

TOSHIBA

FILE NO. 060-200510

SERVICE MANUAL

Plasma Color Television



42WP56A
42WP56E
42WP56R
42WP56T

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SERVICE SAFETY PRECAUTIONS










- The caution items shown here describe major safety issues and should always be observed.
- The meanings of the various indications are as follows.

 WARNING	Indicates a hypothetical situation in which service personnel and nearby third parties, or even end users due to a product defect after the service operation is completed, could possibly be in danger of injury or even death in the event of operational error.
 CAUTION	Indicates a hypothetical situation in which service personnel and nearby third parties, or even end users after the service operation is completed, could possibly be in danger of injury, or where there could be physical damage in the event of operational error.

* Physical damage means major damage to a home, furnishings and other possessions.




Examples of marks

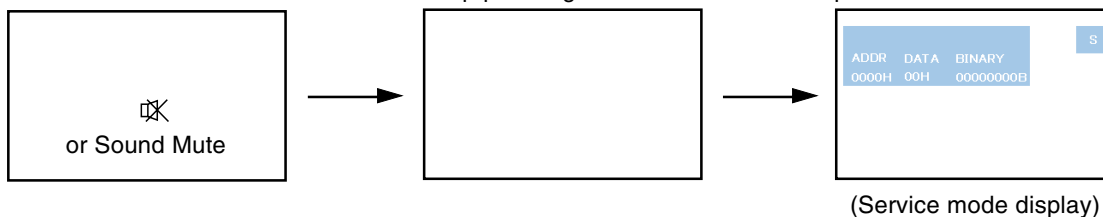
 SHOCK HAZARD	The Δ indicates caution (including danger and warning). The actual meaning of this caution is indicated inside the Δ or nearby illustrations or text. The example shown to the left indicates the danger of "electrical shock".
 PROHIBIT DISASSEMBLING	The \ominus indicates a forbidden action. The actual meaning of this caution is indicated inside the \ominus or nearby illustrations or text. The example shown to the left indicates that disassembly is forbidden.
 UNPULUG	The \bullet indicates a forced action (an action that must be performed). The actual meaning of this forced action is indicated by \bullet or nearby illustrations or text. The example shown to the left indicates that the power plug must be disconnected.

	 WARNING
 KEEP CHILDREN AWAY	<ul style="list-style-type: none"> Always advise users to keep children away. There is danger of injury to children from tools, disassembled products, etc.
 UNPLUG	<ul style="list-style-type: none"> Always disconnect the power plug before starting work whenever power is not required. Failure to disconnect the power plug before starting work can result in electrical shock.
 SHOCK HAZARD	<ul style="list-style-type: none"> Depending on the model, use an insulation transformer or wear gloves when servicing with the power on, and disconnect the power plug to avoid electrical shock when replacing parts. In some cases, alternating current is also impressed in the chassis, so electrical shock is possible if the chassis is contacted with the power on.
 USE SPECIFIED PARTS	<ul style="list-style-type: none"> Always use the replacement parts specified for the particular model when making repairs. The parts used in products have the necessary safety characteristics such as inflammability, voltage resistance, etc.; therefore, use only replacement parts that have these same characteristics. Use only the specified parts when the  mark is included in a circuit diagram or parts list.
 CAUTION FOR WIRING	<ul style="list-style-type: none"> Parts mounting and routing of the wiring should be the same as that used originally. For safety purposes, insulating materials such as tubing or tape is sometimes used and printed circuit boards are sometimes mounted floating. Also make sure that wiring is routed and clamped to avoid parts that generate heat and which use high voltage. Always follow the original scheme.
 CAUTION FOR ASSEMBLING / WIRING	<ul style="list-style-type: none"> After a repair has been completed, reassemble all disassembled parts, and route and reconnect the wiring, in accordance with the original scheme. Do not allow internal wiring to be pinched by cabinets, panels, etc. Any error in reassembly or wiring can result in electrical leakage, flame, etc., and may be hazardous.
 CHECK INSULATION RESISTANCE	<ul style="list-style-type: none"> After completing the work, disconnect the power plug from the outlet, remove the antenna, turn on the power switch. Then, use a 500V insulation resistance meter to check the insulation resistance of the antenna terminal, other metallic parts and between the prongs of the power plug to make sure that the insulation resistance is 1M Ω or more. The set will require inspection and repair if the insulation resistance is below this value.
 PROHIBIT REMODELING	<ul style="list-style-type: none"> Never remodel the product in any way. Remodeling can result in improper operation, malfunction, or electrical leakage and flame, which may be hazardous

SERVICE MODE

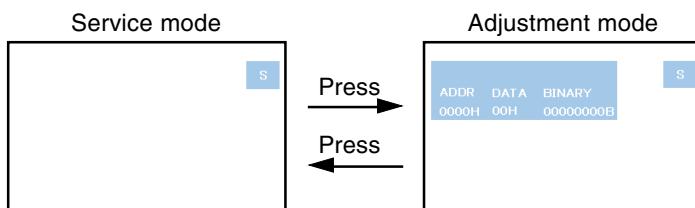
1. ENTERING SERVICE MODE

- 1) Press  button once on Remote Control.
- 2) Press  button again and keep pressing.
- 3) While pressing the  button, press MENU button on TV set.




2. DISPLAYING THE ADJUSTMENT MENU

- 1) Press MENU button on TV.



3. KEY FUNCTION IN THE SERVICE MODE

The following key entry during display of adjustment menu provides special functions.

Test signal selection :	-⊖ button (on Remote)
Selection of the adjustment items :	Channel ▲/▼ (on TV or Remote)
Change of the data value :	Volume  +/- (on TV or Remote)
Adjustment menu mode ON/OFF :	MENU button (on TV)
Initialization of the memory :	CALL + Channel button on TV (▲)
Reset the count of operating protect circuit to "00":	CALL + Channel button on TV (▼)
"RCUT" selection :	1 button
"GCUT" selection :	2 button
"BCUT" selection :	3 button
"SCNT" selection :	4 button
"COLP" selection :	5 button - - - - Color thickness correction
"TNTC" selection :	6 button
Automatic A/D Adjustment(PC, Component) :	7 button
Self diagnostic display ON/OFF :	9 button

note: Displayed differently as shown below, depending on the setting of the receiving color system.
COLP (PAL)
COLC (NTSC)
COLS (SECAM)

CAUTION : Never try to perform initialization unless you have changed the memory IC.

4. SELECTING THE ADJUSTING ITEMS

- 1) Every pressing of CHANNEL ▲ button in the service mode changes the adjustment items in the order of table-2.
(▼ button for reverse order)

5. ADJUSTING THE DATA

- 1) Pressing of VOLUME ▲ +/- button will change the value of data in the range from 00H to FFH. The variable range depends on the adjusting item.

6. EXIT FROM SERVICE MODE

- 1) Pressing POWER button to turn off the TV once.

■ INITIALIZATION OF MEMORY DATA

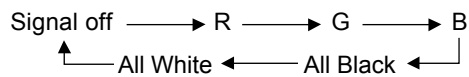
After replacing EEPROM IC, the following initialization is required.

1. Enter the service mode, then select any register item.
2. Press and hold the CALL button on the Remote, then press the CHANNEL ▲ button on the TV. The initialization of EEPROM IC has been completed.
3. Check the picture carefully. If necessary, adjust any adjustment item above.
Perform "Auto tune" on the owner's manual.

CAUTION: Never attempt to initialize the data unless EEPROM IC has been replaced.

7. TEST SIGNAL SELECTION

- 1) Every pressing of -⊖ button on the Remote Control changes the built-in test patterns on screen as described below in SERVICE MODE.



Signals	Picture
<ul style="list-style-type: none">• Red raster• Green raster• Blue raster• All Black• All White	

8. SELF DIAGNOSTIC FUNCTION

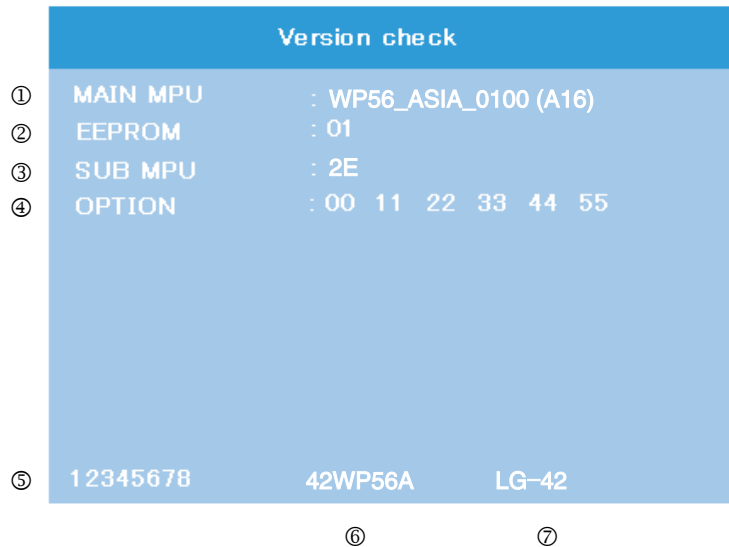
- 1) Press "9" button on Remote Control during display of adjustment menu in the service mode.
The diagnosis will begin to check if interface among IC's is executed properly.
- 2) During diagnosis, the following displays are shown.



- ① Firmware :
Version information of microprocessor
In case of file name : WP56_ASIA and Version : 0100 indicates[WP56_ASIA_0100].
- ② Time : Total hour of turn the TV on. (Unit : H)
- ③ Power : Operation number of protecting circuit ----"000" is normal.
When indication is other than "000", overcurrent apt to flow, and circuit parts may possibly be damaged.
- ④ Bus line : --"OK" is normal
"SCL-GND"(Red indication) : SCL-GND short circuit
"SDA-GND"(Red indication) : SDA-GND short circuit
"SCL-SDA"(Red indication) : SCL-SDA short circuit
- ⑤ Bus cont : --- "OK" is normal.
NG is abnormal(Red indication), when type name of semiconductor indicates.
- ⑥ Block
UV : TV reception mode
V1 : VIDEO 1 input mode (→ 1)
V2 : VIDEO 2 input mode (→ 2)
V3 : COMPONENT VIDEO input mode (→ C1)
V4 : COMPONENT VIDEO input mode (→ C2)
V5 : HDMI 1
V6 : HDMI 2
- ⑦ 8 digit : CD number
- ⑧ Model name (7 digit)

9. VERSION CHECK MODE

- 1) Press "9" button twice on Remote Control during display of adjustment menu in the service mode. The version of main MPU will begin to check.
- 2) During Version Check, the following displays are shown.



- ① MAIN MPU :
Version information of microprocessor
In case of file name : WP56_ASIA, Version 0100 for Code Program Version and (A16) for OSD Version indicates [WP56_ASIA_0100(A16)]
- ② EEPROM :
Version information of EEPROM : Display 1 byte data.
- ③ SUB MPU :
Version information of SUB MPU : Display 1 byte data.
- ④ OPTION :
Option information : Display six numbers of 1 byte data.
- ⑤ CD number : Display 8 digit number
- ⑥ Model name : Display 7 digit number
- ⑦ Panel Vender information display
The following Panel Vender and screen size are displayed.

Panel	Panel Vender	Screen Size(Inch)
LCD	LPL	-23
	SHP	-26
	CMO	-27
		-32
		-37
		-42
PDP	LG	-42

Example : LG-42 indicates that Vender is LG and Screen Size is 42 inch.

10. STATUS CHECK MODE

- 1) Press "9" button thrice on Remote Control during display of adjustment menu in the service mode. The status of this model will begin to check.
- 2) During Status Check, the following displays are shown.

Status check	
①	MAIN : EXT1
②	MAIN FORMAT : 1080i-50
③	MAIN PLL : C6 38 54 CE 08
④	SCREEN SIZE : Super live
⑤	OTHER STATUS : 0000 0000 0000

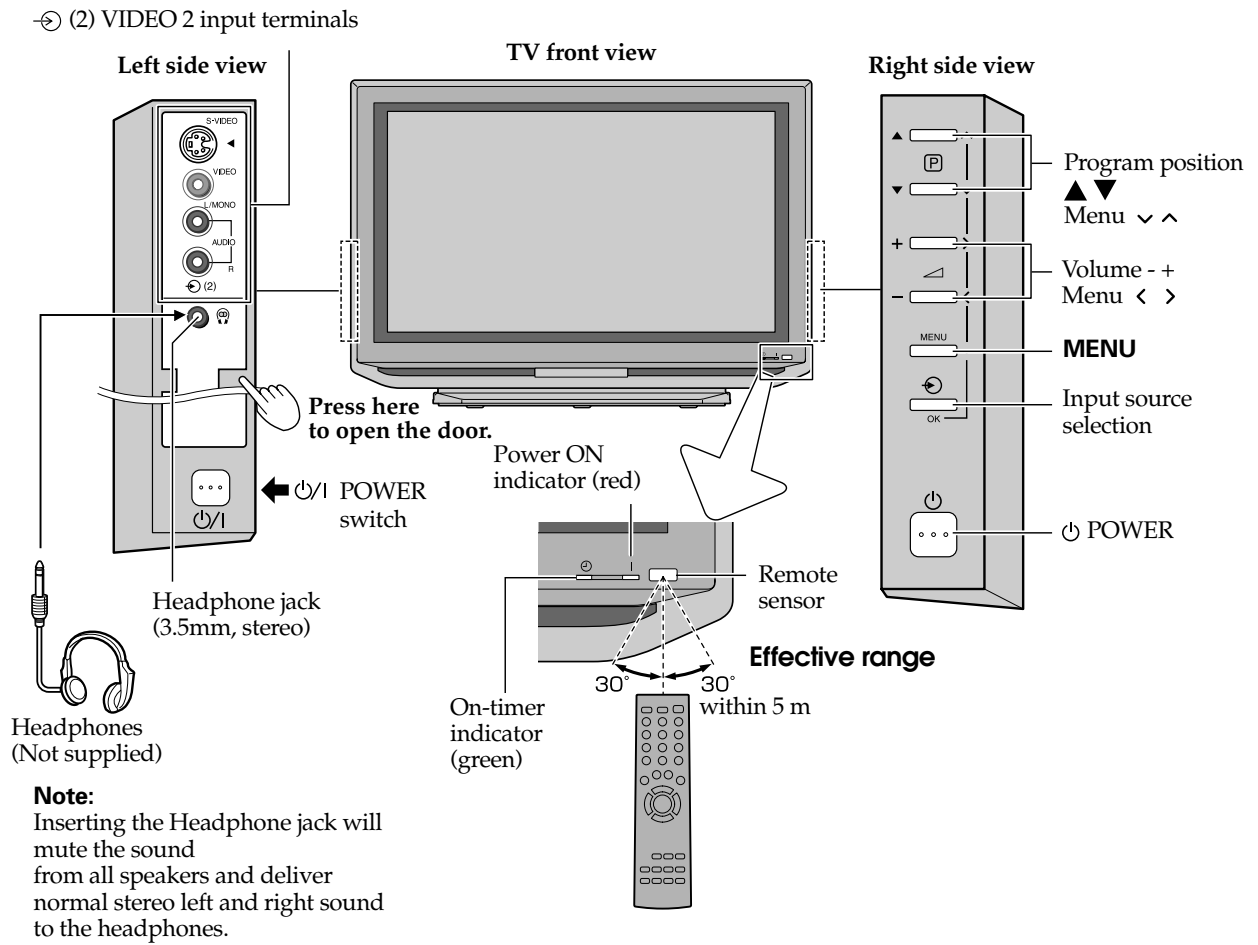
- ① MAIN :
Main source information :
Display RF position number (0 - 99) on the main screen, or Input Source (EXT1/2/3/HDMI etc.)
- ② MAIN FORMAT :
Display Video and PC format information
- ③ MAIN PLL :
Main PLL information : Display five numbers of 1 byte data.
- ④ SCREEN SIZE :
Display the screen size as follows.

Super live
Cinema
Subtitle
14:9
Wide
4:3

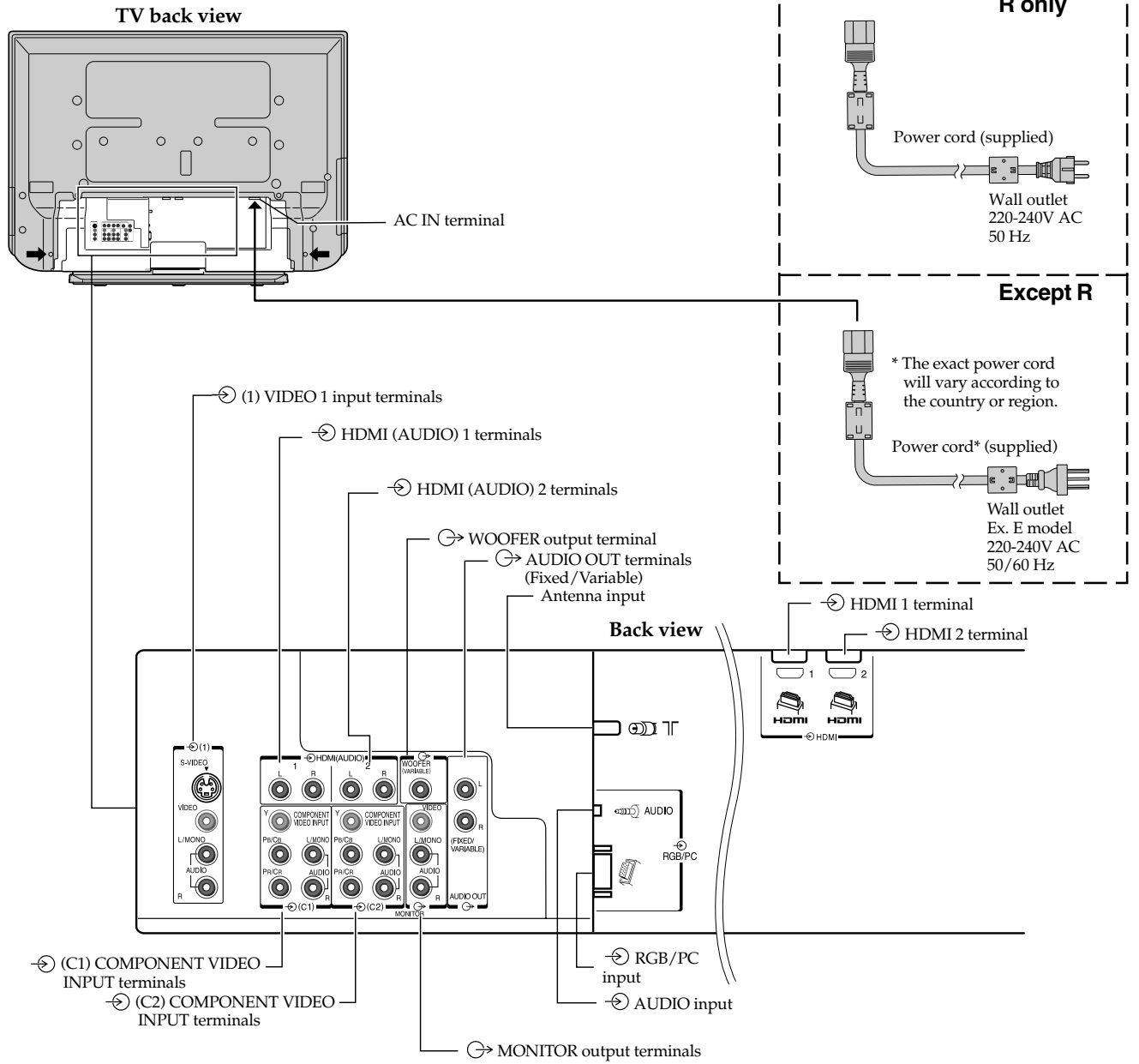
- ⑤ OTHER STATUS :
Other status information : Display three numbers of 2 byte data.

LOCATION OF CONTROLS

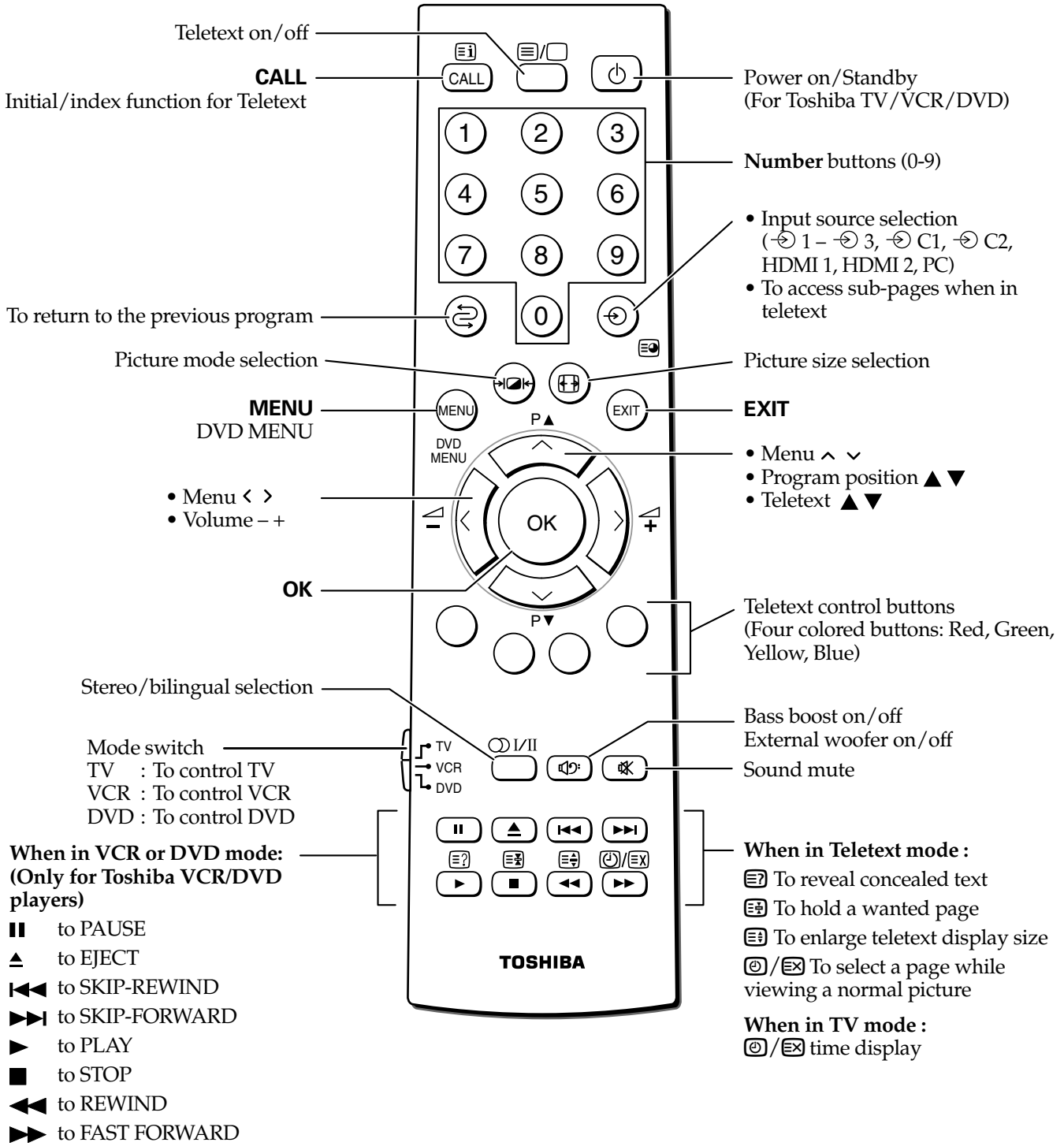
TV FRONT



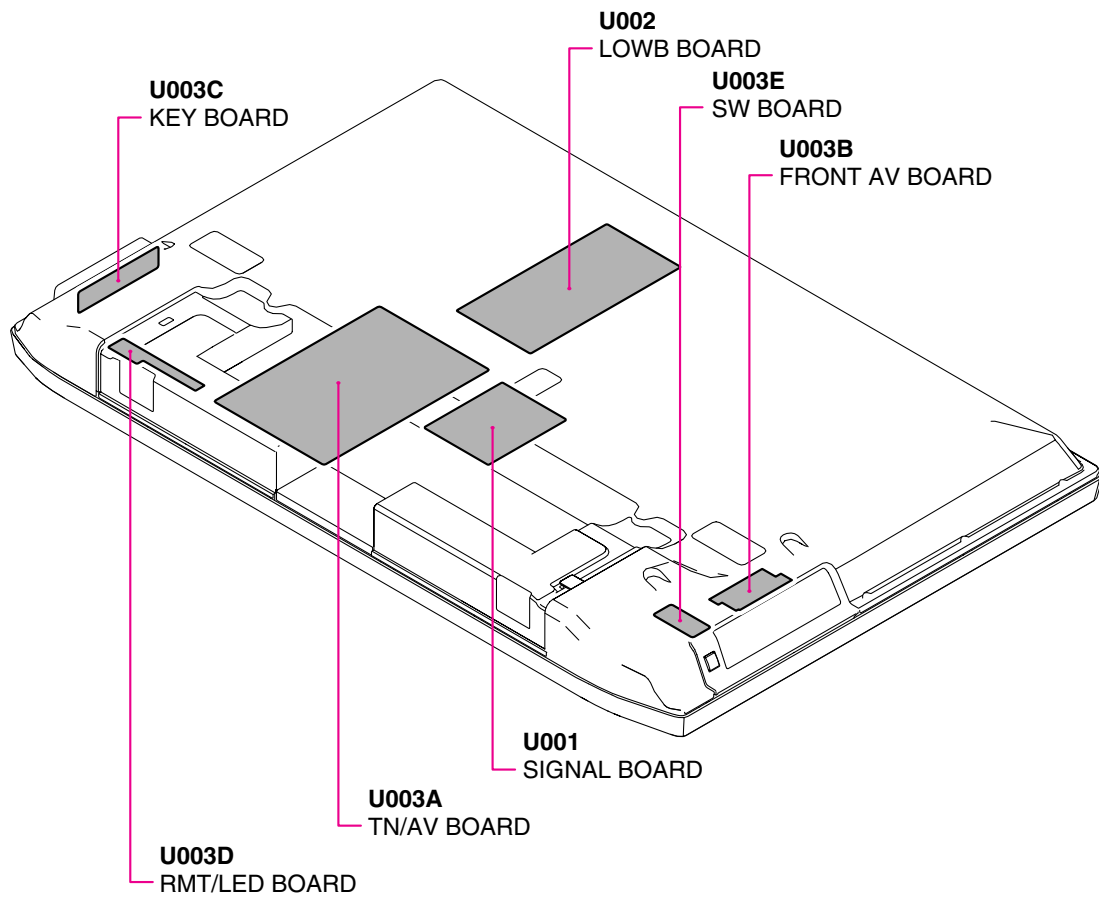
TV BACK



REMOTE CONTROL

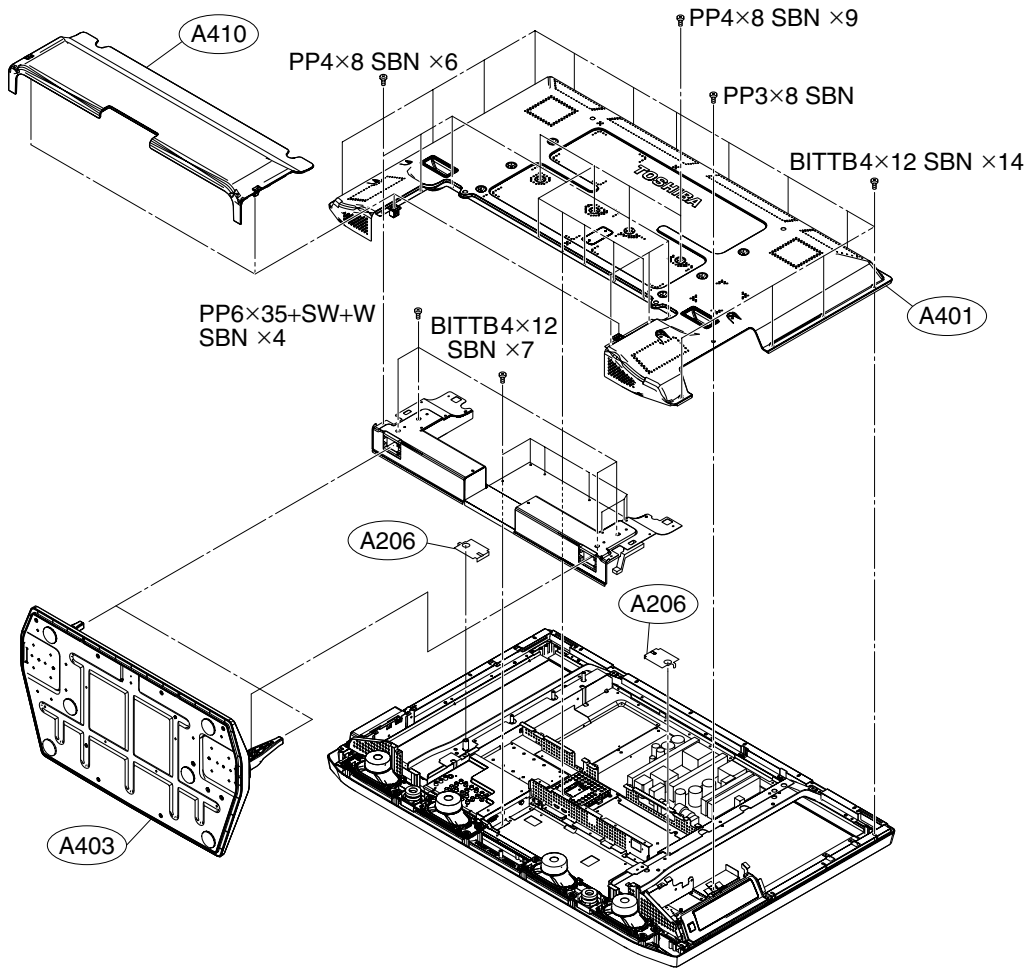


LAYOUT OF MAJOR BOARDS

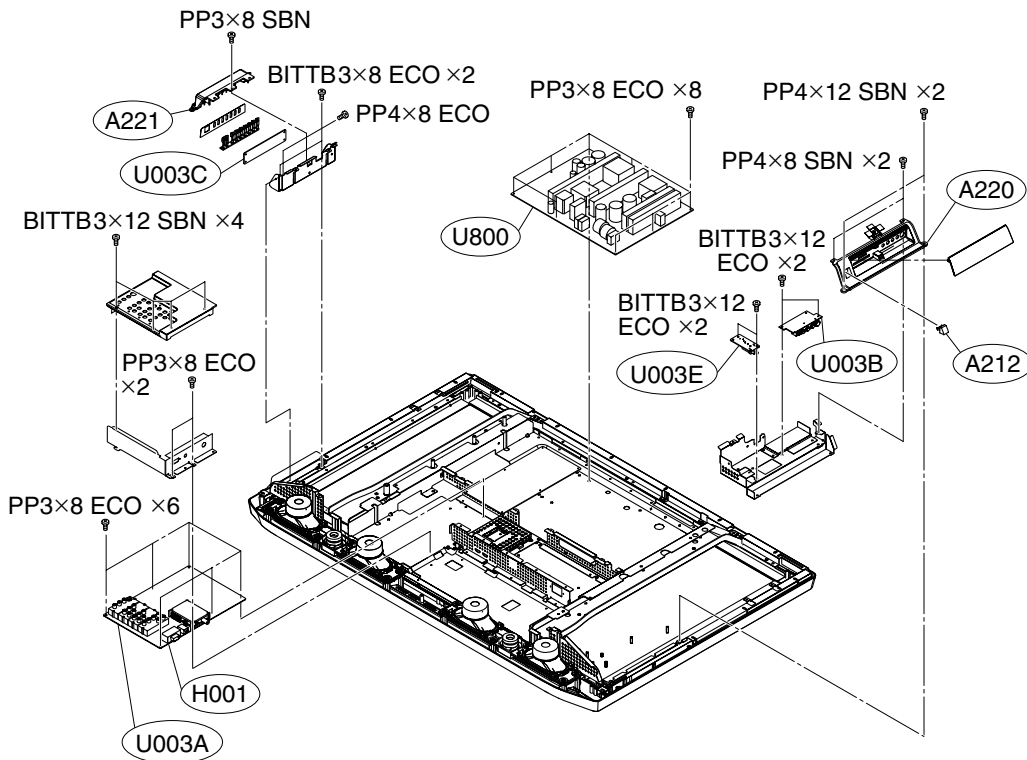


MECHANICAL DISASSEMBLY

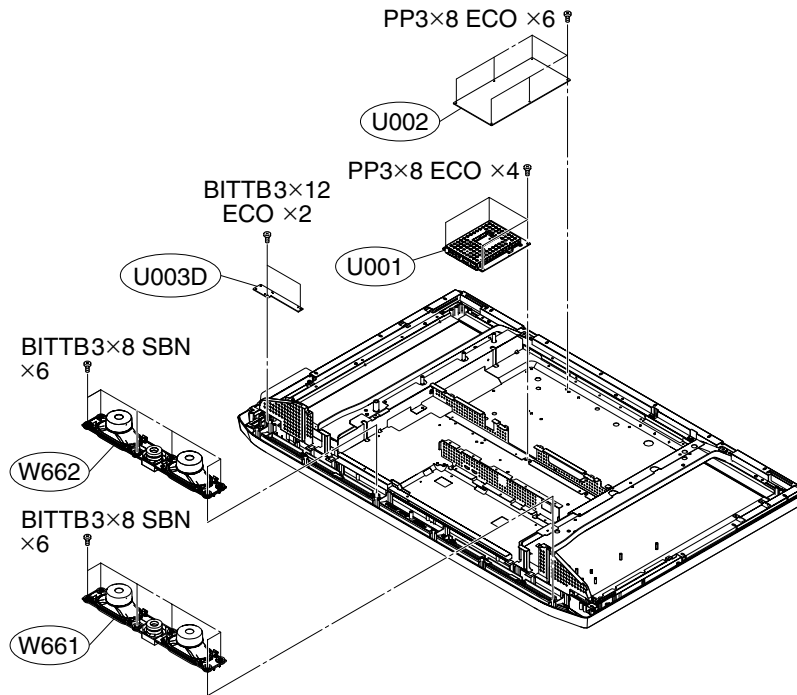
1. Remove the stand (foot) and back cover.



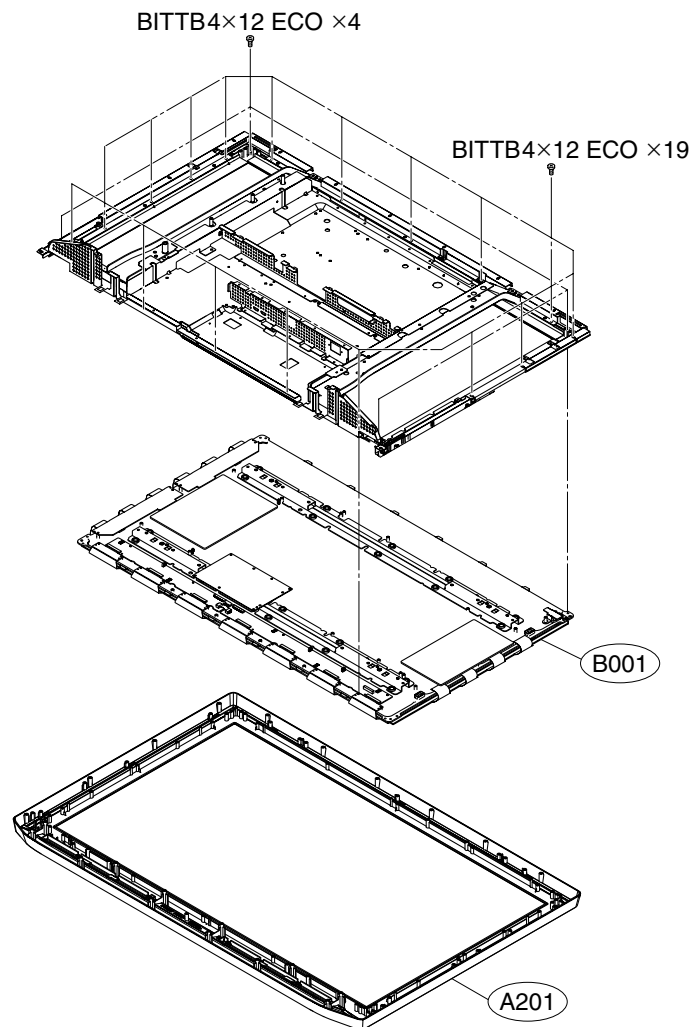
2. Remove the boards (LOWB, TN/AV, FRONT AV, KEY, SW) and piece key ass'y.



3. Remove the boards (SIGNAL, RMT LED) and speaker.

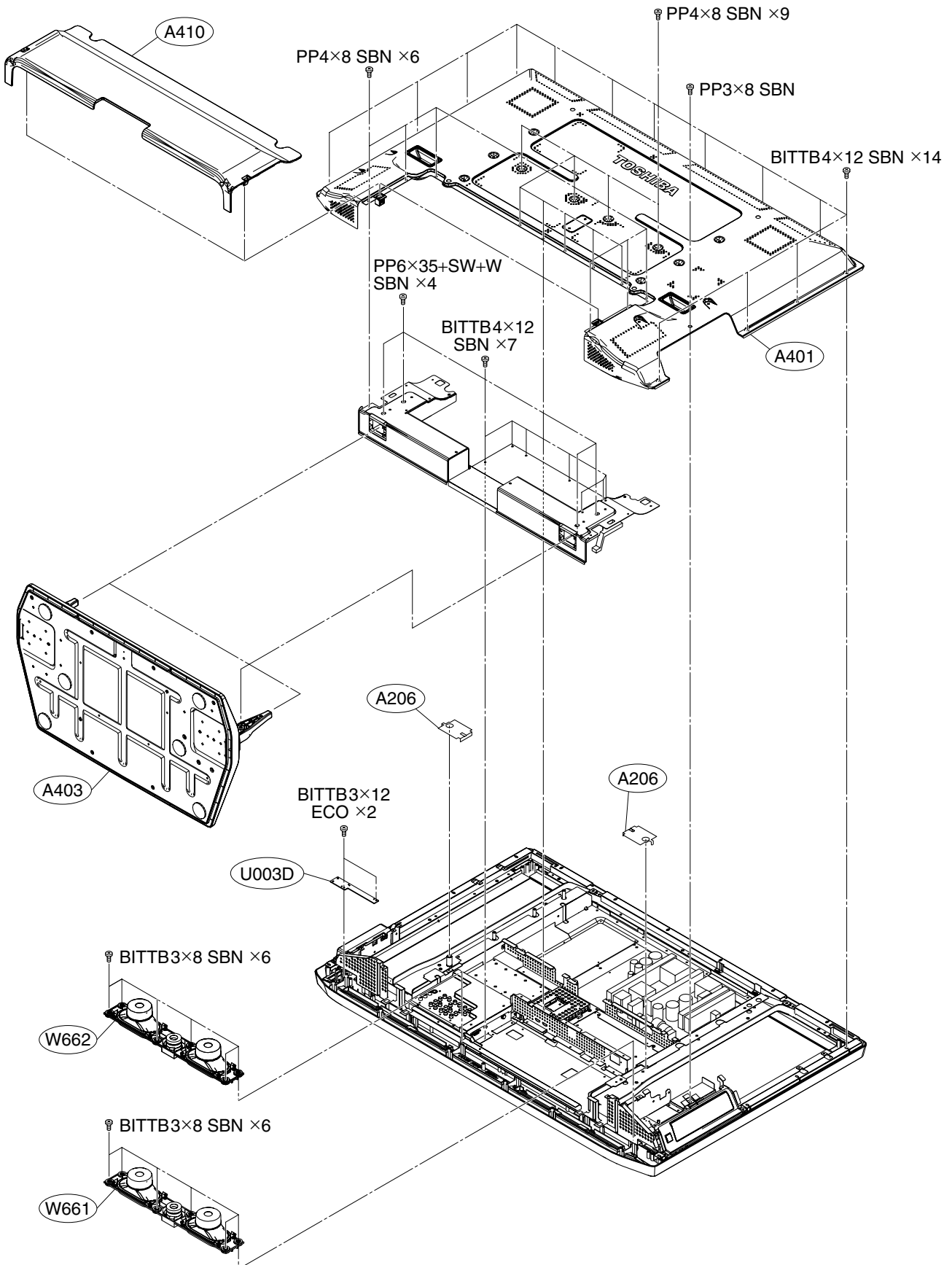


4. Remove the display.

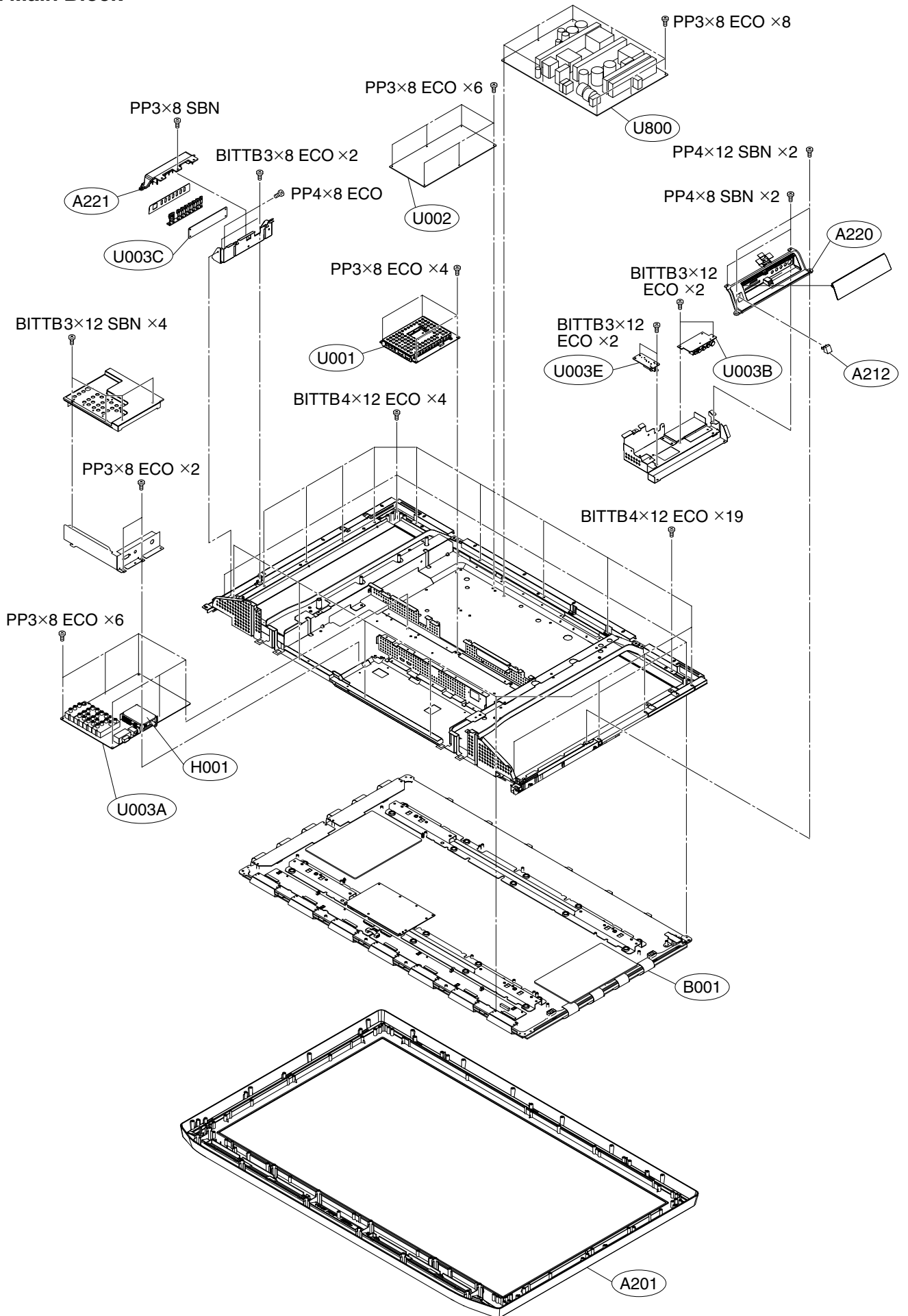


EXPLODED VIEWS

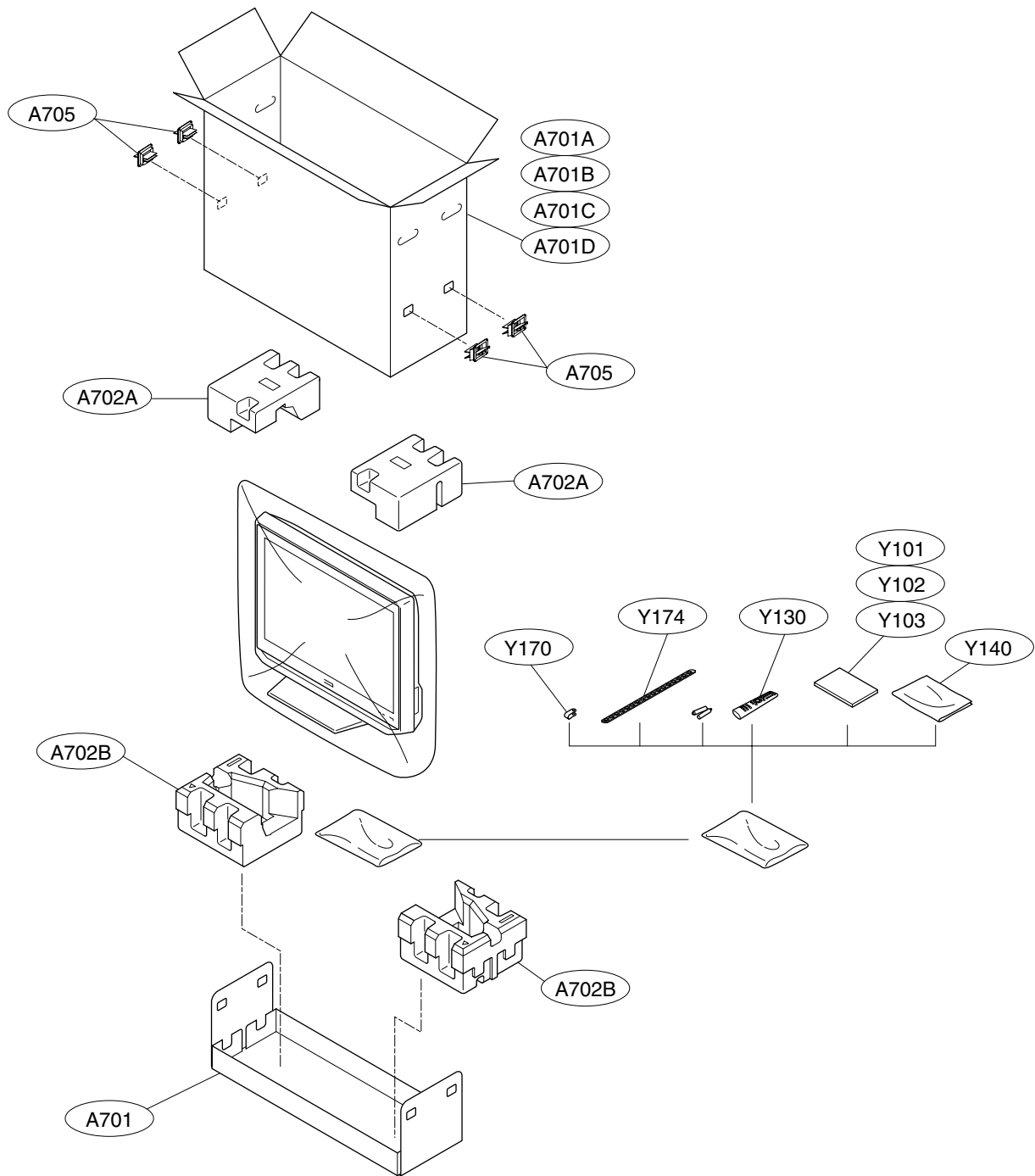
1. Chassis Block



2. Main Block



PACKING DISASSEMBLY



CHASSIS AND CABINET REPLACEMENT PARTS LIST

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "SERVICE SAFETY PRECAUTIONS" ON PAGE 3 OF THIS MANUAL.

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 SERVICE SAFETY PRECAUTIONS. Do not degrade the safety of the receiver through improper servicing.

NOTICE:

- The part number must be used when ordering parts, in order to assist in processing, be sure to include the Model number and Description.
- The PC board assembly with * mark is no longer available after the end of the production.

Model : 42WP56A/E/R/T

Capacitors	CD : Ceramic Disk	PF : Plastic Film	EL : Electrolytic
Resistors	CF : Carbon Film	CC : Carbon Composition	MF : Metal Film
	OMF : Oxide Metal Film	VR : Variable Resistor	FR : Fusible Resistor

(All CD and PF capacitors are $\pm 5\%$, 50V and all resistors, $\pm 5\%$, 1/6W unless otherwise noted.)

Location No.	Parts No.	Description
#1:[42WP56A]		
#2:[42WP56E]		
#3:[42WP56R]		
#4:[42WP56T]		
CAPACITORS		
\triangle C101	76109103	CERAMIC CHIP, 50V B 0.01UF K
\triangle C102	76073019	ELECTROLYTIC, 10V 470UF M 3A
\triangle C103	76109102	CERAMIC CHIP, 50V B 1000PF K
\triangle C104	76619143	ELECTROLYTIC CHIP, 50V 4.7UF M
C105	76073019	ELECTROLYTIC, 10V 470UF M 3A
C117	76109103	CERAMIC CHIP, 50V B 0.01UF K
C118	76109103	CERAMIC CHIP, 50V B 0.01UF K
C162	76105101	CERAMIC CHIP, 50V CH 100PF J
C164	76100103	CERAMIC CHIP, 50V F 0.01UF Z
C190	76092730	CERAMIC CHIP, 16V B 0.1UF K
C501	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C502	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C503	76619046	ELECTROLYTIC CHIP, 16V 470UF
C504	76109103	CERAMIC CHIP, 50V B 0.01UF K
C505	76619046	ELECTROLYTIC CHIP, 16V 470UF
C506	76109103	CERAMIC CHIP, 50V B 0.01UF K
C514	76665221	ELECTROLYTIC, 10V 220UF M 3A
C516	76105110	CERAMIC CHIP, 50V CH 11PF J
C517	76092785	CERAMIC CHIP, 10V B 0.47UF K
C519	76619048	ELECTROLYTIC CHIP, 25V 4.7UF M
C521	76092733	CERAMIC CHIP, 50V B 0.022UF K
C524	76109103	CERAMIC CHIP, 50V B 0.01UF K
C526	76109103	CERAMIC CHIP, 50V B 0.01UF K
C527	76619071	ELECTROLYTIC CHIP, 50V 2.2UF
C529	76100104	CERAMIC CHIP, 25V F 0.1UF Z
C530	76619157	ELECTROLYTIC CHIP, 16V 100UF
C605	76109102	CERAMIC CHIP, 50V B 1000PF K
C606	76109102	CERAMIC CHIP, 50V B 1000PF K
C612	76664102	ELECTROLYTIC, 6.3V 1000UF M 3A
C631	76619102	ELECTROLYTIC CHIP, 16V 47UF M
C632	76092731	CERAMIC CHIP, 16V B 1UF K
C651	76092463	CERAMIC CHIP, 16V B 0.22UF K
C652	76092463	CERAMIC CHIP, 16V B 0.22UF K
C653	76092538	CERAMIC CHIP, 10V F 1UF Z
C655	76109103	CERAMIC CHIP, 50V B 0.01UF K
C661	76109102	CERAMIC CHIP, 50V B 1000PF K
C662	76109102	CERAMIC CHIP, 50V B 1000PF K
C663	76619100	ELECTROLYTIC CHIP, 16V 10UF M

Location No.	Parts No.	Description
C665	76669479	ELECTROLYTIC, 50V 4.7UF M
C666	76669479	ELECTROLYTIC, 50V 4.7UF M
C671	76669100	ELECTROLYTIC, 50V 10UF M
C674	76669100	ELECTROLYTIC, 50V 10UF M
C677	76109681	CERAMIC CHIP, 50V B 680PF K
C678	76109681	CERAMIC CHIP, 50V B 680PF K
C680	76668102	ELECTROLYTIC, 35V 1000UF M 3A
C681	76668102	ELECTROLYTIC, 35V 1000UF M 3A
C682	76668102	ELECTROLYTIC, 35V 1000UF M 3A
C690	76815103	CERAMIC CHIP, 50V B 0.01UF K
C694	76285104	CERAMIC CHIP, 50V B 0.1UF K
C696	76285104	CERAMIC CHIP, 50V B 0.1UF K
C1801	76285104	CERAMIC CHIP, 50V B 0.1UF K
C1802	76109103	CERAMIC CHIP, 50V B 0.01UF K
C1803	76109103	CERAMIC CHIP, 50V B 0.01UF K
C1804	76109103	CERAMIC CHIP, 50V B 0.01UF K
C1805	76109103	CERAMIC CHIP, 50V B 0.01UF K
C1806	76109103	CERAMIC CHIP, 50V B 0.01UF K
C1807	76109103	CERAMIC CHIP, 50V B 0.01UF K
C1808	76109103	CERAMIC CHIP, 50V B 0.01UF K
C1809	76109103	CERAMIC CHIP, 50V B 0.01UF K
C1810	76109103	CERAMIC CHIP, 50V B 0.01UF K
CB01	76202221	ELECTROLYTIC, 10V 220UF M 7L 3A
CB02	76202221	ELECTROLYTIC, 10V 220UF M 7L 3A
CB03	76100104	CERAMIC CHIP, 25V F 0.1UF Z
CB04	76100104	CERAMIC CHIP, 25V F 0.1UF Z
CB05	76202221	ELECTROLYTIC, 10V 220UF M 7L 3A
CB38	76100104	CERAMIC CHIP, 25V F 0.1UF Z
CC11	76109102	CERAMIC CHIP, 50V B 1000PF K
CC12	76109102	CERAMIC CHIP, 50V B 1000PF K
CC21	76109102	CERAMIC CHIP, 50V B 1000PF K
CC31	76109102	CERAMIC CHIP, 50V B 1000PF K
CC40	76109102	CERAMIC CHIP, 50V B 1000PF K
CC41	76109102	CERAMIC CHIP, 50V B 1000PF K
CC62	76109102	CERAMIC CHIP, 50V B 1000PF K
CC63	76109102	CERAMIC CHIP, 50V B 1000PF K
CC66	76109102	CERAMIC CHIP, 50V B 1000PF K
CC67	76109102	CERAMIC CHIP, 50V B 1000PF K
CC71	76109102	CERAMIC CHIP, 50V B 1000PF K
CC74	76109102	CERAMIC CHIP, 50V B 1000PF K
CC75	76109102	CERAMIC CHIP, 50V B 1000PF K
CC76	76109102	CERAMIC CHIP, 50V B 1000PF K
CC79	76109102	CERAMIC CHIP, 50V B 1000PF K
CC82	76109102	CERAMIC CHIP, 50V B 1000PF K

Location No.	Parts No.	Description
CC83	76109102	CERAMIC CHIP, 50V B 1000PF K
CC84	76109102	CERAMIC CHIP, 50V B 1000PF K
CC85	76109102	CERAMIC CHIP, 50V B 1000PF K
CC86	76109102	CERAMIC CHIP, 50V B 1000PF K
CE03	76539104	PLASTIC FILM, 50V 0.1UF J
CE05	76073090	ELECTROLYTIC, 50V 100UF M 3A
CE10	76666470	ELECTORLYTIC, 16V 47UF M 3A
CE11	76539474	PLASTIC FILM, 50V 0.47UF J
CE12	76666470	ELECTORLYTIC, 16V 47UF M 3A
CE60	76073186	ELECTROLYTIC, 35V 470UF M
CE61	76617028	ELECTROLYTIC, 16V 1200UF M
CE62	76073020	ELECTROLYTIC, 10V 1000UF M 3A
CE63	76539104	PLASTIC FILM, 50V 0.1UF J
CE64	76539104	PLASTIC FILM, 50V 0.1UF J
CE65	76666470	ELECTORLYTIC, 16V 47UF M 3A
CE66	76539474	PLASTIC FILM, 50V 0.47UF J
CE67	76666470	ELECTORLYTIC, 16V 47UF M 3A
CE85	76666470	ELECTORLYTIC, 16V 47UF M 3A
CS01	76092731	CERAMIC CHIP, 16V B 1UF K
CS02	76092515	CERAMIC CHIP, 16V F 4.7UF Z
CS03	76092726	CERAMIC CHIP, 10V B 2.2UF K
CS04	76092726	CERAMIC CHIP, 10V B 2.2UF K
CS05	76092726	CERAMIC CHIP, 10V B 2.2UF K
CS06	76092726	CERAMIC CHIP, 10V B 2.2UF K
CS08	76092611	CERAMIC CHIP, 6.3V B 2.2UF K
CS09	76092611	CERAMIC CHIP, 6.3V B 2.2UF K
CS10	76092628	CERAMIC CHIP, 6.3V B 10UF K
CS11	76092628	CERAMIC CHIP, 6.3V B 10UF K
CS12	76109473	CERAMIC CHIP, 25V B 0.047UF K
CS15	76092628	CERAMIC CHIP, 6.3V B 10UF K
CS16	76092628	CERAMIC CHIP, 6.3V B 10UF K
CS26	76619100	ELECTROLYTIC CHIP, 16V 10UF M
CS39	76092573	CERAMIC CHIP, 16V B 0.47UF K
CS40	76092611	CERAMIC CHIP, 6.3V B 2.2UF K
CS41	76092611	CERAMIC CHIP, 6.3V B 2.2UF K
CS42	76092611	CERAMIC CHIP, 6.3V B 2.2UF K
CS43	76092611	CERAMIC CHIP, 6.3V B 2.2UF K
CS44	76092611	CERAMIC CHIP, 6.3V B 2.2UF K
CS45	76092611	CERAMIC CHIP, 6.3V B 2.2UF K
CS46	76092611	CERAMIC CHIP, 6.3V B 2.2UF K
CS47	76092611	CERAMIC CHIP, 6.3V B 2.2UF K
CS48	76092611	CERAMIC CHIP, 6.3V B 2.2UF K
CS49	76092611	CERAMIC CHIP, 6.3V B 2.2UF K
CS50	76092611	CERAMIC CHIP, 6.3V B 2.2UF K
CS51	76092611	CERAMIC CHIP, 6.3V B 2.2UF K
CS54	76092611	CERAMIC CHIP, 6.3V B 2.2UF K
CS55	76092611	CERAMIC CHIP, 6.3V B 2.2UF K
CS56	76092611	CERAMIC CHIP, 6.3V B 2.2UF K
CS57	76619102	ELECTROLYTIC CHIP, 16V 47UF M
CS62	76092611	CERAMIC CHIP, 6.3V B 2.2UF K
CS64	76619101	ELECTROLYTIC CHIP, 16V 22UF M
CS85	76092611	CERAMIC CHIP, 6.3V B 2.2UF K
CS86	76092611	CERAMIC CHIP, 6.3V B 2.2UF K
CT01	76092790	CERAMIC CHIP CK732B 6.3V 10UF K
CT04	76105820	CERAMIC CHIP, 50V CH 82PF J
CT05	76092731	CERAMIC CHIP, 16V B 1UF K
CT06	76092790	CERAMIC CHIP CK732B 6.3V 10UF K
CT07	76092790	CERAMIC CHIP CK732B 6.3V 10UF K
CT10	76105151	CERAMIC CHIP, 50V CH 150PF J
CT11	76092731	CERAMIC CHIP, 16V B 1UF K
CT12	76092790	CERAMIC CHIP CK732B 6.3V 10UF K
CT13	76092790	CERAMIC CHIP CK732B 6.3V 10UF K
CT16	76105151	CERAMIC CHIP, 50V CH 150PF J
CT17	76092731	CERAMIC CHIP, 16V B 1UF K
CT18	76092790	CERAMIC CHIP CK732B 6.3V 10UF K
CT19	76092790	CERAMIC CHIP CK732B 6.3V 10UF K
CT20	76092789	CERAMIC CHIP, 6.3V B 1UF K
CV01	76666471	ELECTROLYTIC, 16V 470UF M
CV02	76100104	CERAMIC CHIP, 25V F 0.1UF Z

Location No.	Parts No.	Description
CV03	76100104	CERAMIC CHIP, 25V F 0.1UF Z
CV04	76100104	CERAMIC CHIP, 25V F 0.1UF Z
CV07	76100104	CERAMIC CHIP, 25V F 0.1UF Z
CV09	76092731	CERAMIC CHIP, 16V B 1UF K
CV10	76100104	CERAMIC CHIP, 25V F 0.1UF Z
CV12	76092731	CERAMIC CHIP, 16V B 1UF K
CV16	76092731	CERAMIC CHIP, 16V B 1UF K
CV17	76092731	CERAMIC CHIP, 16V B 1UF K
CV18	76100104	CERAMIC CHIP, 25V F 0.1UF Z
CV19	76092731	CERAMIC CHIP, 16V B 1UF K
CV21	76092731	CERAMIC CHIP, 16V B 1UF K
CV22	76092731	CERAMIC CHIP, 16V B 1UF K
CV23	76092731	CERAMIC CHIP, 16V B 1UF K
CV24	76092731	CERAMIC CHIP, 16V B 1UF K
CV25	76092731	CERAMIC CHIP, 16V B 1UF K
CV26	76092731	CERAMIC CHIP, 16V B 1UF K
CV33	76100104	CERAMIC CHIP, 25V F 0.1UF Z
CV40	76100104	CERAMIC CHIP, 25V F 0.1UF Z
CV41	76100104	CERAMIC CHIP, 25V F 0.1UF Z
CV42	76100104	CERAMIC CHIP, 25V F 0.1UF Z
CV50	76619102	ELECTROLYTIC CHIP, 16V 47UF M
CV53	76100104	CERAMIC CHIP, 25V F 0.1UF Z
CV56	76619157	ELECTROLYTIC CHIP, 16V 100UF
CV59	76666471	ELECTROLYTIC, 16V 470UF M
CV62	76100104	CERAMIC CHIP, 25V F 0.1UF Z
CV63	76666471	ELECTROLYTIC, 16V 470UF M
CV72	76619101	ELECTROLYTIC CHIP, 16V 22UF M
CV74	76092731	CERAMIC CHIP, 16V B 1UF K
CV121	76109103	CERAMIC CHIP, 50V B 0.01UF K
CV122	76105101	CERAMIC CHIP, 50V CH 100PF J
CY650	76109103	CERAMIC CHIP, 50V B 0.01UF K
RESISTORS		
△R101	76011101	CHIP, 1/20W 100 OHM J
R102	76011101	CHIP, 1/20W 100 OHM J
R103	76011101	CHIP, 1/20W 100 OHM J
R104	76011103	CHIP, 1/20W 10K OHM J
R105	76011273	CHIP, 1/20W 27K OHM J
R107	76000445	CHIP JUMPER, 1608TYPE
R108	76000445	CHIP JUMPER, 1608TYPE
R114	76000445	CHIP JUMPER, 1608TYPE
R167	76011101	CHIP, 1/20W 100 OHM J
R169	76000445	CHIP JUMPER, 1608TYPE
R170	76011682	CHIP, 1/20W 6.8K OHM J
R229	76872680	CHIP, 1/16W 68 OHM J
R501	76011682	CHIP, 1/20W 6.8K OHM J
R502	76011272	CHIP, 1/20W 2.7K OHM J
R504	76011101	CHIP, 1/20W 100 OHM J
R505	76011101	CHIP, 1/20W 100 OHM J
R506	76011273	CHIP, 1/20W 27K OHM J
R507	76011392	CHIP, 1/20W 3.9K OHM J
R508	76011682	CHIP, 1/20W 6.8K OHM J
R512	76011101	CHIP, 1/20W 100 OHM J
R514	76011102	CHIP, 1/20W 1K OHM J
R607	76011223	CHIP, 1/20W 22K OHM J
R617	76011104	CHIP, 1/20W 100K OHM J
R620	76011223	CHIP, 1/20W 22K OHM J
R621	76011472	CHIP, 1/20W 4.7K OHM J
R650	76011102	CHIP, 1/20W 1K OHM J
R651	76011473	CHIP, 1/20W 47K OHM J
R652	76011103	CHIP, 1/20W 10K OHM J
R653	76011223	CHIP, 1/20W 22K OHM J
R654	76011103	CHIP, 1/20W 10K OHM J
R655	76011222	CHIP, 1/20W 2.2K OHM J
R664	76011104	CHIP, 1/20W 100K OHM J
R665	76011104	CHIP, 1/20W 100K OHM J
R667	76011104	CHIP, 1/20W 100K OHM J
R670	76011472	CHIP, 1/20W 4.7K OHM J
R671	76011182	CHIP, 1/20W 1.8K OHM J

Location No.	Parts No.	Description
R672	76011472	CHIP, 1/20W 4.7K OHM J
R673	76011182	CHIP, 1/20W 1.8K OHM J
R675	76011102	CHIP, 1/20W 1K OHM J
R676	76011473	CHIP, 1/20W 47K OHM J
R677	76011473	CHIP, 1/20W 47K OHM J
R684	76871229	CHIP, 1/8W 2.2 OHM J
R685	76871229	CHIP, 1/8W 2.2 OHM J
R687	76871102	CHIP, 1/8W 1K OHM J
R688	76871102	CHIP, 1/8W 1K OHM J
R689	76871102	CHIP, 1/8W 1K OHM J
R690	76871102	CHIP, 1/8W 1K OHM J
R691	76871102	CHIP, 1/8W 1K OHM J
R692	76871102	CHIP, 1/8W 1K OHM J
R697	76000576	CHIP JUMPER, 3216TYPE
R4100	76011102	CHIP, 1/20W 1K OHM J
R4101	76011681	CHIP, 1/20W 680 OHM J
R4102	76011471	CHIP, 1/20W 470 OHM J
R4103	76011102	CHIP, 1/20W 1K OHM J
R4104	76011152	CHIP, 1/20W 1.5K OHM J
R4105	76011102	CHIP, 1/20W 1K OHM J
R4106	76011681	CHIP, 1/20W 680 OHM J
R4107	76011471	CHIP, 1/20W 470 OHM J
R4108	76011102	CHIP, 1/20W 1K OHM J
R4109	76011152	CHIP, 1/20W 1.5K OHM J
R4120	76000445	CHIP JUMPER, 1608TYPE
R4122	76000445	CHIP JUMPER, 1608TYPE
R6603	76011223	CHIP, 1/20W 22K OHM J
R6605	76011103	CHIP, 1/20W 10K OHM J
R6606	76011104	CHIP, 1/20W 100K OHM J
RA71	76011683	CHIP, 1/20W 68K OHM J
RA72	76011223	CHIP, 1/20W 22K OHM J
RA73	76011103	CHIP, 1/20W 10K OHM J
RA74	76000445	CHIP JUMPER, 1608TYPE
RA77	76011103	CHIP, 1/20W 10K OHM J
RA78	76000445	CHIP JUMPER, 1608TYPE
RA79	76000445	CHIP JUMPER, 1608TYPE
RB08	76011470	CHIP, 1/20W 47 OHM J
RB09	76011470	CHIP, 1/20W 47 OHM J
RB10	76011331	CHIP, 1/20W 330 OHM J
RB15	76011471	CHIP, 1/20W 470 OHM J
RB24	76000445	CHIP JUMPER, 1608TYPE
RC01	76011101	CHIP, 1/20W 100 OHM J
RC02	76011101	CHIP, 1/20W 100 OHM J
RC03	76011101	CHIP, 1/20W 100 OHM J
RC04	76011101	CHIP, 1/20W 100 OHM J
RC11	76011101	CHIP, 1/20W 100 OHM J
RC12	76011101	CHIP, 1/20W 100 OHM J
RC13	76011101	CHIP, 1/20W 100 OHM J
RC16	76011101	CHIP, 1/20W 100 OHM J
RC21	76011101	CHIP, 1/20W 100 OHM J
RC22	76011101	CHIP, 1/20W 100 OHM J
RC23	76011101	CHIP, 1/20W 100 OHM J
RC24	76011101	CHIP, 1/20W 100 OHM J
RC40	76011101	CHIP, 1/20W 100 OHM J
RC41	76011101	CHIP, 1/20W 100 OHM J
RE04	76366222	CARBON FILM, 1/6W 2.2K OHM J
RE06	76366473	CARBON FILM, 1/6W 47K OHM J
RE10	76367180	CARBON FILM, 1/6W 18 OHM G
RE11	76367222	CARBON FILM, 1/6W 2.2K OHM G
RE12	76366472	CARBON FILM, 1/6W 4.7K OHM J
RE13	76366102	CARBON FILM, 1/6W 1K OHM J
RE15	76366182	CARBON FILM, 1/6W 1.8K OHM J
RE16	76366473	CARBON FILM, 1/6W 47K OHM J
RE17	76366103	CARBON FILM, 1/6W 10K OHM J
RE18	76366153	CARBON FILM, 1/6W 15K OHM J
RE19	76366473	CARBON FILM, 1/6W 47K OHM J
RE60	76000142	METAL FILM, 1/4W 240 OHM F
RE61	76000360	METAL FILM, 1/4W 1.2K OHM F
RE63	76366102	CARBON FILM, 1/6W 1K OHM J

Location No.	Parts No.	Description
RE65	76367620	CARBON FILM 1/6W 62 G
RE66	76367222	CARBON FILM, 1/6W 2.2K OHM G
RE85	76552222	OXIDE METAL FILM, 1/2W 2.2K OHM J
RE86	76366103	CARBON FILM, 1/6W 10K OHM J
RR01	76871750	CHIP, 1/8W 75 OHM J
RR02	76871750	CHIP, 1/8W 75 OHM J
RR03	76871750	CHIP, 1/8W 75 OHM J
RR04	76011330	CHIP, 1/20W 33 OHM J
RR05	76011330	CHIP, 1/20W 33 OHM J
RR06	76011330	CHIP, 1/20W 33 OHM J
RS01	76011222	CHIP, 1/20W 2.2K OHM J
RS03	76011101	CHIP, 1/20W 100 OHM J
RS04	76011101	CHIP, 1/20W 100 OHM J
RS05	76011101	CHIP, 1/20W 100 OHM J
RS06	76011101	CHIP, 1/20W 100 OHM J
RS07	76011104	CHIP, 1/20W 100K OHM J
RS08	76011104	CHIP, 1/20W 100K OHM J
RS09	76011104	CHIP, 1/20W 100K OHM J
RS10	76011104	CHIP, 1/20W 100K OHM J
RS11	76011223	CHIP, 1/20W 22K OHM J
RS12	76011104	CHIP, 1/20W 100K OHM J
RS13	76011104	CHIP, 1/20W 100K OHM J
RS16	76011473	CHIP, 1/20W 47K OHM J
RS17	76011473	CHIP, 1/20W 47K OHM J
RS18	76011103	CHIP, 1/20W 10K OHM J
RS19	76011104	CHIP, 1/20W 100K OHM J
RS20	76011104	CHIP, 1/20W 100K OHM J
RS27	76011222	CHIP, 1/20W 2.2K OHM J
RS28	76011222	CHIP, 1/20W 2.2K OHM J
RS29	76011102	CHIP, 1/20W 1K OHM J
RS30	76011102	CHIP, 1/20W 1K OHM J
RS33	76011473	CHIP, 1/20W 47K OHM J
RS34	76011473	CHIP, 1/20W 47K OHM J
RS35	76011104	CHIP, 1/20W 100K OHM J
RS36	76011101	CHIP, 1/20W 100 OHM J
RS39	76011101	CHIP, 1/20W 100 OHM J
RS40	76011472	CHIP, 1/20W 4.7K OHM J
RS41	76011472	CHIP, 1/20W 4.7K OHM J
RS42	76011472	CHIP, 1/20W 4.7K OHM J
RS43	76011472	CHIP, 1/20W 4.7K OHM J
RS44	76011472	CHIP, 1/20W 4.7K OHM J
RS45	76011472	CHIP, 1/20W 4.7K OHM J
RS46	76011472	CHIP, 1/20W 4.7K OHM J
RS47	76011472	CHIP, 1/20W 4.7K OHM J
RS48	76011472	CHIP, 1/20W 4.7K OHM J
RS49	76011472	CHIP, 1/20W 4.7K OHM J
RS50	76011472	CHIP, 1/20W 4.7K OHM J
RS51	76011472	CHIP, 1/20W 4.7K OHM J
RS54	76011472	CHIP, 1/20W 4.7K OHM J
RS55	76011472	CHIP, 1/20W 4.7K OHM J
RS56	76011472	CHIP, 1/20W 4.7K OHM J
RS57	76011104	CHIP, 1/20W 100K OHM J
RS58	76011101	CHIP, 1/20W 100 OHM J
RS59	76011101	CHIP, 1/20W 100 OHM J
RS60	76011101	CHIP, 1/20W 100 OHM J
RS61	76011101	CHIP, 1/20W 100 OHM J
RS62	76011472	CHIP, 1/20W 4.7K OHM J
RS63	76011473	CHIP, 1/20W 47K OHM J
RS64	76011682	CHIP, 1/20W 6.8K OHM J
RS65	76011182	CHIP, 1/20W 1.8K OHM J
RS66	76011100	CHIP, 1/20W 10 OHM J
RS73	76011391	CHIP, 1/20W 390 OHM J
RS74	76011104	CHIP, 1/20W 100K OHM J
RS76	76011101	CHIP, 1/20W 100 OHM J
RS77	76011472	CHIP, 1/20W 4.7K OHM J
RS78	76011102	CHIP, 1/20W 1K OHM J
RS79	76011101	CHIP, 1/20W 100 OHM J
RS80	76011472	CHIP, 1/20W 4.7K OHM J
RS81	76011102	CHIP, 1/20W 1K OHM J

Location No.	Parts No.	Description
RS85	76011472	CHIP, 1/20W 4.7K OHM J
RS86	76011472	CHIP, 1/20W 4.7K OHM J
RS87	76011101	CHIP, 1/20W 100 OHM J
RS88	76011101	CHIP, 1/20W 100 OHM J
RS89	76011104	CHIP, 1/20W 100K OHM J
RS90	76011391	CHIP, 1/20W 390 OHM J
RS91	76011473	CHIP, 1/20W 47K OHM J
RS529	76011223	CHIP, 1/20W 22K OHM J
RS530	76011103	CHIP, 1/20W 10K OHM J
RT01	76011222	CHIP, 1/20W 2.2K OHM J
RT02	76011223	CHIP, 1/20W 22K OHM J
RT03	76011683	CHIP, 1/20W 68K OHM J
RT04	76011102	CHIP, 1/20W 1K OHM J
RT05	76011101	CHIP, 1/20W 100 OHM J
RT06	76011221	CHIP, 1/20W 220 OHM J
RT07	76011561	CHIP, 1/20W 560 OHM J
RT08	76011221	CHIP, 1/20W 220 OHM J
RT09	76011471	CHIP, 1/20W 470 OHM J
RT10	76011222	CHIP, 1/20W 2.2K OHM J
RT11	76011223	CHIP, 1/20W 22K OHM J
RT12	76011683	CHIP, 1/20W 68K OHM J
RT13	76011102	CHIP, 1/20W 1K OHM J
RT14	76011101	CHIP, 1/20W 100 OHM J
RT15	76011151	CHIP, 1/20W 150 OHM J
RT16	76011391	CHIP, 1/20W 390 OHM J
RT17	76011181	CHIP, 1/20W 180 OHM J
RT18	76011471	CHIP, 1/20W 470 OHM J
RT19	76011222	CHIP, 1/20W 2.2K OHM J
RT20	76011223	CHIP, 1/20W 22K OHM J
RT21	76011683	CHIP, 1/20W 68K OHM J
RT22	76011102	CHIP, 1/20W 1K OHM J
RT23	76011101	CHIP, 1/20W 100 OHM J
RT24	76011151	CHIP, 1/20W 150 OHM J
RT25	76011391	CHIP, 1/20W 390 OHM J
RT26	76011221	CHIP, 1/20W 220 OHM J
RT27	76011471	CHIP, 1/20W 470 OHM J
RT28	76011103	CHIP, 1/20W 10K OHM J
RT29	76011103	CHIP, 1/20W 10K OHM J
RV01	76011101	CHIP, 1/20W 100 OHM J
RV02	76011562	CHIP, 1/20W 5.6K OHM J
RV04	76011101	CHIP, 1/20W 100 OHM J
RV05	76011101	CHIP, 1/20W 100 OHM J
RV08	76011101	CHIP, 1/20W 100 OHM J
RV09	76011562	CHIP, 1/20W 5.6K OHM J
RV10	76011101	CHIP, 1/20W 100 OHM J
RV11	76011101	CHIP, 1/20W 100 OHM J
RV12	76011101	CHIP, 1/20W 100 OHM J
RV14	76011101	CHIP, 1/20W 100 OHM J
RV15	76011101	CHIP, 1/20W 100 OHM J
RV16	76011101	CHIP, 1/20W 100 OHM J
RV17	76011101	CHIP, 1/20W 100 OHM J
RV18	76011101	CHIP, 1/20W 100 OHM J
RV19	76011101	CHIP, 1/20W 100 OHM J
RV28	76011103	CHIP, 1/20W 10K OHM J
RV29	76011103	CHIP, 1/20W 10K OHM J
RV32	76011104	CHIP, 1/20W 100K OHM J
RV40	76011101	CHIP, 1/20W 100 OHM J
RV41	76011101	CHIP, 1/20W 100 OHM J
RV43	76011101	CHIP, 1/20W 100 OHM J
RV45	76871271	CHIP, 1/8W 270 OHM J
RV47	76011101	CHIP, 1/20W 100 OHM J
RV50	76011101	CHIP, 1/20W 100 OHM J
RV51	76011101	CHIP, 1/20W 100 OHM J
RV52	76011101	CHIP, 1/20W 100 OHM J
RV56	76011101	CHIP, 1/20W 100 OHM J
RV58	76871271	CHIP, 1/8W 270 OHM J
RV59	76871271	CHIP, 1/8W 270 OHM J
RV60	76871271	CHIP, 1/8W 270 OHM J
RV61	76011104	CHIP, 1/20W 100K OHM J

Location No.	Parts No.	Description
RV64	76011470	CHIP, 1/20W 47 OHM J
RV65	76011470	CHIP, 1/20W 47 OHM J
RV66	76011470	CHIP, 1/20W 47 OHM J
RV74	76011101	CHIP, 1/20W 100 OHM J
RV90	76366750	CARBON FILM, 1/6W 75 OHM J
RV90A	23965241	TAPE, CC #12 10MM L30M
RV91	76366750	CARBON FILM, 1/6W 75 OHM J
RV121	76872750	CHIP, 1/16W 75 OHM J
RV129	76011101	CHIP, 1/20W 100 OHM J
RV211	76872750	CHIP, 1/16W 75 OHM J
RV212	76872750	CHIP, 1/16W 75 OHM J
RV231	76011100	CHIP, 1/20W 10 OHM J
RV232	76011100	CHIP, 1/20W 10 OHM J
RV233	76011100	CHIP, 1/20W 10 OHM J
RV236	76872750	CHIP, 1/16W 75 OHM J
RV237	76872750	CHIP, 1/16W 75 OHM J
RV240	76872750	CHIP, 1/16W 75 OHM J
RV241	76011100	CHIP, 1/20W 10 OHM J
RV242	76011100	CHIP, 1/20W 10 OHM J
RV243	76011100	CHIP, 1/20W 10 OHM J
RV244	76872750	CHIP, 1/16W 75 OHM J
RV245	76872750	CHIP, 1/16W 75 OHM J
RV246	76872750	CHIP, 1/16W 75 OHM J
RV247	76872750	CHIP, 1/16W 75 OHM J
COIL & TRANSFORMERS		
L101	23248398	COIL, CHOKE, TLN3278D
L102	23103828	INDUCTOR, BEAD, TEM2121M
△ L103	23103828	INDUCTOR, BEAD, TEM2121M
△ L104	23103828	INDUCTOR, BEAD, TEM2121M
L105	23277002	FERRITE CORE, ACM3225-102-2PT100
L190	23103828	INDUCTOR, BEAD, TEM2121M
L505	23289022	COIL, PEAKING, TRF4100AT
LC09	23103828	INDUCTOR, BEAD, TEM2121M
LC10	23103828	INDUCTOR, BEAD, TEM2121M
LC11	23103828	INDUCTOR, BEAD, TEM2121M
LC12	23103828	INDUCTOR, BEAD, TEM2121M
LC13	23103828	INDUCTOR, BEAD, TEM2121M
LC31	23103238	INDUCTOR, BEAD, TEM2142AD
LC32	23103238	INDUCTOR, BEAD, TEM2142AD
LC33	23103238	INDUCTOR, BEAD, TEM2142AD
LE10	23289980	COIL, PEAKING, TRF4220AZ
LE60	23248456	COIL, CHOKE, TLN3540AH
LE61	23289980	COIL, PEAKING, TRF4220AZ
LE62	23248432	COIL, CHOKE, TLN3499AH
LT01	23289027	COIL, PEAKING, TRF4680AT
LT02	23289072	COIL, PEAKING, TRF4151AT
LT03	23289072	COIL, PEAKING, TRF4151AT
LV05	23277002	FERRITE CORE, ACM3225-102-2PT100
LV06	23277002	FERRITE CORE, ACM3225-102-2PT100
LV07	23277002	FERRITE CORE, ACM3225-102-2PT100
LV15	23289022	COIL, PEAKING, TRF4100AT
LV120	23277002	FERRITE CORE, ACM3225-102-2PT100
LV121	23277002	FERRITE CORE, ACM3225-102-2PT100
LV122	23277002	FERRITE CORE, ACM3225-102-2PT100
SEMICONDUCTORS		
Q101	23205506	TRANSISTOR, 2SC4081 Q
Q501	23085049	IC, TB1274BFG(DRY)
Q504	23205507	TRANSISTOR, 2SA1576A Q
Q610	23085039	IC, TA8246AHQ
Q612	23205443	TRANSISTOR, 2SA1162-Y(F)
Q615	23205325	TRANSISTOR, RN2404(F)
Q620	23205506	TRANSISTOR, 2SC4081 Q
Q621	23205506	TRANSISTOR, 2SC4081 Q
Q622	23205506	TRANSISTOR, 2SC4081 Q
Q627	23205325	TRANSISTOR, RN2404(F)
Q664	23205506	TRANSISTOR, 2SC4081 Q
Q665	23205325	TRANSISTOR, RN2404(F)

Location No.	Parts No.	Description
Q671	23205302	TRANSISTOR,2SC3326-B(F)
Q672	23205302	TRANSISTOR,2SC3326-B(F)
Q4100	23085635	TRANSISTOR,2SC3437-Y(TE85L,F)
Q4101	23085635	TRANSISTOR,2SC3437-Y(TE85L,F)
Q4102	23085635	TRANSISTOR,2SC3437-Y(TE85L,F)
Q4103	23085635	TRANSISTOR,2SC3437-Y(TE85L,F)
QB04	23205463	TRANSISTOR,2SC2712-Y(TE85L,F)
QB07	23205463	TRANSISTOR,2SC2712-Y(TE85L,F)
QE02	23205376	TRANSISTOR,2SC5343-Y(BULK)
QE03	23205315	TRANSISTOR,RN1206(F)
QE04	23205376	TRANSISTOR,2SC5343-Y(BULK)
QE10	23135077	IC, SI-3090CA
QE11	23205315	TRANSISTOR,RN1206(F)
QE60	23085381	IC, SI-8050SS
QE65	23135076	IC, SI-3050C
QE85	23205339	TRANSISTOR,2SC2655-Y(F)
QS01	23009916	IC, MM1631AJBE
QS02	23009614	IC, CD4053BNSR
QS03	23205302	TRANSISTOR,2SC3326-B(F)
QS04	23205302	TRANSISTOR,2SC3326-B(F)
QS05	23205325	TRANSISTOR,RN2404(F)
QS08	23205506	TRANSISTOR,2SC4081 Q
QS09	23205506	TRANSISTOR,2SC4081 Q
QS10	23205302	TRANSISTOR,2SC3326-B(F)
QS11	23205302	TRANSISTOR,2SC3326-B(F)
QS14	23205302	TRANSISTOR,2SC3326-B(F)
QS18	23205302	TRANSISTOR,2SC3326-B(F)
QS19	23205506	TRANSISTOR,2SC4081 Q
QS20	23205506	TRANSISTOR,2SC4081 Q
QS21	23205506	TRANSISTOR,2SC4081 Q
QS52	23205463	TRANSISTOR,2SC2712-Y(TE85L,F)
QS108	23205506	TRANSISTOR,2SC4081 Q
QT01	23205507	TRANSISTOR,2SA1576A Q
QT02	23205506	TRANSISTOR,2SC4081 Q
QT03	23205507	TRANSISTOR,2SA1576A Q
QT04	23205507	TRANSISTOR,2SA1576A Q
QT05	23205506	TRANSISTOR,2SC4081 Q
QT06	23205507	TRANSISTOR,2SA1576A Q
QT07	23205507	TRANSISTOR,2SA1576A Q
QT08	23205506	TRANSISTOR,2SC4081 Q
QT09	23205507	TRANSISTOR,2SA1576A Q
QT10	23085758	IC, VIDEO SW 5IN-1OUT BA7649AF
QT11	23205402	TRANSISTOR,DTC144EUA
QT12	23205402	TRANSISTOR,DTC144EUA
QV01	23009940	IC, MM1630AQ
QV03	23205506	TRANSISTOR,2SC4081 Q
QV04	23205506	TRANSISTOR,2SC4081 Q
QV05	23205506	TRANSISTOR,2SC4081 Q
QV06	23205506	TRANSISTOR,2SC4081 Q
QV10	23009418	IC, MM1505XNRE
D607	23357802	DIODE, ZENER, MA8330-M
D612	23357703	DIODE, 1SS355
D613	23357703	DIODE, 1SS355
D614	23357703	DIODE, 1SS355
D617	23357703	DIODE, 1SS355
D618	23357703	DIODE, 1SS355
D619	23357703	DIODE, 1SS355
D640	23357703	DIODE, 1SS355
D641	23357703	DIODE, 1SS355
D674	23357703	DIODE, 1SS355
D675	23357703	DIODE, 1SS355
DB01	23358606	DIODE, LED RED, SLR-56VC3FPQ
DB04	23358605	DIODE, LED GREEN, SLR-56MC3FPQR
DB20	23357406	DIODE, ZENER, UDZS5.6B
DB22	23357703	DIODE, 1SS355
DB23	23357703	DIODE, 1SS355
DE01	23357706	DIODE, AK04
DE02	23357706	DIODE, AK04
DE03	23357823	DIODE, ZENER, MTZJ3.6A

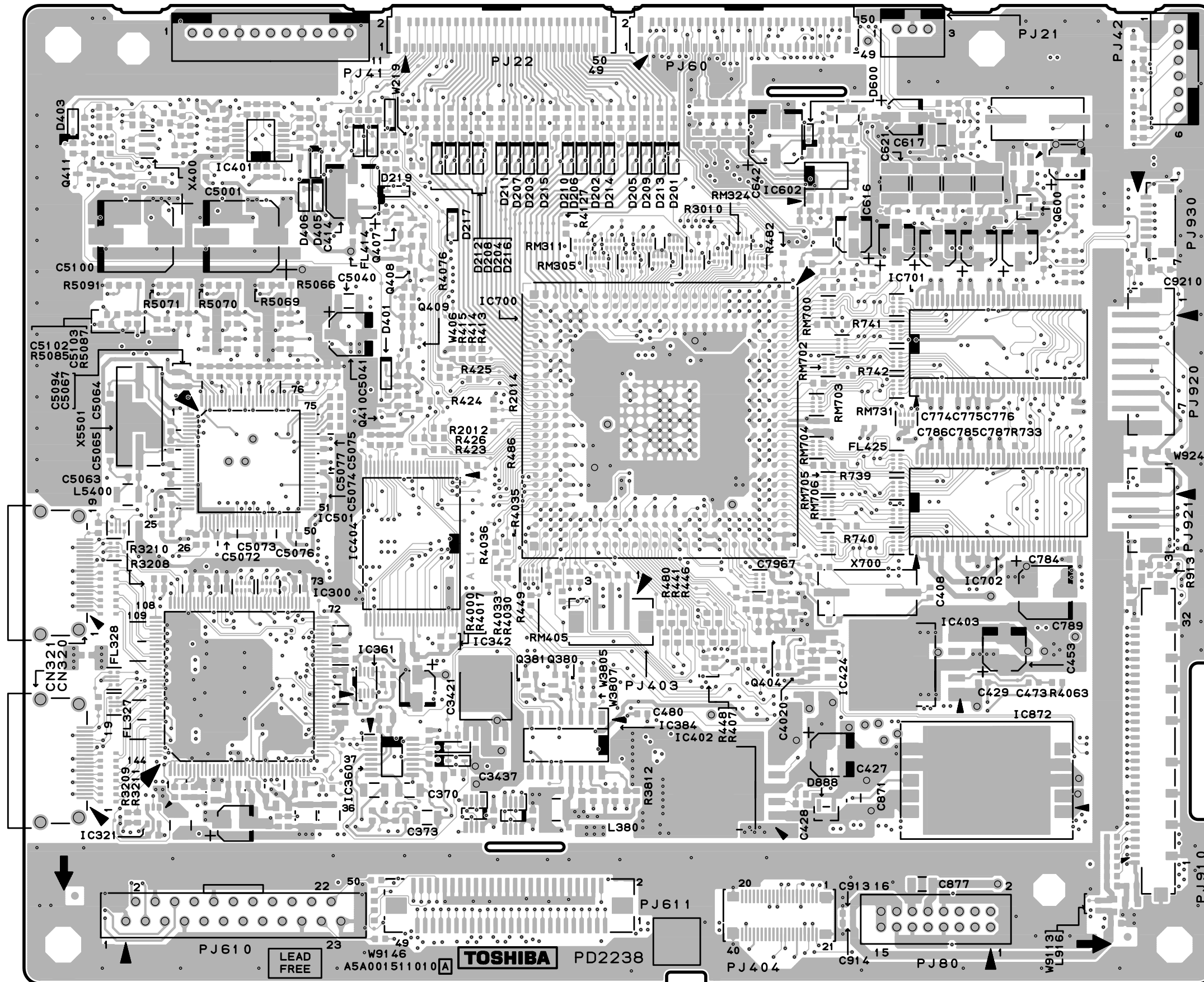
Location No.	Parts No.	Description
DE05	23357499	DIODE, ERB12-01
DE07	23357683	DIODE, ZENER, RD3.3ESA B1
DE60	23357810	DIODE, FMB-G14L
DE61	23357697	DIODE, 1SS133
DE62	23357845	DIODE, ZENER, MTZJ7.5B
DE85	23357861	DIODE, ZENER, MTZJ11A
DE86	23357697	DIODE, 1SS133
DE99	23357840	DIODE, ZENER, MTZJ6.2B
DS13	23357703	DIODE, 1SS355
DS16	23357744	DIODE, ZENER, MA8056-L
DV02	23357762	DIODE, ZENER, MA8091-M
DV04	23357762	DIODE, ZENER, MA8091-M
DV05	23357762	DIODE, ZENER, MA8091-M
DV08	23357762	DIODE, ZENER, MA8091-M
DV09	23357762	DIODE, ZENER, MA8091-M
DV10	23357762	DIODE, ZENER, MA8091-M
DV120	23357745	DIODE, ZENER, MA8056-M
MISCELLANEOUS		
△ B001	23301670	DISPLAY, PDP42V70440
B001A	23405525	OPTICAL FILTER, PDP42V T40 SSC PM00TZ001
B205	23533598	COVER, AV COVER ASSEMBLY 42WP56XE
B213	23717219	SCREW, PP3X8+SW+W SBN
FE20	23144373	FUSE, RADIAL LEAD SUB-MINIATUR 250V 630MA
GC01	76000445	CHIP JUMPER, 1608TYPE
GC02	76000445	CHIP JUMPER, 1608TYPE
GC03	76000445	CHIP JUMPER, 1608TYPE
GC04	76000445	CHIP JUMPER, 1608TYPE
GC05	76000445	CHIP JUMPER, 1608TYPE
GC06	76000445	CHIP JUMPER, 1608TYPE
GC07	76000445	CHIP JUMPER, 1608TYPE
GC08	76000445	CHIP JUMPER, 1608TYPE
GJ413	76000445	CHIP JUMPER, 1608TYPE
GJ414	76000445	CHIP JUMPER, 1608TYPE
GJ603	76000445	CHIP JUMPER, 1608TYPE
GR05	76000445	CHIP JUMPER, 1608TYPE
GR06	76000445	CHIP JUMPER, 1608TYPE
GR25	76000445	CHIP JUMPER, 1608TYPE
GR26	76000445	CHIP JUMPER, 1608TYPE
GR27	76000445	CHIP JUMPER, 1608TYPE
GR28	76000445	CHIP JUMPER, 1608TYPE
GR101	76000445	CHIP JUMPER, 1608TYPE
GR501	76000445	CHIP JUMPER, 1608TYPE
GR605	76000445	CHIP JUMPER, 1608TYPE
GR610	76000445	CHIP JUMPER, 1608TYPE
GR611	76000445	CHIP JUMPER, 1608TYPE
GR623	76000445	CHIP JUMPER, 1608TYPE
GR624	76000445	CHIP JUMPER, 1608TYPE
GR627	76000445	CHIP JUMPER, 1608TYPE
GR628	76000445	CHIP JUMPER, 1608TYPE
GRR01	76000445	CHIP JUMPER, 1608TYPE
GRR02	76000445	CHIP JUMPER, 1608TYPE
GRR03	76000445	CHIP JUMPER, 1608TYPE
GRR04	76011330	CHIP, 1/20W 33 OHM J
GRR05	76000445	CHIP JUMPER, 1608TYPE
GRR44	76000445	CHIP JUMPER, 1608TYPE
GRV01	76000445	CHIP JUMPER, 1608TYPE
GRV02	76000445	CHIP JUMPER, 1608TYPE
GRV03	76000445	CHIP JUMPER, 1608TYPE
GRV04	76000445	CHIP JUMPER, 1608TYPE
GRV05	76000445	CHIP JUMPER, 1608TYPE
GRV06	76000445	CHIP JUMPER, 1608TYPE
GRV37	76000445	CHIP JUMPER, 1608TYPE
GRV38	76000445	CHIP JUMPER, 1608TYPE
GRV39	76000445	CHIP JUMPER, 1608TYPE
GRV40	76000445	CHIP JUMPER, 1608TYPE
GRV41	76000445	CHIP JUMPER, 1608TYPE
GRV42	76000445	CHIP JUMPER, 1608TYPE
GRV45	76000445	CHIP JUMPER, 1608TYPE

Location No.	Parts No.	Description
GRV46	76000445	CHIP JUMPER, 1608TYPE
GRV47	76000445	CHIP JUMPER, 1608TYPE
GRV48	76000445	CHIP JUMPER, 1608TYPE
GRV49	76000445	CHIP JUMPER, 1608TYPE
GRV50	76000445	CHIP JUMPER, 1608TYPE
GRV54	76000445	CHIP JUMPER, 1608TYPE
GRV55	76000445	CHIP JUMPER, 1608TYPE
GRV56	76000445	CHIP JUMPER, 1608TYPE
GRV57	76000445	CHIP JUMPER, 1608TYPE
GRV58	76000445	CHIP JUMPER, 1608TYPE
GRV59	76000445	CHIP JUMPER, 1608TYPE
GRV60	76000445	CHIP JUMPER, 1608TYPE
GRV61	76000445	CHIP JUMPER, 1608TYPE
GRV75	76000445	CHIP JUMPER, 1608TYPE
GRV76	76000445	CHIP JUMPER, 1608TYPE
GRV77	76000445	CHIP JUMPER, 1608TYPE
GRV78	76000445	CHIP JUMPER, 1608TYPE
GT01	76000445	CHIP JUMPER, 1608TYPE
GT02	76000445	CHIP JUMPER, 1608TYPE
GT03	76000445	CHIP JUMPER, 1608TYPE
H001A	70352234	CLIP FINGER(97-605-01), HC-1651
KB01	23009710	REMOCON RECEIVER, GP1UE281RK
MJ22	23389359	CABLE, FFC 0.5 50P L70 GOLD
MJ60	23389359	CABLE, FFC 0.5 50P L70 GOLD
MZ01	23368939	CABLE, LVDS 600MM PDP1
P601A	23713938	CONNECTOR,CONNECTB5B-PH-K-S(LF)
P661	23023302	EARPHONE JACK
P662	23023302	EARPHONE JACK
△ P801	#1 23372287	POWER CORD, SAA 250V 6A 042512/9
△	#2 23372288	POWER CORD, BS 250V 5A 042512/8
△	#3 23372286	POWER CORD, CEE 250V 6A 042512/7
△	#4 23372286	POWER CORD, CEE 250V 6A 042512/7
P801A	23103300	FERRITE CORE, TFE102AK, 32X41X14
P801B	23103778	FERRITE CORE, TFE1008
P801C	23974994	BAND, KESSOKU
P803A	23713763	PLUG, NP 2.5MM G, B12B-EH-F1A
P803B	23713763	PLUG, NP 2.5MM G, B12B-EH-F1A
P804A	23713757	PLUG, 6P 2.5MM G, B6B-EH-F1-TV4
P804B	23713757	PLUG, 6P 2.5MM G, B6B-EH-F1-TV4
P807A	23713763	PLUG, NP 2.5MM G, B12B-EH-F1A
P809A	23713762	PLUG, NP 2.5MM G, B11B-EH-F1A
P881	23023131	INLET, NOISE FILTER, GL-2080FVP-L
PJ21A	23713934	CONNECTOR, 2MM 3P S WHT B3B-PH-K-S(LF)
PJ22A	23757176	CONNECTOR, IRS 9637S-50Y902 GLD
PJ41B	23713943	CONNECTOR,CONNECTB11B-PH-K-S(LF)
PJ42B	23713948	CONNECTOR,CONNECTS6B-PH-K-S(LF)
PJ60A	23757176	CONNECTOR, IRS 9637S-50Y902 GLD
PP02	23845859	HOLDER, WIRE, PVC-COAT, L=70MM
PP04	23974994	BAND, KESSOKU
PP05	23748087	WASHER, WASHER 10X4.2XT0.3TPO
PP07	23974994	BAND, KESSOKU
PP13	23845859	HOLDER, WIRE, PVC-COAT, L=70MM
PV01	23023453	PIN JACK, 1S3P SMK LAP5030-0115F
PV02	23023264	JACK, PIN 7P SMK, LAP50300210F
PV03	23023264	JACK, PIN 7P SMK, LAP50300210F
PV04	23023279	JACK, PIN 6P SMK LAP503002
PV25A	23713944	CONNECTOR,CONNECTB12B-PH-K-S(LF)
PV60	23365275	JACK, PHONO 3P V-L-R YKC21
PV61	23023300	JACK, Y/C YKF51-5560
PV90	23713710	SOCKET, D-SUB 15P, KR D-8622
Q610B	23717240	SCREW
QE10B	23717240	SCREW
△ S801	23344530	SWITCH, ESB92S21B NAT ESB92S21B
SA01	23344507	SWITCH, PUSH, SKHHLMA010
SA02	23344507	SWITCH, PUSH, SKHHLMA010
SA03	23344507	SWITCH, PUSH, SKHHLMA010
SA04	23344507	SWITCH, PUSH, SKHHLMA010
SA05	23344507	SWITCH, PUSH, SKHHLMA010
SA06	23344507	SWITCH, PUSH, SKHHLMA010

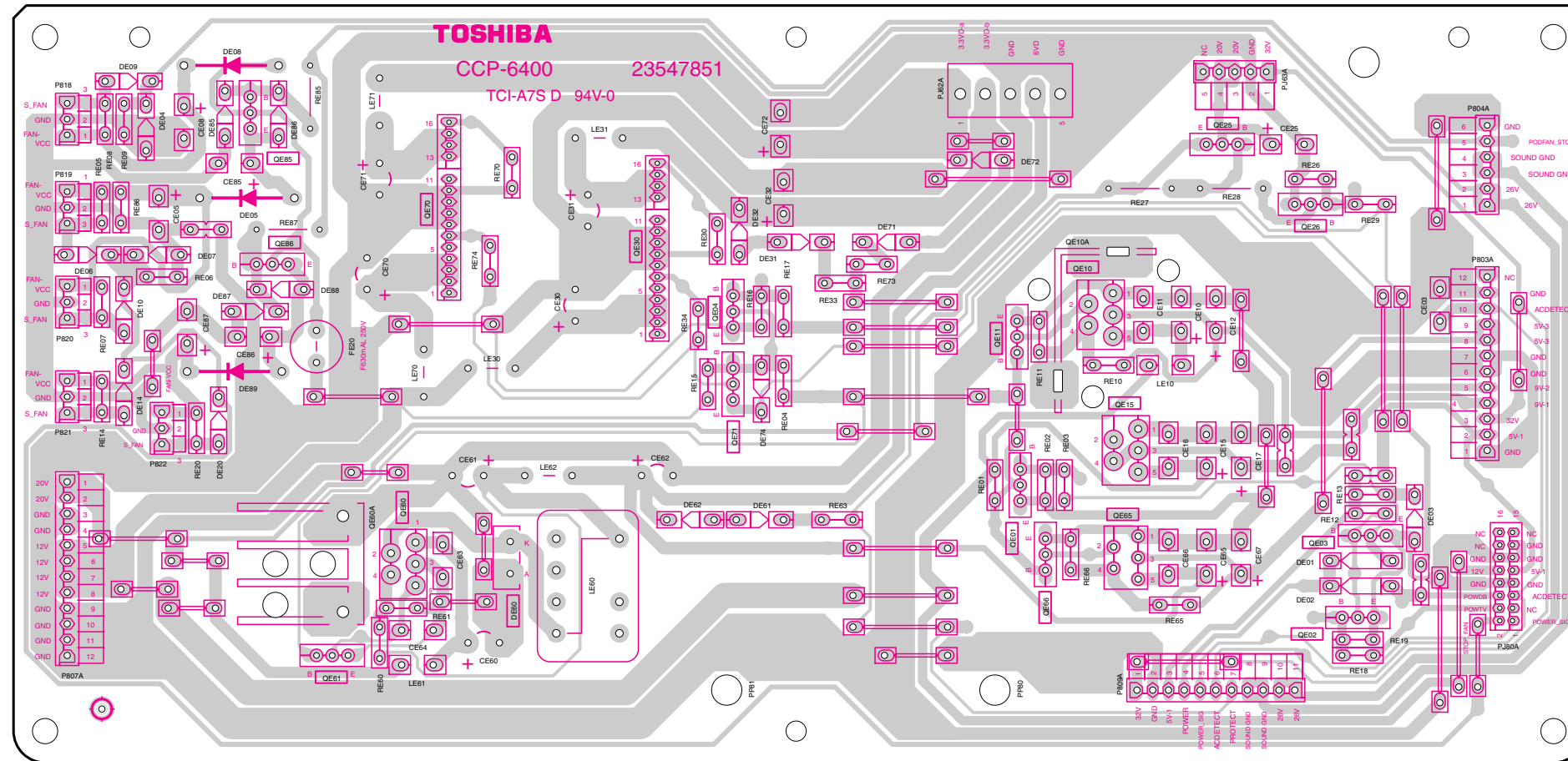
Location No.	Parts No.	Description
SA07	23344507	SWITCH, PUSH, SKHHLMA010
△ U800	23122502	POWER UNIT, POWER BLOCK MODULE 1H276W
W661	23351322	SPEAKER, ASSY, 6X12+6X12+TW SPK-1470BO
W662	23351322	SPEAKER, ASSY, 6X12+6X12+TW SPK-1470BO
X501	23153612	CRYSTAL, 16.200 25PPM 25OHM
ZA01	23103778	FERRITE CORE, TFE1008
ZA02	23103839	FERRITE CORE, TFE1012
ZA07	23103840	FERRITE CORE, TFE1013
ZA08	23103778	FERRITE CORE, TFE1008
ZA09	23103840	FERRITE CORE, TFE1013
PC BOARD ASSEMBLIES		
* U001	75001673	PC BOARD ASSY, PD2238G1 SIGNAL
* U002	75001667	PC BOARD ASSY, PD2202D1 LOWB
* U003A	75001719	PC BOARD ASSY, PD2204B1 TN/AV
* U003B	75001720	PC BOARD ASSY, PD2204B2 FRONT AV
* U003C	75001721	OC BOARD ASSY, PD2204B3 KEY
* U003D	75001722	PC BOARD ASSY, PD2204B4 RMT/LED
* U003E	75001723	PC BOARD ASSY, PD2204B5 SW
TUNER		
△ H001	23321499	TUNER, ENG39A07GF, TIF CHI HOR61 IEC PAL+M
ACCESSORIES		
A701	23015178	CARTON, BOTTOM CASE 42WP56E
A701A #2	23015177	CARTON, TOP CASE 42WP56E
A701B #4	23015177	CARTON, TOP CASE 42WP56T
A701C #1	23015177	CARTON, TOP CASE 42WP56A
A701D #3	23015179	CARTON, TOP CASE 42WP56R
A702A	23580045	PACKING, TOP PACKING 42WP56E
A702B	23580046	PACKING, BOTTOM PACKING 42WP56E
A705	23518043	PACKING, JOINT
△ Y101 #1	23566717	OWNERS MANUAL, ENGL LCD O/M 42WP56A/E/T
△	#2 23566717	OWNERS MANUAL, ENGL LCD O/M 42WP56A/E/T
△	#3 23566716	OWNERS MANUAL, ENGL/RUSIA PSMA O/M 42WP56R
△	#4 23566717	OWNERS MANUAL, ENGL LCD O/M 42WP56A/E/T
△ Y102 #2	23566718	OWNERS MANUAL, CT PSMA O/M 42WP56E-1
△	#4 23566720	OWNERS MANUAL, THAI PSMA O/M 42WP56T
△ Y103 #2	23566719	OWNERS MANUAL, ARABIC PSMA O/M 42WP56E-2
△ Y130	23306590	REMOCON HAND UNIT, CT-90126
Y140	23542012	CLOTH,MC24-TDM-1P
Y170	23845800	HOLDER, WIRE, NYLON66 D6.8
Y174	23845510	BAND
CABINET PARTS		
A201	23533601	COVER, FRONT BEZEL ASSY 42WP56E
A206	23469406	INSULATOR,INSULATOR
A212	23940043	CAP, POWER SWITCH
A220	23940593	PIECE, PIECE FRONT AV ASSY 42WP56E
A221	23940594	PIECE, PIECE CONTROL ASSY 42WP56E
A231	23717214	SCREW,BITTB3X12SBN
A235	23717177	SCREW, PP5X12+SW+W SBN
△ A401	23533556	COVER, BACK COVER ASSY
A403	23436887	FOOT, STAND ASSY
A410	23533616	COVER, CABLE COVER PROPER
A423	23717217	SCREW, PP6X35+SW+W SBN
A431	23717214	SCREW,BITTB3X12SBN

SIGNAL BOARD PD2238G1 (U001)

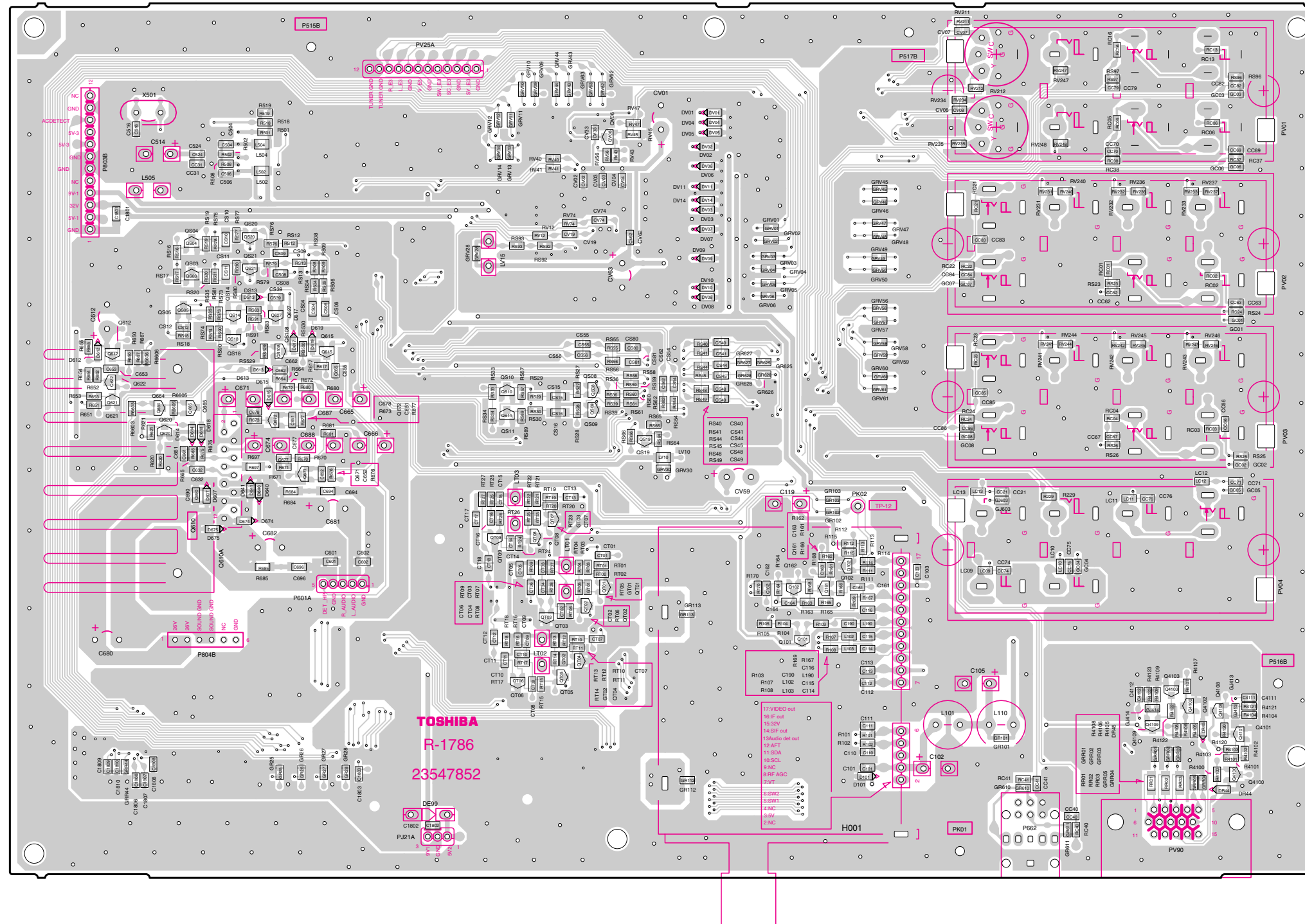
TOP (COMPONENT) SIDE



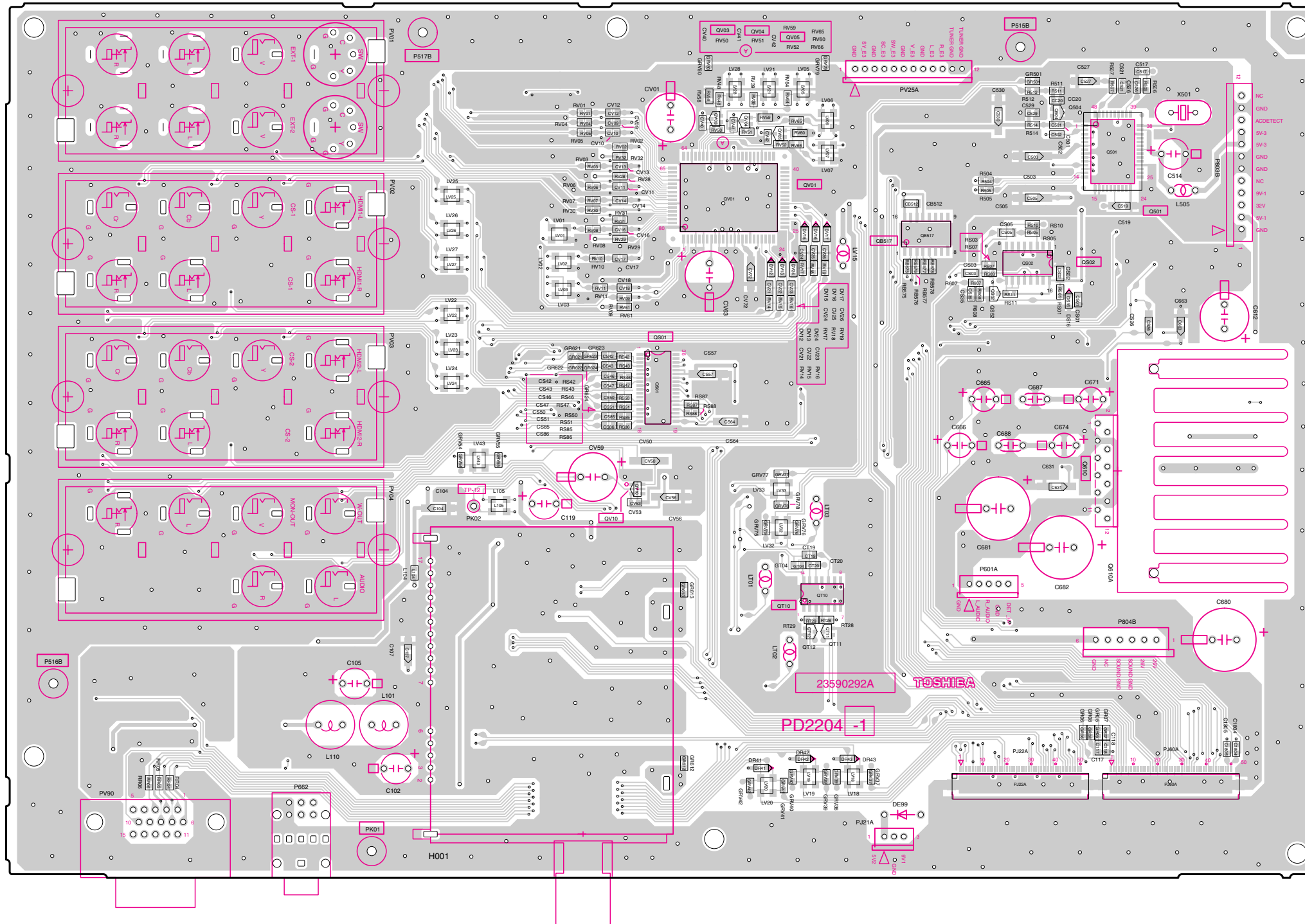
LOWB BOARD PD2202D1 (U002)
BOTTOM (FOIL) SIDE



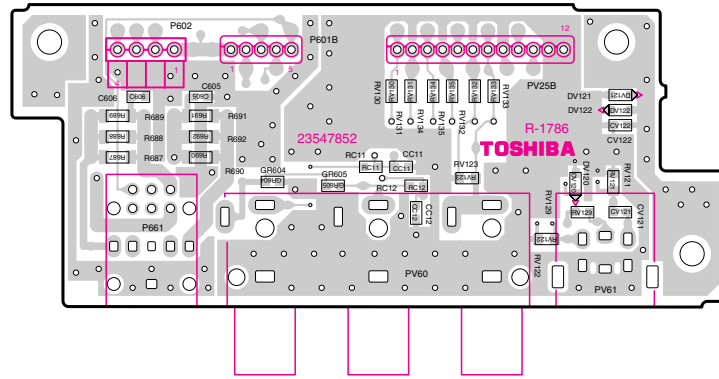
TN/AV BOARD PD2204B1 (U003A)
 BOTTOM (FOIL) SIDE



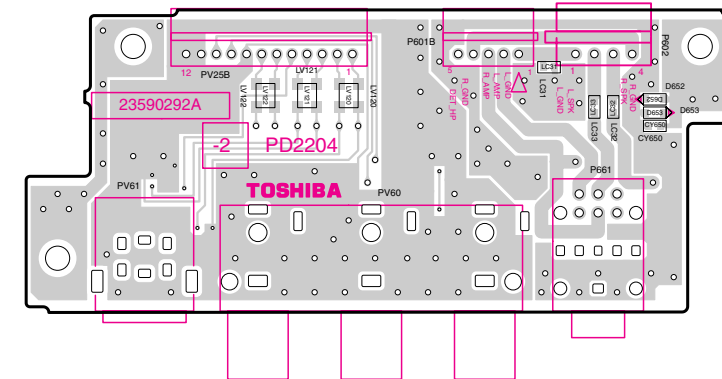
TN/AV BOARD PD2204B1 (U003A)
TOP (COMPONENT) SIDE



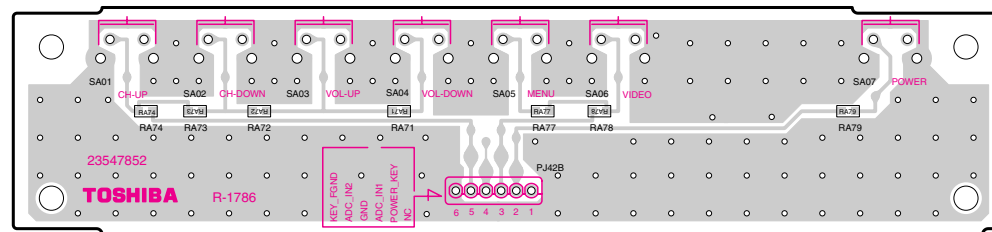
FRONT AV BOARD PD2204B2 (U003B)
BOTTOM (FOIL) SIDE



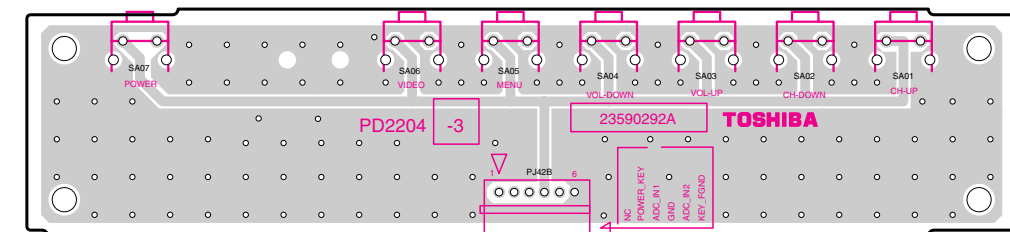
FRONT AV BOARD PD2204B2 (U003B)
TOP (COMPONENT) SIDE



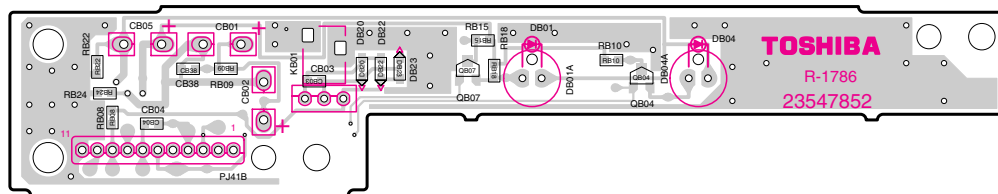
KEY BOARD PD2204B3 (U003C)
BOTTOM (FOIL) SIDE



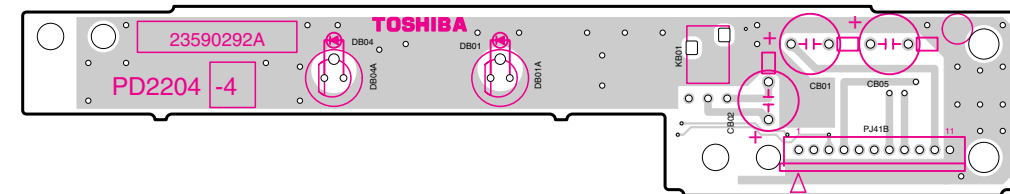
KEY BOARD PD2204B3 (U003C)
TOP (COMPONENT) SIDE



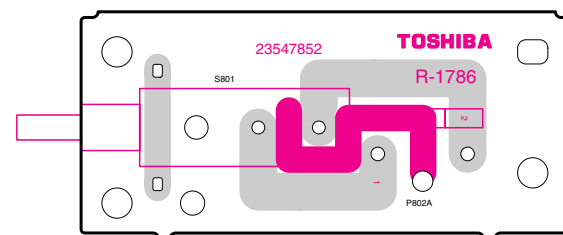
RMT/LED BOARD PD2204B4 (U003D)
BOTTOM (FOIL) SIDE



RMT/LED BOARD PD2204B4 (U003D)
TOP (COMPONENT) SIDE



SW BOARD PD2204B5 (U003E)
BOTTOM (FOIL) SIDE





SCHEMATIC DIAGRAM

MODEL : 42WP56A/E/R/T

WARNING : BEFORE SERVICING THIS CHASSIS, READ THE "SERVICE SAFETY PRECAUTIONS" ON PAGE 3 OF THIS MANUAL.

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 SERVICE SAFETY PRECAUTIONS on the MANUAL for this model. Do not degrade the safety of the receiver through improper servicing.

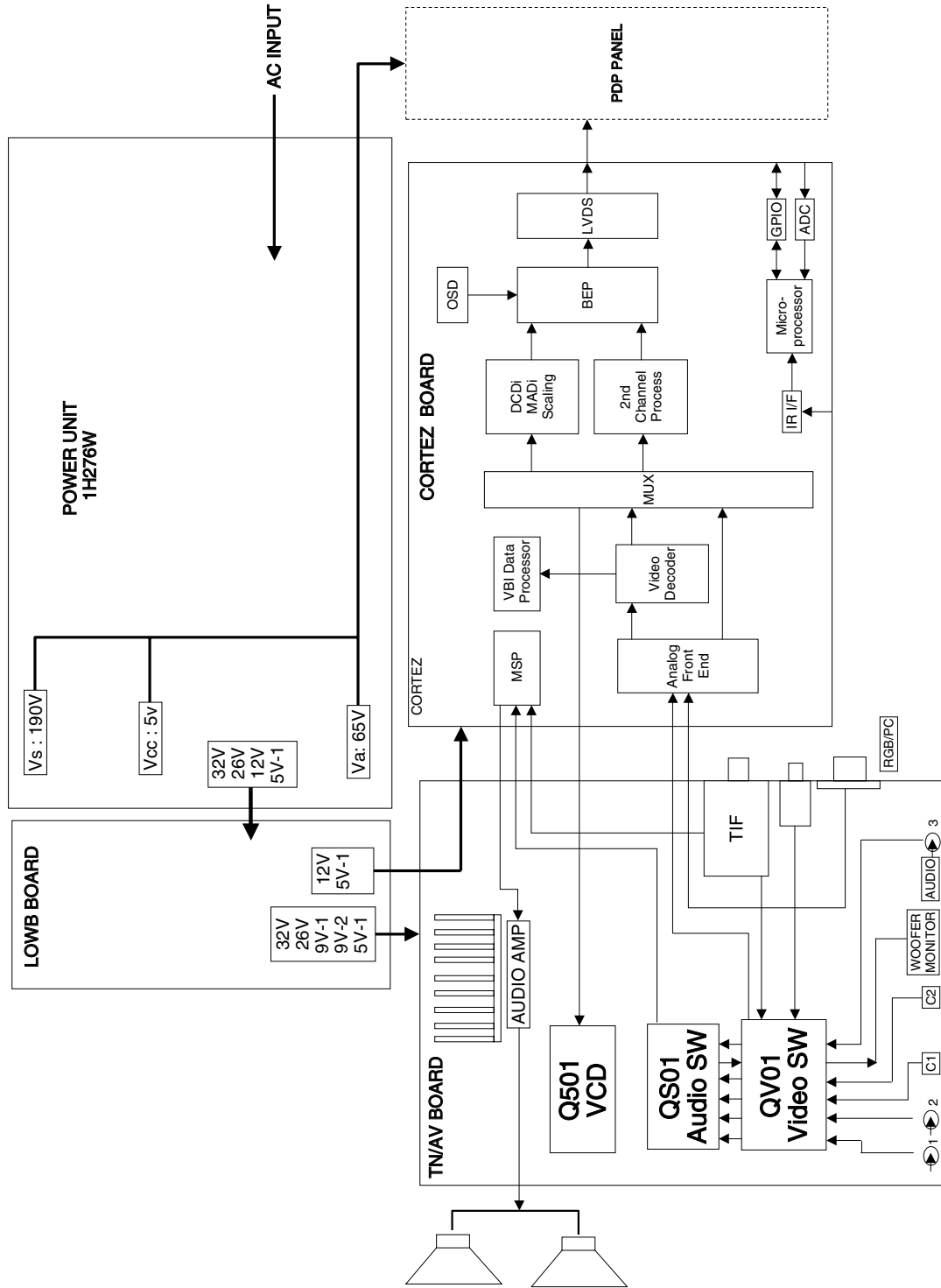
NOTE:

1. 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 = $\pm 10\%$ G = $\pm 2\%$ F = $\pm 1\%$
2. 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
3. The parts indicated with " \triangle " have special characteristics, and should be replaced with identical parts only.
4. Voltages read with DIGITAL MULTI-METER from point indicated to chassing ground, using a color bar signal with all controls at normal, line voltage 220 volts.
5. Waveforms are taken receiving color bar signal with enough sensitivity.
6. Voltage reading shown are nominal values and may vary $\pm 20\%$ except H.V.

■ SCHEMATIC DIAGRAM STRUCTURE:

CONNECTOR		1/56
VIDEO-SW		2/56
TIF		3/56
AV-TERMINAL		4/56
AUDIO-SW		5/56
A-OUT		6/56
AUDIO-MUTE		7/56
TEXT-SW		8/56
TV-OUT		9/56
ANALOG VCD		10/56
EXPANDER FOR PDP		11/56
FRONT-AV		12/56
KEY		13/56
LED_RMT		14/56
POWER_SW		15/56
LOWB		16/56
SIGNAL	ANALOG IN	[SHEET-200] 17/56
	— PIP VCD	[SHEET-206] 18/56
	— REG/RESET	[SHEET-207] 19/56
	— INPUT LPF	[SHEET-208] 20/56
	— Functi	[SHEET-209] 21/56
	— D IN A	[SHEET-300] 22/56
	— D IN B	[SHEET-301] 23/56
	— HDMI (Link, I2C)	[SHEET-302] 24/56
	— HDMI Rx#2 (Video/Audio)	[SHEET-303] 25/56
	— HDMI Rx#3 (PWR,Audio)	[SHEET-304] 26/56
	— HDMI AUDIO PLL	[SHEET-305] 27/56
	— HDMI AUDIO DAC	[SHEET-306] 28/56
	— HDMI AUDIO OUT	[SHEET-307] 29/56
	— HDMI CONTROLLER	[SHEET-308] 30/56
	— EEPROM1	[SHEET-309] 31/56
	— EEPROM2	[SHEET-310] 32/56
	— MICRO I/O	[SHEET-400] 33/56
	— OCM MEMORY I/F	[SHEET-401] 34/56
	— FLASH MEMORY	[SHEET-402] 35/56
	— SYNC SEPA	[SHEET-403] 36/56
	— E2P OTHER	[SHEET-404] 37/56
	— STD-BY MICOR	[SHEET-405] 38/56
	— CORTEZ REG 1	[SHEET-406] 39/56
	— CORTEZ REG 2	[SHEET-407] 40/56
	— CORTEZ REG 3	[SHEET-408] 41/56
	— BOOT CONFIG	[SHEET-409] 42/56
	— SERVICE CONNECTOR	[SHEET-410] 43/56
	— I2C Switch	[SHEET-411] 44/56
	— AUDIO	[SHEET-600] 45/56
	— AUDIO MSP	[SHEET-601] 46/56
	— CORTEZ 1	[SHEET-700] 47/56
	— CORTEZ 2	[SHEET-701] 48/56
	— DDR I/F	[SHEET-702] 49/56
	— DDR SDRAM	[SHEET-703] 50/56
	— DDR TERMINATION	[SHEET-704] 51/56
	— DCDC CONV.	[SHEET-802] 52/56
	— LVDS OUT	[SHEET-900] 53/56
	— LVDS OUT(SHARP LCD)	[SHEET-901] 54/56
	— Power Connector and Dimming	[SHEET-902] 55/56
	— LVDS Power and Others	[SHEET-903] 56/56

CIRCUIT BLOCK DIAGRAM



SPECIFICATIONS

Model	42WP56A, 42WP56E, 42WP56R, 42WP56T		
Power source	42WP56A	220V - 240V AC, 50 Hz	
	42WP56E	220V - 240V AC, 50/60 Hz	
	42WP56R	220V - 240V AC, 50 Hz	
	42WP56T	110V - 240V AC, 50/60 Hz	
Power consumption	315W, 0.5W (standby)		
Dimensions	1100mm (W)	778mm (H)	390mm (D)
Mass (Weight)	*** kg		
Television system (Antenna input)	Channel coverage:		
	PAL	B/G (CCIR)	VHF 2 - 12 UHF 21 - 69 CATV X - Z+2, S1 - S41
	PAL	I (UK)	VHF - UHF 21 - 69 CATV -
	PAL	D/K (CHINA)	VHF 1 - 12 UHF 13 - 57 CATV Z1 - Z38
	SECAM	B/G (CCIR)	VHF 2 - 12 UHF 21 - 69 CATV X - Z+2, S1 - S41
	SECAM	D/K (OIRT)	VHF 1 - 12 UHF 21 - 69 CATV X1 - X19
	NTSC	M (US)	VHF 2 - 13 UHF 14 - 69 CATV A6 - A1, A - W, AA - ZZ, AAA, BBB
	NTSC	M (JAPAN)	VHF 1 - 12 UHF 13 - 62 CATV M1 - M10, S1 - S41
	Special RF signal:		
	NTSC 4.43 color system	5.5/6.0/6.5 MHz sound system	
	PAL 60 Hz color system	5.5/6.0/6.5 MHz sound system	
COMPONENT VIDEO INPUT terminals (the signal format)	480i, 480p, 576i, 576p, 720p (50/60 Hz), 1080i (50/60 Hz) (These signal formats are converted to match the number of pixels of the plasma panel.)		
Color system	PAL, SECAM, NTSC 3.58/4.43		
Aspect ratio	16 : 9		
Visible size (diagonal)	105.6 cm		
Number of pixels	852 (H) dots × 480 (V) dots		
Audio power	10 W + 10 W (10% THD)		
Speakers	Main	60 × 120 mm 4pcs.	
	Tweeter	33 mm (round) 2pcs.	
Input/Output terminals	⊖ (1) Input	4 pin	S-video
		Phono jacks	A/V
	⊖ (2) Input	4 pin	S-video
		Phono jacks	A/V
	⊖ (C1) Input	Component video	Y, P _B /C _B , P _R /C _R
		Phono jacks	Audio L/Mono + R
	⊖ (C2) Input	Component video	Y, P _B /C _B , P _R /C _R
		Phono jacks	Audio L/Mono + R
	⊕ MONITOR Output	Phono jacks	A/V
	⊕ AUDIO OUT Output	Phono jacks	Audio L + R (Fixed/Variable)
	⊕ Woofer Output	Phono jack	Bass Line out (Variable)
	⊖ RGB/PC Input	Mini D-sub 15 pin	Analog RGB
	⊖ AUDIO Input	3.5 mm stereo mini jack	
	⊖ HDMI 1 Input (type A)	19pin	A/V Digital
	⊖ HDMI (AUDIO) 1 Input	Phono jacks	Analog L+R
	⊖ HDMI 2 Input (type A)	19pin	A/V Digital
	⊖ HDMI (AUDIO) 2 Input	Phono jacks	Analog L+R
	Headphones jack 3.5 mm (Diameter) stereo		
Operating condition	Temperature	0°C - 35°C	
	Humidity	20% - 80% (No moisture condensation)	
Supplied accessories :	Owner's manual (1), Power code (1), Remote control (1), Batteries (2), Soft cloth (1), Clip (1), Important information (picture shift) (1)		



This is used to fix the TV to a wall, pillar, etc.

- Design and specifications are subject to change without notice.

TOSHIBA CORPORATION
1-1, SHIBAURA 1-CHOME, MINATO-KU, TOKYO 105-8001, JAPAN



SCHEMATIC DIAGRAM

MODEL : 42WP56A/E/R/T

WARNING : BEFORE SERVICING THIS CHASSIS, READ THE "SERVICE SAFETY PRECAUTIONS" 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 SERVICE SAFETY PRECAUTIONS on the MANUAL for this model. Do not degrade the safety of the receiver through improper servicing.

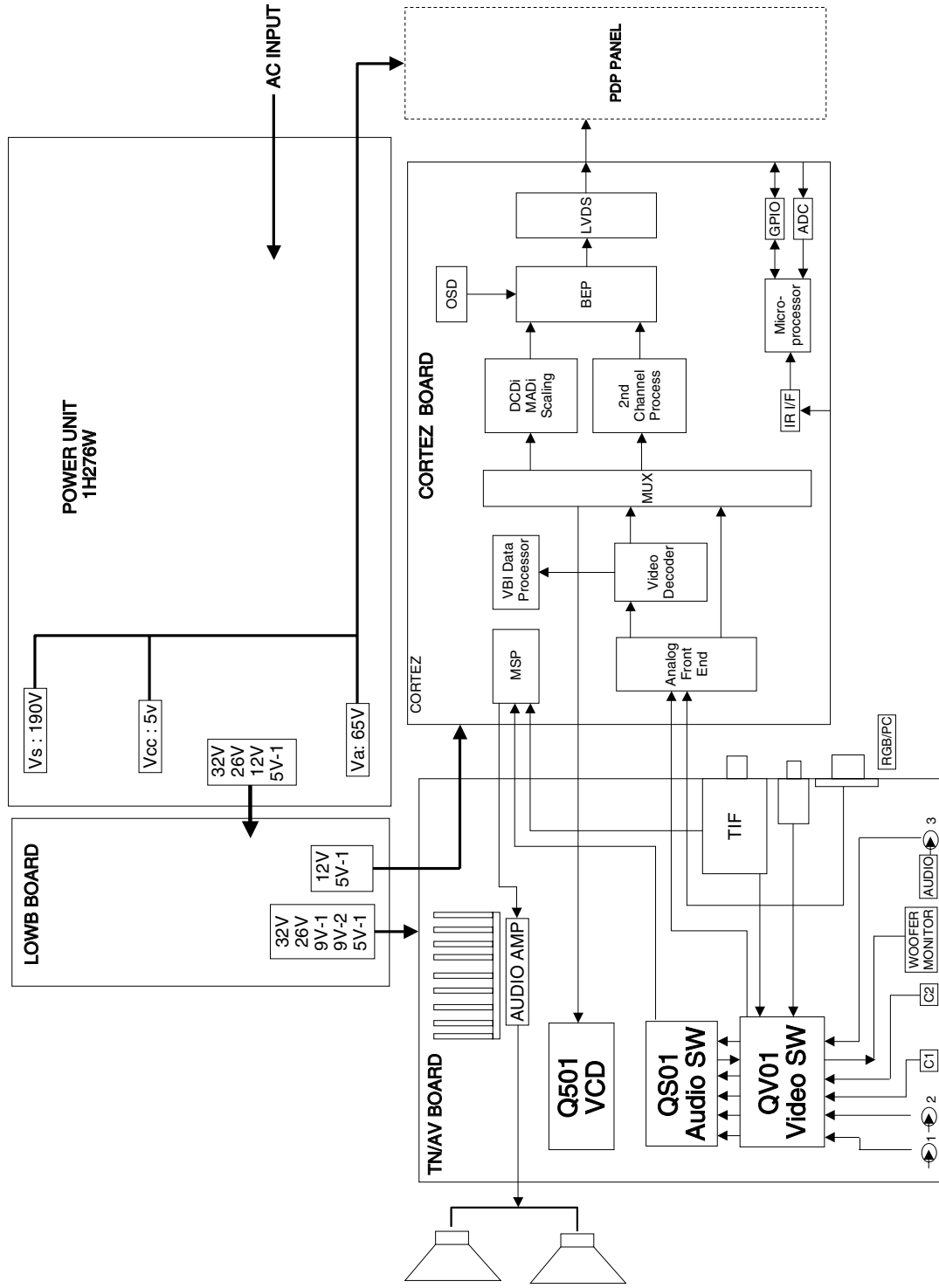
NOTE:

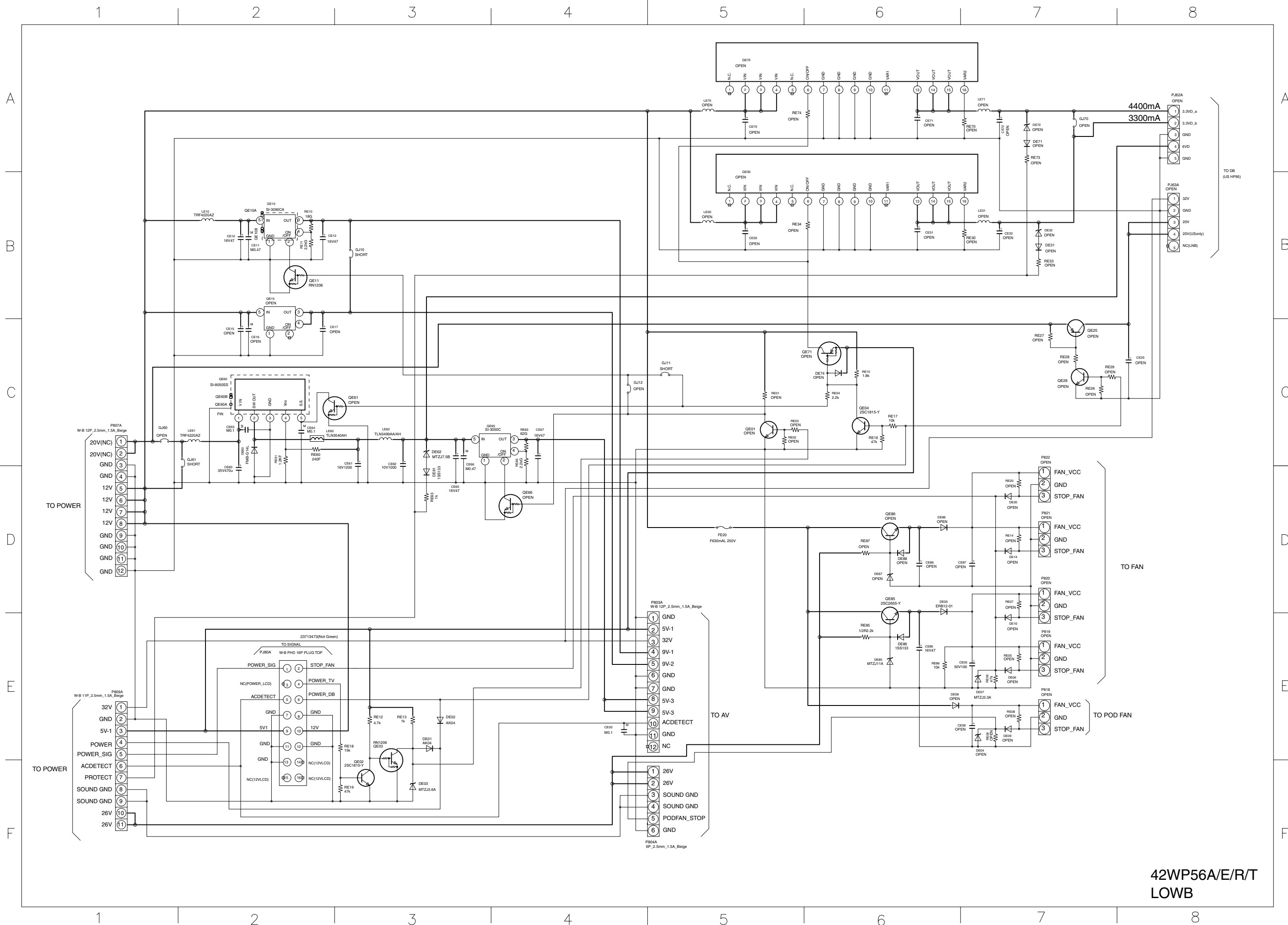
- RESISTOR** Resistance is shown in ohm [K = 1.000, M = 1.000.000]. All resistors are 1/6W and 5% tolerance carbon resistor, unless otherwise noted as the following marks.
1/2R = Metal or Metal oxide of 1/2 watt 1/2S = Carbon composition of 1/2 watt
1RF = Fuse resistor of 1 watt 10W = Cement of 10 watt
K = $\pm 10\%$ G = $\pm 2\%$ F = $\pm 1\%$
- 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 " \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 220 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.

■ SCHEMATIC DIAGRAM STRUCTURE:

CONNECTOR	1/56
VIDEO-SW	2/56
TIF	3/56
AV-TERMINAL	4/56
AUDIO-SW	5/56
A-OUT	6/56
AUDIO-MUTE	7/56
TEXT-SW	8/56
TV-OUT	9/56
ANALOG VCD	10/56
EXPANDER FOR PDP	11/56
FRONT-AV	12/56
KEY	13/56
LED_RMT	14/56
POWER_SW	15/56
LOWB	16/56
SIGNAL —————	
— ANALOG IN	[SHEET-200] 17/56
— PIP VCD	[SHEET-206] 18/56
— REG/RESET	[SHEET-207] 19/56
— INPUT LPF	[SHEET-208] 20/56
— Functi	[SHEET-209] 21/56
— D IN A	[SHEET-300] 22/56
— D IN B	[SHEET-301] 23/56
— HDMI (Link, I2C)	[SHEET-302] 24/56
— HDMI Rx#2 (Video/Audio)	[SHEET-303] 25/56
— HDMI Rx#3 (PWR,Audio)	[SHEET-304] 26/56
— HDMI AUDIO PLL	[SHEET-305] 27/56
— HDMI AUDIO DAC	[SHEET-306] 28/56
— HDMI AUDIO OUT	[SHEET-307] 29/56
— HDMI CONTROLLER	[SHEET-308] 30/56
— EEPROM1	[SHEET-309] 31/56
— EEPROM2	[SHEET-310] 32/56
— MICRO I/O	[SHEET-400] 33/56
— OCM MEMORY I/F	[SHEET-401] 34/56
— FLASH MEMORY	[SHEET-402] 35/56
— SYNC SEPA	[SHEET-403] 36/56
— E2P OTHER	[SHEET-404] 37/56
— STD-BY MICOR	[SHEET-405] 38/56
— CORTEZ REG 1	[SHEET-406] 39/56
— CORTEZ REG 2	[SHEET-407] 40/56
— CORTEZ REG 3	[SHEET-408] 41/56
— BOOT CONFIG	[SHEET-409] 42/56
— SERVICE CONNECTOR	[SHEET-410] 43/56
— I2C Switch	[SHEET-411] 44/56
— AUDIO	[SHEET-600] 45/56
— AUDIO MSP	[SHEET-601] 46/56
— CORTEZ 1	[SHEET-700] 47/56
— CORTEZ 2	[SHEET-701] 48/56
— DDR I/F	[SHEET-702] 49/56
— DDR SDRAM	[SHEET-703] 50/56
— DDR TERMINATION	[SHEET-704] 51/56
— DCDC CONV.	[SHEET-802] 52/56
— LVDS OUT	[SHEET-900] 53/56
— LVDS OUT(SHARP LCD)	[SHEET-901] 54/56
— Power Connector and Dimming	[SHEET-902] 55/56
— LVDS Power and Others	[SHEET-903] 56/56

CIRCUIT BLOCK DIAGRAM





42WP56A/E/R/T
LOWB

1 2 3 4 5 6 7 8

A

A

B

B

C

C

D

D

E

E

F

F

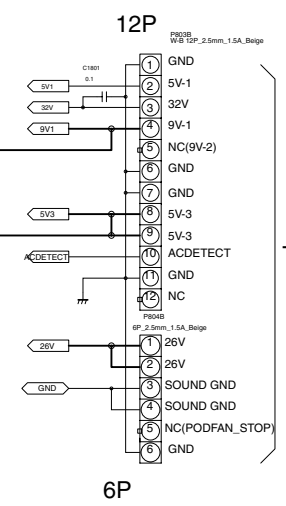
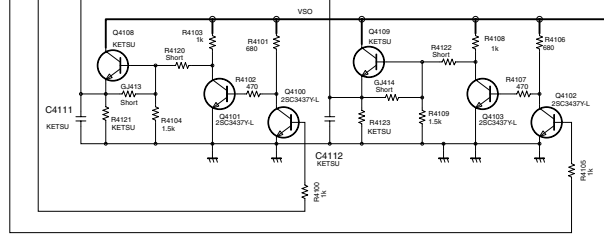
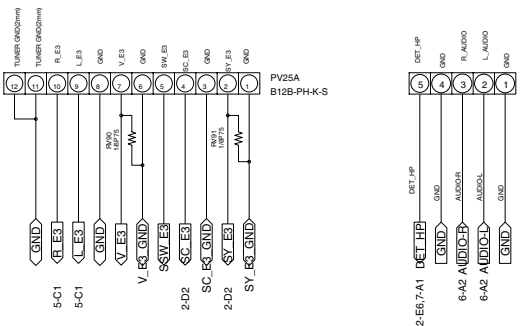
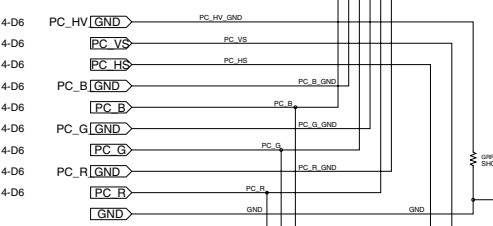
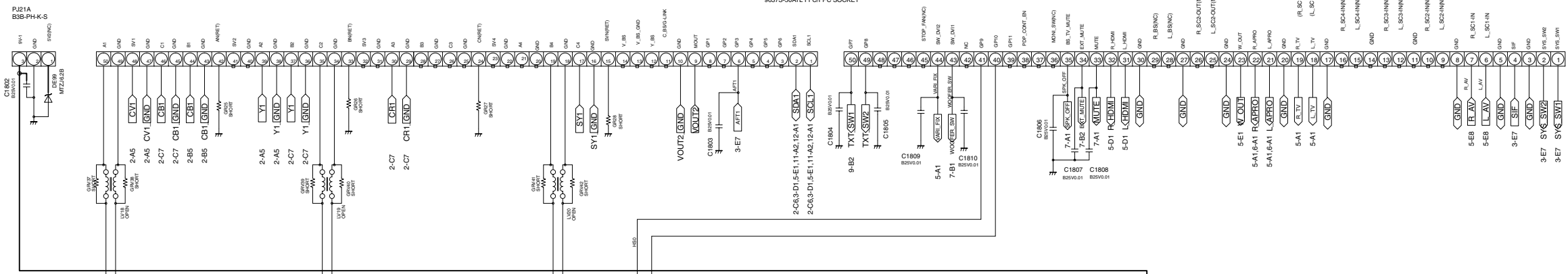
TO SIGNAL BOARD

50P-FFC

PJ22A
9637S-50ATL FFC/FFC SOCKET

50P-FFC

PJ60A
9637S-50ATL FFC/FFC SOCKET



TO LOW BOARD

42WP56A/E/R/T CONNECTOR

1 2 3 4 5 6 7 8

A

A

B

B

C

C

D

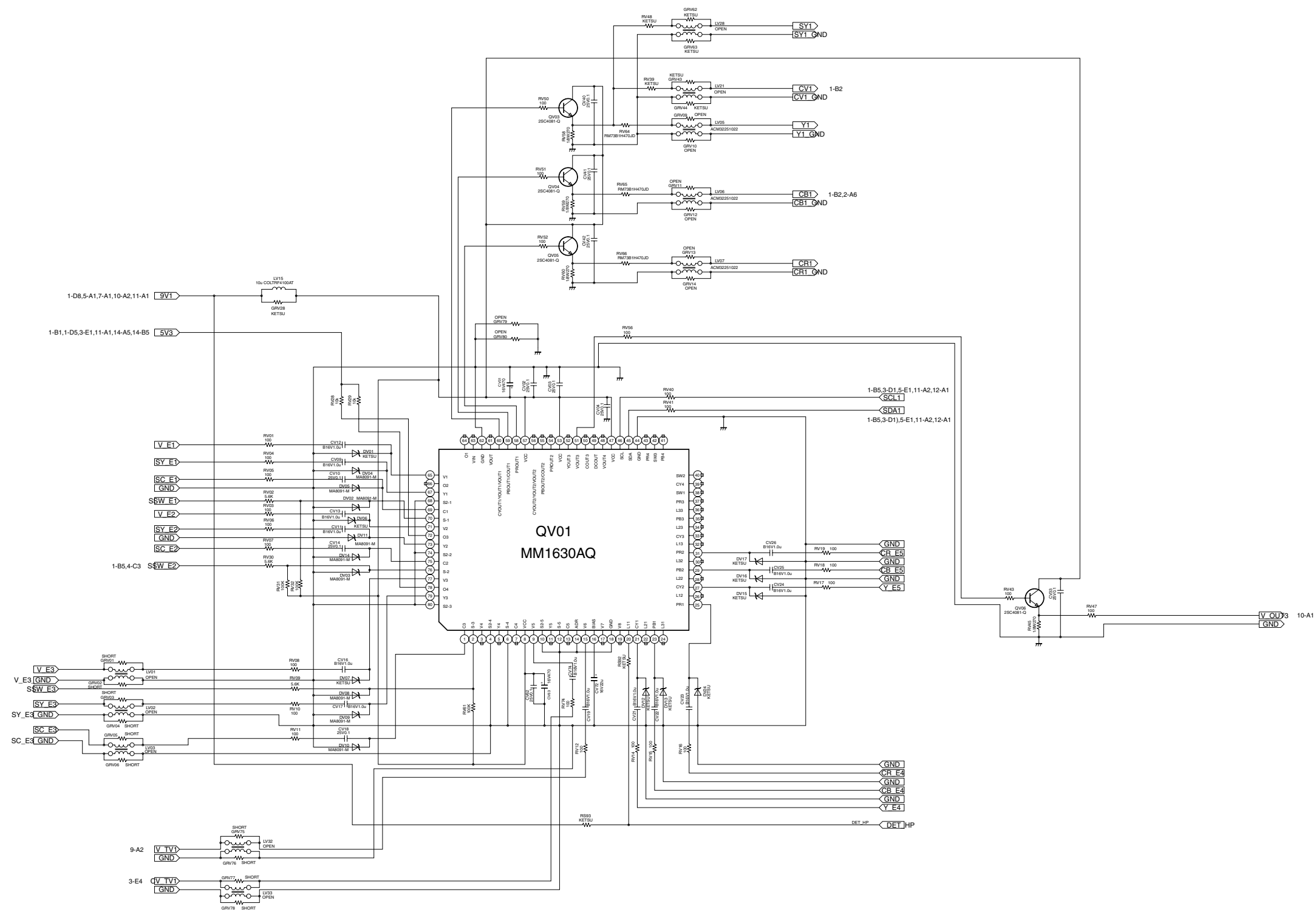
D

E

E

F

F



42WP56A/E/R/T
VIDEO-SW

1 2 3 4 5 6 7 8

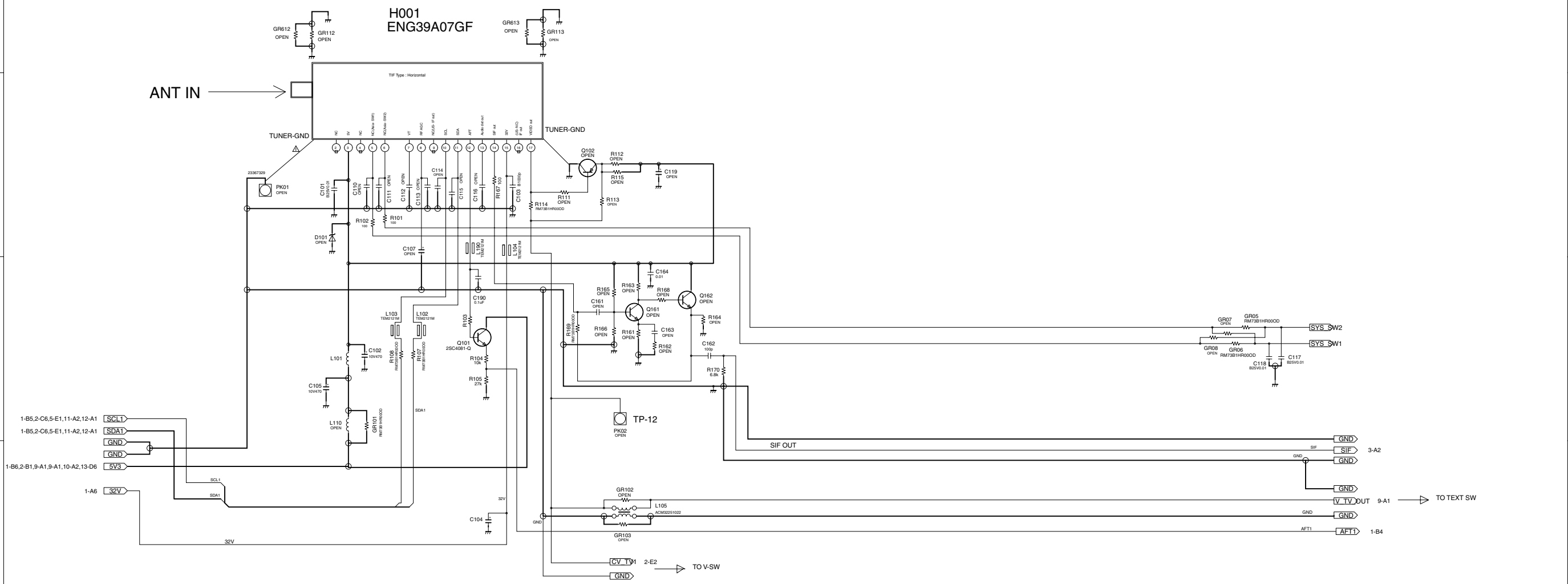
1 2 3 4 5 6 7 8

A
B
C
D
E
F

A
B
C
D
E
F

ASIA SYSTEM ONLY

	SW1	SW2
B/G	H	L
I	L	H
D/K	L	L
M	H	H

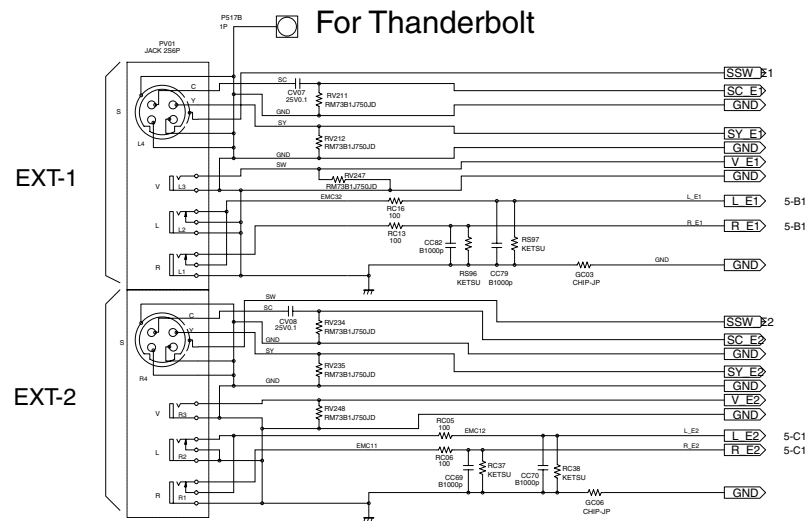


42WP56A/E/R/T
TIF

1 2 3 4 5 6 7 8

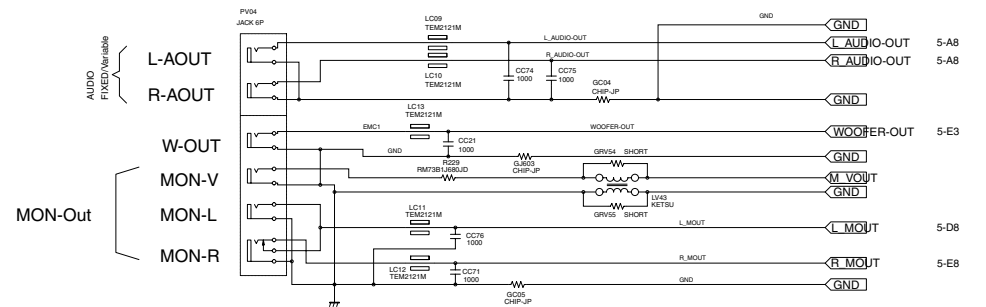
A

A



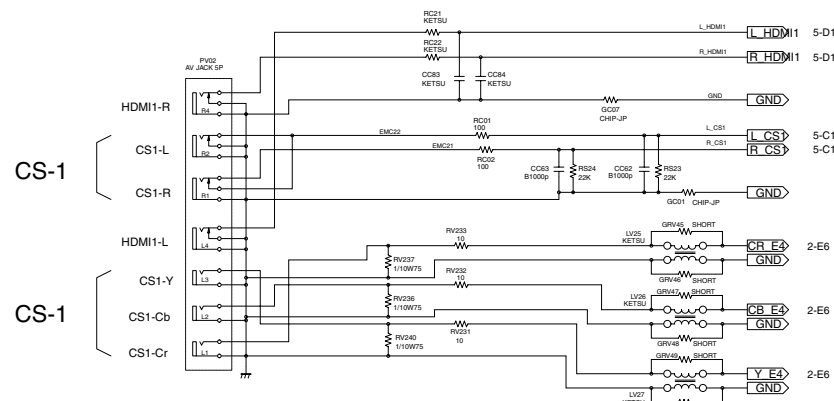
B

B



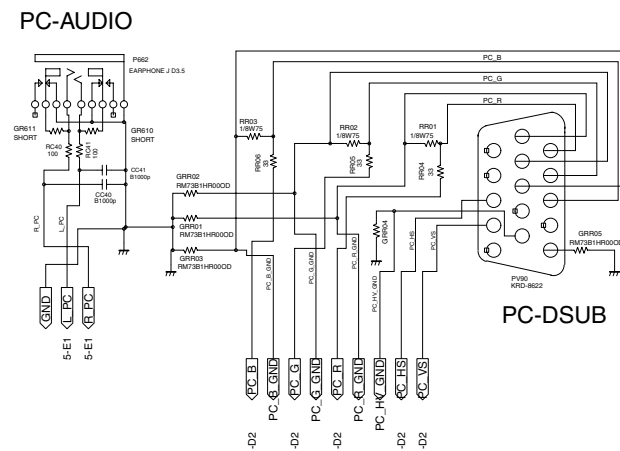
C

C



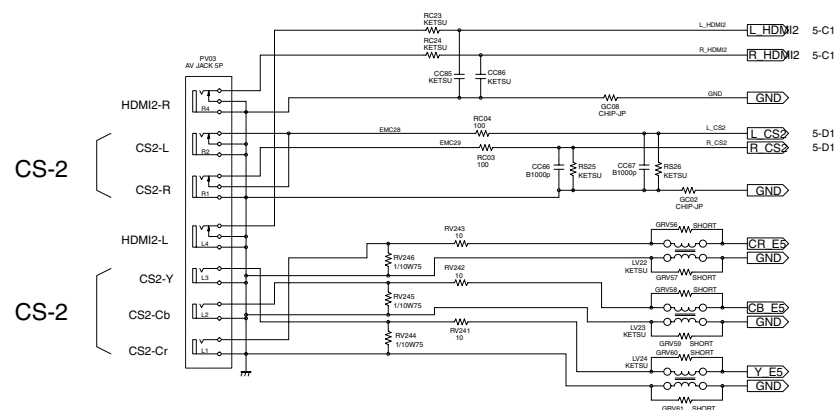
D

D



E

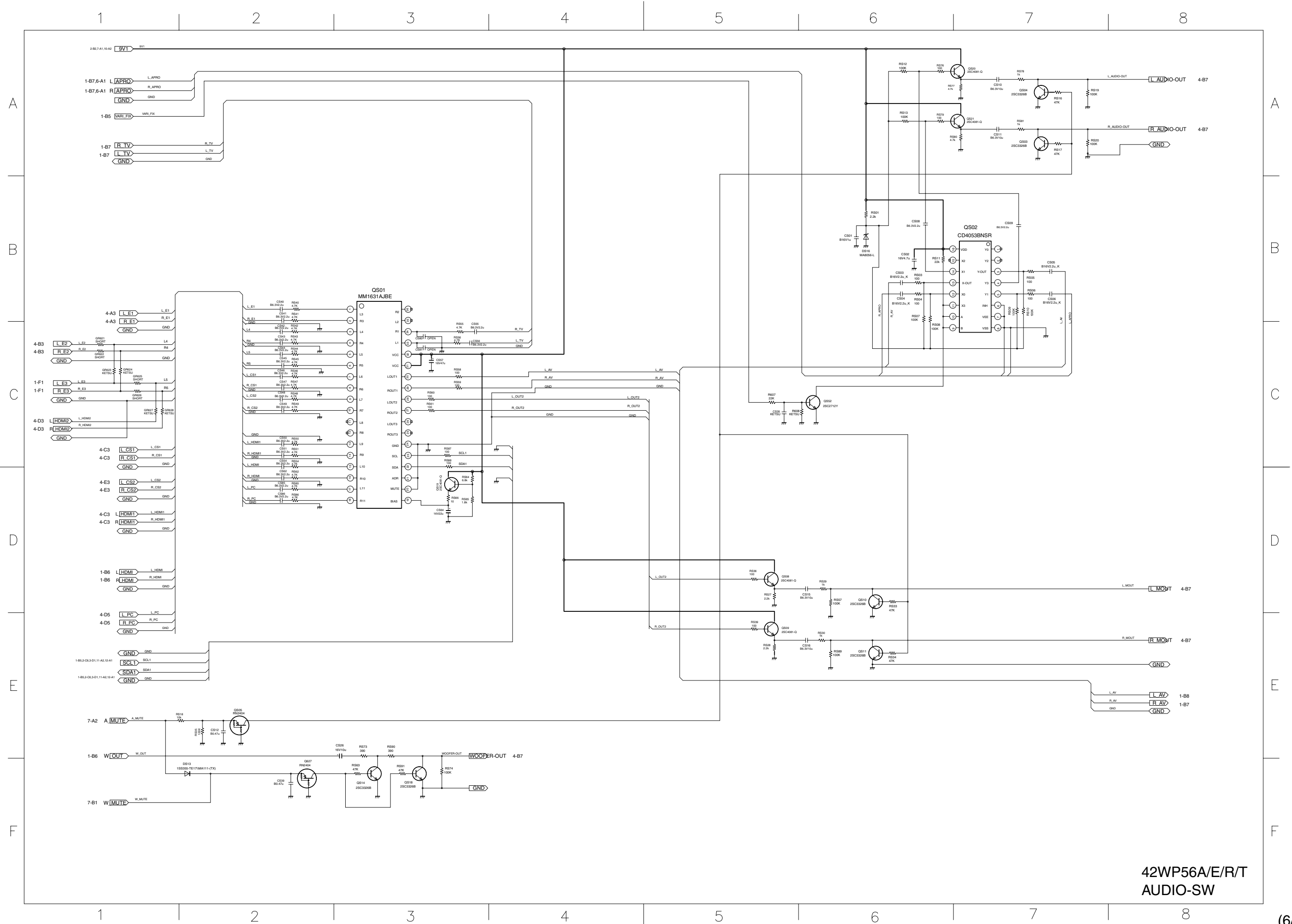
E



F

F

42WP56A/E/R/T
AV-TERMINAL



42WP56A/E/R/T
AUDIO-SW

1

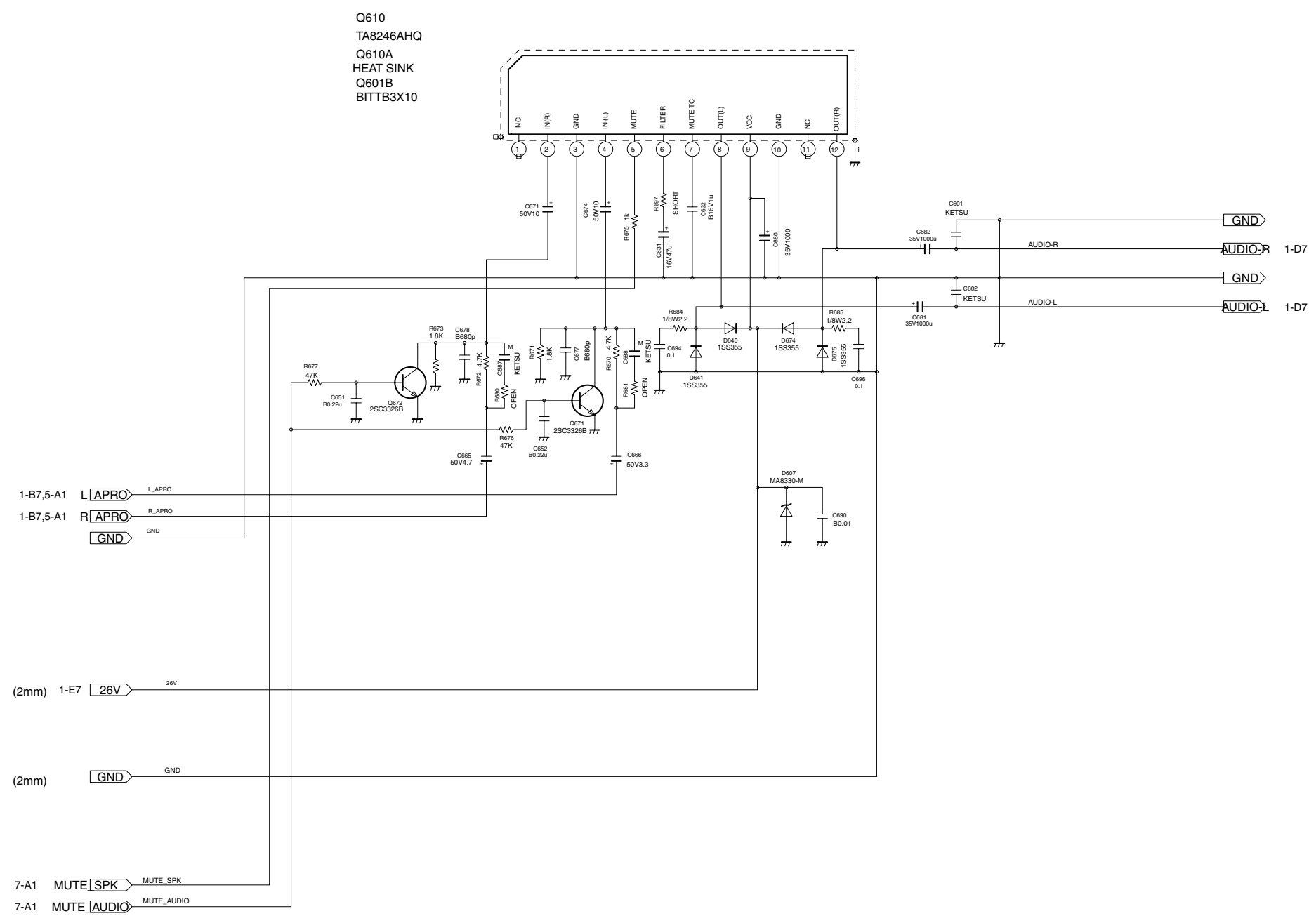
2

A

A

B

B



42WP56A/E/R/T
A-OUT

1

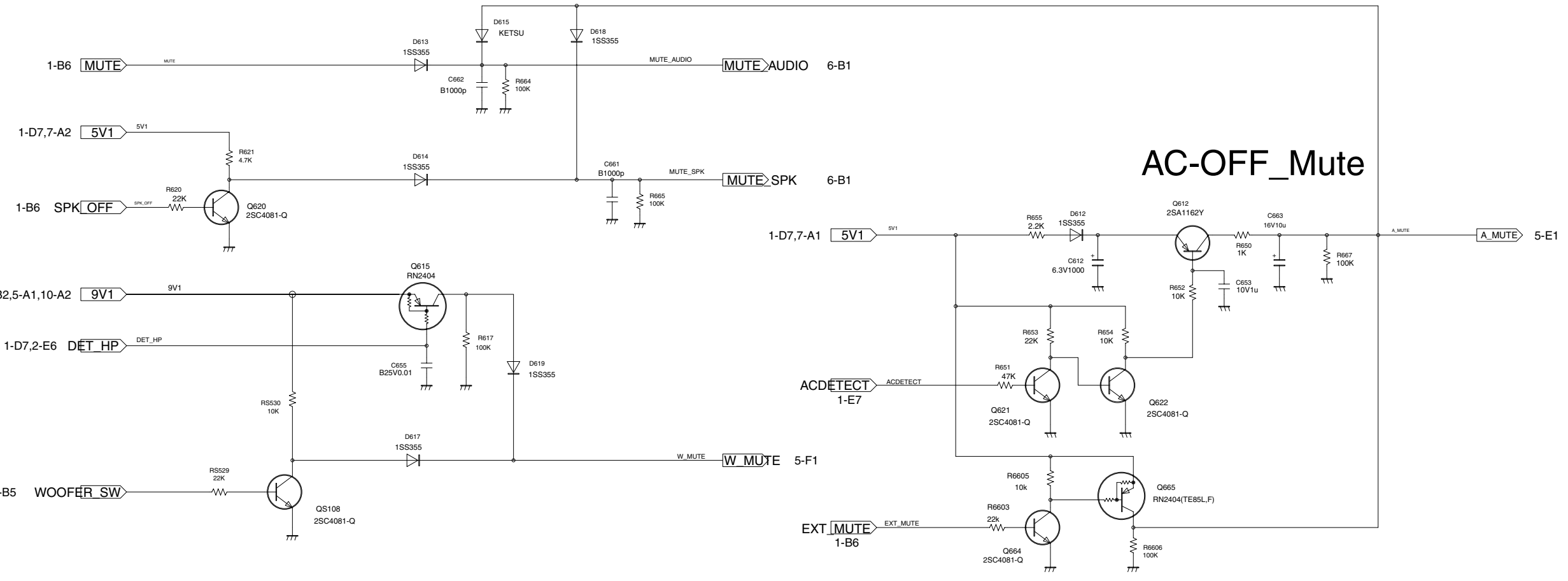
2

A

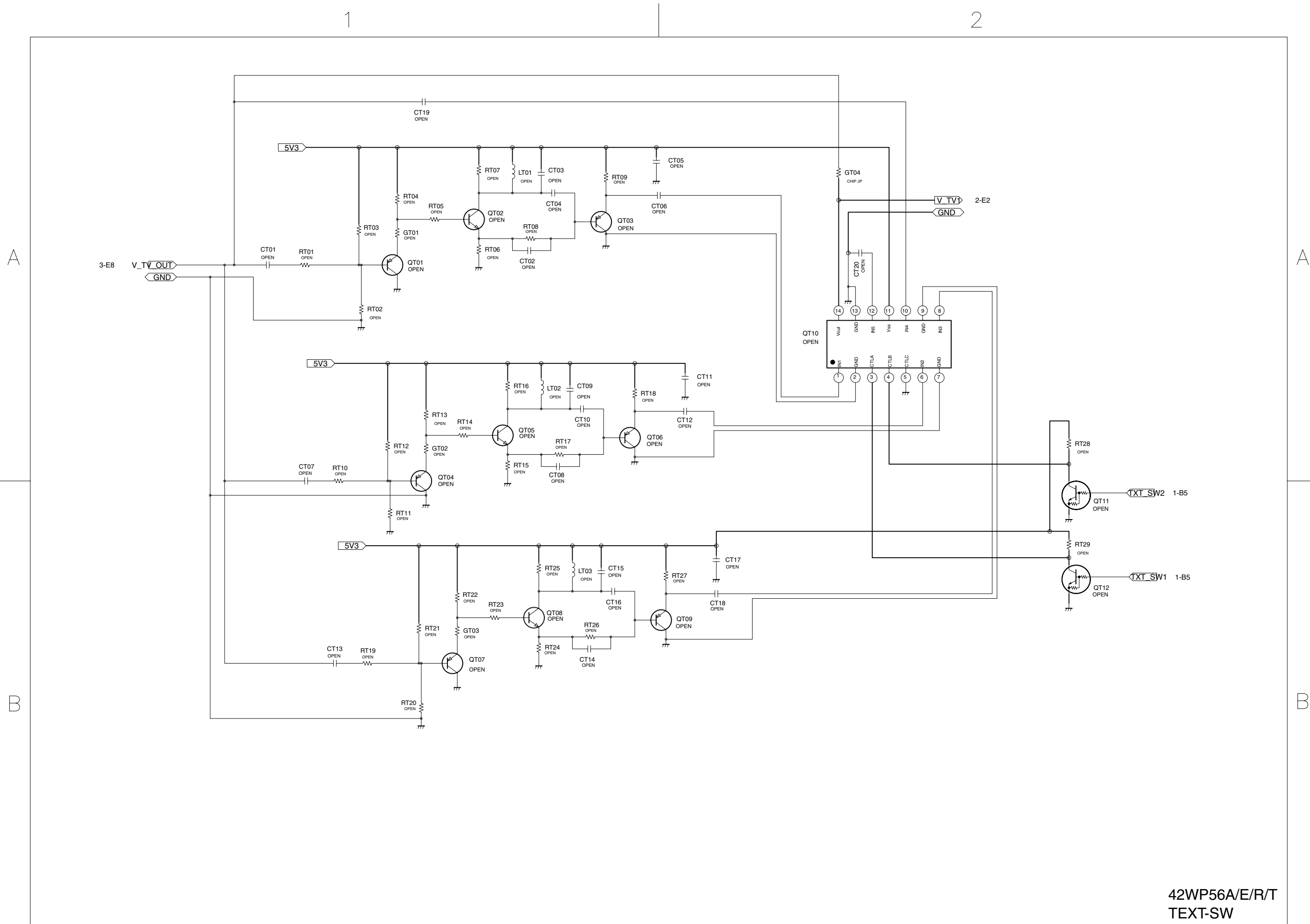
A

B

B



42WP56A/E/R/T
AUDIO-MUTE



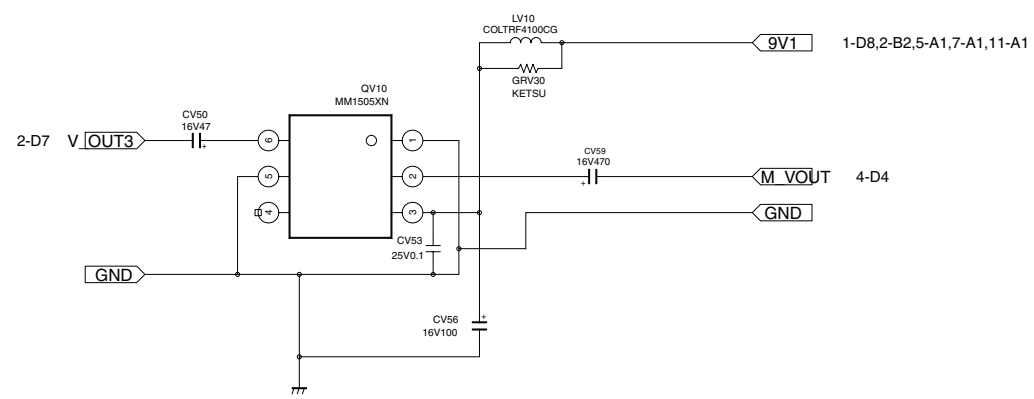
42WP56A/E/R/T
TEXT-SW

1

2

A

A



B

B

42WP56A/E/R/T
TV-OUT

1

2

1

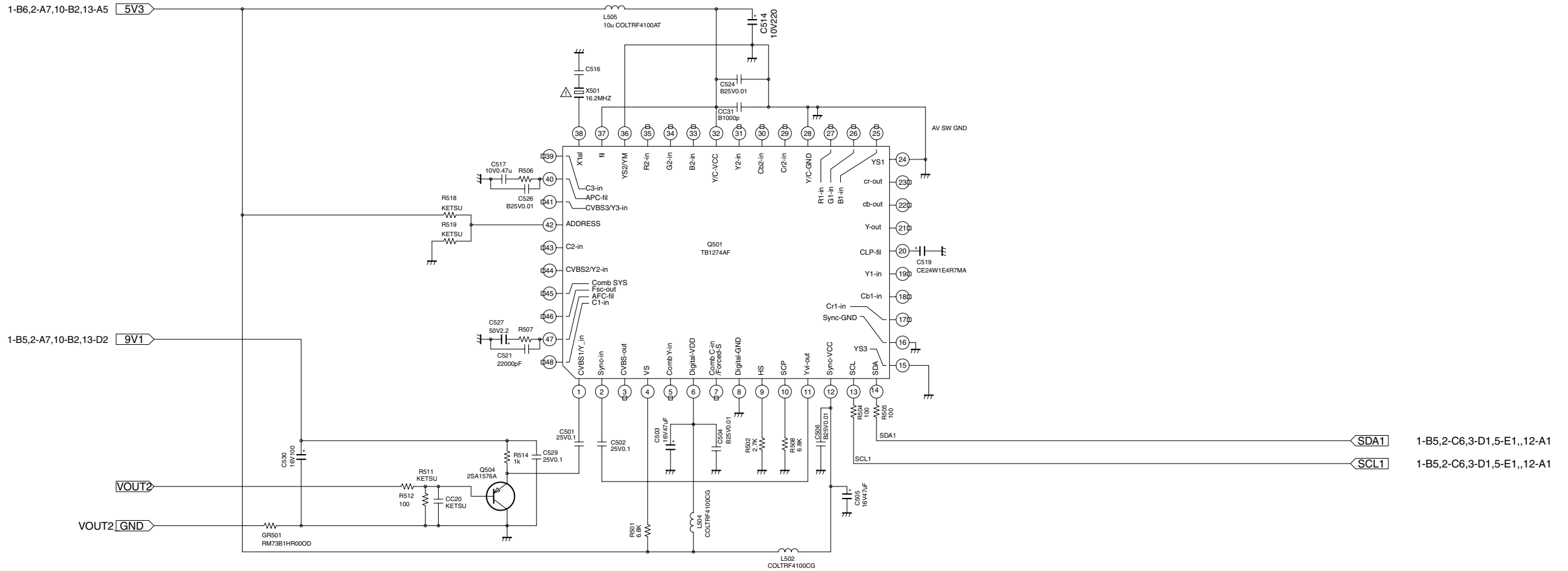
2

A

A

B

B



SDA1 1-B5,2-C6,3-D1,5-E1,,12-A1
 SCL1 1-B5,2-C6,3-D1,5-E1,,12-A1

42WP56A/E/R/T
 ANALOG VCD

1

2

1

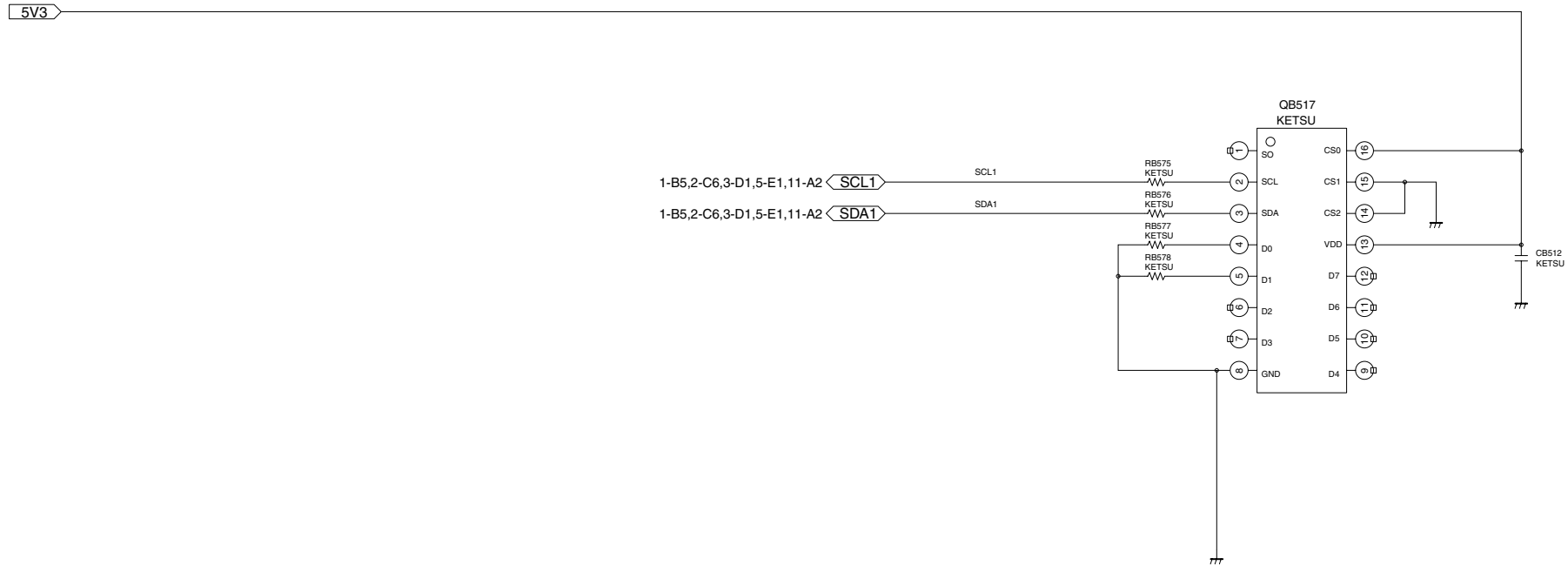
2

A

A

B

B



42WP56A/E/R/T
 EXPANDER FOR PDP

1

2

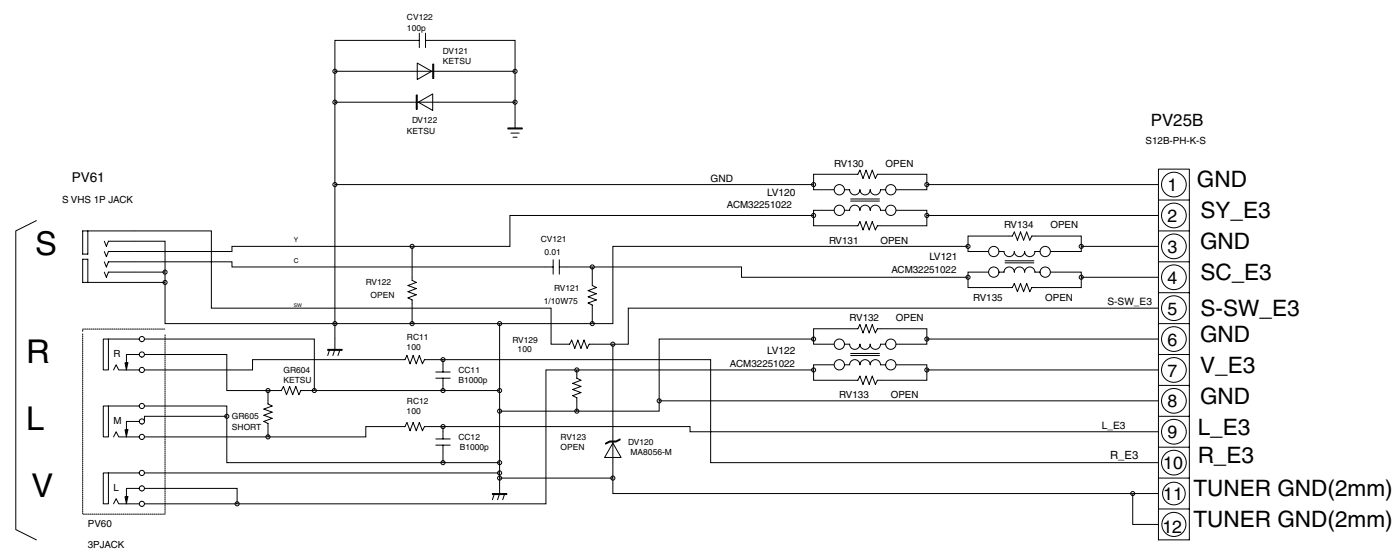
1

2

A

A

E3

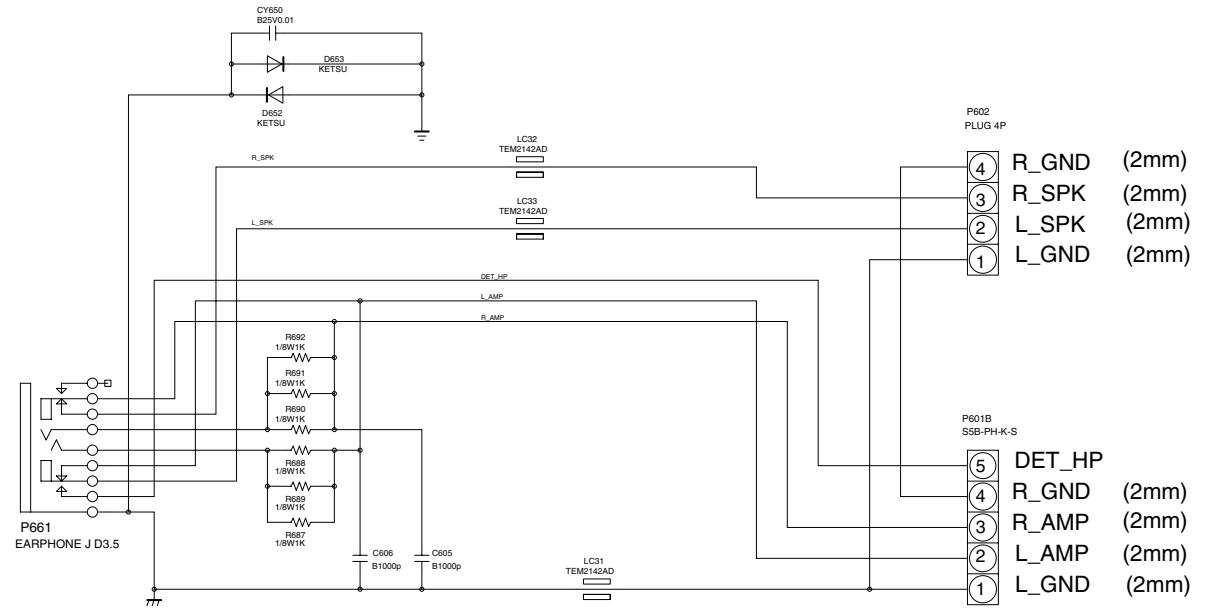


TN-AV

B

B

HP



T
R/L_SPK

TN-AV

42WP56A/E/R/T
FRONT-AV

1

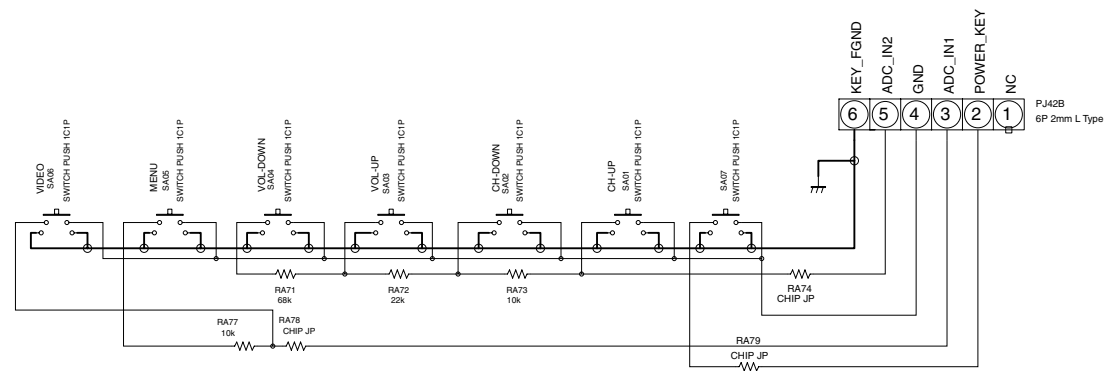
2

1

2

A

A



B

B

42WP56A/E/R/T
KEY

1

2

1

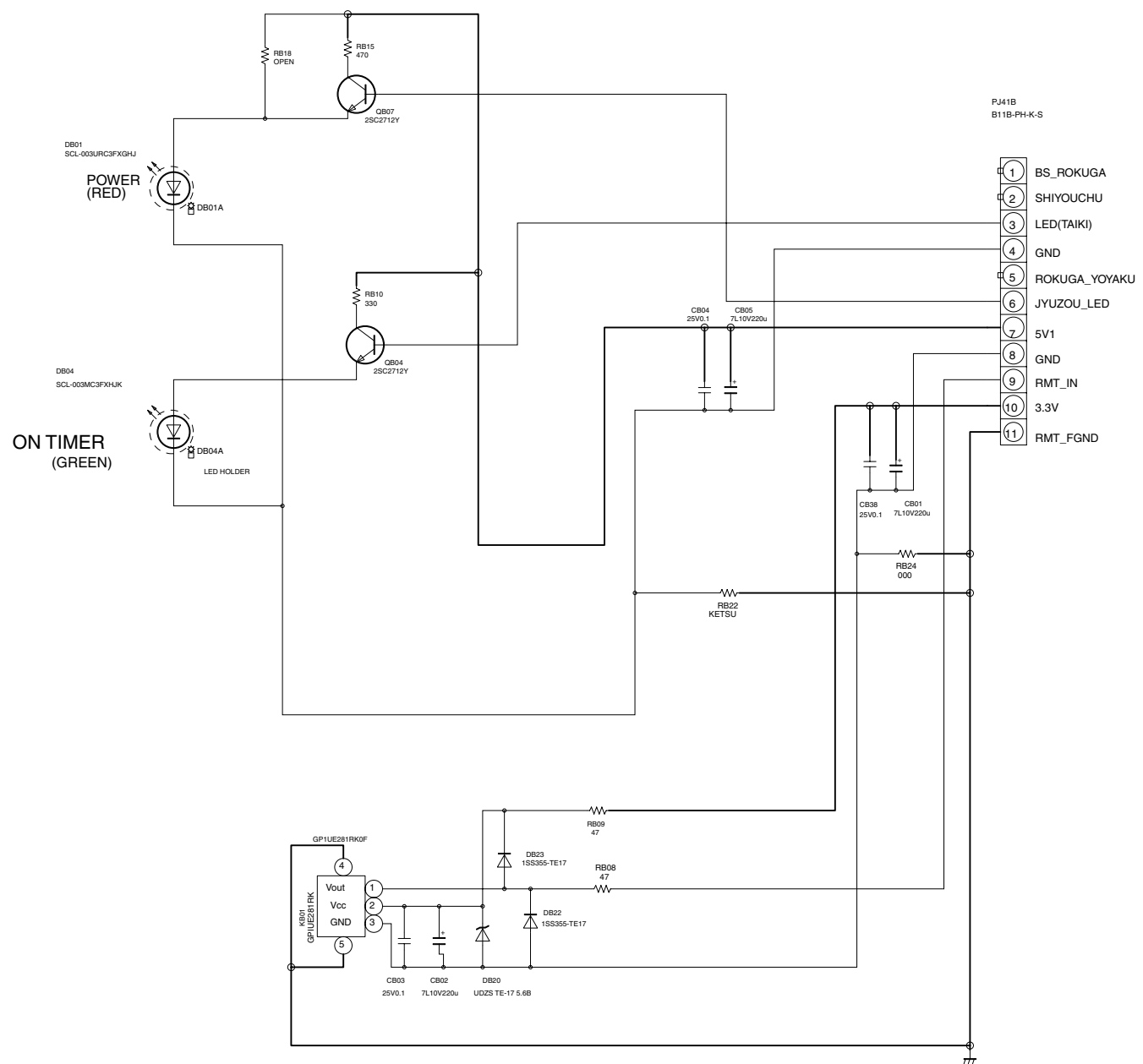
2

A

A

B

B



42WP56A/E/R/T
LED RMT

1

2

1

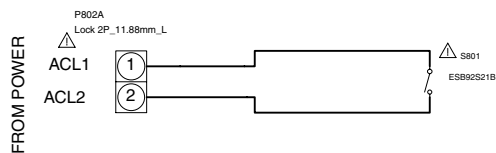
2

A

A

B

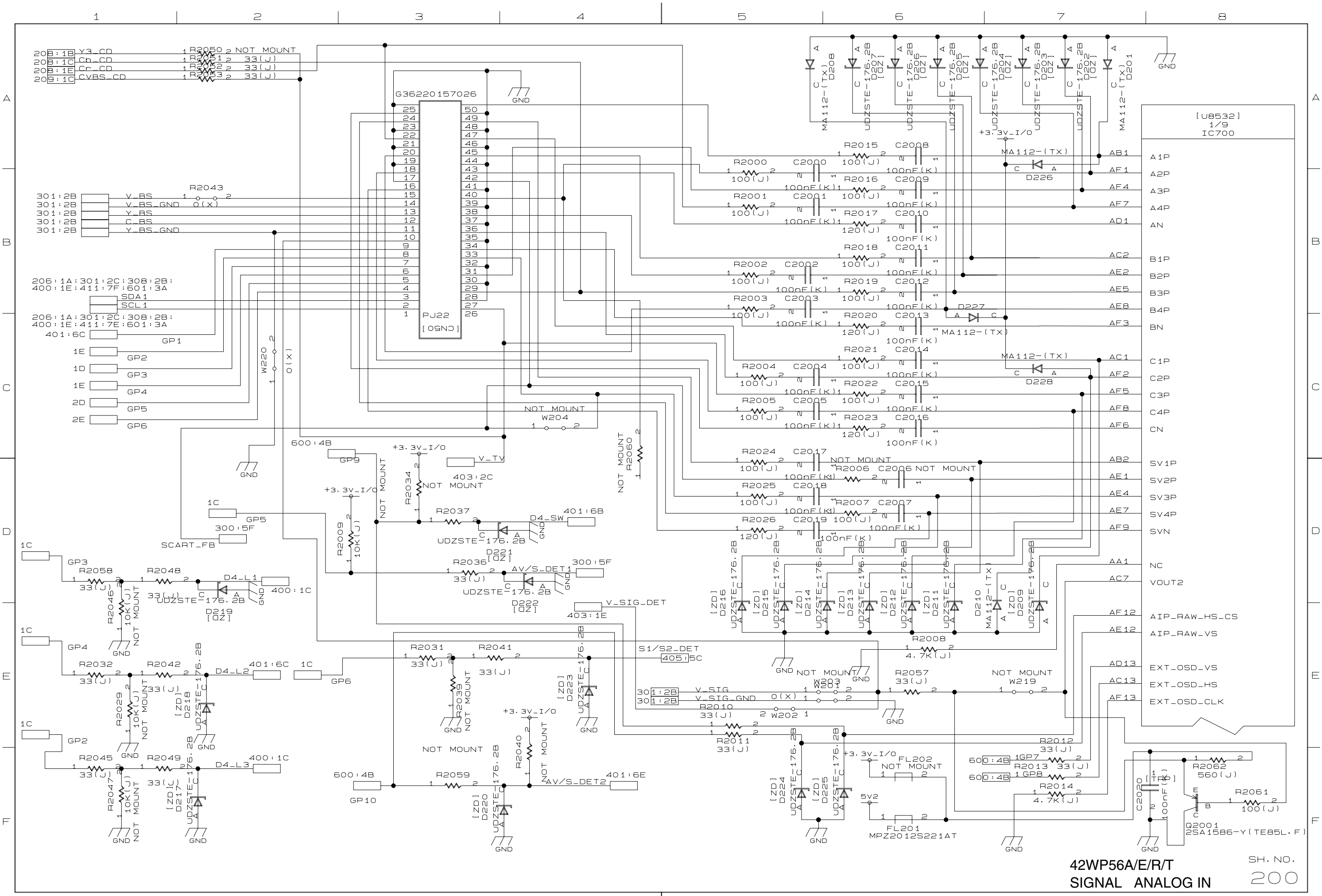
B



42WP56A/E/R/T
POWER SW

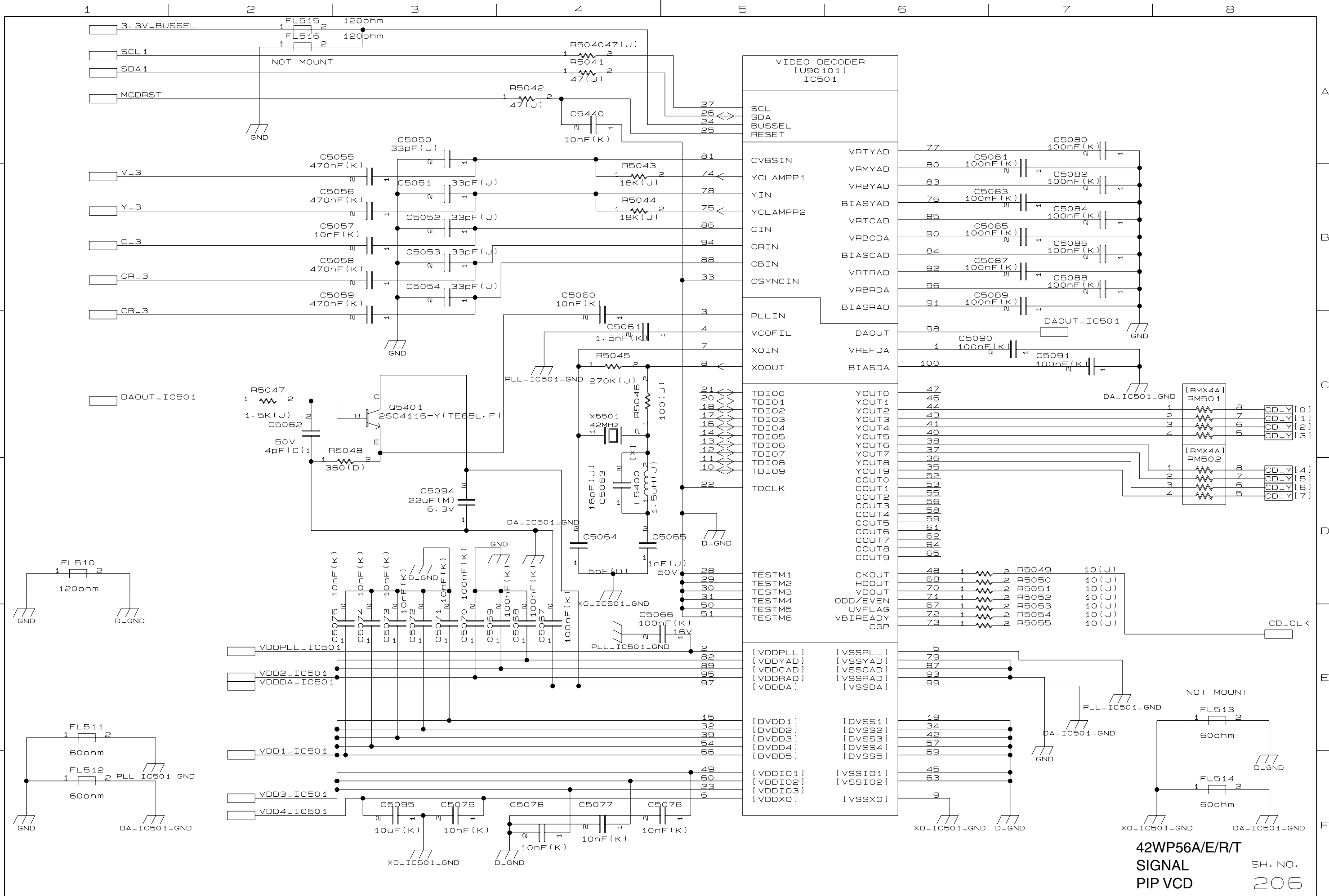
1

2

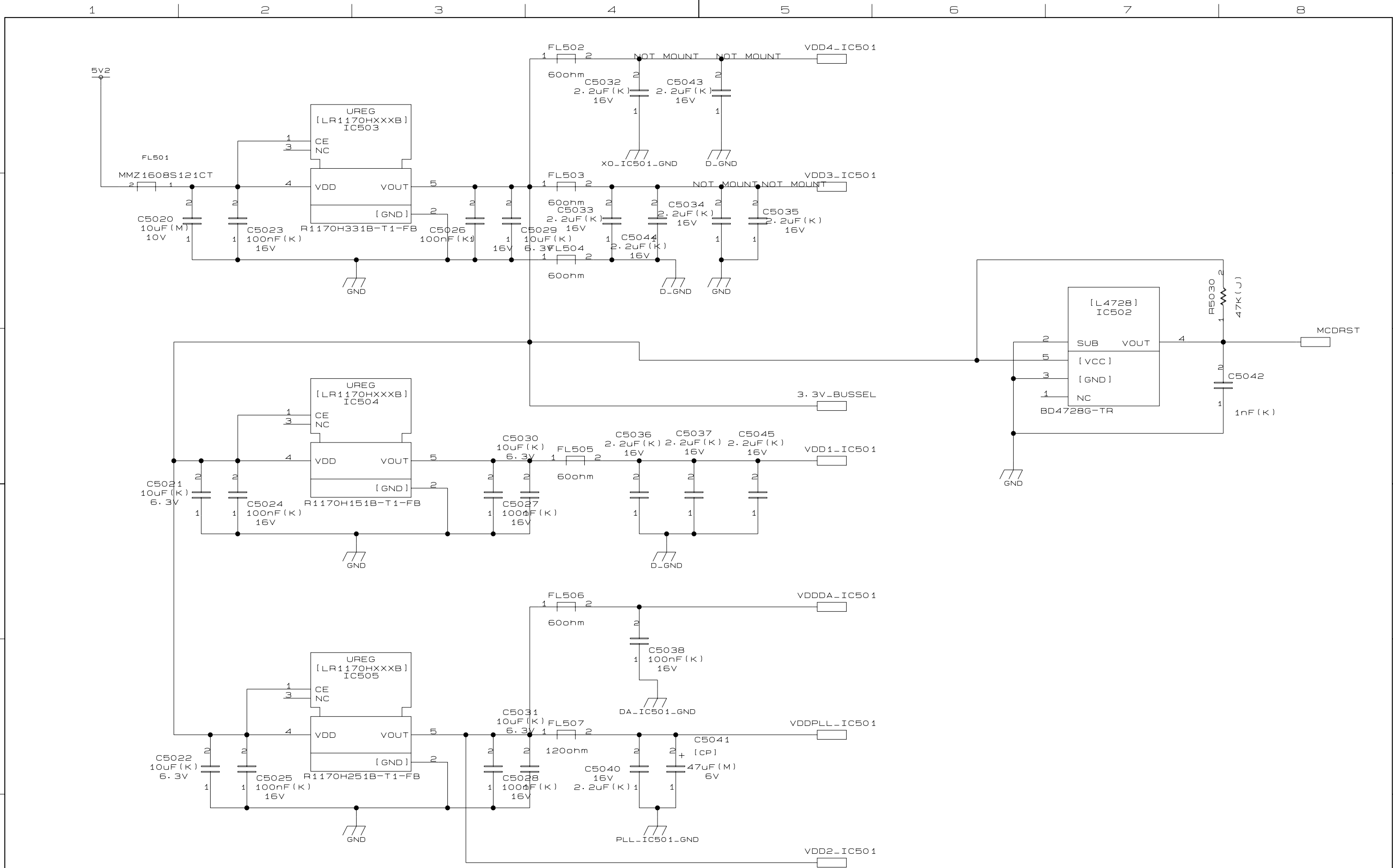


42WP56A/E/R/T
 SIGNAL ANALOG IN

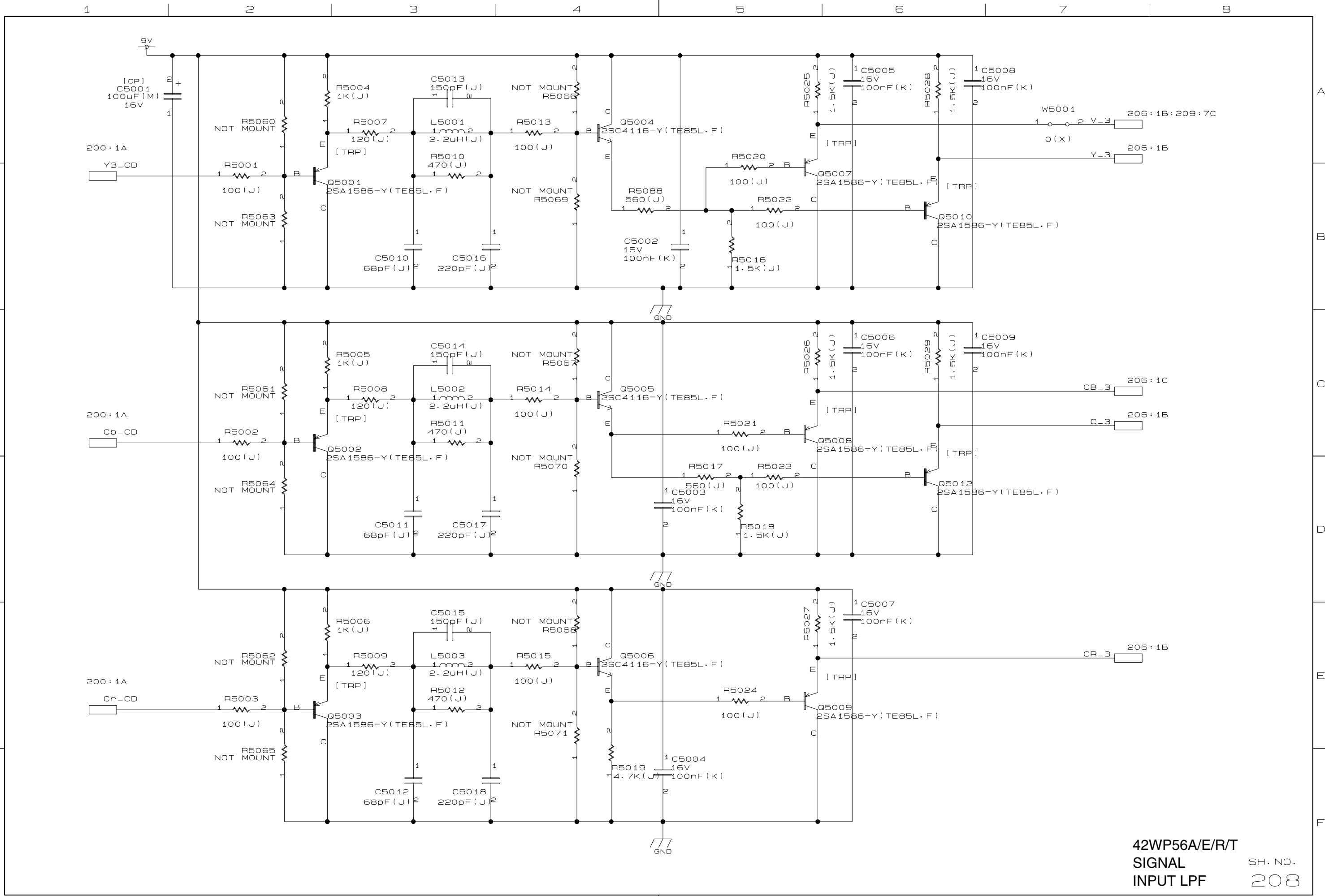
SH. NO.
 200



42WP56A/E/R/T
 SIGNAL PIP VCD
 SH. NO. 206



42WP56A/E/R/T
 SIGNAL REG/RESET SH. NO. 207



42WP56A/E/R/T
 SIGNAL
 INPUT LPF
 SH. NO.
 208

1 2 3 4 5 6 7 8

A

B

C

D

E

F

A

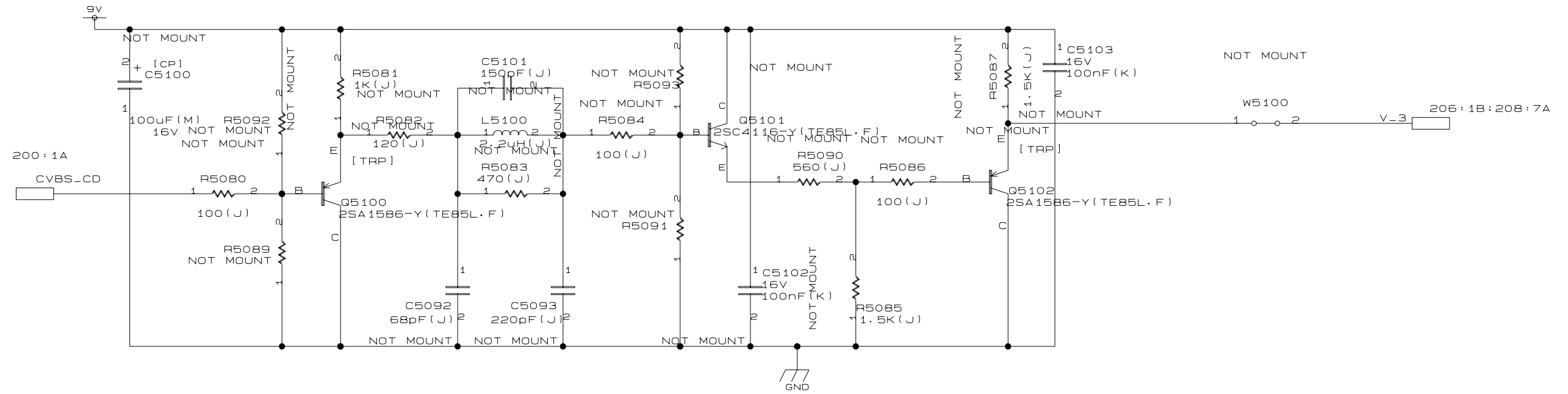
B

C

D

E

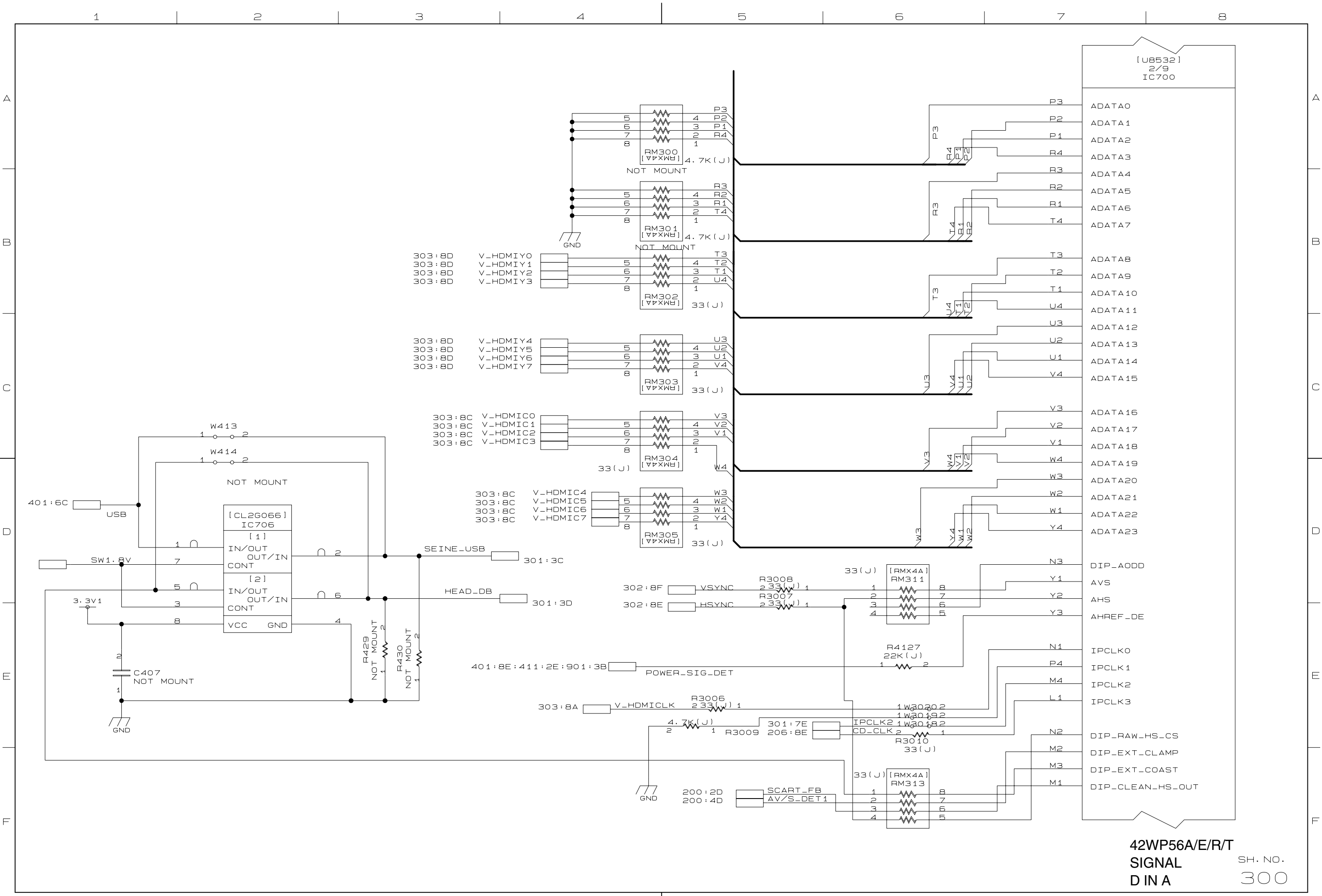
F



AV-TERMINAL

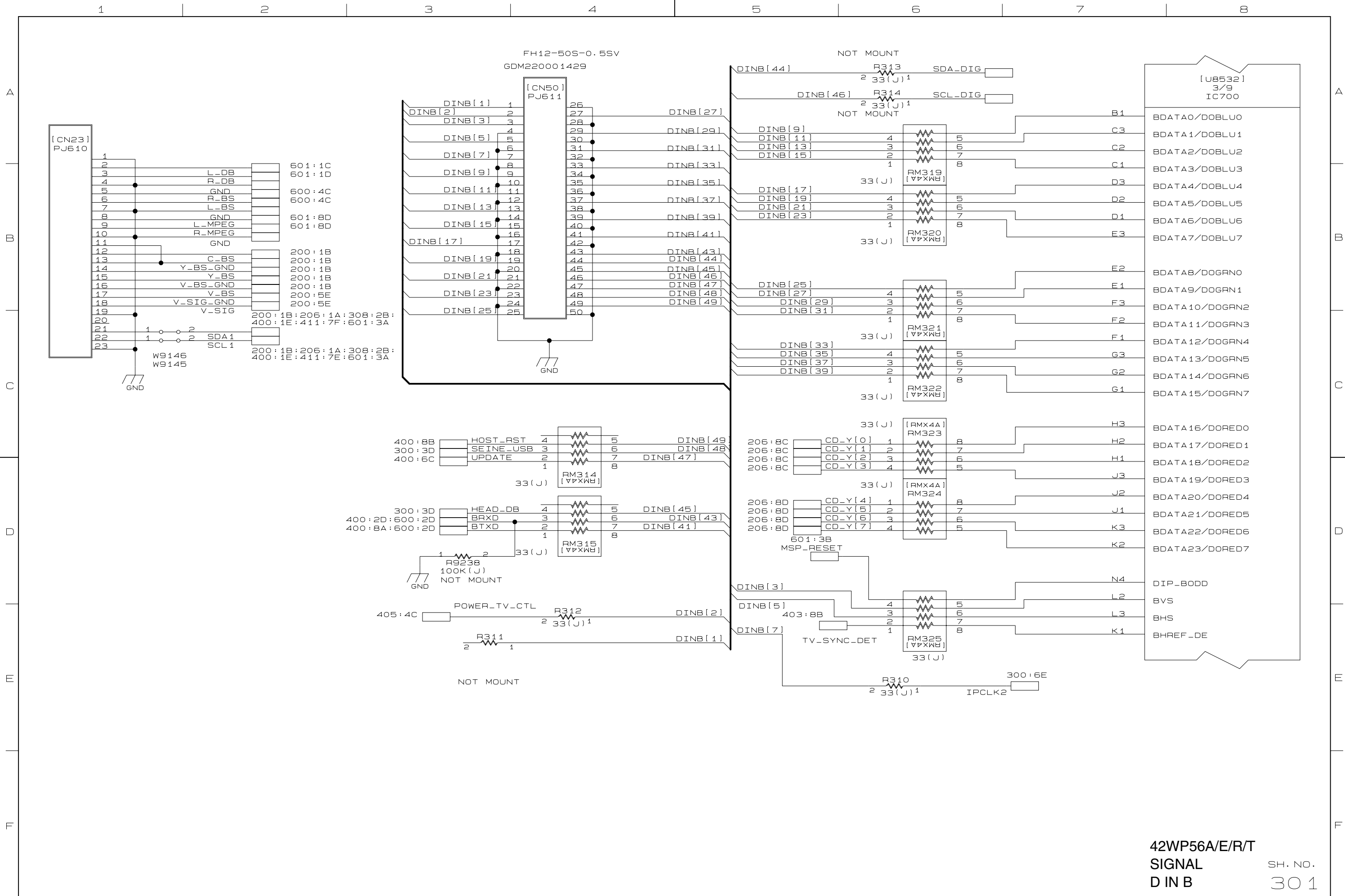
42WP56A/E/R/T
SIGNAL
Functi

SH. NO.
209



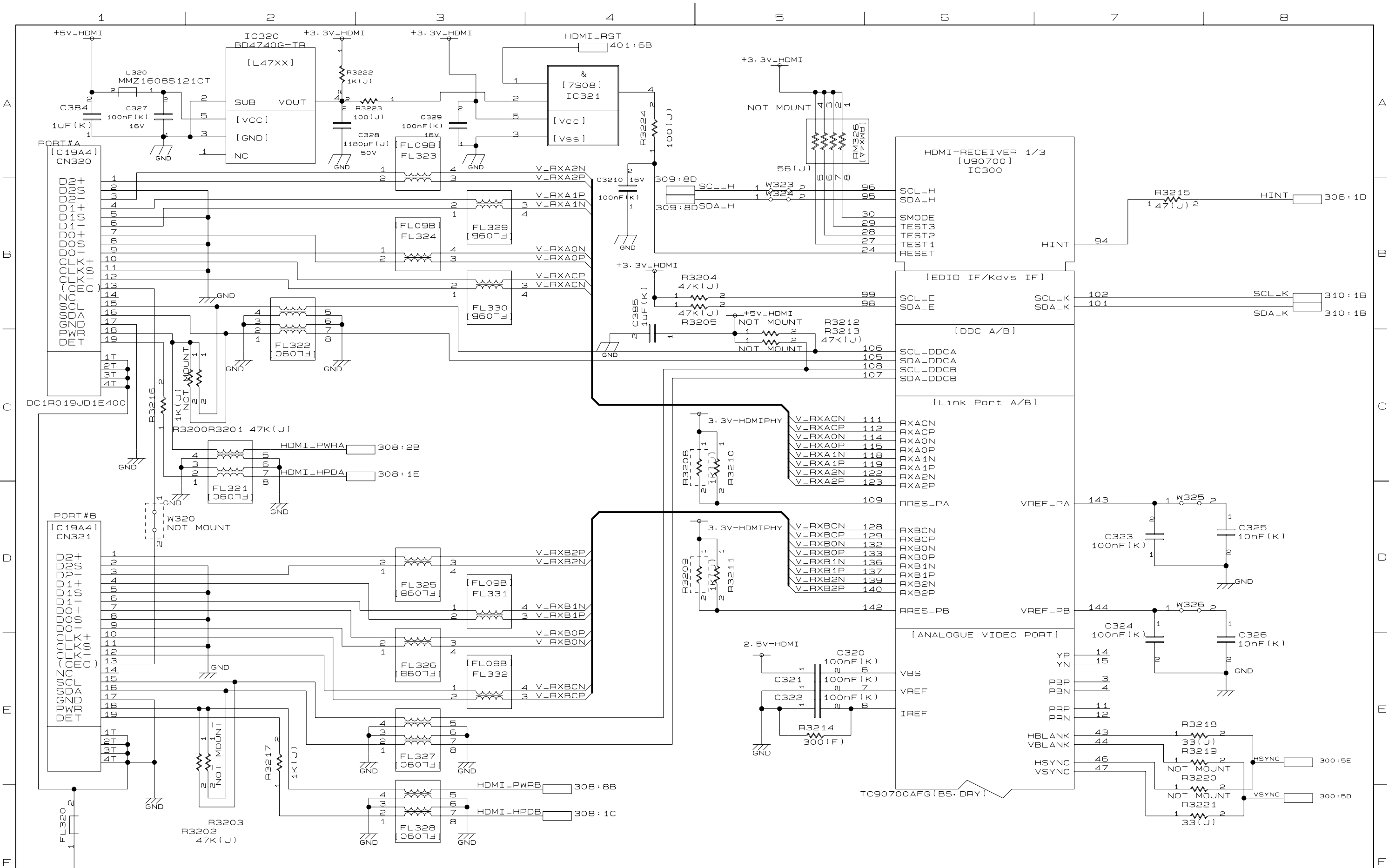
42WP56A/E/R/T
 SIGNAL
 D IN A

SH. NO.
 300

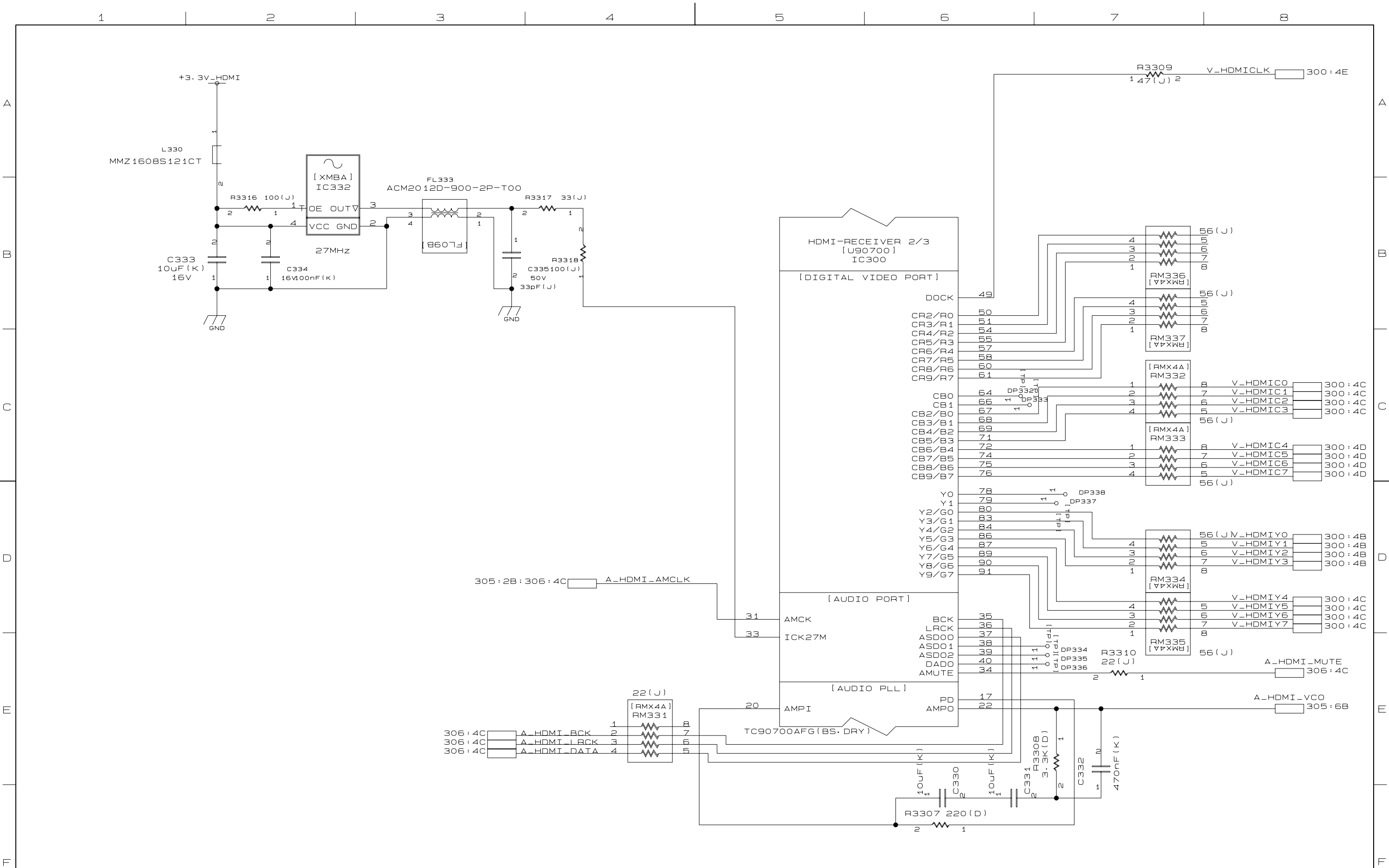


42WP56A/E/R/T
 SIGNAL
 D IN B

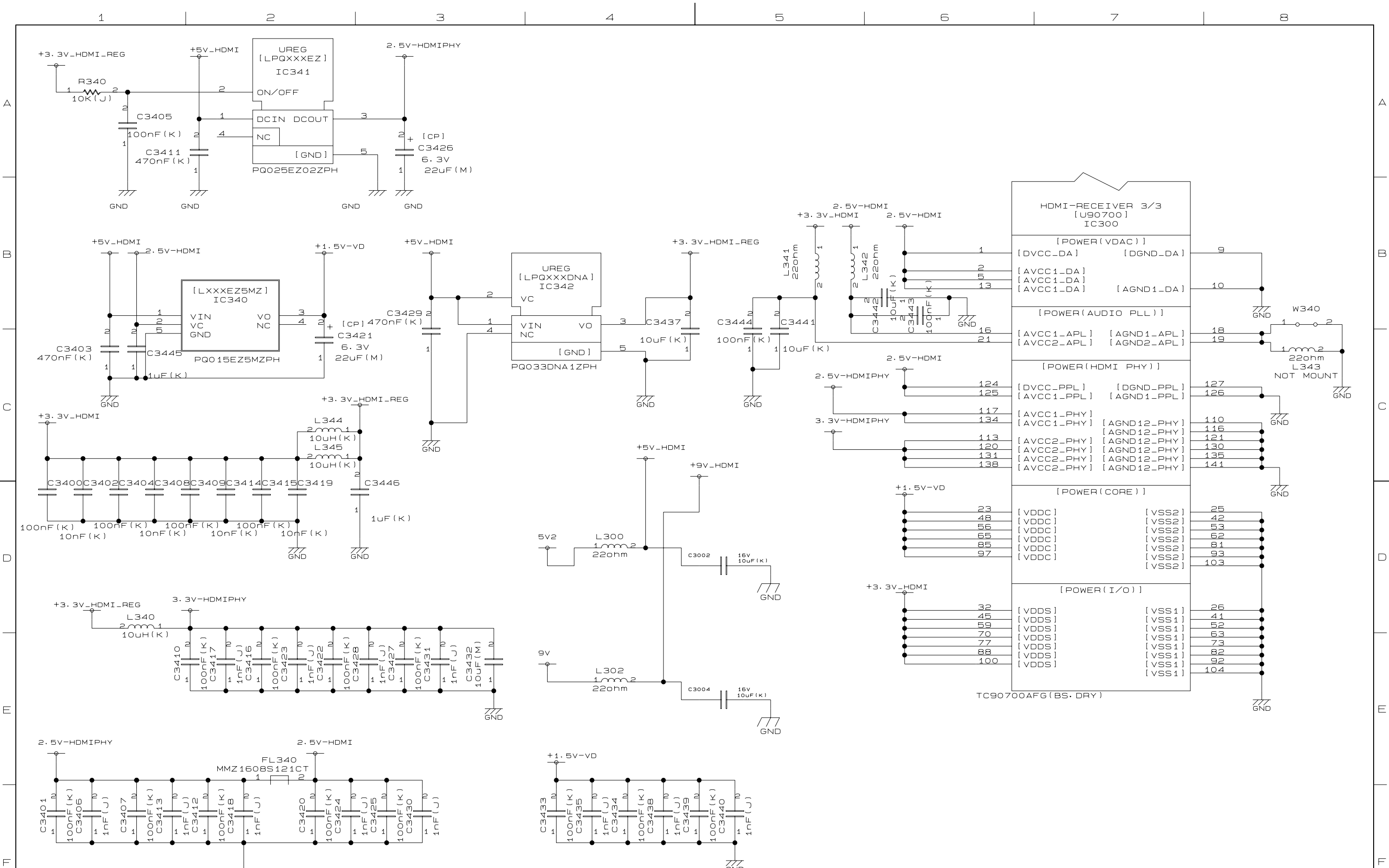
SH. NO.
 301



42WP56A/E/R/T
 SIGNAL
 HDMI (Link,I2C) SH. NO.
 302



42WP56A/E/R/T
 SIGNAL
 HDMI Rx#2 (Video/Audio)
 SH. NO.
 303



42WP56A/E/R/T
 SIGNAL
 HDMI Rx#3 (PWR,Audio)

SH. NO.
 304

1 2 3 4 5 6 7 8

A

B

C

D

E

F

A

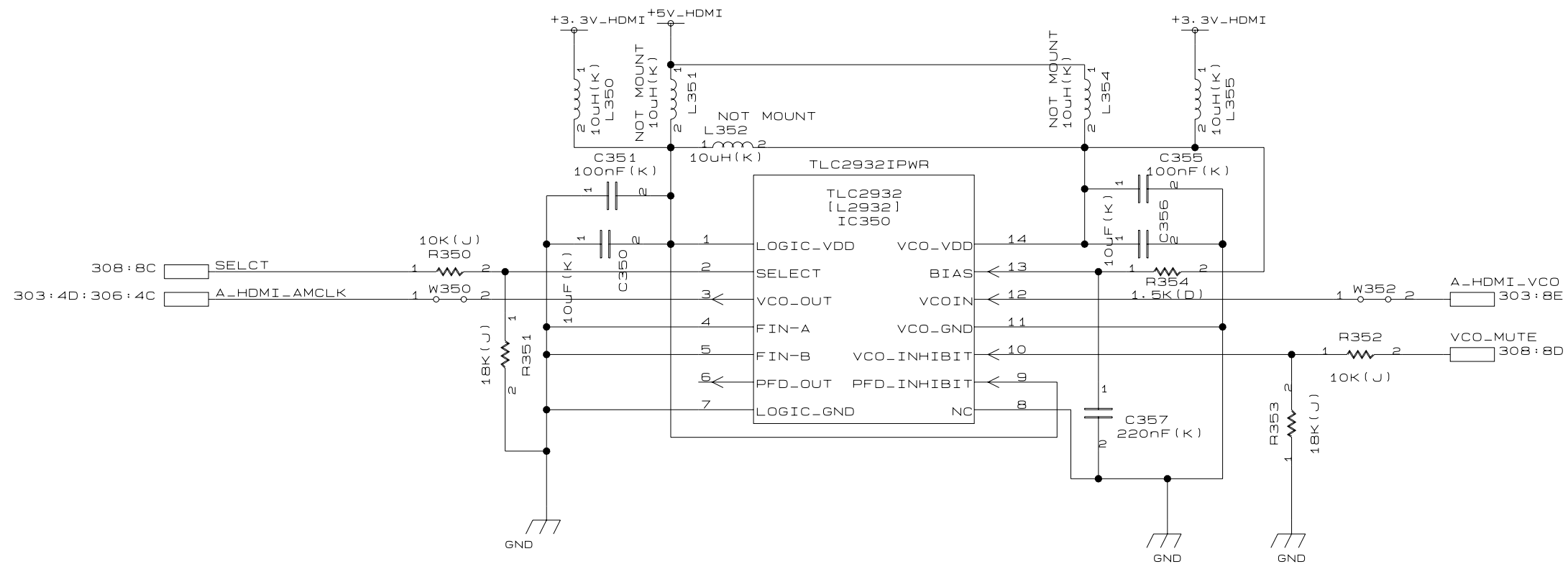
B

C

D

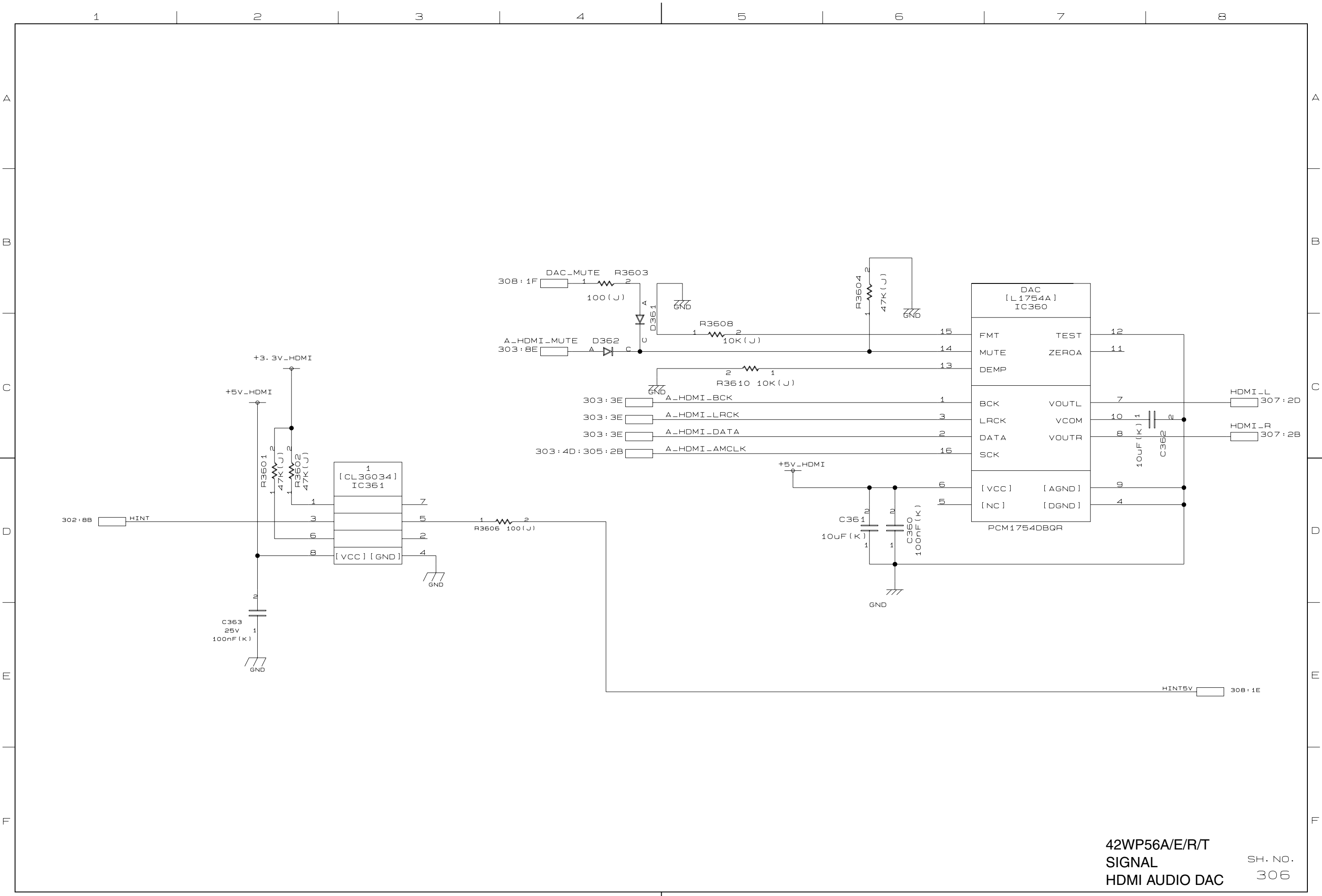
E

F



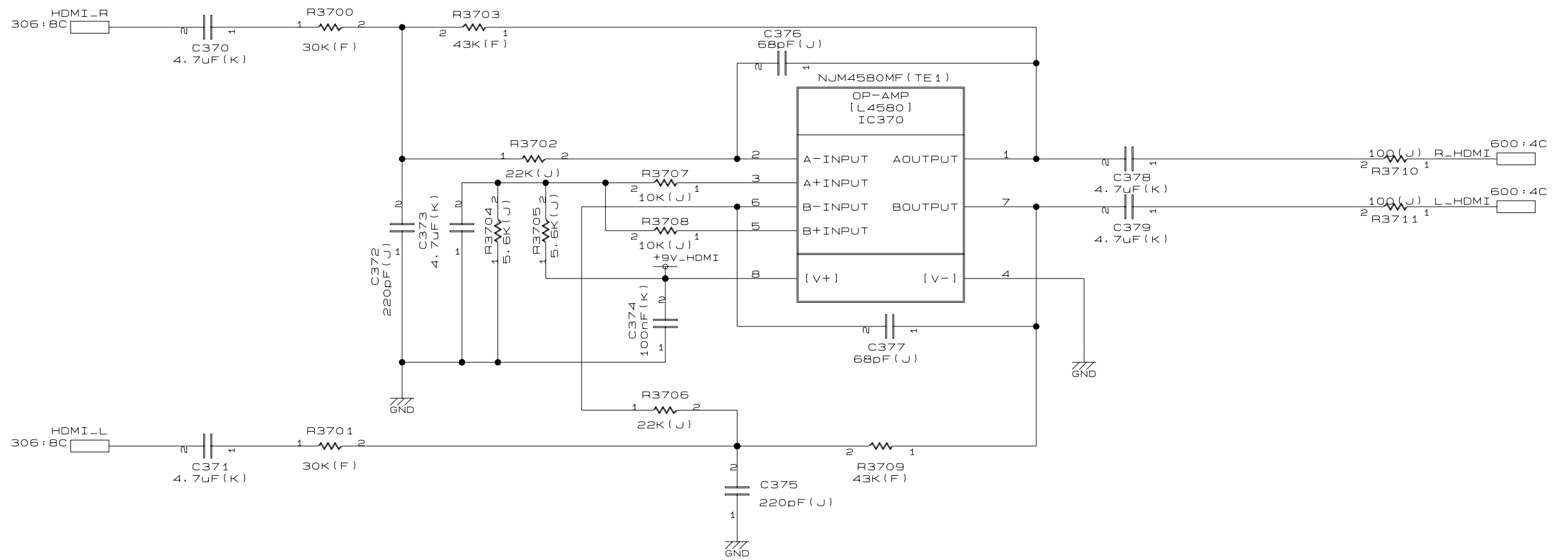
42WP56A/E/R/T
SIGNAL
HDMI AUDIO PLL

SH. NO.
305



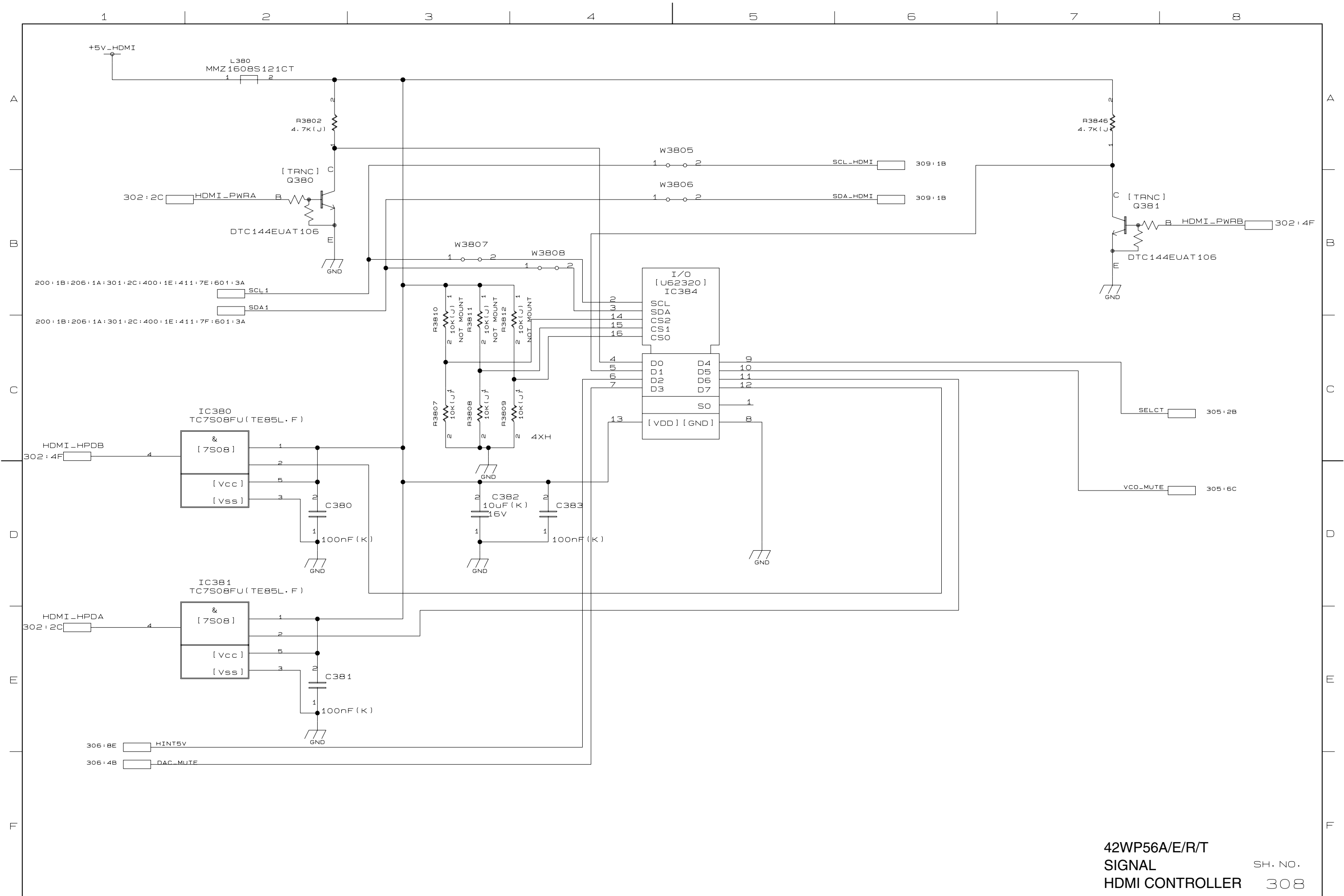
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 SIGNAL
 HDMI AUDIO DAC

SH. NO.
 306



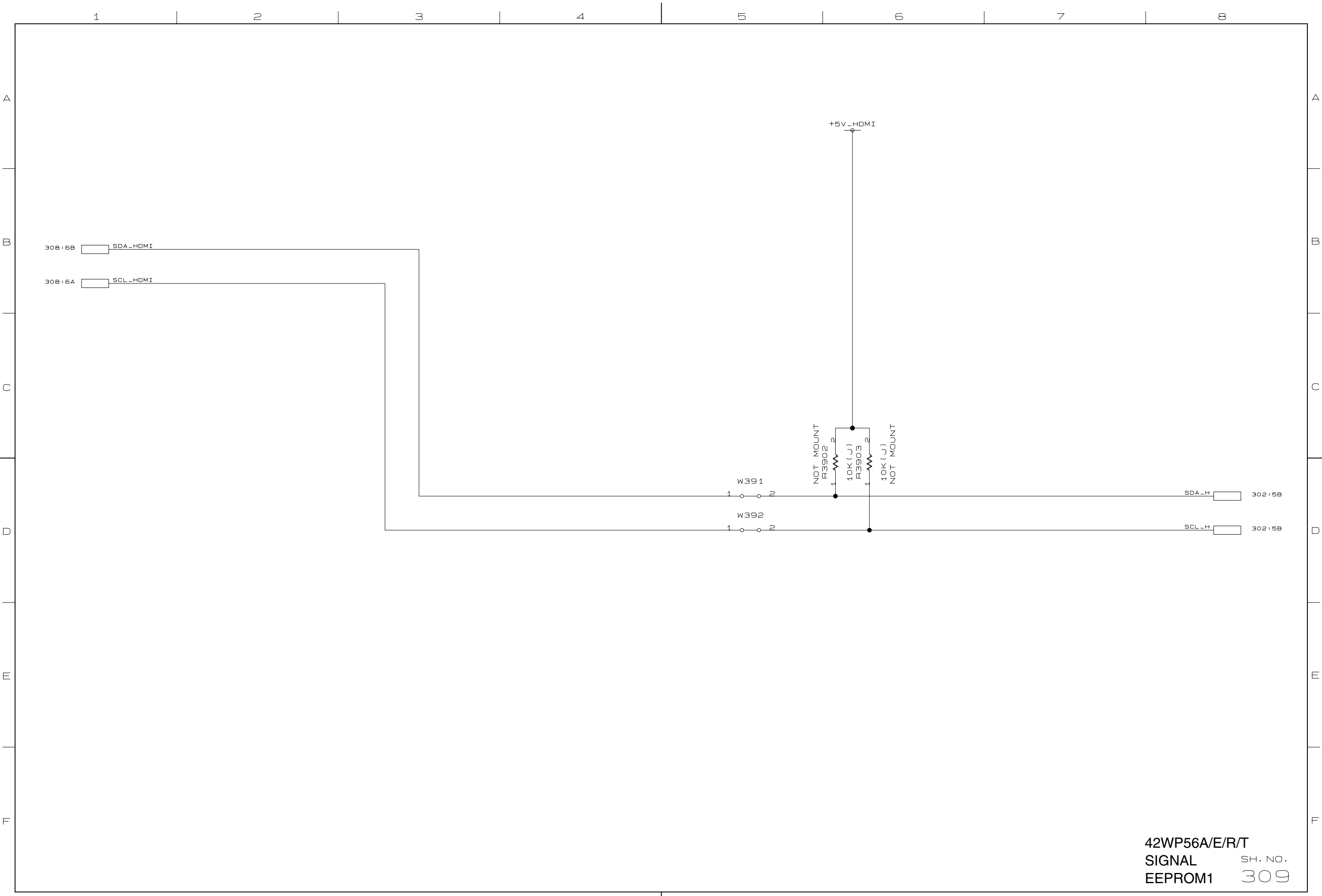
42WP56A/E/R/T
 SIGNAL
 HDMI AUDIO OUT

SH. NO.
 307

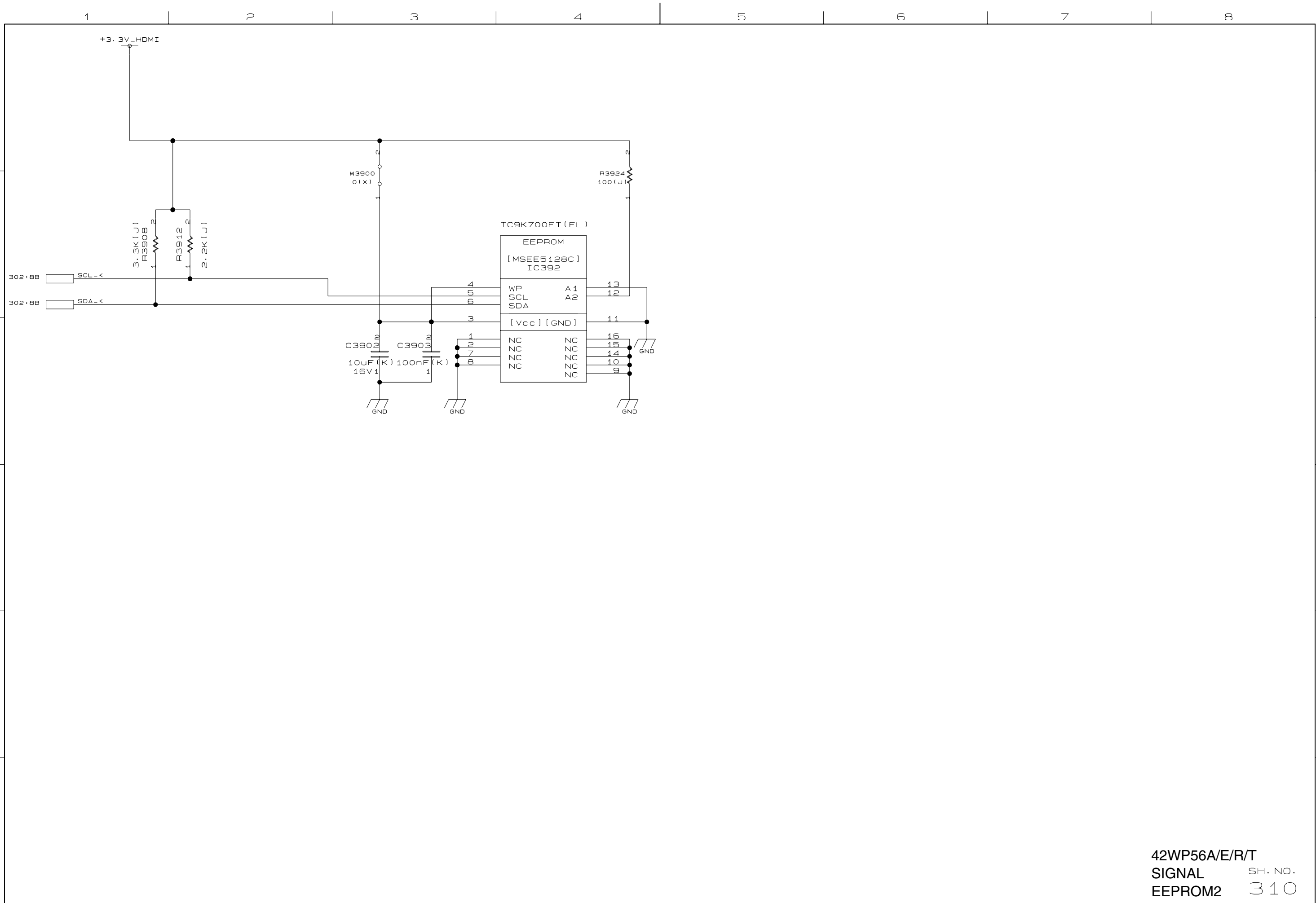


42WP56A/E/R/T
 SIGNAL
 HDMI CONTROLLER

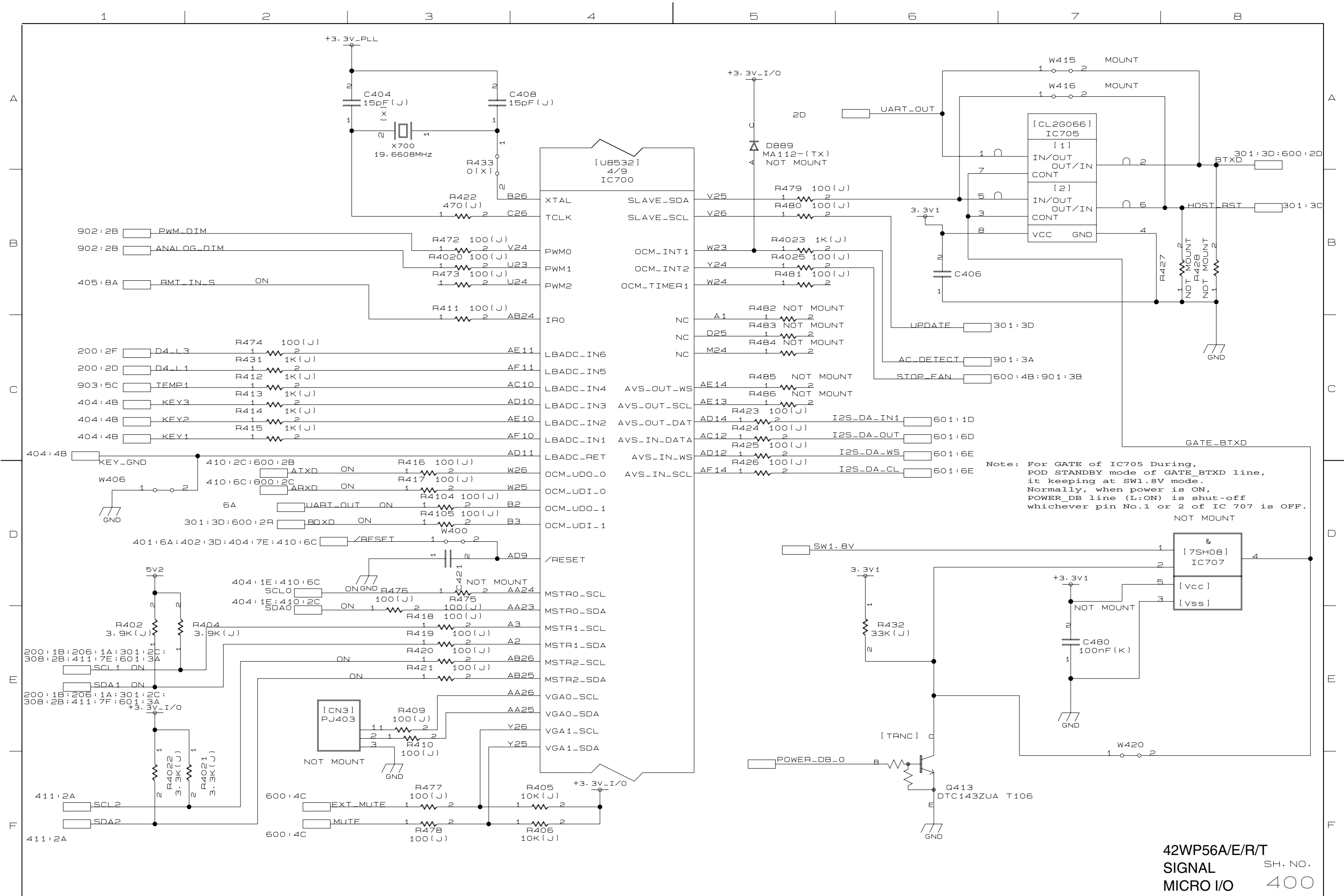
SH. NO.
 308



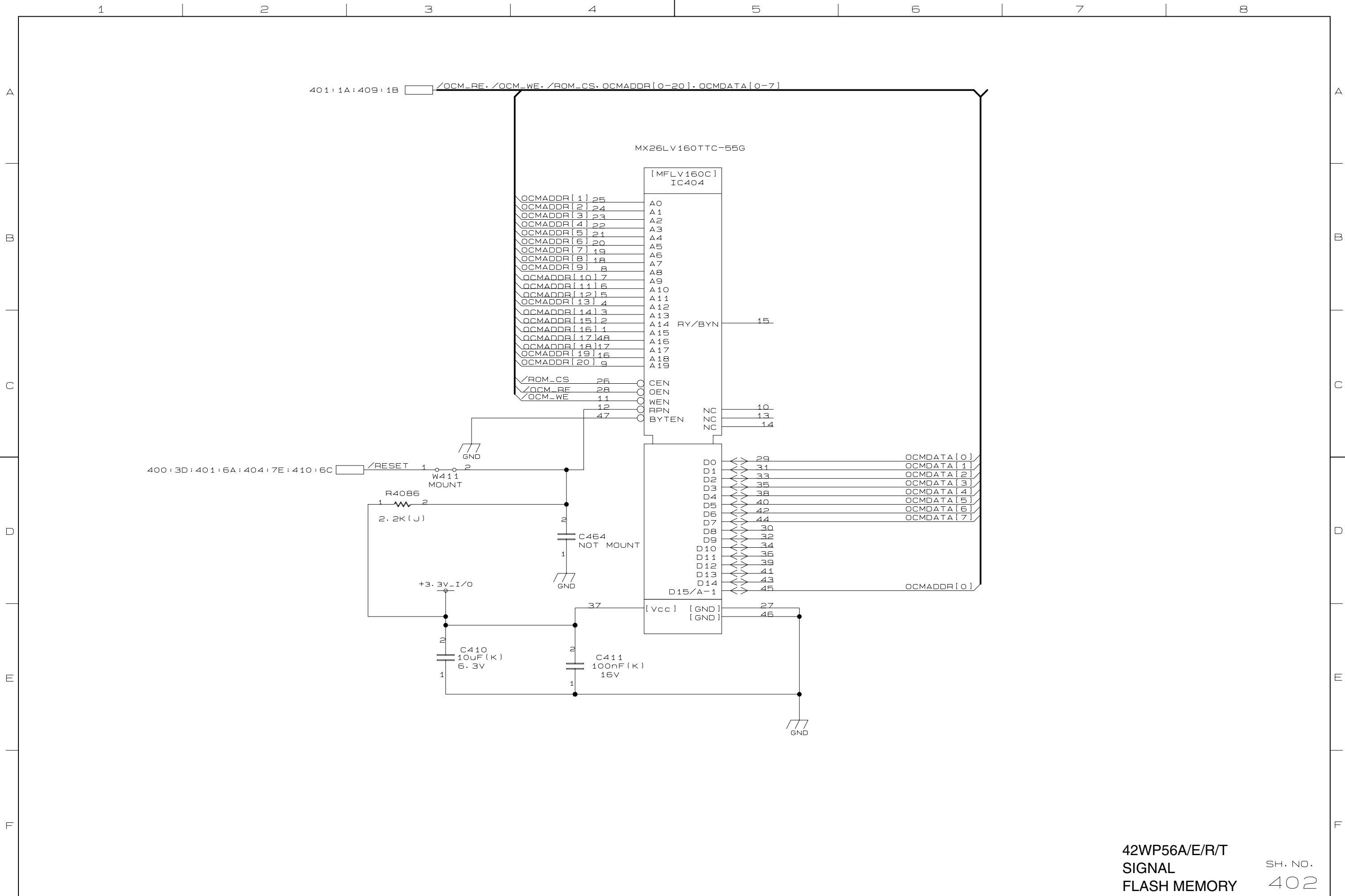
42WP56A/E/R/T
 SIGNAL SH. NO.
 EEPROM1 309



42WP56A/E/R/T
 SIGNAL SH. NO.
 EEPROM2 310

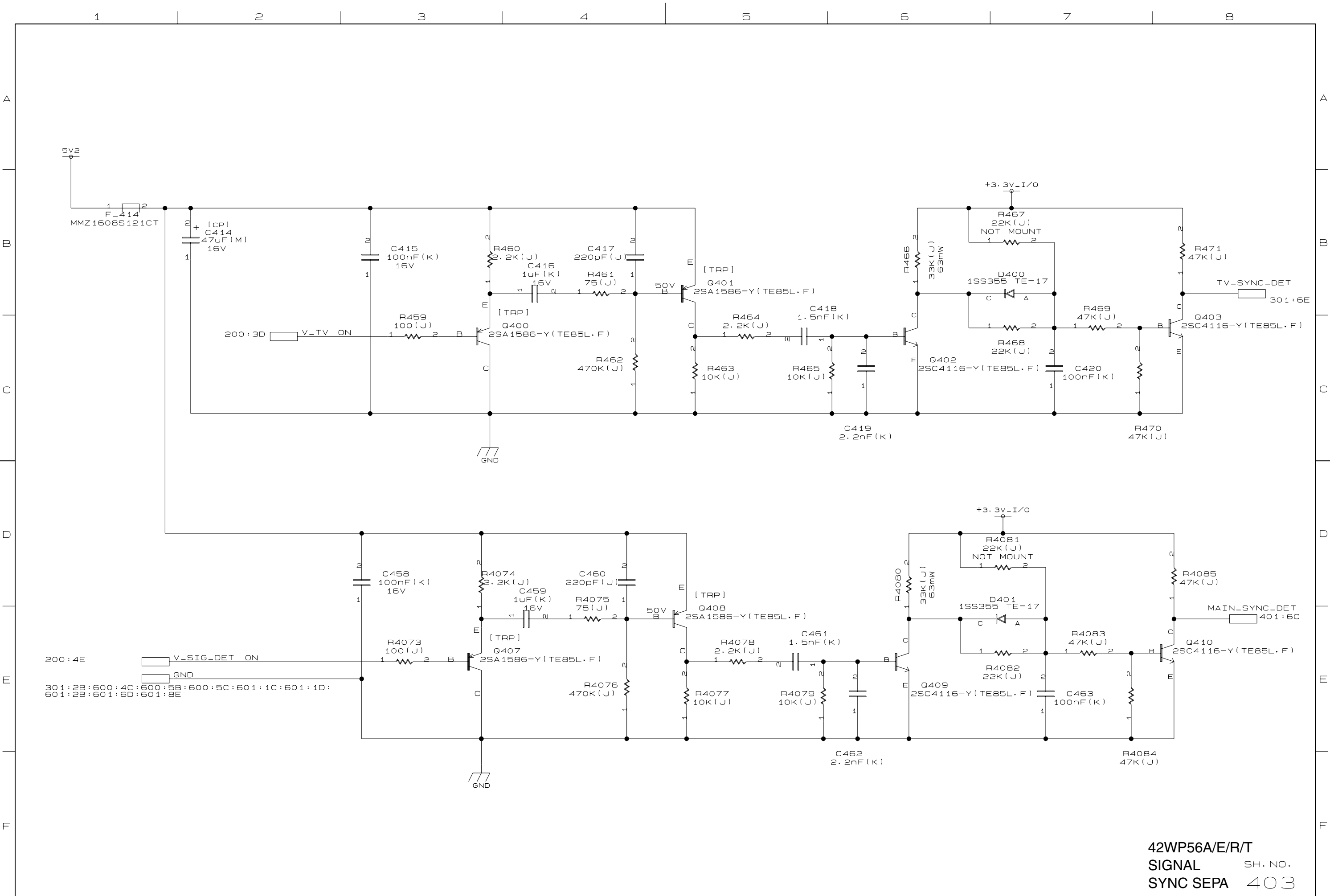


42WP56A/E/R/T
 SIGNAL SH. NO.
 MICRO I/O 400



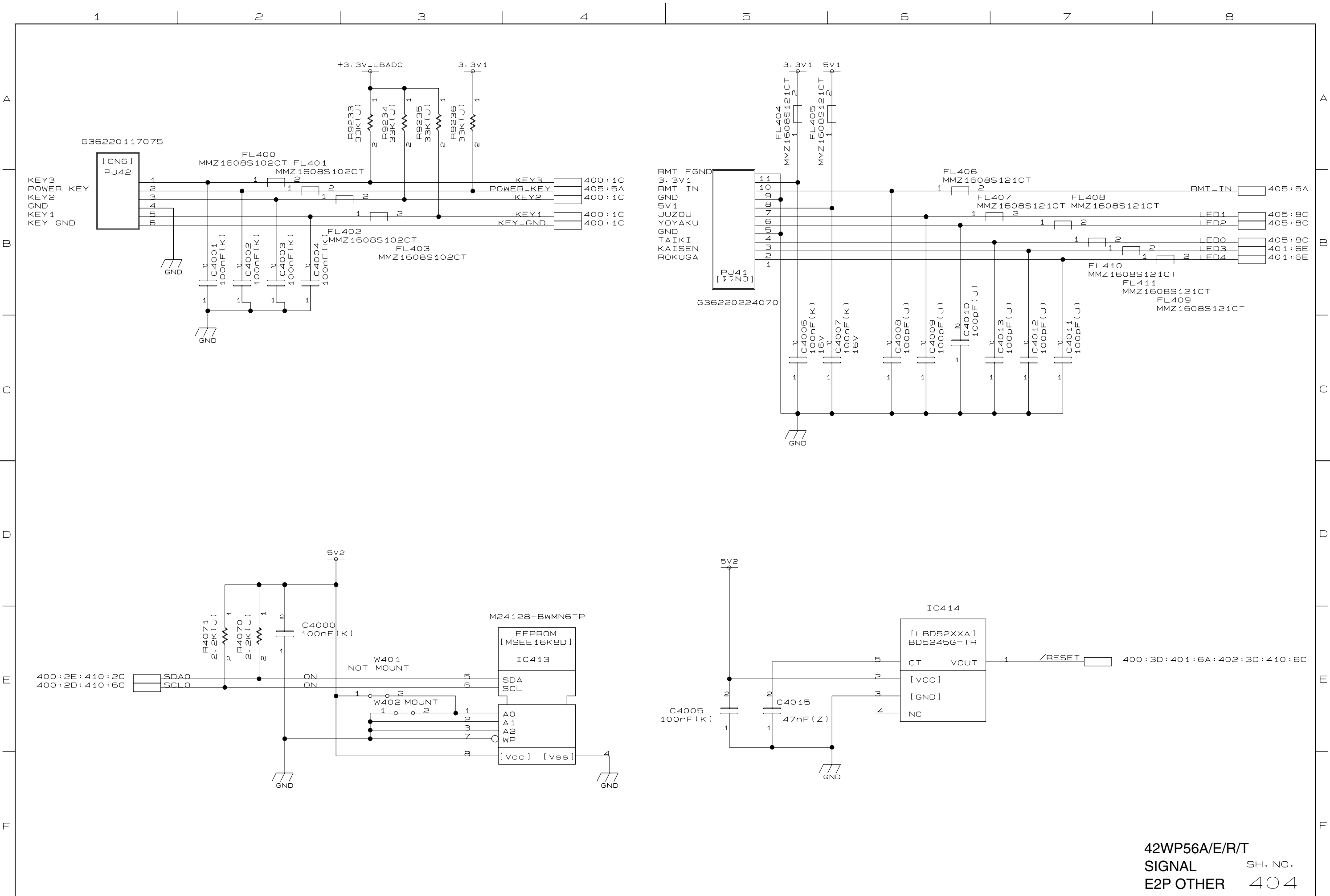
42WP56A/E/R/T
SIGNAL
FLASH MEMORY

SH. NO.
402

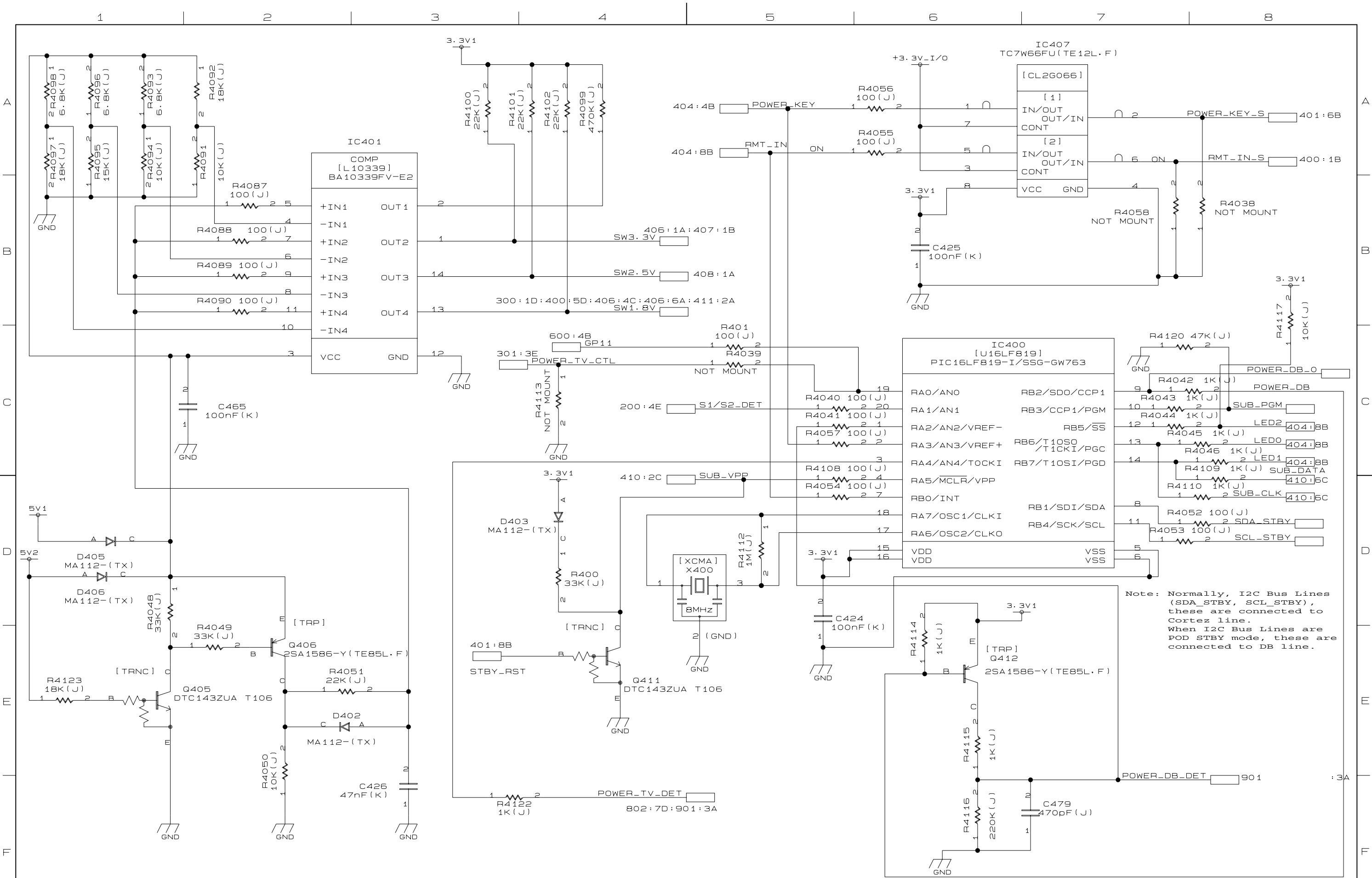


200:3D V-TV ON
 200:4E V-SIG_DET ON
 301:2B:600:4C:600:5B:600:5C:601:1C:601:1D:
 601:2B:601:6D:601:8E

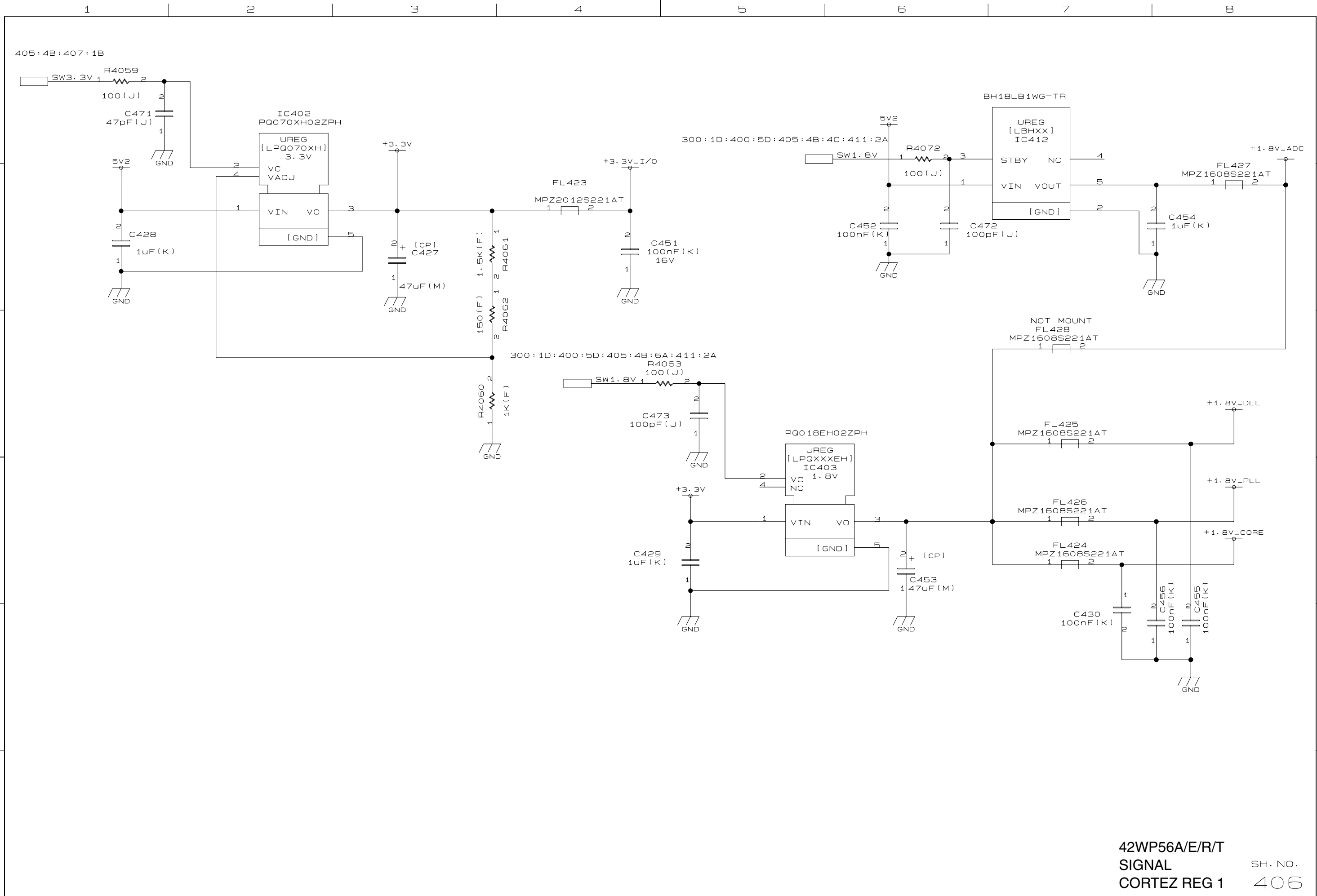
42WP56A/E/R/T
 SIGNAL SH. NO.
 SYNC SEPA 403



42WP56A/E/R/T
 SIGNAL SH. NO.
 E2P OTHER 404

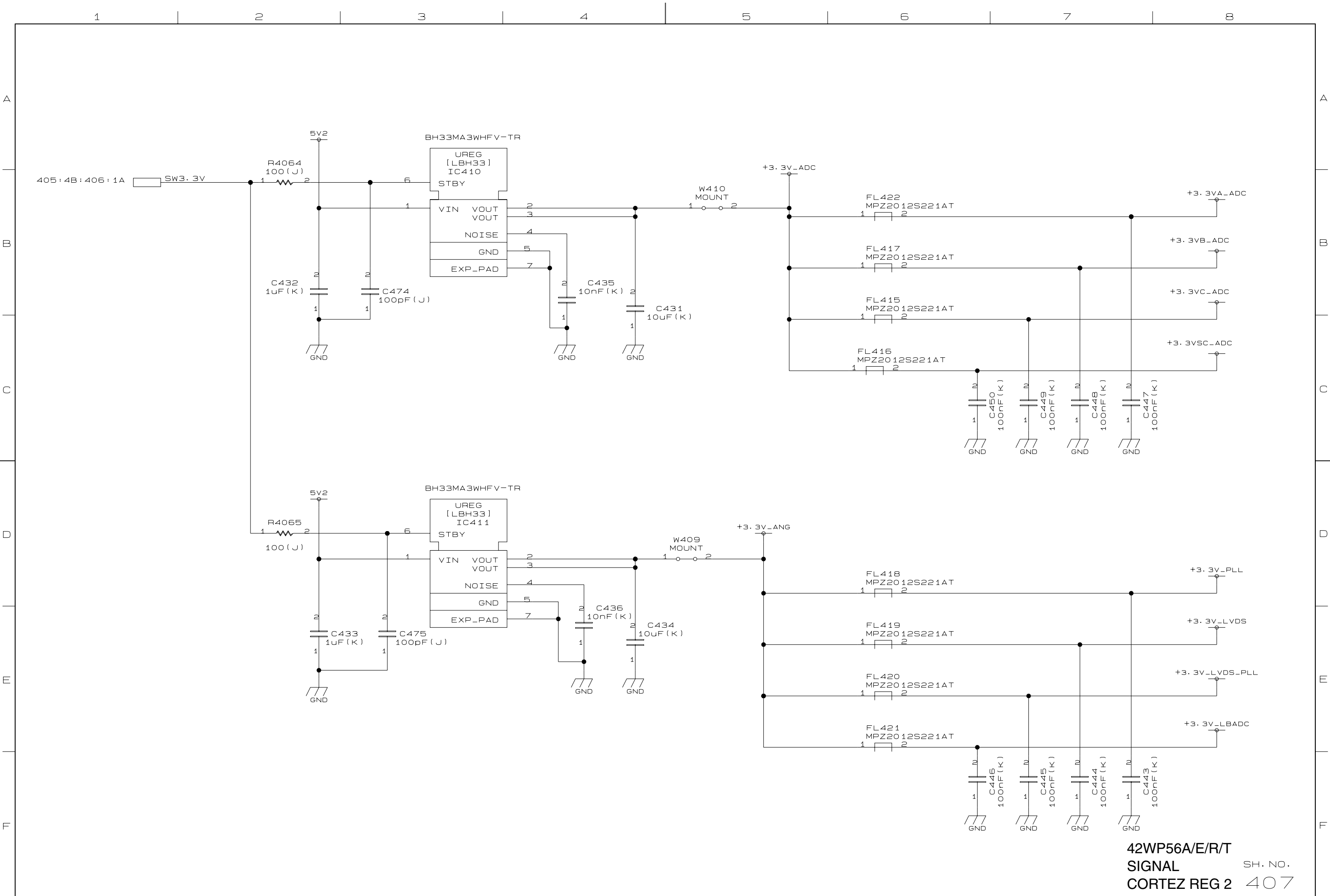


Note: Normally, I2C Bus Lines (SDA_STBY, SCL_STBY), these are connected to Cortex line. When I2C Bus Lines are POD STBY mode, these are connected to DB line.

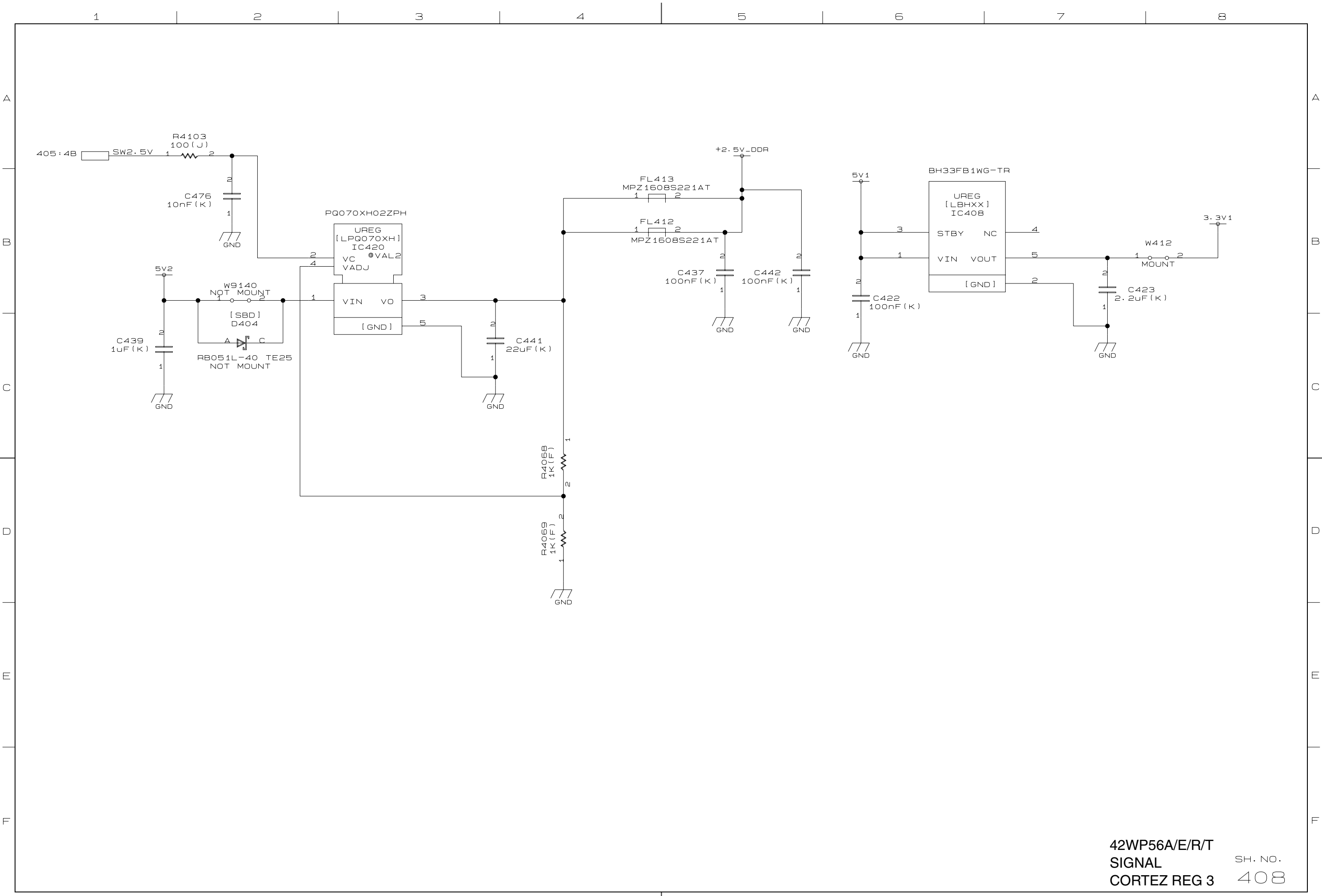


42WP56A/E/R/T
 SIGNAL
 CORTEZ REG 1

SH. NO.
 406

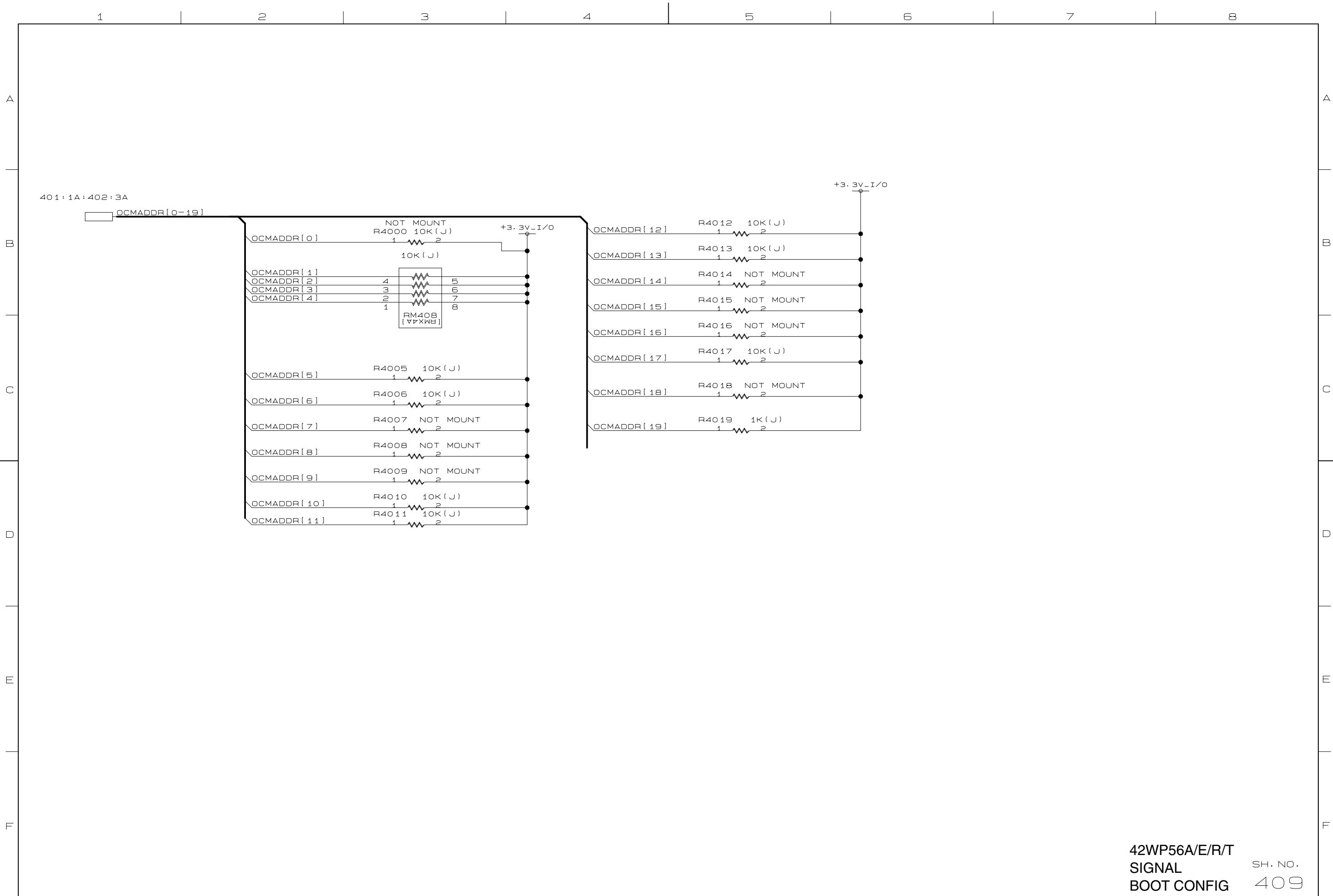


42WP56A/E/R/T
 SIGNAL SH. NO.
 CORTEZ REG 2 407



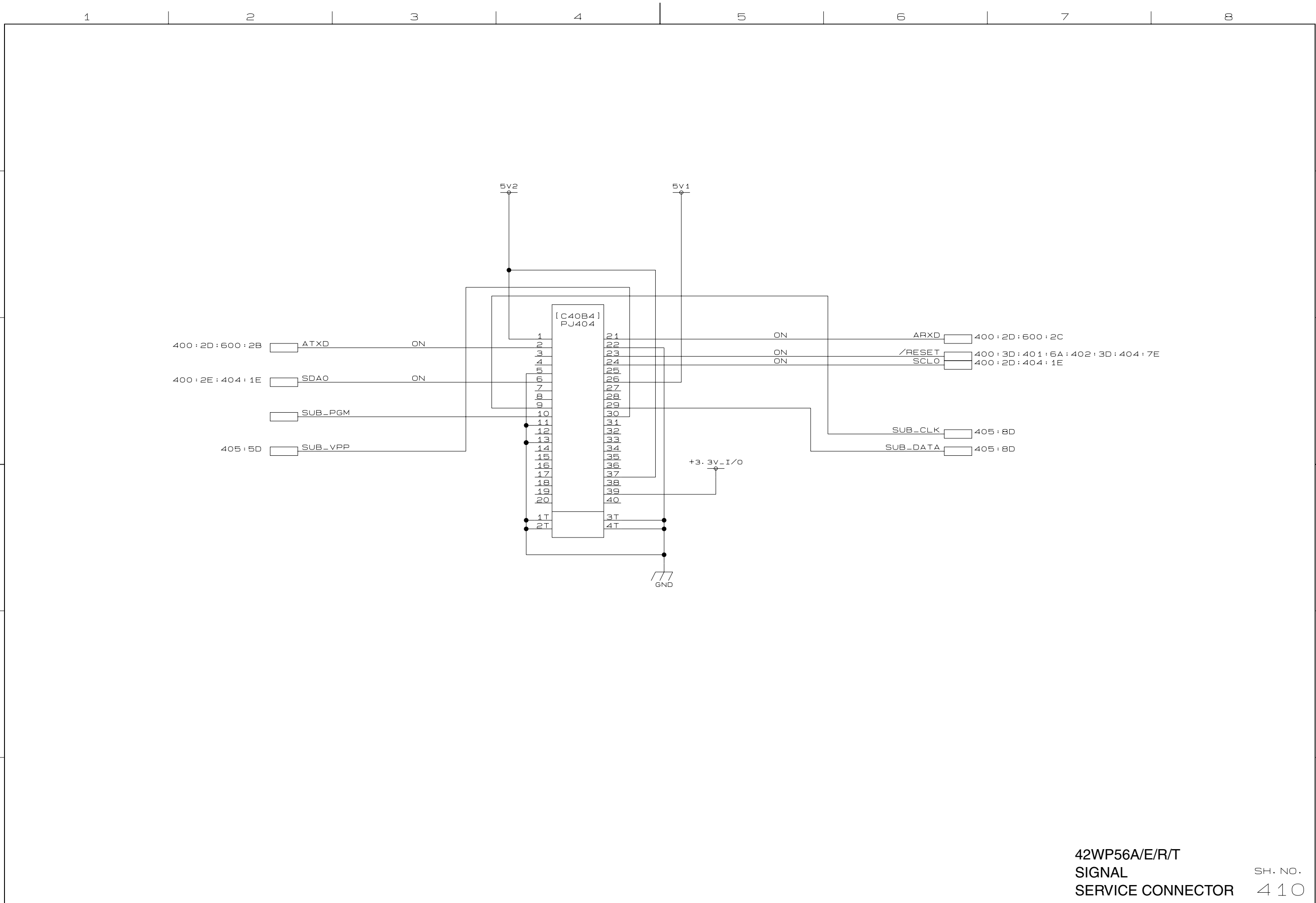
42WP56A/E/R/T
 SIGNAL
 CORTEZ REG 3

SH. NO.
 408



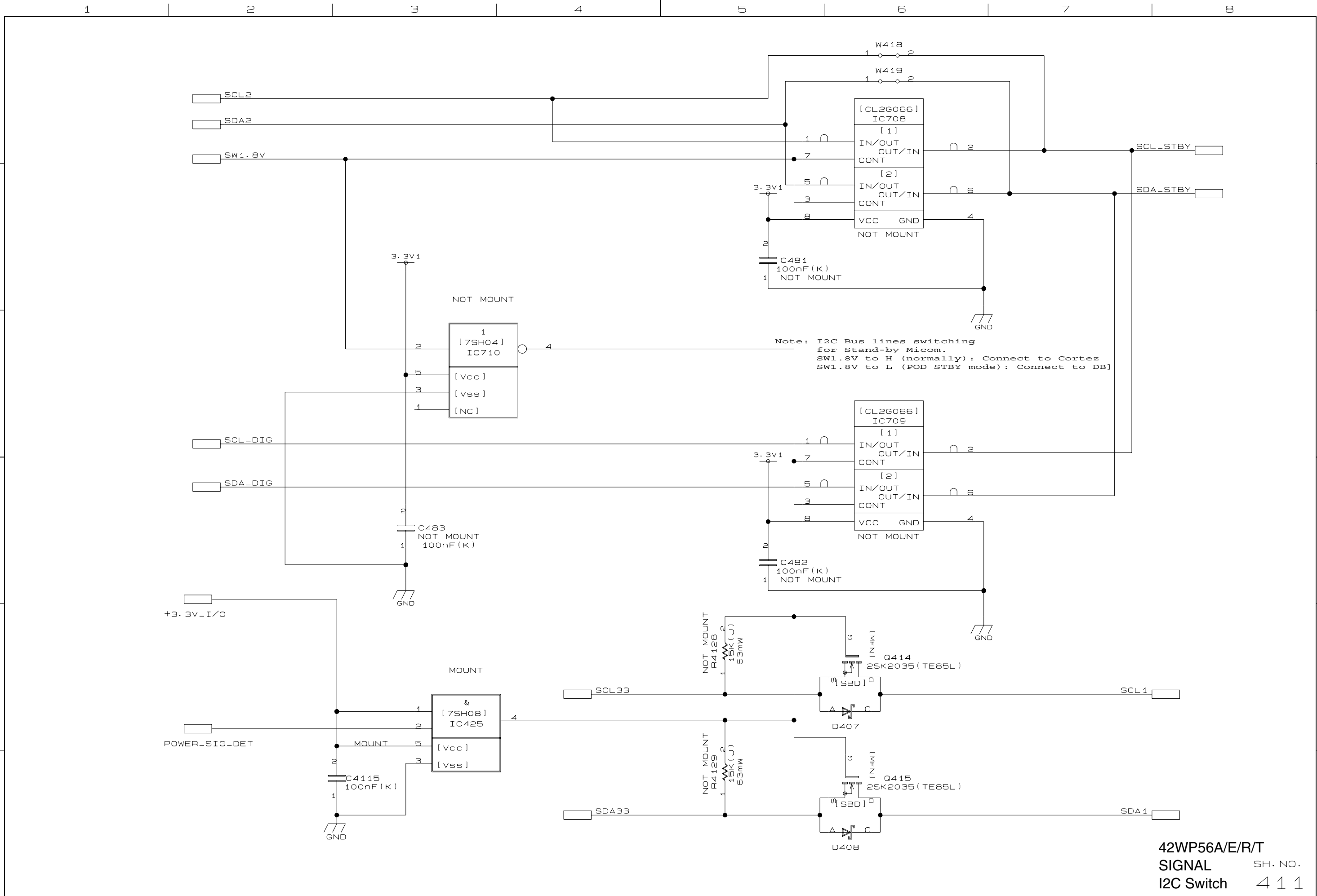
42WP56A/E/R/T
 SIGNAL
 BOOT CONFIG

SH. NO.
 409



42WP56A/E/R/T
 SIGNAL
 SERVICE CONNECTOR

SH. NO.
 410



42WP56A/E/R/T
 SIGNAL SH. NO.
 I2C Switch 411

1 2 3 4 5 6 7 8

A

B

C

D

E

F

A

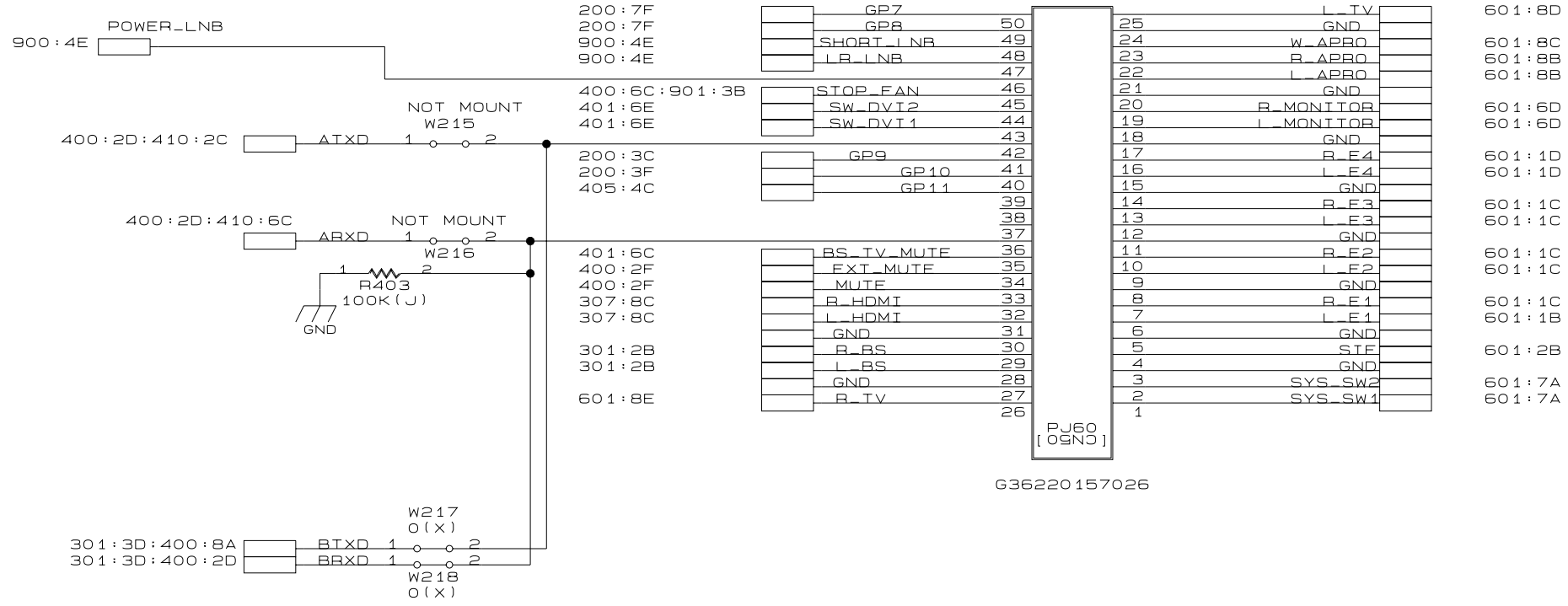
B

C

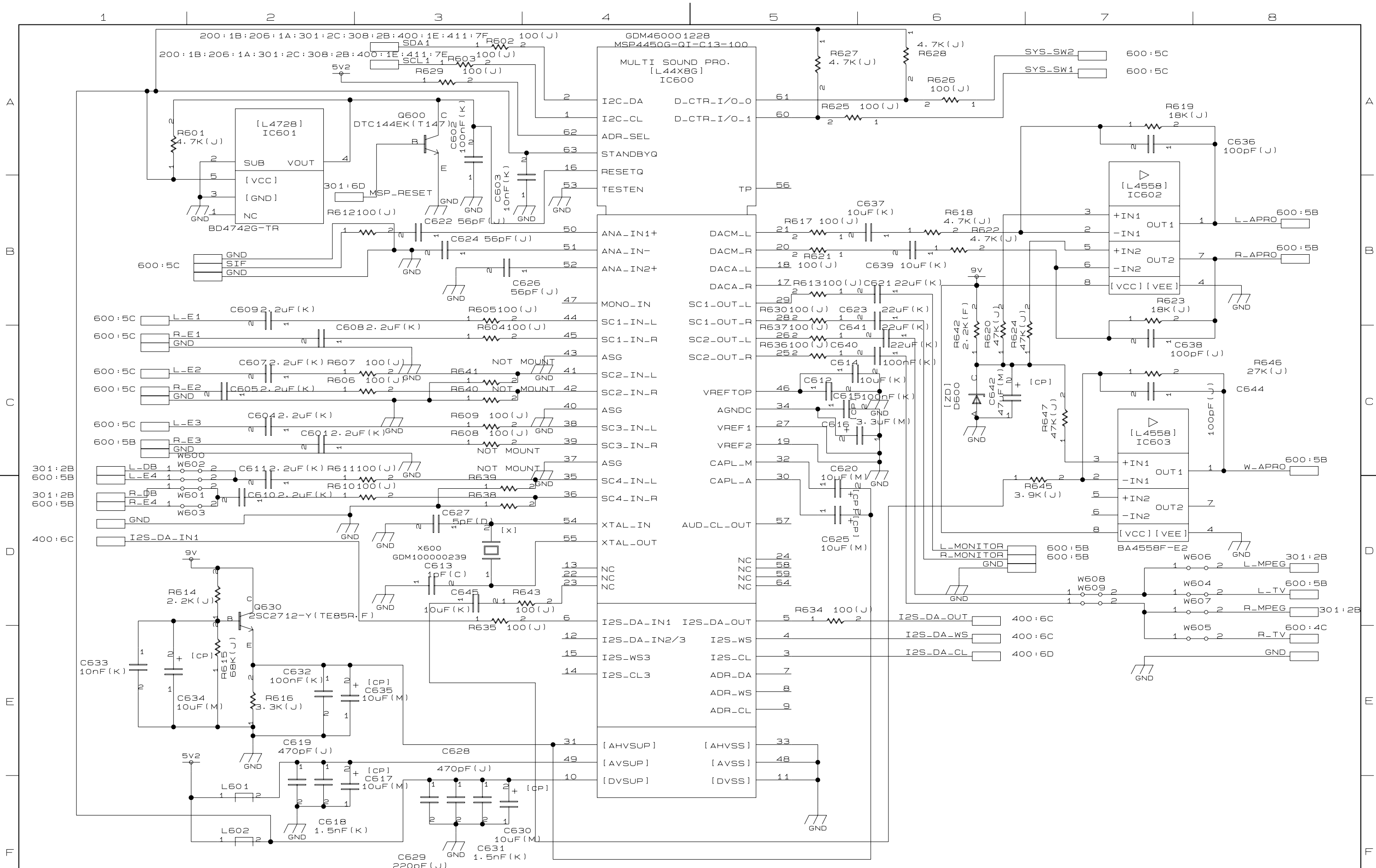
D

E

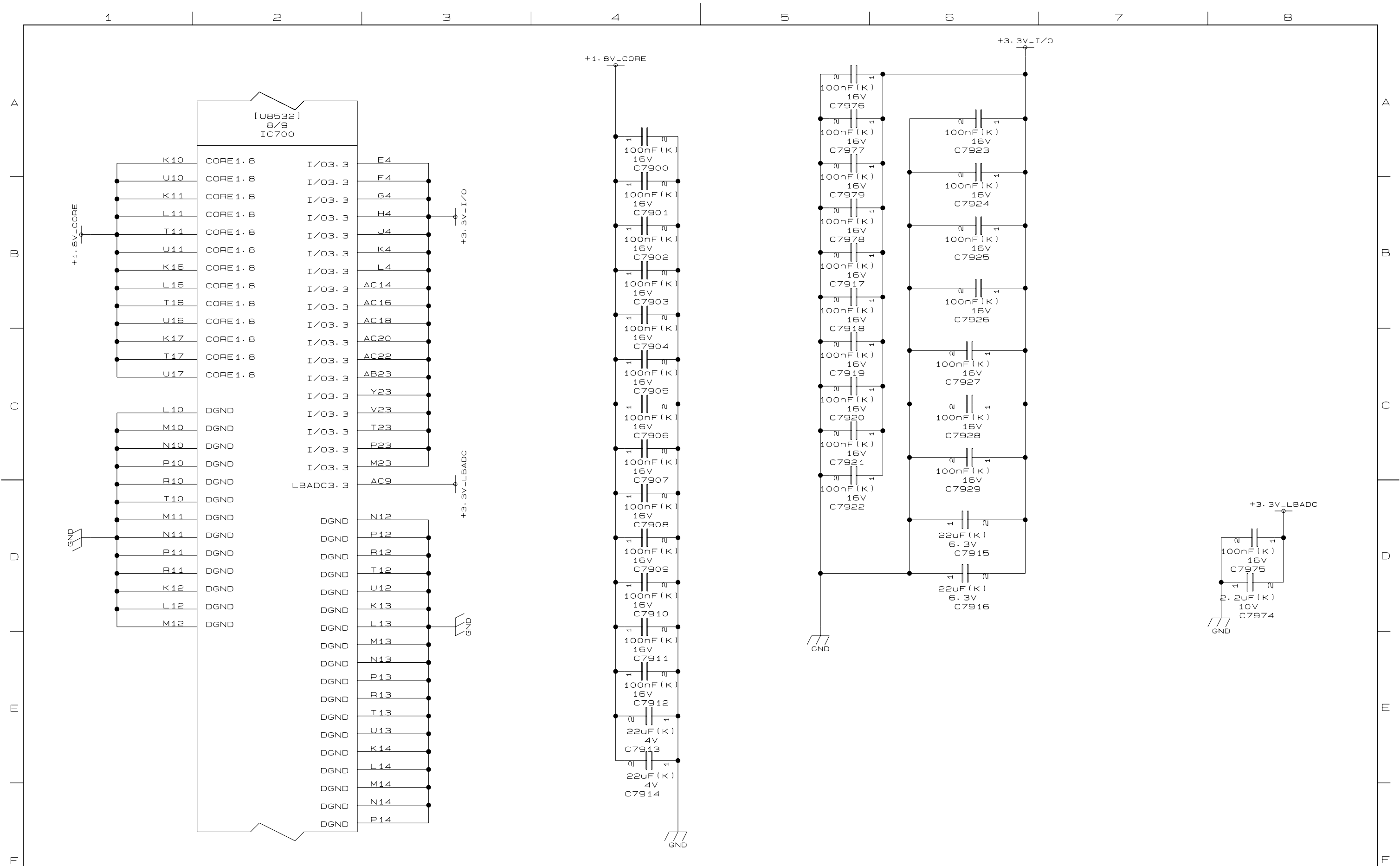
F



42WP56A/E/R/T
SIGNAL SH. NO.
AUDIO 600



42WP56A/E/R/T
 SIGNAL SH. NO.
 AUDIO MSP 601



42WP56A/E/R/T
 SIGNAL SH. NO.
 CORTEZ 2 701

A

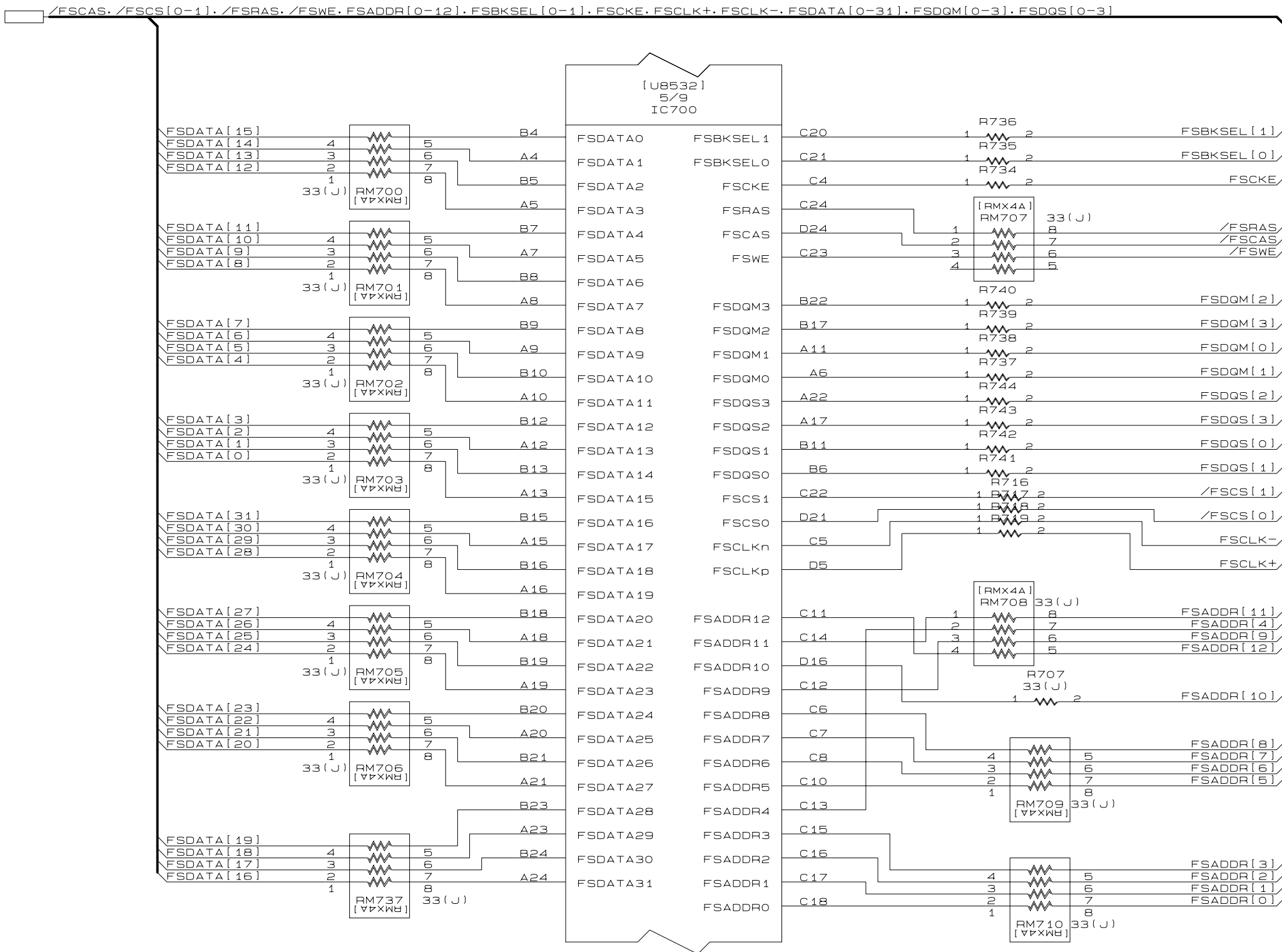
B

C

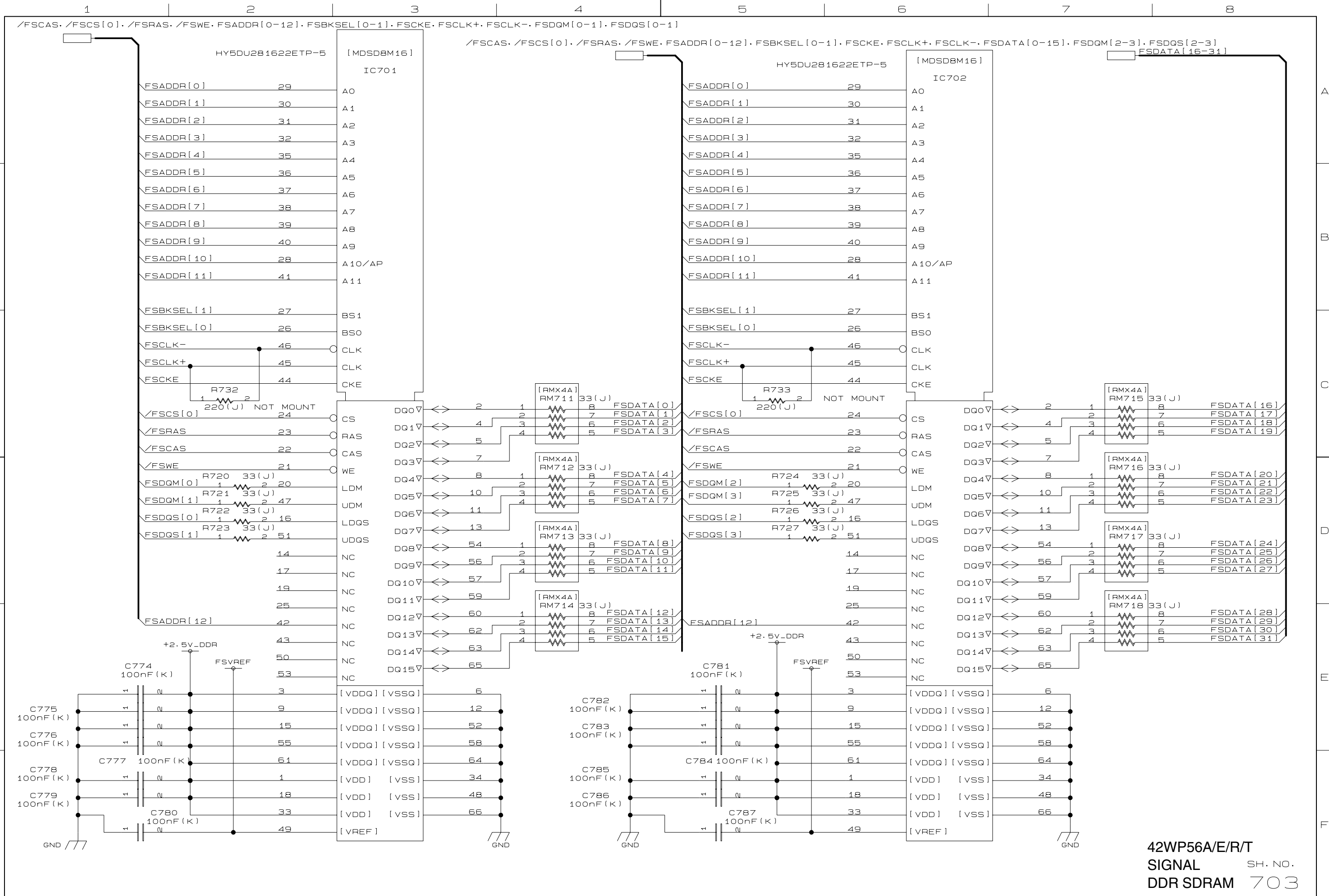
D

E

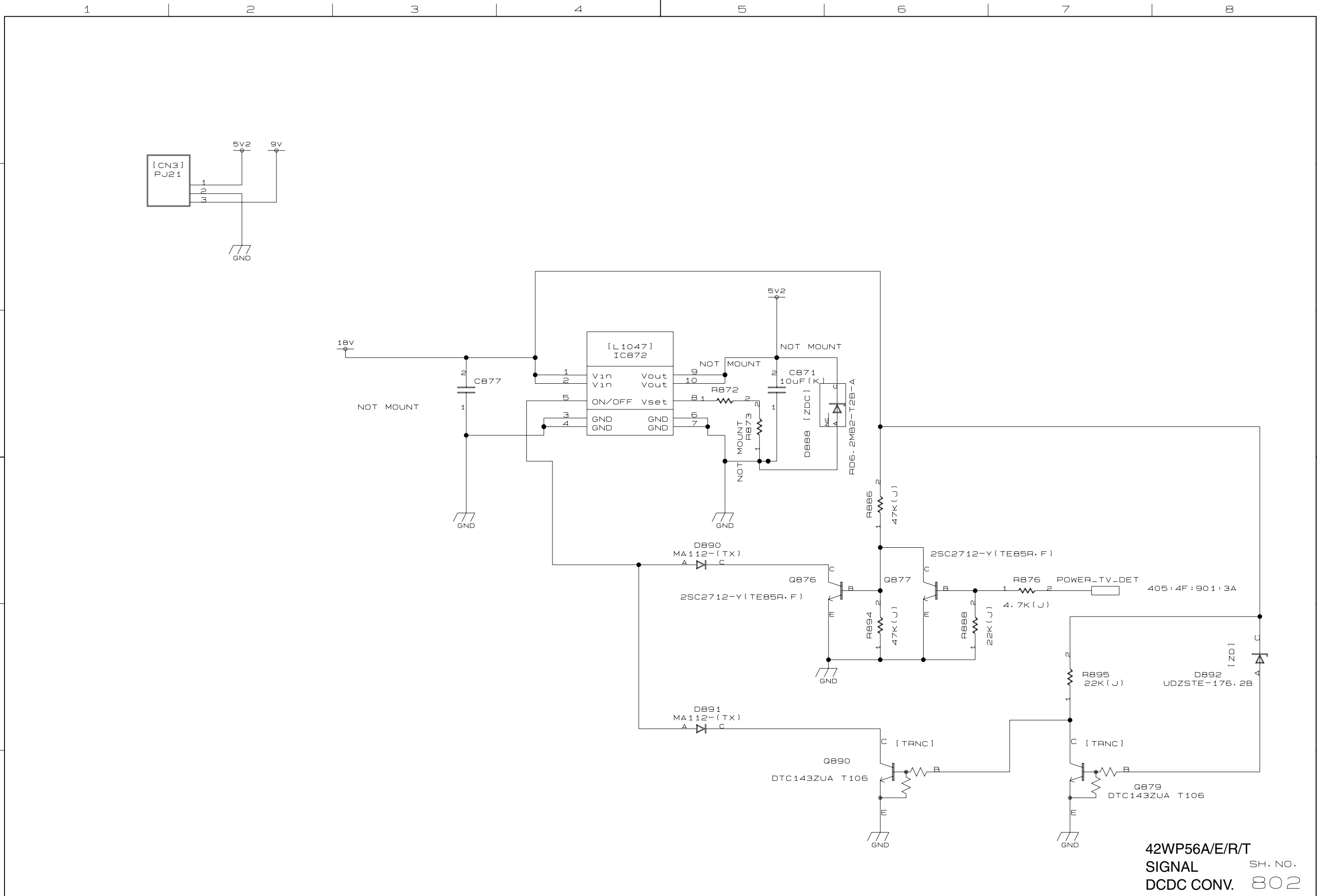
F



42WP56A/E/R/T
 SIGNAL SH. NO.
 DDR I/F 702



42WP56A/E/R/T
 SIGNAL SH. NO.
 DDR SDRAM 703



42WP56A/E/R/T
 SIGNAL
 DCDC CONV. SH. NO. 802

A

B

C

D

E

F

A

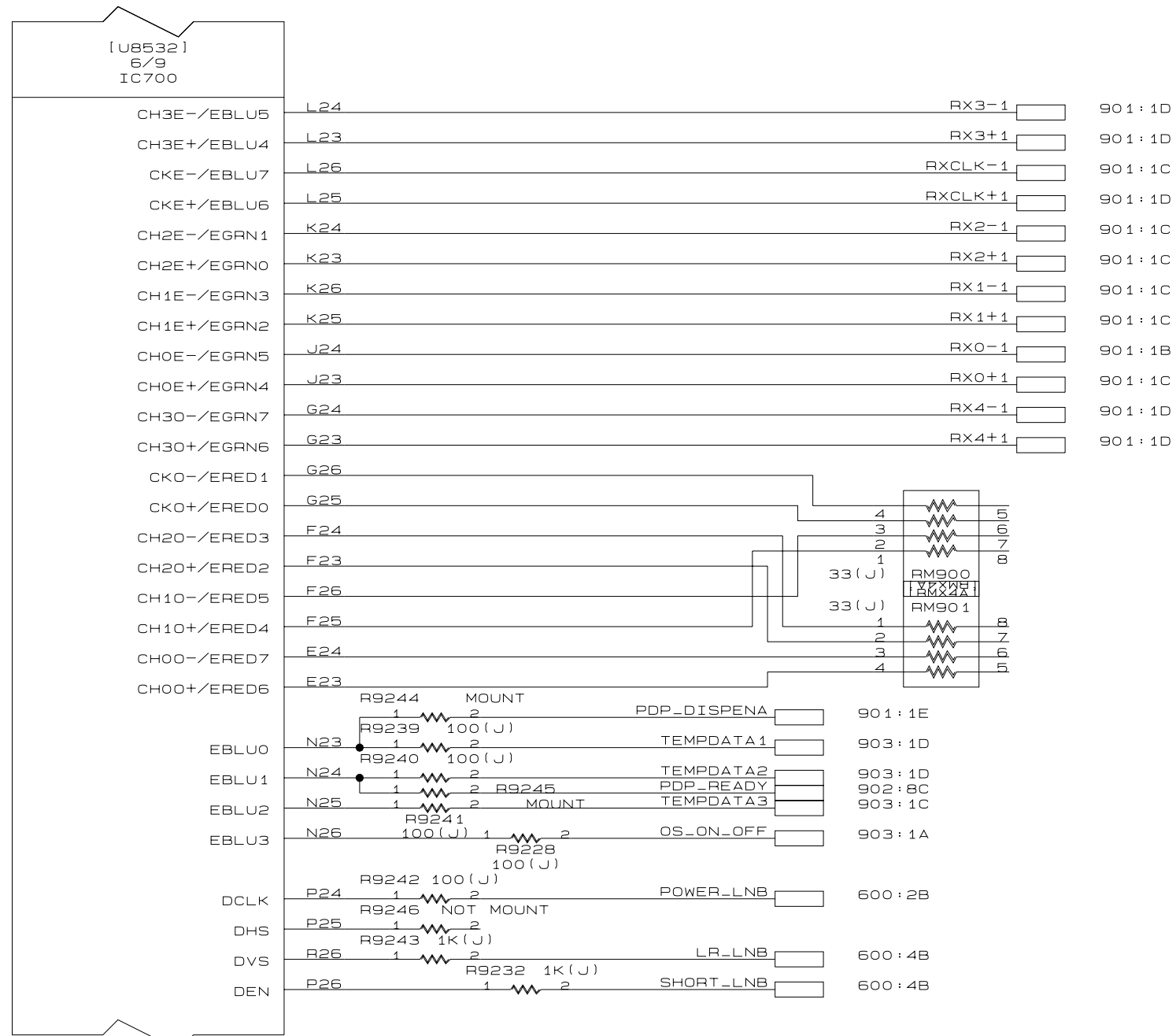
B

C

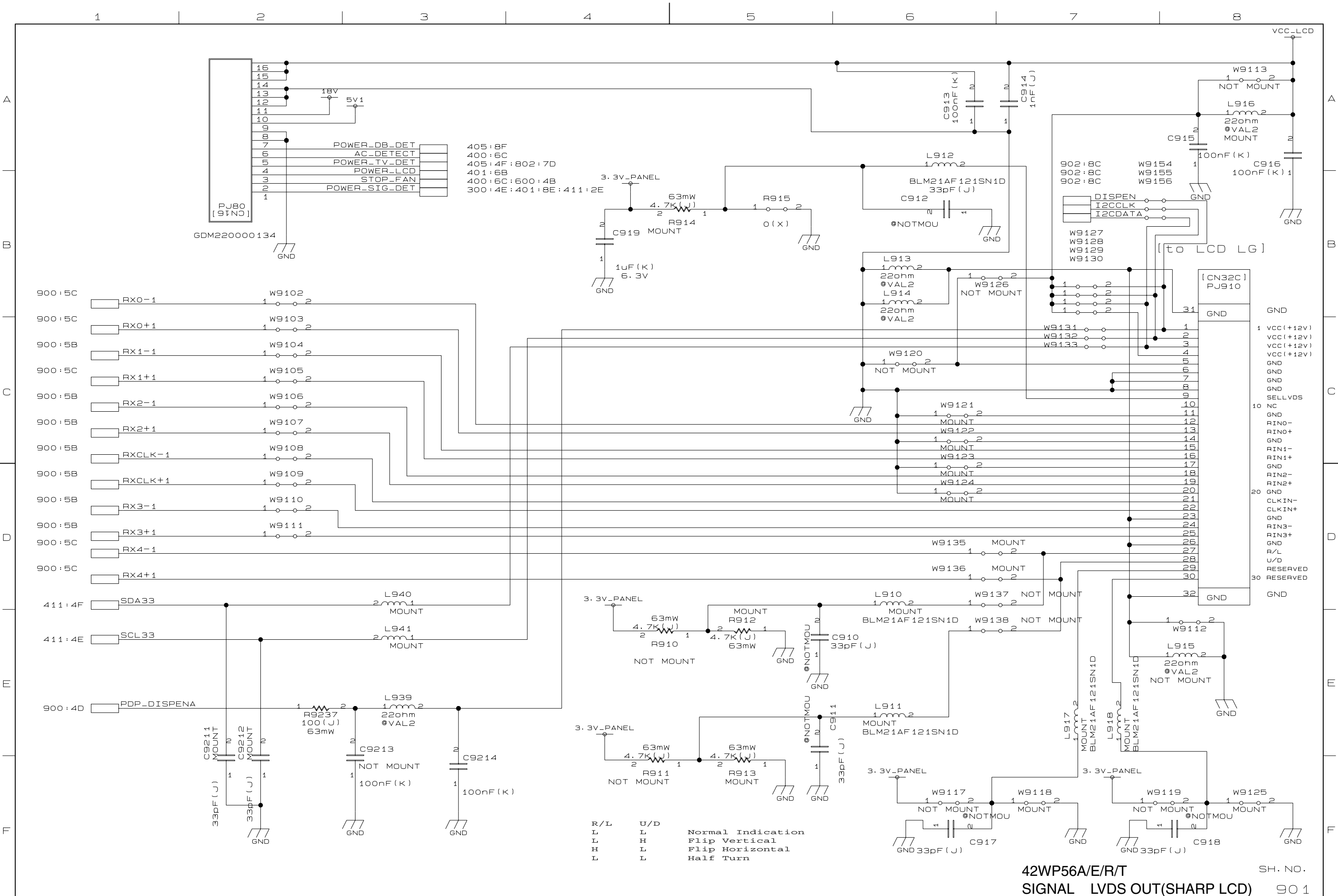
D

E

F

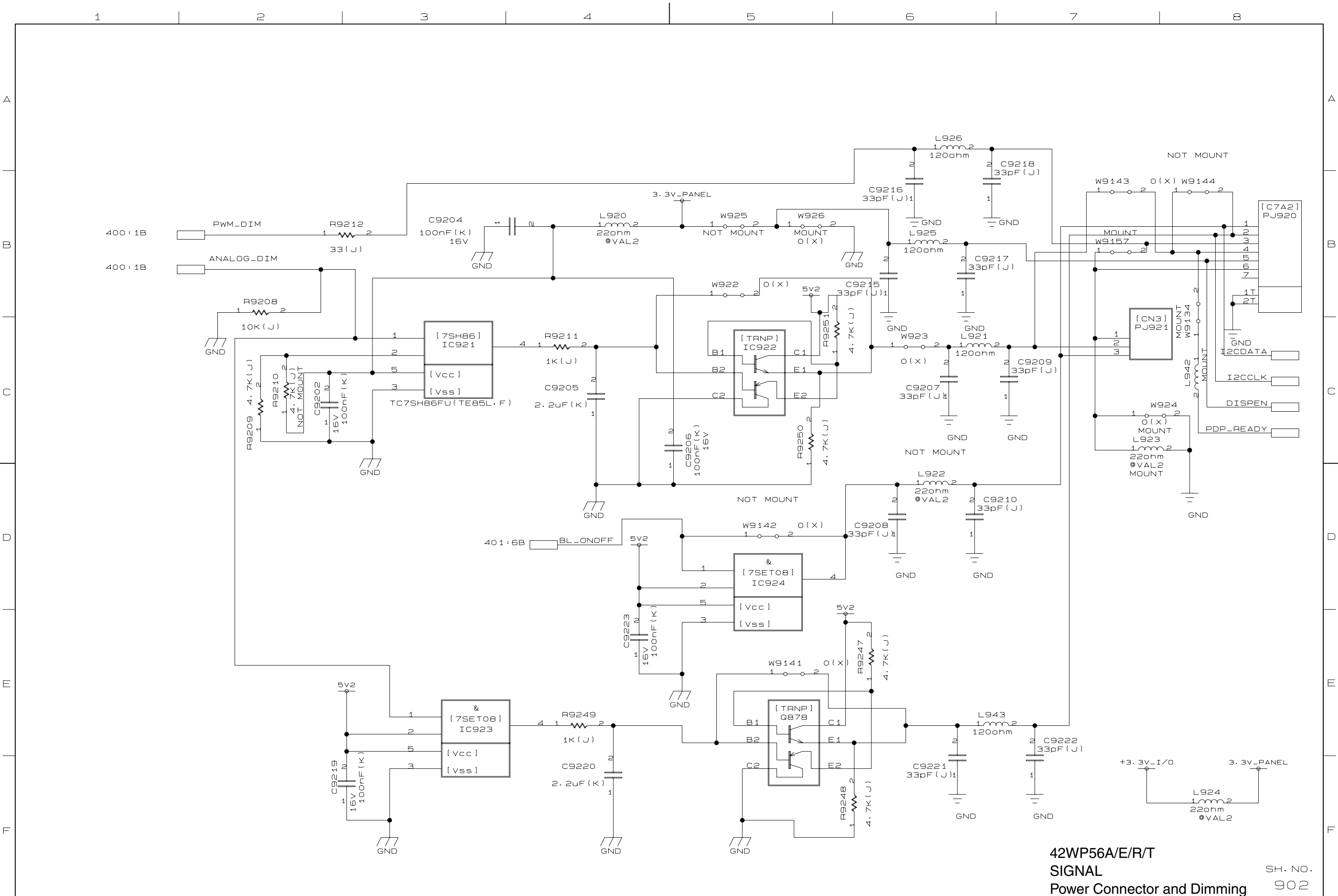


42WP56A/E/R/T
SIGNAL SH. NO.
LVDS OUT 900



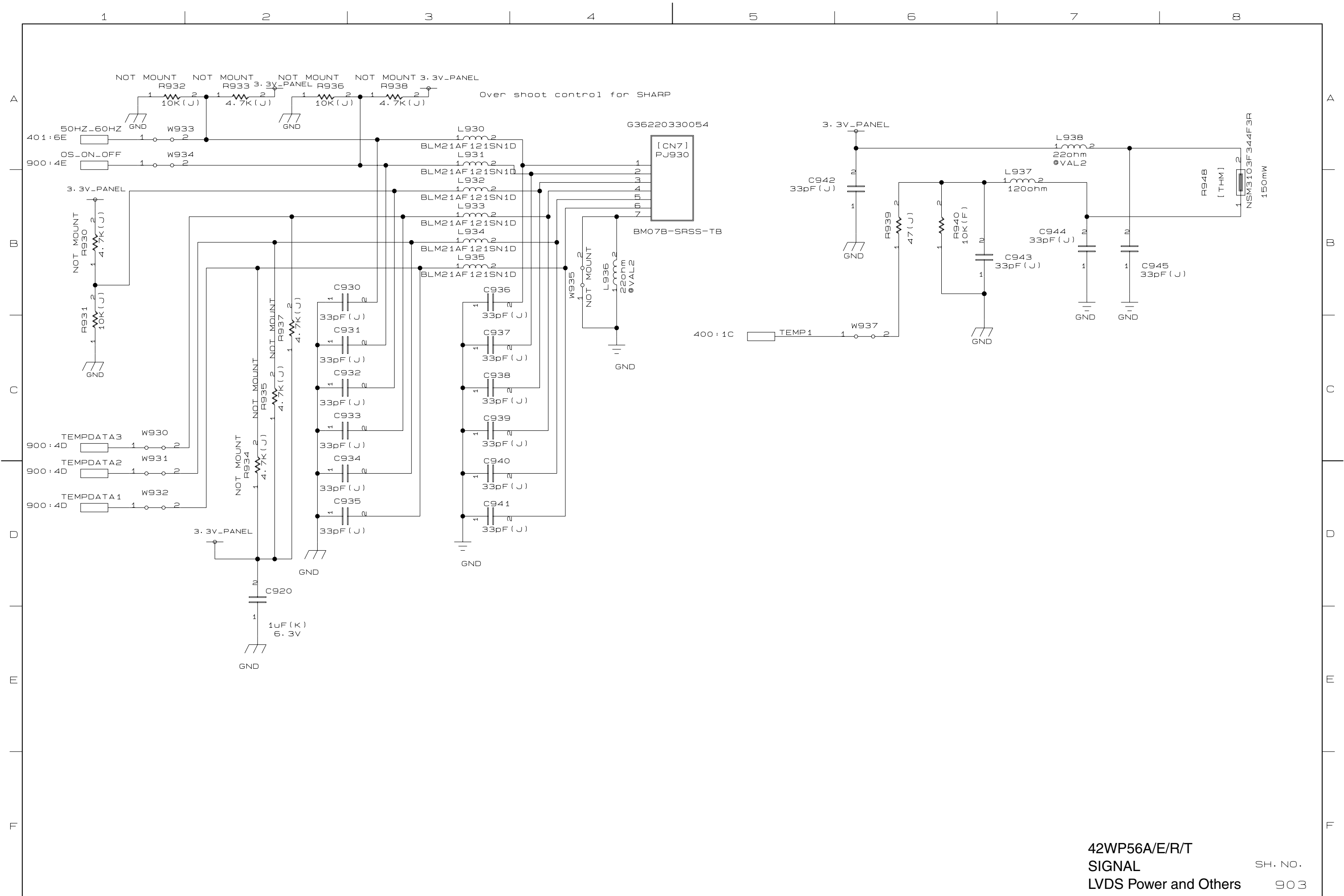
R/L	U/D	
L	L	Normal Indication
L	H	Flip Vertical
H	L	Flip Horizontal
L	L	Half Turn

42WP56A/E/R/T
 SIGNAL LVDS OUT(SHARP LCD)
 SH. NO. 901



42WP56A/E/R/T
 SIGNAL
 Power Connector and Dimming

SH. NO.
 902



42WP56A/E/R/T
 SIGNAL
 LVDS Power and Others

SH. NO.
 903