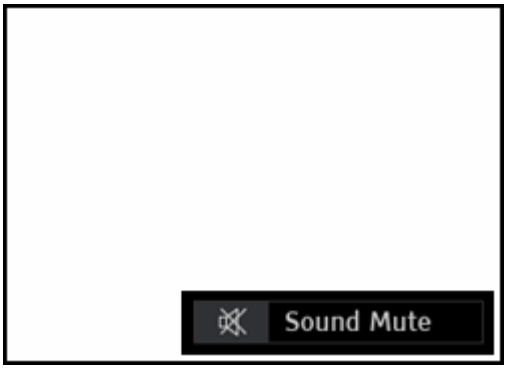
ADJUSTMENT

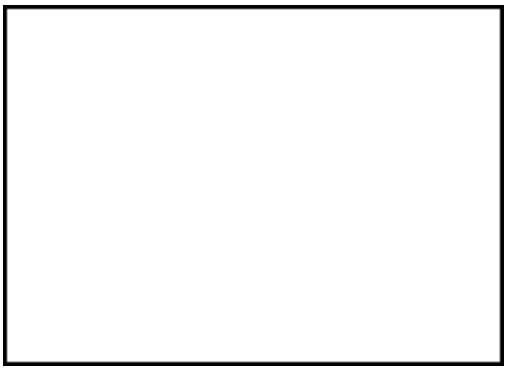
Service Mode

Entering to Service Mode



1. Press button once on remote control.

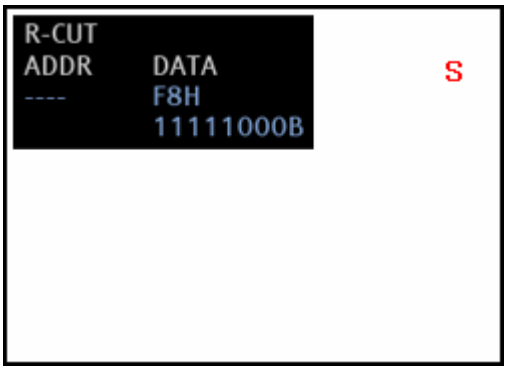
↓



2. Press button again and hold button down.

↓

Service Mode display



3. While holding the button, press MENU button on TV set.

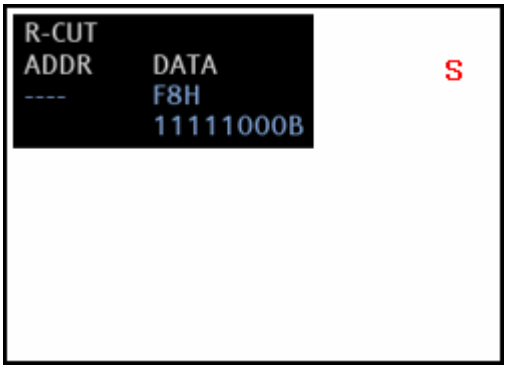
Displaying the Adjustment Menu

Press MENU button on TV.

Service Mode

Press ↑ ↓ Press

Adjustment Mode



Key Function in the Service Mode

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

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

	button (on remote control)

Test signal selection	
Selection of the adjustment items	PROGRAMME ▲/▼ (on TV or remote control)
Change of the data value	Volume +/- (on TV or remote control)
Adjustment menu mode ON/OFF	MENU button (on TV)
Initialization of the memory (IC510)	"i+" + PROGRAMME ▲ button on TV
Reset the count of operating protect circuit to "00"	"i+" + PROGRAMME ▼ button on TV
Turn off TV Micro I2C bus communication	"i+" + Volume + button on TV
"RCUT" selection	1 button
"GCUT" selection	2 button
"BCUT" selection	3 button
"CNTX" selection	4 button
"COLC" selection	5 button
"UVTT" selection	6 button
Automatic A/D Adjustment (PC, Component, Composite (PAL, NTSC))	7 button
Self diagnostic display ON/OFF	9 button

Selecting the Adjusting Item

Every pressing of PROGRAMME ▲ button in the service mode changes the adjustment items in the order of table below. (▼ button for reverse order)

SETTING & ADJUSTING DATA

[SERVICE MODE]

ADJUSTING ITEMS AND DATA IN THE SERVICE MODE:

Note:

The image system data of RCUT-BDRV is different by each image format.
The PAL value is indicated in the table.

Item	Name of adjustment	Address
BRTC	BRIGHTNESS CENTER	--
COLC	COLOR CENTER	--
UVTT	BASE BAND TINT	--
CNTX	CONTRAST MAX	--
OPT1	TV SET OPTION 1	00F1
OPT2	TV SET OPTION 2	00F2
OPT3	TV SET OPTION 3	00F3
OPT4	TV SET OPTION 4 (PANEL OPT DATA FOR VENDOR & INCH)	00F4
OPT5	TV SET OPTION 5	00F5
SETID	MODEL ID	00FE
VOLX	MAX VOLUME LIMITED	0108
SYSNG	Counter for Main sync disable detection at search	0032
SYSOK	Counter for Main sync enable detection at search	0033
SYSTM	Main sync check cycle (2ms x SY1TM)	0035
SY2OK	Counter for Sub sync enable detection	0036
SY2NG	Counter for Sub sync disable detection	0037
HVSEP	AV Switch Setting data 1	01B0
ASYNC	AV Switch Setting data 2	01B1
FREQ2	AV Switch Setting data 3	01B2
HCUNT	AV Switch Setting data 4	01B3
SDET1	AV Switch Setting data 5	01B4
SDET2	AV Switch Setting data 6	01B5
SY1TM	Main sync check cycle (2ms x SY1TM)	01B8
SY1OK	Counter for Main sync enable detection	01B9
SY1NG	Counter for Main sync disable detection	01BA

Factory preset data will be loaded after setting Model ID data.
(Refer to Initialization of Memory Data of IC510 and setting data of signal board.)

Adjusting the Data

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.

I2C Bus Off

Turn off I2C communication between IC500, IC210 and IC320.

1) Press and hold the i+ button on the remote control, then press the Volume + button on the TV.
2) Display "BUS Off" OSD.
3) I2C communication turned off.

Note:

To return Bus on status, press and hold the i+ button on the remote control, then press the Volume + button on the TV again. TV will be turned off and automatically turned on, then status will be Bus On.

Setting TVOP

Enter to service mode and select menu of TVOP by pressing P▲ or P▼ during display of adjustment menu. After selecting TVOP, press + or - to set I2C check function to disable or enable as below.

TVOP	FUNCTION DESCRIPTION	1	0 (Normal)
D5 (bit5)	I2C check between TV-Micro and Standby-Micro (WDT)	Disable	Enable

Setting Panel Option Data

Panel option data is subject to OPT4.
Enter to service mode and select menu of OPT4 by pressing P▲ or P▼ during display of adjustment menu. After selecting OPT4, press + or - to set OPT4 value as table below.

Panel option data

Series		Model name	Panel vendor	OPT4 value
XV566D	EU Digital	37XV566D	LGD	0x16

OPT4

Ex. OPT4 value 0x65 indicates that panel vendor is SAMSUNG and panel size is 32.
Upper 4bit is decided as below table.

		OPT4 (Upper 4bit)							
		D7 (bit7)	D6 (bit6)	D5 (bit5)	D4 (bit4)	D3 (bit3)	D2 (bit2)	D1 (bit1)	D0 (bit0)
Panel vendor	LGD	0	0	0	1				
	SHP	0	0	1	0				
	CMO	0	0	1	1				
	AUO PMVA	0	1	0	0				
	AUO AMVA	0	1	0	1				
	SAMSUNG	0	1	1	0				
	IPS	0	1	1	1				

Lower 4bit is decided as below table.

		OPT4 (Lower 4bit)							
		D7 (bit7)	D6 (bit6)	D5 (bit5)	D4 (bit4)	D3 (bit3)	D2 (bit2)	D1 (bit1)	D0 (bit0)
Panel size	32					0	1	0	1
	37					0	1	1	0
	42					0	1	1	1
	46					1	0	1	0
	52					1	0	1	1

Convert from Bit (Binary) to Hex

The table for converting from bit (D7-D0) to hex (0x**).

		BIT (Binary)			
High nibble		**D7**	**D6**	**D5**	**D4**
Low nibble		**D3**	**D2**	**D1**	**D0**
HEX	**0**	0	0	0	0
	1	0	0	0	**1**
	2	0	0	**1**	0
	3	0	0	**1**	**1**
	4	0	**1**	0	0
	5	0	**1**	0	**1**
	6	0	**1**	**1**	0
	7	0	**1**	**1**	**1**
	8	**1**	0	0	0
	9	**1**	0	0	**1**
	A	**1**	0	**1**	0
	B	**1**	0	**1**	**1**
	C	**1**	**1**	0	0
	D	**1**	**1**	0	**1**
	E	**1**	**1**	**1**	0
	F	**1**	**1**	**1**	**1**

E.g. If Bit D7-0 = 0**1**0**1** **1**0**1**0, Hex data is 0x**5A**.

Exit from Service Mode

Pressing POWER button to turn off the TV once.

Initialization of Memory Data of IC510 and Setting Data of Signal Unit

After replacing IC510 or signal board, the following initialization is required.

CAUTION: Never attempt to initialize the data unless IC510 has been replaced.
Whenever using new signal board to the set, set the Model ID data according to Panel option data.

1) Enter the service mode.

2) Select menu of ID by pressing P▲ or P▼ during display of adjustment menu in the service mode.

3) Change ID data into MODEL ID to initialize by pressing ◿ + or ◿ -, refer to table below.

4) Press and hold the CALL button on the remote control, then press the PROGRAMME ▲ button on the TV.

5) Initialization progress dialog including model name and panel vendor is shown. Progress status is "WRITING".

6) Progress status is changed "OK" and power cycle (automatically). Then IC510 initialization has been completed.

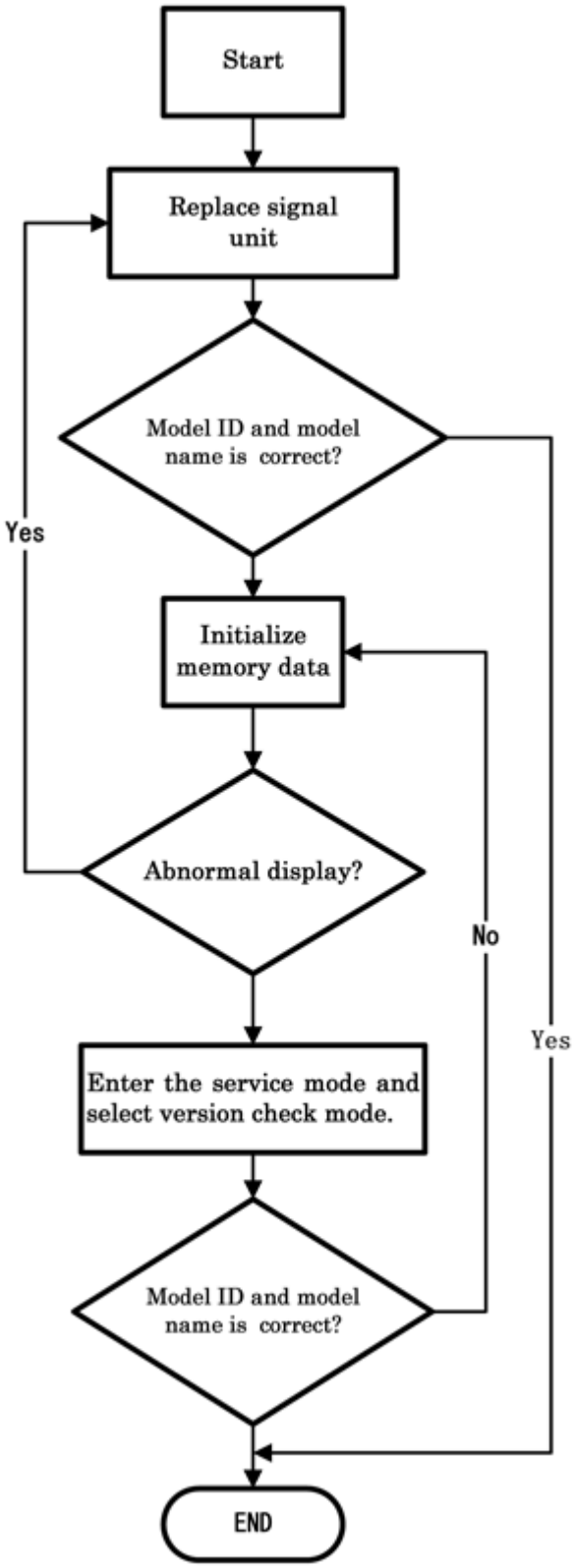
7) Enter the service mode and select version check mode. Confirm if model name and model id set is correct. If not, repeat steps 1) to 6).
Note:
In case initialization by setting wrong MODEL ID is done, there is a possibility of abnormal display.

8) Set I2C check function of TVOP to enable.

9) Check the picture carefully. If necessary, adjust any adjustment item above. Perform "Auto tune" on the owner's manual.

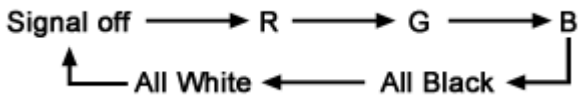
MODEL ID (HEX)	Model name	Panel vendor
0x19	37XV566D	LGD

Initializing Data setting flowchart after replacing the Signal Unit



Test Signal Selection

Every pressing of ⊕ button on the remote control changes the built-in test patterns on screen as described below in Service Mode.



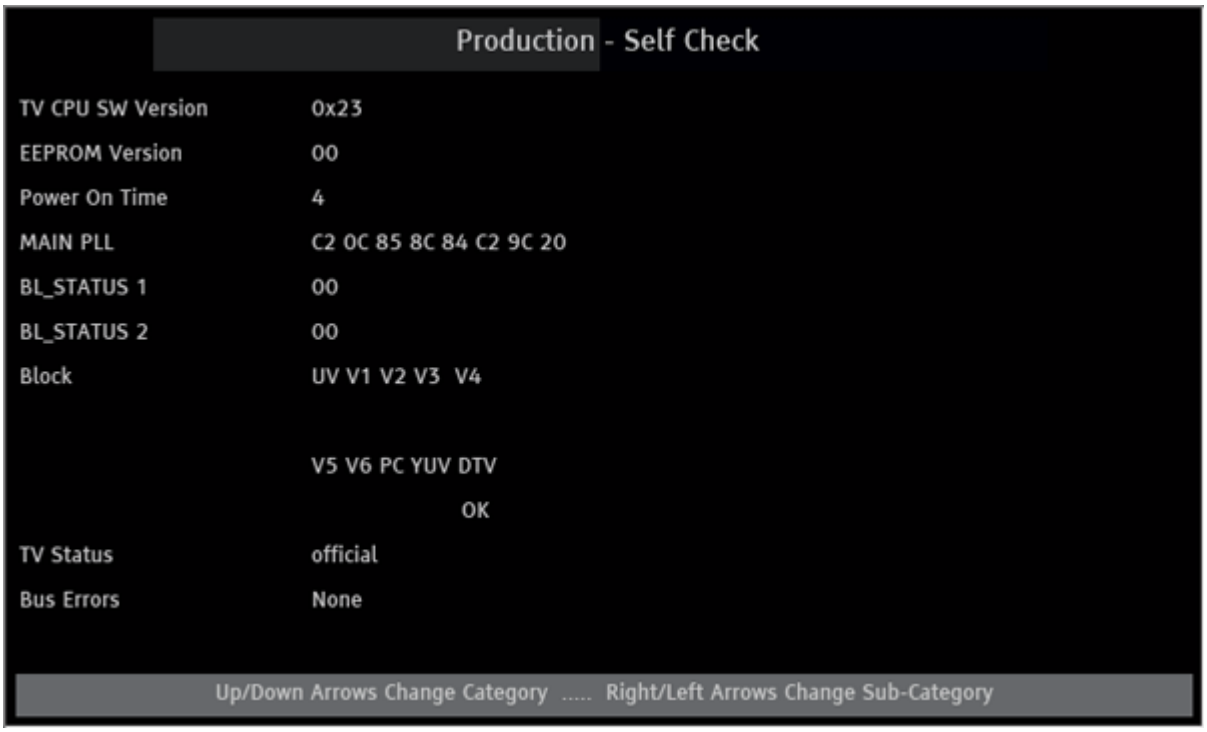
Picture	Signal
	Red raster
	Green raster
	Blue raster
	All Black
	All White

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.

* Self check display and Item are subject to the models.



TV CPU SW Version:
Version information of TV Micro SW: Display 1 byte data. (Hex)

EEPROM Version:
Version information of TV Micro EEPROM: Display 1 byte data. (Hex)

Power On Time: Total hour of turn the TV on. (Unit: H) (Decimal)

Main PLL: Displays Data 11 - Data 18 (8 bytes) of tuner control data. (Hex)

BL_STATUS:

BL_STATUS 1: The total number of times that the panel did not light. (backlight double-light also failed) (Decimal)
BL_STATUS 2: The number of times that the backlight failed to light. (Decimal)

Block:

UV : ATV reception mode
V1 - V6 : VIDEO 1-6 input mode (see SELF DIAGNOSTIC BLOCK TABLE)
PC : PC mode
DTV : DTV mode

For current input: OK: Signal Sync Detected
NG: No Sync Detected

TV Status: "official" is normal.
Bus Errors: "none" is normal.

Block:

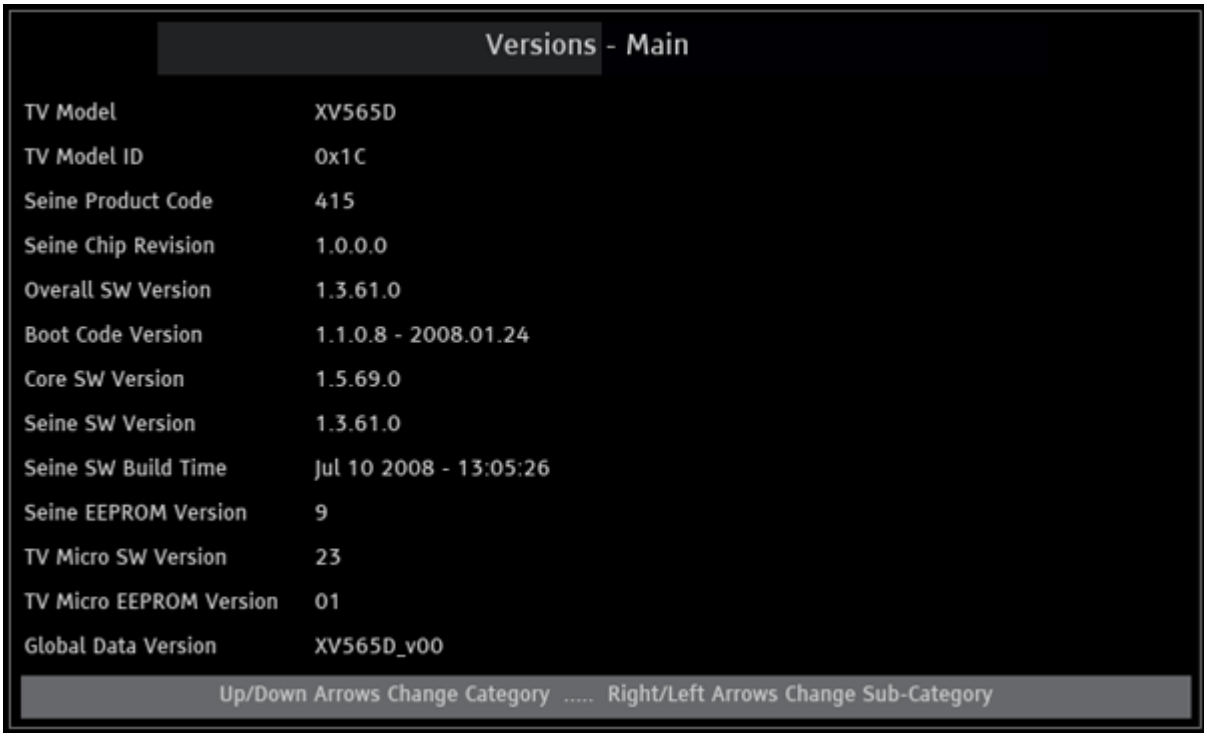
UV	ATV
V1	1 (SCART (FULL))
V2	2 (SCART (S+AV))
V3	3 (Component/Composite)
V4	HDMI1
V5	HDMI2
V6	HDMI3
V7	--
V8	--
V9	--
PC	PC
YUV	--
DTV	DTV (Digital Only)

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 be checked.

2. During Version Check, the following displays are shown.

* Version check display and Item are subject to the models.



TV Model
Boot Code Version
Core SW Version
Seine SW Version
TV Micro SW Version:
Version information of TV Micro SW: Display 1 byte data.

TV Micro EEPROM Version:
Version information of EEPROM: Display 1 byte data.

EDID Checksum:
EDID data check item. Display channel numbers depend on HDMI input numbers.
Pass: EDID data is good.
Fail: EDID data is no good.

Global Data Version
LCD Panel Opt:
Panel Option (OPT4) Data: Display 1 byte data.

Factory Test Status: Optional Data Bits that can be used by factory.

A/D Adjust:
A/D adjustment item.

--COMP : Component input
--PC : PC input
--OK : A/D adjustment set correctly.
--NG : A/D adjustment set incorrect.
-- : A/D adjustment is not needed. Because its picture format is not used.

LED Indication

The Green and Red LEDs on the TV (at the bottom center of the TV) indicate the TV's status, as described below.

- Red ON (solid) and Green OFF = The TV power cord is plugged in.
- Green ON (solid) and Red ON = The On timer is operating.

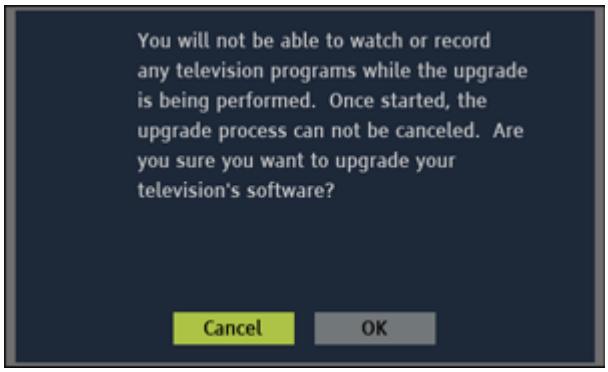
	LED Indication	Condition	Solution
1	Green is OFF; Red blinks continuously at 0.5-second intervals.	Abnormal operation	Turn OFF the TV and unplug the power cord. Plug the power cord in again and turn ON the TV.
2	Green is OFF; Red blinks continuously at 1-second intervals.	Abnormal operation of BUS line.	Turn OFF the TV and unplug the power cord. Plug the power cord in again and turn ON the TV.

DTV Software Upgrade - While Watching TV

1. Extract upgrade files onto an SD card.
2. Connect service jig, FWA1209, to P404A.

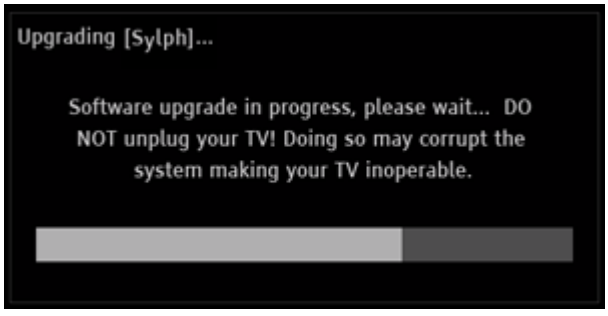
3. Power TV on.

4. Insert SD card into the slot on FWA1209.
   The following OSD will be displayed:



5. Highlight OK and press the OK key on the remote.

6. Upgrading progress for OSD is displayed on TV as bellow.
   Please never power off while updating.



7. After upgrading the software completely, following OSD is displayed on TV.

8. Remove the SD card.
9. Upon completion the power will off/on automatically.

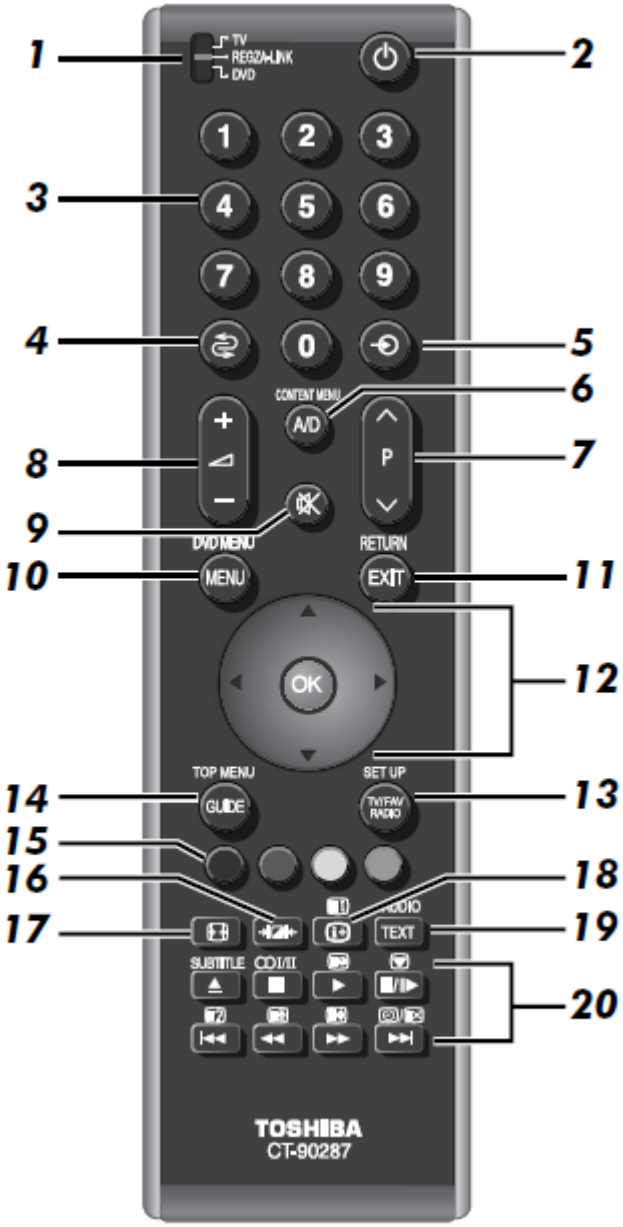
DTV Software Upgrade - from Boot Up

1. Extract upgrade files to an SD card.
2. Unplug TV.
3. Insert the SD card into service jig, FWA1209, and connect it to P404A.
4. Plug in TV and confirm LED indication on the front of the set.
   a. The green LED will blink in groups of three several times.
   b. The red and green LEDs light up, indicating that the set is updating.
5. When only the Red LED is lit, upgrading is successful.
6. Unplug the set and remove the SD card.

FUNCTION AND OPERATION

The Remote Control

Simple at-a-glance reference of your remote control.



1 To select device mode (T/R/D)*

2 For On/Standby mode (T/R/D)

3 Number buttons (T/R/D)

4 To return to the previous programme (T)

5 To select external input sources (T/R/D)

6 To switch between ATV (analogue television) and DTV (digital television) (T)
To display Content menu (R)

7 To change programme positions (T/R)
To change text pages (T)

8 To alter the TV volume (T/R/D)

9 To mute the TV sound (T/R/D)

10 On-screen menus (T)
DVD menus (R/D)

11 To exit menus (T)
To return to previous menu (R/D)

12 When using menus the arrows move the cursor on the screen up, down, left or right. OK to confirm your selection (T/R/D)

13 To display TV, Radio and Favourite channel list when in **digital** mode (T)
To access Setup menu (R/D)

14 To display the **digital** on-screen Programme Guide (T)
To access Top Menu (R/D)

15 Text control buttons (T)
Application control on device (R)

16 TV selectable picture preferences (T/R/D)

17 TV widescreen viewing (T/R/D)

18 To display on-screen information (T/R/D)
To access index page in Text mode (T)

19 To call up text services (T)

20 When in TV mode:

⏲/EX	Analogue time display
▼	Picture still
◯I/II	Stereo/bilingual transmissions
SUBTITLE	Digital subtitles or TEXT subtitle pages if available

When in Text mode:

	To access sub pages
	To reveal concealed text
	To hold a wanted page
	To enlarge text display size
⏲/EX	To select a page whilst viewing a normal picture

When using the Programme Guide:

⏮ – 24 hours
⏭ + 24 hours
◀◀ – 1 page
▶▶ + 1 page

REGZA-LINK or DVD mode:

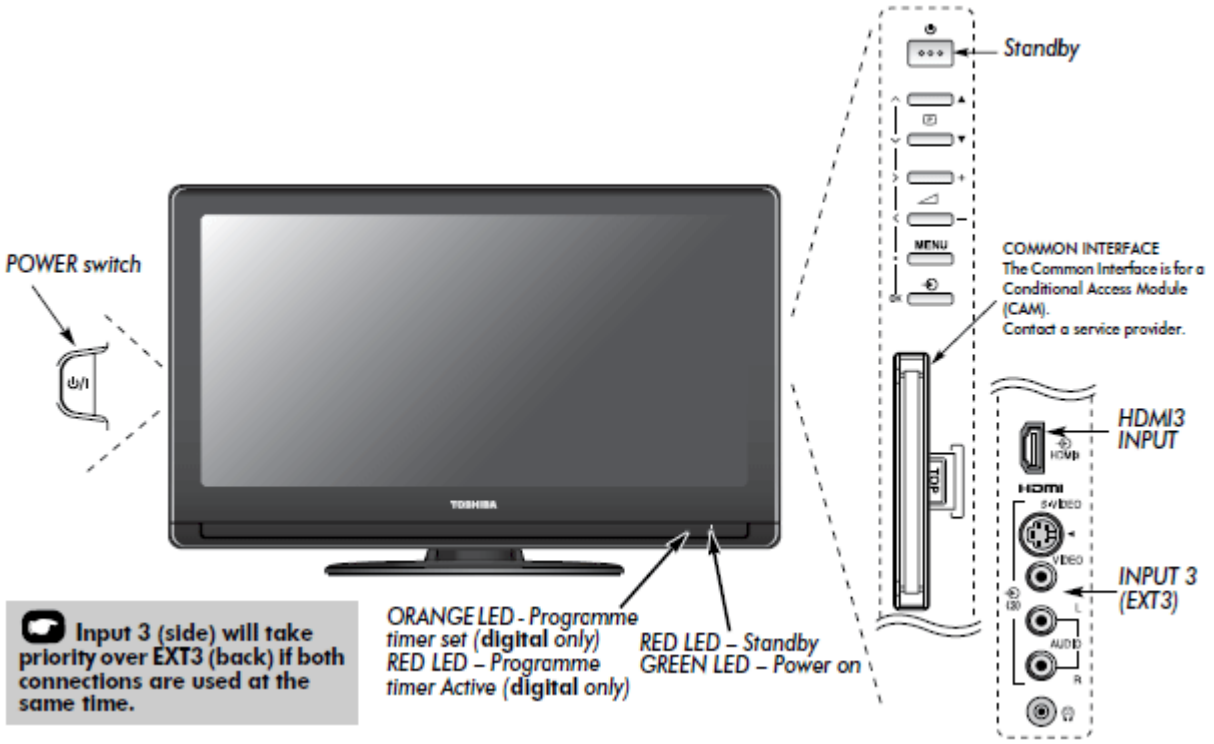
press ⏸/⏯ to PAUSE/STEP
press ▶ to PLAY
press ◀◀ to REWIND
press ▶▶ to FAST FORWARD
press ⏏ to EJECT
press ■ to STOP
press ⏮ to SKIP-REWIND
press ⏭ to SKIP-FORWARD

* T=TV mode, R=REGZA-LINK mode, D=DVD mode

FUNCTION AND OPERATION

Controls and Input Connections

A wide variety of external equipment can be connected to the input sockets on the side of the television. Whilst all the necessary adjustments and controls for the television are made using the remote control, the buttons on the television may be used for some functions.



Switching On

If the RED LED is unlit check that the mains plug is connected to the power supply and press the ⏻/I (POWER) button on the left side of the television to switch the television on. If the picture does not appear press ⏻ on the remote control, it may take a few moments. The GREEN LED will be lit.

To put the television into Standby press ⏻ on the remote control. To view the television press ⏻ again. The picture may take a few seconds to appear.

Using the Remote Control

Press MENU on the remote control to see the menus.

The menu appears as a list of six topics. As each symbol is selected by pressing ◀ or ▶ on the navigation ring on the remote control, its respective options will appear below.

NOTE: The same menu is displayed in DTV (Digital TV) and ATV (Analogue TV) modes; however some items are greyed out in each case.

To use the options, press ▲ and ▼ on the remote control to move up and down through them and OK, ◀ or ▶ to select the required choice. Follow the on-screen instructions. The functions of each menu are described in detail throughout the manual.

Using the Controls and Connections

To alter the volume press – ◿ +.

To alter the programme position press ▼ P ▲.

Press **MENU** and <, >, ^ or v to control the sound and picture options.

Press **MENU** twice to finish.

An S-video cable provides better picture performance than a composite video cable. If you connect an S-video cable to **EXT3**, be sure to disconnect the standard (composite) video cable or the picture performance will be unacceptable.

To select an external input, press ⊕ until the appropriate input source is selected.

Please always refer to the owner's manual of the equipment to be connected for full details.

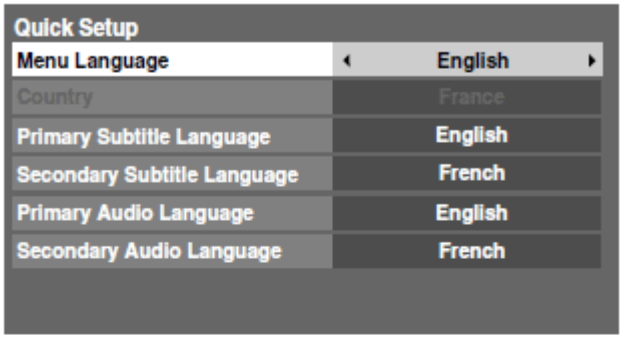
FUNCTION AND OPERATION

Startup Application

Before switching on the television put your decoder and media recorder to **Standby** if they are connected.

Quick Setup

1 Press the ⏻ button. The **Quick Setup** screen will appear. This screen will appear the first time that the television is switched on and each time "**Reset TV**" is executed.



2 Press ◀ or ▶ to select the menu language **Français** or **English**.

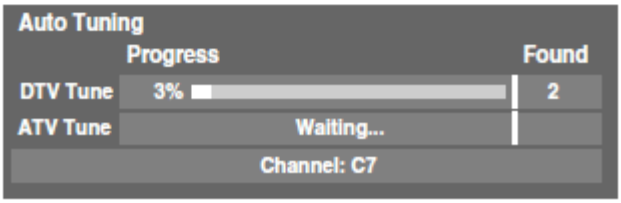
Country is fixed to **France** in this model.

3 Press ▼ to highlight **Primary Subtitle Language, Secondary Subtitle Language, Primary Audio Language** or **Secondary Audio Language** and use ◀ or ▶ to select your preferred language.

4 Press OK to display the **Auto Tuning** startup screen. To execute **Auto Tuning** highlight **Start Scan** and press OK again.

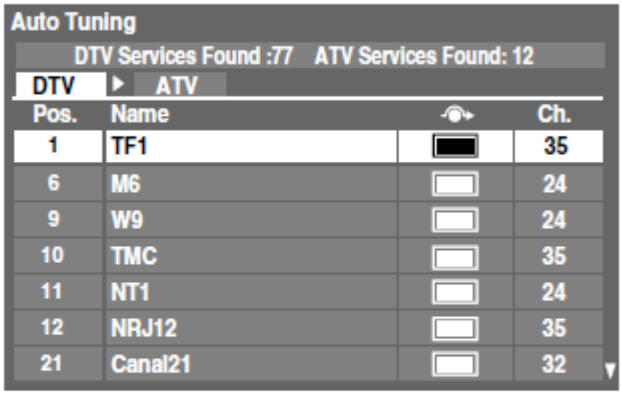
The television will start to search for available ATV and DTV channels. The progress bar will indicate the scan status.

You must allow the television to complete the search.

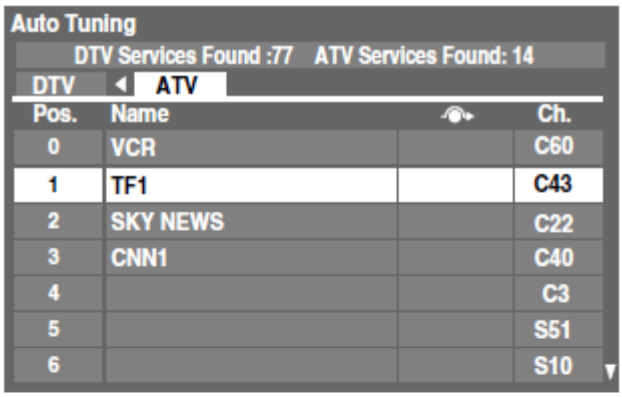


When the search is complete the television will automatically select position one.

The **Auto Tuning** results screen will display the services that are found.



5 Press ◀ or ▶ to view the **DTV** (digital channel) or **ATV** (analogue channel) lists.



6 Use ▼ or ▲ to move through the list to select a channel then press (OK) to view.

NOTE: The time will be set automatically by transmission but can be advanced or decreased by up to 3 hours using **Local Time Setting**.

PLEASE NOTE

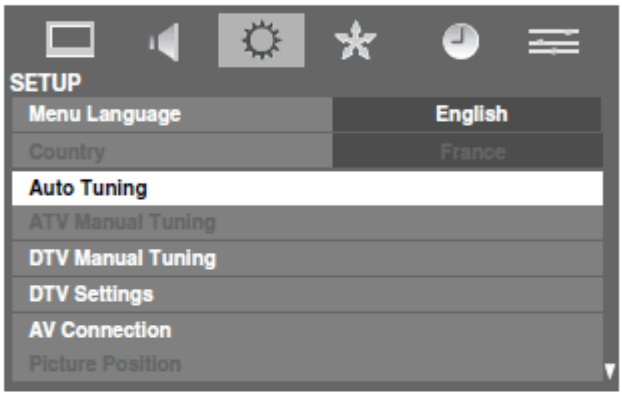
The **Quick Setup** menu can also be displayed at any time from the **SETUP** menu.

Auto Tuning

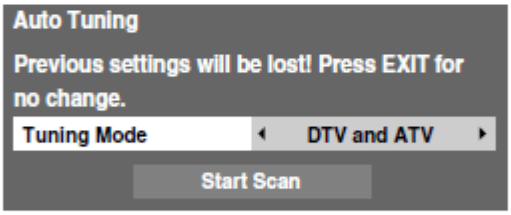
NOTE: As new services are broadcast it will be necessary to re-tune the television in order to view them.

Auto Tuning *will completely re-tune the television and can be used to up date the channel list.*
It is recommended that Auto Tuning is run periodically to ensure that all new services are added. *All current channels and settings, i.e. favourites and locked channels, will be lost.*

1 Press MENU and use ◀ or ▶ to select **SETUP** menu. Use ▼ to highlight **Auto Tuning**. Press OK.



2 A screen will appear warning that previous programmes and settings will be deleted.



Use ◀ or ▶ to select **DTV and ATV**, **DTV** or **ATV**, then highlight **Start Scan** and press OK to continue with the **Auto Tuning**.

The television will start to search for all available DTV and/or ATV services.

You must allow the television to complete the search.

When the search is complete the **Auto Tuning** screen will display the services found.

3 Use ▼ or ▲ to move through the list to select a channel then press OK to view.

Auto Channel Update

If the **Auto Channel Update** is set to **On**, when the TV is in standby mode, Digital Tuning is automatically executed and any new channels are stored.

1. Press MENU, and select **SETUP** menu.
2. Use ▼ to highlight **DTV Settings** and press OK.
3. Press ▼ to select **Auto Channel Update** and use ◀ or ▶ to select **On**.

Analogue Switch-off

This is a **digital** television which is integrated to allow the use of both **digital** and **analogue** services. However, during the lifetime of this set it is very likely that **analogue** services will be switched off to allow for more new **digital** services.

This 'switch-off' will happen in a number of phases, which will be advertised in your area well in advance. It is recommended that at each phase the television is re-tuned to ensure that existing and new **digital** services can be viewed without disruption.

FUNCTION AND OPERATION

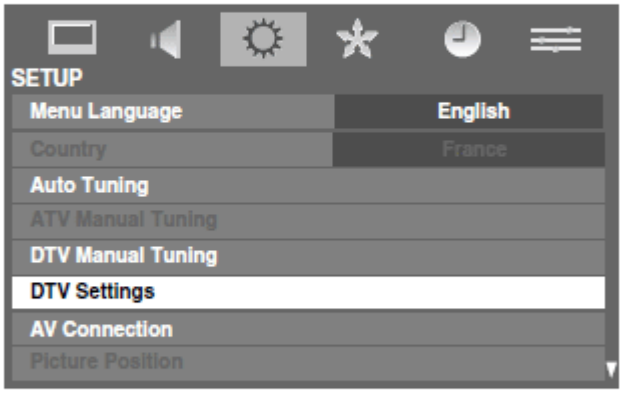
DTV Settings

Channels

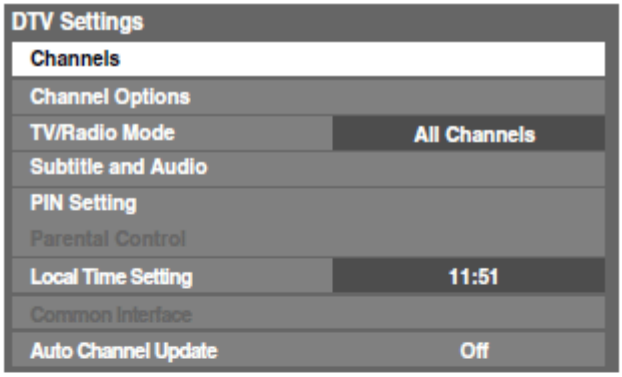
The channel order may be changed to suit your personal preference.

1. Press (MENU), and select **SETUP** menu.

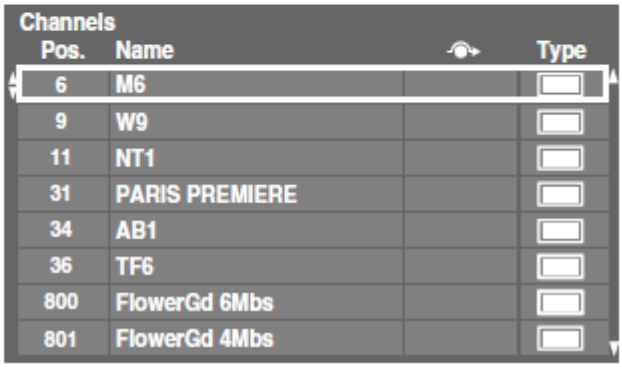
2. Use ▼ to highlight **DTV Settings** and press (OK).



3. Select **Channels** from the **DTV Settings** menu and press (OK).



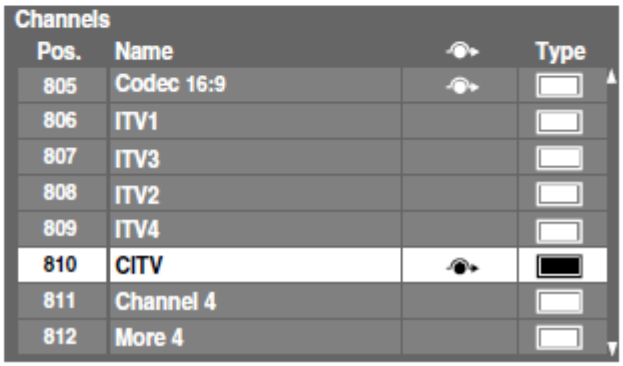
4. With the list of channels showing use ▼ or ▲ to highlight the channel you want to move and press (OK).



5 Use ▼ or ▲ to move through the list to your *preferred* position. As you do so the other channels will move to make room.

6 Press (OK) to store your move. Repeat as necessary, then press (EXIT).

The Skip setting for the highlighted channel can be switched between "Set/Not Set" by pressing the **RED** button on the remote control. This feature allows you to set channels that will be skipped when **P∨** or **P∧** are used to tune. However, these channels will still be available by direct number entry (when tuned a icon will be displayed in the banner to indicate as a skipped channel).

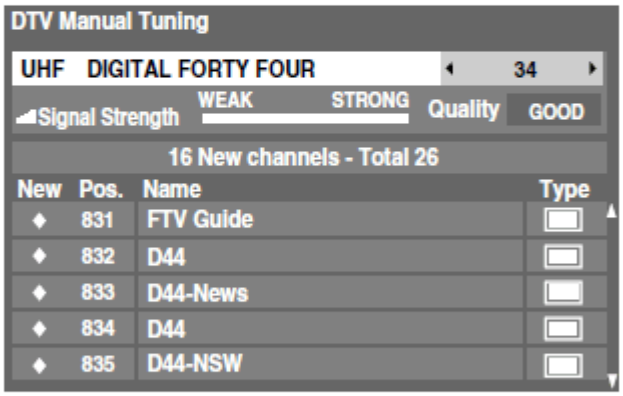


Manual Tuning

This feature is available for service engineers or can be used for direct channel entry if the multiplex channel is known.

1 Select **DTV Manual Tuning** from the **SETUP** menu and press (OK).

2 Enter the multiplex number using the number buttons or use ◀ or ▶ to adjust the number up or down and then press (OK). The television will automatically search for that multiplex.



When the multiplex is found any channels that are not currently in the channel list will be added and the channel information at the top of the screen will be updated.

3 Repeat as necessary. Press (EXIT) to finish.

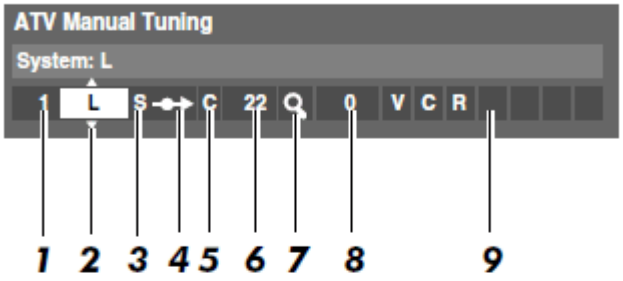
FUNCTION AND OPERATION

ATV Manual Tuning

Tuning

The television can be tuned-in manually using **ATV Manual Tuning**. For example: if the television cannot be connected to a media recorder/decoder with a SCART lead or when you want to tune-in a station on another **System**.

Use ◀ and ▶ to move across the screen and select any of the ATV Manual Tuning options. Then use ▲ or ▼ to adjust the settings.



1 Position:
The number to be pressed on the remote control to tune the channel.

2 System:
Specific to certain areas.

3 Colour System:
Factory set to Auto, should only be changed if problems are experienced, i.e. NTSC input from external source.

4 Skip:
means nothing has been stored or the facility to skip the channel is ON.

5 Channel:
The channel classification and the channel number on which a station is being broadcast.

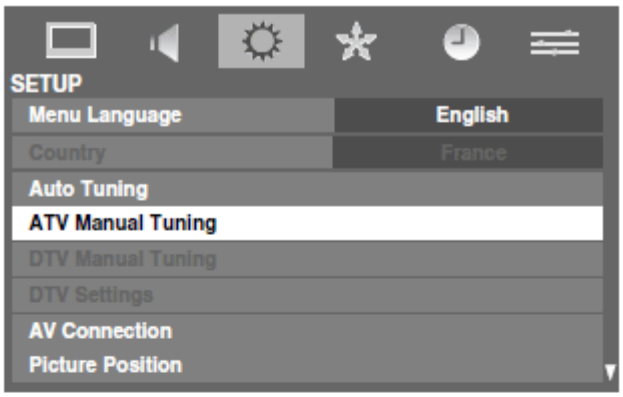
6 Search:
Search up and down for a signal.

7 Fine Tuning:
Only used if interference/weak signal is experienced.

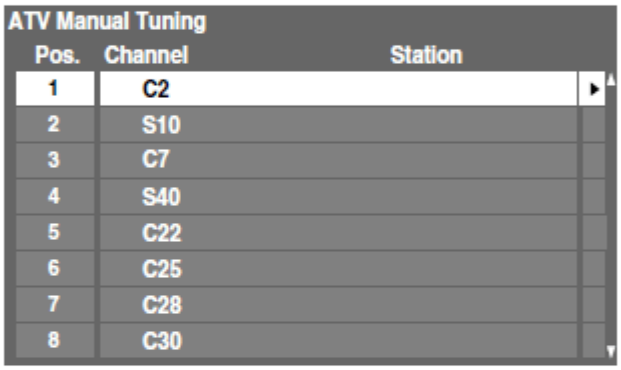
8 Station:
Station identification. Use the ▲ or ▼ and ◀ or ▶ buttons to enter up to seven characters.

To allocate a position on the television for a decoder and media recorder: turn the decoder on, insert a pre-recorded film in the media recorder and press PLAY, then manually tune.

1 Press (MENU) and using ◀ or ▶ select the **SETUP** menu. With ▼ highlight **ATV Manual Tuning** and press (OK) to select.



2 Use ▲ or ▼ to highlight the position required e.g. we suggest ***Pos. 0*** for a media recorder.



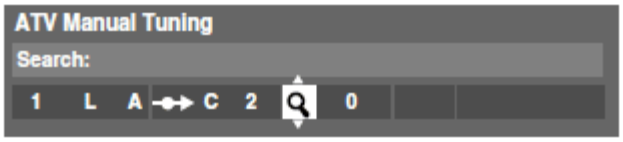
Different **Channel** numbers may be displayed.

3 Press (OK) to select. If the channel is set to skip, **Skip** must be removed before storing.

4 Press ▶ to select **System** and use ▲ or ▼ to change if required.

5 Then press ▶ to select **Search**.

6 Press ▲ or ▼ to begin the search. The search symbol will flash.



7 Each signal will show on the television, if it is not your media recorder, press ▲ or ▼ again to restart the search.

8 When your media recorder signal is found, press ▶ to move along to **Station**. With ▲, ▼, ◀ and ▶ put in the required characters, *e.g.* **VCR**.

9 Press (OK) to store.

10 Repeat for each ***position*** you want to tune or, press (MENU) to return to the list of channels and select the next number to tune.

11 Press (EXIT) when you have finished.

12 To name external equipment, *e.g.* DVD on EXT2, press ⇥ to select ⇥2, then select **Manual Settings** from the **SETUP** menu.

13 Press ▶ to select **Label** then using ▲, ▼, ◀ and ▶ put in the required characters.

PLEASE NOTE

This television has direct channel entry if the channel numbers are known.
Select the **ATV Manual Tuning** screen in ***Step 3***.
Enter the **Position number**, the **System**, then **C** for standard (terrestrial) channels or **S** for cable channels and the **Channel** number. Press (OK) to store.

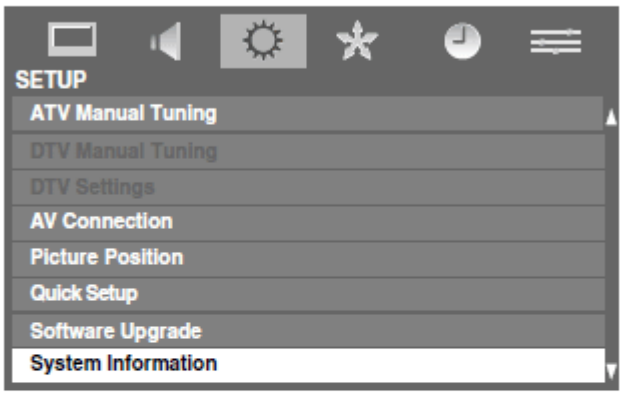
FUNCTION AND OPERATION

Software Upgrade

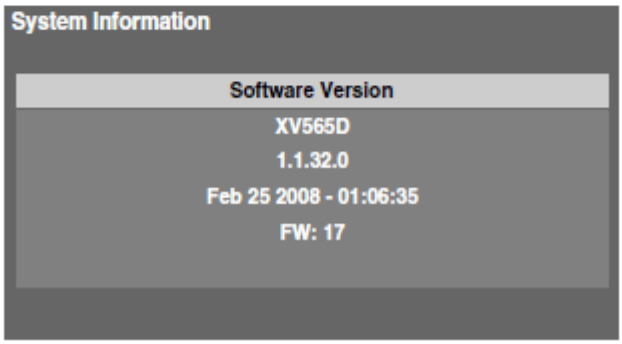
Version

This feature can be used to check the version of software currently installed.

1 From the **SETUP** menu press ▲ or ▼ to select **System Information**.



2 Press (OK) to display the **Software Version**.



Auto Upgrade

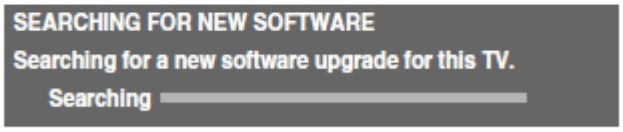
When **Auto Upgrade** *is set to* **On** *(default setting), the television will automatically upgrade while in standby if new software is available.*

1. From the **SETUP** menu press ▲ or ▼ to select **Software Upgrade** and press (OK).
2. Press ▼ to select **Auto Upgrade**.
3. Use ◀ or ▶ to select **On** or **Off**.

Searching for New Software

If preferred, software upgrades can be searched for manually using **Search for New Software**.

1. In the **Software Upgrade** menu press ▲ or ▼ to select **Search for New Software**.
2. Press (OK). The television will automatically start searching for a software upgrade, the progress bar will move along the line.

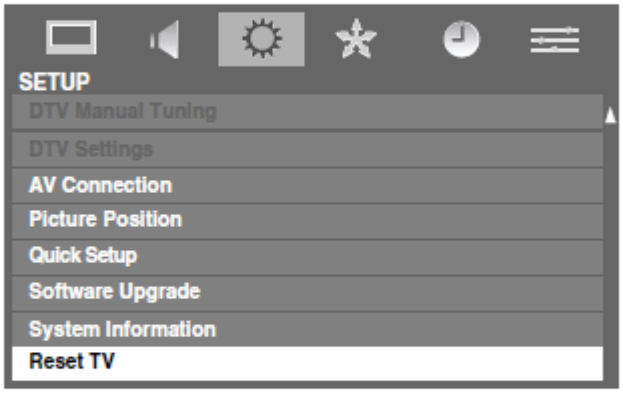


If an upgrade is found the television will automatically start downloading. If not, a screen will appear stating that an upgrade is unavailable.

Reset TV

Selecting **Reset TV** *will reset all TV settings, including stored channels, to their original factory values.*

1 In the **SETUP** menu press ▼ until **Reset TV** is highlighted.



2 Press (OK) to select. A screen will appear warning that all settings will be lost. Press (OK) to continue.

When the set powers back on, the **Quick Setup** screen will appear. Press (OK) to continue, the television will then auto tune.

SAFETY INSTRUCTION

Handling the LCD Module

Safety Precaution

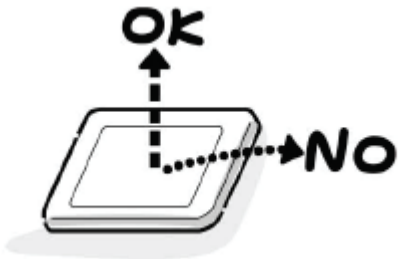
In the event that the screen is damaged or the liquid crystal (fluid) leaks, do not breathe in or drink this fluid.
Also, never touch this fluid. Such actions could cause toxicity or skin irritation. If this fluid should enter the mouth, rinse the mouth thoroughly with water. If the fluid should contact the skin or clothing, wipe off with alcohol, etc., and rinse thoroughly with water. If the fluid should enter the eyes, immediately rinse the eyes thoroughly with running water.

Precautions for Handling the LCD Module

CAUTION: The metal edges of the LCD module are sharp, handle it with care.

The LCD module can easily be damaged during disassembly or reassembly; therefore, always observe the following precautions when handling the module.

1. When attaching the LCD module to the LCD cover, position it appropriately and fasten at the position where the display can be viewed most conveniently.



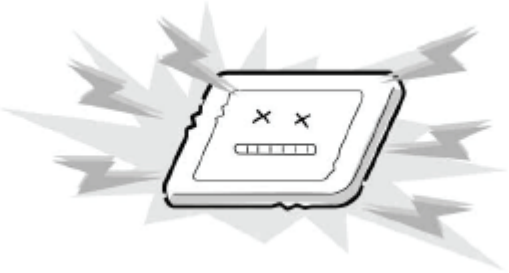
2. Carefully align the holes at all four corners of the LCD module with the corresponding holes in the LCD cover and fasten with screws. Do not strongly push on the module because any impact can adversely affect the performance. Also use caution when handling the polarized screen because it can easily be damaged.

3. If the panel surface becomes soiled, wipe with cotton or a soft cloth. If this does not remove the soiling, breathe on the surface and then wipe again.
   If the panel surface is extremely solied, use a CRT cleaner as a cleaner. Wipe off the panel surface by drop the cleaner on the cloth. Do not drop the cleaner on the panel. Pay attention not to scratch the panel surface.

4. Leaving water or other fluids on the panel screen for an extended period of time can result in discoloration or stripes. Immediately remove any type of fluid from the screen.

5. Glass is used in the panel, so do not drop or strike with hard objects. Such actions can damage the panel.

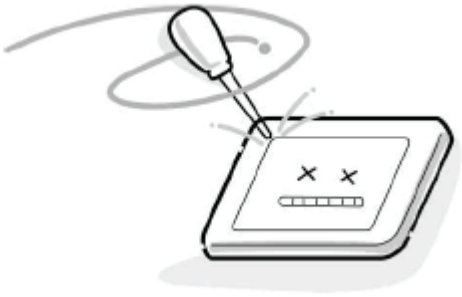
6. CMOS-LSI circuitry is used in the LCD module, so avoid damage due to static electricity. When handling the module, use a wrist ground or anchor ground.



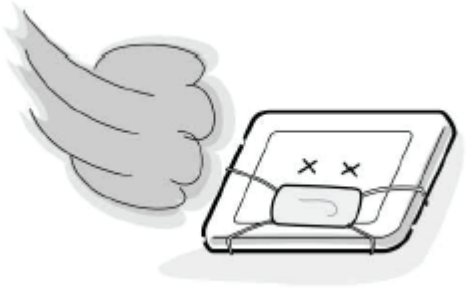
7. Do not expose the LCD module to direct sunlight or strong ultraviolet rays for an extended period of time.

8. Do not store the LCD module below the temperature conditions described in the specifications. Failure to do so could result in freezing of the liquid crystal due to cold air or loss of resilience or other damage.

9. Do not disassemble the LCD module. Such actions could result in improper operation.



10. When transporting the LCD module, do not use packing containing epoxy resin (amine) or silicon resin (alcohol or oxim). The gas generated by these materials can cause loss of polarity.



PANEL IDENTIFICATION

Panel Identification

If the several panels are alternatively used in the same model without amending the model name, the identification marking will be shown at the last digit of the set serial number on the specification label on the back cover.

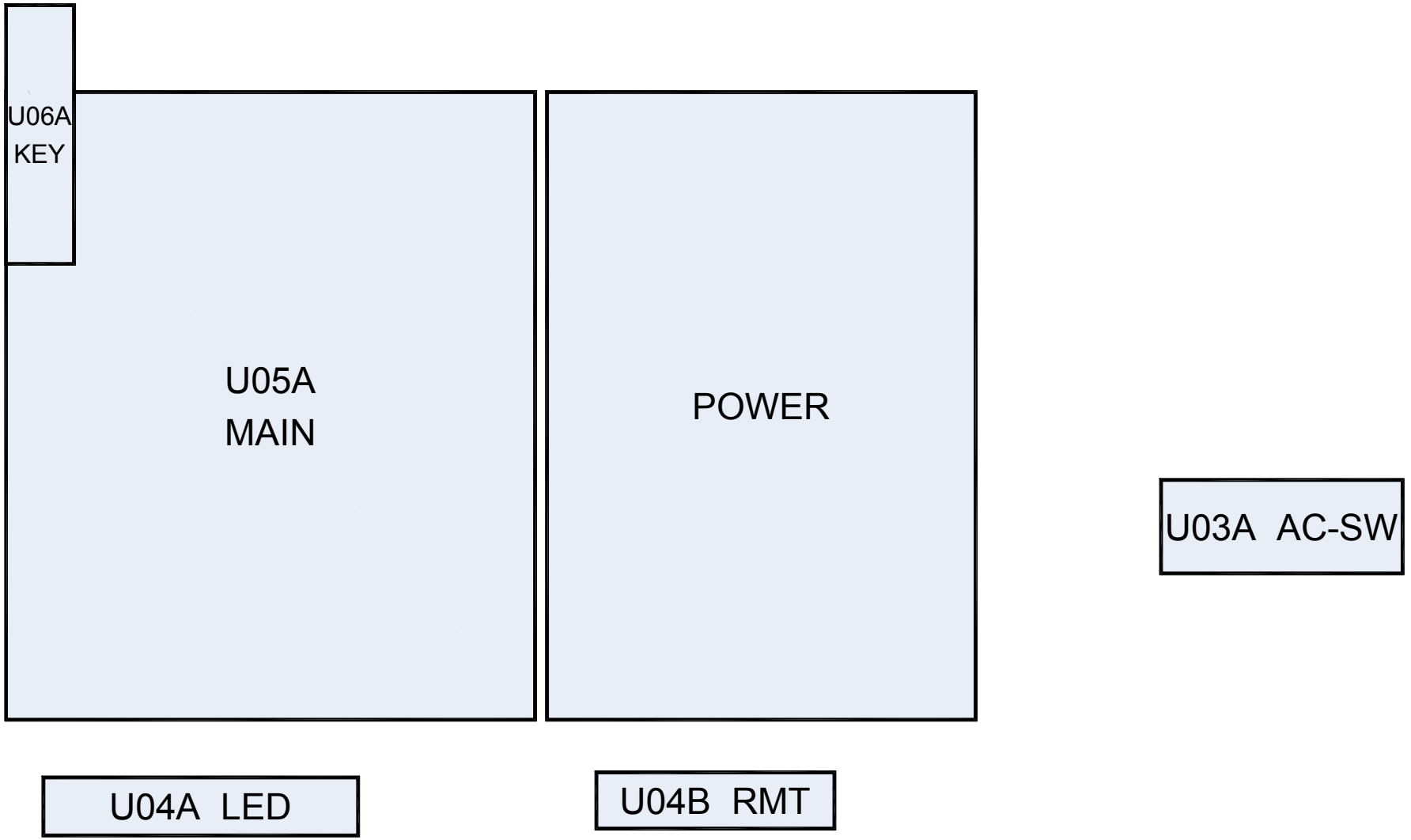
In servicing, do not alter the panel because several setting and parts are different.

Marking	Panel Vendor	Marking	Panel Vendor	Marking	Panel Vendor
A	AUO	J		S	SHARP
B		K	SAMSUNG	T	
C	CMO	L	LGD	U	
D		M		V	
E		N		W	
F		P		X	
G		Q		Y	
H	IPS	R		Z	

With this alternative use, some of key parts may differ and their combinations are indicated with the suffix marking on the location number in the part list (Miscellaneous).

e.g.

Location No.	Part No.	Description
B001A	75007869	LCD Panel, 32" LGD
B001B	75007870	LCD Panel, 32" AUO
MZ01A	75006036	LDVS Cable
MZ01B	75007893	LDVS Cable


U06A
KEY
U05A
MAIN
POWER
U03A AC-SW
U04A LED
U04B RMT

SAFETY INSTRUCTION

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" INSTRUCTIONS BELOW.

Safety Precaution

WARNING: SERVICING SHOULD NOT BE ATTEMPTED BY ANYONE UNFAMILIAR WITH THE NECESSARY PRECAUTIONS ON THIS RECEIVER. THE FOLLOWING ARE THE NECESSARY PRECAUTIONS TO BE OBSERVED BEFORE SERVICING THIS CHASSIS.

1. An isolation transformer should be connected in the power line between the receiver and the AC line before any service is performed on the receiver.

2. Always disconnect the power plug before any disassembling of the product. It may result in electrical shock.

3. When replacing a chassis in the cabinet, always be certain that all the protective devices are put back in place, such as nonmetallic control knobs, insulating covers, shields, isolation resistor-capacitor network, etc.

4. Always keep tools, components of the product, etc away from the children, These items may cause injury to children.

5. Depending on the model, use an isolation transformer or wear suitable 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.

6. Always use the replacement parts specified for the particular model when making repairs. The parts used in products require special 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 indicated in the circuit diagram or parts list.

7. Parts mounting and routing dressing of wirings should be the same as that used originally. For safety purposes, insulating materials such as isolation tube or tape are sometimes used and printed circuit boards are sometimes mounted floating. Also make sure that wirings is routed and clamped to avoid parts that generate heat and which use high voltage. Always follow the manufactured wiring routes / dressings.

8. Always ensure that all internal wirings are in accordance before re-assembling the external casing after a repairing completed. 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.

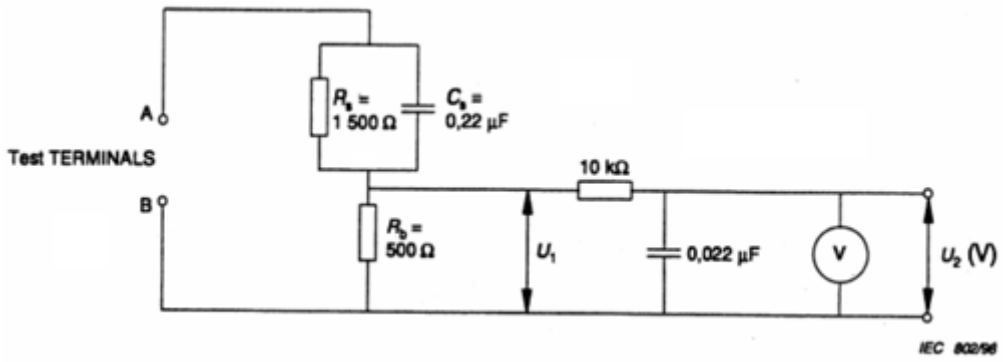
9. NEVER remodel the product in any way. Remodeling can result in improper operation, malfunction, or electrical leakage and flame, which may be hazardous.

10. Touch current check. (After completing the work, measure touch current to prevent an electric shock.)

    - Plug the AC cord directly into the AC outlet. Do NOT use an isolation transformer for this check.
    - Connect a measuring network for touch currents between each exposed metallic part on the set and a good earth ground such as a water pipe.

Annex D
(normative)

Measuring network for TOUCH CURRENTS



Resistance values in orms (Ω).

V: Voltmeter or oscilloscope
(r.m.s. or peak reading)

Input resistance : ≧ 1 MΩ
Input capacitance : ≦ 200 pF
Frequency range : 15 Hz to 1 MHz and d.c. respectively

Note: Appropriate measures should be taken to obtain the correct value in case of non sinusoidal waveforms.

The measuring instrument is calibrated by comparing the frequency factor of U_2 with the solid line in figure F.2 of IEC 60990 at various frequencies. A calibration curve is constructed showing the deviation of U_2 from the ideal curve as a function of frequency.

TOUCH CURRENT = U_2/500 (peak value).

- The potential at any point (TOUCH CURRENT) expressed as voltage U_1 and U_2 does not exceed the following value:

The part or contact of a TERMINAL is not HAZARDOUS LIVE if:

a) The open-circuit voltage should not exceed 35 V (peak) a.c. or 60 V d.c. or, if a) is not met.
b) The measurement of the TOUCH CURRENT shall be carried out in accordance with IEC 60990, with the measuring network described in **Annex D** of this standard.

The TOUCH CURRENT expressed as voltages U_1 and U_2, does not exceed the following values:
- for a.c. : U_1 = 35 V (peak) and U_2 = 0.35 V (peak);
- for d.c. : U_1 = 1.0 V

Note: The limit values of U_2 = 0.35 V (peak) for a.c. and U_1 = 1.0 V for d.c. correspond to the values 0.7 mA (peak) a.c. and 2.0 mA d.c.

Product Safety Notice

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These characteristics are often passed unnoticed by a visual inspection and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by the international hazard symbols on 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 which do not have the same safety characteristics as specified in the parts list may create electrical shock, fire, or other hazards.

SPECIFICATION

DVB-T Broadcast systems/channels
VHF 05-10 (VHF 01-05)
UHF 21-69

Broadcast systems/channels

PAL-I	UHF UK21-UK69
PAL-B/G	UHF E21-E69 VHF E2-E12, S1-S41
SECAM-L	UHF F21-F69 VHF F1-F10, B-Q
SECAM-D/K	UHF R21-R69 VHF R1-R12

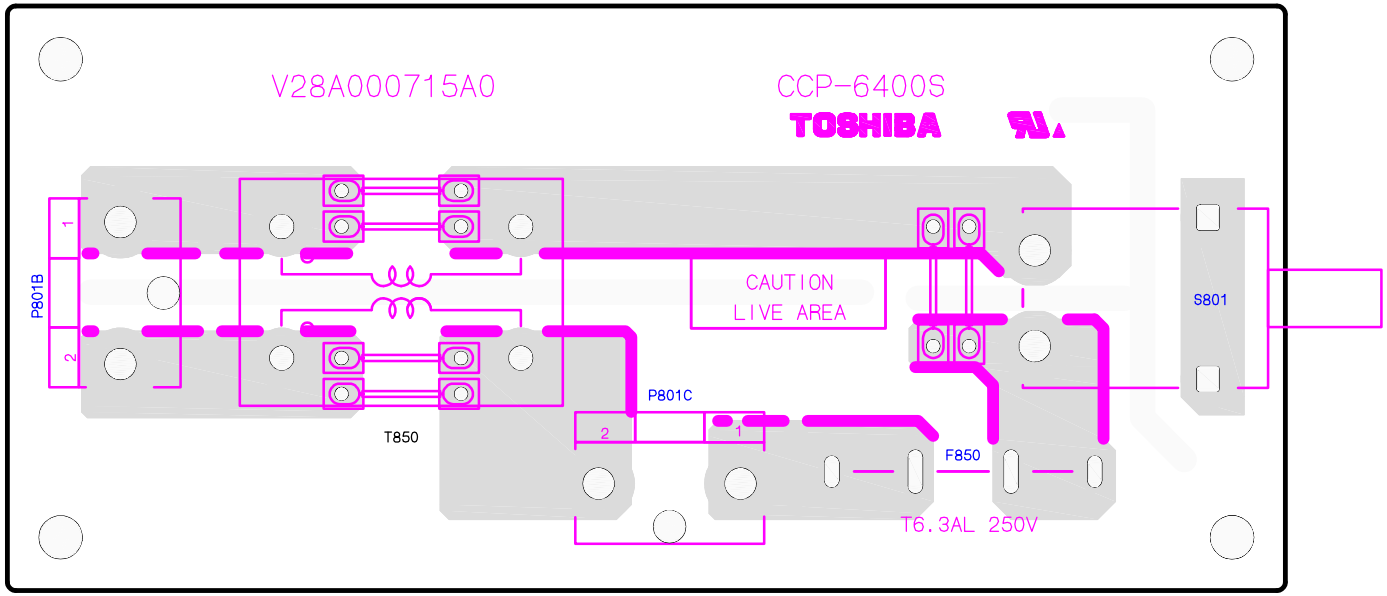
Video Input PAL, SECAM, NTSC 3.58/4.43

External connections

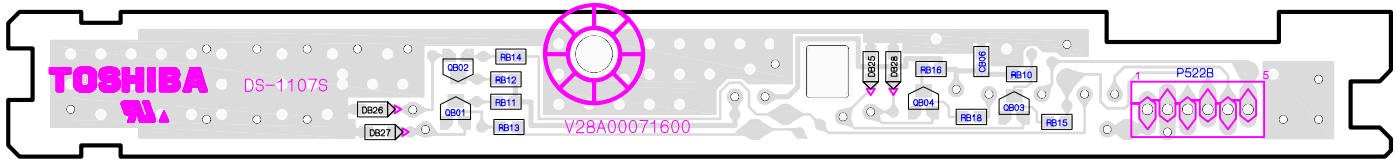
EXT1	Input/Output	21-pin SCART	RGB, A/V (AV out: TV out)
EXT2	Input/Output	21-pin SCART	A/V, S-video (AV out: TV out)
EXT3	Input	Phono jacks Phono jacks	Y, P_B/C_B, P_R/C_R Audio L + R
EXT3	Input (Side)	Phono jack Phono jacks	Video, S-video Audio L + R
HDMI 1/2	Input	HDMI™ (Audio LIP SYNC supported)	
HDMI3	Input (Side)	HDMI™ (Audio LIP SYNC supported)	
PC	Input	Mini D-sub 15-pin Analogue RGB signal	
PC/HDMI1 Audio		3.5mm mini jack	Audio
Digital Audio Output (S/PDIF)		Optical	
Output to Active Super Woofer		Phono jack	
Fixed Audio Output		Phono jacks	Audio L + R

Stereo		Nicam 2 carrier system	
Visible Screen Size (approx.)	Model	32 37 42 46 52	80cm 94cm 107cm 117cm 132cm
Display		16:9	
Sound output (at 10% distortion)		Main 10W + 10W	
Power consumption as specified in EN60107-1 : 1997	Model	32 37 42 46 52	168W 172W 203W 269W 315W
Standby (approx.)	Model	32 37 42 46 52	0.8W 0.8W 0.8W 0.8W 0.8W
Dimensions (approx.)	Model	32 37 42 46 52	57cm (H) 79cm (W) 25cm (D) 63cm (H) 90cm (W) 25cm (D) 69cm (H) 101cm (W) 26cm (D) 75cm (H) 111cm (W) 31cm (D) 84cm (H) 125cm (W) 33cm (D)
		(Height dimension includes foot stand)	
Weight (approx.)	Model	32 37 42 46 52	14.0kg 17.5kg 23.0kg 27.5kg 37.0kg
Headphone socket		3.5mm stereo	
Operating condition		Temperature 5°C - 35°C (41°F - 94°F) Humidity 20% - 80% (non-condensing)	
Accessories		Remote control 2 batteries (AAA, IEC R03 1.5V) Clip Cleaning cloth (to clean the cabinet and control panel)	

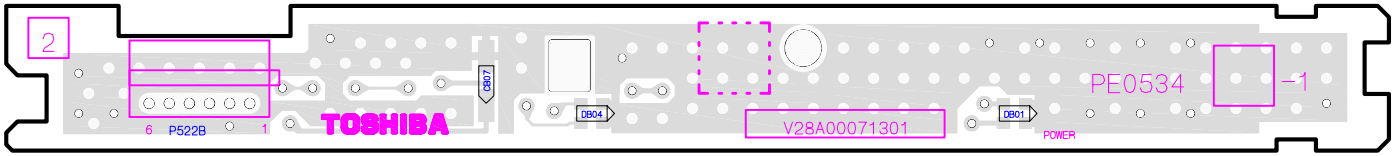
U03A AC-SW [Bottom] (PE0533)



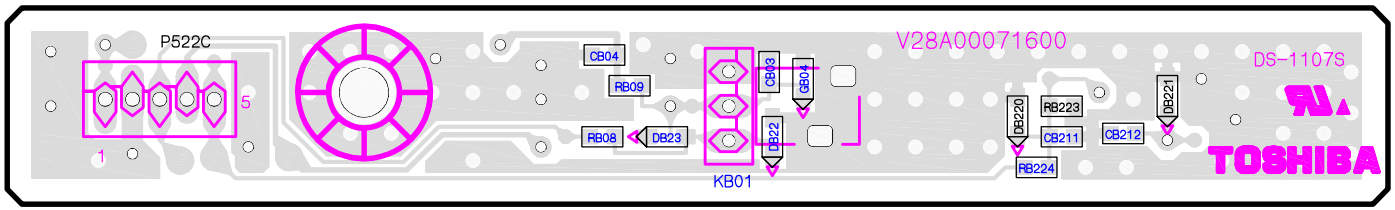
U04A LED [Bottom] (PE0534)



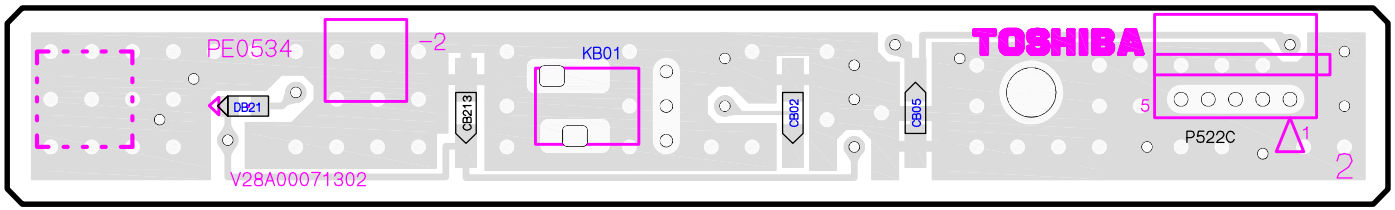
U04A LED [Top] (PE0534)



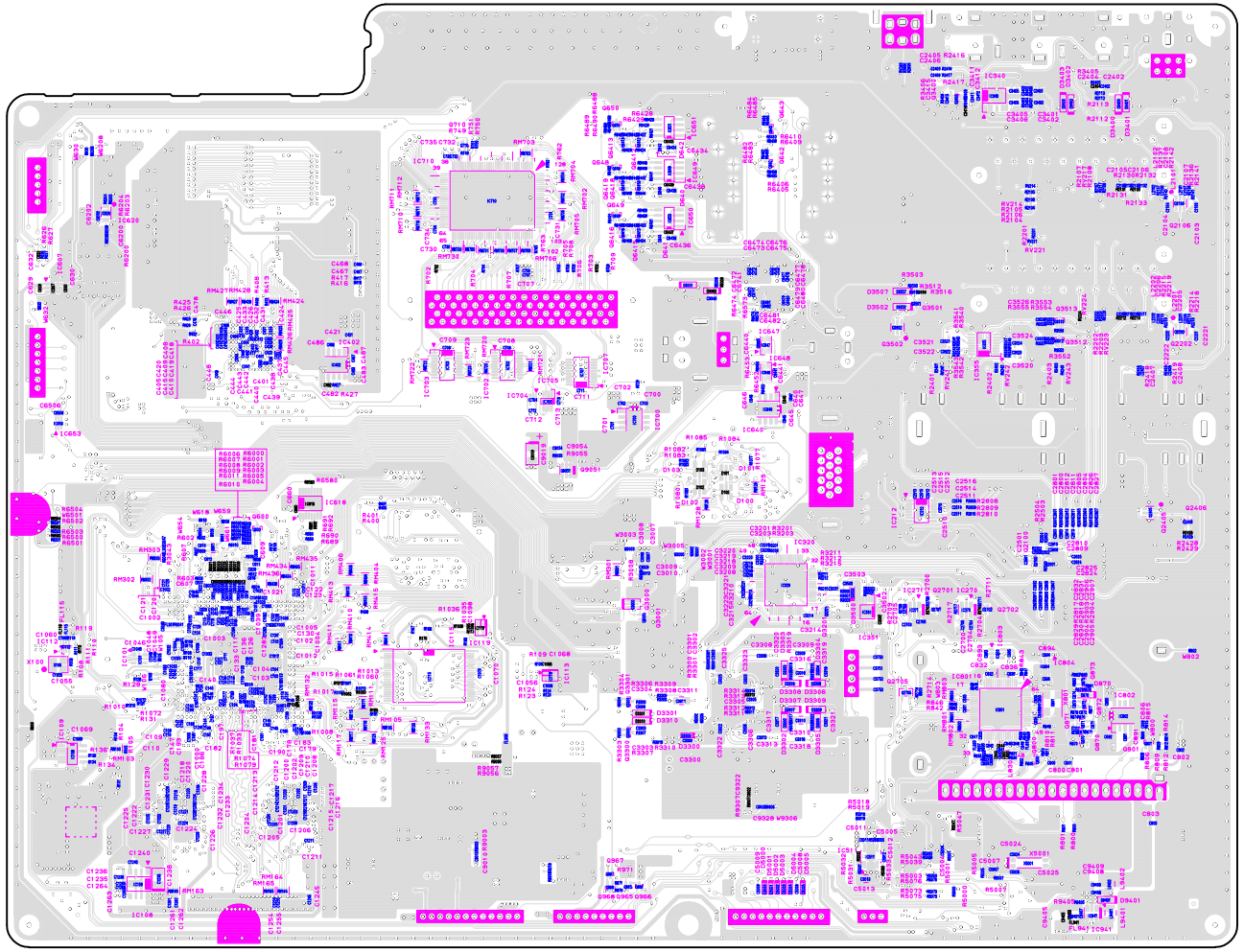
U04B RMT [Bottom] (PE0534)



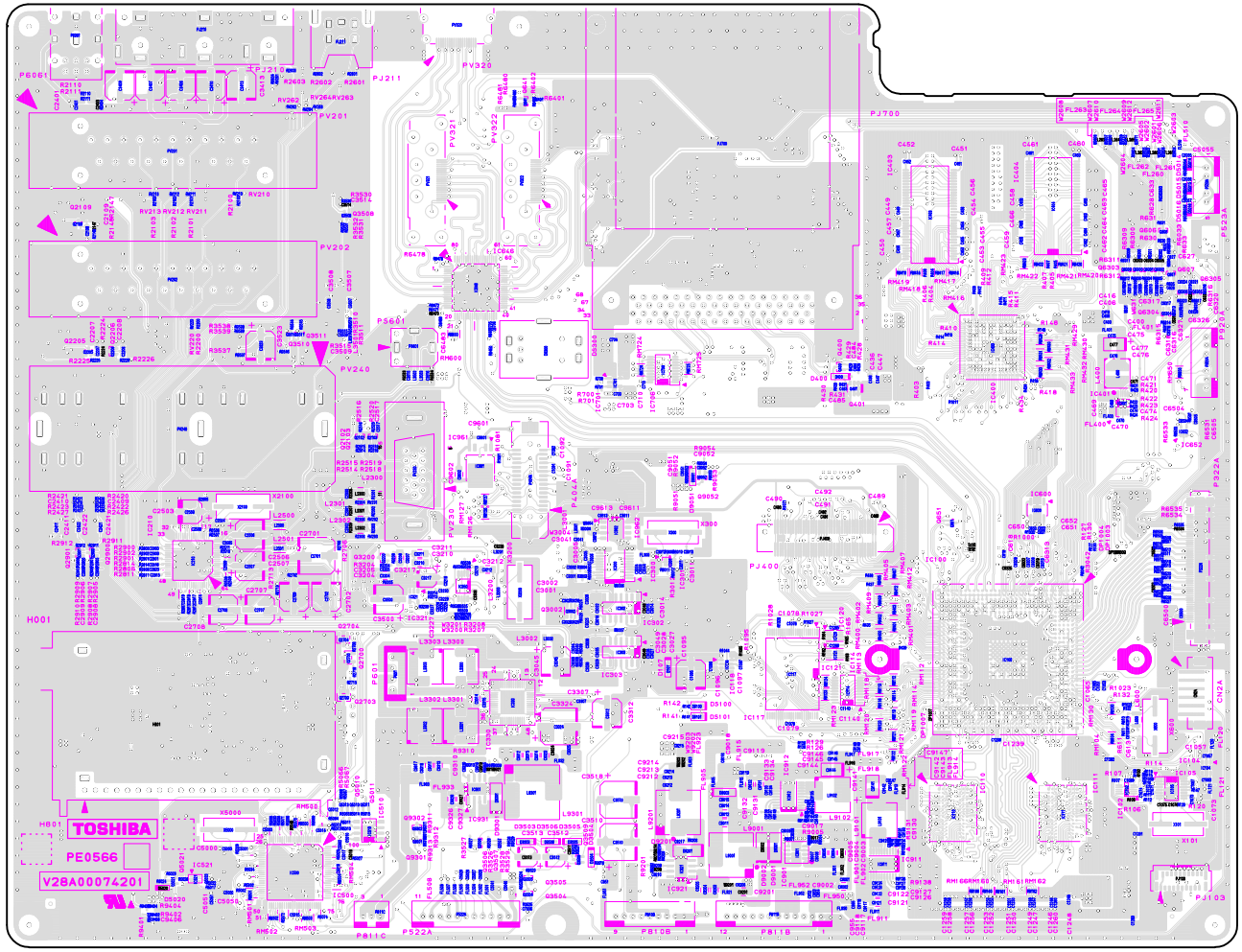
U04B RMT [Top] (PE0534)



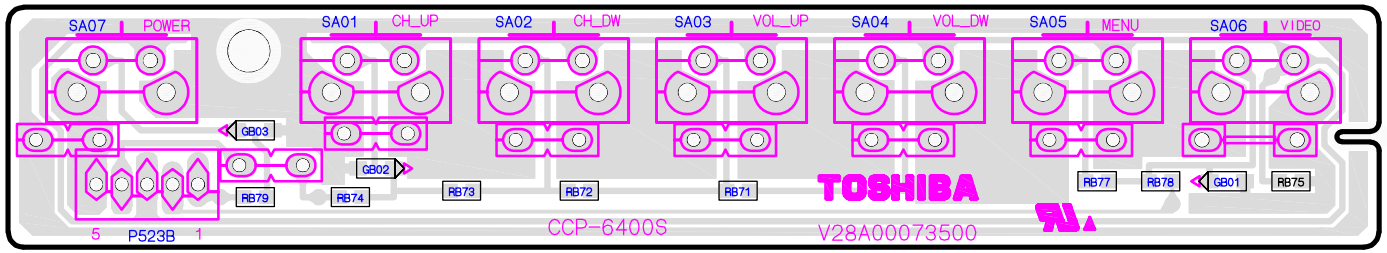
U05AS MAIN [Bottom] (PE0566)

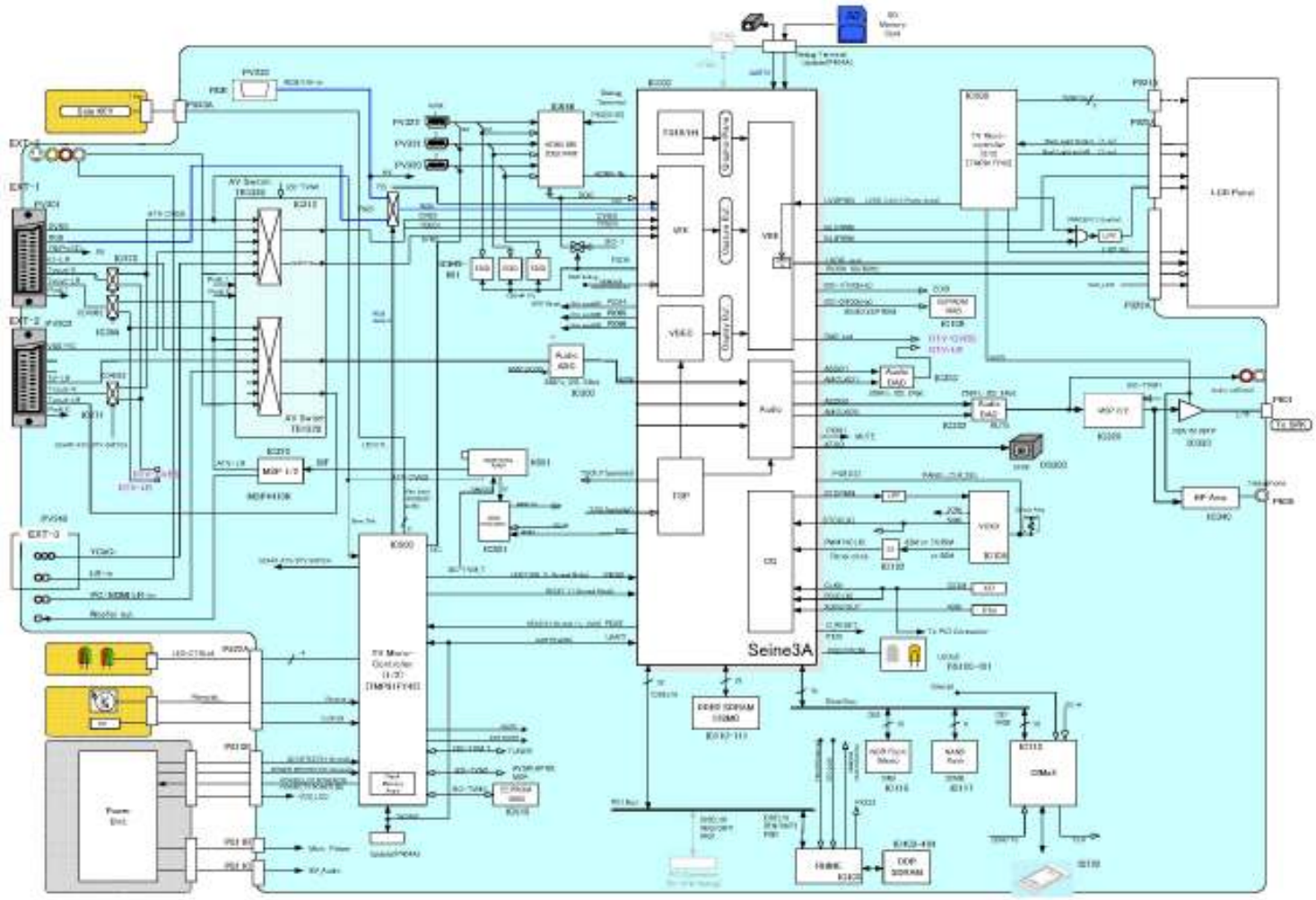


U05AS MAIN [Top] (PE0566)



U06A KEY [Bottom] (PE0560)




Seine3A

SCHEMATIC DIAGRAM

Precaution

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION" FOR DIRECT VIEW CTV ONLY, "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" OF THIS MANUAL.

CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list.

The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the SAFETY PRECAUTION and PRODUCT SAFETY NOTICE.

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 1/6 W 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
   10 W : Cement of 10 watt
   K : ±10 %
   G : ±2 %
   F : ±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 50 V, unless otherwise noted as the following marks.

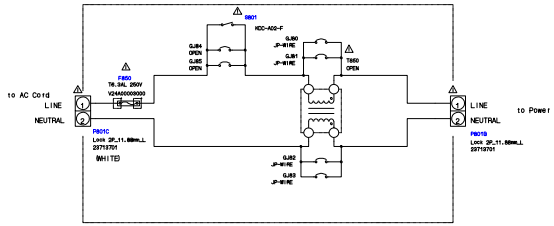
⊣⊢ = Electrolytic capacitor
⊣⊢ = Mylar capacitor

3. The parts indicated with "⚠" have special characteristics, and should be replaced with identical parts only.

4. Voltages read with DIGITAL MULTI-METER from point indicated to chassis ground, using a color bar signal with all controls at normal, line voltage at nominal AC volts.

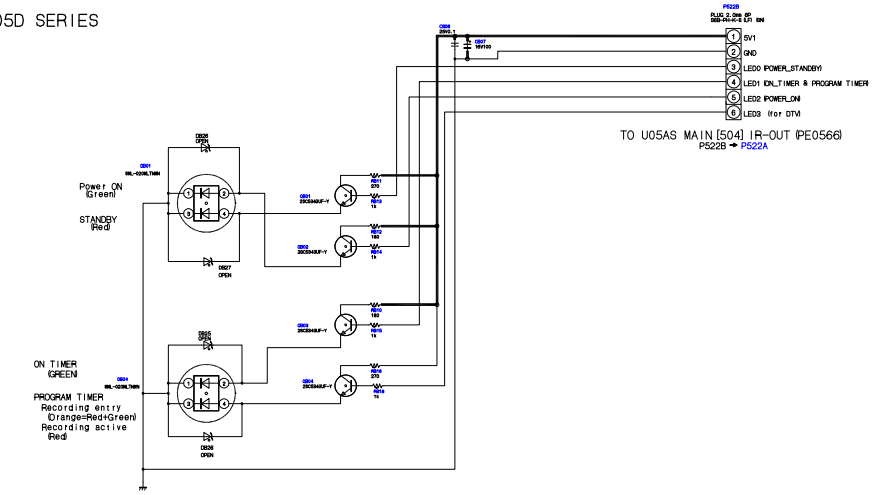
5. Waveforms are taken receiving color bar signal with enough sensitivity.

6. Voltage reading shown are nominal values and may vary ±20 % except H.V.



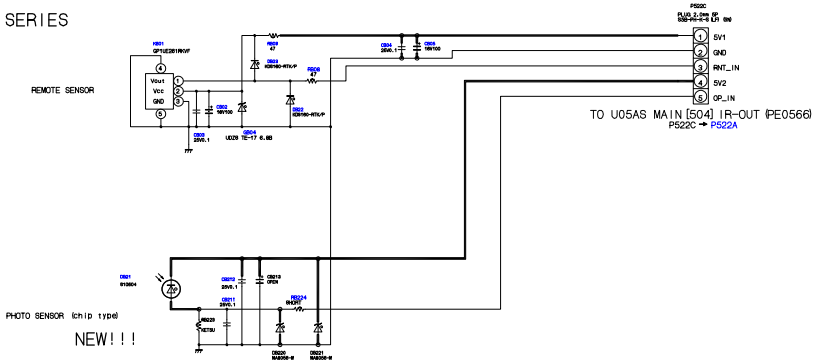
U03A AC-SW [1] AC-SW (PE0533)

for CV/RV/XV505D SERIES

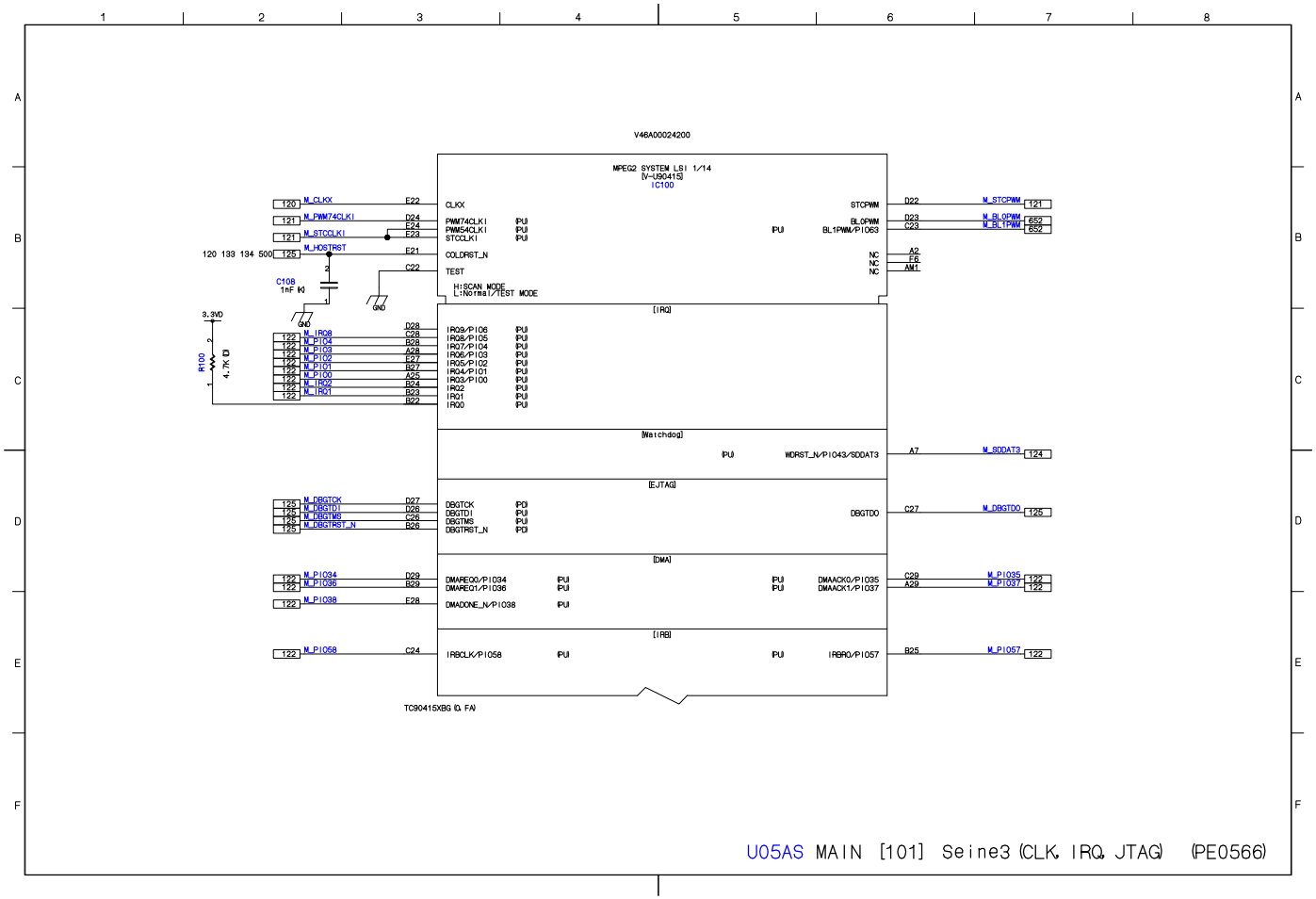


U04A LED [1] LED (PE0534)

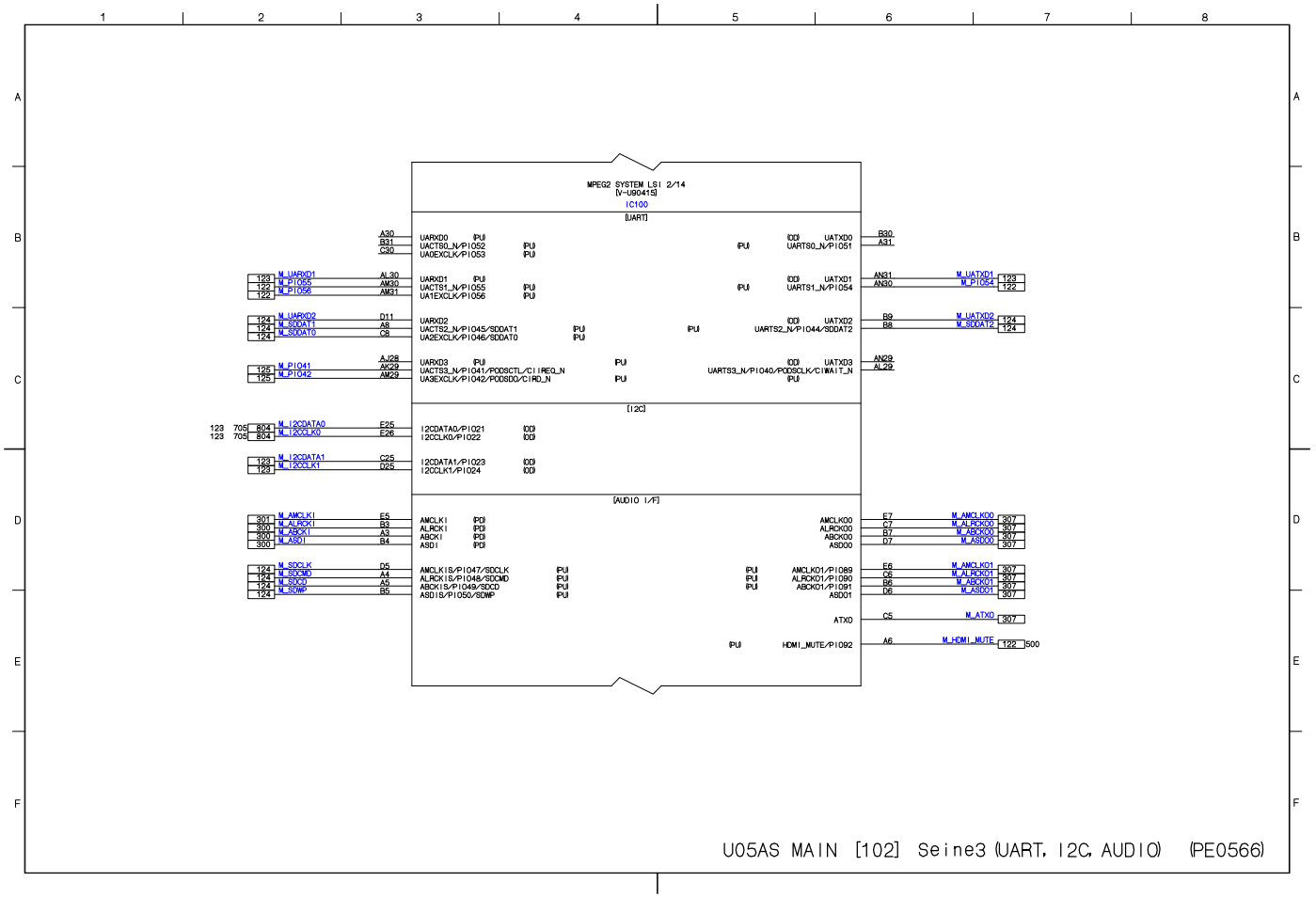
for CV/RV/XV505D SERIES



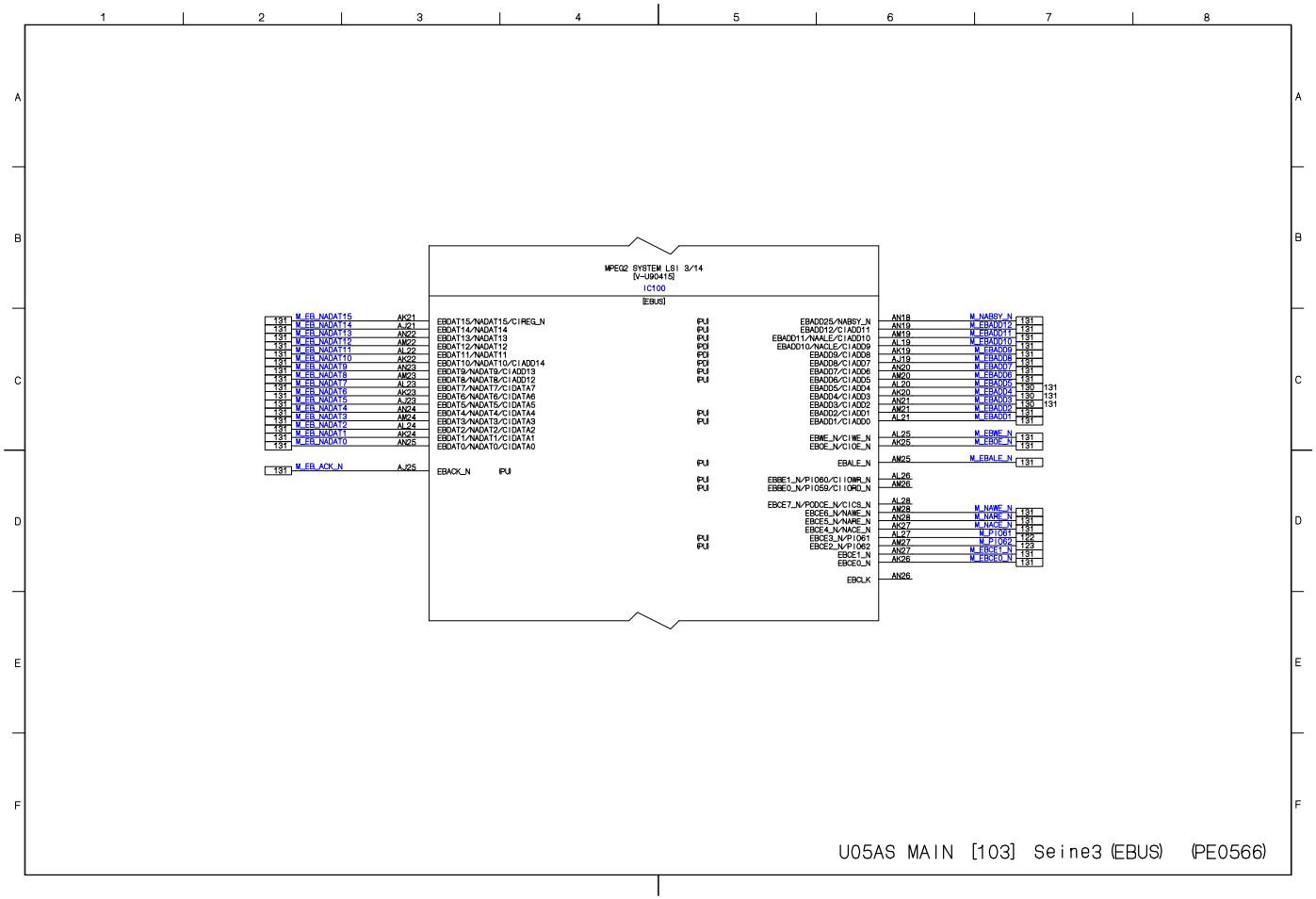
U04B RMT [2] RMT & AUTO IRIS (PE0534)

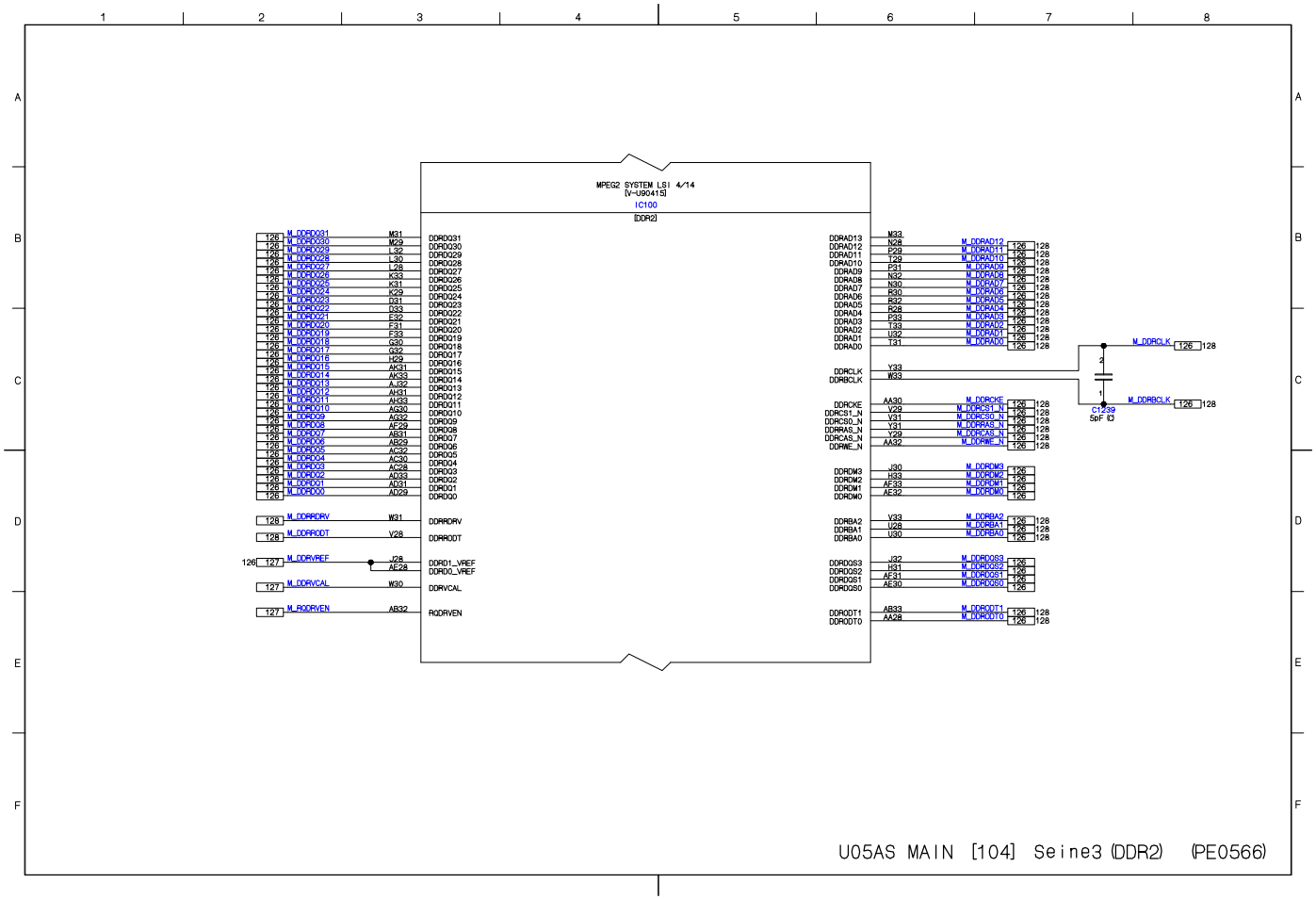


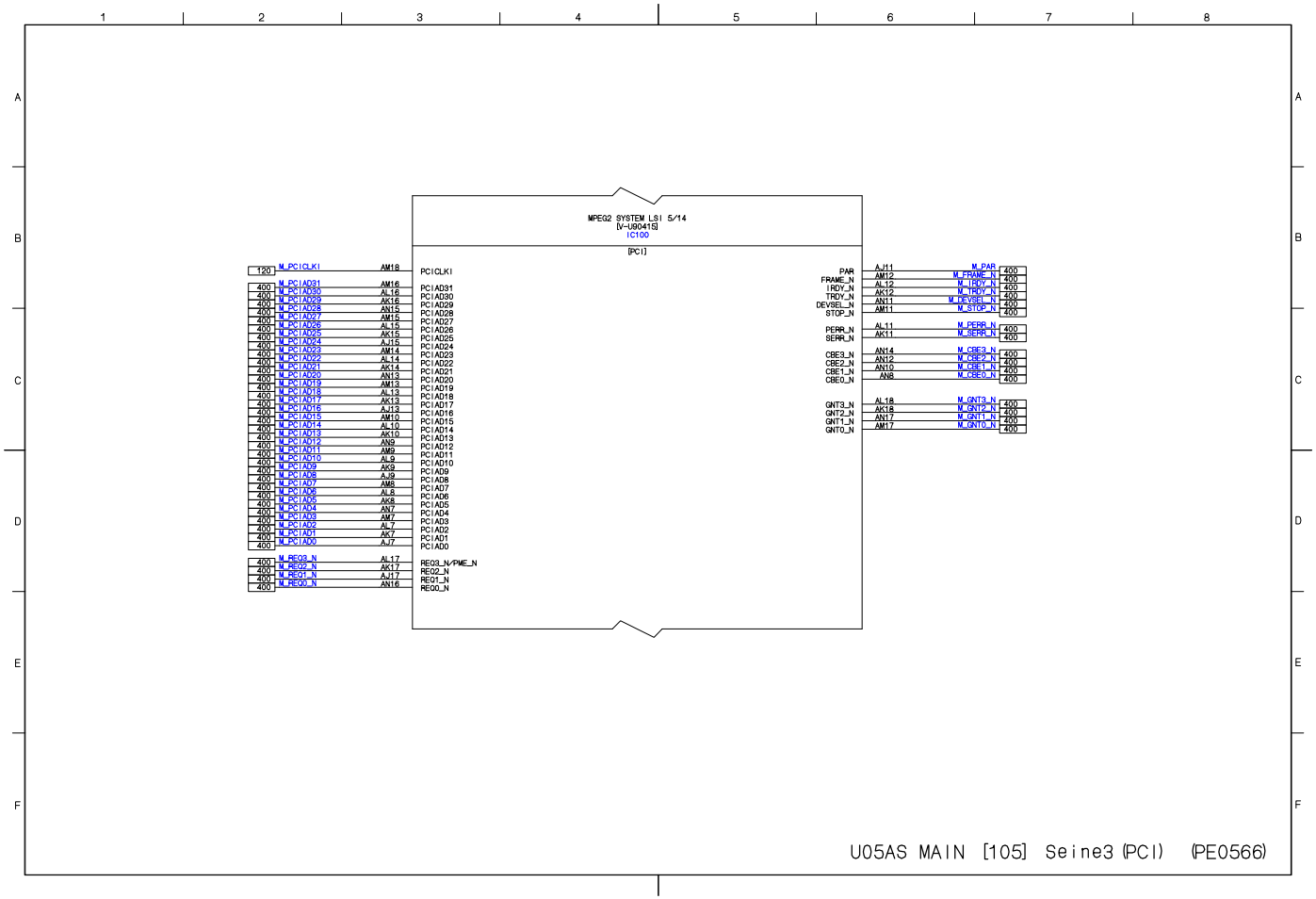
U05AS MAIN [101] Seine3 (CLK, IRQ, JTAG) (PE0566)



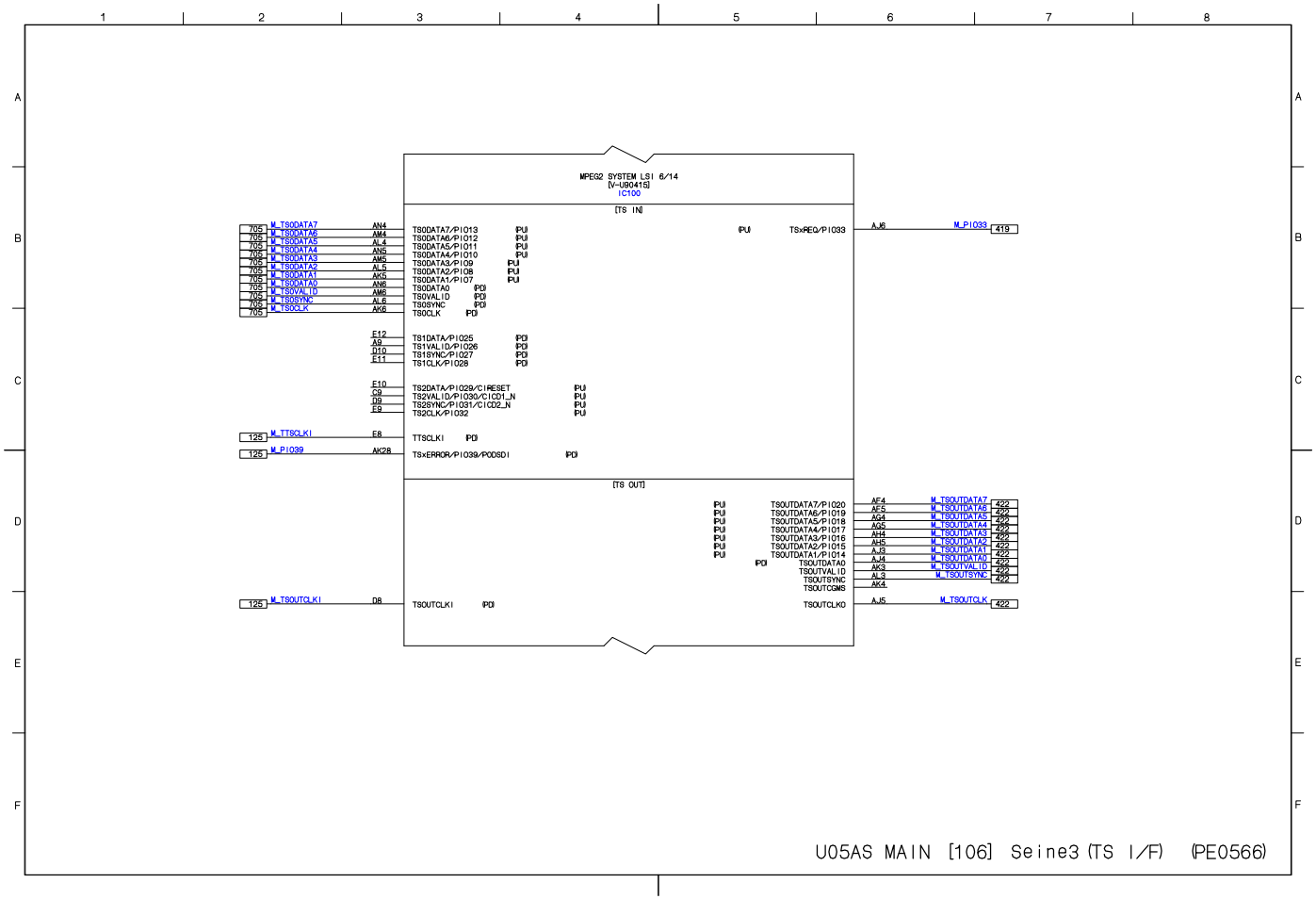
U05AS MAIN [102] Seine3 (UART, I2C, AUDIO) (PE0566)


MPEG2 SYSTEM LSI 3/14
[V-U90415]
IC100
[EBUS]
M_EB_NADAT15 AK21
M_EB_NADAT14 AJ21
M_EB_NADAT13 AN22
M_EB_NADAT12 AM22
M_EB_NADAT11 AL22
M_EB_NADAT10 AK22
M_EB_NADAT9 AN23
M_EB_NADAT8 AM23
M_EB_NADAT7 AL23
M_EB_NADAT6 AK23
M_EB_NADAT5 AJ23
M_EB_NADAT4 AN24
M_EB_NADAT3 AM24
M_EB_NADAT2 AL24
M_EB_NADAT1 AK24
M_EB_NADAT0 AN25
M_EB_ACK_N AJ25
EBDAT15/NADAT15/CIREG_N
EBDAT14/NADAT14
EBDAT13/NADAT13
EBDAT12/NADAT12
EBDAT11/NADAT11
EBDAT10/NADAT10/CIADD14
EBDAT9/NADAT9/CIADD13
EBDAT8/NADAT8/CIADD12
EBDAT7/NADAT7/CIDATA7
EBDAT6/NADAT6/CIDATA6
EBDAT5/NADAT5/CIDATA5
EBDAT4/NADAT4/CIDATA4
EBDAT3/NADAT3/CIDATA3
EBDAT2/NADAT2/CIDATA2
EBDAT1/NADAT1/CIDATA1
EBDAT0/NADAT0/CIDATA0
EBACK_N IPU
IPU
IPU
IPU
PDI
PDI
IPU
IPU
IPU
IPU
IPU
IPU
IPU
IPU
EBADD25/NABSY_N
EBADD12/CIADDT1
EBADD11/NAALE/CIADD10
EBADD10/NACLE/CIADD9
EBADD9/CIADD8
EBADD8/CIADD7
EBADD7/CIADD6
EBADD6/CIADD5
EBADD5/CIADD4
EBADD4/CIADD3
EBADD3/CIADD2
EBADD2/CIADD1
EBADD1/CIADD0
EBWE_N/CIWE_N
EBOE_N/CIOE_N
EBALE_N
EBBE1_N/PIO60/CIIOWR_N
EBBE0_N/PIO59/CIIORD_N
EBCE7_N/PODCE_N/CICS_N
EBCE6_N/NAWE_N
EBCE5_N/NARE_N
EBCE4_N/NACE_N
EBCE3_N/PIO61
EBCE2_N/PIO62
EBCE1_N
EBCE0_N
EBCLK
AN18 M_NABSY_N
AN19 M_EBADD12
AM19 M_EBADD11
AL19 M_EBADD10
AK19 M_EBADD9
AJ19 M_EBADD8
AN20 M_EBADD7
AM20 M_EBADD6
AL20 M_EBADD5
AK20 M_EBADD4
AN21 M_EBADD3
AM21 M_EBADD2
AL21 M_EBADD1
AL25 M_EBWE_N
AK25 M_EBOE_N
AM25 M_EBALE_N
AL26
AM26
AL28
AN28 M_NAWE_N
AN28 M_NARE_N
AK27 M_NACE_N
AL27 M_PIO61
AM27 M_PIO62
AN27 M_EBCE1_N
AK26 M_EBCE0_N
AN26
U05AS MAIN [103] Seine3 (EBUS) (PE0566)

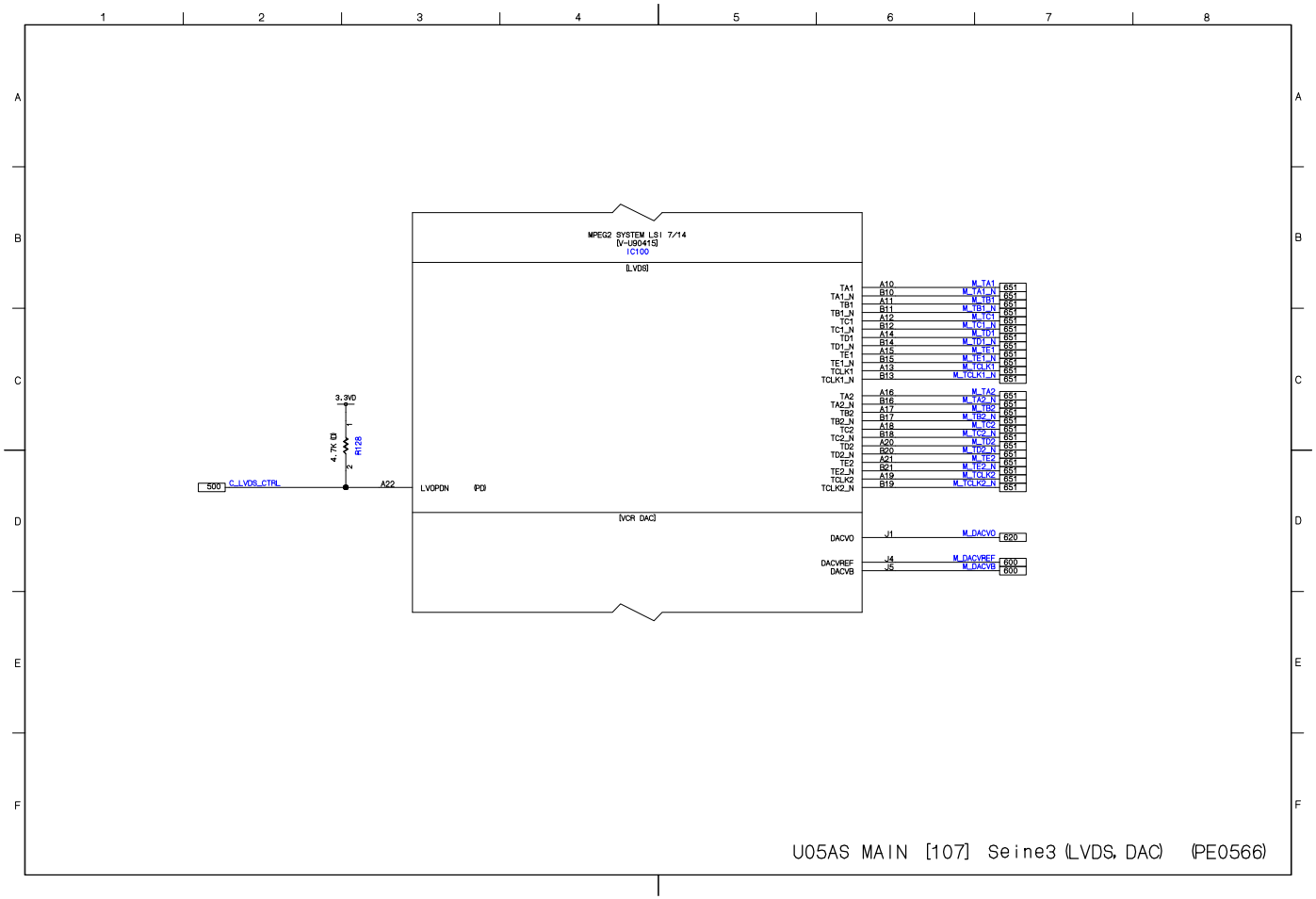

MPEG2 SYSTEM LSI 4/14
[V-U90415]
IC100
[DDR2]
DDRD031
DDRD030
DDRD029
DDRD028
DDRD027
DDRD026
DDRD025
DDRD024
DDRD023
DDRD022
DDRD021
DDRD020
DDRD019
DDRD018
DDRD017
DDRD016
DDRD015
DDRD014
DDRD013
DDRD012
DDRD011
DDRD010
DDRD09
DDRD08
DDRD07
DDRD06
DDRD05
DDRD04
DDRD03
DDRD02
DDRD01
DDRD00
DDRDRV
DDRDODT
DDRD1_VREF
DDRD0_VREF
DDRVCAL
RQDRVEN
DDRAD13
DDRAD12
DDRAD11
DDRAD10
DDRAD09
DDRAD08
DDRAD07
DDRAD06
DDRAD05
DDRAD04
DDRAD03
DDRAD02
DDRAD01
DDRAD00
DDRCLK
DDRBCLK
DDRCKE
DDRCS1_N
DDRCS0_N
DDRRAS_N
DDRCAS_N
DDRWE_N
DDRDM3
DDRDM2
DDRDM1
DDRDM0
DDRBA2
DDRBA1
DDRBA0
DDRDQS3
DDRDQS2
DDRDQS1
DDRDQS0
DDRODT1
DDRODT0
M_DDRCLK
M_DDRBCLK
C1239
5pF (C)
U05AS MAIN [104] Seine3 (DDR2) (PE0566)



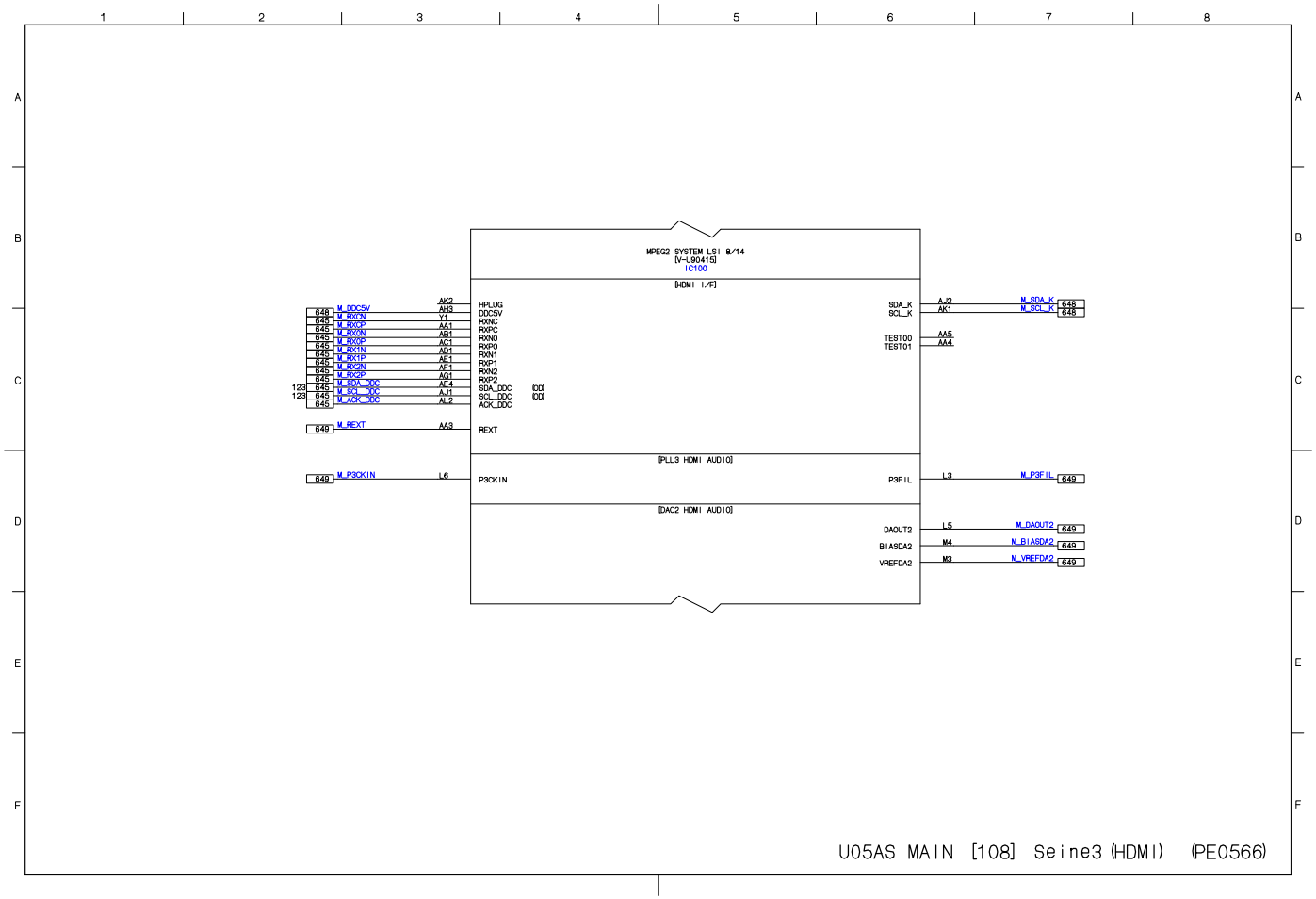
U05AS MAIN [105] Seine3 (PCI) (PE0566)

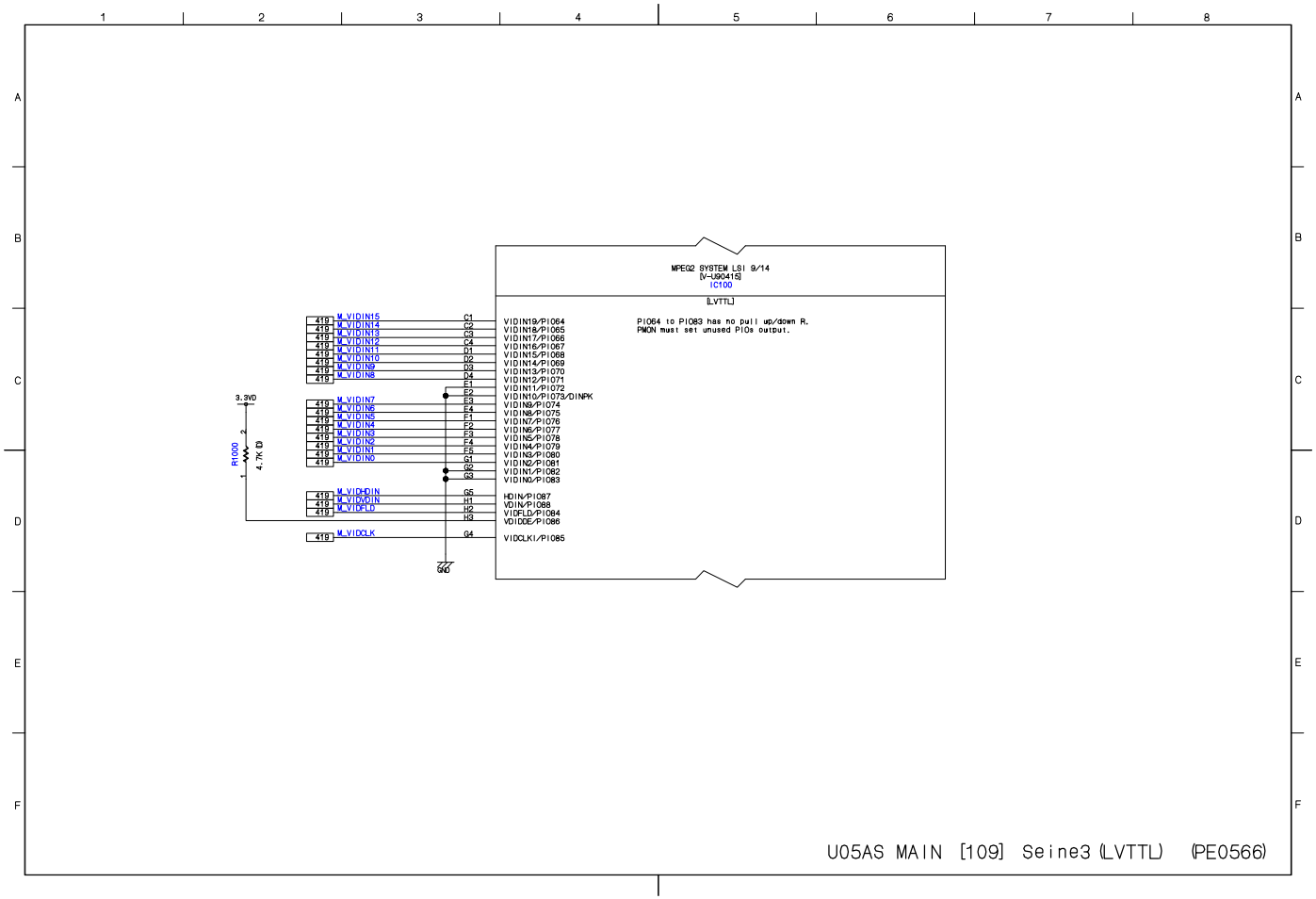


U05AS MAIN [106] Seine3 (TS I/F) (PE0566)

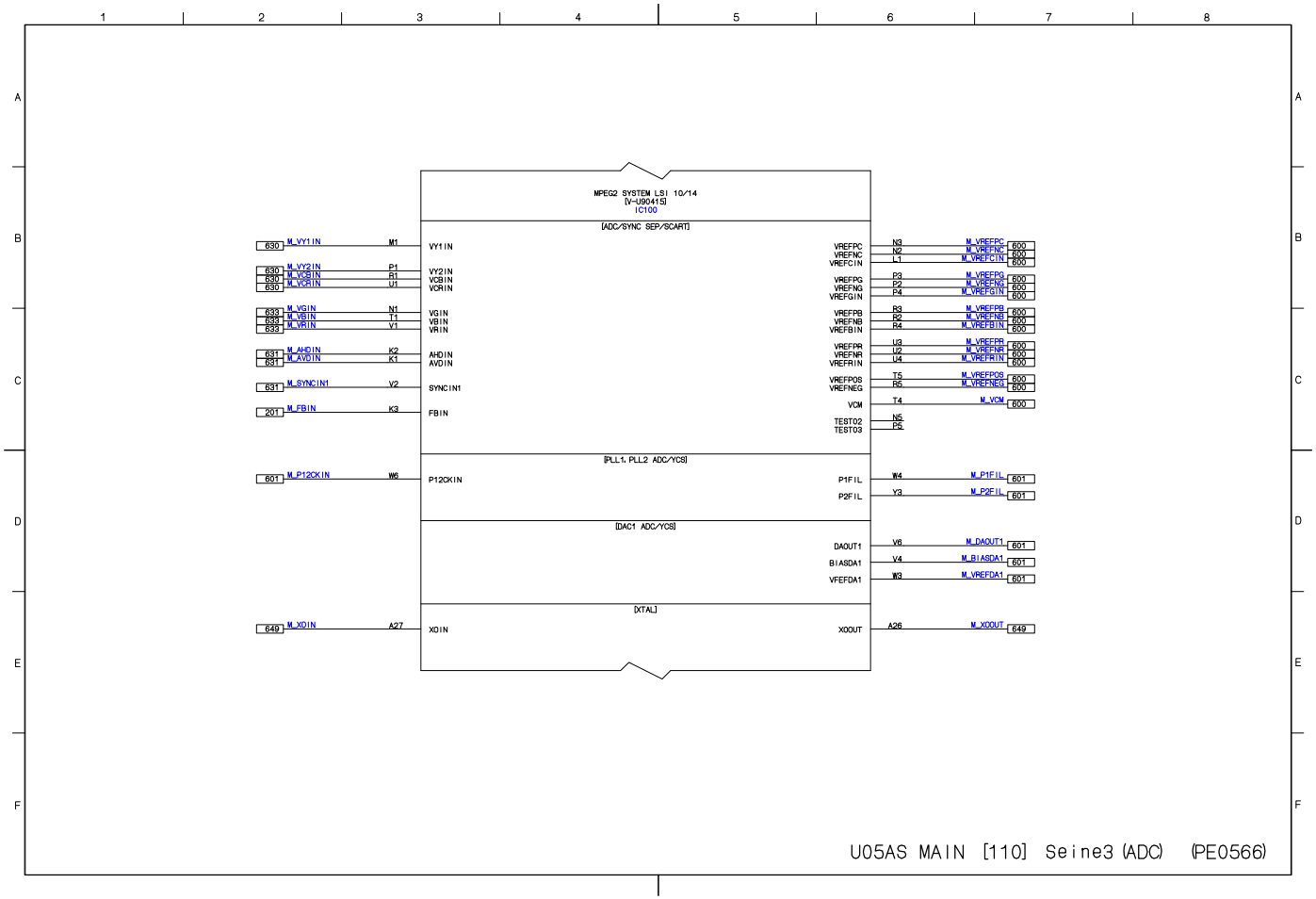


U05AS MAIN [107] Seine3 (LVDS, DAC) (PE0566)

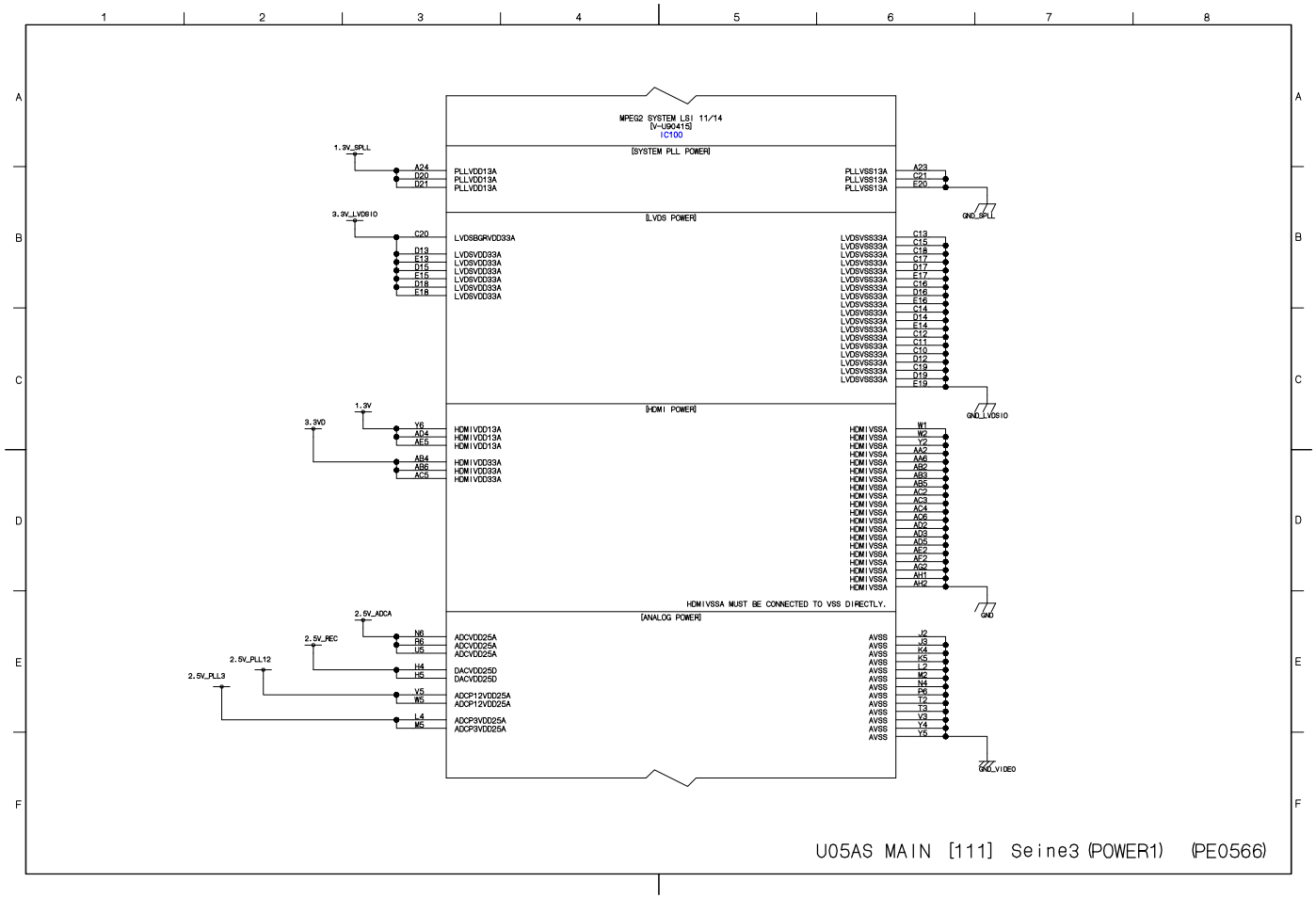

MPEG2 SYSTEM LSI 8/14
[V-U90415]
IC100
[HDMI I/F]
HPLUG
DDC5V
RXNC
RXPC
RXN0
RXP0
RXN1
RXP1
RXN2
RXP2
SDA_DDC
SCL_DDC
ACK_DDC
REXT
SDA_K
SCL_K
TEST00
TEST01
[PLL3 HDMI AUDIO]
P3CKIN
P3FIL
[DAC2 HDMI AUDIO]
DAOUT2
BIASDA2
VREFDA2



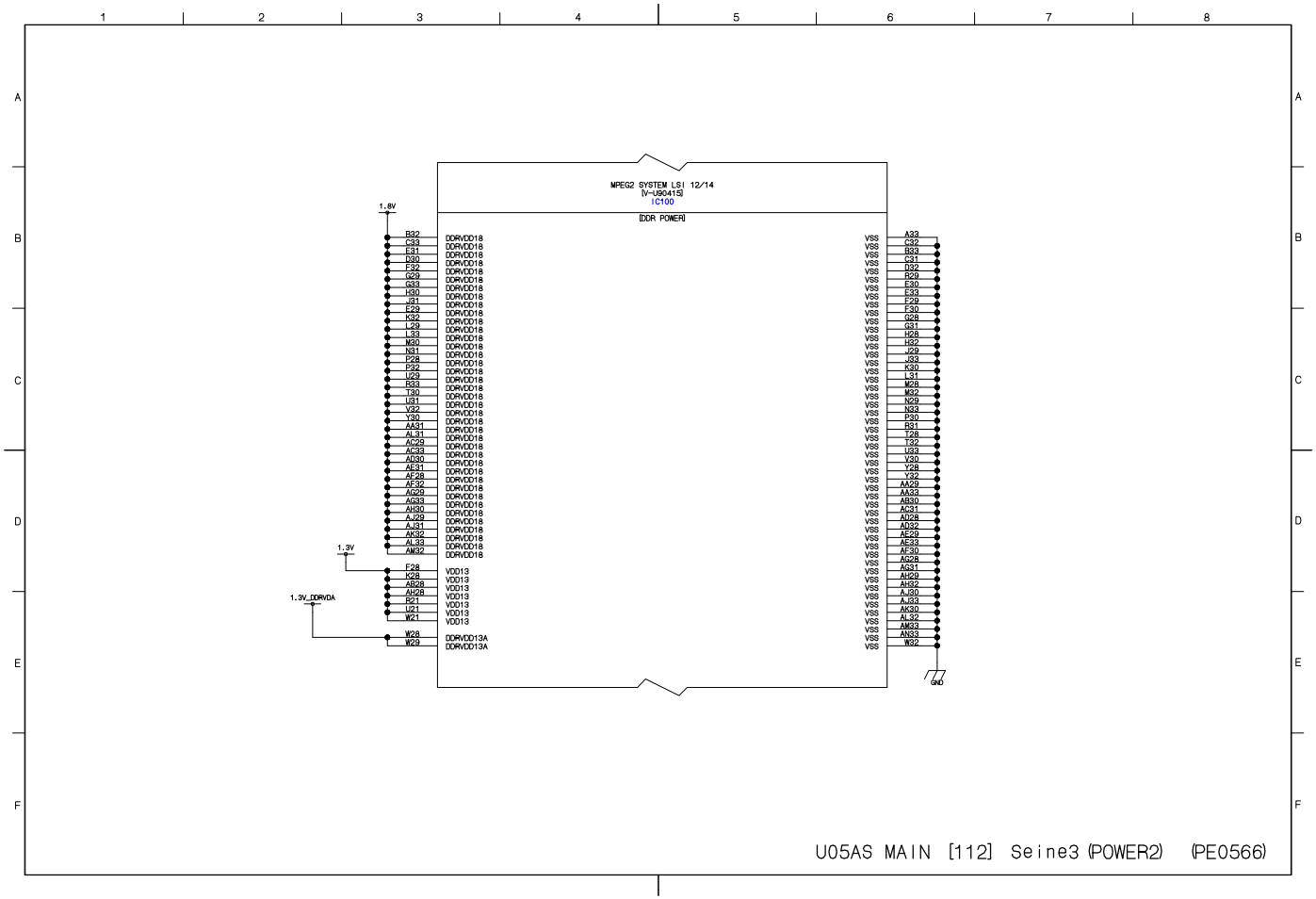
U05AS MAIN [109] Seine3 (LVTTL) (PE0566)



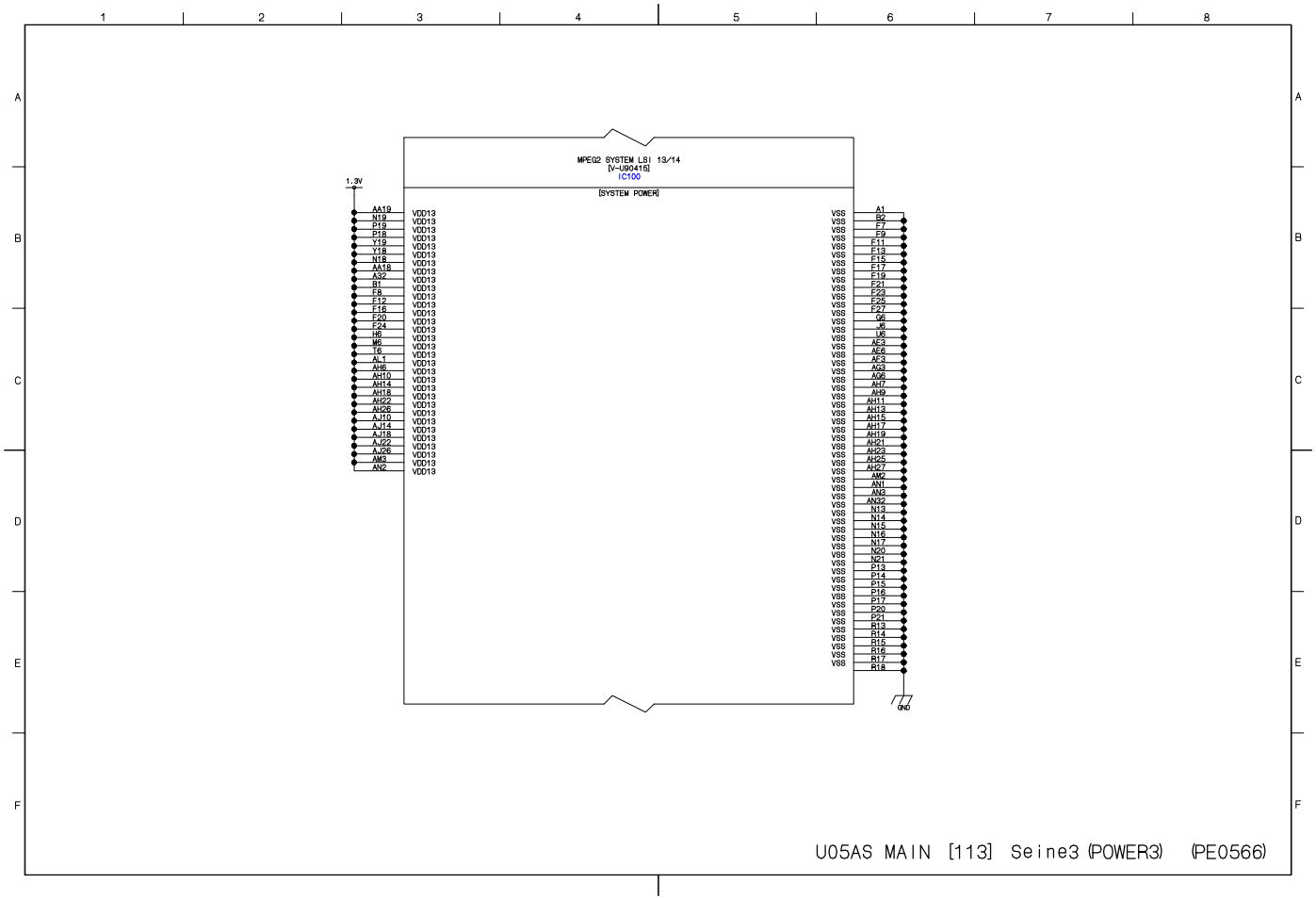
U05AS MAIN [110] Seine3 (ADC) (PE0566)



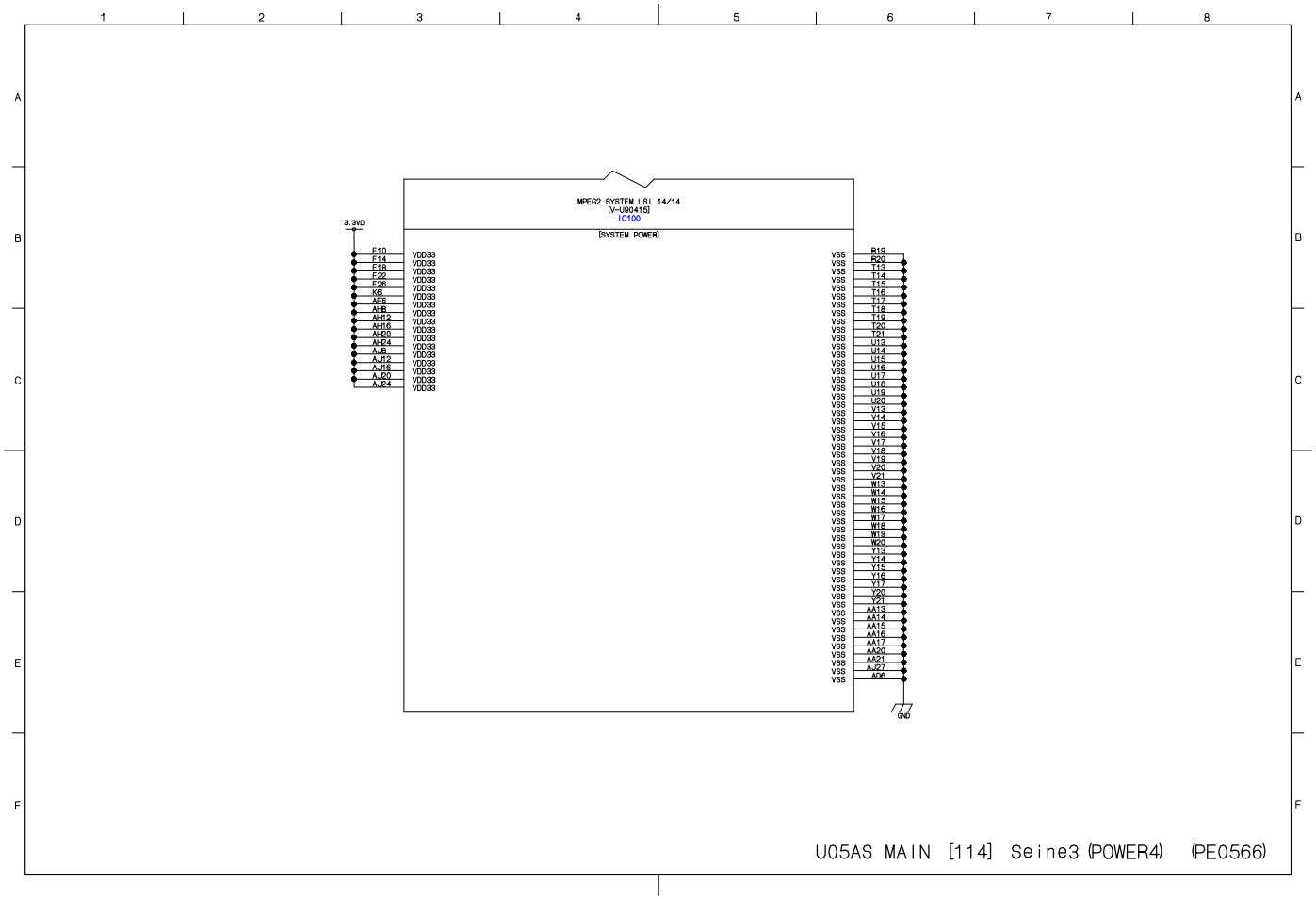
U05AS MAIN [111] Seine3 (POWER1) (PE0566)



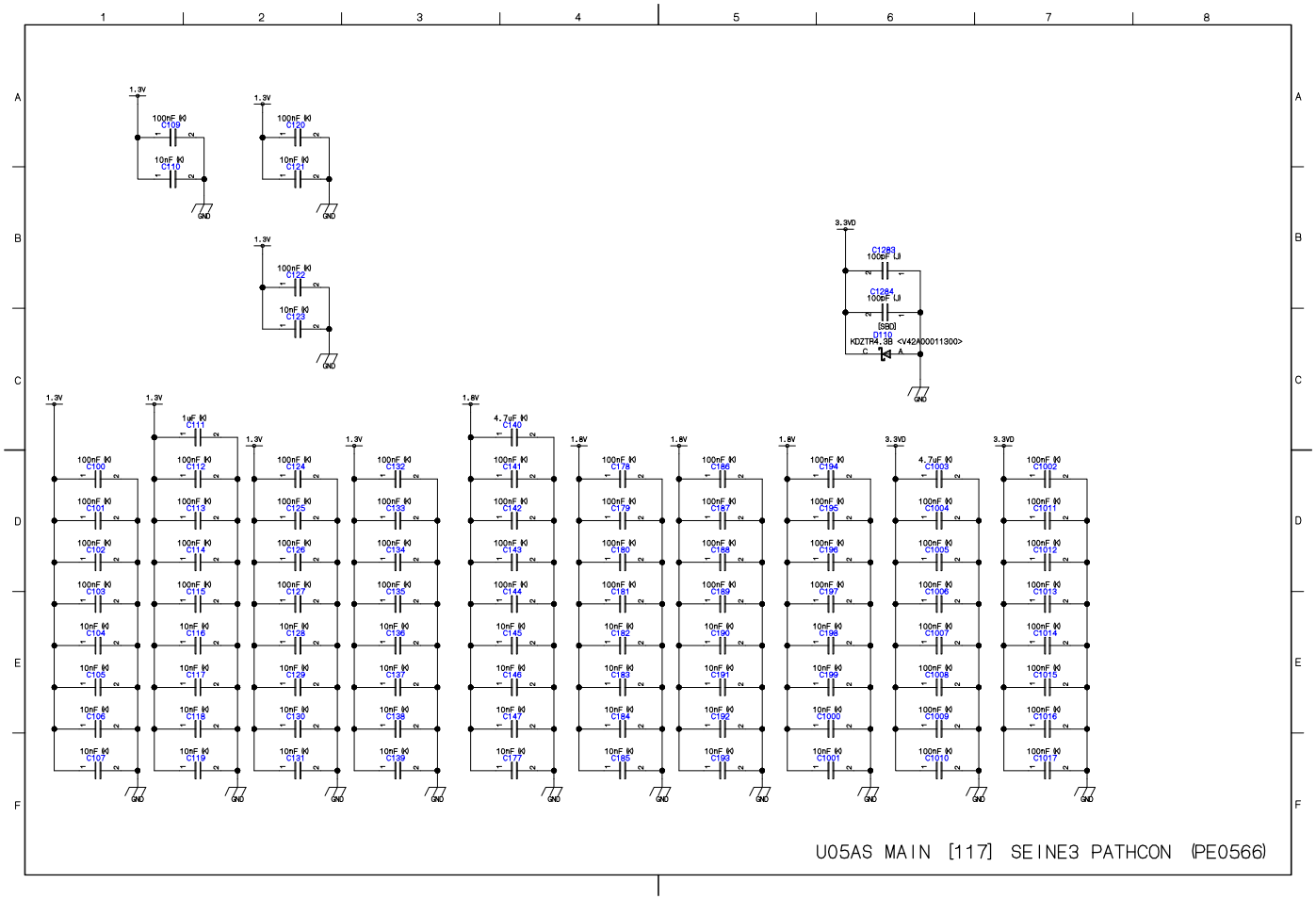
U05AS MAIN [112] Seine3 (POWER2) (PE0566)



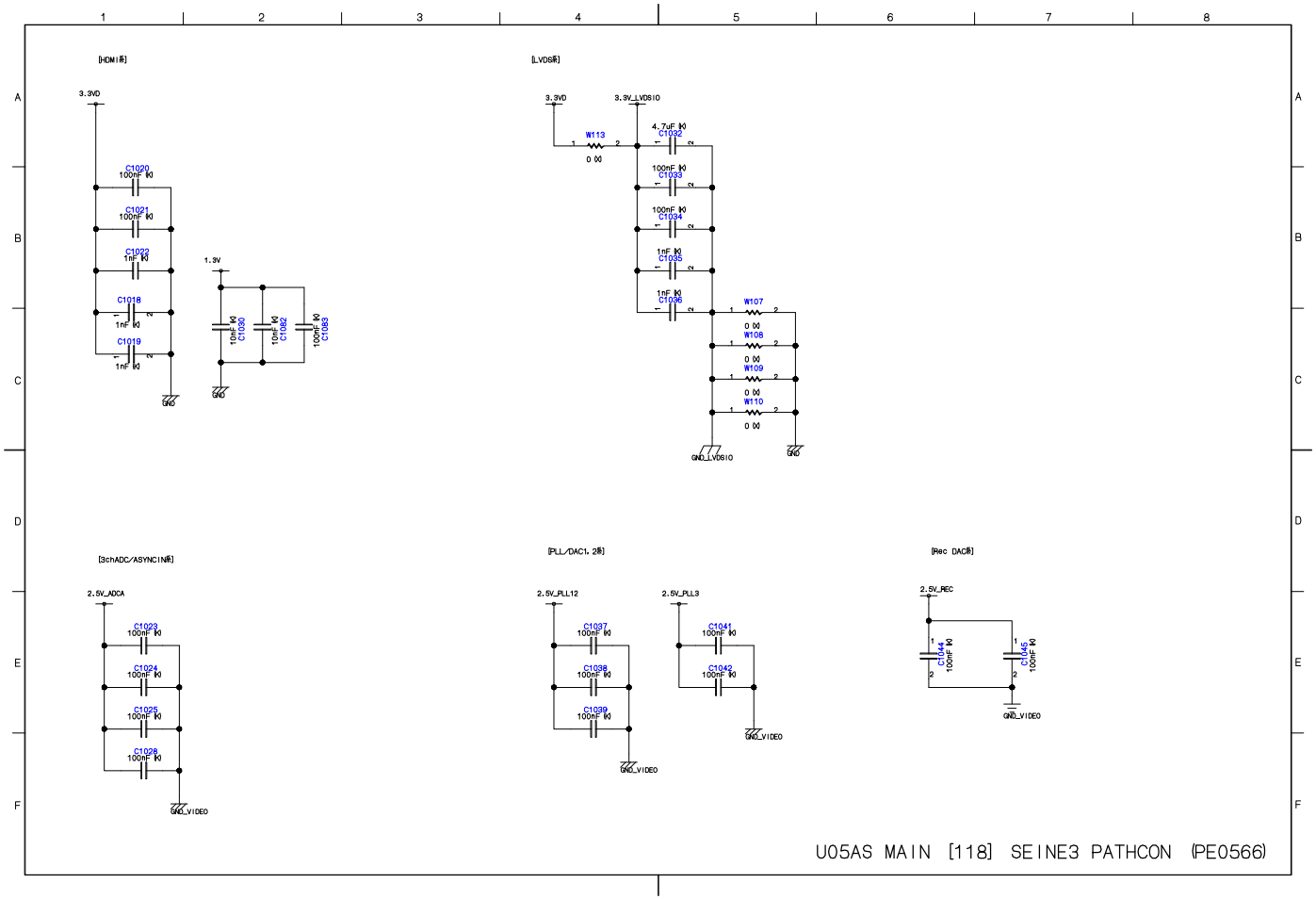
U05AS MAIN [113] Seine3 (POWER3) (PE0566)



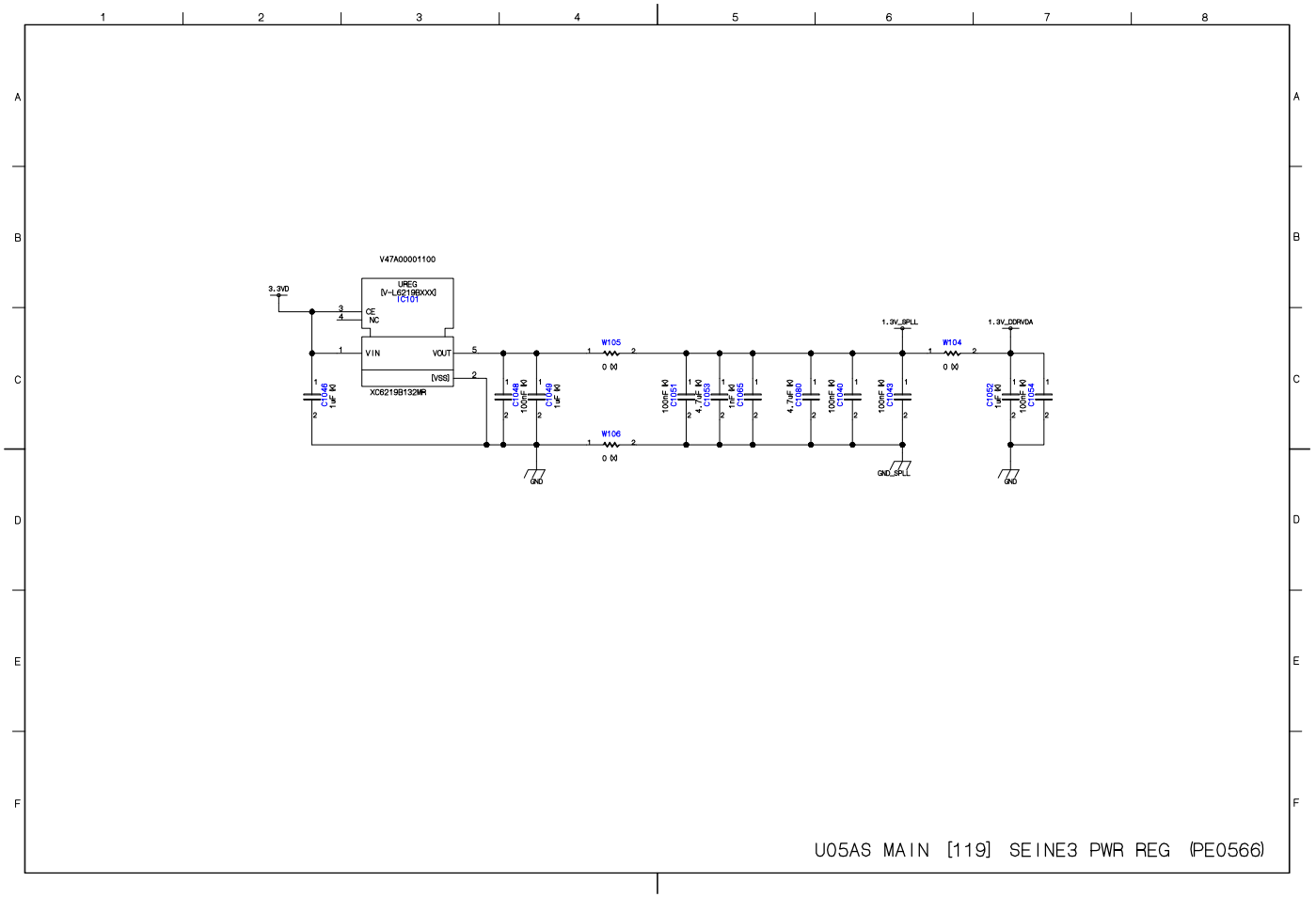
U05AS MAIN [114] Seine3 (POWER4) (PE0566)



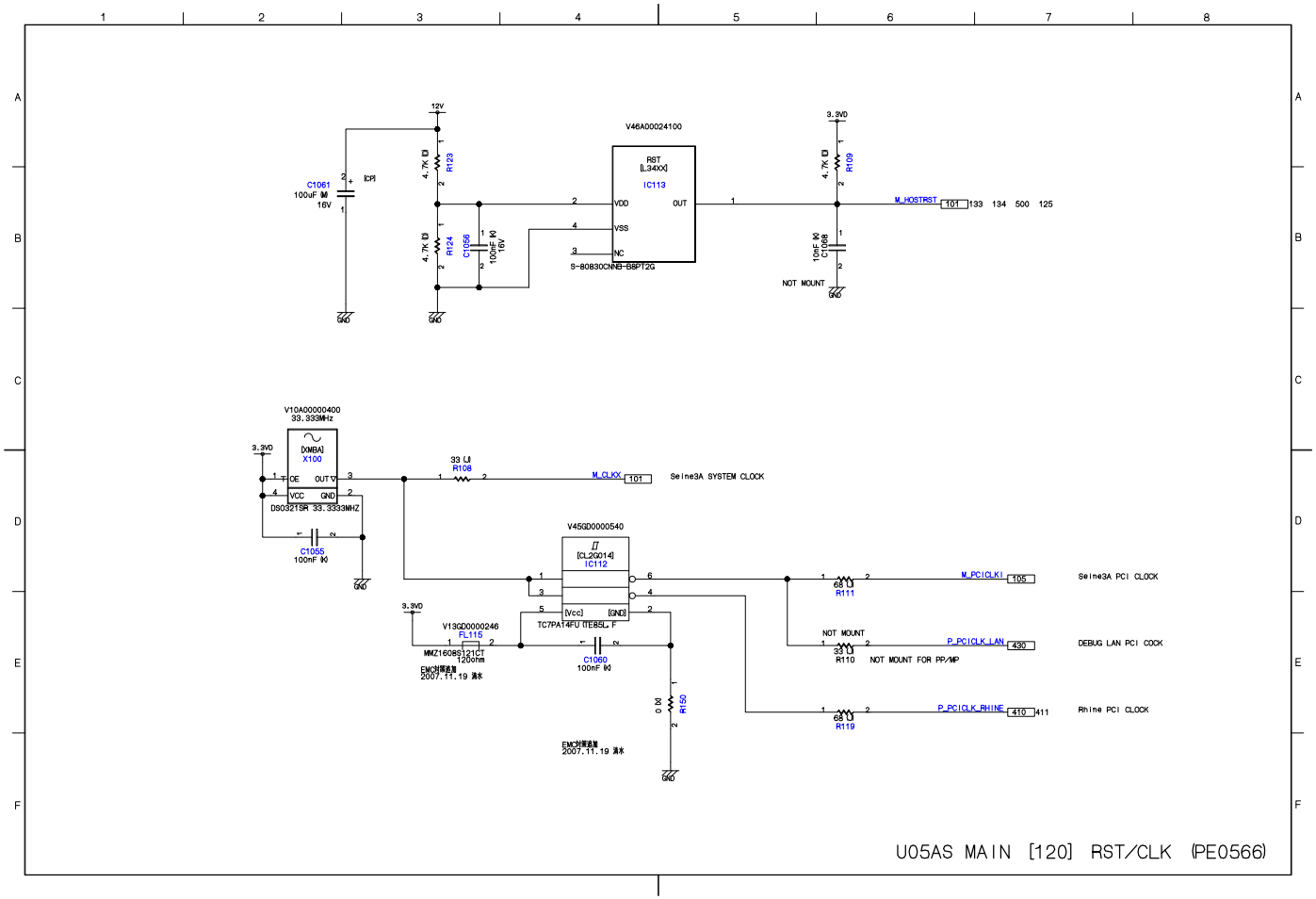
U05AS MAIN [117] SEINE3 PATHCON (PE0566)



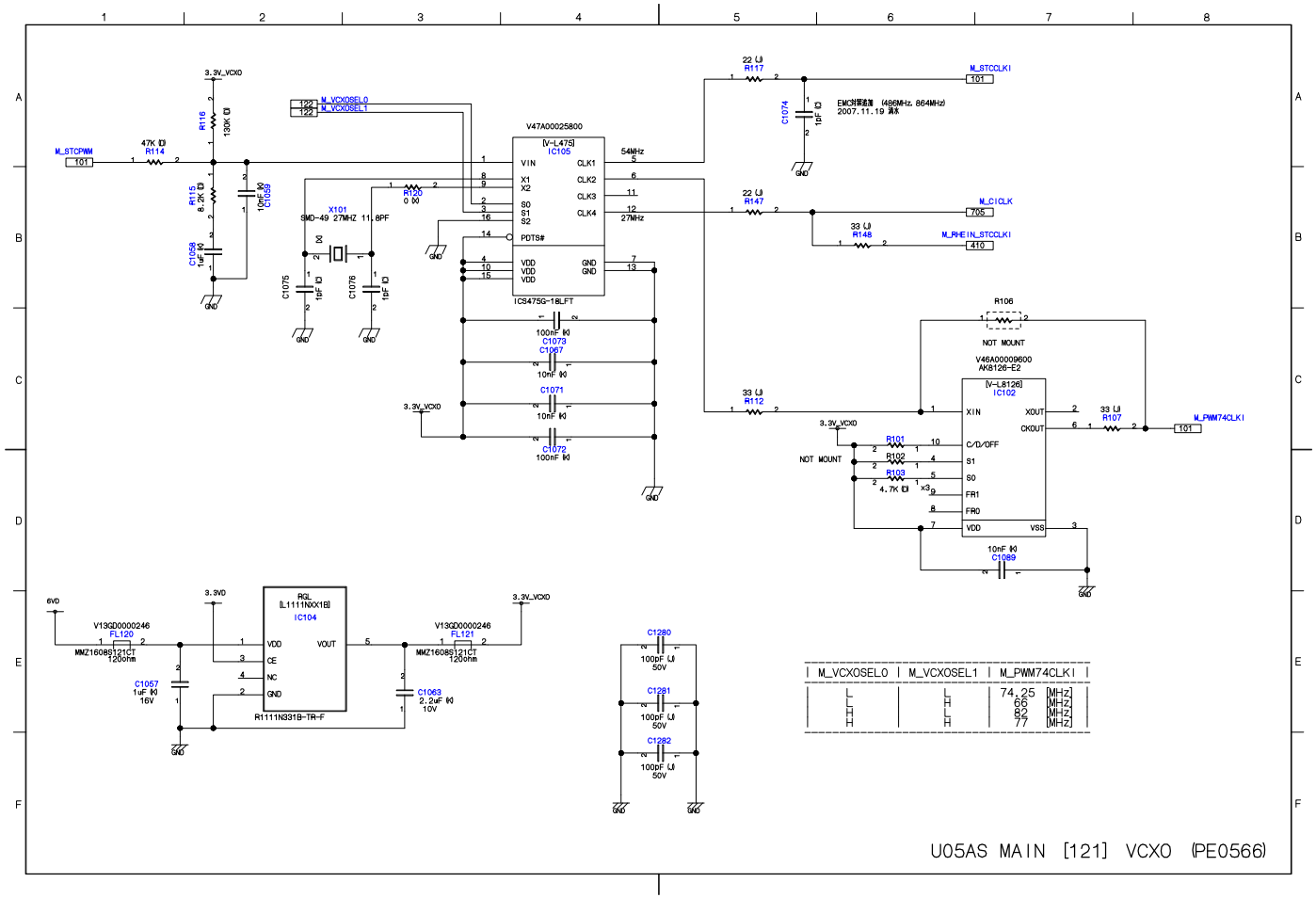
U05AS MAIN [118] SEINE3 PATHCON (PE0566)

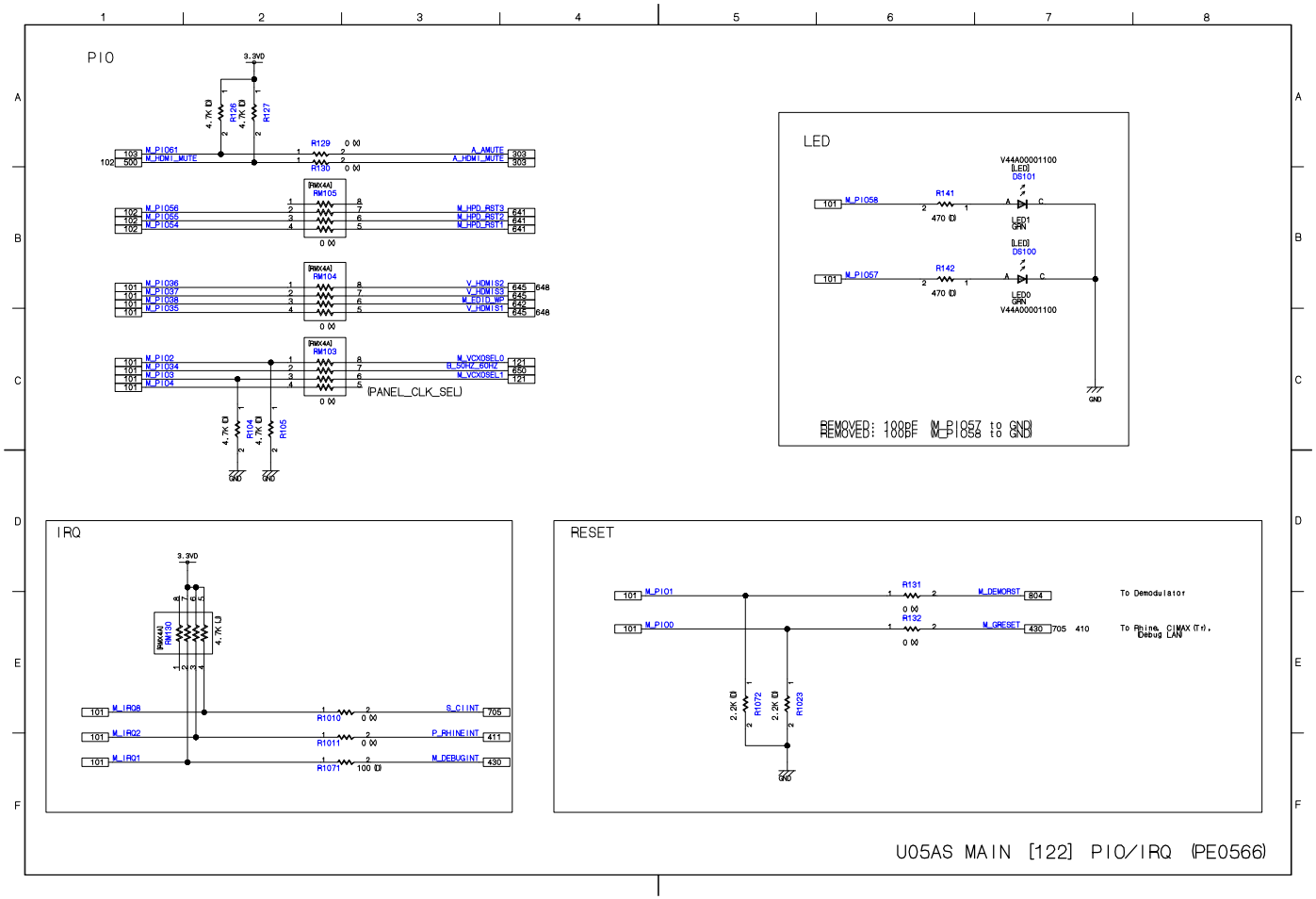


U05AS MAIN [119] SEINE3 PWR REG (PE0566)

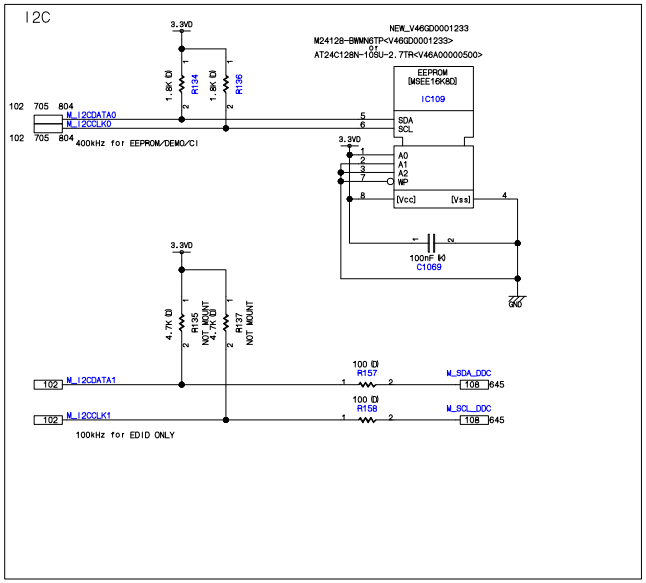


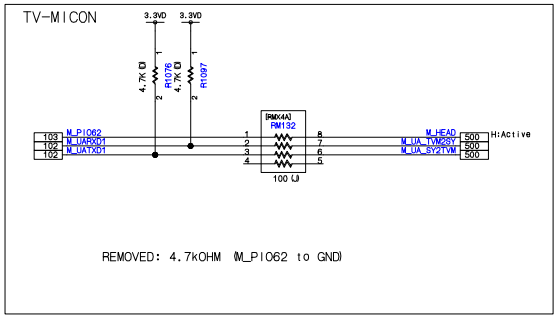
U05AS MAIN [120] RST/CLK (PE0566)


3.3V_VCXO
M_VCXOSEL0
M_VCXOSEL1
M_STCPWM
47K
R114
R116
130K
R115
8.2K
C1059
10nF
C1058
1uF
X101
SMD-49 27MHZ 11.8PF
R120
0
C1075
C1076
18pF
V47A00025800
[V-L475]
IC105
VIN
X1
X2
S0
S1
S2
PDTS#
VDD
VDD
VDD
GND
GND
CLK1
CLK2
CLK3
CLK4
54MHz
27MHz
ICS475G-18LFT
C1073
C1067
C1071
C1072
100nF
10nF
22
R117
M_STCCLKI
101
C1074
1pF
EMC对策追加 (486MHz, 864MHz)
2007.11.19 高永
R147
M_C1CLK
705
33
R148
M_RHEIN_STCCLKI
410
R106
NOT MOUNT
V46A00009600
AK8126-E2
[V-L8126]
IC102
XIN
XOUT
CKOUT
C/D/OFF
S1
S0
FR1
FR0
VDD
VSS
R112
R107
M_PWM74CLKI
R101
R102
R103
4.7K
x3
C1069
6VD
V13GD0000246
FL120
MMZ1608S121CT
120ohm
RGL
[L1111NXX1B]
IC104
R1111N331B-TR-F
C1057
1uF
16V
C1063
2.2uF
10V
FL121
C1280
C1281
C1282
100pF
50V
M_VCXOSEL0
M_VCXOSEL1
M_PWM74CLKI
L
H
74.25 [MHZ]
66 [MHZ]
82 [MHZ]
77 [MHZ]
U05AS MAIN [121] VCXO (PE0566)

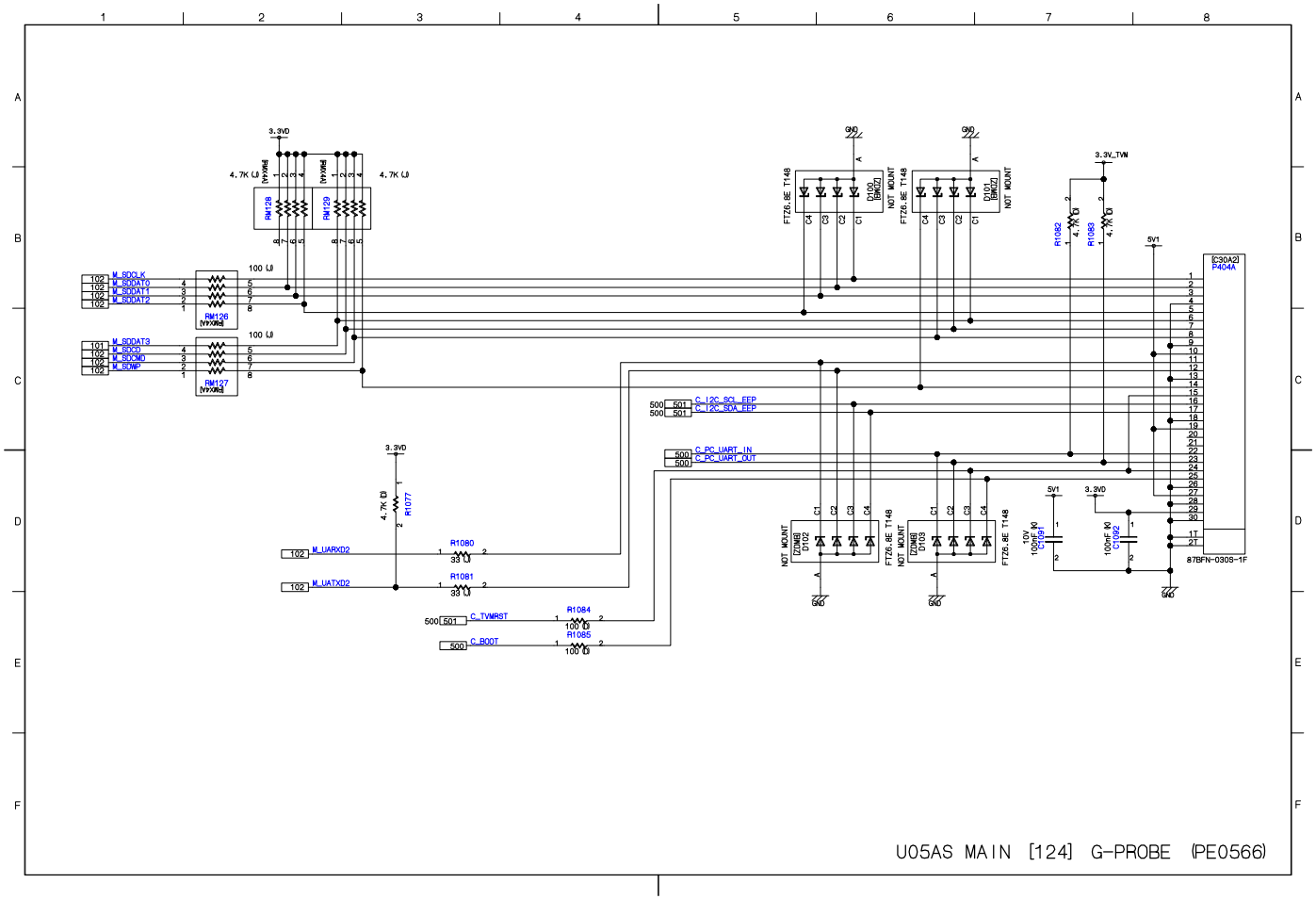


U05AS MAIN [122] PIO/IRQ (PE0566)

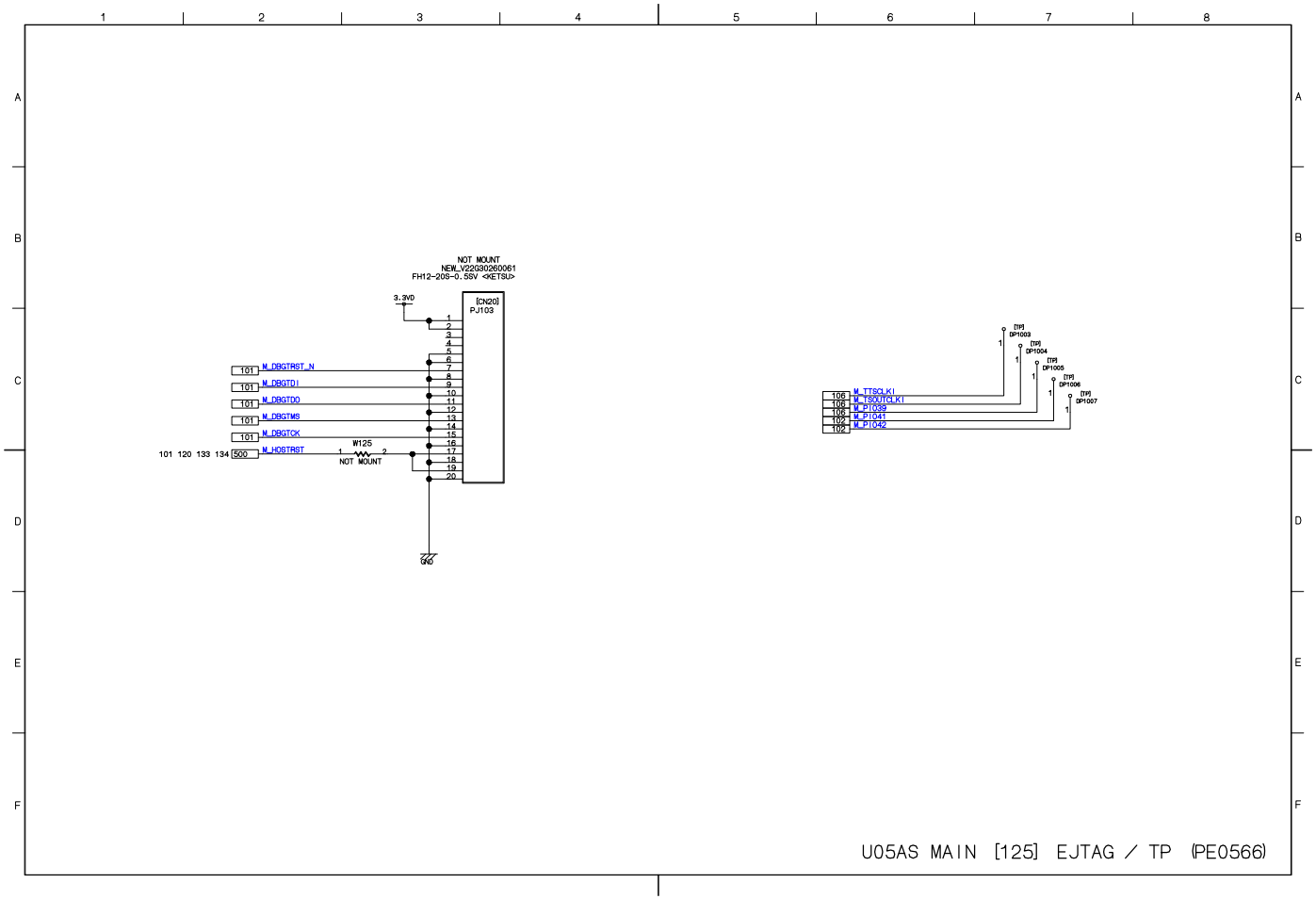


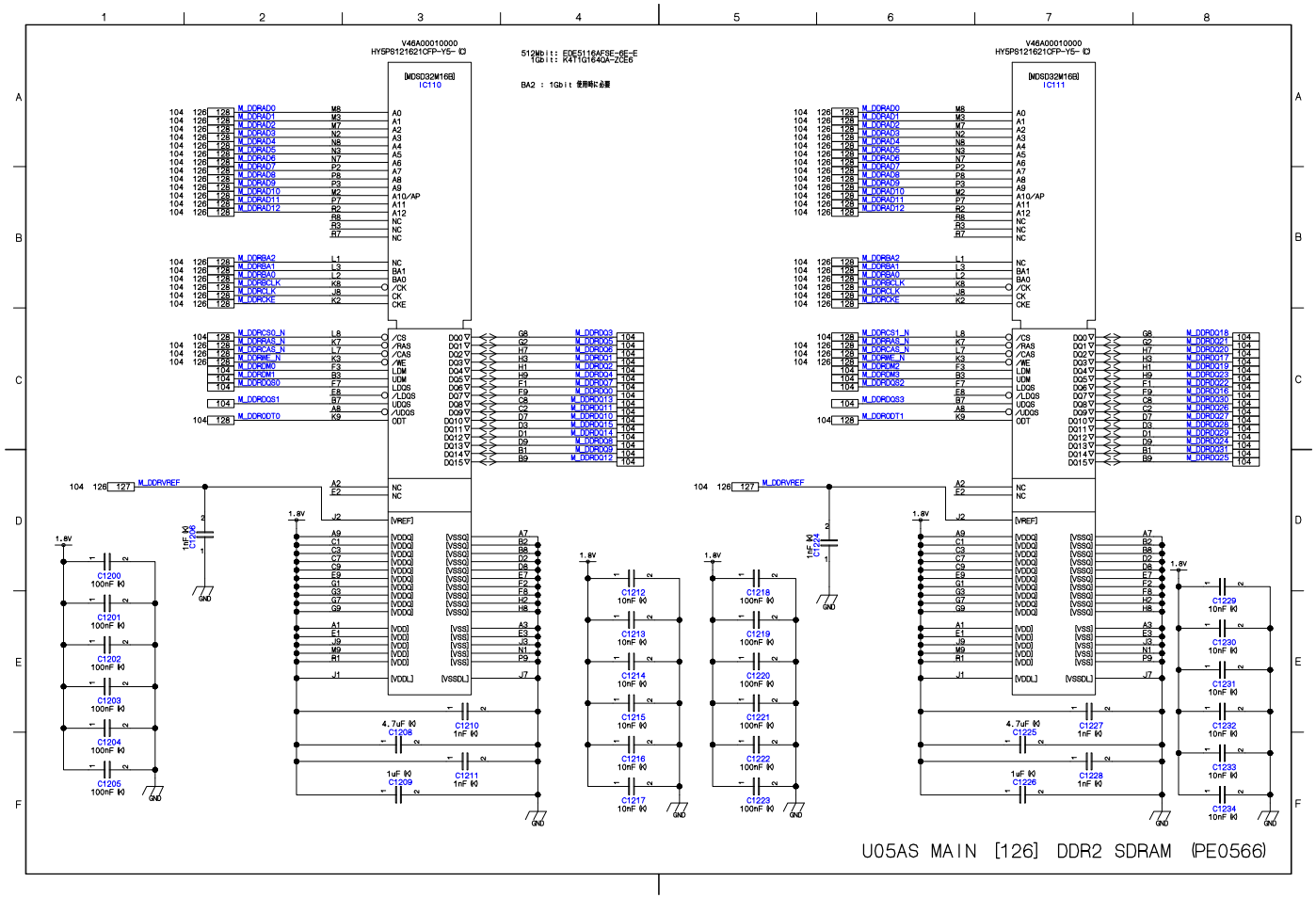


U05AS MAIN [123] I2C/UART (PE0566)

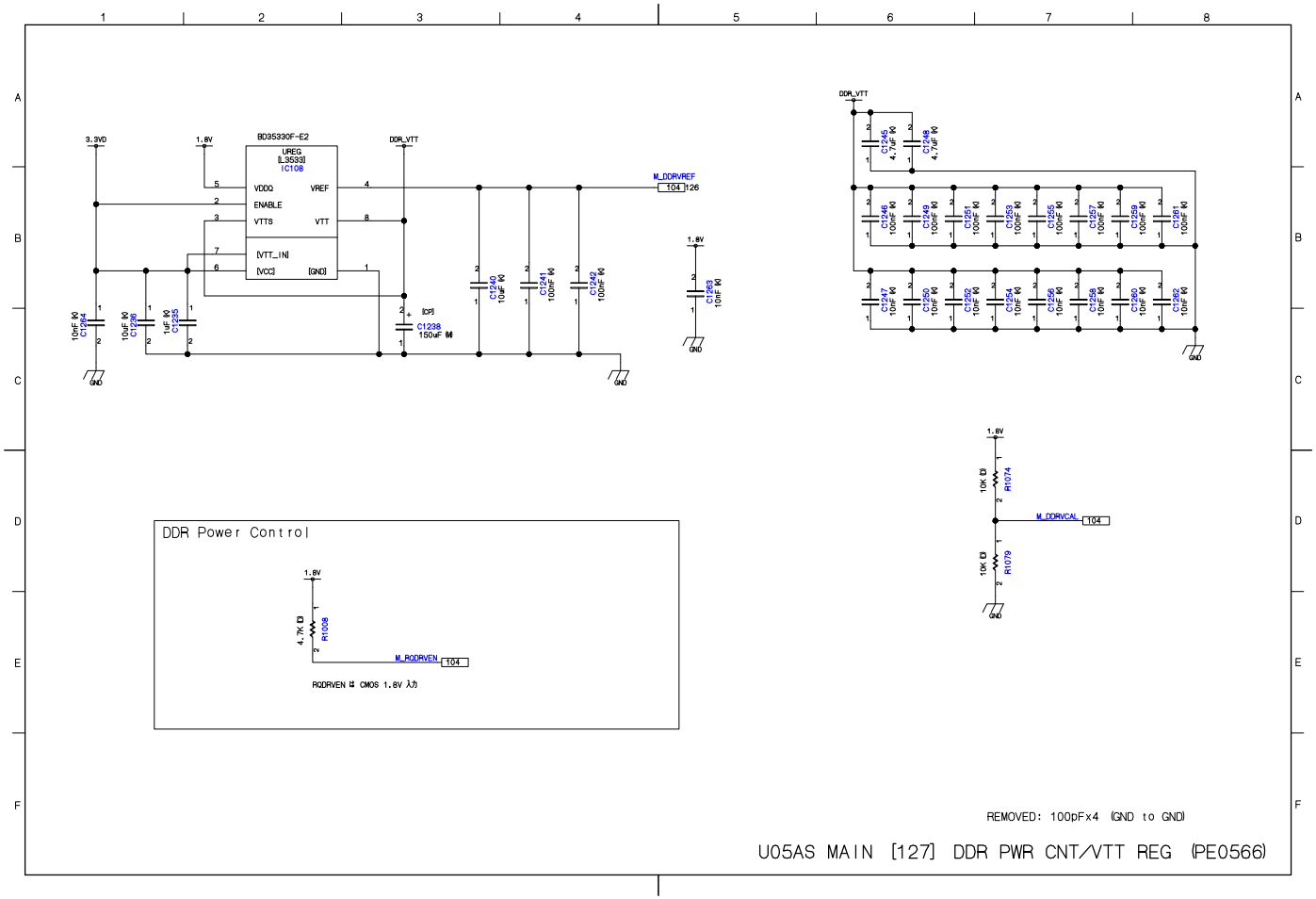


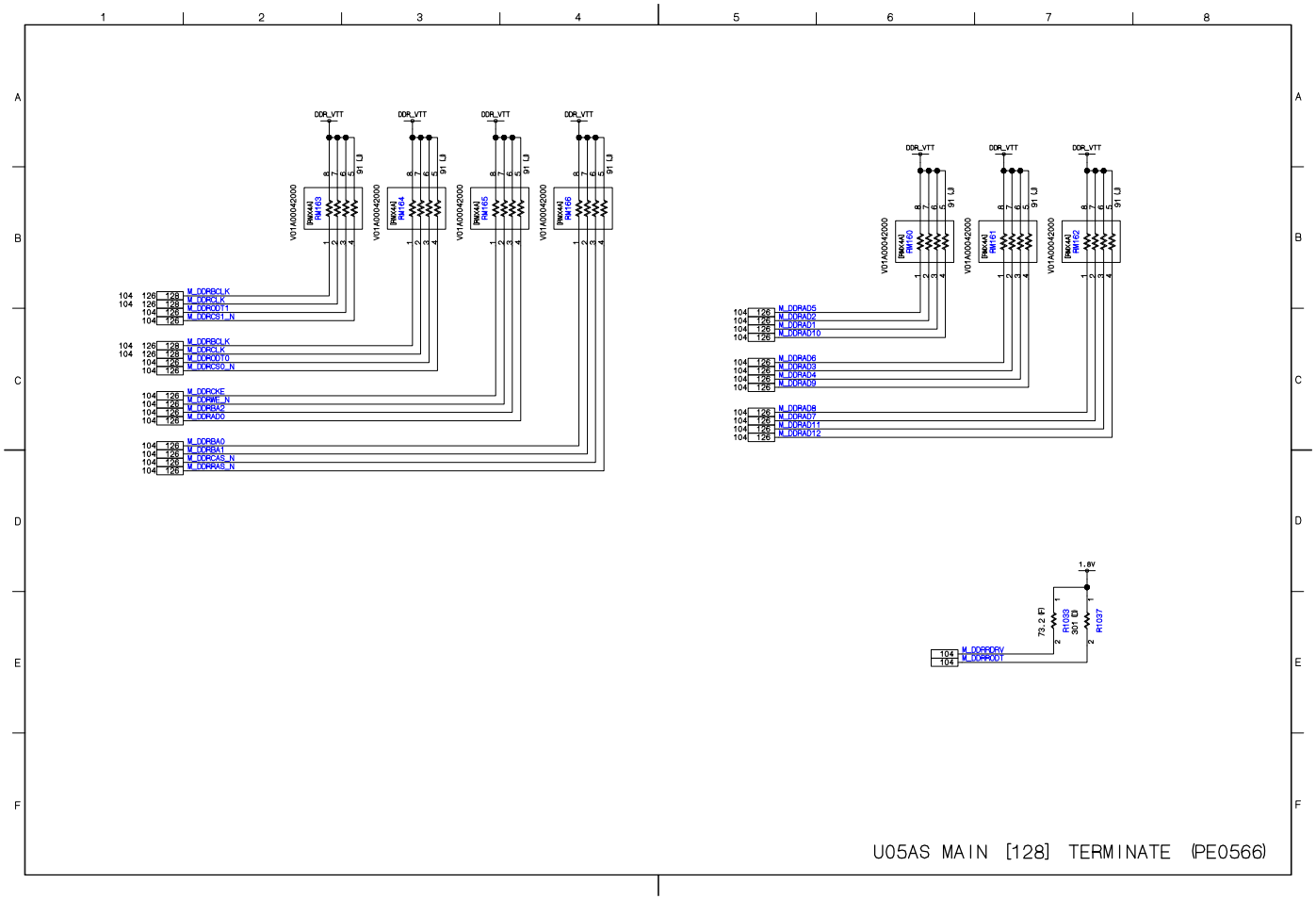
U05AS MAIN [124] G-PROBE (PE0566)


NOT MOUNT
NEW_V2G92026061
FH12-20S-0.5SV <KETSU>
3.3VD
[CN20]
PJ103
101 M_DBGTRST_N
101 M_DBGTDI
101 M_DBGTDO
101 M_DBGTMS
101 M_DBGTCK
101 120 133 134 500 M_HOSTRST
W125
NOT MOUNT
GND
[TP] DP1003
[TP] DP1004
[TP] DP1005
[TP] DP1006
[TP] DP1007
106 M_TTSCLK1
108 M_TSOUTCLK1
105 M_PI039
104 M_PI041
102 M_PI042
U05AS MAIN [125] EJTAG / TP (PE0566)

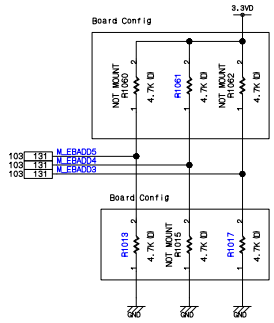


U05AS MAIN [126] DDR2 SDRAM (PE0566)


3.3VD
1.8V
BD9533GF-E2
LREG
(L3533)
IC108
VDDQ
ENABLE
VTTS
VREF
VTT
[VTT_IN]
[VCC]
[GND]
DDR_VTT
M_DDRVREF
104 126
C1234 10nF
C1236 10uF
C1235 1uF
C1238 150uF
C1240 10uF
C1241 100nF
C1242 100nF
C1243 10nF
DDR_VTT
C1245 4.7uF
C1248 4.7uF
C1246 100nF
C1249 100nF
C1251 100nF
C1253 100nF
C1255 100nF
C1257 100nF
C1259 100nF
C1261 100nF
C1247 10nF
C1250 10nF
C1252 10nF
C1254 10nF
C1256 10nF
C1258 10nF
C1260 10nF
C1262 10nF
1.8V
10K R1074
M_DDRVCAL
104
10K R1079
GND
DDR Power Control
1.8V
4.7K R1008
M_RQDRVEN
104
RQDRVEN は CMOS 1.8V 入力
REMOVED: 100pFx4 (GND to GND)
U05AS MAIN [127] DDR PWR CNT/VTT REG (PE0566)



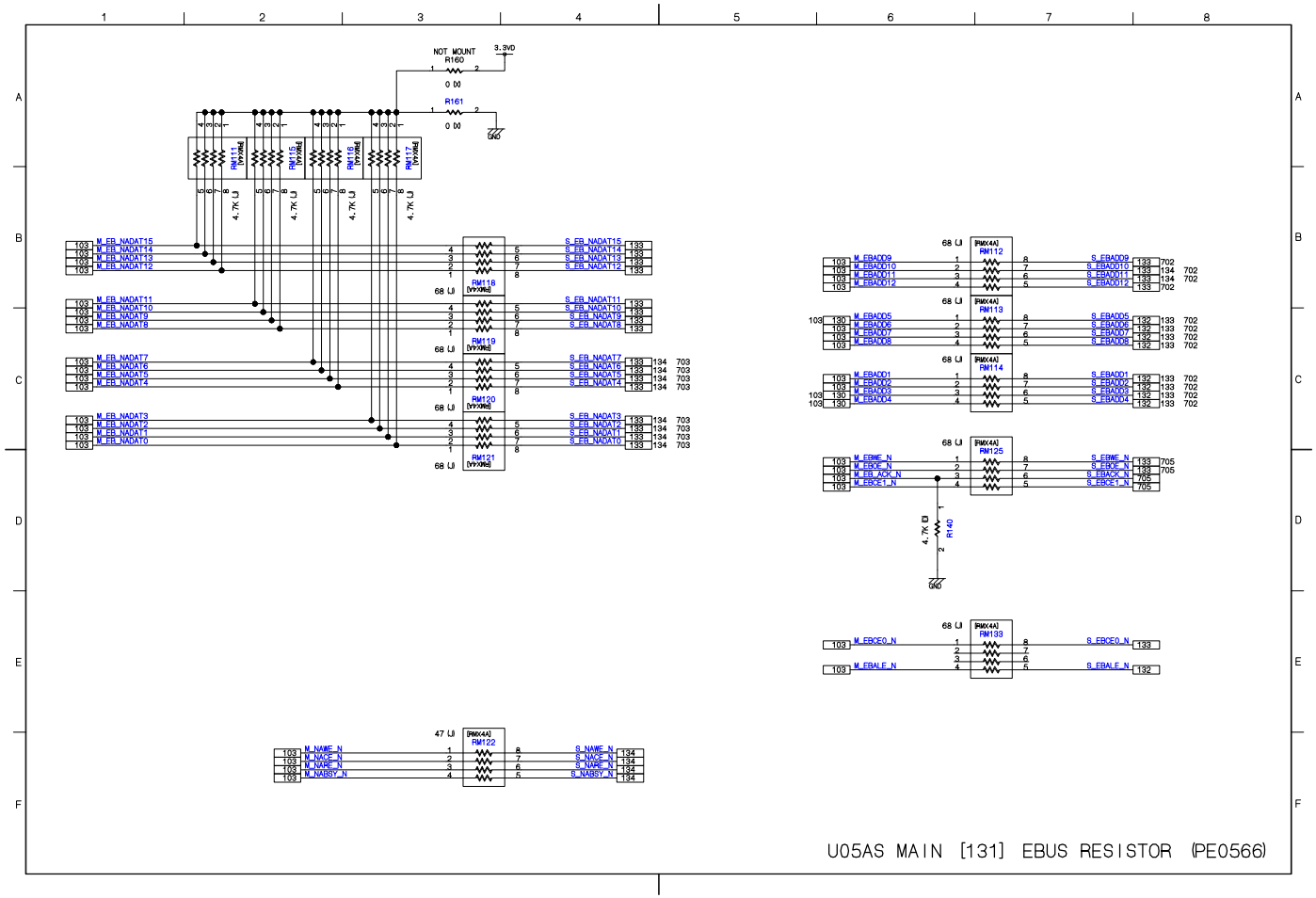
U05AS MAIN [128] TERMINATE (PE0566)



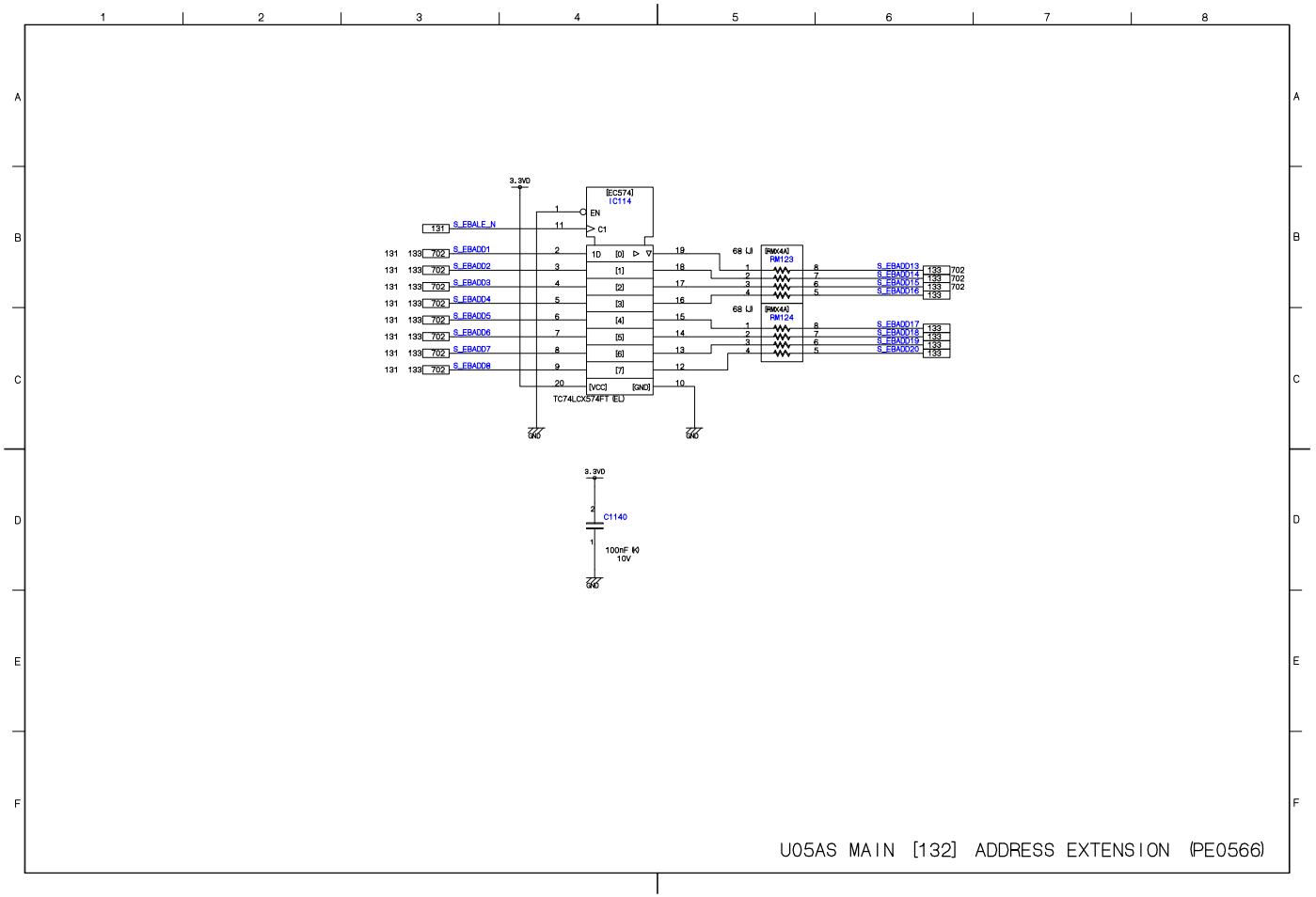
通常動作時は、ボードコンフィグ用の抵抗以外は実装する必要なし。

PIN	FUNCTION	DEF	SETTING	MEANING
EBALE_N	NAND FLASH BIT WIDTH	H	H	8bit
EBADD12	BOOT DEVICE	H	H	NORMAL
EBADD11	TIMER INTERRUPT	H	H	DISABLE
TSOUTDATA0 EBADD[10:8]	SHARE PIN MODE	LLLL	LLLL LLLH LLHL LLHH	NORMAL Mem dbg1 Mem dbg2 656 TEST
EBADD7	FREQ. OF SDRAM	H	H L	666Mbps 533Mbps
EBADD6	BUS WIDTH OF SDRAM	H	H L	32bit 16bit
EBADD[5:3]	BOARD REV.	XXX	LLL LLH LHL LHH	Proto (S3) #1 (S3) PP前半 (S3A) PP (S3A)
EBADD2	PCI ARBITER	H	H	INTERNAL
EBADD1	PCI MODE	H	H	HOST

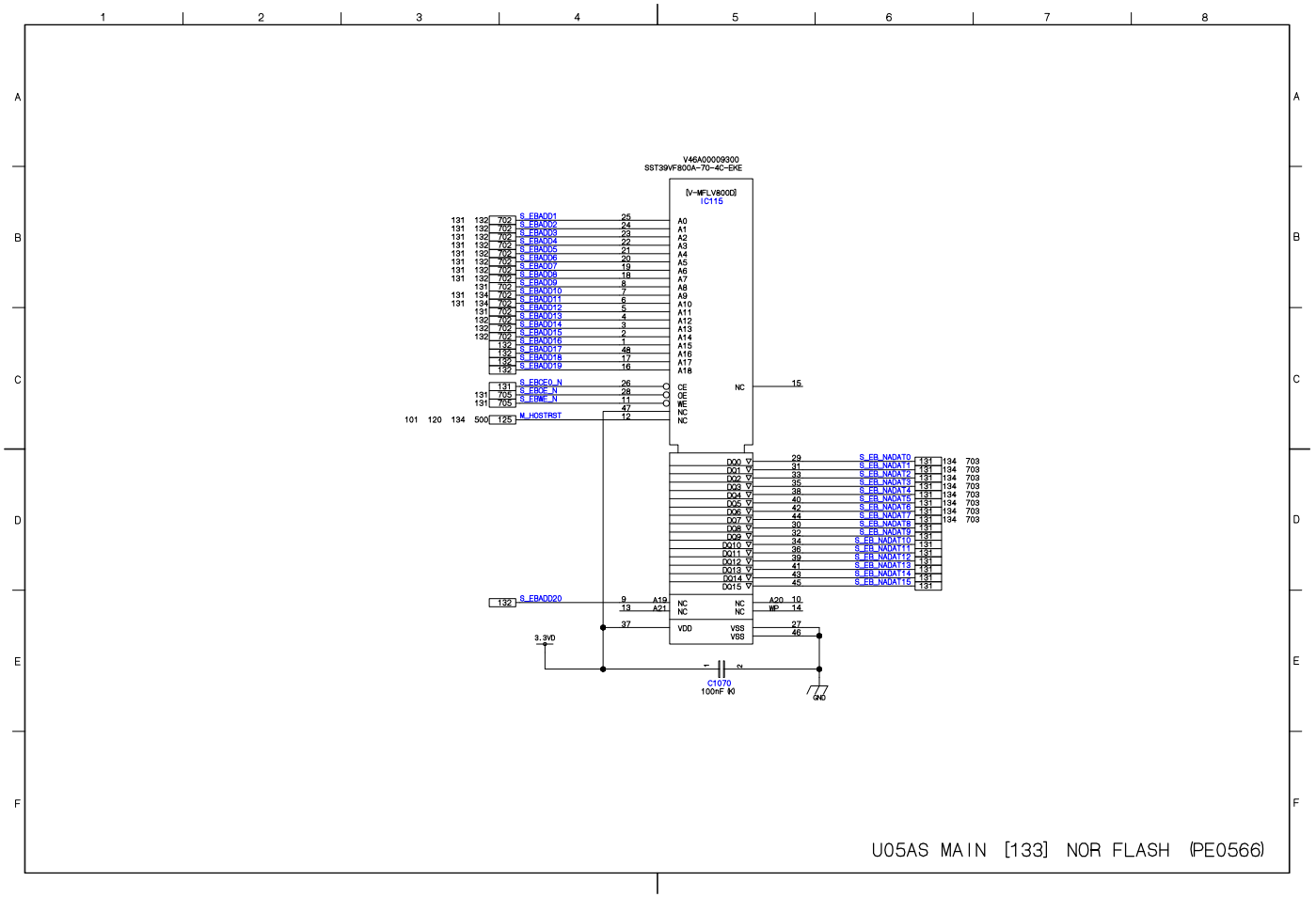
U05AS MAIN [130] PIN CONFIG (PE0566)



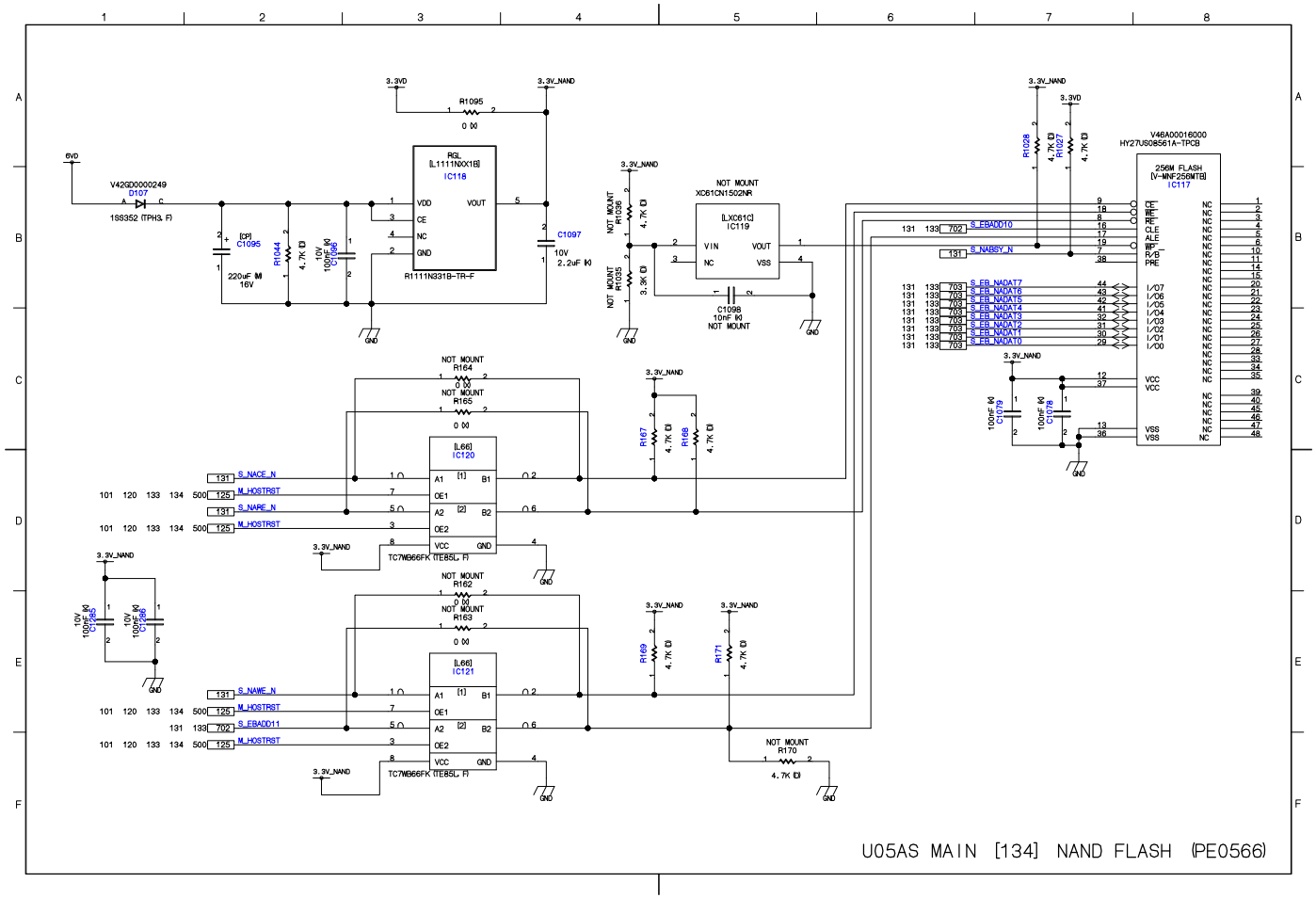
U05AS MAIN [131] EBUS RESISTOR (PE0566)



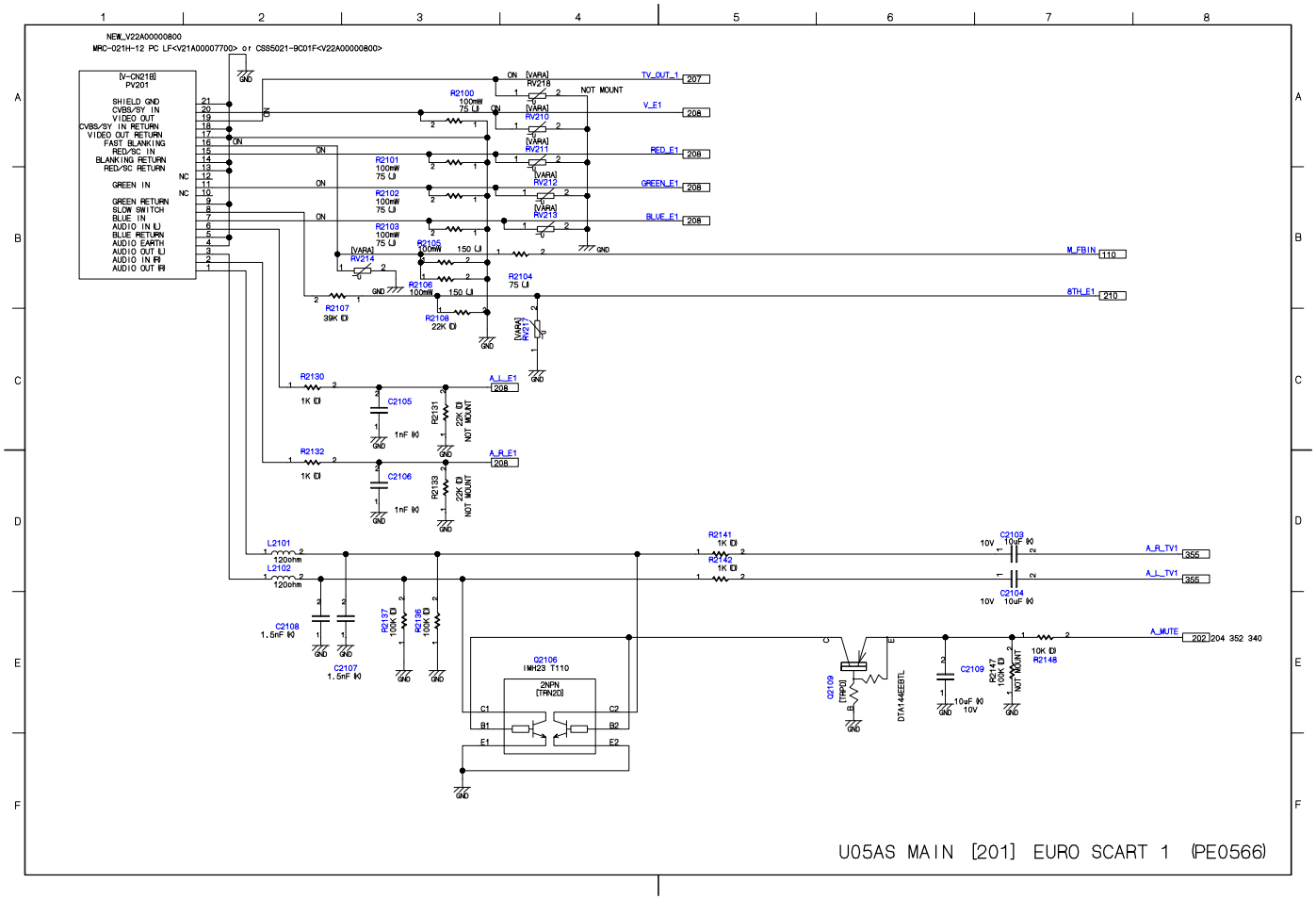
U05AS MAIN [132] ADDRESS EXTENSION (PE0566)

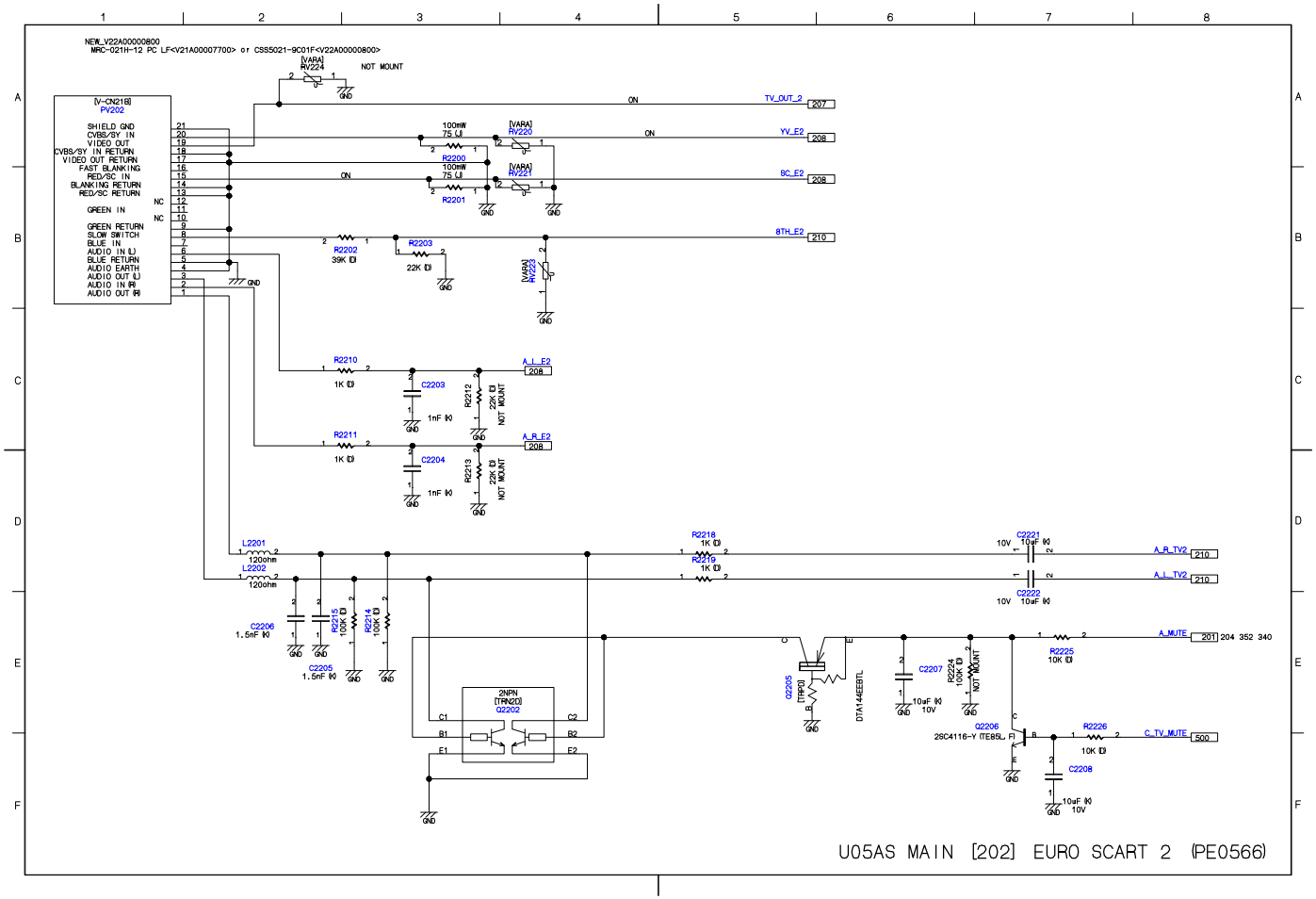


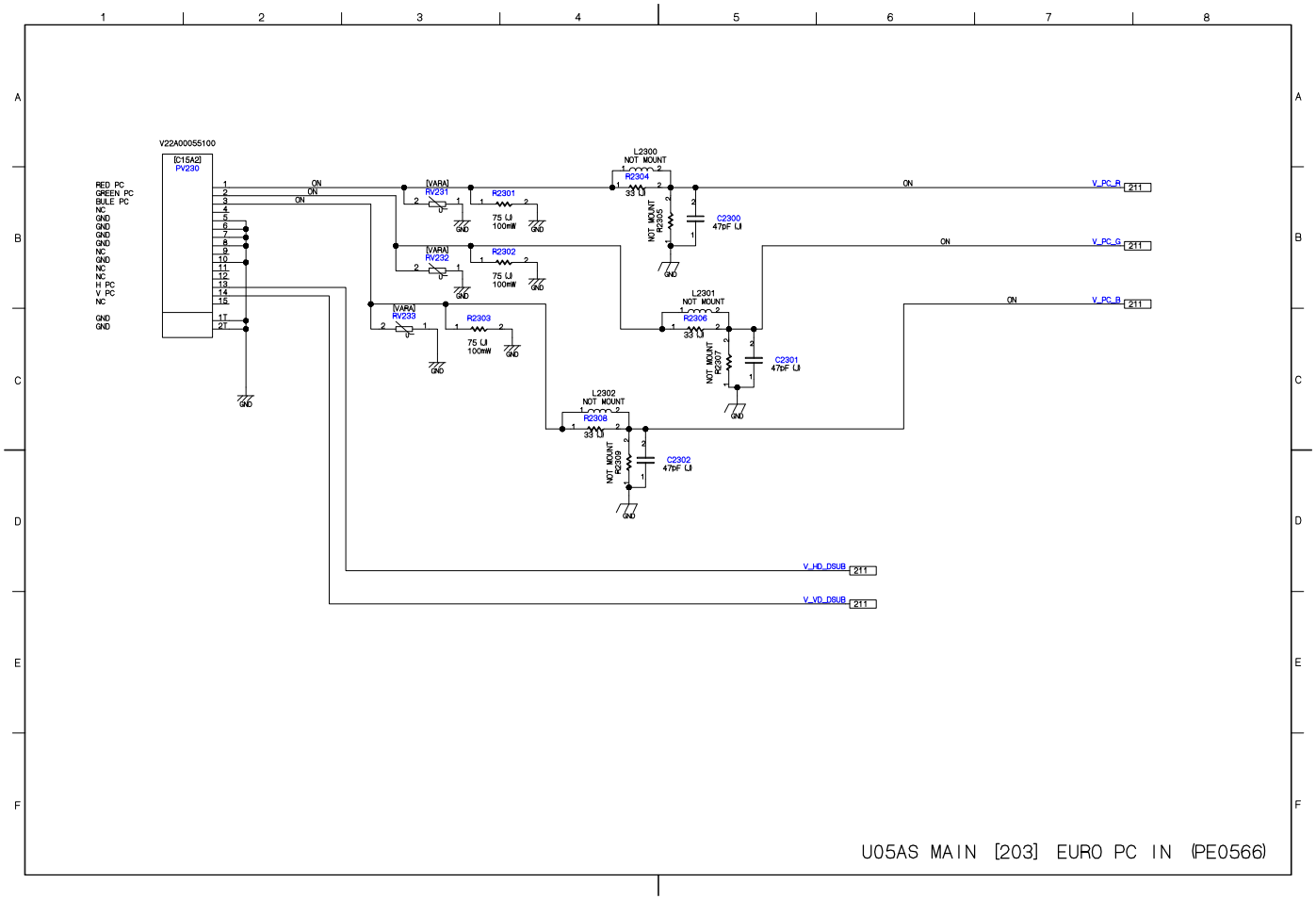
U05AS MAIN [133] NOR FLASH (PE0566)

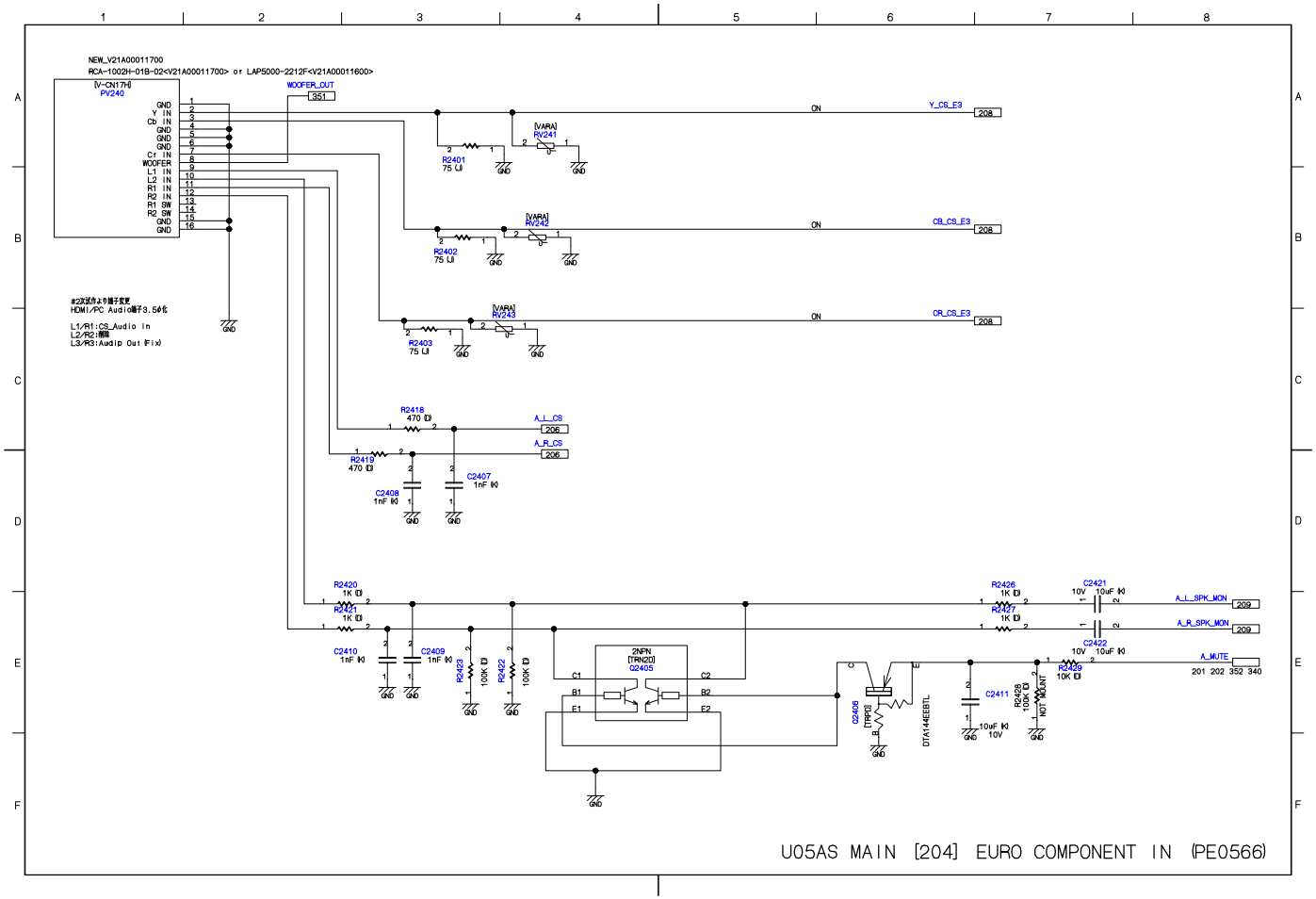


U05AS MAIN [134] NAND FLASH (PE0566)

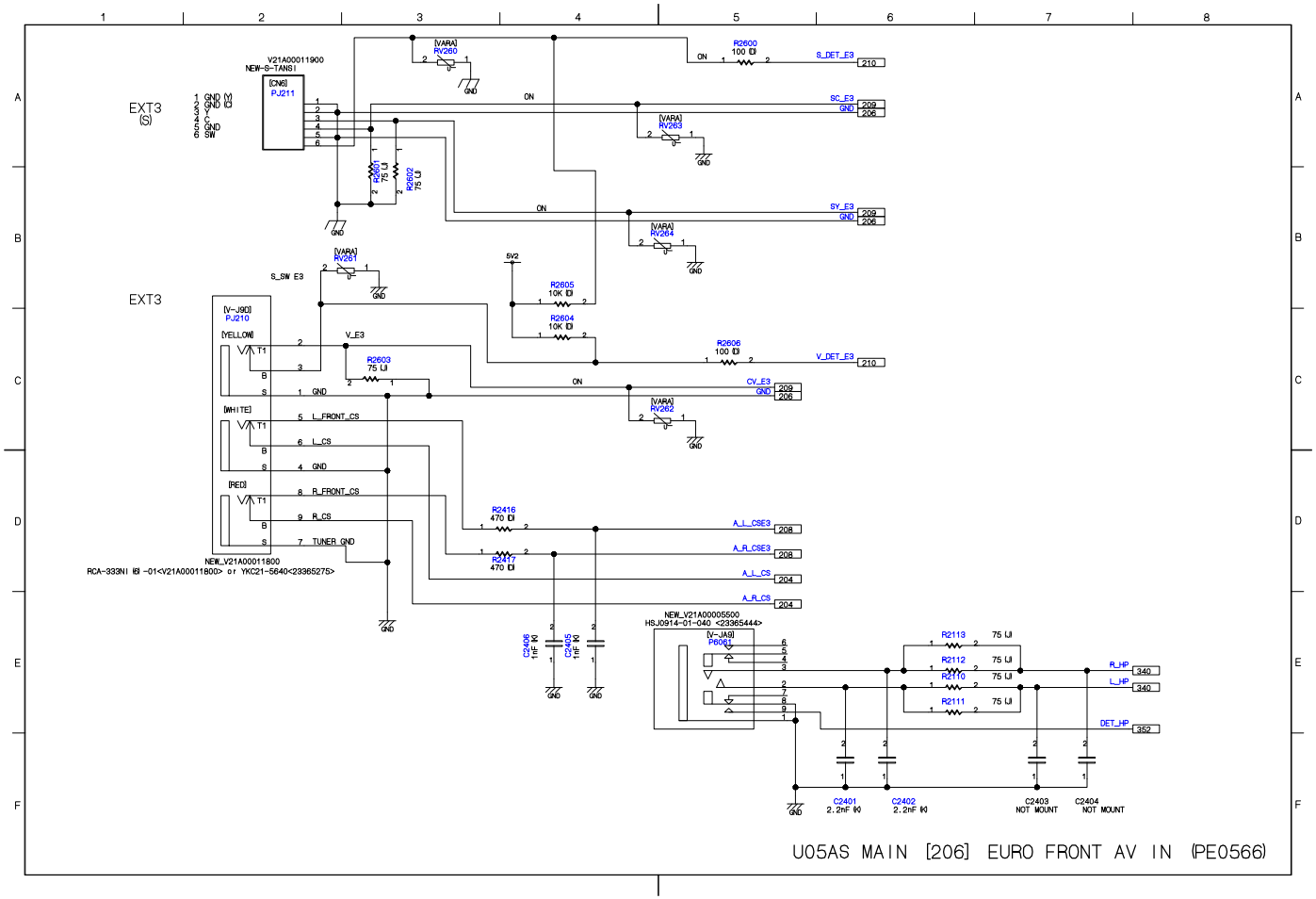

NEW_V22A00000800
MRC-021H-12 PC LF<V21A00007700> or CSS5021-9C01F<V22A00000800>
U05AS MAIN [201] EURO SCART 1 (PE0566)


NEW_V22A00000800
MRC-021H-12 PC LF<V21A00007700> or CSS5021-9C01F<V22A00000800>
[V-CN216] PV202
SHIELD GND
CVBS/SY IN
VIDEO OUT
CVBS/SY IN RETURN
VIDEO OUT RETURN
FAST BLANKING
RED/SC IN
BLANKING RETURN
RED/SC RETURN
GREEN IN
GREEN RETURN
SLOW SWITCH
BLUE IN
AUDIO IN (L)
BLUE RETURN
AUDIO EARTH
AUDIO OUT (L)
AUDIO IN (R)
AUDIO OUT (R)
[VARA] RV224
NOT MOUNT
[VARA] RV220
[VARA] RV221
[VARA] RV223
R2200
R2201
R2202
39K Ω
R2203
22K Ω
R2210
1K Ω
R2211
1K Ω
C2203
1nF
C2204
1nF
R2212
22K Ω
R2213
22K Ω
NOT MOUNT
TV_OUT_2
YV_E2
SC_E2
8TH_E2
A_L_E2
A_R_E2
L2201
120ohm
L2202
120ohm
C2206
1.5nF
C2205
1.5nF
R2215
100K Ω
R2214
100K Ω
R2218
1K Ω
R2219
1K Ω
C2221
10V 10uF
C2222
10V 10uF
A_R_TV2
A_L_TV2
2NPN [TRN23] Q2202
Q2205 [TRP0]
D7A144EE0TL
C2207
10uF 10V
R2224
100K Ω
NOT MOUNT
R2225
10K Ω
A_MUTE
201 204 352 340
Q2206
2SC4116-Y (TE85L, F)
R2226
10K Ω
C_TV_MUTE
500
C2208
10uF 10V
U05AS MAIN [202] EURO SCART 2 (PE0566)

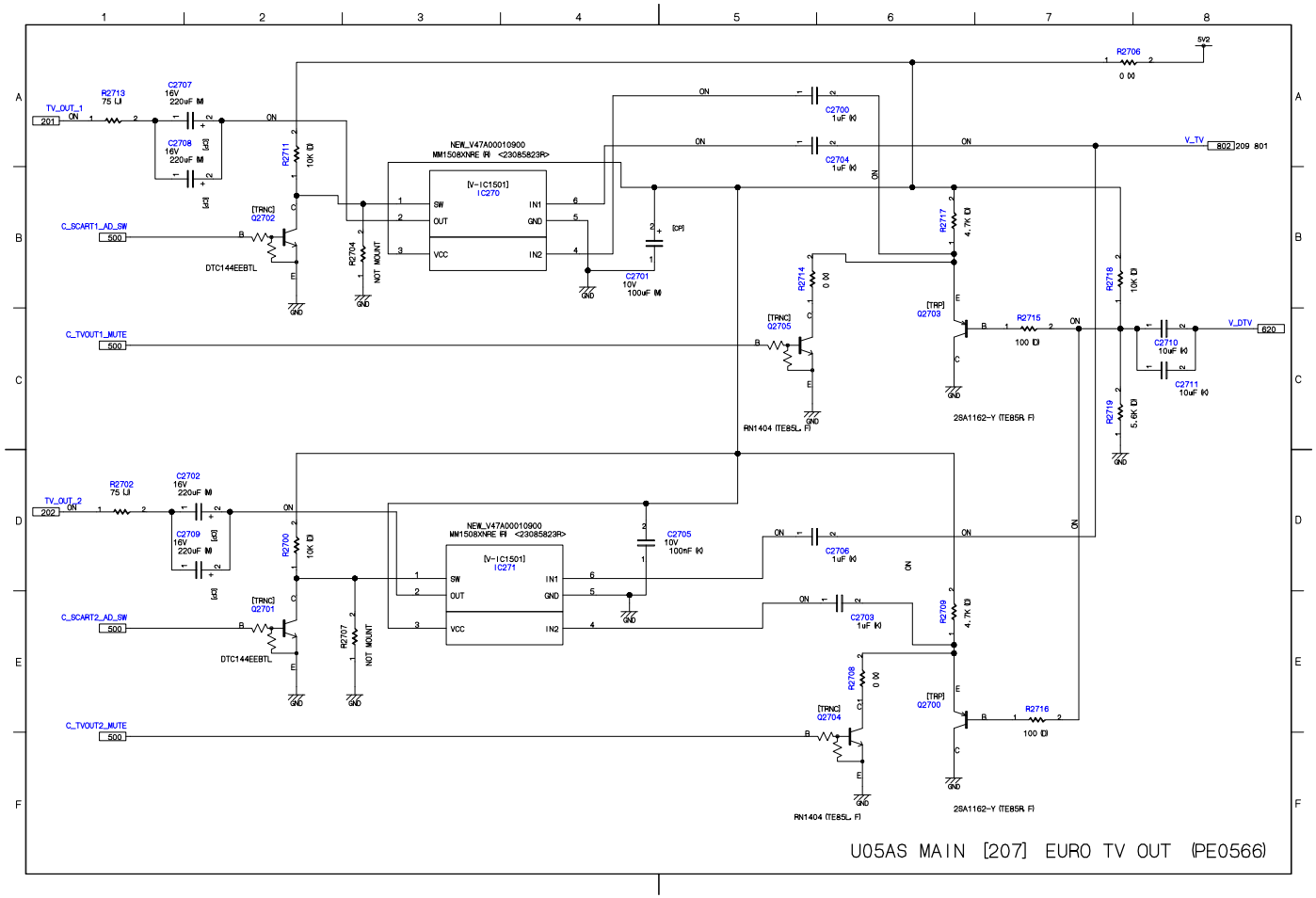

V22A00055100
[C15A2]
PV230
RED PC
GREEN PC
BULE PC
NC
GND
GND
GND
NC
GND
NC
NC
H P/C
V P/C
NC
GND
GND
ON
[VARA]
RV231
R2301
75 Ω
100mW
[VARA]
RV232
R2302
[VARA]
RV233
R2303
L2300
NOT MOUNT
R2304
33 Ω
NOT MOUNT
R2305
C2300
47pF Ω
L2301
NOT MOUNT
R2306
NOT MOUNT
R2307
C2301
47pF Ω
L2302
NOT MOUNT
R2308
NOT MOUNT
R2309
C2302
47pF Ω
V_PC_R
V_PC_G
V_PC_B
211
V_HD_DSUB
V_VD_DSUB
U05AS MAIN [203] EURO PC IN (PE0566)

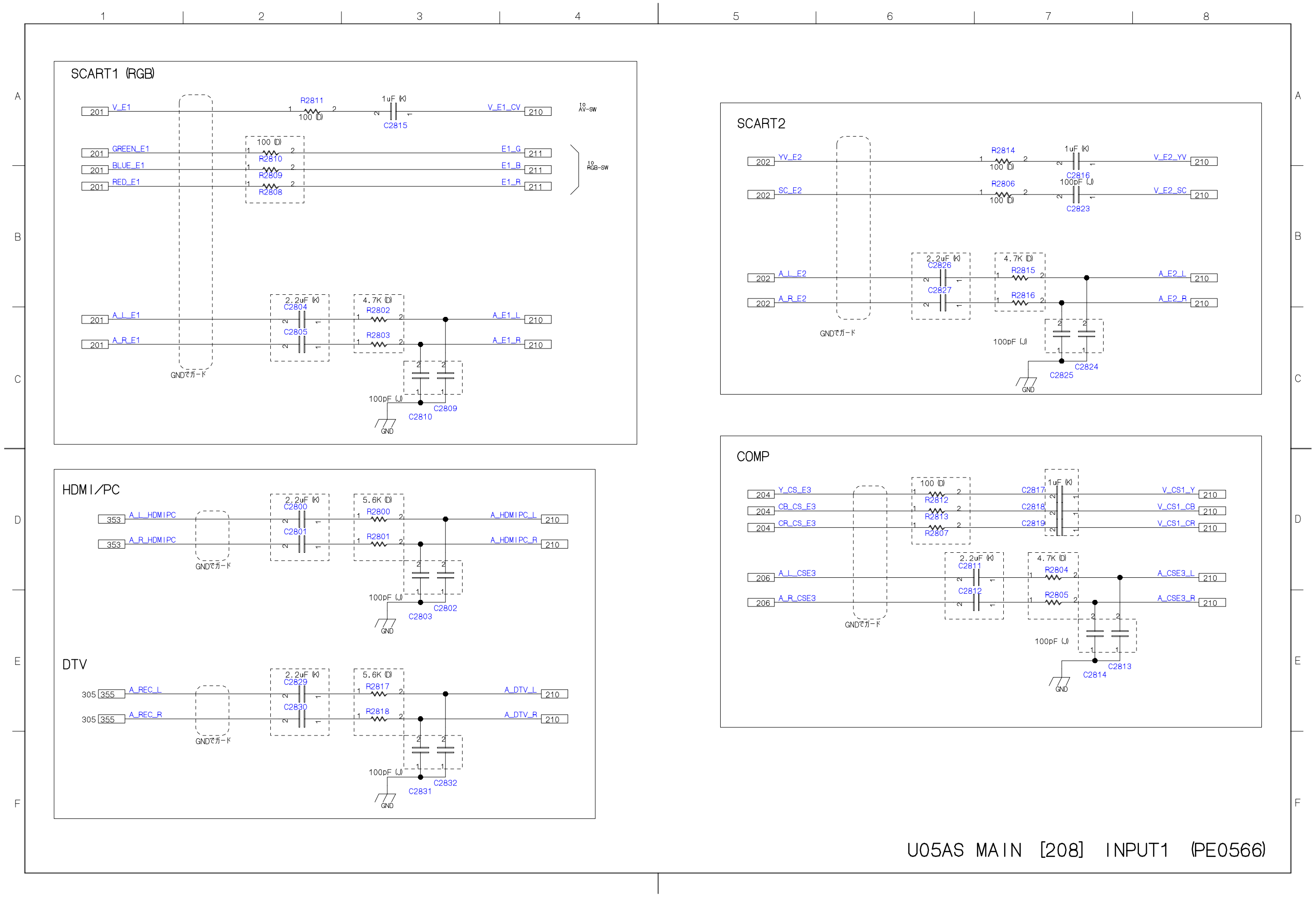


U05AS MAIN [204] EURO COMPONENT IN (PE0566)

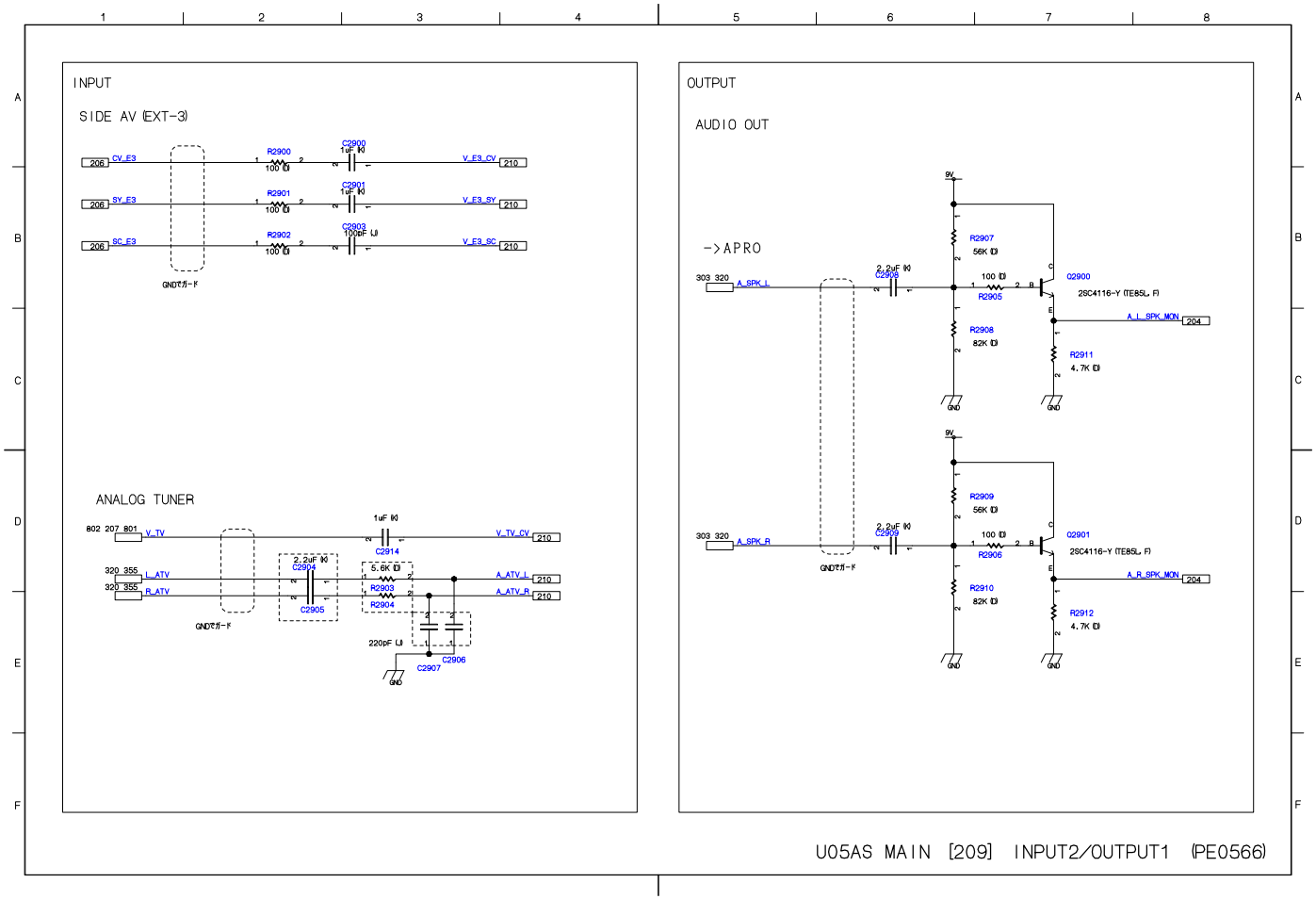


U05AS MAIN [206] EURO FRONT AV IN (PE0566)

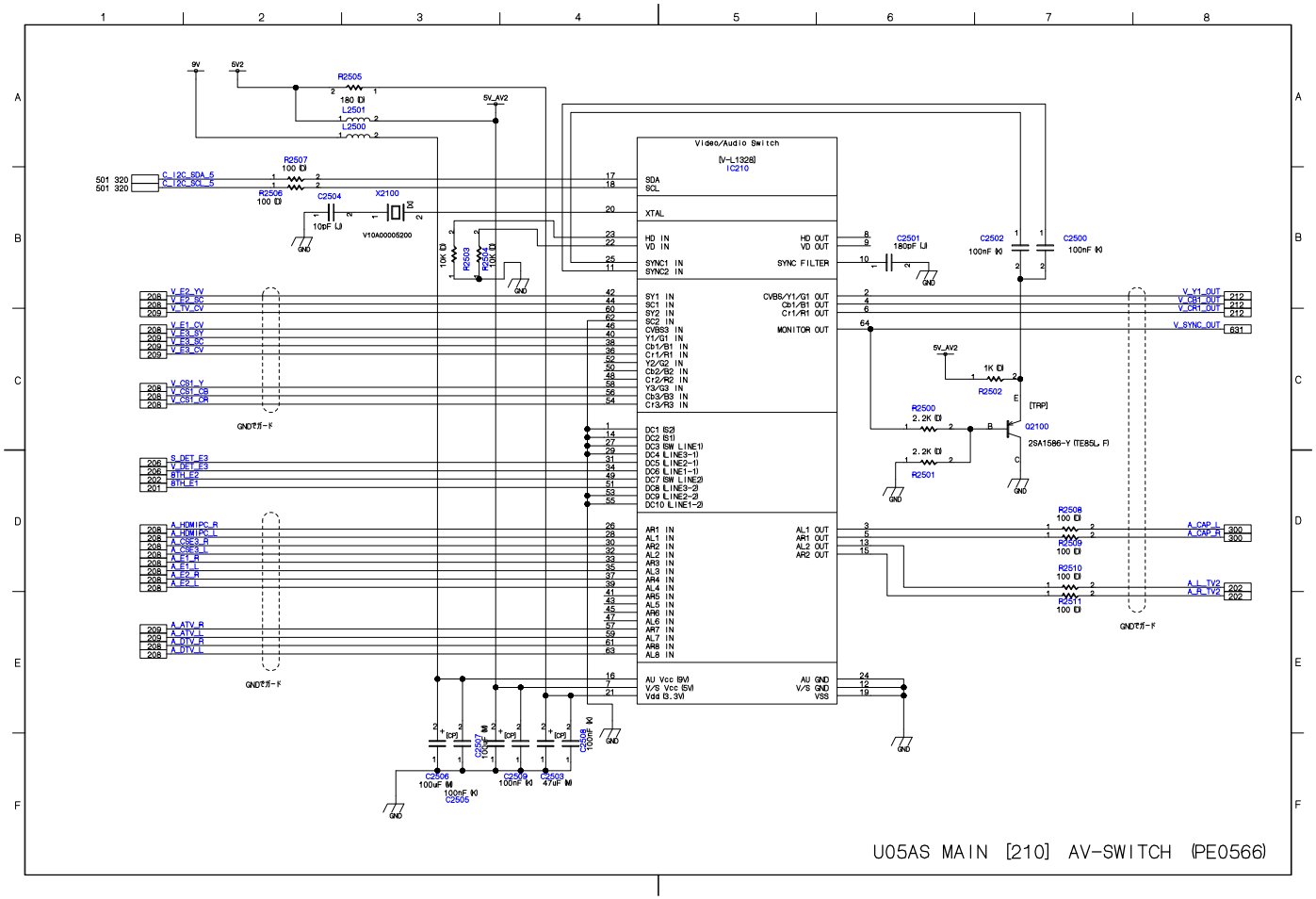

TV_OUT_1
R2713
75 Ω
C2707
16V
220uF
C2708
16V
220uF
R2711
10K Ω
NEW_V47A00010900
MM1508XNRE (R) <23085823R>
IC270
SW
OUT
VCC
IN1
GND
IN2
C2701
10V
100uF
C2700
1uF (K)
C2704
1uF (K)
R2706
0 Ω
5V2
V_TV
209
801
802
C_SCART1_AD_SW
500
Q2702
DTC144EEBTL
R2704
NOT MOUNT
R2717
4.7K Ω
R2714
0 Ω
Q2705
RN1404 (TE85L, F)
Q2703
2SA1162-Y (TE85R, F)
R2715
100 Ω
R2718
10K Ω
R2719
5.6K Ω
C2710
10uF (K)
C2711
10uF (K)
V_DTV
620
C_TVOUT1_MUTE
TV_OUT_2
R2702
75 Ω
C2702
16V
220uF
C2709
16V
220uF
R2700
10K Ω
NEW_V47A00010900
MM1508XNRE (R) <23085823R>
IC271
C2705
10V
100nF (K)
C2706
1uF (K)
C2703
1uF (K)
C_SCART2_AD_SW
500
Q2701
DTC144EEBTL
R2707
NOT MOUNT
R2709
4.7K Ω
R2708
0 Ω
Q2704
RN1404 (TE85L, F)
Q2700
2SA1162-Y (TE85R, F)
R2716
100 Ω
C_TVOUT2_MUTE
U05AS MAIN [207] EURO TV OUT (PE0566)

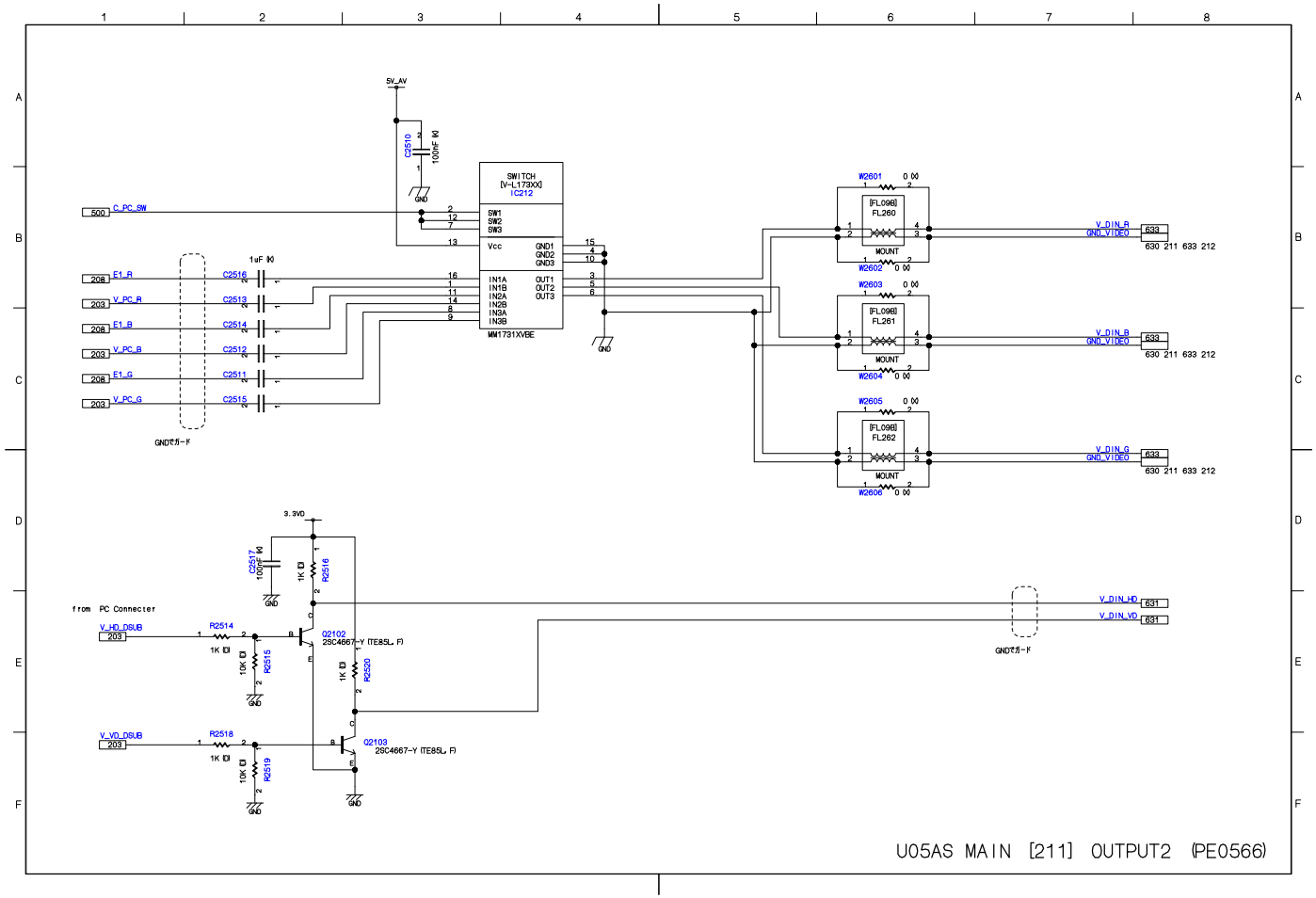


SCART1 (RGB)
SCART2
HDMI/PC
DTV
COMP
GNDでガード
100pF (J)
GND
U05AS MAIN [208] INPUT1 (PE0566)

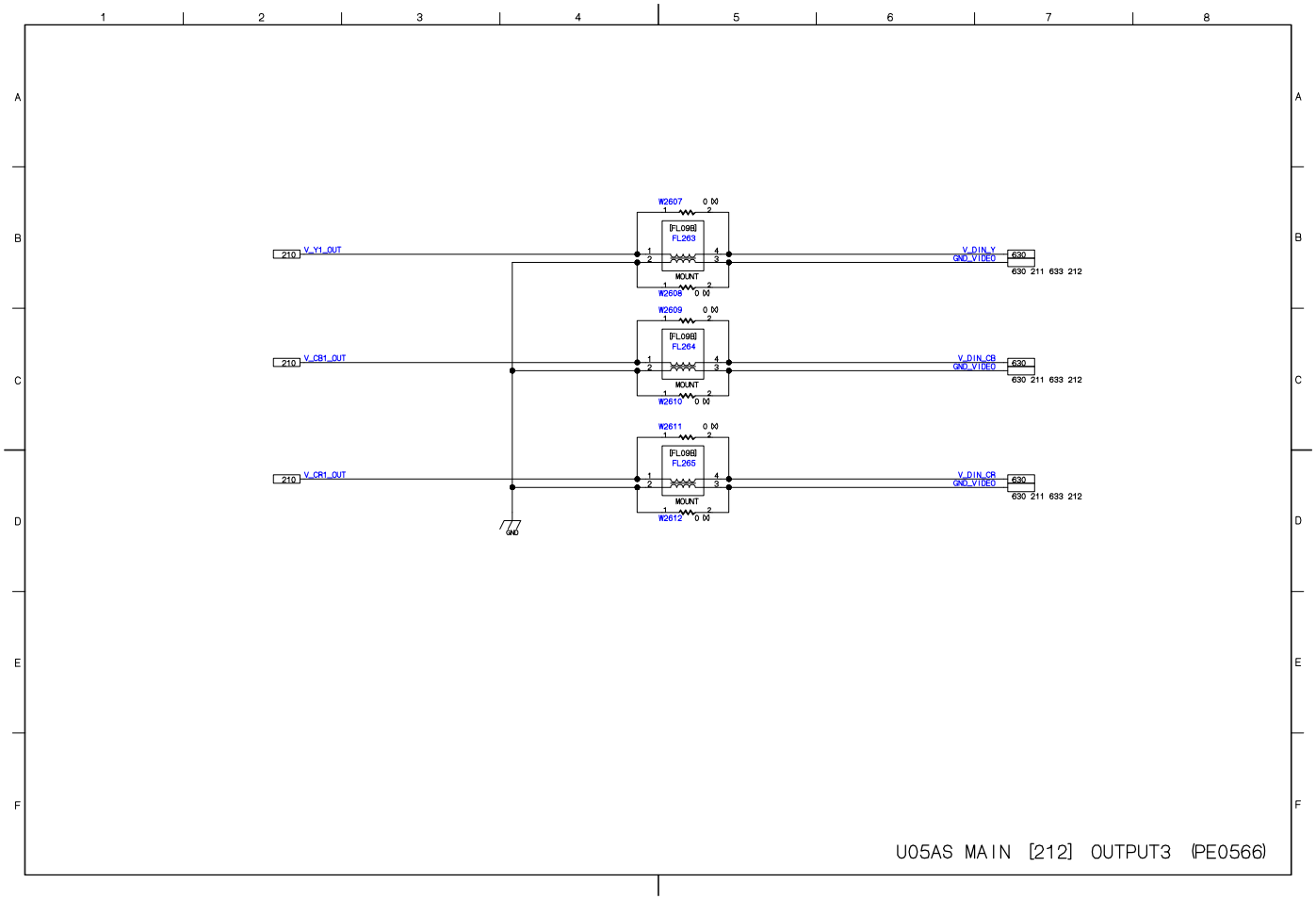


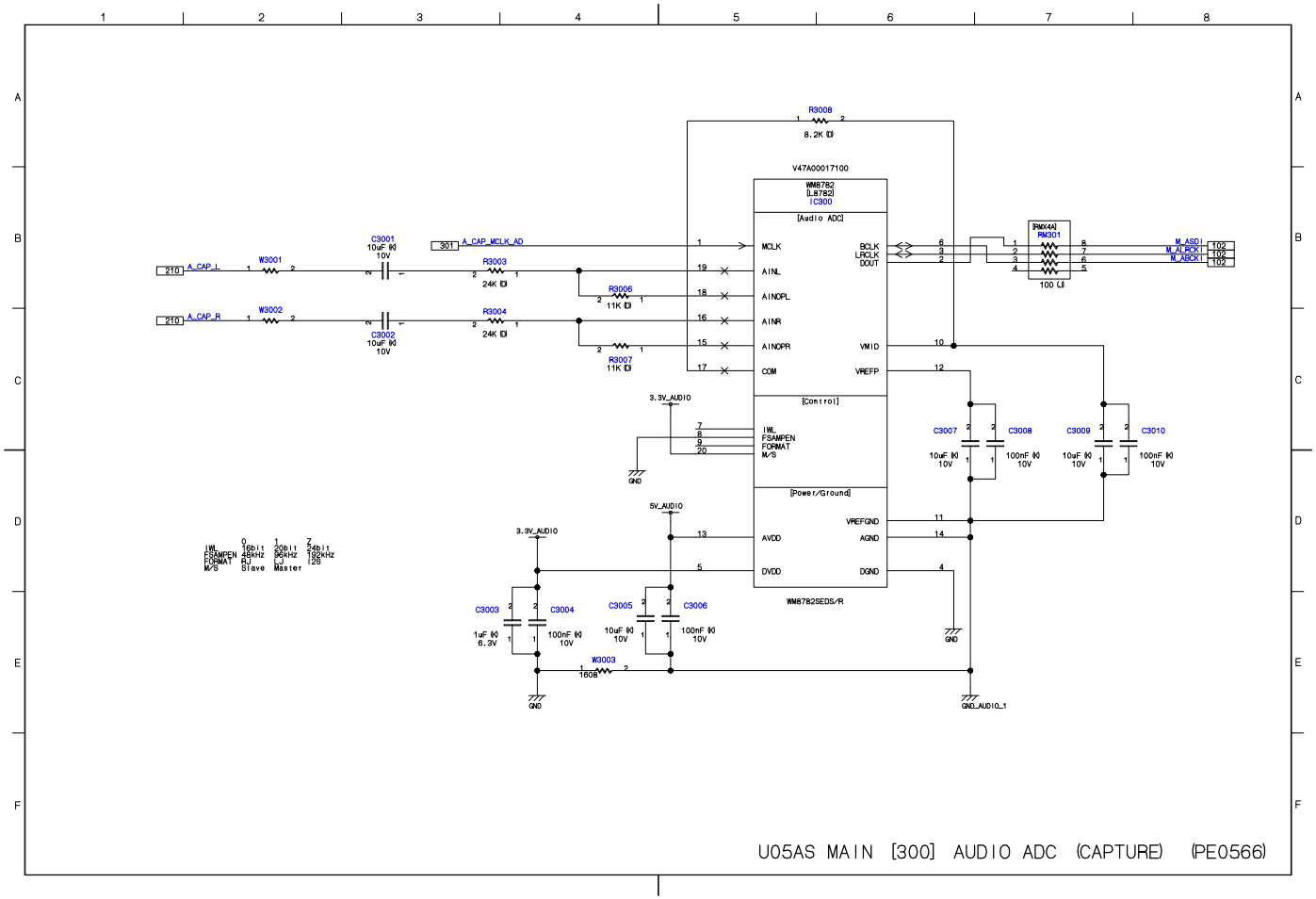
U05AS MAIN [209] INPUT2/OUTPUT1 (PE0566)


Video/Audio Switch
[V-L1328]
IC210
U05AS MAIN [210] AV-SWITCH (PE0566)

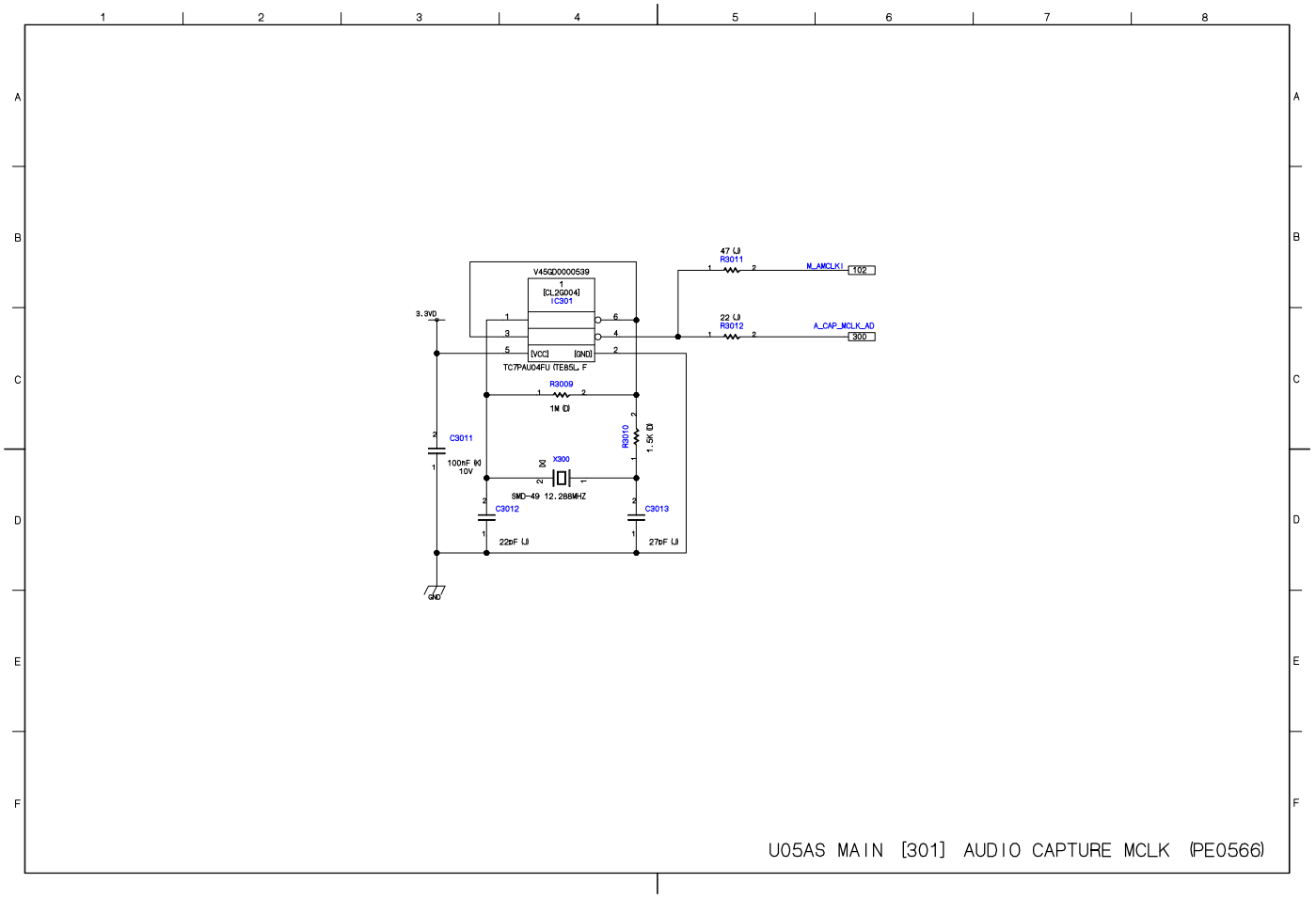


U05AS MAIN [211] OUTPUT2 (PE0566)

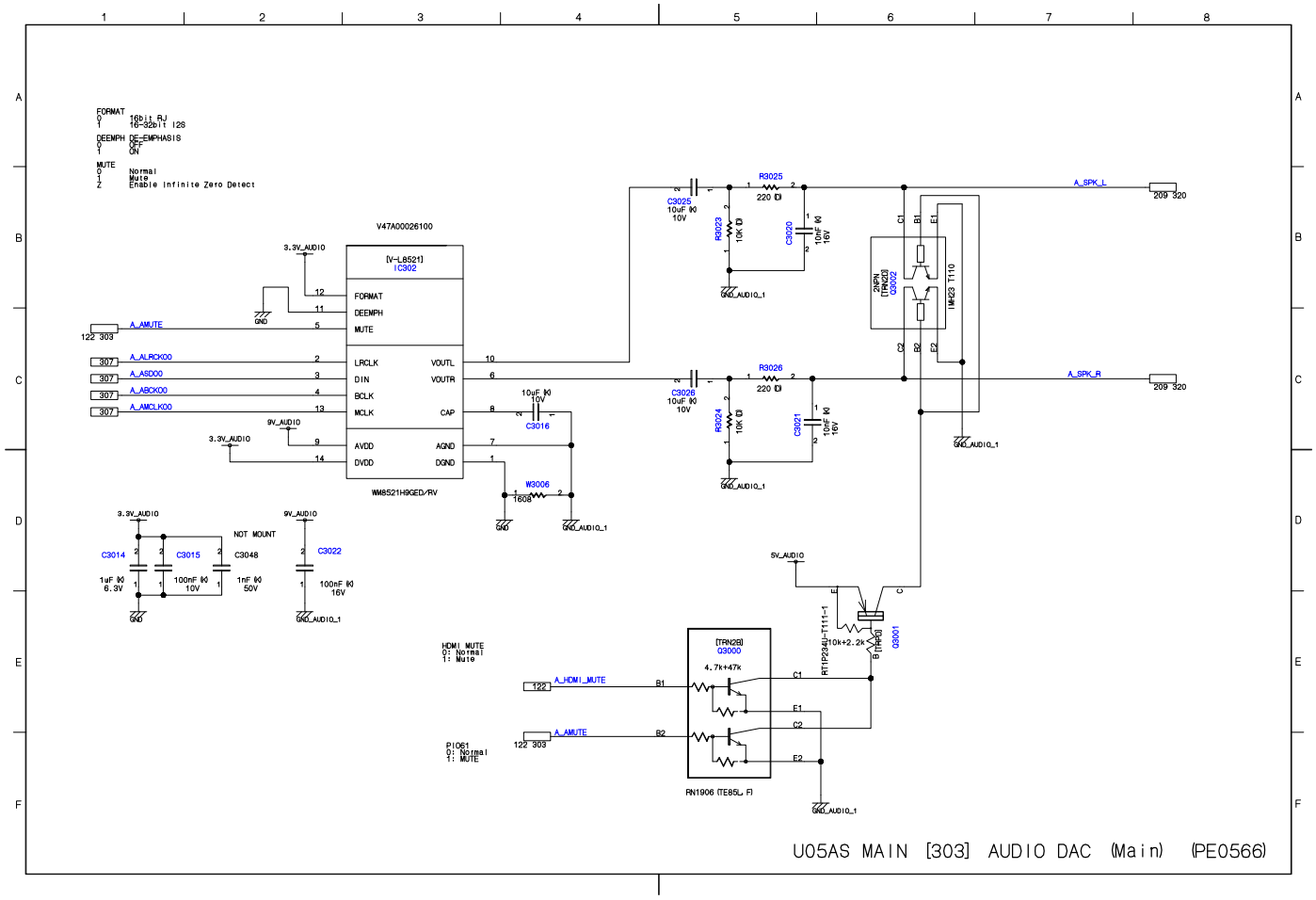

1
2
3
4
5
6
7
8
A
B
C
D
E
F
W2607 0 0Ω
[FL098]
FL263
MOUNT
W2608 0 0Ω
210 V_Y1_OUT
V_DIN_Y
GND_VIDEO
630
630 211 633 212
W2609 0 0Ω
[FL098]
FL264
MOUNT
W2610 0 0Ω
210 V_CB1_OUT
V_DIN_CB
GND_VIDEO
630
630 211 633 212
W2611 0 0Ω
[FL098]
FL265
MOUNT
W2612 0 0Ω
210 V_CR1_OUT
V_DIN_CR
GND_VIDEO
630
630 211 633 212
GND
U05AS MAIN [212] OUTPUT3 (PE0566)



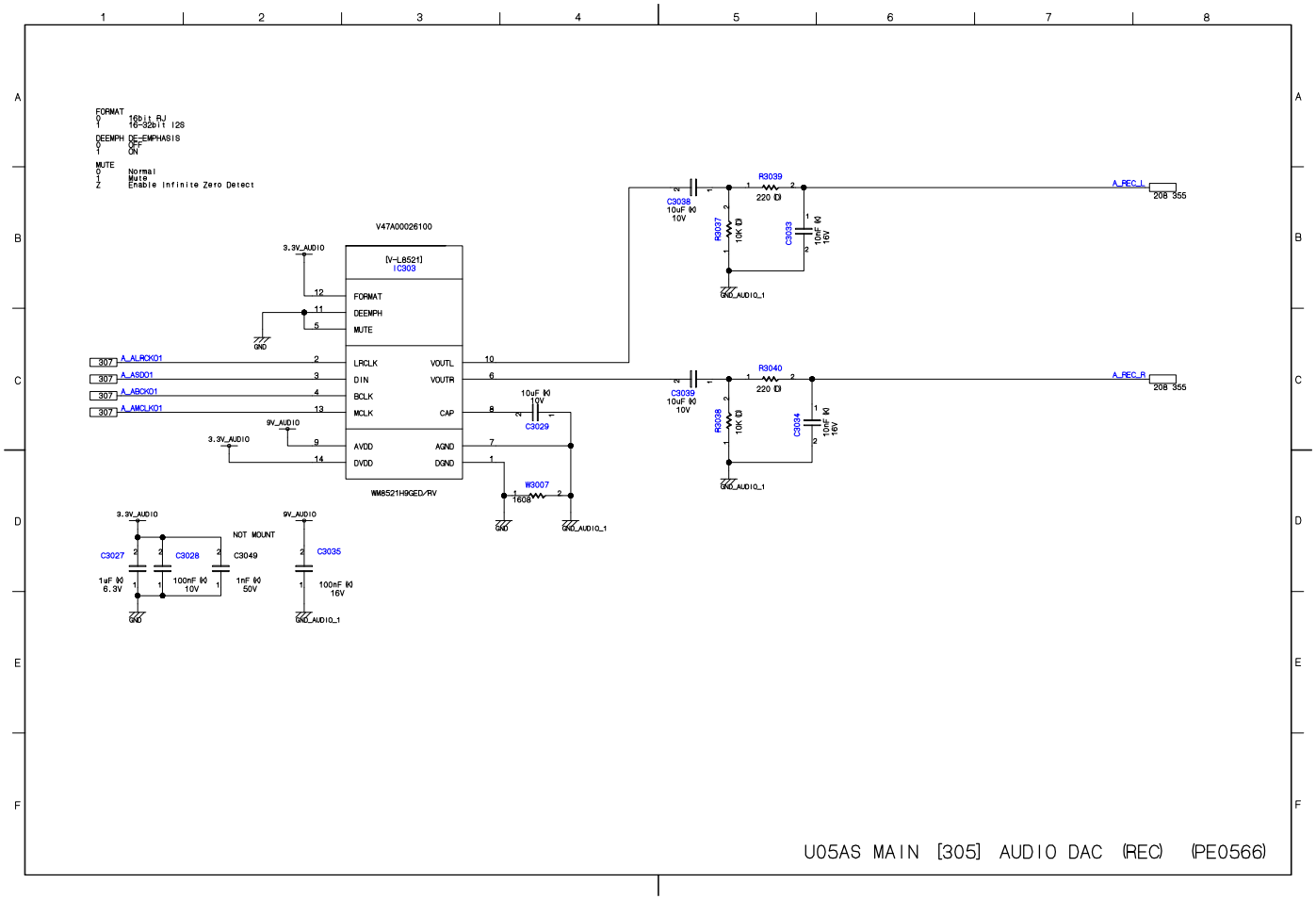
U05AS MAIN [300] AUDIO ADC (CAPTURE) (PE0566)



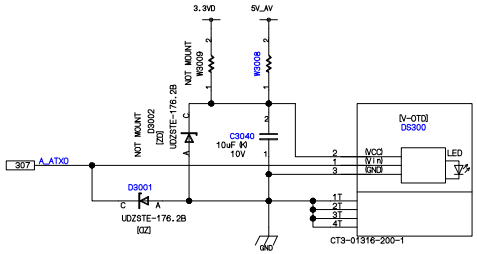
U05AS MAIN [301] AUDIO CAPTURE MCLK (PE0566)



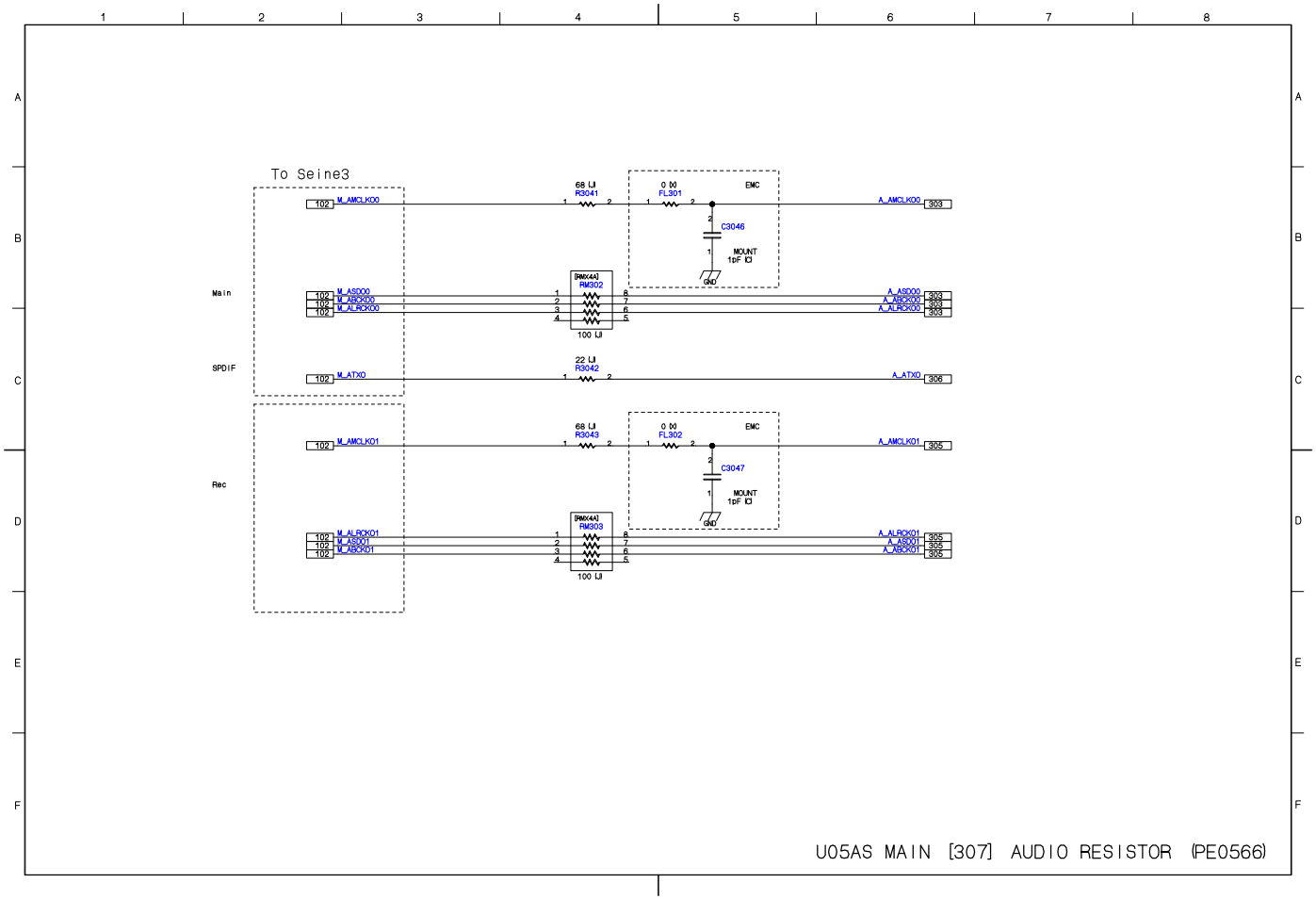
U05AS MAIN [303] AUDIO DAC (Main) (PE0566)



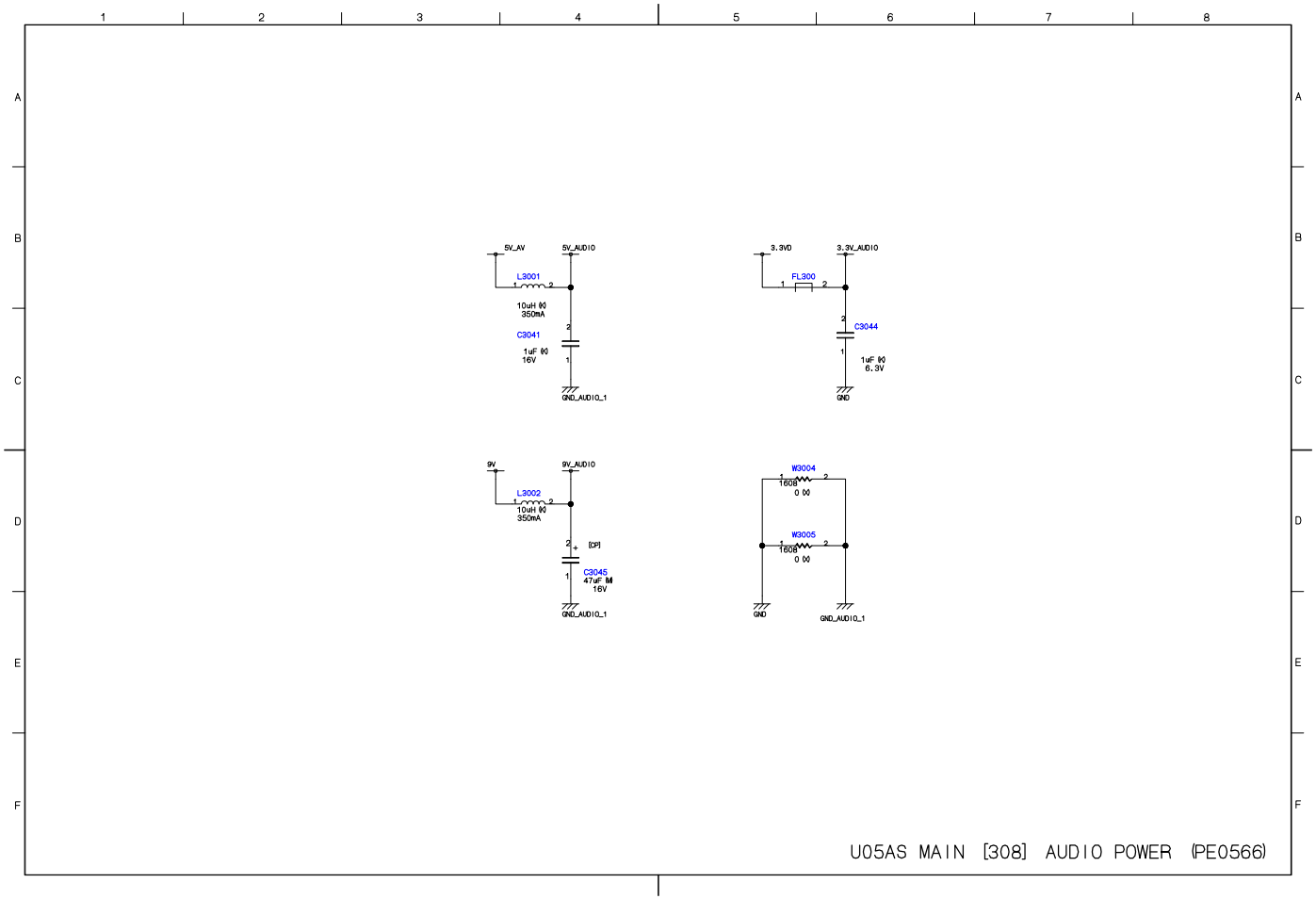
U05AS MAIN [305] AUDIO DAC (REC) (PE0566)

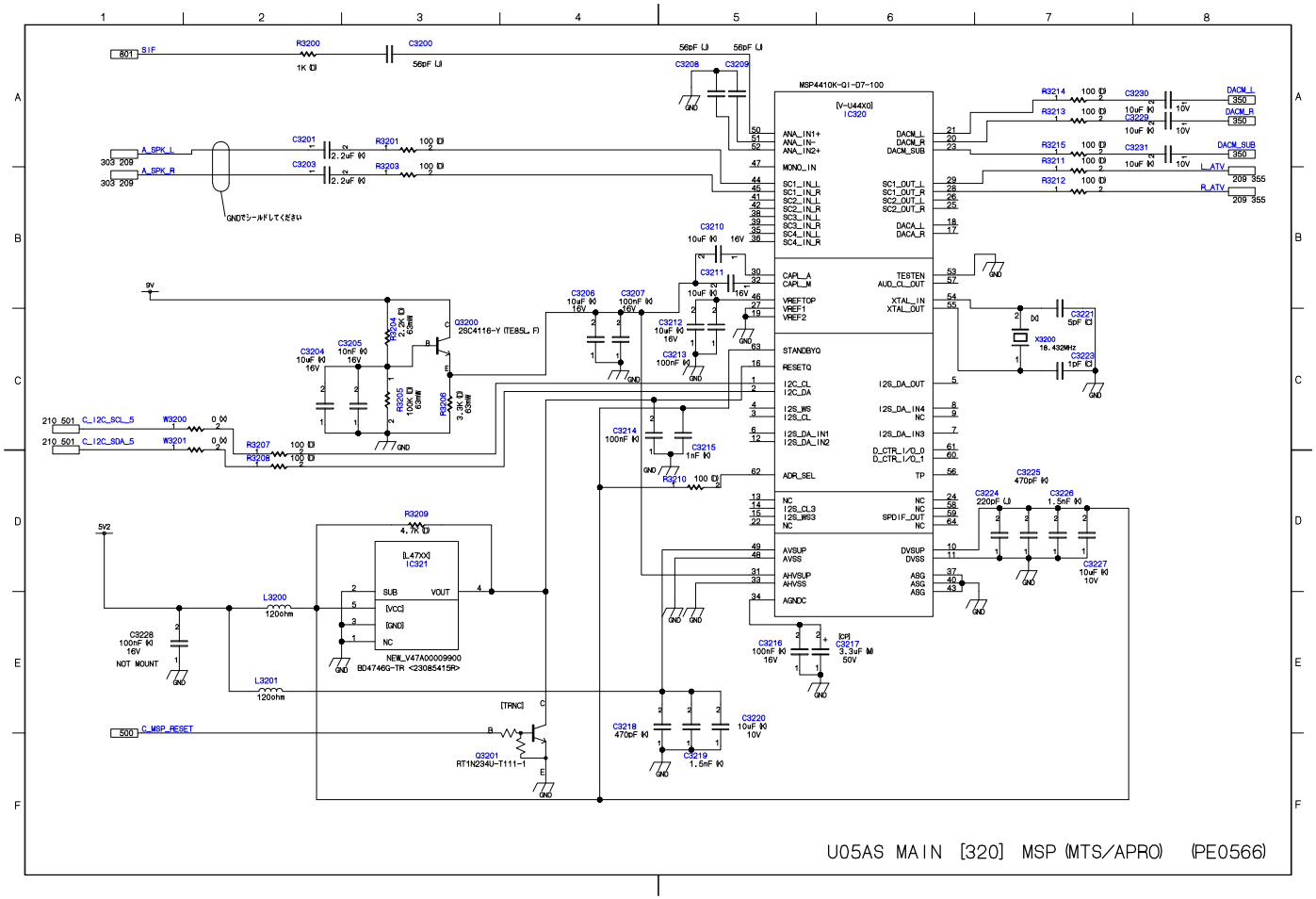


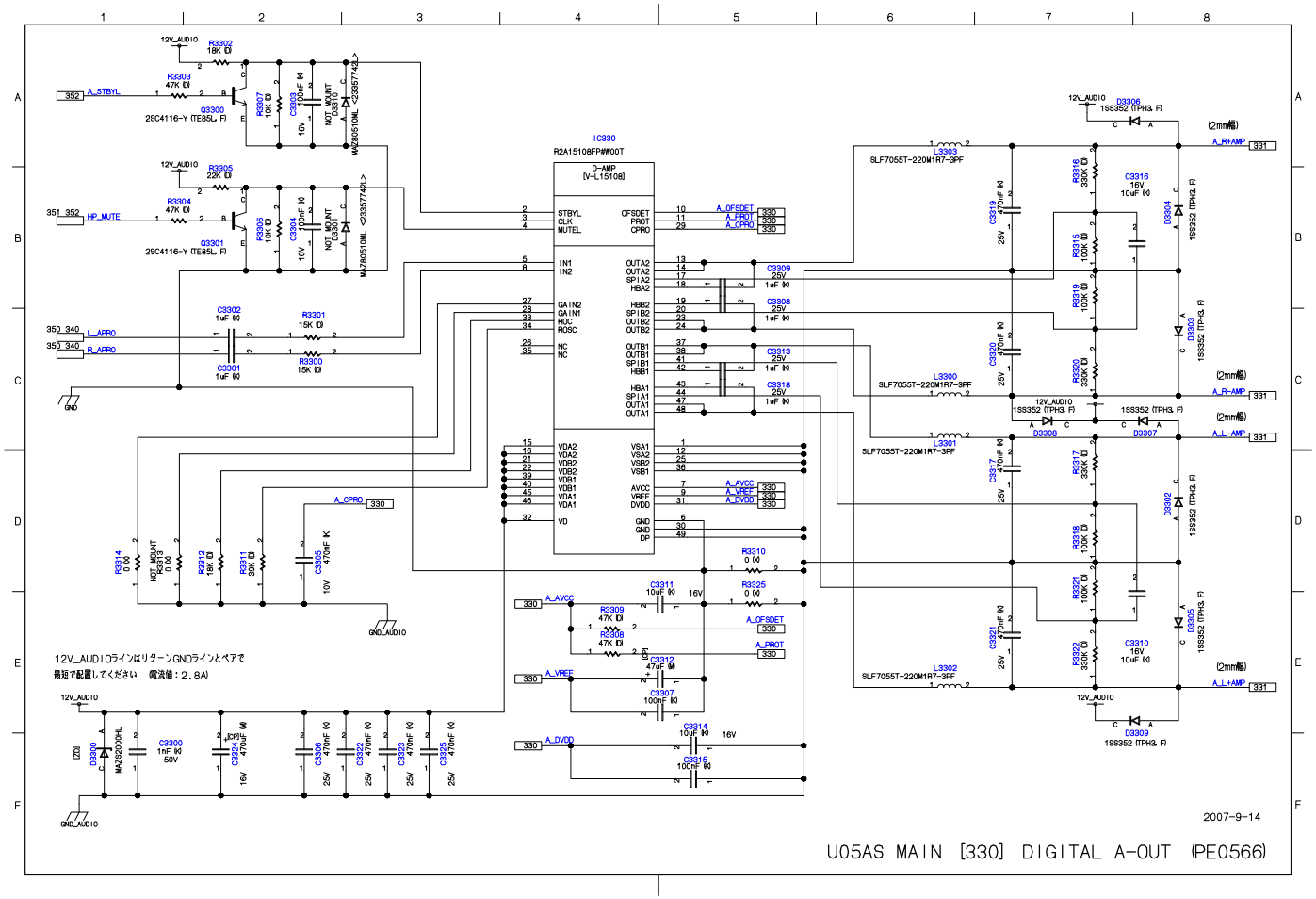
U05AS MAIN [306] S/PDIF CONNECTOR (PE0566)



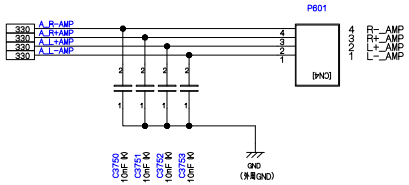
U05AS MAIN [307] AUDIO RESISTOR (PE0566)


1
2
3
4
5
6
7
8
A
B
C
D
E
F
5V_AV
5V_AUDIO
L3001
10uH
350mA
C3041
1uF
16V
GND_AUDIO_1
3.3VD
3.3V_AUDIO
FL300
C3044
1uF
6.3V
GND
9V
9V_AUDIO
L3002
10uH
350mA
[CP]
C3045
47uF
16V
GND_AUDIO_1
W3004
1608
0
W3005
1608
0
GND
GND_AUDIO_1
U05AS MAIN [308] AUDIO POWER (PE0566)

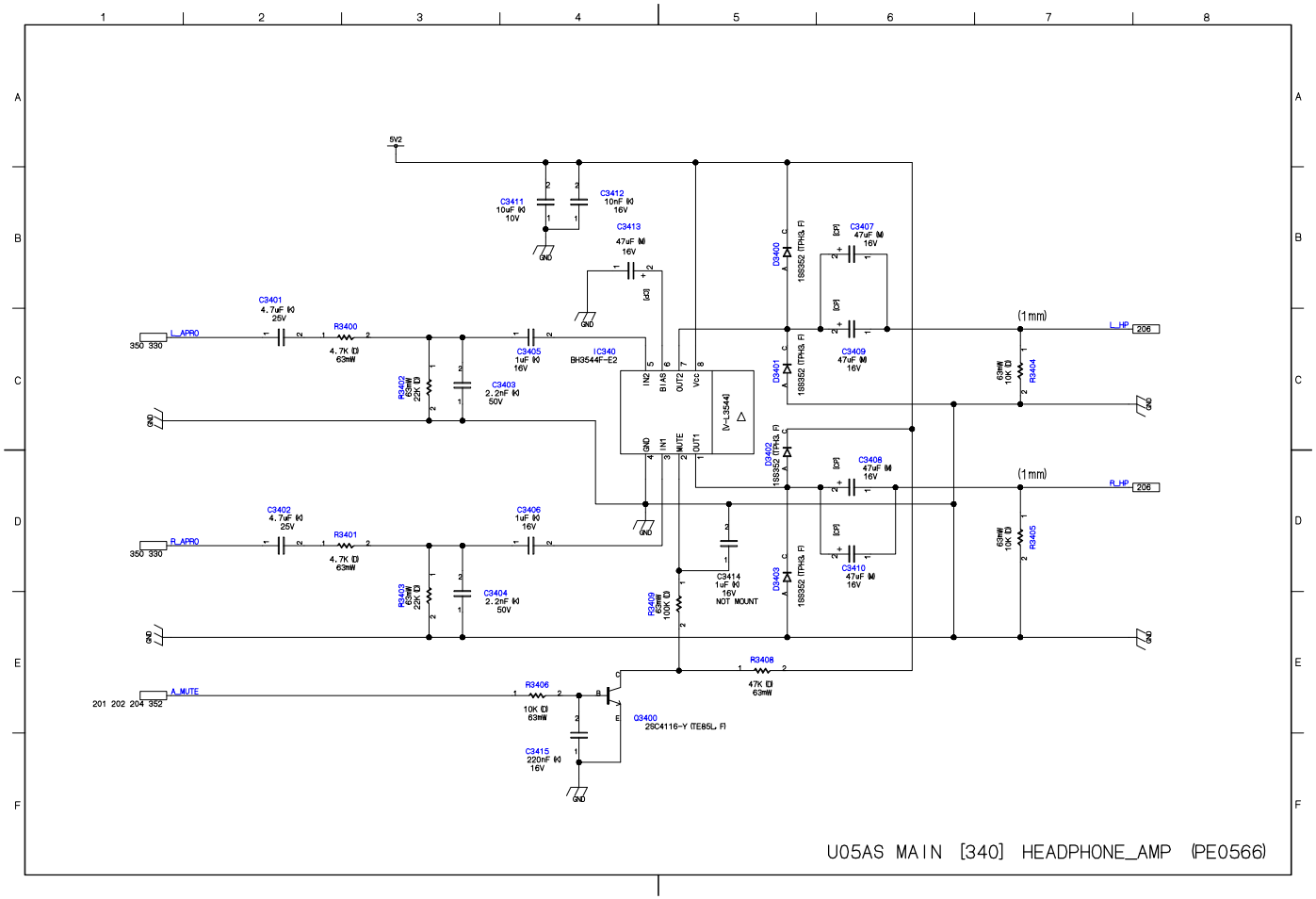

MSP4410K-QI-D7-100
[V-U44X0]
IC320
[L47XX]
IC321
BD4746G-TR <23085415R>
NEW_V47A00009900
[TPNC]
Q3200
2SC4116-Y (TE85L, F)
Q3201
RT1N234U-T111-1
X3200
18.432MHz
SIF
A_SPK_L
A_SPK_R
C_I2C_SCL_5
C_I2C_SDA_5
C_MSP_RESET
GNDでシールドしてください
NOT MOUNT
DACM_L
DACM_R
DACM_SUB
L_ATV
R_ATV
U05AS MAIN [320] MSP (MTS/APRO) (PE0566)


12V_AUDIO
A_STBYL
HP_MUTE
L_APPRO
R_APPRO
IC330
R2A15108FPMW00T
D-AMP
[V-L15108]
STBYL
CLK
MUTEL
OFSDET
PROT
CPRO
A_OFSDET
A_PROT
A_CPRO
IN1
IN2
GAIN2
GAIN1
ROC
ROSC
NC
VD
OUTA2
SP1A2
HBA2
HBB2
SP1B2
OUTB2
OUTB1
SP1B1
HBB1
HBA1
SP1A1
OUTA1
VSA1
VSA2
VSB2
VSB1
AVCC
VREF
DVDD
GND
DP
VDA2
VDB2
VDB1
A_AVCC
A_VREF
A_DVDD
SLF7055T-220M1R7-3PF
1SS352 (TPH3, F)
A_R+AMP
A_R-AMP
A_L-AMP
A_L+AMP
(2mm幅)
12V_AUDIOラインはリターンGNDラインとペアで
最短で配置してください　電流値：2.8A
GND_AUDIO
2007-9-14
U05AS MAIN [330] DIGITAL A-OUT (PE0566)

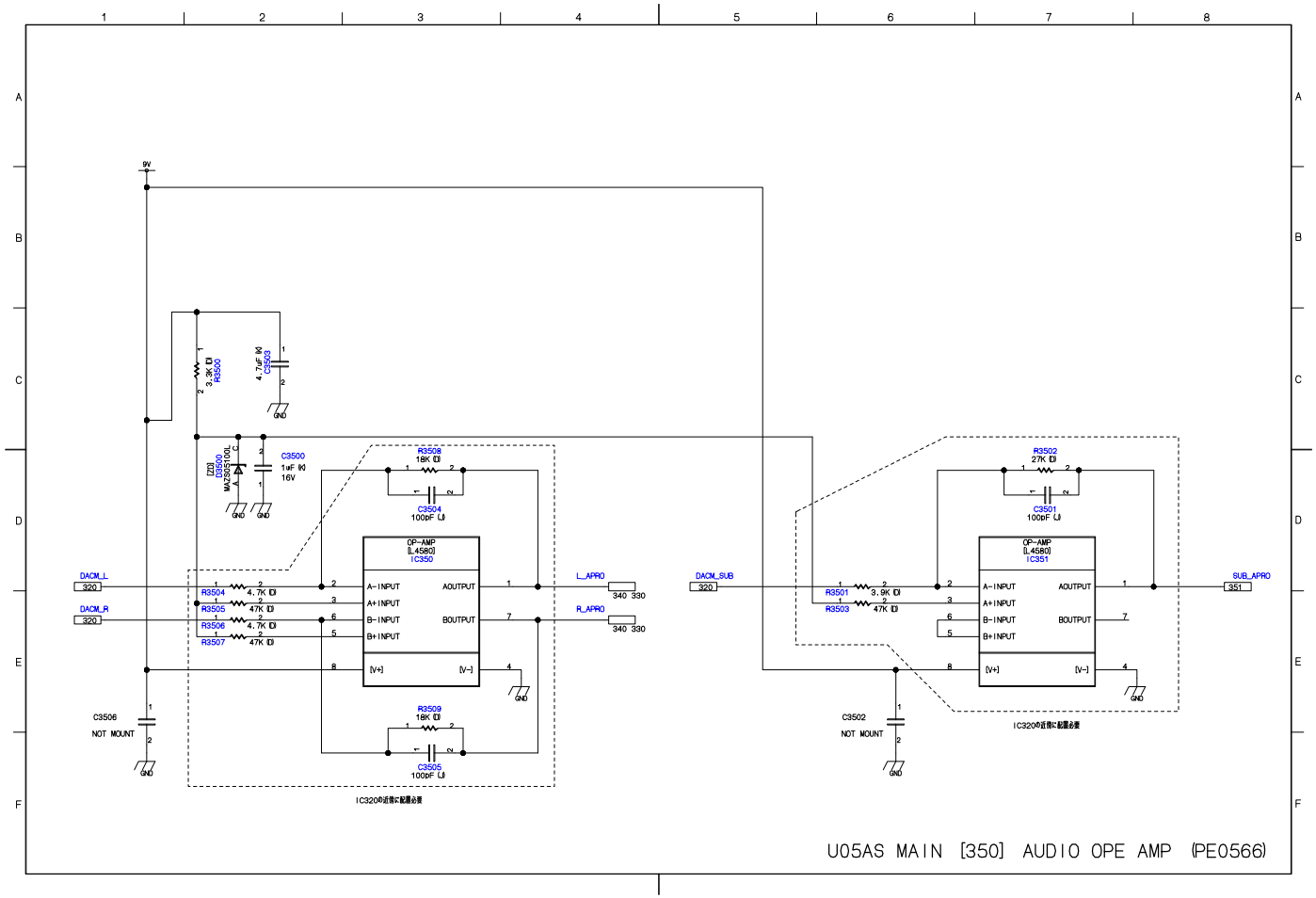
SPEAKER OUT



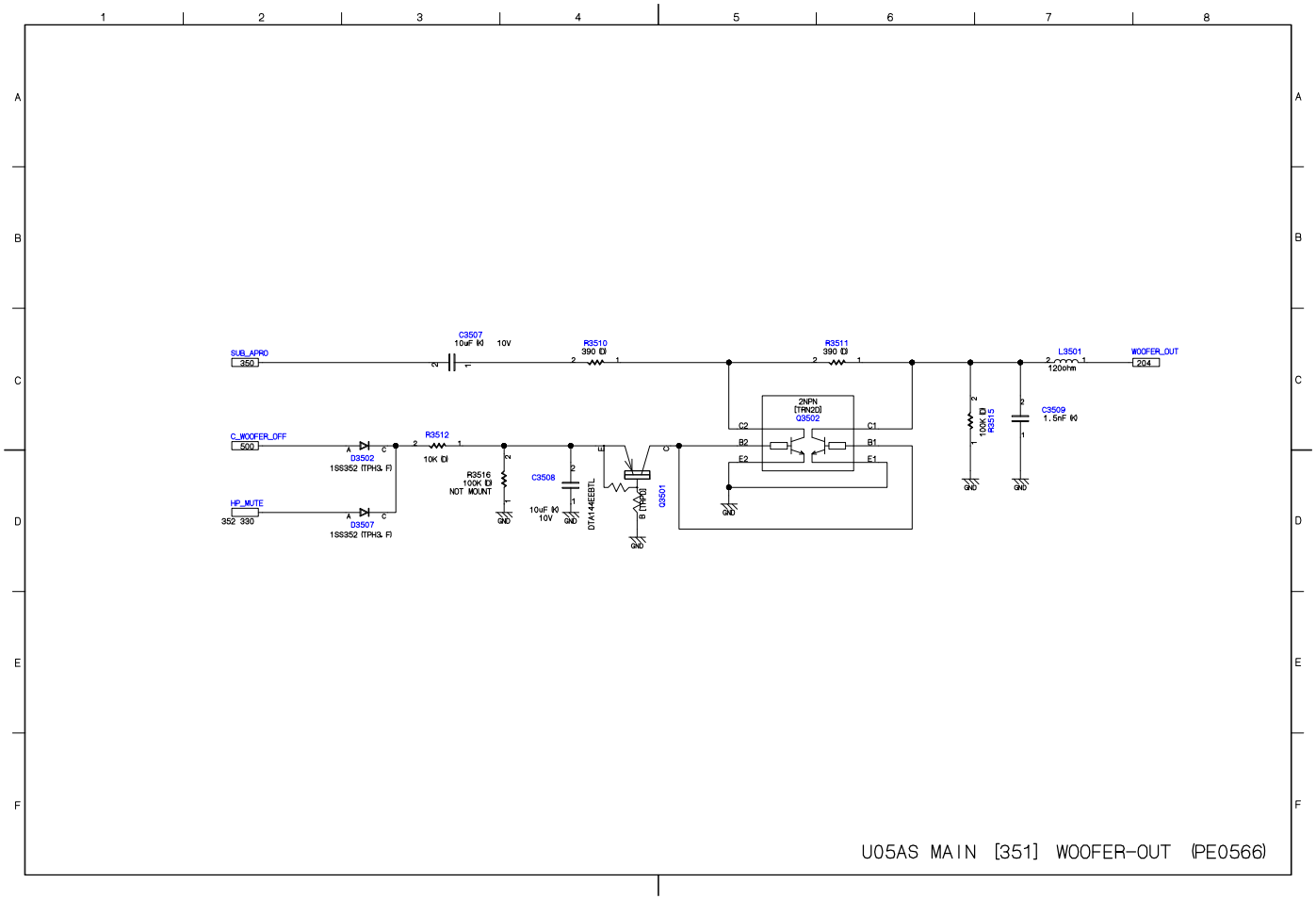
U05AS MAIN [331] SP CONNECTOR (PE0566)



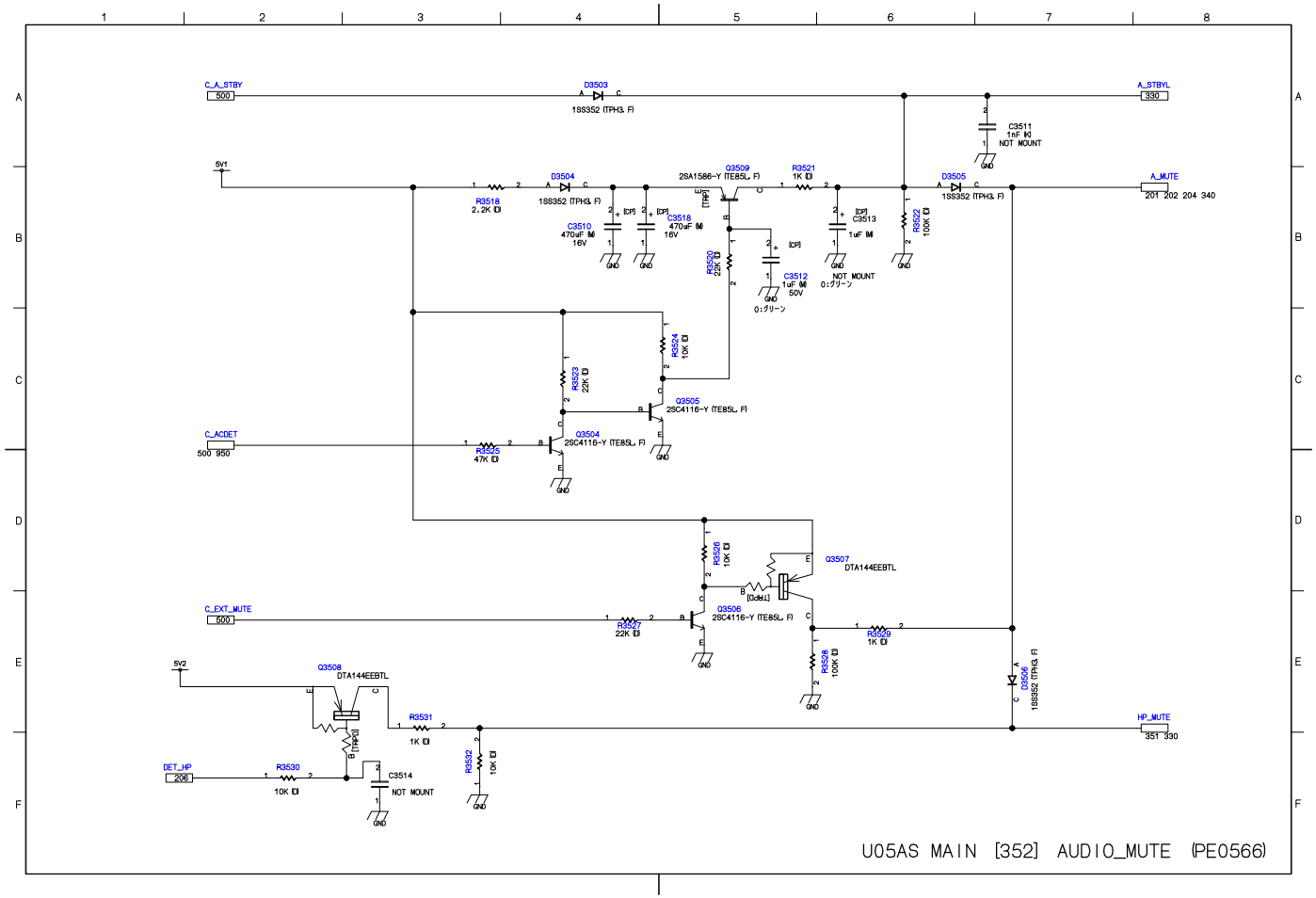
U05AS MAIN [340] HEADPHONE_AMP (PE0566)

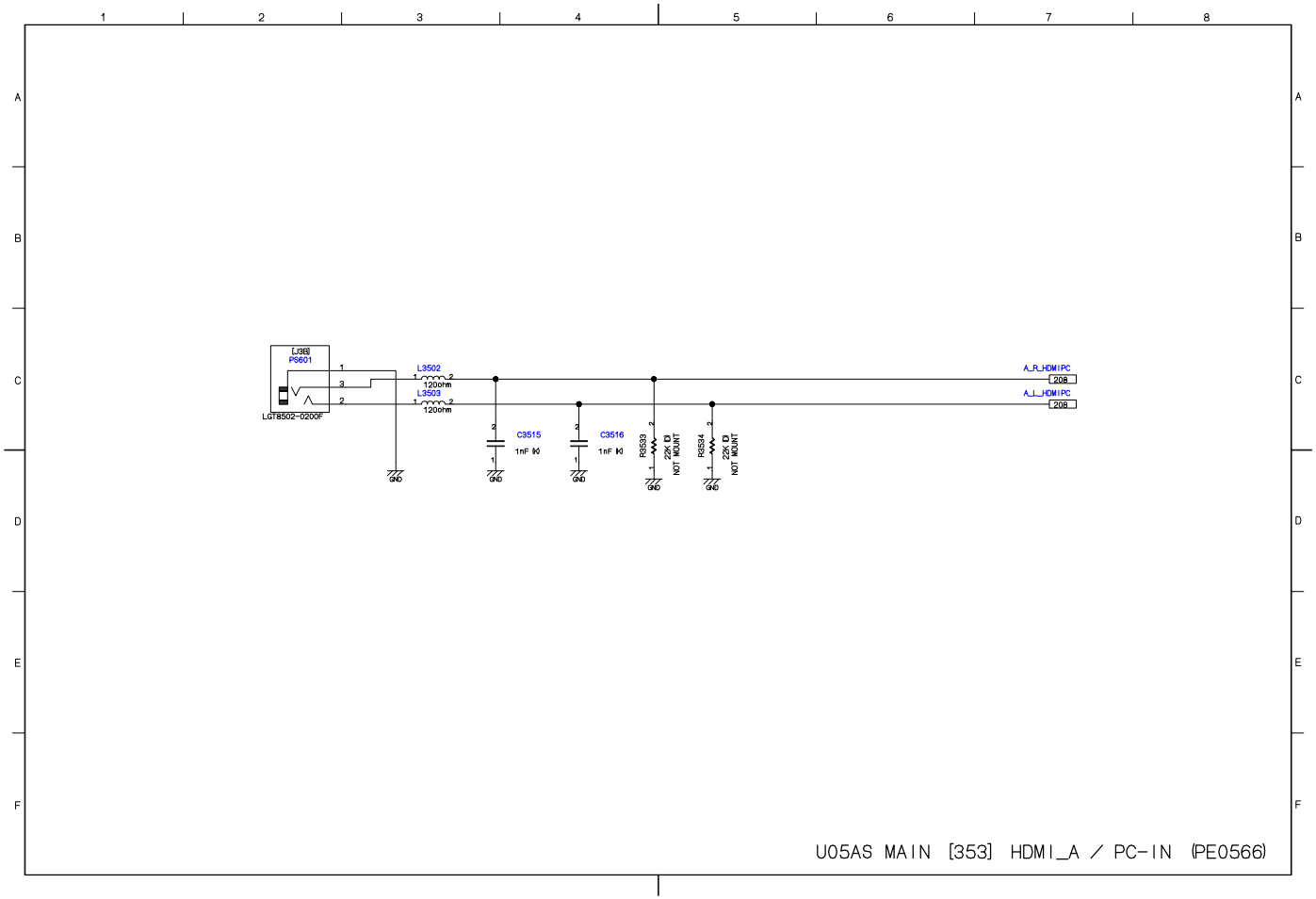


U05AS MAIN [350] AUDIO OPE AMP (PE0566)

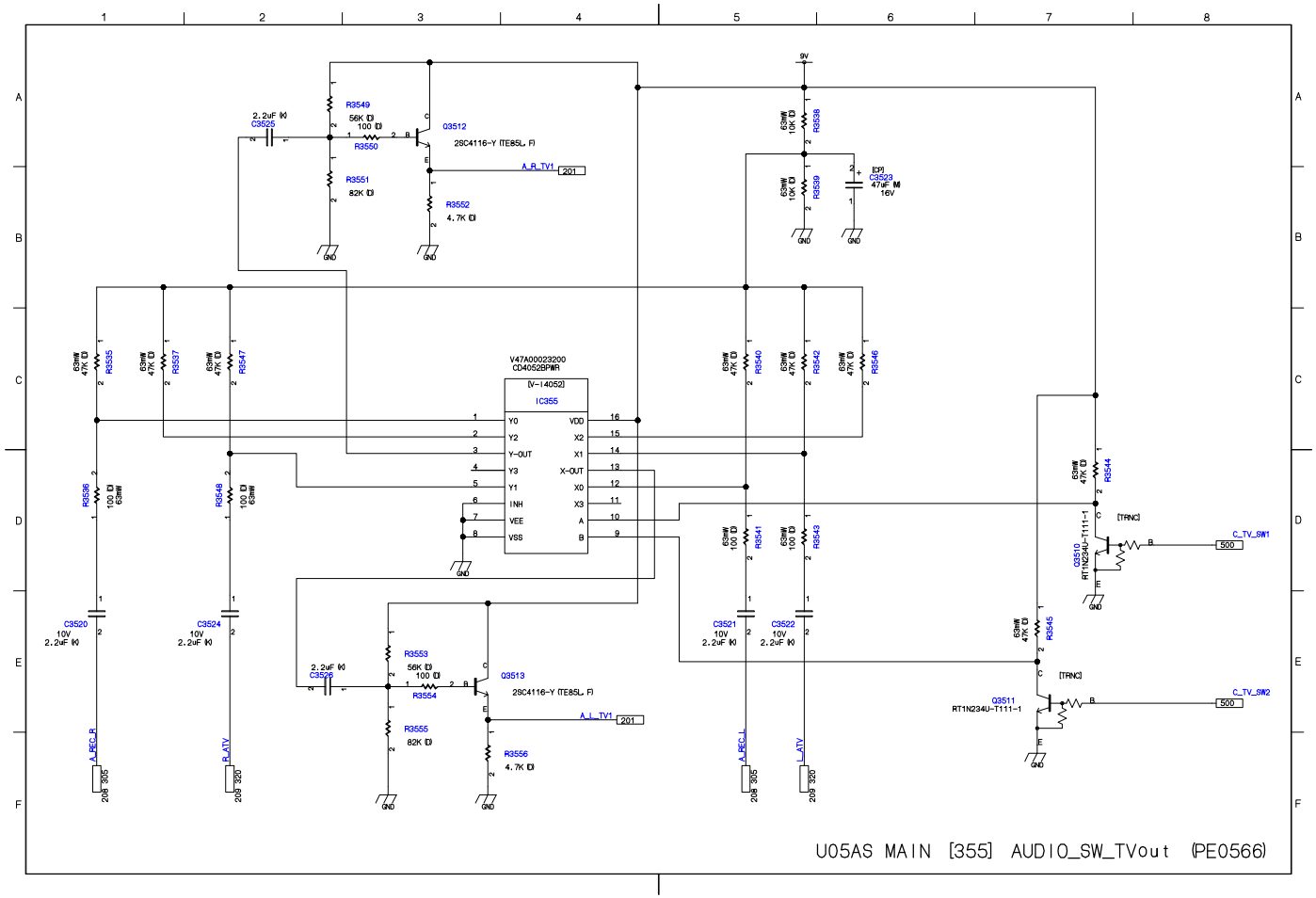


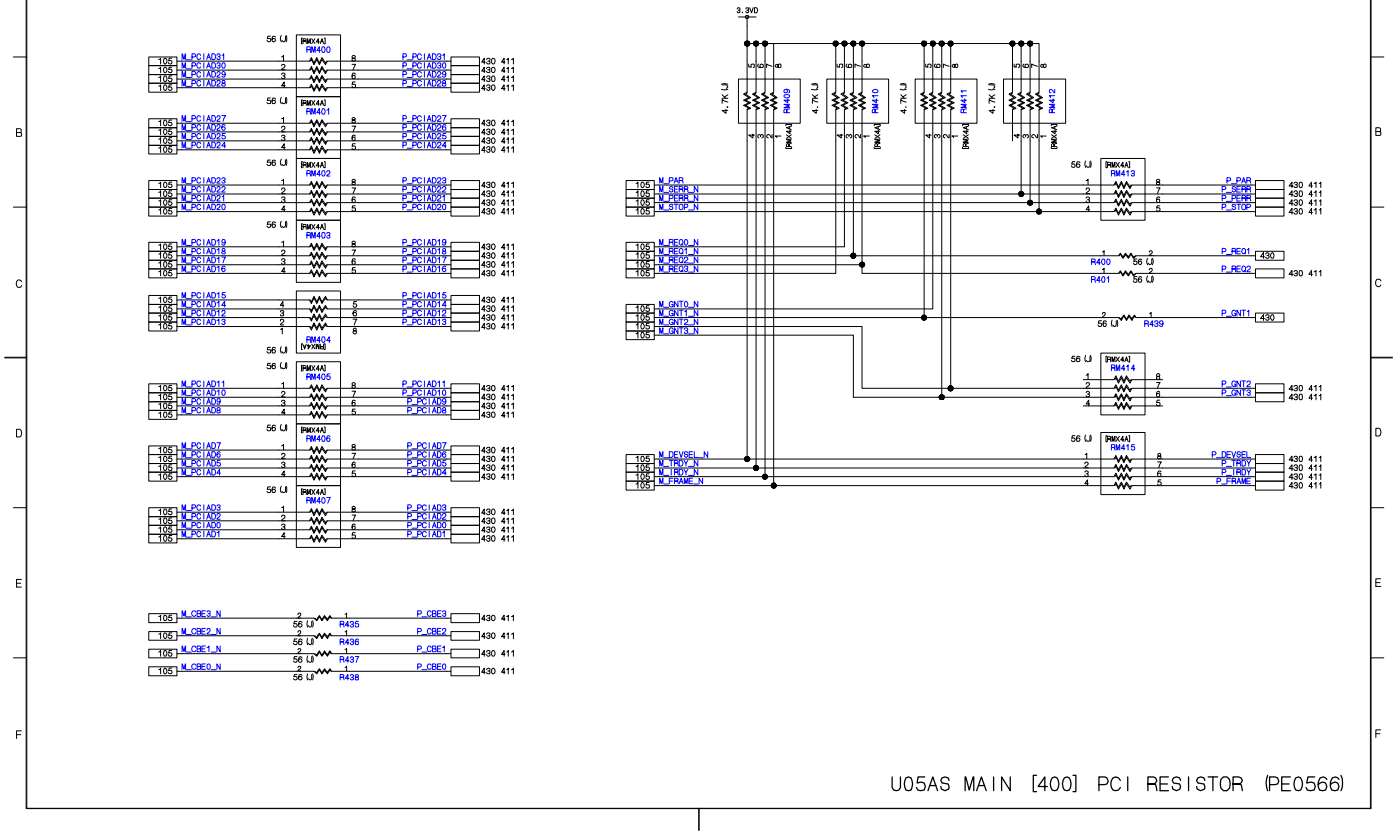
U05AS MAIN [351] WOOFER-OUT (PE0566)


C_A_STBY
500
D3503
1SS352 (TPH3, F)
A_STBYL
330
C3511
1nF (K)
NOT MOUNT
GND
5V1
D3504
1SS352 (TPH3, F)
Q3509
2SA1586-Y (TE85L, F)
R3521
1K (J)
D3505
1SS352 (TPH3, F)
A_MUTE
201 202 204 340
R3518
2.2K (J)
C3510
470uF (M)
16V
C3516
470uF (M)
16V
R3520
22K (J)
C3512
1uF (M)
50V
0:グリーン
C3513
1uF (M)
NOT MOUNT
0:グリーン
R3522
100K (J)
R3524
10K (J)
R3523
22K (J)
Q3505
2SC4116-Y (TE85L, F)
C_ACDET
500 950
Q3504
2SC4116-Y (TE85L, F)
R3525
47K (J)
R3526
10K (J)
Q3507
DTA144EEBTL
C_EXT_MUTE
500
Q3506
2SC4116-Y (TE85L, F)
R3527
22K (J)
R3529
1K (J)
R3528
100K (J)
D3506
1SS352 (TPH3, F)
5V2
Q3508
DTA144EEBTL
R3531
1K (J)
HP_MUTE
351 330
DET_HP
206
R3530
10K (J)
C3514
NOT MOUNT
R3532
10K (J)
U05AS MAIN [352] AUDIO_MUTE (PE0566)

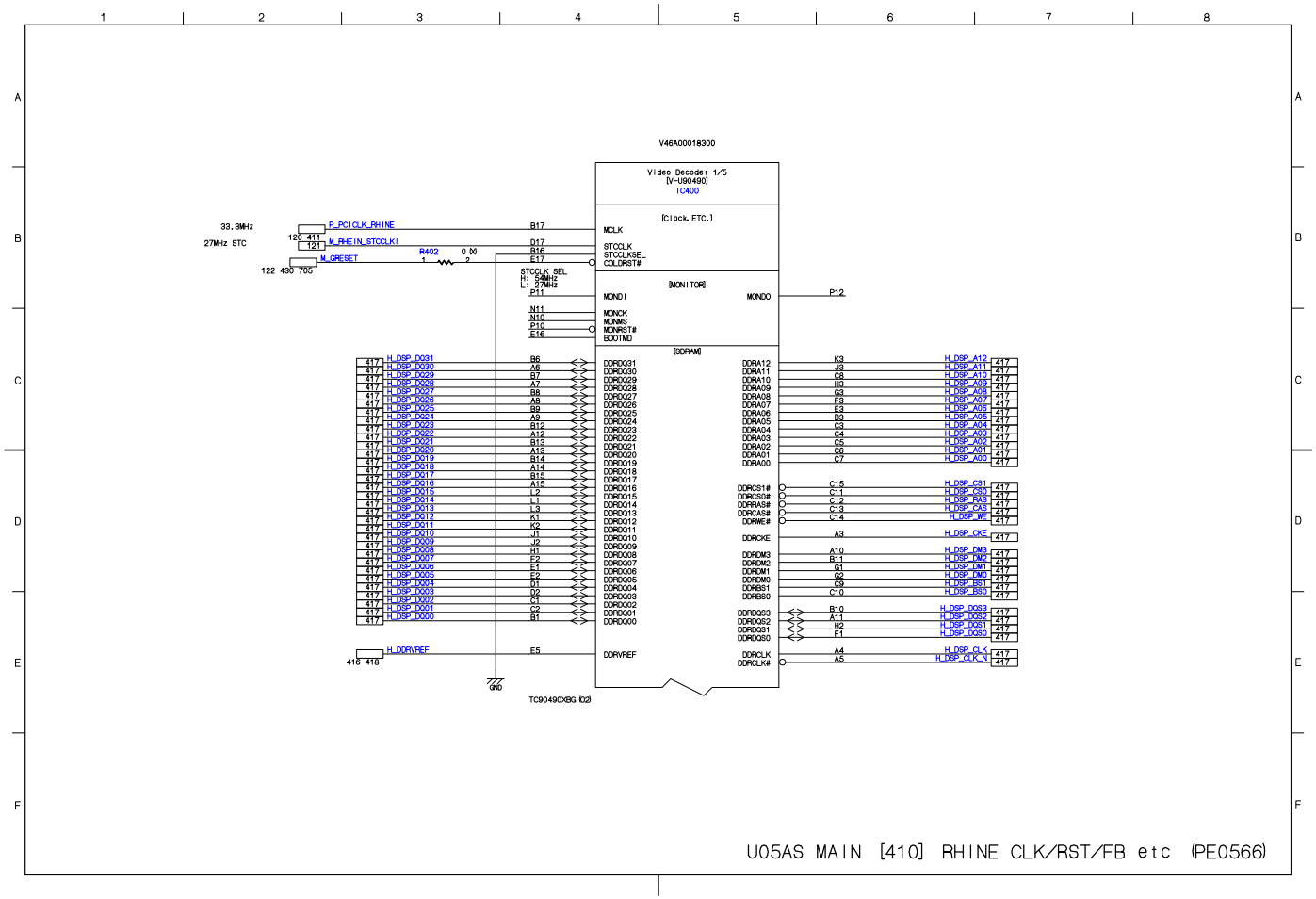


U05AS MAIN [353] HDMI_A / PC-IN (PE0566)

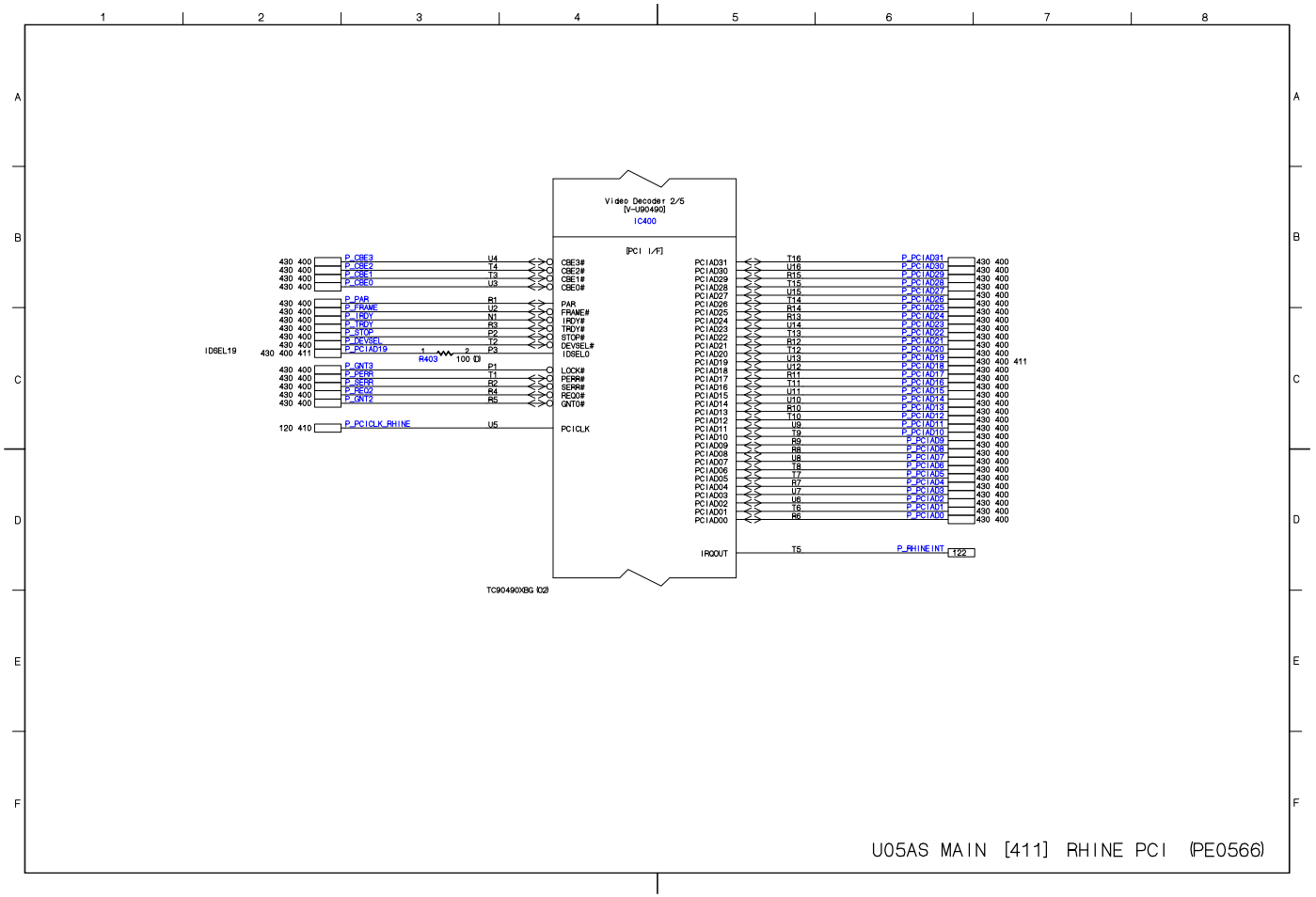

U05AS MAIN [355] AUDIO_SW_TVout (PE0566)
9V
R3549
56K Ω
100 Ω
R3550
Q3512
2SC4116-Y (TE85L, F)
A_R_TV1
201
C3525
2.2uF (K)
R3551
82K Ω
R3552
4.7K Ω
R3538
63mW
10K Ω
R3539
C3523
47uF (M)
16V
V47A00023200
CD4052BPWR
(V-14052)
IC355
Y0
Y2
Y-OUT
Y3
Y1
INH
VEE
VSS
VDD
X2
X1
X-OUT
X0
X3
A
B
R3535
R3537
R3547
R3540
R3542
R3546
47K Ω
R3536
R3548
100 Ω
C3520
C3524
10V
2.2uF (K)
A_REC_R
B_ATV
208
209
305
320
R3553
R3554
R3555
R3556
Q3513
A_L_TV1
C3526
R3541
R3543
C3521
C3522
A_REC_L
L_ATV
R3544
R3545
Q3510
RT1N234U-T111-1
Q3511
[TRNC]
C_TV_SW1
C_TV_SW2
500
GND

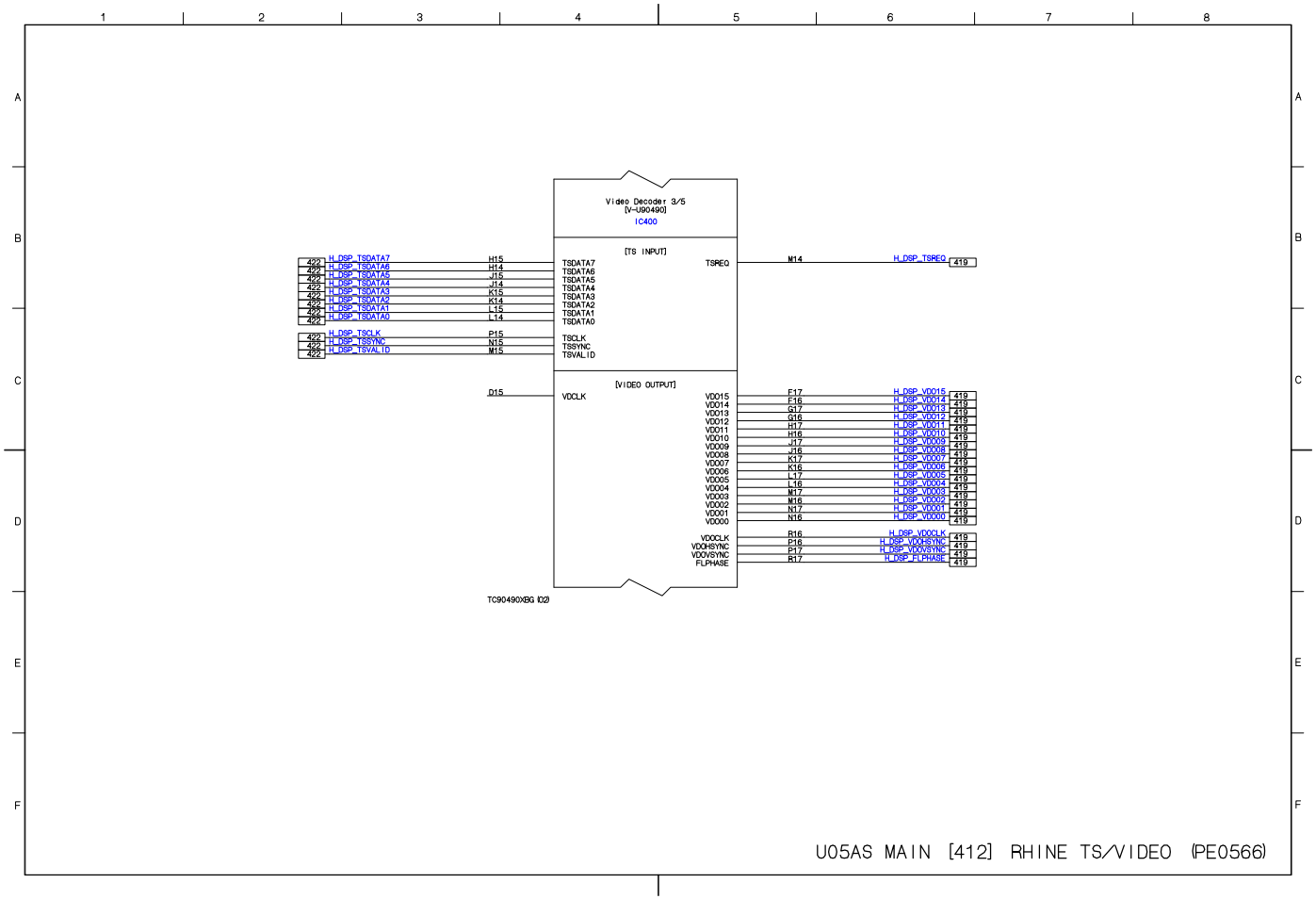


U05AS MAIN [400] PCI RESISTOR (PE0566)

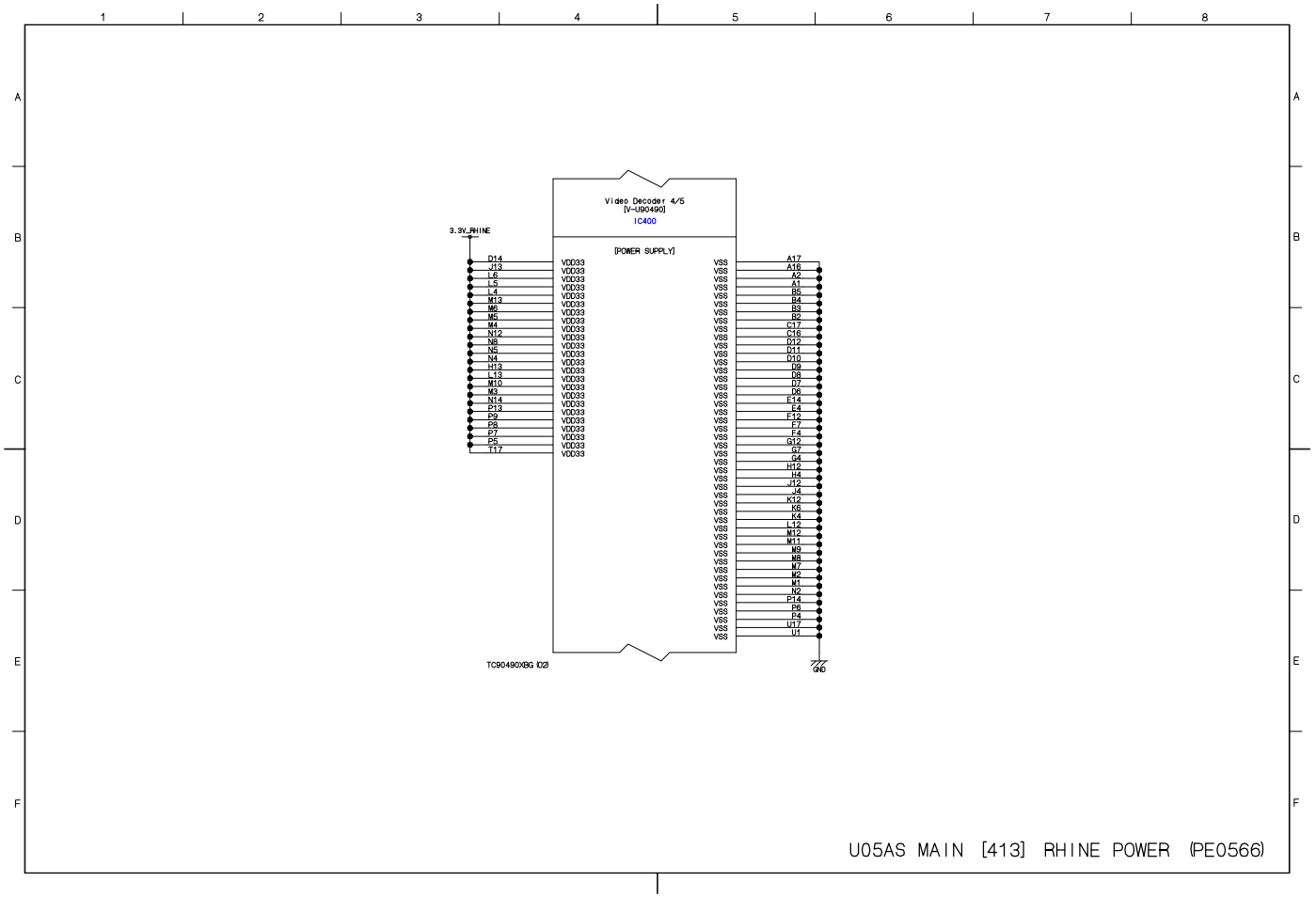


U05AS MAIN [410] RHINE CLK/RST/FB etc (PE0566)

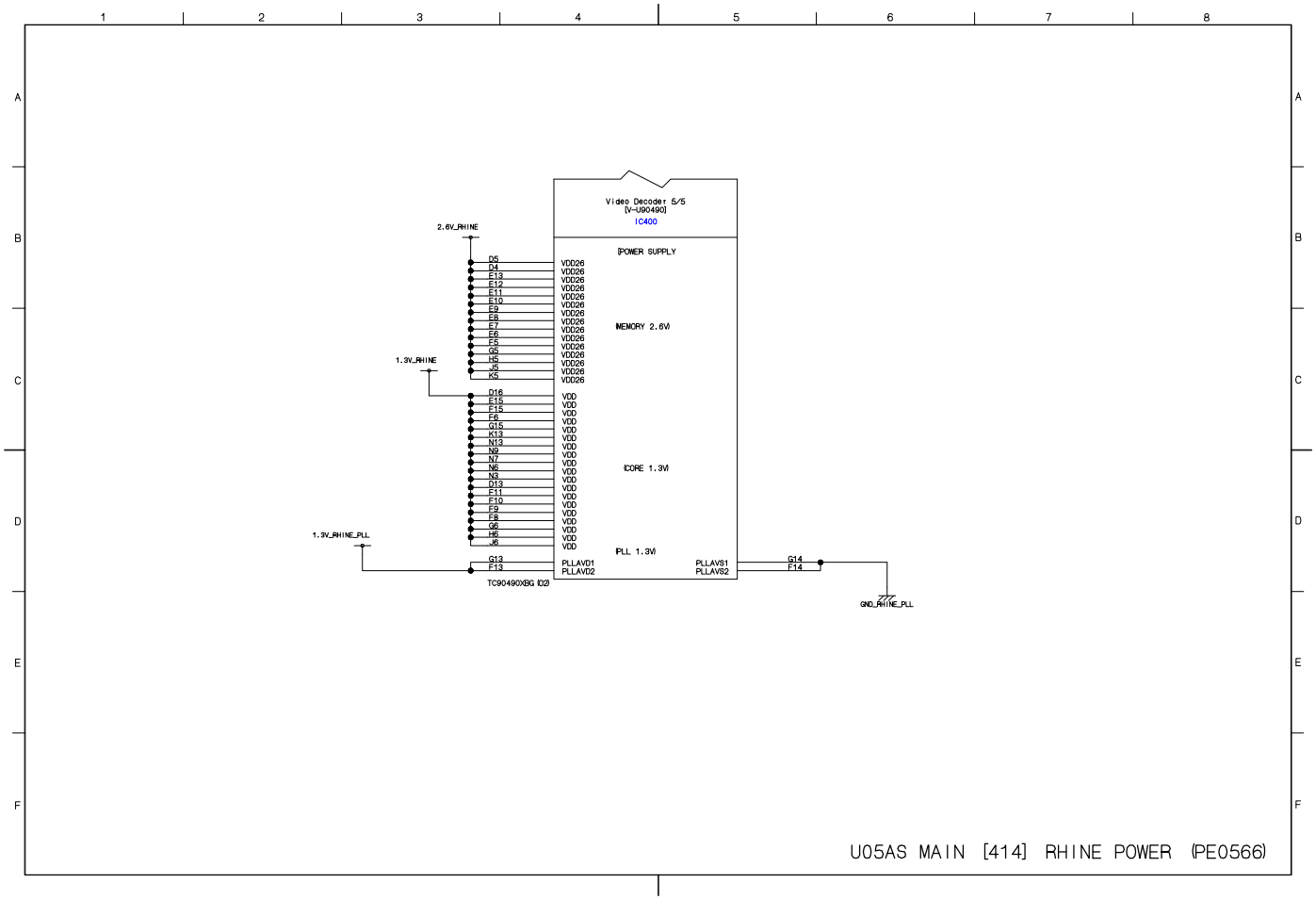

Video Decoder 2/5
[V-U90490]
IC400
[PCI I/F]
TC90490XBG (20)
P_CBE3
P_CBE2
P_CBE1
P_CBE0
P_PAR
P_FRAME
P_IRDY
P_TRDY
P_STOP
P_DEVSEL
P_PCIAD19
R403 100 (0)
IDSEL19
P_GNT3
P_PERR
P_SERR
P_REQ2
P_GNT2
P_PCICLK_RHINE
CBE3#
CBE2#
CBE1#
CBE0#
PAR
FRAME#
IRDY#
TRDY#
STOP#
DEVSEL#
IDSEL0
LOCK#
PERR#
SERR#
REQ0#
GNT0#
PCICLK
IRQOUT
P_RHINEINT
122
U05AS MAIN [411] RHINE PCI (PE0566)



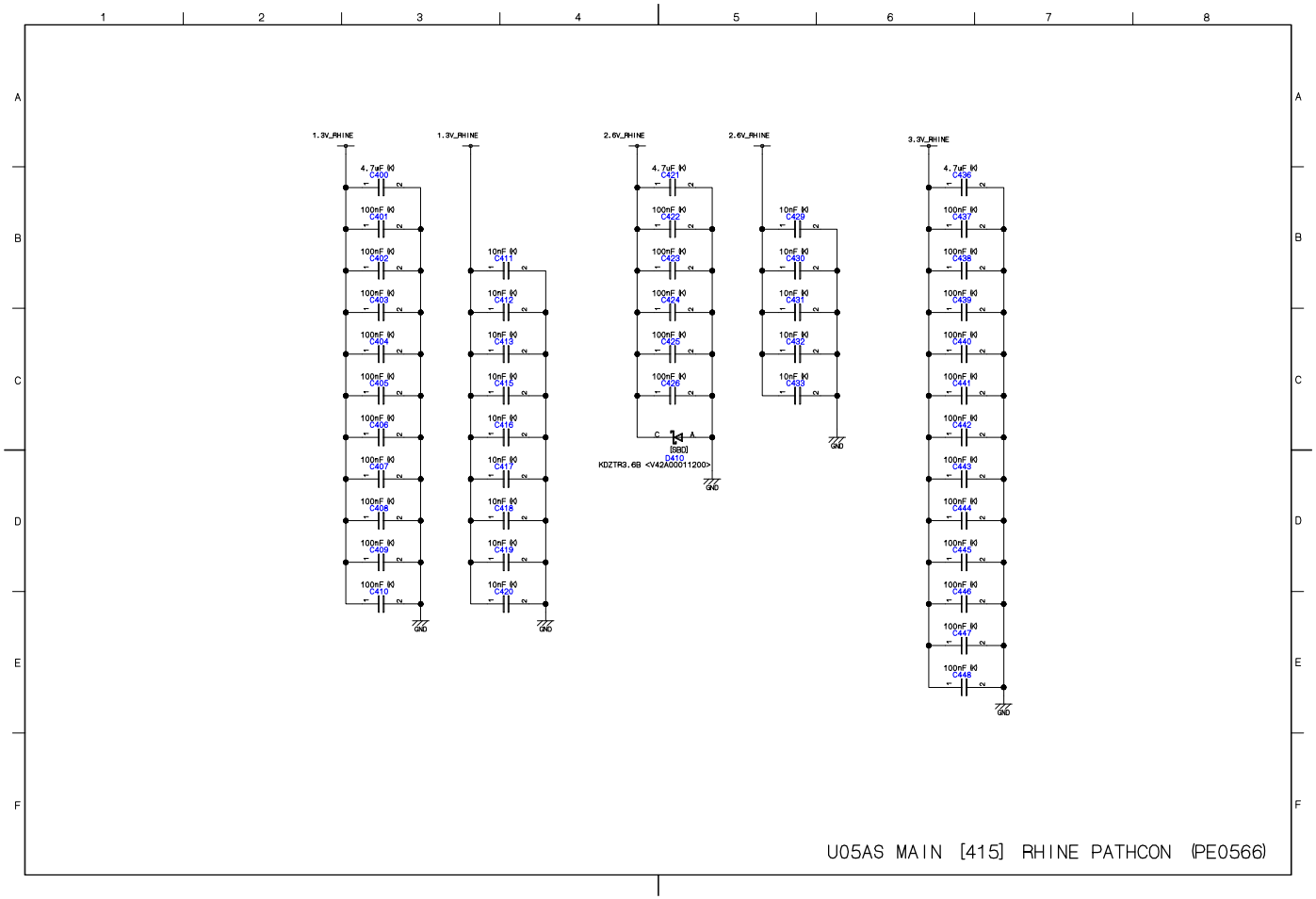
U05AS MAIN [412] RHINE TS/VIDEO (PE0566)



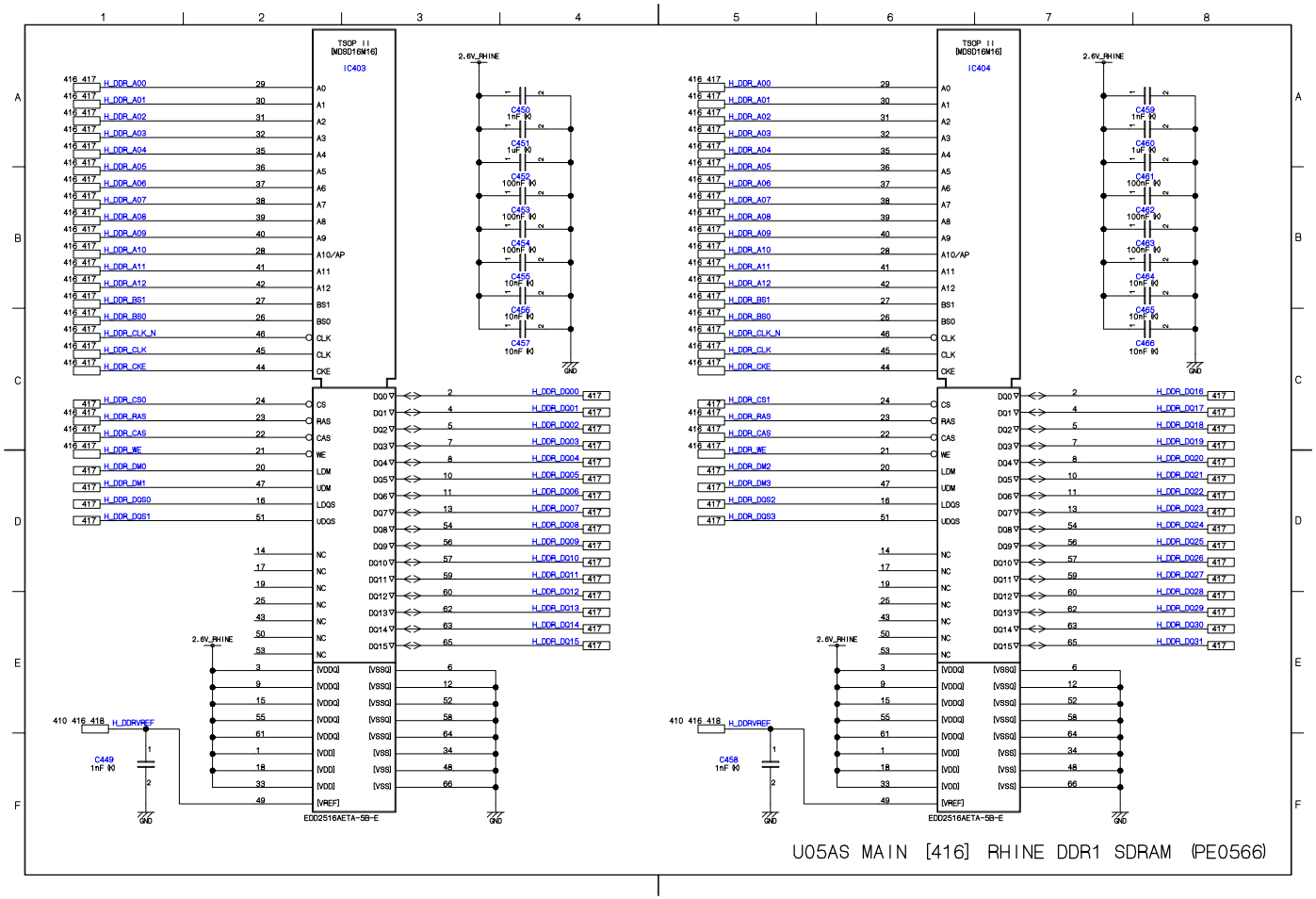
U05AS MAIN [413] RHINE POWER (PE0566)



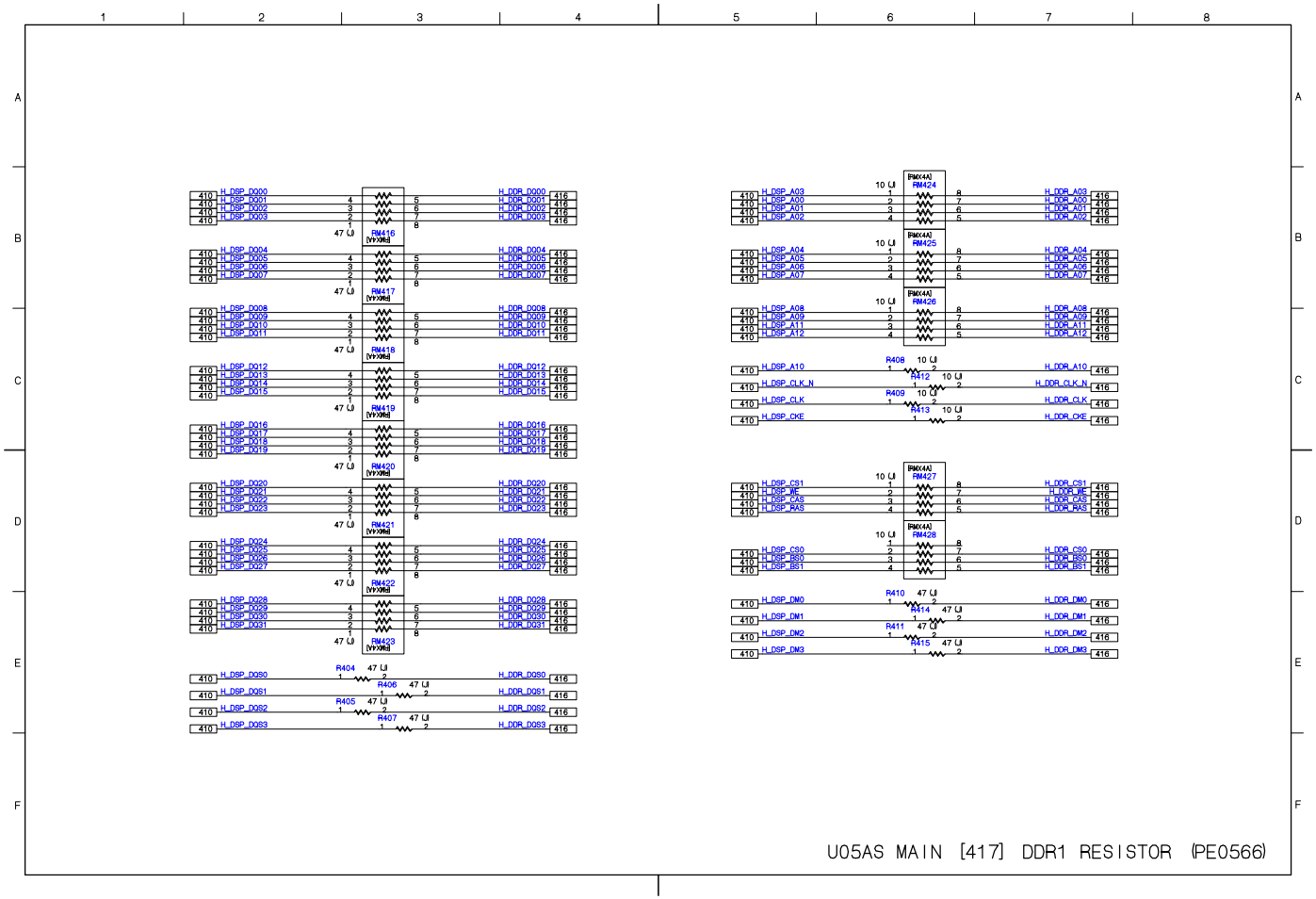
U05AS MAIN [414] RHINE POWER (PE0566)



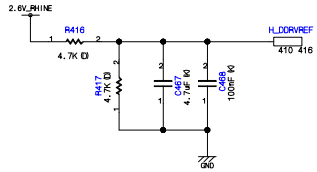
U05AS MAIN [415] RHINE PATHCON (PE0566)



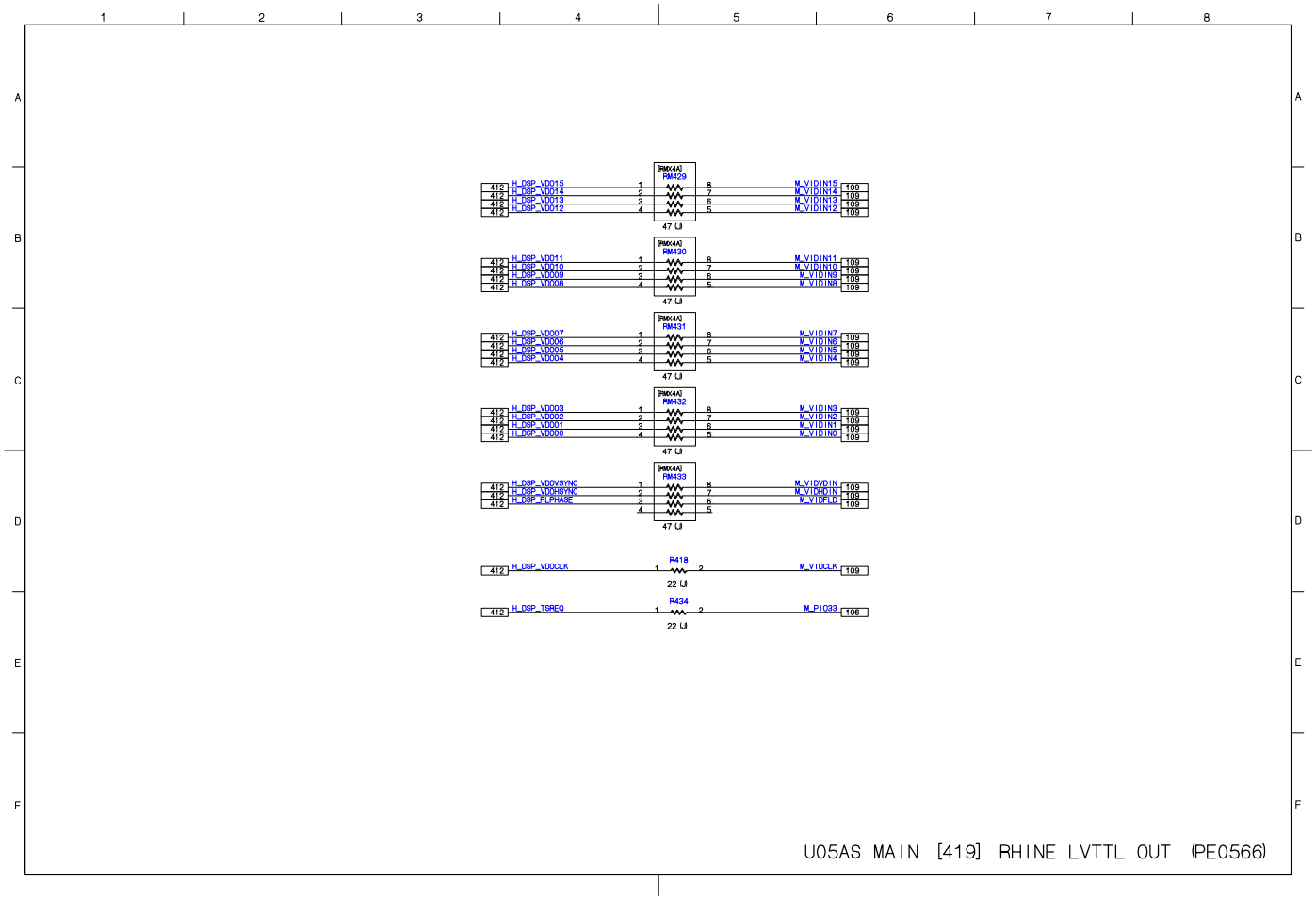
U05AS MAIN [416] RHINE DDR1 SDRAM (PE0566)



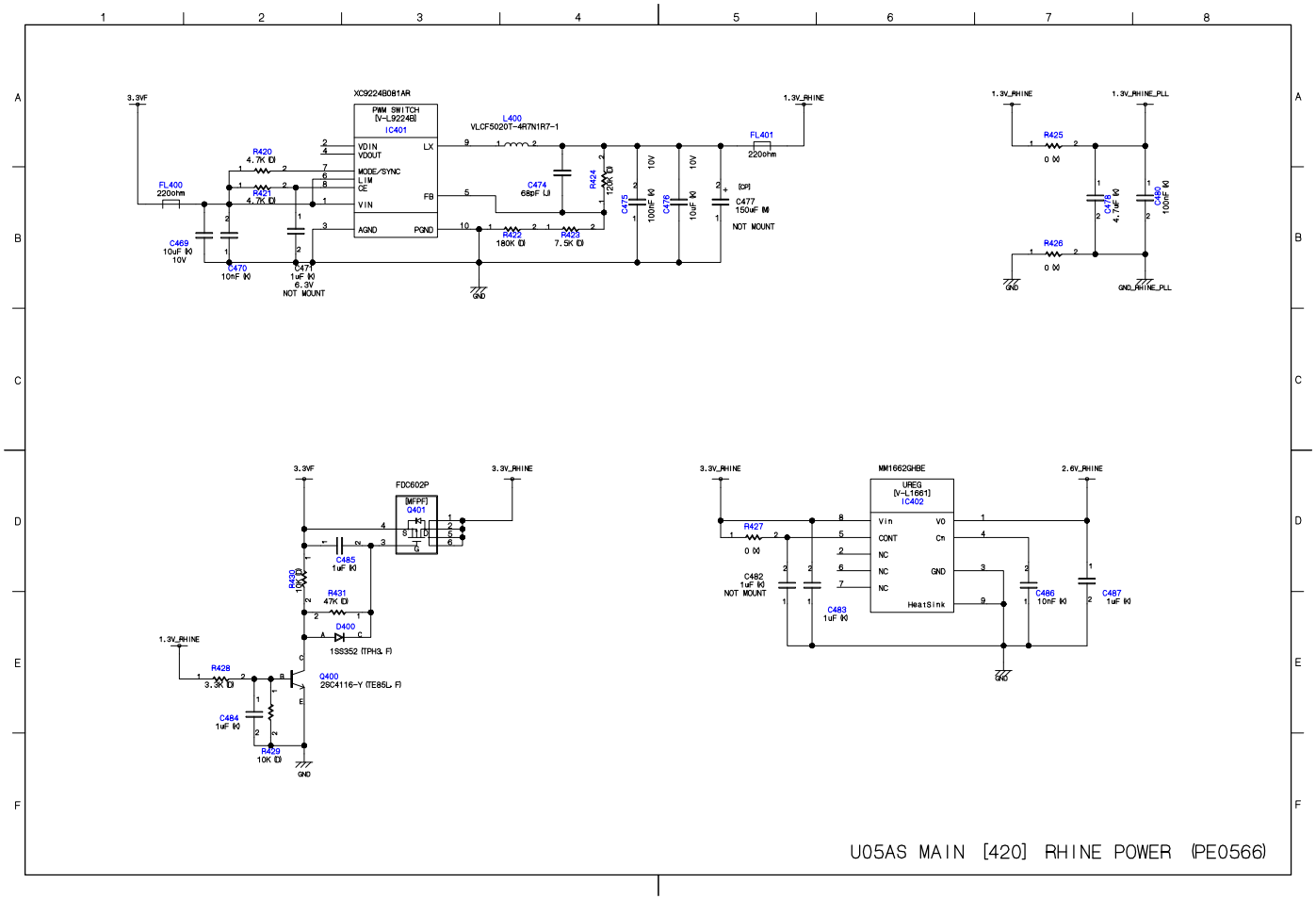
U05AS MAIN [417] DDR1 RESISTOR (PE0566)



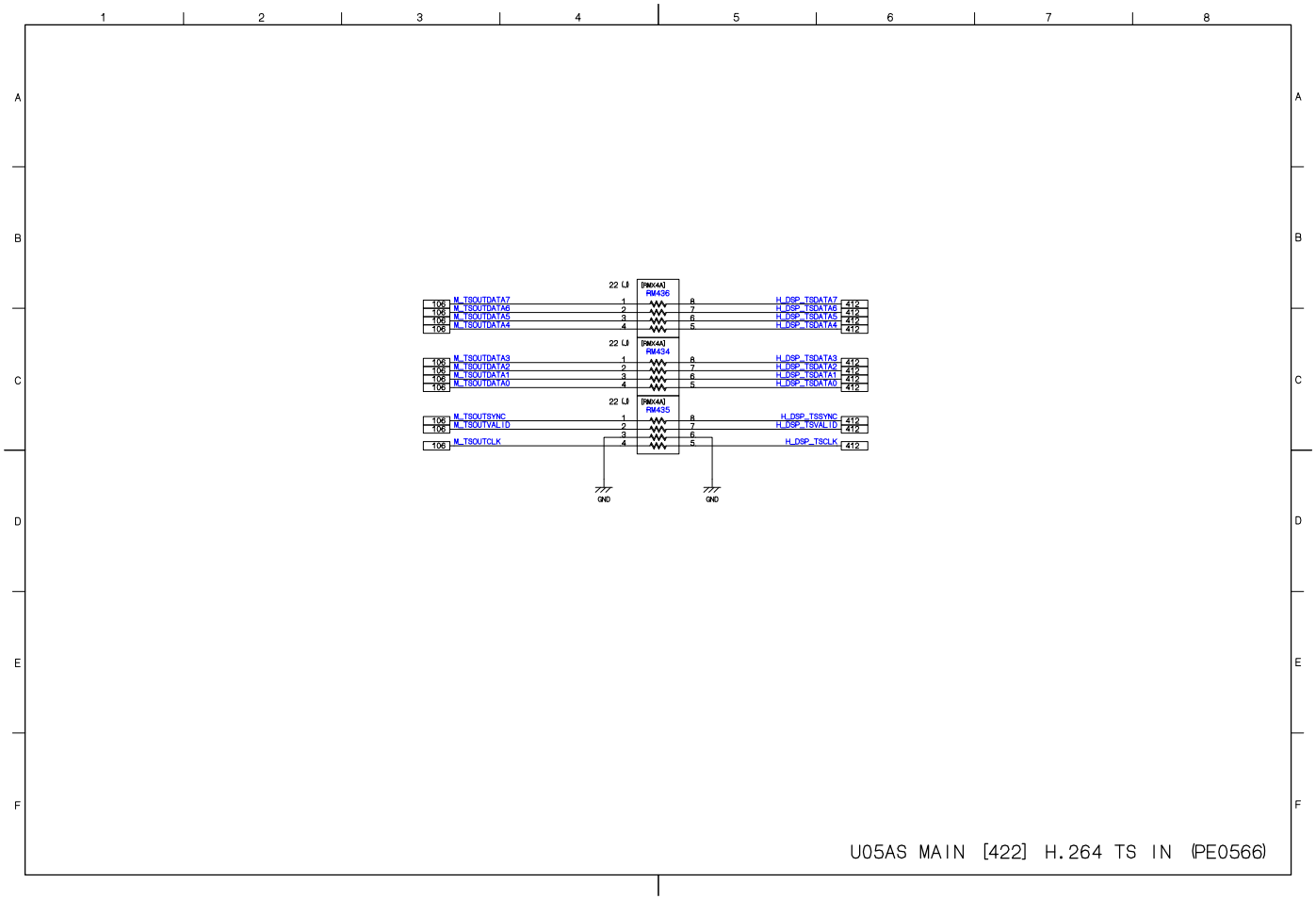
U05AS MAIN [418] RHINE DDR1 VREF (PE0566)



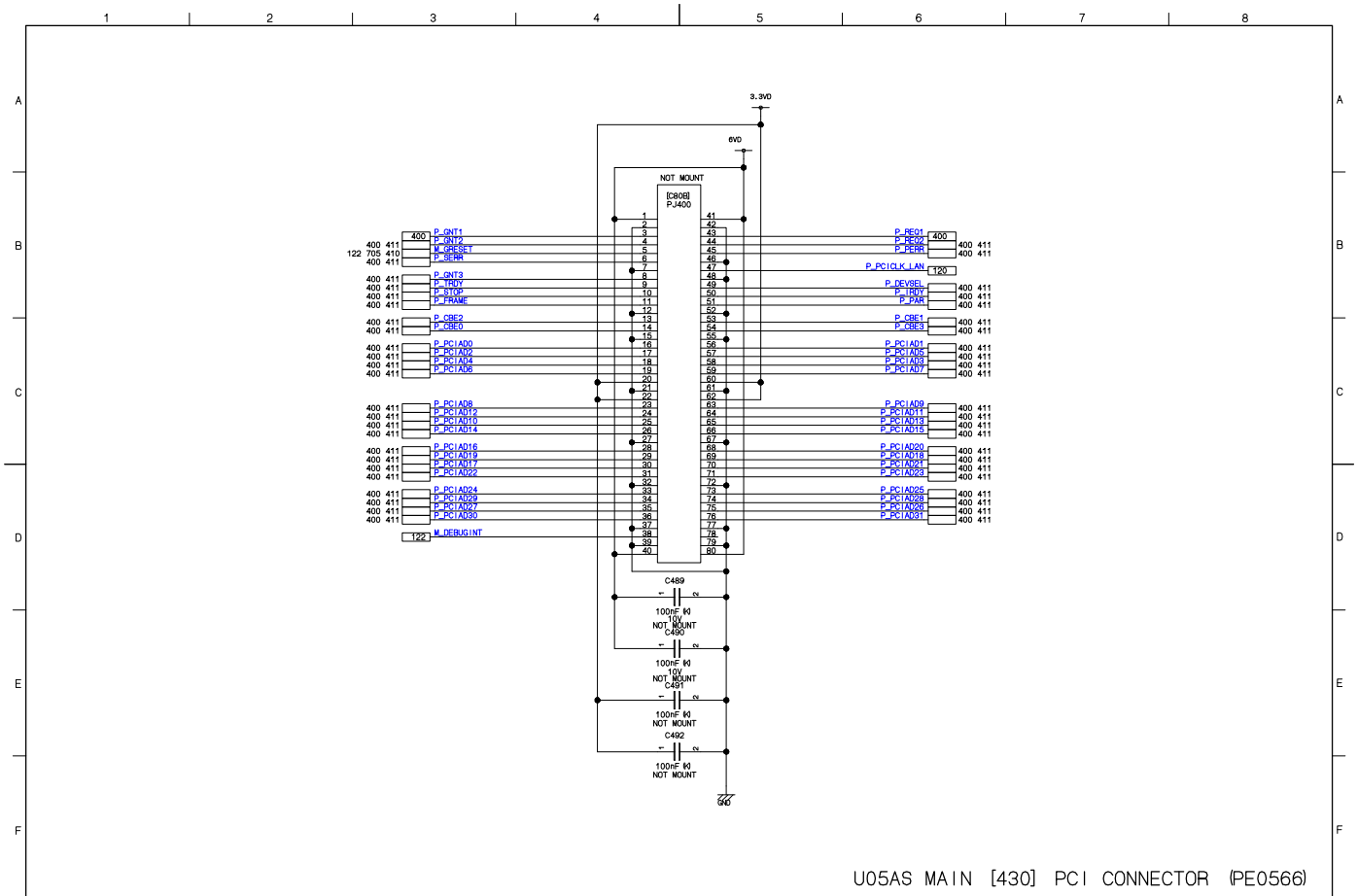
U05AS MAIN [419] RHINE LVTTL OUT (PE0566)



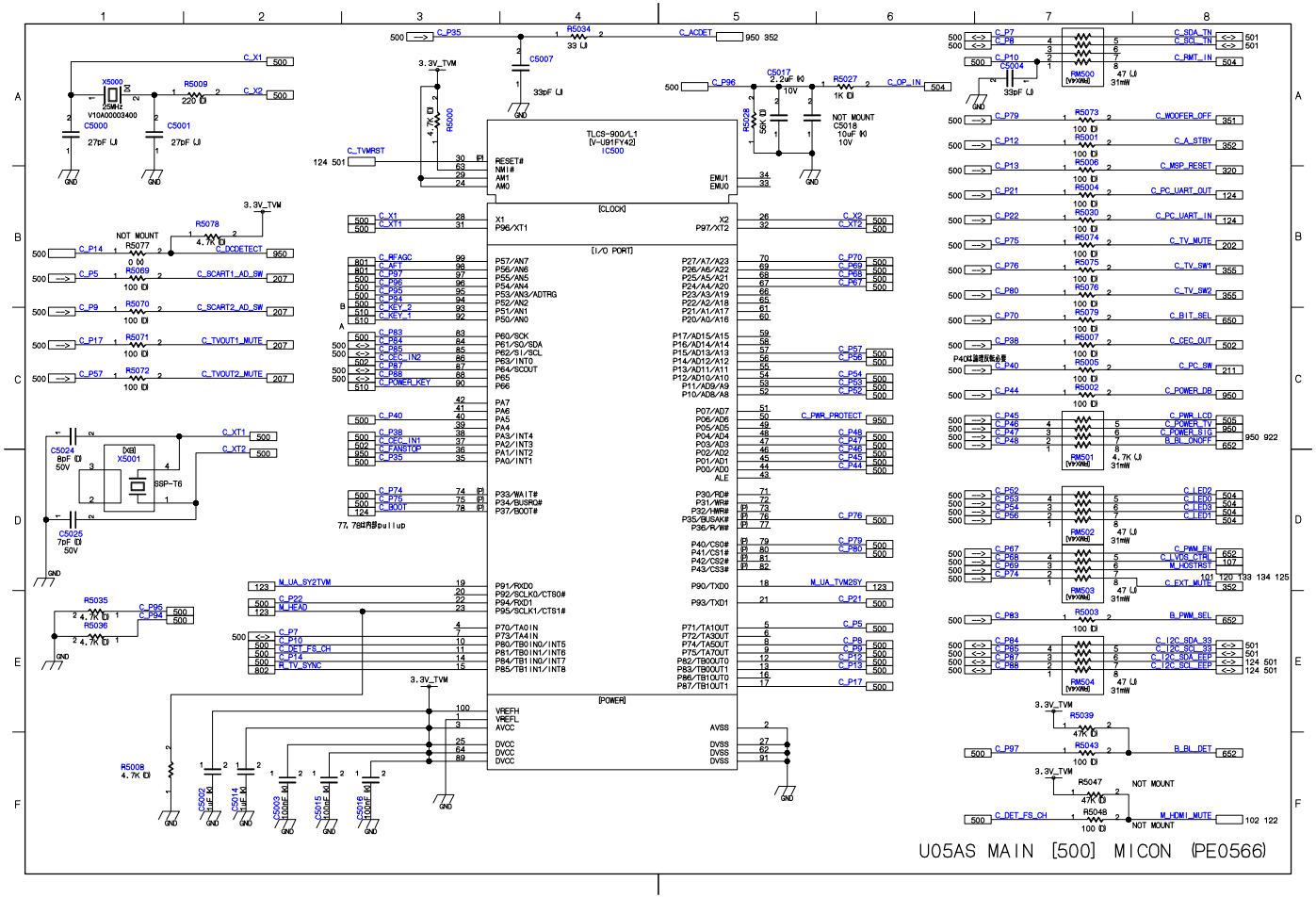
U05AS MAIN [420] RHINE POWER (PE0566)

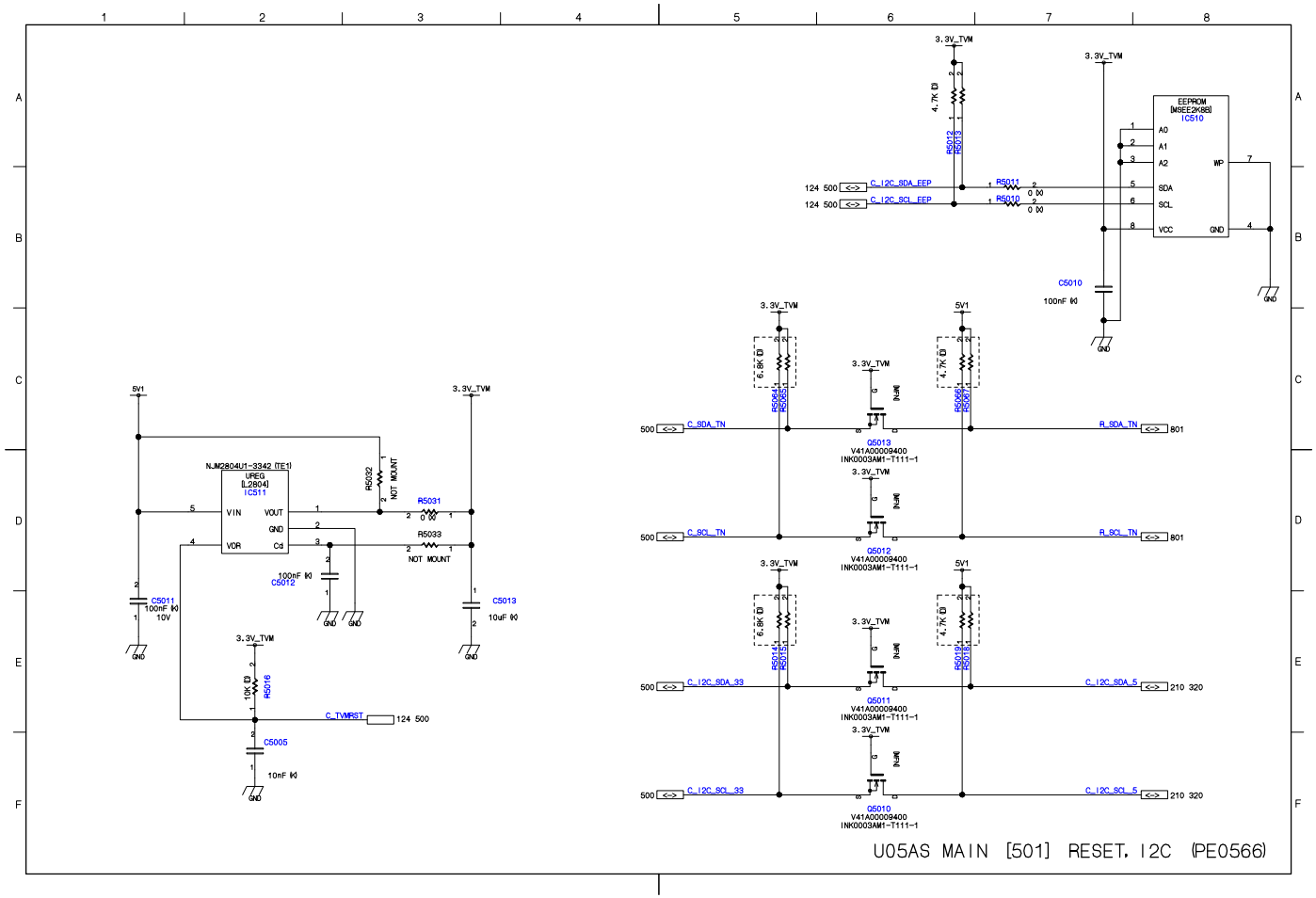


U05AS MAIN [422] H.264 TS IN (PE0566)

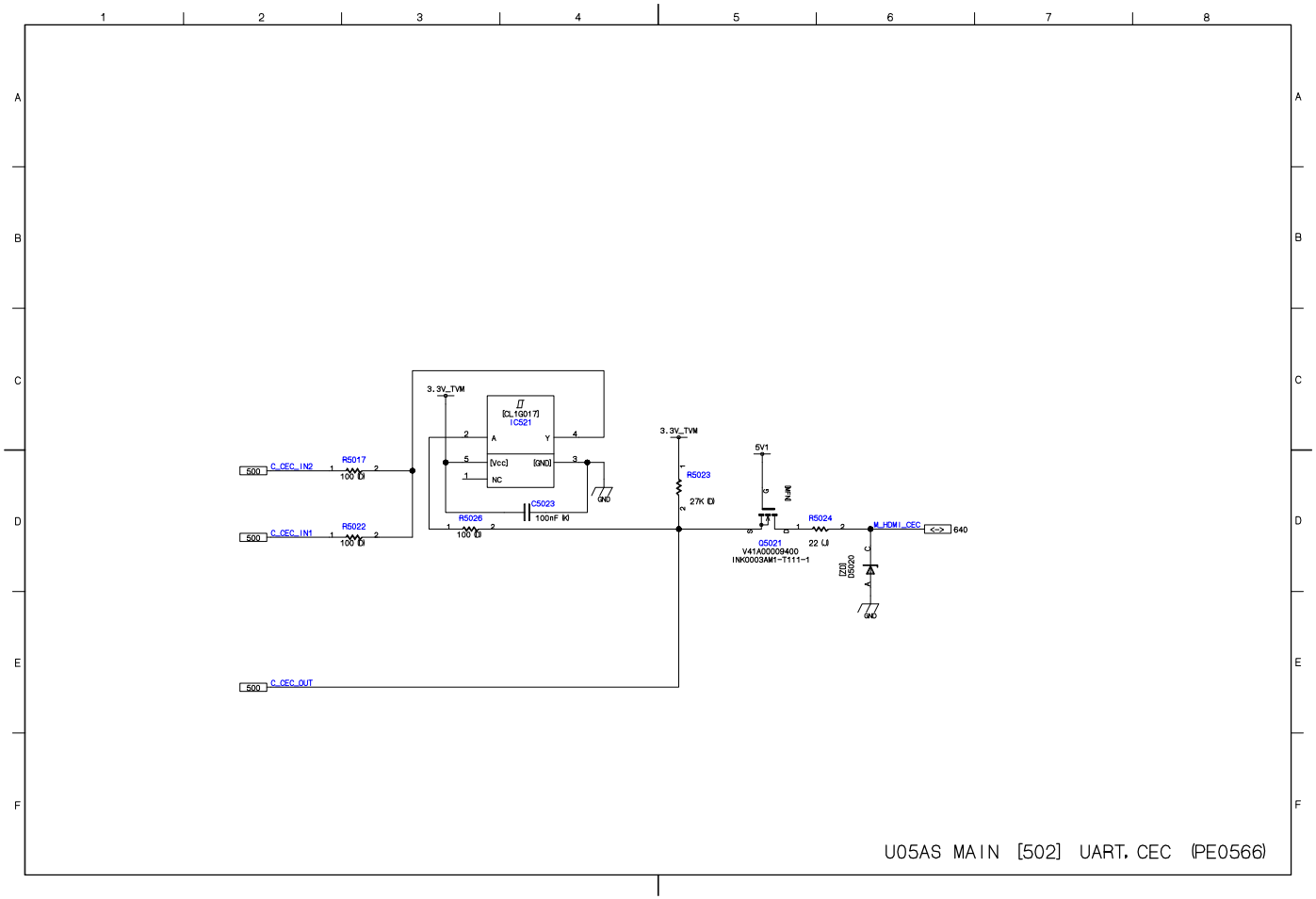


U05AS MAIN [430] PCI CONNECTOR (PE0566)

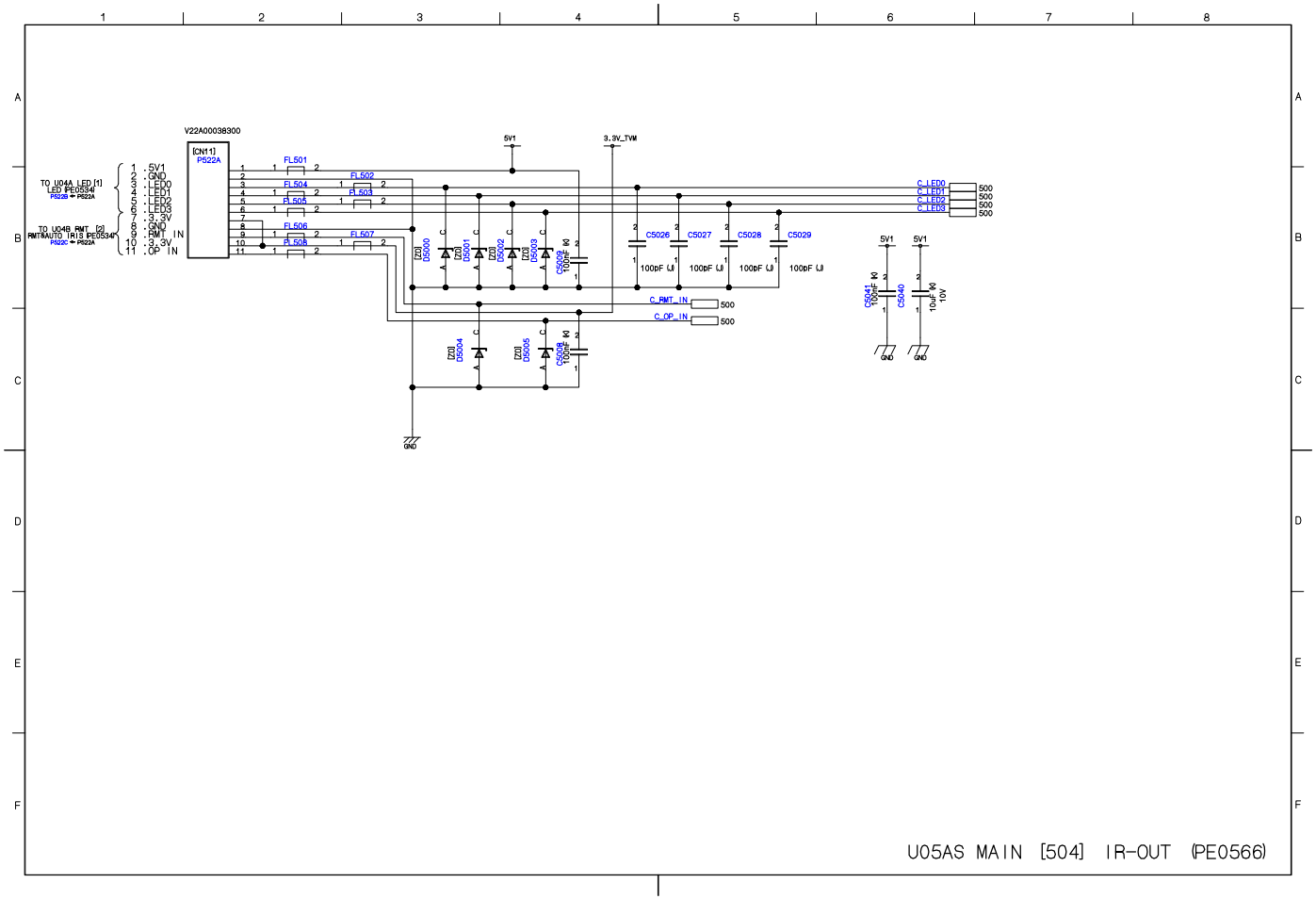

TLCS-900/L1
[V-U91FY42]
IC500
[CLOCK]
[I/O PORT]
[POWER]
X5000
25MHz
V10A00003400
X5001
8MP-T6
RESET#
NMI#
AM1
AM0
EMU1
EMU0
X1
X2
P96/XT1
P97/XT2
P57/AN7
P56/AN6
P55/AN5
P54/AN4
P53/AN3/ADTRG
P52/AN2
P51/AN1
P50/AN0
P60/SCK
P61/SO/SDA
P62/SI/SCL
P63/INT0
P64/SCOUT
P65
P66
PA7
PA6
PA5
PA4
PA3/INT4
PA2/INT3
PA1/INT2
PA0/INT1
P33/WAIT#
P34/BUSRQ#
P37/BOOT#
77, 78번핀 pull up
P91/RXD0
P92/SCLK0/CTS0#
P94/RXD1
P95/SCLK1/CTS1#
P70/TA0IN
P73/TA1IN
P80/TB0IN0/INT5
P81/TB0IN1/INT6
P84/TB1IN0/INT7
P85/TB1IN1/INT8
P27/A7/A23
P26/A6/A22
P25/A5/A21
P24/A4/A20
P23/A3/A19
P22/A2/A18
P21/A1/A17
P20/A0/A16
P17/AD15/A15
P16/AD14/A14
P15/AD13/A13
P14/AD12/A12
P13/AD11/A11
P12/AD10/A10
P11/AD9/A9
P10/AD8/A8
P07/AD7
P06/AD6
P05/AD5
P04/AD4
P03/AD3
P02/AD2
P01/AD1
P00/AD0
ALE
P30/RD#
P31/WR#
P32/HWR#
P35/CLKOUT/BUSAK#
P36/R/W#
P40/CS0#
P41/CS1#
P42/CS2#
P43/CS3#
P90/TXD0
P93/TXD1
P71/TA1OUT
P72/TA3OUT
P74/TA5OUT
P75/TA7OUT
P82/TB0OUT0
P83/TB0OUT1
P86/TB1OUT0
P87/TB1OUT1
VREFH
VREFL
AVCC
AVSS
DVCC
DVSS
3.3V_TVM
C_X1
C_X2
C_XT1
C_XT2
C_TVMRST
C_ACDET
C_OP_IN
C_P96
C_P35
C_AFT
C_P97
C_P96
C_P95
C_P94
C_KEY_2
C_KEY_1
C_P83
C_P84
C_P85
C_CEC_IN2
C_P87
C_P88
C_POWER_KEY
C_P40
C_P38
C_CEC_IN1
C_FANSTOP
C_P35
C_P74
C_P75
C_BOOT
M_UA_SY2TVM
C_P22
M_HEAD
C_P7
C_P10
C_DET_FS_CH
C_P14
R_TV_SYNC
C_P95
C_P94
C_P70
C_P69
C_P68
C_P67
C_P57
C_P56
C_P54
C_P53
C_P52
C_PWR_PROTECT
C_P48
C_P47
C_P46
C_P45
C_P44
C_P76
C_P79
C_P80
M_UA_TVM2SY
C_P21
C_P5
C_P6
C_P9
C_P12
C_P13
C_P17
C_P7
C_P8
C_RMT_IN
C_P79
C_P12
C_P13
C_P21
C_P22
C_P75
C_P76
C_P80
C_P70
C_P98
C_P40
C_P44
C_P45
C_P46
C_P47
C_P48
C_P52
C_P83
C_P84
C_P85
C_P86
C_P67
C_P68
C_P69
C_P74
C_P83
C_P84
C_P87
C_P88
C_P97
C_DET_FS_CH
C_WOOFER_OFF
C_A_STBY
C_MSP_RESET
C_PC_UART_OUT
C_PC_UART_IN
C_TV_MUTE
C_TV_SW1
C_TV_SW2
C_BIT_SEL
C_CEC_OUT
C_PC_SW
C_POWER_DB
C_PWR_LED
C_POWER_TV
C_POWER_SIG
B_BL_ONOFF
C_LED2
C_LED1
C_LED0
C_LED7
C_PWM_EN
C_LVDS_CTRL
M_HOSTRST
C_EXT_MUTE
B_PWM_SEL
C_I2C_SDA_39
C_I2C_SCL_39
C_I2C_SDA_EEP
C_I2C_SCL_EEP
B_BL_DET
M_HDMI_MUTE
C_SDA_TN
C_SCL_TN
C_SCART1_AD_SW
C_SCART2_AD_SW
C_TVOUT1_MUTE
C_TVOUT2_MUTE
C_DCDETECT
P40의 온도검출을 위한 pull up
U05AS MAIN [500] MICON (PE0566)



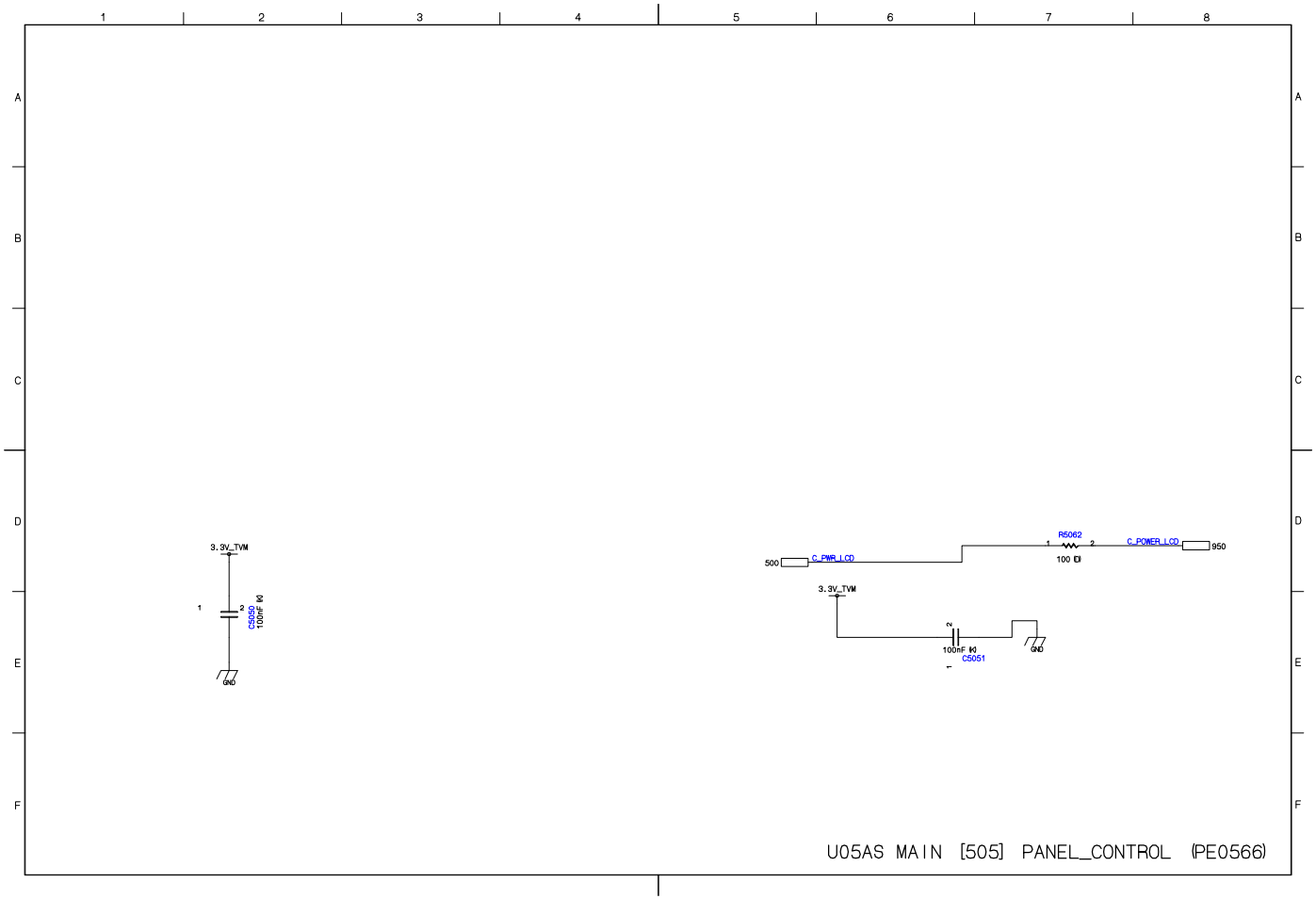
U05AS MAIN [501] RESET, I2C (PE0566)

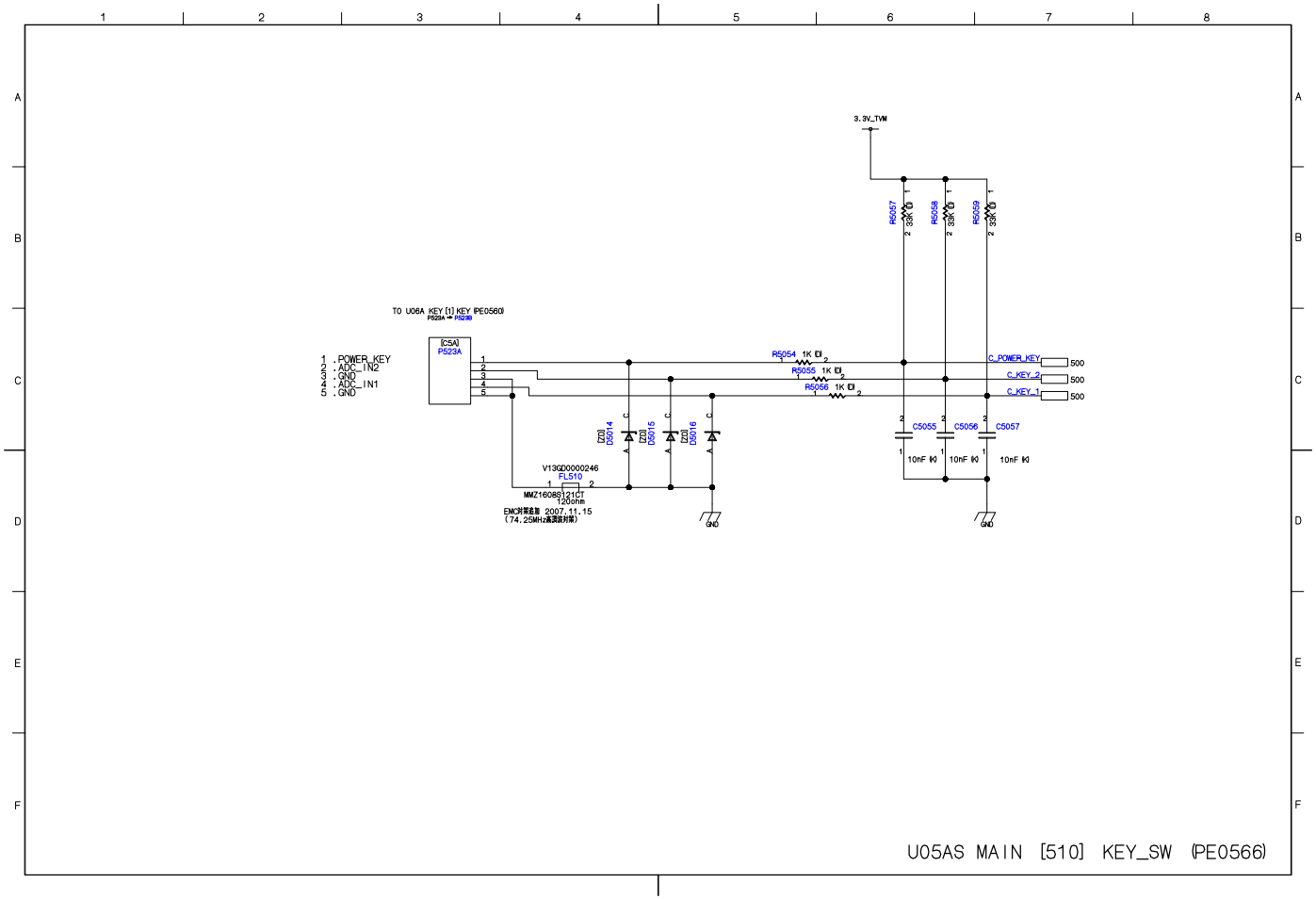


U05AS MAIN [502] UART, CEC (PE0566)

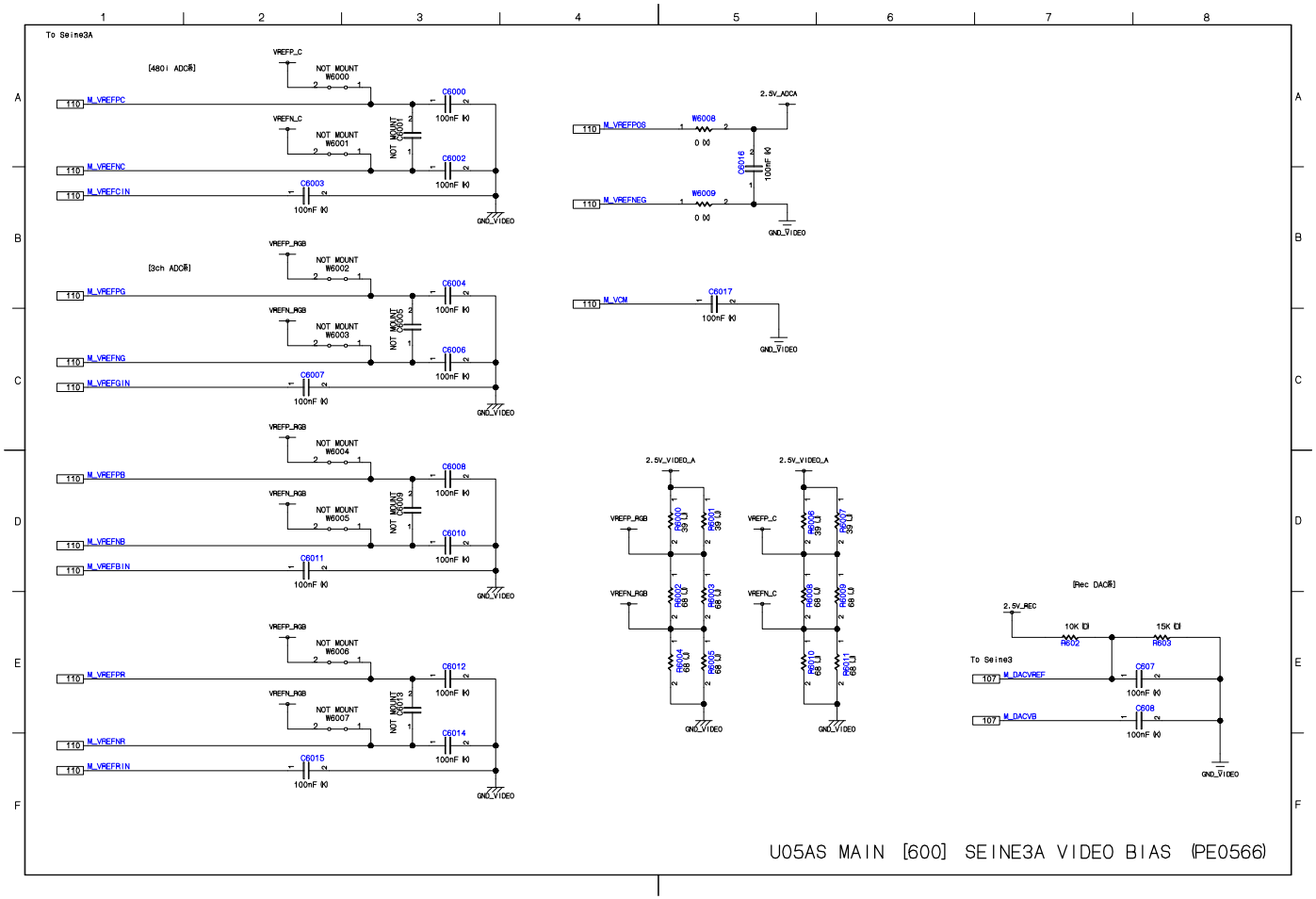


U05AS MAIN [504] IR-OUT (PE0566)

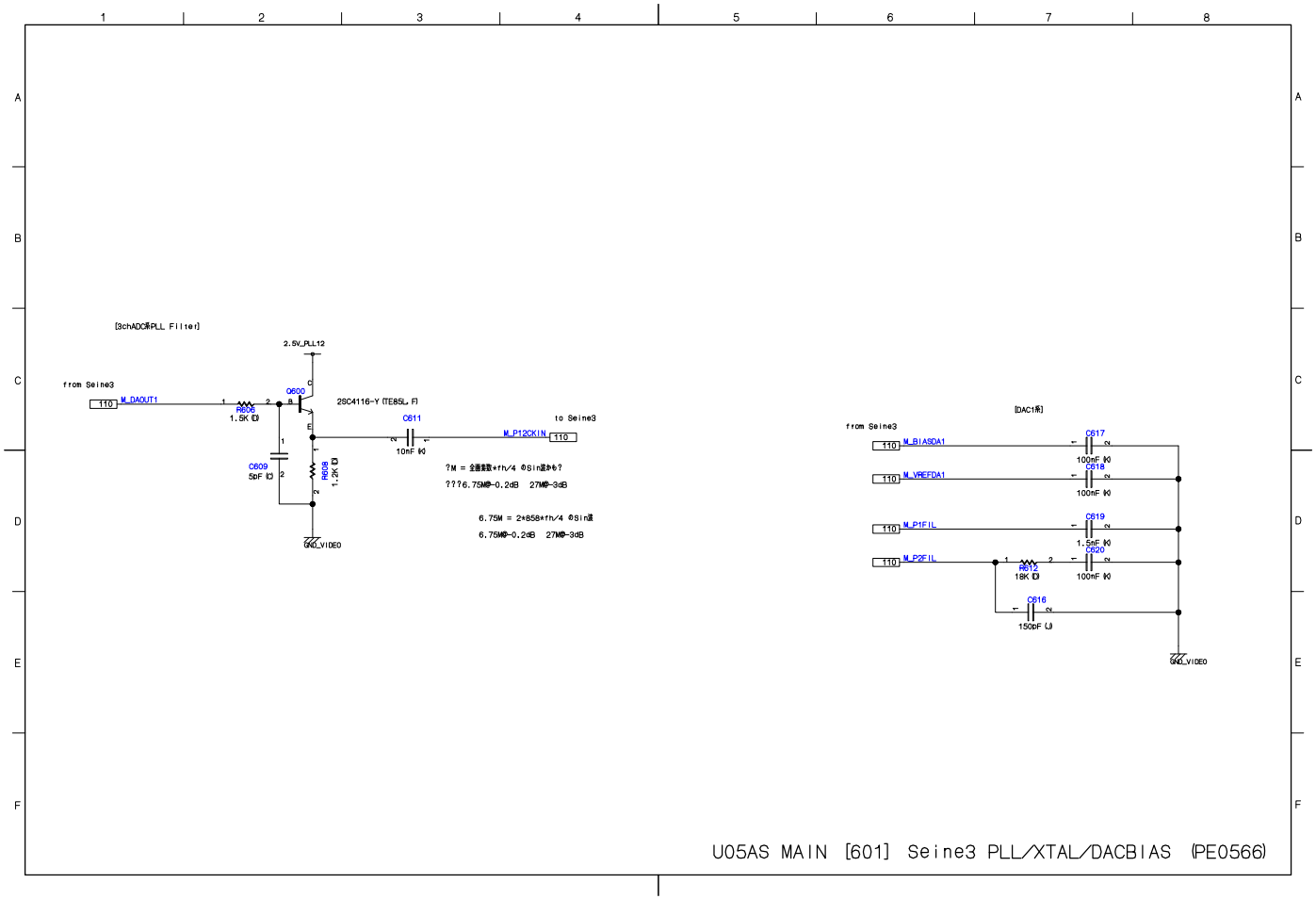

1
2
3
4
5
6
7
8
A
B
C
D
E
F
3.3V_TVM
1
2
C5050
100nF
GND
R5062
1
2
C_POWER_LCD
950
100 Ω
C_PWR_LCD
500
3.3V_TVM
100nF
C5051
GND
U05AS MAIN [505] PANEL_CONTROL (PE0566)



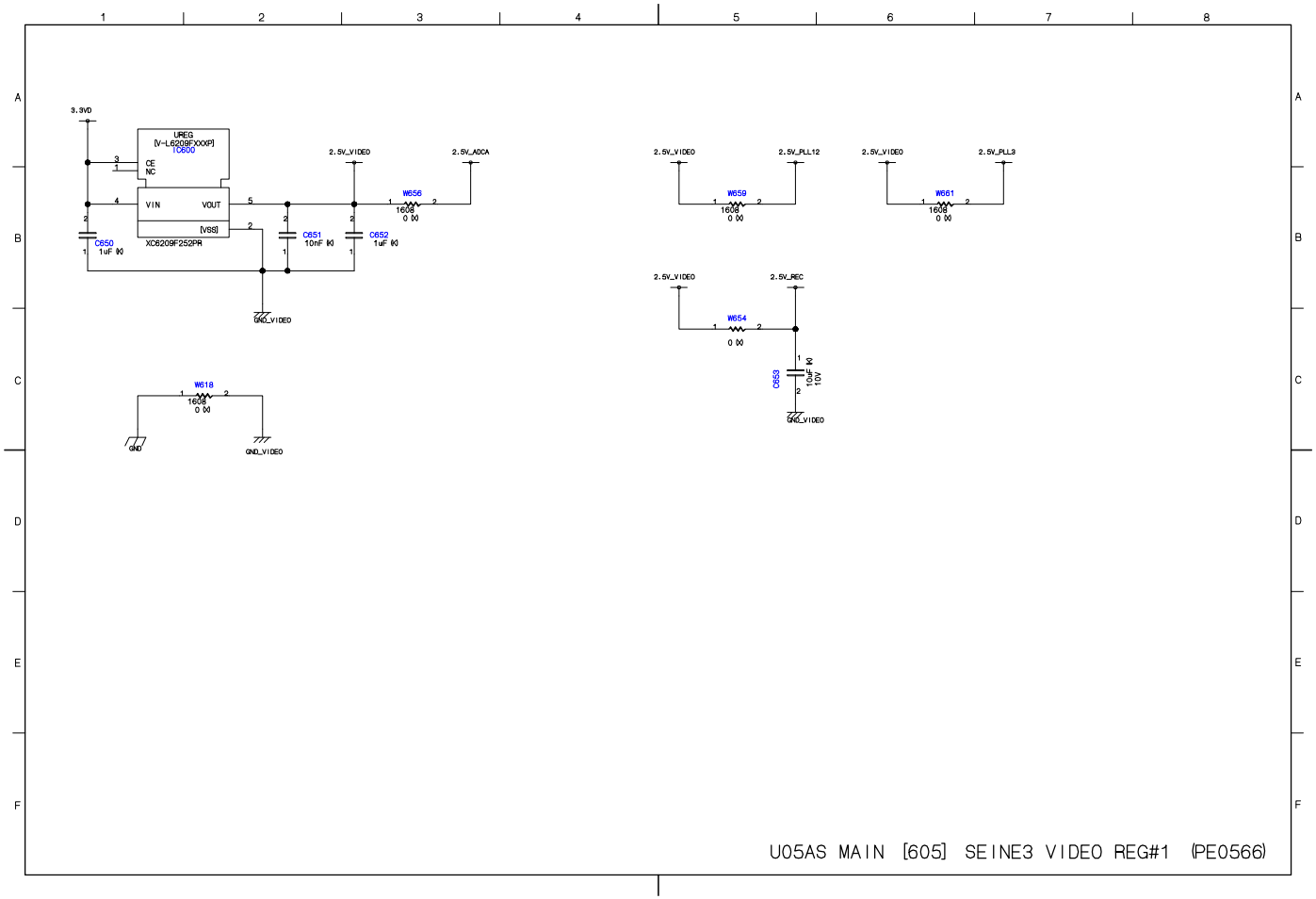
U05AS MAIN [510] KEY_SW (PE0566)

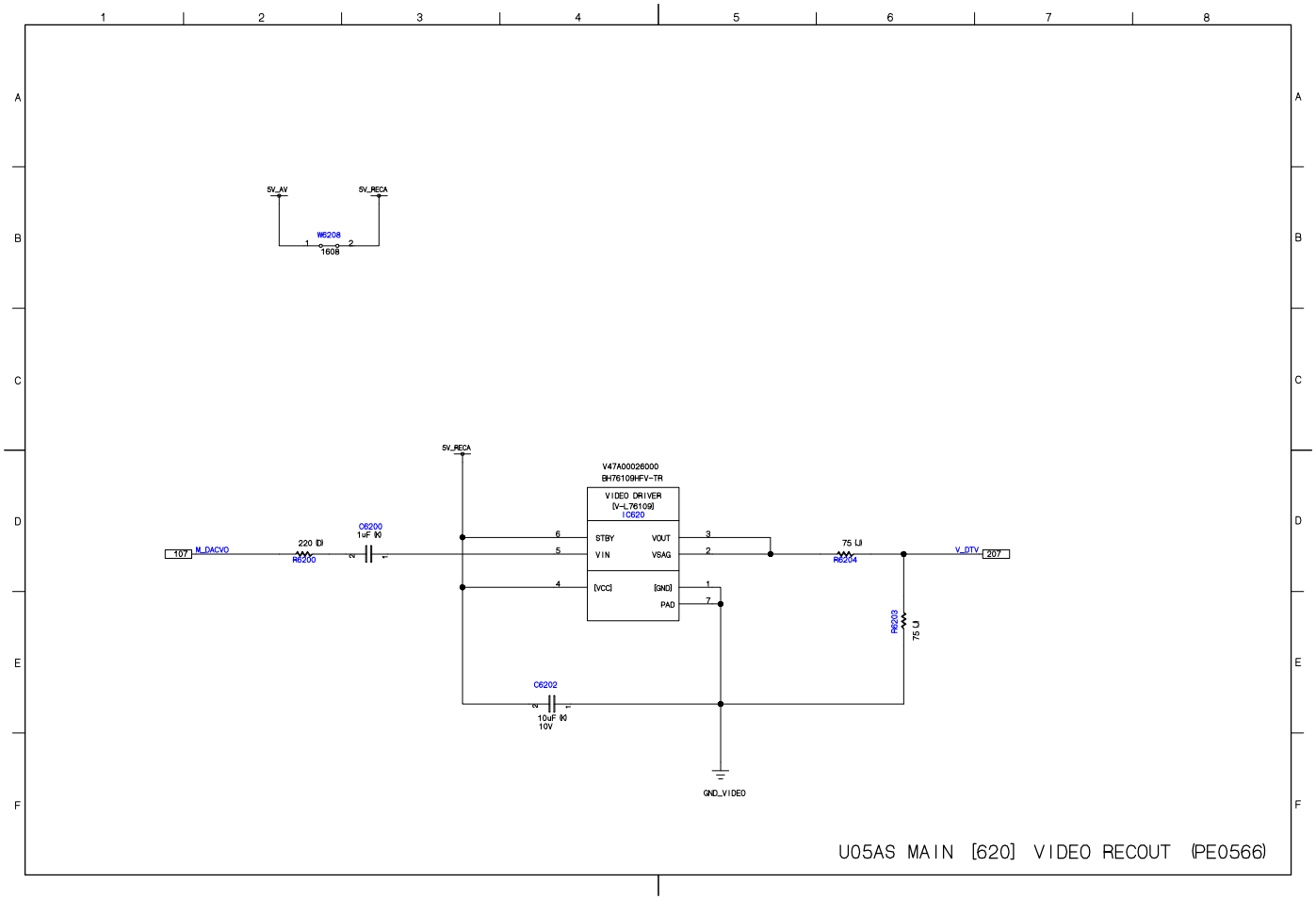


U05AS MAIN [600] SEINE3A VIDEO BIAS (PE0566)

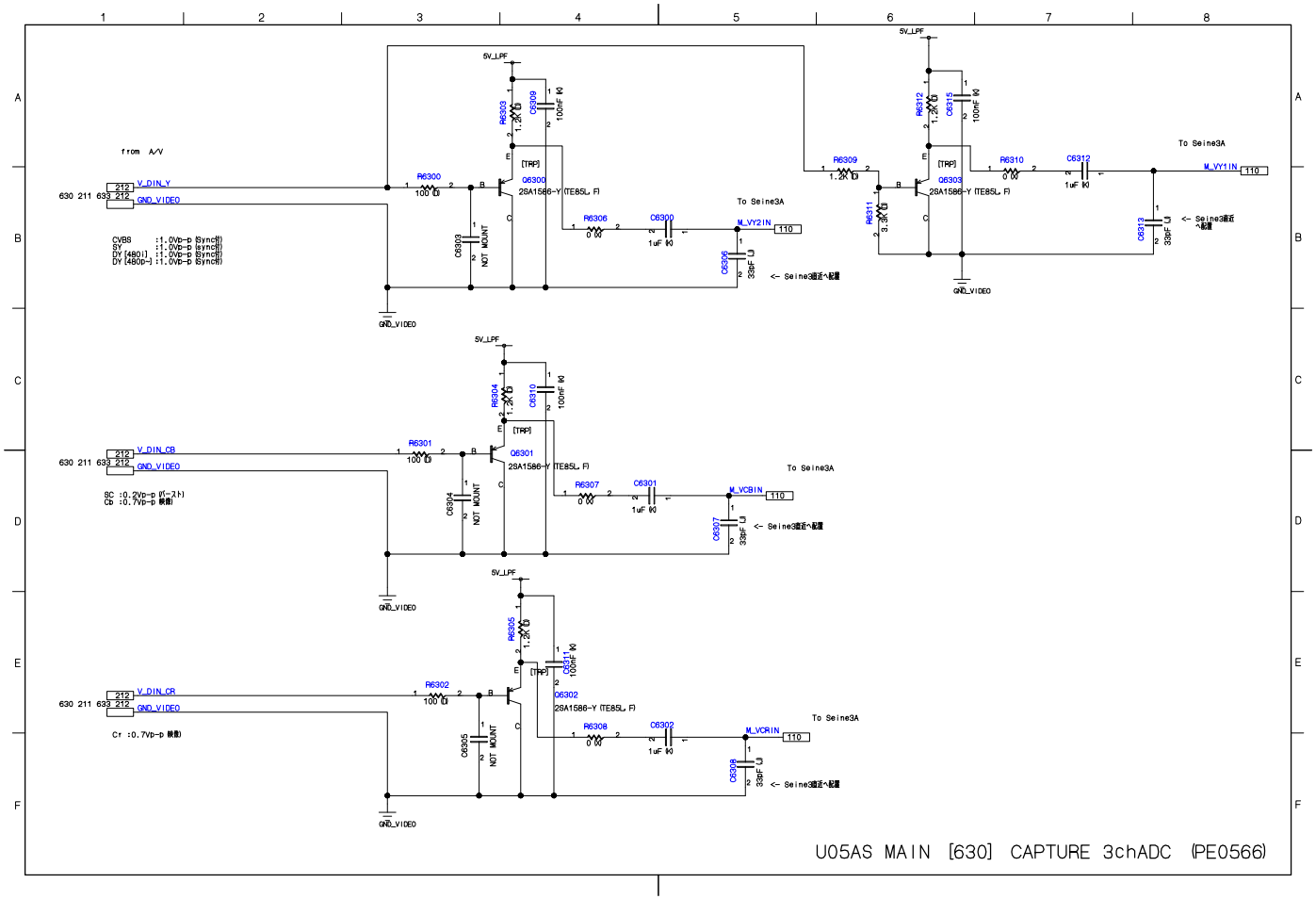


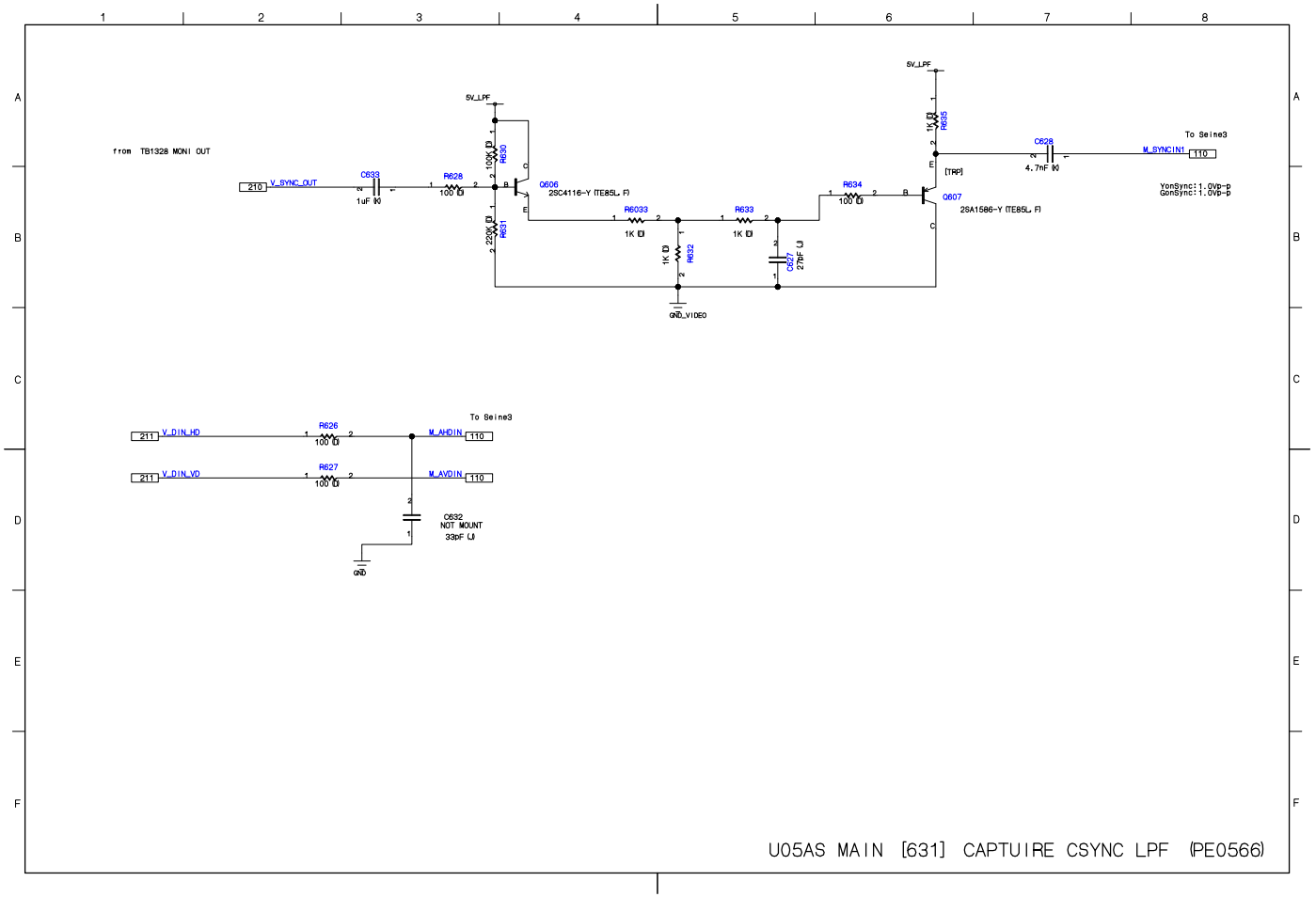
U05AS MAIN [601] Seine3 PLL/XTAL/DACBIAS (PE0566)


3.3VD
UREG
[V-L6209FXXXP]
TC600
CE
NC
VIN
VOUT
[VSS]
XC6209F252PR
C650
1uF (K)
C651
10nF (K)
C652
1uF (K)
2.5V_VIDEO
2.5V_ADCA
W656
1608
0 (K)
GND_VIDEO
W618
1608
0 (K)
GND
2.5V_PLL12
W659
2.5V_PLL9
W661
2.5V_REC
W654
C653
10uF (K)
10V
U05AS MAIN [605] SEINE3 VIDEO REG#1 (PE0566)

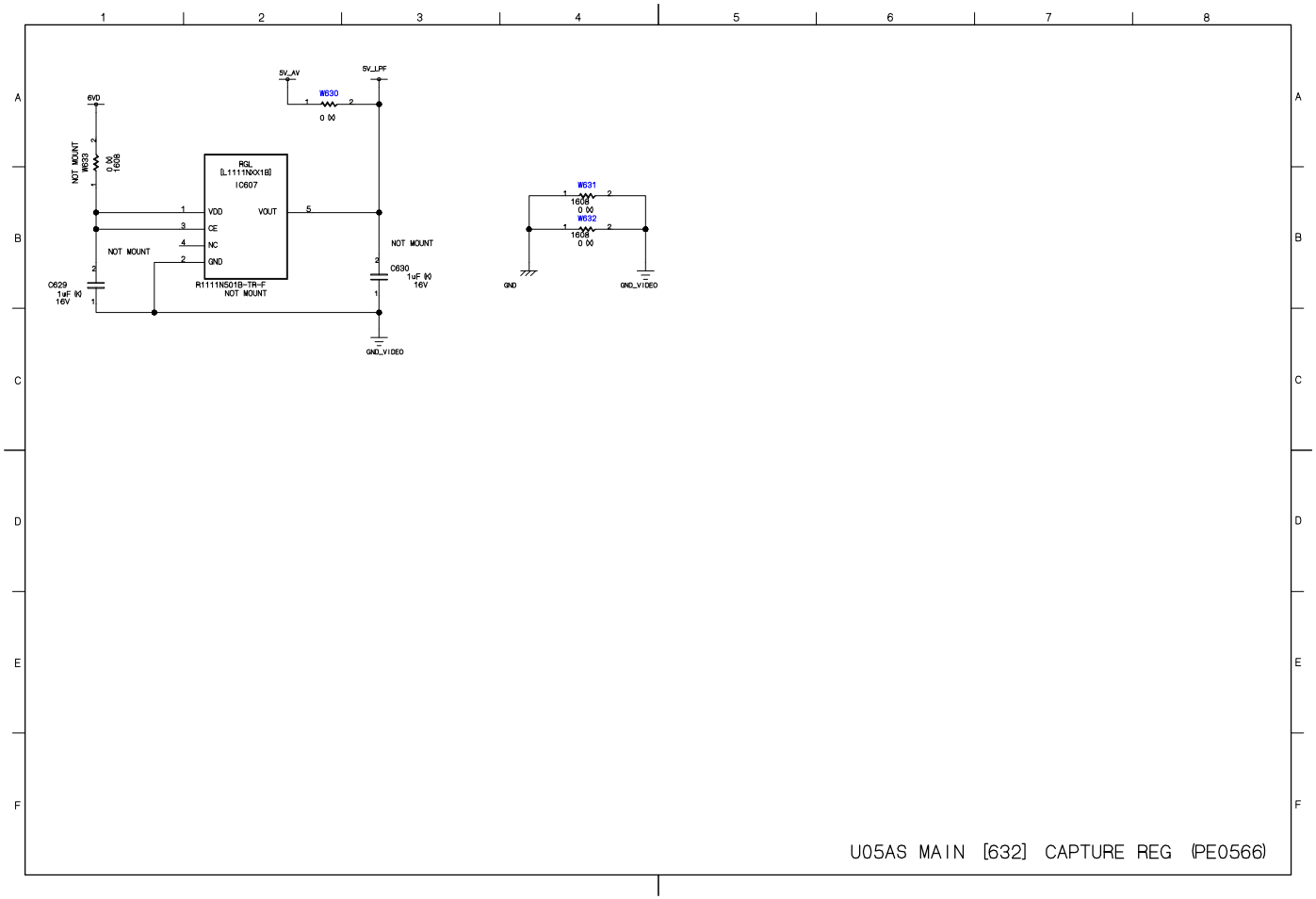


U05AS MAIN [620] VIDEO RECOUT (PE0566)

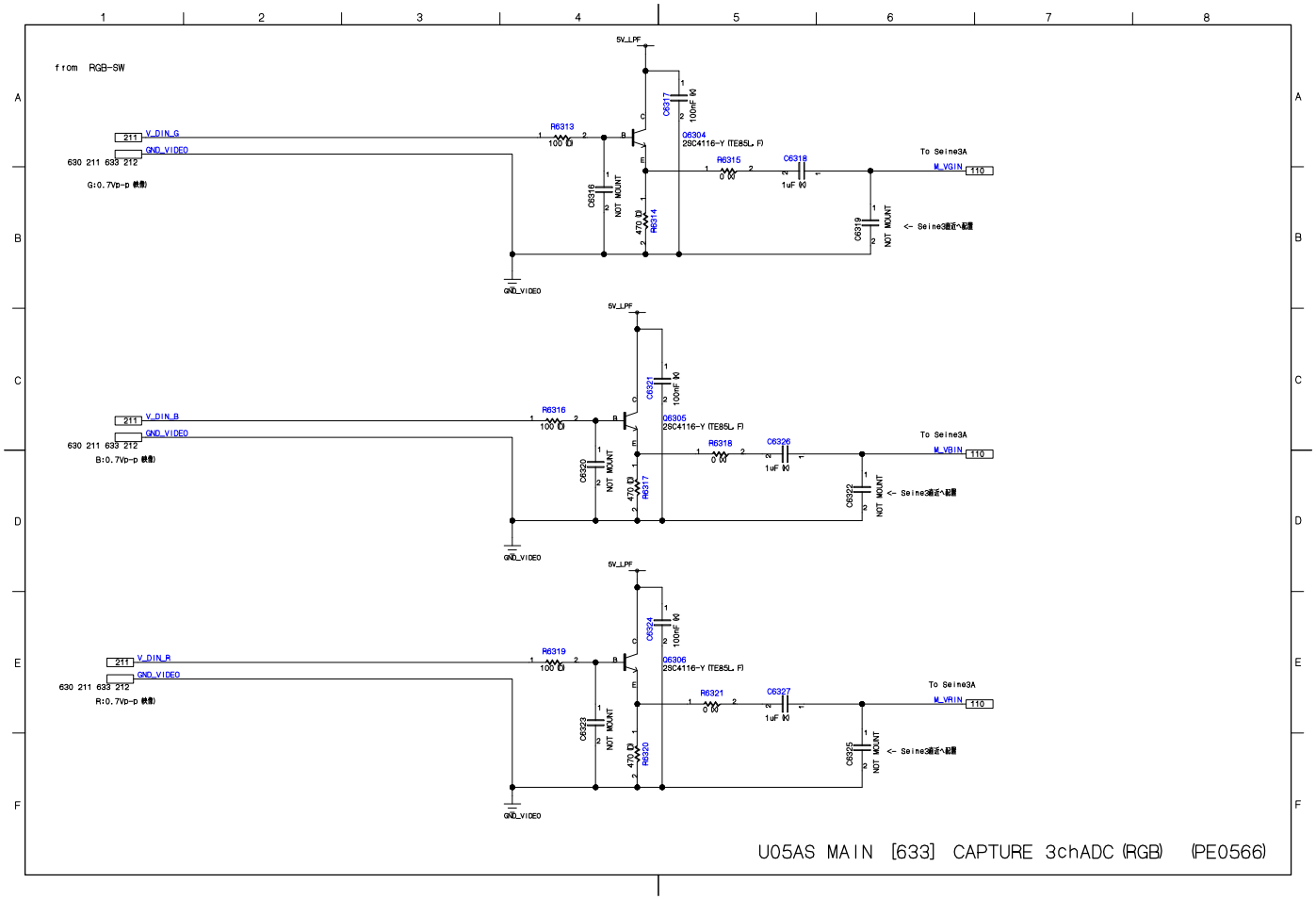

5V_LPF
from A/V
V_DIN_Y
GND_VIDEO
630 211 633
212
CVBS :1.0Vp-p (Sync)
SY :1.0Vp-p (Sync)
CY [480i] :1.0Vp-p (Sync)
CY [480p] :1.0Vp-p (Sync)
R6300
100 Ω
R6303
1.2K Ω
C6309
100nF K
[TRP]
Q6300
2SA1586-Y (TE85L, F)
C6303
NOT MOUNT
R6306
0 Ω
C6300
1uF K
M_VY2IN
110
To Seine3A
C6306
33pF CJ
<- Seine3基板へ配線
R6309
1.2K Ω
R6312
1.2K Ω
C6315
100nF K
R6310
0 Ω
C6312
1uF K
M_VY1IN
R6311
3.3K Ω
C6313
33pF CJ
<- Seine3基板へ配線
V_DIN_CB
GND_VIDEO
R6301
100 Ω
R6304
1.2K Ω
C6310
100nF K
Q6301
2SA1586-Y (TE85L, F)
C6304
NOT MOUNT
R6307
0 Ω
C6301
1uF K
M_VCBIN
C6307
33pF CJ
<- Seine3基板へ配線
V_DIN_CR
GND_VIDEO
R6302
100 Ω
R6305
1.2K Ω
C6311
100nF K
Q6302
2SA1586-Y (TE85L, F)
C6305
NOT MOUNT
R6308
0 Ω
C6302
1uF K
M_VCRIN
C6308
33pF CJ
<- Seine3基板へ配線
U05AS MAIN [630] CAPTURE 3chADC (PE0566)

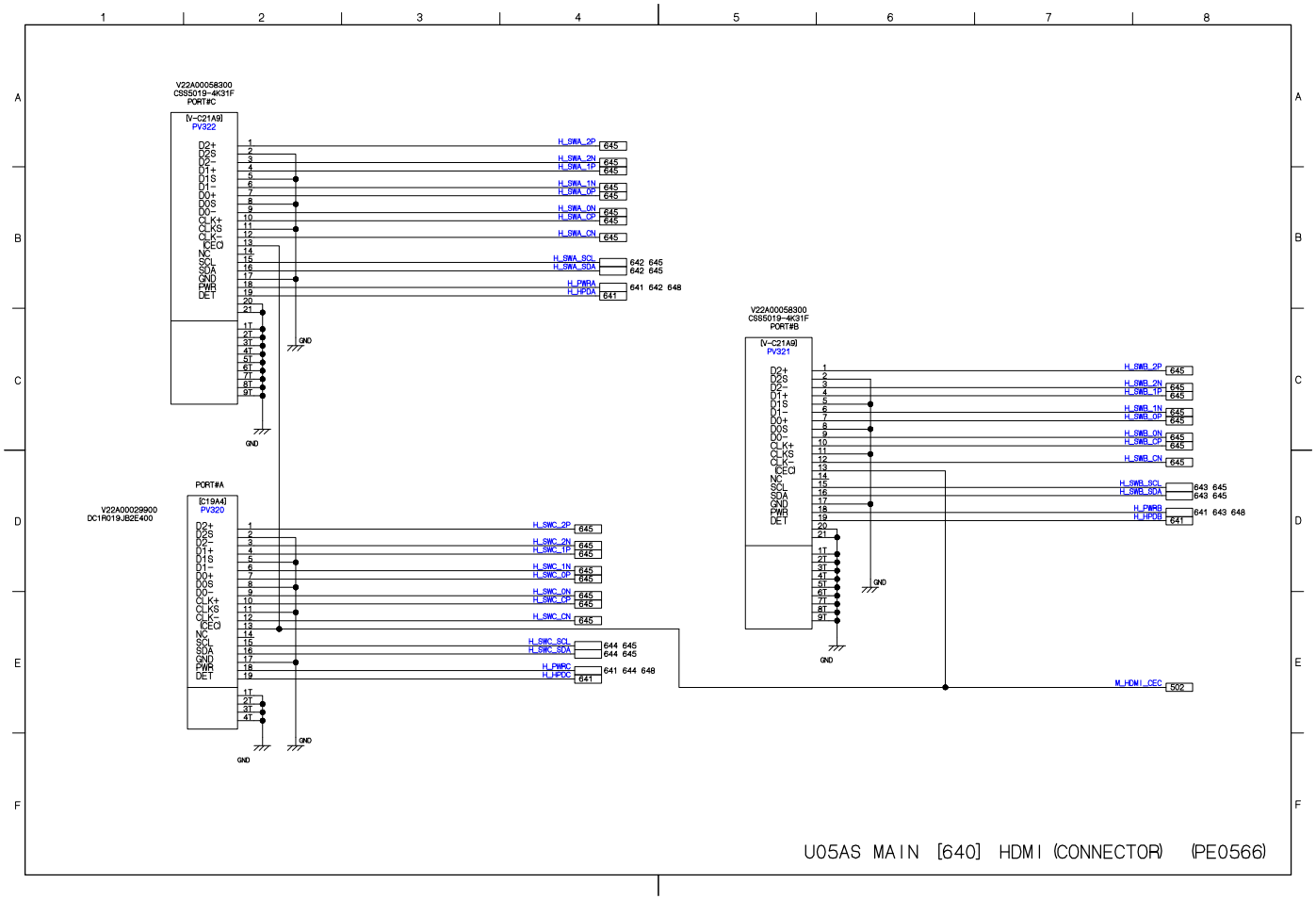


U05AS MAIN [631] CAPTUIRE CSYNC LPF (PE0566)

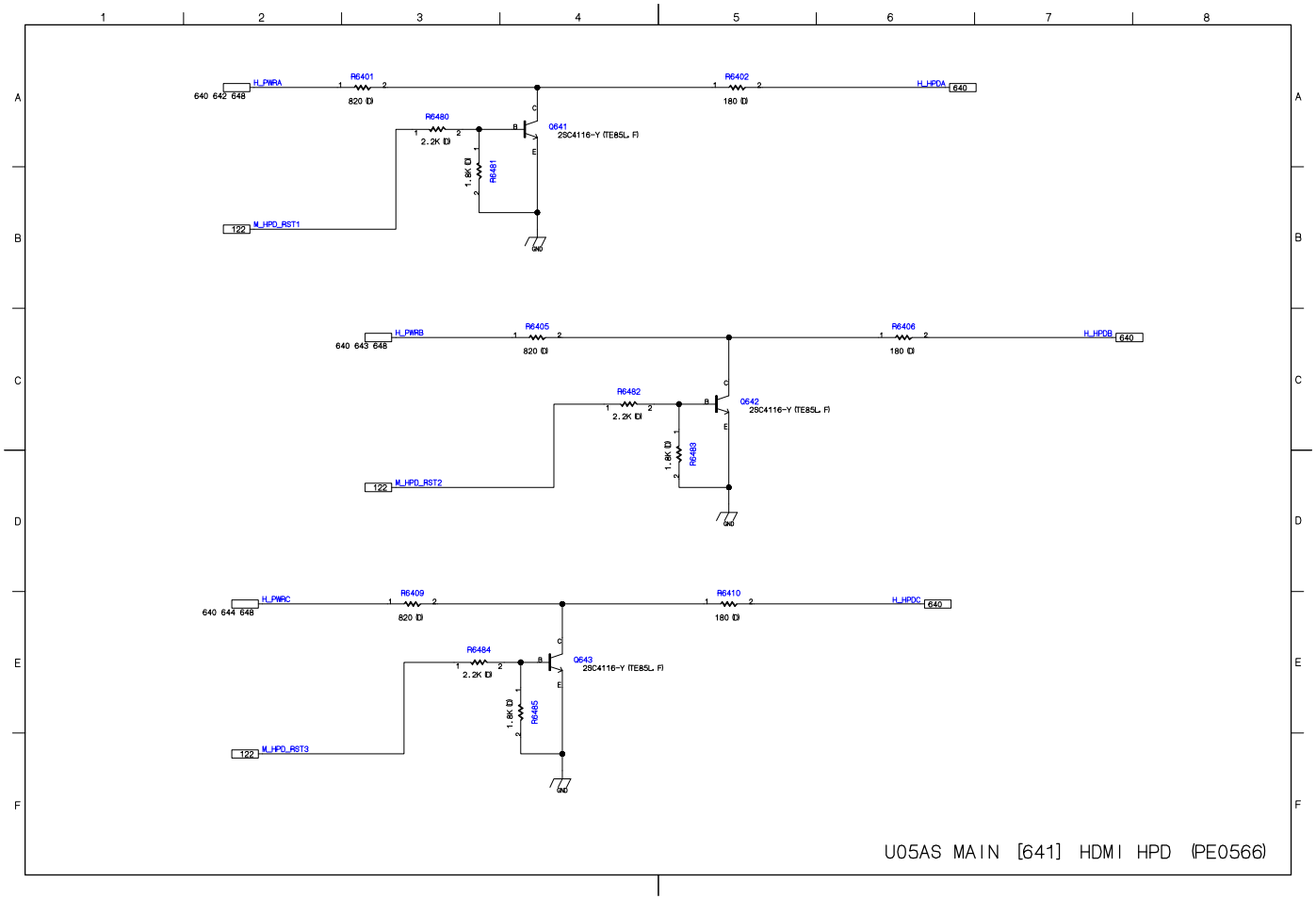


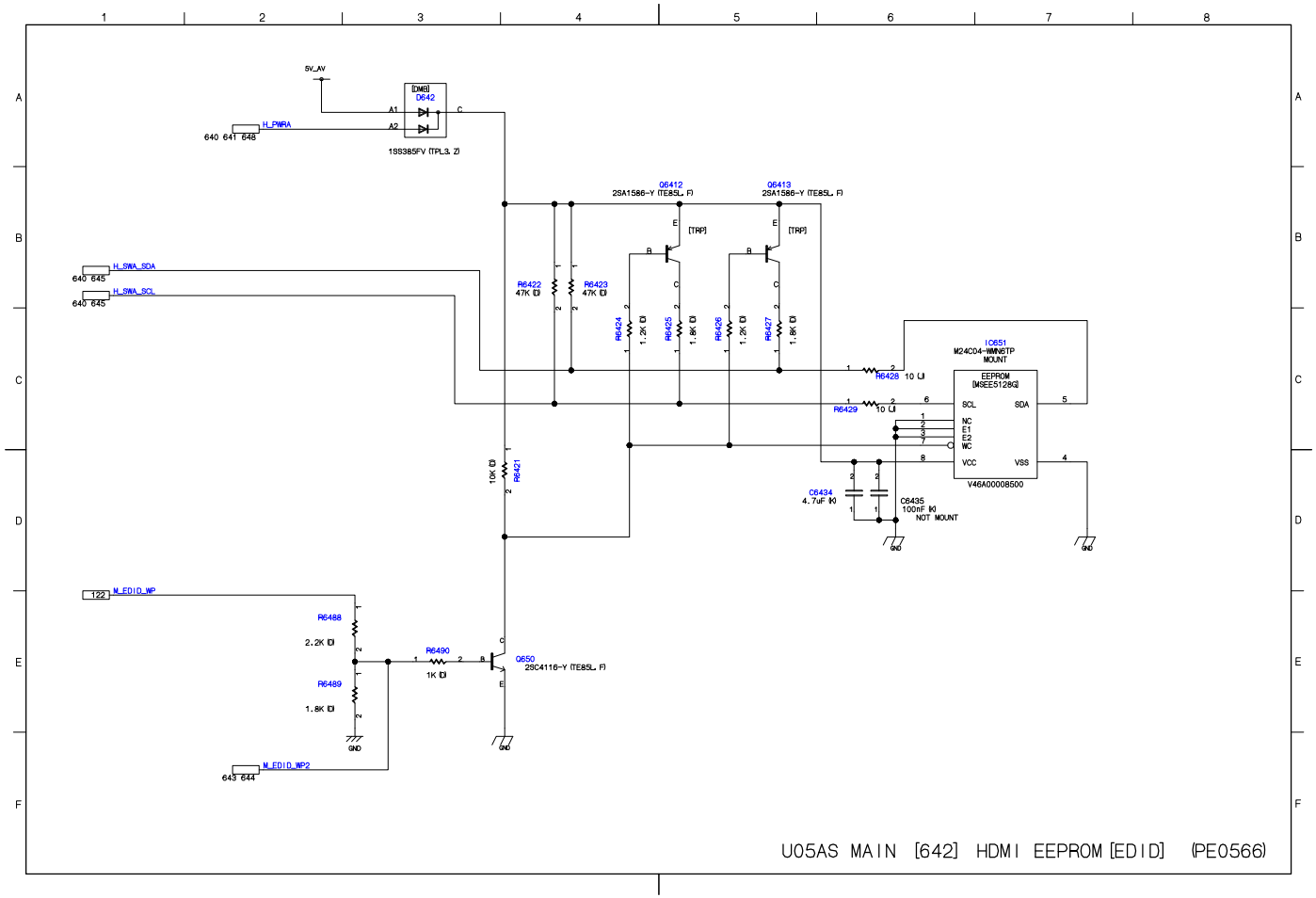
U05AS MAIN [632] CAPTURE REG (PE0566)


from RGB-SW
5V_LPF
V_DIN_G
GND_VIDEO
630 211 633 212
G:0.7Vp-p
R6313
100Ω
C6317
100nF
Q6304
2SC4116-Y (TE85L, F)
R6315
0Ω
C6318
1uF
C6316
NOT MOUNT
R6314
470Ω
C6319
NOT MOUNT
<- Seine3選択配置
To Seine3A
M_VGIN
110
GND_VIDEO
5V_LPF
V_DIN_B
GND_VIDEO
630 211 633 212
B:0.7Vp-p
R6316
100Ω
C6321
100nF
Q6305
2SC4116-Y (TE85L, F)
R6318
0Ω
C6326
1uF
C6320
NOT MOUNT
R6317
470Ω
C6322
NOT MOUNT
<- Seine3選択配置
To Seine3A
M_VBIN
110
GND_VIDEO
5V_LPF
V_DIN_R
GND_VIDEO
630 211 633 212
R:0.7Vp-p
R6319
100Ω
C6324
100nF
Q6306
2SC4116-Y (TE85L, F)
R6321
0Ω
C6327
1uF
C6323
NOT MOUNT
R6320
470Ω
C6325
NOT MOUNT
<- Seine3選択配置
To Seine3A
M_VRIN
110
GND_VIDEO
U05AS MAIN [633] CAPTURE 3chADC (RGB) (PE0566)

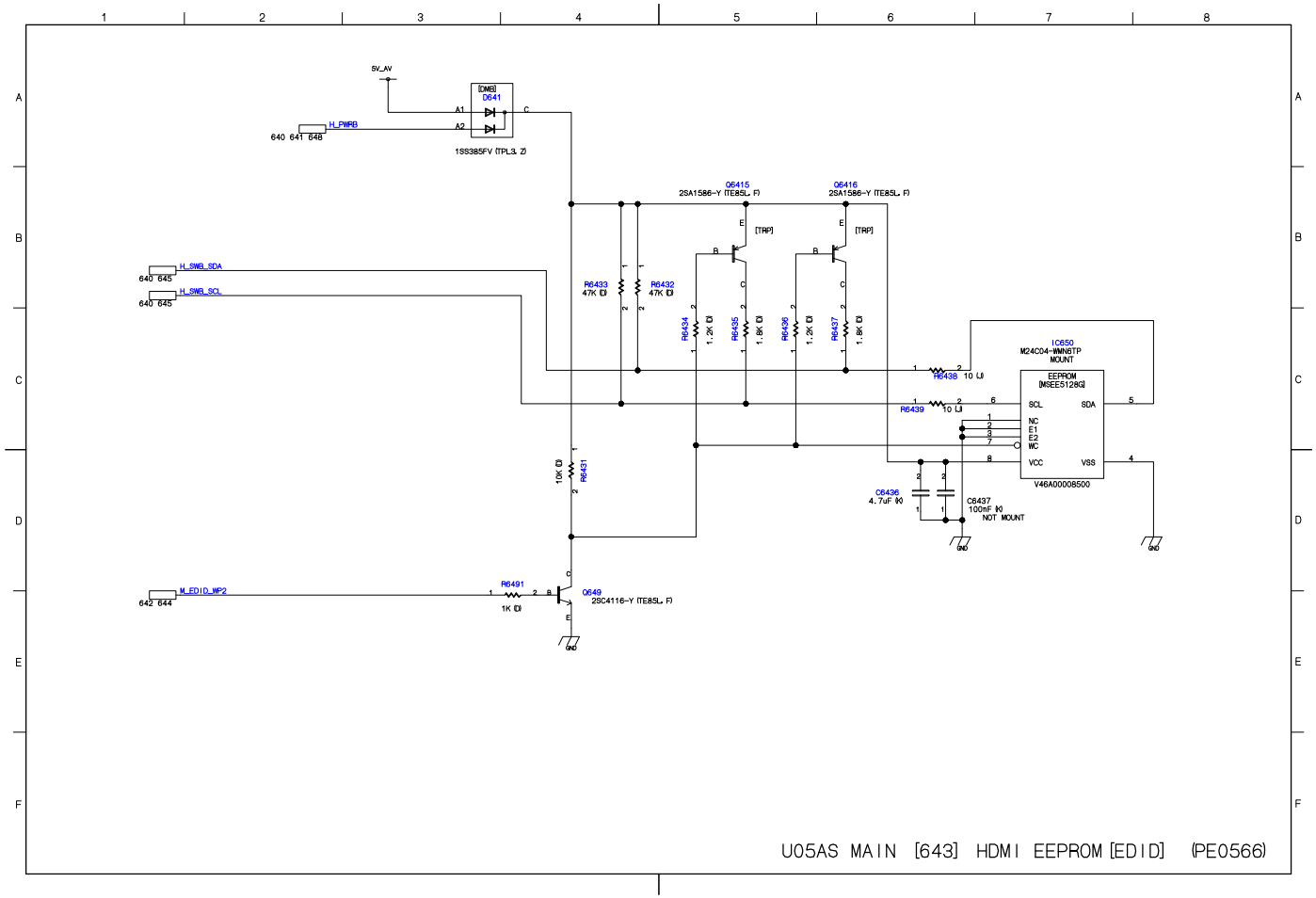


U05AS MAIN [640] HDMI (CONNECTOR) (PE0566)

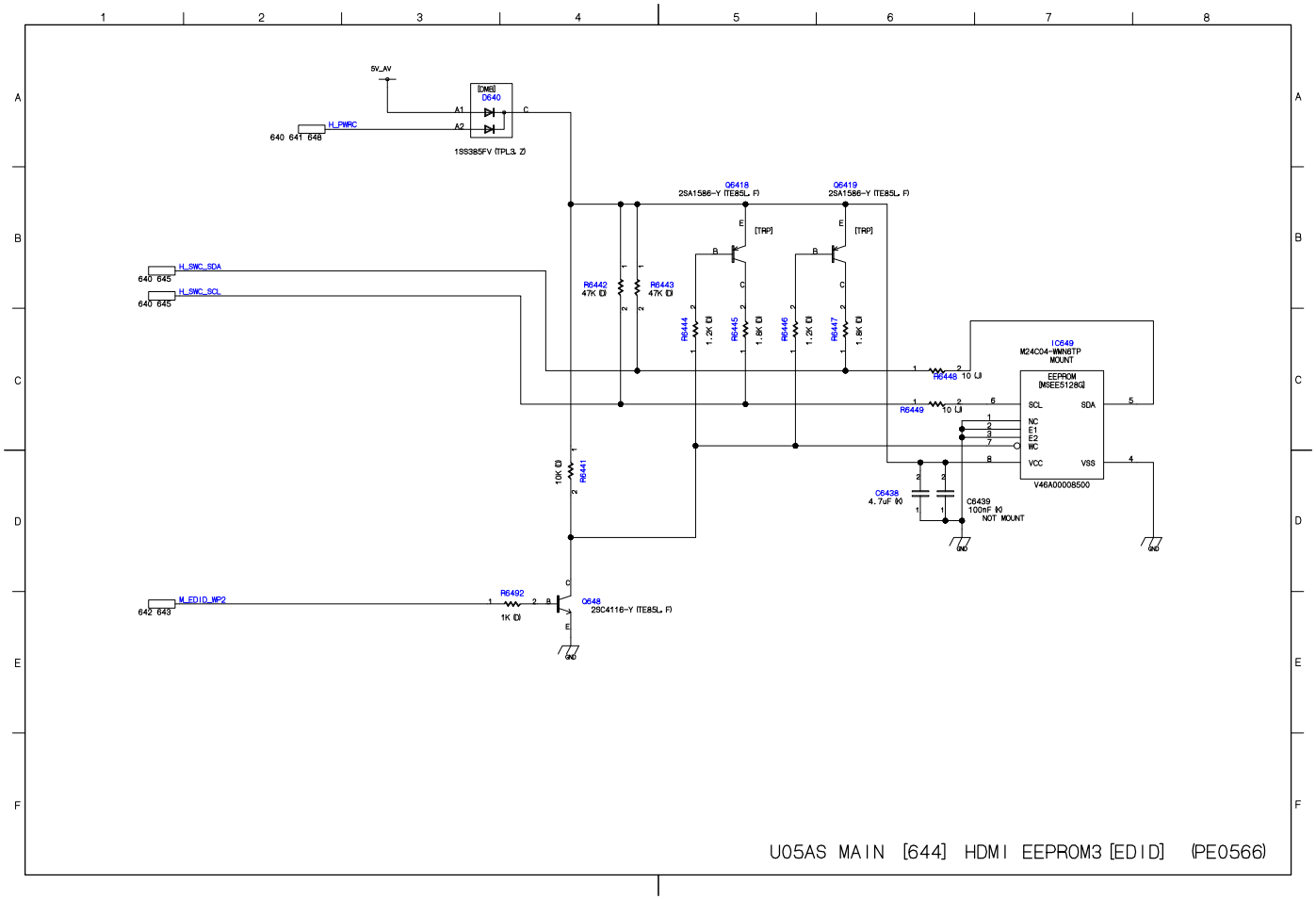

H_PWRA
640 642 648
R6401
820 Ω
R6402
180 Ω
H_HPDA
640
R6480
2.2K Ω
Q641
2SC4116-Y (TE85L, F)
R6481
1.8K Ω
122
M_HPD_RST1
H_PWRB
640 643 648
R6405
820 Ω
R6406
180 Ω
H_HPDB
640
R6482
2.2K Ω
Q642
2SC4116-Y (TE85L, F)
R6483
1.8K Ω
122
M_HPD_RST2
H_PWRC
640 644 648
R6409
820 Ω
R6410
180 Ω
H_HPDC
640
R6484
2.2K Ω
Q643
2SC4116-Y (TE85L, F)
R6485
1.8K Ω
122
M_HPD_RST3
U05AS MAIN [641] HDMI HPD (PE0566)



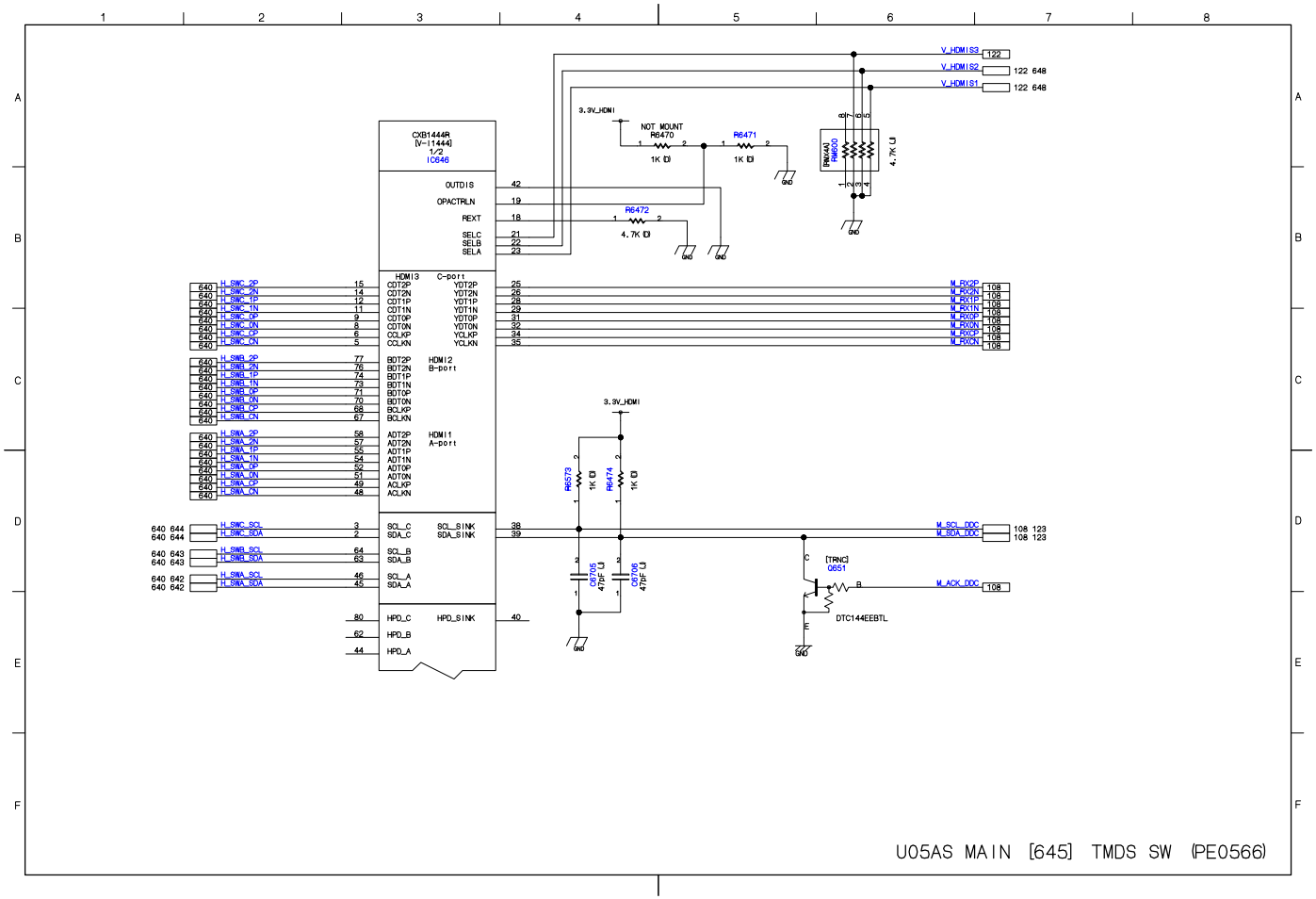
U05AS MAIN [642] HDMI EEPROM [EDID] (PE0566)



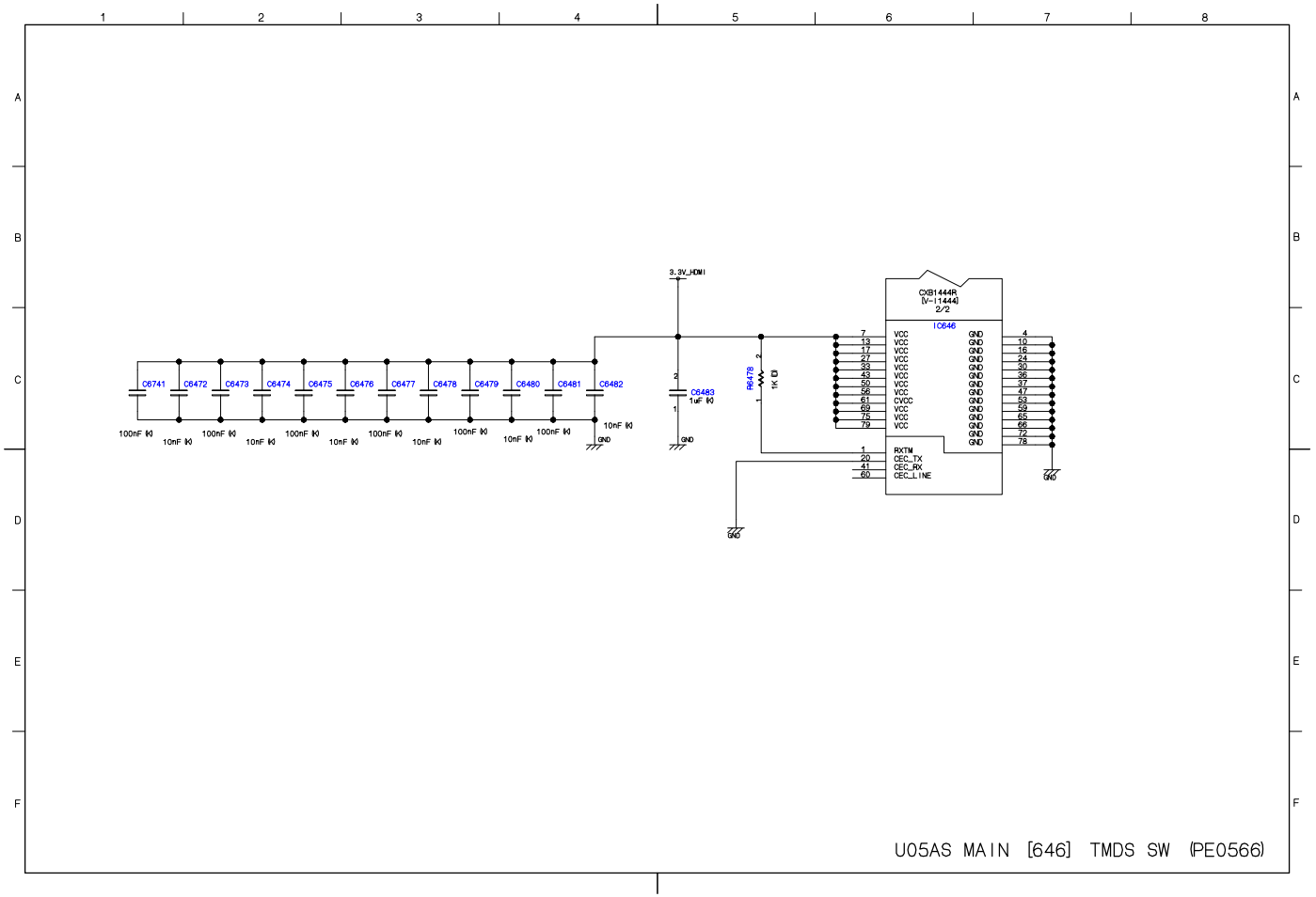
U05AS MAIN [643] HDMI EEPROM [EDID] (PE0566)



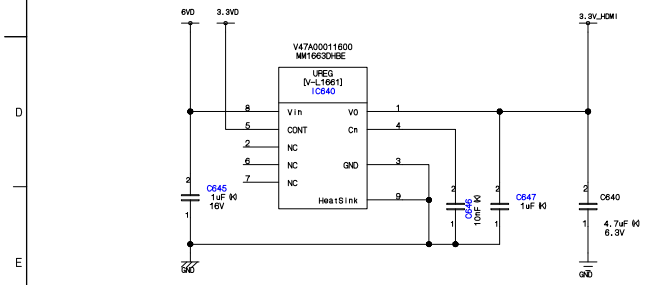
U05AS MAIN [644] HDMI EEPROM3 [EDID] (PE0566)



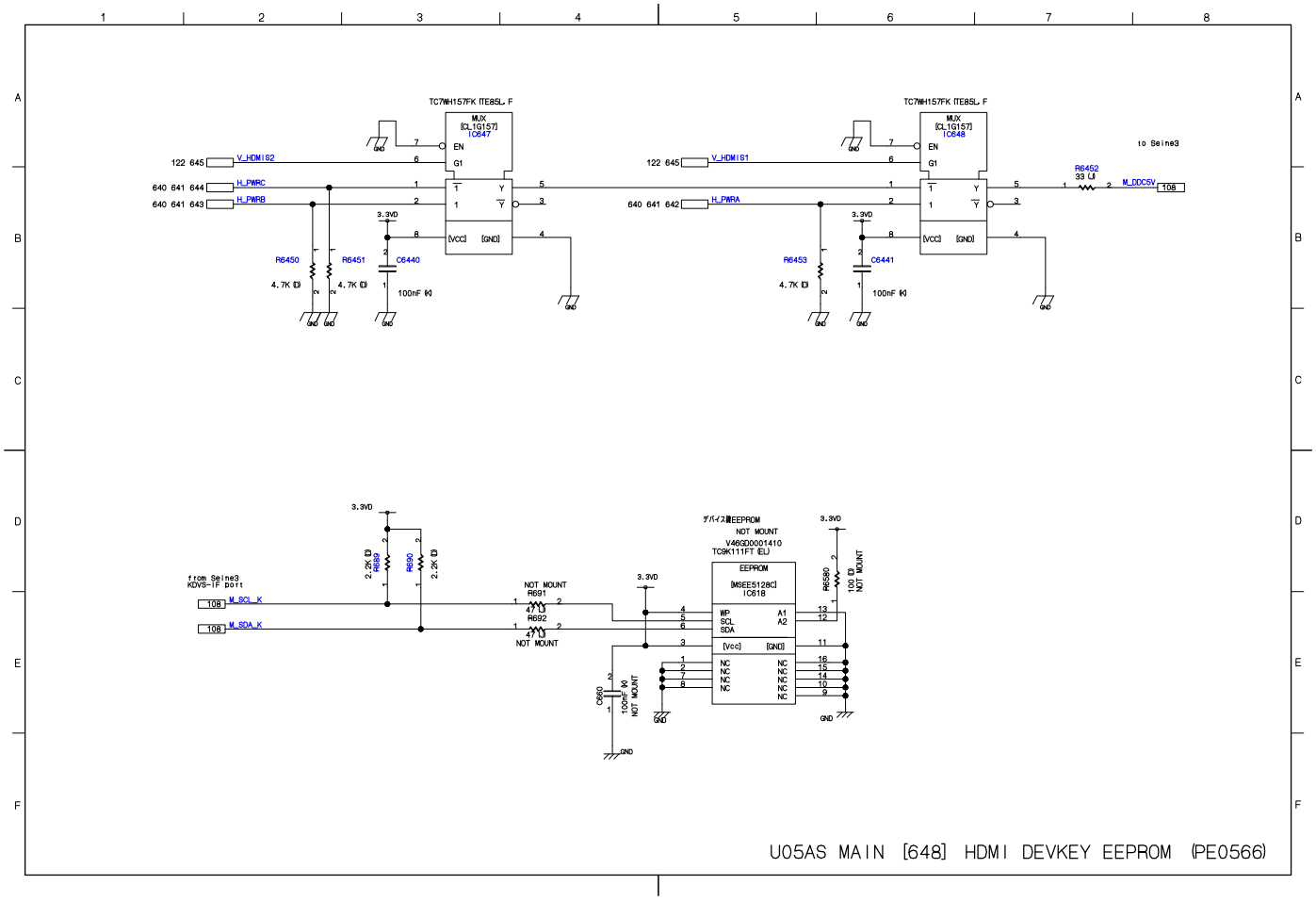
U05AS MAIN [645] TMDS SW (PE0566)



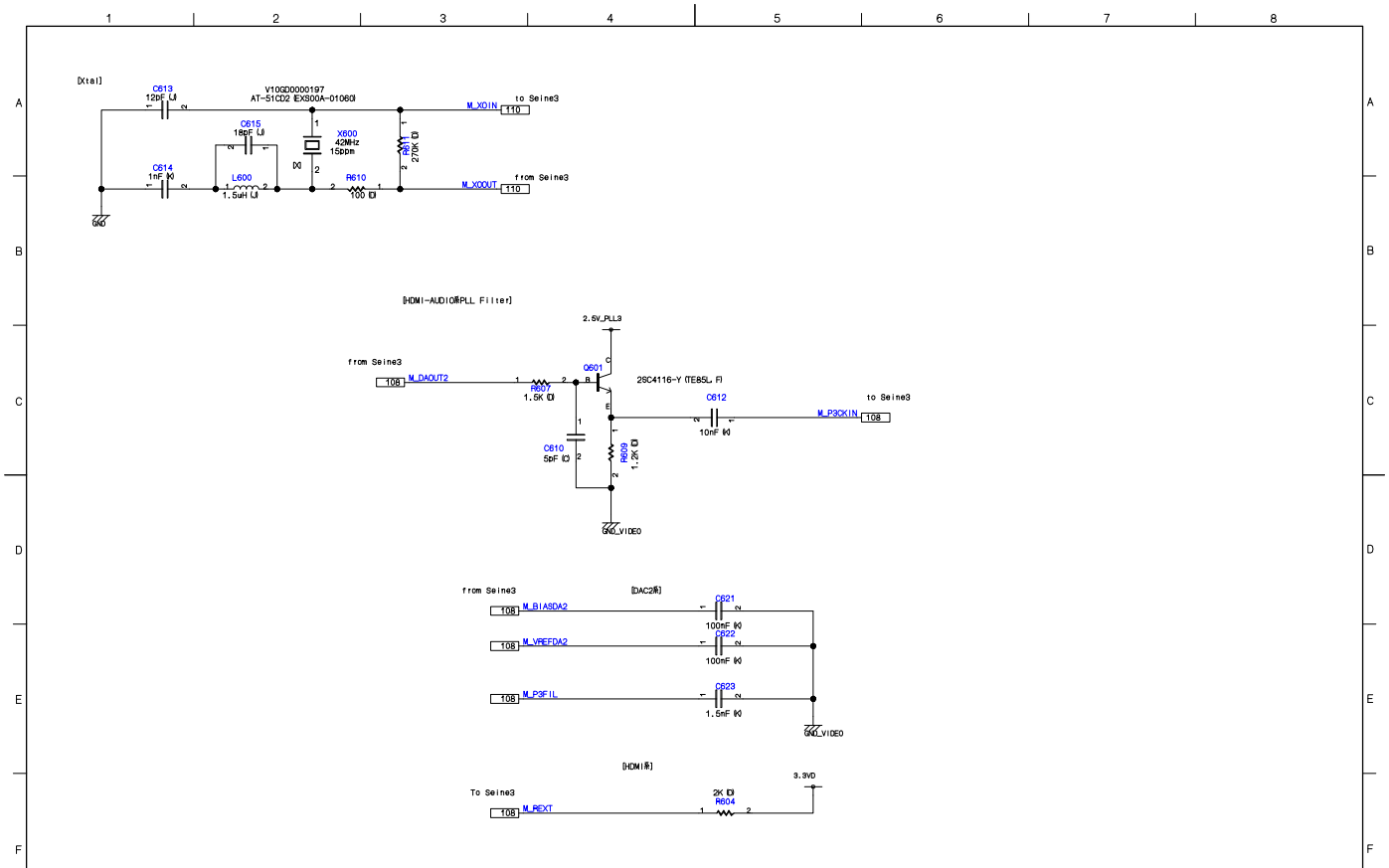
U05AS MAIN [646] TMDS SW (PE0566)



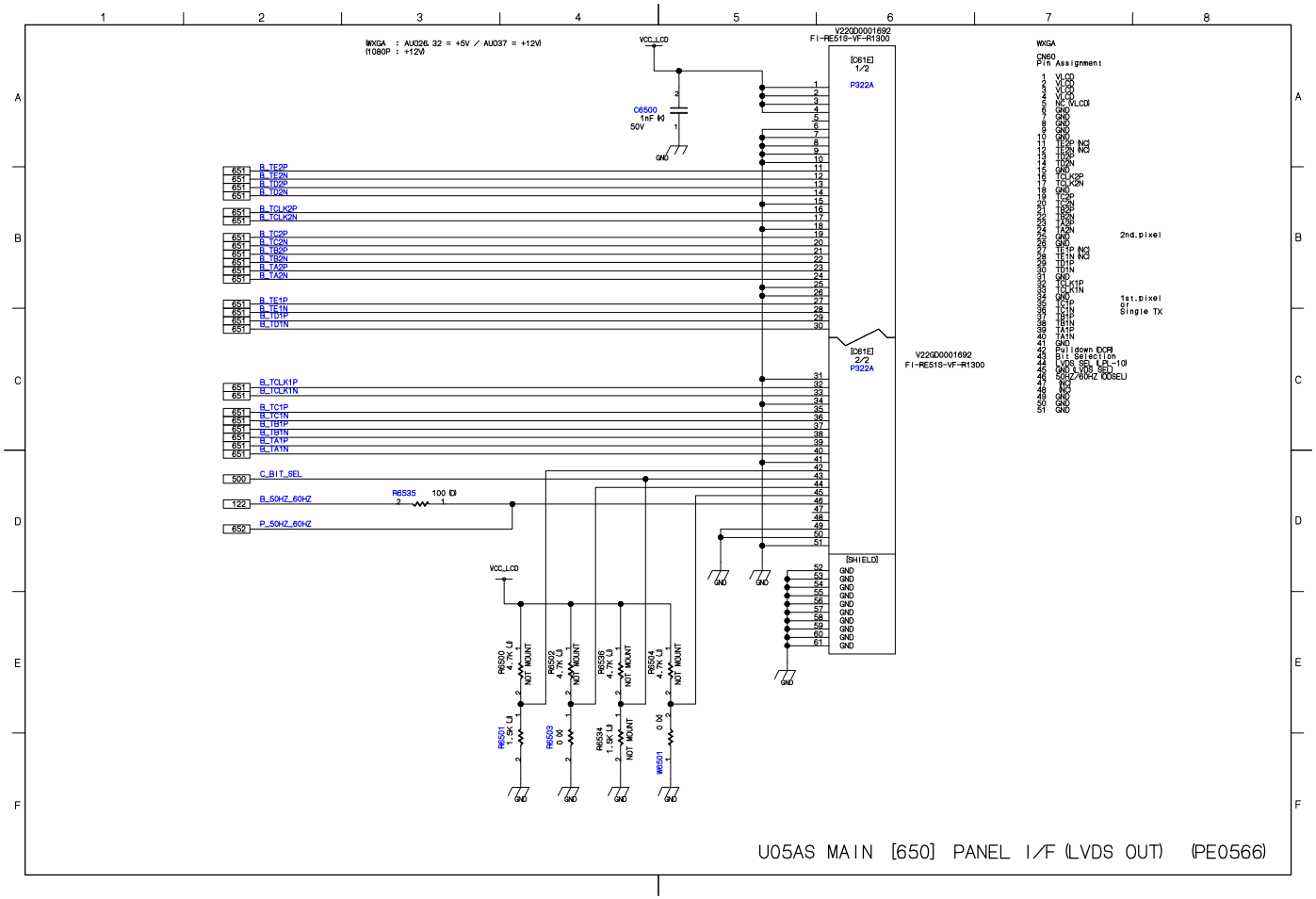
U05AS MAIN [647] HDMI POWER (PE0566)



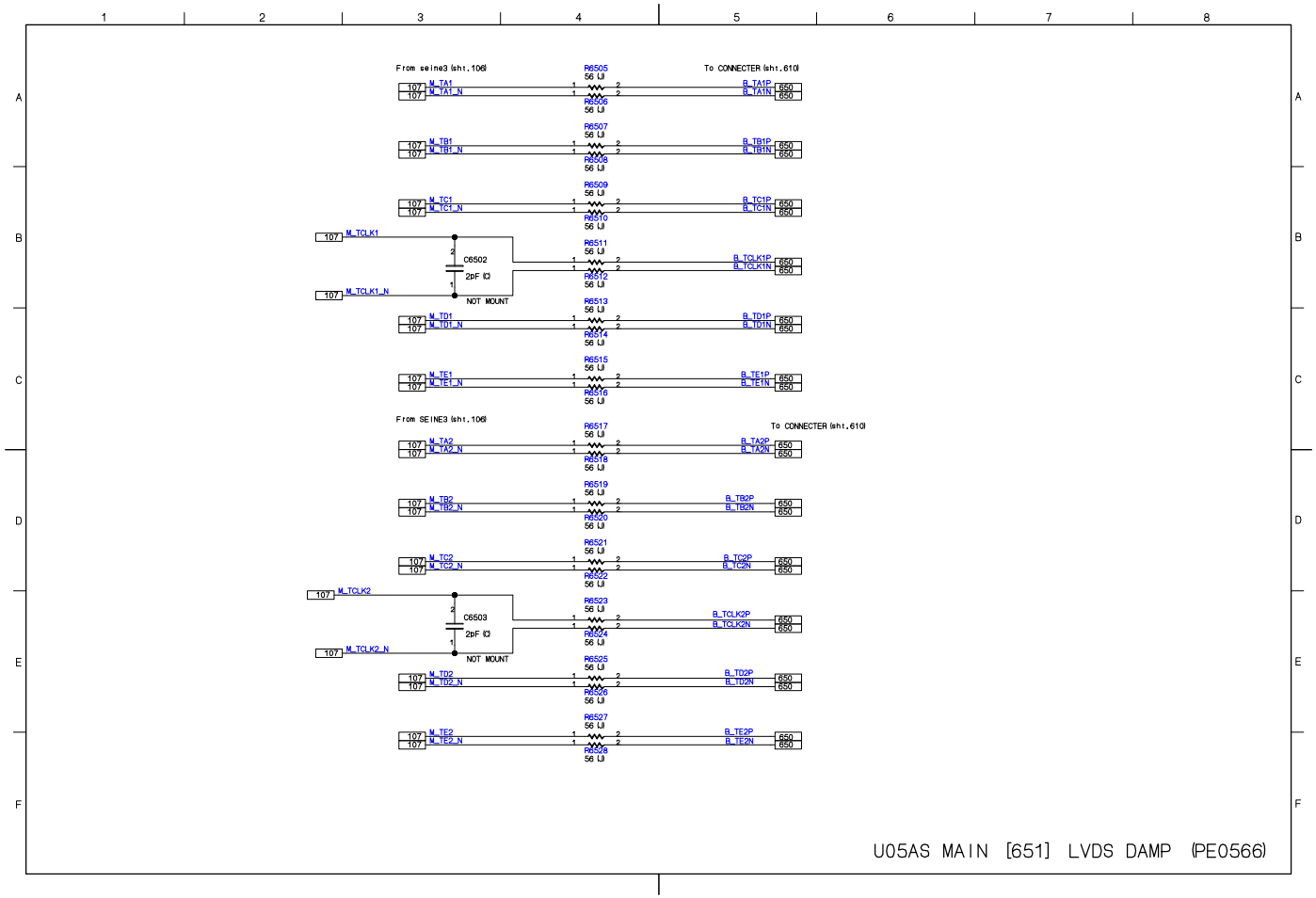
U05AS MAIN [648] HDMI DEVKEY EEPROM (PE0566)



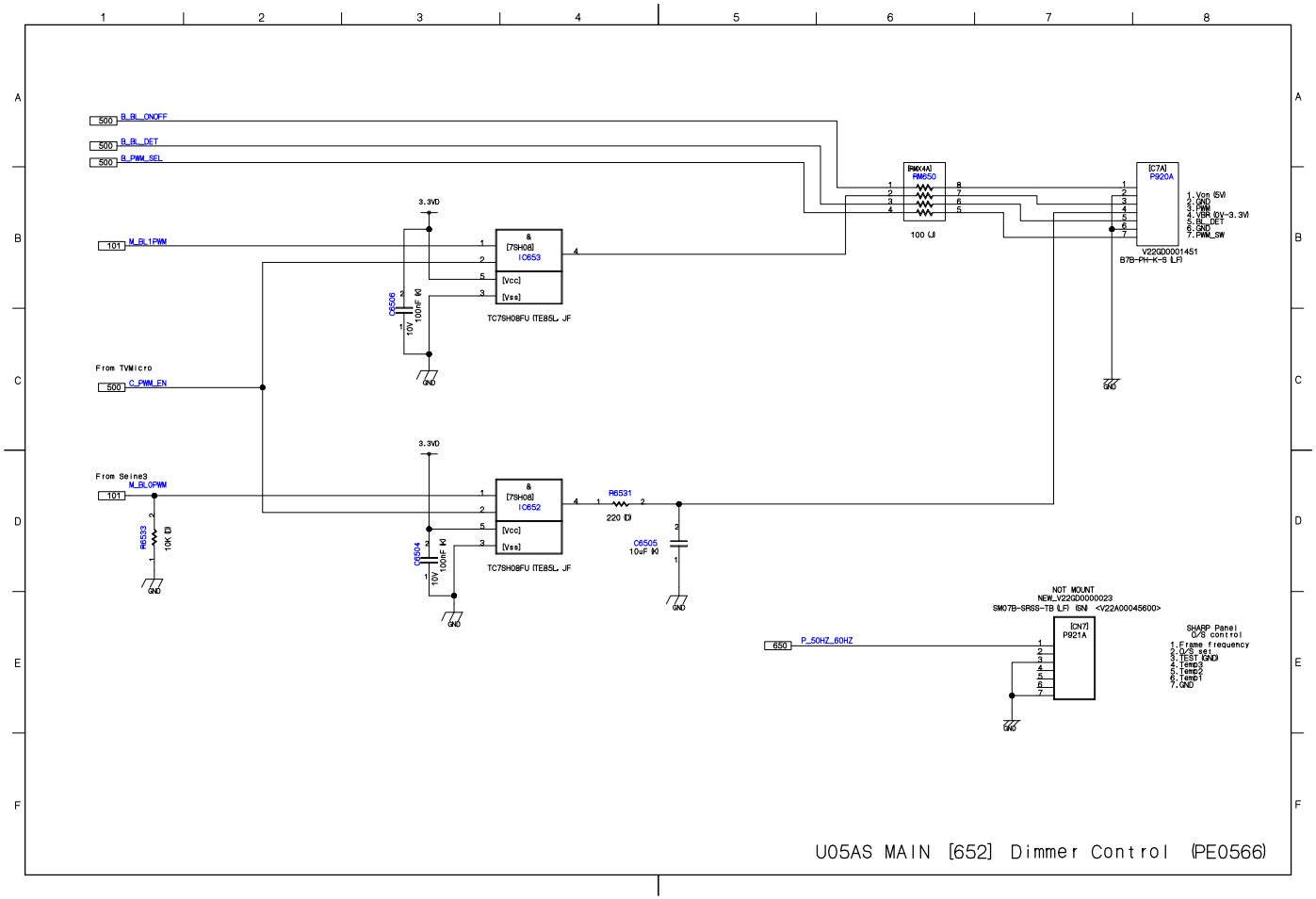
U05AS MAIN [649] Seine3 PLL/XTAL/DACBIAS (PE0566)



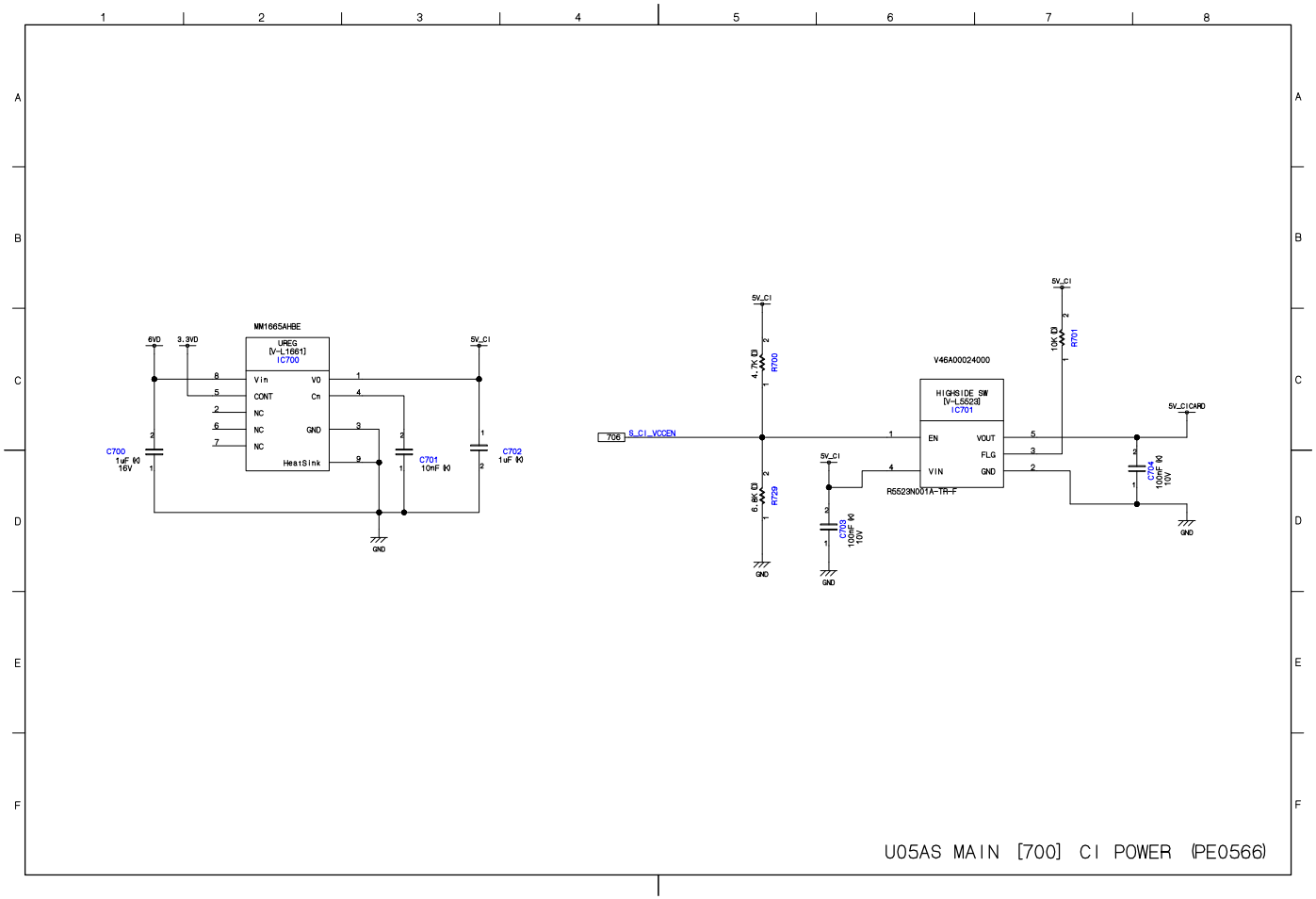
U05AS MAIN [650] PANEL I/F (LVDS OUT) (PE0566)



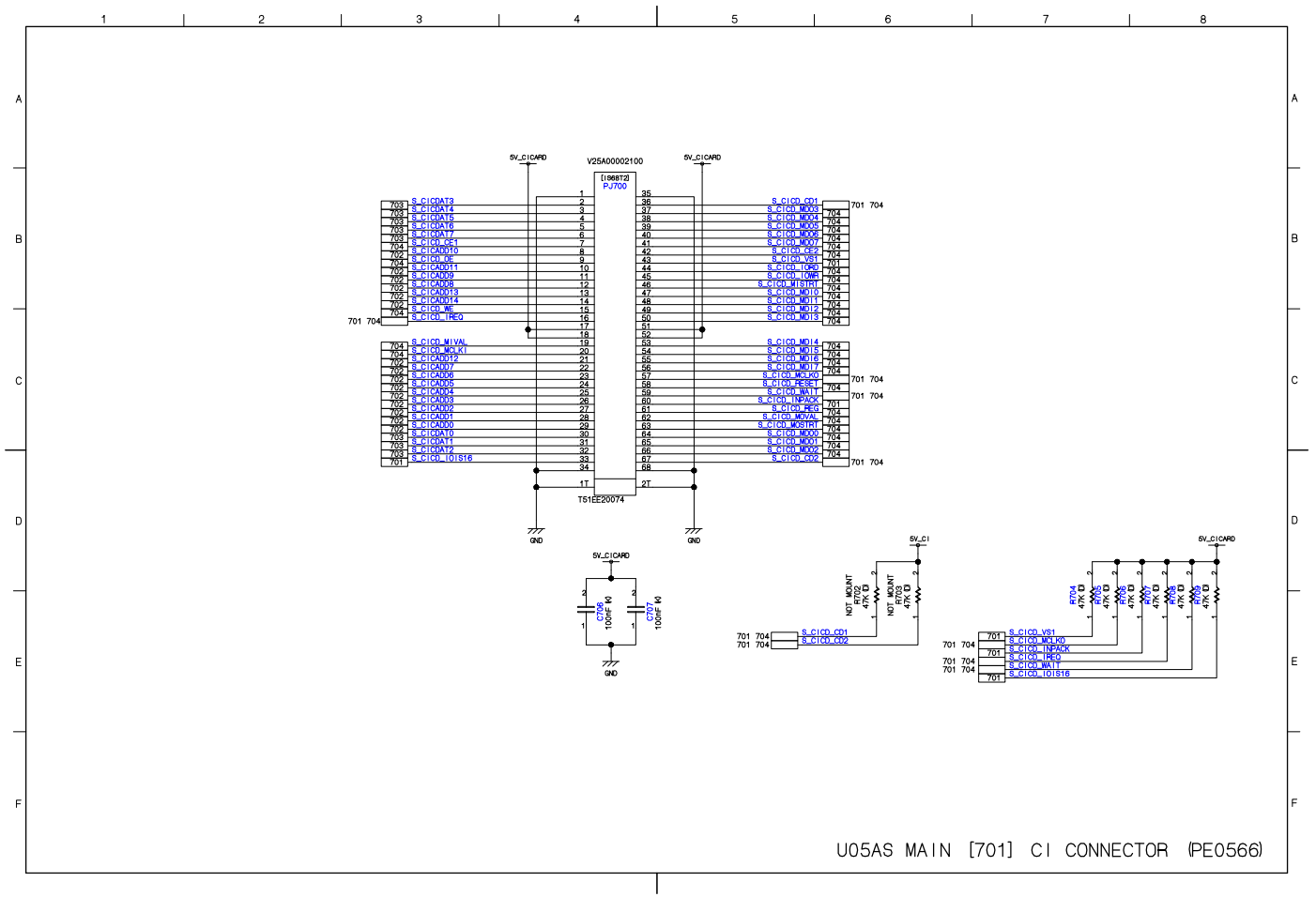
U05AS MAIN [651] LVDS DAMP (PE0566)



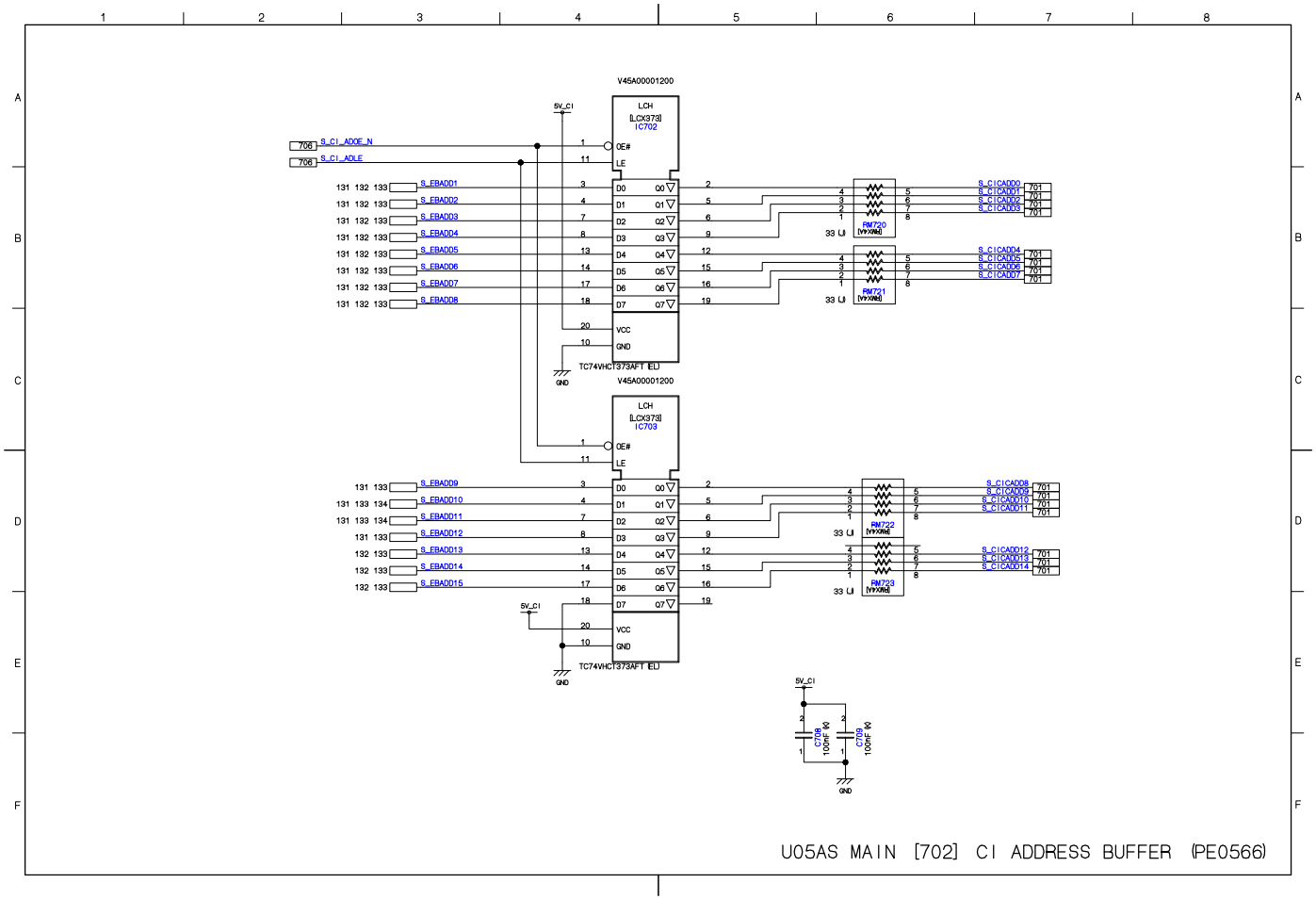
U05AS MAIN [652] Dimmer Control (PE0566)

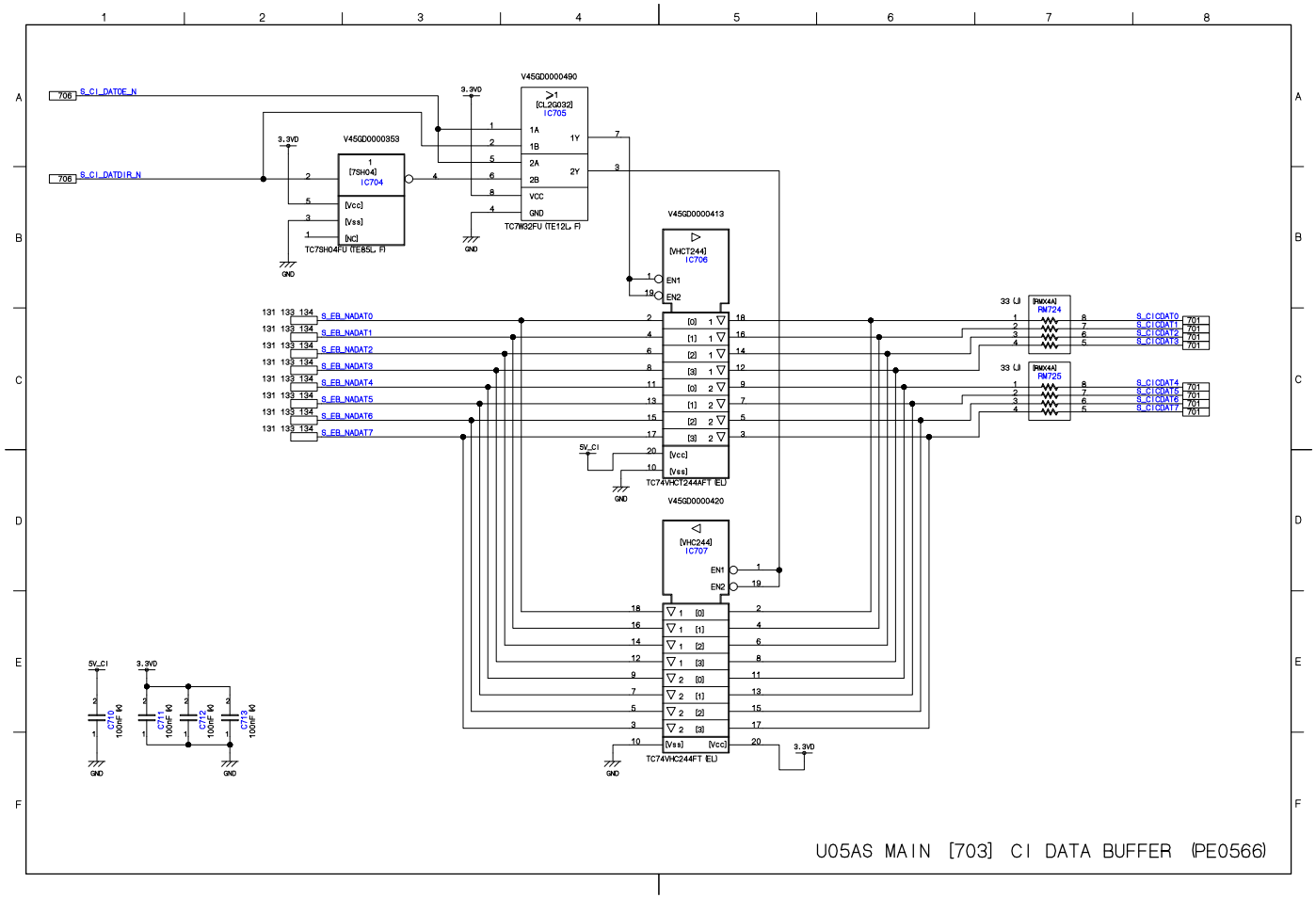


U05AS MAIN [700] CI POWER (PE0566)

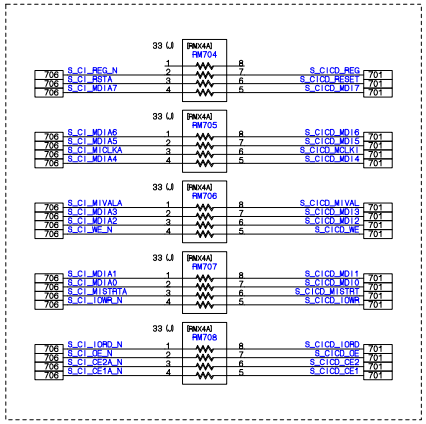


U05AS MAIN [701] CI CONNECTOR (PE0566)

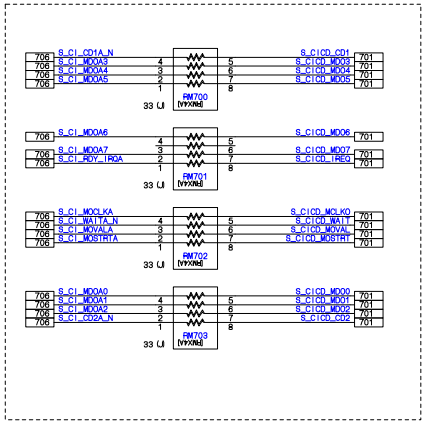

V45A00001200
LCH
[LCX373]
IC702
5V_C1
706 S_C1_ADOE_N
706 S_C1_ADLE
OE#
LE
D0 00
D1 01
D2 02
D3 03
D4 04
D5 05
D6 06
D7 07
VCC
GND
TC74VHCT373AFT (EL)
GND
131 132 133 S_EBADD1
131 132 133 S_EBADD2
131 132 133 S_EBADD3
131 132 133 S_EBADD4
131 132 133 S_EBADD5
131 132 133 S_EBADD6
131 132 133 S_EBADD7
131 132 133 S_EBADD8
RM720
RM721
33 Ω
S_C1CADD0
S_C1CADD1
S_C1CADD2
S_C1CADD3
S_C1CADD4
S_C1CADD5
S_C1CADD6
S_C1CADD7
701
V45A00001200
LCH
[LCX373]
IC703
131 133 S_EBADD9
131 133 134 S_EBADD10
131 133 134 S_EBADD11
131 133 S_EBADD12
132 133 S_EBADD13
132 133 S_EBADD14
132 133 S_EBADD15
RM722
RM723
S_C1CADD8
S_C1CADD9
S_C1CADD10
S_C1CADD11
S_C1CADD12
S_C1CADD13
S_C1CADD14
C708
C709
100nF (W)
U05AS MAIN [702] C1 ADDRESS BUFFER (PE0566)



U05AS MAIN [703] CI DATA BUFFER (PE0566)

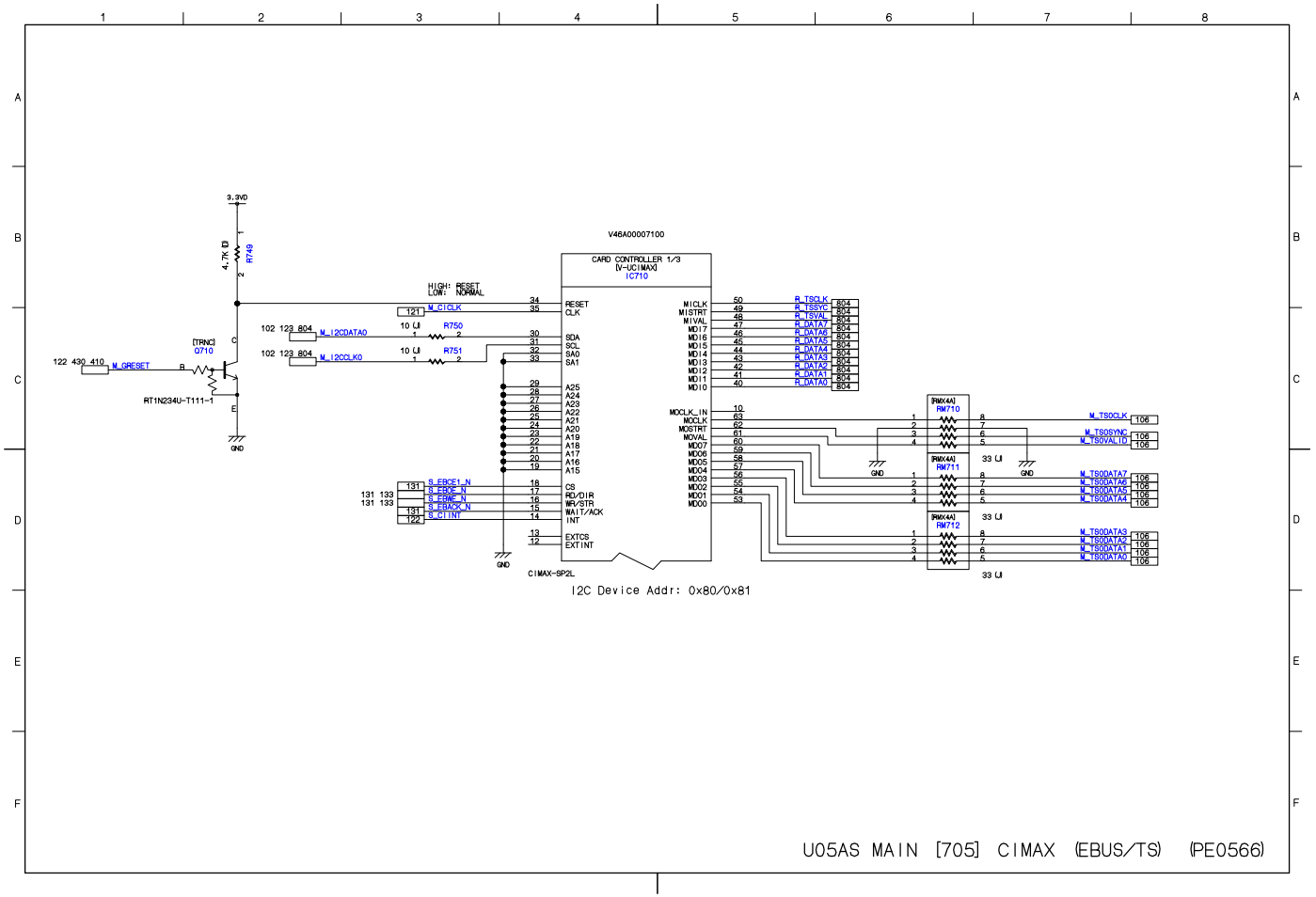


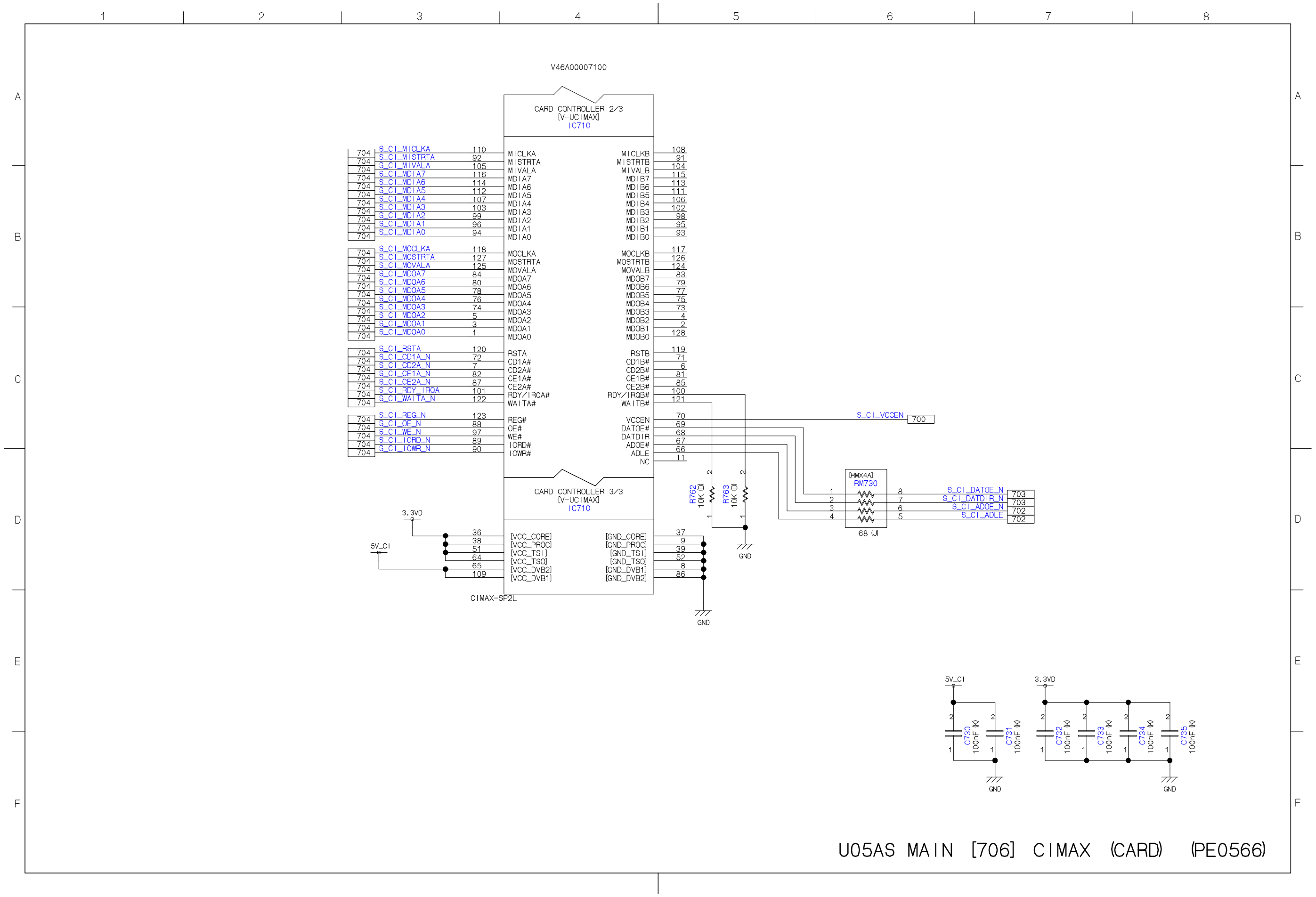
IC710付近に配置（IC710→IS700方向の信号）



IS700付近に配置（IS700→IC710方向の信号）

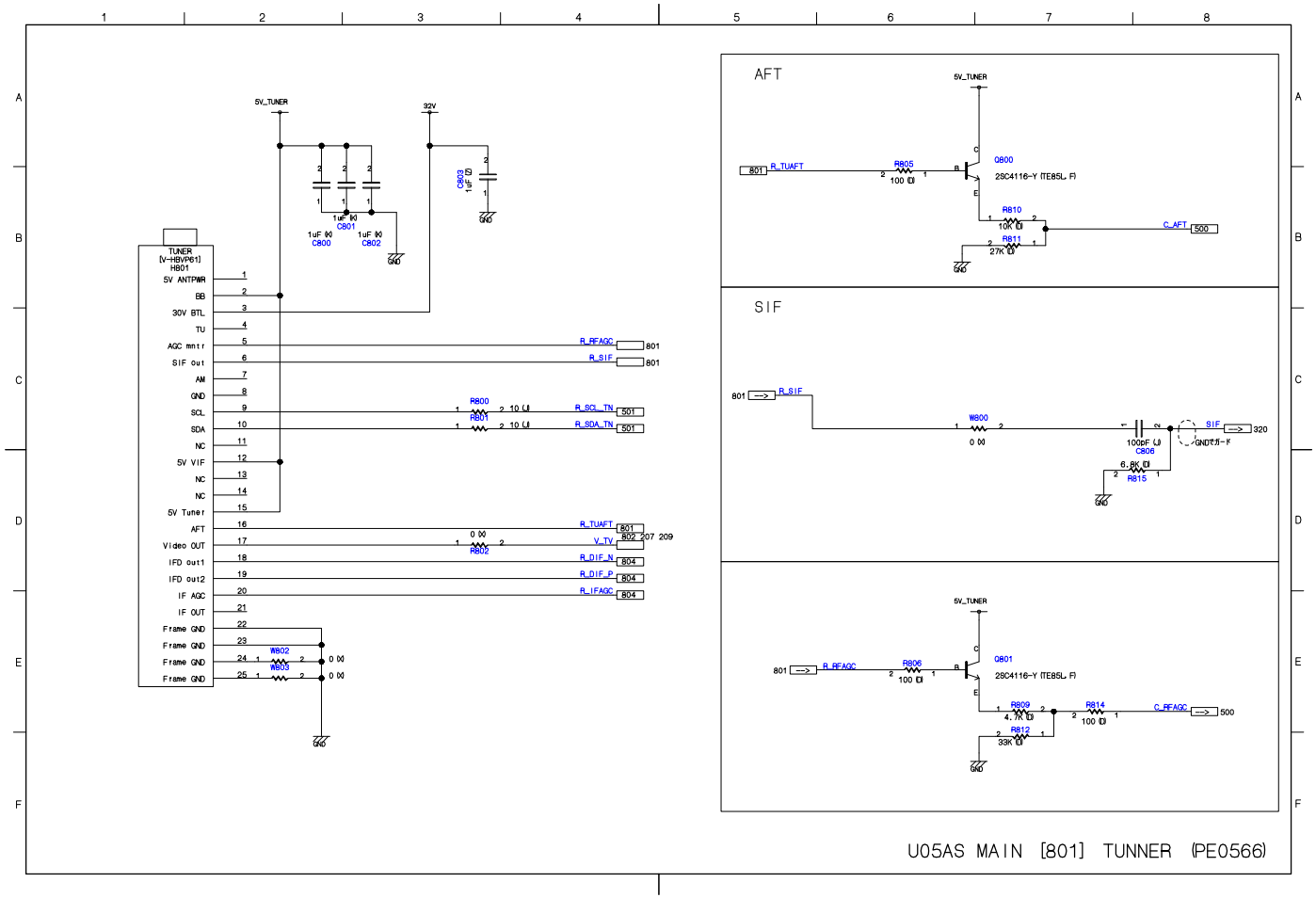
U05AS MAIN [704] CI RESISTOR (PE0566)

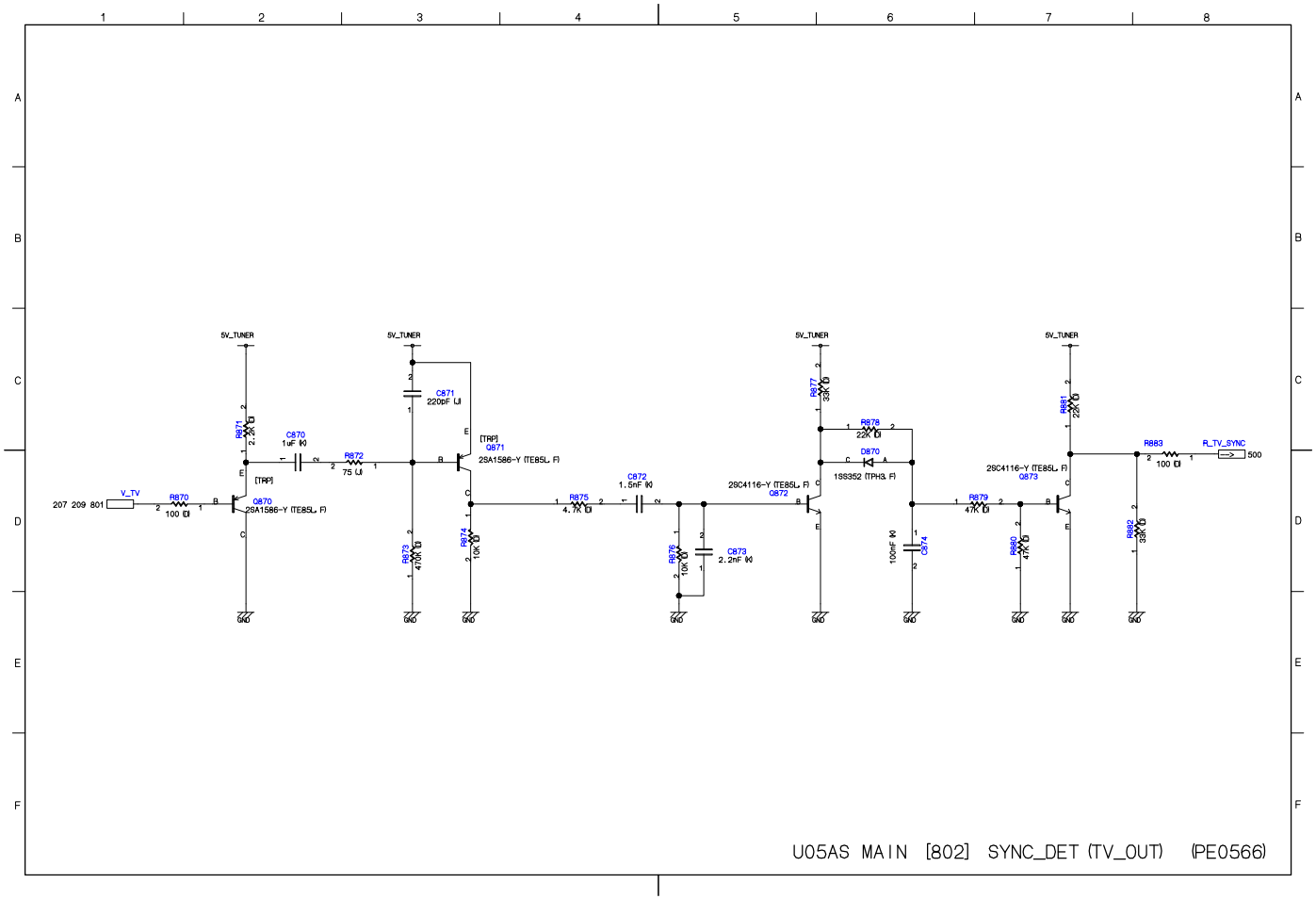

3.3VD
4.7K Ω
R749
HIGH: RESET
LOW: NORMAL
V46A00007100
CARD CONTROLLER 1/3
[V-ICIMAX]
IC710
M_CICLK
10 Ω
R750
R751
M_I2CDATA0
M_I2CCLK0
[TRNC]
Q710
M_GRESET
RT1N234U-T111-1
GND
RESET
CLK
SDA
SCL
SA0
SA1
A25
A24
A23
A22
A21
A20
A19
A18
A17
A16
A15
CS
RD/DIR
WR/STR
WAIT/ACK
INT
EXTCS
EXTINT
MICLK
MISTRT
MIVAL
MD17
MD16
MD15
MD14
MD13
MD12
MD11
MD10
R_TSCLK
R_TSSYC
R_TSVAL
R_DATA7
R_DATA6
R_DATA5
R_DATA4
R_DATA3
R_DATA2
R_DATA1
R_DATA0
MCLK_IN
MOCLK
MOSTRT
MOVAL
MD07
MD06
MD05
MD04
MD03
MD02
MD01
MD00
[RNX44]
RM710
RM711
RM712
33 Ω
M_TSOCLK
M_TSOSYNC
M_TSOVALID
M_TSODATA7
M_TSODATA6
M_TSODATA5
M_TSODATA4
M_TSODATA3
M_TSODATA2
M_TSODATA1
M_TSODATA0
S_EBCE1_N
S_EBOE_N
S_EBWE_N
S_EBACK_N
S_CITNT
CIMAX-SP2L
I2C Device Addr: 0x80/0x81
U05AS MAIN [705] CIMAX (EBUS/TS) (PE0566)



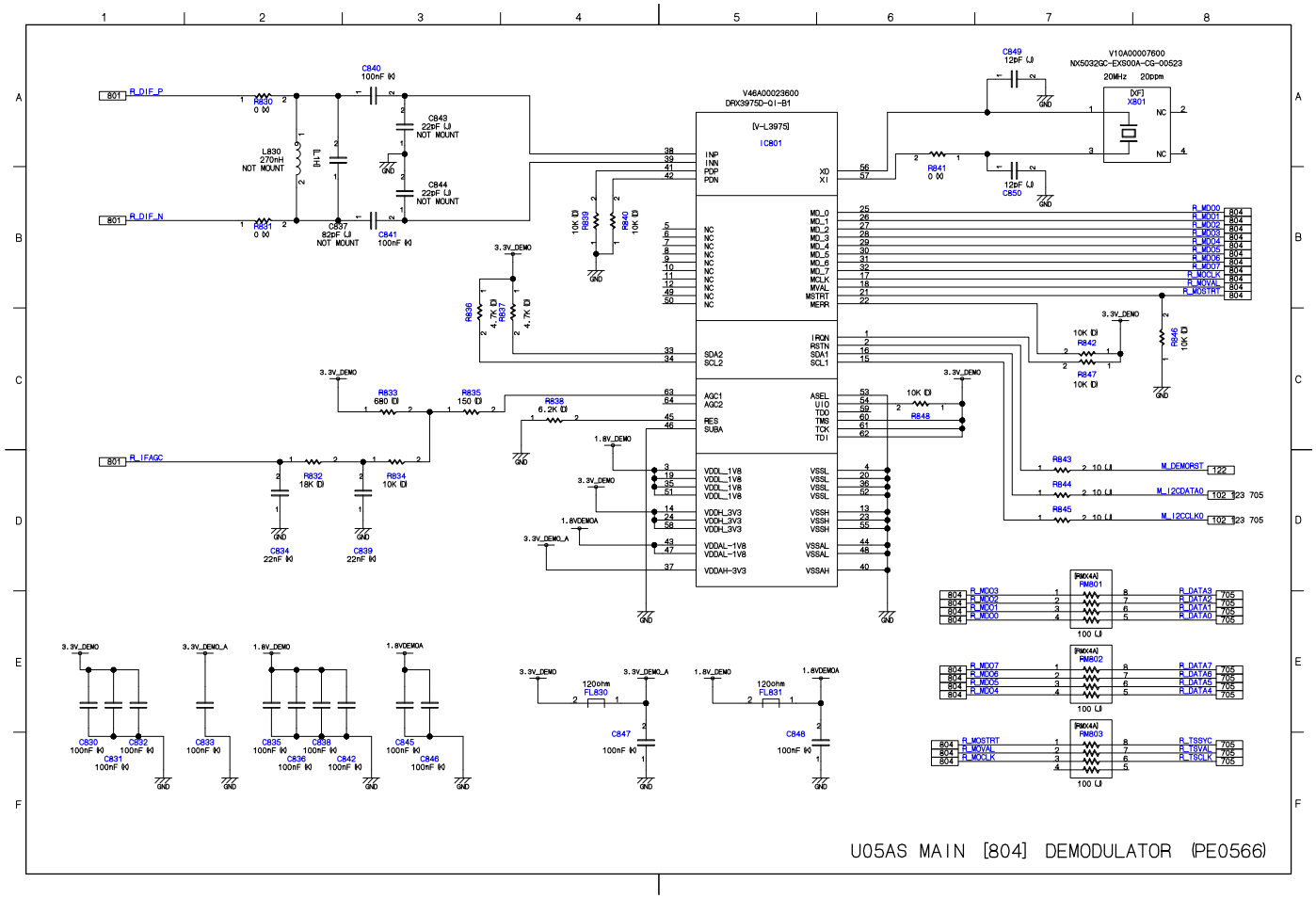
V46A00007100
CARD CONTROLLER 2/3
[V-UCIMAX]
IC710
S_CI_MICLKA
S_CI_MISTRTA
S_CI_MIVALA
S_CI_MDIA7
S_CI_MDIA6
S_CI_MDIA5
S_CI_MDIA4
S_CI_MDIA3
S_CI_MDIA2
S_CI_MDIA1
S_CI_MDIA0
S_CI_MOCLKA
S_CI_MOSTRTA
S_CI_MOVALA
S_CI_MDOA7
S_CI_MDOA6
S_CI_MDOA5
S_CI_MDOA4
S_CI_MDOA3
S_CI_MDOA2
S_CI_MDOA1
S_CI_MDOA0
S_CI_RSTA
S_CI_CD1A_N
S_CI_CD2A_N
S_CI_CE1A_N
S_CI_CE2A_N
S_CI_RDY_IRQA
S_CI_WAITA_N
S_CI_REG_N
S_CI_OE_N
S_CI_WE_N
S_CI_IORD_N
S_CI_IOWR_N
704
MICLKA
MISTRTA
MIVALA
MDIA7
MDIA6
MDIA5
MDIA4
MDIA3
MDIA2
MDIA1
MDIA0
MOCLKA
MOSTRTA
MOVALA
MDOA7
MDOA6
MDOA5
MDOA4
MDOA3
MDOA2
MDOA1
MDOA0
RSTA
CD1A#
CD2A#
CE1A#
CE2A#
RDY/IRQA#
WAITA#
REG#
OE#
WE#
IORD#
IOWR#
MICLKB
MISTRTB
MIVALB
MDIB7
MDIB6
MDIB5
MDIB4
MDIB3
MDIB2
MDIB1
MDIB0
MOCLKB
MOSTRTB
MOVALB
MDOB7
MDOB6
MDOB5
MDOB4
MDOB3
MDOB2
MDOB1
MDOB0
RSTB
CD1B#
CD2B#
CE1B#
CE2B#
RDY/IRQB#
WAITB#
VCCEN
DATOE#
DATDIR
ADOE#
ADLE
NC
S_CI_VCCEN
700
R762
10K 1/16
R763
10K 1/16
[RMX4A]
RM730
68 1/16
S_CI_DATOE_N
S_CI_DATDIR_N
S_CI_ADOE_N
S_CI_ADLE
703
702
CARD CONTROLLER 3/3
[V-UCIMAX]
IC710
3.3VD
5V_CI
[VCC_CORE]
[VCC_PROC]
[VCC_TSI]
[VCC_TSO]
[VCC_DVB2]
[VCC_DVB1]
[GND_CORE]
[GND_PROC]
[GND_TSI]
[GND_TSO]
[GND_DVB1]
[GND_DVB2]
CIMAX-SP2L
GND
C730
C731
C732
C733
C734
C735
100nF 16

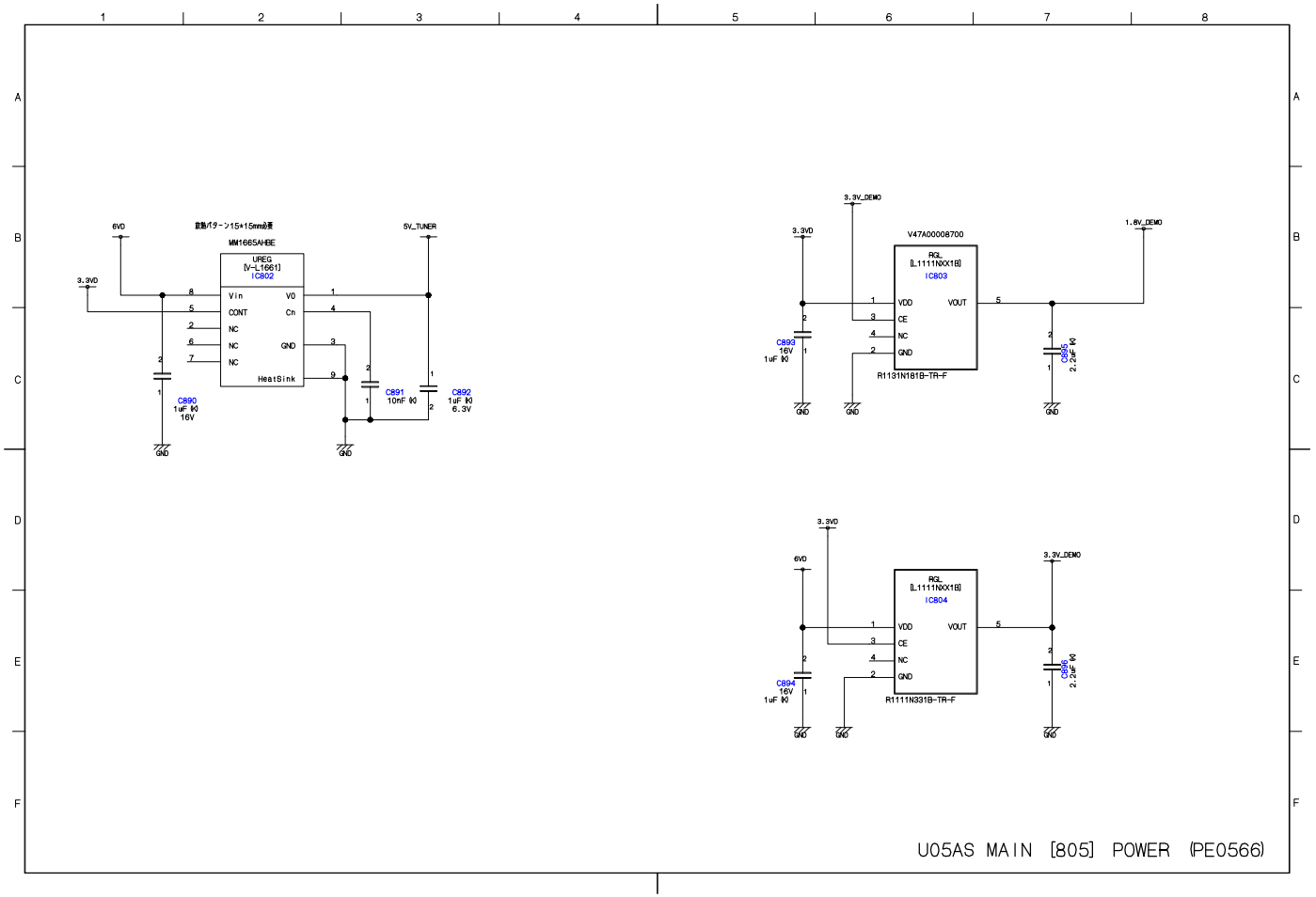
U05AS MAIN [706] CIMAX (CARD) (PE0566)


AFT
SIF
5V_TUNER
32V
TUNER
[V-H8VP01]
H801
5V ANTPWR
BB
30V BTL
TU
AGC mntr
SIF out
AM
GND
SCL
SDA
NC
5V VIF
NC
NC
5V Tuner
AFT
Video OUT
IFD out1
IFD out2
IF AGC
IF OUT
Frame GND
Frame GND
Frame GND
Frame GND
R_RFAGC
R_SIF
R_SCL_TN
R_SDA_TN
R_TUAFT
V_TV
R_DIF_N
R_DIF_P
R_IFAGC
C_AFT
C_RFAGC
Q800
Q801
2SC4116-Y (TE85L F)
R805
R806
R810
R811
R812
R814
R815
R809
W800
W801
W802
W803
C800
C801
C802
C803
C806
100pF (J)
6.8K (D)
0 (X)
100 (D)
10K (D)
27K (D)
33K (D)
4.7K (D)
GND
U05AS MAIN [801] TUNNER (PE0566)

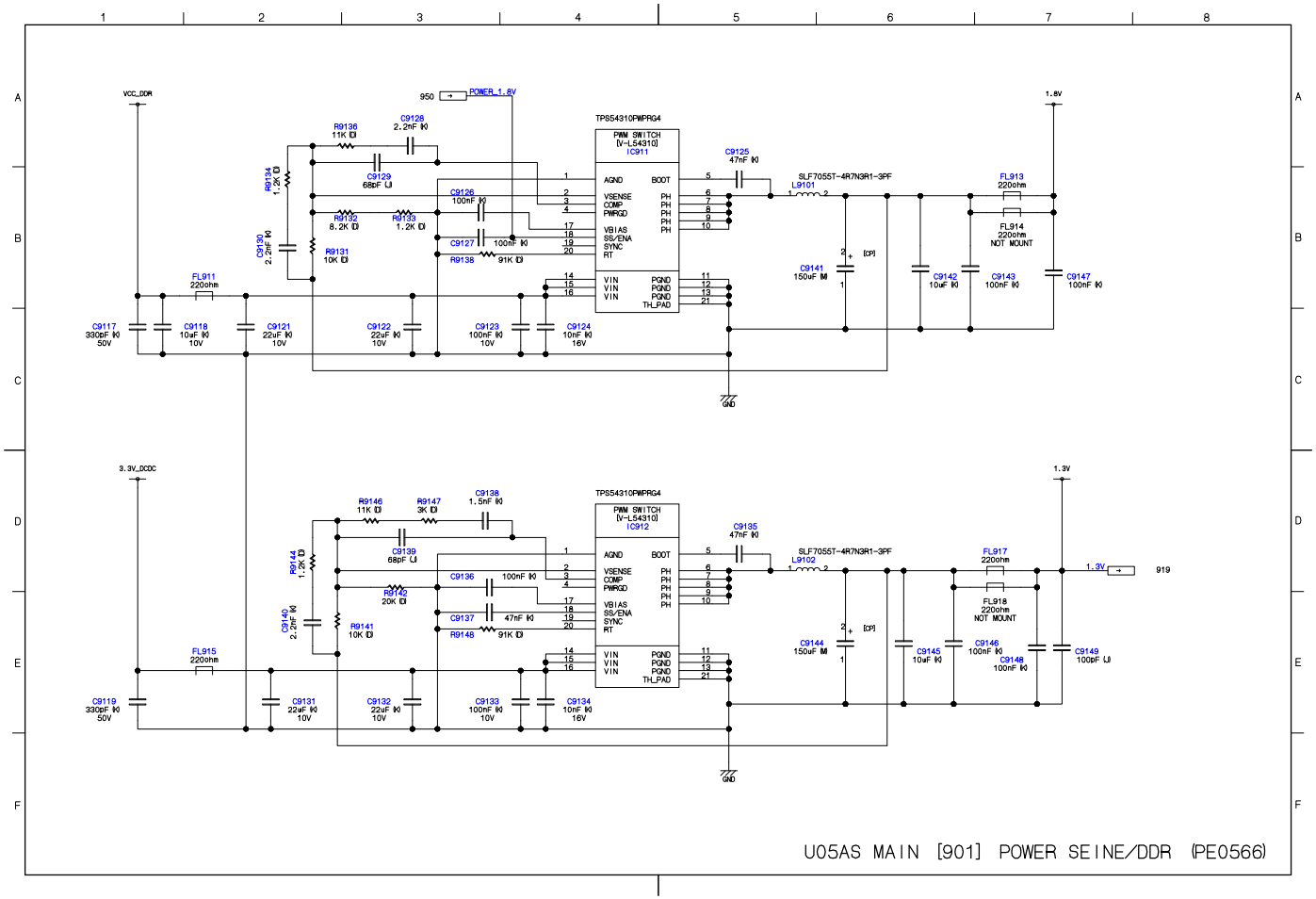


U05AS MAIN [802] SYNC_DET (TV_OUT) (PE0566)

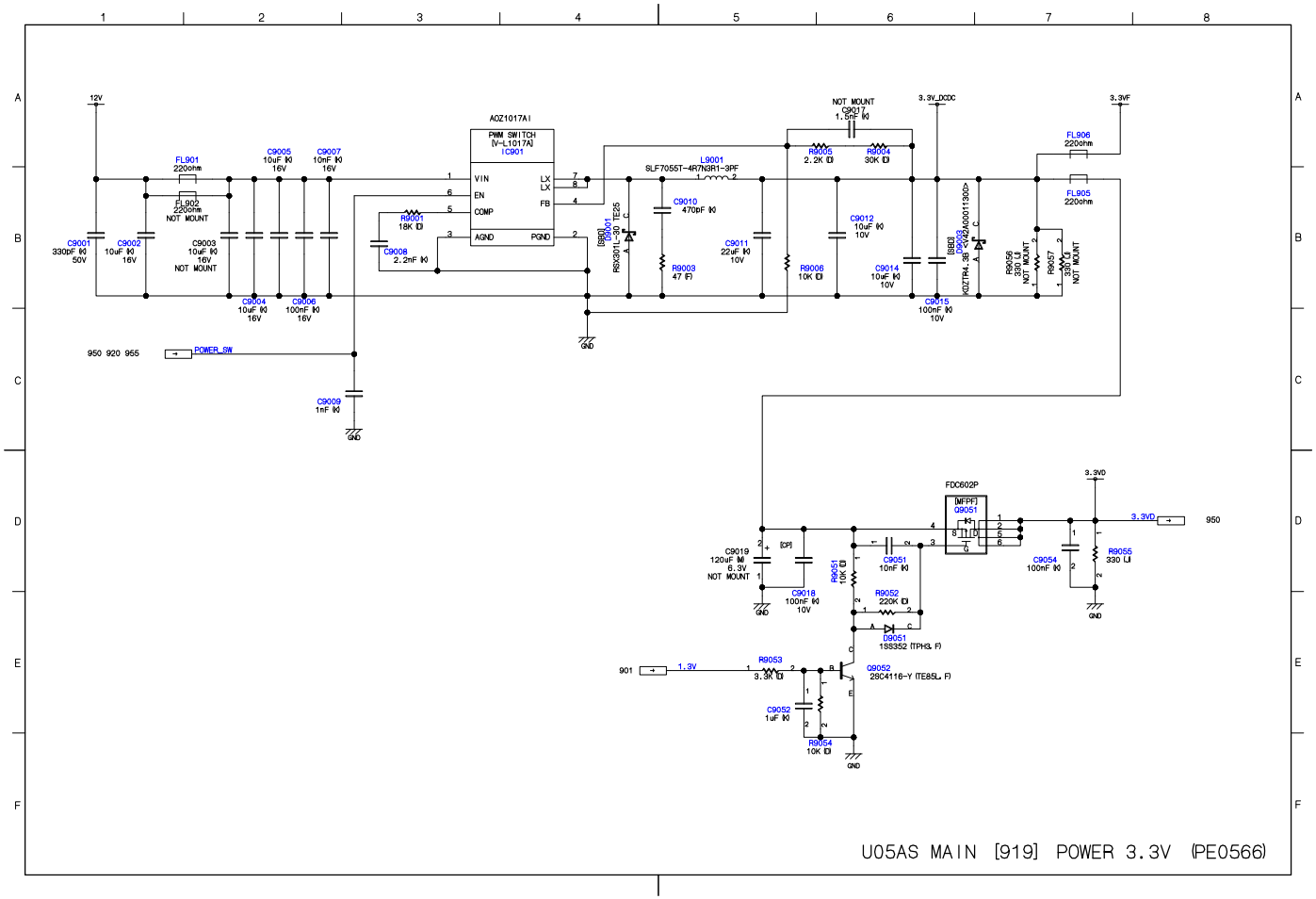

U05AS MAIN [804] DEMODULATOR (PE0566)
IC801
V46A00023600
DRX3975D-Q1-B1
V10A00007600
NX5032GC-EXS00A-CG-00523
20MHz 20ppm
X801
C849
12pF
C850
12pF
R841
0
R_DIF_P
R_DIF_N
R_IFAGC
L830
270nH
NOT MOUNT
C840
100nF
C843
22pF
NOT MOUNT
C844
22pF
NOT MOUNT
C837
82pF
NOT MOUNT
C841
100nF
R830
0
R831
0
R832
18K
R833
680
R834
10K
R835
150
R836
4.7K
R837
4.7K
R838
6.2K
R839
10K
R840
10K
R842
10K
R843
R844
R845
R846
10K
R847
10K
R848
10K
M_DEMORST
M_I2CDATA0
M_I2CCLK0
C834
22nF
C839
22nF
C830
100nF
C831
100nF
C832
100nF
C833
100nF
C835
100nF
C836
100nF
C838
100nF
C842
100nF
C845
100nF
C846
100nF
C847
100nF
C848
100nF
FL830
120ohm
FL831
120ohm
RM801
RM802
RM803
100
3.3V_DEMO
3.3V_DEMO_A
1.8V_DEMO
1.8VDEMOA
GND
R_MD0
R_MD1
R_MD2
R_MD3
R_MD4
R_MD5
R_MD6
R_MD7
R_MCLK
R_MVAL
R_MSTRT
R_DATA0
R_DATA1
R_DATA2
R_DATA3
R_DATA4
R_DATA5
R_DATA6
R_DATA7
R_TSCLK
R_TSVAL
R_TSSYC



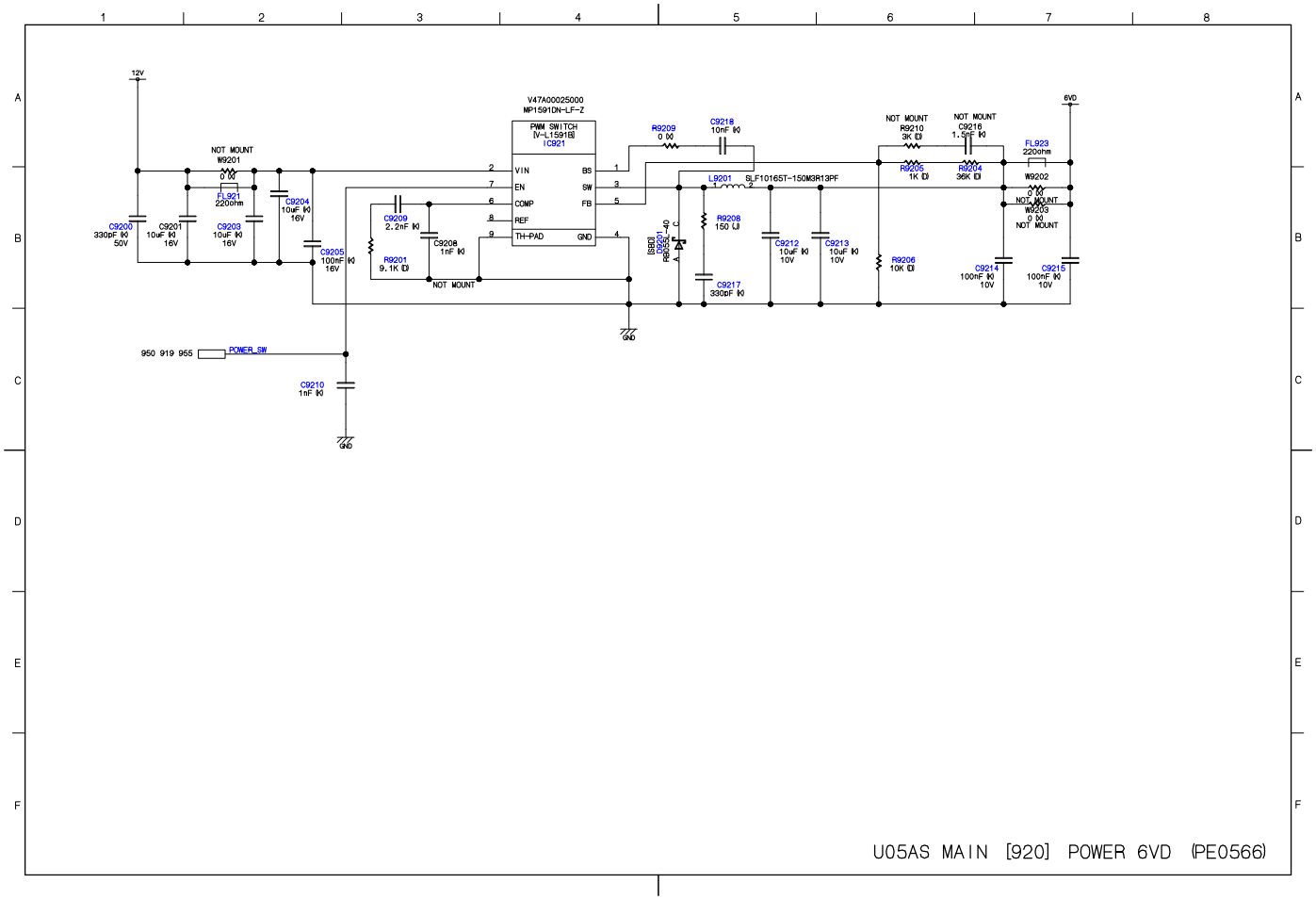
U05AS MAIN [805] POWER (PE0566)



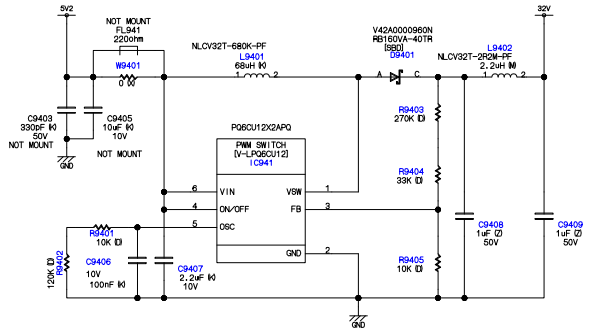
U05AS MAIN [901] POWER SEINE/DDR (PE0566)



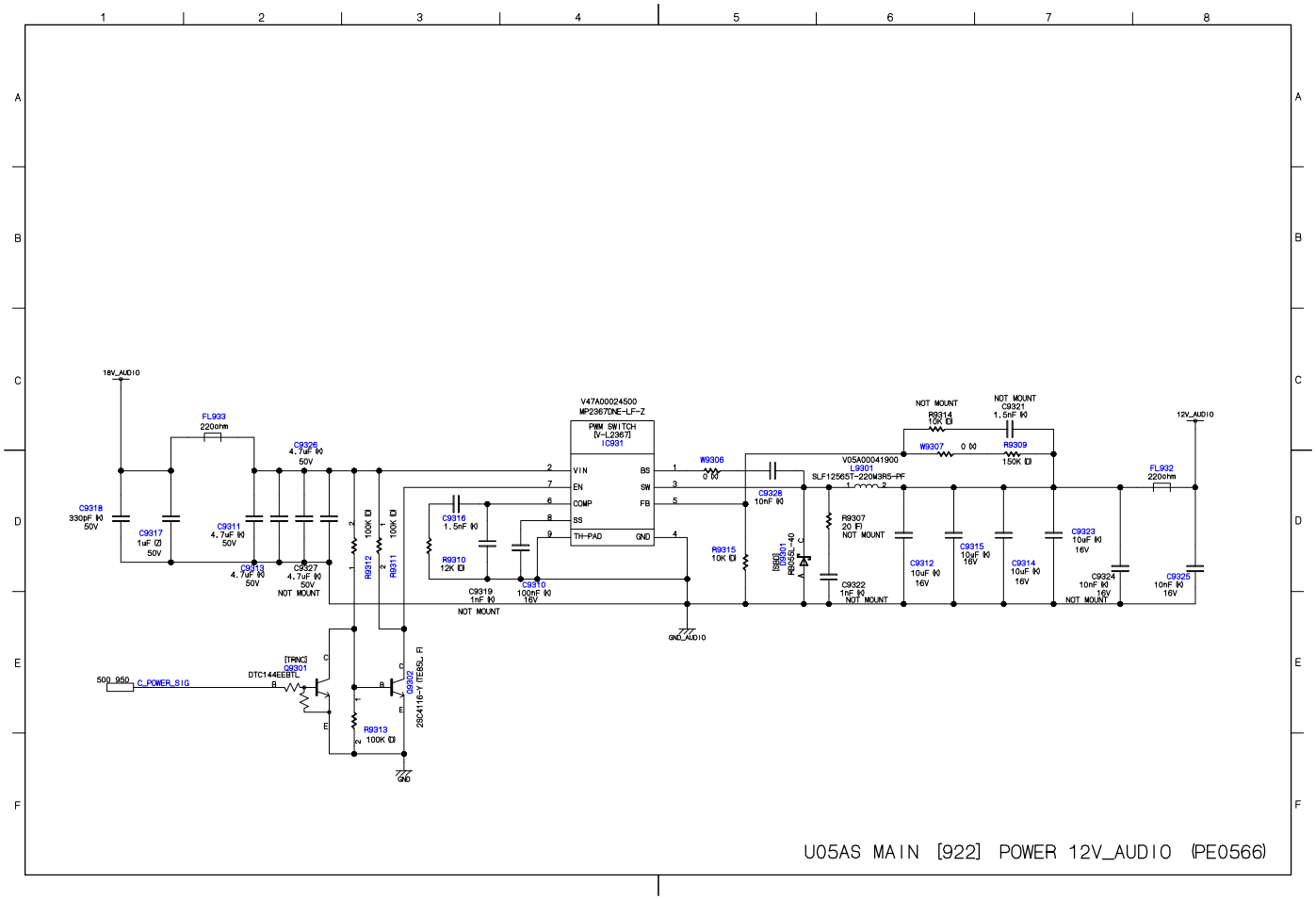
U05AS MAIN [919] POWER 3.3V (PE0566)



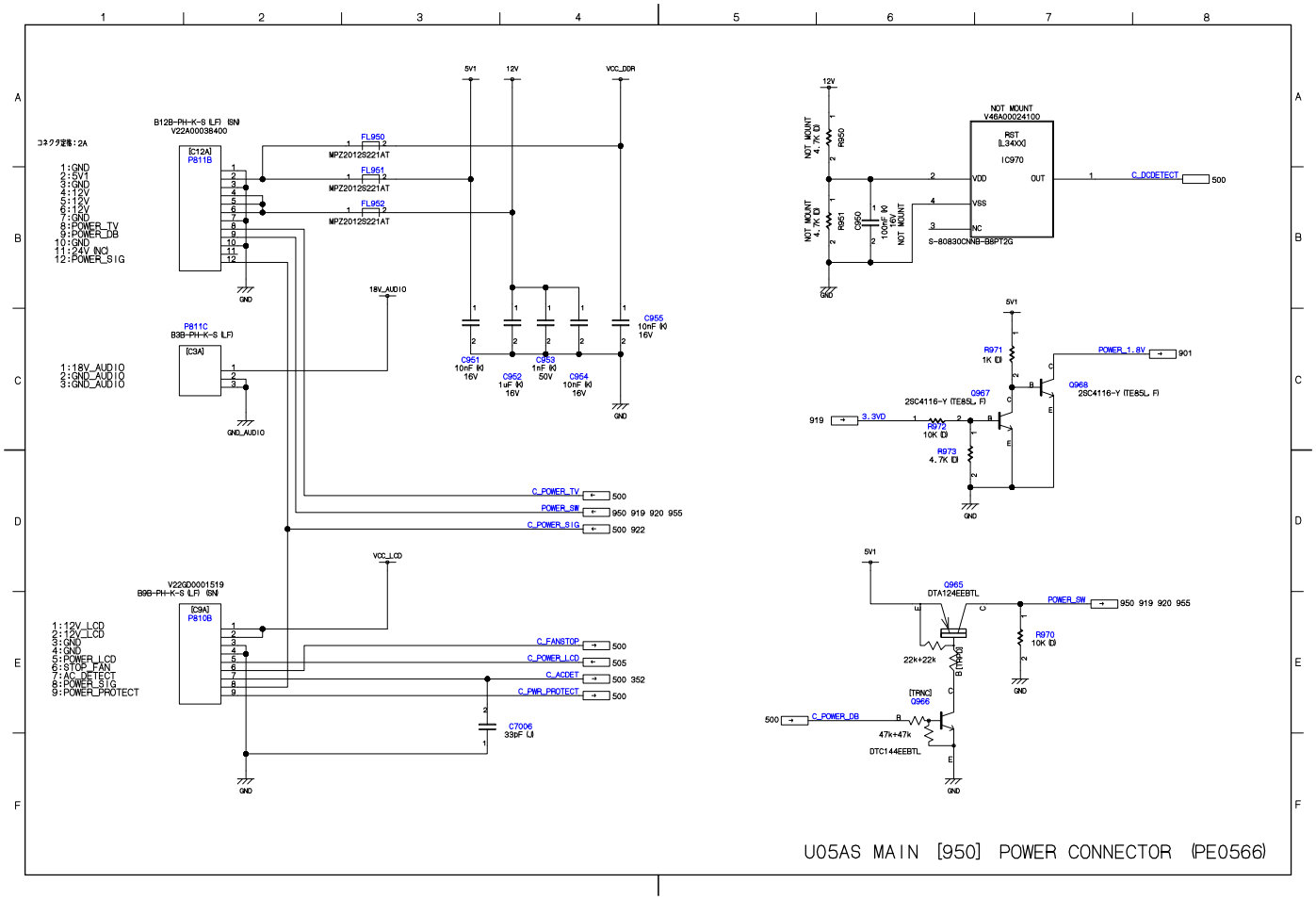
U05AS MAIN [920] POWER 6VD (PE0566)



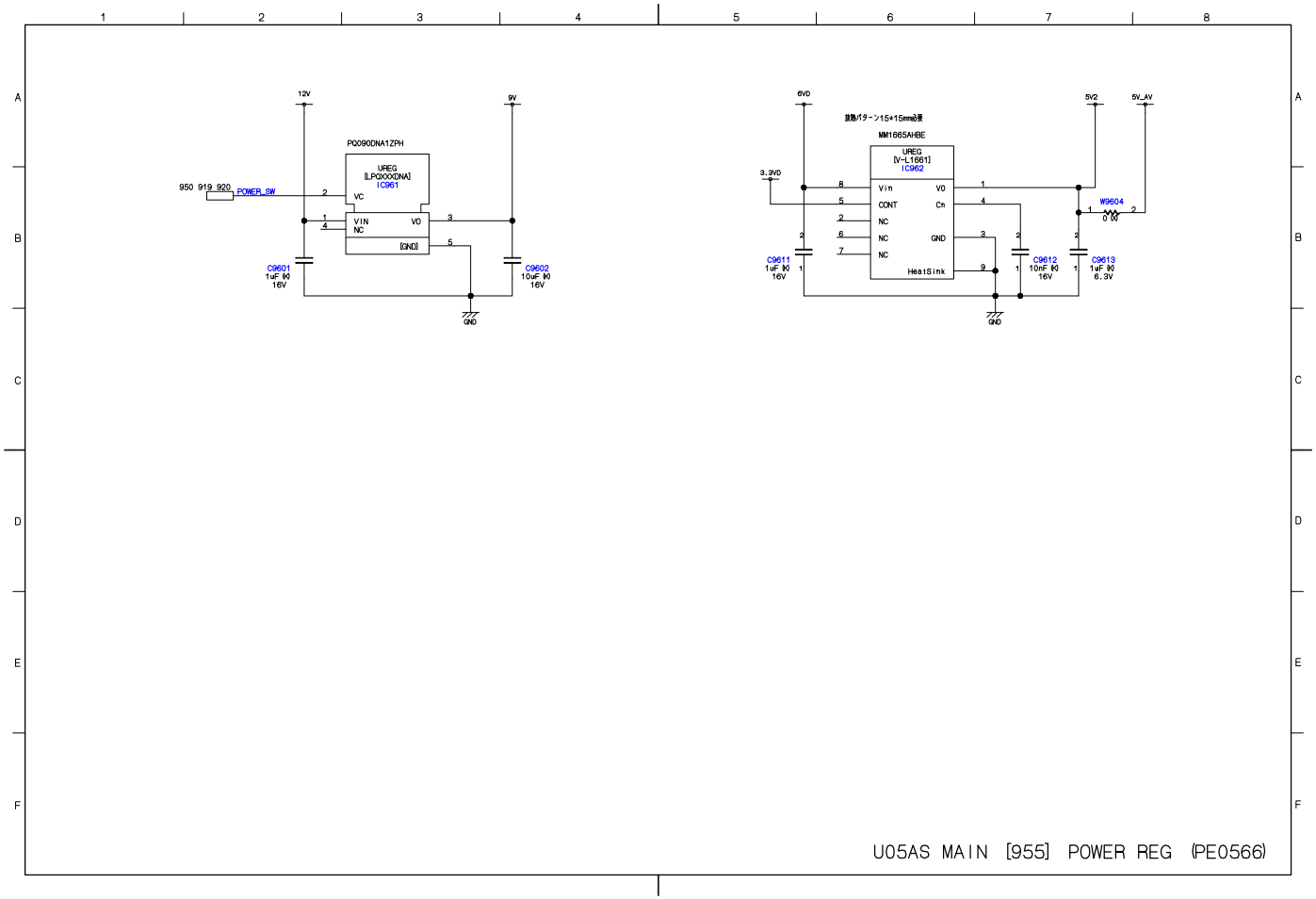
U05AS MAIN [921] POWER 32V (PE0566)



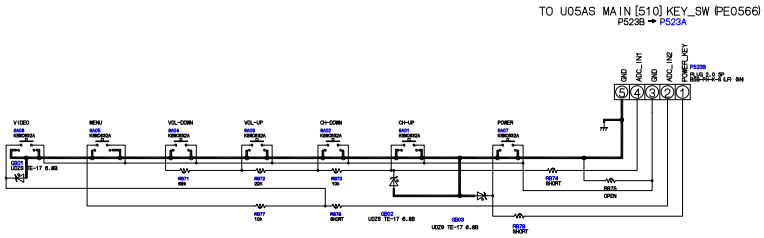
U05AS MAIN [922] POWER 12V_AUDIO (PE0566)



U05AS MAIN [950] POWER CONNECTOR (PE0566)



U05AS MAIN [955] POWER REG (PE0566)



U06A KEY [1] KEY (PE0560)

PARTS LIST

Block : All Block

Location : Search

Parts No. : Search

Page : 1 / 1970 Jump

Block		Location	Parts No.	Description AA S M L
U03A AC-SW (PE0533)	*	U03A	75012739	PC BOARD ASSY, PE0533B1, AC-SW
U03A AC-SW (PE0533)	⚠	F850	75005842	FUSE, CARTRIDGE 5.2X20, FSL 250V 6.3A (EM)
U03A AC-SW (PE0533)		F850A	23165433	FUSE HOLDER, 5.2
U03A AC-SW (PE0533)		F850B	23165433	FUSE HOLDER, 5.2
U03A AC-SW (PE0533)	⚠	P801B	23757043	CONNECTOR, PLUG, B02B-VT-K(LF)(SN)
U03A AC-SW (PE0533)	⚠	P801C	23713702	PLUG, 2P 11.88MM W VT
U03A AC-SW (PE0533)	⚠	S801	75011067	SWITCH, PSE POWER, KDC-A02-F
U04A LED (PE0534)	*	U04A	75011070	PC BOARD ASSY, PE0534A1, LED
U04A LED (PE0534)		CB06	76100104	CAPACITOR, CERAMIC CHIP, 25V F 0.1UF Z
U04A LED (PE0534)		CB07	76619157	CAPACITOR, ELECTROLYTIC CHIP, 16V 100UF
U04A LED (PE0534)		DB01	75009054	DIODE, LED, SML-020MLT T86
U04A LED (PE0534)		DB04	75009054	DIODE, LED, SML-020MLT T86
U04A LED (PE0534)		P522B	23713948	CONNECTOR, S6B-PH-K-S(LF)
U04A LED (PE0534)		QB01	23205392	TRANSISTOR, 2SC5343UF-Y(BULK)
U04A LED (PE0534)		QB02	23205392	TRANSISTOR, 2SC5343UF-Y(BULK)
U04A LED (PE0534)		QB03	23205392	TRANSISTOR, 2SC5343UF-Y(BULK)
U04A LED (PE0534)		QB04	23205392	TRANSISTOR, 2SC5343UF-Y(BULK)
U04A LED (PE0534)		RB10	76011181	RESISTOR, CHIP, 1/20W 180 OHM J
U04A LED (PE0534)		RB11	76011271	RESISTOR, CHIP, 1/20W 270 OHM J
U04A LED (PE0534)		RB12	76011181	RESISTOR, CHIP, 1/20W 180 OHM J
U04A LED (PE0534)		RB13	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
U04A LED (PE0534)		RB14	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
U04A LED (PE0534)		RB15	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
U04A LED (PE0534)		RB16	76011271	RESISTOR, CHIP, 1/20W 270 OHM J
U04A LED (PE0534)		RB18	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
U04B RMT (PE0534)	*	U04B	75011071	PC BOARD ASSY, PE0534A2, RMT
U04B RMT (PE0534)		CB02	76619157	CAPACITOR, ELECTROLYTIC CHIP, 16V 100UF
U04B RMT (PE0534)		CB03	76100104	CAPACITOR, CERAMIC CHIP, 25V F 0.1UF Z
U04B RMT (PE0534)		CB04	76100104	CAPACITOR, CERAMIC CHIP, 25V F 0.1UF Z
U04B RMT (PE0534)		CB05	76619157	CAPACITOR, ELECTROLYTIC CHIP, 16V 100UF

PARTS LIST

Block : U03A AC-SW (PE0533)

Location : Search

Parts No. : Search

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Block		Location	Parts No.	Description AA S M L
U03A AC-SW (PE0533)	*	U03A	75012739	PC BOARD ASSY, PE0533B1, AC-SW
U03A AC-SW (PE0533)	⚠	F850	75005842	FUSE, CARTRIDGE 5.2X20, FSL 250V 6.3A (EM)
U03A AC-SW (PE0533)		F850A	23165433	FUSE HOLDER, 5.2
U03A AC-SW (PE0533)		F850B	23165433	FUSE HOLDER, 5.2
U03A AC-SW (PE0533)	⚠	P801B	23757043	CONNECTOR, PLUG, B02B-VT-K(LF)(SN)
U03A AC-SW (PE0533)	⚠	P801C	23713702	PLUG, 2P 11.88MM W VT
U03A AC-SW (PE0533)	⚠	S801	75011067	SWITCH, PSE POWER, KDC-A02-F

PARTS LIST

Block : U04A LED (PE0534)

Location : Search

Parts No. : Search

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Block		Location	Parts No.	Description AA S M L
U04A LED (PE0534)	*	U04A	75011070	PC BOARD ASSY, PE0534A1, LED
U04A LED (PE0534)		CB06	76100104	CAPACITOR, CERAMIC CHIP, 25V F 0.1UF Z
U04A LED (PE0534)		CB07	76619157	CAPACITOR, ELECTROLYTIC CHIP, 16V 100UF
U04A LED (PE0534)		DB01	75009054	DIODE, LED, SML-020MLT T86
U04A LED (PE0534)		DB04	75009054	DIODE, LED, SML-020MLT T86
U04A LED (PE0534)		P522B	23713948	CONNECTOR, S6B-PH-K-S(LF)
U04A LED (PE0534)		QB01	23205392	TRANSISTOR, 2SC5343UF-Y(BULK)
U04A LED (PE0534)		QB02	23205392	TRANSISTOR, 2SC5343UF-Y(BULK)
U04A LED (PE0534)		QB03	23205392	TRANSISTOR, 2SC5343UF-Y(BULK)
U04A LED (PE0534)		QB04	23205392	TRANSISTOR, 2SC5343UF-Y(BULK)
U04A LED (PE0534)		RB10	76011181	RESISTOR, CHIP, 1/20W 180 OHM J
U04A LED (PE0534)		RB11	76011271	RESISTOR, CHIP, 1/20W 270 OHM J
U04A LED (PE0534)		RB12	76011181	RESISTOR, CHIP, 1/20W 180 OHM J
U04A LED (PE0534)		RB13	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
U04A LED (PE0534)		RB14	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
U04A LED (PE0534)		RB15	76011102	RESISTOR, CHIP, 1/20W 1K OHM J
U04A LED (PE0534)		RB16	76011271	RESISTOR, CHIP, 1/20W 270 OHM J
U04A LED (PE0534)		RB18	76011102	RESISTOR, CHIP, 1/20W 1K OHM J

PARTS LIST

Block : U04B RMT (PE0534)

Location : Search

Parts No. : Search

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Block		Location	Parts No.	Description AA S M L
U04B RMT (PE0534)	*	U04B	75011071	PC BOARD ASSY, PE0534A2, RMT
U04B RMT (PE0534)		CB02	76619157	CAPACITOR, ELECTROLYTIC CHIP, 16V 100UF
U04B RMT (PE0534)		CB03	76100104	CAPACITOR, CERAMIC CHIP, 25V F 0.1UF Z
U04B RMT (PE0534)		CB04	76100104	CAPACITOR, CERAMIC CHIP, 25V F 0.1UF Z
U04B RMT (PE0534)		CB05	76619157	CAPACITOR, ELECTROLYTIC CHIP, 16V 100UF
U04B RMT (PE0534)		CB211	76100104	CAPACITOR, CERAMIC CHIP, 25V F 0.1UF Z
U04B RMT (PE0534)		CB212	76100104	CAPACITOR, CERAMIC CHIP, 25V F 0.1UF Z
U04B RMT (PE0534)		DB21	75011069	OPTICAL DEVICE, PHOTO, S10604
U04B RMT (PE0534)		DB22	23362251	DIODE, SDS511(SOD-323)
U04B RMT (PE0534)		DB23	23362251	DIODE, SDS511(SOD-323)
U04B RMT (PE0534)		GB04	23362042	DIODE, ZENER, UDZS6.8B
U04B RMT (PE0534)		KB01	75002236	IC, GP1UE261RKVF
U04B RMT (PE0534)		RB08	76011470	RESISTOR, CHIP, 1/20W 47 OHM J
U04B RMT (PE0534)		RB09	76011470	RESISTOR, CHIP, 1/20W 47 OHM J
U04B RMT (PE0534)		RB224	76000445	CHIP JUMPER, 1608TYPE

PARTS LIST

Block : U05AS MAIN (PE0566)

Location : Search

Parts No. : Search

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Block		Location	Parts No.	Description
U05AS MAIN (PE0566)	*	U05AS	75012801	PC BOARD ASSY, PE0566C, MAIN
U05AS MAIN (PE0566)		B320	75011088	SCREW, SFS-4S-B1WM
U05AS MAIN (PE0566)		B321	75011088	SCREW, SFS-4S-B1WM
U05AS MAIN (PE0566)		C100	75009867	CAPACITOR, CERAMIC CHIP (1005), CM05B104K10AH
U05AS MAIN (PE0566)		C1000	75009863	CAPACITOR, CERAMIC CHIP (1005), CM05W5R103K16AH
U05AS MAIN (PE0566)		C1001	75009863	CAPACITOR, CERAMIC CHIP (1005), CM05W5R103K16AH
U05AS MAIN (PE0566)		C1002	75009867	CAPACITOR, CERAMIC CHIP (1005), CM05B104K10AH
U05AS MAIN (PE0566)		C1003	75012731	CAPACITOR, CERAMIC CHIP (2012), CM21B475K06AT
U05AS MAIN (PE0566)		C1004	75009867	CAPACITOR, CERAMIC CHIP (1005), CM05B104K10AH
U05AS MAIN (PE0566)		C1005	75009867	CAPACITOR, CERAMIC CHIP (1005), CM05B104K10AH
U05AS MAIN (PE0566)		C1006	75009867	CAPACITOR, CERAMIC CHIP (1005), CM05B104K10AH
U05AS MAIN (PE0566)		C1007	75009867	CAPACITOR, CERAMIC CHIP (1005), CM05B104K10AH
U05AS MAIN (PE0566)		C1008	75009867	CAPACITOR, CERAMIC CHIP (1005), CM05B104K10AH
U05AS MAIN (PE0566)		C1009	75009867	CAPACITOR, CERAMIC CHIP (1005), CM05B104K10AH
U05AS MAIN (PE0566)		C101	75009867	CAPACITOR, CERAMIC CHIP (1005), CM05B104K10AH
U05AS MAIN (PE0566)		C1010	75009867	CAPACITOR, CERAMIC CHIP (1005), CM05B104K10AH
U05AS MAIN (PE0566)		C1011	75009867	CAPACITOR, CERAMIC CHIP (1005), CM05B104K10AH
U05AS MAIN (PE0566)		C1012	75009867	CAPACITOR, CERAMIC CHIP (1005), CM05B104K10AH
U05AS MAIN (PE0566)		C1013	75009867	CAPACITOR, CERAMIC CHIP (1005), CM05B104K10AH
U05AS MAIN (PE0566)		C1014	75009867	CAPACITOR, CERAMIC CHIP (1005), CM05B104K10AH
U05AS MAIN (PE0566)		C1015	75009867	CAPACITOR, CERAMIC CHIP (1005), CM05B104K10AH
U05AS MAIN (PE0566)		C1016	75009867	CAPACITOR, CERAMIC CHIP (1005), CM05B104K10AH
U05AS MAIN (PE0566)		C1017	75009867	CAPACITOR, CERAMIC CHIP (1005), CM05B104K10AH
U05AS MAIN (PE0566)		C1018	75009866	CAPACITOR, CERAMIC CHIP (1005), CM05W5R102K50AH
U05AS MAIN (PE0566)		C1019	75009866	CAPACITOR, CERAMIC CHIP (1005), CM05W5R102K50AH
U05AS MAIN (PE0566)		C102	75009867	CAPACITOR, CERAMIC CHIP (1005), CM05B104K10AH
U05AS MAIN (PE0566)		C1020	75009867	CAPACITOR, CERAMIC CHIP (1005), CM05B104K10AH
U05AS MAIN (PE0566)		C1021	75009867	CAPACITOR, CERAMIC CHIP (1005), CM05B104K10AH
U05AS MAIN (PE0566)		C1022	75009866	CAPACITOR, CERAMIC CHIP (1005), CM05W5R102K50AH
U05AS MAIN (PE0566)		C1023	75009867	CAPACITOR, CERAMIC CHIP (1005), CM05B104K10AH

PARTS LIST

Block : U06A KEY (PE0560)

Location : Search

Parts No. : Search

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Block		Location	Parts No.	Description AA S M L
U06A KEY (PE0560)	*	U06A	75011072	PC BOARD ASSY, PE0560A1, KEY
U06A KEY (PE0560)		GB01	23362042	DIODE, ZENER, UDZS6.8B
U06A KEY (PE0560)		GB02	23362042	DIODE, ZENER, UDZS6.8B
U06A KEY (PE0560)		GB03	23362042	DIODE, ZENER, UDZS6.8B
U06A KEY (PE0560)		P523B	23713938	CONNECTOR, B5B-PH-K-S(LF)
U06A KEY (PE0560)		RB71	76011683	RESISTOR, CHIP, 1/20W 68K OHM J
U06A KEY (PE0560)		RB72	76011223	RESISTOR, CHIP, 1/20W 22K OHM J
U06A KEY (PE0560)		RB73	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
U06A KEY (PE0560)		RB74	76000445	CHIP JUMPER, 1608TYPE
U06A KEY (PE0560)		RB77	76011103	RESISTOR, CHIP, 1/20W 10K OHM J
U06A KEY (PE0560)		RB78	76000445	CHIP JUMPER, 1608TYPE
U06A KEY (PE0560)		RB79	76000445	CHIP JUMPER, 1608TYPE
U06A KEY (PE0560)		SA01	75007379	SWITCH, TACTILE, KSMC632A
U06A KEY (PE0560)		SA02	75007379	SWITCH, TACTILE, KSMC632A
U06A KEY (PE0560)		SA03	75007379	SWITCH, TACTILE, KSMC632A
U06A KEY (PE0560)		SA04	75007379	SWITCH, TACTILE, KSMC632A
U06A KEY (PE0560)		SA05	75007379	SWITCH, TACTILE, KSMC632A
U06A KEY (PE0560)		SA06	75007379	SWITCH, TACTILE, KSMC632A
U06A KEY (PE0560)		SA07	75007379	SWITCH, TACTILE, KSMC632A

PARTS LIST

Block : Miscellaneous

Location : Search

Parts No. : Search

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Block		Location	Parts No.	Description AA S M L
Miscellaneous	⚠	B001A	75011199	LCD PANEL, LC370WUN-SAB1
Miscellaneous		H001	75010735	TUNER, ENG37E05KF
Miscellaneous		MZ01A	75011515	WIRE, MF0211
Miscellaneous	⚠	P801	23372297	POWER CORD, CEE
Miscellaneous		PP23	23974994	BAND, KESSOKU
Miscellaneous	⚠	U800	75012573	POWER UNIT, SRV2169WW
Miscellaneous		W661	75010928	SPEAKER ASSY, SPK1504BM, 35X160 8-OHM 10W
Miscellaneous		Z809A	23103914	FERRITE CORE, TFE1015AD

PARTS LIST

Block : Accessory

Location : Search

Parts No. : Search

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Block		Location	Parts No.	Description AA S M L
Accessory	⚠	Y101E	75012768	OWNERS MANUAL, FRANCE
Accessory		Y130	75008381	REMOCON HAND UNIT, CT-90287
Accessory		Y131	75012514	POWER UNIT BATTERY, R03UG(JE)SP-2TGC-T
Accessory		Y170	23845800	HOLDER, WIRE, NYLON66 D6.8
Accessory		Y186	75009788	CLOTH, CLEAN

PARTS LIST

Block : Cabinet

Location : Search

Parts No. : Search

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Block		Location	Parts No.	Description AA S M L
Cabinet		A201	75012769	FRONT BEZEL ASSY
Cabinet		A342	75011097	BUTTON ASSY, POWER
Cabinet		A345	23748087	WASHER, 10X4.2XT0.3TPO
Cabinet	⚠	A401	75011151	BACK COVER ASSY
Cabinet		A412	75010345	SCREW, BITTB3X8 SBN
Cabinet		A420	75011099	BRACKET ASSY, STAND
Cabinet		A421	75011194	BASE ASSY, SW, STAND
Cabinet		A422	75010937	TOOL SET, STAND

PARTS LIST

Block : Packing

Location : Search

Parts No. : Search

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Block		Location	Parts No.	Description AA S M L
Packing		A701	75012845	CARTON BOX, TPO
Packing		A702A	75011153	PAD, TOP PACKING
Packing		A702B	75011154	PAD, BOTTOM PACKING

PARTS LIST

Precaution

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION" FOR DIRECT VIEW CTV ONLY, "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" OF THIS MANUAL.

CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list.

The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the SAFETY PRECAUTION and PRODUCT SAFETY NOTICE.

Do not degrade the safety of the receiver through improper servicing.

Note:

- 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.

Abbreviations

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

MF : Metal Film
FR : Fusible Resistor

All CD and PF capacitors are ±5 %, 50 V and all resistor, ±5 %, 1/6 W unless otherwise noted.