

# 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.

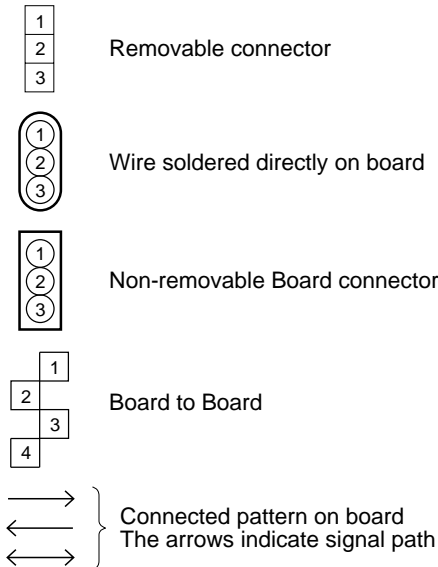
- 1) All resistance values are in ohm, 1/6 W, 1/8 W (refer to parts list).  
Chip resistors are 1/16 W.  
K: K $\Omega$  (1000 $\Omega$ ), M: M $\Omega$  (1000K $\Omega$ )
- 2) All capacitance values are in  $\mu$ F, (P: PF).
- 3) All inductance values are in  $\mu$ H, (m: mH).
- 4) All diodes are 1SS133,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

### 2. Indications of control voltage

AUX : Active at high

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

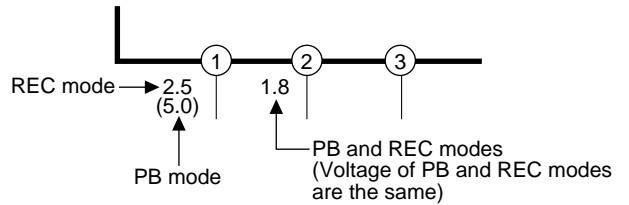
### 3. Interpreting Connector indications



### 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

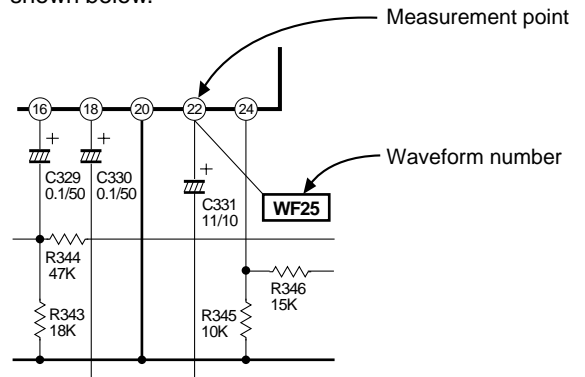
- 4) Indication on schematic diagram  
 Voltage Indications for REC and PB mode on the schematic diagram are as shown below.



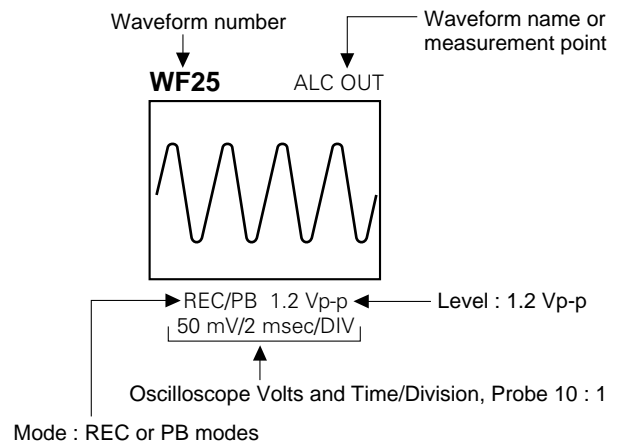
**Note: If the voltages are not indicated on the schematic diagram, refer to the voltage charts.**

### 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.

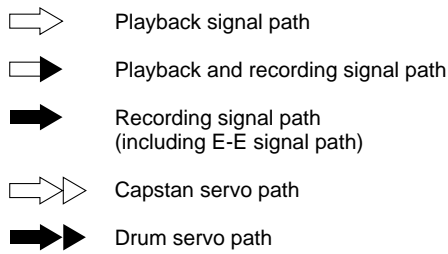


### 5) Waveform indications

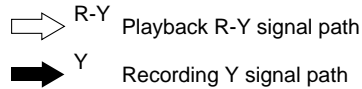


## 6. Signal path Symbols

The arrows indicate the signal path as follows.

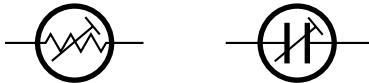


(Example)



## 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.



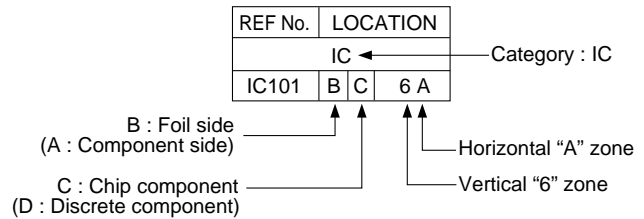
## CIRCUIT BOARD NOTES

### 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

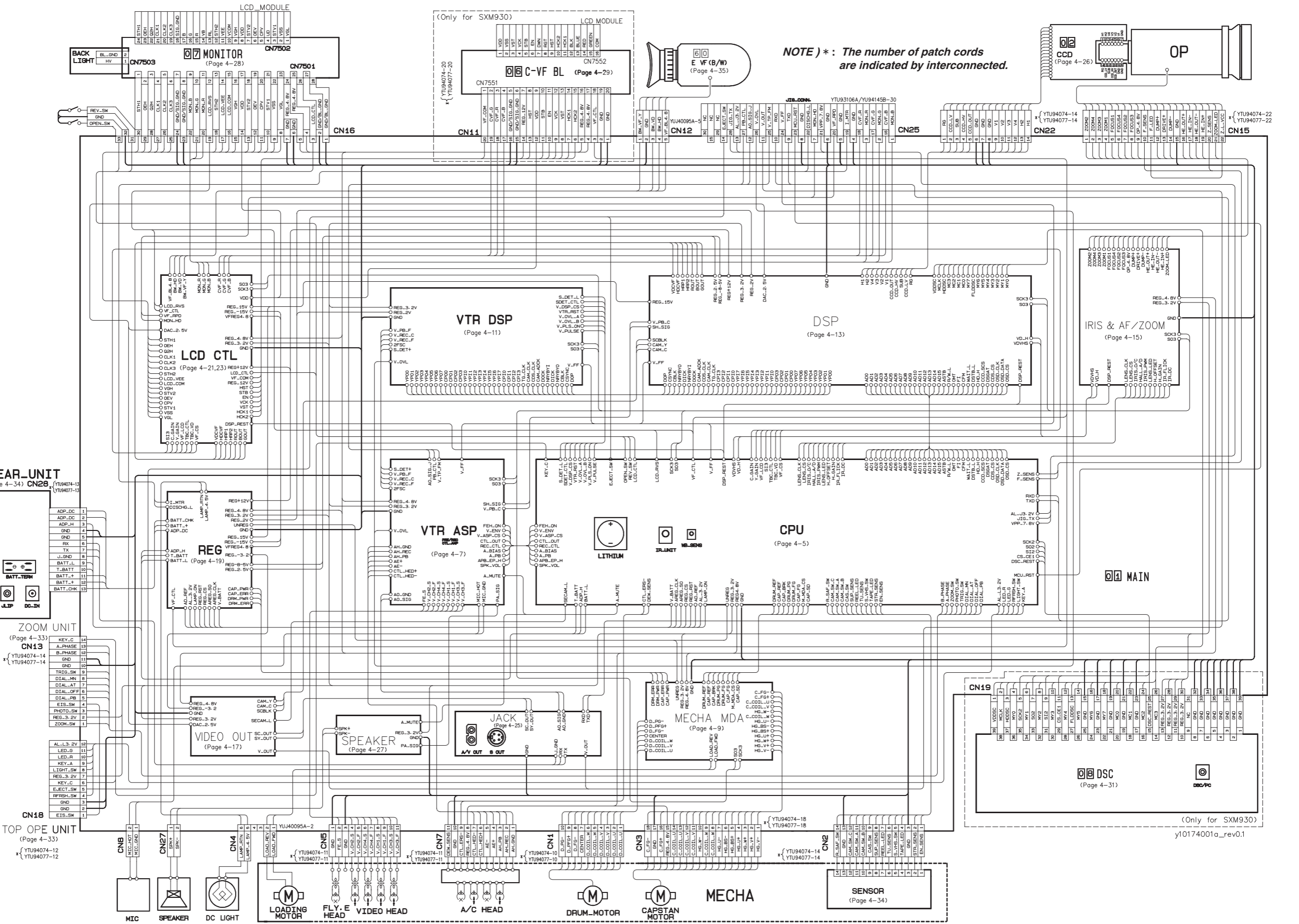
5

4

3

2

1



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

REAR\_UNIT (Page 4-34) CN28

ZOOM\_UNIT (Page 4-33) CN13

TOP OPE UNIT (Page 4-33)

(Only for SXM930)

yl0174001a\_rev0.1

A

B

C

D

4-3

4-4

E

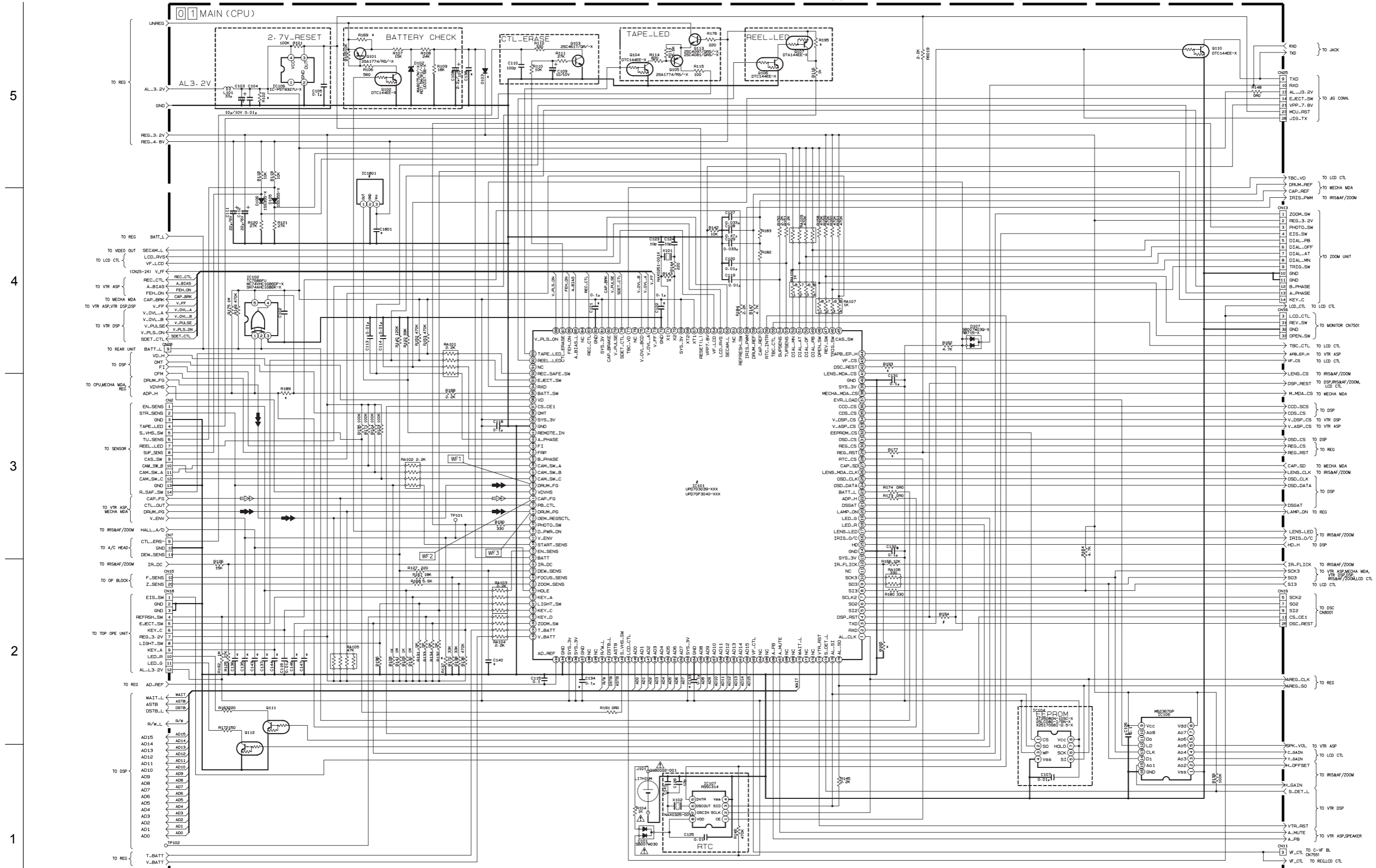
F

G

H

## 4.2 CPU SCHEMATIC DIAGRAM

**NOTES:** ● 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.



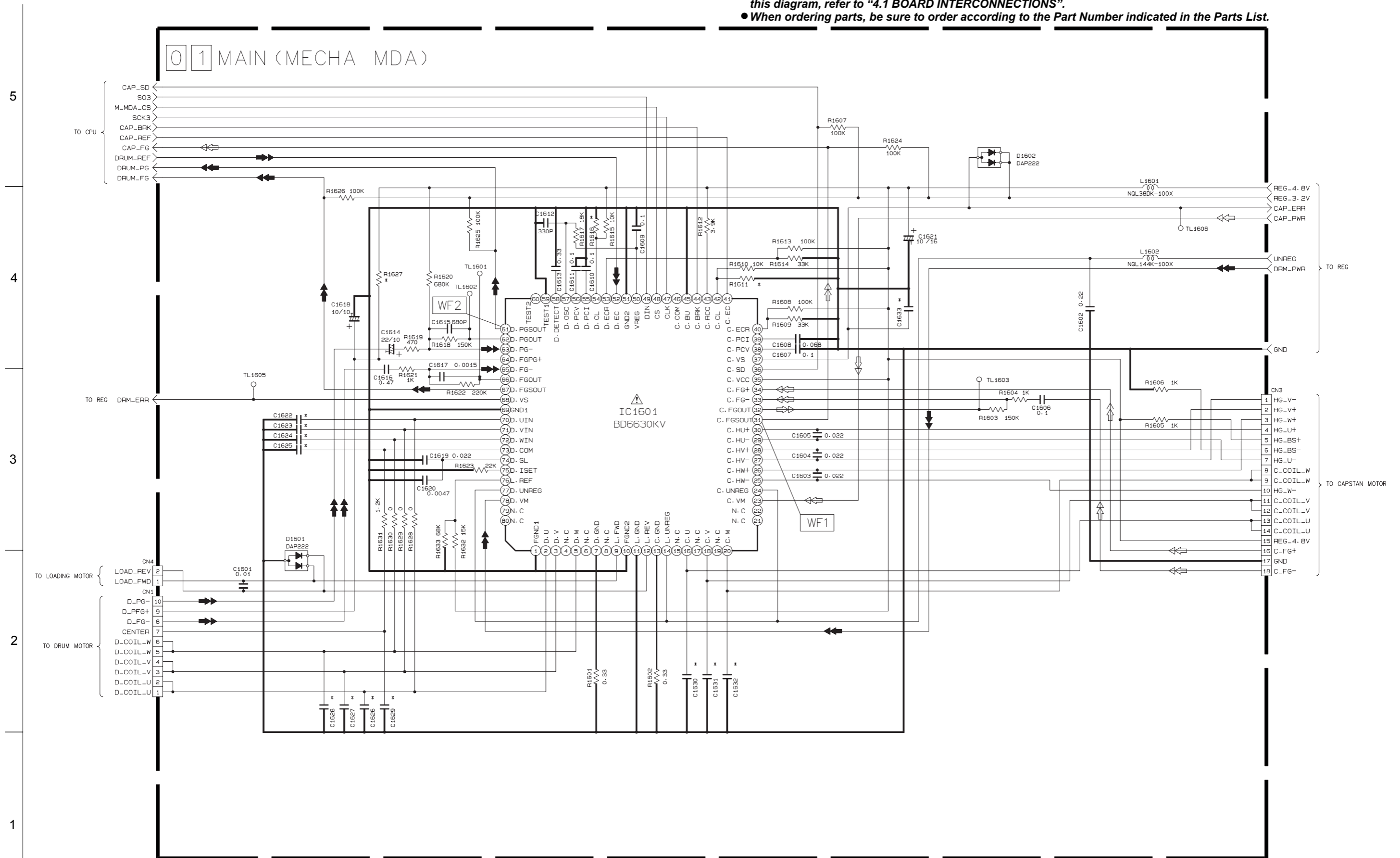
NOTES: 1. THE PARTS WITH MARKED (\*) IS NOT USED.  
2. For CPU waveforms, please refer to page 4-63.

MODEL	ROM No	REMOCON	YES	NO	DISC	YES	NO
PAL picture element low	-026	IC1801	PC-260435	*	R194	080	*
NTSC others	-027						
NTSC JVC	-028						
NTSC RCA AC	-029						



4.4 MECHA MDA SCHEMATIC DIAGRAM

NOTES: ● 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 (x) IS NOT USED.  
 2. For MECHA MDA waveforms, please refer to page 4-63.

EXCHANGE PARTS LIST.

	NTSC	PAL
C1620	*	0.0047

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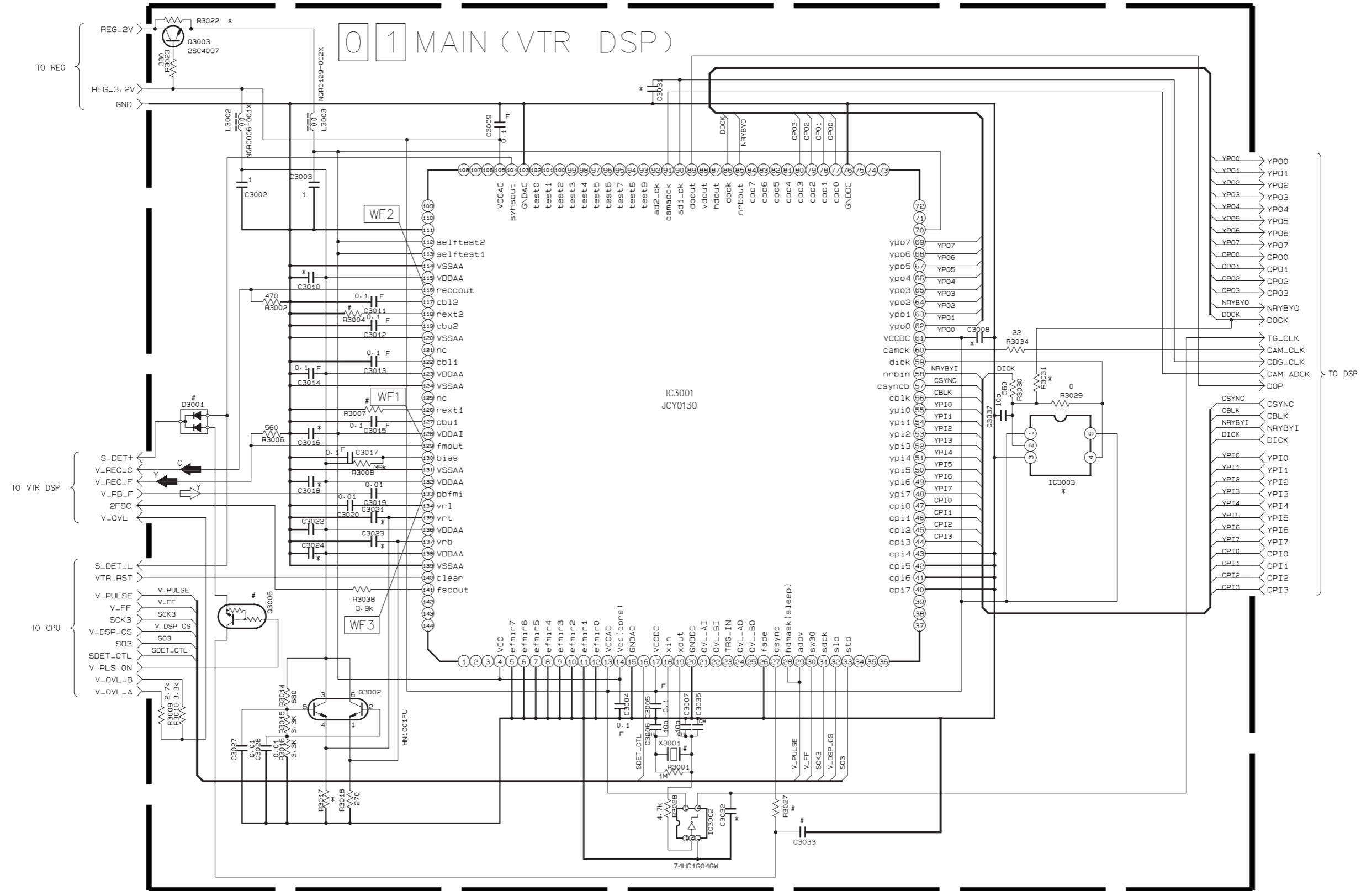
5  
4  
3  
2  
1

A B C D 4-9 4-10 E F G H



4.5 VTR DSP SCHEMATIC DIAGRAM

NOTES: ● 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 4-63.

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	x	DAN222
Q3006	x	DTC144EE
R3027	x	10k
C3033	x	0.1

x... NO WEAR

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5

4

3

2

1

A

B

C

D

4-11

4-12

E

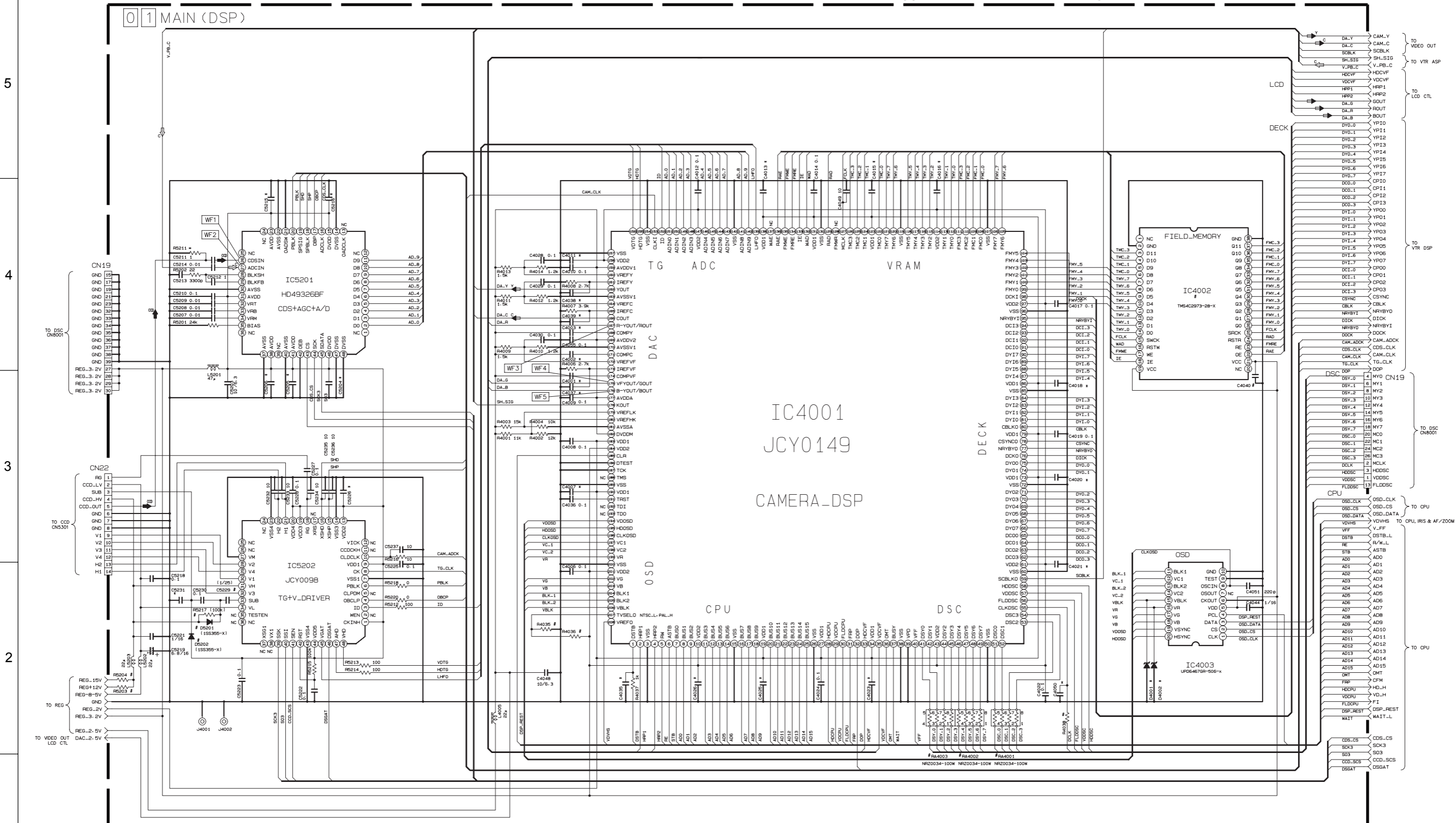
F

G

H

4.6 DSP SCHEMATIC DIAGRAM

NOTES: ● 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 4-63.

EXCHANGE PARTS LIST

CCD	R4035	R4036	R5203	R5204	D5201	D5202	R5217	C5229
NTSC_L	TC05621P	0	*	0	0	1SS355-X	*	0
PAL_H	NR391132FT	0	*	0	1SS355-X	*	100K	1/25
PAL_L	NR372132FT	*	0	*	0	1SS355-X	*	100K
ICX2874K	*	0	0	*	0	1SS355-X	*	100K
PAL_H	NR39241FT	*	0	*	0	1SS355-X	*	100K
ICX289AK	*	0	0	0	*	1SS355-X	*	100K

IC4002	C4040	R4036	R4401	R4402	R4403
M1#6	*	*	*	*	*
M1#7	TMS4C2973-28-X	1	*	*	*
M1#8	TMS4C2973-28-X	1	100	NR20034-100W	NR20034-100W

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1

5

4

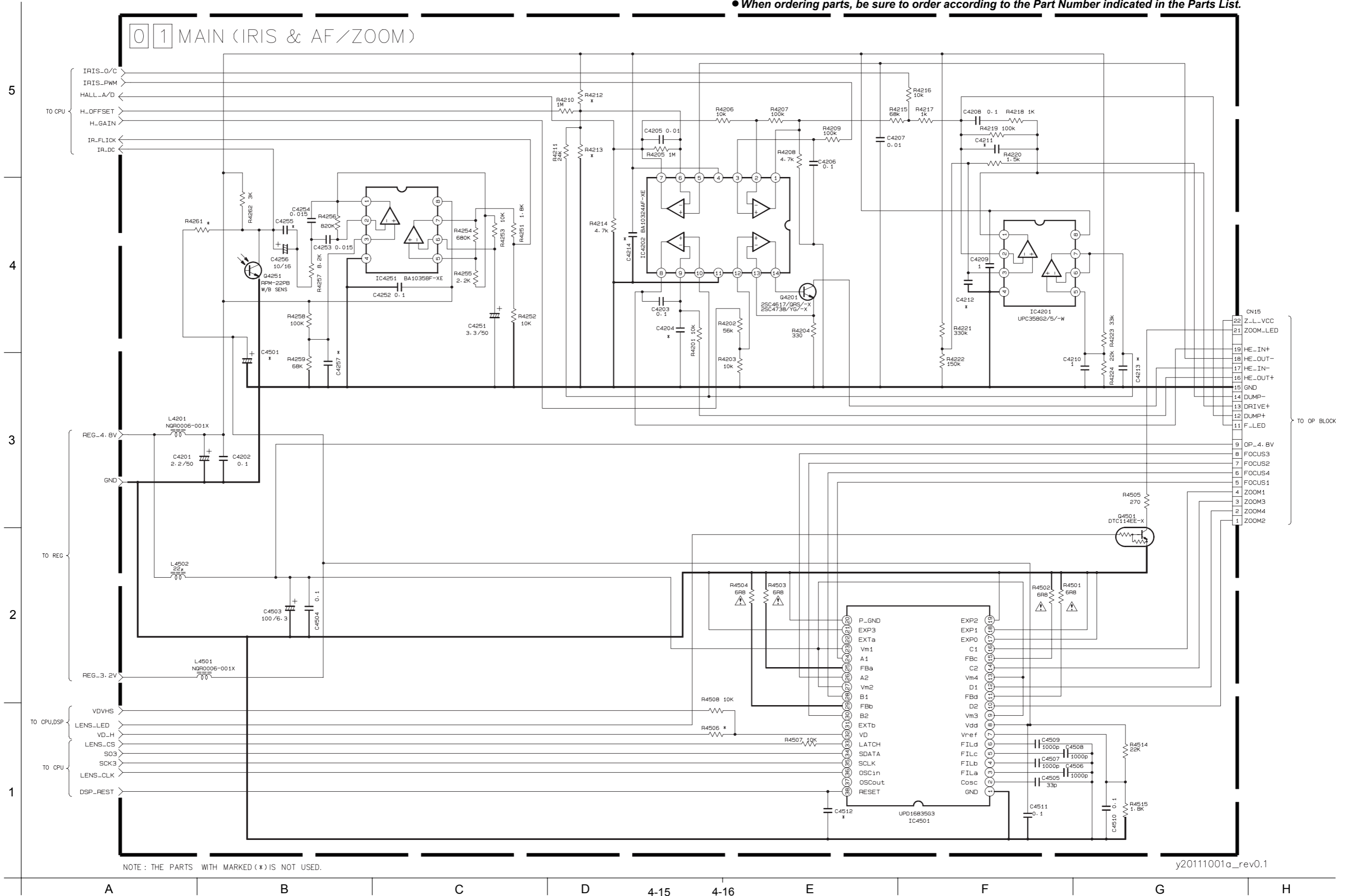
3

2



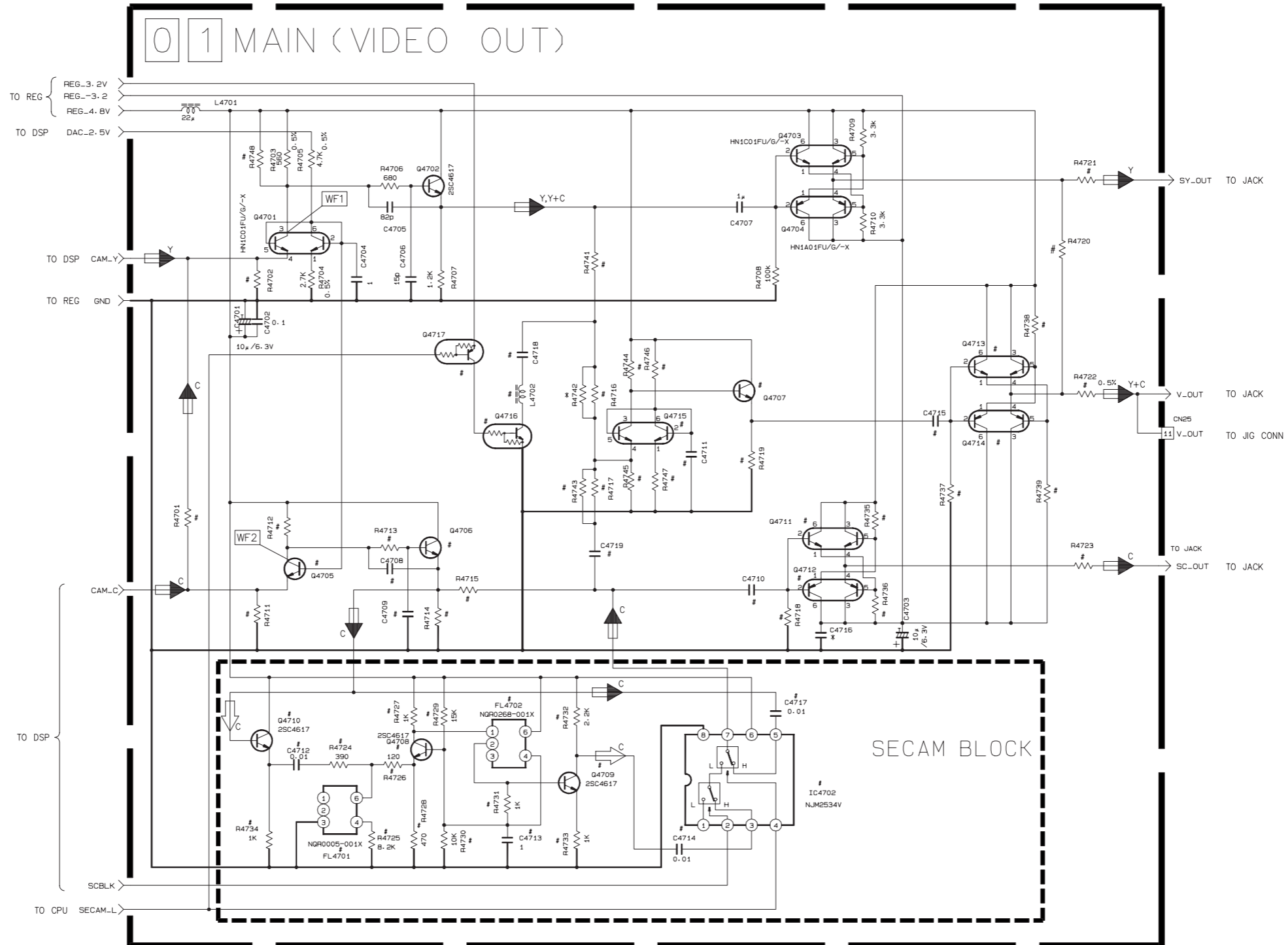
4.7 IRIS & AF/ZOOM SCHEMATIC DIAGRAM

NOTES: ● 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.



4.8 VIDEO OUT SCHEMATIC DIAGRAM

NOTES: ● 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 4-63.

y30116001a\_rev0.2

EXCHANGE PARTS LIST

	R4711	R4712	R4713	R4714	C4708	C4709	Q4705	Q4706	R4721	C4710	R4718	R4735	R4736	Q4711	Q4712	R4723	R4741	R4715	C4716	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%	620 0.5%	2.2k 0.5%	0.01	2.2k 0.5%	470	2.2k 0.5%	470	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	*	DTA144 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	↑	↑	↑	↑	↑	*
SVHS MODEL PAL	*	100	*	68 0.5%	15k 0.5%	0Ω
SVHS MODEL NTSC	↑	↑	↑	↑	22k 0.5%	↑

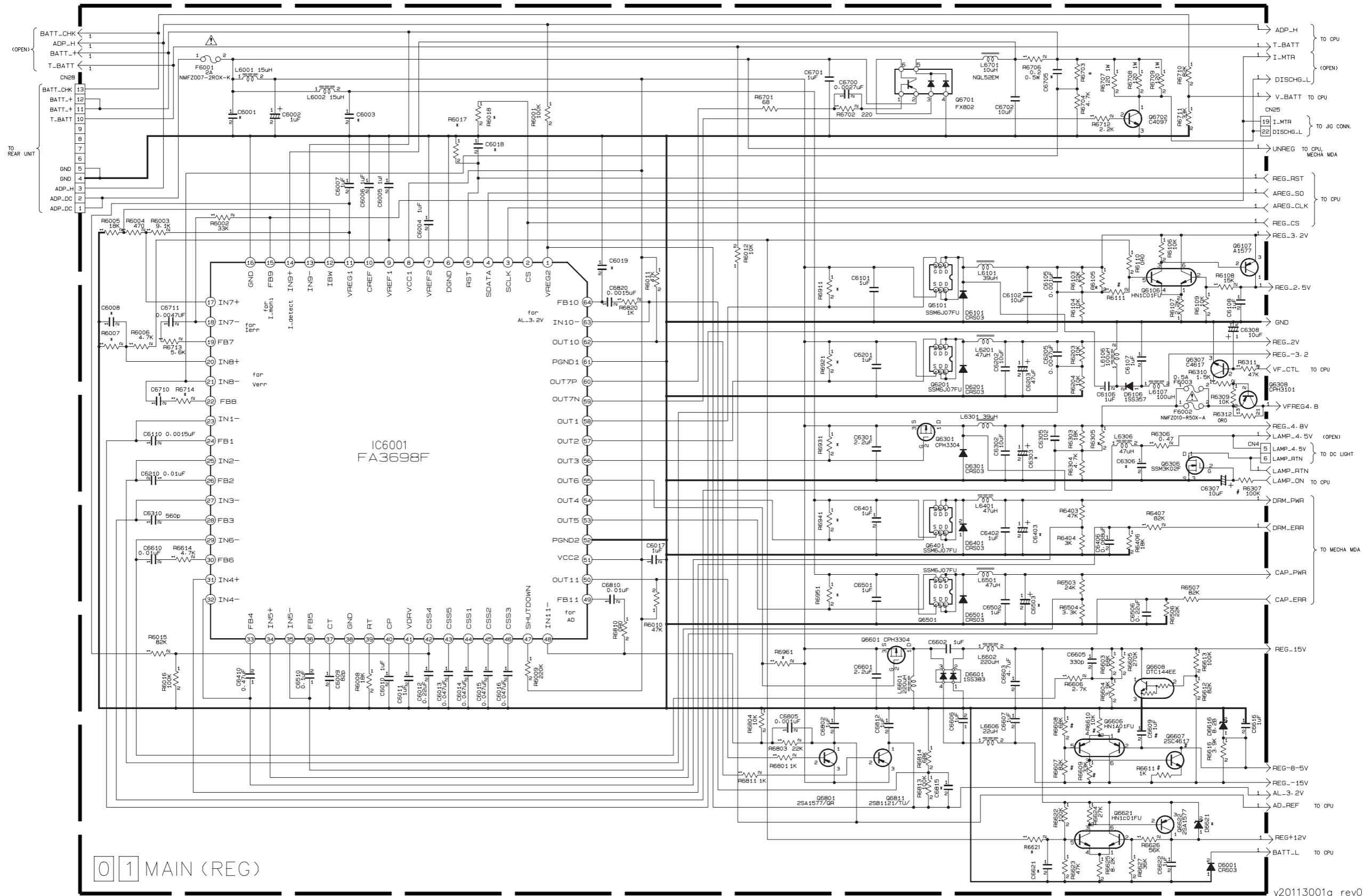
\*... NO WEAR

1

# 4.9 REGULATOR SCHEMATIC DIAGRAM

**NOTES:** ● 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.

5  
4  
3  
2  
1



0 1 MAIN (REG)

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	ccd voltage picture elements	PAL	NTSC
G6306	exist	open	G6307-6308	exist	open	memory	LOW	others
L6306	exist	open	R6309-6311	exist	open	D6616	8.2V	5.1V
C6307	exist	open	C6308	exist	open			8.2V
R6306-6307	exist	open	R6312	open	OR0			

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A B C D 4-19 4-20 E F G H

4.10 LCD CTL SCHEMATIC DIAGRAM

— FOR AXM230/SXM330 —

NOTES: ● 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.

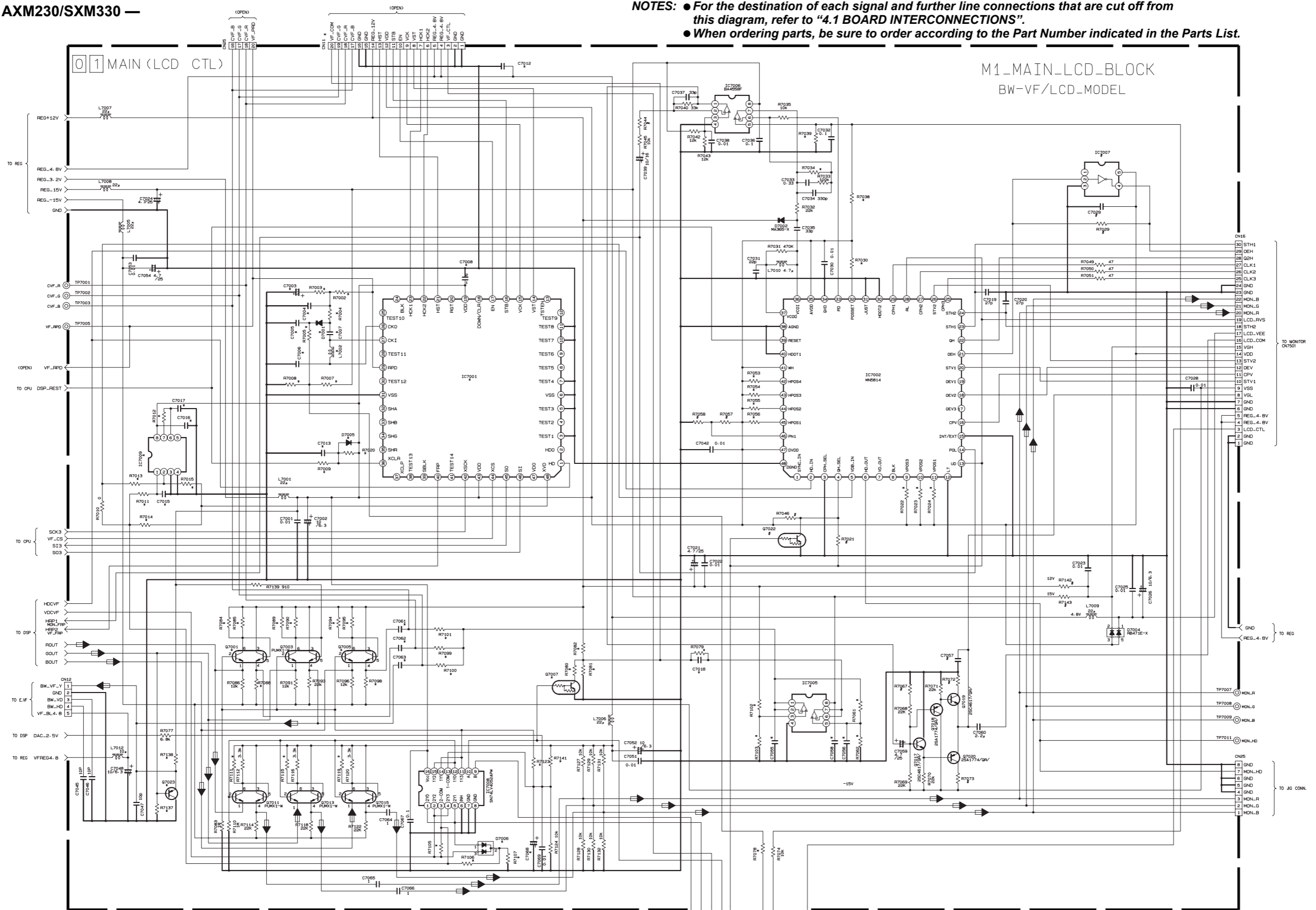
5

4

3

2

1



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

EXCHANGE PARTS LIST											
IC7007	Q7002	R7021	R7029	R7044	R7046	R7067	R7072	R7142	R7143	C7029	C7057
2.51inch	TC7504FU	DTC144EE	*	*	7.5k	10k	22k	1.0k	330	0	0.1
31inch	*	*	0	0	4.3k	*	6.8k	1.2k	820	0	*

R7057	R7058
NTSC	0
PAL	0

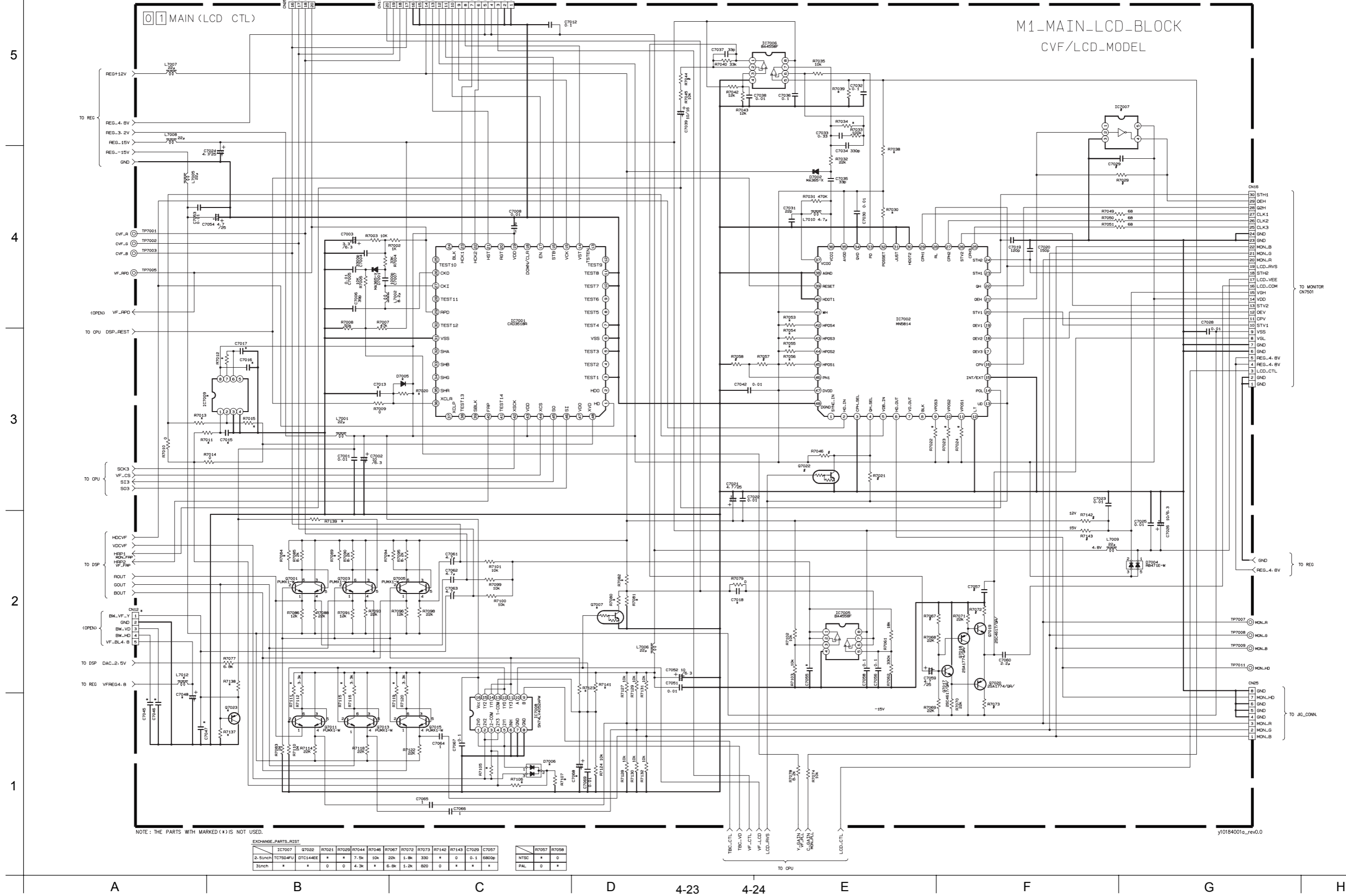
y10175001a\_rev.0.0

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

# 4.11 LCD CTL SCHEMATIC DIAGRAM

— FOR SXM930 —

**NOTES:** ● 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.



EXCHANGE PARTS LIST

IC7007	R7021	R7029	R7044	R7046	R7067	R7072	R7073	R7142	R7143	C7029	C7057	
2.51inch TC7904FU	DTC144EE	*	*	7.5K	10K	20K	1.8K	330	*	0	0.1	6800p
31inch	*	0	0	4.3K	*	6.8K	1.2K	820	0	*	*	

R7057	R7058
NTSC	*
PAL	0

y10184001a\_rev.0.0

4.12 JACK AND CCD SCHEMATIC DIAGRAMS

NOTES: ● 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.

— JACK —

— CCD —

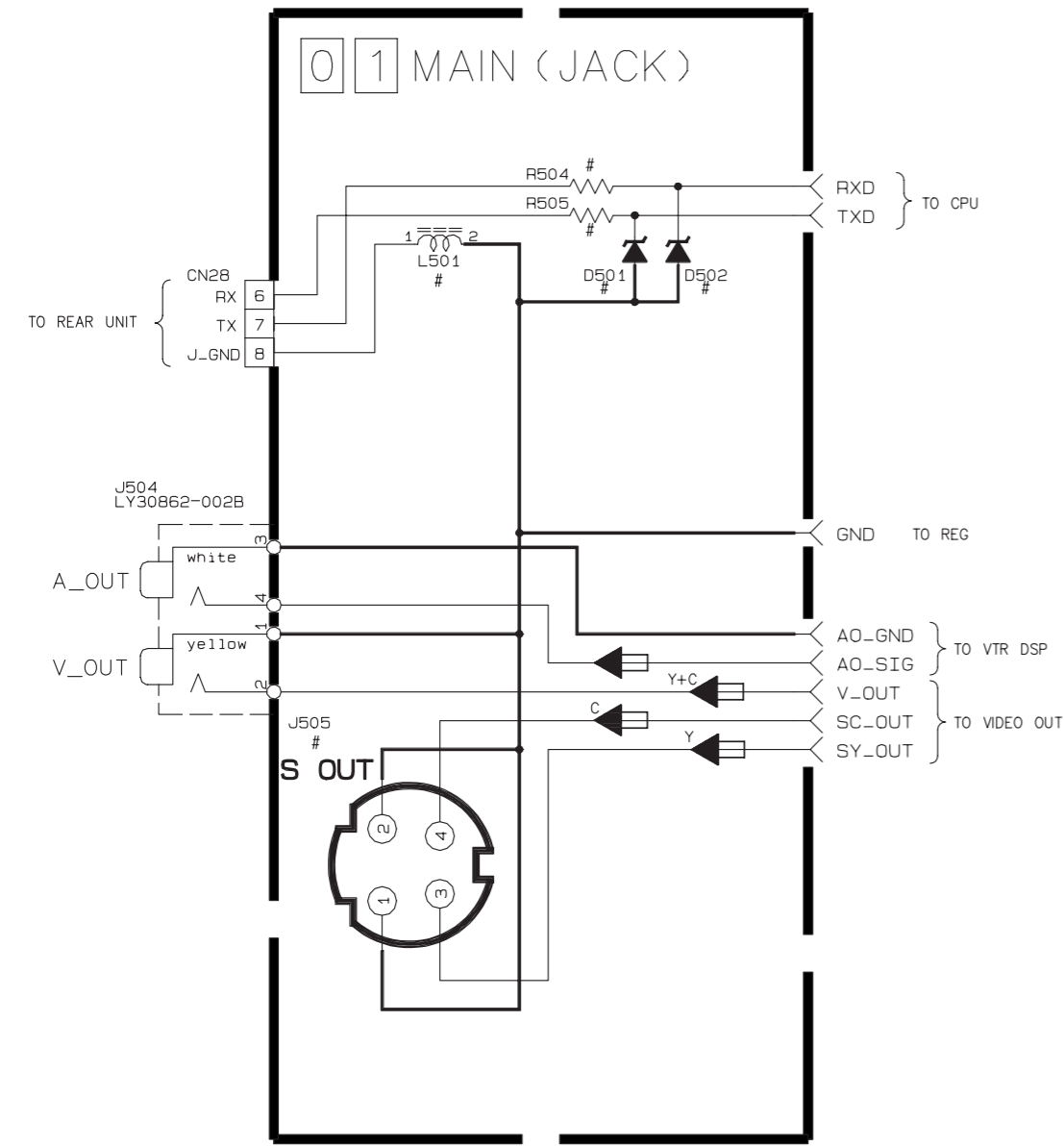
5

4

3

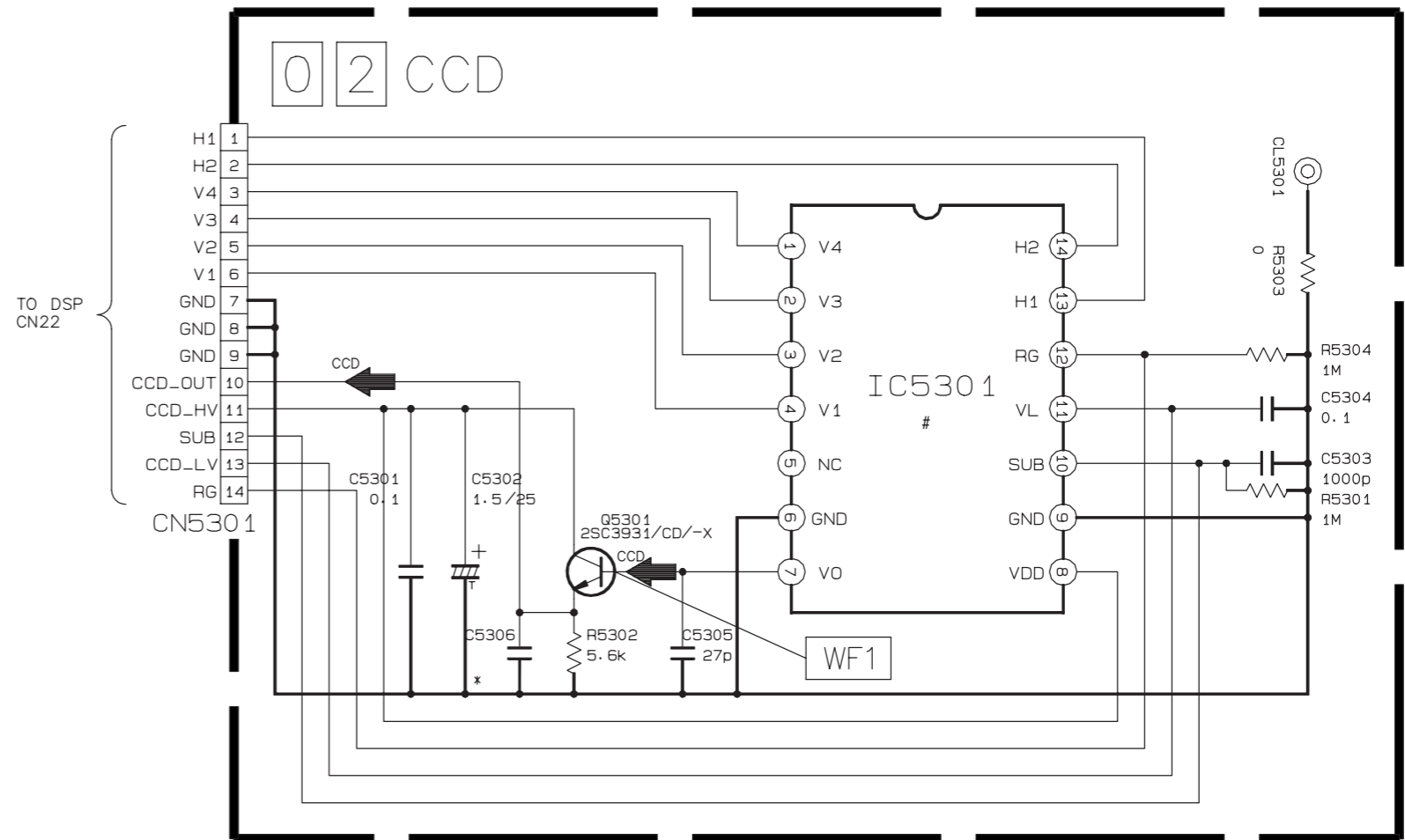
2

1



y40066001a\_rev0.0

Note: IC5301 is incorporated in the CCD base assembly.  
 When IC5301 needs replacement, replace the CCD base assembly in whole because it cannot be replaced alone.



NOTES: 1. THE PARTS WITH MARKED (\*) IS NOT USED.  
 2. For CCD waveform, please refer to page 4-63.

y40065001a\_rev0.1

EXCHANGE PARTS LIST

	JLIP-MODEL	NON JLIP-MODEL	S-VHS MODEL	N-VHS MODEL
L501	NQR0129-002	*	J505	QND007B-001
D501	MAB068-X	*	* : NO WEAR	
D502	MAB068-X	*		
R504	NRSA63J-221X	*		
R505	NRSA63J-331X	*		

EXCHANGE PARTS LIST

MODEL	CCD PWB ASSY	IC5301	R5301	R5304	C5303	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

A

B

C

D 4-25

4-26

E

F

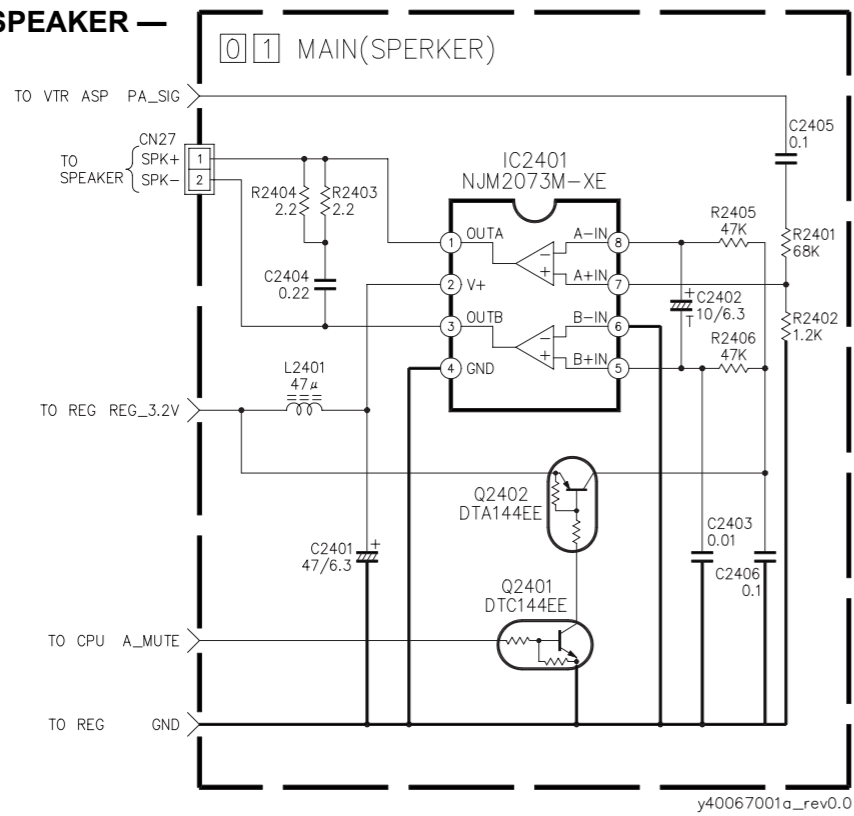
G

H



### 4.13 SPEAKER AND MONITOR SCHEMATIC DIAGRAMS

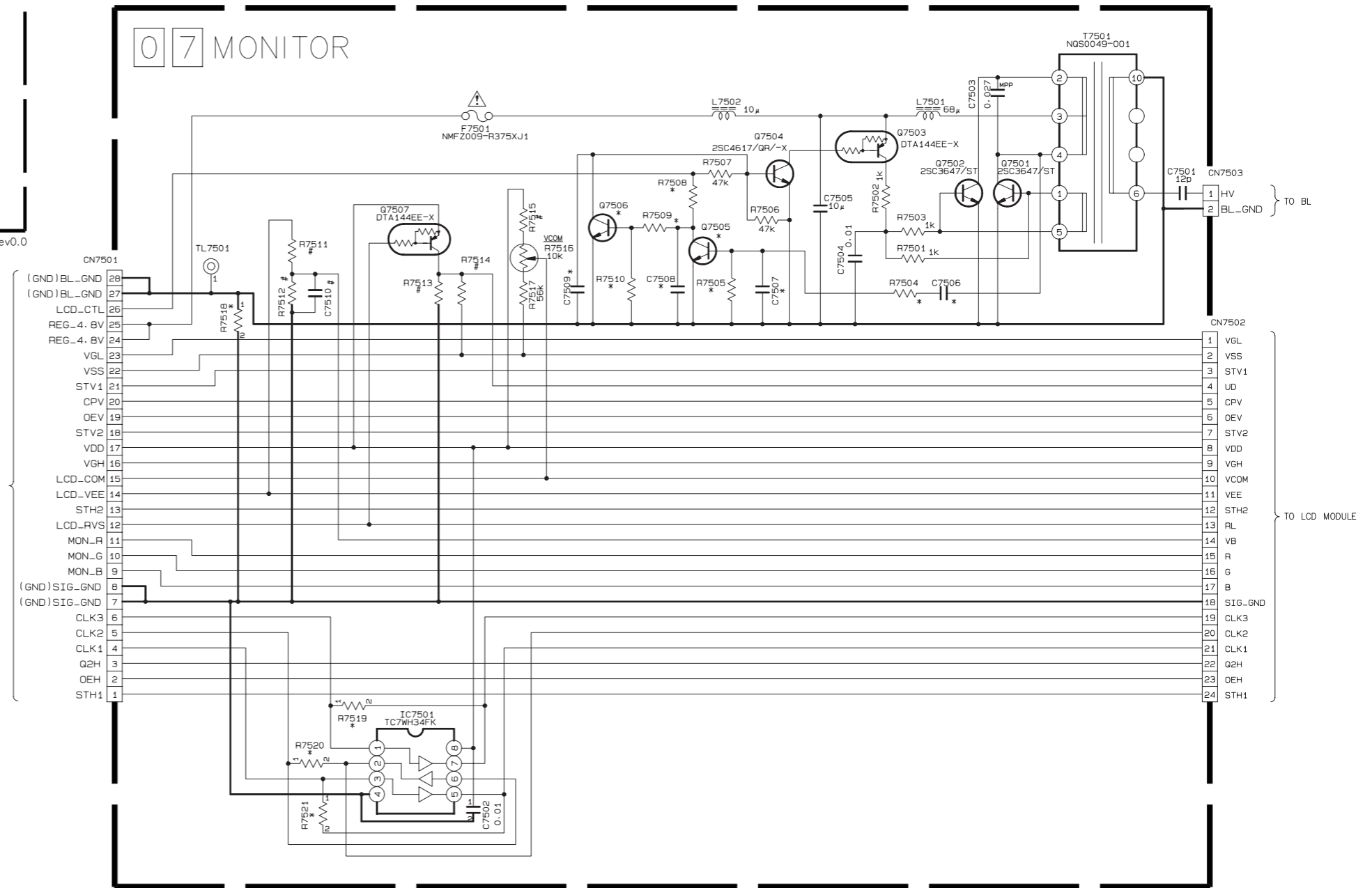
#### — SPEAKER —



**NOTES:**

- 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.

#### — MONITOR —



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

EXCHANGE\_PARTS\_LIST

	R7511	R7512	R7513	R7514	R7515	C7510
2.5inch	*	*	10k	*	3k	*
3inch	22k	22k	*	33k	5.6k	0.01

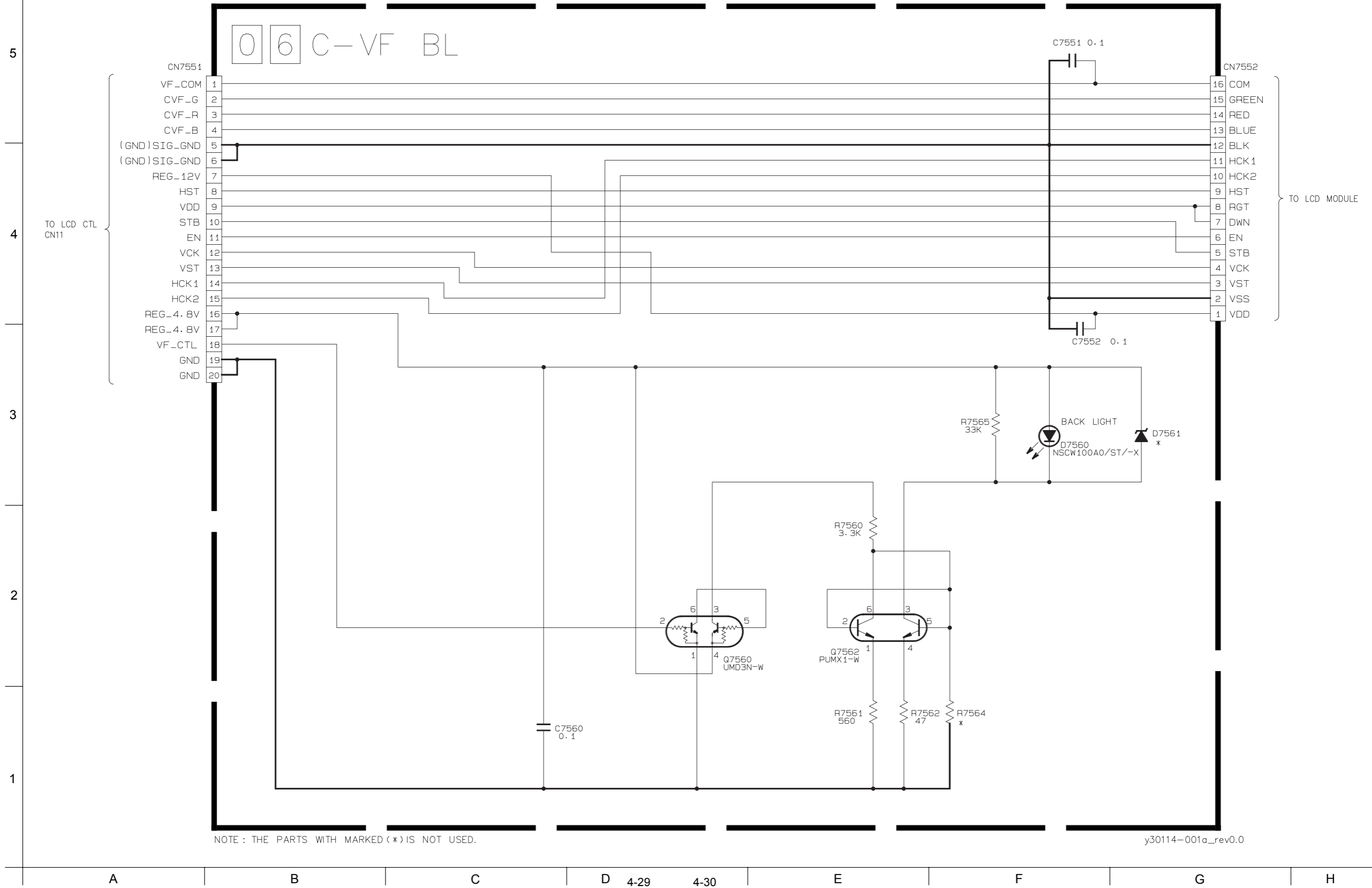
5  
4  
3  
2  
1

A B C D 4-27 4-28 E F G H

4.14 C-VF BL SENSOR SCHEMATIC DIAGRAM

— FOR SXM930 —

NOTES: ● 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.

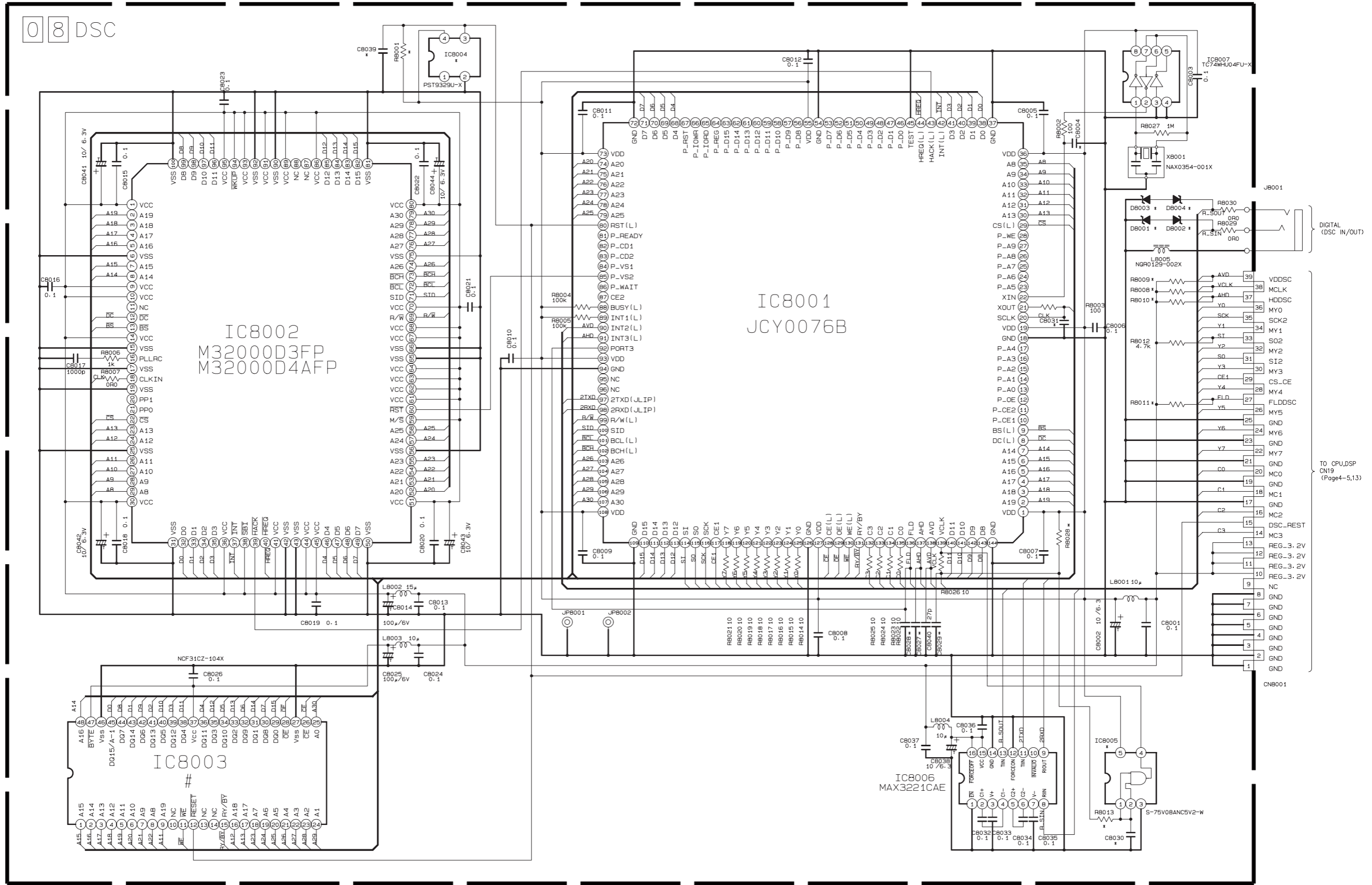


4.15 DSC SCHEMATIC DIAGRAM

— FOR SXM930 —

NOTES: ● 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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4  
3  
2  
1



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

y20115-001a-rev.0

EXCHANGE-PARTS-LIST

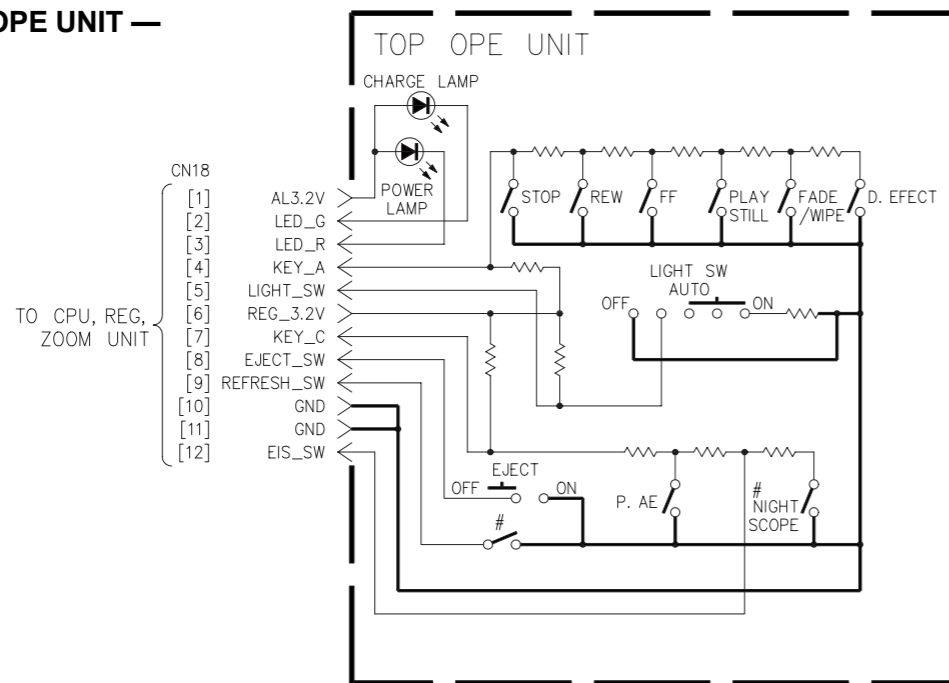
MODEL	IC8003
PAL	TC58FV116FT0/79
NTSC	MBV160T90PTA04

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

4.16 TOP OPE UNIT, ZOOM UNIT, REAR UNIT AND SENSOR SCHEMATIC DIAGRAMS

NOTES: ● For the destination of each signal and further line connections that are cut off from this diagram, refer to "4.1 BOARD INTERCONNECTIONS".  
 ● The schematic diagram is only for reference. Avoid replacing individual parts. Replace the entire unit only.

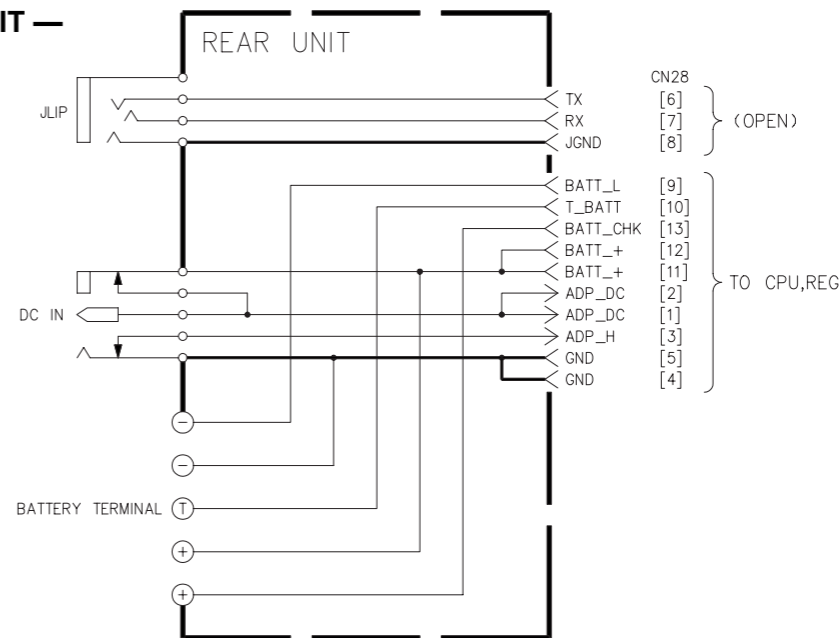
— TOP OPE UNIT —



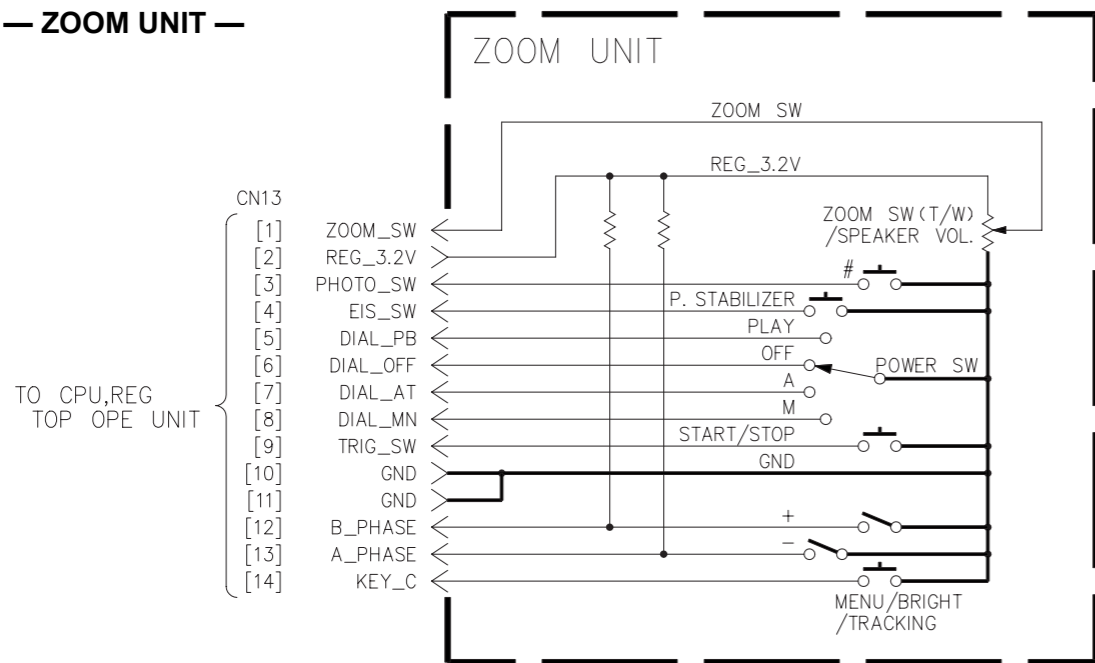
NOTE : COMPARISON CHART OF MODELS & MARKS (#).

FUNCTION	GR-AXM230	GR-SXM330	GR-SXM930
REFRESH/DSC	REFRESH	REFRESH	REFRESH/DSC
NIGHT SCOPE	NOT USED	USED	USED

— REAR UNIT —



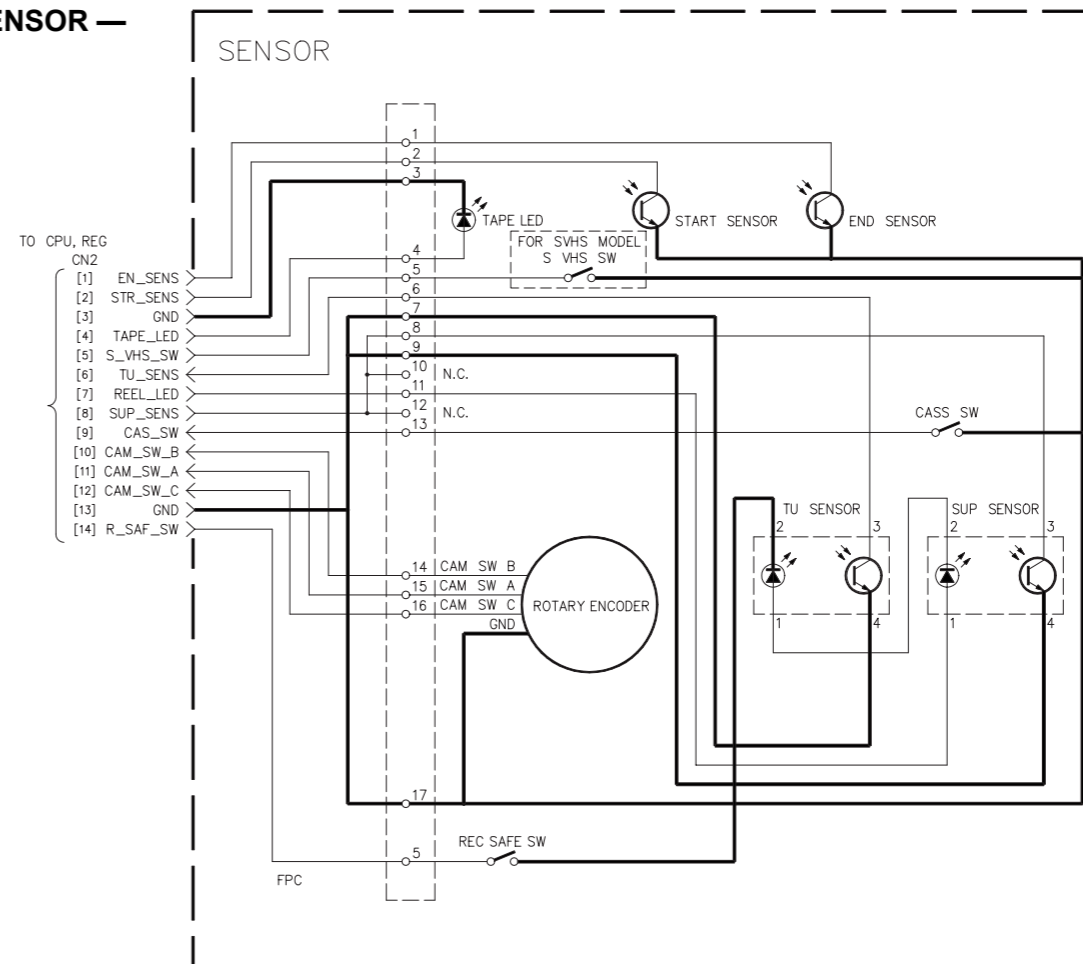
— ZOOM UNIT —



NOTE : COMPARISON CHART OF MODELS & MARKS (#).

MODELS	FUNCTION
GR-AXM230	5 SEC REC
GR-SXM330	SNAP SHOT
GR-SXM930	SNAP SHOT

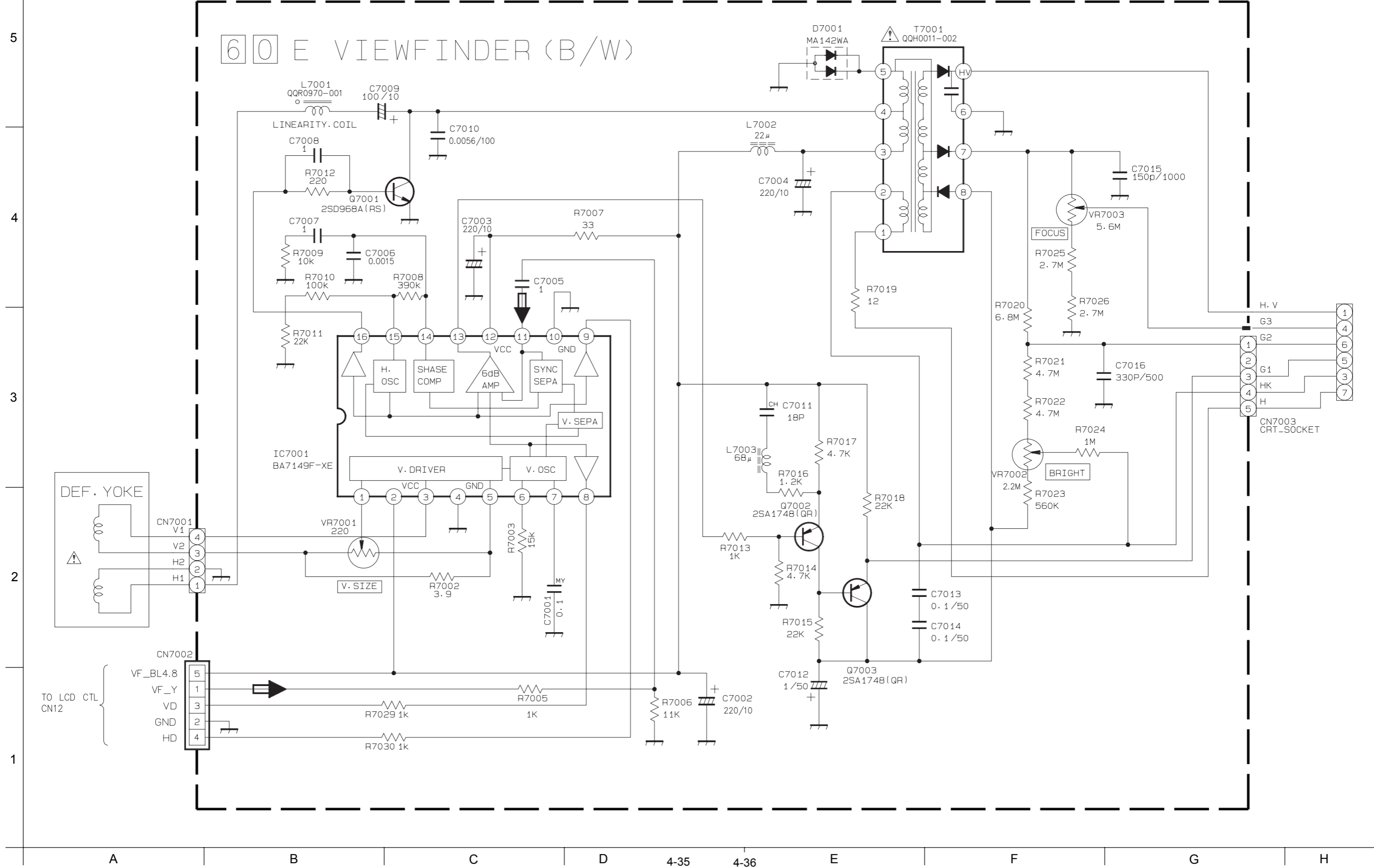
— SENSOR —



5  
4  
3  
2  
1

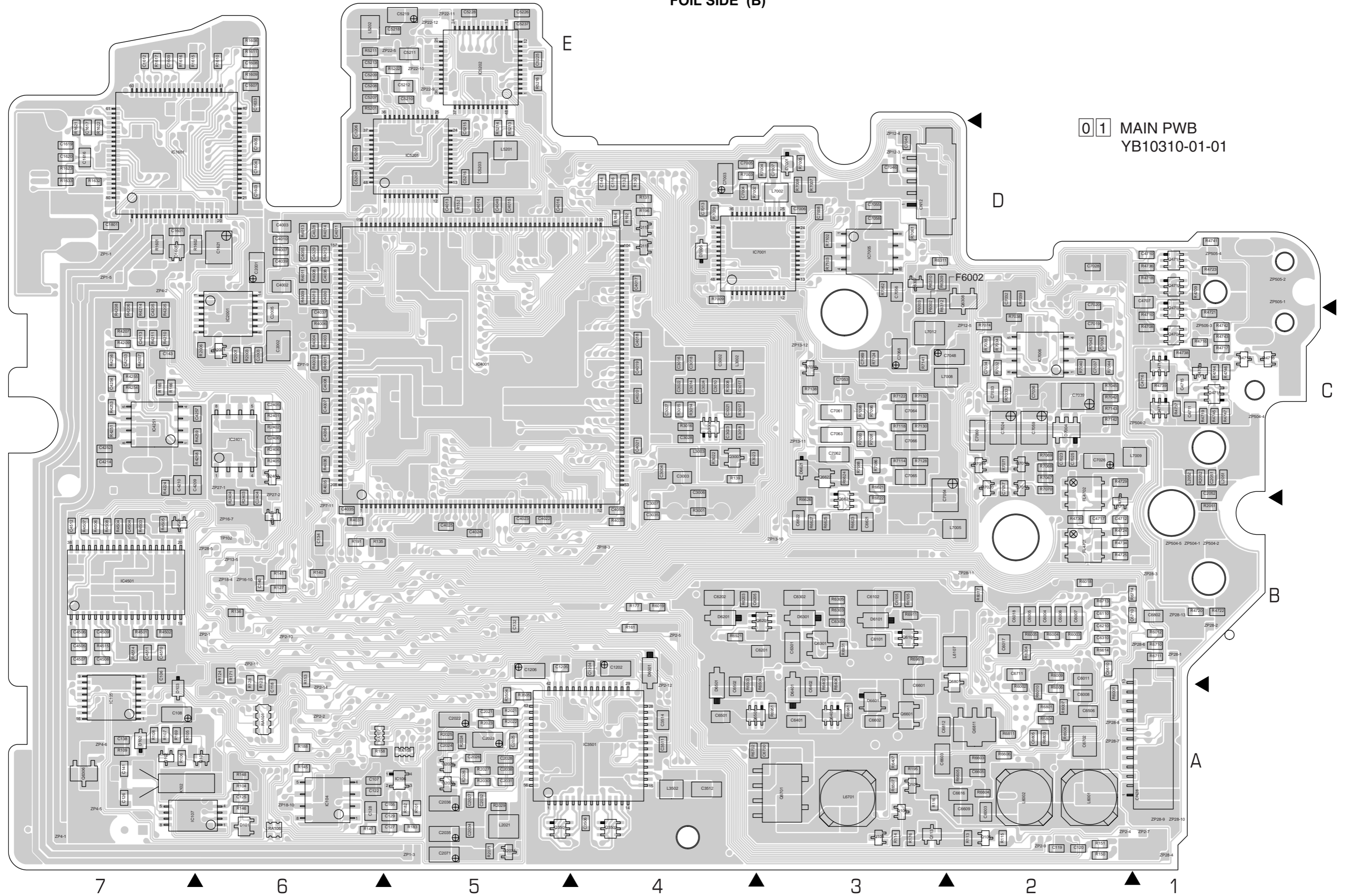
4.17 ELECTRONIC VIEWFINDER SCHEMATIC DIAGRAM

— FOR AXM230,SXM330 —





FOIL SIDE (B)



01 MAIN PWB  
YB10310-01-01

7 6 5 4 3 2 1

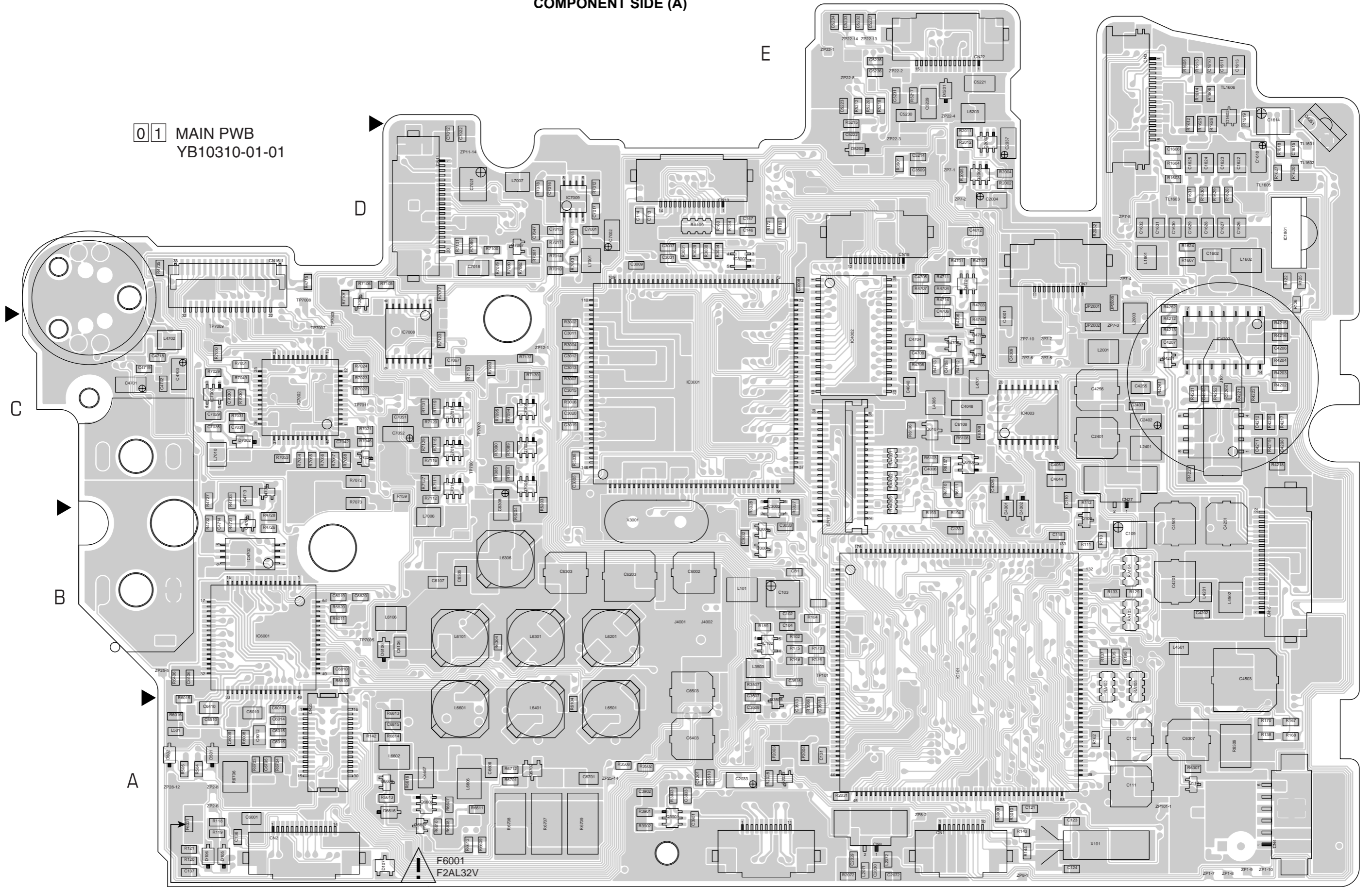






COMPONENT SIDE (A)

01 MAIN PWB  
YB10310-01-01



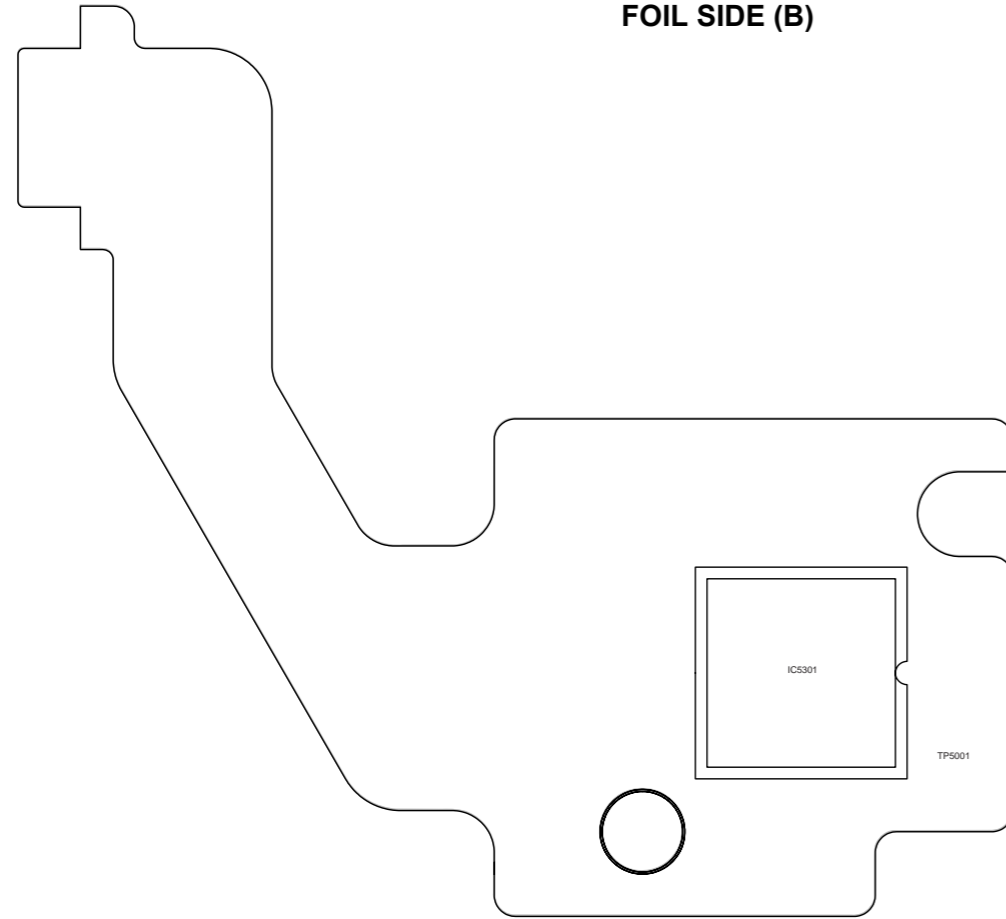
1 2 3 4 5 6 7



4.19 CCD AND C-VF BL CIRCUIT BOARDS

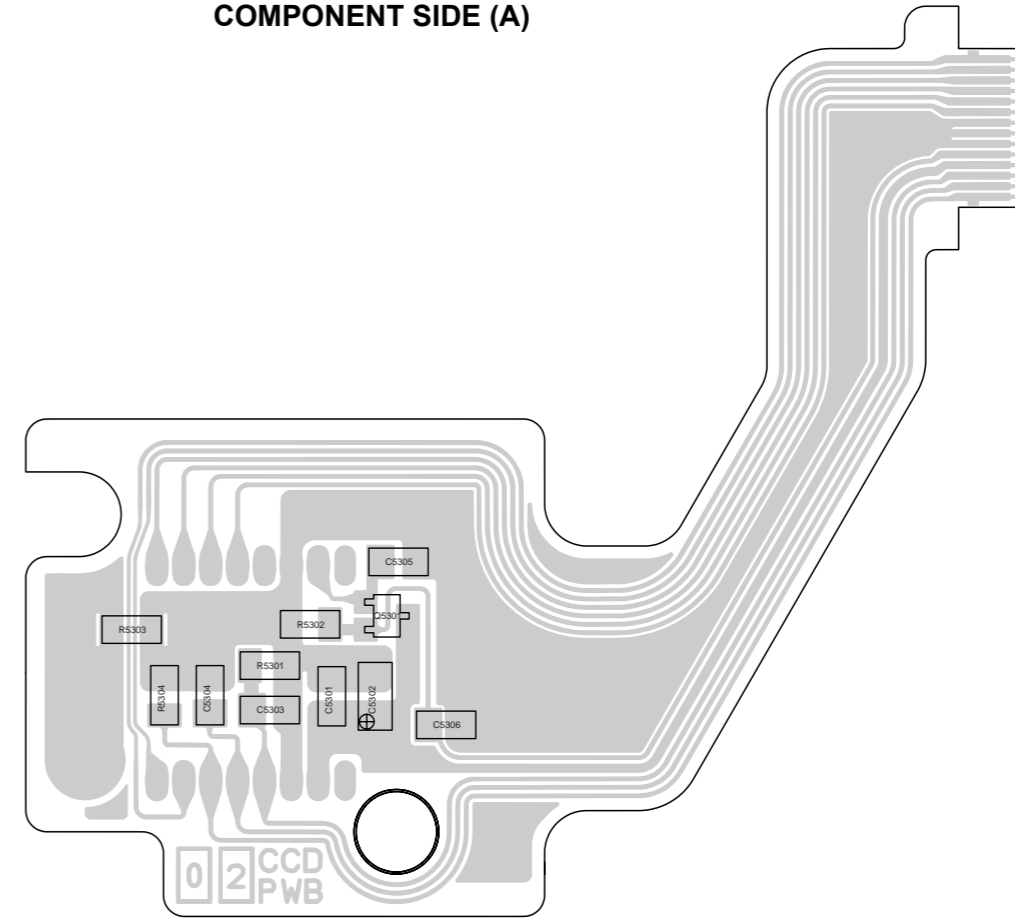
— CCD —

FOIL SIDE (B)



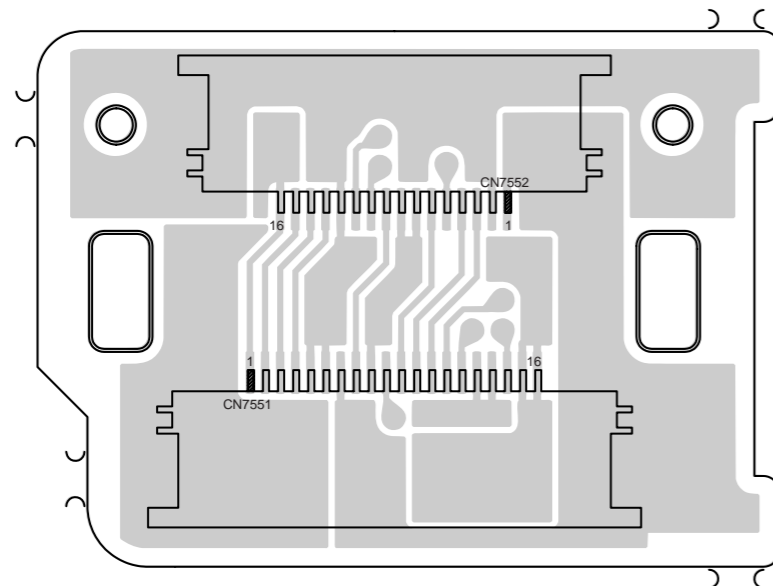
02 CCD PWB  
YB20899-01-01

COMPONENT SIDE (A)



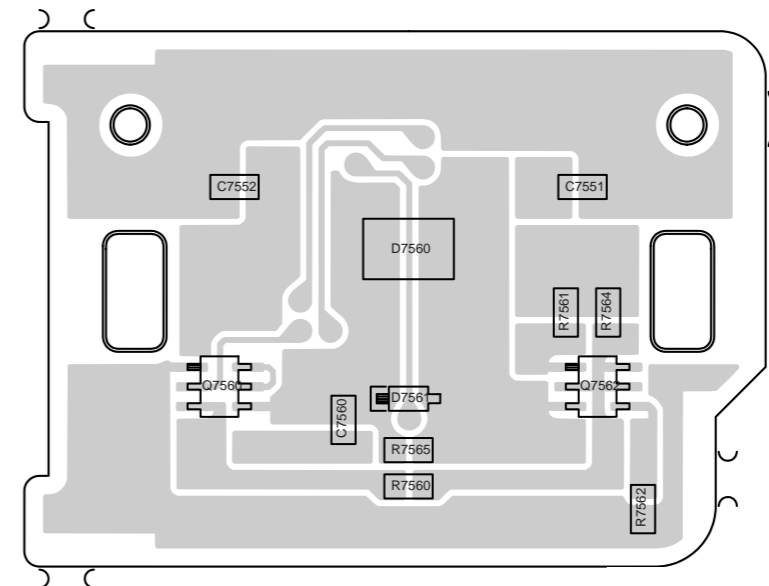
— C-VF BL —  
(FOR SXM930)

FOIL SIDE (B)



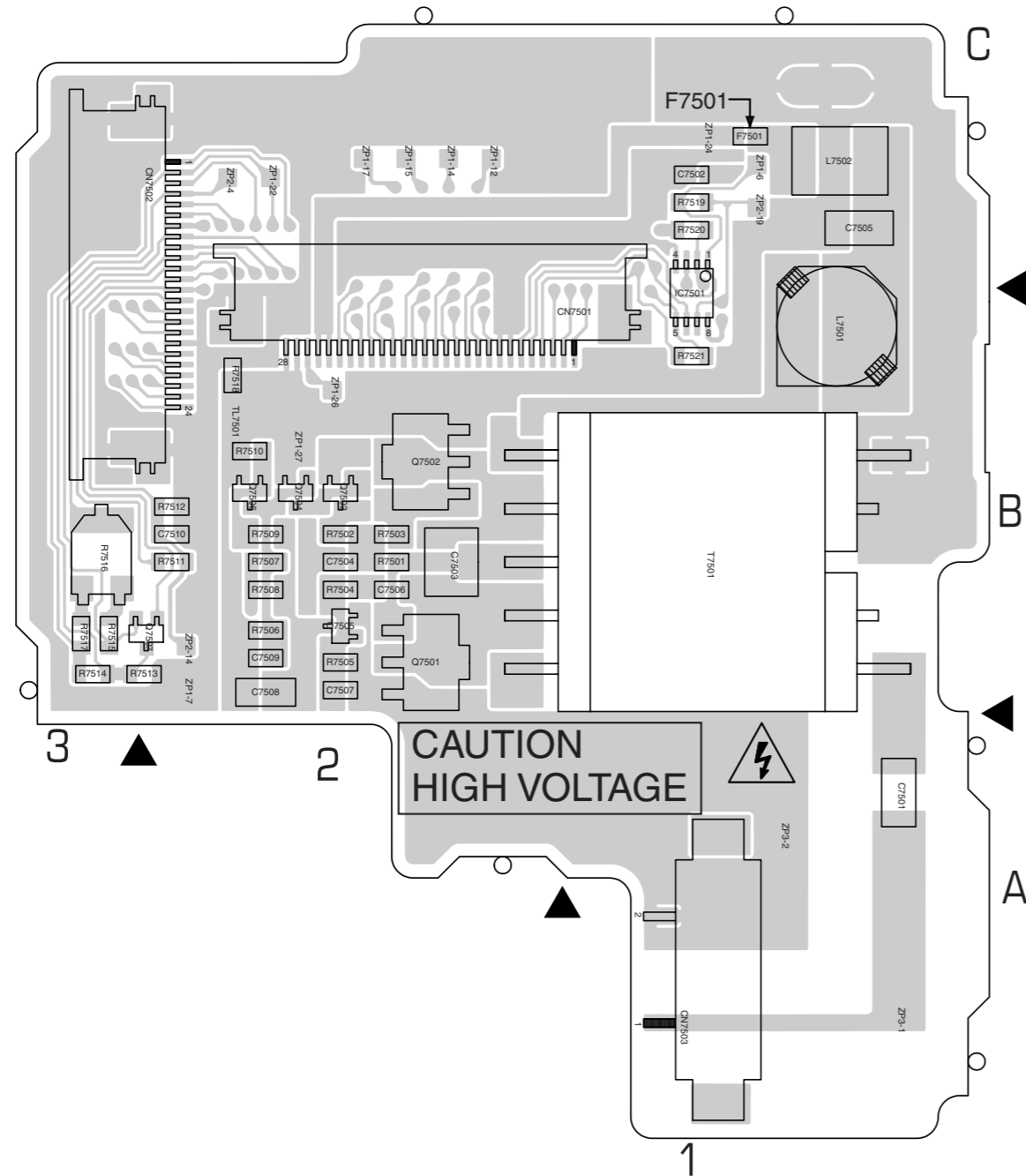
06 C-VF BL  
YB20901

COMPONENT SIDE (A)



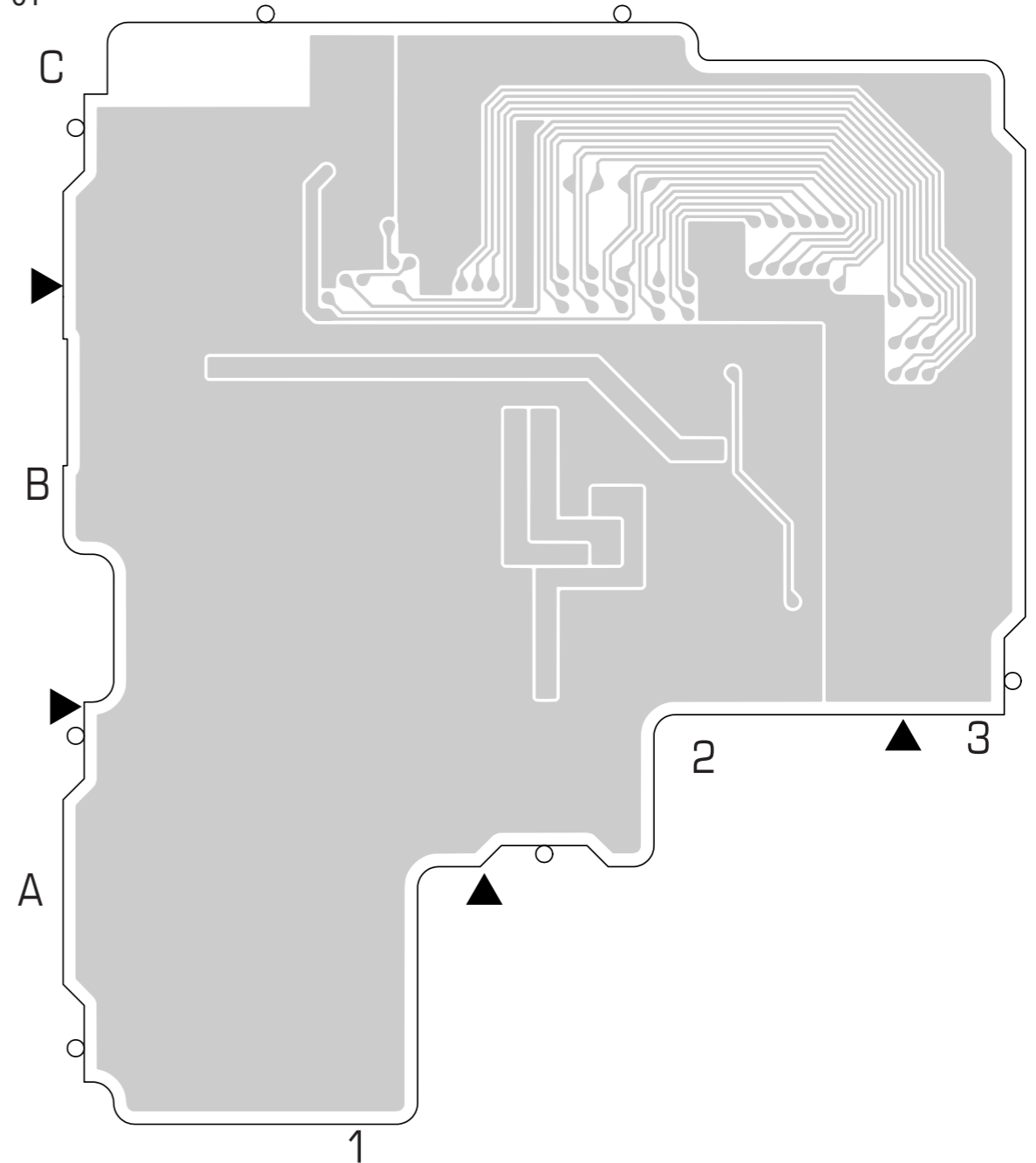
4.20 MONITOR CIRCUIT BOARD

FOIL SIDE (B)



07 MONITOR PWB  
YB20900-01-01

COMPONENT SIDE (A)



COMPONENT PARTS LOCATION GUIDE <MONITOR >

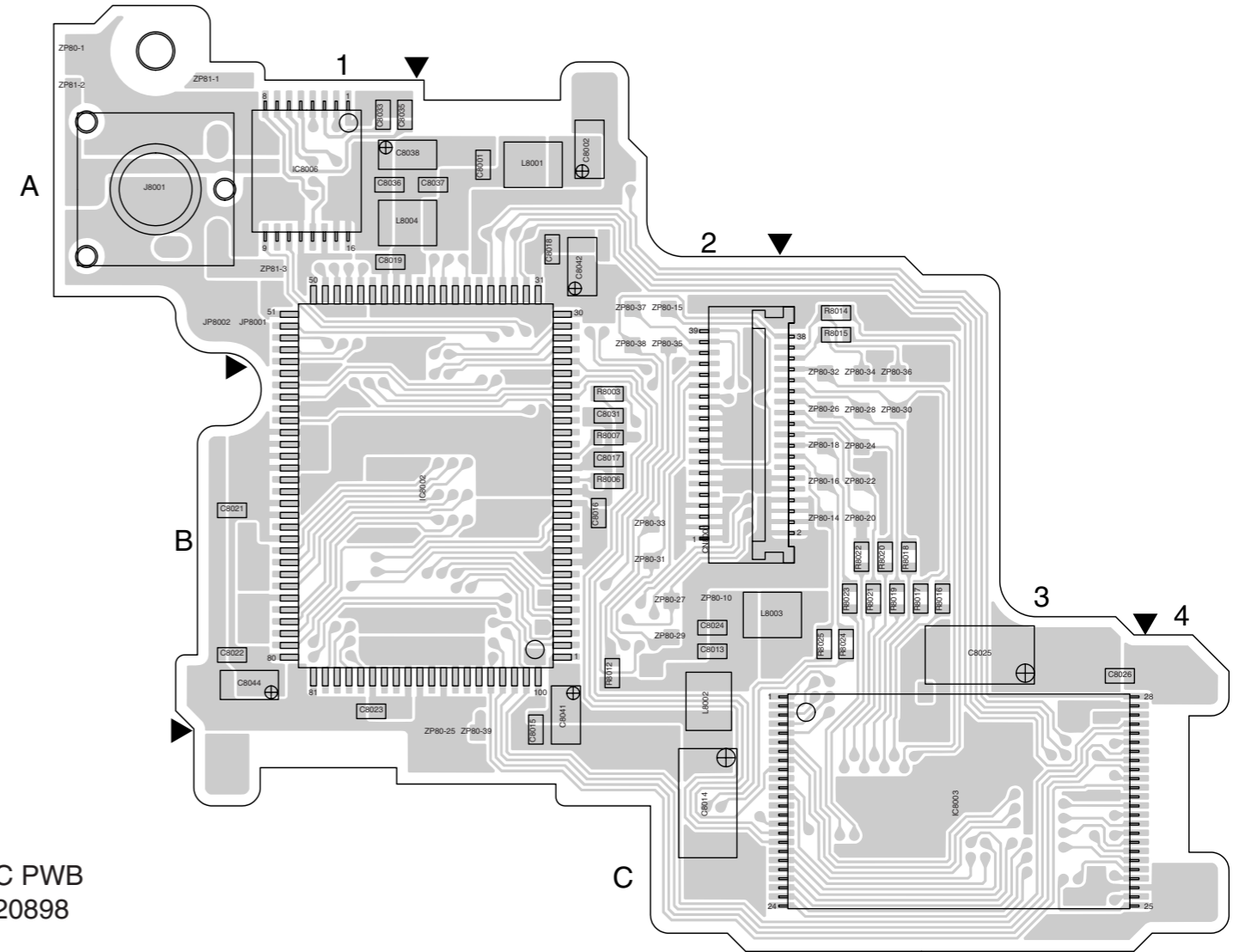
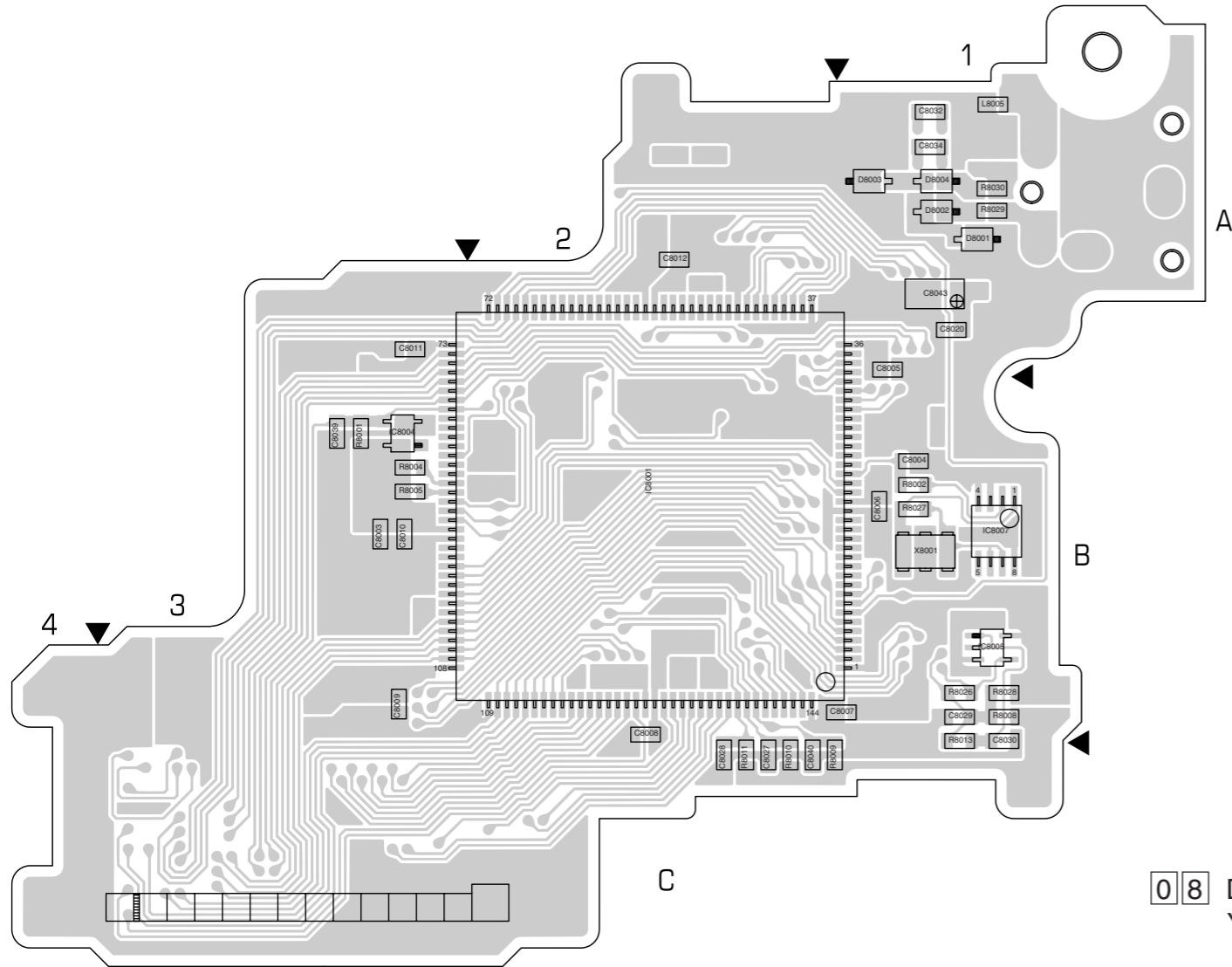
REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION
<b>CAPACITOR</b>		<b>IC</b>		R7503	A C 2B	R7521	A C 1B
C7501	A C 1A	IC7501	A C 1C	R7504	A C 2B	<b>OTHER</b>	
C7502	A C 1C	<b>COIL</b>		R7505	A C 2B	T7501	A C 1B
C7503	A C 2B	L7501	A C 1B	R7506	A C 2B	TL7501	A C 2B
C7504	A C 2B	L7502	A C 1C	R7507	A C 2B	ZP1-6	A C 1C
C7505	A C 1C	<b>TRANSISTOR</b>		R7508	A C 2B	ZP1-7	A C 2B
C7506	A C 2B	Q7501	A C 2B	R7509	A C 2B	ZP2-4	A C 2C
C7507	A C 2B	Q7502	A C 2B	R7510	A C 2B	ZP3-1	A C 1A
C7508	A C 2B	Q7503	A C 2B	R7511	A C 2B	ZP3-2	A C 1A
C7509	A C 2B	Q7504	A C 2B	R7512	A C 2B	ZP1-14	A C 2C
C7510	A C 2B	Q7505	A C 2B	R7513	A C 2B	ZP1-15	A C 2C
<b>CONNECTOR</b>		Q7506	A C 2B	R7514	A C 3B	ZP1-17	A C 2C
CN7501	A C 1B	Q7507	A C 2B	R7515	A C 3B	ZP1-22	A C 2C
CN7502	A C 2C	<b>RESISTOR</b>		R7516	A C 3B	ZP1-24	A C 1C
CN7503	A C 1A	R7501	A C 2B	R7517	A C 3B	ZP1-26	A C 2B
<b>FUSE</b>		R7502	A C 2B	R7518	A C 2B	ZP1-27	A C 2B
F7501	A C 1C	R7502	A C 2B	R7519	A C 1C	ZP2-14	A C 2B
				R7520	A C 1C	ZP2-19	A C 1C

4.21 DSC CIRCUIT BOARD

— FOR SXM930 —

FOIL SIDE (B)

COMPONENT SIDE (A)



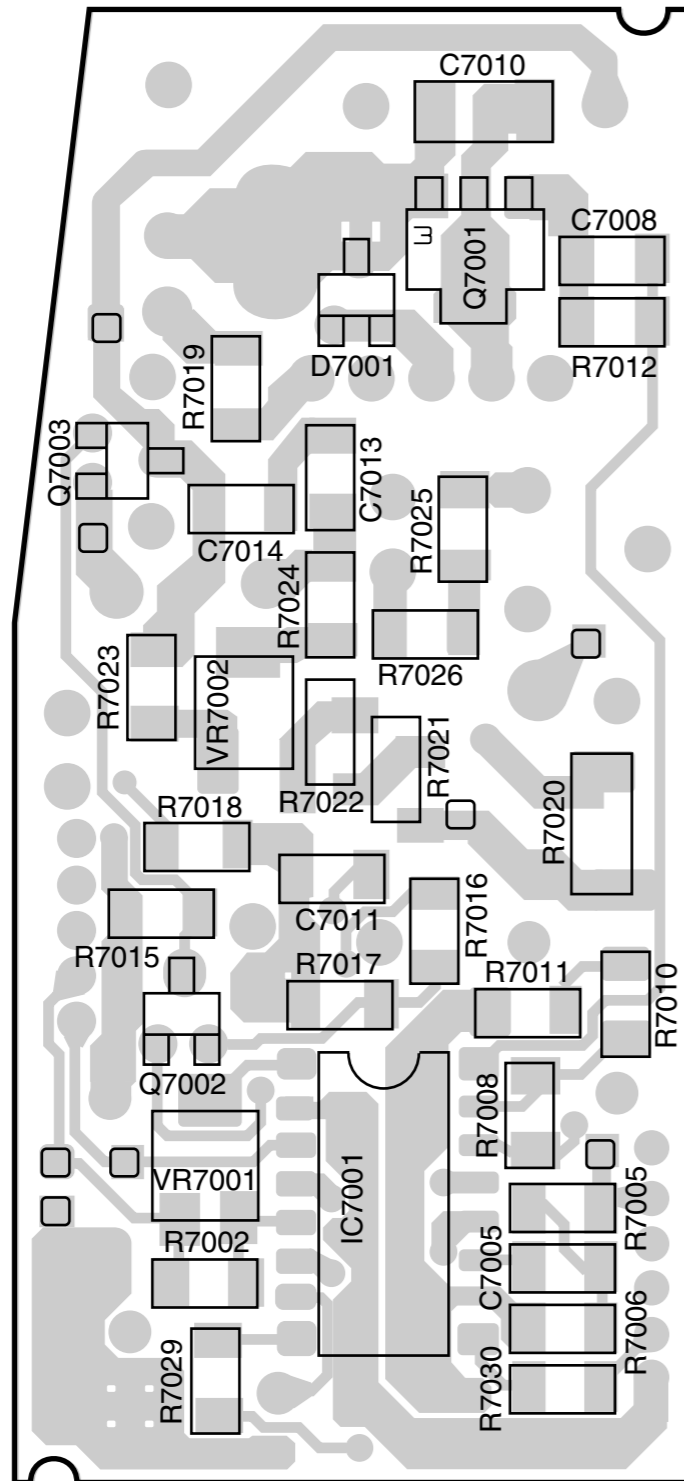
08 DSC PWB  
YB20898

COMPONENT PARTS LOCATION GUIDE <DSC>

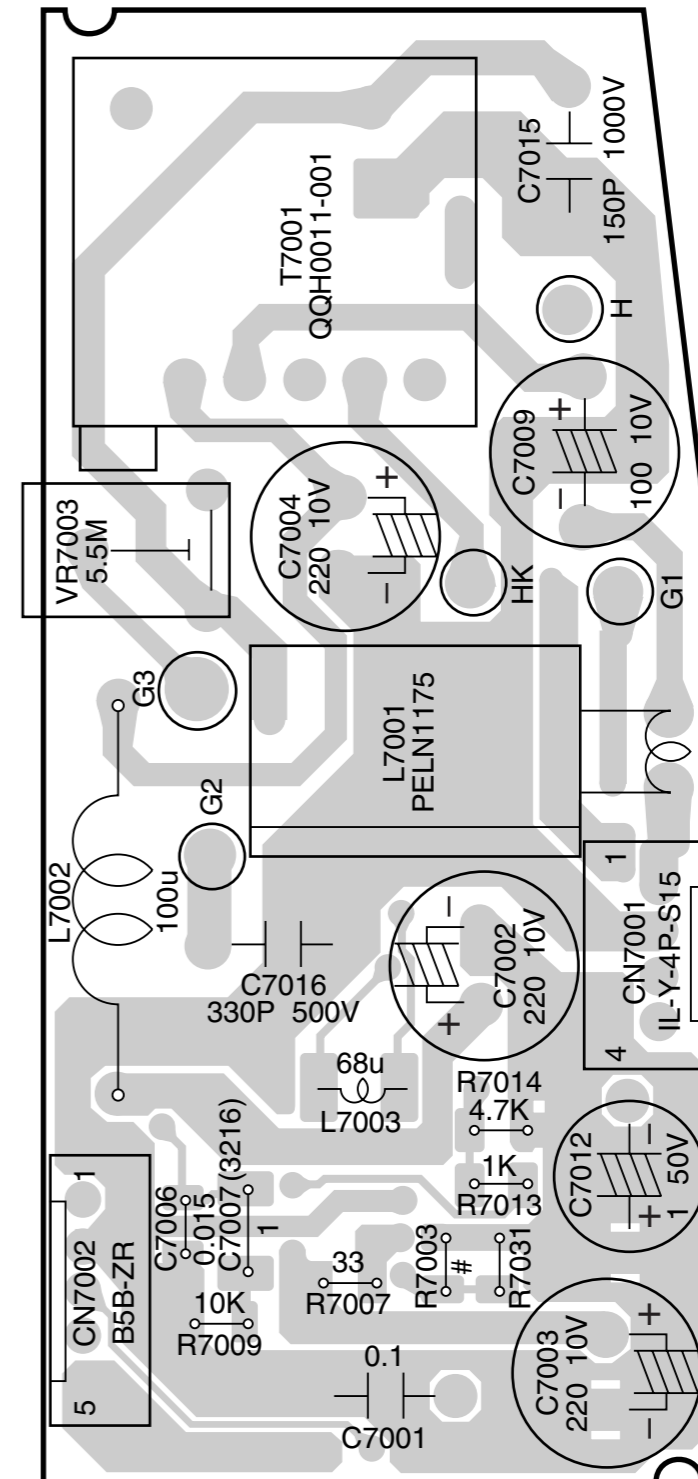
REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION
CAPACITOR		C8013	A C 2B	C8027	B C 2C	C8041	A C 2B	IC		L8005	B C 1A	R8012	A C 2B	R8026	B C 1B
C8002	A C 2A	C8014	A C 2C	C8028	B C 2C	C8042	A C 2A	IC8001	B C 2B	RESISTOR		R8013	B C 1B	R8027	B C 1B
C8003	B C 3B	C8015	A C 2B	C8029	B C 1B	C8043	B C 1A	IC8002	A C 2B	R8014	A C 3A	R8015	A C 3A	R8028	B C 1B
C8004	B C 1B	C8016	A C 2B	C8030	B C 1B	C8044	A C 1B	IC8003	A C 3C	R8016	A C 3B	R8017	A C 3B	R8029	B C 1A
C8005	B C 1A	C8017	A C 2B	C8031	A C 2B	CONNECTOR		IC8004	A C 3B	R8018	A C 3B	R8030	B C 1A	OTHER	
C8006	B C 1B	C8018	A C 2A	C8032	B C 1A	CN8001	A C 2B	IC8005	B C 1B	R8019	A C 3B	J8001	A D 1A	ZP80-1	A C 1A
C8007	B C 1B	C8019	A C 1A	C8033	A C 1A	DIODE		IC8006	A C 1A	R8020	A C 3B	JP8001	A D 1A	ZP80-2	A C 1A
C8008	B C 2B	C8020	B C 1A	C8034	B C 1A	D8001	B C 1A	IC8007	B C 1B	R8007	A C 2B	JP8002	A D 1A	ZP80-3	A C 1A
C8009	B C 3B	C8021	A C 1B	C8035	A C 1A	D8002	B C 1A	COIL		R8008	B C 1B	TM4	A C 1B	ZP80-4	A C 2A
C8010	B C 3B	C8022	A C 1B	C8036	A C 1A	D8003	B C 1A	L8001	A C 2A	R8009	B C 2C	TM8	A C 1B	ZP80-5	A C 2A
C8011	B C 3A	C8023	A C 1B	C8037	A C 2A	D8004	B C 1A	L8002	A C 2B	R8010	B C 2C	X8001	B C 1B	ZP80-6	A C 3B
C8012	B C 2A	C8024	A C 2B	C8038	A C 1A			L8003	A C 2B	R8011	B C 2C	ZP80-7	A C 2B	ZP80-8	A C 3B
		C8025	A C 3B	C8039	B C 3B			L8004	A C 1A			ZP80-9	A C 2B	ZP80-28	A C 3B
		C8026	A C 3B	C8040	B C 2C							ZP80-29	A C 2B	ZP80-29	A C 2B
												ZP80-30	A C 3B	ZP80-30	A C 3B
												ZP80-31	A C 2B	ZP80-31	A C 2B
												ZP80-32	A C 3B	ZP80-32	A C 3B
												ZP80-33	A C 2B	ZP80-33	A C 2B
												ZP80-34	A C 3B	ZP80-34	A C 3B
												ZP80-35	A C 2A	ZP80-35	A C 2A
												ZP80-36	A C 3B	ZP80-36	A C 3B
												ZP80-37	A C 2A	ZP80-37	A C 2A
												ZP80-38	A C 2A	ZP80-38	A C 2A
												ZP80-39	A C 2B	ZP80-39	A C 2B



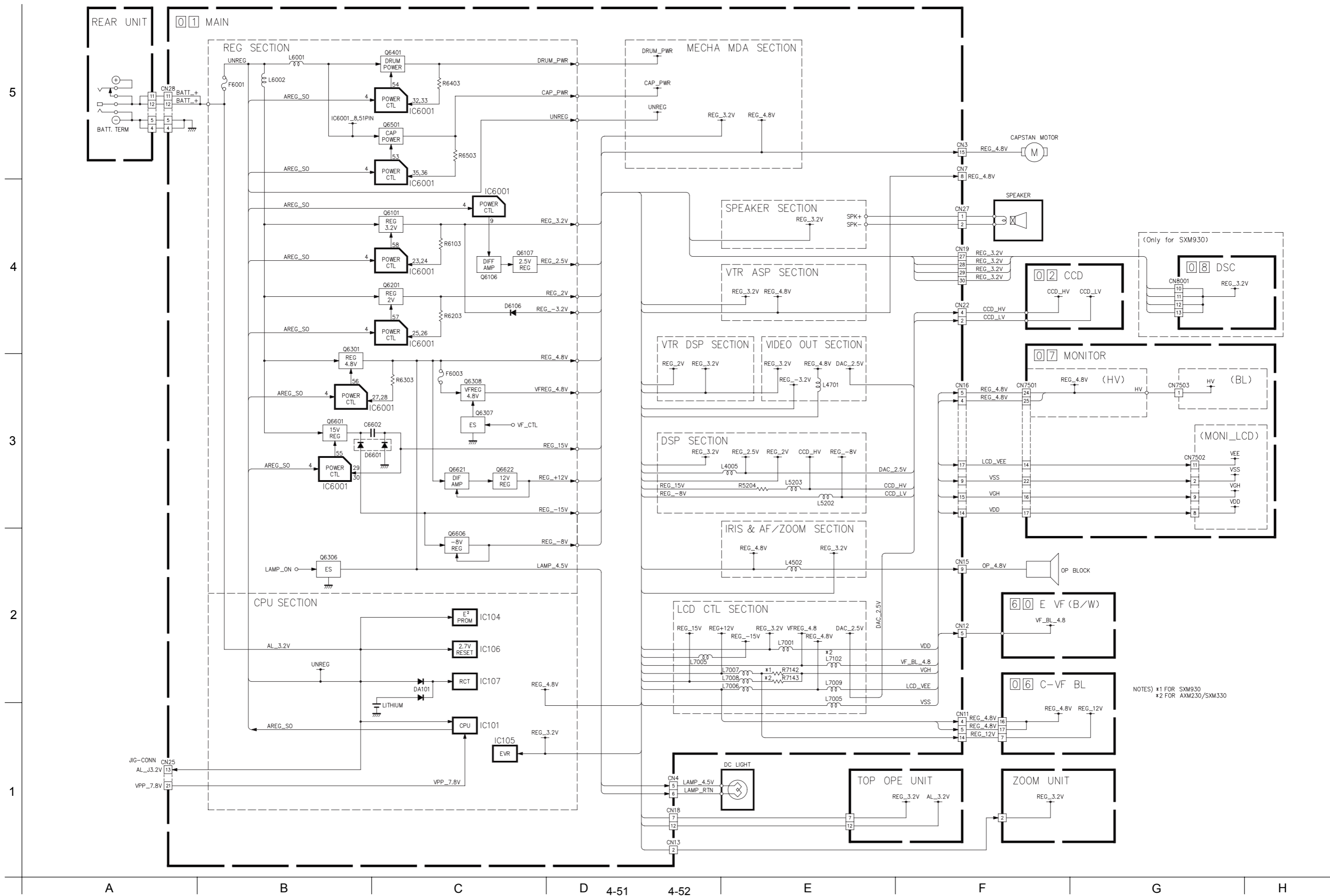
FIOL SIDE (B)



COMPONENT SIDE (A)

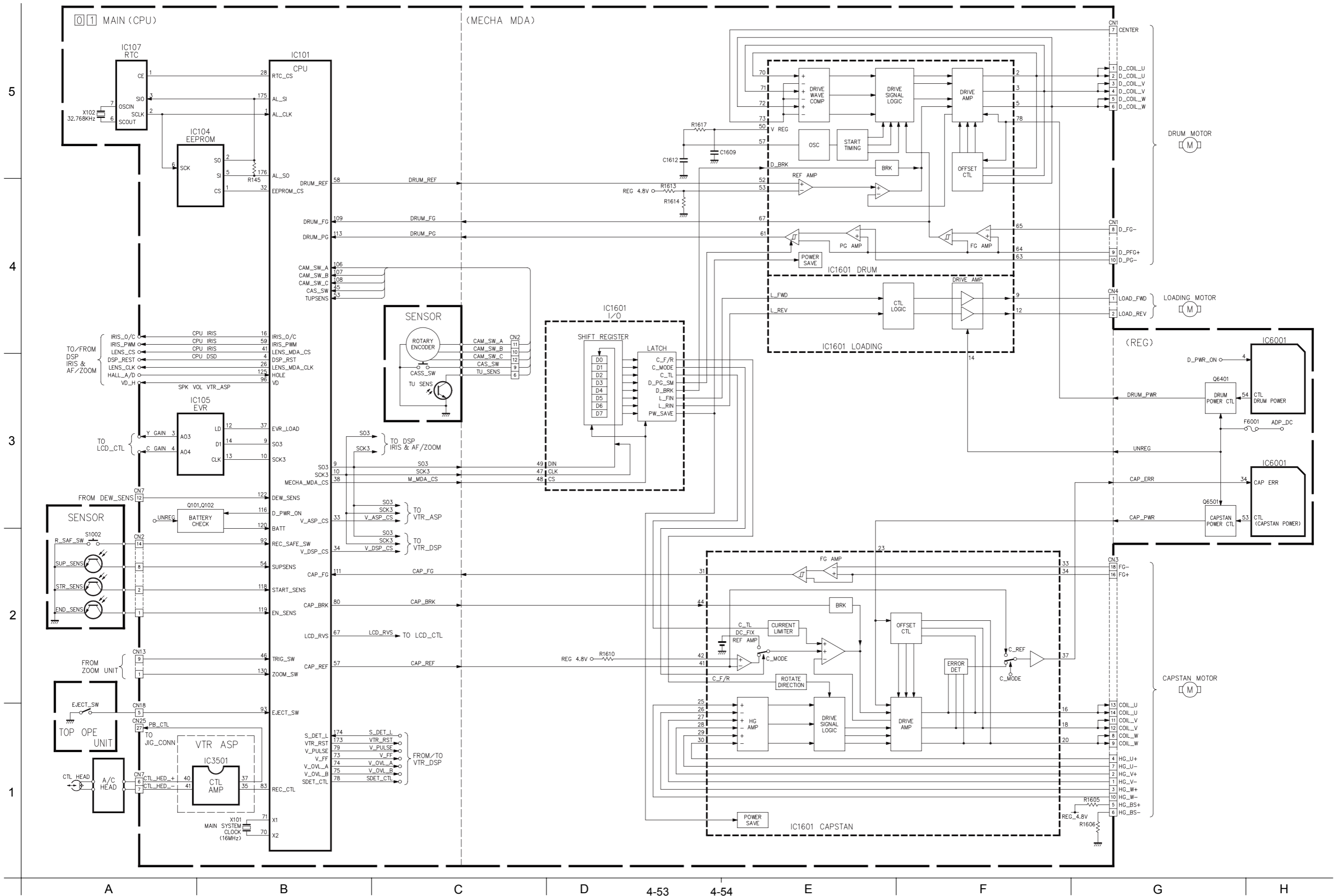


4.23 POWER SYSTEM BLOCK DIAGRAM



NOTES) \*1 FOR SXM930  
\*2 FOR AXM230/SXM330

4.24 CPU/MDA SYSTEM BLOCK DIAGRAM



4.25 CAMERA SYSTEM BLOCK DIAGRAM

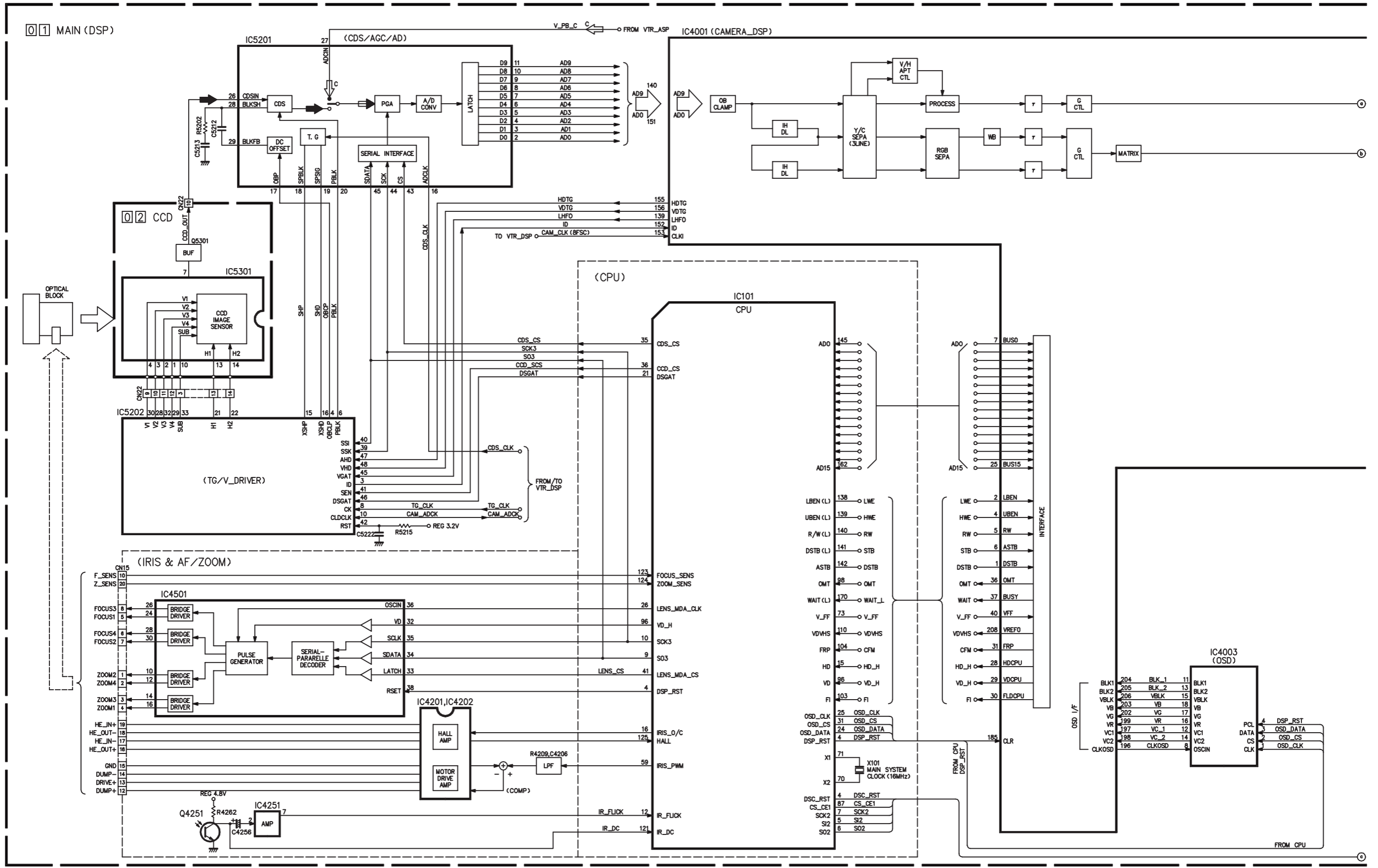
5

4

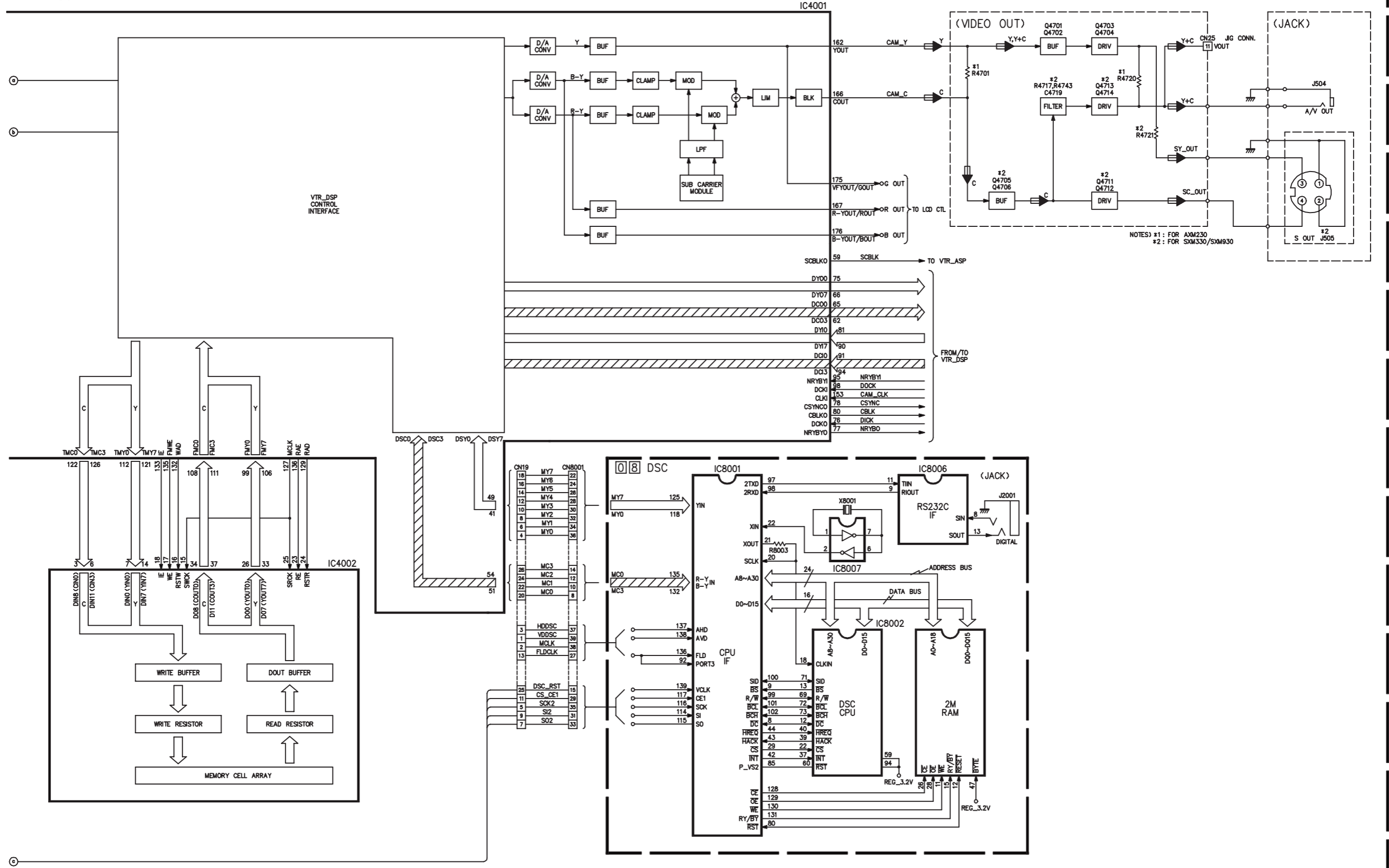
3

2

1



(DSP)



I

J

K

L

4-57

4-58

M

N

O

P



4.26 Y/C SYSTEM BLOCK DIAGRAM

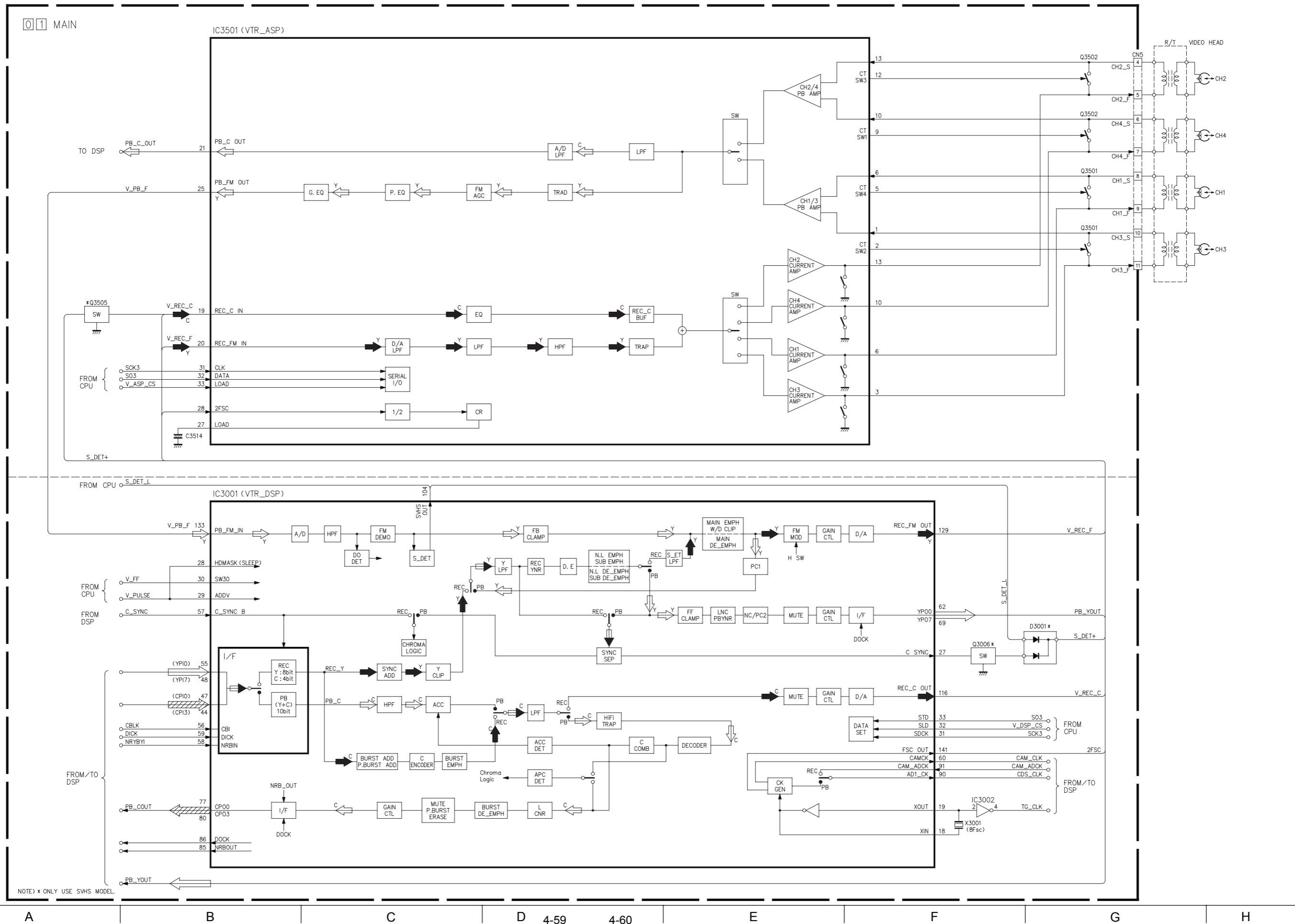
5

4

3

2

1



4.27 MONITOR SYSTEM BLOCK DIAGRAM

5

4

3

2

1

A

B

C

D

4-61

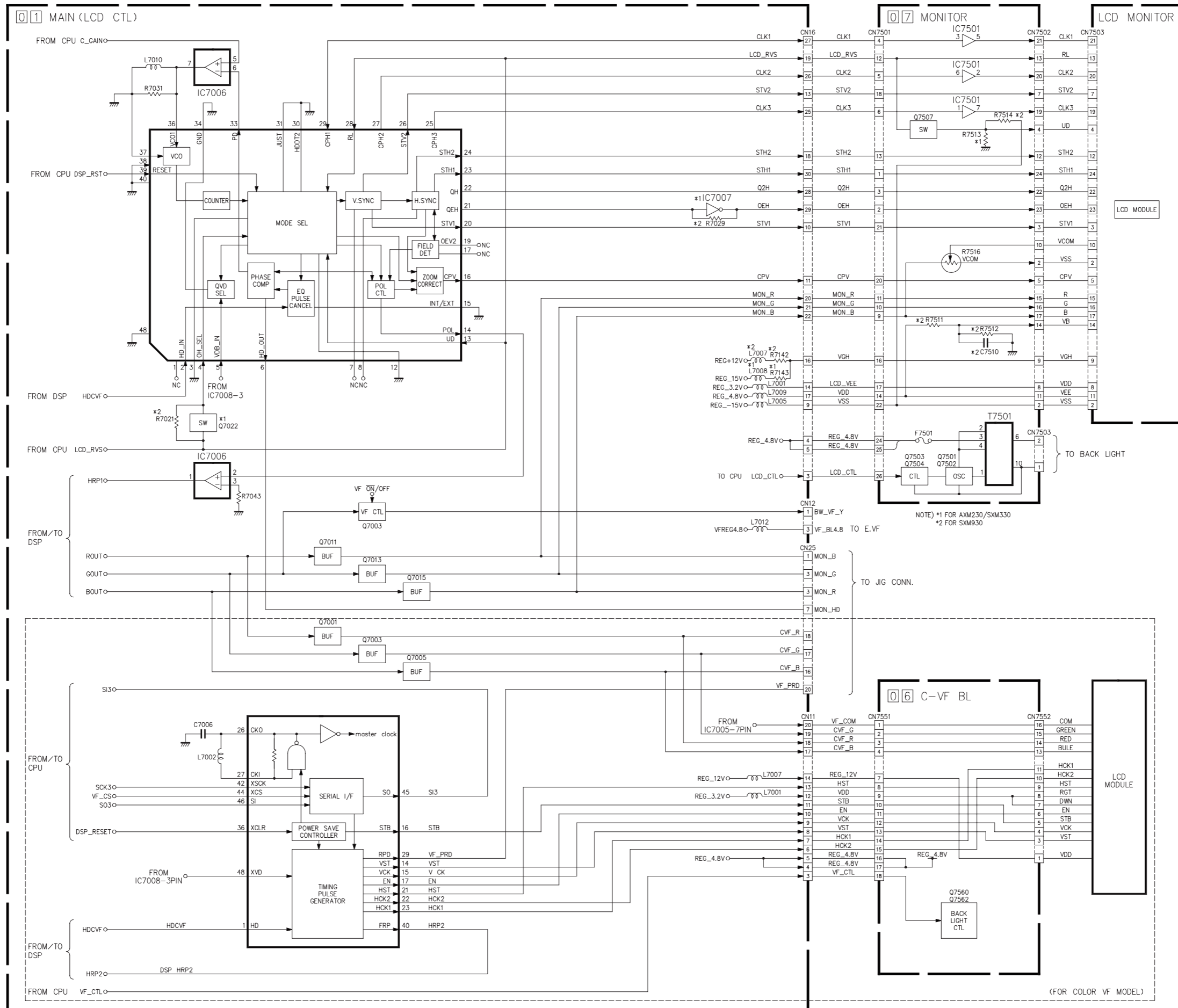
4-62

E

F

G

H



(FOR COLOR VF MODEL)



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

<SPEAKER>

MODE PIN NO.	REC	PLAY
IC2401		
1	1.3	1.3
2	3.2	3.2
3	1.3	1.3
4	0	0
5	0.6	0.6
6	0	0
7	0	0
8	0.6	0.6
Q2401		
E	0	0
C	3.2	3.2
B	0	0
Q2402		
E	3.2	3.2
C	0.6	0.6
B	3.2	3.2

<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
IC4002		
1	0	0
2	0	0
3	1.4	1.3
4	1.2	1.7
5	1.1	1.4
6	1.1	1.3
7	0.7	0.7
8	1.1	0.9
9	1	1
10	0.9	1.1
11	1.4	1.1
12	1.7	1.5
13	1.8	1.3
14	1.3	1.4
15	1.5	1.5
16	0	0
17	2.6	2.6
18	3	3
19	3.2	3.2
20	0	0
21	3.2	3.2
22	2.7	2.7
23	2.6	2.6
24	0	0
25	1.5	1.6
26	1.7	1.5
27	1.9	1.7

MODE PIN NO.	REC	PLAY
28	1.9	1.7
29	1.9	1.8
30	1.4	1.5
31	1.5	1.4
32	1.6	1.5
33	1.2	1.4
34	1.6	1.2
35	1.5	1.5
36	1.7	1.9
37	1.5	1.5
38	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
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

MODE PIN NO.	REC	PLAY
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
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

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
Q6307		
E	0	0
C	4.8	4.8
B	0	0
Q6308		
E	4.8	4.8
C	0	0
B	4.8	4.8
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

MODE PIN NO.	REC	PLAY
5	0	0
6	0	0
Q6702		
E	0	0
C	0	0
B	0	0
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
IC7002		
1	1.1	1.1
2	3	3
3	0	0
4	2.9	2.9
5	3.1	3.1
6	3	3
7	3.1	3.1
8	0	0
9	0	0



MODE PIN NO.	REC	PB
92	0	0
93	3	3.1
94	3.1	3.1
95	3.1	3.1
96	3	1.6
97	3	1.6
98	3	1.4
99	3	1.9
100	3	0
IC8003		
1	0	0
2	1.7	2
3	2	2
4	2	2.1
5	2	2
6	2	2
7	3	2
8	3.1	2
9	3	0.9
10	0	0
11	3.1	3.1
12	0	3
13	0	0
14	3.1	0
15	3	3.1
16	3	1
17	3	2.9
18	3	1.9
19	3	2
20	3	2
21	3	2
22	3	2
23	3	1.8
24	3	0
25	1.7	1.8
26	3	3.1
27	0	0
28	3.1	3.1
29	1.6	1.6
30	3	1.7
31	3	1.5
32	3	1.8
33	3	1.6
34	3	1.8
35	3	1.6
36	3	1.6
37	3.2	3.2
38	3	1.7
39	3	1.7
40	3	1.7
41	3	1.6
42	3	1.4
43	3	1.4
44	3	1.9
45	3	0.8
46	0	0
47	3.2	3.2
48	3.1	1.9
IC8006		
1	0	0
2	3.2	3.2
3	3.2	3.2
4	3.2	3.2
5	3.2	3.2
6	0	0
7	0	0
8	0	0
9	3.2	3.2
10	0	0
11	3.1	3.1
12	0	0
13	0	0
14	0	0
15	3.2	3.2
16	3.2	3.2
IC8007		
1	1.7	1.6
2	1.6	1.5
3	0	0

MODE PIN NO.	REC	PB
4	0	0
5	3.1	3.1
6	1.6	1.6
7	1.6	1.6
8	3.1	3

<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

<MONITOR>

MODE PIN NO.	EE
IC7501	
1	-
2	-
3	-
4	-
5	-
6	-
7	-
8	-
Q7501	
E	0
C	4.4
B	0.4
Q7502	
E	0
C	4.4
B	0.4
Q7503	
E	4.6
C	4.5
B	0
Q7504	
E	0
C	0
B	0.7
Q7507	
E	3.2
C	0
B	3

<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
Q7002	
E	2.8
C	-24.6
B	2.3
Q7003	
E	-24
C	-34.3
B	-24.6