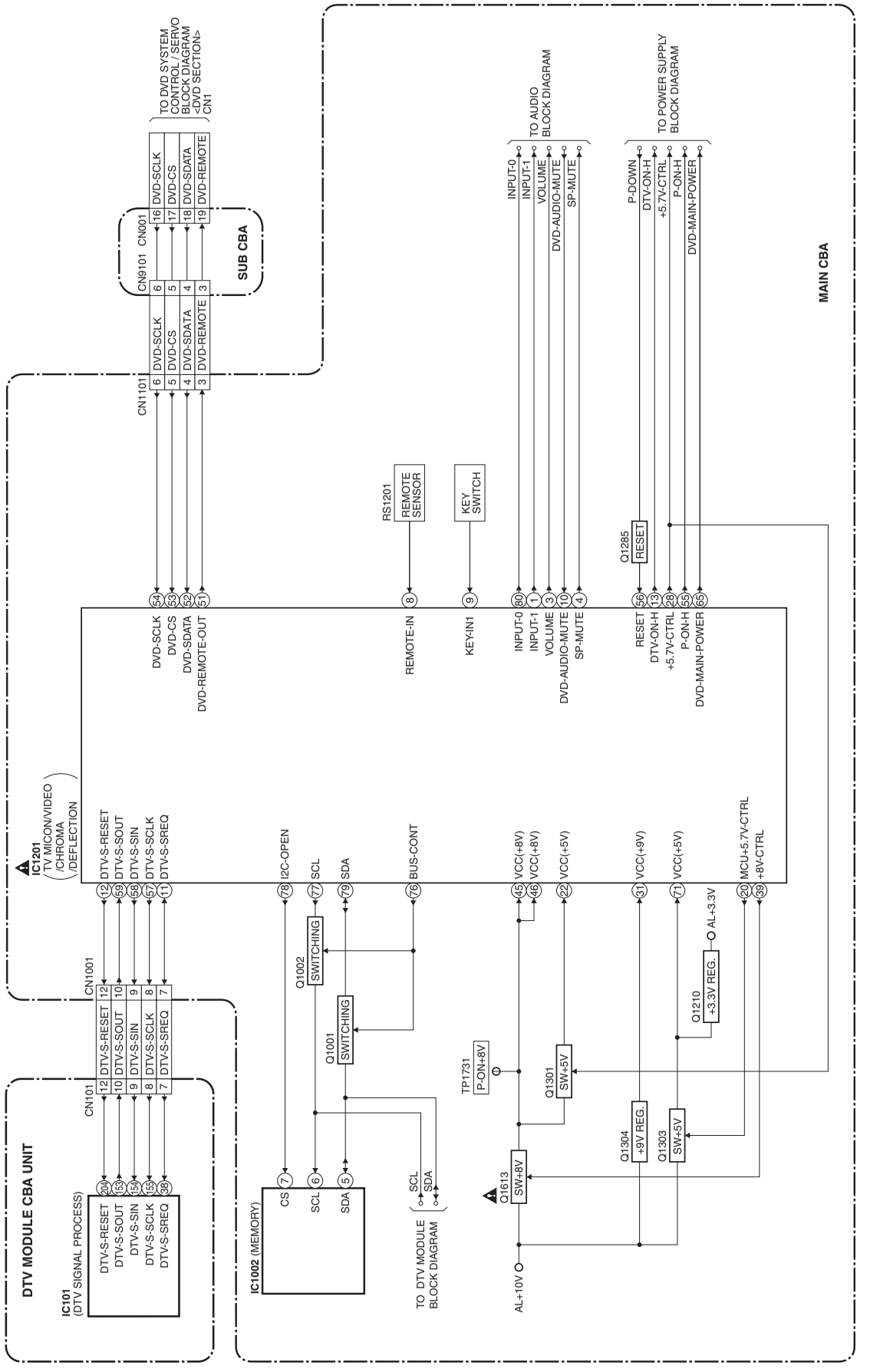
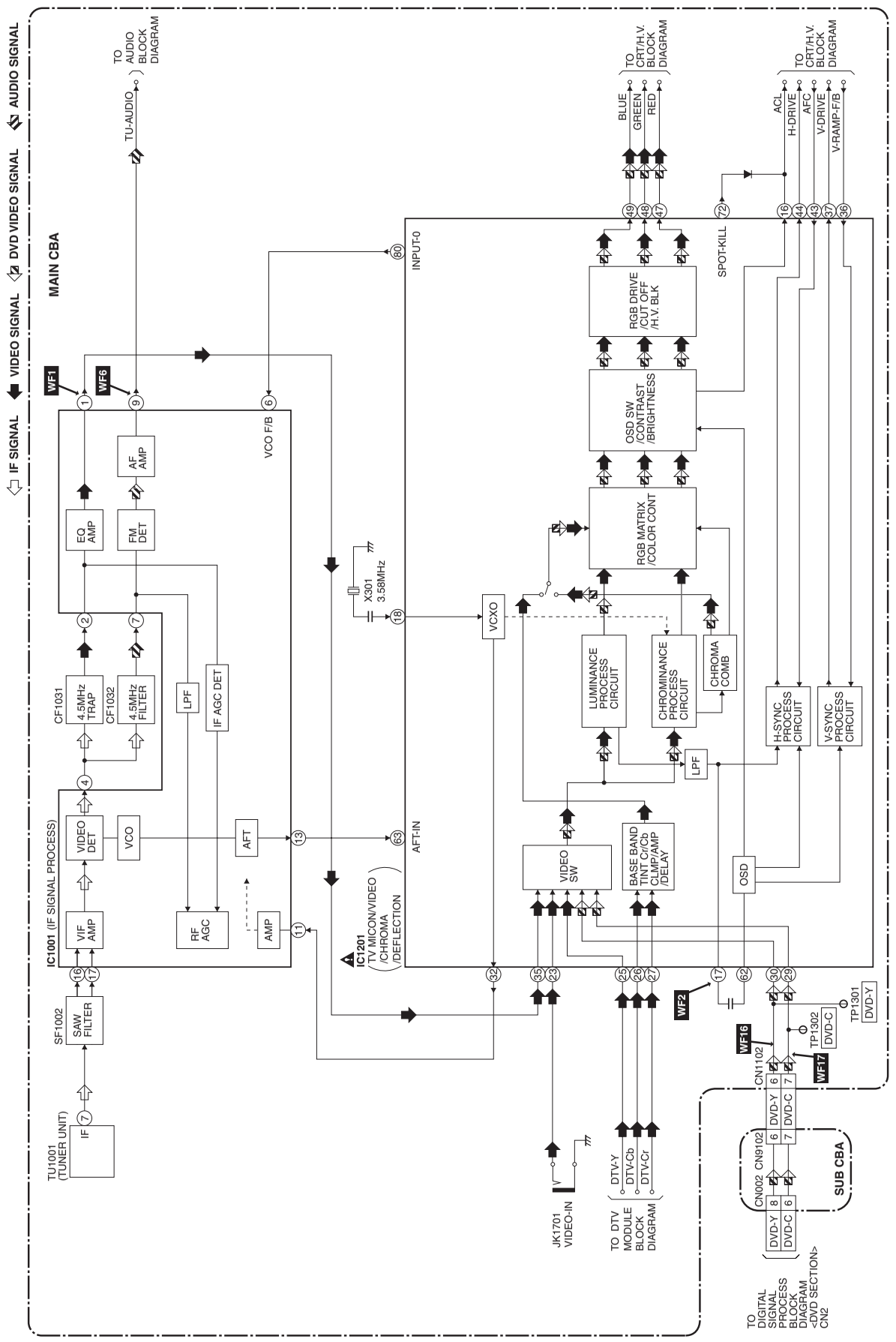
BLOCK DIAGRAMS < TV Section >

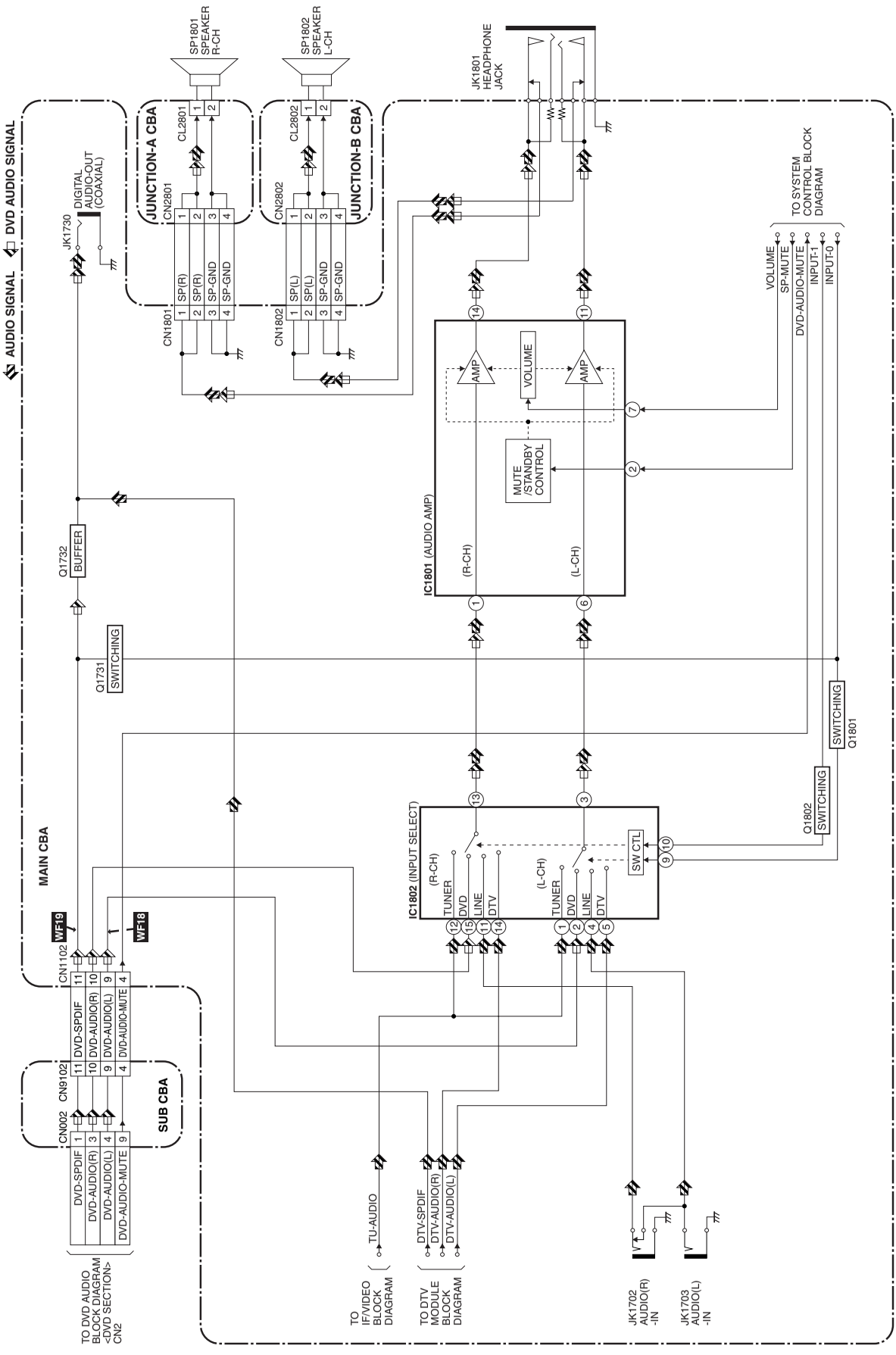
System Control Block Diagram



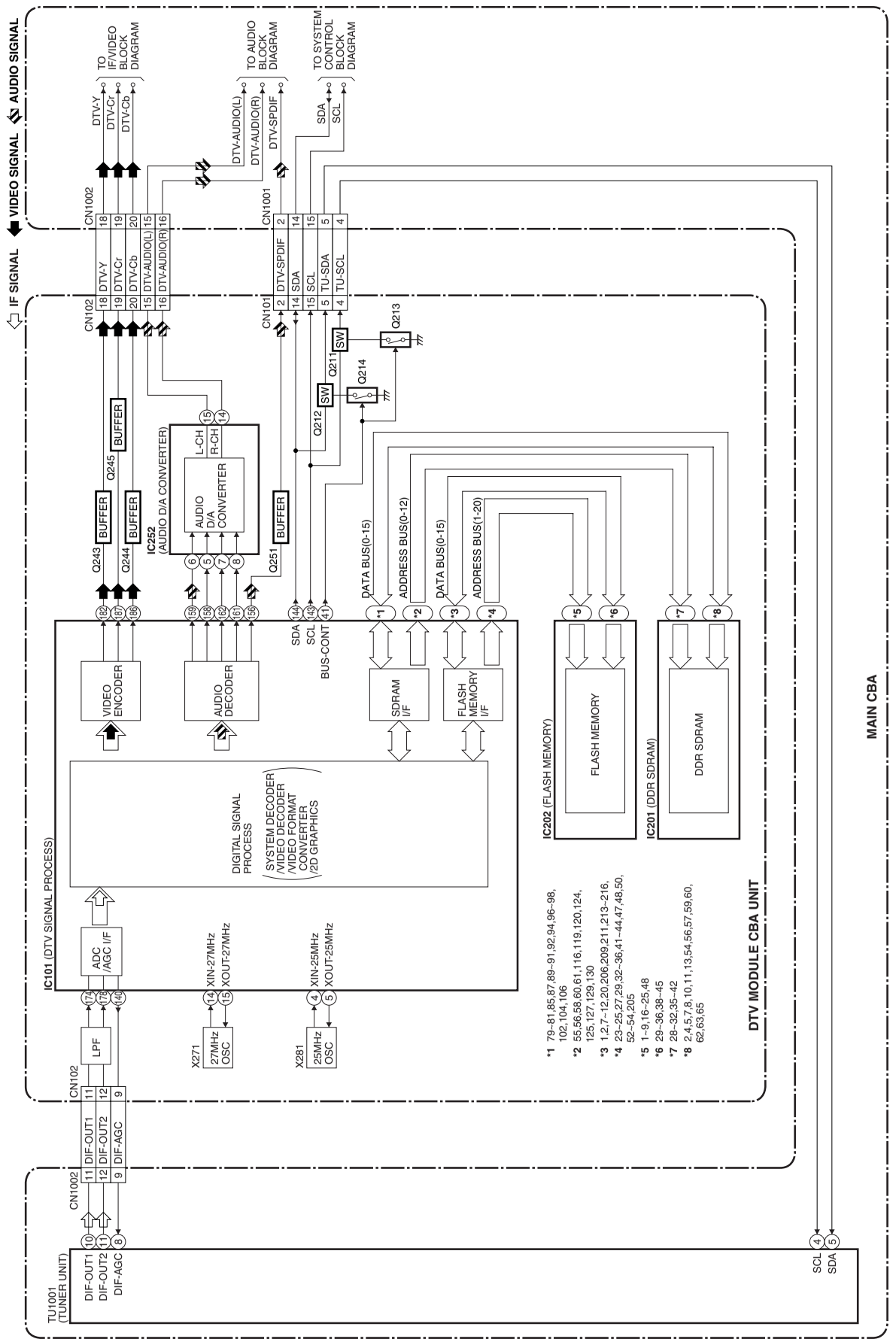
IF/Video Block Diagram



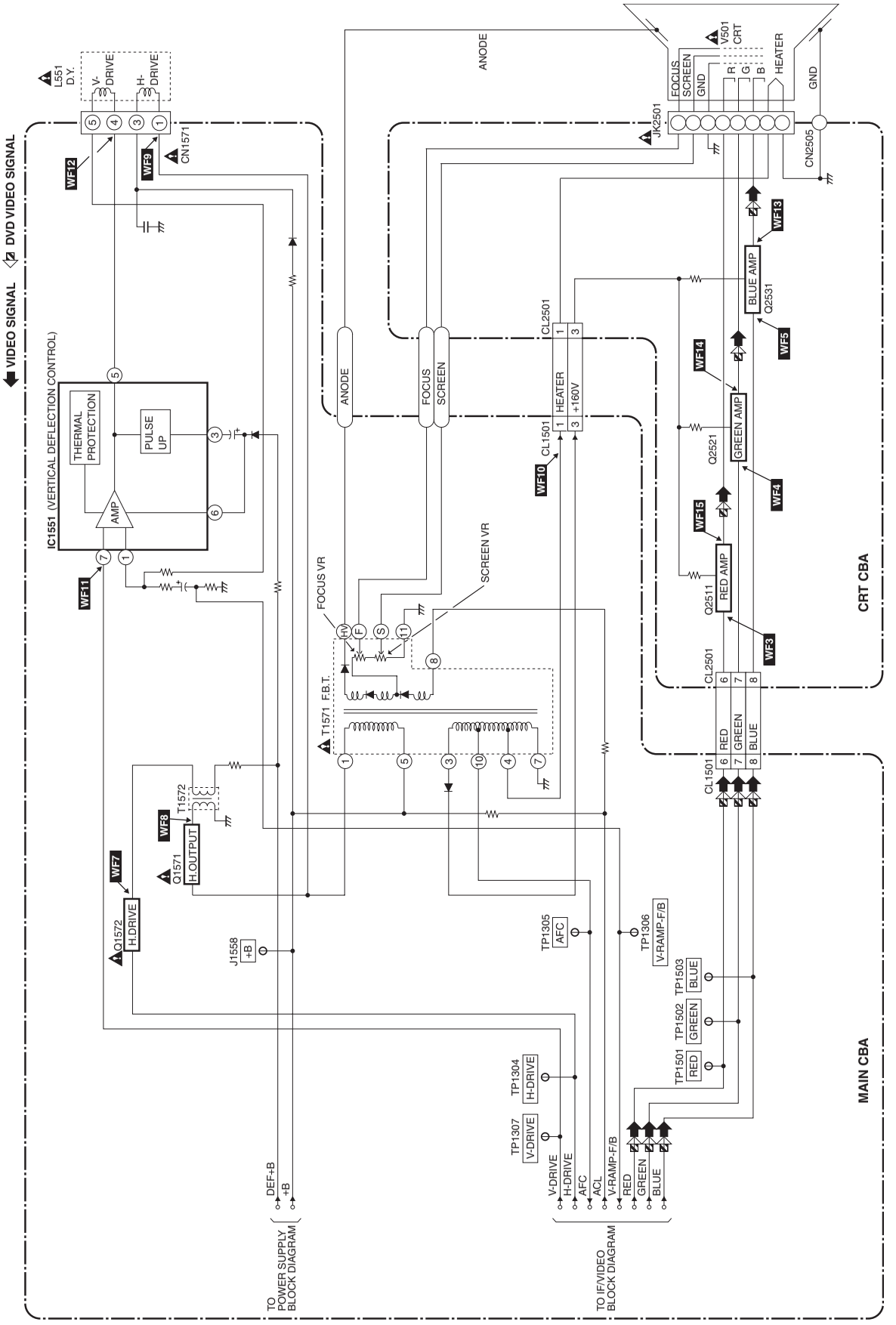
Audio Block Diagram



DTV Module Block Diagram



CRT/H.V. Block Diagram



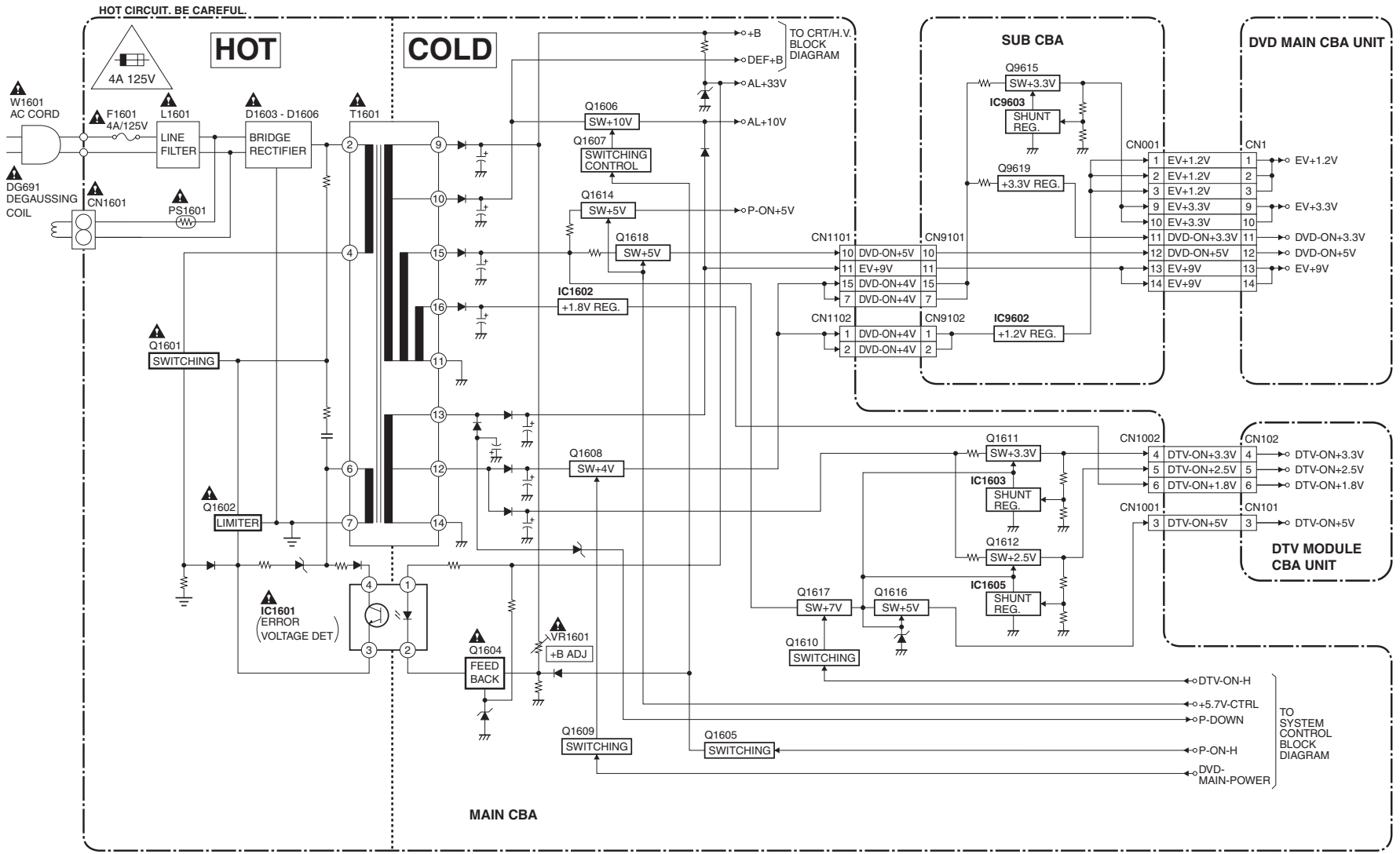
Power Supply Block Diagram

CAUTION !
Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit.
If Main Fuse (F1601) is blown , check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply.
Otherwise it may cause some components in the power supply circuit to fail.

4A 125V

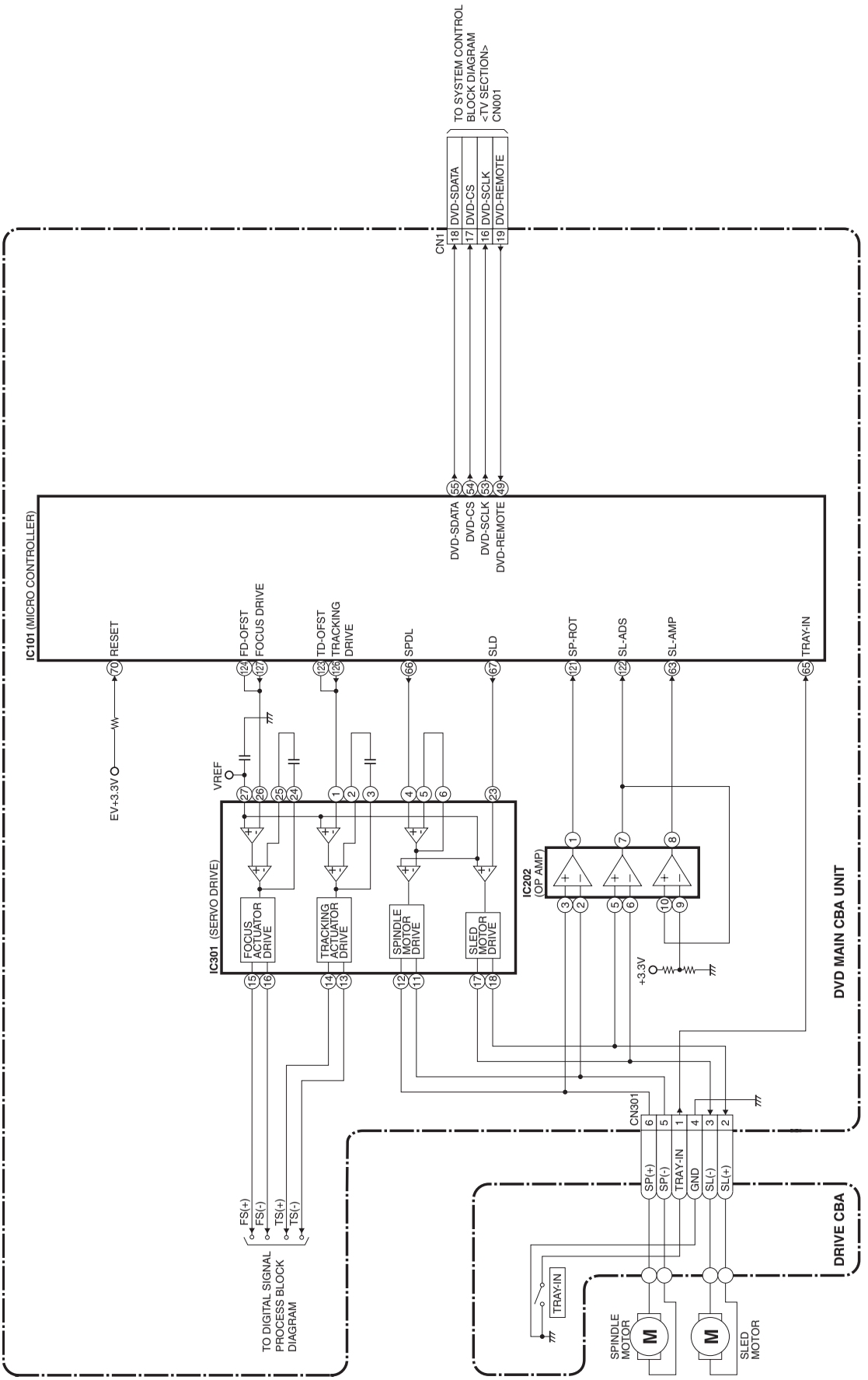
CAUTION ! : For continued protection against risk of fire, replace only with same type 4 A, 125V fuse.
ATTENTION : Utiliser un fusible de rechange de même type de 4A, 125V.

NOTE:
The voltage for parts in hot circuit is measured using hot GND as a common terminal.

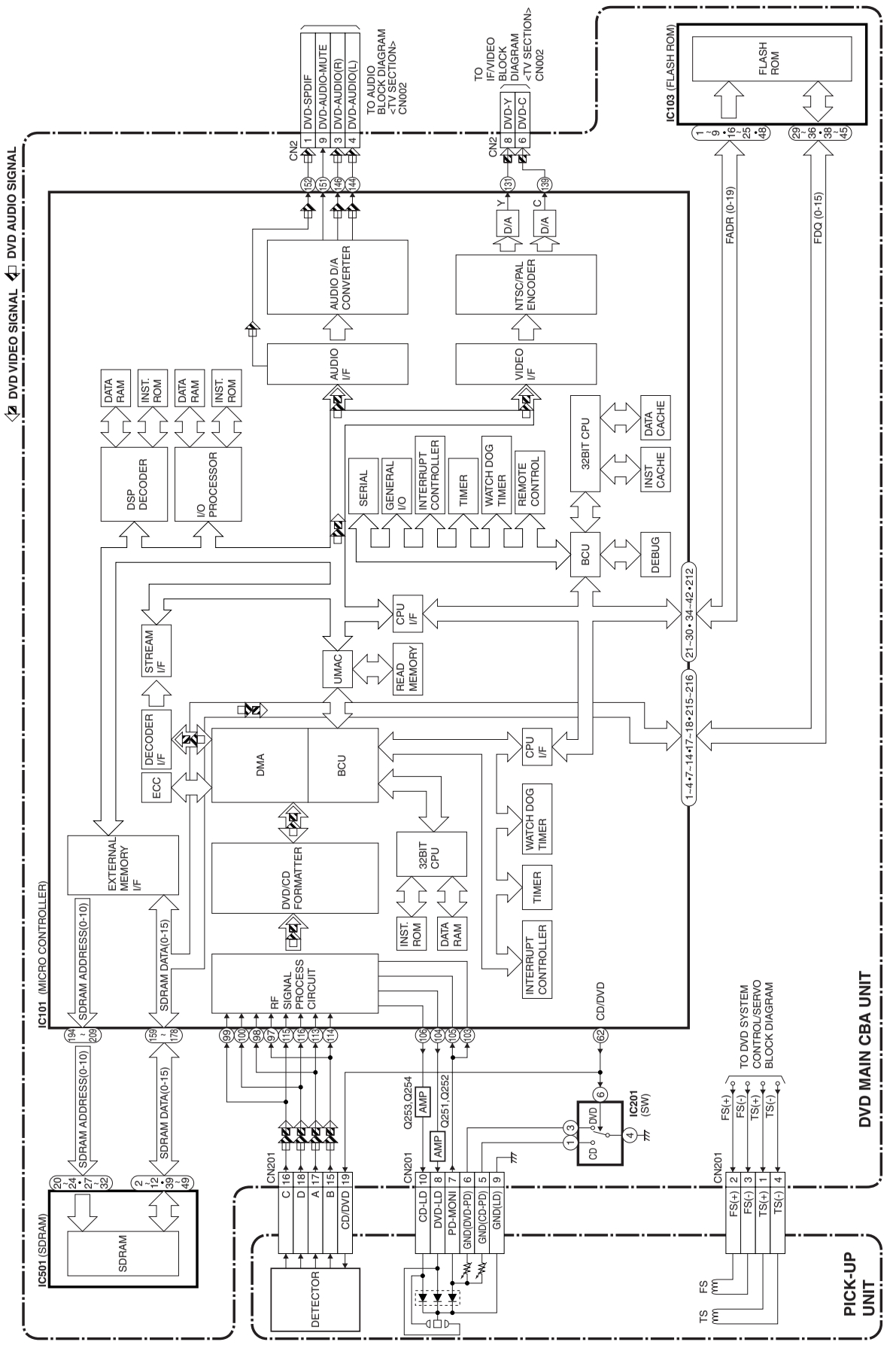


BLOCK DIAGRAMS < DVD Section >

DVD System Control / Servo Block Diagram



Digital Signal Process Block Diagram



SCHEMATIC DIAGRAMS / CBA'S AND TEST POINTS

Standard Notes

WARNING

Many electrical and mechanical parts in this chassis have special characteristics. These characteristics often pass unnoticed and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts that have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by the mark "⚠" in the schematic diagram and the parts list. Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts that do not have the same safety characteristics as specified in the parts list may create shock, fire, or other hazards.

Notes:

1. Do not use the part number shown on these drawings for ordering. The correct part number is shown in the parts list, and may be slightly different or amended since these drawings were prepared.
2. All resistance values are indicated in ohms ($K = 10^3$, $M = 10^6$).
3. Resistor wattages are 1/4W or 1/6W unless otherwise specified.
4. All capacitance values are indicated in μF ($P = 10^{-6}$ μF).
5. All voltages are DC voltages unless otherwise specified.

LIST OF CAUTION, NOTES, AND SYMBOLS USED IN THE SCHEMATIC DIAGRAMS ON THE FOLLOWING PAGES:

1. CAUTION: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE4A, 125V FUSE.
ATTENTION: UTILISER UN FUSIBLE DE RECHANGE DE MÊME TYPE DE4A, 125V.

2. CAUTION:

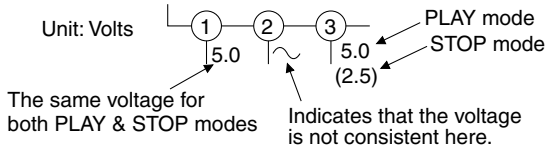
Fixed Voltage (or Auto voltage selectable) power supply circuit is used in this unit.
If Main Fuse (F1601) is blown, first check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the power supply circuit to fail.

3. Note:

1. Do not use the part number shown on the drawings for ordering. The correct part number is shown in the parts list, and may be slightly different or amended since the drawings were prepared.
2. To maintain original function and reliability of repaired units, use only original replacement parts which are listed with their part numbers in the parts list section of the service manual.

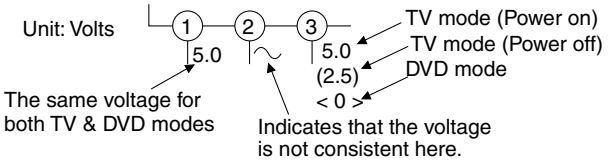
4. Voltage indications on the schematics are as shown below:

< DVD Section >

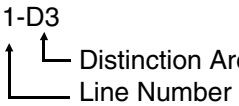


< TV Section >

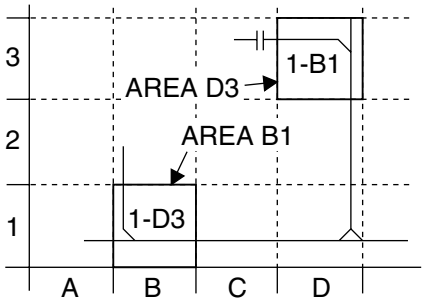
Unit: Volts



5. How to read converged lines



Examples:
1. "1-D3" means that line number "1" goes to the line number "1" of the area "D3".
2. "1-B1" means that line number "1" goes to the line number "1" of the area "B1".



6. Test Point Information

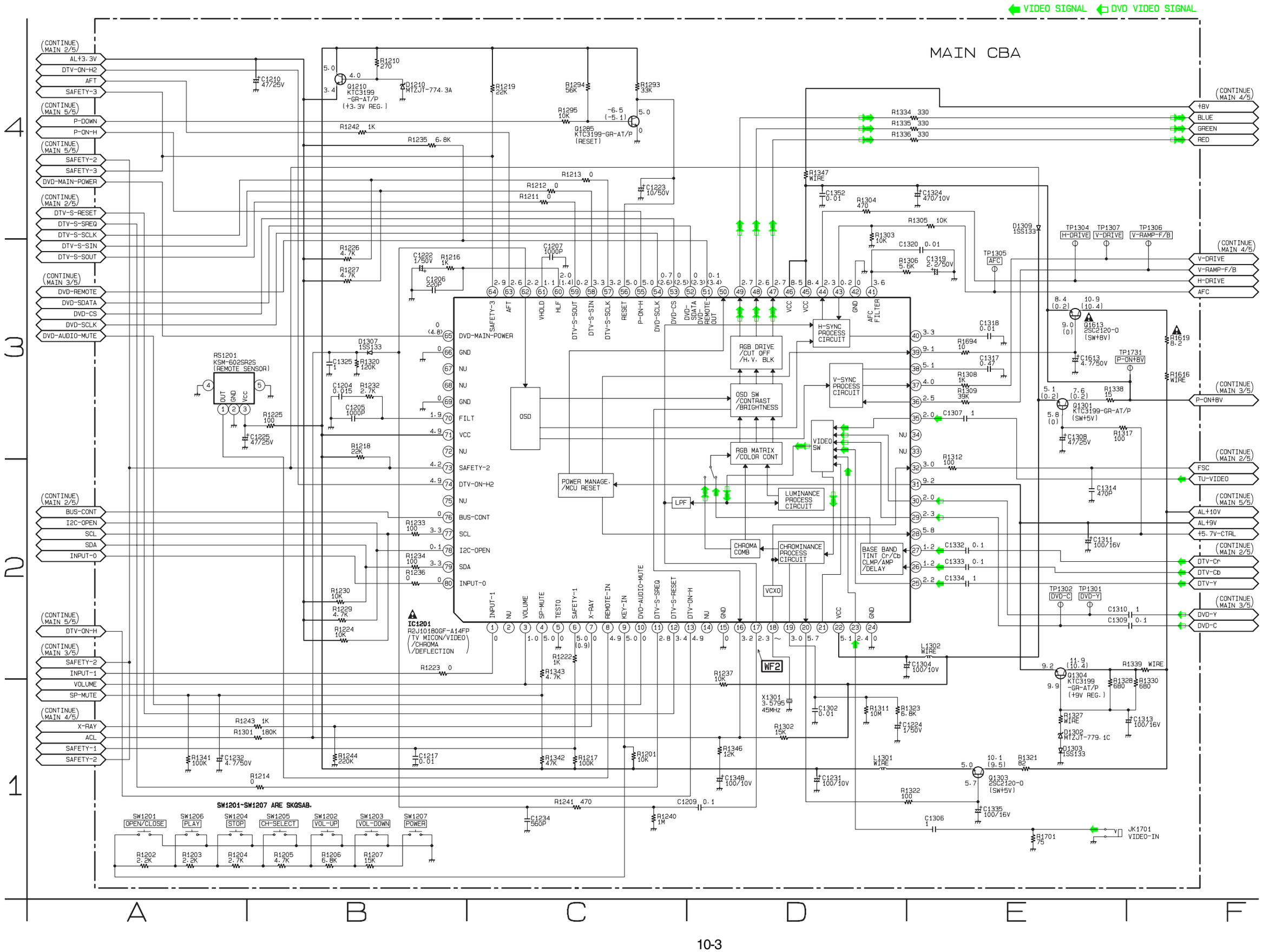
: Indicates a test point with a jumper wire across a hole in the PCB.

: Used to indicate a test point with a component lead on foil side.

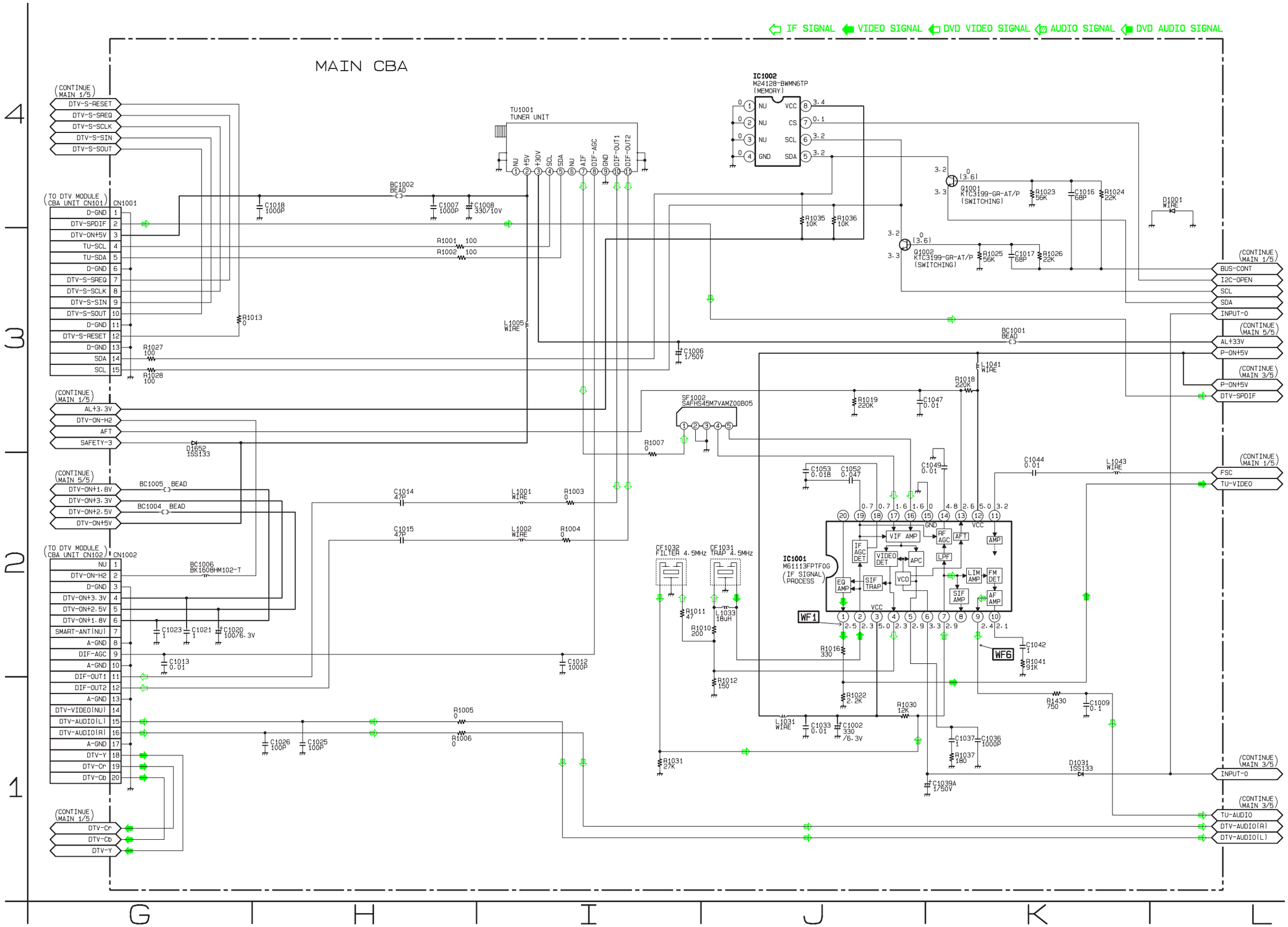
: Used to indicate a test point with no test pin.

: Used to indicate a test point with a test pin.

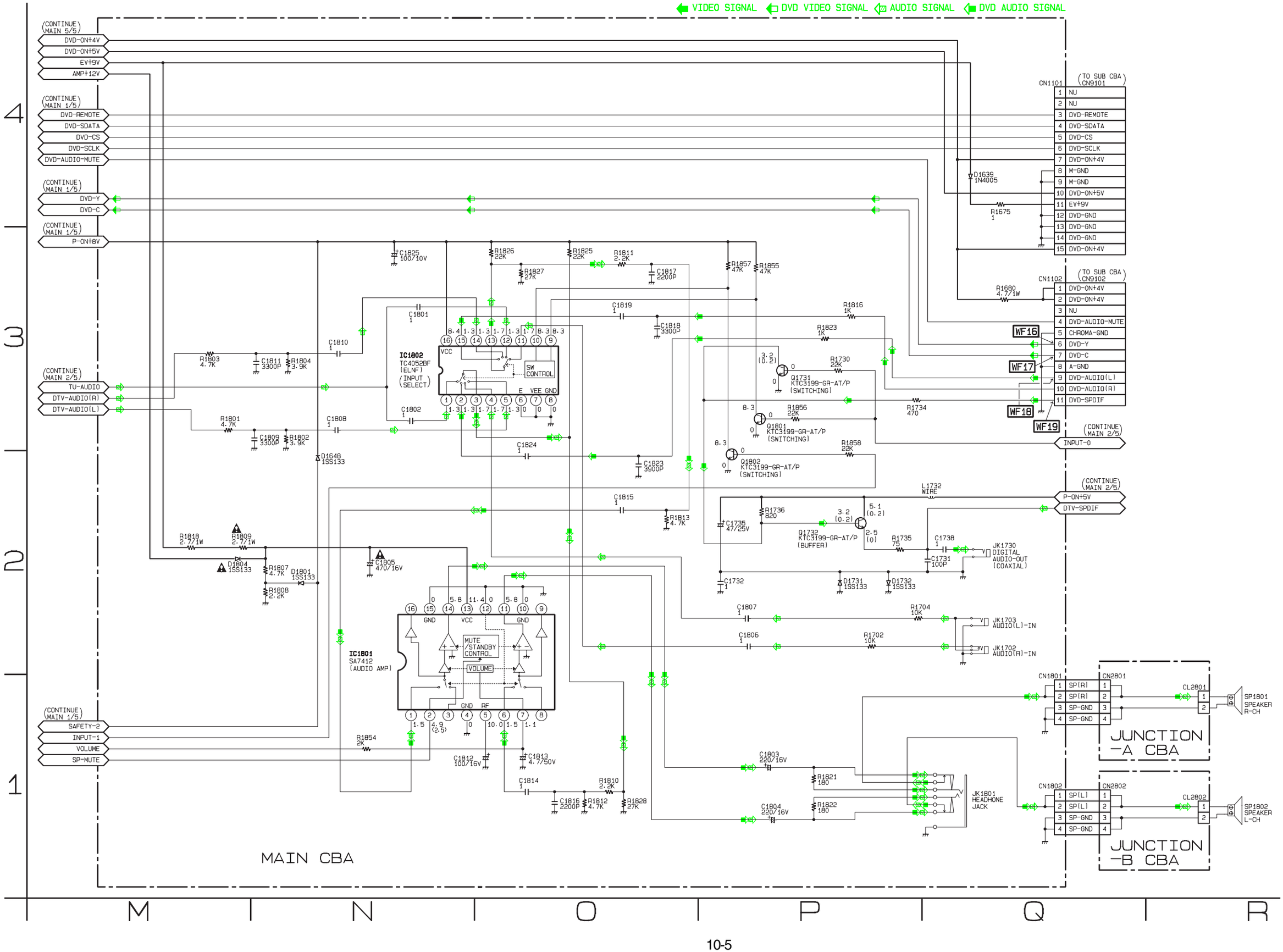
Main 1/5 Schematic Diagram < TV Section >



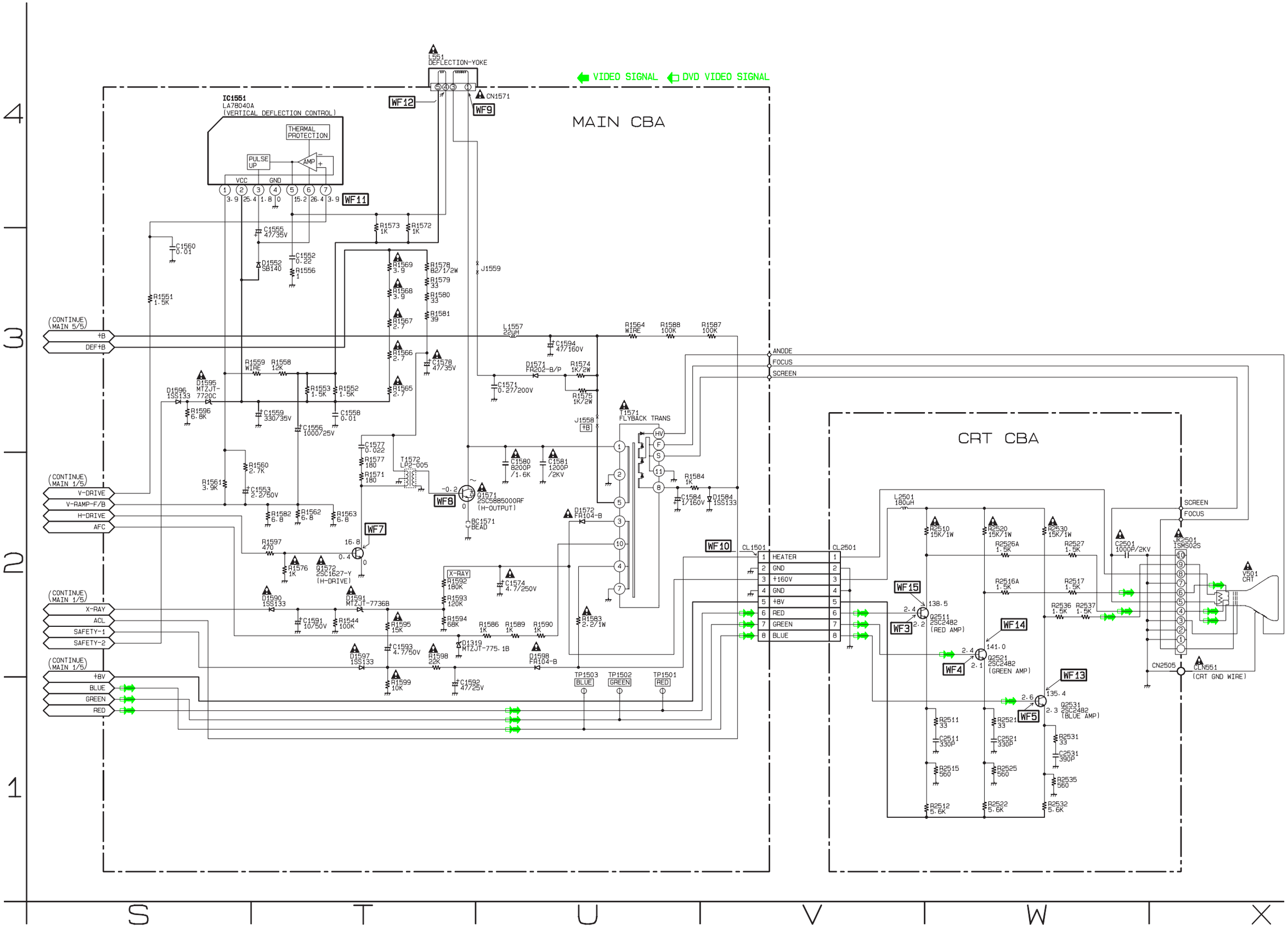
Main 2/5 Schematic Diagram < TV Section >



Main 3/5, Junction-A & Junction-B Schematic Diagram < TV Section >



Main 4/5 & CRT Schematic Diagram < TV Section >



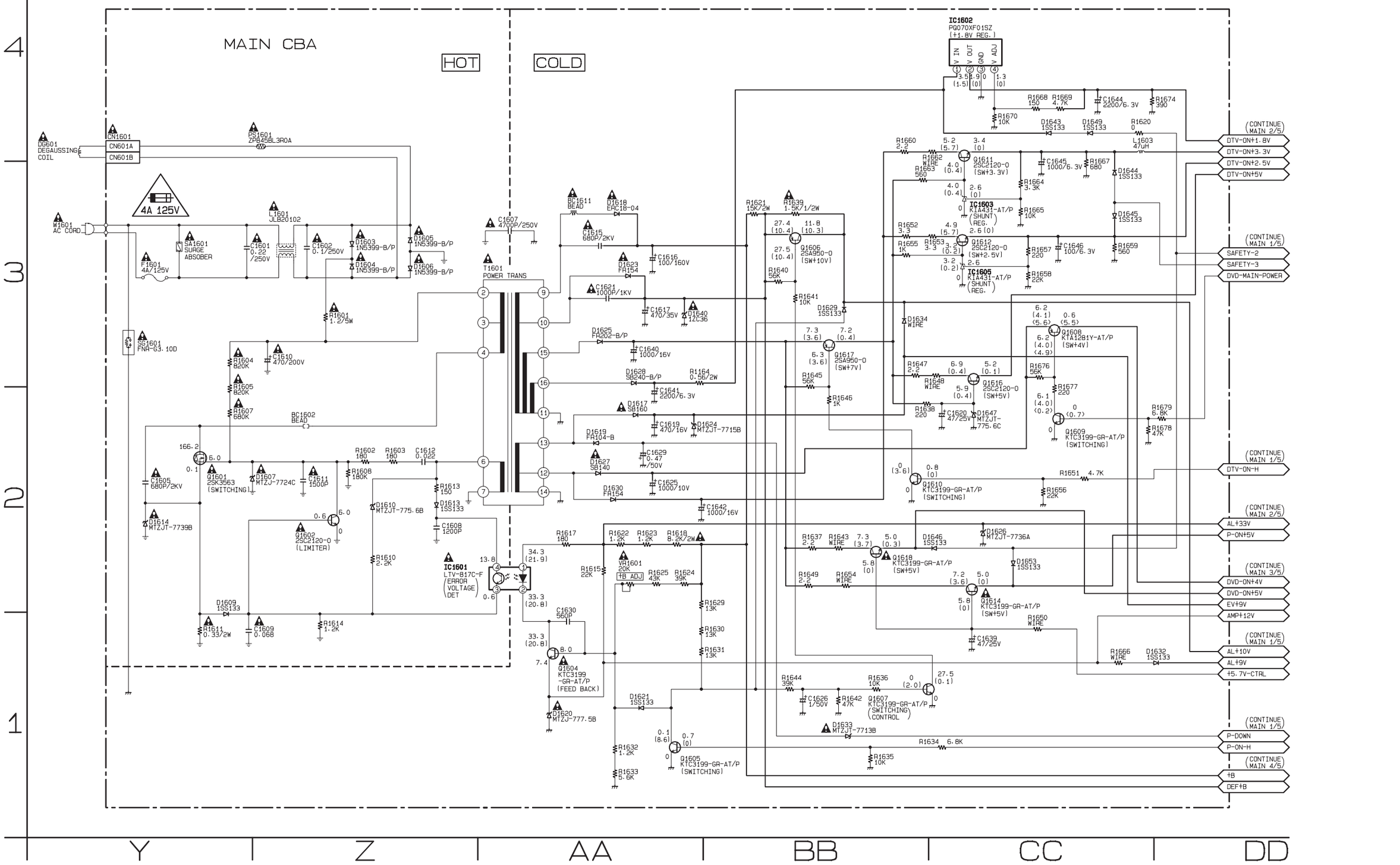
Main 5/5 Schematic Diagram < TV Section >

CAUTION !
Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit.
If Main Fuse (F1601) is blown , check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply.
Otherwise it may cause some components in the power supply circuit to fail.

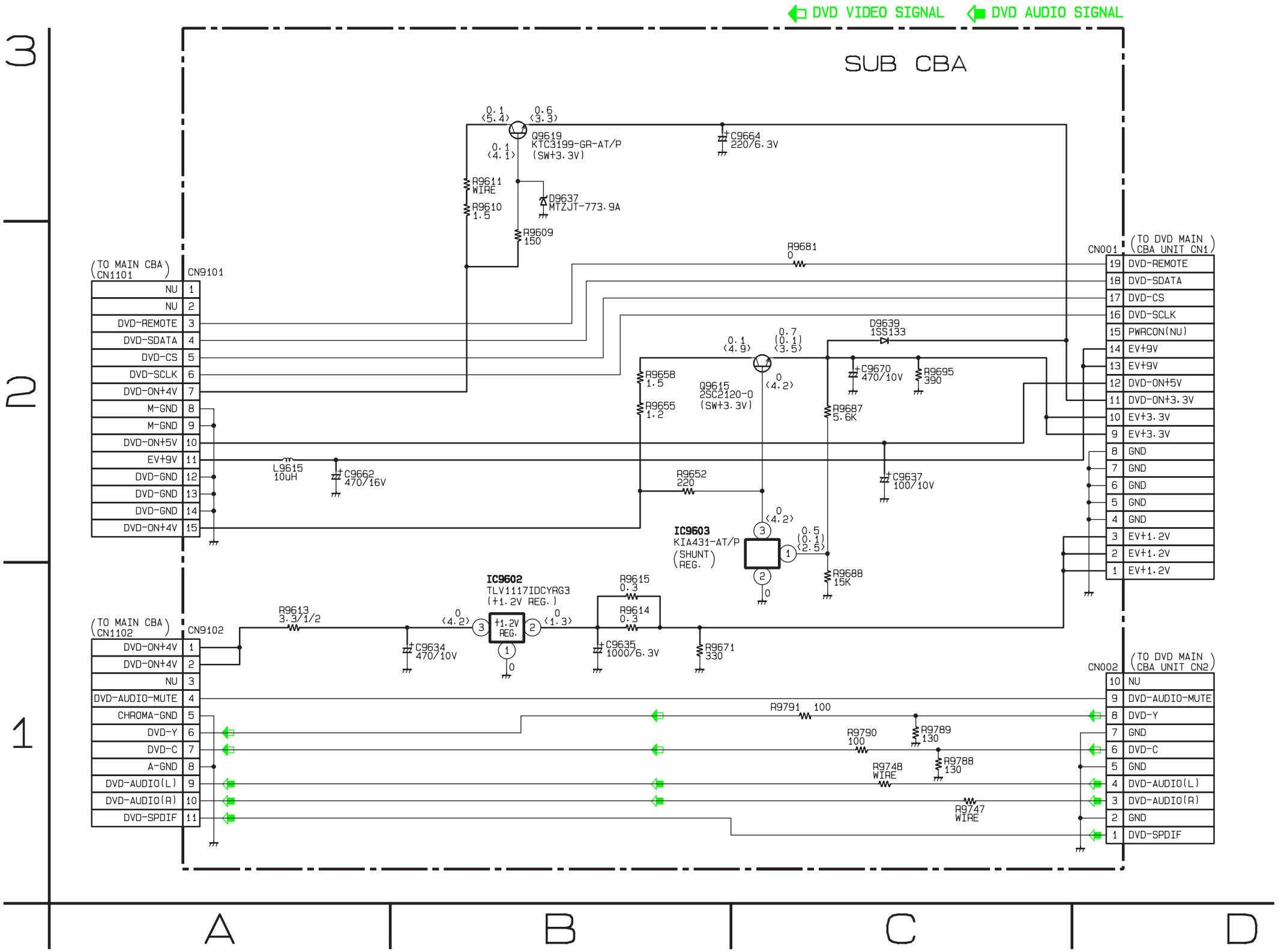
4A 125V

CAUTION ! : For continued protection against risk of fire, replace only with same type 4 A, 125V fuse.
ATTENTION : Utiliser un fusible de rechange de même type de 4A, 125V.

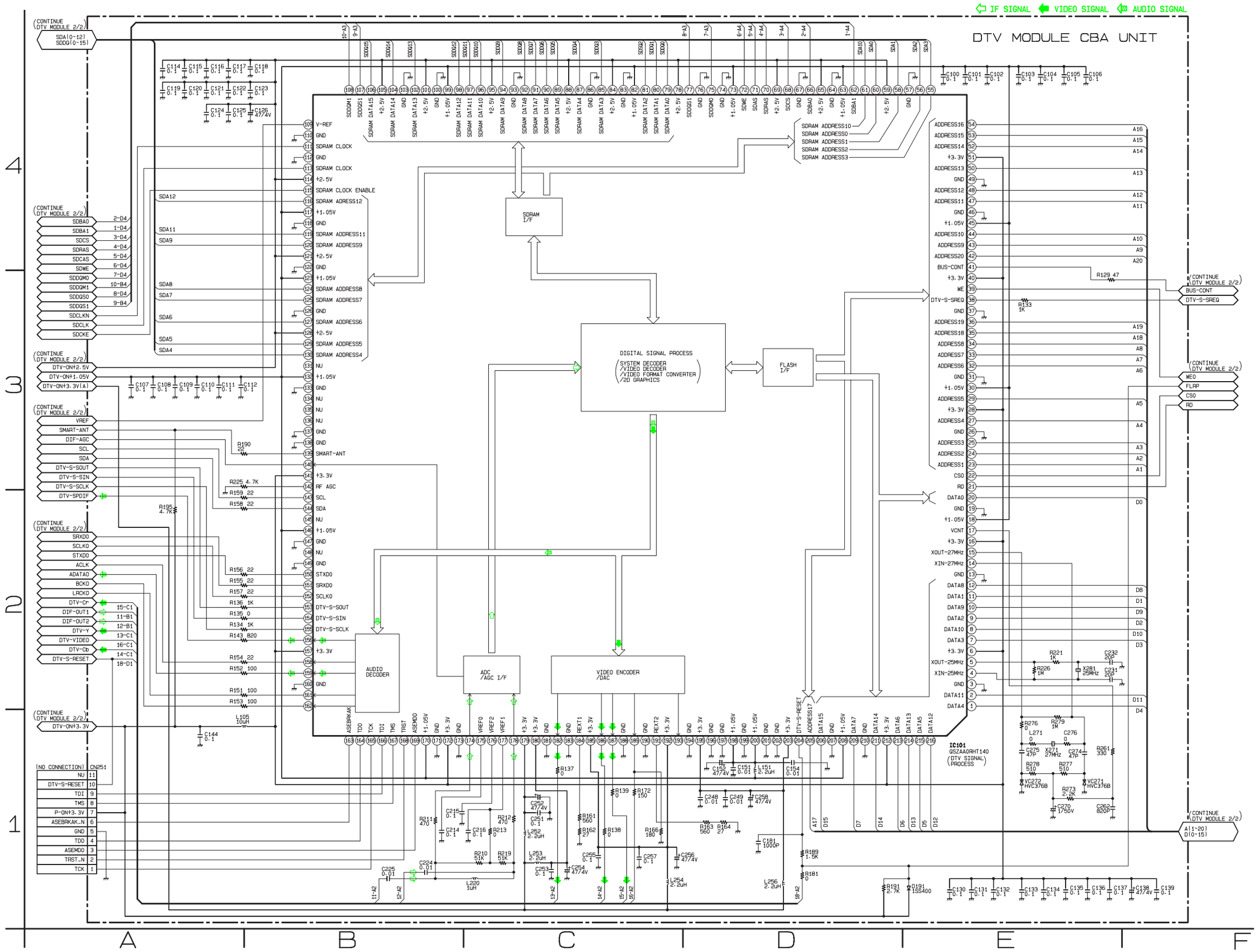
NOTE:
The voltage for parts in hot circuit is measured using hot GND as a common terminal.



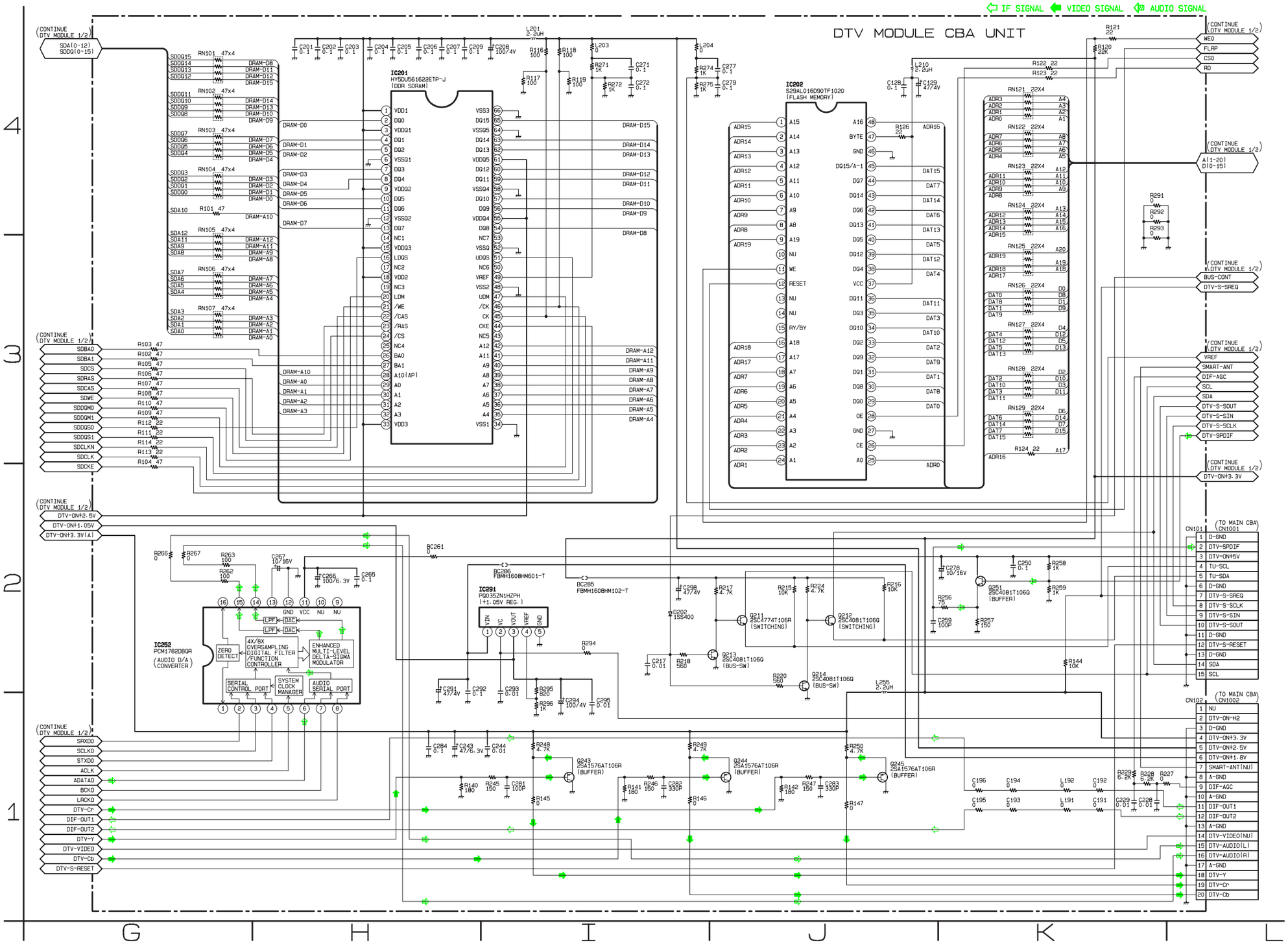
Sub Schematic Diagram < TV Section >



DTV Module 1/2 Schematic Diagram < TV Section >



DTV Module 2/2 Schematic Diagram < TV Section >



VOLTAGE CHART

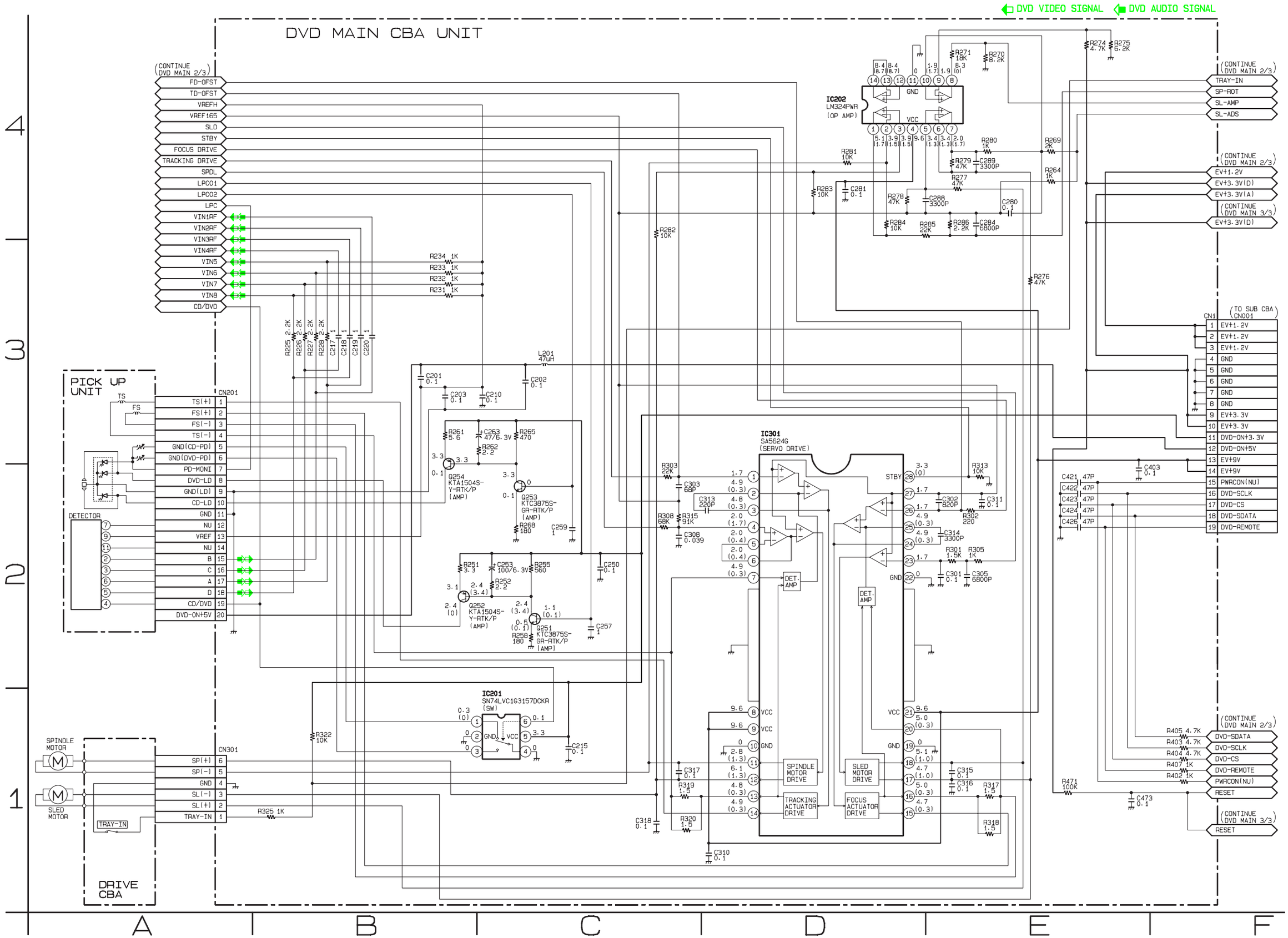
CN101

Pin No.	Voltage
1	0
2	1.9
3	5.2
4	3.4
5	3.4
6	0
7	2.8
8	3.2
9	3.3
10	0.2
11	0
12	3.4
13	0
14	3.2
15	3.2

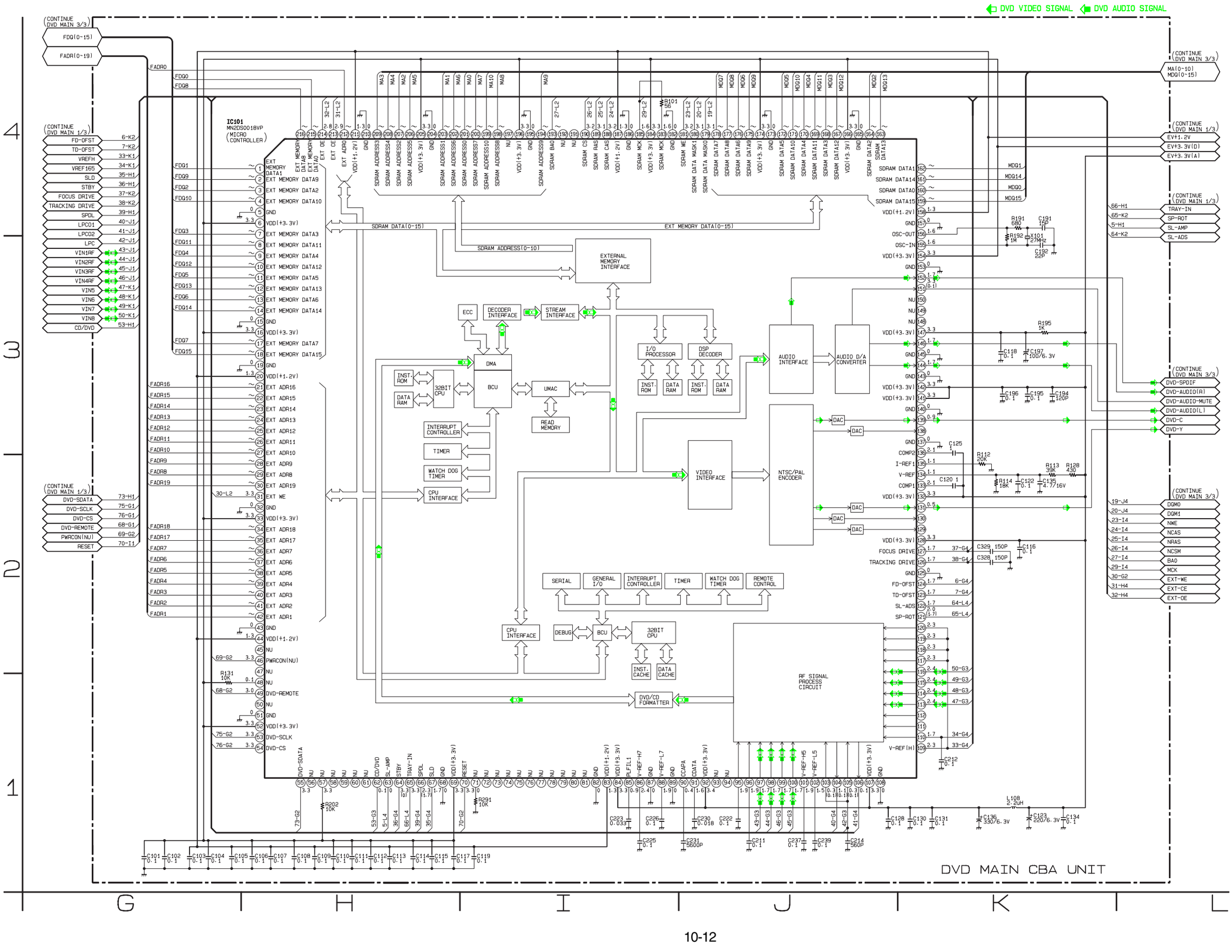
CN102

Pin No.	Voltage
1	---
2	4.9
3	0
4	3.4
5	2.6
6	1.9
7	---
8	0
9	1.7
10	0
11	0
12	0
13	0
14	---
15	2.6
16	2.5
17	0
18	~
19	~
20	~

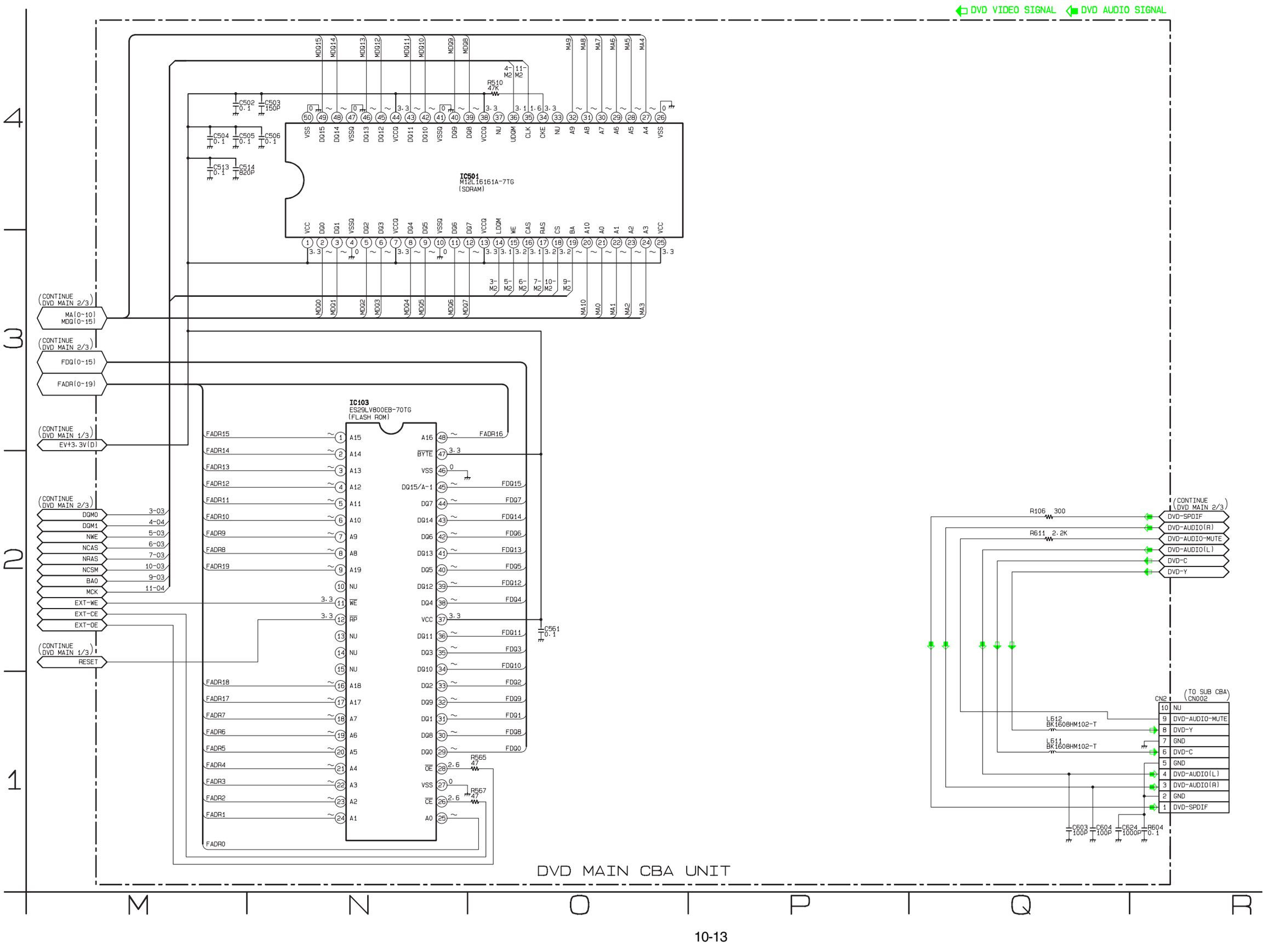
DVD Main 1/3 Schematic Diagram < DVD Section >



DVD Main 2/3 Schematic Diagram < DVD Section >



DVD Main 3/3 Schematic Diagram < DVD Section >



Main CBA Top View < TV Section >

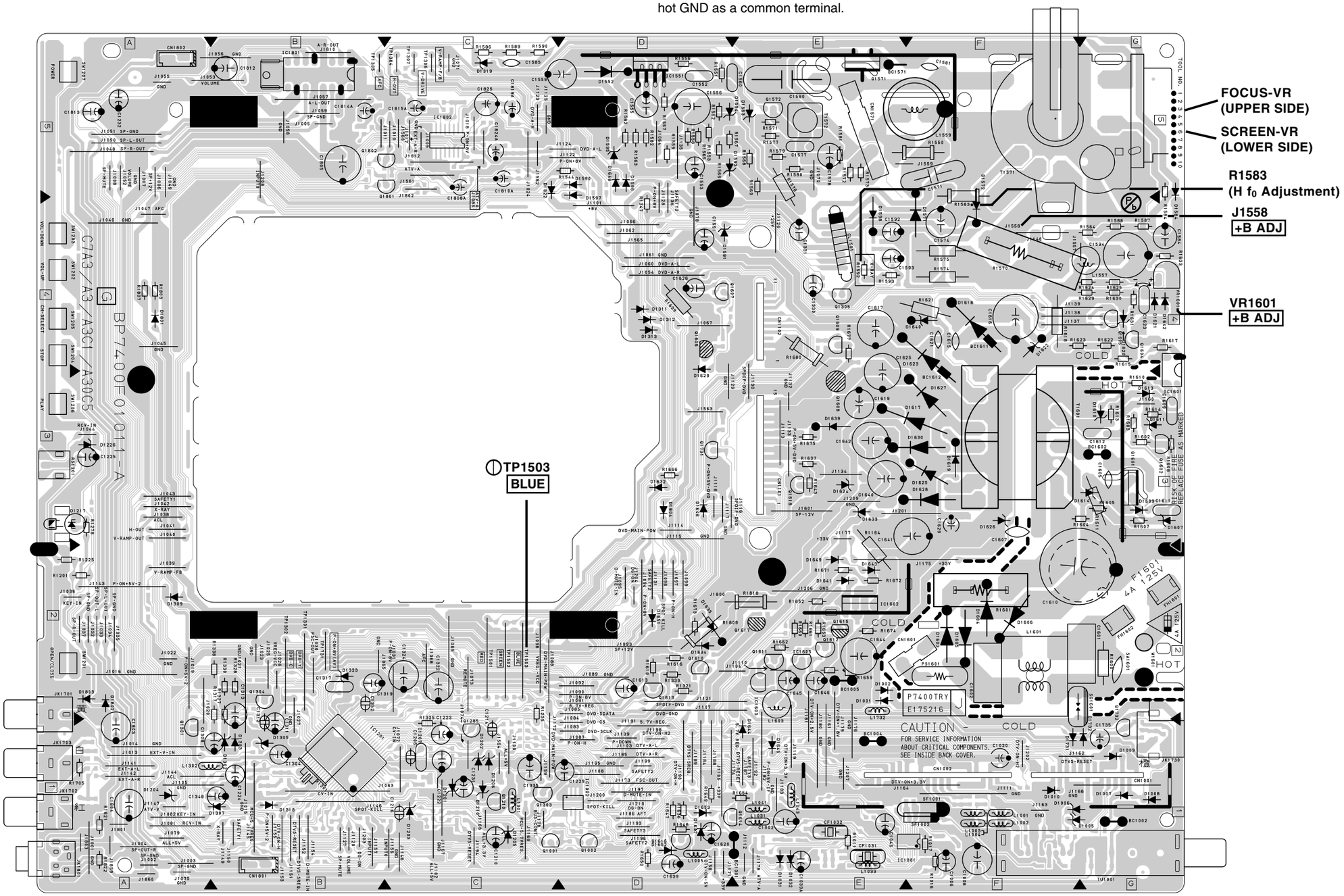
CAUTION !
Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit.
If Main Fuse (F1601) is blown , check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply.
Otherwise it may cause some components in the power supply circuit to fail.

4A 125V

CAUTION ! : For continued protection against risk of fire, replace only with same type 4 A, 125V fuse.
ATTENTION : Utiliser un fusible de rechange de même type de 4A, 125V.

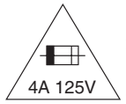
Because a hot chassis ground is present in the power supply circuit, an isolation transformer must be used. Also, in order to have the ability to increase the input slowly,when troubleshooting this type power supply circuit, a variable isolation transformer is required.

NOTE:
The voltage for parts in hot circuit is measured using hot GND as a common terminal.



Main CBA Bottom View < TV Section >

CAUTION !
Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit.
If Main Fuse (F1601) is blown , check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply.
Otherwise it may cause some components in the power supply circuit to fail.



CAUTION ! : For continued protection against risk of fire, replace only with same type 4 A, 125V fuse.
ATTENTION : Utiliser un fusible de rechange de même type de 4A, 125V.

Because a hot chassis ground is present in the power supply circuit, an isolation transformer must be used. Also, in order to have the ability to increase the input slowly,when troubleshooting this type power supply circuit, a variable isolation transformer is required.

NOTE:
The voltage for parts in hot circuit is measured using hot GND as a common terminal.

WF8
Q1571
Base

WF11
PIN 7
OF IC1551

WF9
PIN 1
OF CN1571

WF12
PIN 4
OF CN1571

WF7
Q1572
Collector

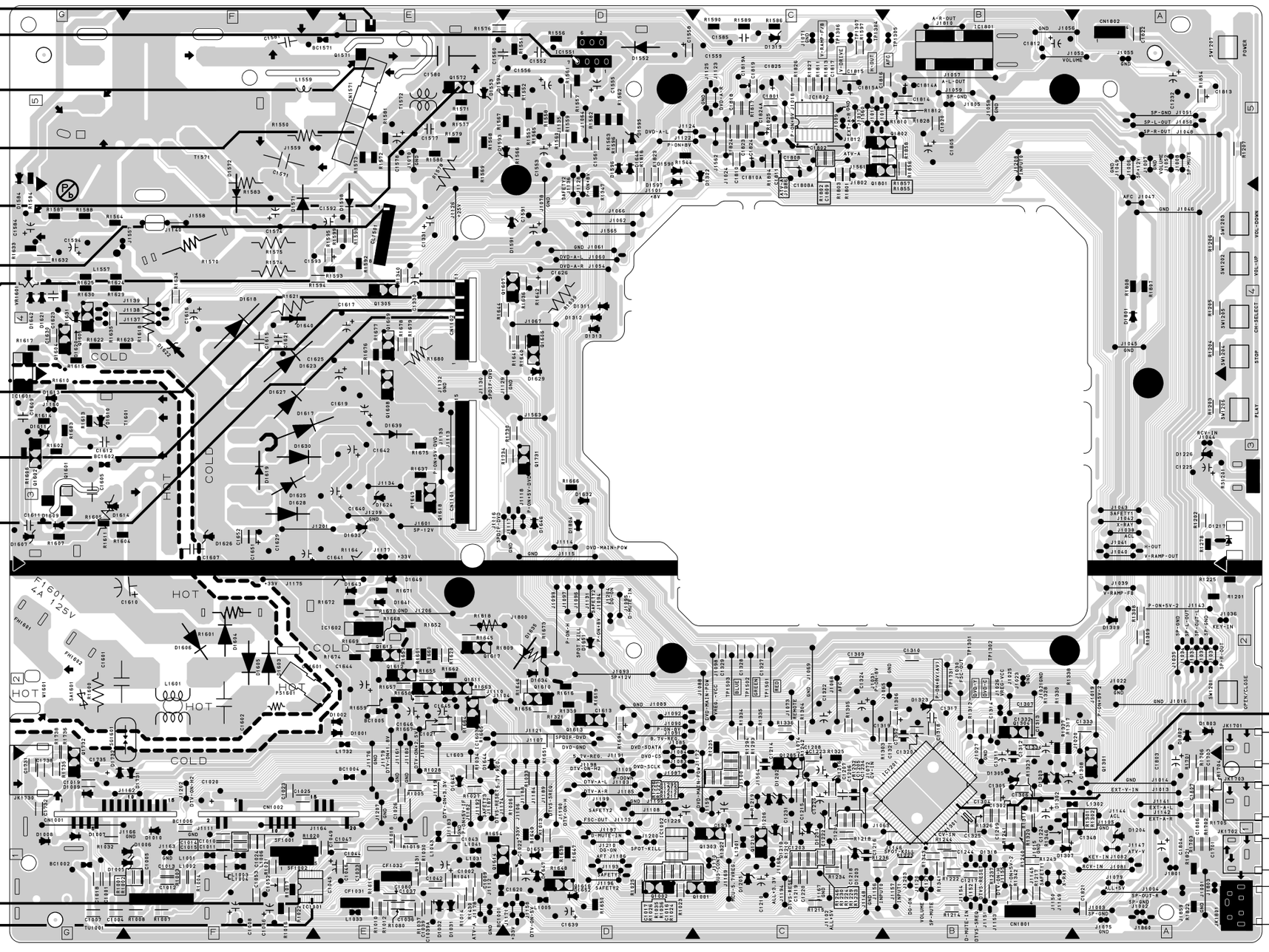
WF10
PIN 1
OF CL1501

WF19
PIN 11
OF CN1102

WF18
PIN 9
OF CN1102

WF17
PIN 7
OF CN1102

WF16
PIN 6
OF CN1102

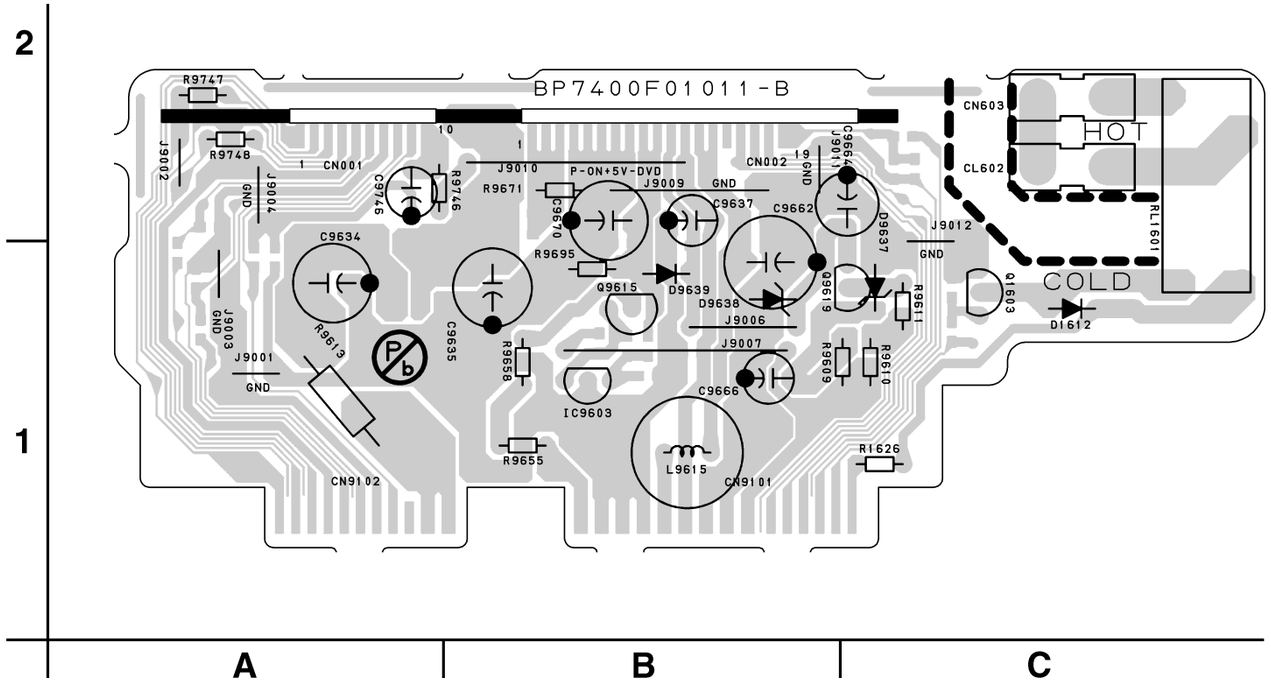


WF2
PIN 17
OF IC1201

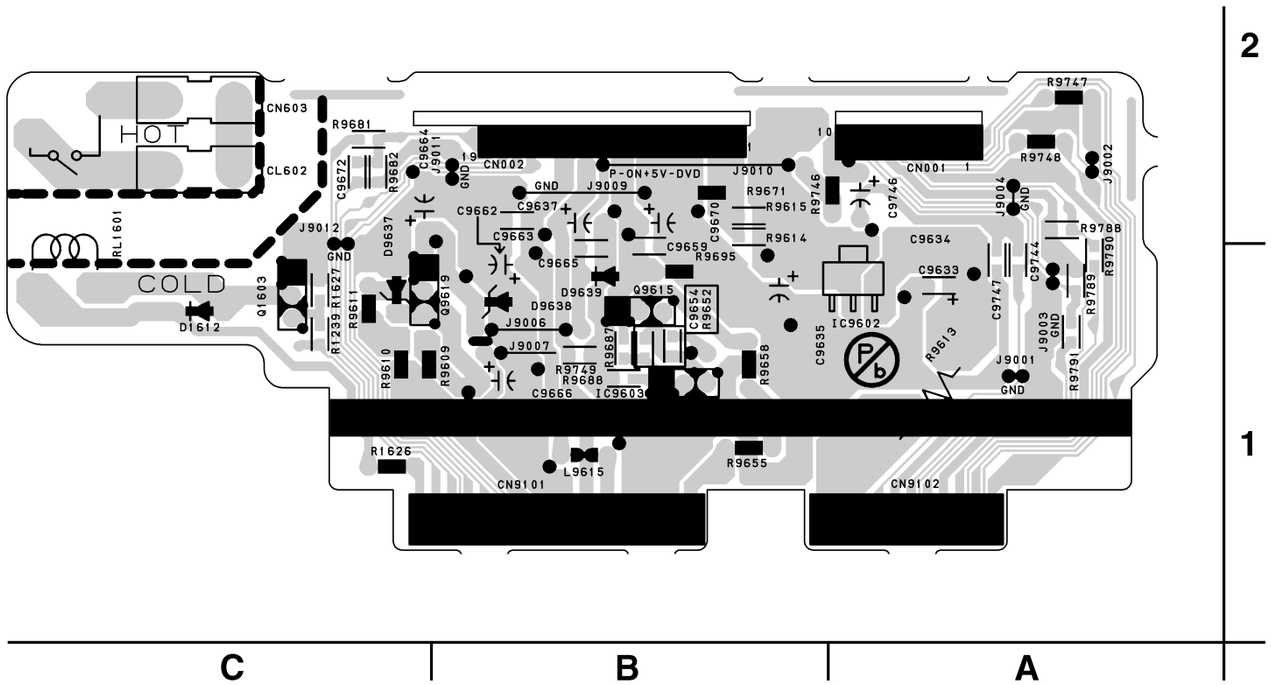
WF1
PIN 1
OF IC1001

WF6
PIN 9
OF IC1001

Sub CBA Top View < TV Section >

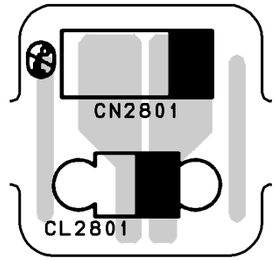


Sub CBA Bottom View < TV Section >

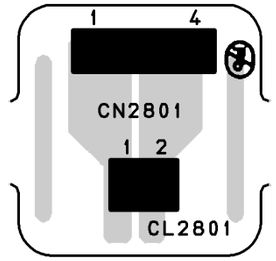


BP7400F01011-B

Junction-A CBA Top View < TV Section >

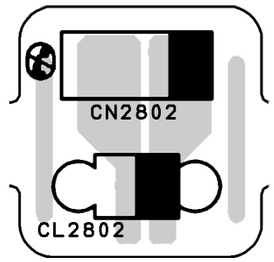


Junction-A CBA Bottom View < TV Section >

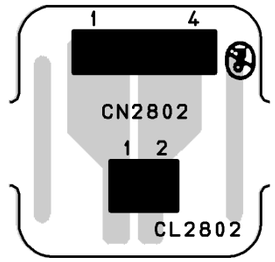


BP7400F01011-D

Junction-B CBA Top View < TV Section >

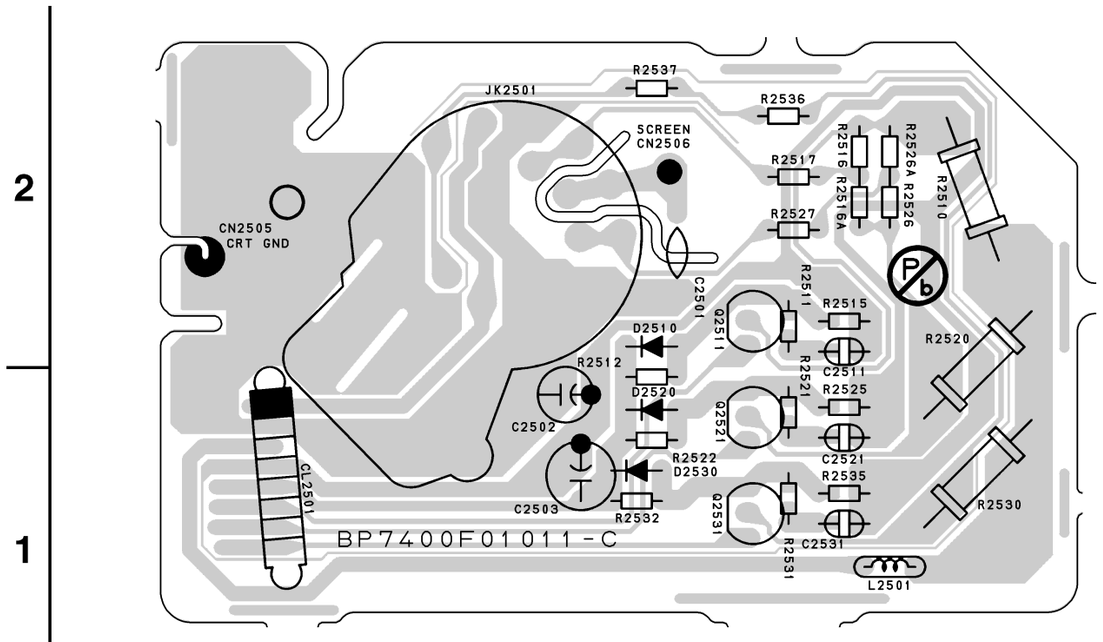


Junction-B CBA Bottom View < TV Section >

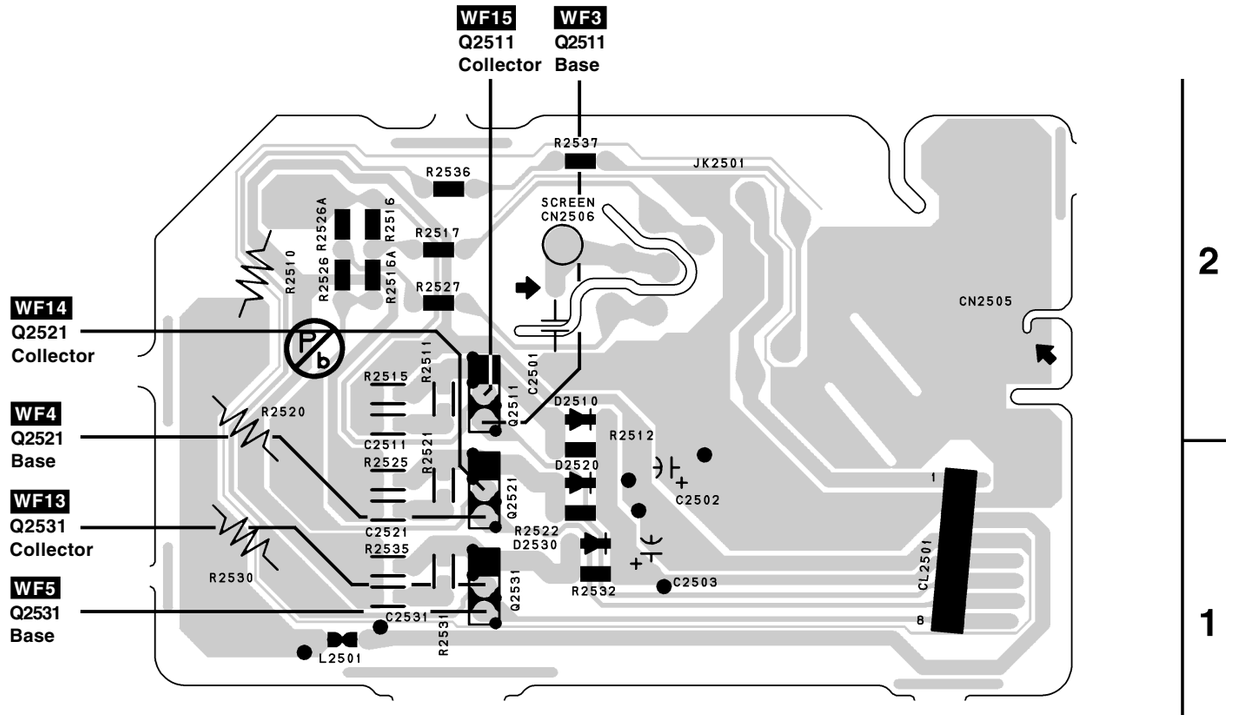


BP7400F01011-E

CRT CBA Top View < TV Section >

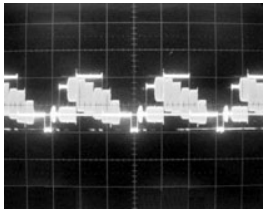


CRT CBA Bottom View < TV Section >

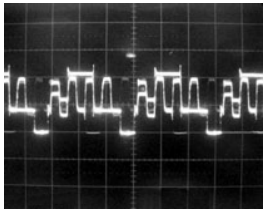


WAVEFORMS

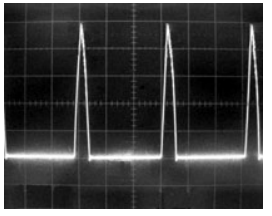
Input: NTSC Color Bar Signal (with 1kHz Audio Signal) --- WF1~WF15
DVD Video (Power on (Stop) MODE) --- WF16, WF17
CD (1KHz Play) --- WF18, WF19
INITIAL POSITION: Unplug unit from AC outlet for at least five minutes, reconnect to AC outlet and then turn power on.
(Brightness---Center Color---Center Tint---Center Contrast---Approx 70%)



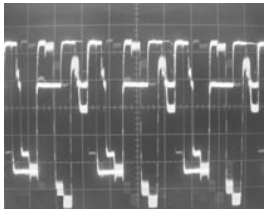
WF1 1DIV: 0.5V 20µs
IC1001 Pin 1



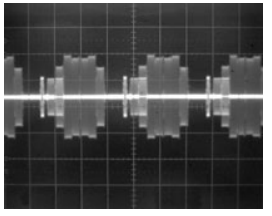
WF5 1DIV: 2V 20µs
Q2531 Base



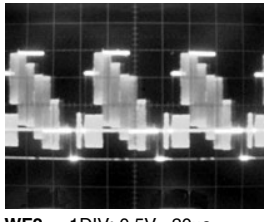
WF9 1DIV: 200V 20µs
CN1571 Pin 1



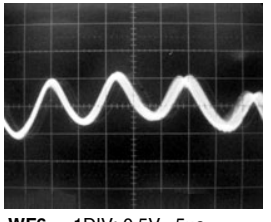
WF13 1DIV: 20V 20µs
Q2531 Collector



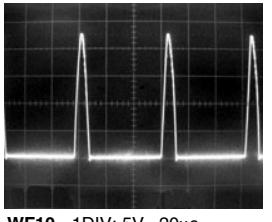
WF17 1DIV: 0.2V 20µs
CN1102 Pin 7



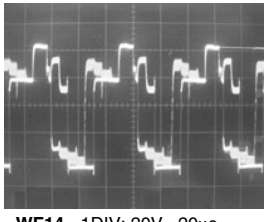
WF2 1DIV: 0.5V 20µs
IC1201 Pin 17



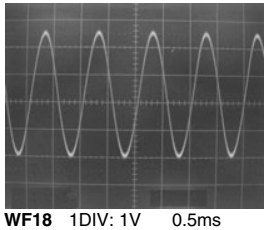
WF6 1DIV: 0.5V 5µs
IC1001 Pin 9



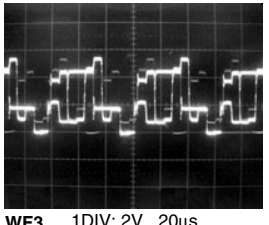
WF10 1DIV: 5V 20µs
CL1501 Pin 1



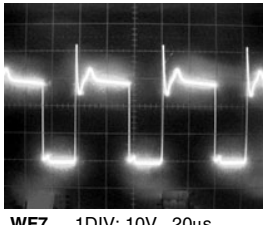
WF14 1DIV: 20V 20µs
Q2521 Collector



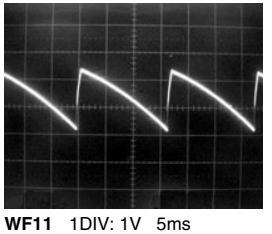
WF18 1DIV: 1V 0.5ms
CN1102 Pin 9



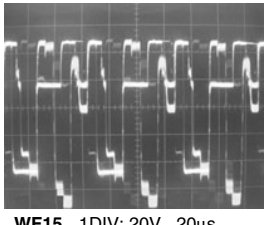
WF3 1DIV: 2V 20µs
Q2511 Base



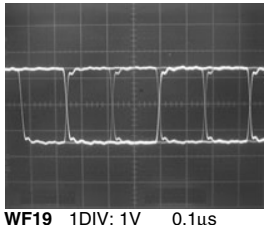
WF7 1DIV: 10V 20µs
Q1572 Collector



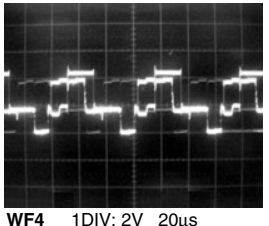
WF11 1DIV: 1V 5ms
IC1551 Pin 7



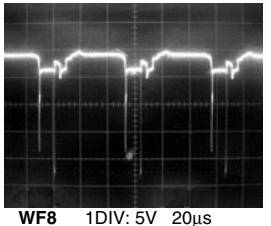
WF15 1DIV: 20V 20µs
Q2511 Collector



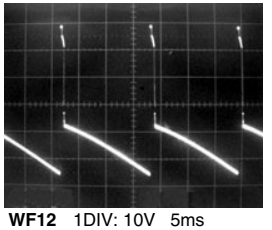
WF19 1DIV: 1V 0.1µs
CN1102 Pin 11



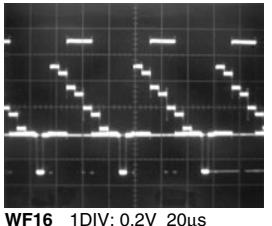
WF4 1DIV: 2V 20µs
Q2521 Base



WF8 1DIV: 5V 20µs
Q1571 Base



WF12 1DIV: 10V 5ms
CN1571 Pin 4



WF16 1DIV: 0.2V 20µs
CN1102 Pin 6

WIRING DIAGRAM