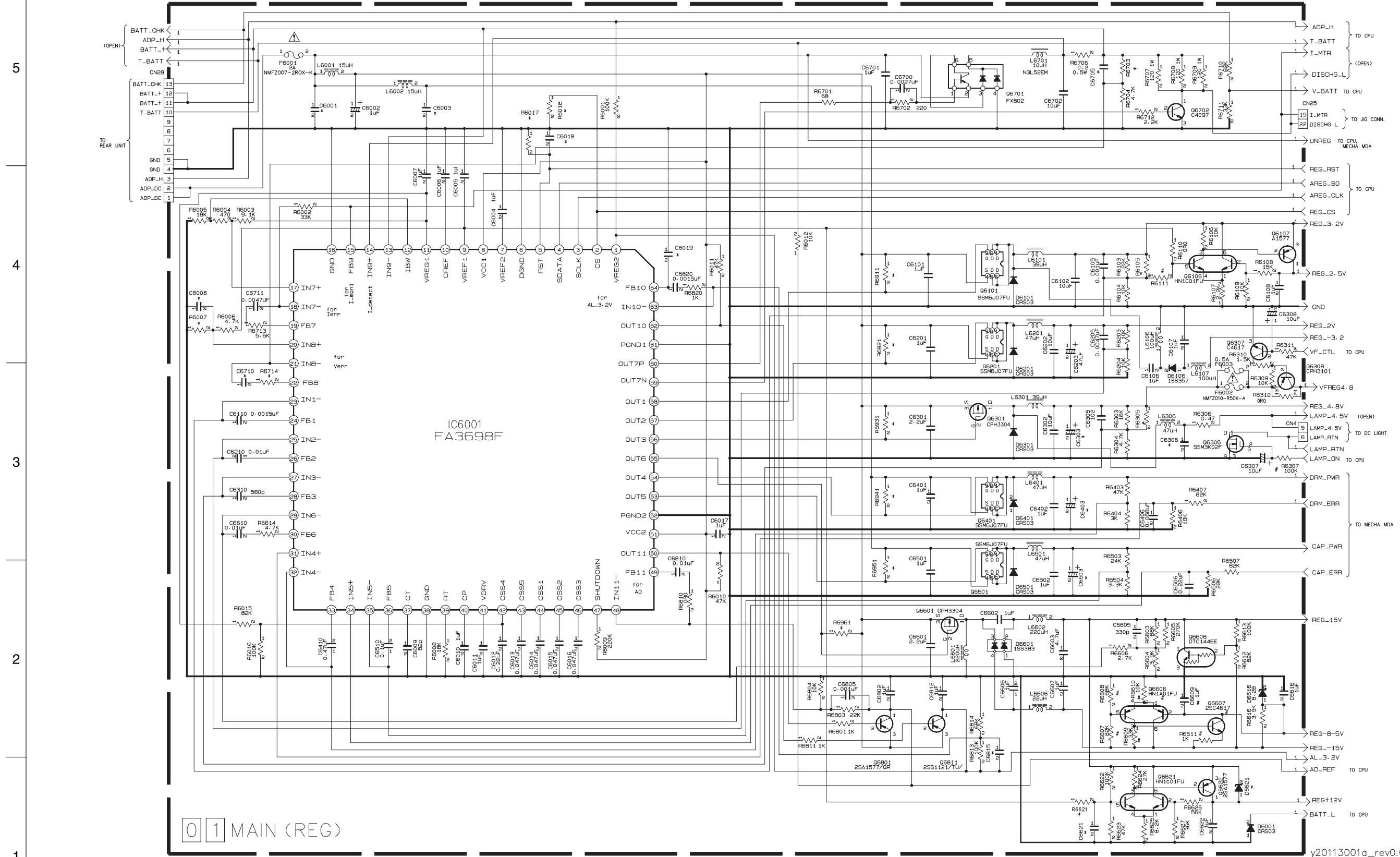
	R4715	Q4716	Q4717	L4702	C4718	SECAM BLOCK
VHS MODEL	*	*	*	*	*	*
SVHS EG MODEL	*	DTC144 EE	DTA144 EE	56	24p	○
SVHS OTHER MODEL	0Ω	*	*	*	*	*

	R4701	R4702	R4720	R4722	R4743	R4748
VHS MODEL	0Ω	75	0Ω	75 0.5%	*	33k 0.5%
VHS MODEL NTSC	↑	↑	↑	↑	↑	18k 0.5%
SVHS MODEL PAL	*	100	*	68 0.5%	15k 0.5%	0Ω
SVHS MODEL NTSC	↑	↑	↑	↑	22k 0.5%	18k 0.5%

\* ... NO WEAR

## 4.9 REGULATOR SCHEMATIC DIAGRAM

**NOTE :** • For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS"  
 • When ordering parts, be sure to order according to the Part Number indicated in the Parts List.



NOTE : THE PARTS WITH MARKED (\*) IS NOT USED.  
 EXCHANGE LIST

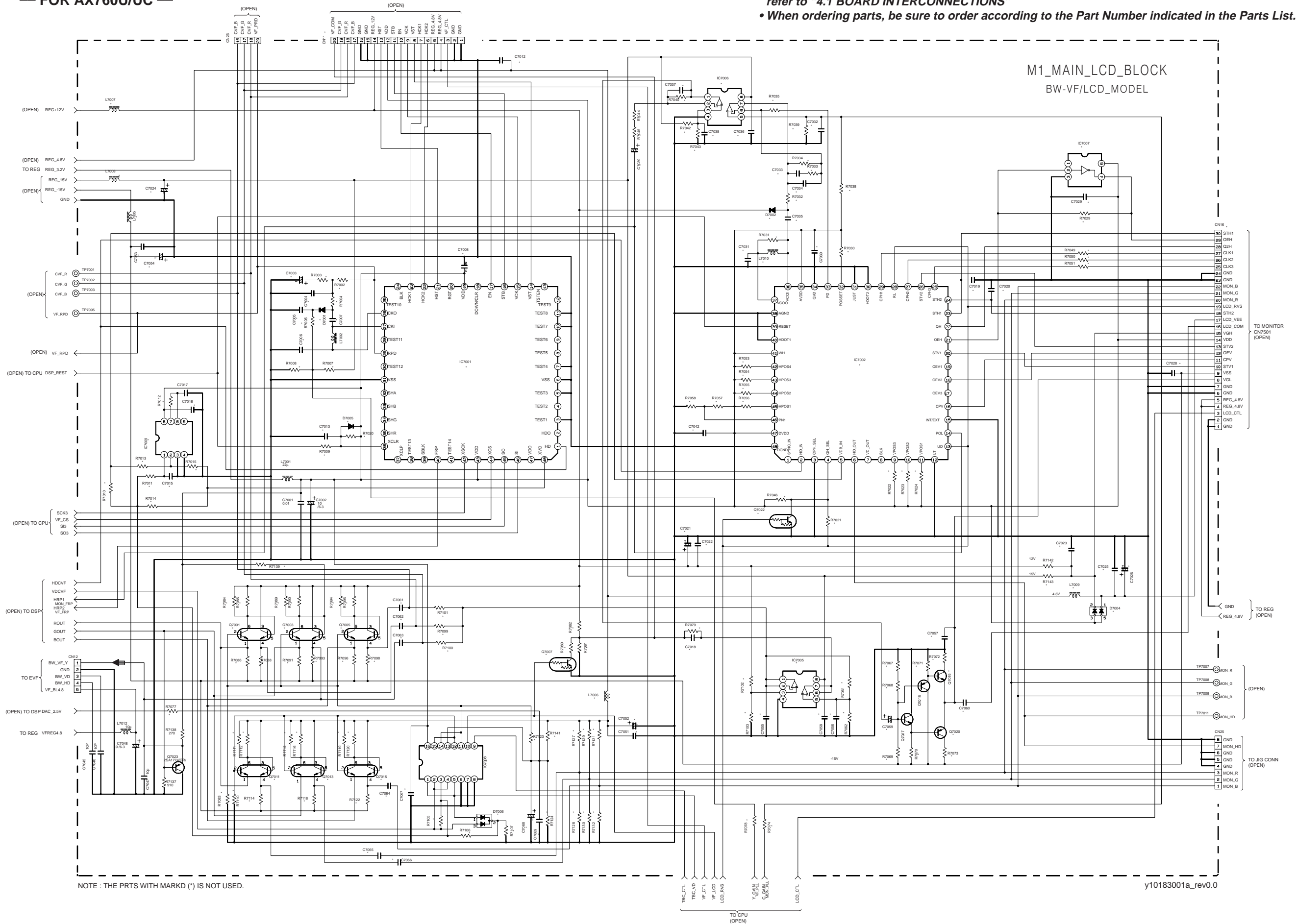
1. LIGHT YES OR NO		2. LCD YES OR NO		3. CCD VOLTAGE		
LIGHT	YES	NO	LCD	YES	NO	
Q6306	exist	open	Q6307-6308	exist	open	CCD VOLTAGE
L6306	exist	open	R6309-6311	exist	open	picture elements
C6307	exist	open	R6312	open	OR0	memory
R6306-6307	exist	open				NO
						LOW
						others
						8.2V
						5.1V
						8.2V

y20113001a\_rev0.0

# 4.10 LCD CTL SCHEMATIC DIAGRAM

— FOR AX760U/UC —

**NOTE :** • For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS"  
 • When ordering parts, be sure to order according to the Part Number indicated in the Parts List.



NOTE : THE PRTS WITH MARKD (\*) IS NOT USED.

y10183001a\_rev0.0

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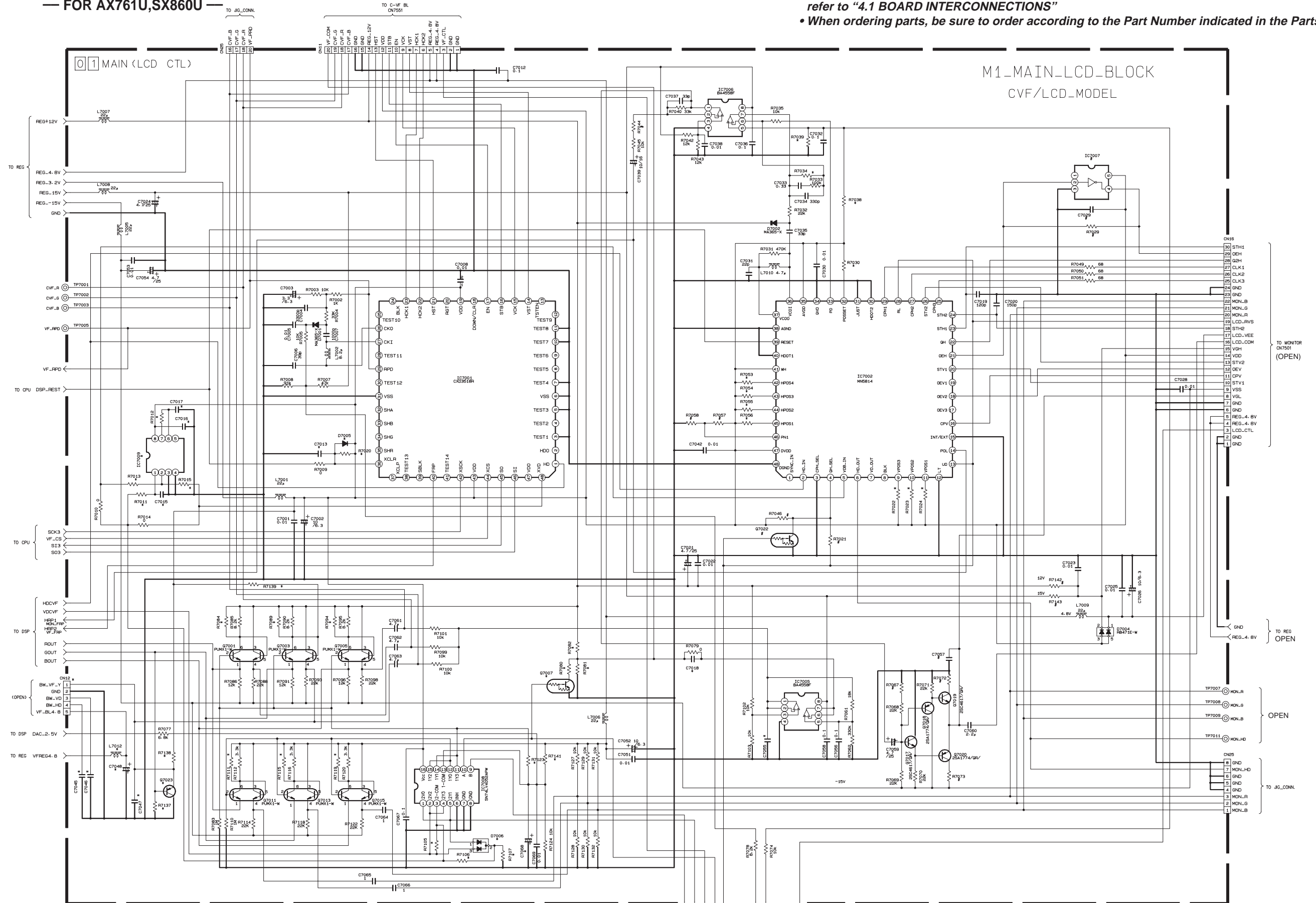
A B C D 4-21 4-22 E F G H

# 4.11 LCD CTL SCHEMATIC DIAGRAM

— FOR AX761U, SX860U —

**NOTE :** • For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS"  
 • When ordering parts, be sure to order according to the Part Number indicated in the Parts List.

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3  
2  
1



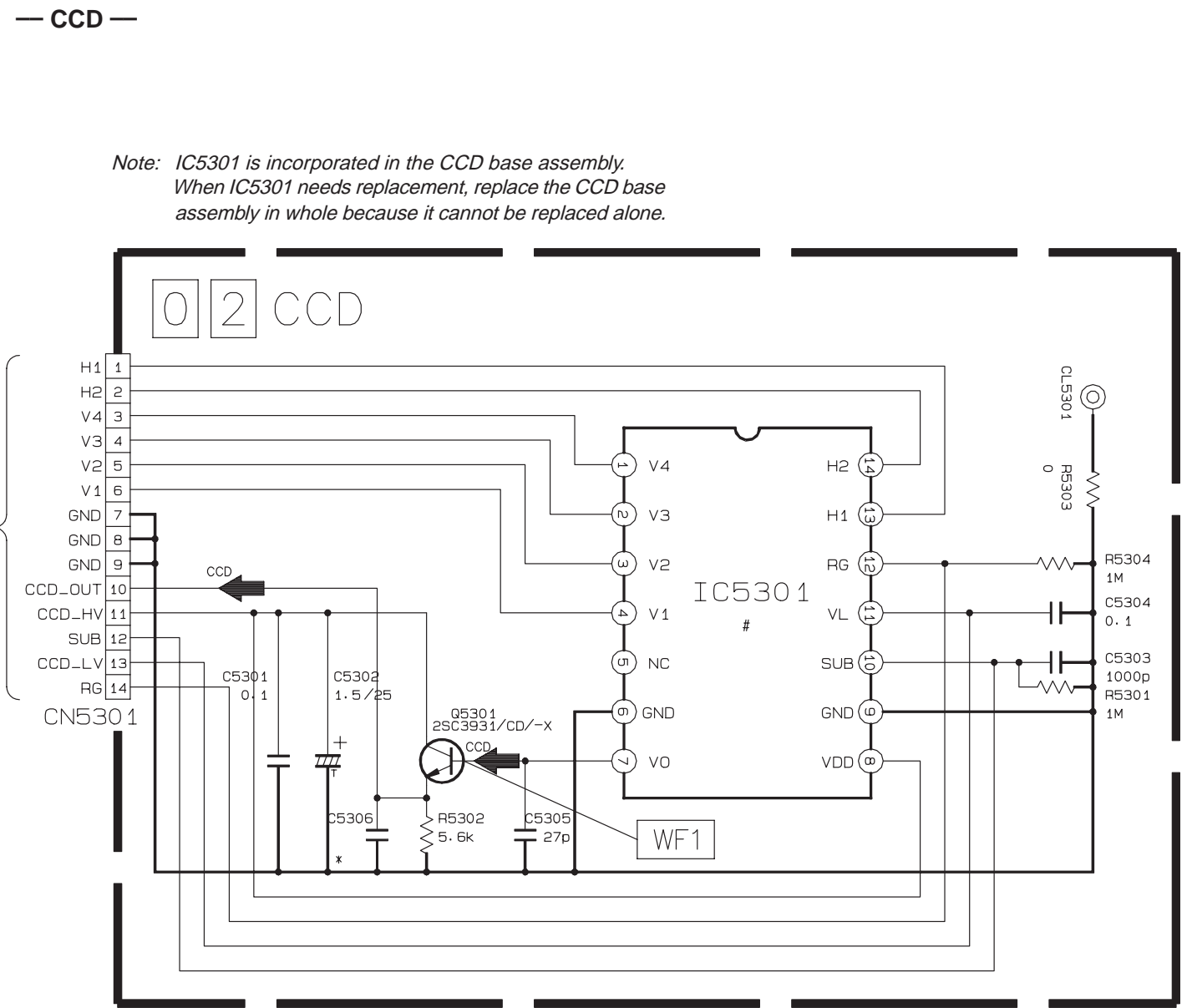
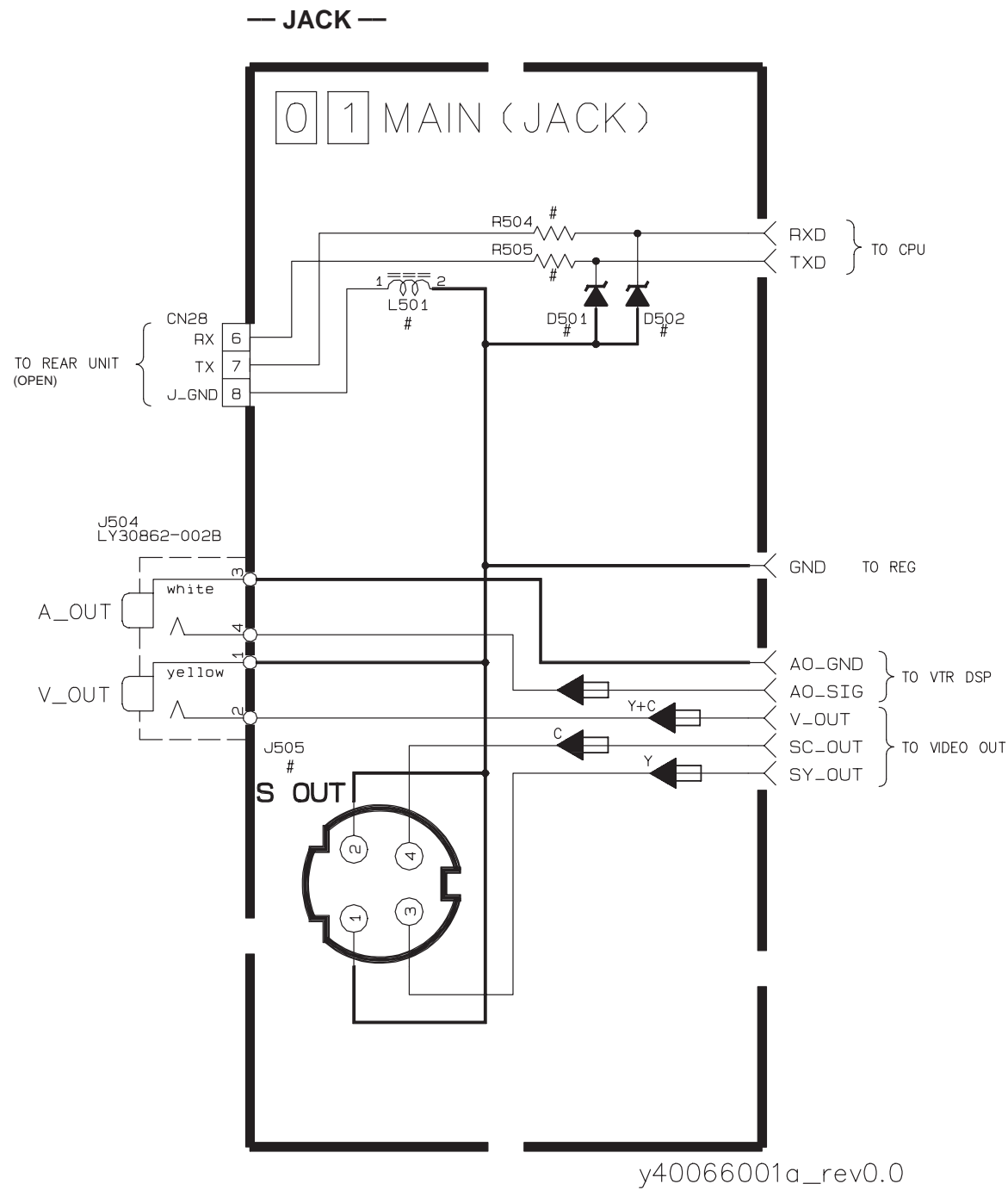
NOTE: THE PARTS WITH MARKED (\*) IS NOT USED.

A B C D 4-23 4-24 E F G H



4.12 JACK AND CCD SCHEMATIC DIAGRAMS

NOTE : • For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS"  
• When ordering parts, be sure to order according to the Part Number indicated in the Parts List.



NOTES : 1. THE PARTS WITH MARKED (\*) IS NOT USED.  
2. For CCD waveform, please refer to page 4-55.

y40065001a\_rev0.1

EXCHANGE PARTS LIST

	JLIP-MODEL	NON JLIP-MODEL	S-VHS MODEL	N-VHS MODEL
L501	NGR0129-002	*	J505	QND007B-001
D501	MA806B-X	*	* : NO WEAR	
D502	MA806B-X	*		
R504	NRSA63J-221X	*		
R505	NRSA63J-331X	*		

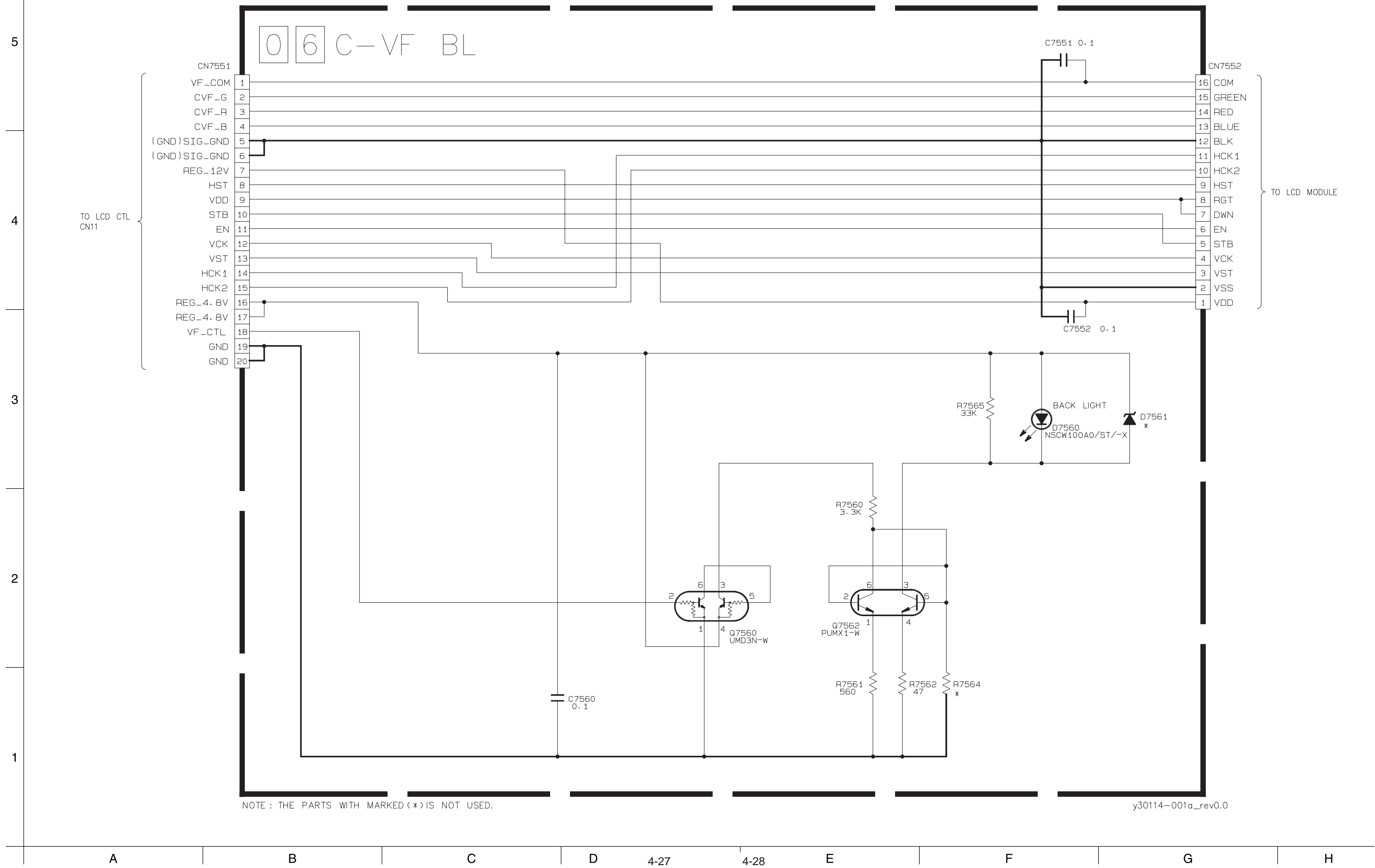
EXCHANGE PARTS LIST

MODEL	CCD PWB ASSY	IC5301	R5301	R5304	C 303	CCD-HV	CCD-LV
NTSC-L	YB20899C-##	TCD5621P	*	*	*	15V	-8V
NTSC-L	YB20899B-##	MN39117FT	1M	*	1000p	15V	-8V
PAL-L	YB20899A-##	MN372132FT	1M	1M	1000p	15V	-8V
PAL-L	YB20899A-##	ICX227AK	1M	1M	1000p	12V	-5V
PAL-H	YB20899A-##	MN39241FT	1M	1M	1000p	15V	-8V
PAL-H	YB20899A-##	ICX229AK	1M	1M	1000p	12V	-5V

### 4.13 C-VF BL SENSOR SCHEMATIC DIAGRAM

— FOR AX761U, SX860U —

**NOTE :** • For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS"  
 • When ordering parts, be sure to order according to the Part Number indicated in the Parts List.

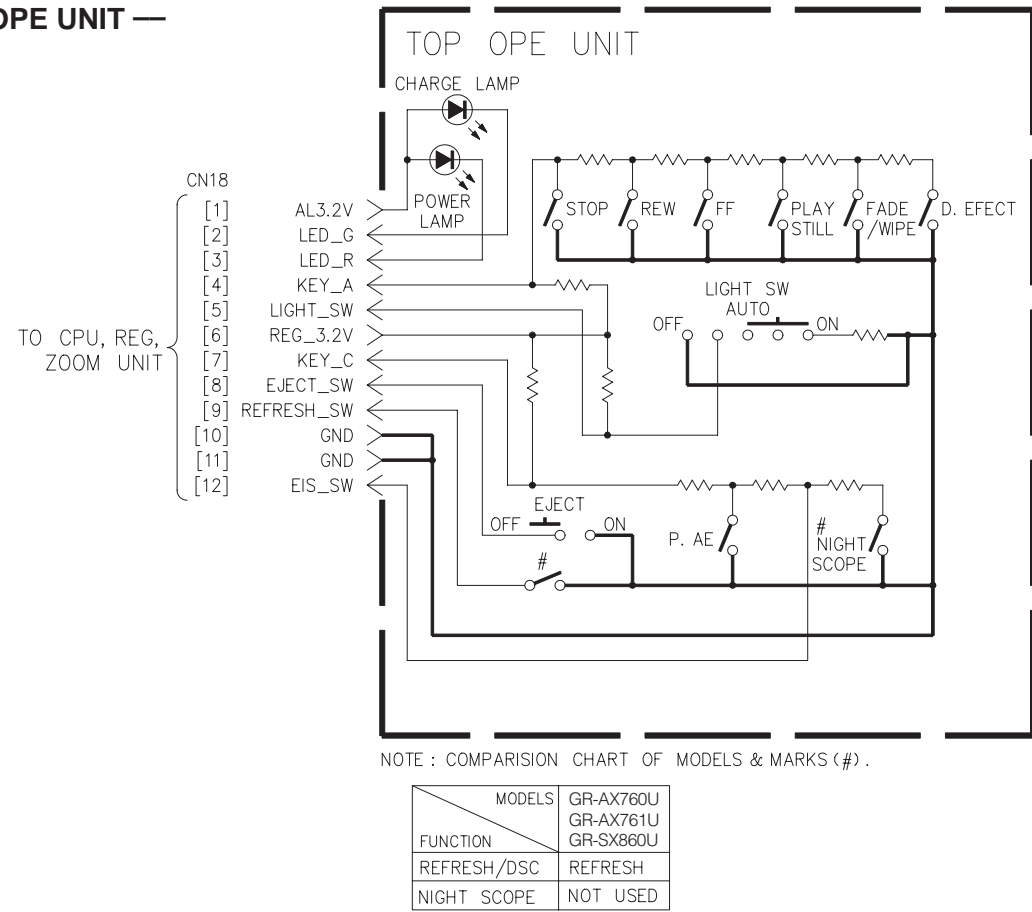


NOTE : THE PARTS WITH MARKED (\*) IS NOT USED.

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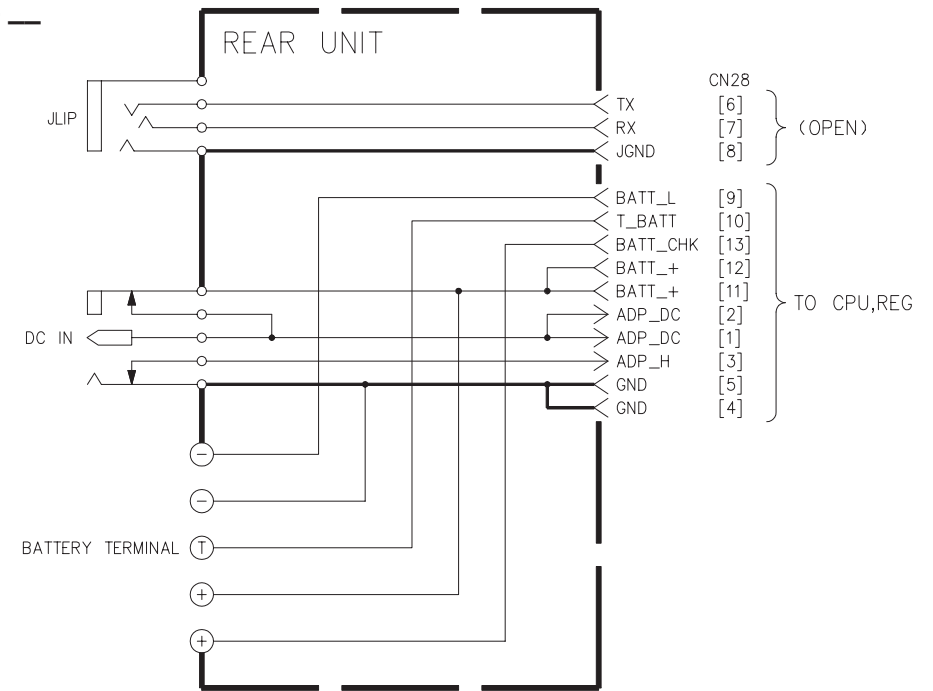
#### 4.14 TOP OPE UNIT, ZOOM UNIT, REAR UNIT AND SENSOR SCHEMATIC DIAGRAMS

##### — TOP OPE UNIT —

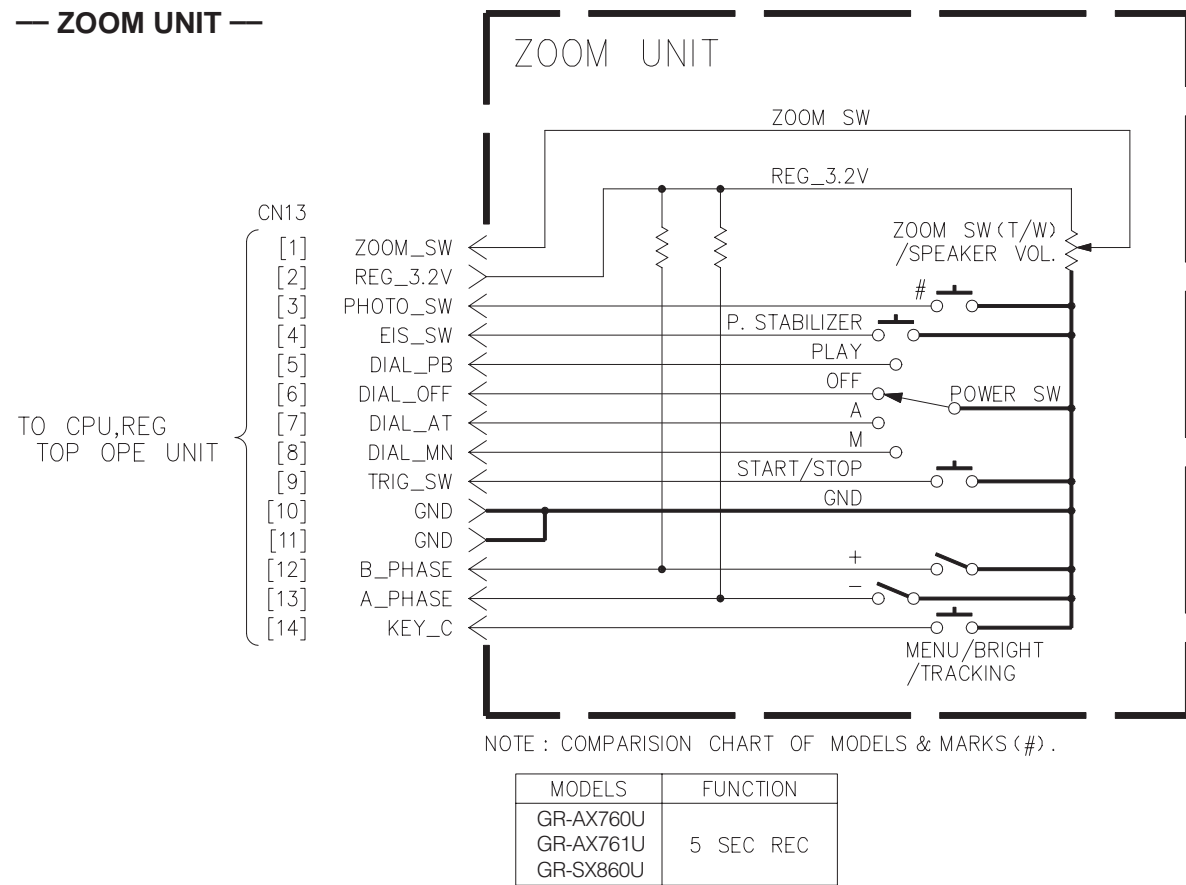


NOTE : • For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS"  
• When ordering parts, be sure to order according to the Part Number indicated in the Parts List.

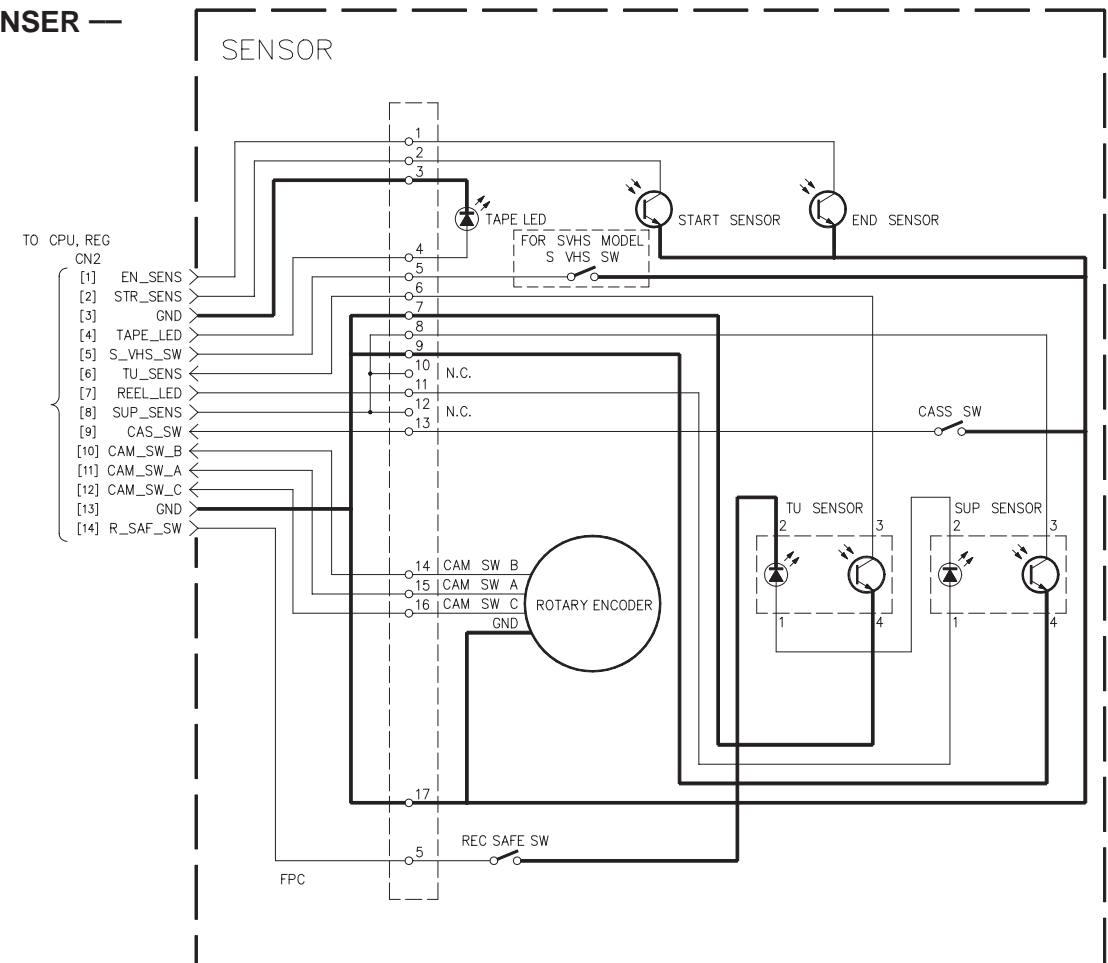
##### — REAR UNIT —



##### — ZOOM UNIT —

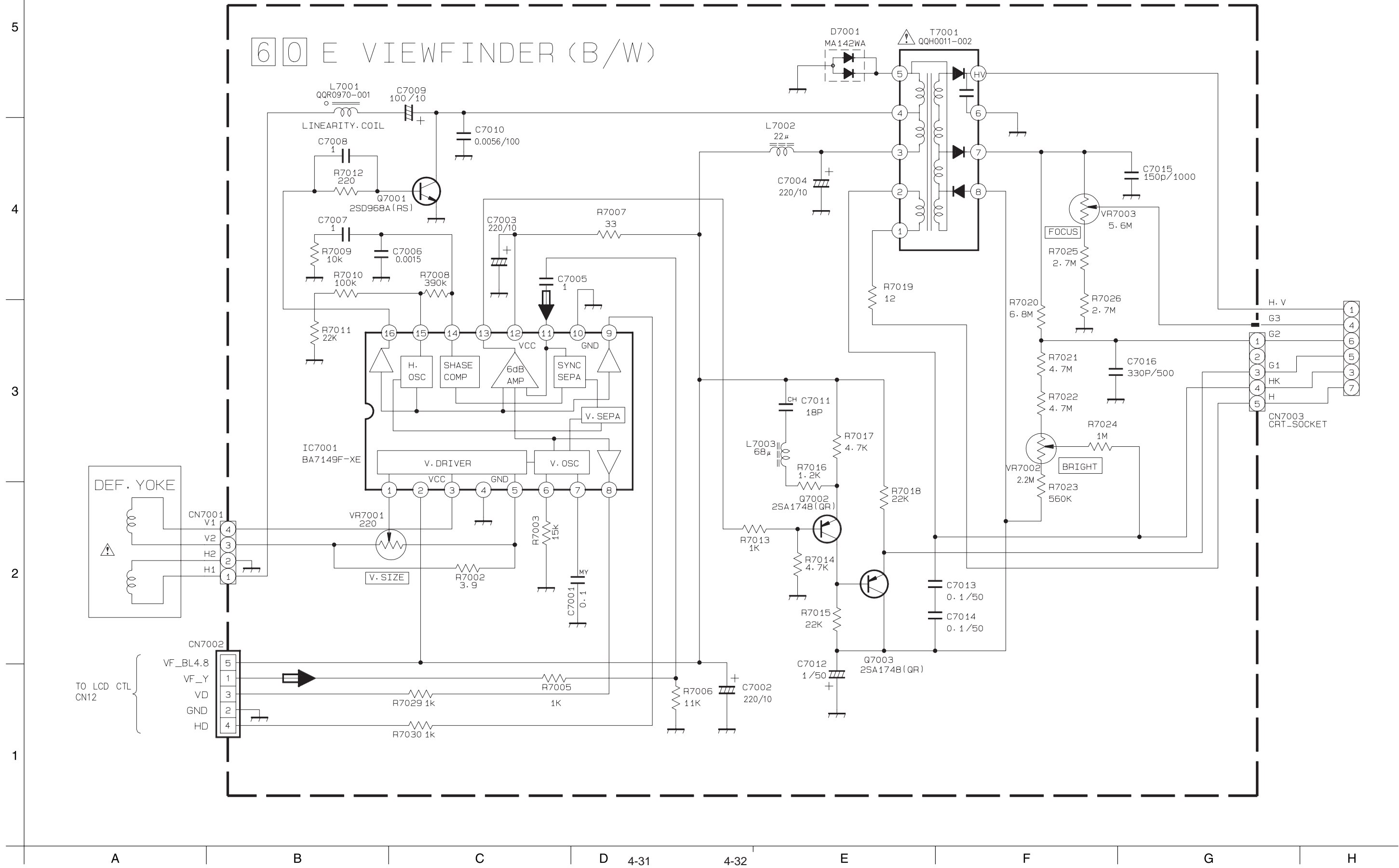


##### — SENSOR —



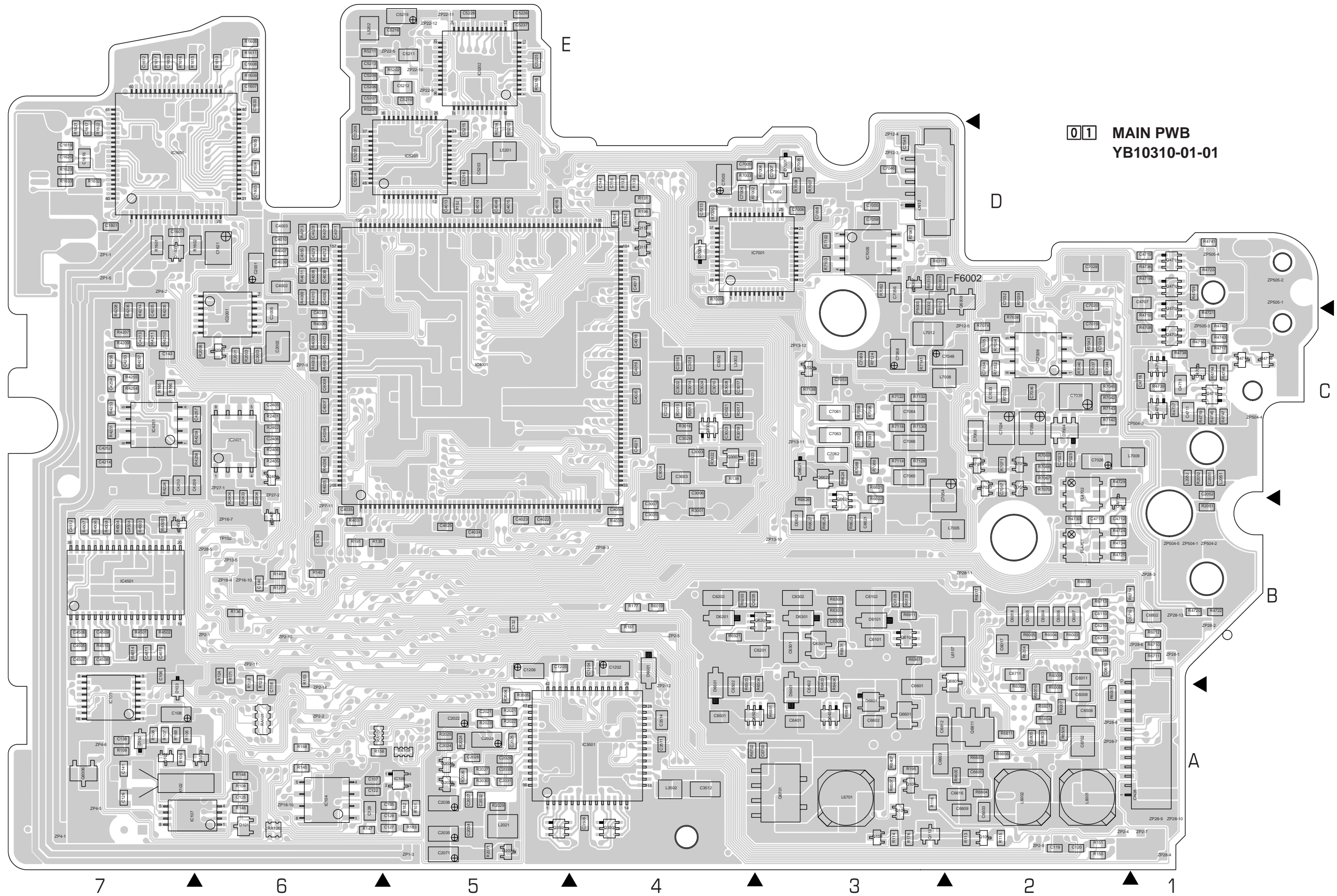
4.15 ELECTRONIC VIEWFINDER SCHEMATIC DIAGRAM  
 — FOR AX760U/UC —

NOTE: • For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS"  
 • When ordering parts, be sure to order according to the Part Number indicated in the Parts List.



4.16 MAIN CIRCUIT BOARD

FOIL SIDE (B)



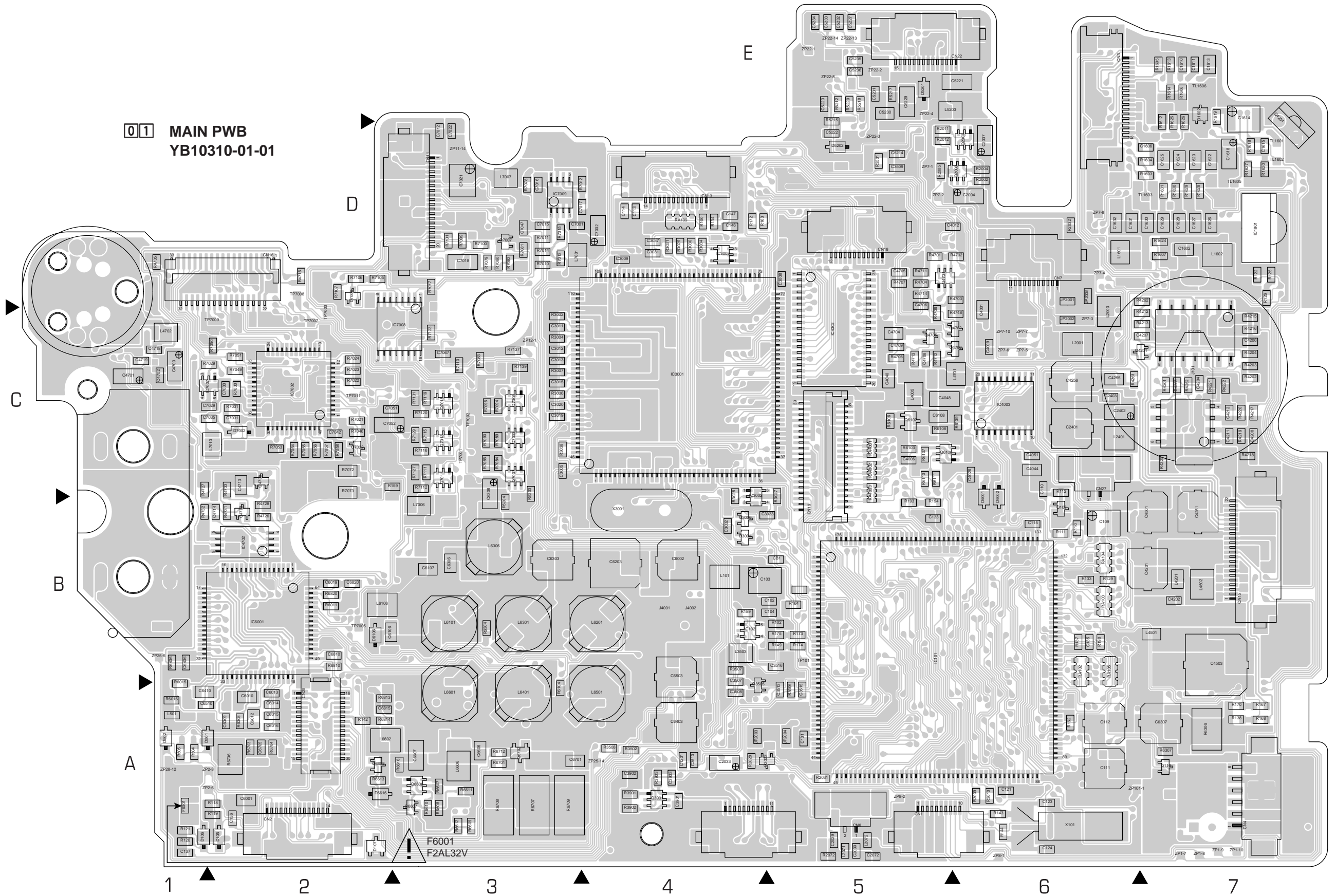






COMPONENT SIDE (A)

01 MAIN PWB  
YB10310-01-01

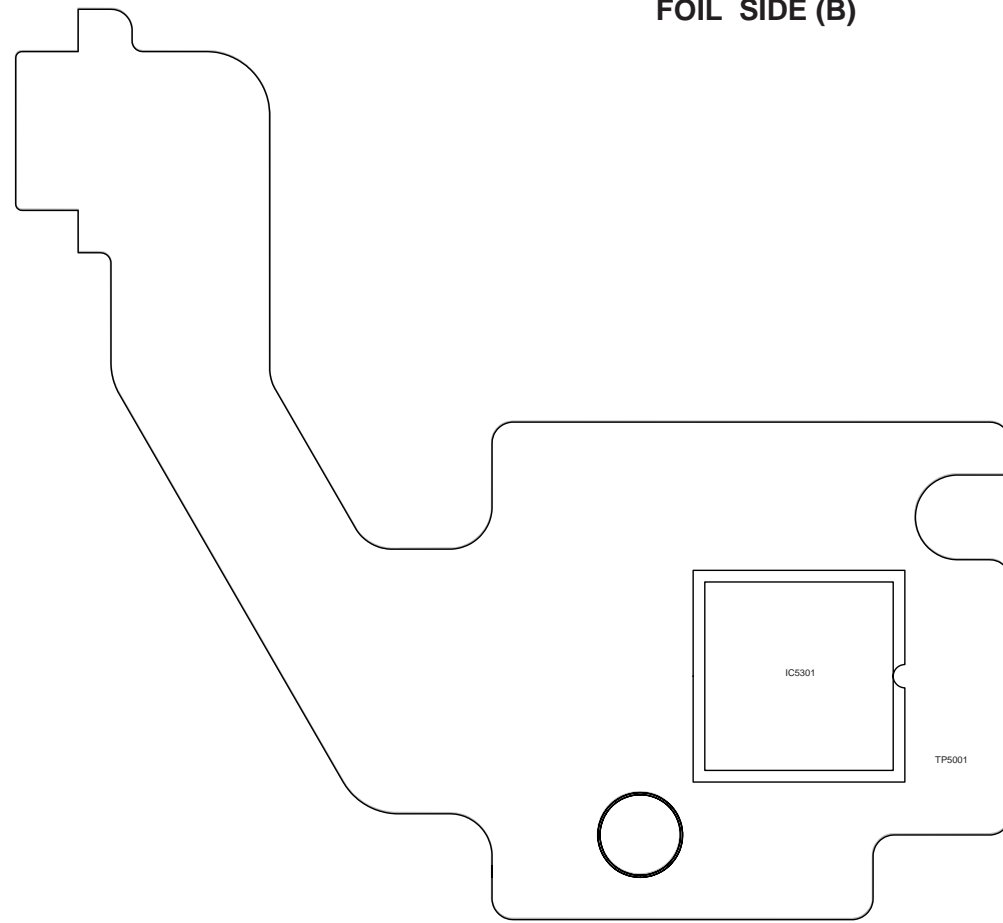




4.17 CCD AND C-VF CIRCUIT BOARDS

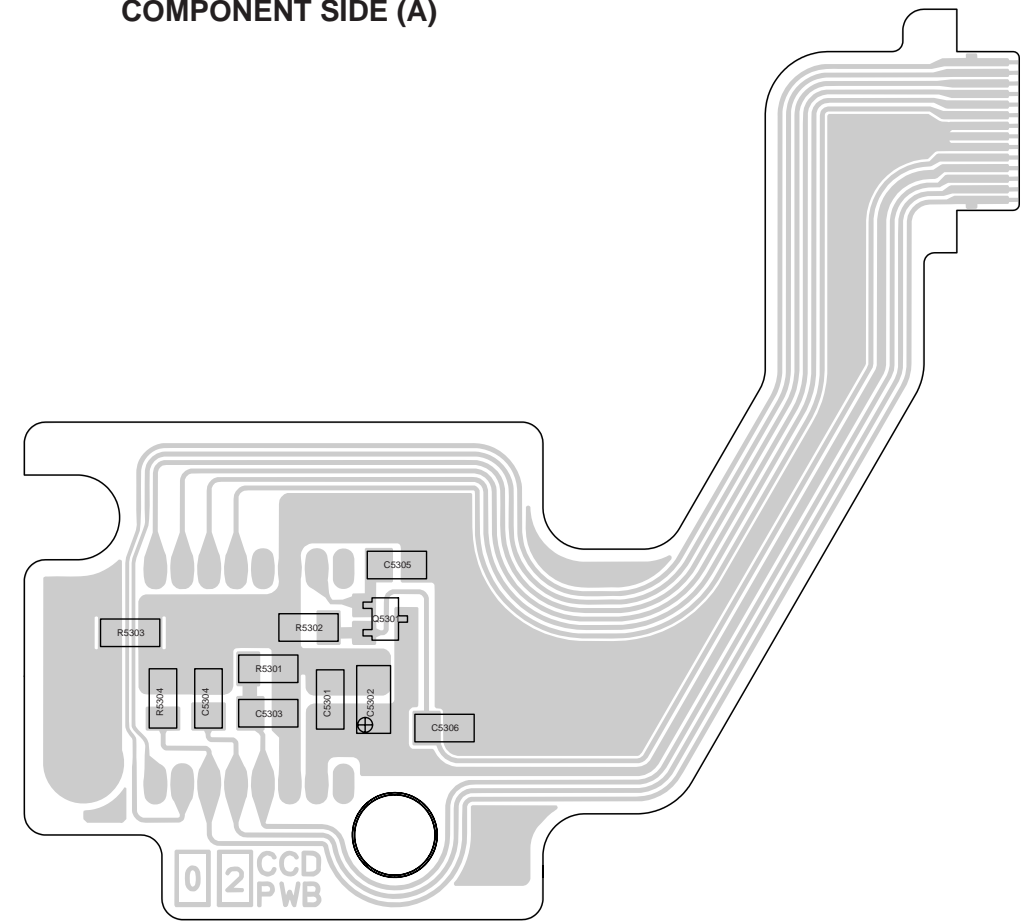
— CCD —

FOIL SIDE (B)



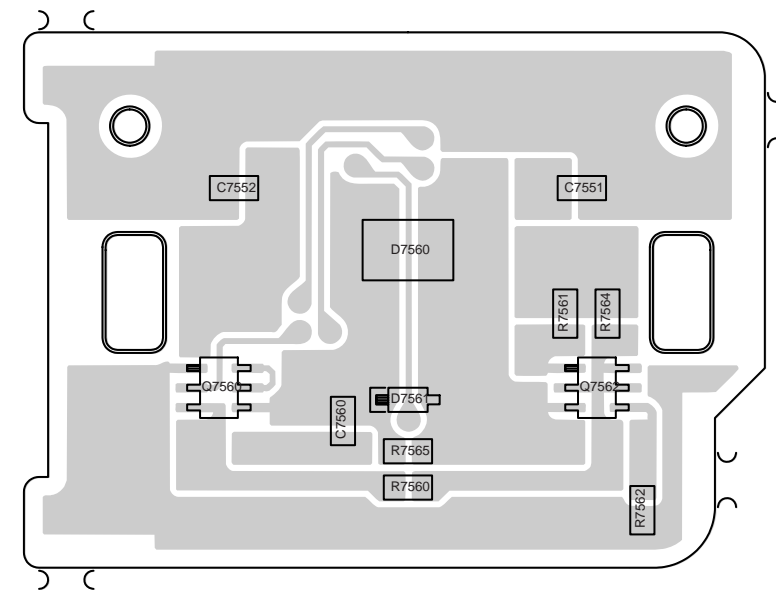
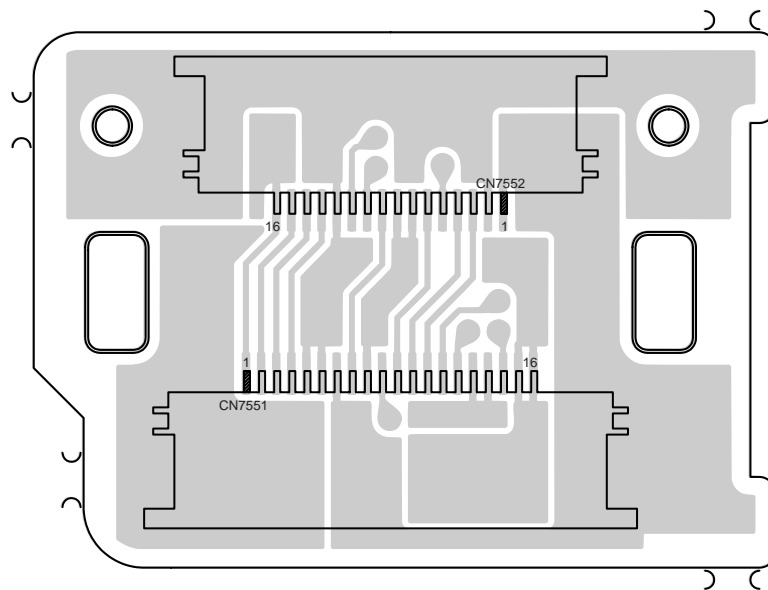
COMPONENT SIDE (A)

02 CCD PWB  
YB20899-01-01



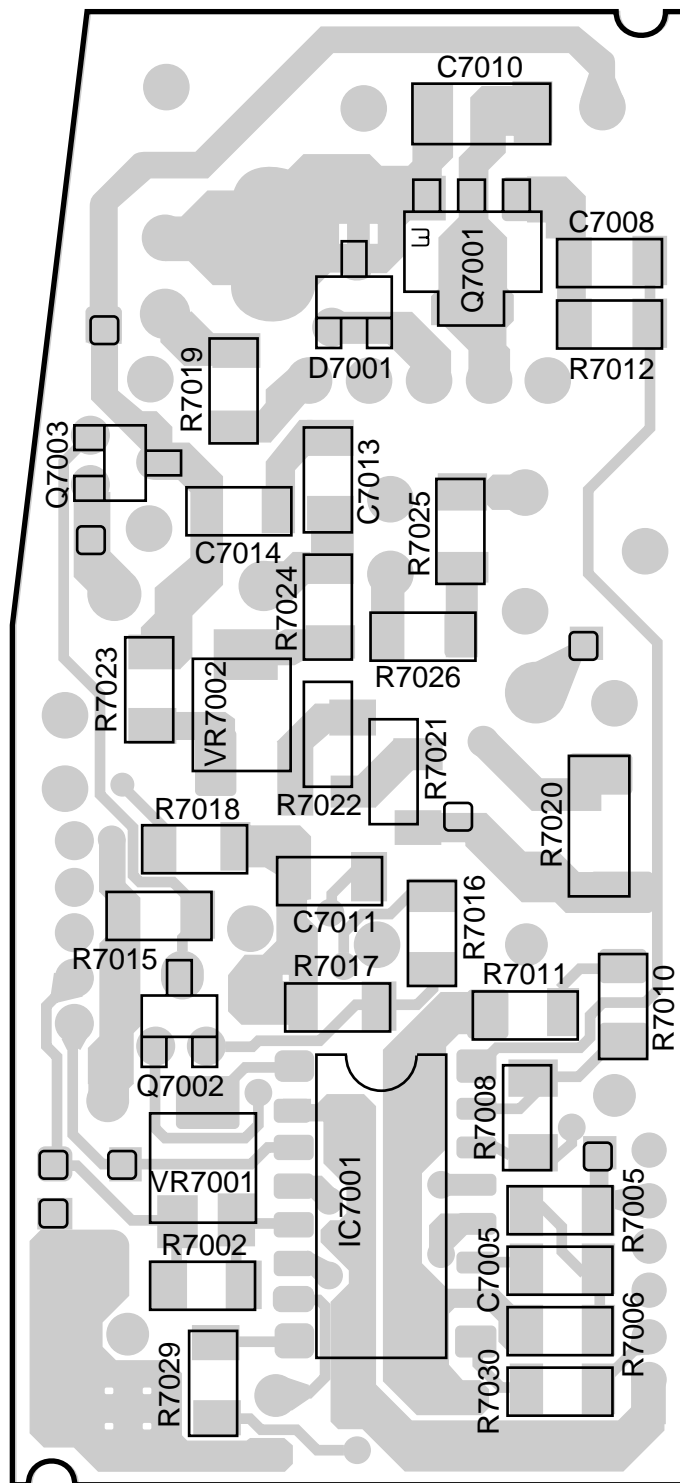
— C-VF BL —  
(FOR AX761U/SX860U)

06 C-VF BL  
YB20901

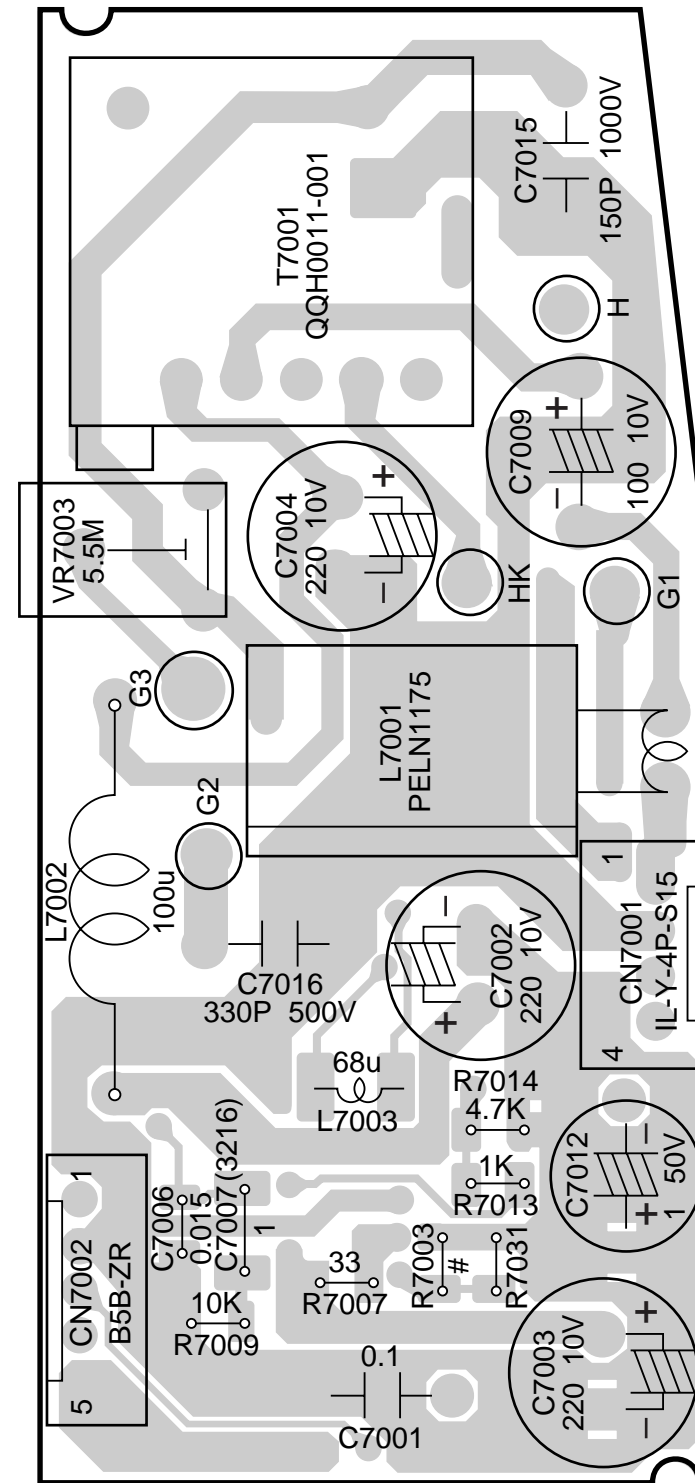


4.18 ELECTRONIC VIEWFINDER CIRCUIT BOARD

FOIL SIDE (B)

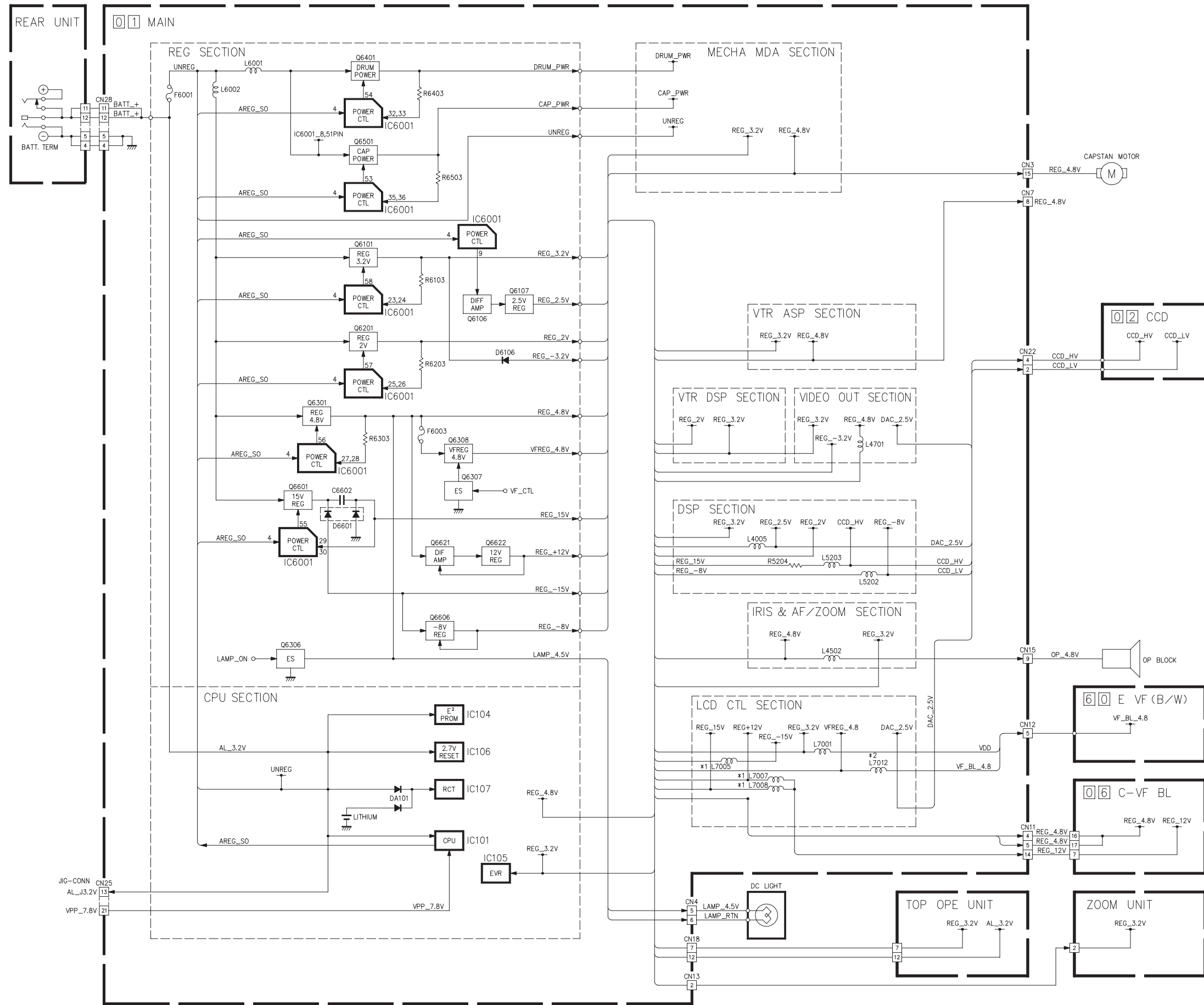


COMPONENT SIDE (A)





# 4.19 POWER SYSTEM BLOCK DIAGRAM

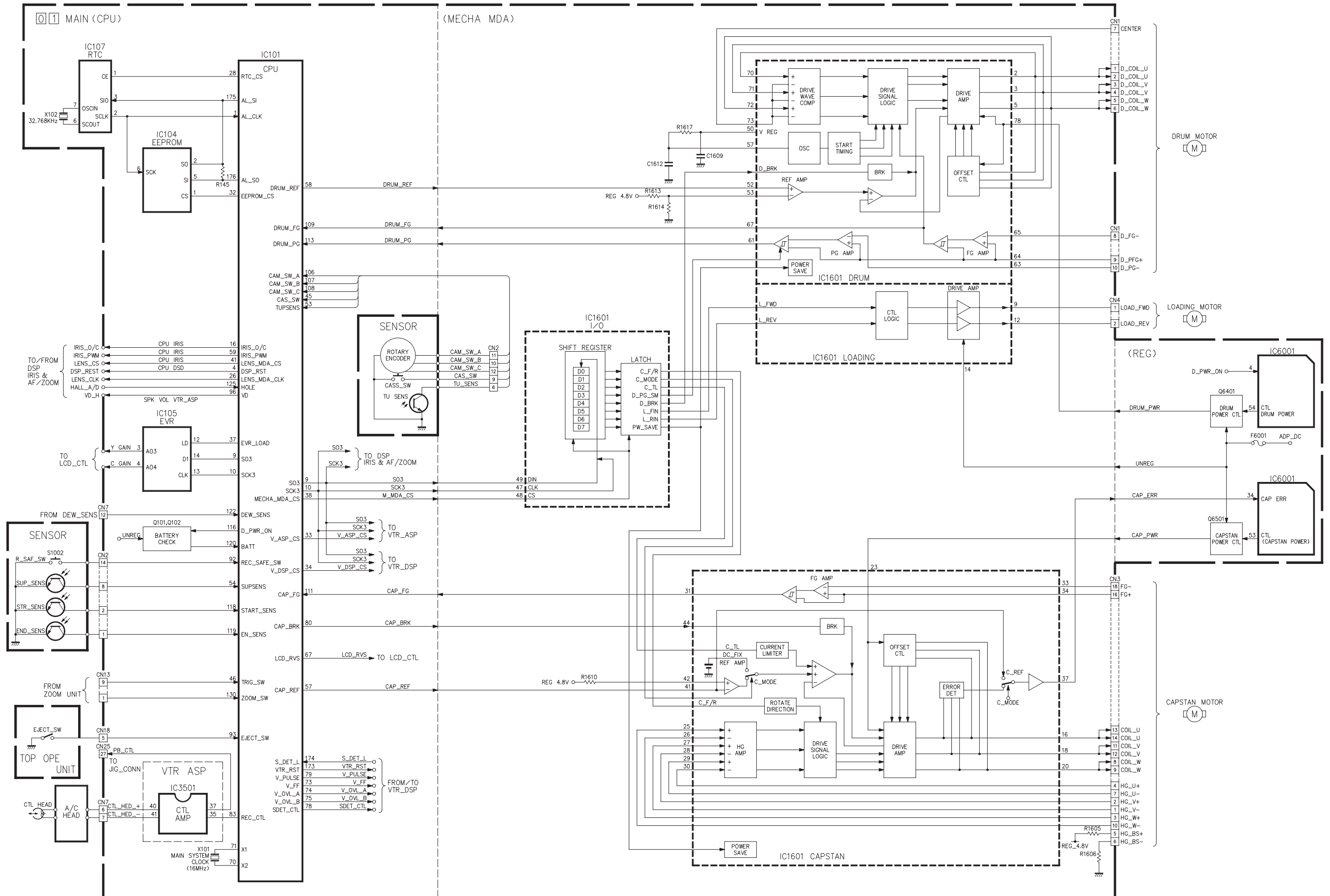


NOTES) \*1 FOR AX761U, SX860U  
 \*2 FOR AX760U/UC

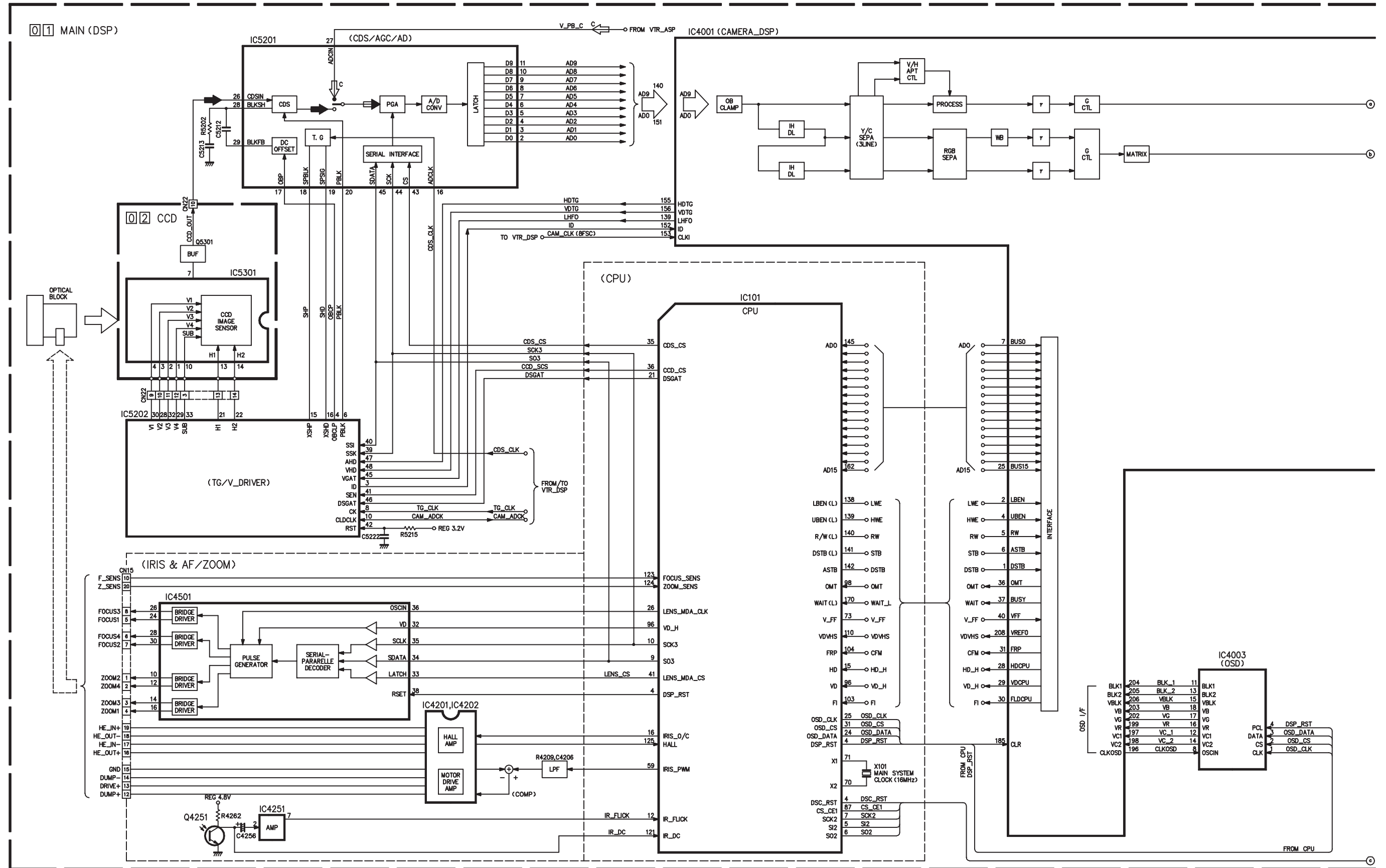
5  
 4  
 3  
 2  
 1

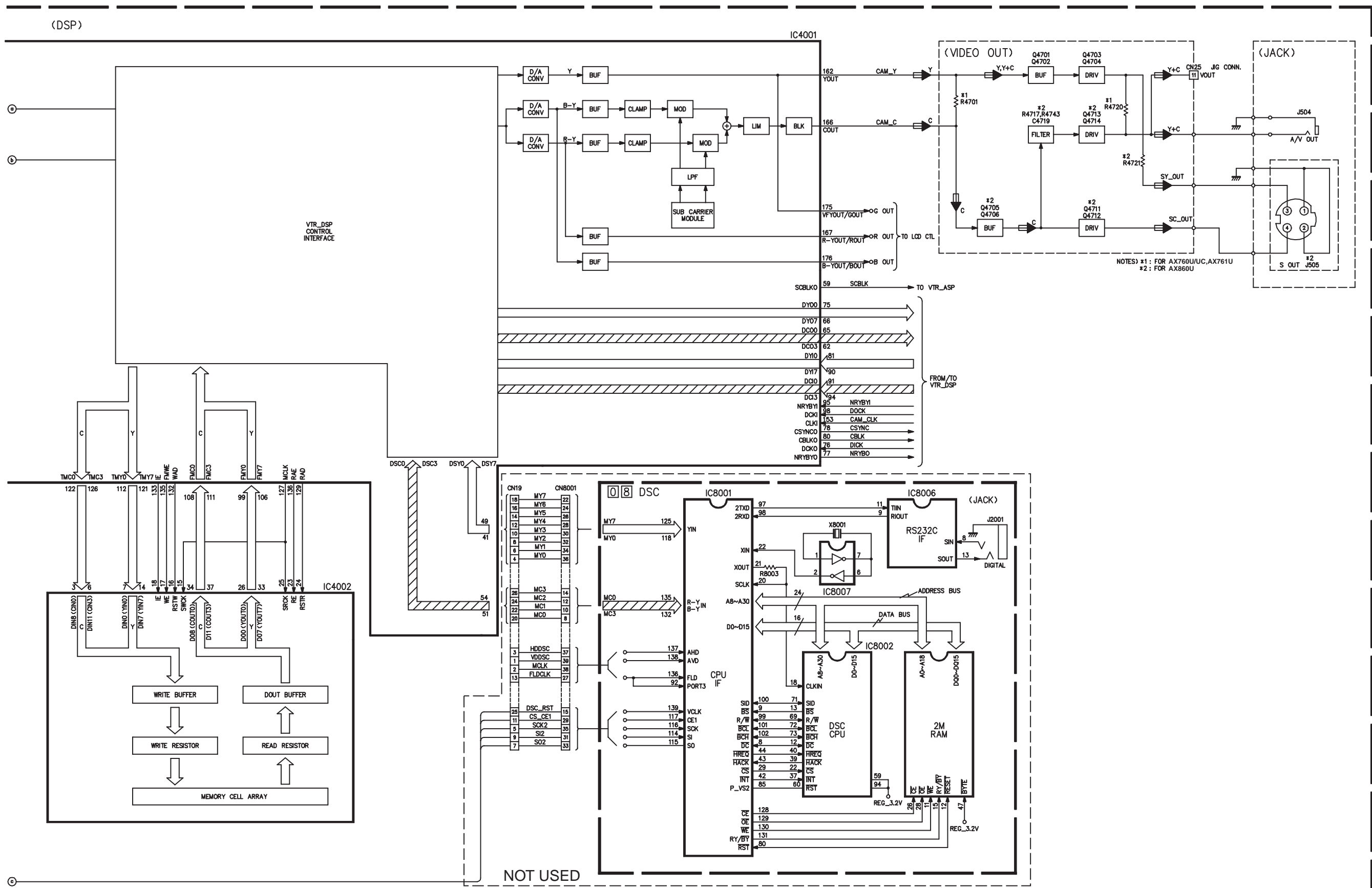
A B C D 4-43 4-44 E F G H

# 4.20 CPU/MDA SYSTEM BLOCK DIAGRAM

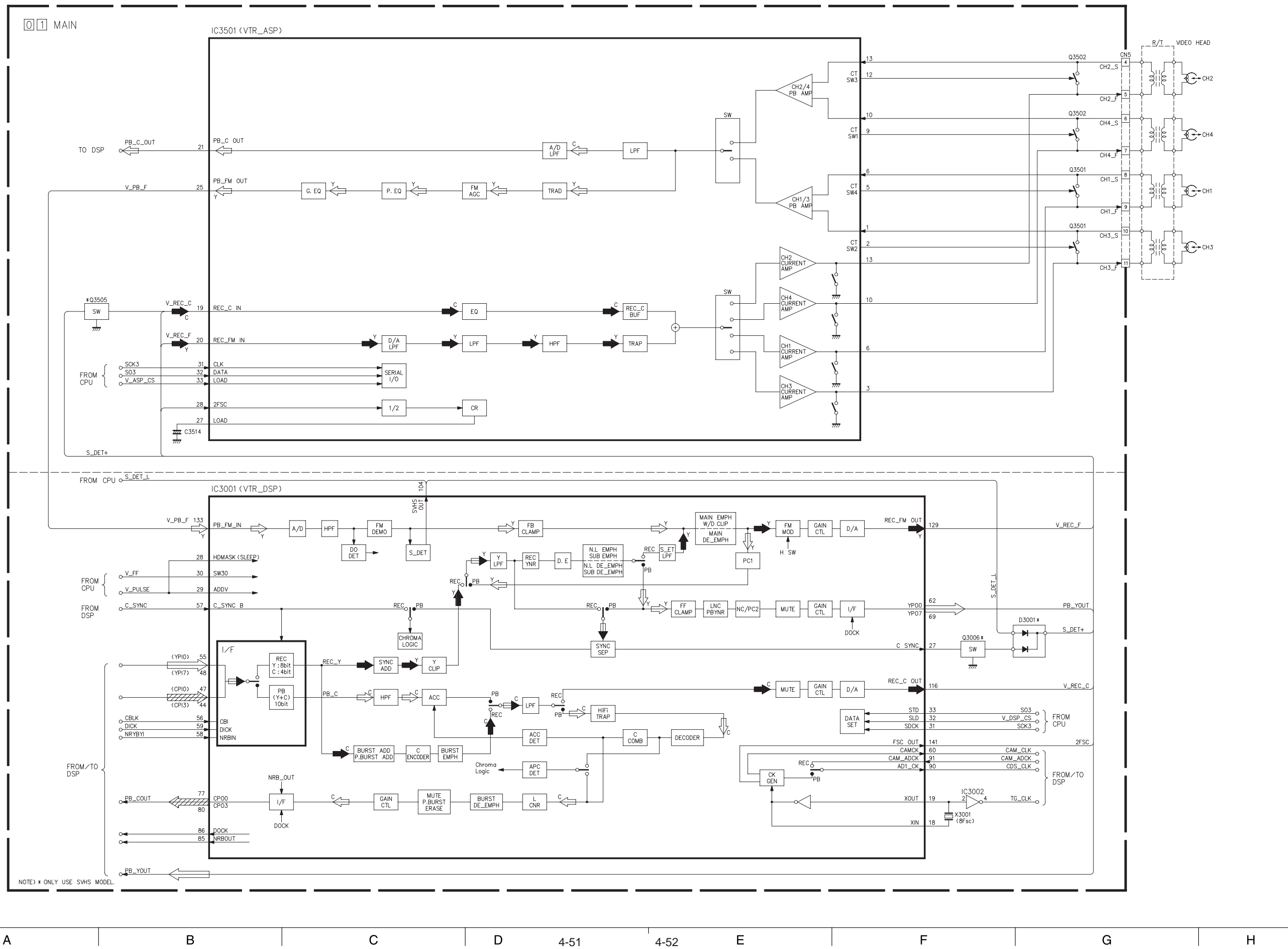


# 4.21 CAMERA SYSTEM BLOCK DIAGRAM





4.22 Y/C SYSTEM BLOCK DIAGRAM



5

4

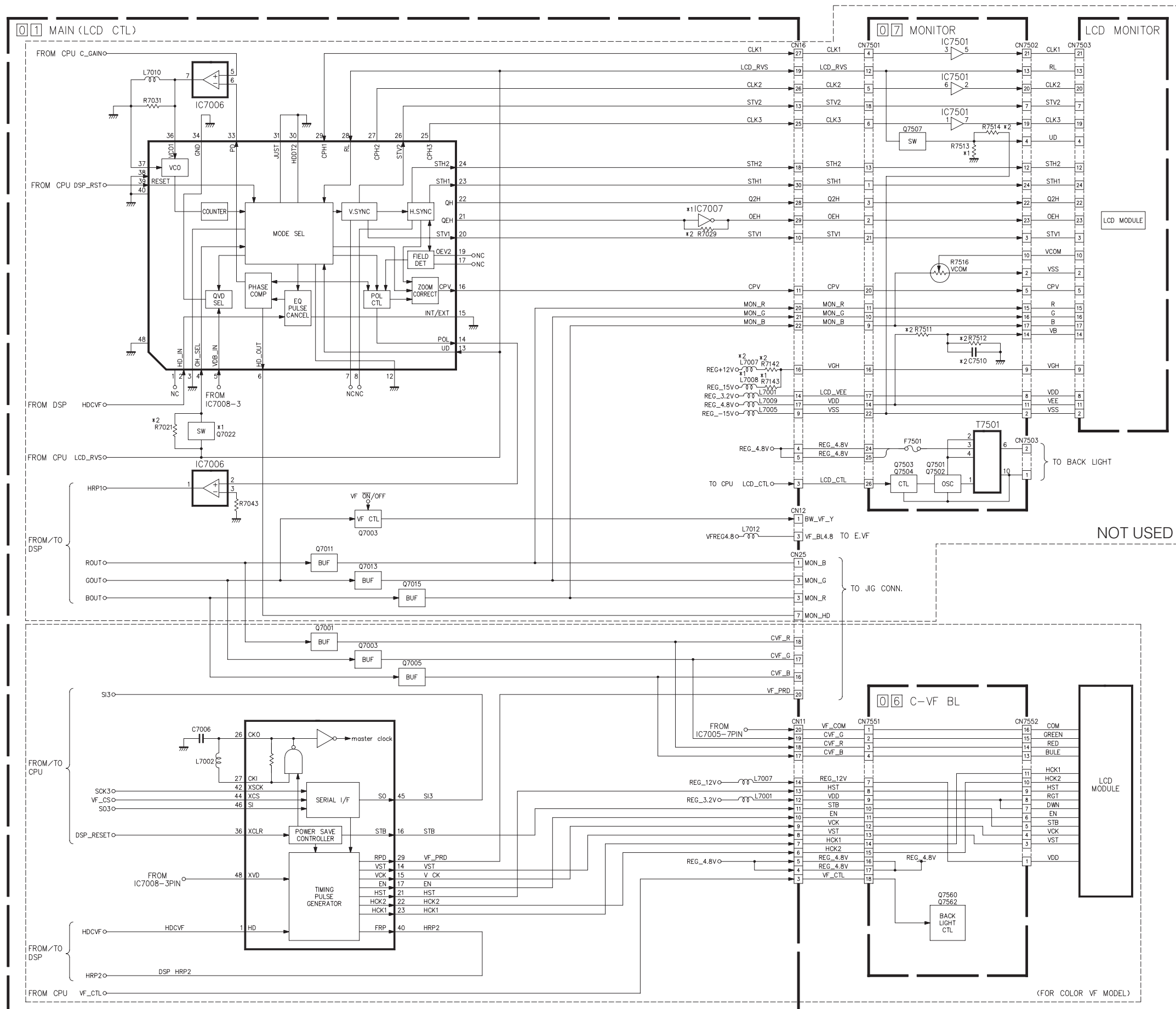
3

2

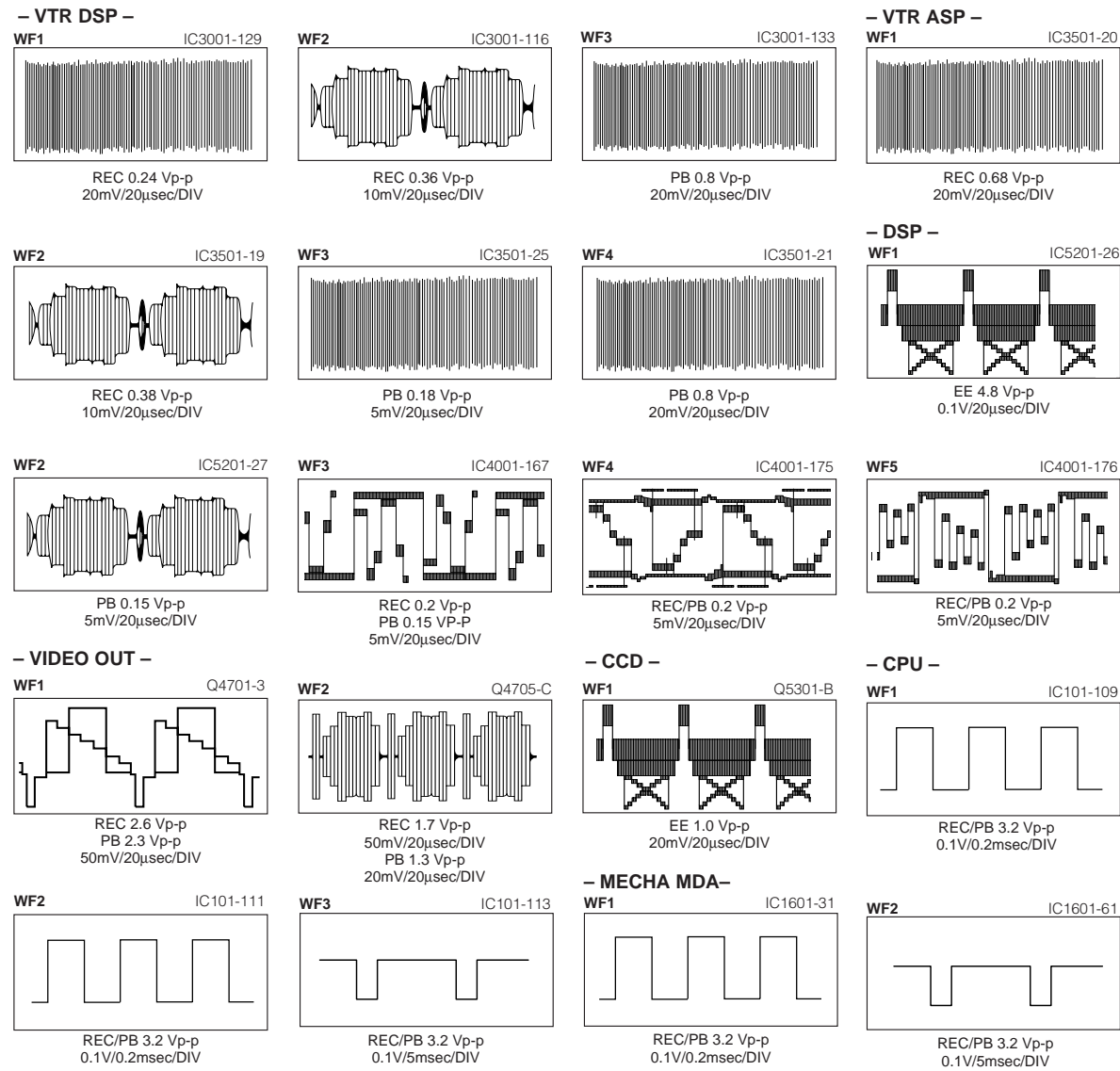
1



### 4.23 MONITOR SYSTEM BLOCK DIAGRAM



## 4.24 WAVEFORMS



## 4.25 VOLTAGE CHARTS

<CPU>

MODE PIN NO.	REC	PLAY	MODE PIN NO.	REC	PLAY	MODE PIN NO.	REC	PLAY	MODE PIN NO.	REC	PLAY	MODE PIN NO.	REC	PLAY
IC101			80	0	0	160	0.7	0.9	Q104			34	1.9	1.8
1	3	3	81	3	3	161	0.7	0.9	E	0	0	35	1.8	0
2	3	3	82	0	0	162	0.7	0.8	C	4.9	4.9	36	0	0
3	3	3	83	1.8	0	163	0	0	B	0	0	37	2.6	2.3
4	3	3	84	0	3	164	3	3	Q105			38	3	3
5	0	0	85	3	0	165	3	3	E	0	0	39	4.8	4.8
6	0	0	86	3	0	166	3	0	C	-0.5	-0.4	40	2.4	2.1
7	3	3	87	3	0	167	0	0	B	5.1	5	41	2.3	2.1
8	3.2	3.2	88	0	0	168	0	0	Q110			42	2.8	2.8
9	0.6	0.6	89	0	0	169	0	0	E	0	0	43	2.8	2.5
10	3	3	90	3	3	170	3.2	3.2	C	0	0	44	2.7	2.5
11	0	0	91	0	0	171	0	3	B	3	3	45	2.5	2.4
12	1.5	1.5	92	2.7	2.7	172	0	3	Q111			46	2.3	2.5
13	3	3	93	2.8	2.8	173	0	0	E	0	0	47	0	0.4
14	0	0	94	3	3	174	0	0	C	0	0	48	2.5	2.5
15	0	0	95	0	0	175	3	3	B	3	3	49	2.5	2.5
16	1.6	0	96	0	0	176	3	3	Q112			50	0	0
17	0	0	97	0	0	IC102			E	0	0	51	2.5	2.5
18	3	3	98	0	0	1	2.9	3	C	2.2	2.2	52	2.5	2.5
19	0	0	99	3	3	2	2.8	2.8	B	0	0	53	2.5	2.5
20	0	0	100	0	0	3	0	0	Q113			54	4.7	4.7
21	3	0	101	3	3	4	0	0	E	-	-	55	2.5	2.5
22	3	3	102	0	0	5	3	3	C	-	-	56	0	1.4
23	2.9	2.8	103	1.6	1.6	IC104			B	-	-	Q2001		
24	2.6	2.6	104	-	-	1	3	3	E	3	3.2			
25	2.9	2.9	105	3.2	3.2	2	3	3	C	1.4	3.2			
26	1.5	1.5	106	0	0	3	3	3	B	3	0			
27	3	3.1	107	3.1	3.1	4	0	0	Q2007					
28	0	0	108	3.1	3.1	5	0	0	1	-10.5	0			
29	3	3	109	1.6	1.6	6	3	3	2	-16.6	0.7			
30	3	3	110	0	0	7	3	3	3	0	0			
31	2.4	2.3	111	1.6	1.6	8	3	3	4	-10.5	0			
32	3	3	112	1.8	1.9	IC105			5	-16.6	0.7			
33	3	3	113	2.9	3	1	0	0	6	0	0			
34	3	3	114	0	0	2	2.1	2.1	Q2008					
35	3	3	115	3	3	3	1.6	1.6	1	3	1.8			
36	0	0	116	3	3	4	1.6	1.6	2	3	1.2			
37	0	0	117	0	2.9	5	0	1.4	3	3	1.2			
38	0	0	118	0.8	0.8	6	0	1.4	4	3	1.7			
39	3	3	119	3.1	3.1	7	0	1.4	5	3	1.2			
40	0	0	120	3.2	3.2	8	3.2	3.2	6	-16.6	0.8			
41	0	0	121	2.7	2.7	9	3.2	3.2	Q2021					
42	0	0	122	0	0	10	0	0	E	0	0			
43	0	0	123	0	0	11	1.4	1	C	0	0			
44	0	0	124	0	0	12	0	0	B	0	0			
45	0	0	125	1.4	0.4	13	3	3	Q2022					
46	2.9	3	126	3.1	3.1	14	0.6	1	E	0	0			
47	0	0	127	3.2	3.2	15	2.4	2.4	C	0	0			
48	0	0	128	3.2	3.2	16	0	0	B	0	3			
49	2.8	0	129	2.7	2.7	IC106			Q2023					
50	2.8	2.9	130	1.6	1.6	1	0	0	E	0	0			
51	0	2.9	131	3.2	3.2	2	0	0	C	0	0			
52	2.8	2.9	132	0	0	3	3	3	B	0	0			
53	-	-	133	3.2	3.2	4	3	3	Q2071					
54	-	-	134	0	0	IC107			E	4.4	4.4			
55	3	3	135	3	3	1	0	0	C	4.7	4.7			
56	0	0	136	3	3	2	3	3	B	4.7	4.7			
57	1.6	1.6	137	0	0	3	3	3	Q3501					
58	1.5	1.5	138	0	0	4	0	0	1	2.2	2.2			
59	1.4	0	139	0	0	5	0	0	2	2.3	2.4			
60	2.7	2.7	140	3	3	6	0	0.6	3	2.2	2.2			
61	0	0	141	3	3	7	0.7	0	4	2.2	2.2			
62	3	3	142	3	3	8	3	3	5	2.3	2.3			
63	0	0	143	3	3	IC1801			6	2.2	2.2			
64	0	0	144	3	3	1	3	3	17	4	5.2			
65	0	0	145	0.8	1	2	0	0	18	0	0			
66	3	3	146	0.9	1	3	4.8	4.8	19	2.9	0			
67	3	3	147	0.9	1	Q101			20	2.8	0			
68	0	0	148	0.8	1	E	11	11	21	1	0			
69	3	3	149	0.8	1	C	0	11.1	22	1	2.2			
70	1.4	1.4	150	0.8	1	B	10.3	10.3	23	2.1	2.1			
71	-	-	151	0.8	1	Q102			24	4.7	4.8			
72	0	0	152	0.7	0.9	E	0	0	25	2.4	2.4			
73	1.5	1.5	153	3	3	C	3.2	3.3	26	0	3			
74	0	0	154	0	0	B	3	3	27	2.5	2.5			
75	0	0	155	0.8	0.9	Q103			28	2.9	2.9			
76	0	0	156	0.8	1	E	0	0	29	0	0			
77	0	0	157	0.8	0.9	C	0	4.8	30	1.5	1.5			
78	0	0	158	0.8	0.9	B	0.7	0	31	3	3			
79	0	0	159	0.8	0.9				32	0.6	0.9			

MODE PIN NO.	REC	PLAY
4	4.6	4.8
5	4	5.3
6	0	0

<MECHA MDA>

MODE PIN NO.	REC	PLAY
IC1601		
1	0	0
2	1.3	1.3
3	1.3	1.3
4	0	0
5	1.3	1.3
6	0	0
7	0	0
8	0	0
9	0.4	0
10	0	0
11	0	0
12	0	0.4
13	0	0
14	11	11.1
15	0	0
16	0.6	0.6
17	0	0
18	0.7	0.6
19	0	0
20	0.6	0.6
21	0	0
22	0	0
23	1.4	1.3
24	11.1	11.1
25	2.4	2.4
26	2.4	2.4
27	2.4	2.4
28	2.4	2.4
29	2.4	2.4
30	0	2.4
31	1.6	1.6
32	2.4	2.4
33	2.1	2.4
34	2.4	2.4
35	4.8	4.8
36	3	3
37	0.8	0.8
38	0	0.7
39	0.7	0.7
40	0	1.2
41	1.6	1.6
42	4.8	4.8
43	4.8	4.8
44	0	0
45	0	0
46	0	0
47	3	3
48	0	0
49	0.6	1
50	2	1.9
51	0	0
52	1.5	1.5
53	1.2	1.2
54	4.8	4.8
55	0.7	0.7
56	0.7	0.7
57	1.1	1.1
58	0.7	0.7
59	0	0
60	1.6	0
61	2.9	2.9
62	1.8	1.8
63	2.3	2.3
64	2.4	2.3
65	2.4	2.3
66	2.4	2.3
67	1.6	1.6
68	0.9	0.9
69	0	0

MODE PIN NO.	REC	PLAY
70	1.3	1.3
71	1.3	1.3
72	0	1.3
73	1.3	1.3
74	1.1	1.2
75	0.4	0.5
76	3.9	3.9
77	11.1	11
78	2.7	2.7
79	0	0
80	0	0

<VTR DSP>

MODE PIN NO.	REC	PLAY
IC3001		
1	3.2	3.2
2	3.2	3.2
3	0	0
4	1.9	1.9
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	3.3	3.2
14	1.9	1.9
15	0	0
16	0	0
17	3.2	3.2
18	1.5	1.5
19	1.5	1.5
20	0	0
21	1.3	1.3
22	1.3	1.3
23	1.3	1.3
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	1.5	1.5
31	3	3
32	3	3
33	0.6	1
34	3.2	3.2
35	3.2	3.2
36	3.2	3.2
37	0	0
38	0	0
39	0	0
40	0	0
41	0	0
42	0	0
43	0	0
44	1.5	0
45	1.5	0
46	1.3	1.2
47	1.1	1.9
48	0.7	1.9
49	0.8	1.9
50	1	1.8
51	1.1	1.6
52	2.3	1.6
53	1.9	0
54	2	1.5
55	1.1	1.5
56	2.4	0
57	2.9	2.8
58	1.6	1.6
59	1.5	1.6
60	1.4	1.3
61	3.2	3.2
62	1.3	1.6
63	1.2	1.6
64	2	1.7
65	1.5	1.8
66	0.6	1.9
67	0.5	0.6
68	2	2
69	1.4	1.4
70	1.9	1.9
71	0	0
72	0	0
73	0	0
74	0	0
75	0	0
76	0	0
77	1.3	1.5
78	1.3	1.6

MODE PIN NO.	REC	PLAY
79	1.3	1.7
80	1.4	1.4
81	0	0
82	0	0
83	0	0
84	0	0
85	1.6	1.6
86	1.5	1.5
87	2.9	2.9
88	3.2	3.2
89	0	0
90	1.6	1.5
91	1.6	1.6
92	1.4	1.4
93	0	0
94	0	0
95	0	0
96	0	0
97	0	0
98	0	0
99	0	0
100	0	0
101	0	0
102	0	0
103	0	0
104	0	3.2
105	3.2	3.2
106	0	0
107	0	0
108	0	0
109	3.2	3.2
110	3.2	3.2
111	0	0
112	1.9	1.9
113	1.9	1.9
114	0	0
115	3.2	3.2
116	0	0
117	0.9	0.9
118	1.6	1.6
119	2	2
120	0	0
121	0	0
122	0.8	0
123	3.2	3.2
124	0	0
125	0	0
126	1.1	0
127	1.9	3.2
128	1.9	1.9
129	1.9	0
130	0	1
131	3.2	0
132	3.2	3.2
133	0.7	1.5
134	0.7	1.5
135	2.2	2.2
136	3.2	3.2
137	0.8	0.5
138	3.2	3.2
139	0	0
140	0	0
141	1.5	1.5
142	3.2	3.2
143	3.2	3.2
144	3.2	3.2
IC3002		
1	0	0
2	1.5	1.5
3	0	0
4	1.6	1.6
5	3.2	3.2
Q3002		
1	0.8	0.8
2	1.4	1.4
3	3.2	3.2
4	2.2	2.2
5	2.9	2.9
6	3.2	3.2

MODE PIN NO.	REC	PLAY
Q3003		
E	1.9	1.9
C	2	2
B	2.6	2.6
Q3006		
E	0	0
C	0	2.8
B	0	0

<DSP>

MODE PIN NO.	REC	PLAY
IC4001		
1	3	3
2	1.6	1.6
3	0	0
4	0	0.9
5	3	3
6	3	3
7	1.1	1.3
8	1.1	1.2
9	1.1	1.2
10	3.2	3.2
11	1	1.1
12	1	1.2
13	1	1.1
14	1	1.2
15	0	0
16	1	1.1
17	1	1.2
18	1	1.2
19	2	2
20	1.1	1.1
21	1.1	1.1
22	1.1	1.2
23	1	1.2
24	1	1.2
25	1	1.2
26	0	0
27	2	2
28	0	0
29	0	0
30	1.6	1.6
31	-	-
32	0	0
33	3	3
34	2	2
35	3.1	3.1
36	0	0
37	3.2	3.2
38	0	0
39	0	0
40	1.5	1.5
41	0.9	1.2
42	0.9	1.2
43	3.2	3.2
44	1	1.2
45	1	1.3
46	1	1.3
47	1	1.3
48	1	1.3
49	1	1.3
50	0	0
51	1.1	1.2
52	1.1	1.2
53	1.2	1.2
54	1.2	1.2
55	1.4	1.5
56	1.5	1.6
57	0	0
58	0	0
59	3.2	3.2
60	0	0
61	3.2	3.2
62	1.4	0
63	1.2	0
64	1.1	1.4
65	1.1	1.6
66	0.6	1.6
67	0.9	1.5
68	1	1.5
69	0.6	1.5
70	2.1	0
71	2	1.5
72	0	0
73	2	2
74	2	1.5
75	1	1.5
76	1.5	1.5
77	1.6	1.6
78	2.9	2.9

MODE PIN NO.	REC	PLAY
79	2	2
80	2.4	2.4
81	1.3	1.9
82	1.2	1.8
83	2.1	1.9
84	1.5	1.9
85	0	0
86	2	2
87	0.9	1.9
88	0.6	1.9
89	2.1	2
90	1.3	1.8
91	1.3	1.6
92	1.1	1.6
93	1.3	1.6
94	1.4	1.5
95	1.6	1.6
96	0	0
97	3.2	3.2
98	1.5	1.5
99	1.7	1.7
100	1.9	1.6
101	1.9	1.6
102	1.8	1.6
103	1.3	1.6
104	1.2	1.5
105	1.4	1.4
106	1.3	1.3
107	0	0
108	1.5	1.8
109	1.4	1.8
110	1.6	1.9
111	1.6	1.8
112	1.2	1.6
113	1.8	1.3
114	3.2	3.2
115	1.8	1.5
116	1.4	1.6
117	0.8	1.5
118	0.7	1.5
119	0	0
120	0.9	1.5
121	0.8	0.8
122	1	1.5
123	2	2
124	1	1.6
125	1.2	1.6
126	1.3	1.5
127	1.5	1.5
128	0	0
129	0	0
130	0	0
131	2	2
132	0	0
133	3	3
134	2.6	2.6
135	2.6	2.6
136	2.6	2.7
137	3.2	3.2
138	2	2
139	0	0
140	0	1.4
141	0.5	1.6
142	0	0
143	0.7	1.6
144	0.8	1.6
145	2.3	1.6
146	0.8	1.6
147	3.2	3.2
148	0.8	1.5
149	1.1	1.6
150	1.2	1.6
151	1.2	1.6
152	1.5	1.6
153	1.3	1.3
154	0	0
155	2.9	0
156	3.1	0
157	0	0

MODE PIN NO.	REC	PLAY
158	3.2	3.2
159	2.5	2.5
160	1.1	1.1
161	1.1	1.1
162	0.7	0.8
163	0	0
164	1.1	1.1
165	1.1	1.1
166	0.7	0.7
167	0.9	0.9
168	0	0
169	2.5	2.5
170	0	0
171	0	0
172	1.1	1.1
173	1.1	1.1
174	0	0
175	0.9	0.8
176	0.9	0.8
177	2.5	2.5
178	1.1	1.2
179	1.1	1.1
180	1.2	1.2
181	0	0
182	2.5	2.5
183	2	2
184	3.2	3.2
185	3	3
186	0	0
187	0	0
188	3.2	3.2
189	0	0
190	2	2
191	3.2	3.2
192	3.2	3.2
193	1.3	1.3
194	3.1	1.3
195	3	3.1
196	1.5	3
197	0	1.4
198	0	0
199	0	0
200	0	0
201	3.2	3.2
202	0	0
203	0	0
204	0	0
205	0	0
206	0	0
207	3.2	3.2
208	0	0
IC4003		
1	2.9	2.9
2	2.4	2.2
3	2.6	2.5
4	3	3
5	3.2	3.2
6	0	0
7	1.3	1.3
8	1.5	1.5
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	3.1	3.1
20	3	3
IC5201		
1	0	0
2	1.2	1.6
3	1.2	1.6
4	1.1	1.6
5	0.8	1.5
6	0.8	1.5

MODE PIN NO.	REC	PLAY
7	2.2	1.6
8	0.8	1.6
9	0.7	1.6
10	0.6	1.6
11	0	1.4
12	0	0
13	0	0
14	0	0
15	3.1	3.1
16	1.6	1.5
17	3	0
18	2.7	0
19	2.7	0
20	2.5	0
21	0	0
22	0	0
23	3.2	3.1
24	0	0
25	0	0
26	2.1	-
27	1.5	1.5
28	2.1	0
29	2.1	0
30	0	0
31	3.1	3.1
32	2.1	2.1
33	1	1
34	1.5	1.5
35	1.3	1.2
36	0	0
37	0	0
38	3.1	3.2
39	0	0
40	0	0
41	3.1	3.2
42	0	0
43	0	3
44	3	3
45	0.6	1
46	3.1	3.2
47	0	0
48	0	0
IC5202		
1	3.1	3.1
2	3.1	3.1
3	1.5	1.6
4	3	0
5	3	0
6	0	0
7	0	0
8	1.6	1.6
9	3.1	3.1
10	1.5	1.6
11	1	1.3
12	1.6	0
13	3.1	3.2
14	0	0
15	2.7	0
16	2.7	0
17	2.5	0
18	0	0
19	3.1	3.2
20	3.1	3.2
21	1.6	0
22	1.3	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	-7.3	0
30	0	14.9
31	14.9	14.8
32	-7.3	14.9
33	-7.8	14.8
34	-7.8	-8.2
35	0	0
36	0	0

MODE PIN NO.	REC	PLAY
37	3.1	0
38	0	0
39	3	0
40	0.6	0.9
41	0	0
42	3.1	3.1
43	0	0
44	3.1	3.2
45	0	0
46	3	0
47	2.9	0
48	3.1	0

<IRIS & AF/ZOOM>

MODE PIN NO.	REC	PLAY
IC4201		
1	2.2	2.8
2	1.6	0.4
3	1.6	0.4
4	0	0
5	1.9	1.9
6	1.9	1.9
7	1.9	1.9
8	4.8	4.8
IC4202		
1	1.3	0
2	1.3	0
3	1.3	0
4	4.8	4.8
5	1.9	1.9
6	1.9	1.9
7	1.3	0.4
8	2.5	2.5
9	1.9	1.9
10	1.9	1.9
11	0	0
12	0.4	0.4
13	0.4	0.4
14	0.9	1
IC4251		
1	2	1.9
2	2	2
3	2	1.9
4	0	0
5	2	1.9
6	1.9	1.9
7	1.7	1.6
8	4.8	4.8
IC4501		
1	0	0
2	0.7	0.8
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	3.2	3.2
9	4.8	4.8
10	0	0
11	0	0
12	0.4	0
13	4.8	4.8
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	-	0
23	4.8	4.8
24	-	-
25	0	0
26	-	0.4
27	4.8	4.8
28	0.8	0
29	0	0
30	3.5	0
31	0	0
32	0	0
33	0	0
34	0.6	0.9
35	3	3
36	1.5	1.5
37	1.5	1.5
38	3	3
Q4201		
E	0.4	0.4
C	1.2	1.2
B	1	1

MODE PIN NO.	REC	PLAY
Q4251		
E	0	0
C	4.4	4.5
B	-	-
Q4501		
E	0	0
C	3.9	4
B	0	0

<VIDEO OUT>

MODE PIN NO.	REC	PLAY
Q4701		
1	0.7	0.7
2	1.3	1.3
3	2.4	2.3
4	0.6	0.7
5	1.3	1.3
6	1.3	1.3
Q4702		
E	1.8	1.8
C	4.8	4.8
B	2.4	2.4
Q4703		
1	0	0
2	0	0
3	4.8	4.8
4	0	0
5	0.9	0.9
6	4.8	4.8
Q4704		
1	0.9	0.9
2	0	0
3	-3.1	-3.1
4	0	0
5	0	0
6	-3.1	-3.1
Q4705		
E	0.7	0.7
C	3.3	3.3
B	1.3	1.3
Q4706		
E	2.6	2.6
C	4.8	4.8
B	3.2	3.3
Q4707		
E	1.8	1.8
C	4.8	4.8
B	2.4	2.4
Q4711		
1	0	0
2	0	0
3	4.8	4.8
4	0	0
5	0.9	0.8
6	4.8	4.8
Q4712		
1	0.8	0.9
2	0	0
3	-3.1	-3.1
4	0	0
5	0	0
6	-3.1	-3.1
Q4713		
1	0	0
2	0	0
3	4.8	4.8
4	0	0
5	0.9	0.9
6	4.8	4.8
Q4714		
1	0.8	0.9
2	0	0
3	-3.1	-3.1
4	0	0
5	0	0
6	-3.1	-3.1

MODE PIN NO.	REC	PLAY
Q4715		
1	0.7	0.7
2	1.4	1.3
3	2.4	2.4
4	0.7	0.7
5	1.4	1.4
6	1.4	1.3

<REG>

MODE PIN NO.	REC	PLAY
IC6001		
1	3.1	3.1
2	3	3
3	3	3
4	3	3
5	-	-
6	0	0
7	1.3	0
8	11	1.2
9	1	1
10	1.3	1.3
11	2.2	1
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	2.2	2.2
20	1	1
21	0	0
22	2.2	2.2
23	1	1
24	0.6	0.6
25	1	1
26	0.6	0.6
27	1	1
28	0	0
29	1	1
30	0.8	0.8
31	0	0
32	0	0
33	0.6	0.6
34	0	0
35	0	0
36	0.5	0.5
37	0.8	0.8
38	0	0
39	1	1
40	0	0
41	2.4	2.4
42	1.1	1.1
43	0	0
44	2.1	2.2
45	2.2	2.2
46	2.2	2.2
47	6.3	6.3
48	1	1
49	1	1
50	10.6	10.8
51	11	11
52	0	0
53	9.7	9.7
54	8.4	8.4
55	6.3	6.3
56	6	6
57	9	9
58	7.8	7.8
59	0	0
60	11	11
61	0	0
62	10.3	10.3
63	1.2	1.2
64	1	1

<REG>

MODE PIN NO.	REC	PLAY
Q6101		
1	3.2	3.2
2	3.2	3.2
3	7.8	7.8
4	11	11
5	3.2	3.2
6	3.2	3.2
Q6106		
1	0.4	0.4
2	0.9	0.9
3	0.6	0.6
4	0.4	0.4
5	1	1
6	3.2	3.2
Q6107		
E	3.2	3.2
C	2.5	2.5
B	0.6	0.6
Q6201		
1	2	2
2	2	2
3	9	9
4	11	11
5	2	2
6	2	2
Q6301		
G	6	6
D	4.9	4.9
S	11	11
Q6306		
G	0	0
D	0	0
S	0	0
Q6401		
1	2.8	2.7
2	2.8	2.7
3	8.3	8.4
4	11	11.1
5	2.8	2.7
6	2.8	2.7
Q6501		
1	1.5	1.3
2	1.5	1.3
3	9.5	9.7
4	11.1	11.1
5	1.5	1.3
6	1.5	1.3
Q6601		
G	10.8	6
D	3.2	4.9
S	11	11.1
Q6608		
E	0	0
C	14.9	14.8
B	-0.9	-0.9
Q6621		
1	4.2	4.2
2	5.4	5.5
3	14.5	14.6
4	4.2	4.2
5	4.7	4.7
6	14.8	14.8
Q6622		
E	14.8	14.8
C	12.3	12.3
B	14.6	14.6
Q6701		
1	11	11.1
2	11	11.1
3	0	0
4	0	0
5	0	0
6	0	0
Q6702		
E	0	0
C	0	0
B	0	0

MODE PIN NO.	REC	PLAY
Q6801		
E	11	11
C	3.2	3.2
B	10.8	10.8
Q6811		
E	11	11
C	3.1	3.1
B	10.4	10.4

<LCD CTL>

MODE PIN NO.	REC	PLAY
IC7001		
1	3	2.9
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	0	0
12	0	0
13	3.2	3.2
14	0	0
15	1.6	1.6
16	3.1	3.2
17	3.2	3.2
18	0	0
19	3.1	3.2
20	3.2	3.2
21	0	0
22	1.6	1.6
23	1.6	1.6
24	0	0
25	3.2	3.2
26	1.6	1.6
27	1.6	1.6
28	0	0
29	2.1	2.1
30	0	0
31	0	0
32	1	1
33	1	1
34	3.2	3.2
35	1	1
36	3	3
37	3.1	3.1
38	3.2	3.2
39	0	0
40	1.5	1.6
41	3.2	3.2
42	2.9	2.9
43	3.1	3.2
44	3	3
45	0.4	0.4
46	0.6	0.4
47	0	0
48	3	3.1
IC7005		
1	6.1	6.2
2	6.1	6.1
3	6.1	6.2
4	0	0
5	5.8	5.8
6	5.8	5.8
7	5.8	5.8
8	14.9	14.9



MODE PIN NO.	REC	PLAY
IC7008		
1	0	0
2	3.1	3.1
3	3.1	3.1
4	3.1	3.1
5	0	0
6	0	0
7	0	0
8	0	0
9	3	3
10	0	0
11	0.4	0.4
12	1.4	1.4
13	1.4	1.4
14	0.4	0.4
15	1.4	1.4
16	3.2	3.2
Q7001		
1	0.9	0.9
2	0	0
3	4.7	4.7
4	0.5	4.2
5	4.8	4.8
6	4.8	4.8
Q7003		
1	0.9	0.9
2	0.5	0.5
3	3.2	3.2
4	2.6	2.6
5	3.2	3.2
6	3.2	3.2
Q7005		
1	0.9	0.9
2	0	0
3	4.8	4.8
4	4.2	4.2
5	4.8	4.8
6	4.8	4.8

<CCD>

MODE PIN NO.	EE
IC5301	
1	-7.3
2	-7.3
3	0
4	0
5	0
6	0
7	11.2
8	14.9
9	0
10	6.9
11	-7.8
12	6.8
13	1.6
14	1.2
Q5301	
E	10.4
C	14.8
B	11.2

<C-VF BL>

MODE PIN NO.	EE
Q7560	
1	0
2	3
3	0
4	4.8
5	0
6	0
Q7562	
1	0.6
2	1.2
3	1.6
4	0.5
5	1.2
6	1.2

<E. VF>

MODE PIN NO.	EE
IC7001	
1	2.1
2	4.9
3	2
4	0
5	2.1
6	1.3
7	2
8	6
9	4.2
10	0
11	1.9
12	4.5
13	2.8
14	1.7
15	1.8
16	1.6
Q7001	
E	0
C	4.4
B	0.5
Q7003	
E	-24
C	-34.3
B	-24.6