



# SCHEMATIC DIAGRAM

MODEL : 50HX70	ChassisNo. TAC0067
55HX70	ChassisNo. TAC0066
61HX70	ChassisNo. TAC0065
55H70	ChassisNo. TAC0069
61H70	ChassisNo. TAC0068

**WARNING:** BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON THE MANUAL FOR THIS MODEL.

**CAUTION:** The international hazard symbols " $\triangle$ " in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on the MANUAL for this model. Do not degrade the safety of the receiver through improper servicing.

## NOTE:

- RESISTOR** Resistance is shown in ohm [K = 1.000, M = 1.000.000]. All resistors are 1/6W and 5% tolerance carbon resistor, unless otherwise noted as the following marks.  
1/2R = Metal or Metal oxide of 1/2 watt  
1RF = Fuse resistor of 1 watt  
K =  $\pm 10\%$  G =  $\pm 2\%$  F =  $\pm 1\%$   
1/2S = Carbon composition of 1/2 watt  
10W = Cement of 10 watt
- CAPACITOR** Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in  $\mu\text{F}$ , and the values more than 1 in pF.  
All capacitors are ceramic 50V, unless otherwise noted as the following marks.  
 Electrolytic capacitor       Mylar capacitor
- The parts indicated with " $\triangle$ " have special characteristics, and should be replaced with identical parts only.
- Voltages read with DIGITAL MULTI-METER from point indicated to chassing ground, using a color bar signal with all controls at normal, line voltage 120 volts.
- Waveforms are taken receiving color bar signal with enough sensitivity.
- Voltage reading shown are nominal values and may vary  $\pm 20\%$  except H.V.

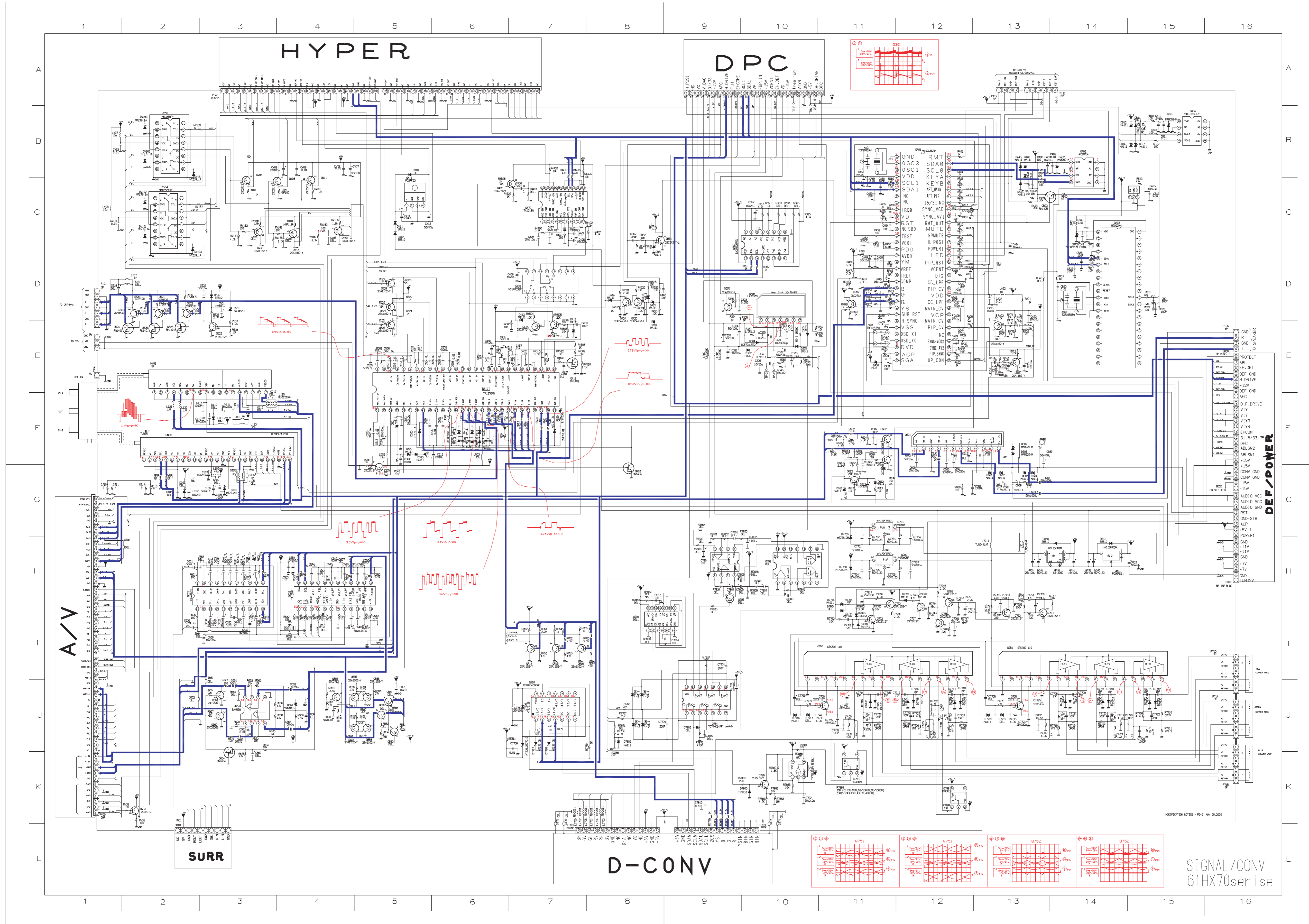
**WARNING:** BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON THE MANUAL FOR THIS MODEL.

**CAUTION:** The international hazard symbols "△" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on the MANUAL for this model. Do not degrade the safety of the receiver through improper servicing.

**NOTE:**

- RESISTOR** Resistance is shown in ohm [K = 1,000, M = 1,000,000]. All resistors are 1/6W and 5% tolerance carbon resistor, unless otherwise noted as the following marks.  
1/2R = Metal or Metal oxide of 1/2 watt      1/2S = Carbon composition of 1/2 watt  
1RF = Fuse resistor of 1 watt      10W = Cement of 10 watt  
K = ±10%    G = ±2%    F = ±1%
- CAPACITOR** Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in μF, and the values more than 1 in pF.  
All capacitors are ceramic 50V, unless otherwise noted as the following marks.  
—|— Electrolytic capacitor      —|— Mylar capacitor
- The parts indicated with "△" have special characteristics, and should be replaced with identical parts only.

4. Voltages read with DIGITAL MULTI-METER from point indicated to chassis ground, using a color bar signal with all controls at normal, line voltage 120 volts.
5. Waveforms are taken receiving color bar signal with enough sensitivity.
6. Voltage reading shown are nominal values and may vary ±20% except H.V.



1

2

3

A

B

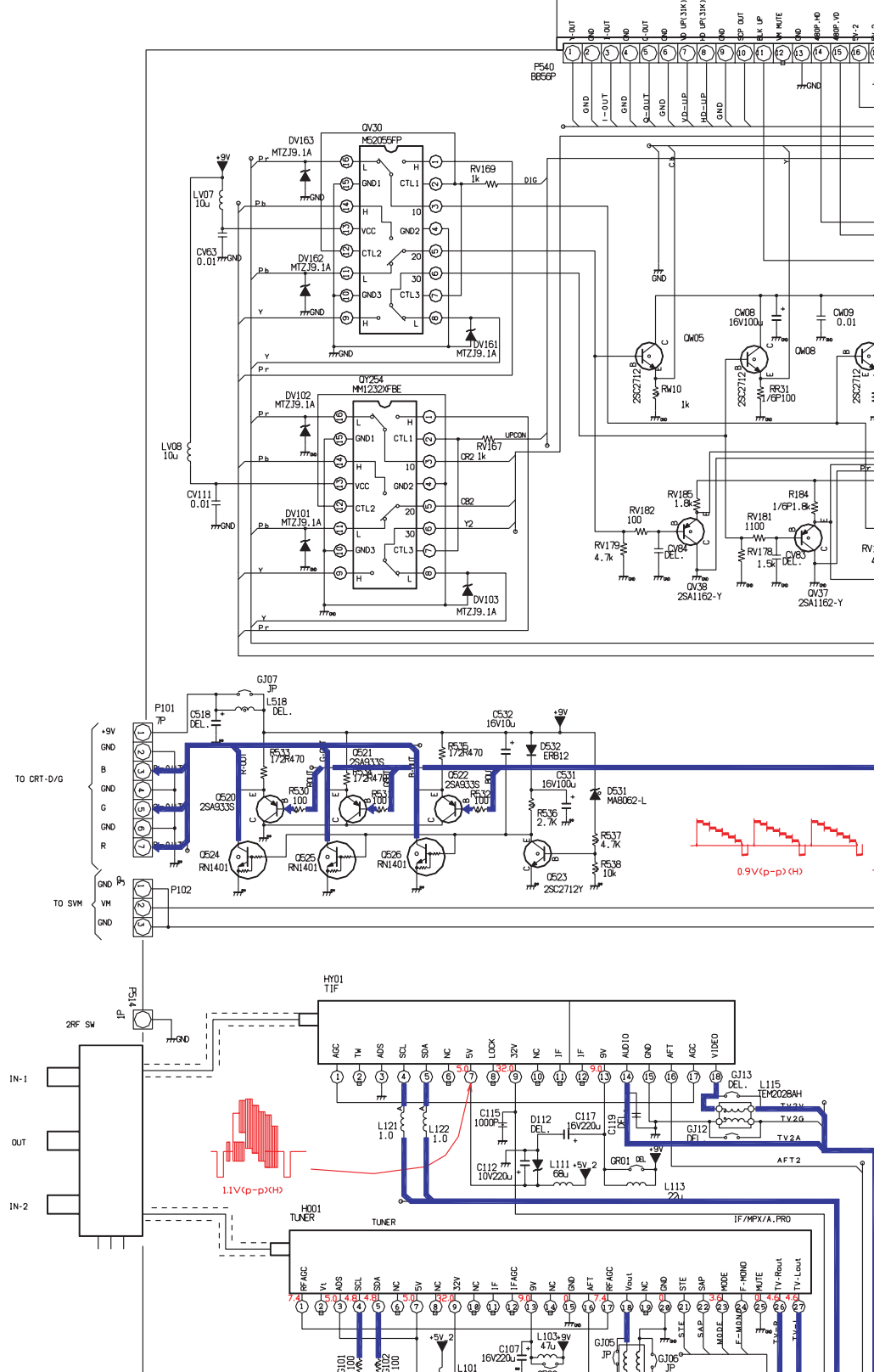
C

D

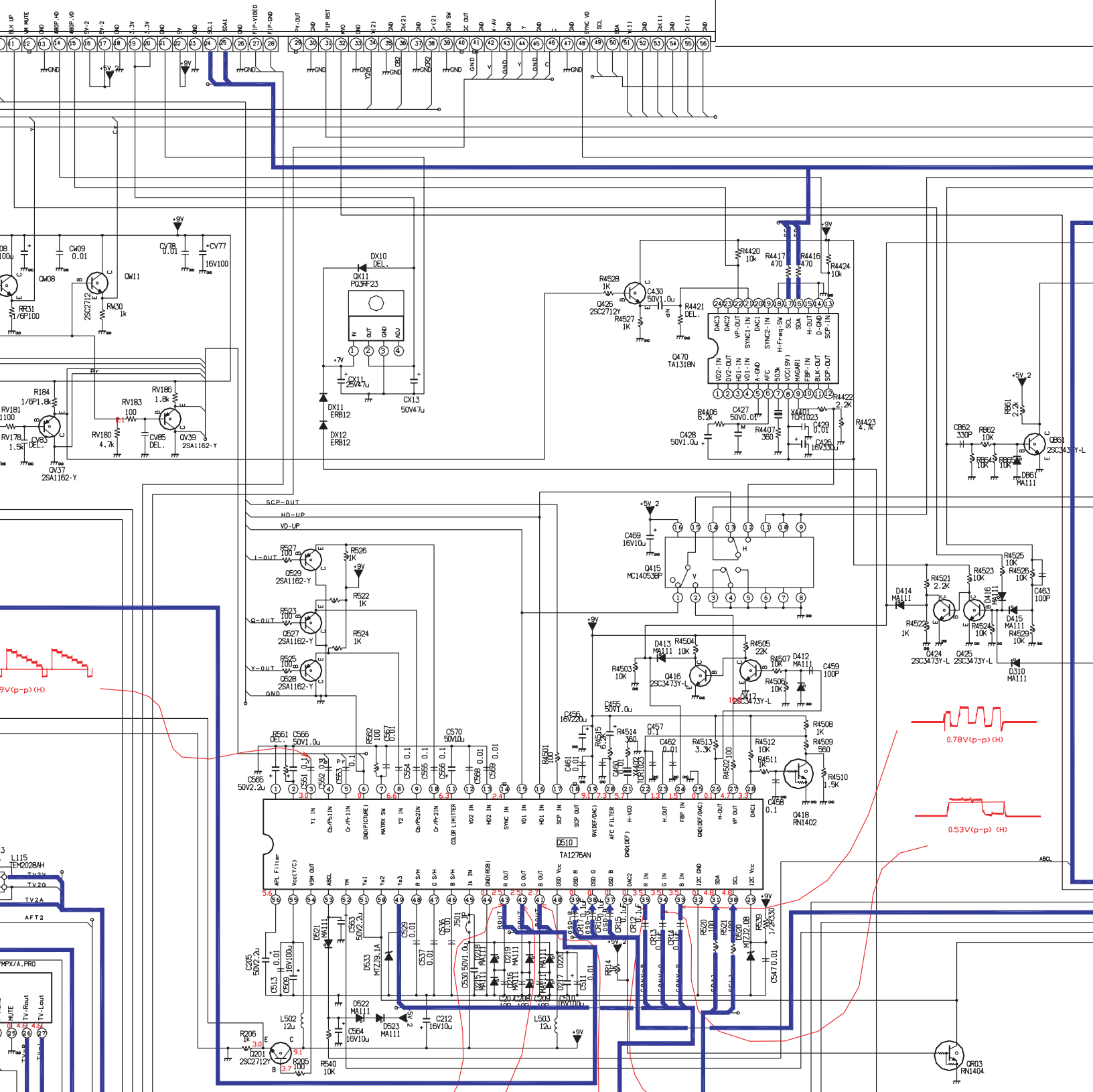
E

F

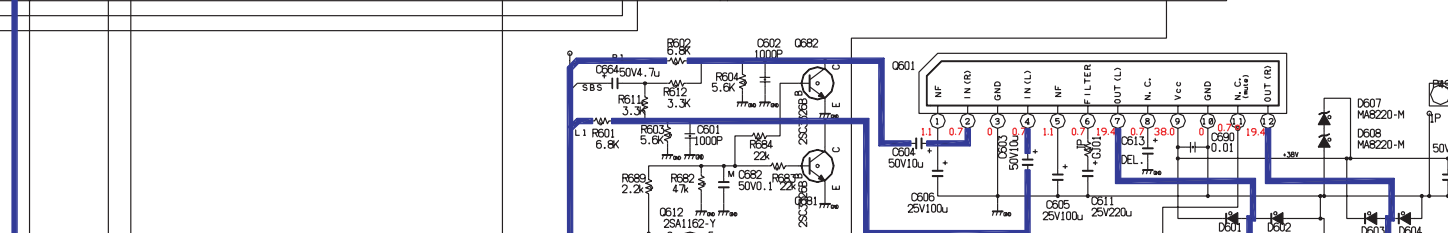
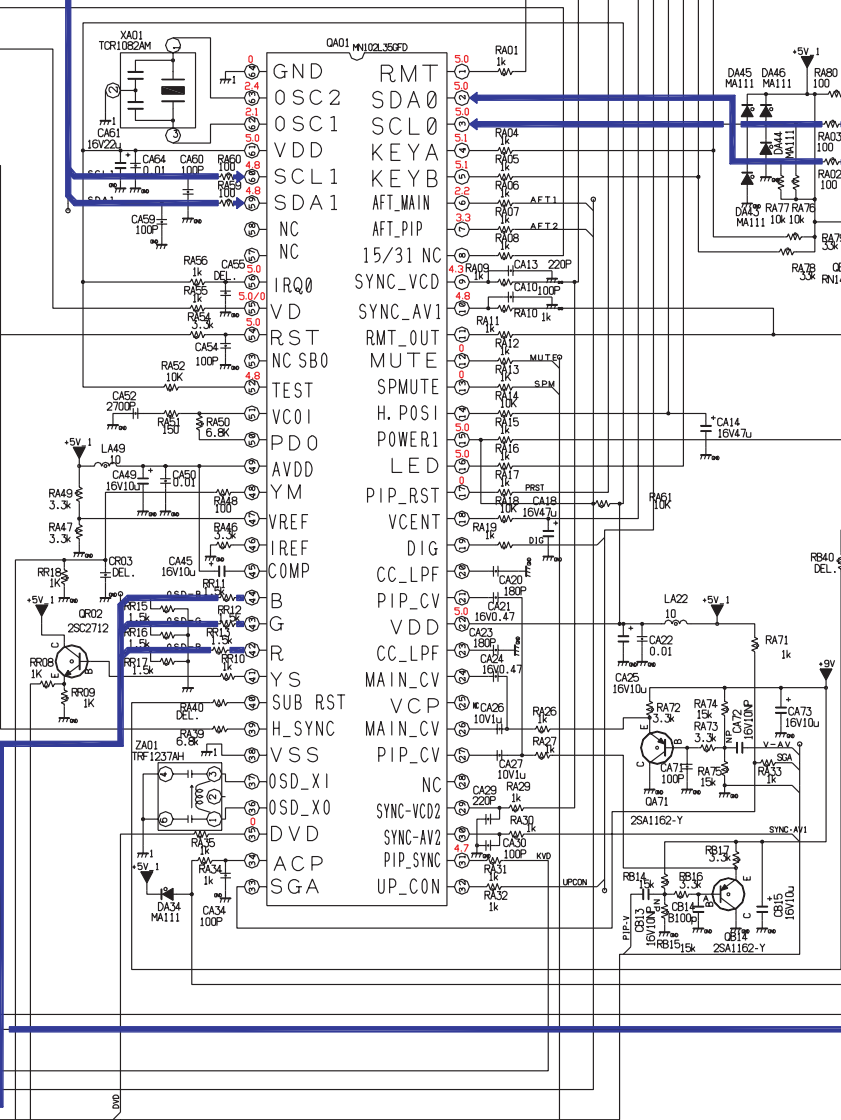
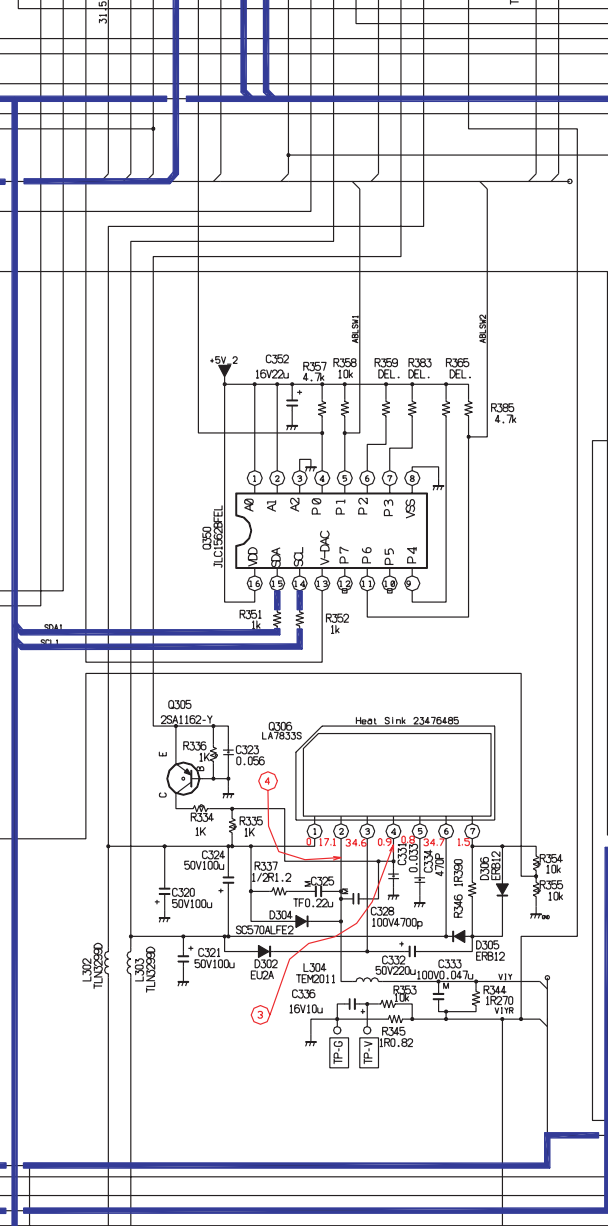
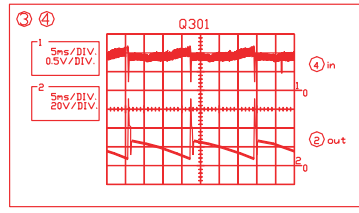
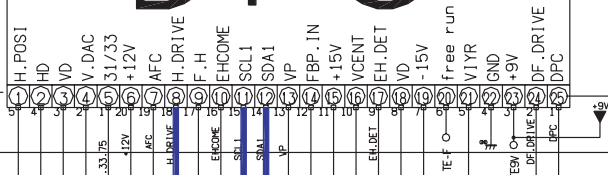
H



# H Y P E R



# D P C



3

14

15

16

A

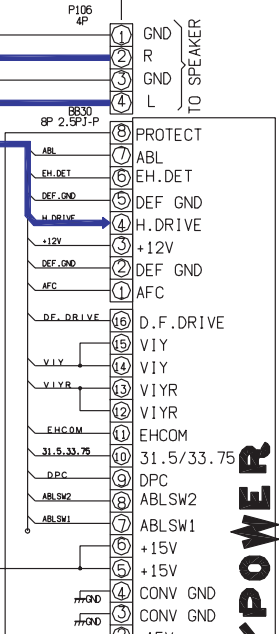
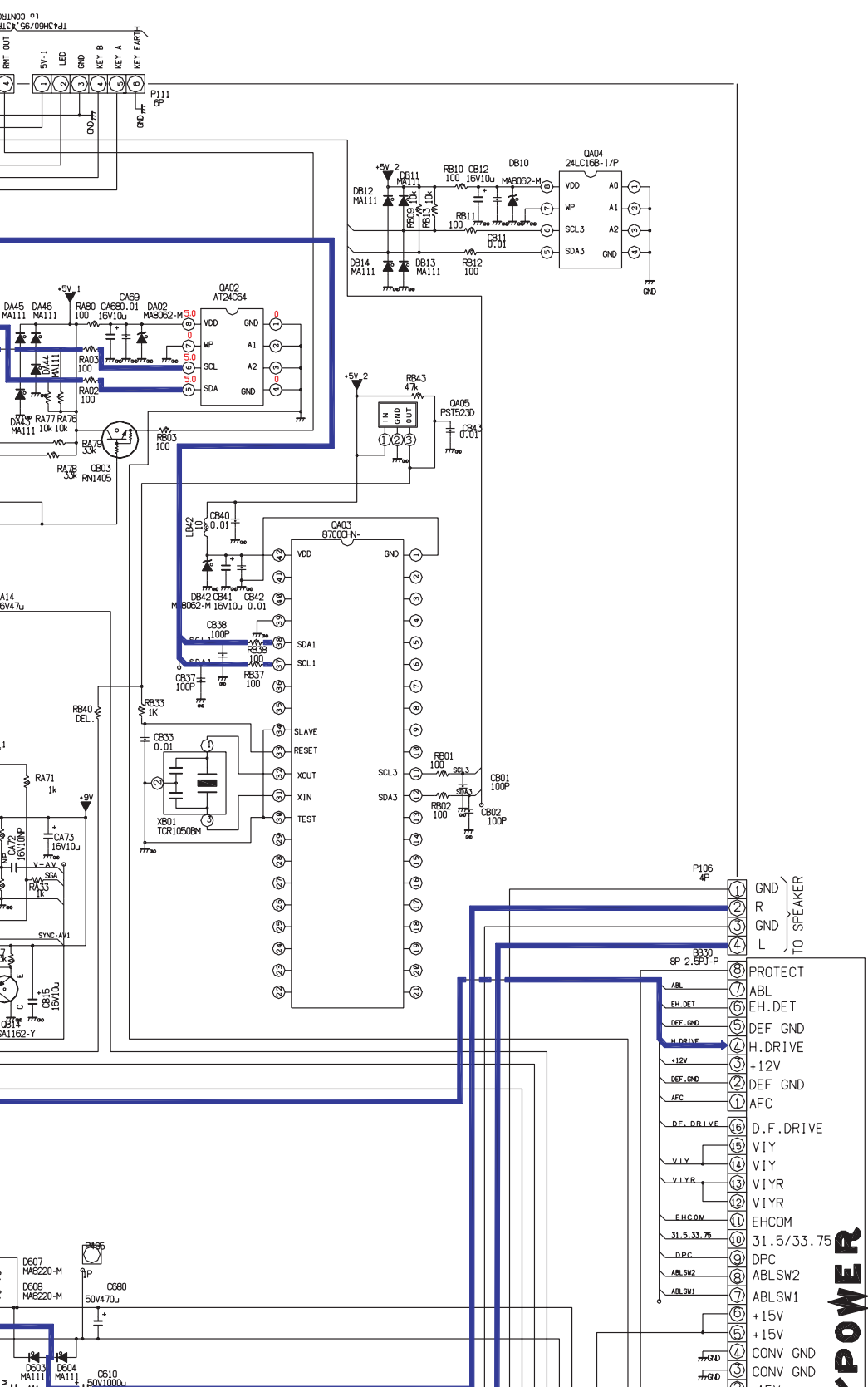
B

C

D

E

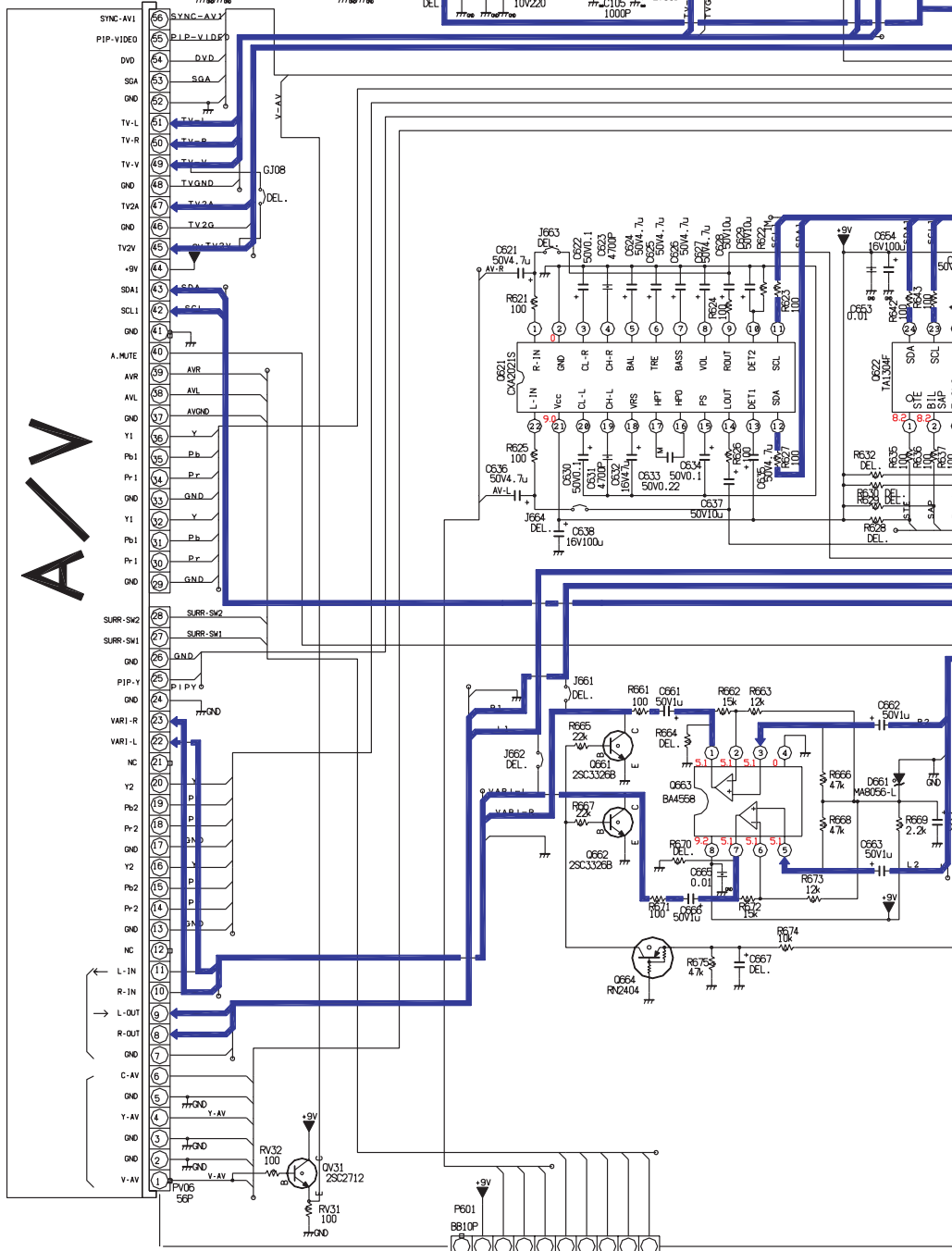
F



**POWER**

G  
H  
I  
J  
K  
L

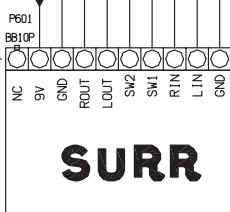
# A/V



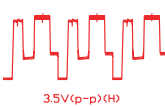
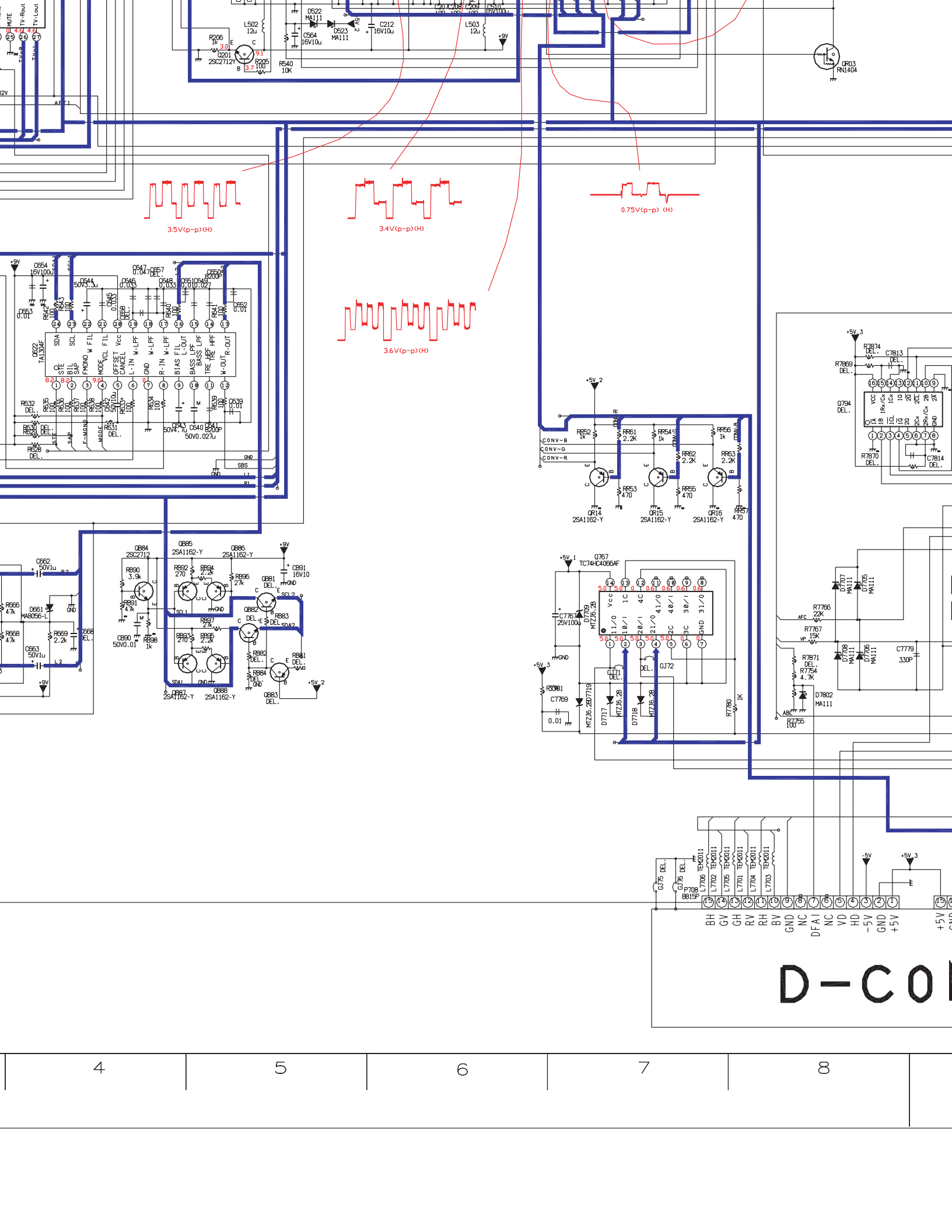
1

2

3



# SURR



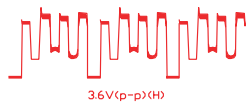
3.5V(p-p)(H)



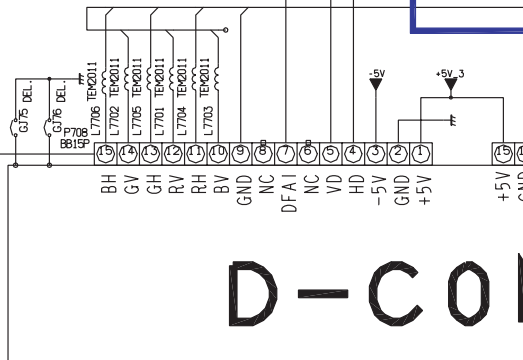
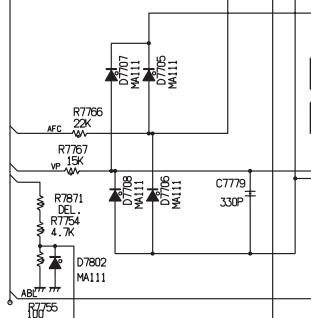
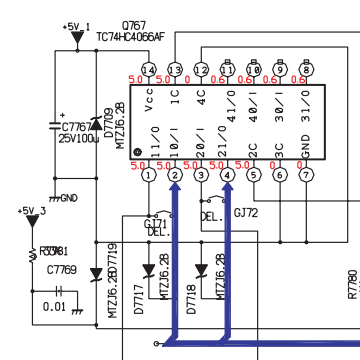
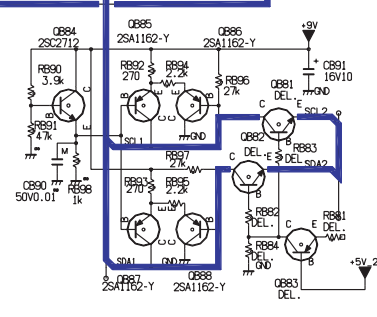
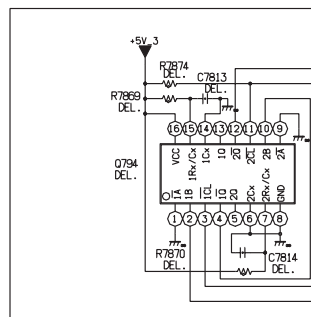
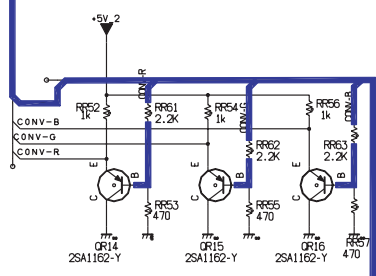
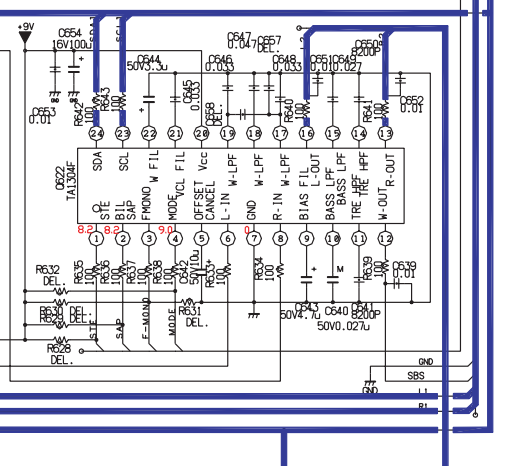
3.4V(p-p)(H)



0.75V(p-p)(H)



3.6V(p-p)(H)



D-COM

4

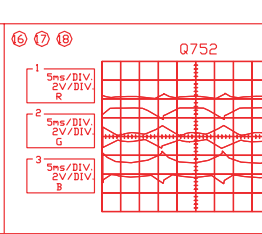
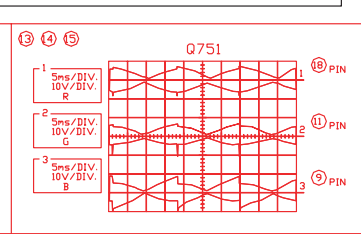
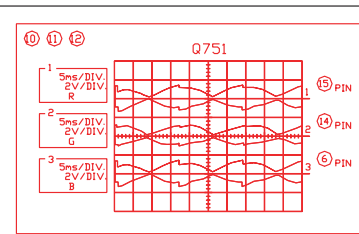
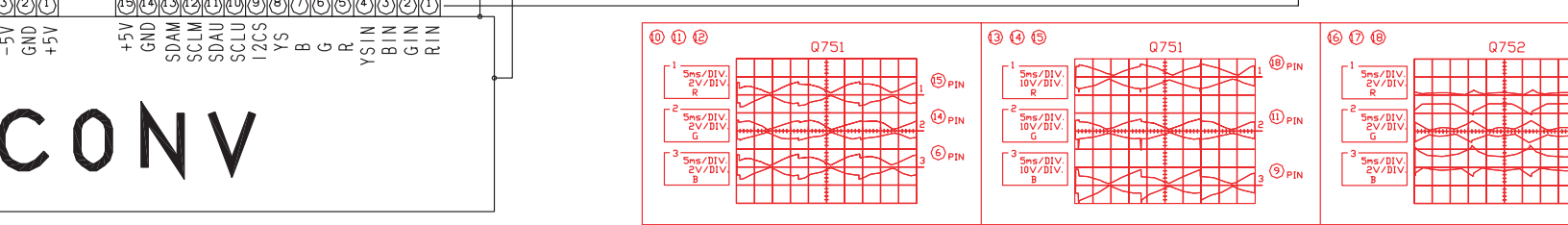
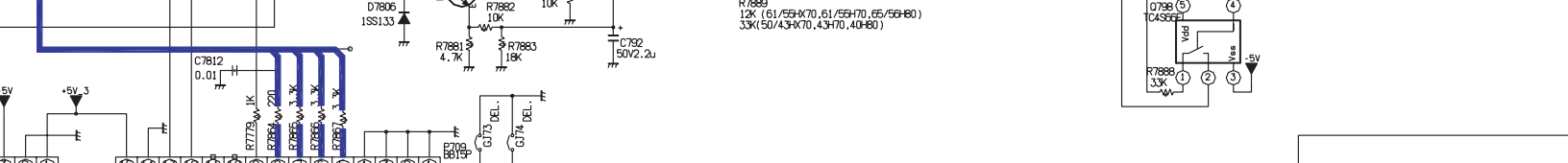
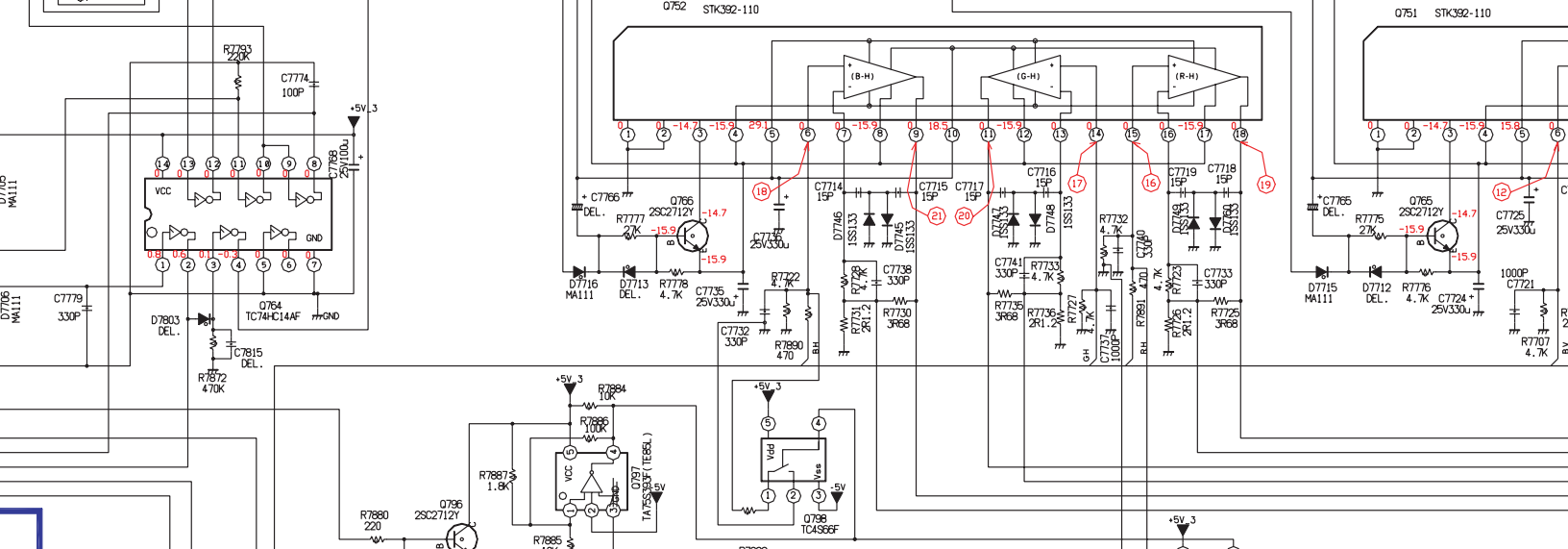
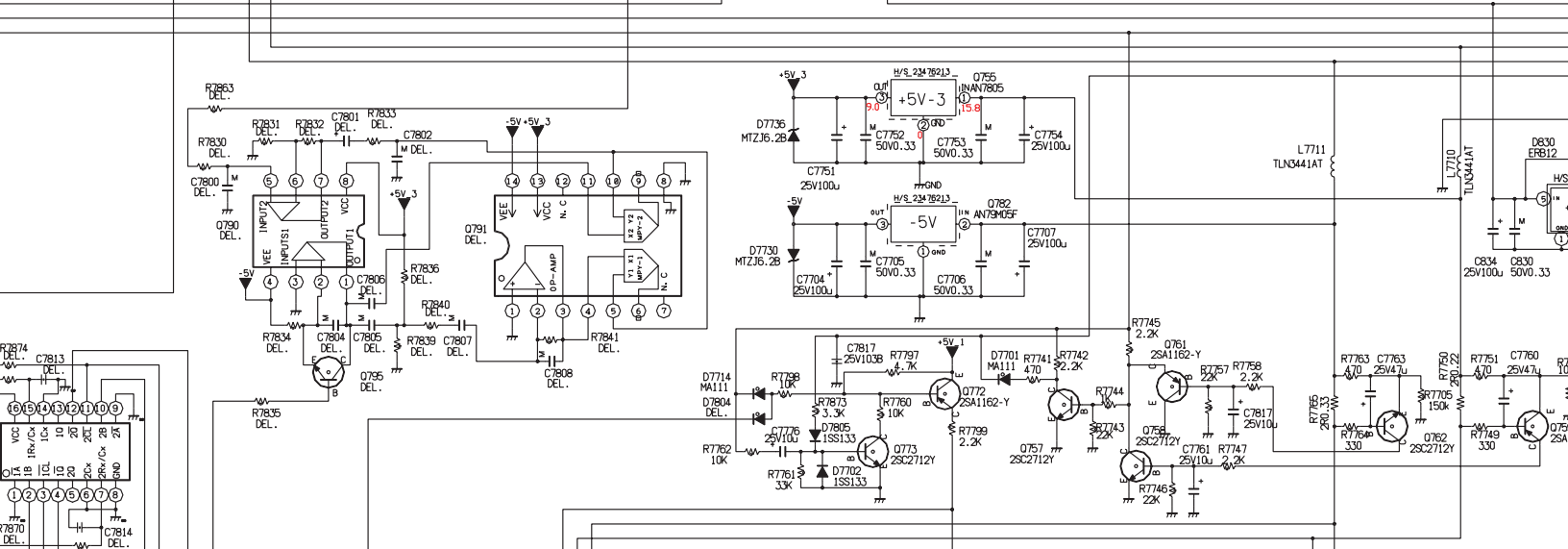
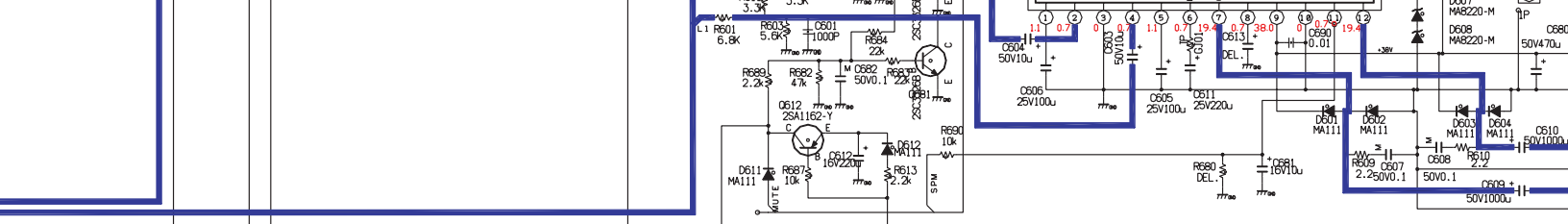
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7

8





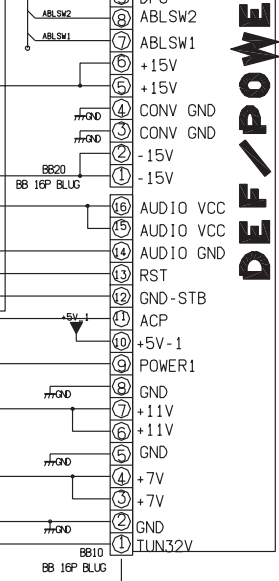
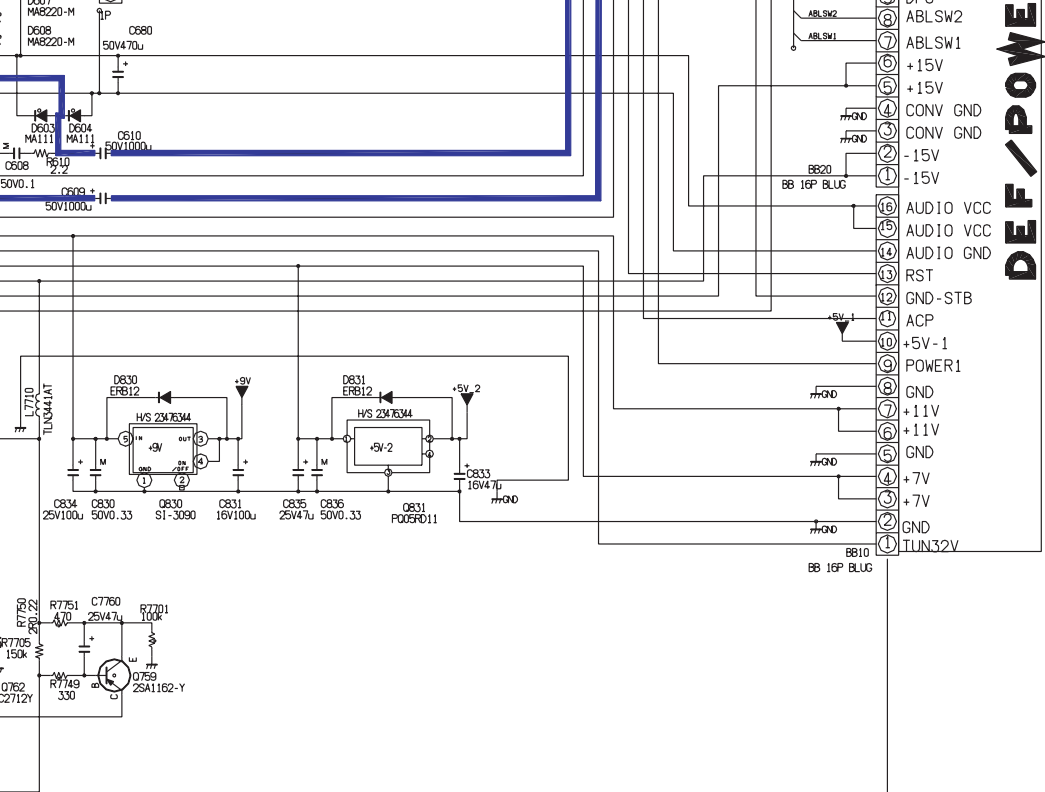
9

10

11

12

13



**DEF/POWER**

G

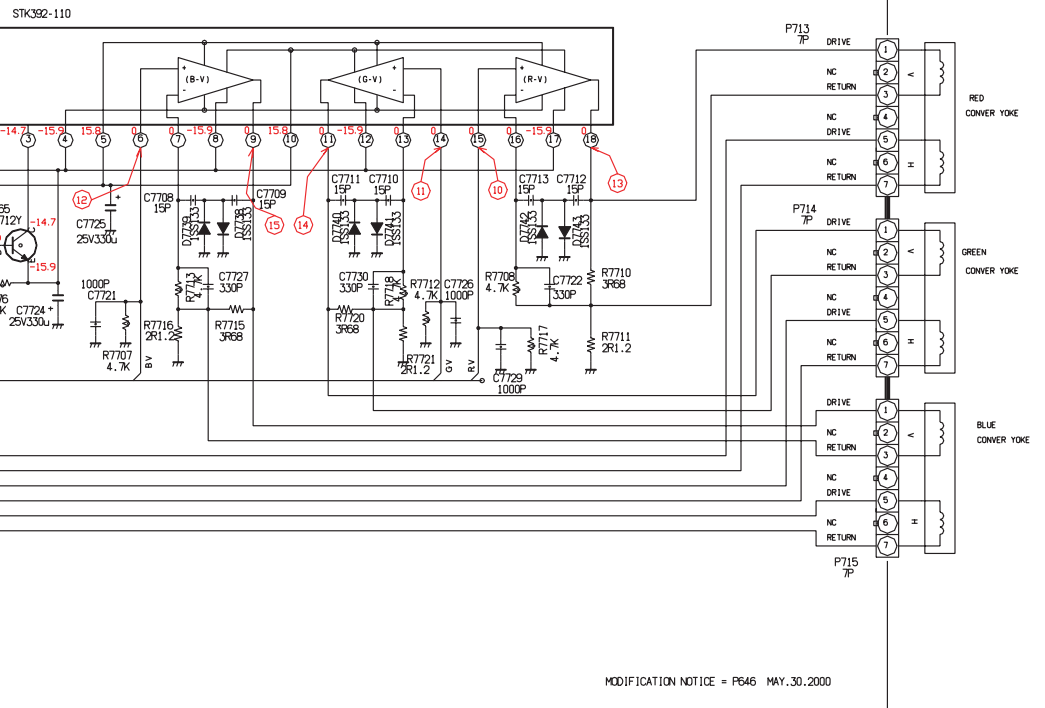
H

I

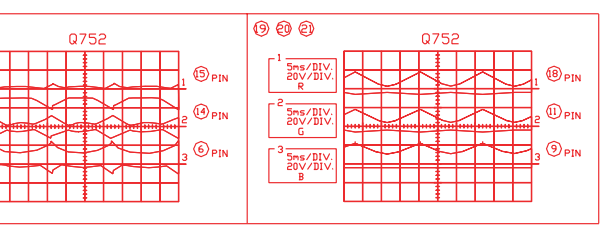
J

K

L

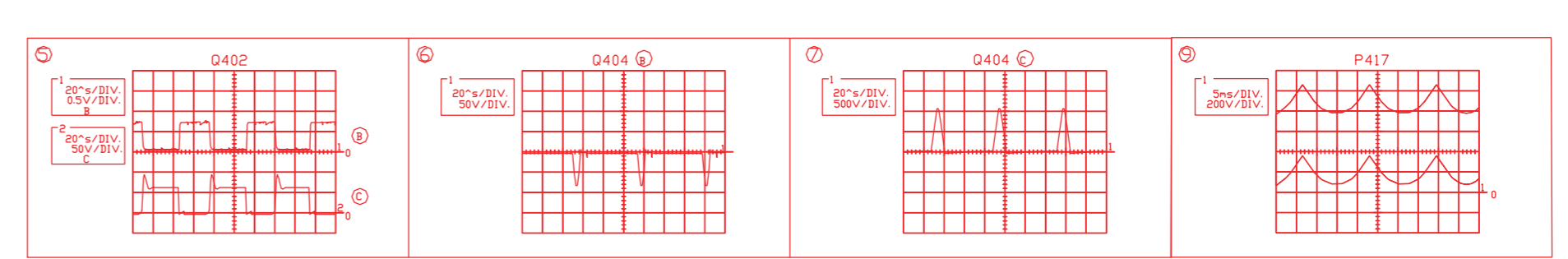
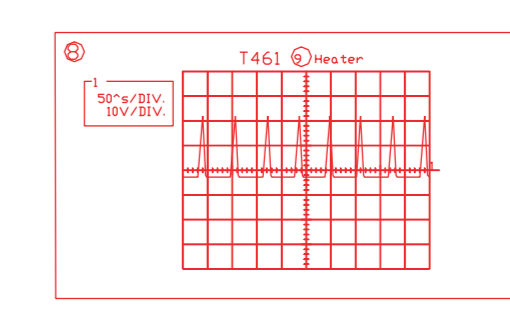
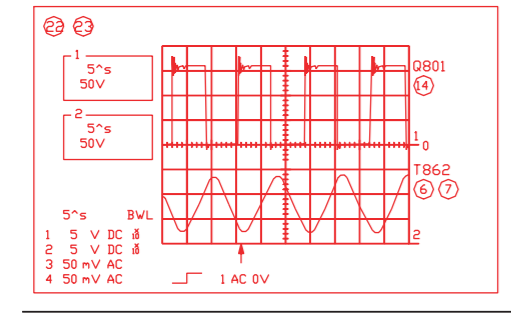


MODIFICATION NOTICE = P646 MAY.30.2000



SIGNAL/CONV  
61HX70ser ise

3 14 15 16



NOTE

1. RESISTOR: Resistance is shown in ohms (Ω), kilohms (k), or megohms (M). All resistors are 1/8W and 5% tolerance carbon resistor unless otherwise noted by the following marks:  
 1/2R | Metal or Metal oxide of 1/2 watt  
 1/2S | Coated of 1/2 watt  
 K = 5%    G = 2%    F = 1%

2. CAPACITOR: Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in pF and the values are then 1 in pF.  
 All capacitors are ceramic 50V, unless otherwise noted as the following marks:  
 \*E | Electrolytic capacitor  
 \*M | Mylar capacitor

3. The parts indicated with \* have special characteristics should be replaced with identical parts only.

4. This schematic diagram is the latest time of copying, so it must be changed in accordance with all informed modification notes.

DEF/POW  
61HX70series

1

2

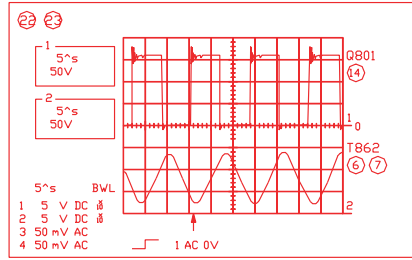
3

A

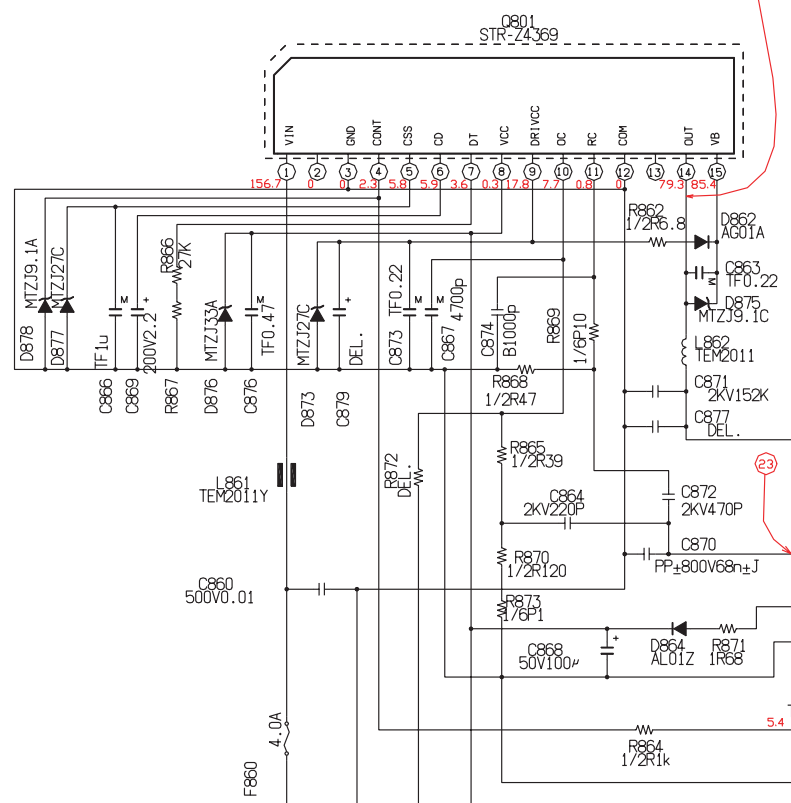
B

C

D



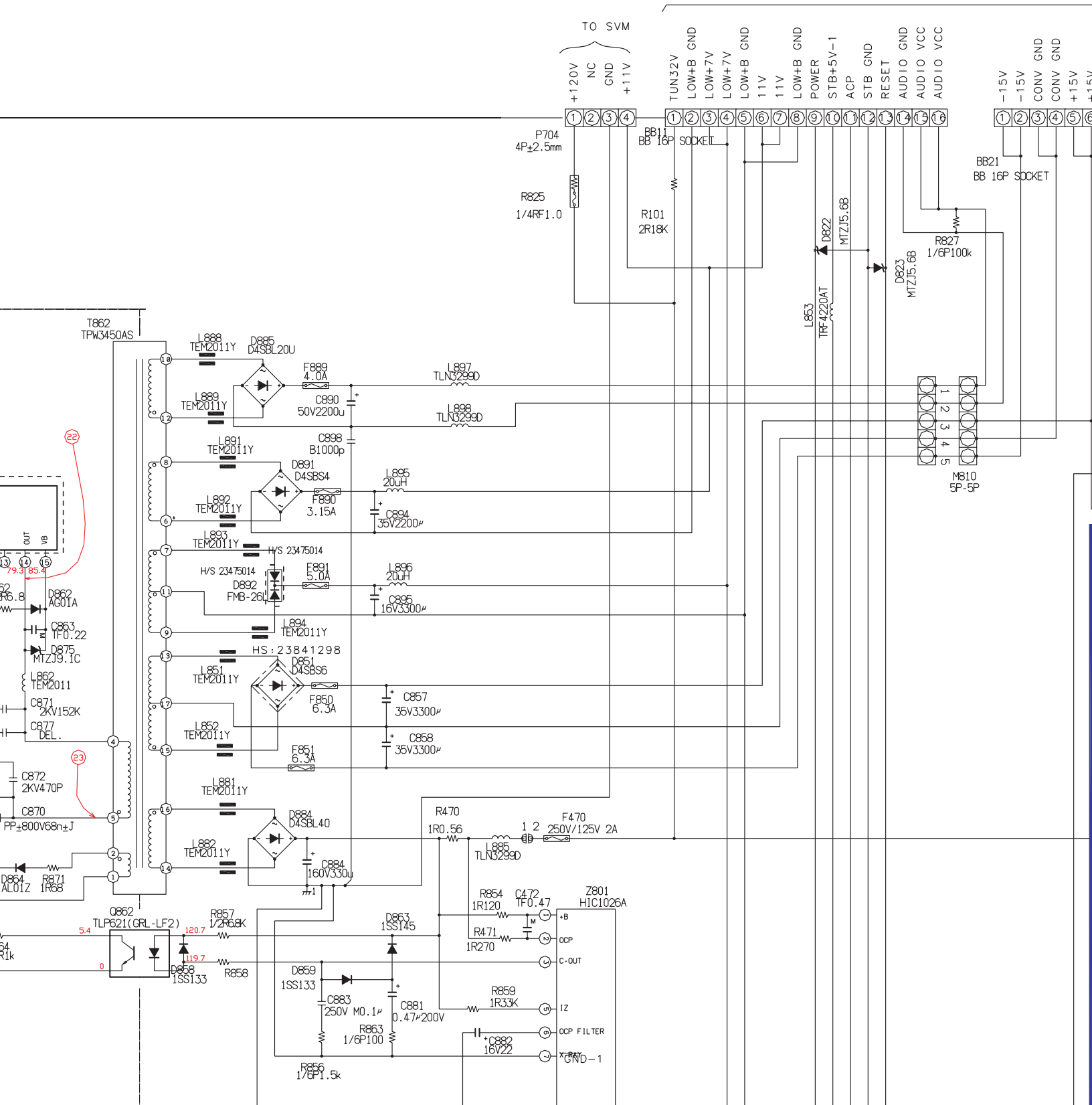
LIVE AREA



22

23

T86  
TFW

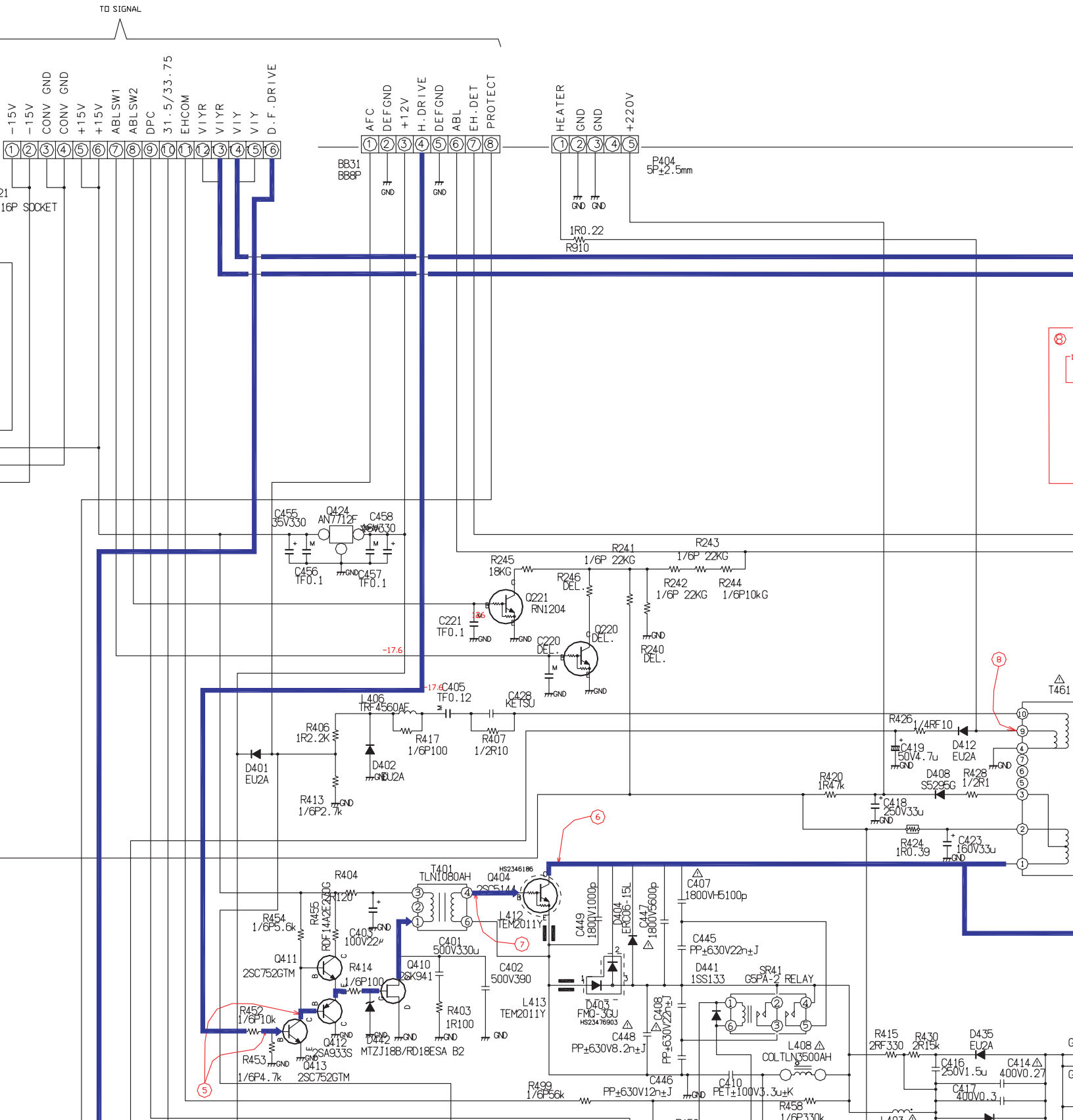


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10



10

11

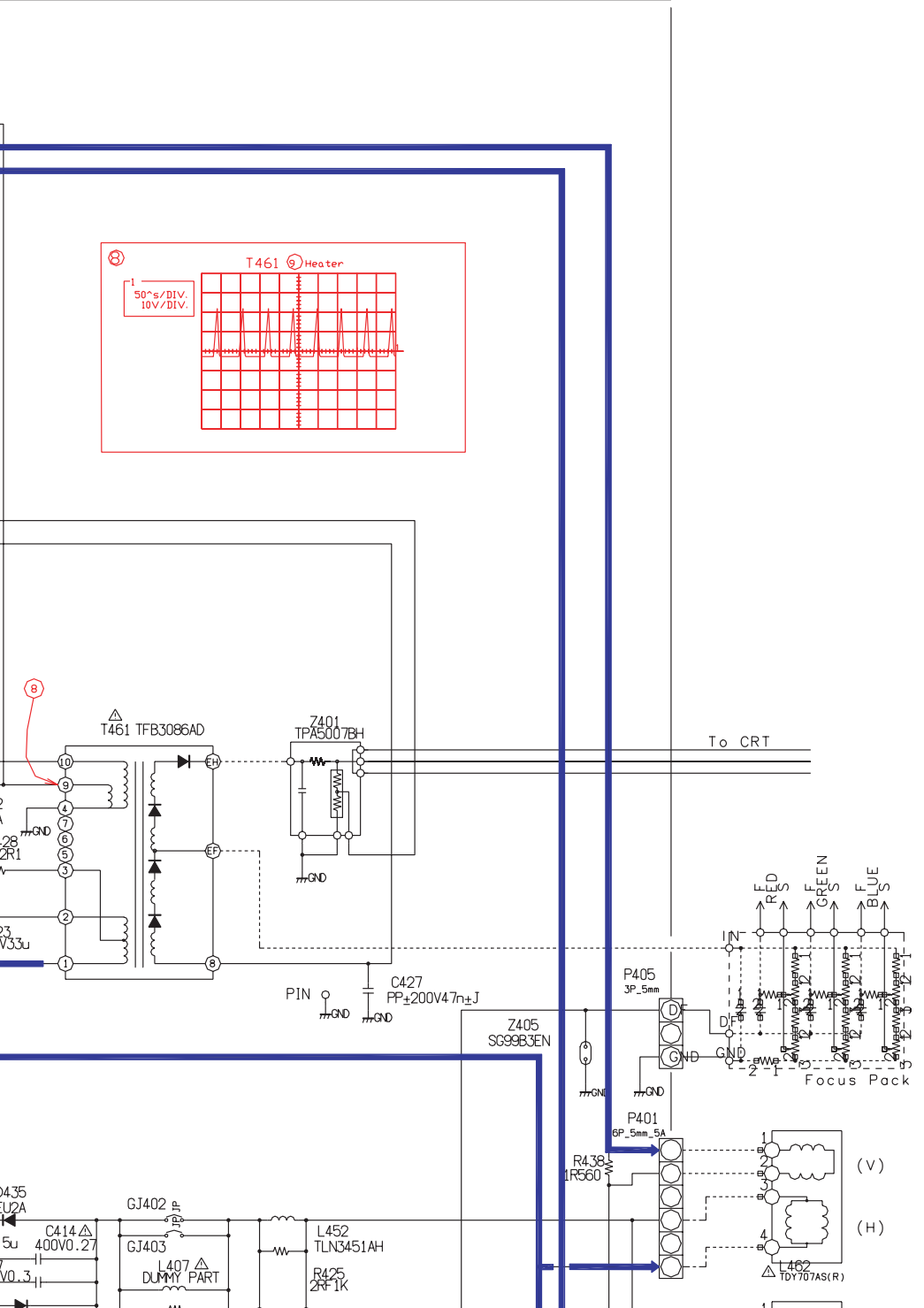
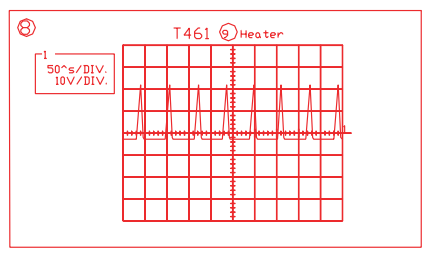
12

A

B

C

D



04.35

LU2A

5u

400V0.27

4.07.3

DUMMY PART

L407

L452

TLN3451AH

R425

2R1K

L462

TDY707AS(R)

(V)

(H)

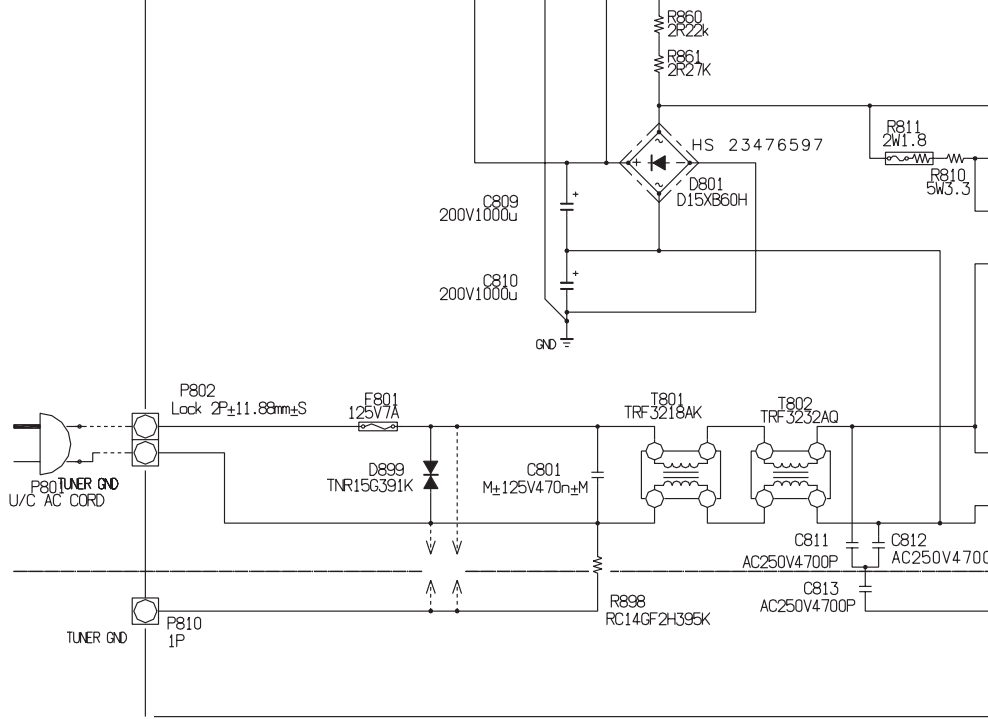
1

E

F

G

H



NOTE |

1. RESISTOR Resistance is shown in ohm (k = 1,000, M = 1,000,000) . All resistors are 1/8W and 5% tolerance carbon resistor, unless otherwise noted as the following marks.

1/2R | Metal or Metal oxide of 1/2 watt 1/2S | Solid of 1/2 watt

1RF | Fuse resistor of 1 watt 10W | Cement of 10 watts

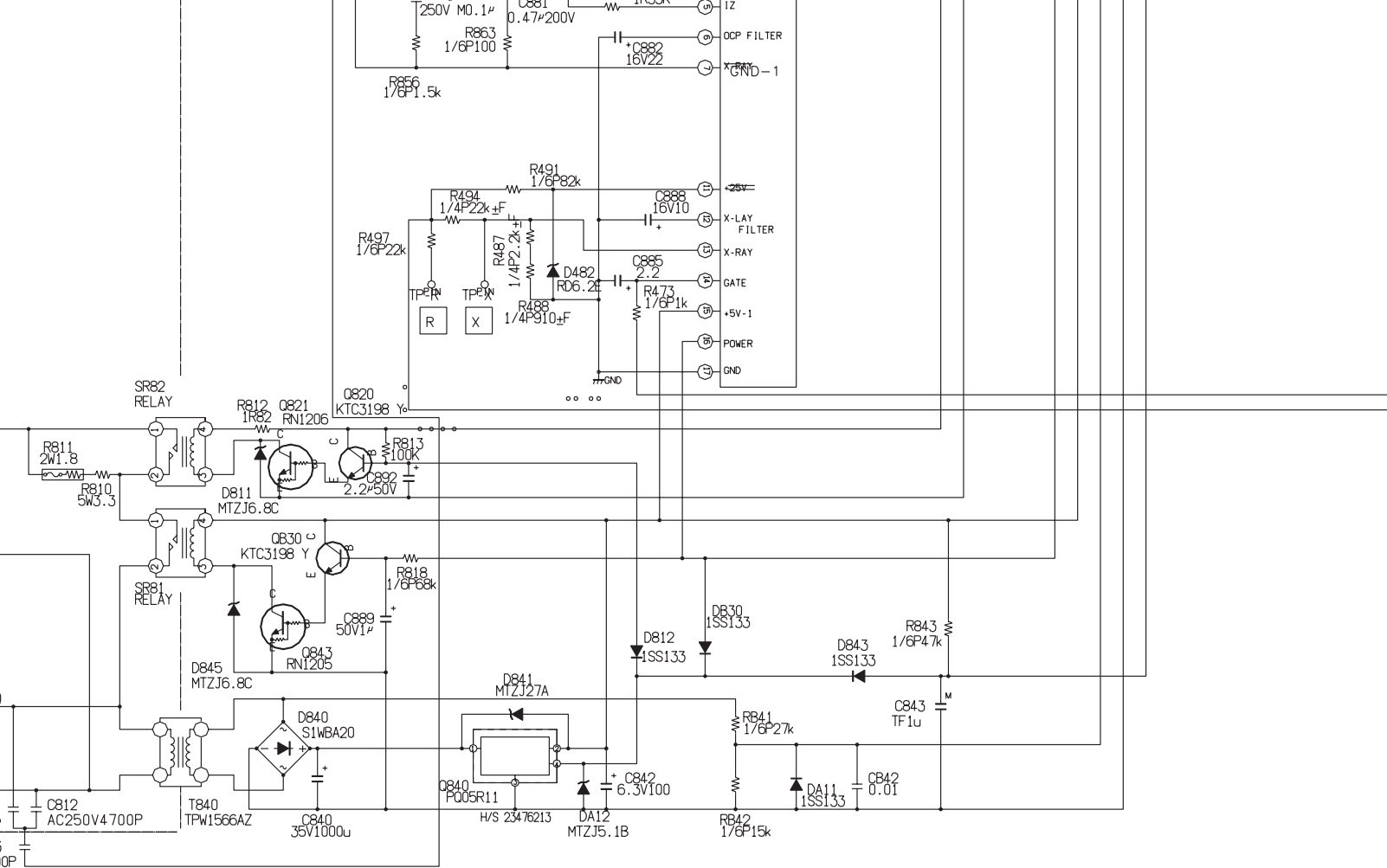
K = ±10% G = 2% F = 1%

1

2

3

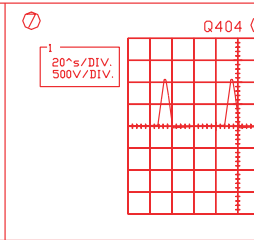
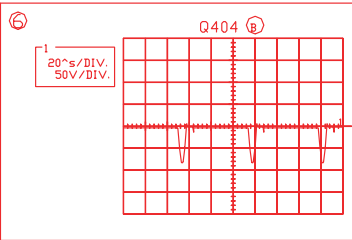
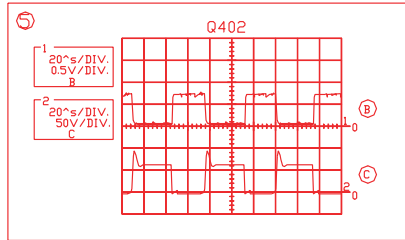
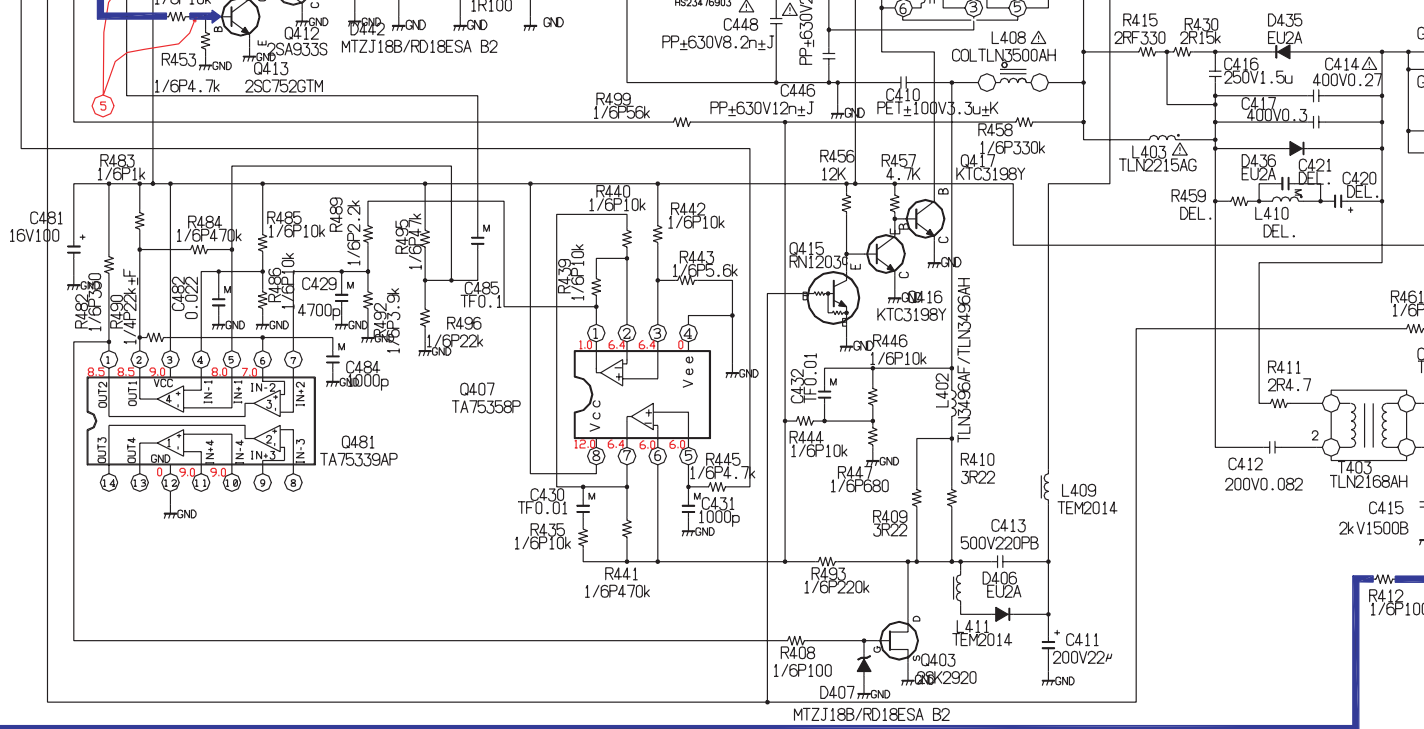


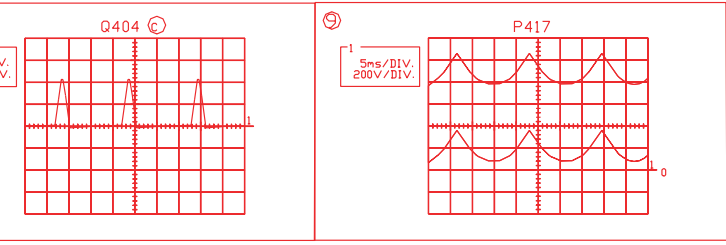
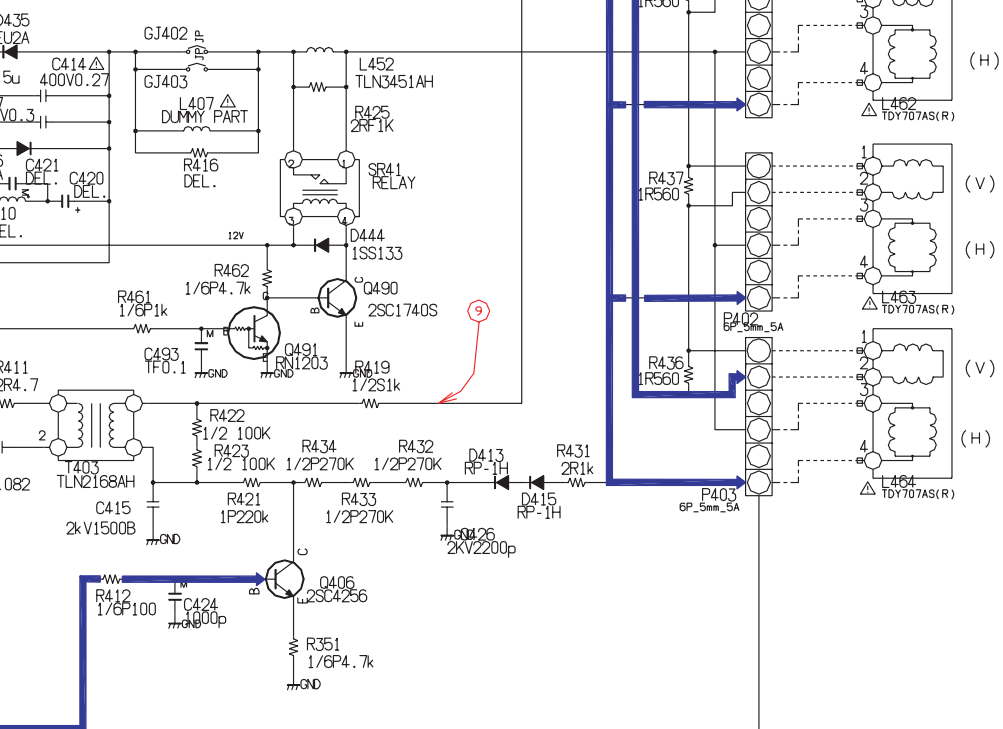


2. CAPACITOR Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in  $\mu\text{F}$ , and the values more than 1 in pF. All capacitors are ceramic 50V, unless otherwise noted as the following marks.

$\text{---}\text{||}\text{---}$  Electrolytic capacitor       $\text{---}\text{||}\text{---}$  Mylar capacitor

- The parts indicated with \* have special characteristics should be replaced with identical parts only.
- This schematic diagram is the latest of the time of copying, so it must be changed in accordance with all informed modification notices.

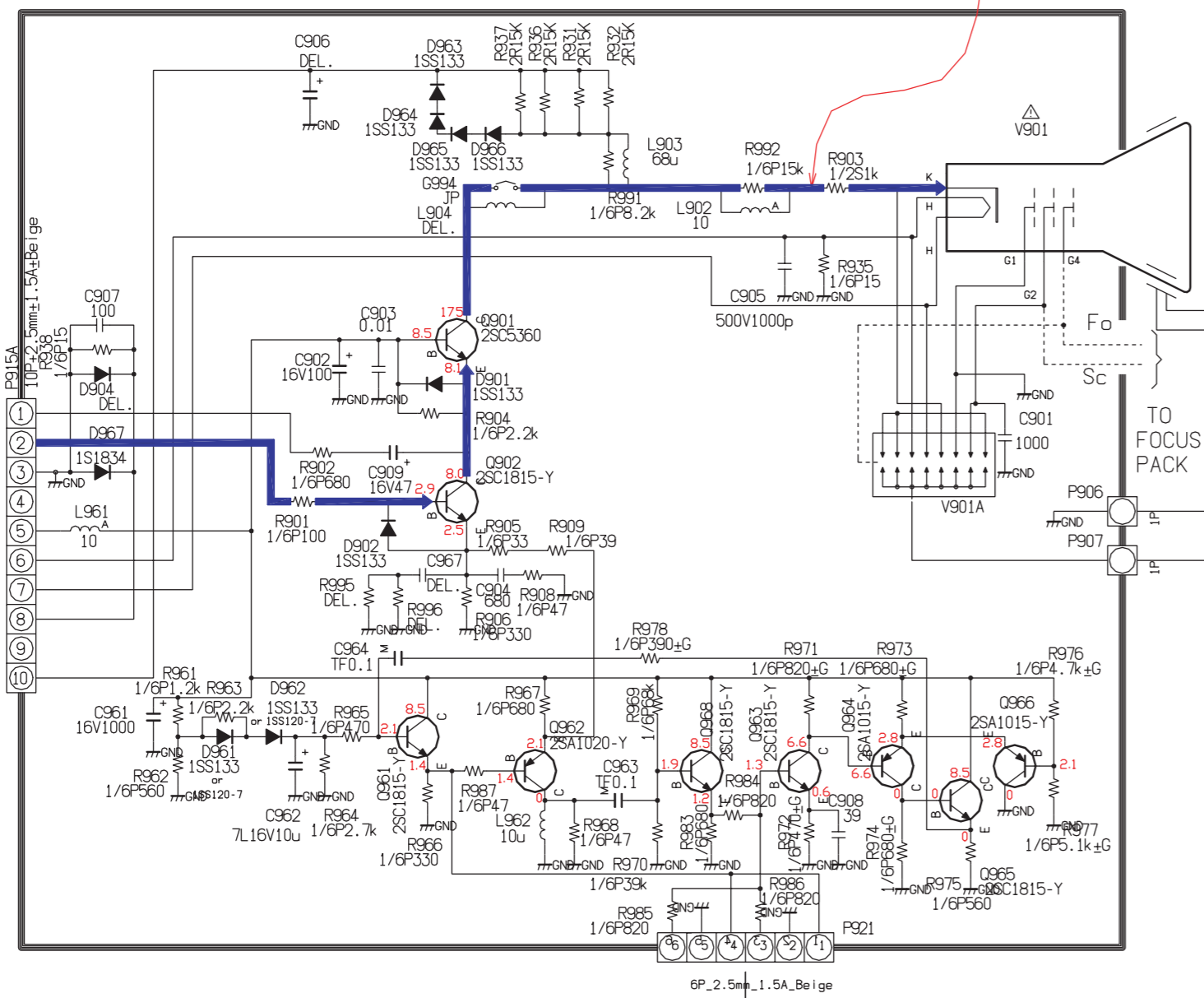




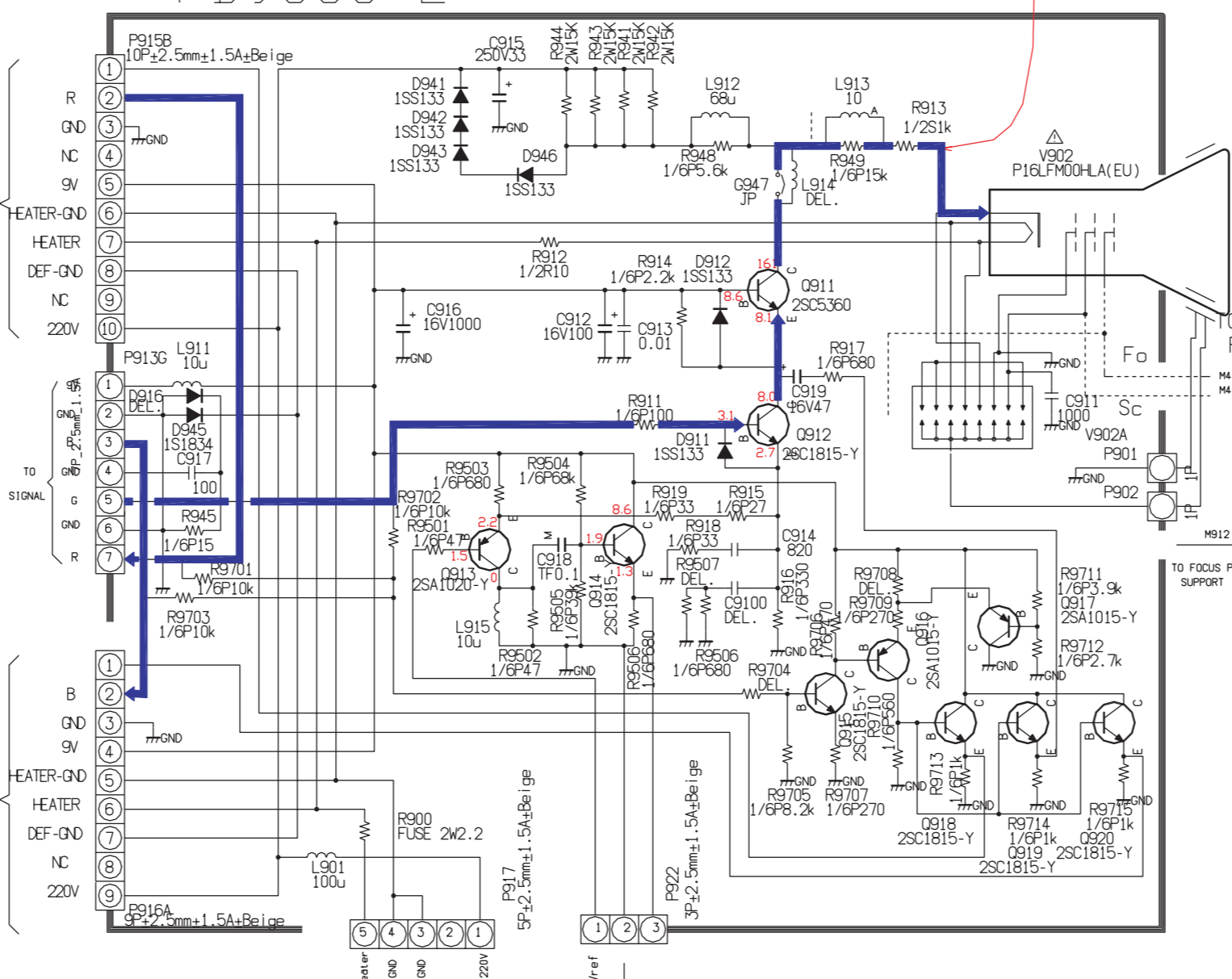
(H)  
(V)  
(H)  
(V)  
(H)  
(V)  
(H)  
  
F  
  
G  
  
H

DEF / POW  
61HX70series

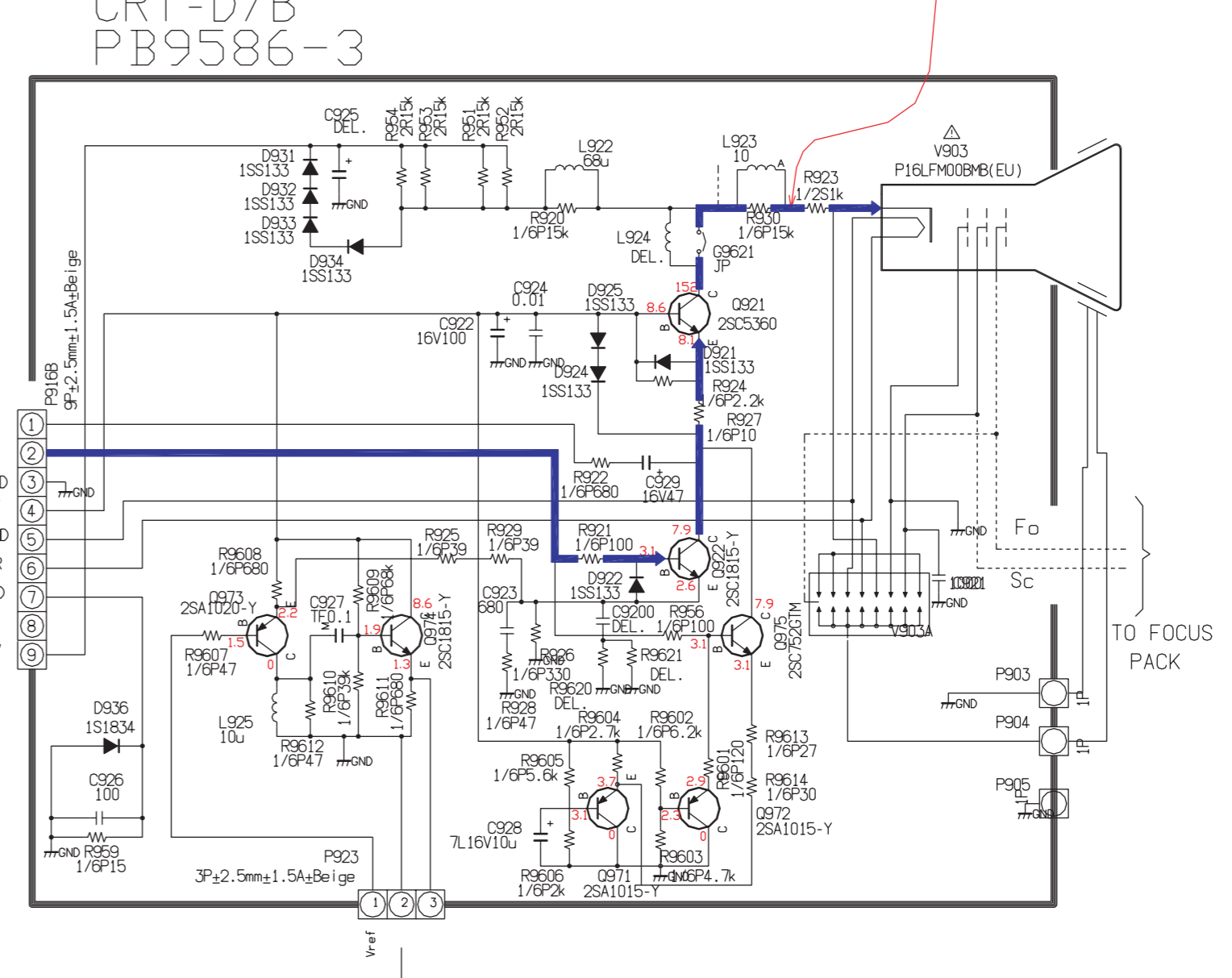
CRT-D/R  
PB9586-1



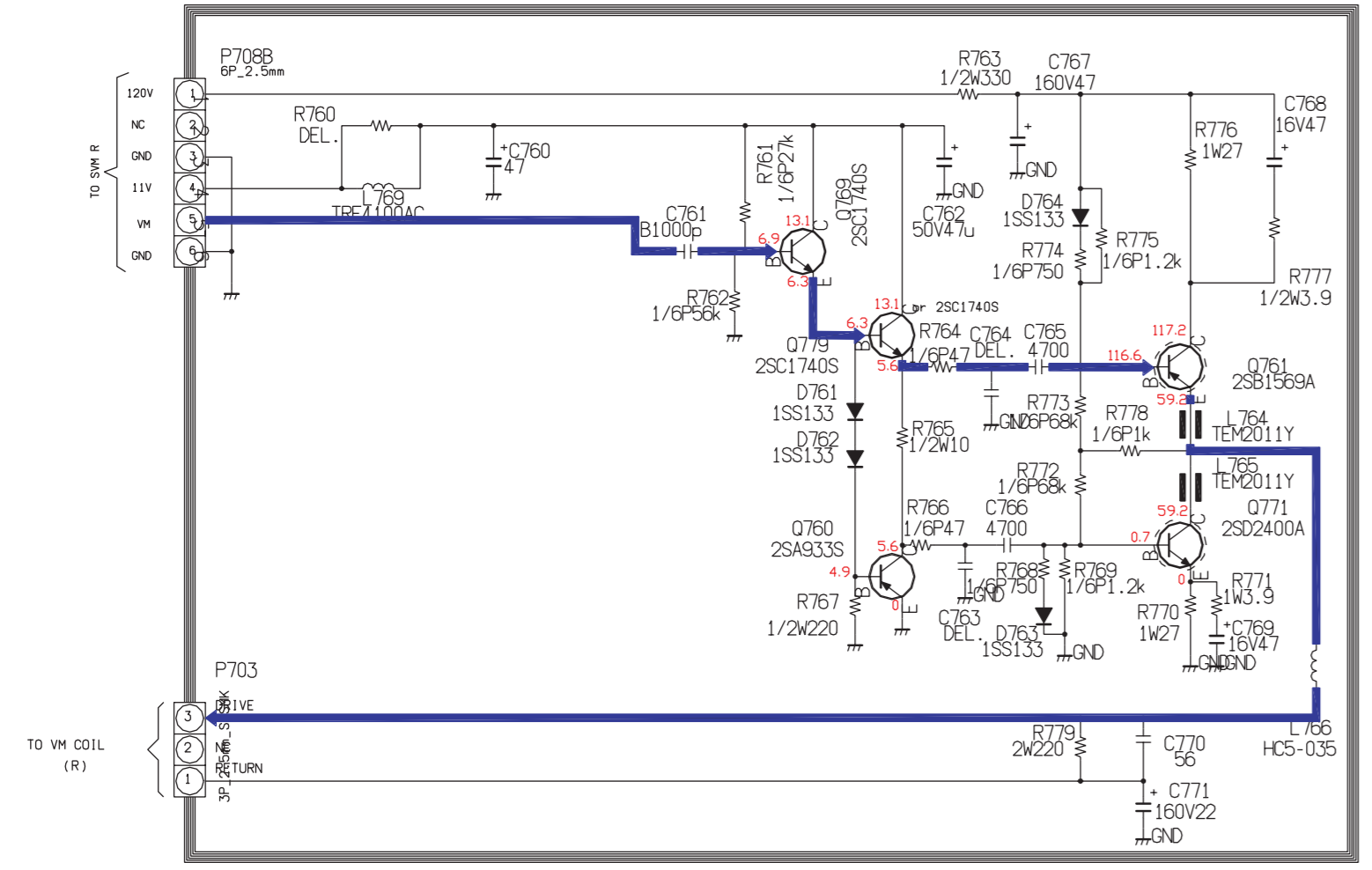
CRT-D/G  
PB9586-2



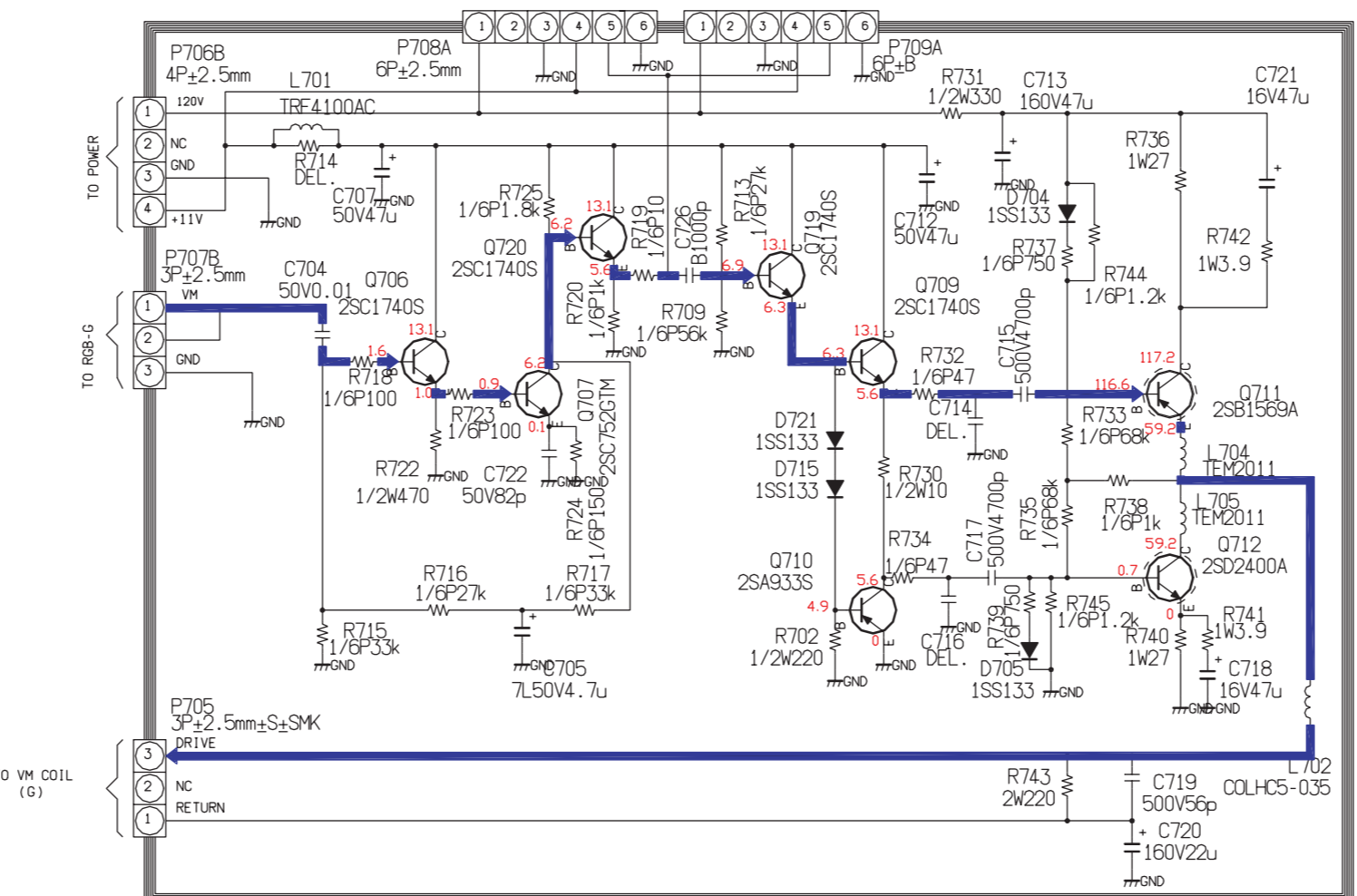
CRT-D/B  
PB9586-3



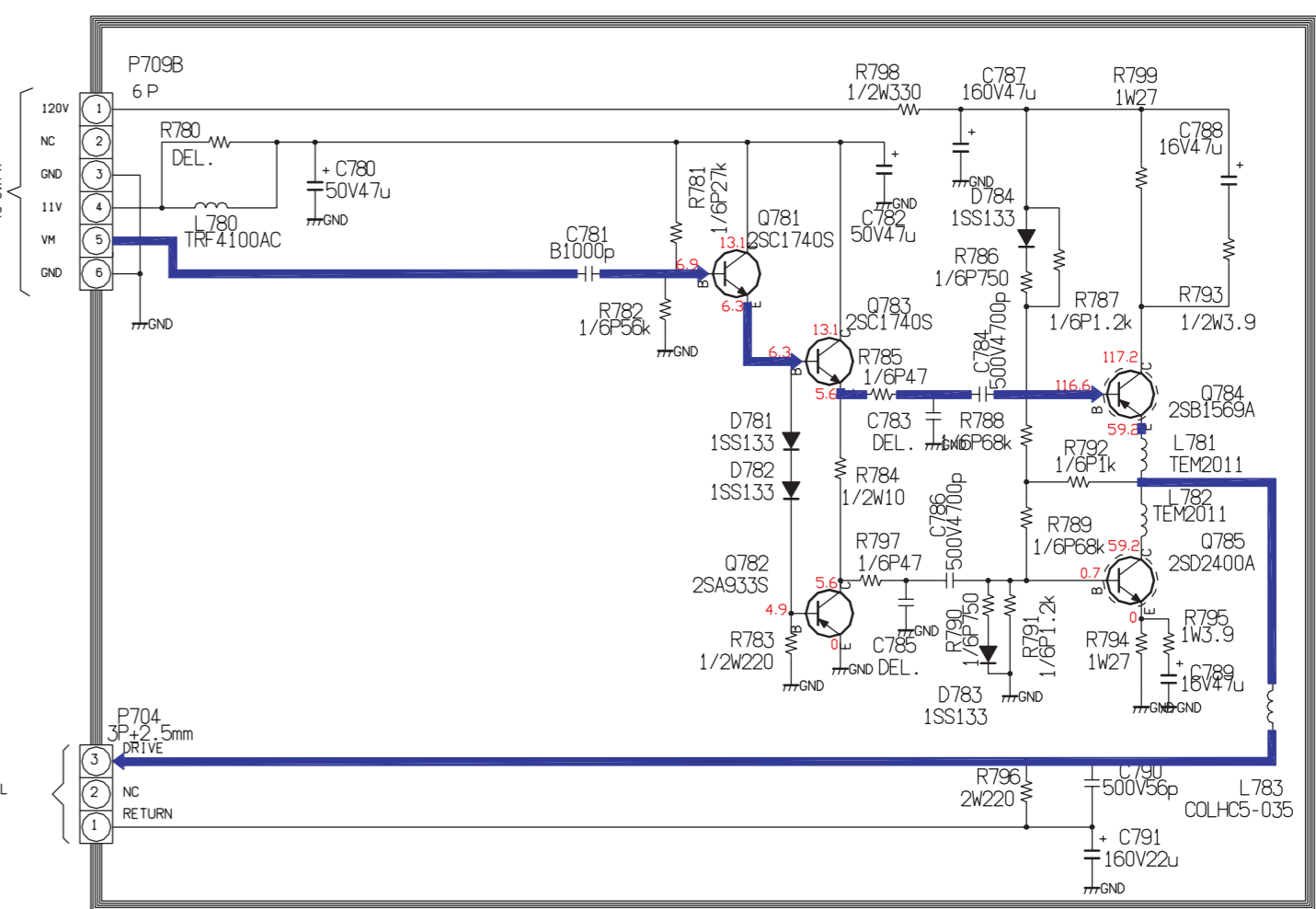
SVM/R  
PB9586-4



SVM/G  
PB9586-5



SVM/B  
PB9586-6



CRT/SVM  
61HX70 serie

1

2

3

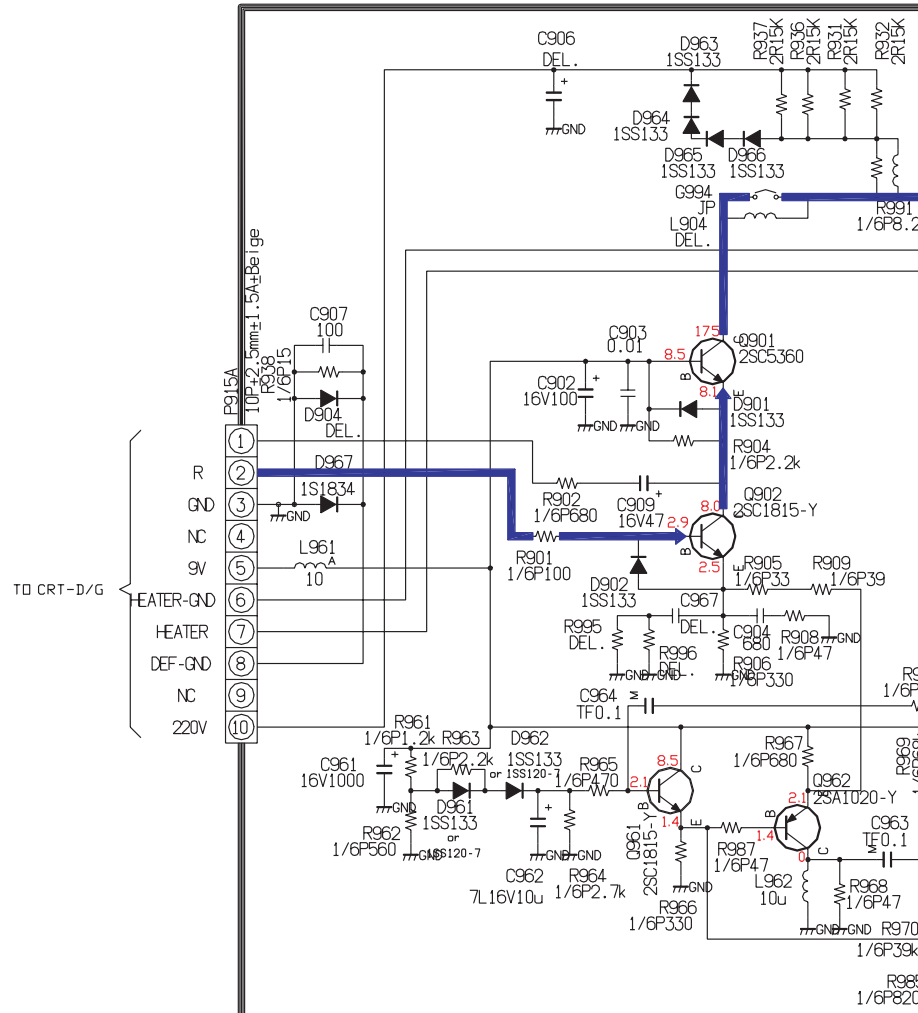
A

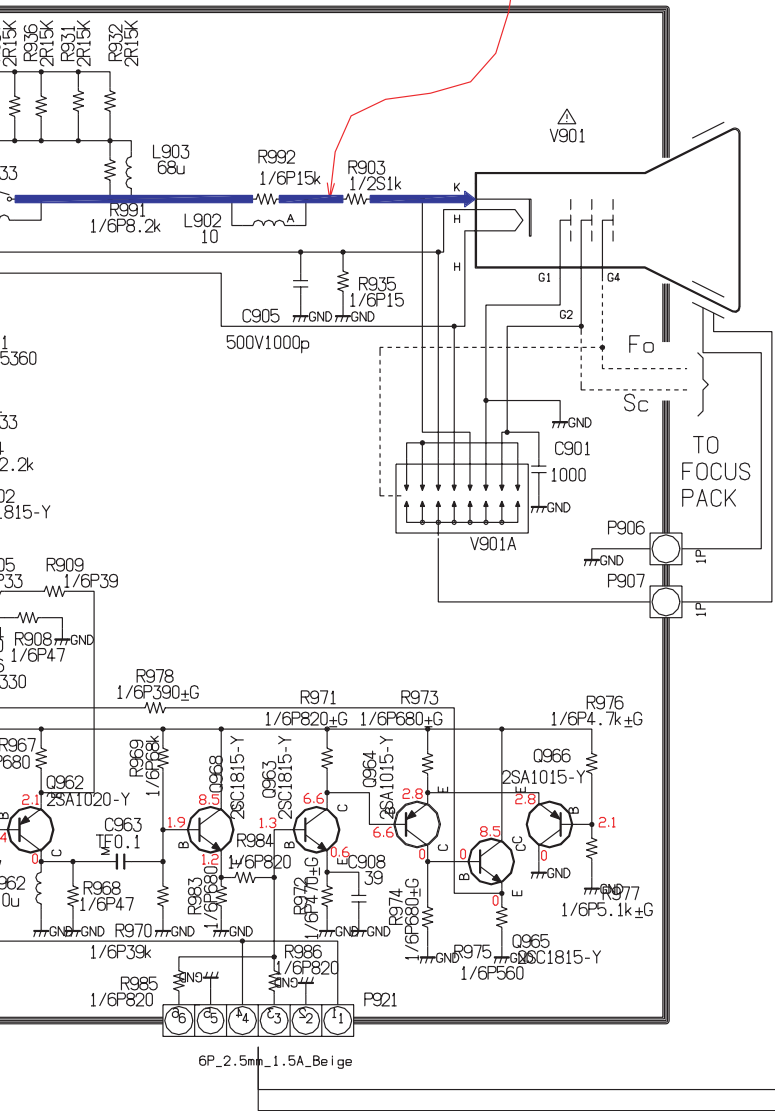
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C

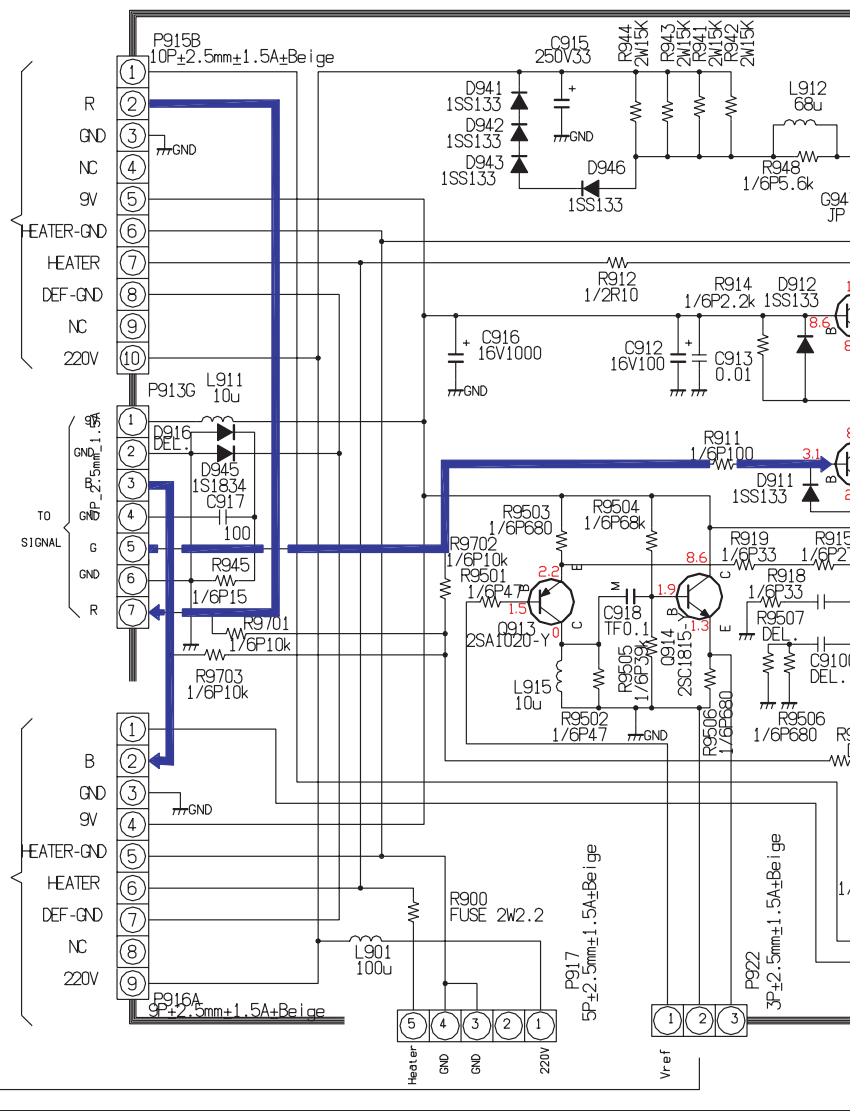
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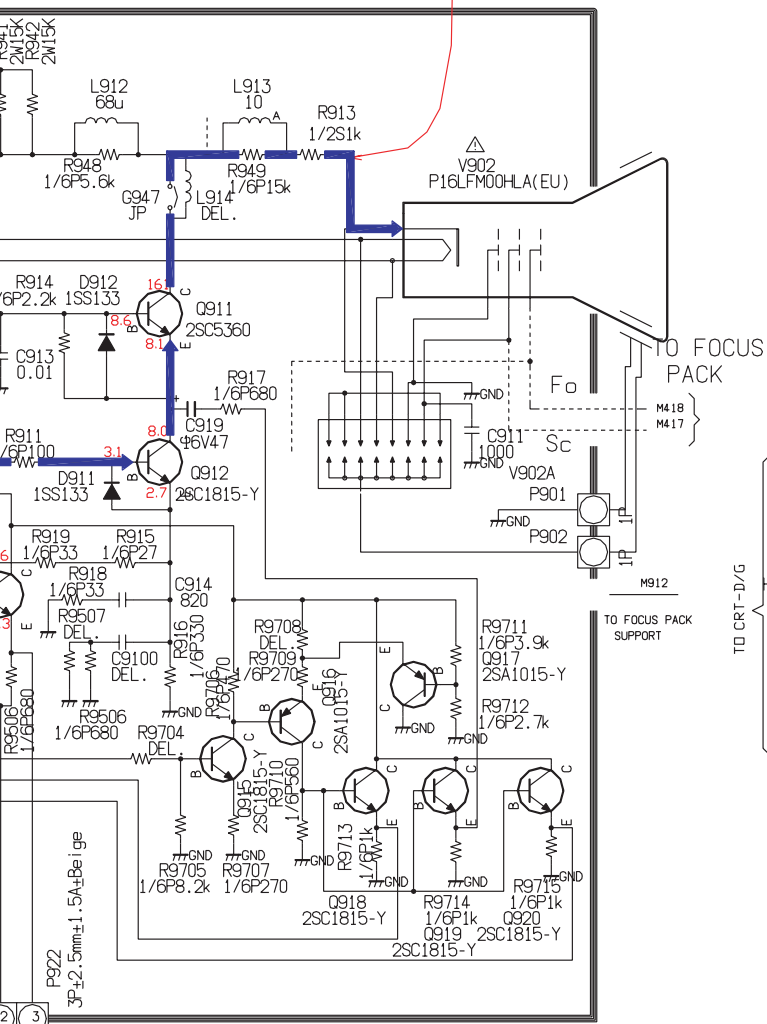
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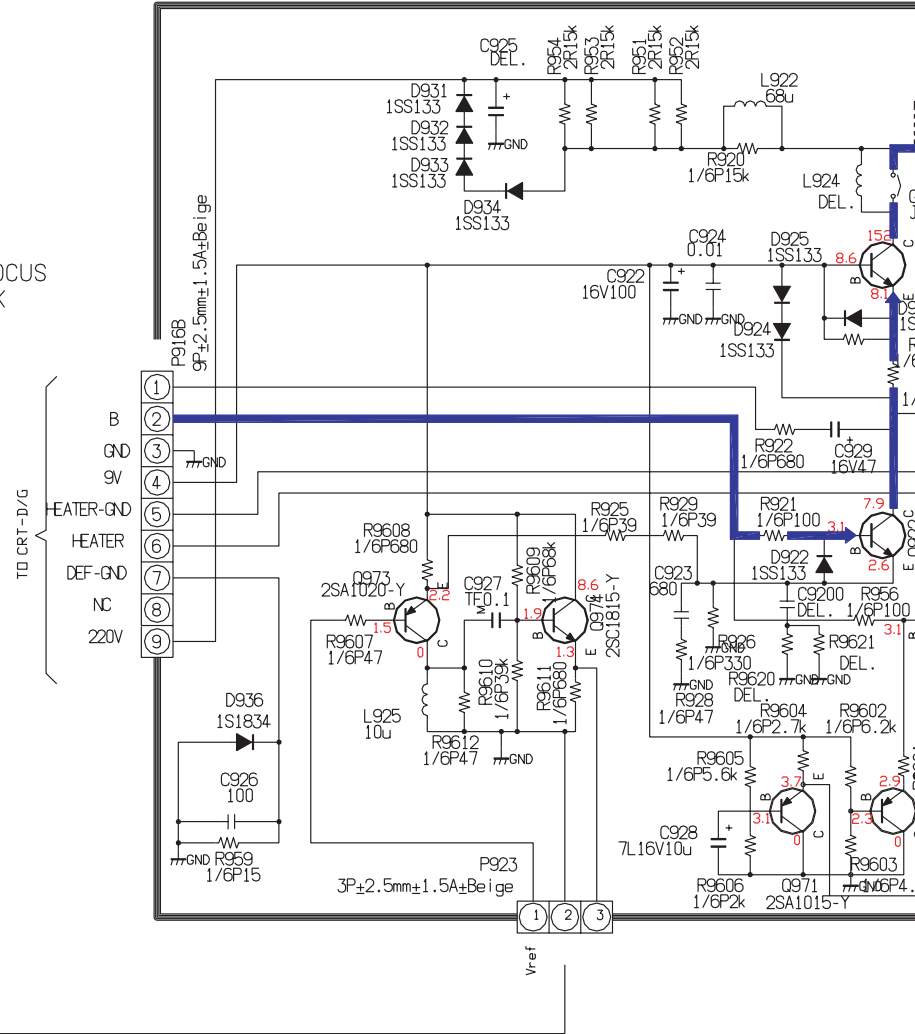


CRT-D/G  
PB9586-2





# CRT-D/B PB9586-3

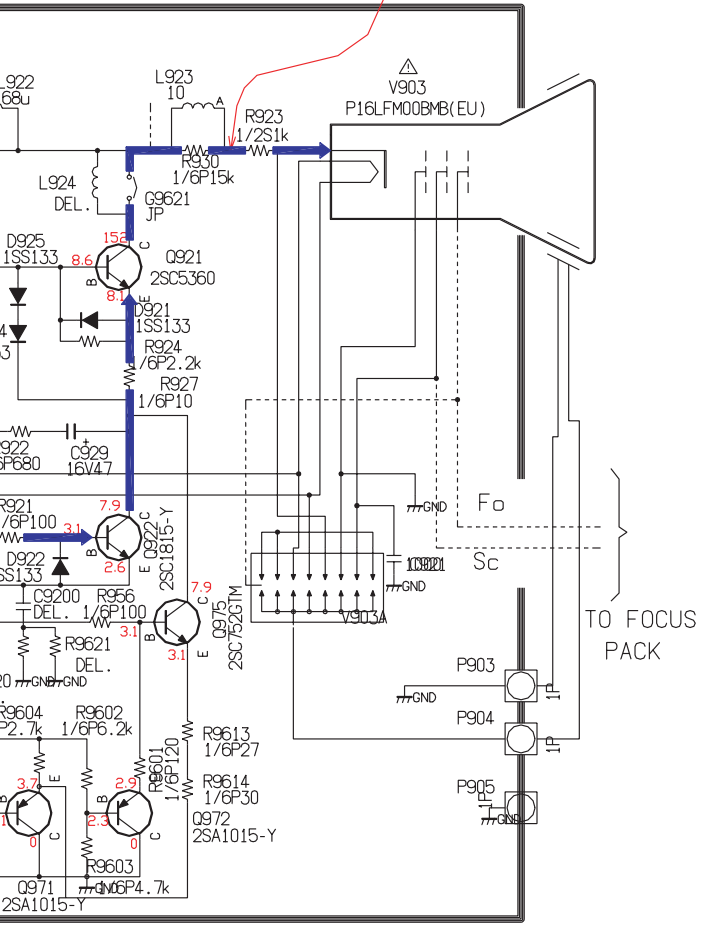
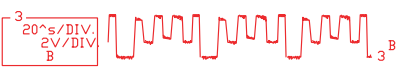


A

B

C

D



TO FOCUS PACK



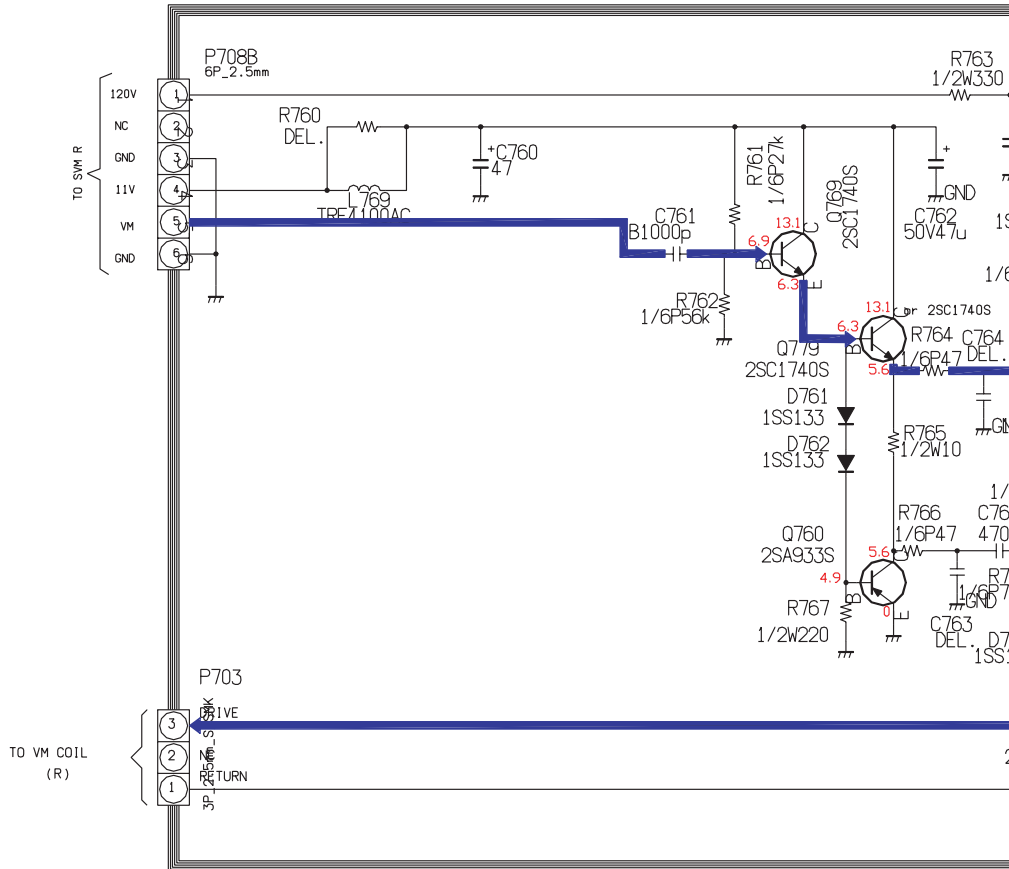
E

# SVM/R PB9586-4

F

G

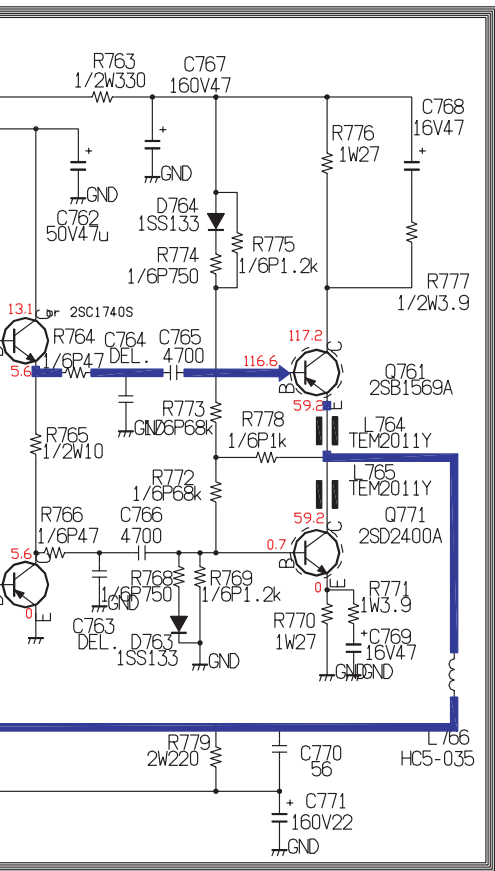
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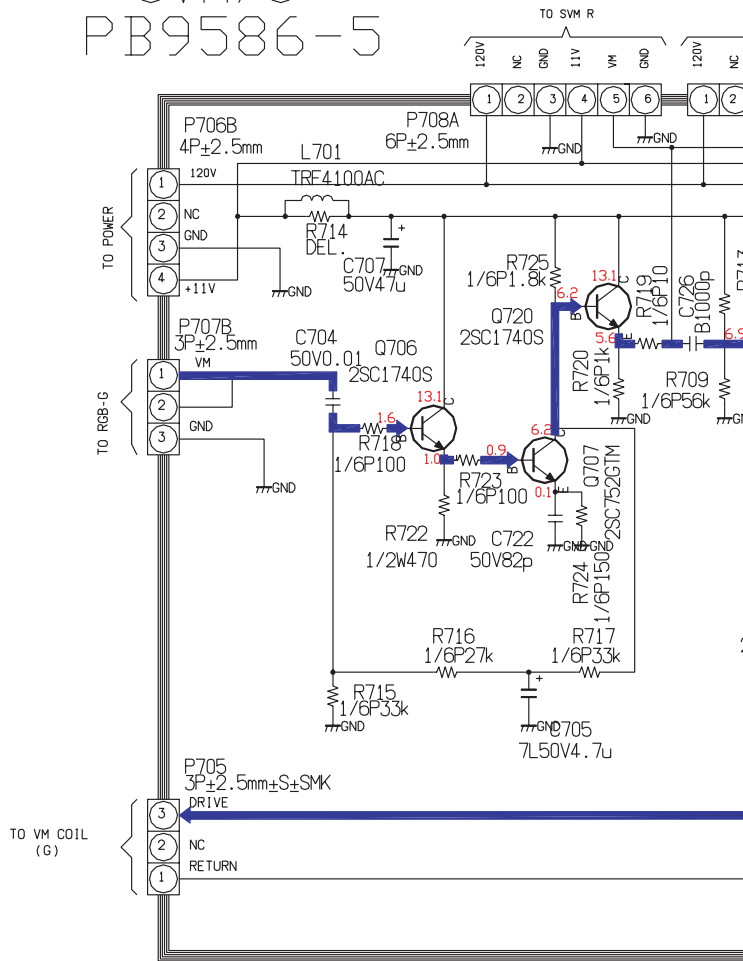
1

2

3



# SVM/G PB9586-5



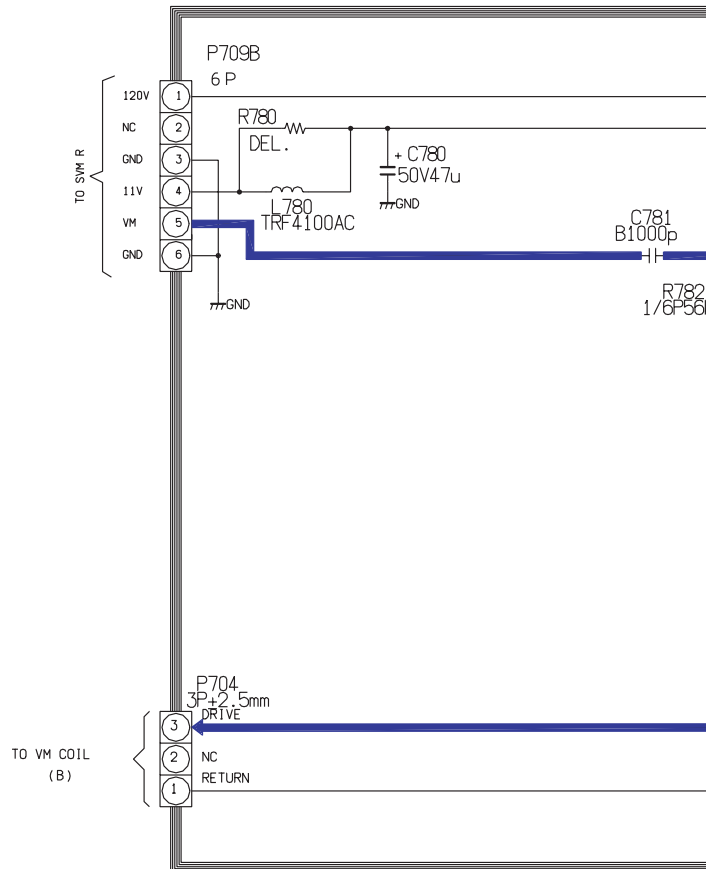
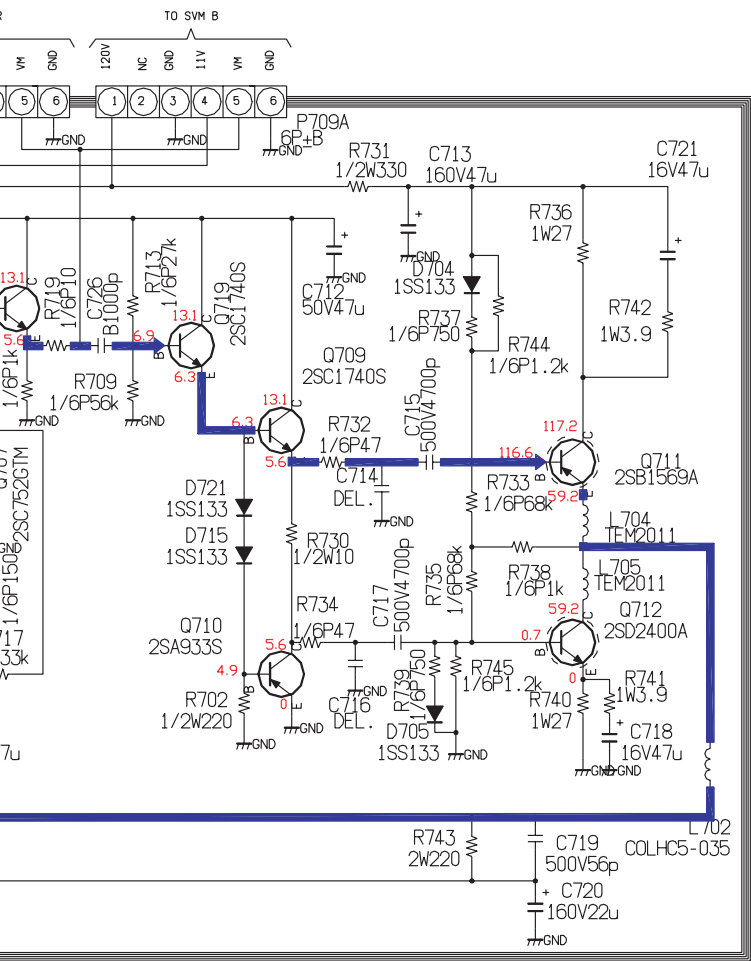
3

4

5

6

# SVM/B PB9586-6

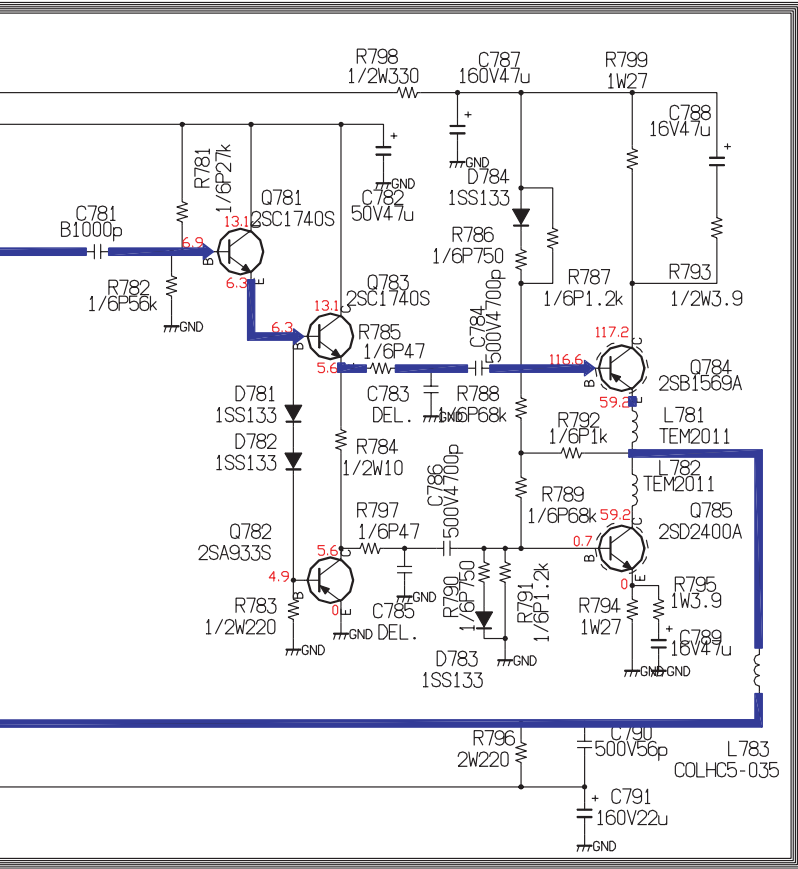


E

F

G

H



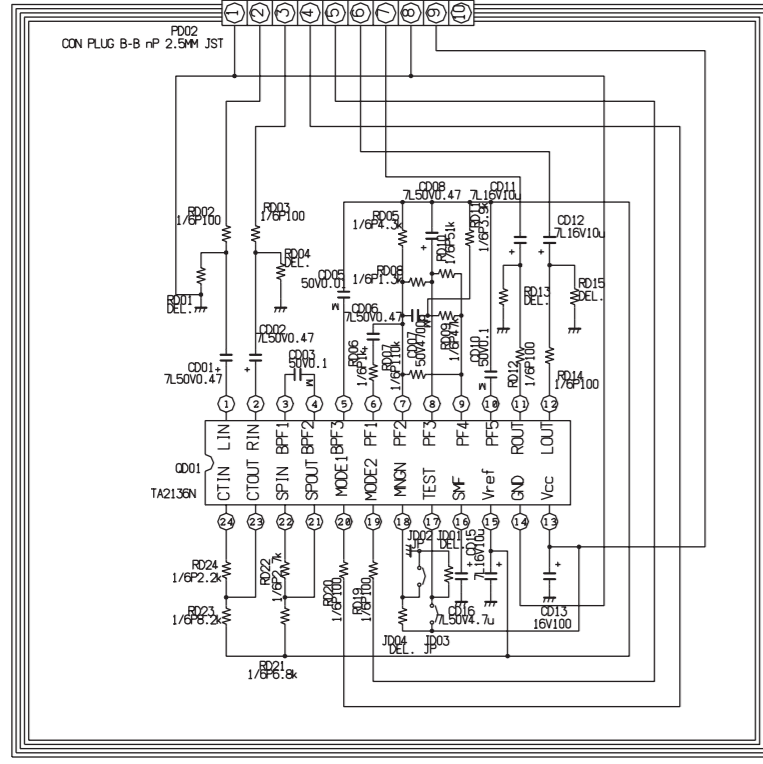
CRT/SVM  
61HX70 serie

10

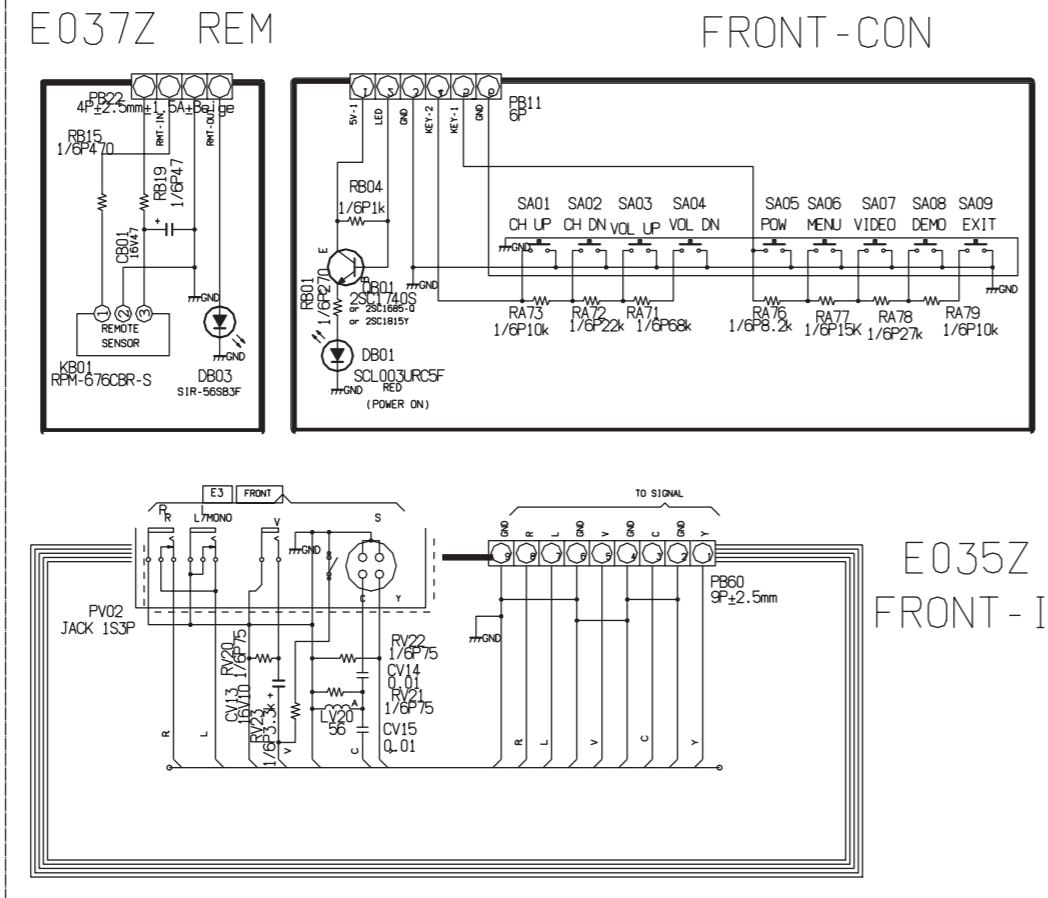
11

12

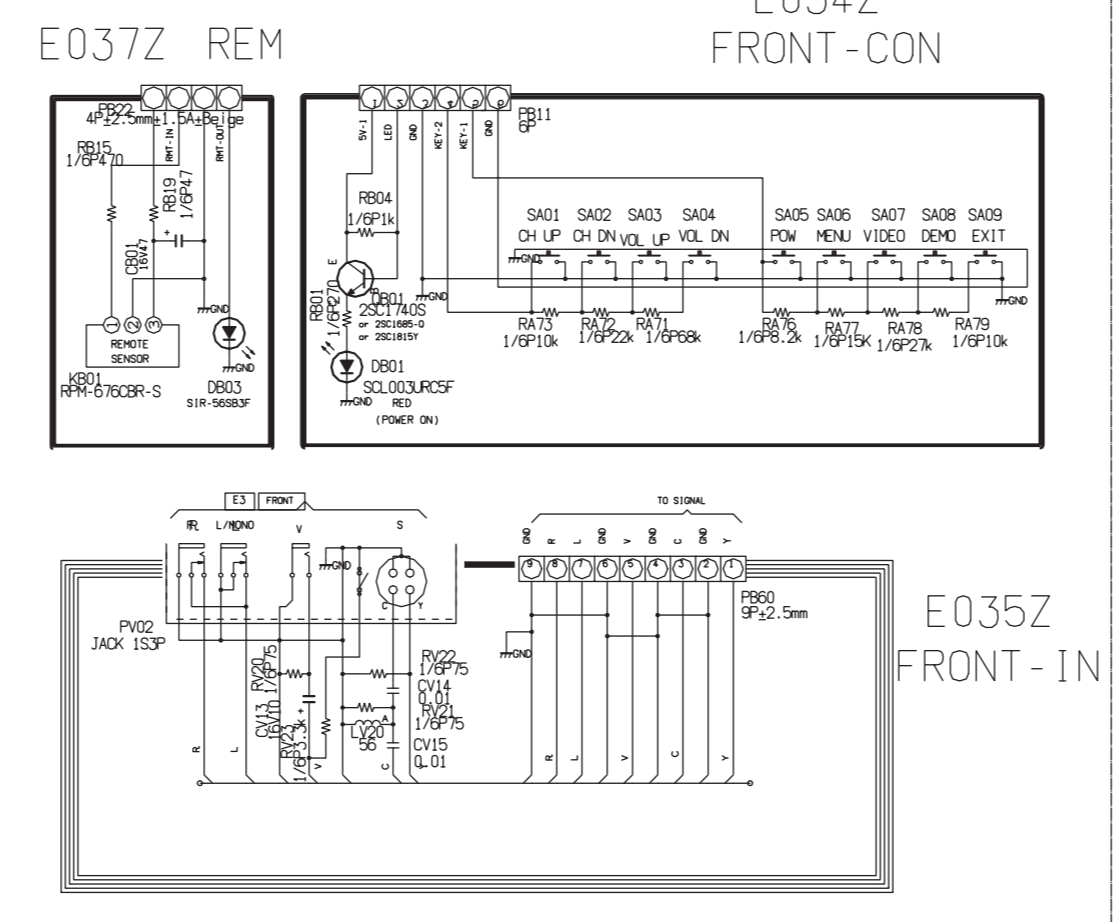
PB9587  
SRS



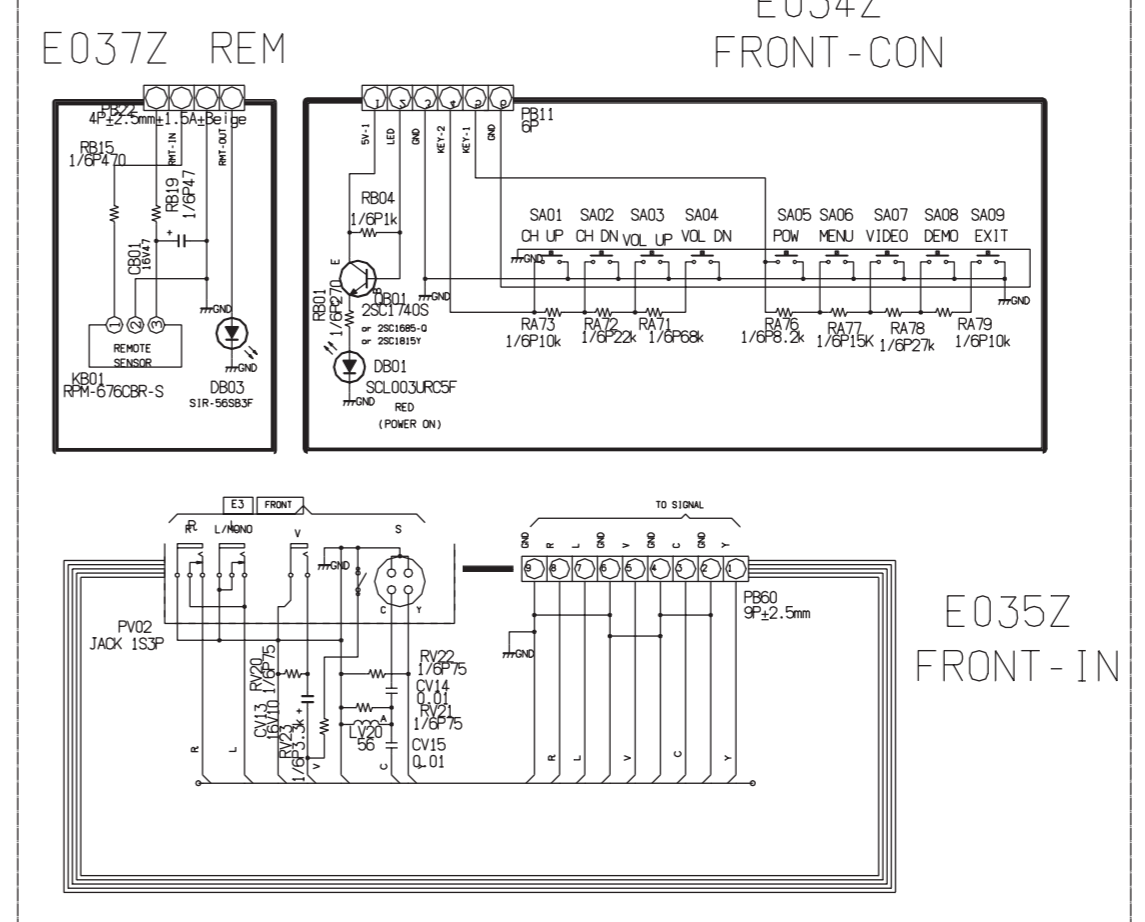
PB9615  
61/55/50HX70  
61/55H70



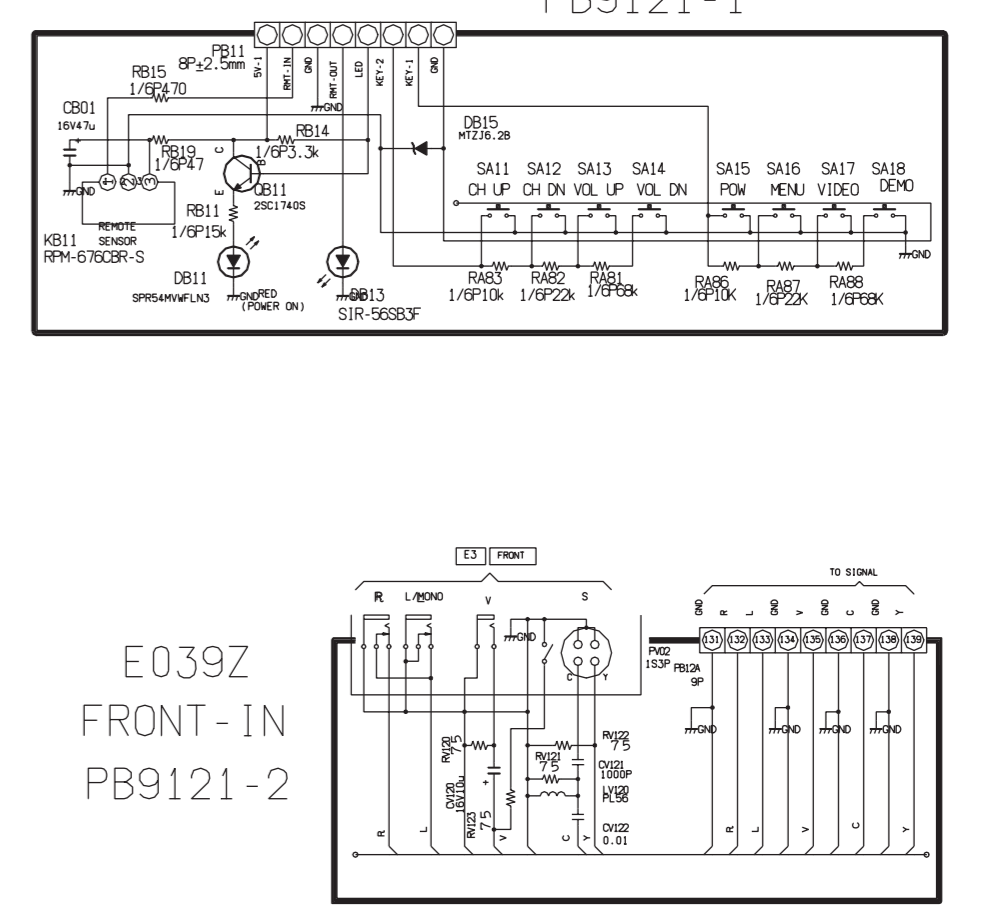
PB9651  
43HX70/43H70



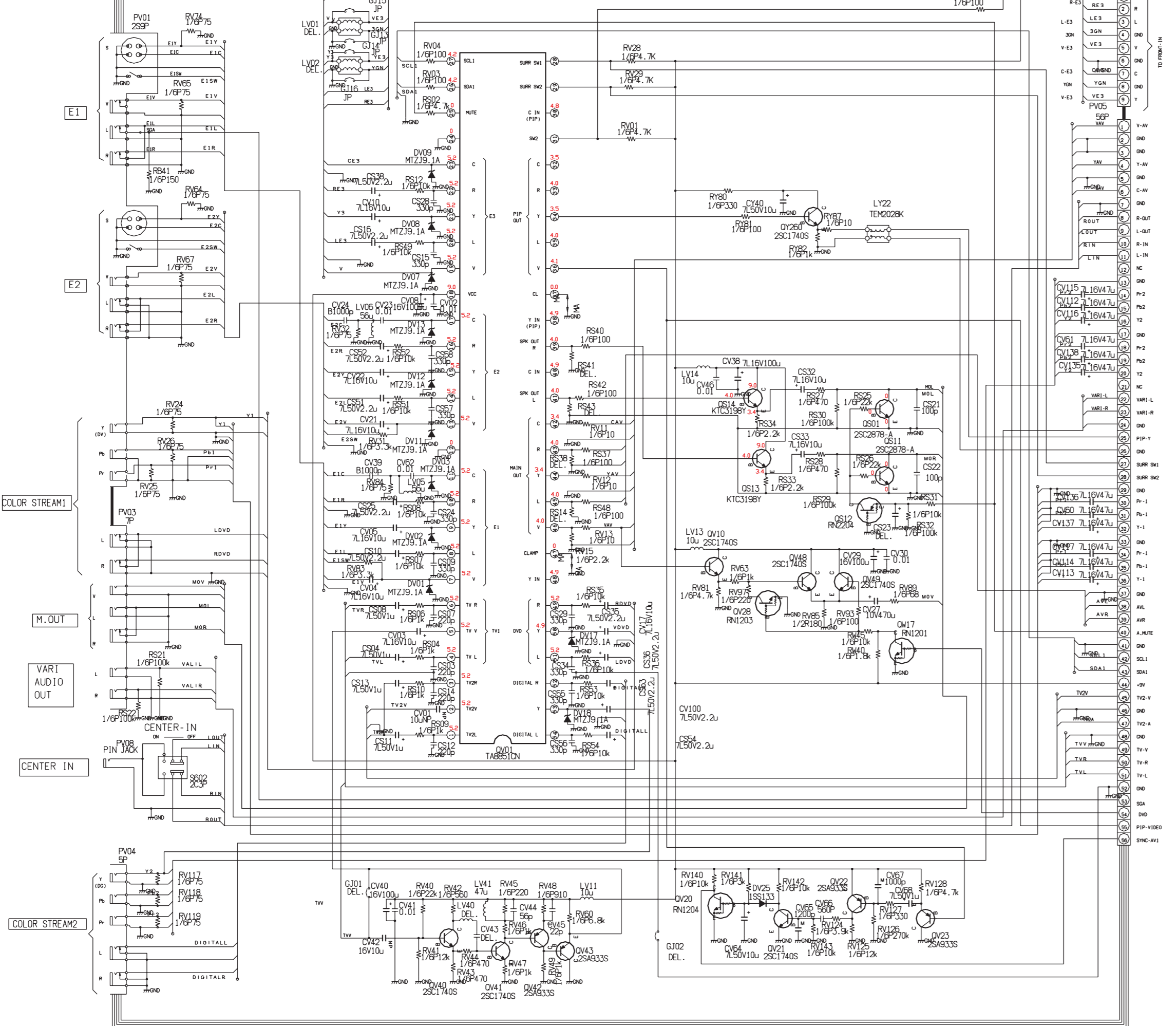
PB9652  
40H80



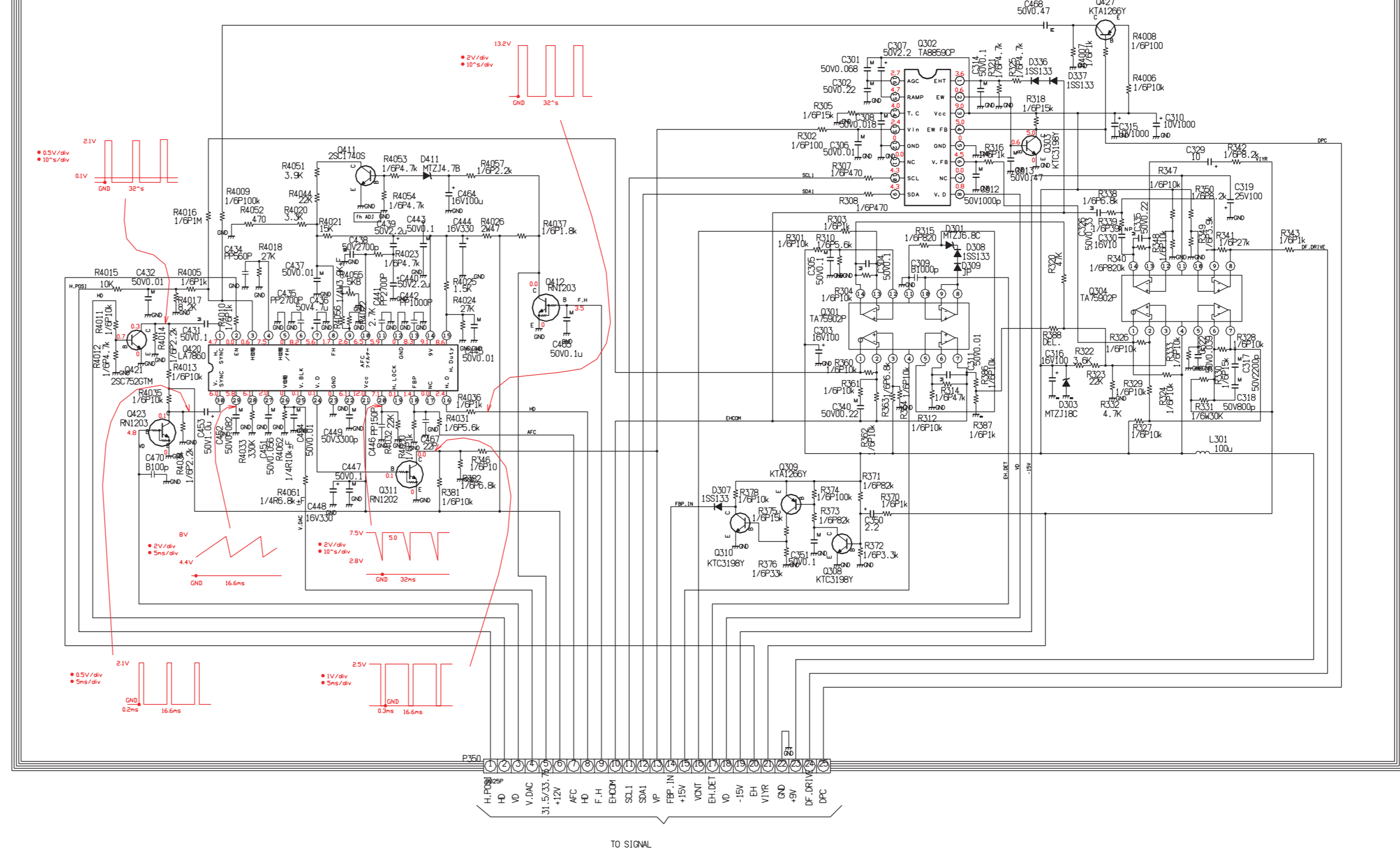
PB9121  
65H80/56H80



A/V  
PB9583



DPC  
PB9602



1

2

3

A

B

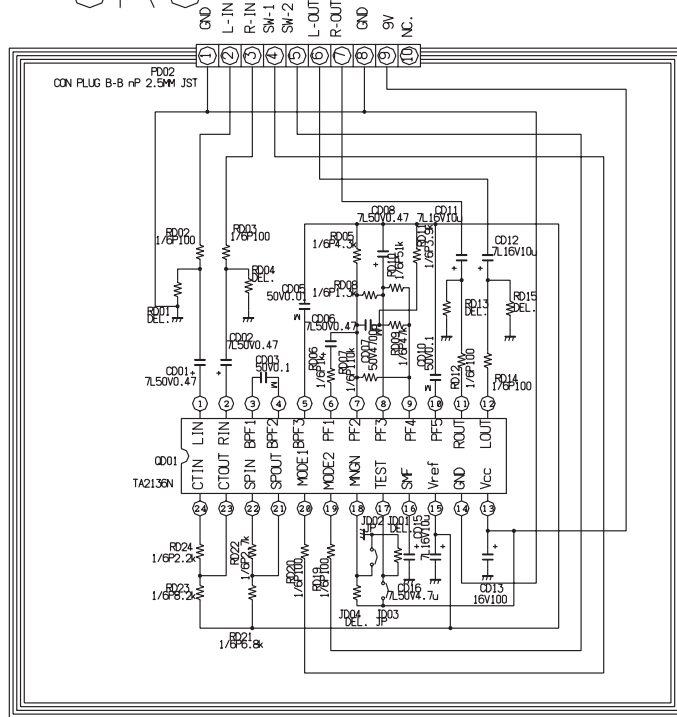
C

D

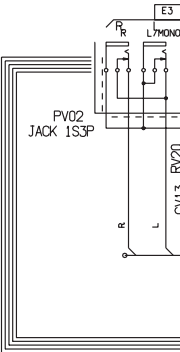
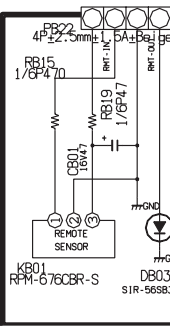
E

F

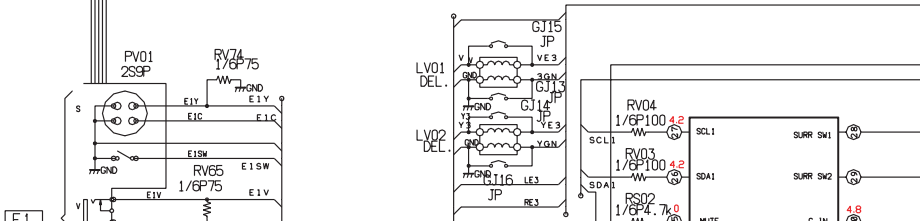
# PB9587 SRS



# PB 6 6 E037Z RE



# A/V PB9583



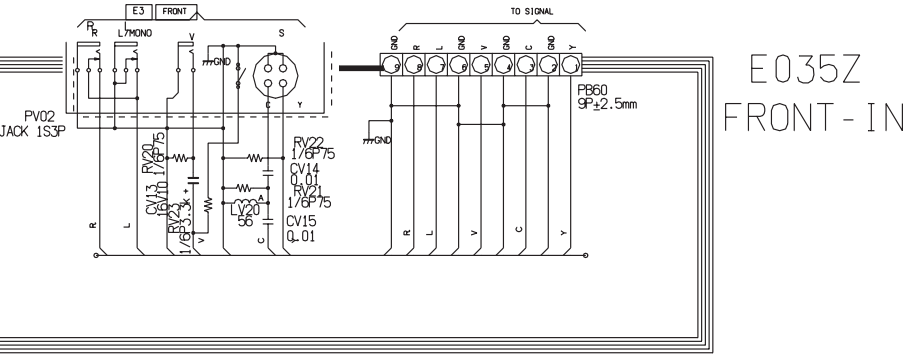
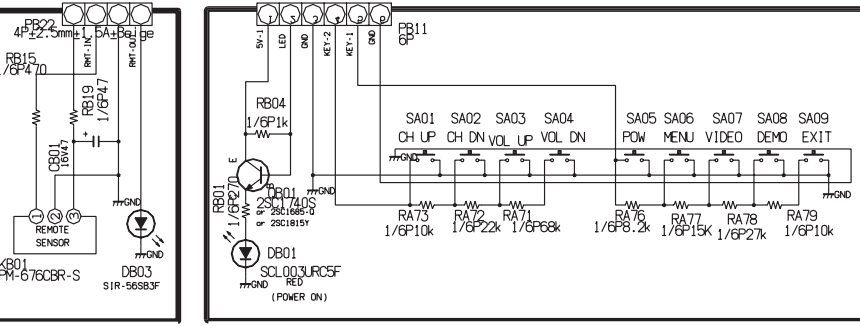
# PB9615

61/55/50HX70

61/55H70

E034Z  
FRONT-CON

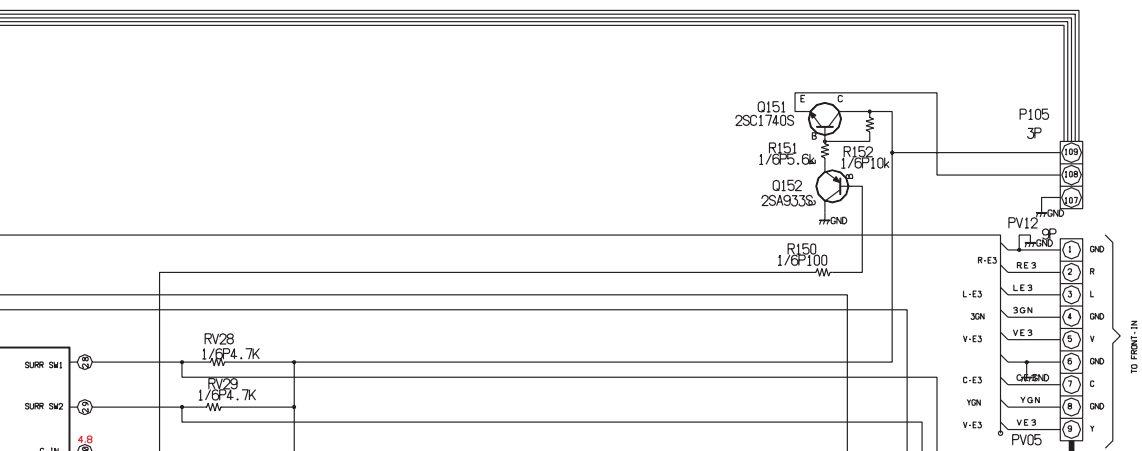
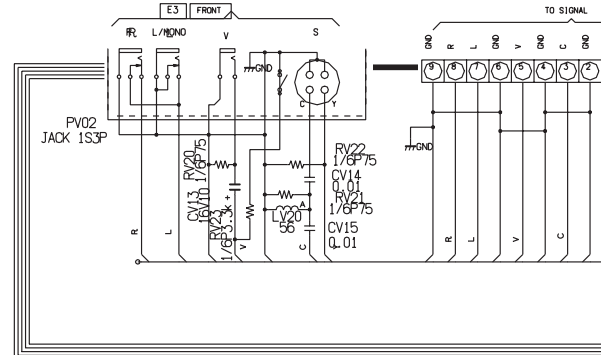
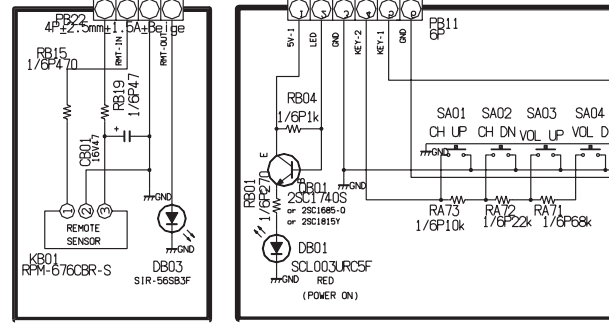
E037Z REM



# PB9651

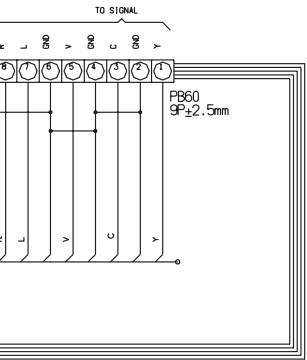
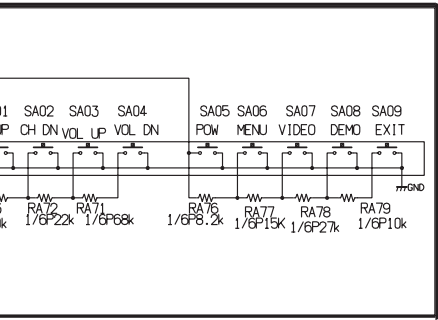
43HX70/43H70

E037Z REM



# DPC PB9602

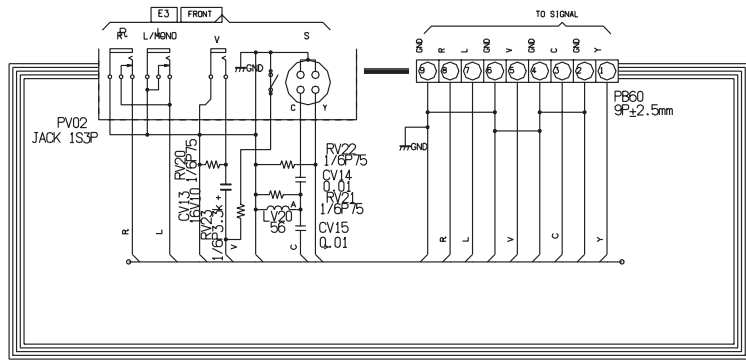
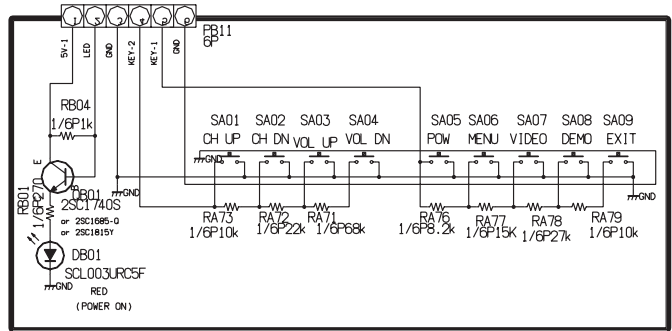
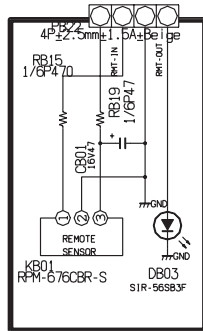
### E034Z FRONT-CON



### E035Z FRONT-IN

# PB9652 40H80

### E037Z REM

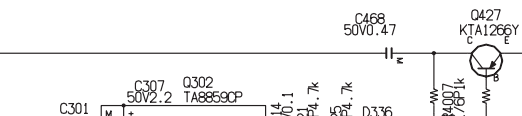


### E035Z FRONT-IN

602

13.2V

• 2V/div  
• 10°s/div





3

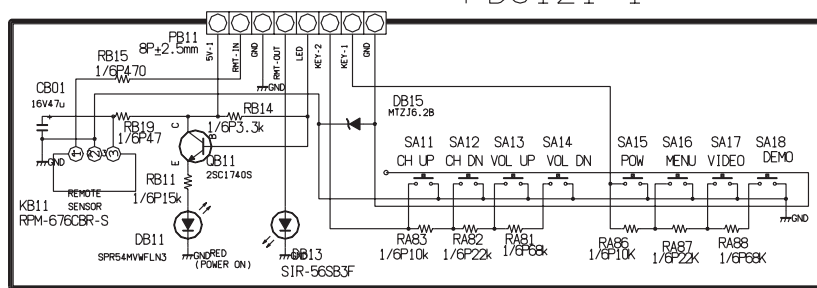
14

15

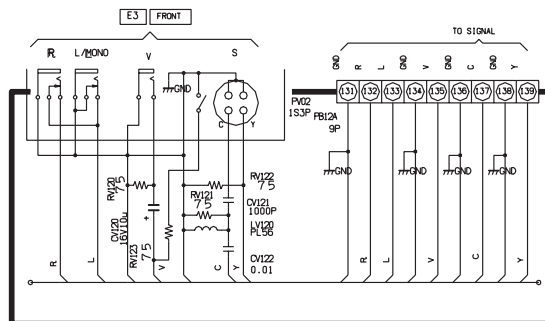
16

PB9121  
65H80/56H80

FRONT-CON  
PB9121-1



E039Z  
FRONT-IN  
PB9121-2



A

B

C

D

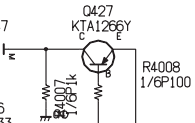
E

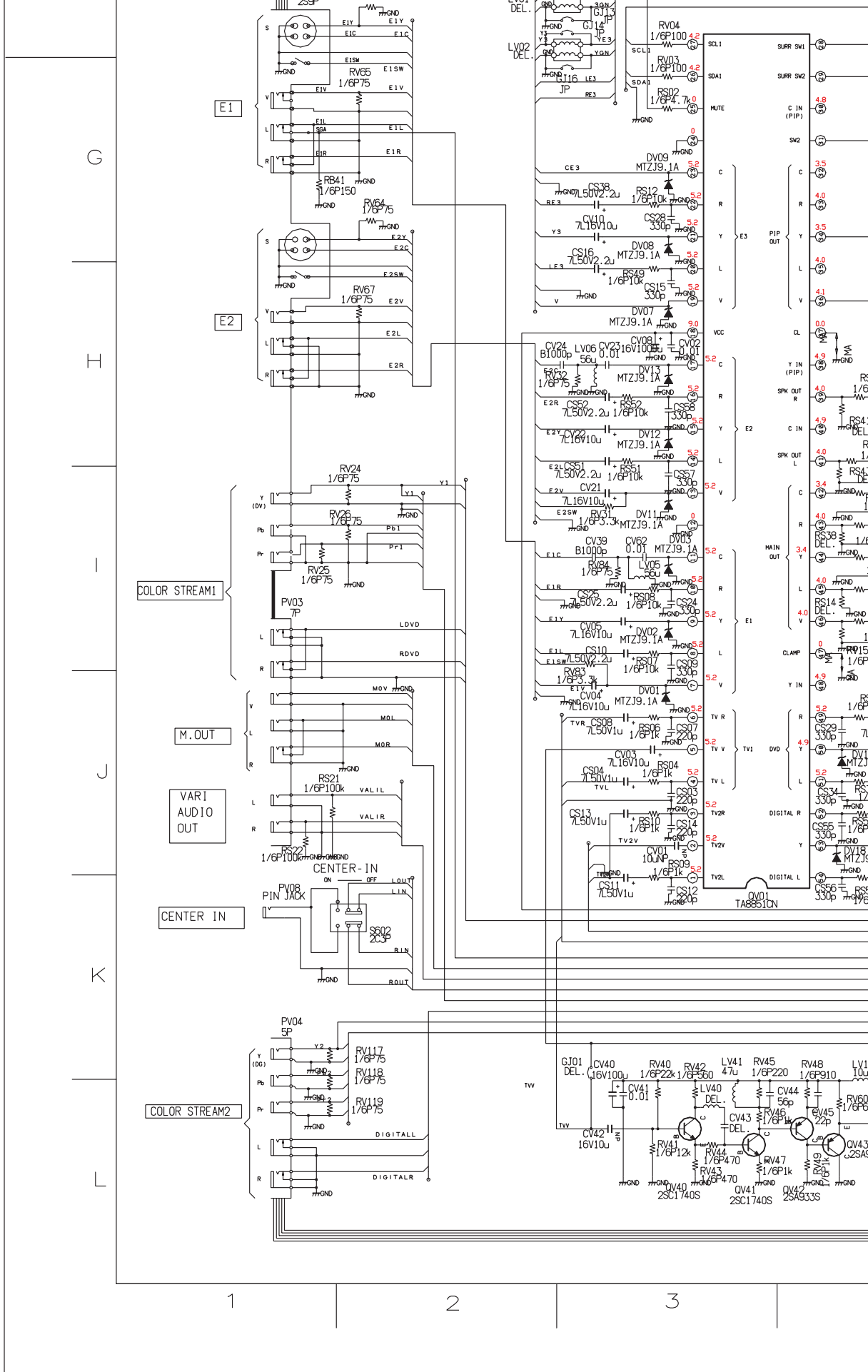
F

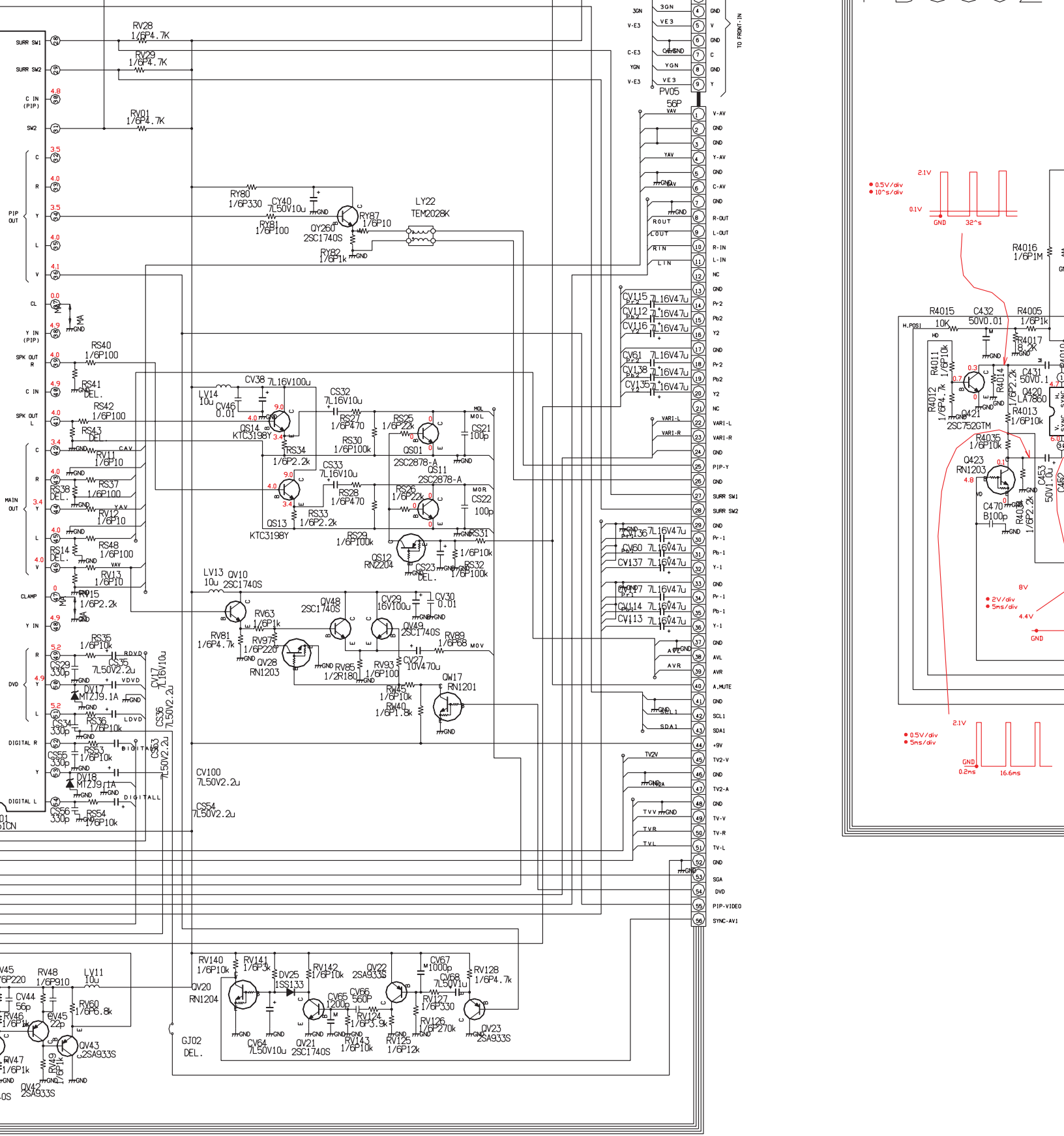
IN

7

3







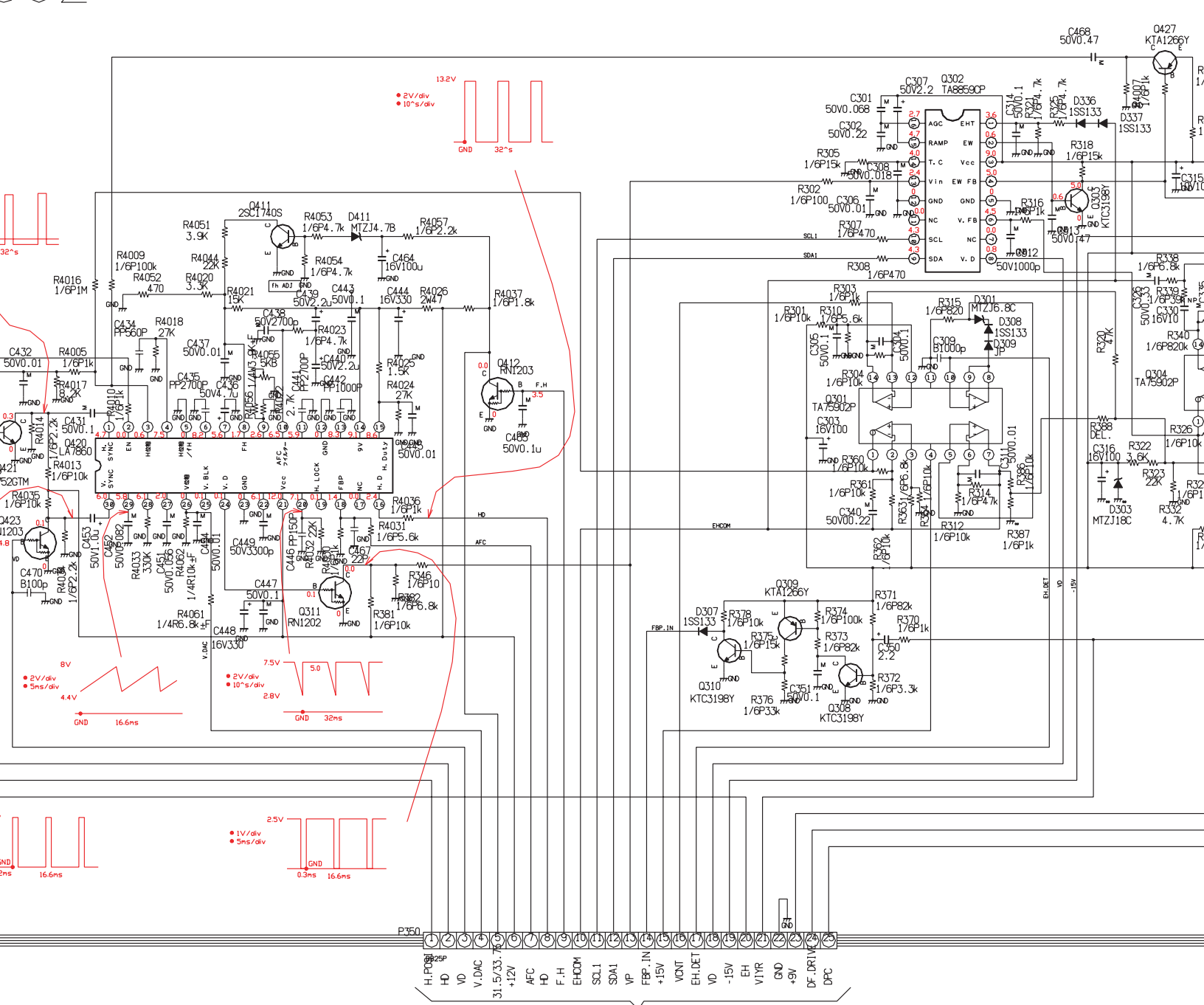
4

5

6

7

8



TO SIGNAL

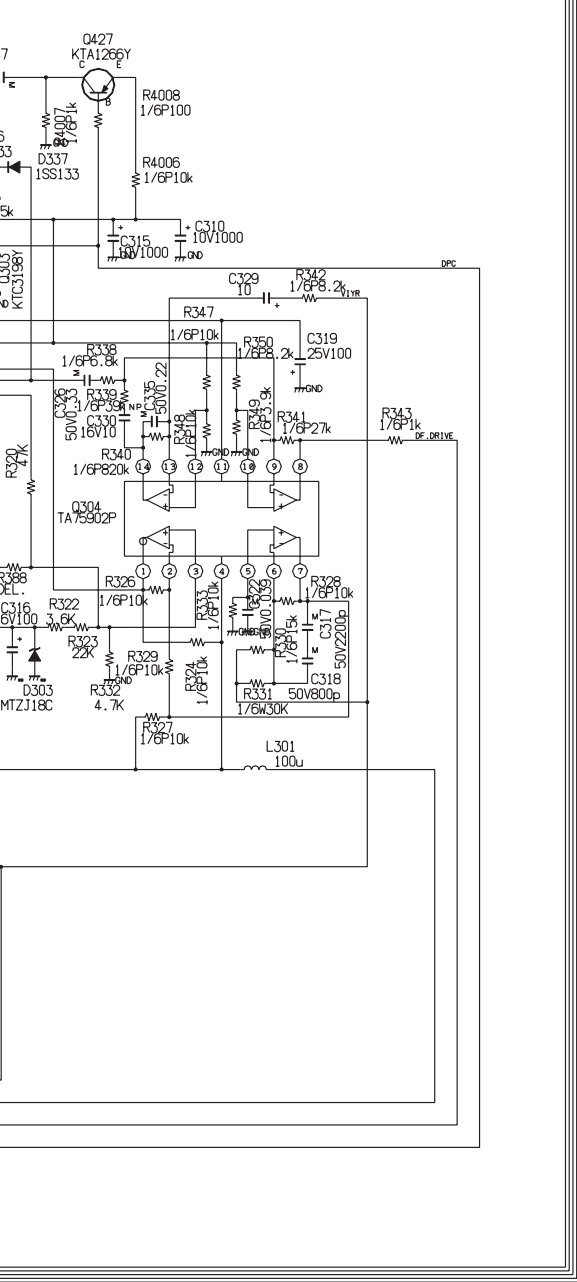
9

10

11

12

13



G

H

I

J

K

L

A/V SRS FRONT DPC  
61HX70 serie

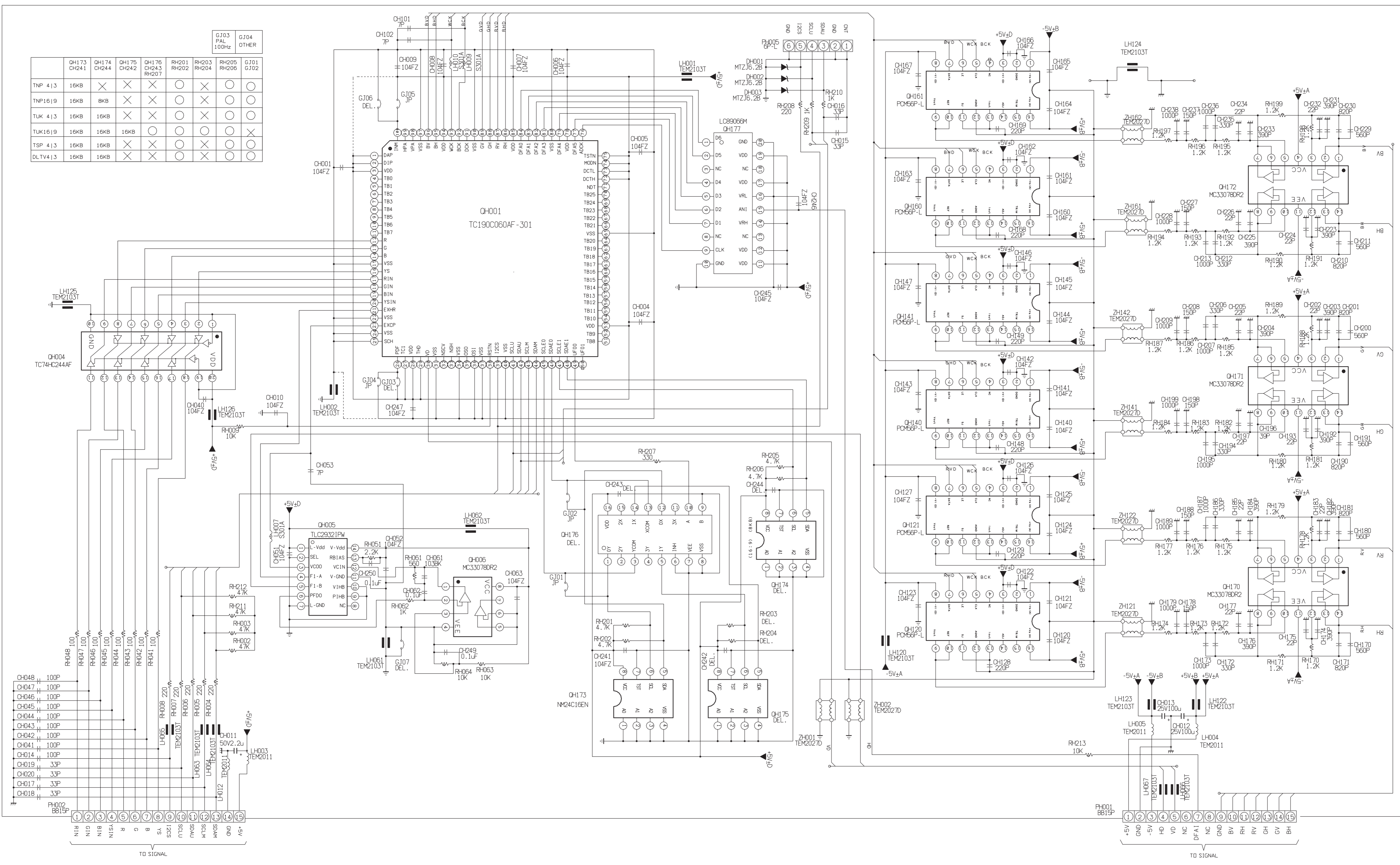
3

14

15

16

	GJ03 PAL 100Hz	GJ04 OTHER
Q173 CH241		
Q174 CH244		
Q175 CH242		
Q176 CH243 RH207		
Q177 CH244 RH207		
Q178 CH245 RH207		
Q179 CH246 RH207		
Q180 CH247 RH207		
Q181 CH248 RH207		
Q182 CH249 RH207		
Q183 CH250 RH207		



TO SIGNAL

TO SIGNAL

# DIGITAL CONVER 61HX70

1

2

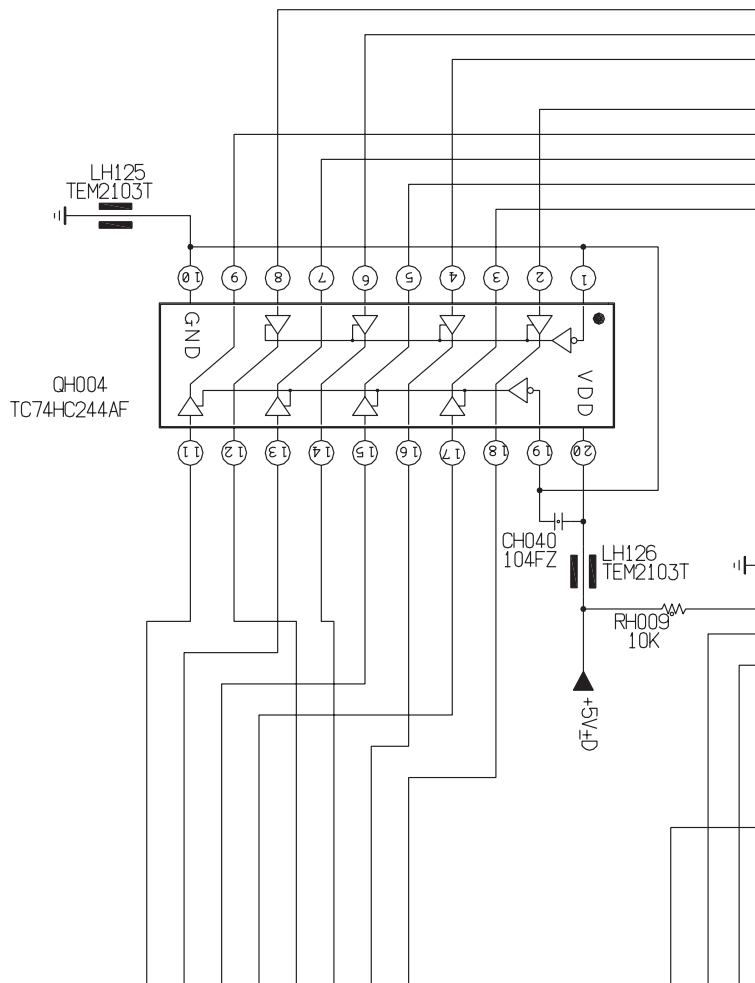
A

B

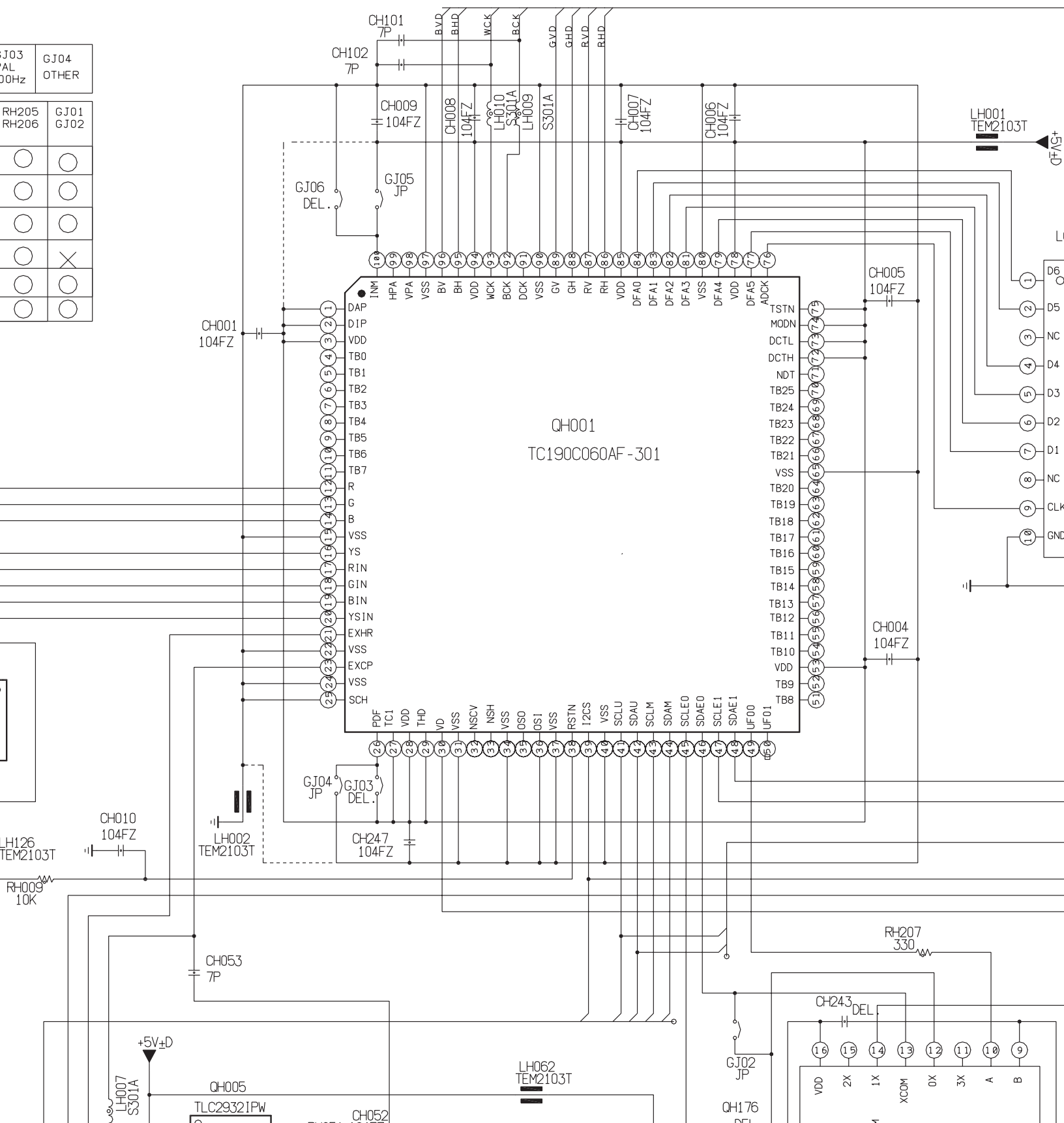
C

GJ03 PAL 100Hz	GJ04 OTHER
----------------------	---------------

	QH173 CH241	QH174 CH244	QH175 CH242	QH176 CH243 RH207	RH201 RH202	RH203 RH204	RH205 RH206	GJ01 GJ02
TNP 4 3	16KB	×	×	×	○	×	○	○
TNP16 9	16KB	8KB	×	×	○	×	○	○
TUK 4 3	16KB	16KB	×	×	○	×	○	○
TUK16 9	16KB	16KB	16KB	○	○	○	○	×
TSP 4 3	16KB	16KB	×	×	○	×	○	○
DLTV4 3	16KB	16KB	×	×	○	×	○	○



J03 AI 00Hz	GJ04 OTHER
RH205 RH206	GJ01 GJ02
<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>
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<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>



LH126  
TEM2103T

RH009  
10K

+5V±D

LH007  
S301A

QH005  
TLC2932IPW

CH052

LH062  
TEM2103T

QH176

CH243  
DEL.

VDD 2X 1X XCOM 0X 3X A B

RH207  
330

GJ02  
JP

CH053  
7P

LH002  
TEM2103T

CH247  
104FZ

GJ04  
JP

GJ03  
DEL.

CH001  
104FZ

QH001  
TC190C060AF-301

CH004  
104FZ

CH005  
104FZ

LH001  
TEM2103T

CF/IG+

CH101  
7P

CH102  
7P

CH009  
104FZ

CH008  
104FZ

LH010  
S301A

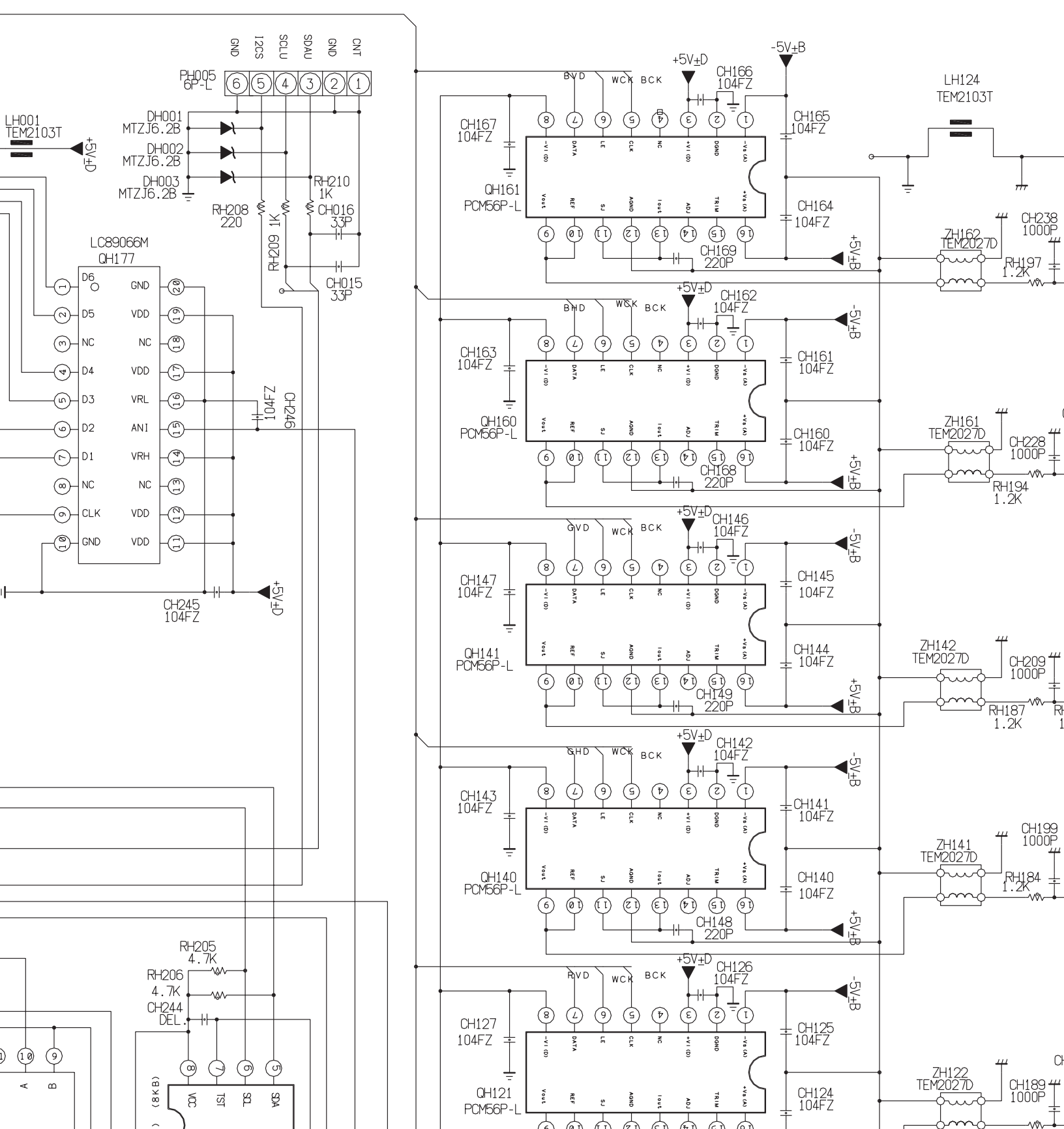
LH009  
S301A

CH007  
104FZ

CH006  
104FZ

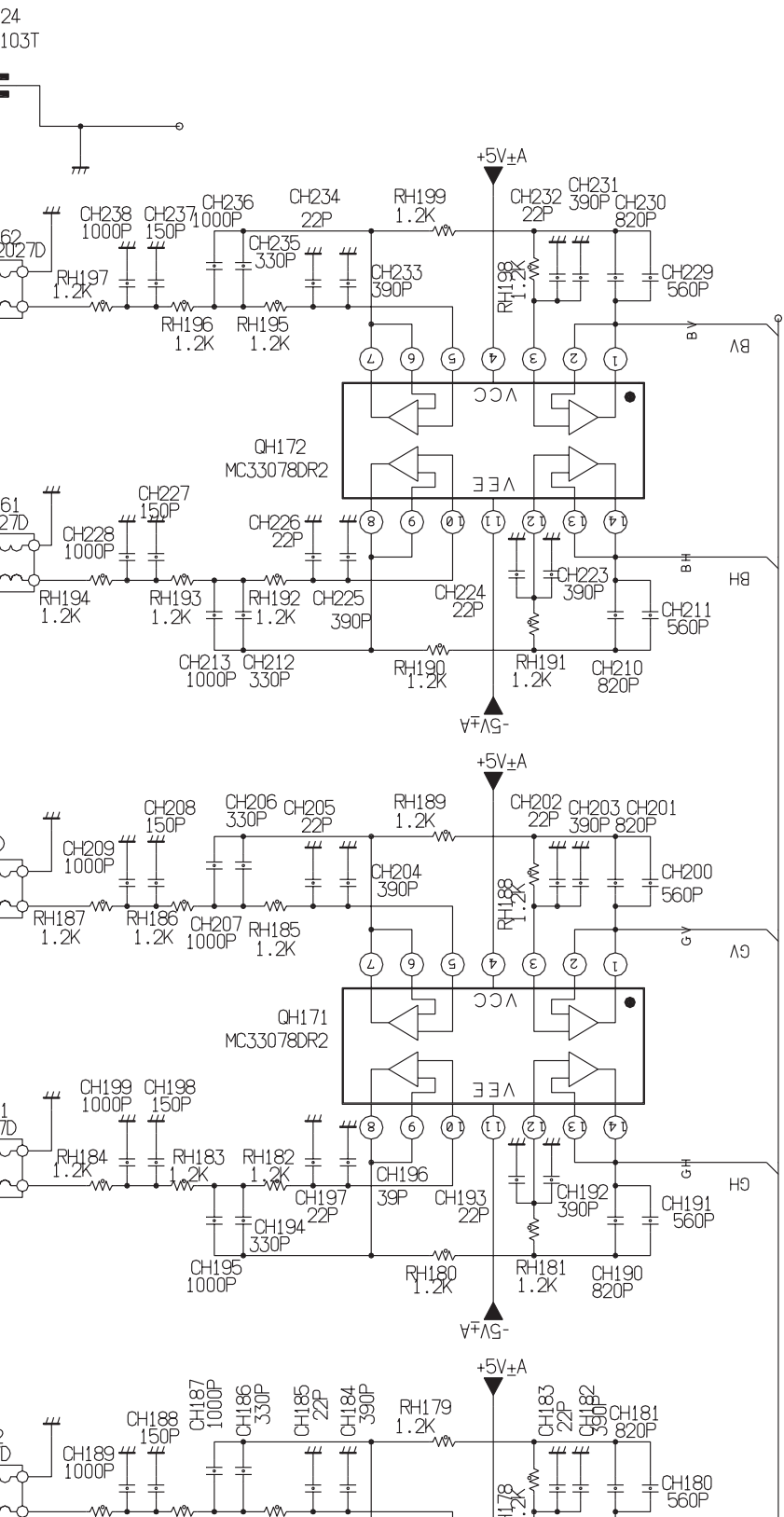
D6  
D5  
NC  
D4  
D3  
D2  
D1  
NC  
CLK  
GND





7

8



A

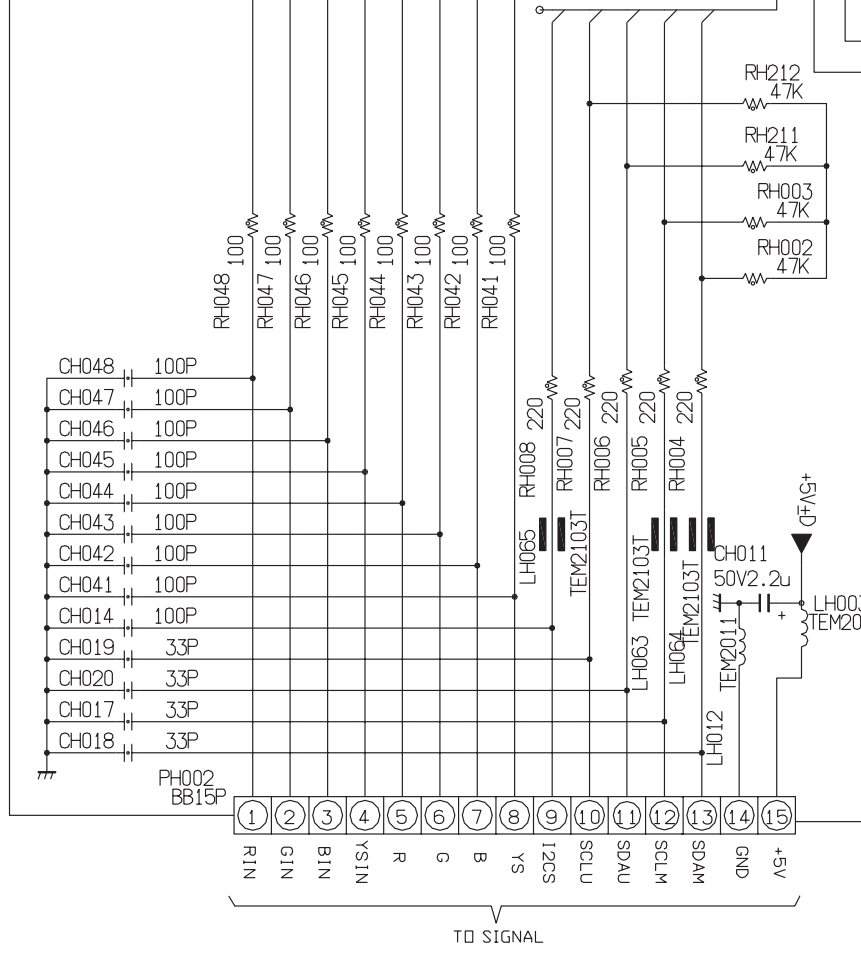
B

C

D

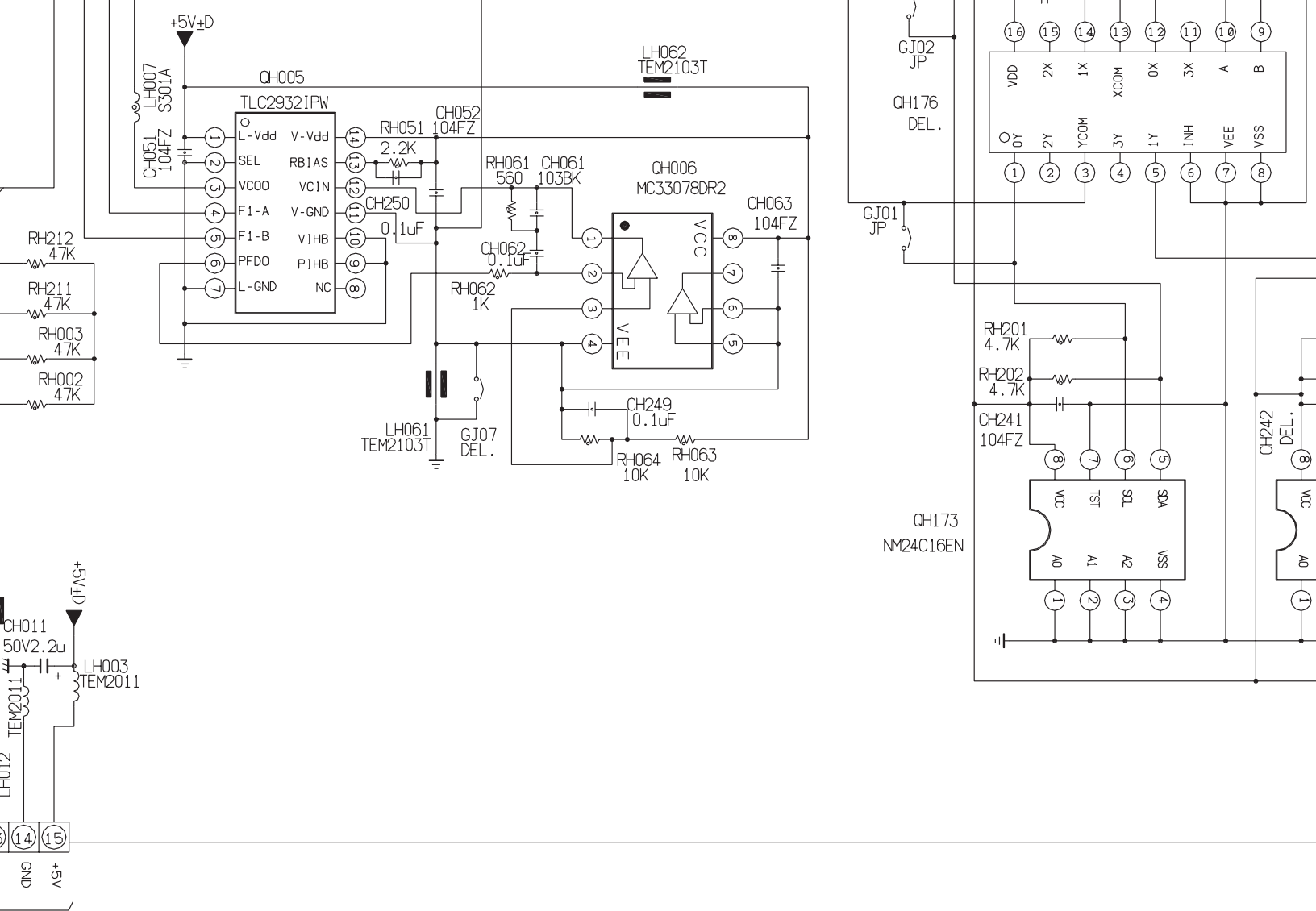
F

F



1

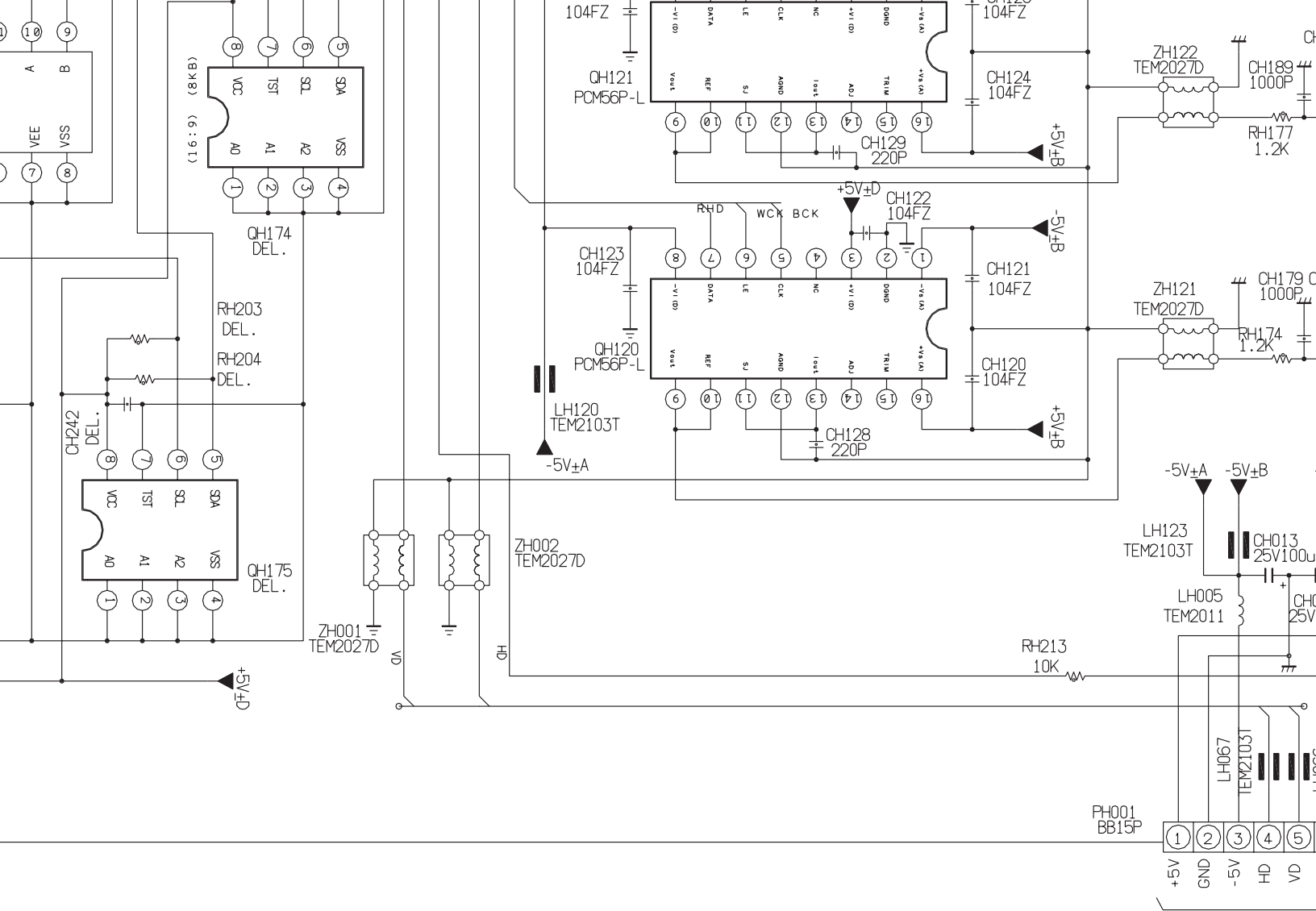
2



2

3

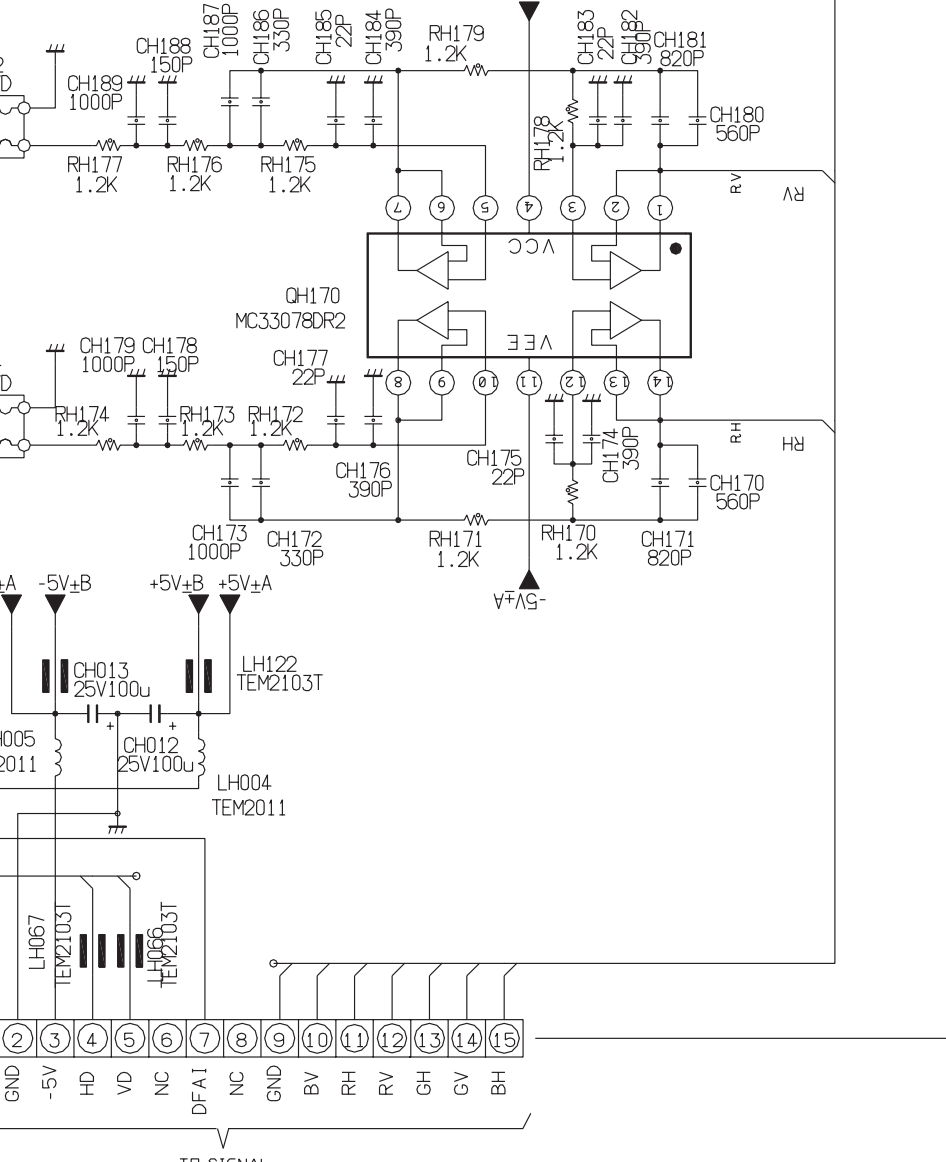
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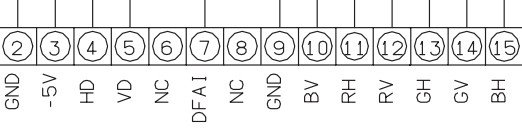
5

6

7



TO SIGNAL



DIGITAL CONVER  
61HX70

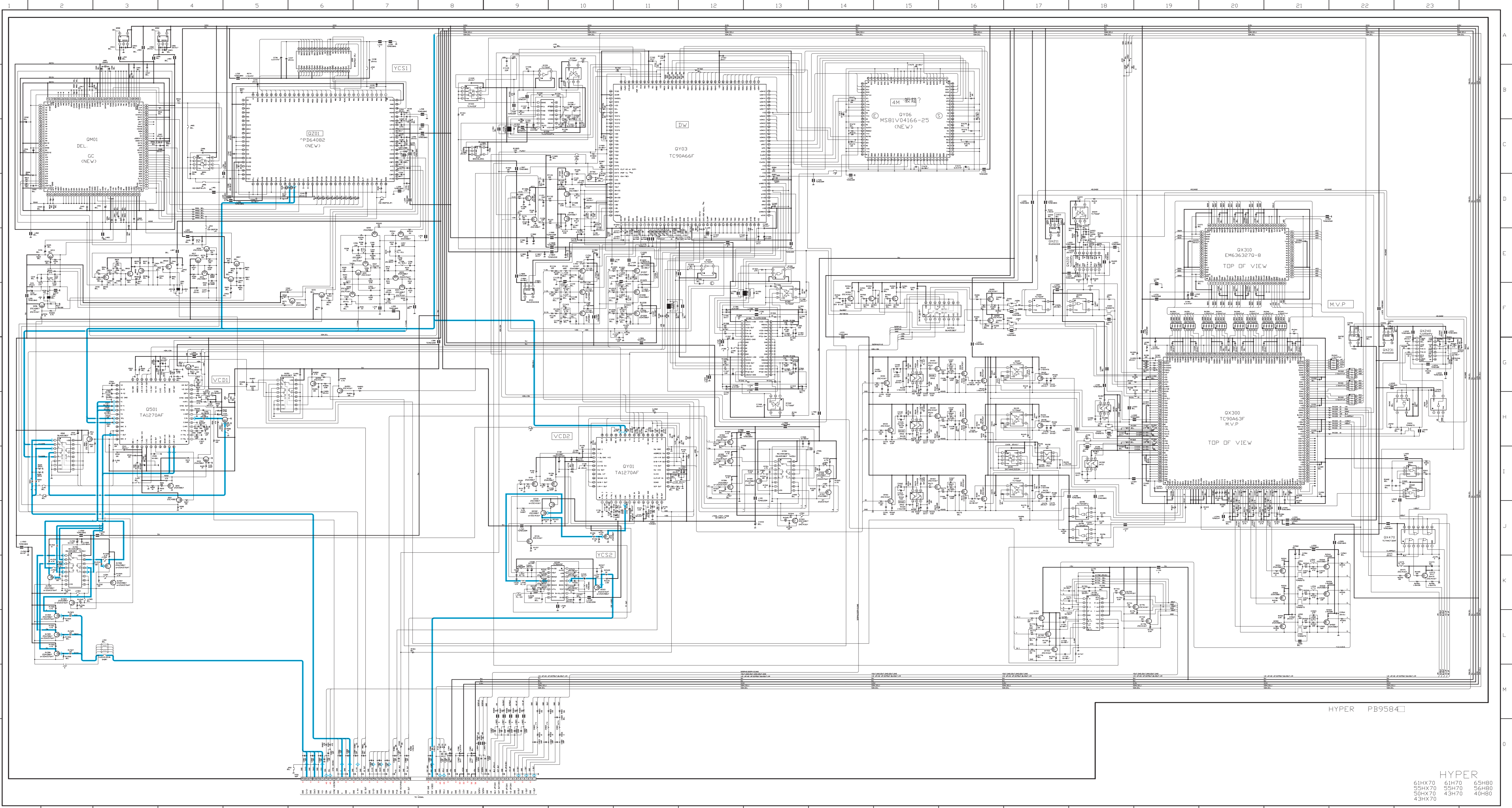
7

8

D

E

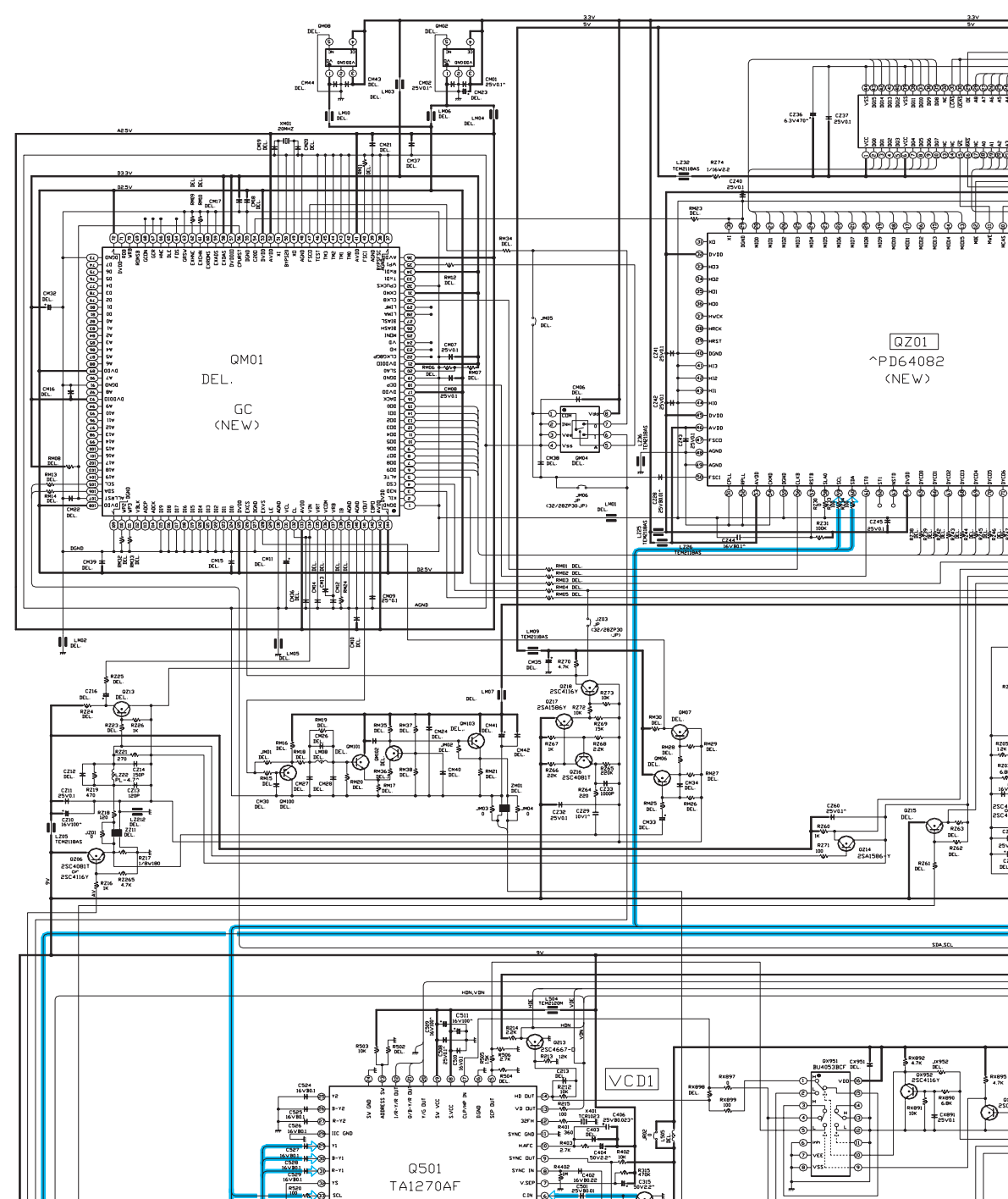
F



HYPER  
61HX70 61H70 65H80  
53HX70 53H70 56H80  
50HX70 43H70 40H80  
43HX70

1 2 3 4 5 6

A  
B  
C  
D  
E  
F  
G  
H



QM01  
DEL.  
GC  
(NEW)

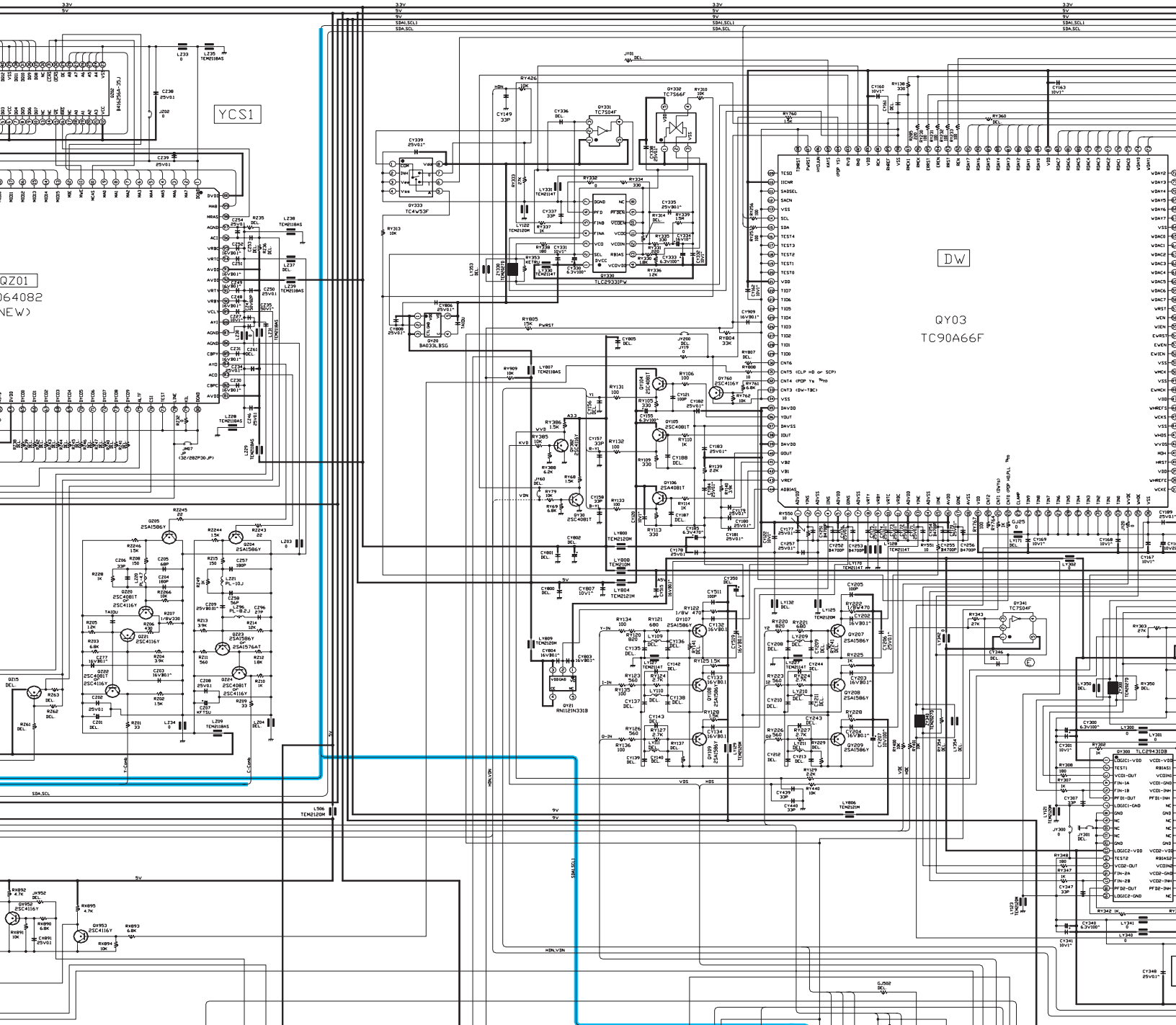
QZ01  
^PD640B2  
(NEW)

Q501  
TA1270AF

VCD1

52A.SCL







A

B

C

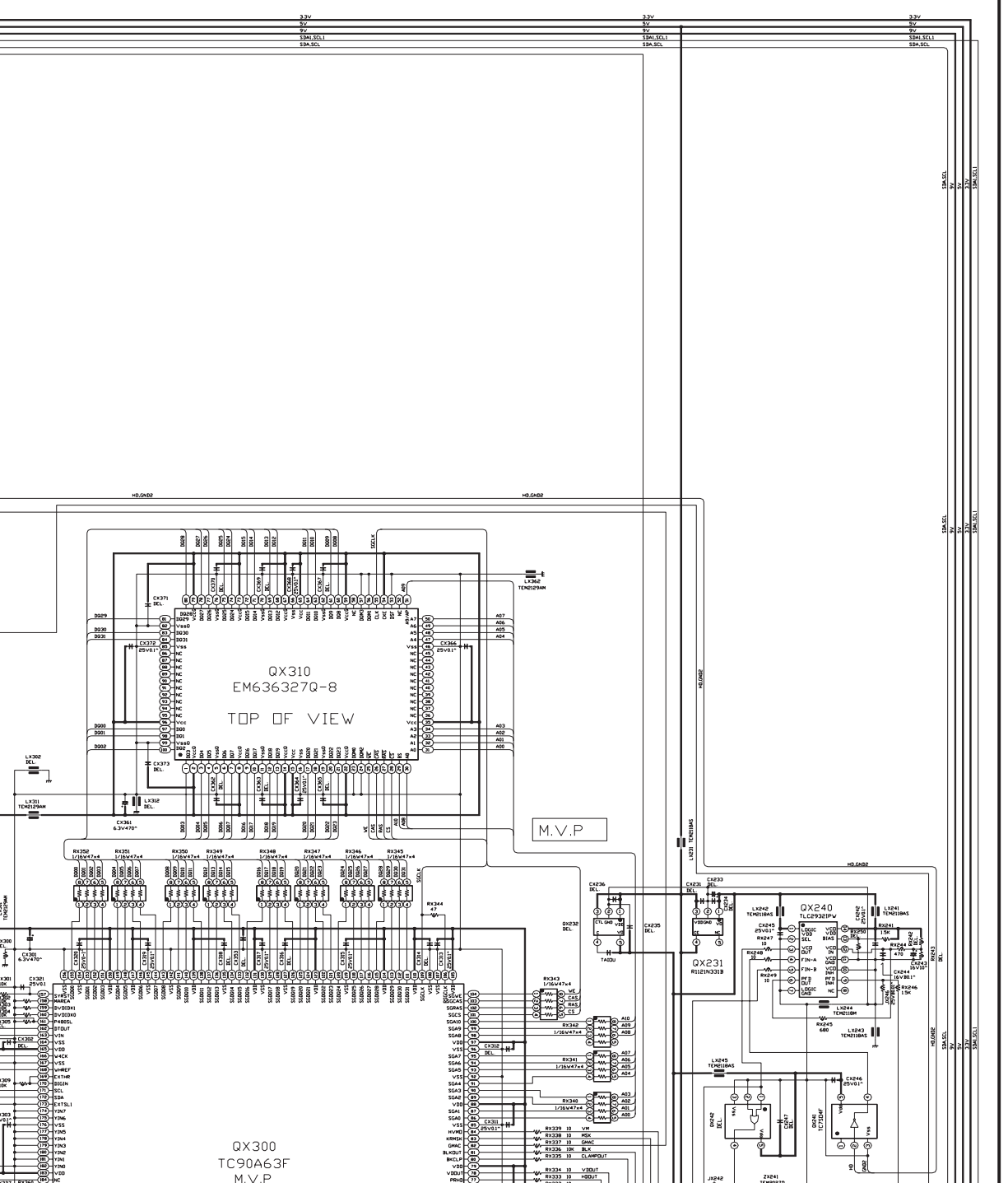
D

E

F

G

H



HS.GND2

HS.GND2

HS.GND2

HS.GND2

HS.GND2

HS.GND2

HS.GND2

QX300  
TC90A63F  
M.V.P

QX310  
EM636327Q-8  
TOP OF VIEW

QX240  
TLCC9230PW

QX231  
M121M0319

M.V.P

HS.GND2

HS.GND2

HS.GND2

HS.GND2

HS.GND2

HS.GND2

HS.GND2

HS.GND2

HS.GND2

HS.GND2

HS.GND2

HS.GND2

HS.GND2

HS.GND2

HS.GND2

10K.SVL

5V

3.3V

5V

10K.SVL

5V

3.3V

5V

10K.SVL

5V

3.3V

5V

10K.SVL

5V

3.3V

5V

10K.SVL

5V

3.3V

5V

10K.SVL

5V

3.3V

5V

10K.SVL

5V

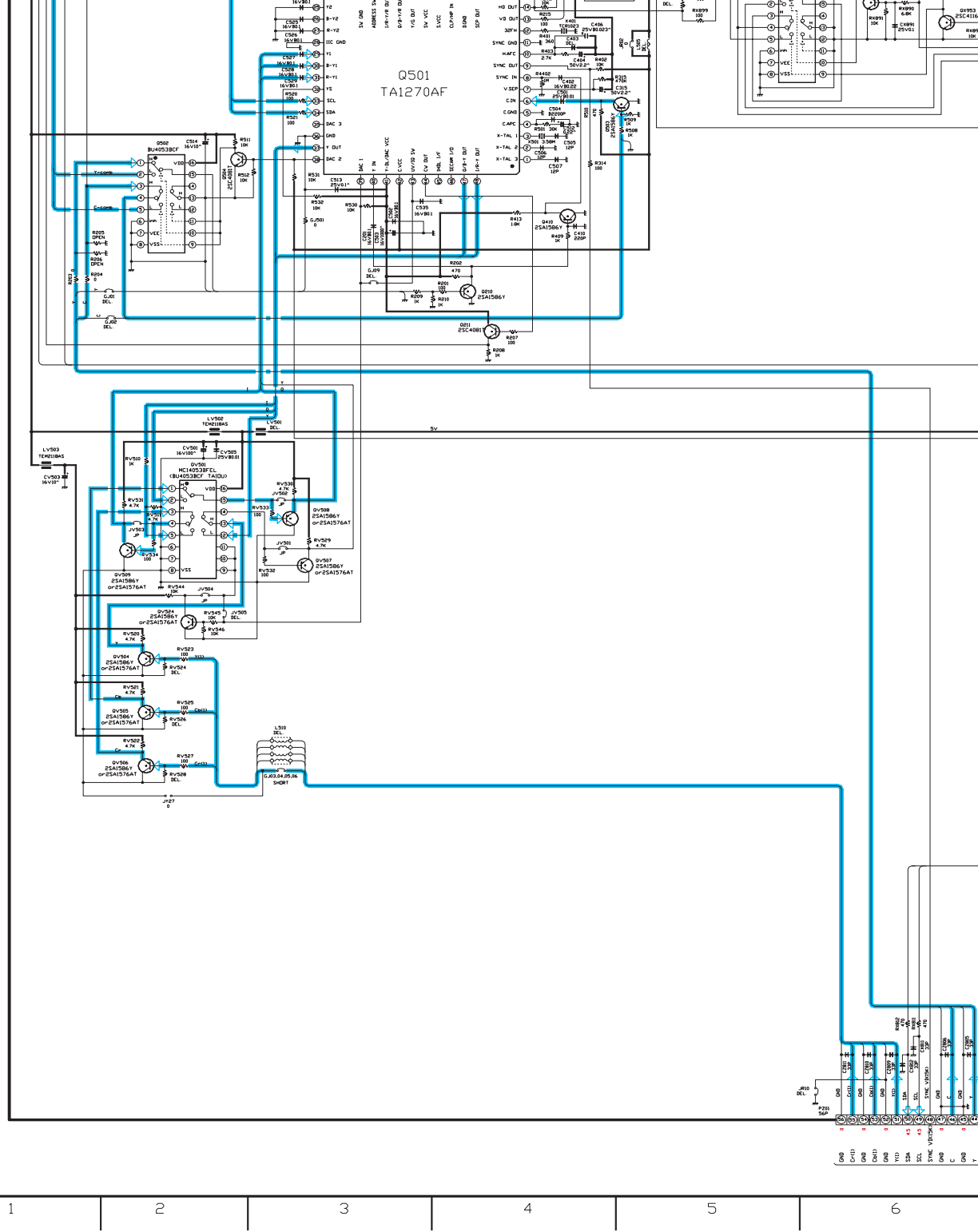
3.3V

5V

10K.SVL

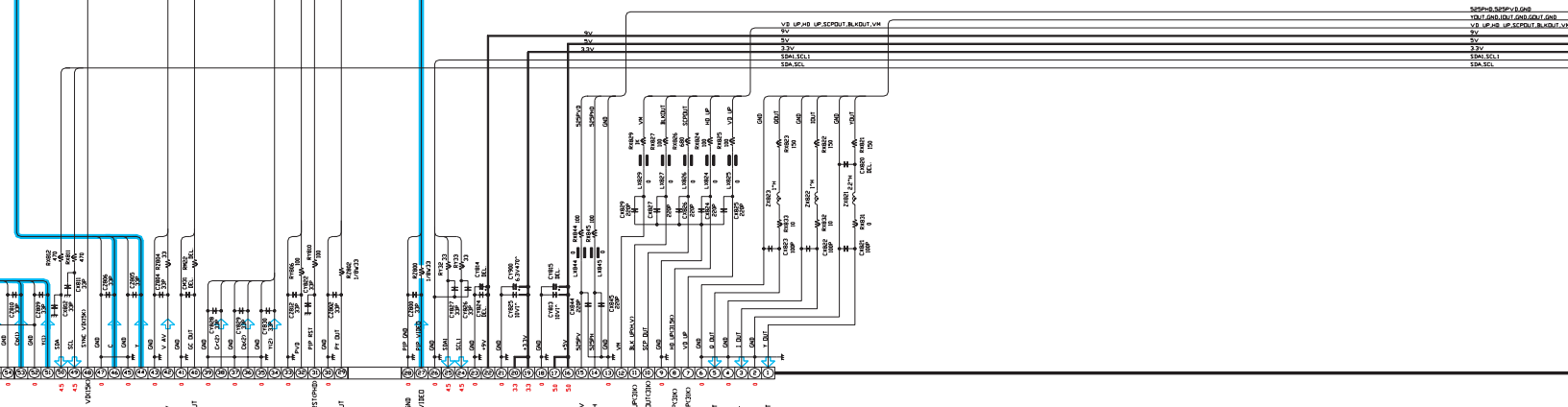
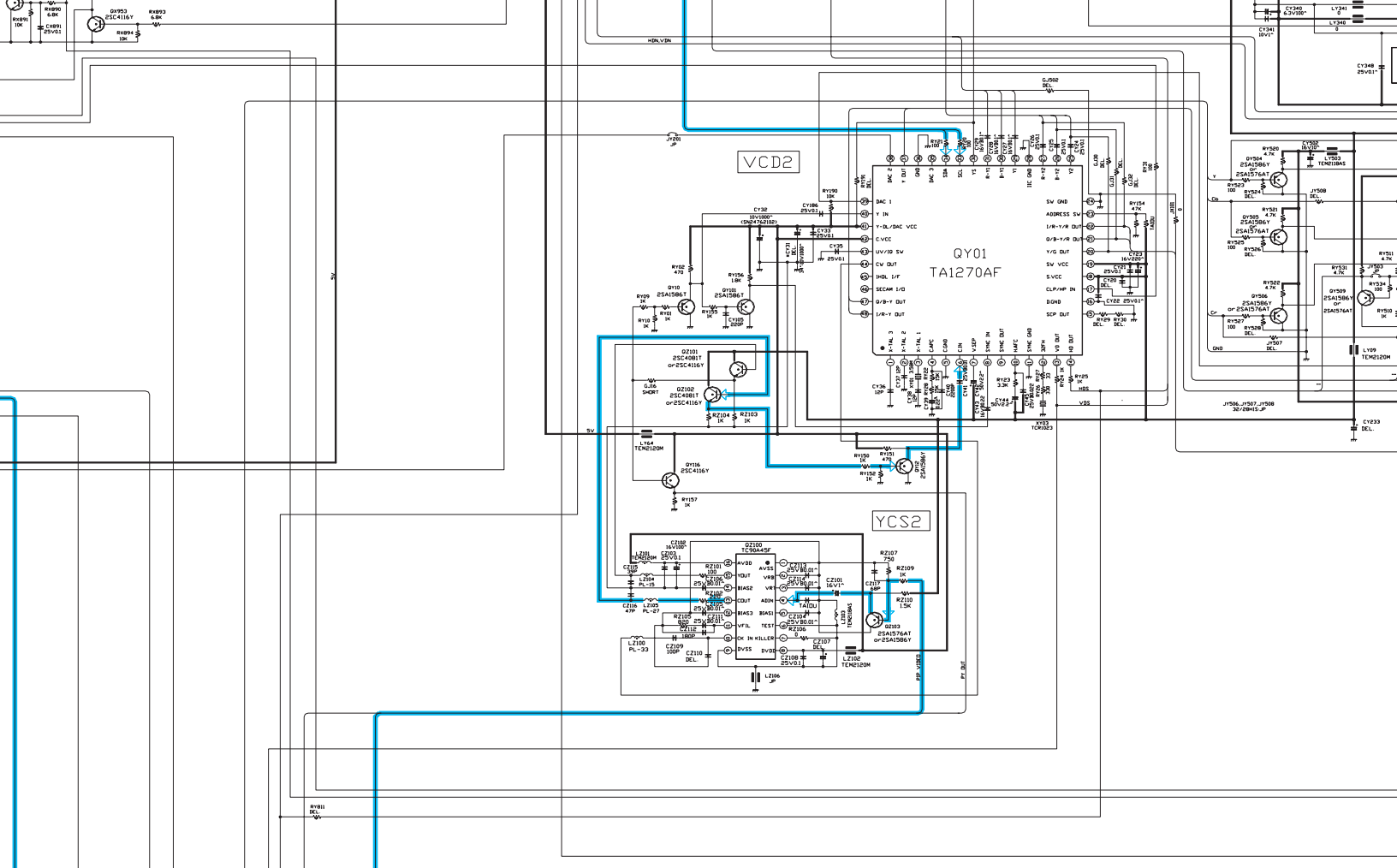
5V

H  
I  
J  
K  
L  
M  
N



1 2 3 4 5 6

Pin	Signal
1	5V
2	NC
3	NC
4	NC
5	NC
6	NC
7	NC
8	NC
9	NC
10	NC
11	NC
12	NC
13	NC
14	NC
15	NC
16	NC
17	NC
18	NC
19	NC
20	NC
21	NC
22	NC
23	NC
24	NC
25	NC
26	NC
27	NC
28	NC
29	NC
30	NC
31	NC
32	NC
33	NC
34	NC
35	NC
36	NC
37	NC
38	NC
39	NC
40	NC
41	NC
42	NC
43	NC
44	NC
45	NC
46	NC
47	NC
48	NC
49	NC
50	NC
51	NC
52	NC
53	NC
54	NC
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58	NC
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62	NC
63	NC
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76	NC
77	NC
78	NC
79	NC
80	NC
81	NC
82	NC
83	NC
84	NC
85	NC
86	NC
87	NC
88	NC
89	NC
90	NC
91	NC
92	NC
93	NC
94	NC
95	NC
96	NC
97	NC
98	NC
99	NC
100	NC



TO 3104K

6

7

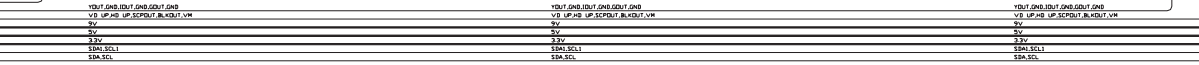
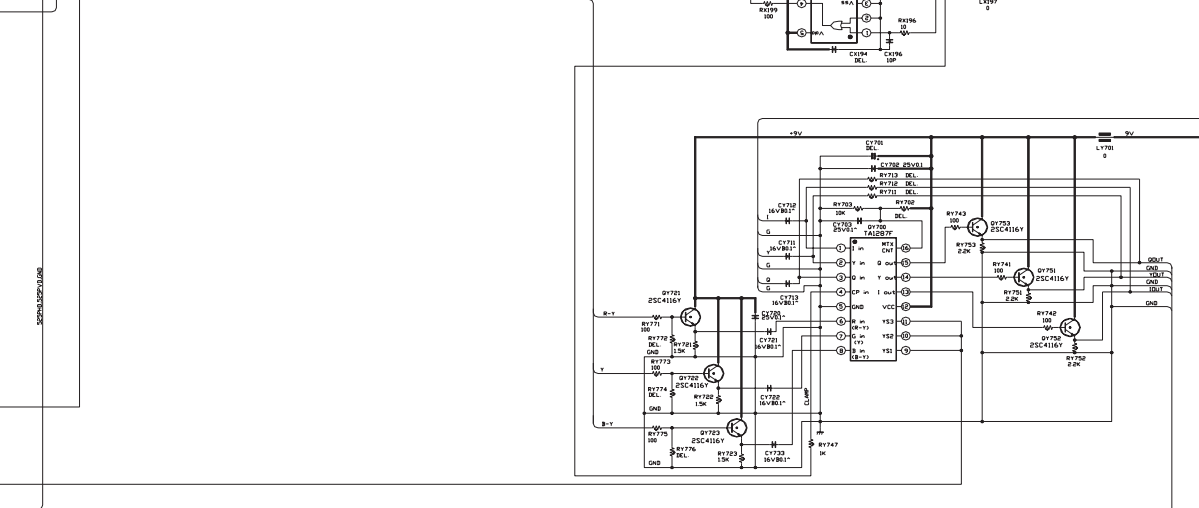
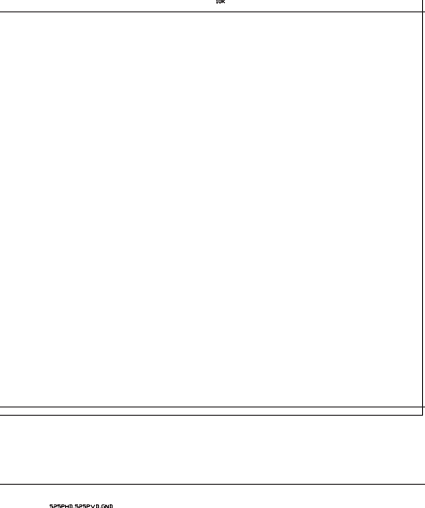
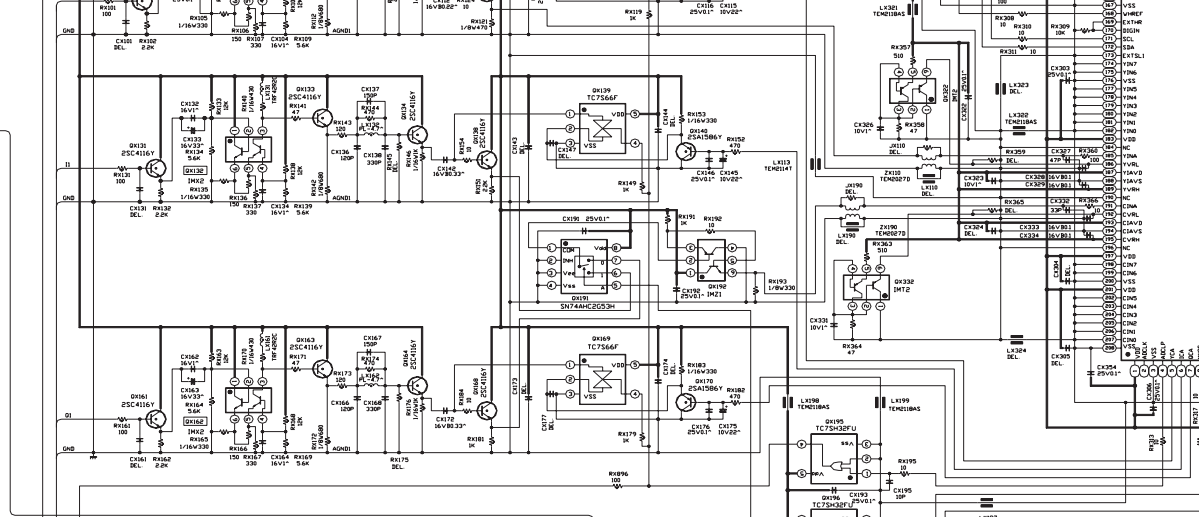
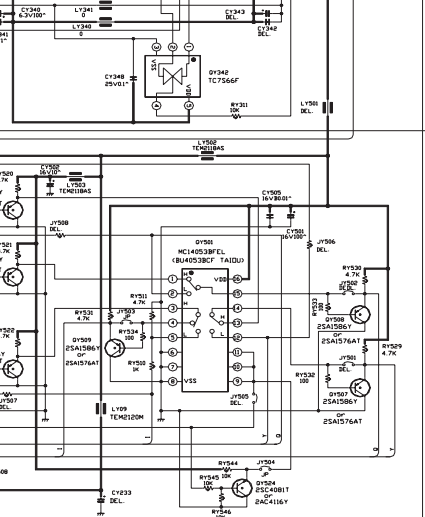
8

9

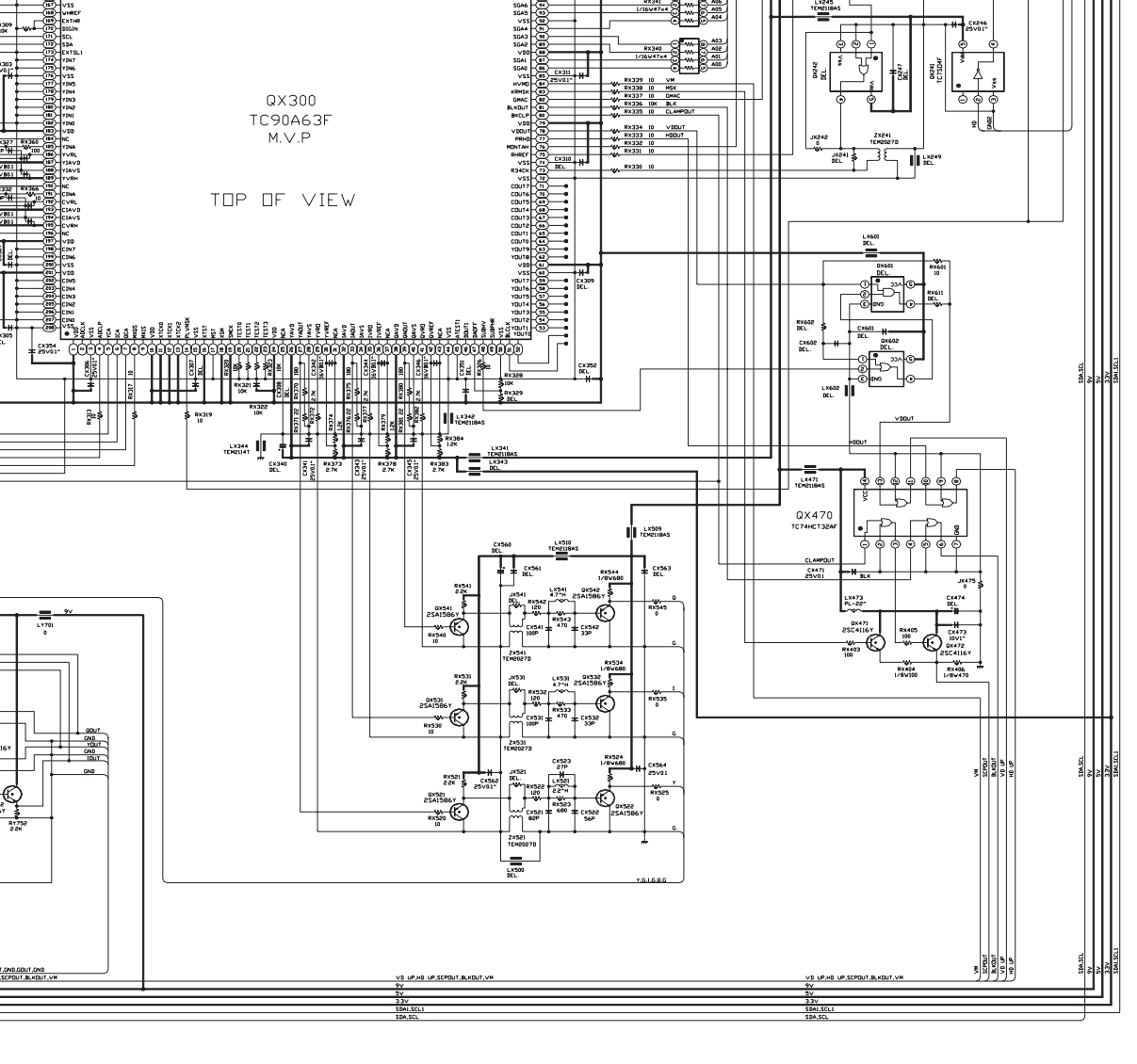
10

11

12



QX300  
TC90A63F  
M.V.P  
TOP OF VIEW



HYPER PB9584

HYPER  
61HX70 61H70 65H80  
55HX70 55H70 56H80  
50HX70 43H70 40H80  
43HX70

19 20 21 22 23

H  
I  
J  
K  
L  
M  
O