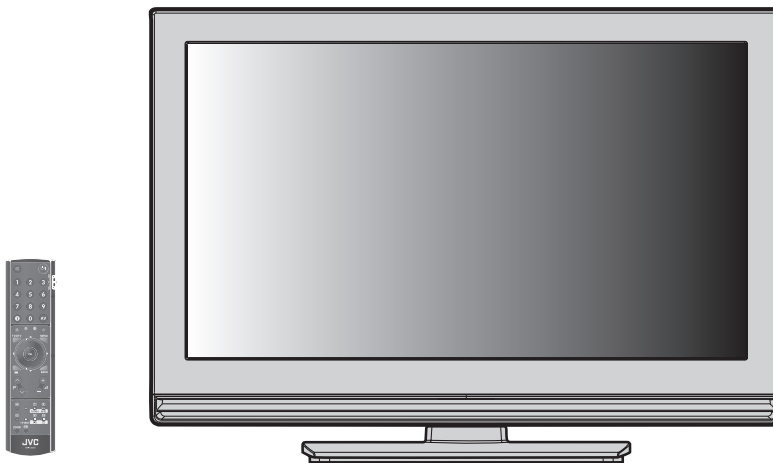


JVC

SERVICE MANUAL

INTEGRATED DIGITAL TERRESTRIAL/SATELLITE LCD TELEVISION

LT-19DA9BJ, LT-19DA9BU, LT-19DB9BD



<MODEL LINEUP>

No.YA605 : LT-19DA9/19DB9 series	No.YA606 : LT-26DA9/26DB9 series
No.YA607 : LT-32DA9/26DB9 series	No.YA608 : LT-42DA9/42DB9 series
No.YA609 : LT-26DE9 series	No.YA610 : LT-32DE9 series

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SPECIFICATION

Items		Contents		
		LT-19DA9BJ	LT-19DA9BU	LT-19DB9BD
Dimensions (W × H × D)		47.0 cm × 36.7 cm × 16.0 cm [47.0 cm × 33.5 cm × 7.3 cm (Without stand)]		
Mass		6.1 kg [5.2 kg (Without stand)]		
Power Input		AC220V - AC240 V, 50 Hz		
Power Consumption		55 W (Standby: 0.8 W)		70 W (Standby: 0.8 W)
TV RF System	Analog	CCIR (B/G, I, D/K, L)		
	Digital	DVB-T		DVB-T / DVB-S
Colour System		PAL, SECAM, NTSC 3.58/4.43 [EXT only]		
Stereo System		NICAM (B/G, I, D/K, L), A2 (B/G, D/K)		
Receiving Frequency	Analog	VHF: 46.25 MHz - 470MHz UHF: 470 MHz - 855.25 MHz CATV: 116MHz - 172MHz / 220MHz - 469MHz		
	Digital	UHF:474 MHz - 858 MHz		UHF:474 MHz - 858 MHz (Terrestrial) UHF:950 MHz - 2150 MHz (Satellite)
Intermediate Frequency	VIF	38.9MHz (B/G, I, D/K, L)		
	SIF	33.4MHz (5.5MHz:B/G) 32.9MHz (6.0MHz:I) 32.4MHz (6.5MHz:D/K)		
Colour Sub Carrier Frequency	PAL	4.43MHz		
	SECAM	4.40625MHz / 4.25MHz		
	NTSC	3.58MHz / 4.43MHz		
Teletext System	Analog	FLOF (Fastext), TOP		
	Digital	MHEG 5 UK profile	EBU TEXT	
LCD panel		19-inch wide aspect (16 : 10)		
Screen Size		Diagonal : 48.0 cm (H: 40.8 cm × V: 25.5 cm)		
Display Pixels		Horizontal : 1440 dots × Vertical : 900 dots		
Audio Power Output		3 W + 3 W		
Speaker		3.0 cm × 11.0 cm, oval type × 2		
Aerial terminal (VHF/UHF)		75 Ω unbalanced, coaxial × 1		75 Ω unbalanced, coaxial × 2
EXT-1 (Input/Output)		21-pin Euro connector (SCART socket) × 1		
EXT-2 (Input)	Component Video 750p / 1125i 625p / 525p / 625i / 525i	RCA pin jack × 3 Y: 1 V (p-p) (Sync signal: ±0.35V(p-p), 3-value sync.), 75Ω / Pb/Pr: ±0.35V(p-p), 75 Ω Y: 1 V (p-p), Positive (Negative sync.), 75 Ω / Cb/Cr: 0.7V(p-p), 75 Ω		
	Audio	500 mV(rms) (-4dBs), high impedance, RCA pin jack × 2		
EXT-3 (Input)	S-Video	Mini-DIN 4 pin × 1 Y: 1 V (p-p), Positive (Negative sync provided), 75 Ω C: 0.286 V (p-p) (Burst signal), 75 Ω		
	Video	1V (p-p), Positive (Negative sync provided), 75 Ω, RCA pin jack × 1		
	Audio	500 mV (rms), High impedance, RCA pin jack × 2		
EXT-4 (Digital Input)	Video / Audio	HDMI 2-row 19pin connector × 1 (Digital-input terminal is not compatible with picture signals of personal computer) 576i(625i),576p(625p),480i(525i),480p(525p),720p(750p),1080i(1125i) signals are available.		
Digital Audio Optical Output		Digital SPDIF × 1		
Headphone		3.5 mm stereo mini jack × 1		
Remote Control Unit		RM-C1892B (AA/R6 dry cell battery × 2)		

Design & specifications are subject to change without notice.

SECTION 1

PRECAUTION

1.1 SAFETY PRECAUTIONS [EXCEPT FOR UK]

- (1) The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
- (2) Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
- (3) Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (Δ) on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.
- (4) **Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.**
Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : ($\perp$) side GND, the ISOLATED (NEUTRAL) : ($\perp$) side GND and EARTH : ($\oplus$) side GND.
Don't short between the LIVE side GND and ISOLATED (NEUTRAL) side GND or EARTH side GND and never measure the LIVE side GND and ISOLATED (NEUTRAL) side GND or EARTH side GND at the same time with a measuring apparatus (oscilloscope etc.). If above note will not be kept, a fuse or any parts will be broken.
- (5) When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

(6) Isolation Check (Safety for Electrical Shock Hazard)

After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screw heads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

a) Dielectric Strength Test

The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 3000V AC (r.m.s.) for a period of one second. (. . . Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.)

This method of test requires a test equipment not generally found in the service trade.

b) Leakage Current Check

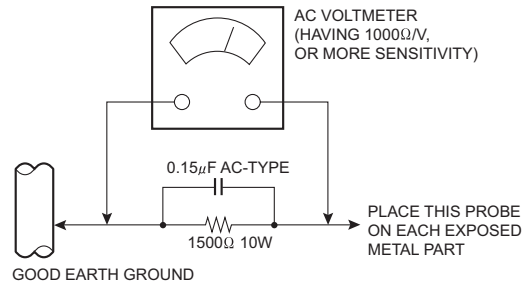
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).

However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

Alternate Check Method

Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000 Ω per volt or more sensitivity in the following manner. Connect a 1500 Ω 10W resistor paralleled by a 0.15 μ F AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.7mA AC (r.m.s.).

However, in tropical area, this must not exceed 0.35V AC (r.m.s.). This corresponds to 0.3mA AC (r.m.s.).



1.2 SAFETY PRECAUTIONS [FOR UK]

- (1) The design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
- (2) Alterations of the design or circuitry of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
- (3) Many electrical and mechanical parts in the product have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessary be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (Δ) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the Parts List of Service Manual may cause shock, fire, or other hazards.
- (4) The leads in the products are routed and dressed with ties, clamps, tubing's, barriers and the like to be separated from live parts, high temperature parts, moving parts and / or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.

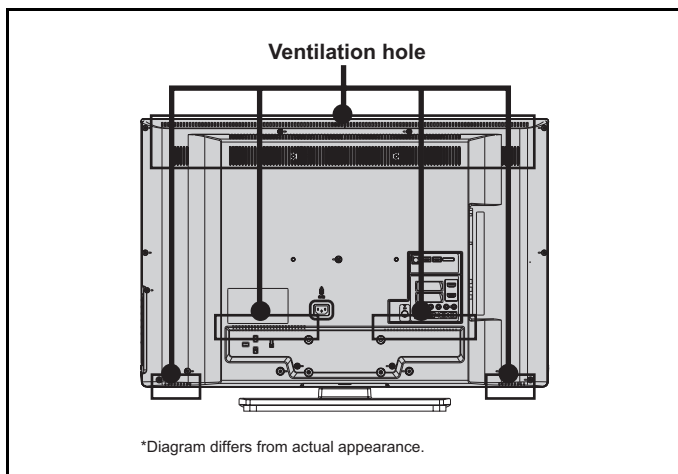
WARNING

- (1) The equipment has been designed and manufactured to meet international safety standards.
- (2) It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
- (3) Repairs must be made in accordance with the relevant safety standards.
- (4) It is essential that safety critical components are replaced by approved parts.
- (5) If mains voltage selector is provided, check setting for local voltage.

1.3 INSTALLATION

1.3.1 HEAT DISSIPATION

If the heat dissipation vent behind this unit is blocked, cooling efficiency may deteriorate and temperature inside the unit will rise. The temperature sensor that protects the unit will be activated when internal temperature exceeds the pre-determined level and power will be turned off automatically. Therefore, please make sure pay attention not to block the heat dissipation vent as well as the ventilation outlet behind the unit and ensure that there is room for ventilation around it.

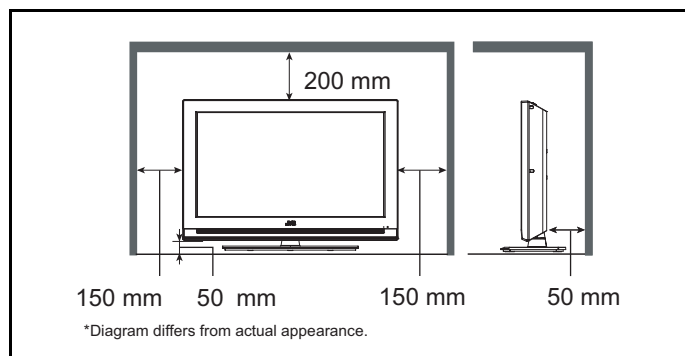


1.3.2 NOTES ON HANDLING

When taking the unit out of a packing case, do not grasp the upper part of the unit. If you take the unit out while grasping the upper part, the LCD PANEL may be damaged because of a pressure. Instead of grasping the upper part, put your hands on the lower backside or sides of the unit.

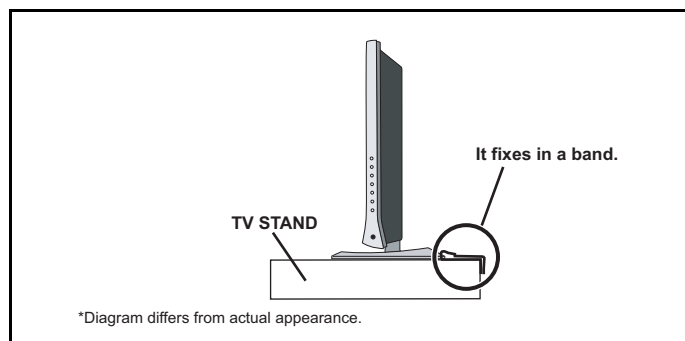
1.3.3 INSTALLATION REQUIREMENTS

Ensure that the minimal distance is maintained, as specified below, between the unit with and the surrounding walls, as well as the floor etc. Install the unit on stable flooring or stands. Take precautionary measures to prevent the unit from tipping in order to protect against accidents and earthquakes.



1.3.4 INSTALLATION REQUIREMENTS

To ensure safety in an emergency such as an earthquake, and to prevent accidents, ensure that measures are taken to prevent the TV dropping or falling over.



1.4 HANDLING LCD PANEL

1.4.1 PRECAUTIONS FOR TRANSPORTATION

When transporting the unit, pressure exerted on the internal LCD panel due to improper handling (such as tossing and dropping) may cause damages even when the unit is carefully packed. To prevent accidents from occurring during transportation, pay careful attention before delivery, such as through explaining the handling instructions to transporters.

Ensure that the following requirements are met during transportation, as the LCD panel of this unit is made of glass and therefore fragile:

- (1) **USE A SPECIAL PACKING CASE FOR THE LCD PANEL**
When transporting the LCD panel of the unit, use a special packing case (packing materials). A special packing case is used when a LCD panel is supplied as a service spare part.
- (2) **ATTACH PROTECTION SHEET TO THE FRONT**
Since the front (display part) of the panel is vulnerable, attach the protection sheet to the front of the LCD panel before transportation. Protection sheet is used when a LCD panel is supplied as a service spare part.
- (3) **AVOID VIBRATIONS AND IMPACTS**
The unit may be broken if it is toppled sideways even when properly packed. Continuous vibration may shift the gap of the panel, and the unit may not be able to display images properly. Ensure that the unit is carried by at least 2 persons and pay careful attention not to exert any vibration or impact on it.
- (4) **DO NOT PLACE EQUIPMENT HORIZONTALLY**
Ensure that it is placed upright and not horizontally during transportation and storage as the LCD panel is very vulnerable to lateral impacts and may break. During transportation, ensure that the unit is loaded along the traveling direction of the vehicle, and avoid stacking them on one another. For storage, ensure that they are stacked in 2 layers or less even when placed upright.

1.4.2 OPTICAL FILTER (ON THE FRONT OF THE LCD PANEL)

- (1) Avoid placing the unit under direct sunlight over a prolonged period of time. This may cause the optical filter to deteriorate in quality and COLOUR.
- (2) Clean the filter surface by wiping it softly and lightly with a soft and lightly fuzz cloth (such as outing flannel).
- (3) Do not use solvents such as benzene or thinner to wipe the filter surface. This may cause the filter to deteriorate in quality or the coating on the surface to come off. When cleaning the filter, usually use the neutral detergent diluted with water. When cleaning the dirty filter, use water-diluted ethanol.
- (4) Since the filter surface is fragile, do not scratch or hit it with hard materials. Be careful enough not to touch the front surface, especially when taking the unit out of the packing case or during transportation.

1.4.3 PRECAUTIONS FOR REPLACEMENT OF EXTERIOR PARTS

Take note of the following when replacing exterior parts (REAR COVER, FRONT PANEL, etc.):

- (1) Do not exert pressure on the front of the LCD panel (filter surface). It may cause irregular COLOUR.
- (2) Pay careful attention not to scratch or stain the front of the LCD panel (filter surface) with hands.
- (3) When replacing exterior parts, the front (LCD panel) should be placed facing downward. Place a mat, etc. underneath to avoid causing scratches to the front (filter surface).

SECTION 2

SPECIFIC SERVICE INSTRUCTIONS

2.1 FEATURES

DIGITAL TUNER

This TV can receive both DVB-T (Digital terrestrial broadcasting), DVB-S(Digital satellite broadcasting: DB9 only) and Analogue terrestrial broadcasting.

HDMI INPUT

By connecting a HDMI compatible device, high definition pictures can be displayed on your TV in their digital form.

PICTURE MODE

This function can adjust the picture settings automatically. There are BRIGHT, STANDARD, SOFT and MANUAL in the PICTURE MODE.

ZOOM

This function can change the screen size according to the picture aspect ratio.

HYPER SOUND

You can enjoy sounds with a wider ambience.

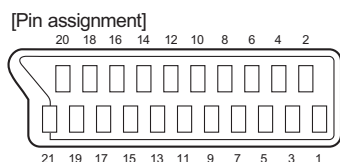
2.2 MAIN DIFFERENCE LIST

Items	Contents		
	LT-19DA9BJ	LT-19DA9BU	LT-19DB9BD
Satellite Broadcasting	NO	NO	YES
Power Consumption	55 W (Standby: 0.8 W)	←	70 W (Standby: 0.8 W)
TV RF System (Digital)	DVB-T	←	DVB-T / DVB-S
Receiving Frequency (Digital)	UHF:474 MHz - 858 MHz	←	UHF:474 MHz - 858 MHz (Terrestrial) UHF:950 MHz - 2150 MHz (Satellite)
Teletext System (Digital)	MHEG 5 UK profile	EBU TEXT	

2.3 21-PIN EURO CONNECTOR (SCART) : EXT-1

Pin No.	Signal designation	Matching value	EXT-1
1	AUDIO R output	500mV(rms) (Nominal), Low impedance	Used (TV OUT)
2	AUDIO R input	500mV(rms) (Nominal), High impedance	Used (R1)
3	AUDIO L output	500mV(rms) (Nominal), Low impedance	Used (TV OUT)
4	AUDIO GND		Used
5	GND (B)		Used
6	AUDIO L input	500mV(rms) (Nominal), High impedance	Used (L1)
7	B input	700mV _(B-W) , 75Ω	Used
8	FUNCTION SW (SLOW SW)	Low : 0V-3V High : 8V-12V, High impedance	Used
9	GND (G)		Used
10	SCL / T-V LINK		Not used
11	G input	700mV _(B-W) , 75Ω	Used
12	SDA		Not used
13	GND (R)		Used
14	GND (YS)		Used
15	R / C input	R : 700mV _(B-W) , 75Ω C : 300mV _(P-P) , 75Ω	Used (R)
16	Ys input (FAST SW)	Low : 0V-0.4V, High : 1V-3V, 75Ω	Used
17	GND (VIDEO output)		Used
18	GND (VIDEO input)		Used
19	VIDEO output	1V _(P-P) (Negative sync), 75Ω	Used (TV OUT)
20	VIDEO / Y input	1V _(P-P) (Negative sync), 75Ω	Used
21	COMMON GND		Used

(P-P= Peak to Peak, B-W= Blanking to white peak)



2.4 TECHNICAL INFORMATION

2.4.1 LCD PANEL

This unit uses the flat type LCD (Liquid Crystal Display) panel that occupies little space, instead of using the conventional CRT(Cathode Ray Tube). This panel adopts "normally white" mode where the transmittance or reflective rate is maximum, and the screen is white when no voltage is applied.

2.4.1.1 SPECIFICATIONS

The following table shows the specifications of this unit.

Item	Specifications
Maximum dimensions (W × H × D)	428.0 mm × 278.0 mm × 18.5 mm
Weight	2.6 kg
Effective screen size	Diagonal : 48.0 cm (H: 40.8 cm × V: 25.5 cm)
Aspect ratio	16 : 10
Drive device / system	a-Si-TFT active matrix system
Resolution	Horizontally 1440 × Vertically 900 × RGB < W-XGA > 3888000 dots in total
Pixel pitch (pixel size)	Horizontally: 0.2835 mm, Vertically: 0.2835 mm
Displayed color	16777216 colors 256 colors for R G and B
Brightness	300cd/m2
Contrast ratio	1000 : 1
Response time (Tr + Tf)	less than 10 ms
View angle (Horizontally)	160°
View angle (Vertically)	160°
Surface polarizer	Anti-Glare type Low reflective coat
Color filter	Vertical stripe
Backlight	Cold cathode fluorescent lamp × 2
Power supply voltage in LCD	5 V
Power supply voltage in inverter	12 V
Panel interface system	LVDS (Low Voltage Differential Signaling)

2.4.1.2 PIXEL FAULT

There are three pixel faults - bright fault , dark fault and flicker fault - that are respectively defined as follows.

■ BRIGHT FAULT

In this pixel fault, a cell that should not light originally is lighting on and off.

For checking this pixel fault, input ALL BLACK SCREEN and find out the cell that is lighting on and off.

■ DARK FAULT

In this pixel fault, a cell that should light originally is not lighting or lighting with the brightness twice as brighter as originally lighting.

For checking this pixel fault, input 100% of each R/G/B colour and find out the cell that is not lighting.

■ FLICKER FAULT

In the pixel fault, a cell that should light originally or not light originally is flashing on and off.

For checking this pixel fault, input ALL BLACK SCREEN signal or 100% of each RGB colour and find out the cell that is flashing on and off.

SECTION 3

DISASSEMBLY

3.1 CAUTION AT DISASSEMBLY

- Make sure that the power cord is disconnected from the outlet.
- Pay special attention not to break or damage the parts.
- Make sure that there is no bent or stain on the connectors before inserting, and firmly insert the connectors.
- Be sure to reattach the wire clamps removed during the procedure to the original positions. (Attaching the wire clamps in wrong positions may affect the performance.)

REFERENCE:

When removing each board, remove the connector if necessary. The operation is easier if you write down the connection points (connector numbers) of the connector. For connection of each board, refer to the "WIRING DIAGRAM" of the Standard Circuit Diagram.

3.2 DISASSEMBLY PROCEDURE

3.2.1 REMOVING THE REAR COVER (Fig.3-1)

- (1) Remove the 2 screws [A].
- (2) Remove the CORD GUIDE.
- (3) Remove the 4 screws [B].
- (4) Remove the REAR COVER.

3.2.2 REMOVING THE POWER UNIT (Fig.3-1)

- Remove the REAR COVER.
 - (1) Remove the 4 screws [C].
 - (2) Remove the POWER UNIT.

3.2.3 REMOVING THE MAIN PWB / MPEG PWB (Fig.3-1)

- Remove the REAR COVER.
 - (1) Remove the 2 screws [D].
 - (2) Remove the SIDE SHIELD.
 - (3) Remove the 4 screws [E] and 4 screws [F].
 - (4) Remove the MAIN PWB and MPEG PWB together.
 - (5) Remove the connector connecting the MAIN PWB and MPEG PWB to separate each board.

3.2.4 REMOVING THE KEY PWB (Fig.3-1)

- Remove the REAR COVER.
 - (1) Remove the 2 screws [G].
 - (2) Remove the CONTROL BASE and KEY PWB together.
 - (3) Remove the 2 screws [H].
 - (4) Remove the KEY PWB from the CONTROL BASE.

3.2.5 REMOVING THE SPEAKER (Fig.3-1)

- Remove the REAR COVER.
 - (1) Remove the 2 screws [J].
 - (2) Remove the SPEAKER.
 - (3) Follow the same steps when removing the other SPEAKER.

3.2.6 REMOVING THE IR PWB (Fig.3-1)

- Remove the REAR COVER.
- Remove the SPEAKER.
 - (1) Remove the 1 screw [K].
 - (2) Remove the IR PWB.

3.2.7 REMOVING THE STAND (Fig.3-1)

- (1) Remove the 4 screws [L].
- (2) Remove the STAND.

3.2.8 REMOVING THE BLUE LED MODULE (Fig.3-1)

- Remove the REAR COVER.
- Remove the STAND.
- Remove the MAIN PWB.
 - (1) Remove the 4 screws [M].
 - (2) Remove the FRONT BRACKET.
 - (3) Remove the BLUE LED MODULE.

3.2.9 REMOVING THE LCD PANEL UNIT (Fig.3-1)

- Remove the REAR COVER.
- Remove the STAND.
- Remove the SPEAKER.
 - (1) Remove the 6 screws [N].
 - (2) Remove the MAIN SHIELD and LCD PANEL UNIT together.
 - (3) Remove the 4 screws [P].
 - (4) Remove the LCD PANEL UNIT from the MAIN SHIELD.

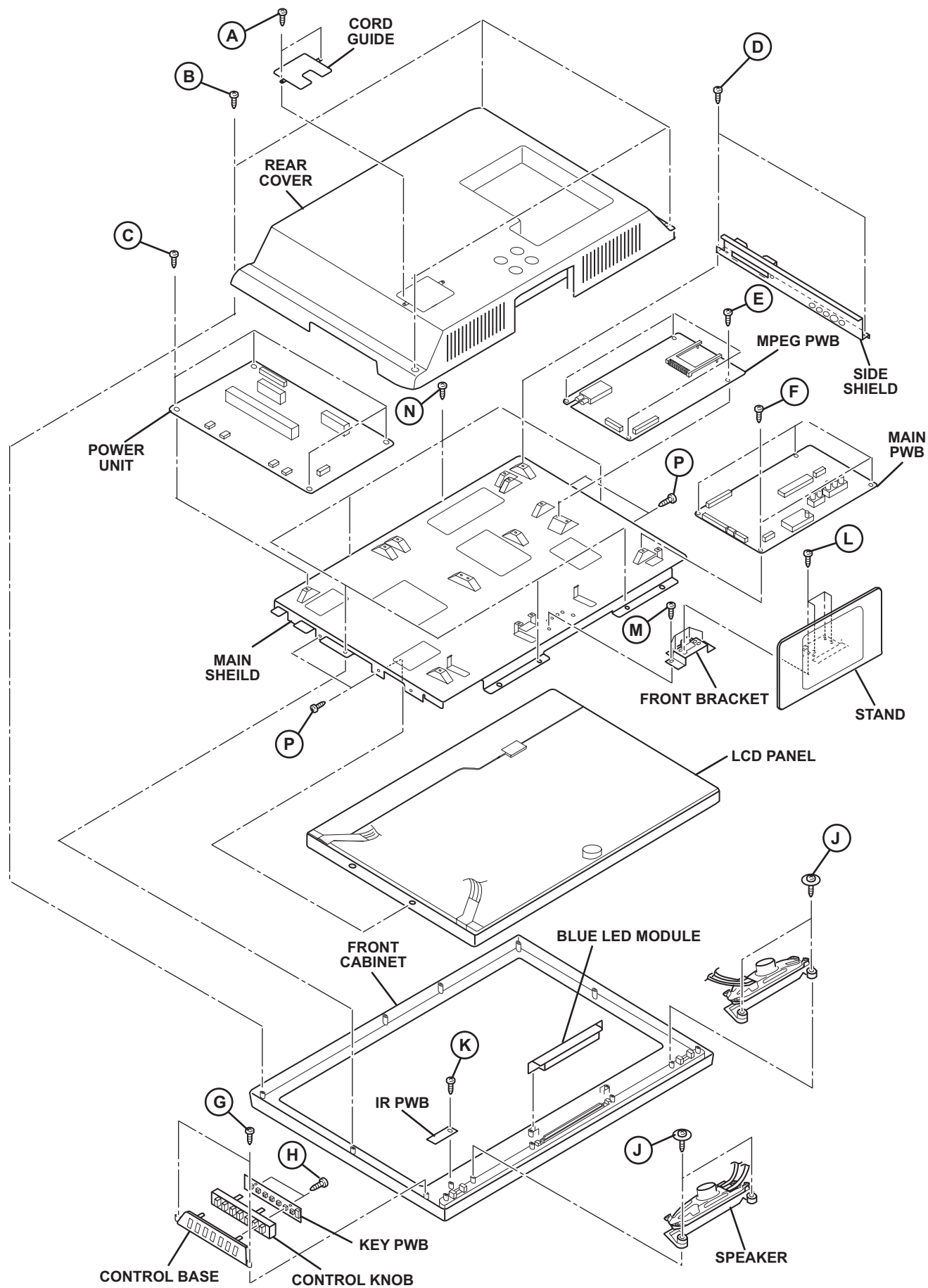


Fig.3-1

3.3 MEMORY IC REPLACEMENT

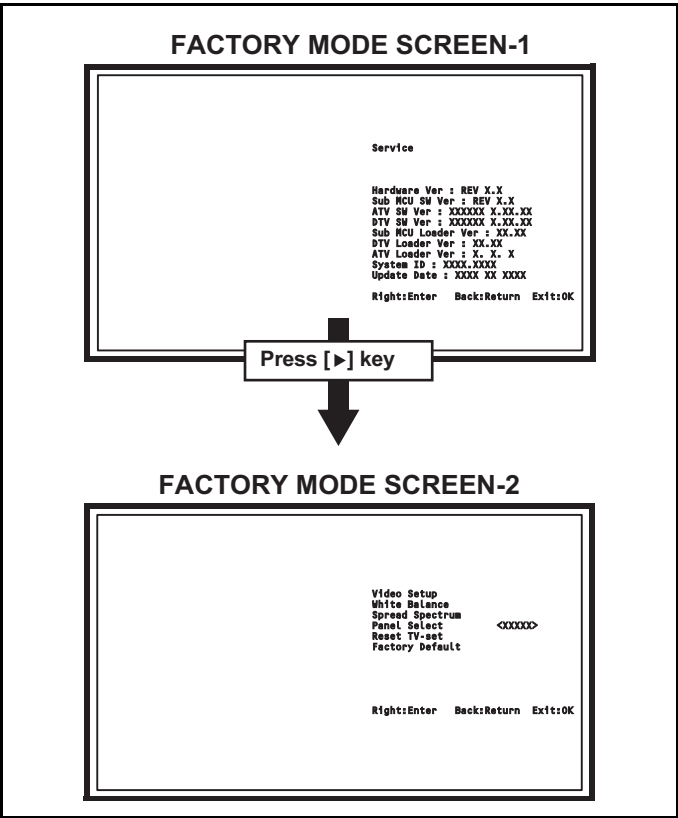
- This model uses the memory IC.
- This memory IC stores data for proper operation of the video and drive circuits.
- When replacing, be sure to use an IC containing this (initial value) data.

3.3.1 MEMORY IC REPLACEMENT PROCEDURE

- 1. Power off**
Switch off the power and disconnect the power plug from the AC outlet.
- 2. Replace the memory IC**
Be sure to use the memory IC written with the initial setting values.
- 3. Power on**
Connect the power plug to the AC outlet and switch on the power.
- 4. Receiving channel setting**
Refer to the OPERATING INSTRUCTIONS and set the receive channels (Channels Preset) as described.
- 5. User setting**
Check the user setting items according to the given in page later. Where these do not agree, refer to the OPERATING INSTRUCTIONS and set the items as described.
- 6. FACTORY MODE setting**
Verify what to set in the FACTORY MODE, and set whatever is necessary.

3.3.2 FACTORY MODE SETTING

■FACTORY MODE SCREEN



■SETTING ITEM

Setting items	Settings
Video Setup	[Do not adjust]
White Balance	Adjust
Spread Spectrum	[Do not adjust]
Panel Select	[Do not adjust]
Reset TV-set	---
Factory Default	---

3.3.3 SETTINGS OF FACTORY SHIPMENT

3.3.3.1 BUTTON OPERATION

Setting item	Setting position
POWER	Off
CHANNEL	PR1
VOLUME	10
AV	TV

3.3.3.3 REMOTE CONTROL MENU OPERATION

(1) Picture

Setting item	Setting position
Mode	Bright
Fleshtone	Off
Colour Temperature	Cool
Noise Reduction	High
Backlight	High

(2) Sound

Setting item	Setting position
Bass	0
Treble	0
Balance	0
AVL	On
Hyper Sound	Off

(3) Install

Setting item	Setting position
Country	BJ MODEL: UK BU/BD MODEL: Germany
Antenna Power	Off
Auto Search	---
Manual Search	---
Edit Channels	---

3.3.3.2 REMOTE CONTROL DIRECT OPERATION

Setting item	Setting position
CHANNEL	PR1
VOLUME	10
ZOOM	AUTO
SUB POWER	OFF

(4) Feature

Setting item		Setting position
Language		English
Time Setting	Power On Time	Off
	Power Off Time	Off
	Auto Power Off	Off
Parental Control		Disable
OSD Transparency		30
Blue Back		Off
Power Lamp		On
4 : 3 Aspect Setting		Panoramic

(5) APS (in Analog tV Mode only)

Setting item	Setting position
Language	English
Antenna Power	Off
Country	BJ MODEL: UK BU/BD MODEL: Germany
Channel Search	---

3.4 REPLACEMENT OF CHIP COMPONENT

3.4.1 CAUTIONS

- (1) Avoid heating for more than 3 seconds.
- (2) Do not rub the electrodes and the resist parts of the pattern.
- (3) When removing a chip part, melt the solder adequately.
- (4) Do not reuse a chip part after removing it.

3.4.2 SOLDERING IRON

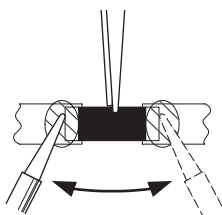
- (1) Use a high insulation soldering iron with a thin pointed end of it.
- (2) A 30w soldering iron is recommended for easily removing parts.

3.4.3 REPLACEMENT STEPS

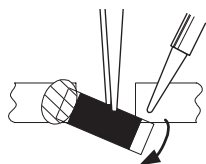
1. How to remove Chip parts

[Resistors, capacitors, etc.]

- (1) As shown in the figure, push the part with tweezers and alternately melt the solder at each end.



- (2) Shift with the tweezers and remove the chip part.

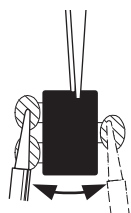


[Transistors, diodes, variable resistors, etc.]

- (1) Apply extra solder to each lead.



- (2) As shown in the figure, push the part with tweezers and alternately melt the solder at each lead. Shift and remove the chip part.



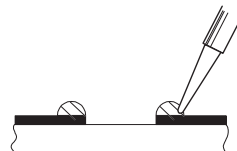
NOTE :

After removing the part, remove remaining solder from the pattern.

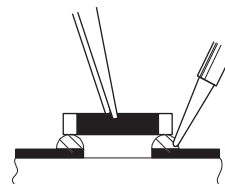
2. How to install Chip parts

[Resistors, capacitors, etc.]

- (1) Apply solder to the pattern as indicated in the figure.

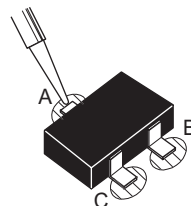


- (2) Grasp the chip part with tweezers and place it on the solder. Then heat and melt the solder at both ends of the chip part.

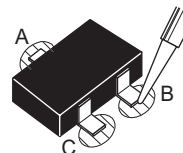


[Transistors, diodes, variable resistors, etc.]

- (1) Apply solder to the pattern as indicated in the figure.
- (2) Grasp the chip part with tweezers and place it on the solder.
- (3) First solder lead **A** as indicated in the figure.



- (4) Then solder leads **B** and **C**.



SECTION 4 ADJUSTMENT

4.1 ADJUSTMENT PREPARATION

- (1) This TV is adjusted by using REMOTE CONTROL UNIT.
- (2) The adjustment using the REMOTE CONTROL UNIT is made on the basis of the initial setting values. The setting values which adjust the screen to the optimum condition can be different from the initial setting values.
- (3) Make sure that connection is correctly made AC to AC power source.
- (4) Turn on the power of the TV and measuring instruments for warming up for at least 30 minutes before starting adjustments.
- (5) If the receive or input signal is not specified, use the most appropriate signal for adjustment.
- (6) Never touch the parts (such as variable resistors, transformers and condensers) not shown in the adjustment items of this service adjustment.

4.2 PRESET SETTING BEFORE ADJUSTMENTS

Unless otherwise specified in the adjustment items, preset the following functions with the REMOTE CONTROL UNIT.

Setting item	Settings position
Picture Mode	Standard
Colour Temperature	Normal

4.3 MEASURING INSTRUMENT AND FIXTURES

- Signal generator (Pattern generator)[PAL]
- Remote control unit

4.4 ADJUSTMENT ITEMS

■ VIDEO CIRCUIT

- WHITE BALANCE adjustment

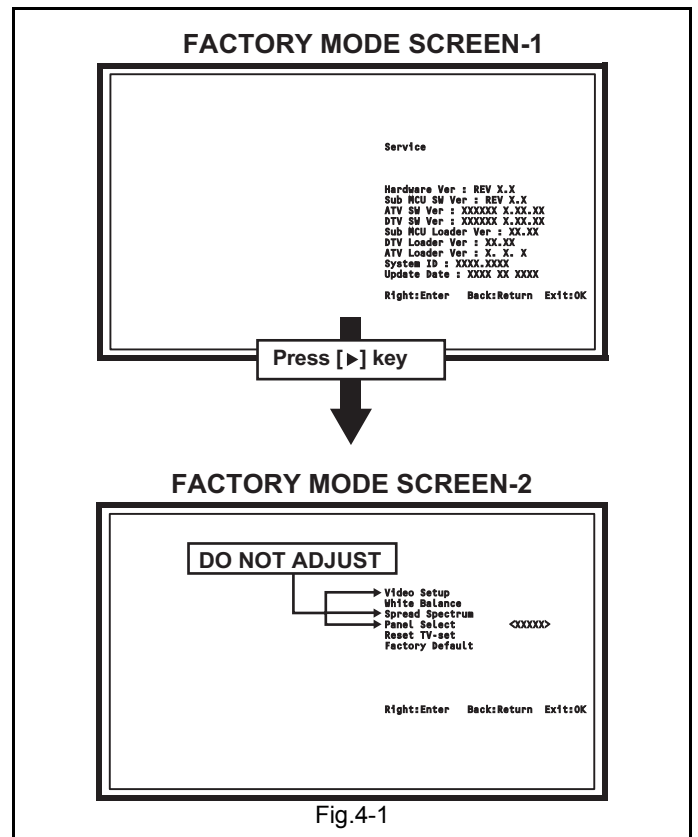
4.5 BASIC OPERATION OF FACTORY MODE

4.5.1 HOW TO ENTER THE FACTORY MODE

- (1) Press [INFORMATION] key and [MUTING] key on the remote control unit simultaneously to enter the FACTORY MODE SCREEN-1. (Fig.4-1)
- (2) Press [▶] key on the remote control unit simultaneously to enter the FACTORY MODE SCREEN-2. (Fig.4-1)

4.5.2 HOW TO EXIT THE FACTORY MODE

Press the [OK] key to exit the factory mode.



4.5.3 CHANGE AND MEMORY OF SETTING VALUE

SELECTION OF SETTING ITEM

- **[FUNCTION ▲/▼]** key.
For scrolling up / down the setting items.
- **[FUNCTION ◀/▶]** key.
For select the setting items.

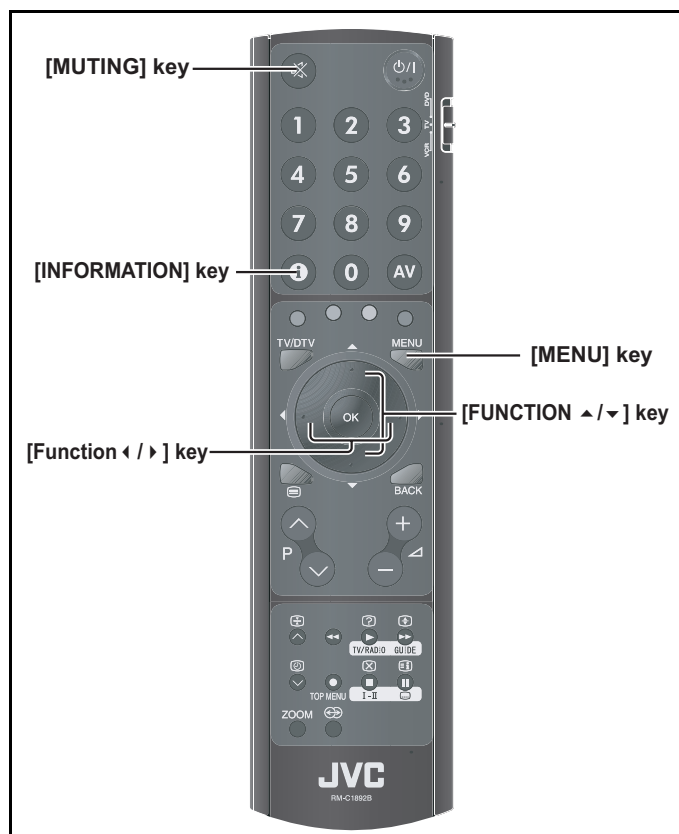
CHANGE OF SETTING VALUE (DATA)

- **[FUNCTION ◀/▶]** key.
For scrolling up / down the setting values.

MEMORY OF SETTING VALUE (DATA)

The setting value will be stored automatically when release the REMOTE CONTROL UNIT keys.

4.5.4 FACTORY MODE SELECT KEY LOCATION



4.6 SETTING ITEM IN THE FACTORY MODE

Swetting item				Variable range	Default Value	Comment
Video Setup	RF(Analog TV)	Standard	Brightness	0 - 100	41	Adjust the Brightness value of Standard mode in Analog TV.
			Contrast	0 - 100	68	Adjust the Contrast value of Standard mode in Analog TV.
			Sharpness	0 - 100	65	Adjust the Sharpness value of Standard mode in Analog TV.
			Colour	0 - 100	58	Adjust the Colour value of Standard mode in Analog TV.
			Farbton	0 - 100	0	Adjust the Farbton value of Standard mode in Analog TV.
		Bright	Brightness	0 - 100	41	Adjust the Brightness value of Bright mode in Analog TV.
			Contrast	0 - 100	73	Adjust the Contrast value of Bright mode in Analog TV.
			Sharpness	0 - 100	65	Adjust the Sharpness value of Bright mode in Analog TV.
			Colour	0 - 100	59	Adjust the Colour value of Bright mode in Analog TV.
			Farbton	0 - 100	0	Adjust the Farbton value of Bright mode in Analog TV.
		Game	Brightness	0 - 100	43	Adjust the Brightness value of Game mode in Analog TV.
			Contrast	0 - 100	63	Adjust the Contrast value of Game mode in Analog TV.
			Sharpness	0 - 100	65	Adjust the Sharpness value of Game mode in Analog TV.
			Colour	0 - 100	58	Adjust the Colour value of Game mode in Analog TV.
			Farbton	0 - 100	0	Adjust the Farbton value of Game mode in Analog TV.
		Soft	Brightness	0 - 100	42	Adjust the Brightness value of Soft mode in Analog TV.
			Contrast	0 - 100	63	Adjust the Contrast value of Soft mode in Analog TV.
			Sharpness	0 - 100	65	Adjust the Sharpness value of Soft mode in Analog TV.
			Colour	0 - 100	58	Adjust the Colour value of Soft mode in Analog TV.
			Farbton	0 - 100	0	Adjust the Farbton value of Soft mode in Analog TV.

Swetting item				Variable range	Default Value	Comment
Video Setup	CVBS(EXT-4)	Standard	Brightness	0 - 100	41	Adjust the Brightness value of Standard mode in CVBS(EXT-4).
			Contrast	0 - 100	68	Adjust the Contrast value of Standard mode in CVBS(EXT-4).
			Sharpness	0 - 100	65	Adjust the Sharpness value of Standard mode in CVBS(EXT-4).
			Colour	0 - 100	58	Adjust the Colour value of Standard mode in CVBS(EXT-4).
			Farbton	0 - 100	0	Adjust the Farbton value of Standard mode in CVBS(EXT-4).
		Bright	Brightness	0 - 100	41	Adjust the Brightness value of Bright mode in CVBS(EXT-4).
			Contrast	0 - 100	73	Adjust the Contrast value of Bright mode in CVBS(EXT-4).
			Sharpness	0 - 100	65	Adjust the Sharpness value of Bright mode in CVBS(EXT-4).
			Colour	0 - 100	59	Adjust the Colour value of Bright mode in CVBS(EXT-4).
			Farbton	0 - 100	0	Adjust the Farbton value of Bright mode in CVBS(EXT-4).
		Game	Brightness	0 - 100	43	Adjust the Brightness value of Bright mode in CVBS(EXT-4).
			Contrast	0 - 100	63	Adjust the Contrast value of Bright mode in CVBS(EXT-4).
			Sharpness	0 - 100	65	Adjust the Sharpness value of Bright mode in CVBS(EXT-4).
			Colour	0 - 100	58	Adjust the Colour value of Bright mode in CVBS(EXT-4).
			Farbton	0 - 100	0	Adjust the Farbton value of Bright mode in CVBS(EXT-4).
		Soft	Brightness	0 - 100	42	Adjust the Brightness value of Soft mode in CVBS(EXT-4).
			Contrast	0 - 100	63	Adjust the Contrast value of Soft mode in CVBS(EXT-4).
			Sharpness	0 - 100	65	Adjust the Sharpness value of Soft mode in CVBS(EXT-4).
			Colour	0 - 100	58	Adjust the Colour value of Soft mode in CVBS(EXT-4).
			Farbton	0 - 100	0	Adjust the Farbton value of Soft mode in CVBS(EXT-4).
Video Setup	RGB(Digital TV EXT-1 EXT-2)	Standard	Brightness	0 - 100	41	Adjust the Brightness value of Standard mode in RGB(Digital TV EXT-1 EXT-2).
			Contrast	0 - 100	68	Adjust the Contrast value of Standard mode in RGB(Digital TV EXT-1 EXT-2).
			Sharpness	0 - 100	65	Adjust the Sharpness value of Standard mode in RGB(Digital TV EXT-1 EXT-2).
			Colour	0 - 100	58	Adjust the Colour value of Standard mode in RGB(Digital TV EXT-1 EXT-2).
			Farbton	0 - 100	0	Adjust the Farbton value of Standard mode in RGB(Digital TV EXT-1 EXT-2).
		Bright	Brightness	0 - 100	41	Adjust the Brightness value of Bright mode in RGB(Digital TV EXT-1 EXT-2).
			Contrast	0 - 100	73	Adjust the Contrast value of Bright mode in RGB(Digital TV EXT-1 EXT-2).
			Sharpness	0 - 100	65	Adjust the Sharpness value of Bright mode in RGB(Digital TV EXT-1 EXT-2).
			Colour	0 - 100	59	Adjust the Colour value of Bright mode in RGB(Digital TV EXT-1 EXT-2).
			Farbton	0 - 100	0	Adjust the Farbton value of Bright mode in RGB(Digital TV EXT-1 EXT-2).
		Game	Brightness	0 - 100	43	Adjust the Brightness value of Game mode in RGB(Digital TV EXT-1 EXT-2).
			Contrast	0 - 100	63	Adjust the Contrast value of Game mode in RGB(Digital TV EXT-1 EXT-2).
			Sharpness	0 - 100	65	Adjust the Sharpness value of Game mode in RGB(Digital TV EXT-1 EXT-2).
			Colour	0 - 100	58	Adjust the Colour value of Game mode in RGB(Digital TV EXT-1 EXT-2).
			Farbton	0 - 100	0	Adjust the Farbton value of Game mode in RGB(Digital TV EXT-1 EXT-2).
		Soft	Brightness	0 - 100	42	Adjust the Brightness value of Soft mode in RGB(Digital TV EXT-1 EXT-2).
			Contrast	0 - 100	63	Adjust the Contrast value of Soft mode in RGB(Digital TV EXT-1 EXT-2).
			Sharpness	0 - 100	65	Adjust the Sharpness value of Soft mode in RGB(Digital TV EXT-1 EXT-2).
			Colour	0 - 100	58	Adjust the Colour value of Soft mode in RGB(Digital TV EXT-1 EXT-2).
			Farbton	0 - 100	0	Adjust the Farbton value of Soft mode in RGB(Digital TV EXT-1 EXT-2).

Swetting item				Variable range	Default Value	Comment
Video Setup	YC(EXT-4S)	Standard	Brightness	0 - 100	41	Adjust the Brightness value of Standard mode in YC(EXT-4S).
			Contrast	0 - 100	68	Adjust the Contrast value of Standard mode in YC(EXT-4S).
			Sharpness	0 - 100	65	Adjust the Sharpness value of Standard mode in YC(EXT-4S).
			Colour	0 - 100	58	Adjust the Colour value of Standard mode in YC(EXT-4S).
			Farbton	0 - 100	0	Adjust the Farbton value of Standard mode in YC(EXT-4S).
		Bright	Brightness	0 - 100	41	Adjust the Brightness value of Bright mode in YC(EXT-4S).
			Contrast	0 - 100	73	Adjust the Contrast value of Bright mode in YC(EXT-4S).
			Sharpness	0 - 100	65	Adjust the Sharpness value of Bright mode in YC(EXT-4S).
			Colour	0 - 100	59	Adjust the Colour value of Bright mode in YC(EXT-4S).
			Farbton	0 - 100	0	Adjust the Farbton value of Bright mode in YC(EXT-4S).
		Game	Brightness	0 - 100	43	Adjust the Brightness value of Game mode in YC(EXT-4S).
			Contrast	0 - 100	63	Adjust the Contrast value of Game mode in YC(EXT-4S).
			Sharpness	0 - 100	65	Adjust the Sharpness value of Game mode in YC(EXT-4S).
			Colour	0 - 100	58	Adjust the Colour value of Game mode in YC(EXT-4S).
			Farbton	0 - 100	0	Adjust the Farbton value of Game mode in YC(EXT-4S).
		Soft	Brightness	0 - 100	42	Adjust the Brightness value of Soft mode in YC(EXT-4S).
			Contrast	0 - 100	63	Adjust the Contrast value of Soft mode in YC(EXT-4S).
			Sharpness	0 - 100	65	Adjust the Sharpness value of Soft mode in YC(EXT-4S).
			Colour	0 - 100	58	Adjust the Colour value of Soft mode in YC(EXT-4S).
			Farbton	0 - 100	0	Adjust the Farbton value of Soft mode in YC(EXT-4S).
Video Setup	COMP(EXT-3)	Standard	Brightness	0 - 100	49	Adjust the Brightness value of Standard mode in COMP(EXT-3).
			Contrast	0 - 100	70	Adjust the Contrast value of Standard mode in COMP(EXT-3).
			Sharpness	0 - 100	65	Adjust the Sharpness value of Standard mode in COMP(EXT-3).
			Colour	0 - 100	60	Adjust the Colour value of Standard mode in COMP(EXT-3).
			Farbton	0 - 100	0	Adjust the Farbron value of Standard mode in COMP(EXT-3).
		Bright	Brightness	0 - 100	49	Adjust the Brightness value of Bright mode in COMP(EXT-3).
			Contrast	0 - 100	77	Adjust the Contrast value of Bright mode in COMP(EXT-3).
			Sharpness	0 - 100	65	Adjust the Sharpness value of Bright mode in COMP(EXT-3).
			Colour	0 - 100	60	Adjust the Colour value of Bright mode in COMP(EXT-3).
			Farbton	0 - 100	0	Adjust the Farbron value of Bright mode in COMP(EXT-3).
		Game	Brightness	0 - 100	51	Adjust the Brightness value of Game mode in COMP(EXT-3).
			Contrast	0 - 100	61	Adjust the Contrast value of Game mode in COMP(EXT-3).
			Sharpness	0 - 100	65	Adjust the Sharpness value of Game mode in COMP(EXT-3).
			Colour	0 - 100	60	Adjust the Colour value of Game mode in COMP(EXT-3).
			Farbton	0 - 100	0	Adjust the Farbron value of Game mode in COMP(EXT-3).
		Soft	Brightness	0 - 100	50	Adjust the Brightness value of Soft mode in COMP(EXT-3).
			Contrast	0 - 100	61	Adjust the Contrast value of Soft mode in COMP(EXT-3).
			Sharpness	0 - 100	65	Adjust the Sharpness value of Soft mode in COMP(EXT-3).
			Colour	0 - 100	60	Adjust the Colour value of Soft mode in COMP(EXT-3).
			Farbton	0 - 100	0	Adjust the Farbron value of Soft mode in COMP(EXT-3).

Swetting item				Variable range	Default Value	Comment
Video Setup	HDMI(EXT-5 EXT-6 EXT7)	Standard	Brightness	0 - 100	49	Adjust the Brightness value of Standard mode in HDMI(EXT-5 EXT-6 EXT7)
			Contrast	0 - 100	70	Adjust the Contrast value of Standard mode in HDMI(EXT-5 EXT-6 EXT7)
			Sharpness	0 - 100	65	Adjust the Sharpness value of Standard mode in HDMI(EXT-5 EXT-6 EXT7)
			Colour	0 - 100	60	Adjust the Colour value of Standard mode in HDMI(EXT-5 EXT-6 EXT7)
			Farbton	0 - 100	0	Adjust the Farbton value of Standard mode in HDMI(EXT-5 EXT-6 EXT7)
		Bright	Brightness	0 - 100	49	Adjust the Brightness value of Bright mode in HDMI(EXT-5 EXT-6 EXT7)
			Contrast	0 - 100	77	Adjust the Contrast value of Bright mode in HDMI(EXT-5 EXT-6 EXT7)
			Sharpness	0 - 100	65	Adjust the Sharpness value of Bright mode in HDMI(EXT-5 EXT-6 EXT7)
			Colour	0 - 100	60	Adjust the Colour value of Bright mode in HDMI(EXT-5 EXT-6 EXT7)
			Farbton	0 - 100	0	Adjust the Farbton value of Bright mode in HDMI(EXT-5 EXT-6 EXT7)
		Game	Brightness	0 - 100	51	Adjust the Brightness value of Game mode in HDMI(EXT-5 EXT-6 EXT7)
			Contrast	0 - 100	61	Adjust the Contrast value of Game mode in HDMI(EXT-5 EXT-6 EXT7)
			Sharpness	0 - 100	65	Adjust the Sharpness value of Game mode in HDMI(EXT-5 EXT-6 EXT7)
			Colour	0 - 100	60	Adjust the Colour value of Game mode in HDMI(EXT-5 EXT-6 EXT7)
			Farbton	0 - 100	0	Adjust the Farbton value of Game mode in HDMI(EXT-5 EXT-6 EXT7)
		Soft	Brightness	0 - 100	50	Adjust the Brightness value of Soft mode in HDMI(EXT-5 EXT-6 EXT7)
			Contrast	0 - 100	61	Adjust the Contrast value of Soft mode in HDMI(EXT-5 EXT-6 EXT7)
			Sharpness	0 - 100	65	Adjust the Sharpness value of Soft mode in HDMI(EXT-5 EXT-6 EXT7)
			Colour	0 - 100	60	Adjust the Colour value of Soft mode in HDMI(EXT-5 EXT-6 EXT7)
			Farbton	0 - 100	0	Adjust the Farbton value of Soft mode in HDMI(EXT-5 EXT-6 EXT7)
White Balance	Normal	Normal R		0 - 100	50	Adjust Red value of Normal Colour Temperature.
		Normal G		0 - 100	31	Adjust Green value of Normal Colour Temperature.
		Normal B		0 - 100	26	Adjust Blue value of Normal Colour Temperature.
	Cool	Cool R		0 - 100	50	Adjust Red value of Cool Colour Temperature.
		Cool G		0 - 100	34	Adjust Green value of Cool Colour Temperature.
		Cool B		0 - 100	38	Adjust Blue value of Cool Colour Temperature.
	Warm	Warm R		0 - 100	39	Adjust Red value of Warm Colour Temperature.
		Warm G		0 - 100	24	Adjust Green value of Warm Colour Temperature.
Warm B		0 - 100	0	Adjust Blue value of Warm Colour Temperature.		
Spread Spectrum	SS Enable			Yes/No	Yes	Turn on or off the Spread Spectrum operation
	SS Width			0 - 100	15	Adjusting the Width of Spread Spectrum
	SS Frequency			0 - 100	100	Adjusting the frequency of Spread Spectrum
Reset TV-Set	Initialize NVM From ROM Press green key to contrinue...			---	---	Initialize Nvram data from ROM. (When push green key it will start the initializing. When push back key it will returns to previous.)
Factory Default	Initialize the set			---	---	Initialize the set. (When push right arrown key it will start the initializing. When push back key it will returns to previous.)

4.7 ADJUSTMENT PROCEDURE

4.7.1 VIDEO CIRCUIT

Item	Measuring instrument	Test point	Adjustment part	Description
WHITE BALANCE	Remote control unit		[White Balance] Normal R Normal G Normal B	(1) Set COLOUR TEMP. to "Normal". (2) Select "White Balance" from the FACTORY MODE. (3) Receive a PAL 75% all white signal. (4) Set the setting values of <Normal R>, <Normal G> and <Normal B> to the values in the left table. (5) Adjust the setting values of <Normal R> and <Normal R> so that the screen becomes maximum white. NOTE: When the normal mode is adjusted, other modes (cool/ warm) are automatically adjusted.
	Signal generator			
[WHITE BALANCE SETTING]				

SECTION 5 TROUBLESHOOTING

This service manual does not describe TROUBLESHOOTING.



Victor Company of Japan, Limited

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PARTS LIST

Preliminary

CAUTION

- The parts identified by the Δ symbol are important for the safety . Whenever replacing these parts, be sure to use specified ones to secure the safety.
- The parts not indicated in this Parts List and those which are filled with lines --- in the Parts No. columns will not be supplied.
- P.W. BOARD Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied.

ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS		CAPACITORS	
CR	Carbon Resistor	C CAP.	Ceramic Capacitor
FR	Fusible Resistor	E CAP.	Electrolytic Capacitor
PR	Plate Resistor	M CAP.	Mylar Capacitor
VR	Variable Resistor	CH CAP.	Chip Capacitor
HV R	High Voltage Resistor	HV CAP.	High Voltage Capacitor
MF R	Metal Film Resistor	MF CAP.	Metalized Film Capacitor
MG R	Metal Glazed Resistor	MM CAP.	Metalized Mylar Capacitor
MP R	Metal Plate Resistor	MP CAP.	Metalized Polystyrol Capacitor
OM R	Metal Oxide Film Resistor	PP CAP.	Polypropylene Capacitor
CMF R	Coating Metal Film Resistor	PS CAP.	Polystyrol Capacitor
UNF R	Non-Flammable Resistor	TF CAP.	Thin Film Capacitor
CH V R	Chip Variable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH MG R	Chip Metal Glazed Resistor	TAN. CAP.	Tantalum Capacitor
COMP. R	Composition Resistor	CH C CAP.	Chip Ceramic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
		CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

RESISTORS									
F	G	J	K	M	N	R	H	Z	P
$\pm 1\%$	$\pm 2\%$	$\pm 5\%$	$\pm 10\%$	$\pm 20\%$	$\pm 30\%$	+30% -10%	+50% -10%	+80% -20%	+100% -0%

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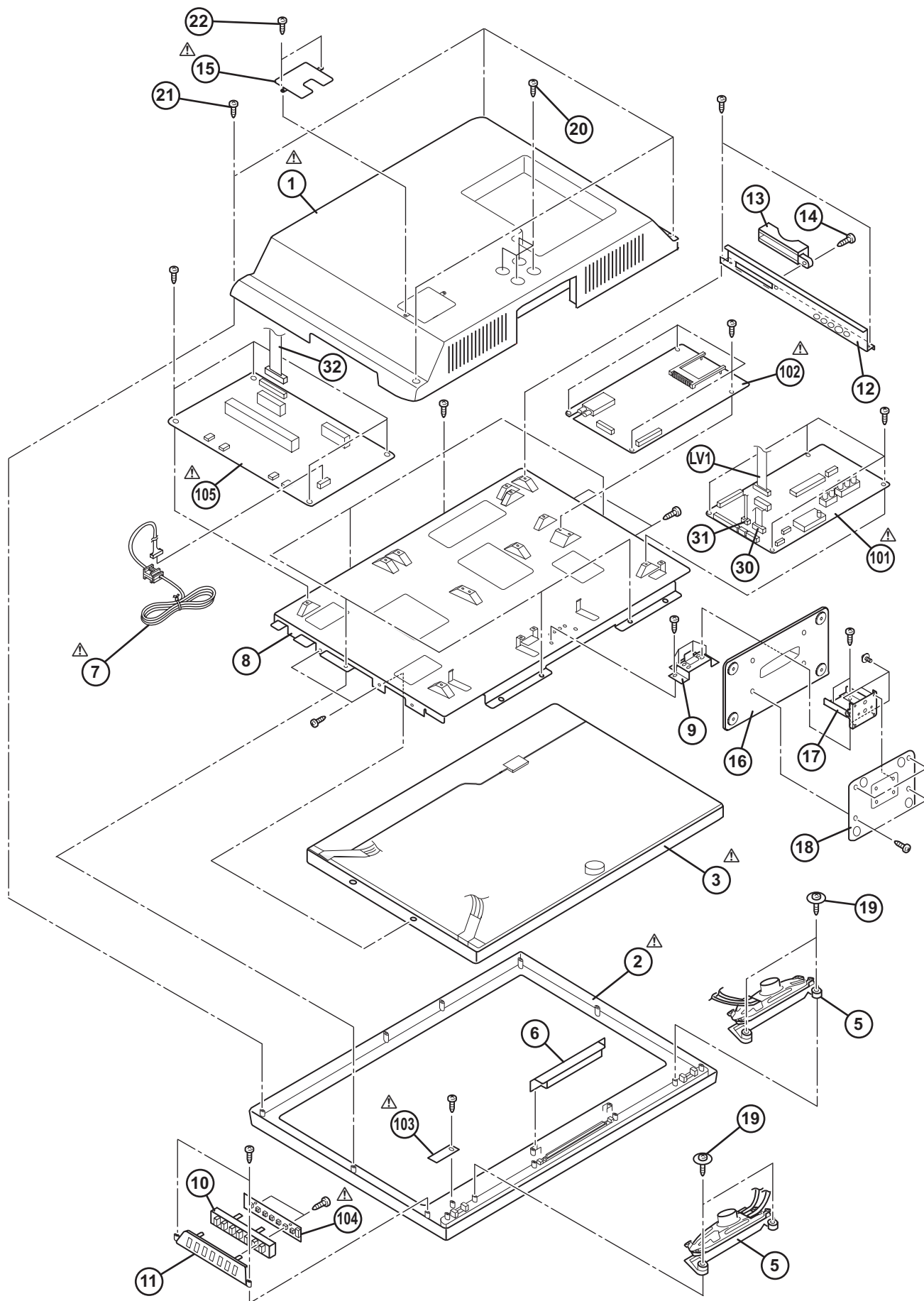
USING P.W. BOARD & REMOTE CONTROL UNIT

P.W.B ASS'Y name	P.W.B ASS'Y No.		
	LT-19DA9BJ	LT-19DA9BU	LT-19DB9BD
MAIN P.W.B	HU-71200008	←	←
MPEG P.W.B	HU-71200005	←	HU-71200006
IR P.W.B	HU-72200001	←	←
KEY P.W.B	HU-72200002	←	←
REMOTE CONTROL UNIT	HU-0320200009	←	←

EXPLODED VIEW PARTS LIST

△ Ref.No.	Part No.	Part Name	Description	Local
LV1	HU-0130100001	DIGITAL(LVDS) CABLE		
△ 1	HU-014213340PN	REAR COVER		
△ 2	HU-014213330PN	FRONT CABINET		
△ 3	HU-014130320	LCD PANEL UNIT	LTM190M2-L31	
5	HU-024000460	SPEAKER	12 ohm 5W 2 pcs 1 set	
6	HU-0210000001	BLUE LED MODULE		
△ 7	HU-0130000005	POWER CORD		LT-19DA9BJ
△ 7	HU-0130000004	POWER CORD		LT-19DA9BU,LT-19DB9BD
8	HU-3010118001CO	MAIN SHIELD		
9	HU-3011605001CO	FRONT BRACKET		
10	HU-3025220001PN	CONTROL KNOB		
11	HU-3029406001PN	GUIDE KNOB		
12	HU-3010309001CO	SIDE SHIELD		
13	HU-3029304001CO	CI GUIDE		
14	HU-M1305301017	SCREW	M3x10	
△ 15	HU-3029202001PN	CORD GUIDE		
16	HU-3022115001PN	STAND BASE		
17	HU-014213360	HINGE BRACKET		
18	HU-014213350CO	BASE BRACKET		
19	HU-M1308420815	SCREW	M4x8(x4)	
20	HU-M1100400617	SCREW	M4x6(x4)	
21	HU-M1305301017	SCREW	M3x10(x4)	
22	HU-M1101301017	SCREW	M3x10(x2)	
30	HU-0130100008	E-HARNESS ASSY	MAIN-IR	
31	HU-0130100006	E-HARNESS ASSY	MAIN-KEY	
32	HU-0130100025	E-HARNESS ASSY	MAIN-POWER UNIT	
△ 101	HU-71200008	MAIN PWB		
△ 102	HU-71200005	MPEG PWB		LT-19DA9BJ,LT-19DA9BU
△ 102	HU-71200006	MPEG PWB		LT-19DB9BD
△ 103	HU-72200001	IR PWB		
△ 104	HU-72200002	KEY PWB		
△ 105	HU-014031350	POWER UNIT		

EXPLODED VIEW



PRINTED WIRING BOARD PARTS LIST [LT-19DA9BJ, LT-19DA9BU]

MAIN P.W. BOARD ASS'Y (HU-71200008)

△Ref No.	Part No.	Part Name	Description	Local	△Ref No.	Part No.	Part Name	Description	Local
U2	HU-004020013	FET			C38	HU-001060250	C CAPACITOR	0.1uF 16V K	
U60	HU-000010440	IC	PROCESSOR		C39	HU-001060286	C CAPACITOR	10uF 10V	
U120	HU-000120400	IC	MUX/DEMUX		C40	HU-001060250	C CAPACITOR	0.1uF 16V K	
U180	HU-000060019	IC	OP AMP		C41	HU-001060250	C CAPACITOR	0.1uF 16V K	
U200	HU-000090180	IC	SWITCH		C42	HU-001060321	C CAPACITOR	10uF 10V K	
U470	HU-000230270	IC	HDMI RECEIVER		C43	HU-001060250	C CAPACITOR	0.1uF 16V K	
U560	HU-000140450	IC	AUDIO DAC		C44	HU-001060236	C CAPACITOR	10uF 25V	
U580	HU-000060610	IC	AUDIO AMP		C45	HU-001060105	C CAPACITOR	0.1uF 50V	
U581	HU-000060510	IC	HEADPHONE AMP		C46	HU-001060236	C CAPACITOR	10uF 25V	
U630	HU-004020250	FET			C47	HU-001060236	C CAPACITOR	10uF 25V	
U660	HU-000170030	IC	RS232 DRIVER		C60	HU-001060250	C CAPACITOR	0.1uF 16V K	
U661	HU-000120091	IC	CMOS		C64	HU-001060250	C CAPACITOR	0.1uF 16V K	
U720	HU-000140583	IC	DC-DC CONV		C66	HU-001063002	C CAPACITOR	14pF 50V	
U721	HU-000091100	IC	REGULATOR		C67	HU-001063002	C CAPACITOR	14pF 50V	
U723	HU-000091100	IC	REGULATOR		C68	HU-001060199	C CAPACITOR	0.22uF 25V	
U725	HU-000091100	IC	REGULATOR		C120	HU-001060288	C CAPACITOR	1uF 25V	
U726	HU-000091070	IC	REGULATOR		C121	HU-001060288	C CAPACITOR	1uF 25V	
U770	HU-014040950	TUNER	ANALOG		C122	HU-001060288	C CAPACITOR	1uF 25V	
U771	HU-000090090	IC	REGULATOR		C123	HU-001060318	C CAPACITOR	0.1uF 50V	
U772	HU-0009000001	IC	POWER SW		C124	HU-001060318	C CAPACITOR	0.1uF 50V	
U800	HU-000990055	IC	VOLTAGE DETECTOR		C125	HU-001060318	C CAPACITOR	0.1uF 50V	
U801	HU-000010610	IC	MICOM		C126	HU-001060288	C CAPACITOR	1uF 25V	
					C127	HU-001060288	C CAPACITOR	1uF 25V	
Q1	HU-004001001	TRANSISTOR			C128	HU-001060288	C CAPACITOR	1uF 25V	
Q61	HU-004001001	TRANSISTOR			C129	HU-001060318	C CAPACITOR	0.1uF 50V	
Q120	HU-004001001	TRANSISTOR			C130	HU-001060288	C CAPACITOR	1uF 25V	
Q374	HU-004001001	TRANSISTOR			C131	HU-001060318	C CAPACITOR	0.1uF 50V	
Q581	HU-004001001	TRANSISTOR			C132	HU-001060318	C CAPACITOR	0.1uF 50V	
Q582	HU-004020030	MOS FET			C133	HU-001060288	C CAPACITOR	1uF 25V	
Q583	HU-004001001	TRANSISTOR			C134	HU-001060288	C CAPACITOR	1uF 25V	
Q631	HU-004001001	TRANSISTOR			C135	HU-001060288	C CAPACITOR	1uF 25V	
Q632	HU-004001001	TRANSISTOR			C136	HU-001060288	C CAPACITOR	1uF 25V	
Q634	HU-004000260	FET			C137	HU-001060288	C CAPACITOR	1uF 25V	
Q660	HU-004001001	TRANSISTOR			C138	HU-001060288	C CAPACITOR	1uF 25V	
Q661	HU-004000260	FET			C145	HU-001060266	C CAPACITOR	56pF 50V J	
Q662	HU-004000260	FET			C146	HU-001063035	C CAPACITOR	10pF 50V C	
Q680	HU-004000008	TRANSISTOR			C147	HU-001060250	C CAPACITOR	0.1uF 16V K	
Q681	HU-004001001	TRANSISTOR			C148	HU-001060266	C CAPACITOR	56pF 50V J	
Q686	HU-004000008	TRANSISTOR			C149	HU-001060286	C CAPACITOR	10uF 10V	
Q773	HU-004001001	TRANSISTOR			C150	HU-001060318	C CAPACITOR	0.1uF 50V	
Q800	HU-004000260	FET			C151	HU-001060219	C CAPACITOR	1000pF 50V K	
Q802	HU-004000260	FET			C152	HU-001060288	C CAPACITOR	1uF 25V	
Q803	HU-004001001	TRANSISTOR			C153	HU-001060219	C CAPACITOR	1000pF 50V K	
					C154	HU-001060288	C CAPACITOR	1uF 25V	
D1	HU-003010046	Z DIODE			C155	HU-001060236	C CAPACITOR	10uF 25V	
D370	HU-003040008	SI DIODE			C156	HU-001060219	C CAPACITOR	1000pF 50V K	
Z330	HU-003010053	Z DIODE			C158	HU-001060219	C CAPACITOR	1000pF 50V K	
Z331	HU-003010053	Z DIODE			C159	HU-001060219	C CAPACITOR	1000pF 50V K	
					C160	HU-001060219	C CAPACITOR	1000pF 50V K	
C3	HU-001060286	C CAPACITOR	10uF 10V		C161	HU-001060288	C CAPACITOR	1uF 25V	
C4	HU-001060250	C CAPACITOR	0.1uF 16V K		C162	HU-001060219	C CAPACITOR	1000pF 50V K	
C5	HU-001060286	C CAPACITOR	10uF 10V		C163	HU-001060288	C CAPACITOR	1uF 25V	
C6	HU-001060250	C CAPACITOR	0.1uF 16V K		C164	HU-001060219	C CAPACITOR	1000pF 50V K	
C7	HU-001060250	C CAPACITOR	0.1uF 16V K		C166	HU-001060236	C CAPACITOR	10uF 25V	
C8	HU-001060286	C CAPACITOR	10uF 10V		C180	HU-001071194	E CAPACITOR	100uF 25V	
C9	HU-001060250	C CAPACITOR	0.1uF 16V K		C181	HU-001060318	C CAPACITOR	0.1uF 50V	
C10	HU-001060236	C CAPACITOR	10uF 25V		C182	HU-001060318	C CAPACITOR	0.1uF 50V	
C11	HU-001060250	C CAPACITOR	0.1uF 16V K		C186	HU-001071228	E CAPACITOR	470uF 16V	
C12	HU-001060249	C CAPACITOR	100pF 50V J		C200	HU-001060286	C CAPACITOR	10uF 10V	
C13	HU-001060286	C CAPACITOR	10uF 10V		C201	HU-001060236	C CAPACITOR	10uF 25V	
C14	HU-001060250	C CAPACITOR	0.1uF 16V K		C202	HU-001060297	C CAPACITOR	0.01pF 50V K	
C15	HU-001060286	C CAPACITOR	10uF 10V		C203	HU-001060250	C CAPACITOR	0.1uF 16V K	
C16	HU-001060250	C CAPACITOR	0.1uF 16V K		C204	HU-001060318	C CAPACITOR	0.1uF 50V	
C17	HU-001060286	C CAPACITOR	10uF 10V		C205	HU-001060286	C CAPACITOR	10uF 10V	
C18	HU-001060250	C CAPACITOR	0.1uF 16V K		C206	HU-001060224	C CAPACITOR	0.47uF 16V	
C19	HU-001060286	C CAPACITOR	10uF 10V		C207	HU-001060250	C CAPACITOR	0.1uF 16V K	
C20	HU-001060250	C CAPACITOR	0.1uF 16V K		C212	HU-001060250	C CAPACITOR	0.1uF 16V K	
C21	HU-001060286	C CAPACITOR	10uF 10V		C213	HU-001060250	C CAPACITOR	0.1uF 16V K	
C22	HU-001060250	C CAPACITOR	0.1uF 16V K		C214	HU-001060250	C CAPACITOR	0.1uF 16V K	
C23	HU-001060286	C CAPACITOR	10uF 10V		C215	HU-001060250	C CAPACITOR	0.1uF 16V K	
C24	HU-001060250	C CAPACITOR	0.1uF 16V K		C216	HU-001060288	C CAPACITOR	1uF 25V	
C25	HU-001060286	C CAPACITOR	10uF 10V		C217	HU-001060288	C CAPACITOR	1uF 25V	
C26	HU-001060250	C CAPACITOR	0.1uF 16V K		C220	HU-001071210	E CAPACITOR	47uF 25V	
C27	HU-001060250	C CAPACITOR	0.1uF 16V K		C221	HU-001060318	C CAPACITOR	0.1uF 50V	
C28	HU-001060286	C CAPACITOR	10uF 10V		C233	HU-001060219	C CAPACITOR	1000pF 50V K	
C29	HU-001060286	C CAPACITOR	10uF 10V		C234	HU-001060219	C CAPACITOR	1000pF 50V K	
C30	HU-001060219	C CAPACITOR	1000pF 50V K		C235	HU-001060236	C CAPACITOR	10uF 25V	
C31	HU-001060219	C CAPACITOR	1000pF 50V K		C236	HU-001060219	C CAPACITOR	1000pF 50V K	
C32	HU-001060250	C CAPACITOR	0.1uF 16V K		C237	HU-001060236	C CAPACITOR	10uF 25V	
C33	HU-001060250	C CAPACITOR	0.1uF 16V K		C238	HU-001060219	C CAPACITOR	1000pF 50V K	
C34	HU-001060250	C CAPACITOR	0.1uF 16V K		C299	HU-001060250	C CAPACITOR	0.1uF 16V K	
C35	HU-001060286	C CAPACITOR	10uF 10V		C370	HU-001060250	C CAPACITOR	0.1uF 16V K	
C36	HU-001060250	C CAPACITOR	0.1uF 16V K		C372	HU-001060286	C CAPACITOR	10uF 10V	
C37	HU-001060286	C CAPACITOR	10uF 10V		C373	HU-001060250	C CAPACITOR	0.1uF 16V K	
					C470	HU-001060219	C CAPACITOR	1000pF 50V K	
					C471	HU-001060219	C CAPACITOR	1000pF 50V K	

△Ref No.	Part No.	Part Name	Description Local	△Ref No.	Part No.	Part Name	Description Local
C472	HU-001060219	C CAPACITOR	1000pF 50V K	C726	HU-001060286	C CAPACITOR	10uF 10V
C473	HU-001060219	C CAPACITOR	1000pF 50V K	C728	HU-001060312	C CAPACITOR	22uF 6.3V M
C474	HU-001060219	C CAPACITOR	1000pF 50V K	C729	HU-001060312	C CAPACITOR	22uF 6.3V M
C475	HU-001060297	C CAPACITOR	0.01pF 50V K	C730	HU-001060312	C CAPACITOR	22uF 6.3V M
C476	HU-001060297	C CAPACITOR	0.01pF 50V K	C731	HU-001060250	C CAPACITOR	0.1uF 16V K
C477	HU-001060297	C CAPACITOR	0.01pF 50V K	C732	HU-001071223	E CAPACITOR	100uF 16V
C488	HU-001060250	C CAPACITOR	0.1uF 16V K	C733	HU-001060312	C CAPACITOR	22uF 6.3V M
C489	HU-001060250	C CAPACITOR	0.1uF 16V K	C734	HU-001060297	C CAPACITOR	0.01pF 50V K
C490	HU-001060250	C CAPACITOR	0.1uF 16V K	C737	HU-001060286	C CAPACITOR	10uF 10V
C491	HU-001060250	C CAPACITOR	0.1uF 16V K	C738	HU-001060250	C CAPACITOR	0.1uF 16V K
C492	HU-001060250	C CAPACITOR	0.1uF 16V K	C743	HU-001071223	E CAPACITOR	100uF 16V
C493	HU-001060250	C CAPACITOR	0.1uF 16V K	C745	HU-001060286	C CAPACITOR	10uF 10V
C494	HU-001060250	C CAPACITOR	0.1uF 16V K	C746	HU-001060250	C CAPACITOR	0.1uF 16V K
C495	HU-001060250	C CAPACITOR	0.1uF 16V K	C747	HU-001071223	E CAPACITOR	100uF 16V
C496	HU-001060250	C CAPACITOR	0.1uF 16V K	C748	HU-001060250	C CAPACITOR	0.1uF 16V K
C497	HU-001060288	C CAPACITOR	1uF 25V	C751	HU-001060250	C CAPACITOR	0.1uF 16V K
C498	HU-001060286	C CAPACITOR	10uF 10V	C752	HU-001060286	C CAPACITOR	10uF 10V
C499	HU-001060286	C CAPACITOR	10uF 10V	C753	HU-001060250	C CAPACITOR	0.1uF 16V K
C500	HU-001060286	C CAPACITOR	10uF 10V	C754	HU-001060274	C CAPACITOR	3300pF 50V
C501	HU-001060286	C CAPACITOR	10uF 10V	C770	HU-001060250	C CAPACITOR	0.1uF 16V K
C502	HU-001060286	C CAPACITOR	10uF 10V	C772	HU-001071228	E CAPACITOR	470uF 16V
C503	HU-001060273	C CAPACITOR	24pF 50V	C773	HU-001060309	C CAPACITOR	10uF 16V K
C504	HU-001060273	C CAPACITOR	24pF 50V	C774	HU-001060250	C CAPACITOR	0.1uF 16V K
C505	HU-001063027	C CAPACITOR	2pF 50V	C775	HU-001060309	C CAPACITOR	10uF 16V K
C560	HU-001060286	C CAPACITOR	10uF 10V	C776	HU-001060105	C CAPACITOR	0.1uF 50V
C561	HU-001060236	C CAPACITOR	10uF 25V	C777	HU-001060309	C CAPACITOR	10uF 16V K
C562	HU-001060236	C CAPACITOR	10uF 25V	C778	HU-001060250	C CAPACITOR	0.1uF 16V K
C563	HU-001060250	C CAPACITOR	0.1uF 16V K	C779	HU-001060249	C CAPACITOR	100pF 50V J
C564	HU-001060236	C CAPACITOR	10uF 25V	C780	HU-001071225	E CAPACITOR	2.2uF 50V
C565	HU-001060236	C CAPACITOR	10uF 25V	C781	HU-001060171	C CAPACITOR	33pF 50V
C566	HU-001060250	C CAPACITOR	0.1uF 16V K	C782	HU-001060171	C CAPACITOR	33pF 50V
C567	HU-001060250	C CAPACITOR	0.1uF 16V K	C800	HU-001060250	C CAPACITOR	0.1uF 16V K
C580	HU-001060219	C CAPACITOR	1000pF 50V K	C801	HU-001060346	C CAPACITOR	1uF 16V K
C581	HU-001060288	C CAPACITOR	1uF 25V	C802	HU-001060286	C CAPACITOR	10uF 10V
C582	HU-001071082	E CAPACITOR	470uF 25V	C803	HU-001060250	C CAPACITOR	0.1uF 16V K
C583	HU-001060288	C CAPACITOR	1uF 25V	C804	HU-001060250	C CAPACITOR	0.1uF 16V K
C584	HU-001060288	C CAPACITOR	1uF 25V	C805	HU-001060250	C CAPACITOR	0.1uF 16V K
C585	HU-001071082	E CAPACITOR	470uF 25V	C807	HU-001060250	C CAPACITOR	0.1uF 16V K
C586	HU-001060288	C CAPACITOR	1uF 25V	C808	HU-001060250	C CAPACITOR	0.1uF 16V K
C587	HU-001060219	C CAPACITOR	1000pF 50V K	C809	HU-001063058	C CAPACITOR	18pF 50V J
C588	HU-001060199	C CAPACITOR	0.22uF 25V	C810	HU-001063058	C CAPACITOR	18pF 50V J
C589	HU-001060199	C CAPACITOR	0.22uF 25V	C840	HU-001060219	C CAPACITOR	1000pF 50V K
C590	HU-001060288	C CAPACITOR	1uF 25V	C841	HU-001060219	C CAPACITOR	1000pF 50V K
C591	HU-001060288	C CAPACITOR	1uF 25V	PR470	HU-002070025	NET RESISTOR	100Ωx4
C592	HU-001060224	C CAPACITOR	0.47uF 16V	PR471	HU-002070025	NET RESISTOR	100Ωx4
C593	HU-001060288	C CAPACITOR	1uF 25V	PR472	HU-002070025	NET RESISTOR	100Ωx4
C594	HU-001060219	C CAPACITOR	1000pF 50V K	PR473	HU-002070025	NET RESISTOR	100Ωx4
C595	HU-001060288	C CAPACITOR	1uF 25V	PR474	HU-002070025	NET RESISTOR	100Ωx4
C596	HU-001060199	C CAPACITOR	0.22uF 25V	PR475	HU-002070025	NET RESISTOR	100Ωx4
C597	HU-001060199	C CAPACITOR	0.22uF 25V	PR560	HU-002070039	NET RESISTOR	33Ωx4
C598	HU-001060199	C CAPACITOR	0.22uF 25V	R1	HU-002000453	MG RESISTOR	470Ω
C599	HU-001060199	C CAPACITOR	0.22uF 25V	R2	HU-002000453	MG RESISTOR	470Ω
C600	HU-001060224	C CAPACITOR	0.47uF 16V	R3	HU-002000453	MG RESISTOR	470Ω
C601	HU-001060199	C CAPACITOR	0.22uF 25V	R4	HU-002000453	MG RESISTOR	470Ω
C602	HU-001060199	C CAPACITOR	0.22uF 25V	R5	HU-002000557	MG RESISTOR	6.2kΩ
C603	HU-001060230	C CAPACITOR	0.022uF 16V K	R6	HU-002000436	MG RESISTOR	100kΩ
C604	HU-001060297	C CAPACITOR	0.01pF 50V K	R7	HU-002000417	MG RESISTOR	4.7kΩ
C605	HU-001060288	C CAPACITOR	1uF 25V	R61	HU-002000437	MG RESISTOR	10kΩ
C606	HU-001060230	C CAPACITOR	0.022uF 16V K	R62	HU-002000437	MG RESISTOR	10kΩ
C607	HU-001060250	C CAPACITOR	0.1uF 16V K	R63	HU-002000437	MG RESISTOR	10kΩ
C608	HU-001060288	C CAPACITOR	1uF 25V	R64	HU-002000437	MG RESISTOR	10kΩ
C610	HU-001071191	E CAPACITOR	47uF 16V	R66	HU-002000448	MG RESISTOR	33Ω
C611	HU-001071191	E CAPACITOR	47uF 16V	R68	HU-002000527	MG RESISTOR	100Ω
C612	HU-001060288	C CAPACITOR	1uF 25V	R70	HU-002000405	MG RESISTOR	1kΩ
C613	HU-001060288	C CAPACITOR	1uF 25V	R71	HU-002000405	MG RESISTOR	1kΩ
C615	HU-001060286	C CAPACITOR	10uF 10V	R72	HU-002000405	MG RESISTOR	1kΩ
C616	HU-001060288	C CAPACITOR	1uF 25V	R73	HU-002000405	MG RESISTOR	1kΩ
C630	HU-001060288	C CAPACITOR	1uF 25V	R75	HU-002000405	MG RESISTOR	1kΩ
C631	HU-001060250	C CAPACITOR	0.1uF 16V K	R76	HU-002000405	MG RESISTOR	1kΩ
C632	HU-001060236	C CAPACITOR	10uF 25V	R77	HU-002000405	MG RESISTOR	1kΩ
C633	HU-001060105	C CAPACITOR	0.1uF 50V	R80	HU-002000405	MG RESISTOR	1kΩ
C636	HU-001060236	C CAPACITOR	10uF 25V	R81	HU-002000405	MG RESISTOR	1kΩ
C637	HU-001060250	C CAPACITOR	0.1uF 16V K	R82	HU-002000405	MG RESISTOR	1kΩ
C660	HU-001060250	C CAPACITOR	0.1uF 16V K	R84	HU-002000417	MG RESISTOR	4.7kΩ
C661	HU-001060250	C CAPACITOR	0.1uF 16V K	R85	HU-002000417	MG RESISTOR	4.7kΩ
C662	HU-001060250	C CAPACITOR	0.1uF 16V K	R86	HU-002000417	MG RESISTOR	4.7kΩ
C663	HU-001060250	C CAPACITOR	0.1uF 16V K	R87	HU-002000417	MG RESISTOR	4.7kΩ
C664	HU-001060286	C CAPACITOR	10uF 10V	R88	HU-002000405	MG RESISTOR	1kΩ
C665	HU-001060250	C CAPACITOR	0.1uF 16V K	R89	HU-002000405	MG RESISTOR	1kΩ
C680	HU-001060250	C CAPACITOR	0.1uF 16V K	R90	HU-002000405	MG RESISTOR	1kΩ
C681	HU-001071236	E CAPACITOR	470uF 16V	R91	HU-002000417	MG RESISTOR	4.7kΩ
C682	HU-001060250	C CAPACITOR	0.1uF 16V K	R92	HU-002000417	MG RESISTOR	4.7kΩ
C683	HU-001071236	E CAPACITOR	470uF 16V	R93	HU-002000407	MG RESISTOR	2.2kΩ
C684	HU-001060318	C CAPACITOR	0.1uF 50V	R95	HU-002000433	MG RESISTOR	0Ω
C685	HU-001071236	E CAPACITOR	470uF 16V	R96	HU-002000436	MG RESISTOR	100kΩ
C686	HU-001060250	C CAPACITOR	0.1uF 16V K	R99	HU-002000527	MG RESISTOR	100Ω
C687	HU-001060286	C CAPACITOR	10uF 10V	R100	HU-002000433	MG RESISTOR	0Ω
C688	HU-001060250	C CAPACITOR	0.1uF 16V K	R101	HU-002000433	MG RESISTOR	0Ω
C724	HU-001071223	E CAPACITOR	100uF 16V				

△Ref No.	Part No.	Part Name	Description Local	△Ref No.	Part No.	Part Name	Description Local
R120	HU-002000405	MG RESISTOR	1kΩ	R582	HU-002001028	MG RESISTOR	12.1kΩ
R141	HU-002000437	MG RESISTOR	10kΩ	R583	HU-002001124	MG RESISTOR	47kΩ
R142	HU-002000433	MG RESISTOR	0Ω	R584	HU-002000454	MG RESISTOR	47kΩ
R143	HU-002000437	MG RESISTOR	10kΩ	R585	HU-002000443	MG RESISTOR	22Ω
R144	HU-002000405	MG RESISTOR	1kΩ	R587	HU-002000433	MG RESISTOR	0Ω
R147	HU-002000417	MG RESISTOR	4.7kΩ	R590	HU-002000443	MG RESISTOR	22Ω
R149	HU-002000405	MG RESISTOR	1kΩ	R591	HU-002000436	MG RESISTOR	100kΩ
R154	HU-002001165	MG RESISTOR	75Ω	R592	HU-002000417	MG RESISTOR	4.7kΩ
R155	HU-002001165	MG RESISTOR	75Ω	R594	HU-002000433	MG RESISTOR	0Ω
R156	HU-002001165	MG RESISTOR	75Ω	R595	HU-002000417	MG RESISTOR	4.7kΩ
R160	HU-002000433	MG RESISTOR	0Ω	R597	HU-002000910	MG RESISTOR	20kΩ
R161	HU-002000433	MG RESISTOR	0Ω	R598	HU-002001041	MG RESISTOR	16kΩ
R163	HU-002000433	MG RESISTOR	0Ω	R599	HU-002000437	MG RESISTOR	10kΩ
R164	HU-002000433	MG RESISTOR	0Ω	R600	HU-002000437	MG RESISTOR	10kΩ
R186	HU-002000433	MG RESISTOR	0Ω	R601	HU-002000910	MG RESISTOR	20kΩ
R187	HU-002000266	MG RESISTOR	470Ω	R602	HU-002001041	MG RESISTOR	16kΩ
R189	HU-002000266	MG RESISTOR	470Ω	R603	HU-002000437	MG RESISTOR	10kΩ
R200	HU-002000910	MG RESISTOR	20kΩ	R604	HU-002000454	MG RESISTOR	47kΩ
R201	HU-002000421	MG RESISTOR	75Ω	R631	HU-002000602	MG RESISTOR	2kΩ
R202	HU-002000421	MG RESISTOR	75Ω	R632	HU-002000417	MG RESISTOR	4.7kΩ
R203	HU-002000421	MG RESISTOR	75Ω	R634	HU-002000405	MG RESISTOR	1kΩ
R204	HU-002000421	MG RESISTOR	75Ω	R635	HU-002000499	MG RESISTOR	10kΩ
R205	HU-002000421	MG RESISTOR	75Ω	R637	HU-002000417	MG RESISTOR	4.7kΩ
R206	HU-002000421	MG RESISTOR	75Ω	R638	HU-002000433	MG RESISTOR	0Ω
R207	HU-002000421	MG RESISTOR	75Ω	R640	HU-002000417	MG RESISTOR	4.7kΩ
R208	HU-002000421	MG RESISTOR	75Ω	R641	HU-002000499	MG RESISTOR	10kΩ
R209	HU-002000910	MG RESISTOR	20kΩ	R644	HU-002000433	MG RESISTOR	0Ω
R212	HU-002000499	MG RESISTOR	10kΩ	R645	HU-002000417	MG RESISTOR	4.7kΩ
R213	HU-002000499	MG RESISTOR	10kΩ	R646	HU-002000417	MG RESISTOR	4.7kΩ
R216	HU-002000527	MG RESISTOR	100Ω	R647	HU-002001123	MG RESISTOR	470kΩ
R218	HU-002000421	MG RESISTOR	75Ω	R648	HU-002000433	MG RESISTOR	0Ω
R219	HU-002000436	MG RESISTOR	100kΩ	R660	HU-002000527	MG RESISTOR	100Ω
R220	HU-002000421	MG RESISTOR	75Ω	R661	HU-002000417	MG RESISTOR	4.7kΩ
R221	HU-002000527	MG RESISTOR	100Ω	R662	HU-002000527	MG RESISTOR	100Ω
R222	HU-002000527	MG RESISTOR	100Ω	R663	HU-002000417	MG RESISTOR	4.7kΩ
R230	HU-002000443	MG RESISTOR	22Ω	R664	HU-002000437	MG RESISTOR	10kΩ
R231	HU-002000421	MG RESISTOR	75Ω	R665	HU-002000417	MG RESISTOR	4.7kΩ
R232	HU-002000421	MG RESISTOR	75Ω	R666	HU-002000437	MG RESISTOR	10kΩ
R233	HU-002000421	MG RESISTOR	75Ω	R667	HU-002000417	MG RESISTOR	4.7kΩ
R234	HU-002000421	MG RESISTOR	75Ω	R668	HU-002000417	MG RESISTOR	4.7kΩ
R235	HU-002000421	MG RESISTOR	75Ω	R669	HU-002000437	MG RESISTOR	10kΩ
R238	HU-002000421	MG RESISTOR	75Ω	R680	HU-002000437	MG RESISTOR	10kΩ
R240	HU-002001060	MG RESISTOR	220kΩ	R681	HU-002000417	MG RESISTOR	4.7kΩ
R244	HU-002001060	MG RESISTOR	220kΩ	R682	HU-002000405	MG RESISTOR	1kΩ
R245	HU-002000527	MG RESISTOR	100Ω	R685	HU-002000437	MG RESISTOR	10kΩ
R246	HU-002000527	MG RESISTOR	100Ω	R691	HU-002000453	MG RESISTOR	470Ω
R313	HU-002000099	MG RESISTOR	4.7Ω	R693	HU-002000470	MG RESISTOR	300Ω
R314	HU-002000433	MG RESISTOR	0Ω	R695	HU-002000470	MG RESISTOR	300Ω
R330	HU-002000421	MG RESISTOR	75Ω	R697	HU-002000437	MG RESISTOR	10kΩ
R334	HU-002000433	MG RESISTOR	0Ω	R710	HU-002000421	MG RESISTOR	75Ω
R335	HU-002000433	MG RESISTOR	0Ω	R711	HU-002000421	MG RESISTOR	75Ω
R336	HU-002000433	MG RESISTOR	0Ω	R712	HU-002000421	MG RESISTOR	75Ω
R338	HU-002000421	MG RESISTOR	75Ω	R713	HU-002000421	MG RESISTOR	75Ω
R348	HU-002000421	MG RESISTOR	75Ω	R721	HU-002000547	MG RESISTOR	120Ω
R351	HU-002001060	MG RESISTOR	220kΩ	R722	HU-002001173	MG RESISTOR	9.1kΩ
R353	HU-002001060	MG RESISTOR	220kΩ	R723	HU-002001002	MG RESISTOR	56Ω
R355	HU-002000433	MG RESISTOR	0Ω	R724	HU-002001064	MG RESISTOR	24kΩ
R356	HU-002000433	MG RESISTOR	0Ω	R727	HU-002000547	MG RESISTOR	120Ω
R357	HU-002000433	MG RESISTOR	0Ω	R728	HU-002001002	MG RESISTOR	56Ω
R370	HU-002000405	MG RESISTOR	1kΩ	R729	HU-002000436	MG RESISTOR	100kΩ
R372	HU-002000437	MG RESISTOR	10kΩ	R730	HU-002000547	MG RESISTOR	120Ω
R373	HU-002000437	MG RESISTOR	10kΩ	R731	HU-002000529	MG RESISTOR	5.6kΩ
R376	HU-002000591	MG RESISTOR	18kΩ	R732	HU-002001002	MG RESISTOR	56Ω
R382	HU-002000454	MG RESISTOR	47kΩ	R770	HU-002000433	MG RESISTOR	0Ω
R383	HU-002000454	MG RESISTOR	47kΩ	R773	HU-002000417	MG RESISTOR	4.7kΩ
R388	HU-002000527	MG RESISTOR	100Ω	R776	HU-002000448	MG RESISTOR	33Ω
R389	HU-002000527	MG RESISTOR	100Ω	R777	HU-002000448	MG RESISTOR	33Ω
R400	HU-002000104	MG RESISTOR	22Ω	R779	HU-002000433	MG RESISTOR	0Ω
R473	HU-002000519	MG RESISTOR	10Ω	R780	HU-002000421	MG RESISTOR	75Ω
R474	HU-002000519	MG RESISTOR	10Ω	R781	HU-002000437	MG RESISTOR	10kΩ
R475	HU-002000519	MG RESISTOR	10Ω	R784	HU-002000527	MG RESISTOR	100Ω
R477	HU-002000519	MG RESISTOR	10Ω	R785	HU-002000435	MG RESISTOR	1.5kΩ
R484	HU-002000437	MG RESISTOR	10kΩ	R786	HU-002000909	MG RESISTOR	33kΩ
R485	HU-002000519	MG RESISTOR	10Ω	R787	HU-002000499	MG RESISTOR	10kΩ
R489	HU-002000519	MG RESISTOR	10Ω	R789	HU-002000435	MG RESISTOR	1.5kΩ
R491	HU-002001106	MG RESISTOR	390Ω	R791	HU-002000433	MG RESISTOR	0Ω
R494	HU-002000519	MG RESISTOR	10Ω	R792	HU-002000433	MG RESISTOR	0Ω
R496	HU-002000519	MG RESISTOR	10Ω	R801	HU-002000437	MG RESISTOR	10kΩ
R497	HU-002000433	MG RESISTOR	0Ω	R805	HU-002000417	MG RESISTOR	4.7kΩ
R499	HU-002000527	MG RESISTOR	100Ω	R806	HU-002000417	MG RESISTOR	4.7kΩ
R500	HU-002000448	MG RESISTOR	33Ω	R811	HU-002000527	MG RESISTOR	100Ω
R503	HU-002000448	MG RESISTOR	33Ω	R812	HU-002000437	MG RESISTOR	10kΩ
R504	HU-002000448	MG RESISTOR	33Ω	R814	HU-002000527	MG RESISTOR	100Ω
R560	HU-002000417	MG RESISTOR	4.7kΩ	R815	HU-002000592	MG RESISTOR	1.6kΩ
R561	HU-002000453	MG RESISTOR	470Ω	R816	HU-002000437	MG RESISTOR	10kΩ
R562	HU-002000453	MG RESISTOR	470Ω	R817	HU-002000592	MG RESISTOR	1.6kΩ
R563	HU-002000433	MG RESISTOR	0Ω	R820	HU-002000433	MG RESISTOR	0Ω
R580	HU-002001028	MG RESISTOR	12.1kΩ	R821	HU-002000433	MG RESISTOR	0Ω
R581	HU-002001124	MG RESISTOR	47kΩ	R822	HU-002000433	MG RESISTOR	0Ω

△Ref No.	Part No.	Part Name	Description	Local	△Ref No.	Part No.	Part Name	Description	Local
R827	HU-002000433	MG RESISTOR		0Ω	RV234	HU-002110004	VARISTOR	100pF 5.6V	
R840	HU-002000443	MG RESISTOR		22Ω	RV235	HU-002110008	VARISTOR		
R841	HU-002000421	MG RESISTOR		75Ω	RV236	HU-002110008	VARISTOR		
R842	HU-002000443	MG RESISTOR		22Ω	RV237	HU-002110008	VARISTOR		
R843	HU-002000421	MG RESISTOR		75Ω	RV238	HU-002110008	VARISTOR		
R844	HU-002000443	MG RESISTOR		22Ω	RV239	HU-002110008	VARISTOR		
R845	HU-002000421	MG RESISTOR		75Ω	RV330	HU-002110004	VARISTOR	100pF 5.6V	
R846	HU-002000405	MG RESISTOR		1kΩ	RV331	HU-002110004	VARISTOR	100pF 5.6V	
R847	HU-002001060	MG RESISTOR		220kΩ	RV332	HU-002110008	VARISTOR		
R848	HU-002000405	MG RESISTOR		1kΩ	RV333	HU-002110008	VARISTOR		
R849	HU-002001060	MG RESISTOR		220kΩ	RV370	HU-002110008	VARISTOR		
RN121	HU-002070044	NET RESISTOR		33Ωx2	RV377	HU-002110008	VARISTOR		
RN122	HU-002070044	NET RESISTOR		33Ωx2	RV660	HU-002110008	VARISTOR		
RN123	HU-002070044	NET RESISTOR		33Ωx2	RV661	HU-002110008	VARISTOR		
RN124	HU-002070044	NET RESISTOR		33Ωx2	RV840	HU-002110004	VARISTOR	100pF 5.6V	
RN125	HU-002070044	NET RESISTOR		33Ωx2	RV841	HU-002110004	VARISTOR	100pF 5.6V	
RN126	HU-002070044	NET RESISTOR		33Ωx2	RV842	HU-002110004	VARISTOR	100pF 5.6V	
RN127	HU-002070044	NET RESISTOR		33Ωx2	RV843	HU-002110008	VARISTOR		
RN128	HU-002070044	NET RESISTOR		33Ωx2	RV844	HU-002110008	VARISTOR		
RN129	HU-002070044	NET RESISTOR		33Ωx2	Y60	HU-005000900	CRYSTAL	20.25MHz	
RN130	HU-002070044	NET RESISTOR		33Ωx2	Y470	HU-005000890	CRYSTAL	14.31818MHz	
					Y800	HU-005000940	CRYSTAL	16MHz	
L2	HU-011030011	FERRITE BEAD			MPEG P.W. BOARD ASS'Y (HU-71200005)				
L3	HU-011030011	FERRITE BEAD			△Ref No.	Part No.	Part Name	Description	Local
L4	HU-011030011	FERRITE BEAD							
L5	HU-011030011	FERRITE BEAD							
L6	HU-011030011	FERRITE BEAD							
L7	HU-011030011	FERRITE BEAD							
L8	HU-011030011	FERRITE BEAD							
L9	HU-011030011	FERRITE BEAD							
L10	HU-011030011	FERRITE BEAD							
L11	HU-011030011	FERRITE BEAD							
L12	HU-011030011	FERRITE BEAD			U1	HU-000030020	IC	ASIC	
L13	HU-011030011	FERRITE BEAD			U2	HU-000120027	IC	CMOS 1-INPUT INVERTER	
L14	HU-011030025	FERRITE BEAD			U80	HU-000120091	IC	CMOS	
L15	HU-011030300	FERRITE BEAD			U82	HU-000120091	IC	CMOS	
L16	HU-011030300	FERRITE BEAD			U130	HU-014040930	TUNER		
L180	HU-011030011	FERRITE BEAD			U131	HU-000300001	IC	DUAL COMPARATOR	
L200	HU-011030011	FERRITE BEAD			U180	HU-000270090	IC	DEMODULATOR	
L201	HU-011030011	FERRITE BEAD			U380	HU-000100410	IC	DECODER	
L230	HU-011000060	INDUCTOR	1.8uH		U430	HU-000990052	IC	VOLTAGE DETECTOR	
L234	HU-011000060	INDUCTOR	1.8uH		U432	HU-000990140	IC	VCXO 27MHz	
L235	HU-011000060	INDUCTOR	1.8uH		U530	HU-000040710	IC	SDRAM	
L236	HU-011000060	INDUCTOR	1.8uH		U531	HU-000040930	IC	SDRAM	
L331	HU-011030006	BEAD			U580	HU-000060016	IC	OP AMP	
L332	HU-011030006	BEAD			U750	HU-000140450	IC	AUDIO DAC	
L379	HU-011000056	INDUCTOR	1.8uH		U800	HU-000090760	IC	REGULATOR	
L381	HU-011000056	INDUCTOR	1.8uH		U801	HU-000091100	IC	REGULATOR	
L382	HU-011030020	FERRITE BEAD			U802	HU-000091100	IC	REGULATOR	
L470	HU-011030011	FERRITE BEAD			U803	HU-000091070	IC	REGULATOR	
L471	HU-011030011	FERRITE BEAD			U804	HU-000091100	IC	REGULATOR	
L472	HU-011030011	FERRITE BEAD							
L473	HU-011030011	FERRITE BEAD			Q40	HU-004020004	FET		
L474	HU-011030011	FERRITE BEAD			Q41	HU-004001001	TRANSISTOR		
L475	HU-011030320	FERRITE BEAD			Q80	HU-004001001	TRANSISTOR		
L560	HU-011030011	FERRITE BEAD			Q430	HU-004001001	TRANSISTOR		
L580	HU-011000056	INDUCTOR	1.8uH		Q431	HU-004001001	TRANSISTOR		
L582	HU-011002180	INDUCTOR	15uH		Q432	HU-004001001	TRANSISTOR		
L583	HU-011002180	INDUCTOR	15uH		Q433	HU-004001001	TRANSISTOR		
L586	HU-011002180	INDUCTOR	15uH		Q434	HU-004001001	TRANSISTOR		
L587	HU-011002180	INDUCTOR	15uH		Q700	HU-004001001	TRANSISTOR		
L589	HU-011000056	INDUCTOR	1.8uH						
L631	HU-011030300	FERRITE BEAD			D800	HU-003000004	SI DIODE		
L681	HU-011030240	FERRITE BEAD							
L682	HU-011030240	FERRITE BEAD			C1	HU-001060250	C CAPACITOR	0.1uF 16V K	
L683	HU-011030240	FERRITE BEAD			C2	HU-001060250	C CAPACITOR	0.1uF 16V K	
L684	HU-011030240	FERRITE BEAD			C3	HU-001060250	C CAPACITOR	0.1uF 16V K	
L687	HU-011030011	FERRITE BEAD			C4	HU-001060250	C CAPACITOR	0.1uF 16V K	
L721	HU-0110000003	INDUCTOR	100mH		C5	HU-001060250	C CAPACITOR	0.1uF 16V K	
L723	HU-011030025	FERRITE BEAD			C40	HU-001060282	C CAPACITOR	6.8nF 50V K	
L724	HU-011030025	FERRITE BEAD			C41	HU-001060250	C CAPACITOR	0.1uF 16V K	
L840	HU-011000060	INDUCTOR	1.8uH		C42	HU-001060250	C CAPACITOR	0.1uF 16V K	
L841	HU-011000060	INDUCTOR	1.8uH		C43	HU-001060250	C CAPACITOR	0.1uF 16V K	
					C44	HU-001060267	C CAPACITOR	68pF 50V J	
JP230	HU-0090400001	SCART CONNECTOR	EXT-1		C45	HU-001060250	C CAPACITOR	0.1uF 16V K	
JP292	HU-009090120	OPT CONNECTOR	DIGITAL AUDIO OUT		C46	HU-001060250	C CAPACITOR	0.1uF 16V K	
JP330	HU-0090100001	RCA CONNECTOR	EXT-3 Y/Pb/Pr		C80	HU-001060250	C CAPACITOR	0.1uF 16V K	
JP331	HU-009130050	PIN JACK	EXT-3 L/R		C81	HU-001060250	C CAPACITOR	0.1uF 16V K	
JP370	HU-009100750	HDMI CONNECTOR	HDMI		C82	HU-001060250	C CAPACITOR	0.1uF 16V K	
JP580	HU-009010076	HEADPHONE JACK	HEADPHONE		C130	HU-001071224	E CAPACITOR	220uF 16V	
JP660	HU-009130030	JACK	SERVICE		C131	HU-001060250	C CAPACITOR	0.1uF 16V K	
JP840	HU-009010036	S JACK	EXT-4 S-VIDEO		C132	HU-001060250	C CAPACITOR	0.1uF 16V K	
JP841	HU-009010940	RCA JACK	EXT-4 VIDEO/ AUDIO(L/R)		C133	HU-001060250	C CAPACITOR	0.1uF 16V K	
RV230	HU-002110004	VARISTOR	100pF 5.6V		C134	HU-001060219	C CAPACITOR	1000pF 50V K	
RV231	HU-002110004	VARISTOR	100pF 5.6V		C135	HU-001071224	E CAPACITOR	220uF 16V	
RV232	HU-002110004	VARISTOR	100pF 5.6V		C136	HU-001060250	C CAPACITOR	0.1uF 16V K	
RV233	HU-002110004	VARISTOR	100pF 5.6V		C137	HU-001060219	C CAPACITOR	1000pF 50V K	
					C138	HU-001060250	C CAPACITOR	0.1uF 16V K	
					C141	HU-001071224	E CAPACITOR	220uF 16V	
					C142	HU-001060250	C CAPACITOR	0.1uF 16V K	

△Ref No.	Part No.	Part Name	Description Local	△Ref No.	Part No.	Part Name	Description Local
C143	HU-001060219	C CAPACITOR	1000pF 50V K	C803	HU-001071223	E CAPACITOR	100uF 16V
C180	HU-001060250	C CAPACITOR	0.1uF 16V K	C804	HU-001071223	E CAPACITOR	100uF 16V
C181	HU-001060250	C CAPACITOR	0.1uF 16V K	C806	HU-001060286	C CAPACITOR	10uF 10V
C183	HU-001060265	C CAPACITOR	1uF 16V K	C807	HU-001060286	C CAPACITOR	10uF 10V
C184	HU-001060265	C CAPACITOR	1uF 16V K	C809	HU-001071223	E CAPACITOR	100uF 16V
C186	HU-001060258	C CAPACITOR	30pF 50V J	C810	HU-001060286	C CAPACITOR	10uF 10V
C187	HU-001060258	C CAPACITOR	30pF 50V J	C811	HU-001060286	C CAPACITOR	10uF 10V
C188	HU-001060250	C CAPACITOR	0.1uF 16V K	C812	HU-001071223	E CAPACITOR	100uF 16V
C189	HU-001060250	C CAPACITOR	0.1uF 16V K	C813	HU-001060250	C CAPACITOR	0.1uF 16V K
C190	HU-001060250	C CAPACITOR	0.1uF 16V K	C814	HU-001060250	C CAPACITOR	0.1uF 16V K
C191	HU-001060250	C CAPACITOR	0.1uF 16V K	C815	HU-001060249	C CAPACITOR	100pF 50V J
C192	HU-001060250	C CAPACITOR	0.1uF 16V K	C816	HU-001071223	E CAPACITOR	100uF 16V
C193	HU-001060250	C CAPACITOR	0.1uF 16V K	C817	HU-001060250	C CAPACITOR	0.1uF 16V K
C194	HU-001060250	C CAPACITOR	0.1uF 16V K	C819	HU-001071223	E CAPACITOR	100uF 16V
C195	HU-001060250	C CAPACITOR	0.1uF 16V K	C820	HU-001060286	C CAPACITOR	10uF 10V
C330	HU-001060286	C CAPACITOR	10uF 10V	C821	HU-001060286	C CAPACITOR	10uF 10V
C331	HU-001060250	C CAPACITOR	0.1uF 16V K	C822	HU-001071228	E CAPACITOR	470uF 16V
C332	HU-001060250	C CAPACITOR	0.1uF 16V K	C823	HU-001060250	C CAPACITOR	0.1uF 16V K
C333	HU-001060250	C CAPACITOR	0.1uF 16V K	C824	HU-001060250	C CAPACITOR	0.1uF 16V K
C334	HU-001060250	C CAPACITOR	0.1uF 16V K	C900	HU-001060250	C CAPACITOR	0.1uF 16V K
C335	HU-001060250	C CAPACITOR	0.1uF 16V K	C901	HU-001060250	C CAPACITOR	0.1uF 16V K
C336	HU-001060250	C CAPACITOR	0.1uF 16V K	C902	HU-001060250	C CAPACITOR	0.1uF 16V K
C337	HU-001060250	C CAPACITOR	0.1uF 16V K	C903	HU-001071194	E CAPACITOR	100uF 25V
C338	HU-001060286	C CAPACITOR	10uF 10V	C904	HU-001071194	E CAPACITOR	100uF 25V
C339	HU-001060286	C CAPACITOR	10uF 10V	C905	HU-001060250	C CAPACITOR	0.1uF 16V K
C340	HU-001060286	C CAPACITOR	10uF 10V	C906	HU-001071194	E CAPACITOR	100uF 25V
C341	HU-001060250	C CAPACITOR	0.1uF 16V K				
C342	HU-001060250	C CAPACITOR	0.1uF 16V K	PR2	HU-002070006	NET RESISTOR	47Ωx4
C343	HU-001060250	C CAPACITOR	0.1uF 16V K	PR3	HU-002070006	NET RESISTOR	47Ωx4
C344	HU-001060250	C CAPACITOR	0.1uF 16V K	PR5	HU-002070006	NET RESISTOR	47Ωx4
C345	HU-001060250	C CAPACITOR	0.1uF 16V K	PR6	HU-002070006	NET RESISTOR	47Ωx4
C346	HU-001060250	C CAPACITOR	0.1uF 16V K	PR40	HU-002070003	NET RESISTOR	10kΩx4
C347	HU-001060250	C CAPACITOR	0.1uF 16V K	PR41	HU-002070003	NET RESISTOR	10kΩx4
C380	HU-001060250	C CAPACITOR	0.1uF 16V K	PR180	HU-002070050	NET RESISTOR	47Ωx4
C381	HU-001060286	C CAPACITOR	10uF 10V	PR181	HU-002070050	NET RESISTOR	47Ωx4
C382	HU-001060219	C CAPACITOR	1000pF 50V K	PR182	HU-002070050	NET RESISTOR	47Ωx4
C383	HU-001060250	C CAPACITOR	0.1uF 16V K	PR380	HU-002070039	NET RESISTOR	33Ωx4
C384	HU-001060286	C CAPACITOR	10uF 10V	PR381	HU-002070039	NET RESISTOR	33Ωx4
C385	HU-001060219	C CAPACITOR	1000pF 50V K	PR382	HU-002070039	NET RESISTOR	33Ωx4
C386	HU-001060250	C CAPACITOR	0.1uF 16V K	PR383	HU-002070039	NET RESISTOR	33Ωx4
C387	HU-001060286	C CAPACITOR	10uF 10V	PR384	HU-002070039	NET RESISTOR	33Ωx4
C388	HU-001060219	C CAPACITOR	1000pF 50V K	PR385	HU-002070039	NET RESISTOR	33Ωx4
C389	HU-001060250	C CAPACITOR	0.1uF 16V K	PR386	HU-002070039	NET RESISTOR	33Ωx4
C390	HU-001060286	C CAPACITOR	10uF 10V	PR387	HU-002070039	NET RESISTOR	33Ωx4
C430	HU-001060250	C CAPACITOR	0.1uF 16V K	PR750	HU-002070014	NET RESISTOR	33Ωx4
C431	HU-001071221	E CAPACITOR	4.7uF 35V	R1	HU-002000090	COIL	
C432	HU-001060150	C CAPACITOR	1uF 25V	R3	HU-0020000520	MG RESISTOR	47Ω
C433	HU-001060250	C CAPACITOR	0.1uF 16V K	R4	HU-0020000520	MG RESISTOR	47Ω
C434	HU-001060250	C CAPACITOR	0.1uF 16V K	R6	HU-0020000520	MG RESISTOR	47Ω
C435	HU-001060219	C CAPACITOR	1000pF 50V K	R9	HU-0020000520	MG RESISTOR	47Ω
C436	HU-001060286	C CAPACITOR	10uF 10V	R10	HU-0020000520	MG RESISTOR	47Ω
C437	HU-001063090	C CAPACITOR	3.3pF 50V	R11	HU-0020000520	MG RESISTOR	47Ω
C438	HU-001060108	C CAPACITOR	0.01uF 50V	R12	HU-0020000437	MG RESISTOR	10kΩ
C480	HU-001060250	C CAPACITOR	0.1uF 16V K	R13	HU-0020000417	MG RESISTOR	4.7kΩ
C481	HU-001060250	C CAPACITOR	0.1uF 16V K	R16	HU-0020000417	MG RESISTOR	4.7kΩ
C482	HU-001060286	C CAPACITOR	10uF 10V	R18	HU-002000090	COIL	Ω
C483	HU-001060250	C CAPACITOR	0.1uF 16V K	R40	HU-002000087	MG RESISTOR	4.7kΩ
C484	HU-001060250	C CAPACITOR	0.1uF 16V K	R41	HU-002000096	MG RESISTOR	10kΩ
C530	HU-001060250	C CAPACITOR	0.1uF 16V K	R42	HU-0020000417	MG RESISTOR	4.7kΩ
C531	HU-001060250	C CAPACITOR	0.1uF 16V K	R43	HU-0020000538	MG RESISTOR	120Ω
C532	HU-001060250	C CAPACITOR	0.1uF 16V K	R45	HU-0020000417	MG RESISTOR	4.7kΩ
C533	HU-001060250	C CAPACITOR	0.1uF 16V K	R46	HU-002000096	MG RESISTOR	10kΩ
C534	HU-001060250	C CAPACITOR	0.1uF 16V K	R47	HU-0020000437	MG RESISTOR	10kΩ
C535	HU-001060286	C CAPACITOR	10uF 10V	R48	HU-0020000437	MG RESISTOR	10kΩ
C536	HU-001060250	C CAPACITOR	0.1uF 16V K	R49	HU-0020000437	MG RESISTOR	10kΩ
C537	HU-001060250	C CAPACITOR	0.1uF 16V K	R50	HU-0020000417	MG RESISTOR	4.7kΩ
C538	HU-001060250	C CAPACITOR	0.1uF 16V K	R51	HU-0020000417	MG RESISTOR	4.7kΩ
C539	HU-001060250	C CAPACITOR	0.1uF 16V K	R52	HU-0020000437	MG RESISTOR	10kΩ
C540	HU-001060250	C CAPACITOR	0.1uF 16V K	R53	HU-0020000437	MG RESISTOR	10kΩ
C541	HU-001060286	C CAPACITOR	10uF 10V	R54	HU-0020000437	MG RESISTOR	10kΩ
C580	HU-001060250	C CAPACITOR	0.1uF 16V K	R55	HU-0020000437	MG RESISTOR	10kΩ
C581	HU-001071223	E CAPACITOR	100uF 16V	R56	HU-0020000437	MG RESISTOR	10kΩ
C582	HU-001060250	C CAPACITOR	0.1uF 16V K	R57	HU-0020000437	MG RESISTOR	10kΩ
C583	HU-001060250	C CAPACITOR	0.1uF 16V K	R58	HU-0020000417	MG RESISTOR	4.7kΩ
C585	HU-001060221	C CAPACITOR	22pF 50V J	R80	HU-0020000527	MG RESISTOR	100Ω
C587	HU-001060221	C CAPACITOR	22pF 50V J	R82	HU-0020000527	MG RESISTOR	100Ω
C589	HU-001060221	C CAPACITOR	22pF 50V J	R84	HU-0020000527	MG RESISTOR	100Ω
C591	HU-001060221	C CAPACITOR	22pF 50V J	R86	HU-0020000527	MG RESISTOR	100Ω
C700	HU-001060250	C CAPACITOR	0.1uF 16V K	R88	HU-0020000527	MG RESISTOR	100Ω
C701	HU-001071223	E CAPACITOR	100uF 16V	R90	HU-0020000527	MG RESISTOR	100Ω
C750	HU-001071192	E CAPACITOR	10uF 25V	R92	HU-0020000527	MG RESISTOR	100Ω
C751	HU-001071192	E CAPACITOR	10uF 25V	R94	HU-0020000527	MG RESISTOR	100Ω
C752	HU-001060286	C CAPACITOR	10uF 10V	R99	HU-0020000527	MG RESISTOR	100Ω
C753	HU-001060250	C CAPACITOR	0.1uF 16V K	R100	HU-0020000527	MG RESISTOR	100Ω
C754	HU-001071192	E CAPACITOR	10uF 25V	R101	HU-0020000527	MG RESISTOR	100Ω
C755	HU-001071192	E CAPACITOR	10uF 25V	R102	HU-0020000437	MG RESISTOR	10kΩ
C756	HU-001060250	C CAPACITOR	0.1uF 16V K	R103	HU-0020000417	MG RESISTOR	4.7kΩ
C757	HU-001060250	C CAPACITOR	0.1uF 16V K	R104	HU-0020000437	MG RESISTOR	10kΩ
C802	HU-001060286	C CAPACITOR	10uF 10V	R130	HU-0020000436	MG RESISTOR	100kΩ

△Ref No.	Part No.	Part Name	Description	Local	△Ref No.	Part No.	Part Name	Description	Local
R132	HU-002000417	MG RESISTOR	4.7kΩ		R911	HU-002000526	MG RESISTOR	3.3kΩ	
R133	HU-002000436	MG RESISTOR	100kΩ		L1	HU-011030015	FERRITE BEAD		
R181	HU-002000454	MG RESISTOR	47kΩ		L40	HU-011030015	FERRITE BEAD		
R182	HU-002000405	MG RESISTOR	1kΩ		L130	HU-011030011	FERRITE BEAD		
R184	HU-002000437	MG RESISTOR	10kΩ		L131	HU-011030011	FERRITE BEAD		
R187	HU-002001050	MG RESISTOR	2.7kΩ		L132	HU-011030011	FERRITE BEAD		
R188	HU-002001050	MG RESISTOR	2.7kΩ		L180	HU-011030020	FERRITE BEAD		
R380	HU-002000437	MG RESISTOR	10kΩ		L181	HU-011030020	FERRITE BEAD		
R381	HU-002000437	MG RESISTOR	10kΩ		L182	HU-011030020	FERRITE BEAD		
R382	HU-002000437	MG RESISTOR	10kΩ		L183	HU-011030020	FERRITE BEAD		
R383	HU-002000437	MG RESISTOR	10kΩ		L184	HU-011030020	FERRITE BEAD		
R384	HU-002001137	MG RESISTOR	51Ω		L380	HU-011030011	FERRITE BEAD		
R386	HU-002001137	MG RESISTOR	51Ω		L381	HU-002000090	COIL		
R388	HU-002000417	MG RESISTOR	4.7kΩ		L382	HU-002000090	COIL		
R389	HU-002000417	MG RESISTOR	4.7kΩ		L383	HU-011030011	FERRITE BEAD		
R390	HU-002000520	MG RESISTOR	47Ω		L385	HU-011030011	FERRITE BEAD		
R391	HU-002000417	MG RESISTOR	4.7kΩ		L386	HU-011030011	FERRITE BEAD		
R392	HU-002000433	MG RESISTOR	0Ω		L390	HU-011030011	FERRITE BEAD		
R394	HU-002000910	MG RESISTOR	20kΩ		L391	HU-011030011	FERRITE BEAD		
R395	HU-002000910	MG RESISTOR	20kΩ		L392	HU-011030011	FERRITE BEAD		
R396	HU-002000417	MG RESISTOR	4.7kΩ		L393	HU-011030011	FERRITE BEAD		
R397	HU-002000417	MG RESISTOR	4.7kΩ		L430	HU-002000090	COIL		
R398	HU-002000443	MG RESISTOR	22Ω		L431	HU-002000090	COIL		
R430	HU-002000437	MG RESISTOR	10kΩ		L530	HU-011030011	FERRITE BEAD		
R431	HU-002000417	MG RESISTOR	4.7kΩ		L531	HU-011030011	FERRITE BEAD		
R432	HU-002000417	MG RESISTOR	4.7kΩ		L580	HU-011030011	FERRITE BEAD		
R433	HU-002000405	MG RESISTOR	1kΩ		L750	HU-011030011	FERRITE BEAD		
R434	HU-002000552	MG RESISTOR	22kΩ		L805	HU-011030020	FERRITE BEAD		
R436	HU-002000417	MG RESISTOR	4.7kΩ		L900	HU-011030011	FERRITE BEAD		
R437	HU-002000417	MG RESISTOR	4.7kΩ		L901	HU-011030025	FERRITE BEAD		
R438	HU-002000437	MG RESISTOR	10kΩ		L902	HU-011030025	FERRITE BEAD		
R439	HU-002001138	MG RESISTOR	560Ω		JP40	HU-009030060	PCMCIA CONNECTOR	CI SLOT	
R441	HU-002000437	MG RESISTOR	10kΩ		JP900	HU-009060660	CONNECTOR		
R442	HU-002000417	MG RESISTOR	4.7kΩ		Y180	HU-005000940	CRYSTAL	16MHz	
R443	HU-002000527	MG RESISTOR	100Ω		Y430	HU-005001080	CRYSTAL	27MHz	
R445	HU-002000522	MG RESISTOR	680Ω						
R446	HU-002000527	MG RESISTOR	100Ω						
R447	HU-002000522	MG RESISTOR	680Ω						
R448	HU-002000096	MG RESISTOR	10kΩ						
R449	HU-002000437	MG RESISTOR	10kΩ						
R480	HU-002000433	MG RESISTOR	0Ω						
R530	HU-002000433	MG RESISTOR	0Ω						
R580	HU-002000908	MG RESISTOR	330Ω						
R581	HU-002000421	MG RESISTOR	75Ω						
R582	HU-002000266	MG RESISTOR	470Ω						
R584	HU-002000266	MG RESISTOR	470Ω						
R585	HU-002000421	MG RESISTOR	75Ω						
R586	HU-002000266	MG RESISTOR	470Ω						
R587	HU-002000908	MG RESISTOR	330Ω						
R589	HU-002000266	MG RESISTOR	470Ω						
R590	HU-002000421	MG RESISTOR	75Ω						
R591	HU-002000266	MG RESISTOR	470Ω						
R592	HU-002000908	MG RESISTOR	330Ω						
R594	HU-002000266	MG RESISTOR	470Ω						
R595	HU-002000421	MG RESISTOR	75Ω						
R596	HU-002000266	MG RESISTOR	470Ω						
R597	HU-002000908	MG RESISTOR	330Ω						
R599	HU-002000266	MG RESISTOR	470Ω						
R600	HU-002000908	MG RESISTOR	330Ω						
R601	HU-002000908	MG RESISTOR	330Ω						
R630	HU-002000096	MG RESISTOR	10kΩ						
R631	HU-002000090	COIL							
R700	HU-002000407	MG RESISTOR	2.2KΩ						
R701	HU-002000437	MG RESISTOR	10kΩ						
R702	HU-002000437	MG RESISTOR	10kΩ						
R703	HU-002000437	MG RESISTOR	10kΩ						
R704	HU-002000407	MG RESISTOR	2.2KΩ						
R705	HU-002000437	MG RESISTOR	10kΩ						
R750	HU-002000417	MG RESISTOR	4.7kΩ						
R751	HU-002000453	MG RESISTOR	470Ω						
R752	HU-002000453	MG RESISTOR	470Ω						
R753	HU-002000433	MG RESISTOR	0Ω						
R800	HU-002000547	MG RESISTOR	120Ω						
R801	HU-002000509	MG RESISTOR	200Ω						
R802	HU-002000548	MG RESISTOR	1.2kΩ						
R803	HU-002001152	MG RESISTOR	680Ω						
R804	HU-002000405	MG RESISTOR	1kΩ						
R806	HU-002000547	MG RESISTOR	120Ω						
R807	HU-002000509	MG RESISTOR	200Ω						
R900	HU-002000433	MG RESISTOR	0Ω						
R901	HU-002000433	MG RESISTOR	0Ω						
R902	HU-002000433	MG RESISTOR	0Ω						
R903	HU-002000433	MG RESISTOR	0Ω						
R904	HU-002000433	MG RESISTOR	0Ω						
R905	HU-002000433	MG RESISTOR	0Ω						
R906	HU-002000433	MG RESISTOR	0Ω						
R907	HU-002000433	MG RESISTOR	0Ω						
R908	HU-002000433	MG RESISTOR	0Ω						
R909	HU-002000433	MG RESISTOR	0Ω						

IR PWB P.W. BOARD ASS'Y (HU-72200001)

△Ref No.	Part No.	Part Name	Description	Local
U1	HU-006050110	REMOCON SENSOR		
D1	HU-006020000	LED		
C1	HU-001060288	C CAPACITOR	1uF 25V	
C2	HU-001060288	C CAPACITOR	1uF 25V	
C3	HU-0010900002	TA CAPACITOR	220uF 10V	
R2	HU-002000390	MG RESISTOR	20Ω	
JP1	HU-009060118	CONNECTOR		
RV1	HU-002110004	VARISTOR	100pF 5.6V	
RV2	HU-002110004	VARISTOR	100pF 5.6V	

KEY P.W. BOARD ASS'Y (HU-72200002)

△Ref No.	Part No.	Part Name	Description	Local
R5	HU-002000500	MG RESISTOR	27Ω	
R6	HU-002000500	MG RESISTOR	27Ω	
R7	HU-002000453	MG RESISTOR	470Ω	
R8	HU-002000453	MG RESISTOR	470Ω	
R9	HU-002000405	MG RESISTOR	1kΩ	
R11	HU-002001050	MG RESISTOR	2.7kΩ	
R12	HU-002000405	MG RESISTOR	1kΩ	
R13	HU-002001050	MG RESISTOR	2.7kΩ	
RV3	HU-002110004	VARISTOR	100pF 5.6V	
RV4	HU-002110004	VARISTOR	100pF 5.6V	
S1	HU-008020050	TACT SW	TV/AV	
S2	HU-008020050	TACT SW	PROGRAM +	
S3	HU-008020050	TACT SW	MENU/OK	
S4	HU-008020050	TACT SW	PROGRAM -	
S5	HU-008020050	TACT SW	VOL -	
S6	HU-008020050	TACT SW	POWER ON/OFF	
S7	HU-008020050	TACT SW	VOL +	

PRINTED WIRING BOARD PARTS LIST [LT-19DB9BD]

MAIN P.W. BOARD ASS'Y (HU-71200008)

REFER TO PARTS LIST IN PAGE 3-4 FOR THIS P.W. BOARD.

MPEG P.W. BOARD ASS'Y (HU-71200006)

△Ref No.	Part No.	Part Name	Description	Local
U1	HU-000030020	IC	ASIC	
U2	HU-000120027	IC	CMOS 1-INPUT INVERTER	
U80	HU-000120091	IC	CMOS	
U81	HU-000120091	IC	CMOS	
U82	HU-000120091	IC	CMOS	
U130	HU-014040930	TUNER		
U131	HU-000300001	IC	DUAL COMPARATOR	
U180	HU-000270090	IC	DEMOMULATOR	
U230	HU-014040700	TUNER	SATELLITE	
U280	HU-000180006	IC	LNB POWER	
U281	HU-004020015	MOS FET		
U380	HU-000100410	IC	DECODER	
U430	HU-000990052	IC	VOLTAGE DETECTOR	
U432	HU-000990140	IC	VCXO 27MHz	
U530	HU-000040710	IC	SDRAM	
U531	HU-000040930	IC	SDRAM	
U580	HU-000060016	IC	OP AMP	
U750	HU-000140450	IC	AUDIO DAC	
U800	HU-000090760	IC	REGULATOR	
U801	HU-000091100	IC	REGULATOR	
U802	HU-000091100	IC	REGULATOR	
U803	HU-000091070	IC	REGULATOR	
U804	HU-000091100	IC	REGULATOR	
Q40	HU-004020004	FET		
Q41	HU-004001001	TRANSISTOR		
Q80	HU-004001001	TRANSISTOR		
Q430	HU-004001001	TRANSISTOR		
Q431	HU-004001001	TRANSISTOR		
Q432	HU-004001001	TRANSISTOR		
Q433	HU-004001001	TRANSISTOR		
Q434	HU-004001001	TRANSISTOR		
Q700	HU-004001001	TRANSISTOR		
D230	HU-003050230	DIODE		
D281	HU-0030000001	DIODE		
D800	HU-003000004	SI DIODE		
C1	HU-001060250	C CAPACITOR	0.1uF 16V K	
C2	HU-001060250	C CAPACITOR	0.1uF 16V K	
C3	HU-001060250	C CAPACITOR	0.1uF 16V K	
C4	HU-001060250	C CAPACITOR	0.1uF 16V K	
C5	HU-001060250	C CAPACITOR	0.1uF 16V K	
C40	HU-001060282	C CAPACITOR	6.8nF 50V K	
C41	HU-001060250	C CAPACITOR	0.1uF 16V K	
C42	HU-001060250	C CAPACITOR	0.1uF 16V K	
C43	HU-001060250	C CAPACITOR	0.1uF 16V K	
C44	HU-001060267	C CAPACITOR	68pF 50V J	
C45	HU-001060250	C CAPACITOR	0.1uF 16V K	
C46	HU-001060250	C CAPACITOR	0.1uF 16V K	
C80	HU-001060250	C CAPACITOR	0.1uF 16V K	
C81	HU-001060250	C CAPACITOR	0.1uF 16V K	
C82	HU-001060250	C CAPACITOR	0.1uF 16V K	
C130	HU-001071224	E CAPACITOR	220uF 16V	
C131	HU-001060250	C CAPACITOR	0.1uF 16V K	
C132	HU-001060250	C CAPACITOR	0.1uF 16V K	
C133	HU-001060250	C CAPACITOR	0.1uF 16V K	
C134	HU-001060219	C CAPACITOR	1000pF 50V K	
C135	HU-001071224	E CAPACITOR	220uF 16V	
C136	HU-001060250	C CAPACITOR	0.1uF 16V K	
C137	HU-001060219	C CAPACITOR	1000pF 50V K	
C138	HU-001060250	C CAPACITOR	0.1uF 16V K	
C141	HU-001071224	E CAPACITOR	220uF 16V	
C142	HU-001060250	C CAPACITOR	0.1uF 16V K	
C143	HU-001060219	C CAPACITOR	1000pF 50V K	
C180	HU-001060250	C CAPACITOR	0.1uF 16V K	
C181	HU-001060250	C CAPACITOR	0.1uF 16V K	
C183	HU-001060265	C CAPACITOR	1uF 16V K	
C184	HU-001060265	C CAPACITOR	1uF 16V K	
C186	HU-001060258	C CAPACITOR	30pF 50V J	
C187	HU-001060258	C CAPACITOR	30pF 50V J	
C188	HU-001060250	C CAPACITOR	0.1uF 16V K	
C189	HU-001060250	C CAPACITOR	0.1uF 16V K	
C190	HU-001060250	C CAPACITOR	0.1uF 16V K	
C191	HU-001060250	C CAPACITOR	0.1uF 16V K	
C192	HU-001060250	C CAPACITOR	0.1uF 16V K	
C193	HU-001060250	C CAPACITOR	0.1uF 16V K	
C194	HU-001060250	C CAPACITOR	0.1uF 16V K	

△Ref No.	Part No.	Part Name	Description	Local
C195	HU-001060250	C CAPACITOR	0.1uF 16V K	
C230	HU-001060288	C CAPACITOR	1uF 25V	
C231	HU-001060265	C CAPACITOR	1uF 16V K	
C232	HU-001071228	E CAPACITOR	470uF 16V	
C233	HU-001060250	C CAPACITOR	0.1uF 16V K	
C234	HU-001060249	C CAPACITOR	100pF 50V J	
C235	HU-001071223	E CAPACITOR	100uF 16V	
C236	HU-001060250	C CAPACITOR	0.1uF 16V K	
C237	HU-001071223	E CAPACITOR	100uF 16V	
C238	HU-001060250	C CAPACITOR	0.1uF 16V K	
C281	HU-001071078	E CAPACITOR	220uF 50V	
C282	HU-001060026	C CAPACITOR	0.22uF 50V	
C283	HU-001060026	C CAPACITOR	0.22uF 50V	
C284	HU-001071078	E CAPACITOR	220uF 50V	
C285	HU-001071078	E CAPACITOR	220uF 50V	
C286	HU-001060026	C CAPACITOR	0.22uF 50V	
C287	HU-001060082	C CAPACITOR	0.1uF 50V	
C288	HU-001060001	C CAPACITOR	0.01uF 50V	
C330	HU-001060286	C CAPACITOR	10uF 10V	
C331	HU-001060250	C CAPACITOR	0.1uF 16V K	
C332	HU-001060250	C CAPACITOR	0.1uF 16V K	
C333	HU-001060250	C CAPACITOR	0.1uF 16V K	
C334	HU-001060250	C CAPACITOR	0.1uF 16V K	
C335	HU-001060250	C CAPACITOR	0.1uF 16V K	
C336	HU-001060250	C CAPACITOR	0.1uF 16V K	
C337	HU-001060250	C CAPACITOR	0.1uF 16V K	
C338	HU-001060286	C CAPACITOR	10uF 10V	
C339	HU-001060286	C CAPACITOR	10uF 10V	
C340	HU-001060286	C CAPACITOR	10uF 10V	
C341	HU-001060250	C CAPACITOR	0.1uF 16V K	
C342	HU-001060250	C CAPACITOR	0.1uF 16V K	
C343	HU-001060250	C CAPACITOR	0.1uF 16V K	
C344	HU-001060250	C CAPACITOR	0.1uF 16V K	
C345	HU-001060250	C CAPACITOR	0.1uF 16V K	
C346	HU-001060250	C CAPACITOR	0.1uF 16V K	
C347	HU-001060250	C CAPACITOR	0.1uF 16V K	
C380	HU-001060250	C CAPACITOR	0.1uF 16V K	
C381	HU-001060286	C CAPACITOR	10uF 10V	
C382	HU-001060219	C CAPACITOR	1000pF 50V K	
C383	HU-001060250	C CAPACITOR	0.1uF 16V K	
C384	HU-001060286	C CAPACITOR	10uF 10V	
C385	HU-001060219	C CAPACITOR	1000pF 50V K	
C386	HU-001060250	C CAPACITOR	0.1uF 16V K	
C387	HU-001060286	C CAPACITOR	10uF 10V	
C388	HU-001060219	C CAPACITOR	1000pF 50V K	
C389	HU-001060250	C CAPACITOR	0.1uF 16V K	
C390	HU-001060286	C CAPACITOR	10uF 10V	
C430	HU-001060250	C CAPACITOR	0.1uF 16V K	
C431	HU-001071221	E CAPACITOR	4.7uF 35V	
C432	HU-001060150	C CAPACITOR	1uF 25V	
C433	HU-001060250	C CAPACITOR	0.1uF 16V K	
C434	HU-001060250	C CAPACITOR	0.1uF 16V K	
C435	HU-001060219	C CAPACITOR	1000pF 50V K	
C436	HU-001060286	C CAPACITOR	10uF 10V	
C437	HU-001063090	C CAPACITOR	3.3pF 50V	
C438	HU-001060108	C CAPACITOR	0.01uF 50V	
C480	HU-001060250	C CAPACITOR	0.1uF 16V K	
C481	HU-001060250	C CAPACITOR	0.1uF 16V K	
C482	HU-001060286	C CAPACITOR	10uF 10V	
C483	HU-001060250	C CAPACITOR	0.1uF 16V K	
C484	HU-001060250	C CAPACITOR	0.1uF 16V K	
C530	HU-001060250	C CAPACITOR	0.1uF 16V K	
C531	HU-001060250	C CAPACITOR	0.1uF 16V K	
C532	HU-001060250	C CAPACITOR	0.1uF 16V K	
C533	HU-001060250	C CAPACITOR	0.1uF 16V K	
C534	HU-001060250	C CAPACITOR	0.1uF 16V K	
C535	HU-001060286	C CAPACITOR	10uF 10V	
C536	HU-001060250	C CAPACITOR	0.1uF 16V K	
C537	HU-001060250	C CAPACITOR	0.1uF 16V K	
C538	HU-001060250	C CAPACITOR	0.1uF 16V K	
C539	HU-001060250	C CAPACITOR	0.1uF 16V K	
C540	HU-001060250	C CAPACITOR	0.1uF 16V K	
C541	HU-001060286	C CAPACITOR	10uF 10V	
C580	HU-001060250	C CAPACITOR	0.1uF 16V K	
C581	HU-001071223	E CAPACITOR	100uF 16V	
C582	HU-001060250	C CAPACITOR	0.1uF 16V K	
C583	HU-001060250	C CAPACITOR	0.1uF 16V K	
C585	HU-001060221	C CAPACITOR	22pF 50V J	
C587	HU-001060221	C CAPACITOR	22pF 50V J	
C589	HU-001060221	C CAPACITOR	22pF 50V J	
C591	HU-001060221	C CAPACITOR	22pF 50V J	
C700	HU-001060250	C CAPACITOR	0.1uF 16V K	
C701	HU-001071223	E CAPACITOR	100uF 16V	
C750	HU-001071192	E CAPACITOR	10uF 25V	
C751	HU-001071192	E CAPACITOR	10uF 25V	
C752	HU-001060286	C CAPACITOR	10uF 10V	

△Ref No.	Part No.	Part Name	Description Local	△Ref No.	Part No.	Part Name	Description Local
C753	HU-001060250	C CAPACITOR	0.1uF 16V K	R94	HU-002000527	MG RESISTOR	100Ω
C754	HU-001071192	E CAPACITOR	10uF 25V	R99	HU-002000527	MG RESISTOR	100Ω
C755	HU-001071192	E CAPACITOR	10uF 25V	R100	HU-002000527	MG RESISTOR	100Ω
C756	HU-001060250	C CAPACITOR	0.1uF 16V K	R101	HU-002000527	MG RESISTOR	100Ω
C757	HU-001060250	C CAPACITOR	0.1uF 16V K	R102	HU-002000437	MG RESISTOR	10kΩ
C802	HU-001060286	C CAPACITOR	10uF 10V	R103	HU-002000417	MG RESISTOR	4.7kΩ
C803	HU-001071223	E CAPACITOR	100uF 16V	R104	HU-002000437	MG RESISTOR	10kΩ
C804	HU-001071223	E CAPACITOR	100uF 16V	R130	HU-002000436	MG RESISTOR	100kΩ
C806	HU-001060286	C CAPACITOR	10uF 10V	R132	HU-002000417	MG RESISTOR	4.7kΩ
C807	HU-001060286	C CAPACITOR	10uF 10V	R133	HU-002000436	MG RESISTOR	100kΩ
C809	HU-001071223	E CAPACITOR	100uF 16V	R181	HU-002000454	MG RESISTOR	47kΩ
C810	HU-001060286	C CAPACITOR	10uF 10V	R182	HU-002000405	MG RESISTOR	1kΩ
C811	HU-001060286	C CAPACITOR	10uF 10V	R184	HU-002000437	MG RESISTOR	10kΩ
C812	HU-001071223	E CAPACITOR	100uF 16V	R187	HU-002001050	MG RESISTOR	2.7kΩ
C813	HU-001060250	C CAPACITOR	0.1uF 16V K	R188	HU-002001050	MG RESISTOR	2.7kΩ
C814	HU-001060250	C CAPACITOR	0.1uF 16V K	R230	HU-002000000	MG RESISTOR	0Ω
C815	HU-001060249	C CAPACITOR	100pF 50V J	R231	HU-002000417	MG RESISTOR	4.7kΩ
C816	HU-001071223	E CAPACITOR	100uF 16V	R233	HU-002000417	MG RESISTOR	4.7kΩ
C817	HU-001060250	C CAPACITOR	0.1uF 16V K	R234	HU-002000520	MG RESISTOR	47Ω
C819	HU-001071223	E CAPACITOR	100uF 16V	R235	HU-002000520	MG RESISTOR	47Ω
C820	HU-001060286	C CAPACITOR	10uF 10V	R236	HU-002000520	MG RESISTOR	47Ω
C821	HU-001060286	C CAPACITOR	10uF 10V	R239	HU-002000527	MG RESISTOR	100Ω
C822	HU-001071228	E CAPACITOR	470uF 16V	R240	HU-002000527	MG RESISTOR	100Ω
C823	HU-001060250	C CAPACITOR	0.1uF 16V K	R281	HU-002000424	MG RESISTOR	0.1Ω
C824	HU-001060250	C CAPACITOR	0.1uF 16V K	R282	HU-002000424	MG RESISTOR	0.1Ω
C900	HU-001060250	C CAPACITOR	0.1uF 16V K	R283	HU-002000448	MG RESISTOR	33Ω
C901	HU-001060250	C CAPACITOR	0.1uF 16V K	R284	HU-002000448	MG RESISTOR	33Ω
C902	HU-001060250	C CAPACITOR	0.1uF 16V K	R285	HU-002000087	MG RESISTOR	4.7kΩ
C903	HU-001071194	E CAPACITOR	100uF 25V	R286	HU-002000087	MG RESISTOR	4.7kΩ
C904	HU-001071194	E CAPACITOR	100uF 25V	R287	HU-002000096	MG RESISTOR	10kΩ
C905	HU-001060250	C CAPACITOR	0.1uF 16V K	R380	HU-002000437	MG RESISTOR	10kΩ
C906	HU-001071194	E CAPACITOR	100uF 25V	R381	HU-002000437	MG RESISTOR	10kΩ
PR2	HU-002070006	NET RESISTOR	47Ωx4	R382	HU-002000437	MG RESISTOR	10kΩ
PR3	HU-002070006	NET RESISTOR	47Ωx4	R383	HU-002000437	MG RESISTOR	10kΩ
PR5	HU-002070006	NET RESISTOR	47Ωx4	R384	HU-002001137	MG RESISTOR	51Ω
PR6	HU-002070006	NET RESISTOR	47Ωx4	R386	HU-002001137	MG RESISTOR	51Ω
PR40	HU-002070003	NET RESISTOR	10kΩx4	R388	HU-002000417	MG RESISTOR	4.7kΩ
PR41	HU-002070003	NET RESISTOR	10kΩx4	R389	HU-002000417	MG RESISTOR	4.7kΩ
PR180	HU-002070050	NET RESISTOR	47Ωx4	R390	HU-002000520	MG RESISTOR	47Ω
PR181	HU-002070050	NET RESISTOR	47Ωx4	R391	HU-002000417	MG RESISTOR	4.7kΩ
PR182	HU-002070050	NET RESISTOR	47Ωx4	R392	HU-002000433	MG RESISTOR	0Ω
PR230	HU-002070050	NET RESISTOR	47Ωx4	R393	HU-002000433	MG RESISTOR	0Ω
PR231	HU-002070050	NET RESISTOR	47Ωx4	R394	HU-002000910	MG RESISTOR	20kΩ
PR380	HU-002070039	NET RESISTOR	33Ωx4	R395	HU-002000910	MG RESISTOR	20kΩ
PR381	HU-002070039	NET RESISTOR	33Ωx4	R396	HU-002000417	MG RESISTOR	4.7kΩ
PR382	HU-002070039	NET RESISTOR	33Ωx4	R397	HU-002000417	MG RESISTOR	4.7kΩ
PR383	HU-002070039	NET RESISTOR	33Ωx4	R398	HU-002000443	MG RESISTOR	22Ω
PR384	HU-002070039	NET RESISTOR	33Ωx4	R430	HU-002000437	MG RESISTOR	10kΩ
PR385	HU-002070039	NET RESISTOR	33Ωx4	R431	HU-002000417	MG RESISTOR	4.7kΩ
PR386	HU-002070039	NET RESISTOR	33Ωx4	R432	HU-002000417	MG RESISTOR	4.7kΩ
PR387	HU-002070039	NET RESISTOR	33Ωx4	R433	HU-002000405	MG RESISTOR	1kΩ
PR750	HU-002070014	NET RESISTOR	33Ωx4	R434	HU-002000552	MG RESISTOR	22kΩ
R1	HU-002000090	COIL		R436	HU-002000417	MG RESISTOR	4.7kΩ
R3	HU-002000520	MG RESISTOR	47Ω	R437	HU-002000417	MG RESISTOR	4.7kΩ
R4	HU-002000520	MG RESISTOR	47Ω	R438	HU-002000437	MG RESISTOR	10kΩ
R6	HU-002000520	MG RESISTOR	47Ω	R439	HU-002001138	MG RESISTOR	560Ω
R9	HU-002000520	MG RESISTOR	47Ω	R441	HU-002000437	MG RESISTOR	10kΩ
R10	HU-002000520	MG RESISTOR	47Ω	R442	HU-002000417	MG RESISTOR	4.7kΩ
R11	HU-002000520	MG RESISTOR	47Ω	R443	HU-002000527	MG RESISTOR	100Ω
R12	HU-002000437	MG RESISTOR	10kΩ	R445	HU-002000522	MG RESISTOR	680Ω
R13	HU-002000417	MG RESISTOR	4.7kΩ	R446	HU-002000527	MG RESISTOR	100Ω
R16	HU-002000417	MG RESISTOR	4.7kΩ	R447	HU-002000522	MG RESISTOR	680Ω
R18	HU-002000090	COIL	0Ω	R448	HU-002000096	MG RESISTOR	10kΩ
R40	HU-002000087	MG RESISTOR	4.7kΩ	R449	HU-002000437	MG RESISTOR	10kΩ
R41	HU-002000096	MG RESISTOR	10kΩ	R480	HU-002000433	MG RESISTOR	0Ω
R42	HU-002000417	MG RESISTOR	4.7kΩ	R530	HU-002000433	MG RESISTOR	0Ω
R43	HU-002000538	MG RESISTOR	120Ω	R580	HU-002000908	MG RESISTOR	330Ω
R45	HU-002000417	MG RESISTOR	4.7kΩ	R581	HU-002000421	MG RESISTOR	75Ω
R46	HU-002000096	MG RESISTOR	10kΩ	R582	HU-002000266	MG RESISTOR	470Ω
R47	HU-002000437	MG RESISTOR	10kΩ	R584	HU-002000266	MG RESISTOR	470Ω
R48	HU-002000437	MG RESISTOR	10kΩ	R585	HU-002000421	MG RESISTOR	75Ω
R49	HU-002000437	MG RESISTOR	10kΩ	R586	HU-002000266	MG RESISTOR	470Ω
R50	HU-002000417	MG RESISTOR	4.7kΩ	R587	HU-002000908	MG RESISTOR	330Ω
R51	HU-002000417	MG RESISTOR	4.7kΩ	R589	HU-002000266	MG RESISTOR	470Ω
R52	HU-002000437	MG RESISTOR	10kΩ	R590	HU-002000421	MG RESISTOR	75Ω
R53	HU-002000437	MG RESISTOR	10kΩ	R591	HU-002000266	MG RESISTOR	470Ω
R54	HU-002000437	MG RESISTOR	10kΩ	R592	HU-002000908	MG RESISTOR	330Ω
R55	HU-002000437	MG RESISTOR	10kΩ	R594	HU-002000266	MG RESISTOR	470Ω
R56	HU-002000437	MG RESISTOR	10kΩ	R595	HU-002000421	MG RESISTOR	75Ω
R57	HU-002000437	MG RESISTOR	10kΩ	R596	HU-002000266	MG RESISTOR	470Ω
R58	HU-002000417	MG RESISTOR	4.7kΩ	R597	HU-002000908	MG RESISTOR	330Ω
R80	HU-002000527	MG RESISTOR	100Ω	R599	HU-002000266	MG RESISTOR	470Ω
R82	HU-002000527	MG RESISTOR	100Ω	R600	HU-002000908	MG RESISTOR	330Ω
R84	HU-002000527	MG RESISTOR	100Ω	R601	HU-002000908	MG RESISTOR	330Ω
R86	HU-002000527	MG RESISTOR	100Ω	R630	HU-002000096	MG RESISTOR	10kΩ
R88	HU-002000527	MG RESISTOR	100Ω	R631	HU-002000090	COIL	
R90	HU-002000527	MG RESISTOR	100Ω	R700	HU-002000407	MG RESISTOR	2.2KΩ
R92	HU-002000527	MG RESISTOR	100Ω	R701	HU-002000437	MG RESISTOR	10kΩ
				R702	HU-002000437	MG RESISTOR	10kΩ

△Ref No.	Part No.	Part Name	Description Local
R703	HU-002000437	MG RESISTOR	10kΩ
R704	HU-002000407	MG RESISTOR	2.2KΩ
R705	HU-002000437	MG RESISTOR	10kΩ
R750	HU-002000417	MG RESISTOR	4.7kΩ
R751	HU-002000453	MG RESISTOR	470Ω
R752	HU-002000453	MG RESISTOR	470Ω
R753	HU-002000433	MG RESISTOR	0Ω
R800	HU-002000547	MG RESISTOR	120Ω
R801	HU-002000509	MG RESISTOR	200Ω
R802	HU-002000548	MG RESISTOR	1.2kΩ
R803	HU-002001152	MG RESISTOR	680Ω
R804	HU-002000405	MG RESISTOR	1kΩ
R806	HU-002000547	MG RESISTOR	120Ω
R807	HU-002000509	MG RESISTOR	200Ω
R900	HU-002000433	MG RESISTOR	0Ω
R901	HU-002000433	MG RESISTOR	0Ω
R902	HU-002000433	MG RESISTOR	0Ω
R903	HU-002000433	MG RESISTOR	0Ω
R904	HU-002000433	MG RESISTOR	0Ω
R905	HU-002000433	MG RESISTOR	0Ω
R906	HU-002000433	MG RESISTOR	0Ω
R907	HU-002000433	MG RESISTOR	0Ω
R908	HU-002000433	MG RESISTOR	0Ω
R909	HU-002000433	MG RESISTOR	0Ω
R911	HU-002000526	MG RESISTOR	3.3kΩ
L1	HU-011030015	FERRITE BEAD	
L40	HU-011030015	FERRITE BEAD	
L130	HU-011030011	FERRITE BEAD	
L131	HU-011030011	FERRITE BEAD	
L132	HU-011030011	FERRITE BEAD	
L180	HU-011030020	FERRITE BEAD	
L181	HU-011030020	FERRITE BEAD	
L182	HU-011030020	FERRITE BEAD	
L183	HU-011030020	FERRITE BEAD	
L184	HU-011030020	FERRITE BEAD	
L230	HU-011030011	FERRITE BEAD	
L231	HU-011030011	FERRITE BEAD	
L232	HU-011030011	FERRITE BEAD	
L233	HU-011030011	FERRITE BEAD	
L280	HU-011030011	FERRITE BEAD	
L281	HU-011030011	FERRITE BEAD	
L282	HU-011001390	INDUCTOR	22uH
L283	HU-011040002	FERRITE BEAD	
L380	HU-011030011	FERRITE BEAD	
L381	HU-002000090	COIL	
L382	HU-002000090	COIL	
L383	HU-011030011	FERRITE BEAD	
L385	HU-011030011	FERRITE BEAD	
L386	HU-011030011	FERRITE BEAD	
L390	HU-011030011	FERRITE BEAD	
L391	HU-011030011	FERRITE BEAD	
L392	HU-011030011	FERRITE BEAD	
L393	HU-011030011	FERRITE BEAD	
L430	HU-002000090	COIL	
L431	HU-002000090	COIL	
L530	HU-011030011	FERRITE BEAD	
L531	HU-011030011	FERRITE BEAD	
L580	HU-011030011	FERRITE BEAD	
L750	HU-011030011	FERRITE BEAD	
L805	HU-011030020	FERRITE BEAD	
L900	HU-011030011	FERRITE BEAD	
L901	HU-011030025	FERRITE BEAD	
L902	HU-011030025	FERRITE BEAD	
JP40	HU-009030060	PCMCIA CONNECTOR	CI SLOT
JP900	HU-009060660	CONNECTOR	
Y180	HU-005000940	CRYSTAL	16MHz
Y430	HU-005001080	CRYSTAL	27MHz

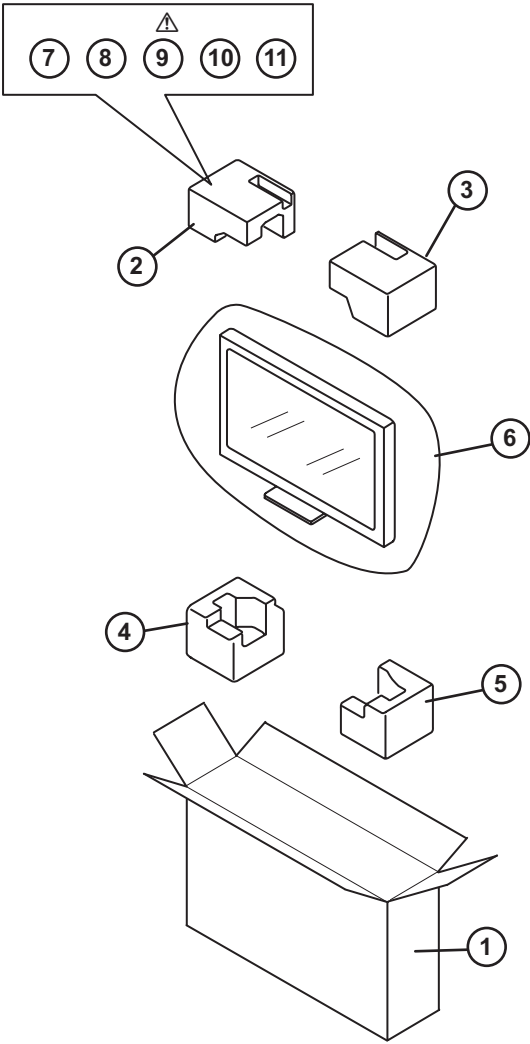
IR PWB P.W. BOARD ASS'Y (HU-72200001)

REFER TO PARTS LIST IN PAGE 3-9 FOR THIS P.W. BOARD.

KEY P.W. BOARD ASS'Y (HU-72200002)

REFER TO PARTS LIST IN PAGE 3-9 FOR THIS P.W. BOARD.

PACKING



PACKING PARTS LIST

△	Ref.No.	Part No.	Part Name	Description	Local
	1	HU-3070129001PK	CARTON BOX		
	2	HU-3071125001PS	TOP CUSHION(L)		
	3	HU-3071125002PS	TOP CUSHION(R)		
	4	HU-3071125003PS	BOTTOM CUSHION(L)		
	5	HU-3071125004PS	BOTTOM CUSHION(R)		
	6	HU-3072112001	POLY BAG		
	7	-----	BATTERY	AA/R6(x2)	
	8	HU-0320200009	REMOCON CONTROL UNIT	RM-C1892B	
△	9	HU-2001000003	INST BOOK	English	LT-19DA9BJ
△	9	HU-2001000004	INST BOOK	Spanish/Romanian/Portuguese/Polish/Italian/Hungarian/Greek/German/French/Dutch/Czech	LT-19DA9BU
△	9	HU-2001000005	INST BOOK	Spanish/Romanian/Portuguese/Polish/Italian/Hungarian/Greek/German/French/Dutch/Czech	LT-19DB9BD
	10	HU-2001100006	SHEET		LT-19DA9BJ
	11	-----	WARRANTY CARD	HU-2030000004PT	

JVC

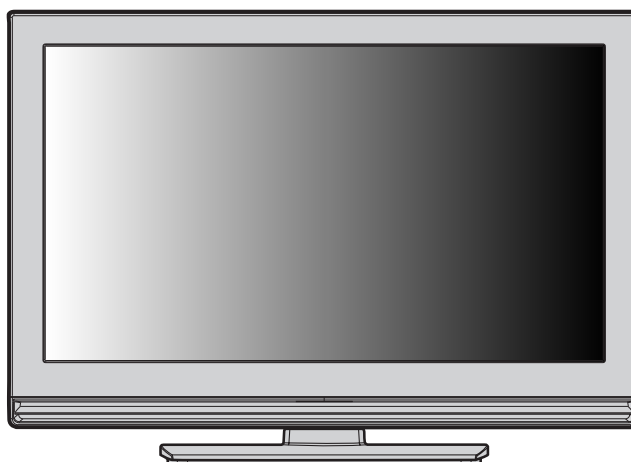
Preliminary

SCHEMATIC DIAGRAMS

INTEGRATED DIGITAL TERRESTRIAL/SATELLITE LCD TELEVISION

LT-19DA9BJ, LT-19DA9BU, LT-19DB9BD

DVD-ROM No.SML2008Q1



LT-19DA9BJ, LT-19DA9BU, LT-19DB9BD

STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1.SAFETY

The components identified by the $\triangle$ symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

- (1)Input signal : Colour bar signal
- (2)Setting positions of each knob/button and variable resistor : Original setting position when shipped
- (3)Internal resistance of tester : DC 20k Ω /V
- (4)Oscilloscope sweeping time : H $\Rightarrow$ 20 μ s / div
: V $\Rightarrow$ 5ms / div
: Others $\Rightarrow$ Sweeping time is specified
- (5)Voltage values : All DC voltage values

* Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3.INDICATION OF PARTS SYMBOL [EXAMPLE]

- In the PW board : R1209 $\rightarrow$ R209

4.INDICATIONS ON THE CIRCUIT DIAGRAM

(1)Resistors

● Resistance value

- No unit : [Ω]
- K : [k Ω]
- M : [M Ω]

● Rated allowable power

- No indication : 1/16 [W]
- Others : As specified

● Type

- No indication : Carbon resistor
- OMR : Oxide metal film resistor
- MFR : Metal film resistor
- MPR : Metal plate resistor
- UNFR : Uninflammable resistor
- FR : Fusible resistor

* Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2)Capacitors

● Capacitance value

- 1 or higher : [pF]
- less than 1 : [μ F]

● Withstand voltage

- No indication : DC50[V]
- Others : DC withstand voltage [V]
- AC indicated : AC withstand voltage [V]

* Electrolytic Capacitors

47/50[Example]: Capacitance value [μ F]/withstand voltage[V]

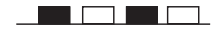
● Type

- No indication : Ceramic capacitor
- MM : Metalized mylar capacitor
- PP : Polypropylene capacitor
- MPP : Metalized polypropylene capacitor
- MF : Metalized film capacitor
- TF : Thin film capacitor
- BP : Bipolar electrolytic capacitor
- TAN : Tantalum capacitor

(3)Coils

- No unit : [μ H]
- Others : As specified

(4)Power Supply

-  : B1
-  : B2 (12V)
-  : 9V
-  : 5V

* Respective voltage values are indicated

(5)Test point

-  : Test point
-  : Only test point display

(6)Connecting method

-  : Connector
-  : Wrapping or soldering
-  : Receptacle

(7)Ground symbol

-  : LIVE side ground
-  : ISOLATED(NEUTRAL) side ground
-  : EARTH ground
-  : DIGITAL ground

5.NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : ($\perp$) side GND and the ISOLATED(NEUTRAL) : ($\perp$) side GND. Therefore, care must be taken for the following points.

- (1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. if the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.
- (2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected, a fuse or any parts will be broken.

◆ Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.

NOTE

◆ Due improvement in performance, some part numbers show in the circuit diagram may not agree with those indicated in the part list.
When ordering parts, please use the numbers that appear in the Parts List.

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 MAIN PWB PATTERN 2-91

 MPEG PWB PATTERN 2-95

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 KEY PWB PATTERN 2-99

USING P.W. BOARD

P.W.B ASS' Y name	LT-19DA9BJ	LT-19DA9BU	LT-19DB9BD
MAIN P.W. BOARD	HU-71200008	←	←
MPEG P.W. BOARD	HU-71200005	←	HU-71200006
IR P.W. BOARD	HU-72200001	←	←
KEY P.W. BOARD	HU-72200002	←	←

SEMICONDUCTOR SHAPES

TRANSISTOR

BOTTOM VIEW	FRONT VIEW				TOP VIEW
					CHIP TR

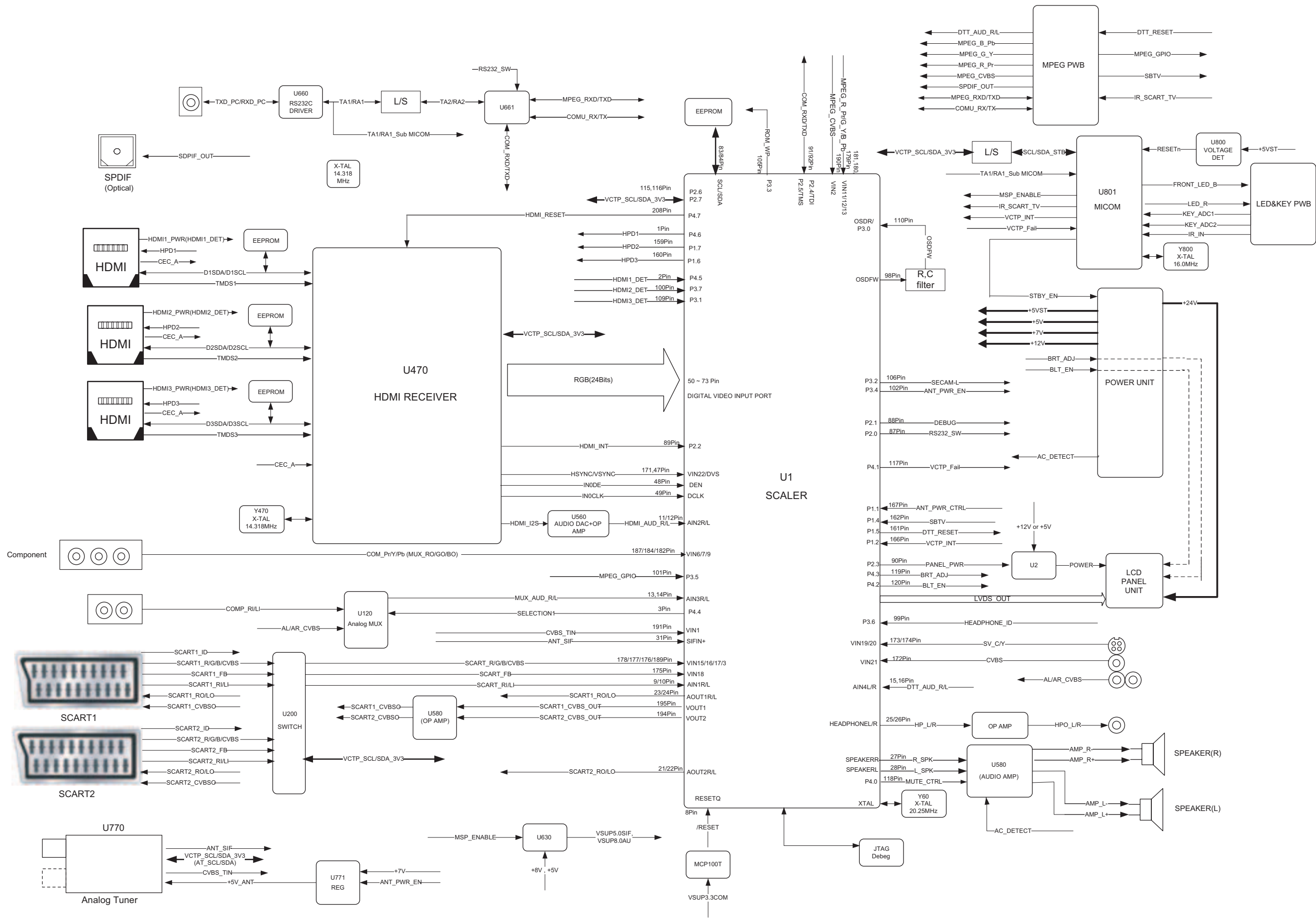
IC

BOTTOM VIEW	FRONT VIEW			TOP VIEW

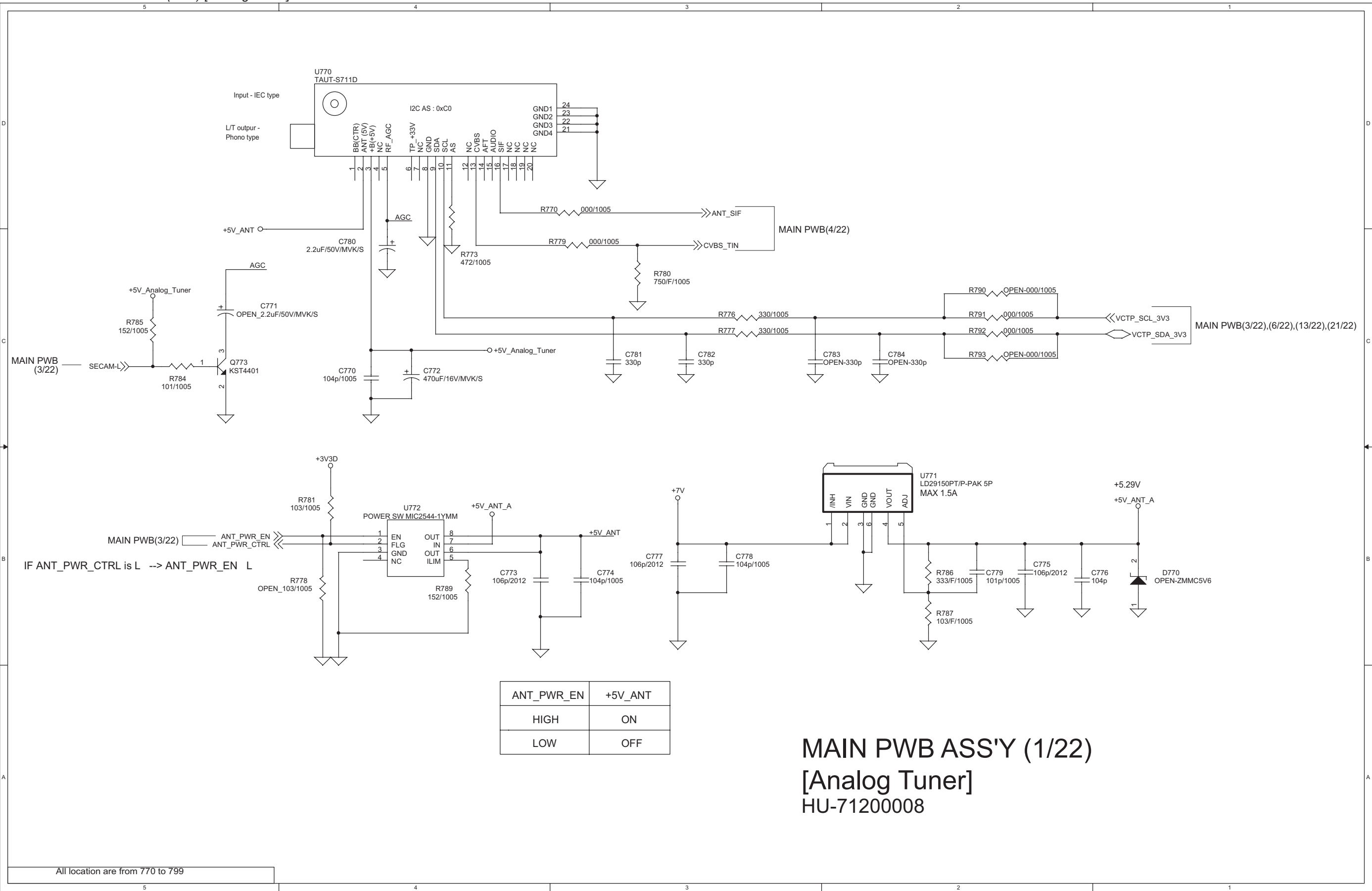
CHIP IC

TOP VIEW		

BLOCK DIAGRAM

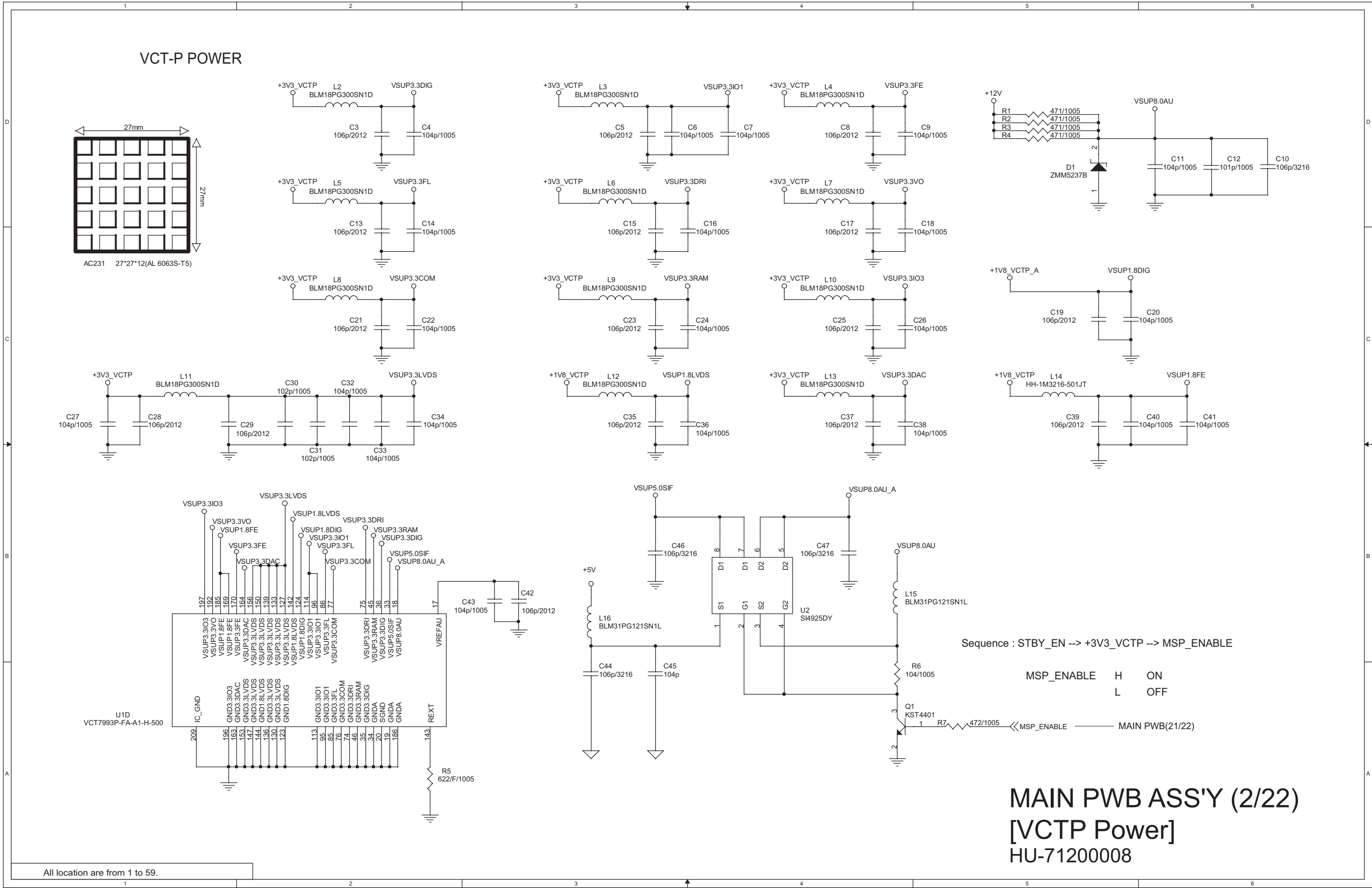


CIRCUIT DIAGRAMS
MAIN PWB CIRCUIT DIAGRAM (1/22) [Analog Tuner]

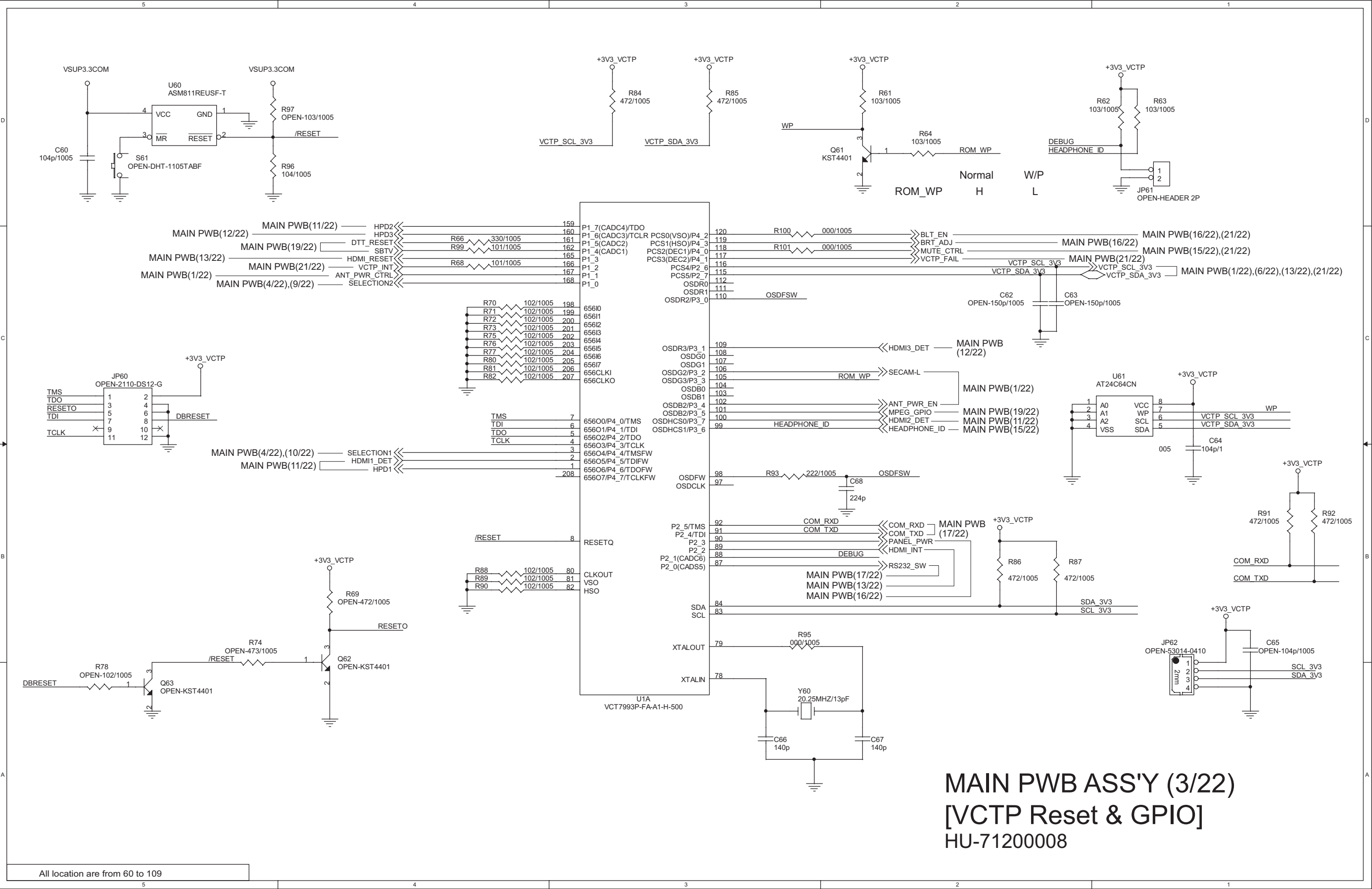


ANT_PWR_EN	+5V_ANT
HIGH	ON
LOW	OFF

MAIN PWB ASS'Y (1/22)
[Analog Tuner]
HU-71200008

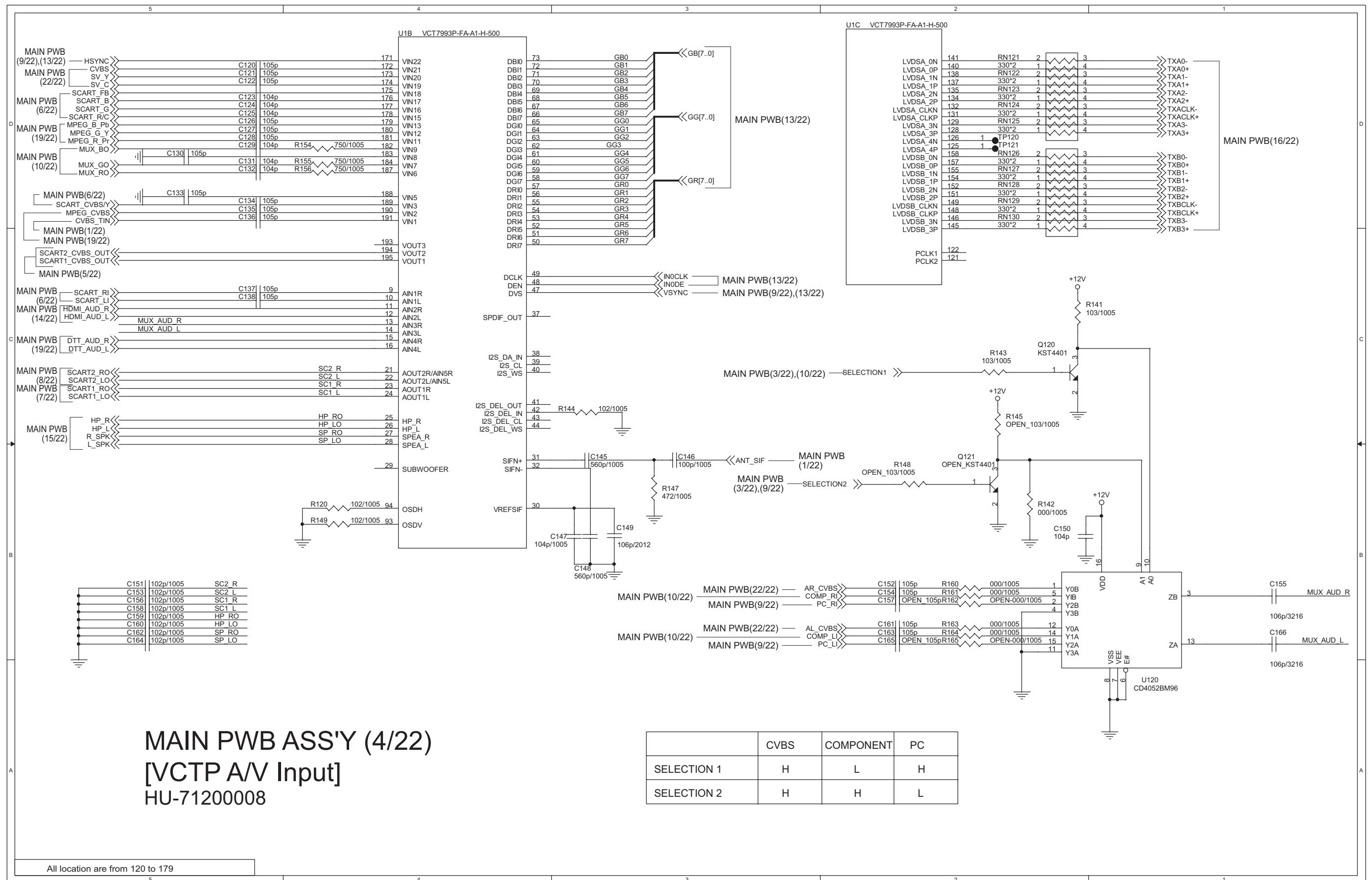


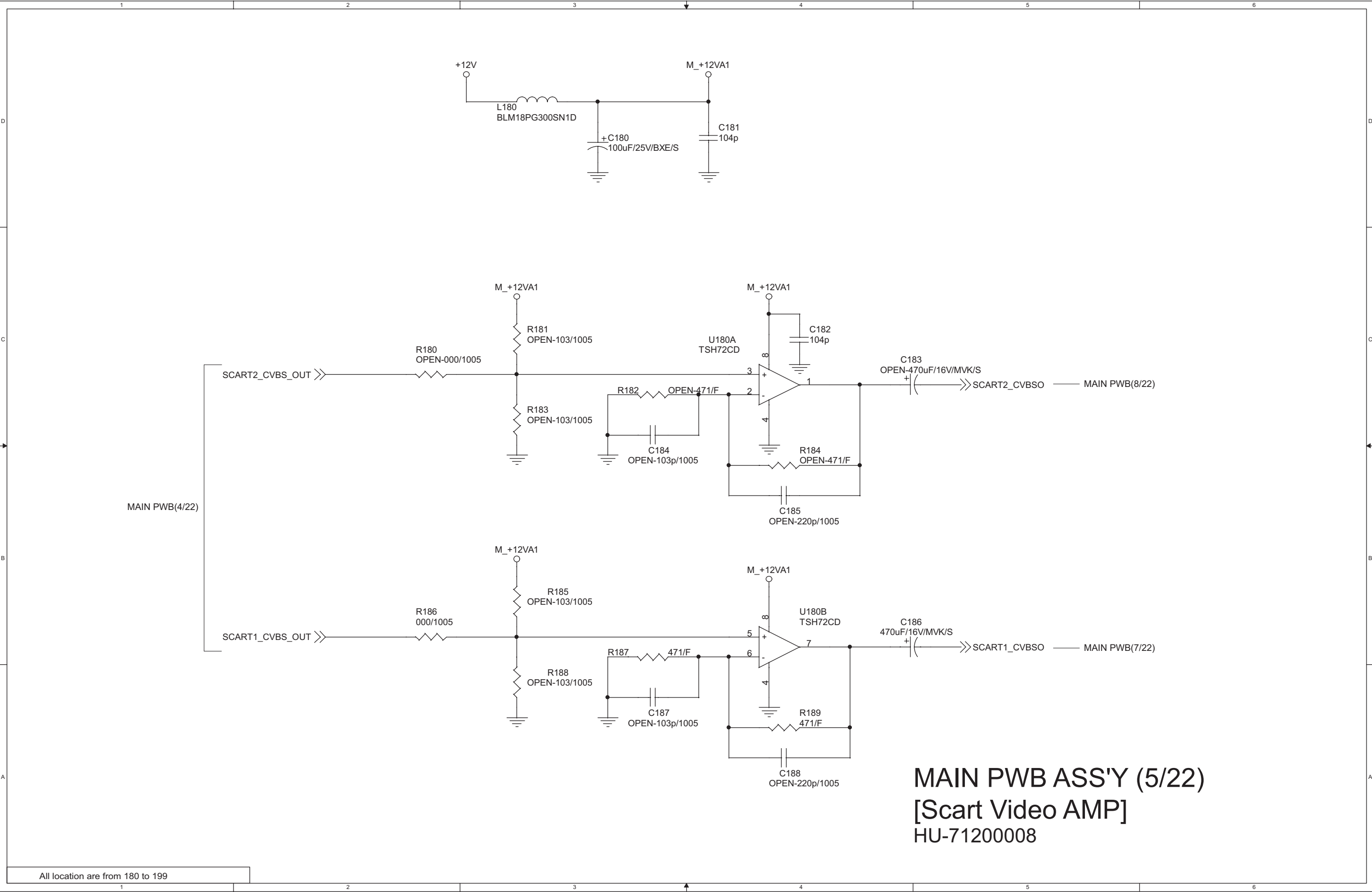
MAIN PWB CIRCUIT DIAGRAM (3/22) [VCTP Reset & GPIO]

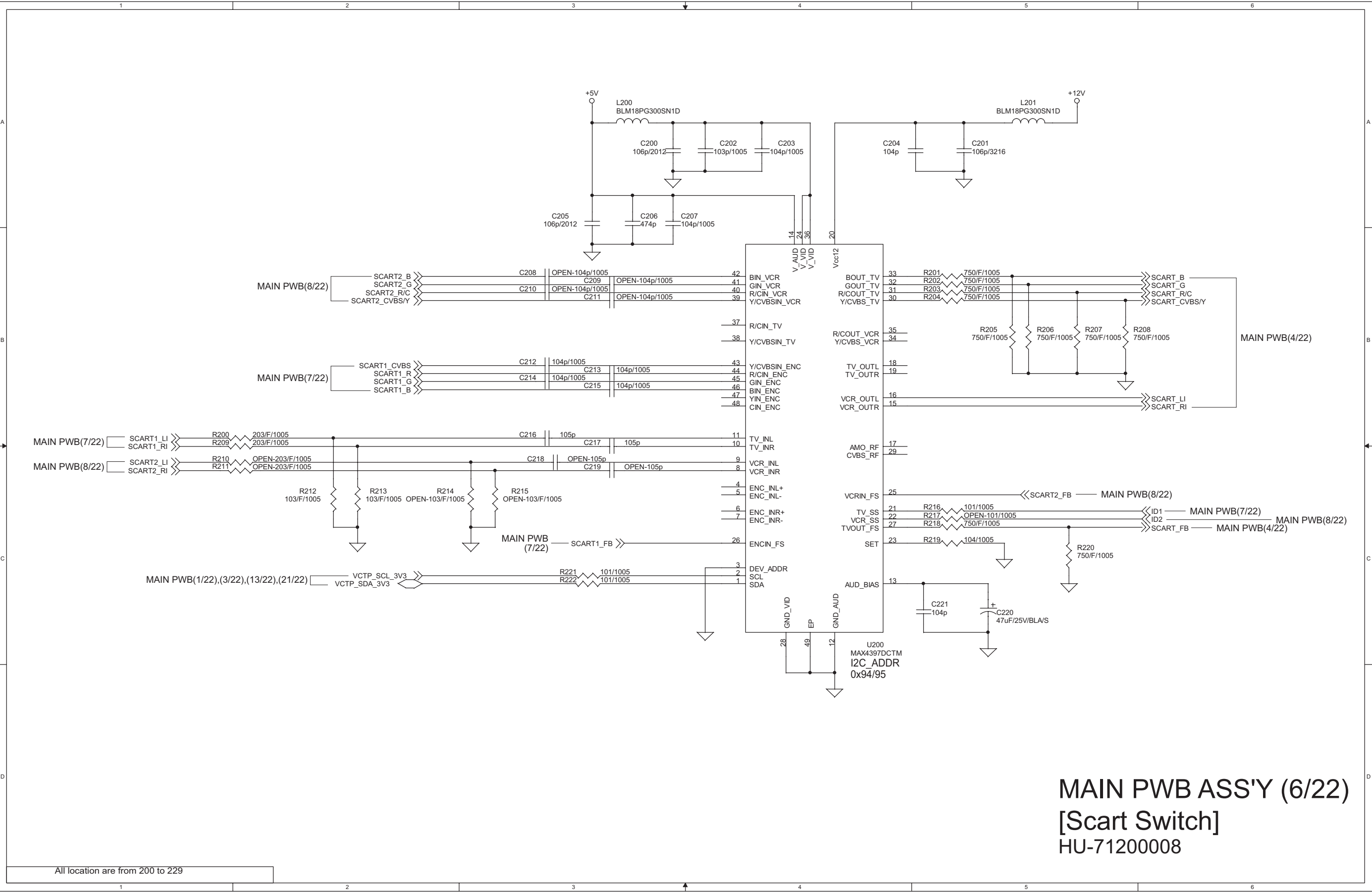


MAIN PWB ASS'Y (3/22)
[VCTP Reset & GPIO]
HU-71200008

MAIN PWB CIRCUIT DIAGRAM (4/22) [VCTP A/V Input]

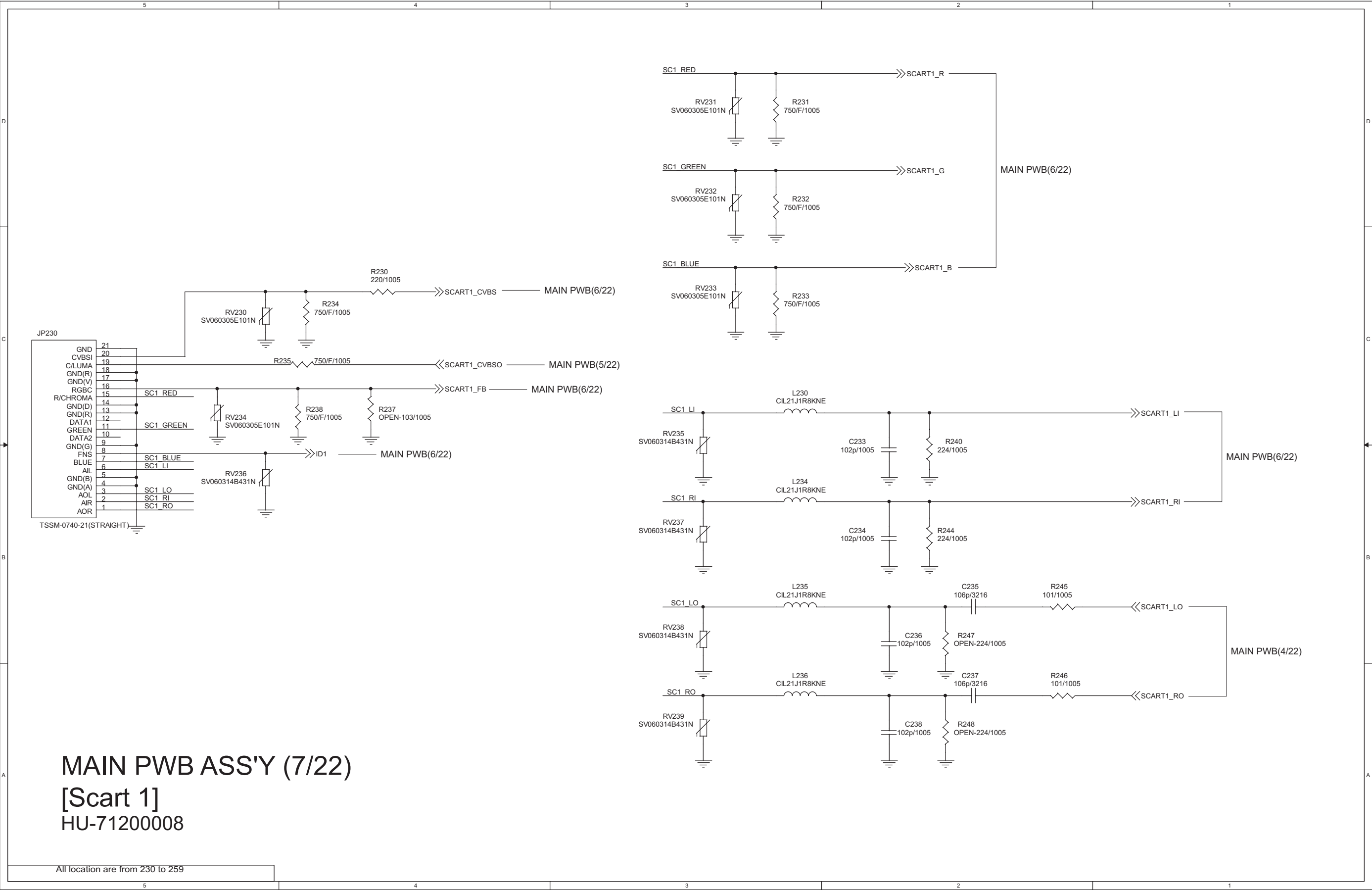






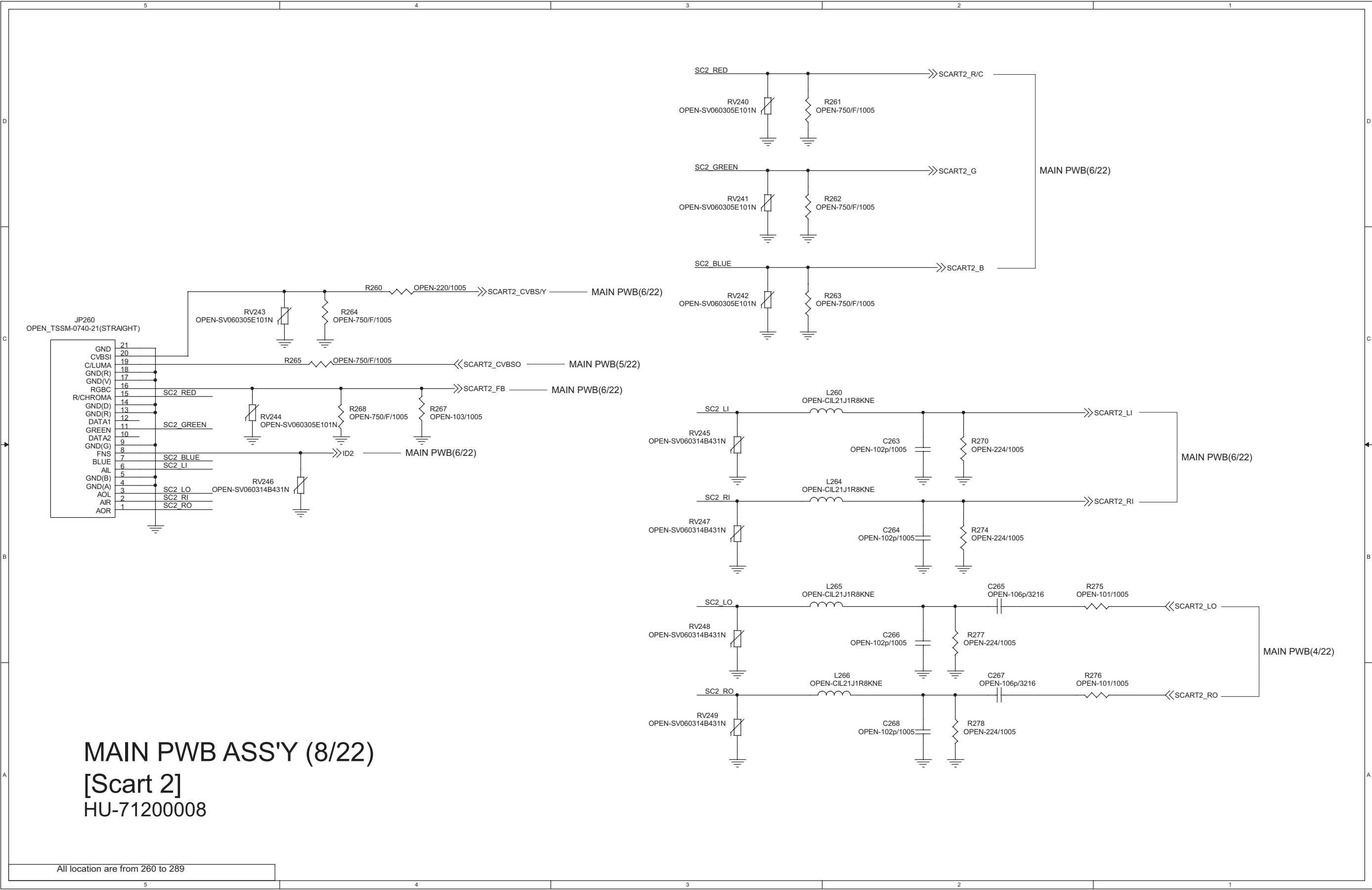
MAIN PWB ASS'Y (6/22)
[Scart Switch]
HU-71200008

All location are from 200 to 229



MAIN PWB ASS'Y (7/22)
[Scart 1]
HU-71200008

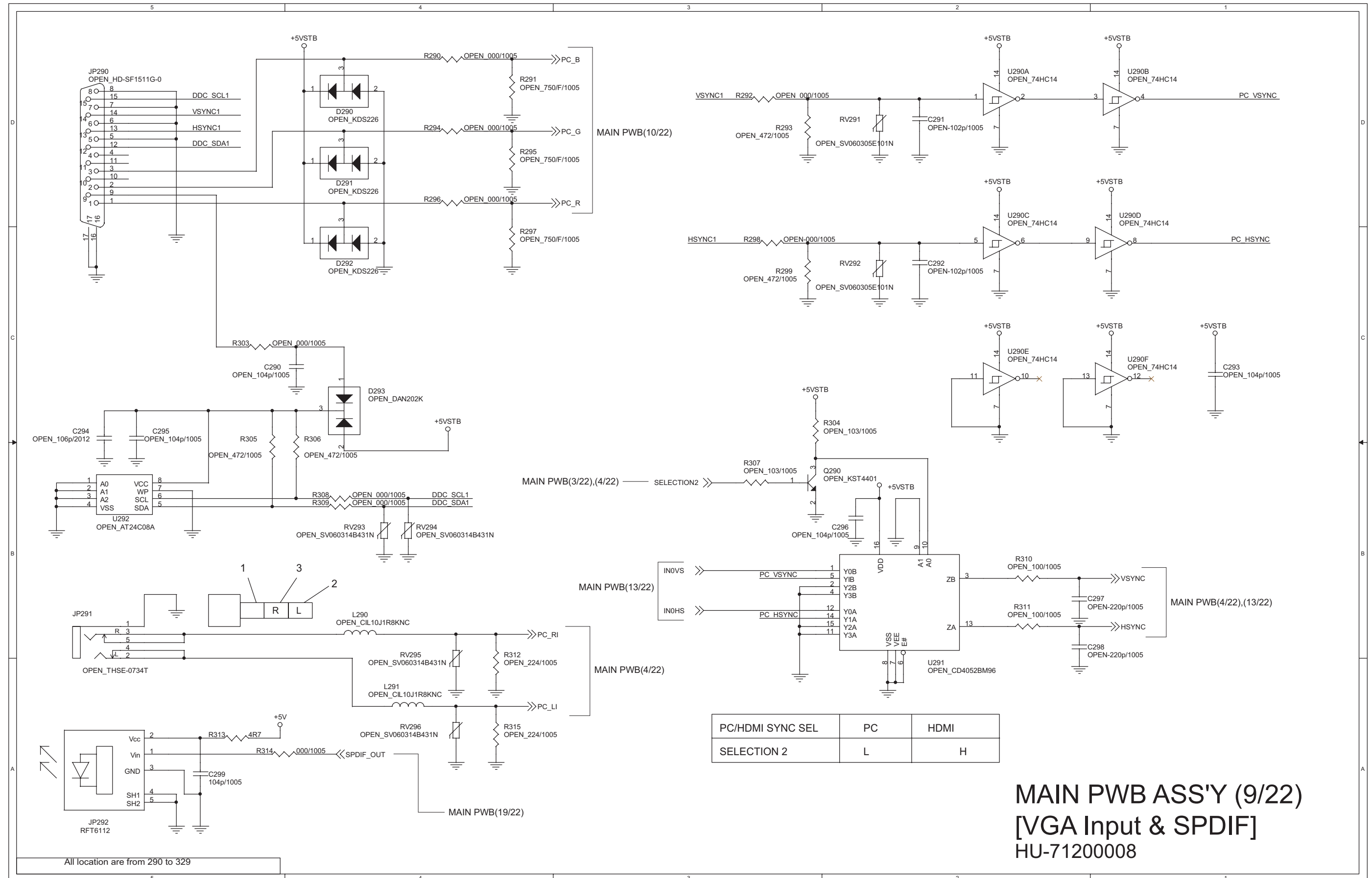
All location are from 230 to 259

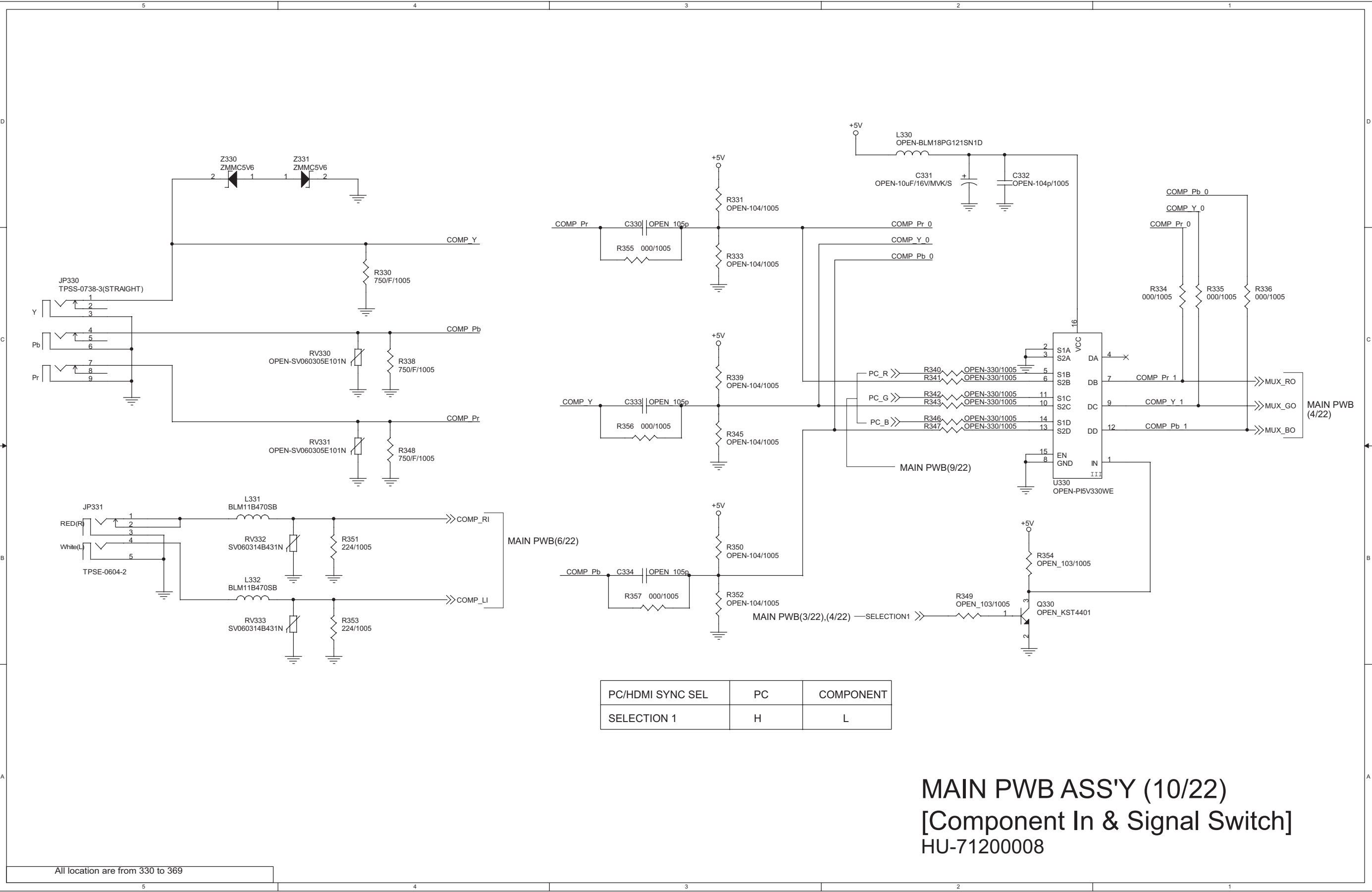


MAIN PWB ASS'Y (8/22)
[Scart 2]
HU-71200008

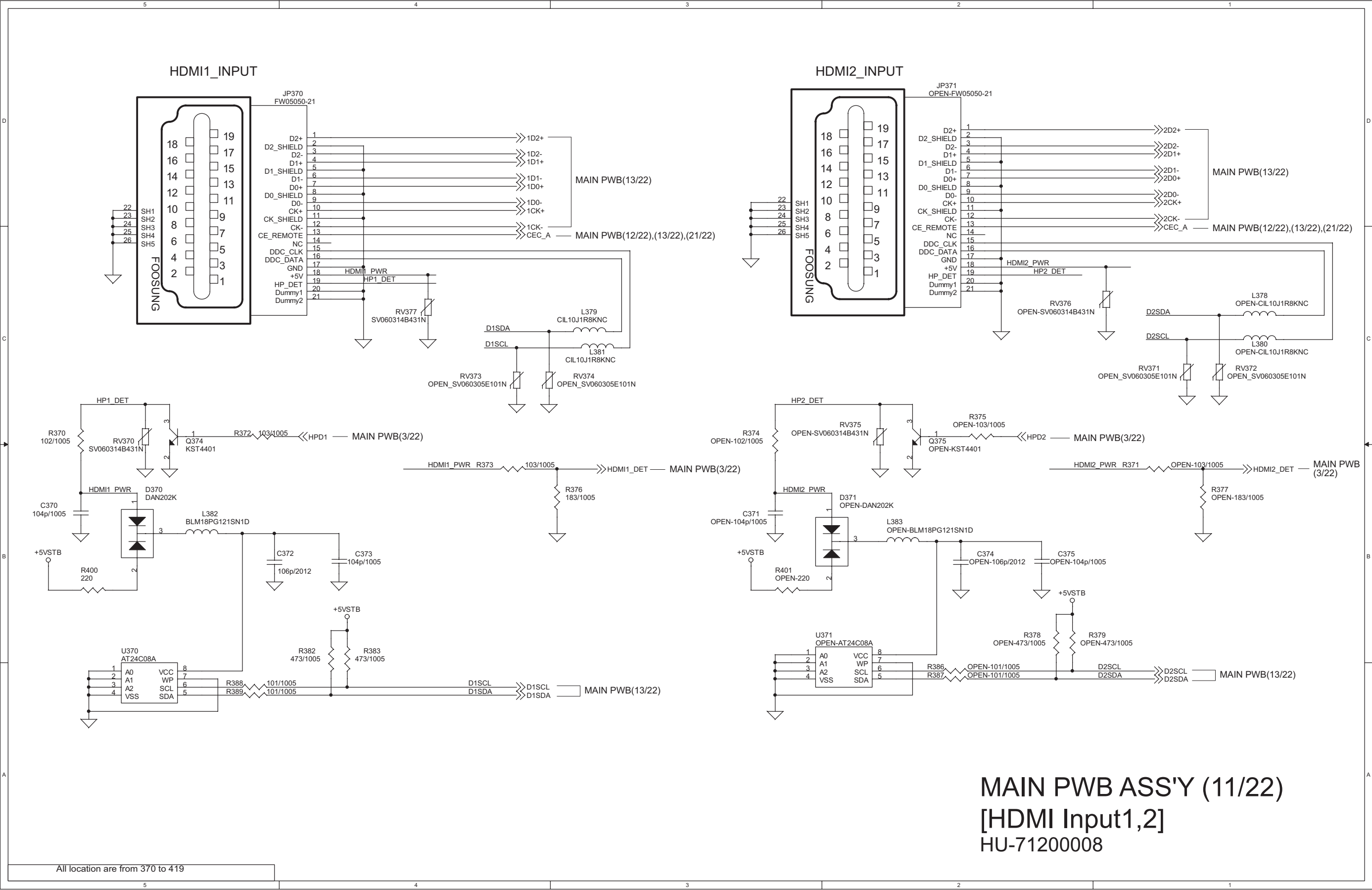
All location are from 260 to 289

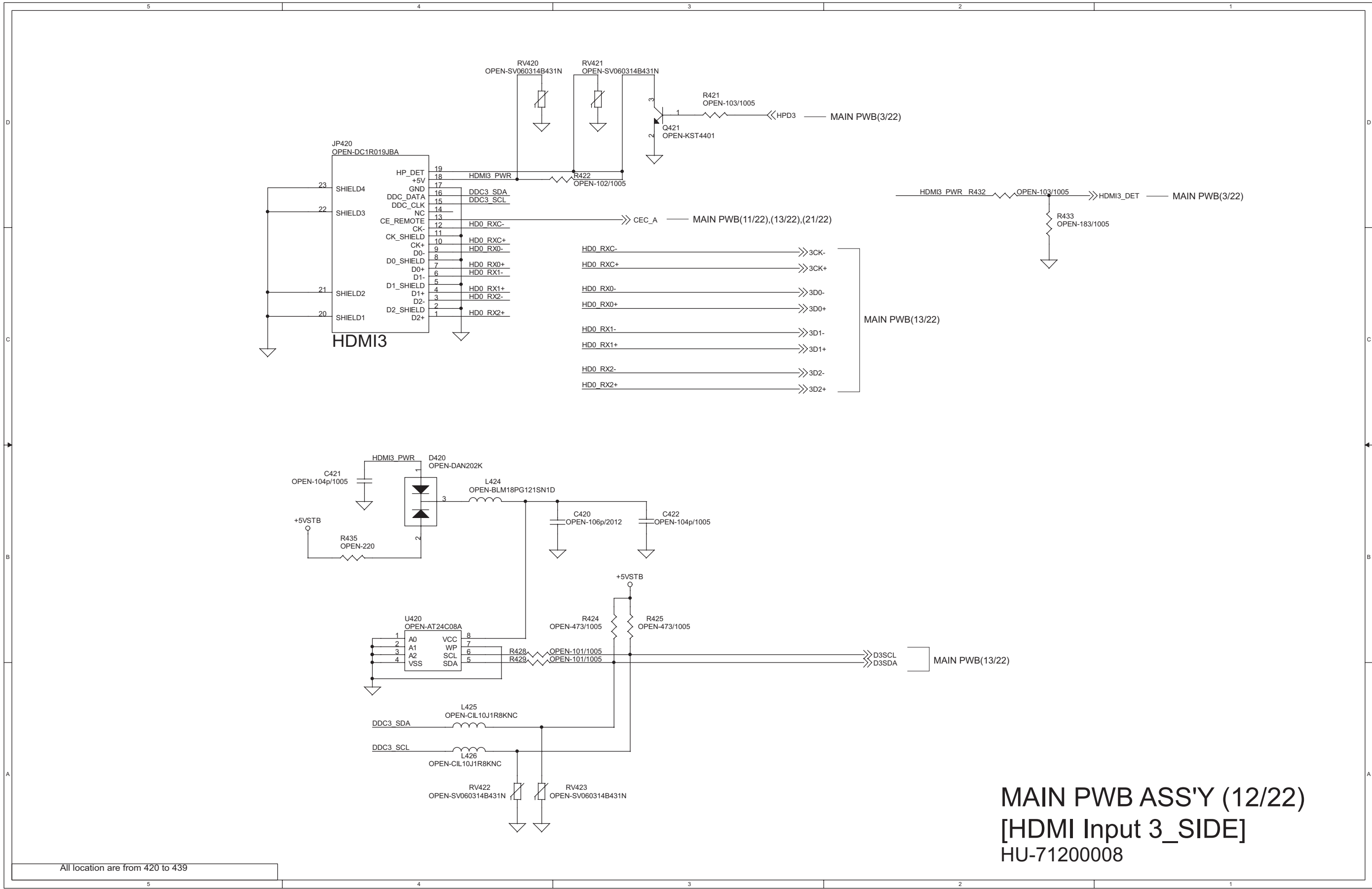
MAIN PWB CIRCUIT DIAGRAM (9/22) [VGA Input & SPDIF]





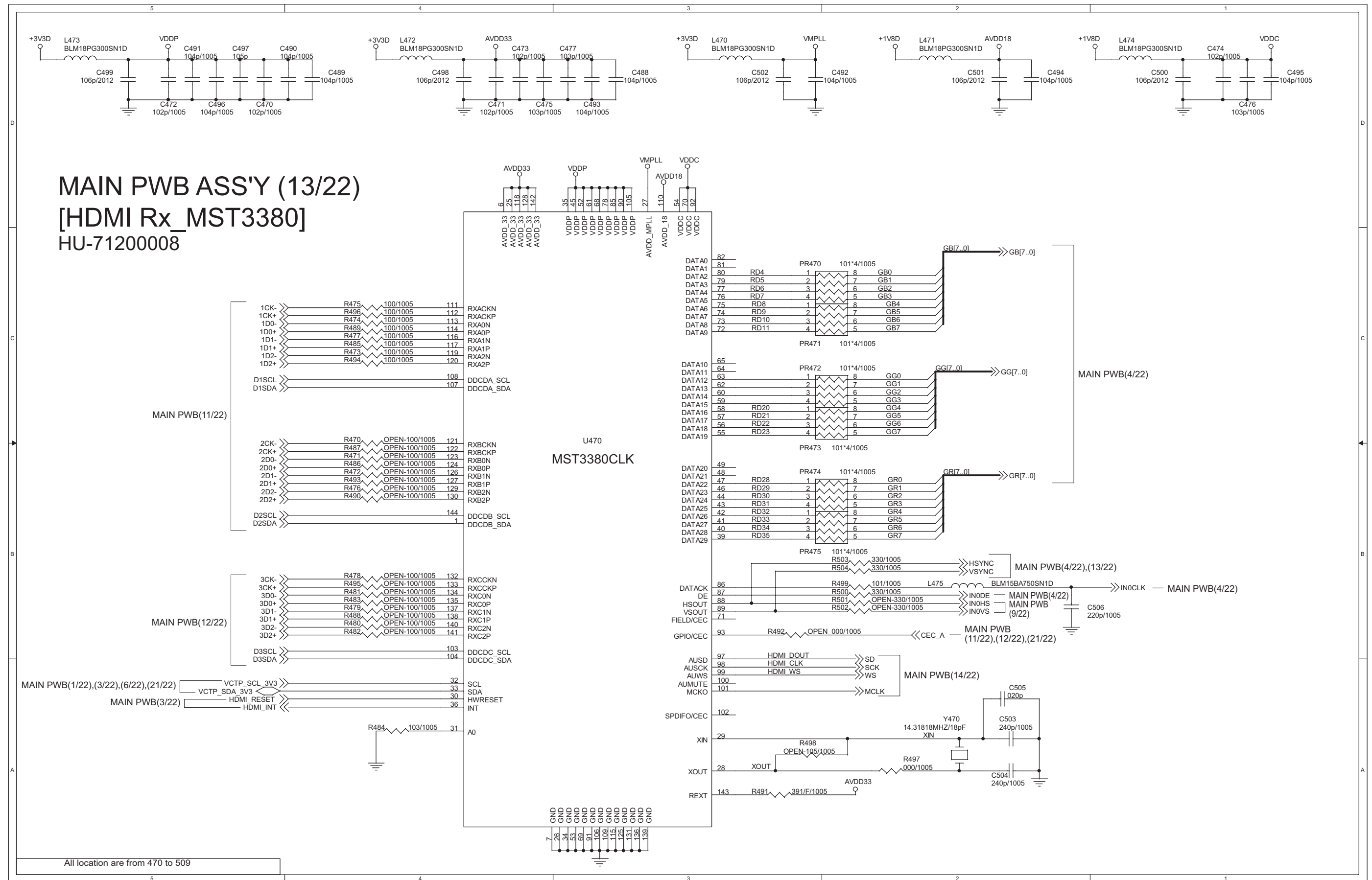
MAIN PWB CIRCUIT DIAGRAM (11/22) [HDMI Input1,2]

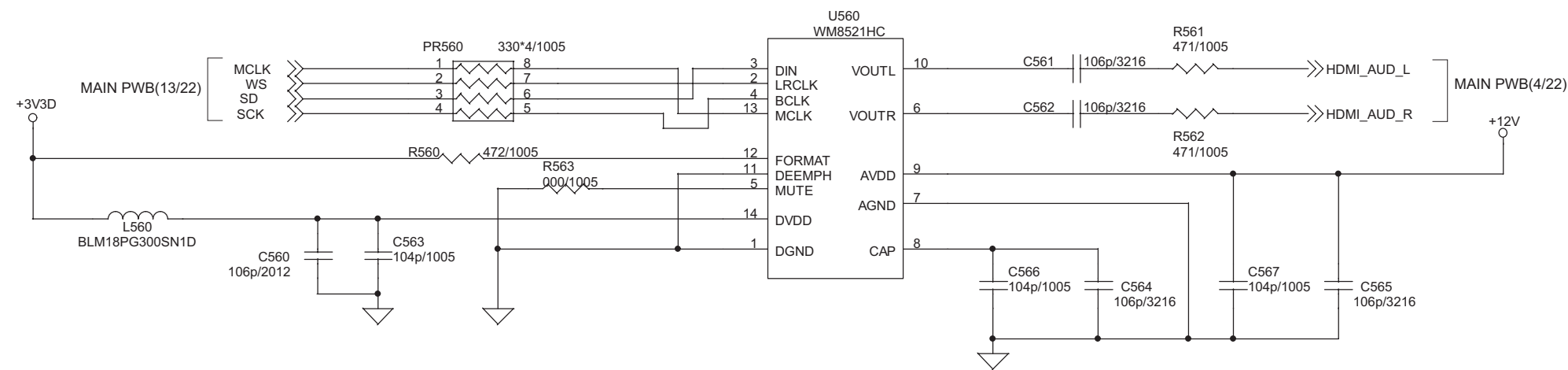




All location are from 420 to 439

MAIN PWB ASS'Y (12/22)
[HDMI Input 3_SIDE]
HU-71200008





* MODE SETTING *

MODE SETTING	
SAMPLING	256FS
FORMAT	I2S

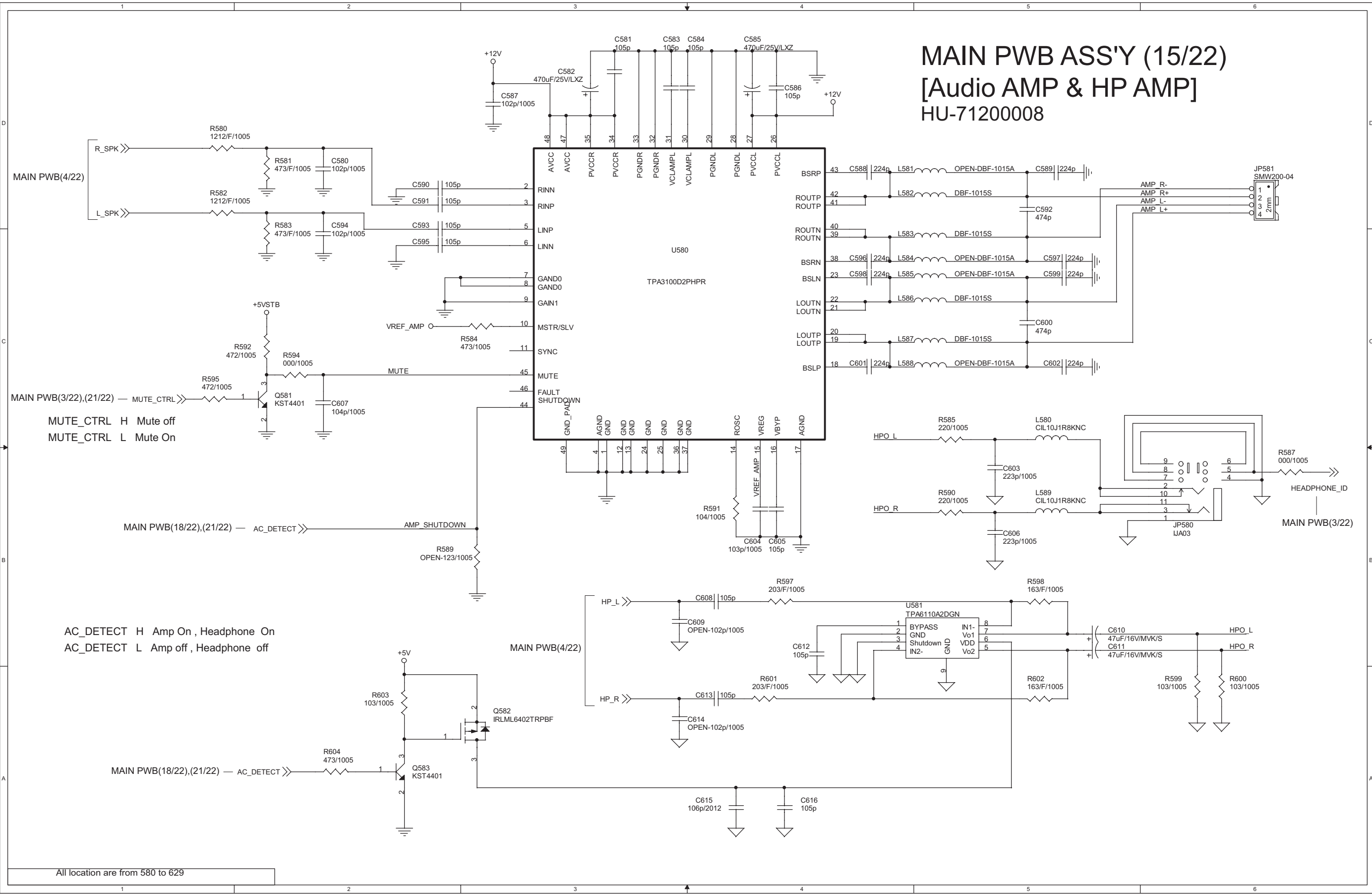
* MUTE CONTROL *

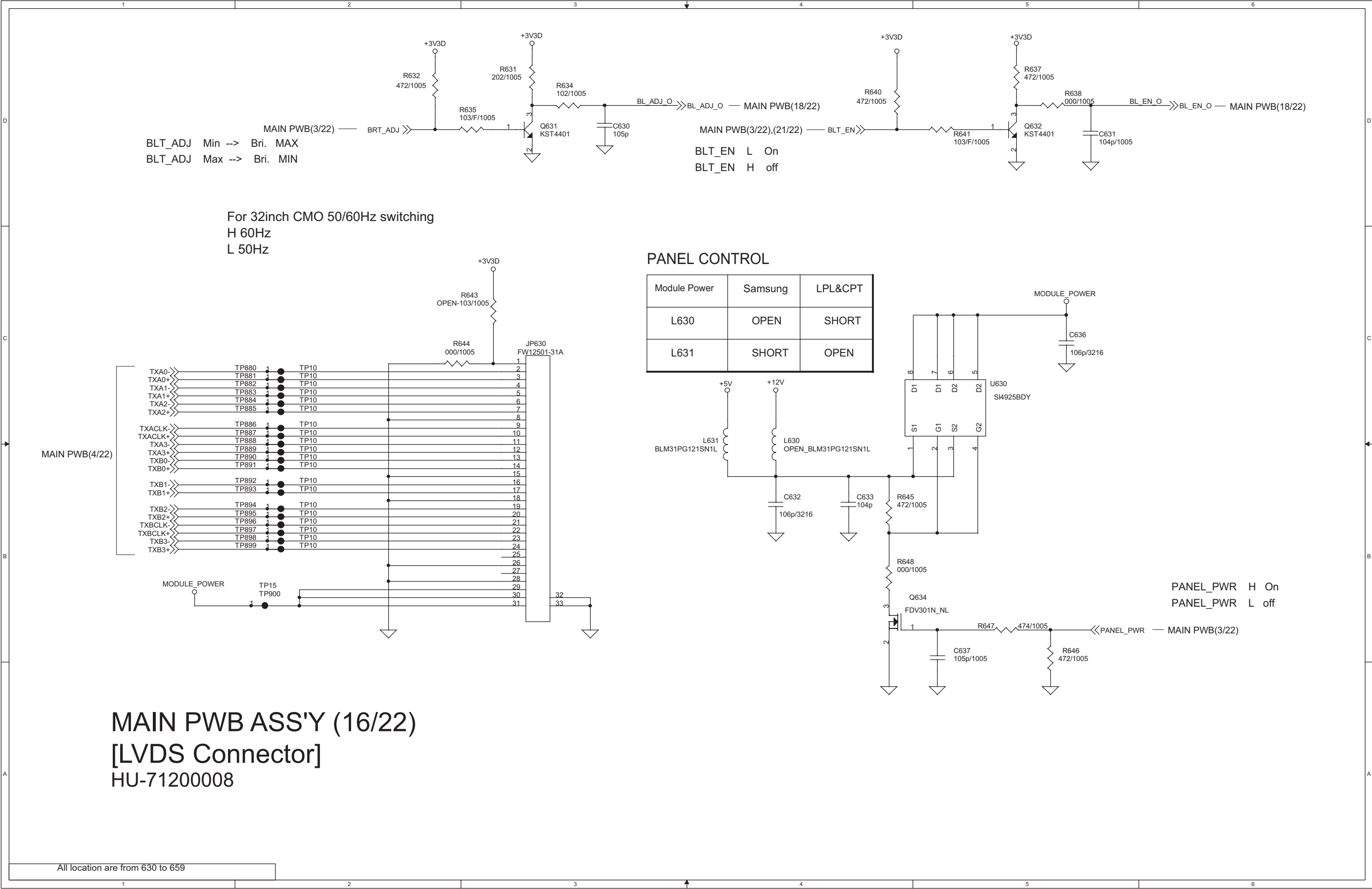
MUTE	FUNCTION
LOW	MUTE OFF
HIGH	MUTE ON

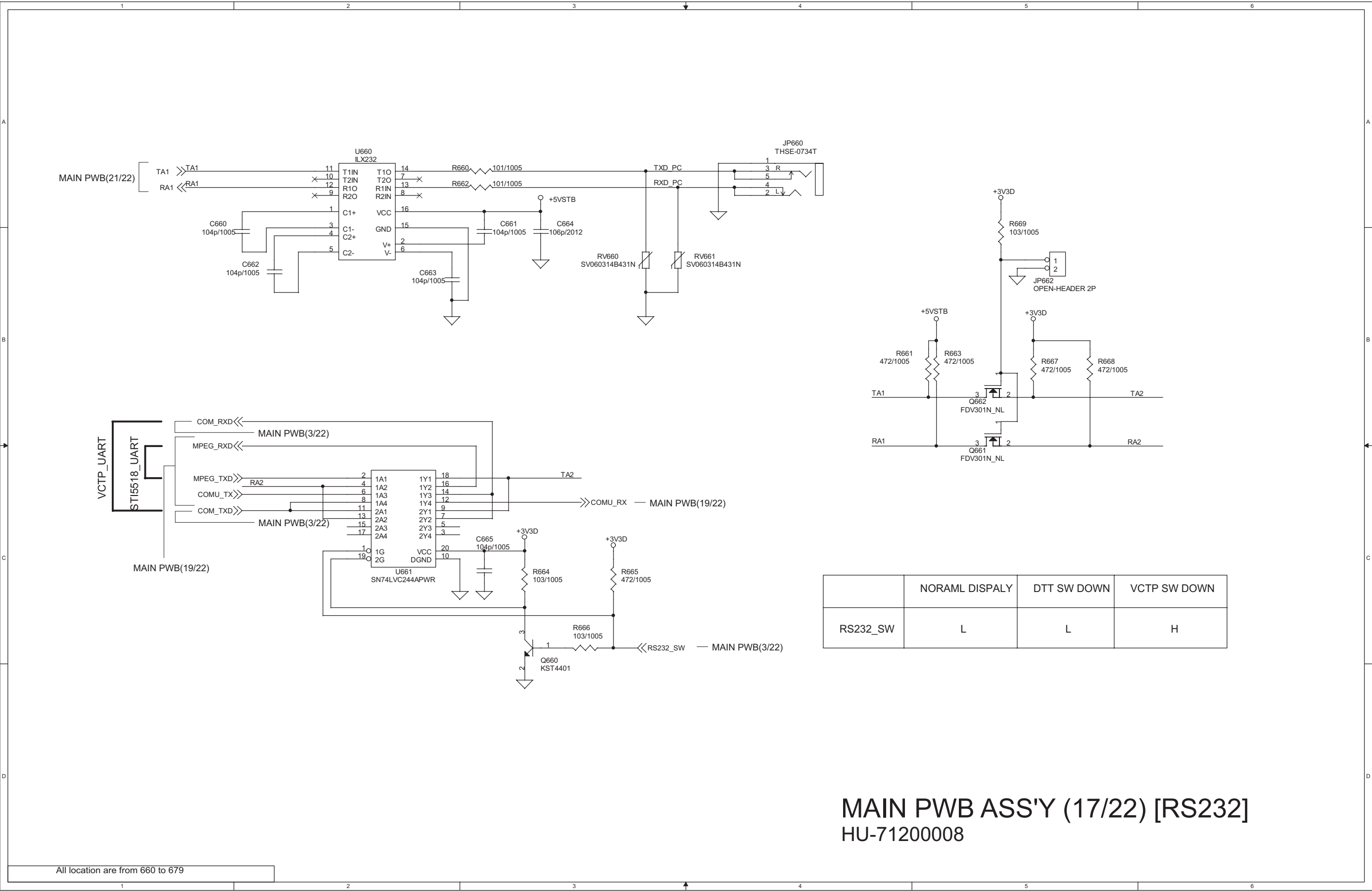
MAIN PWB ASS'Y (14/22)
[HDMI Audio DAC]
HU-71200008

All location are from 560 to 579

MAIN PWB ASS'Y (15/22)
[Audio AMP & HP AMP]
HU-71200008

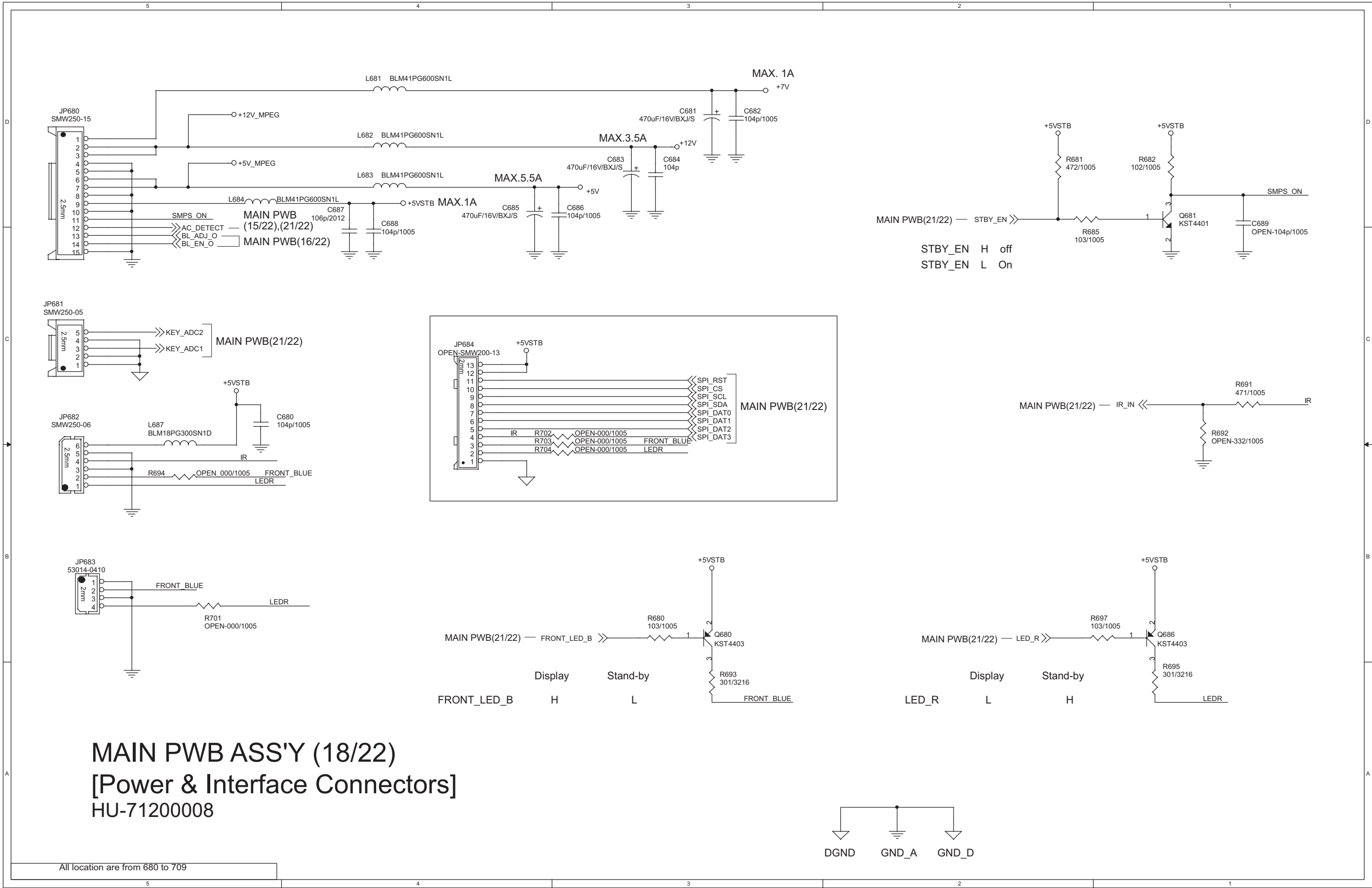


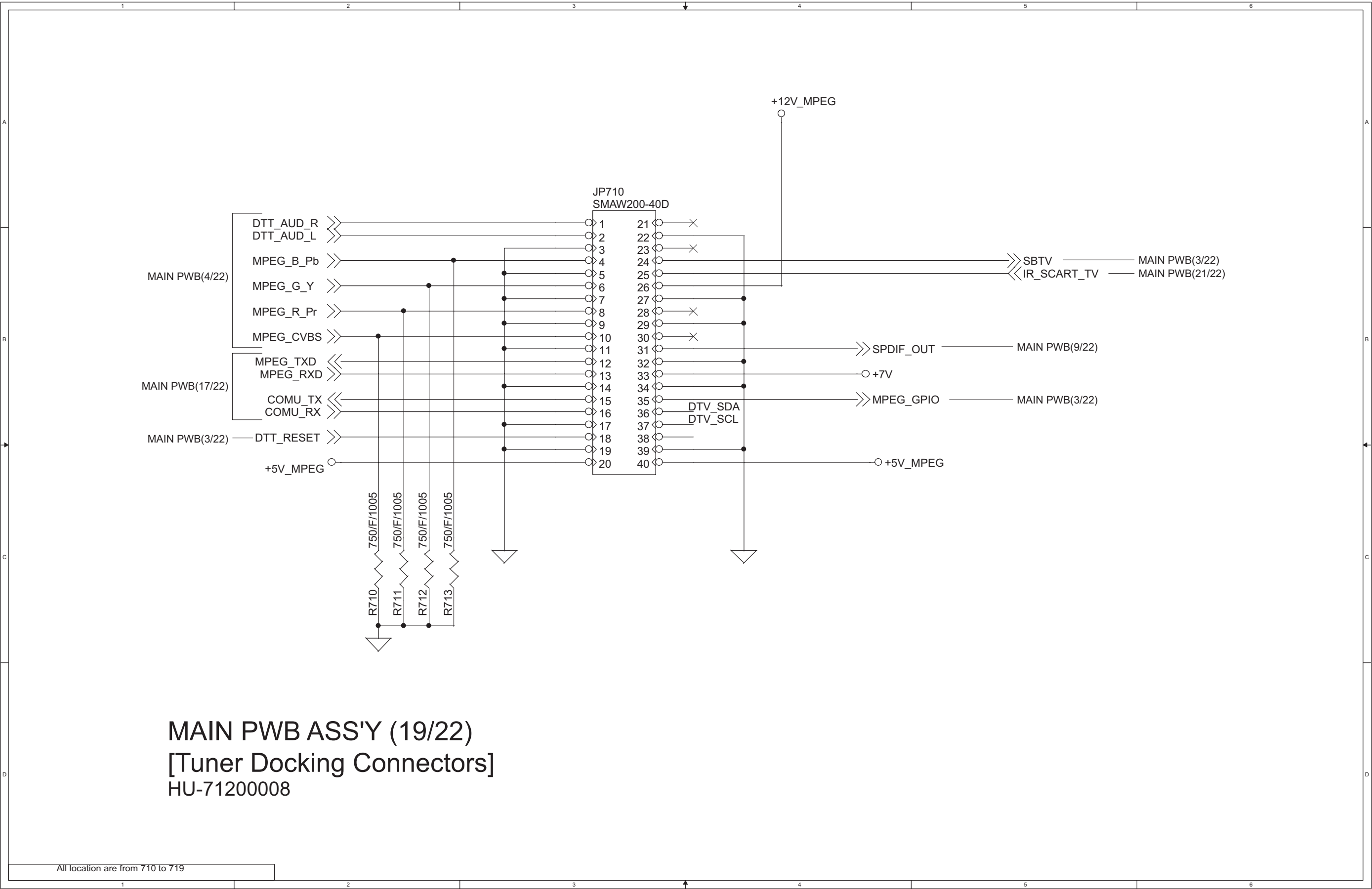


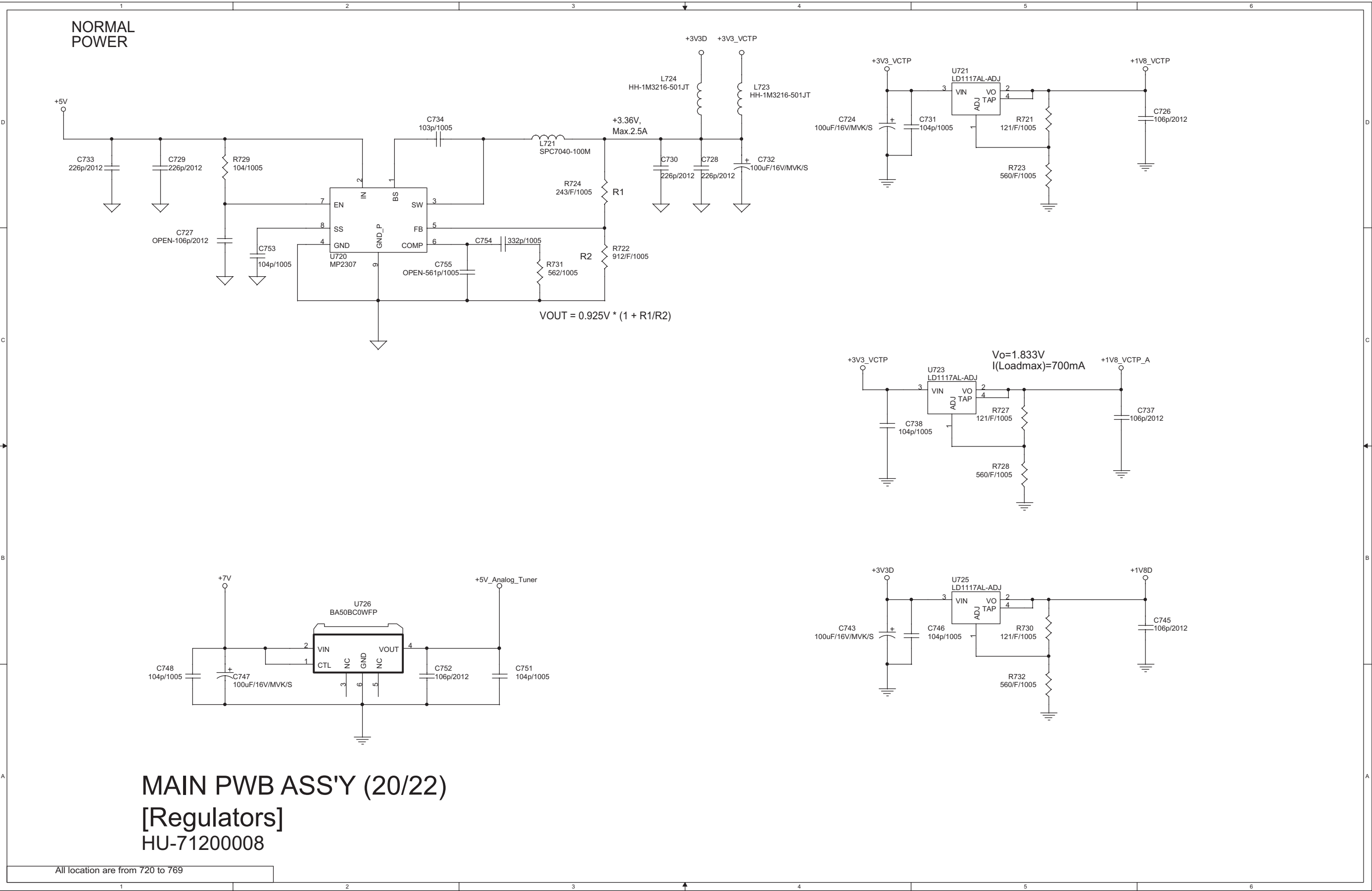


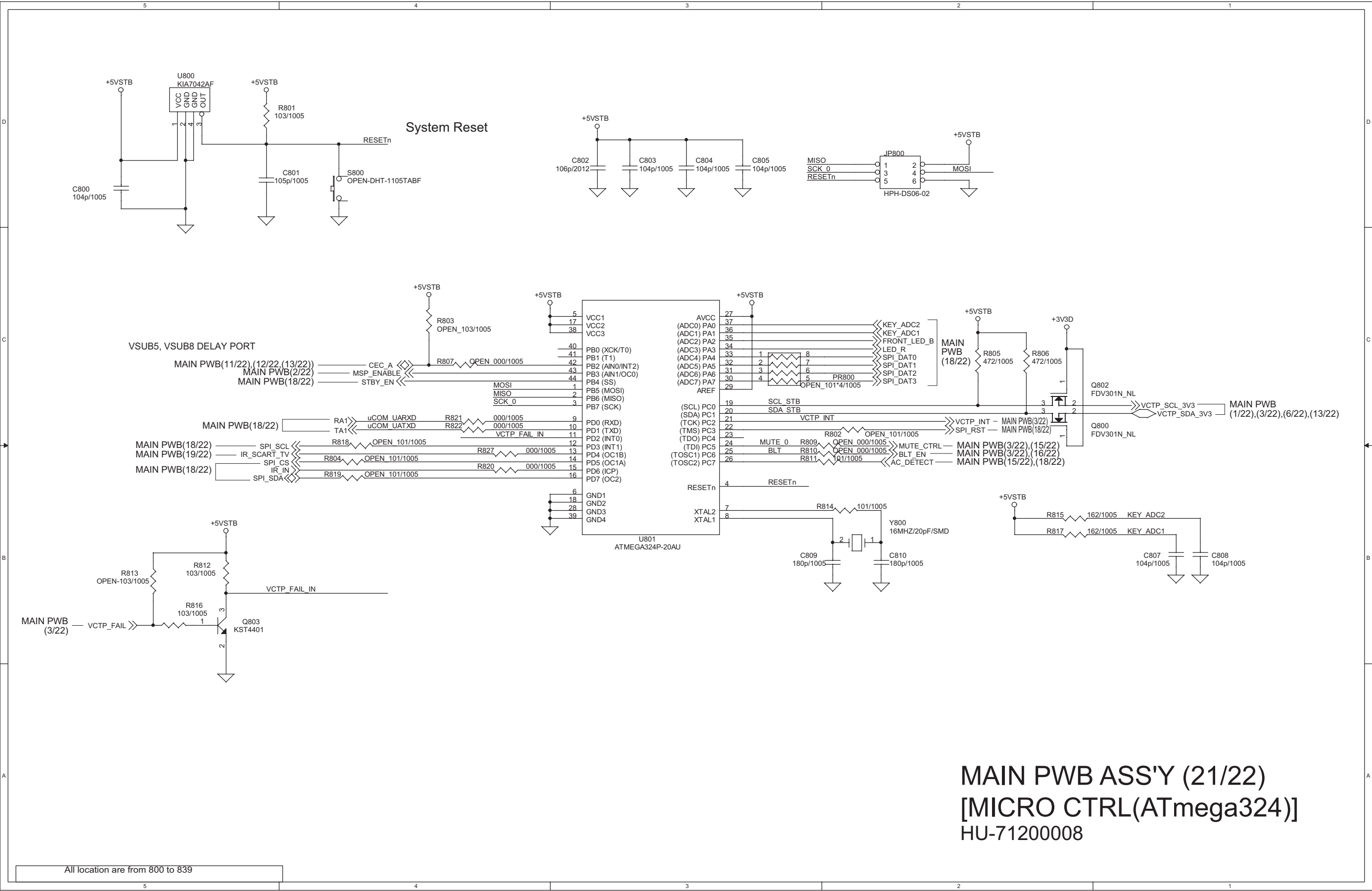
MAIN PWB ASS'Y (17/22) [RS232]
HU-71200008

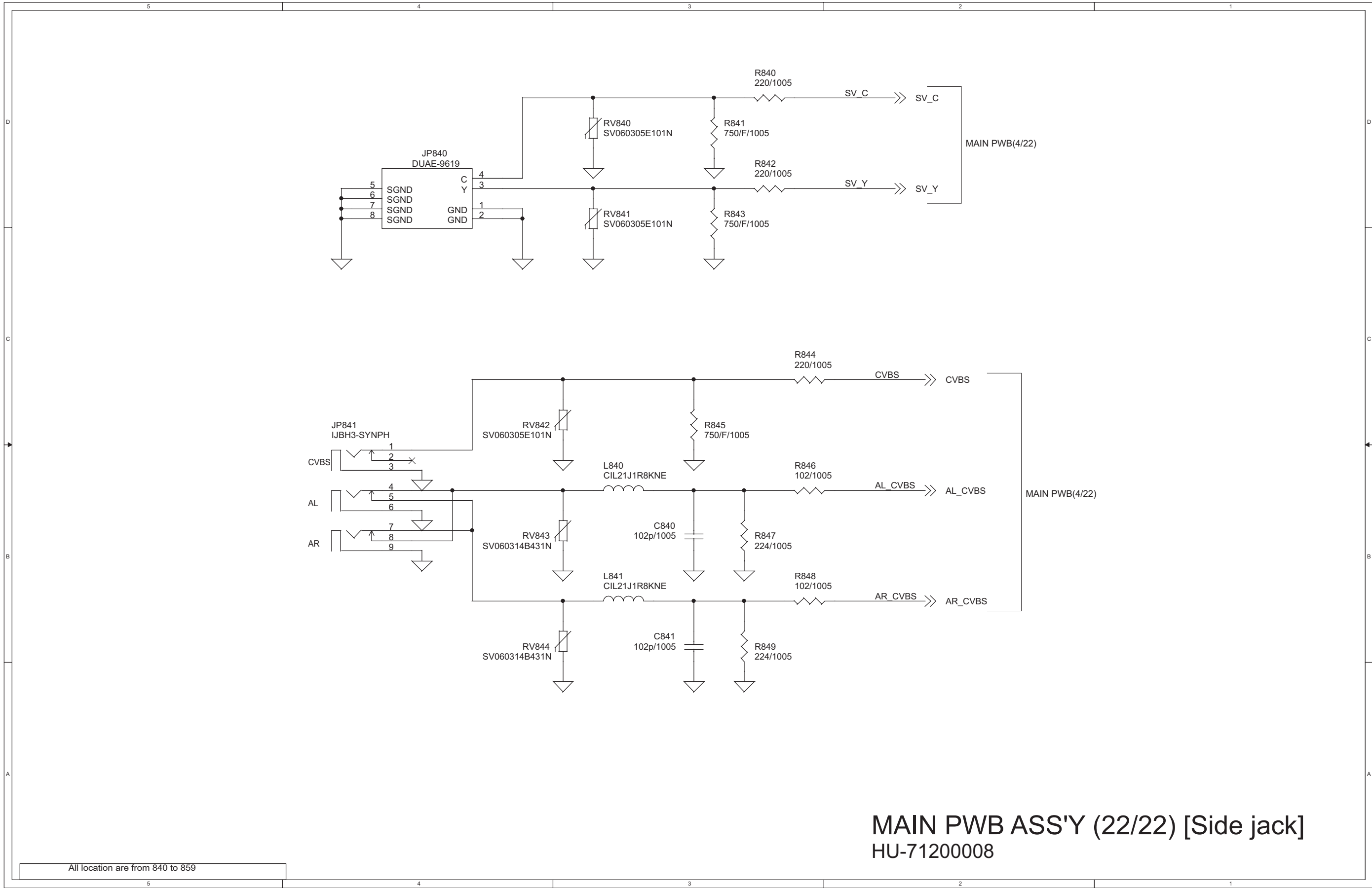
All location are from 660 to 679



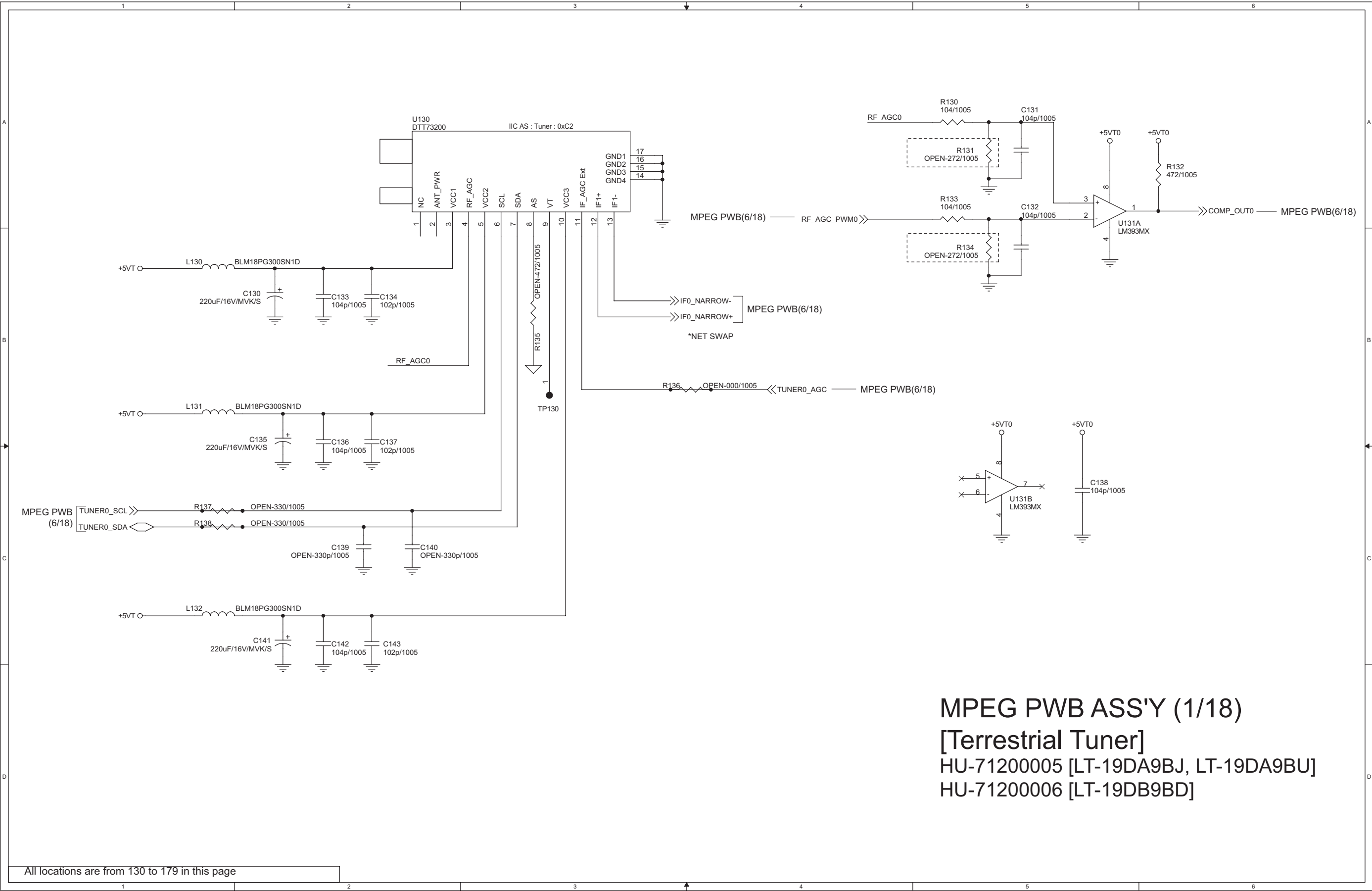




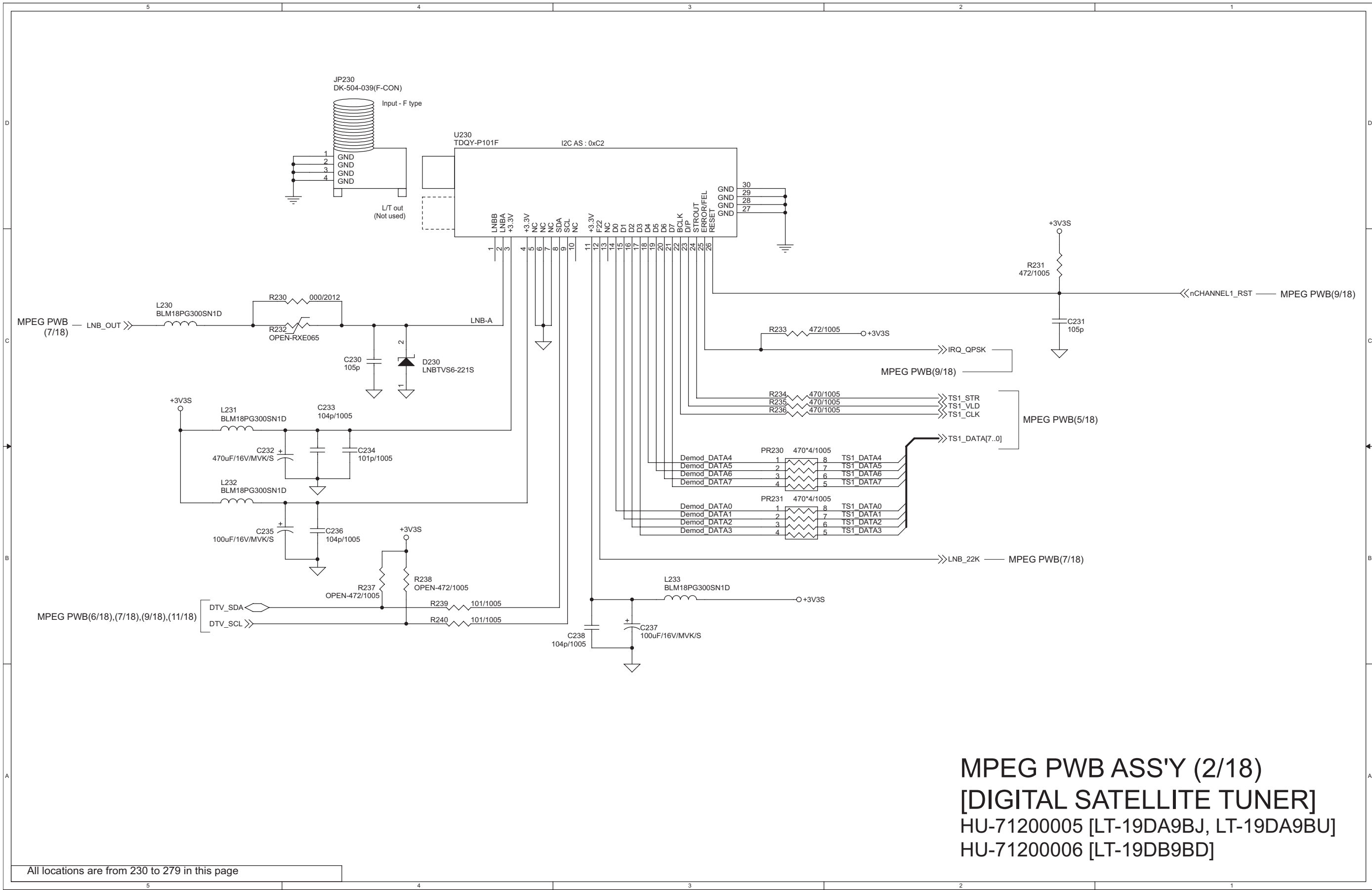


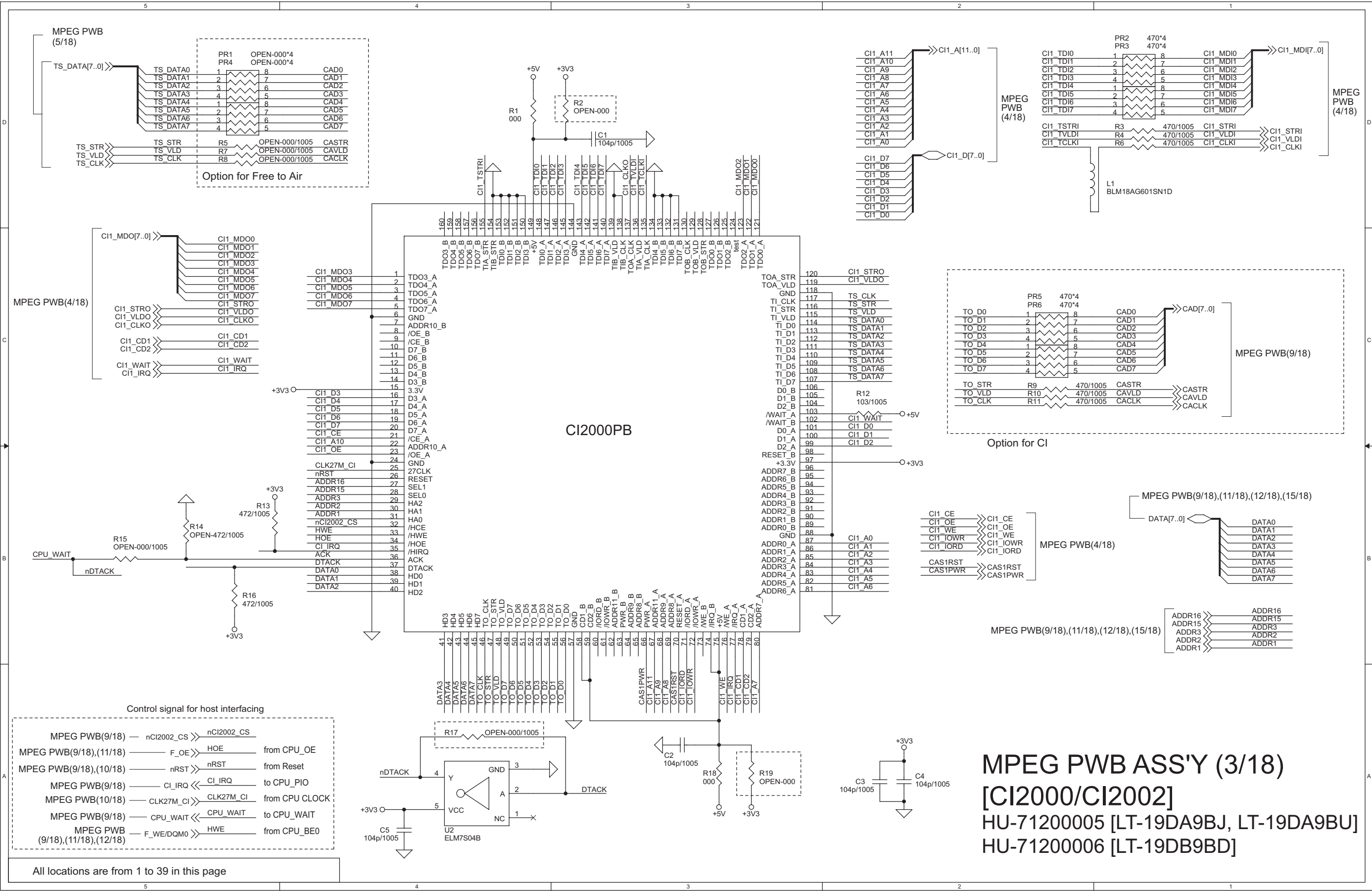


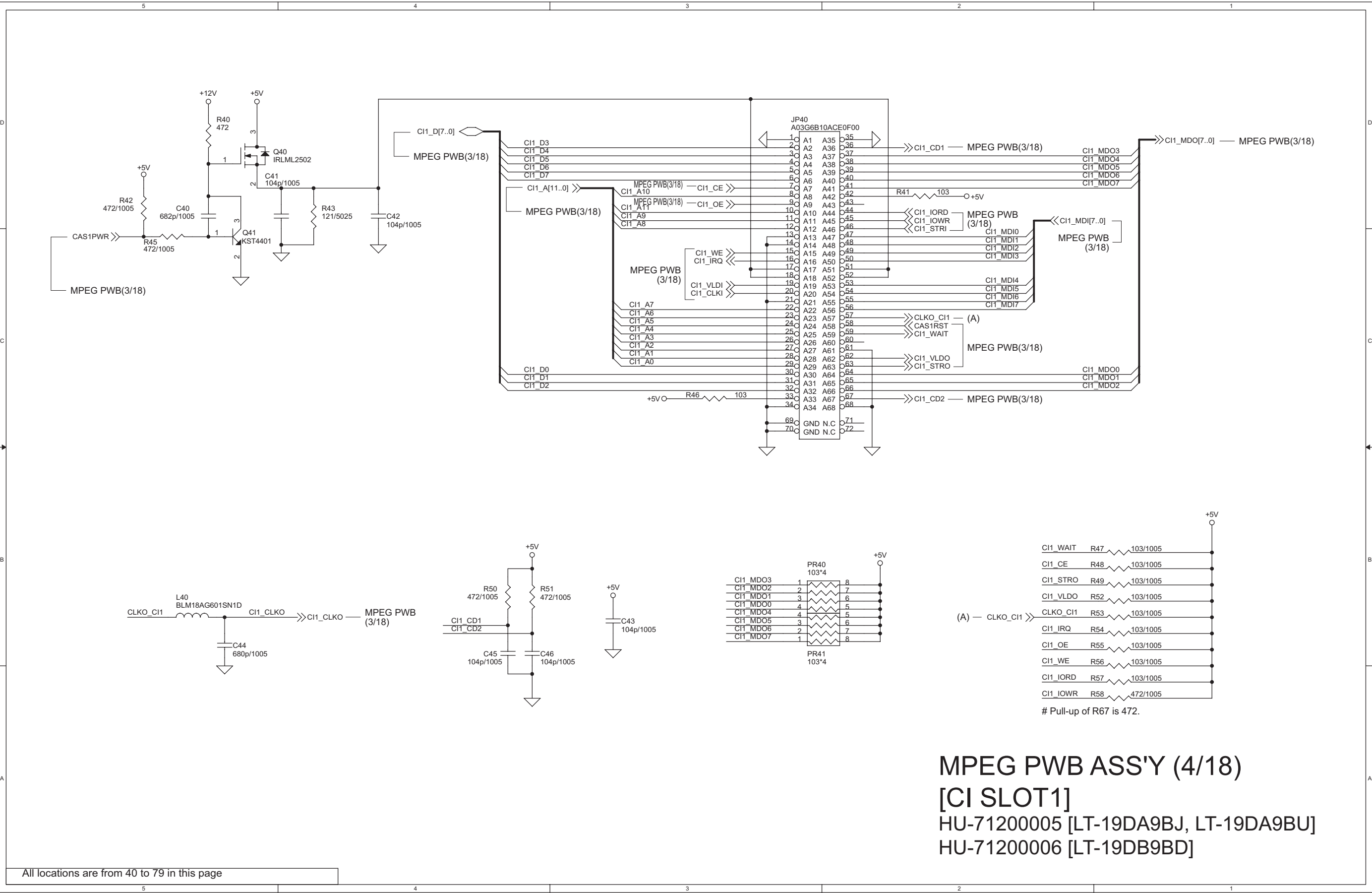
MAIN PWB ASS'Y (22/22) [Side jack]
HU-71200008



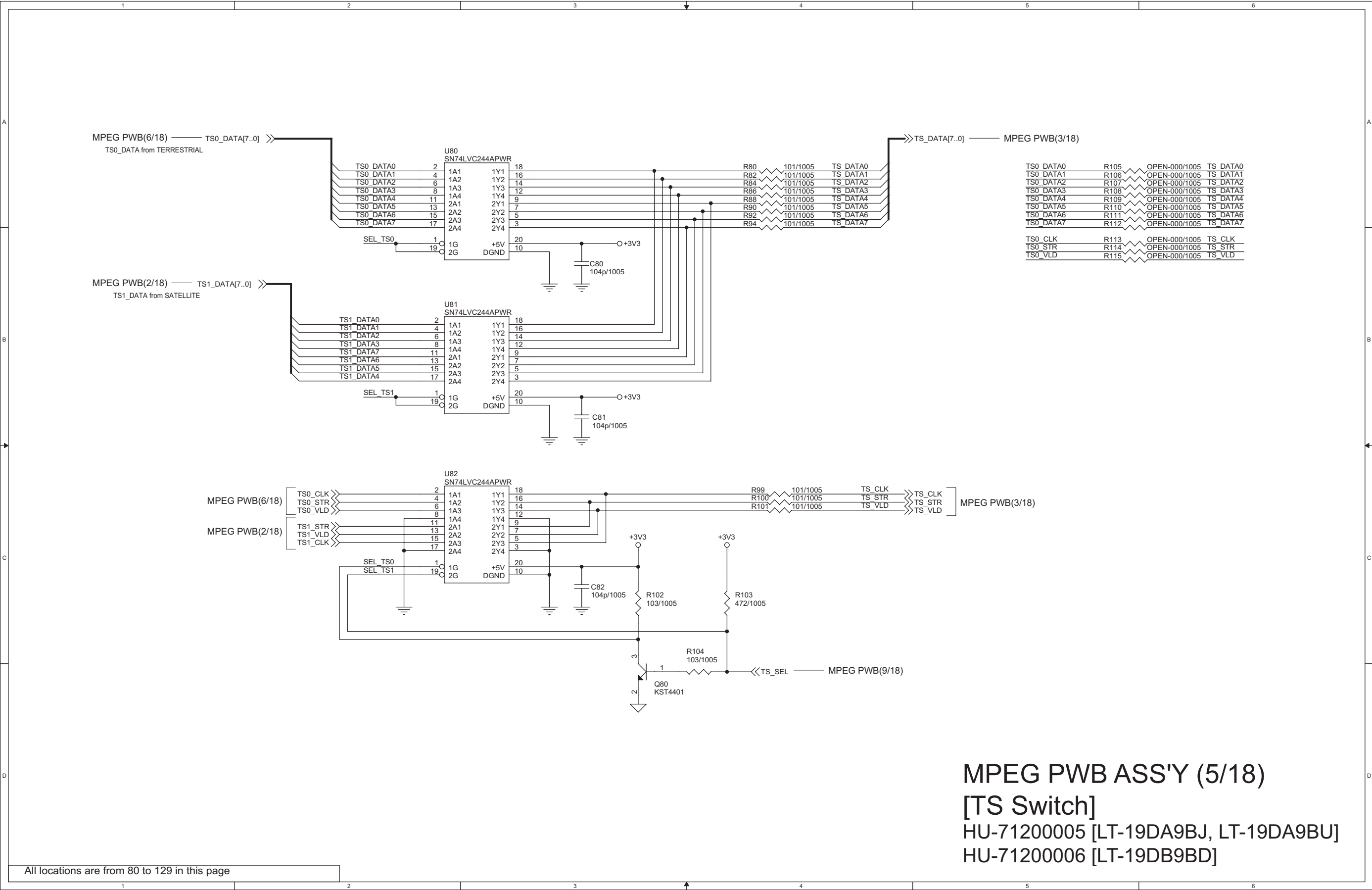
MPEG PWB ASS'Y (1/18)
[Terrestrial Tuner]
HU-71200005 [LT-19DA9BJ, LT-19DA9BU]
HU-71200006 [LT-19DB9BD]





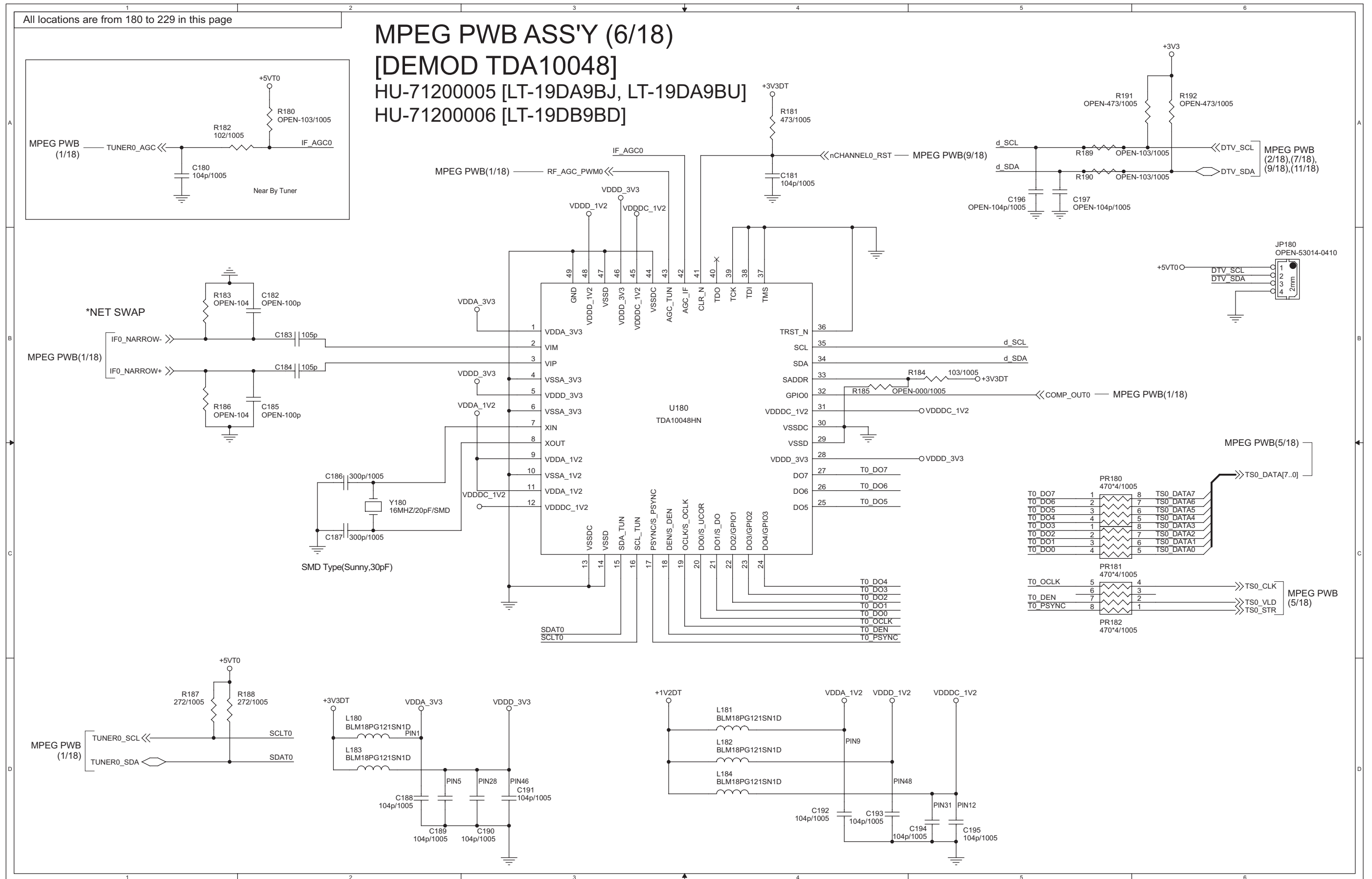


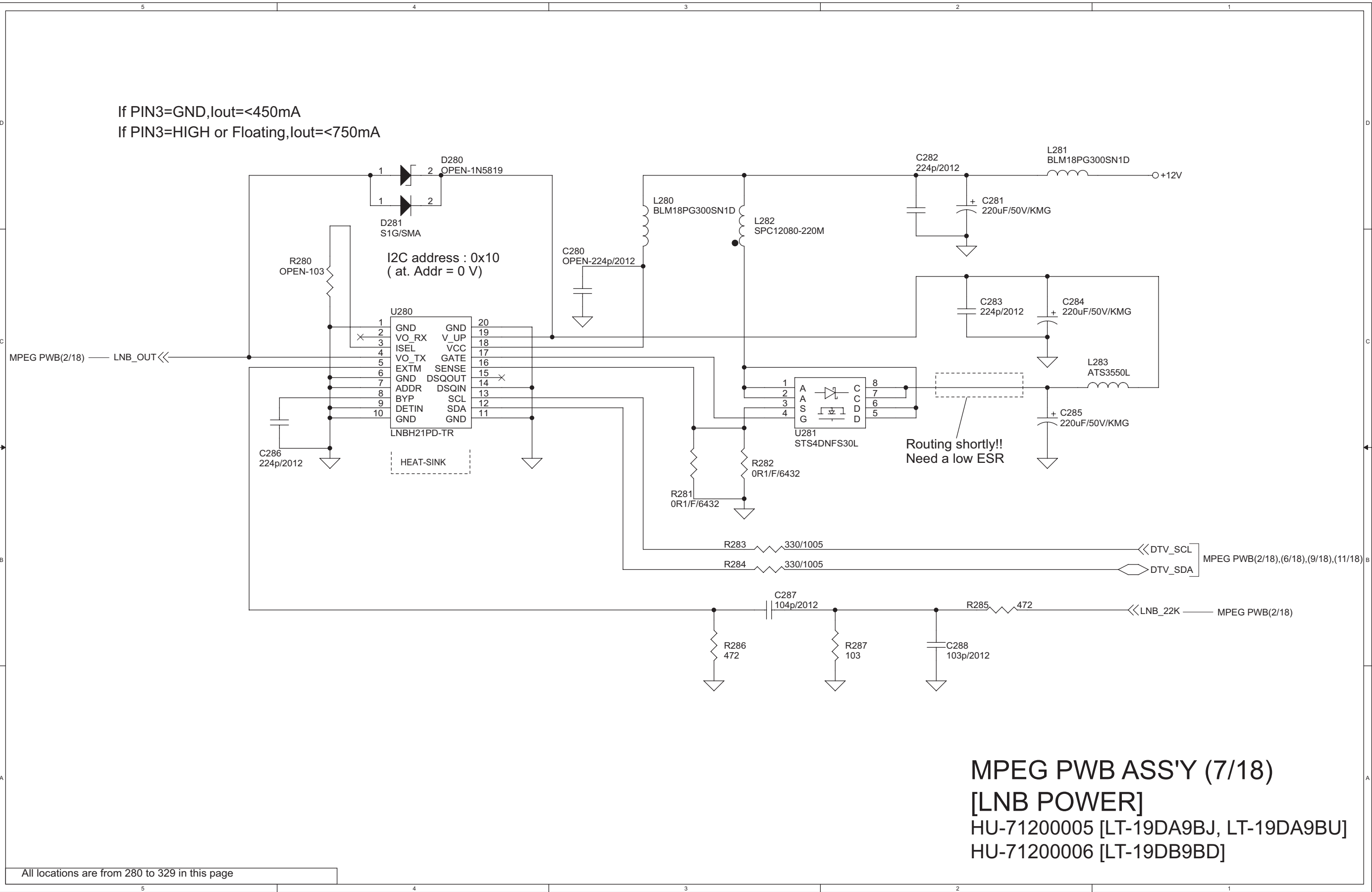
MPEG PWB ASS'Y (4/18)
[CI SLOT1]
HU-71200005 [LT-19DA9BJ, LT-19DA9BU]
HU-71200006 [LT-19DB9BD]

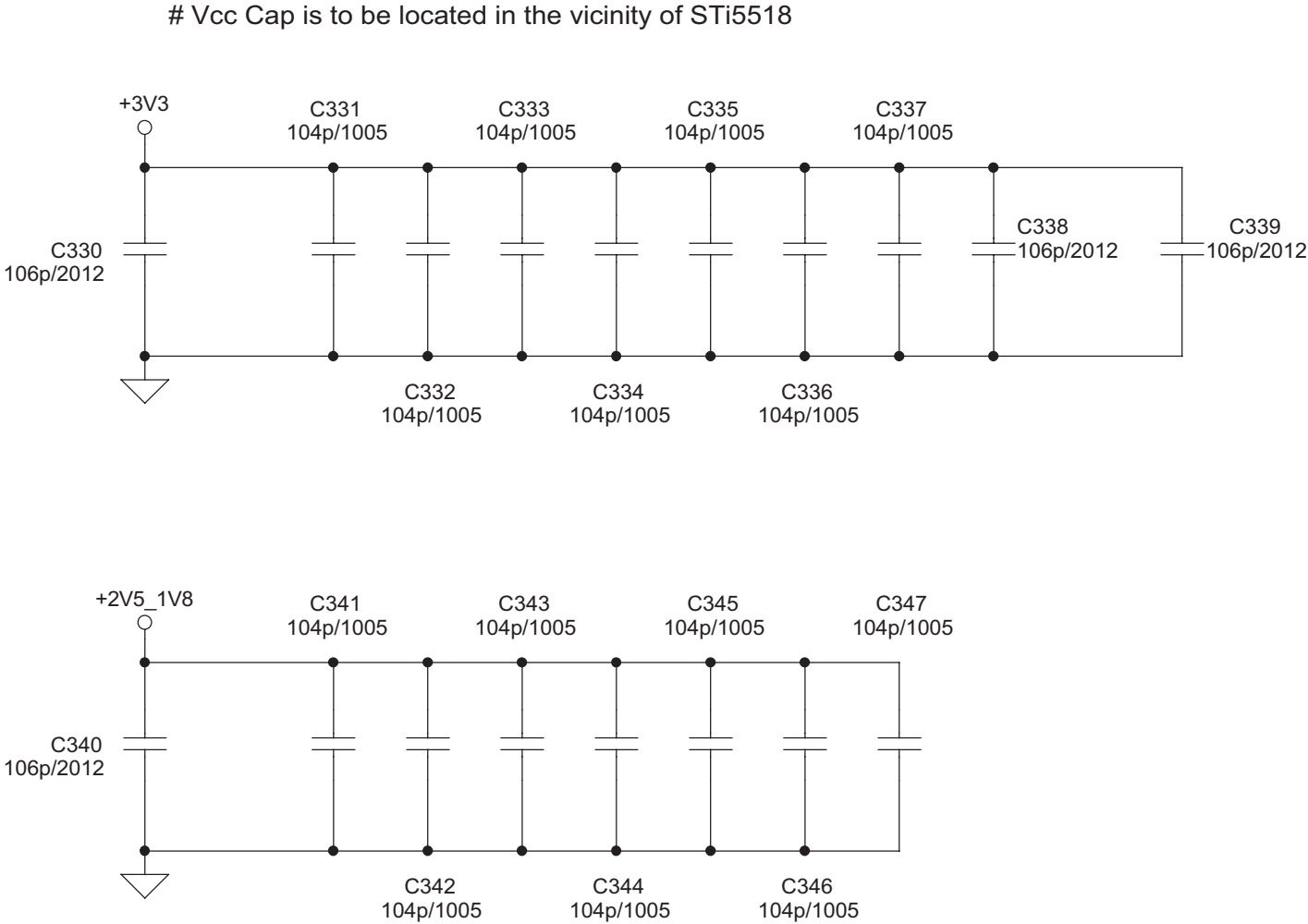


All locations are from 80 to 129 in this page

MPEG PWB ASS'Y (5/18)
[TS Switch]
HU-71200005 [LT-19DA9BJ, LT-19DA9BU]
HU-71200006 [LT-19DB9BD]



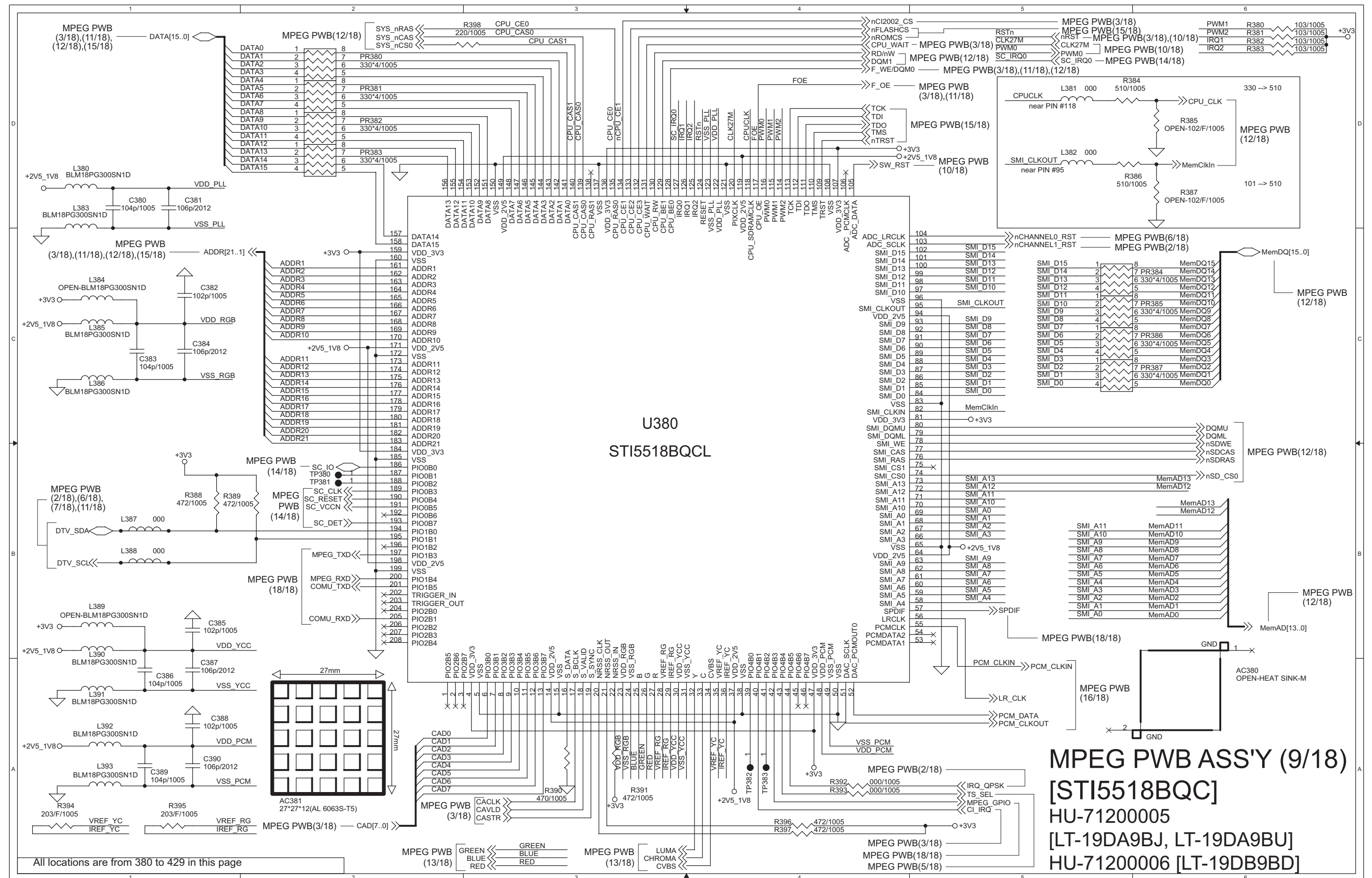




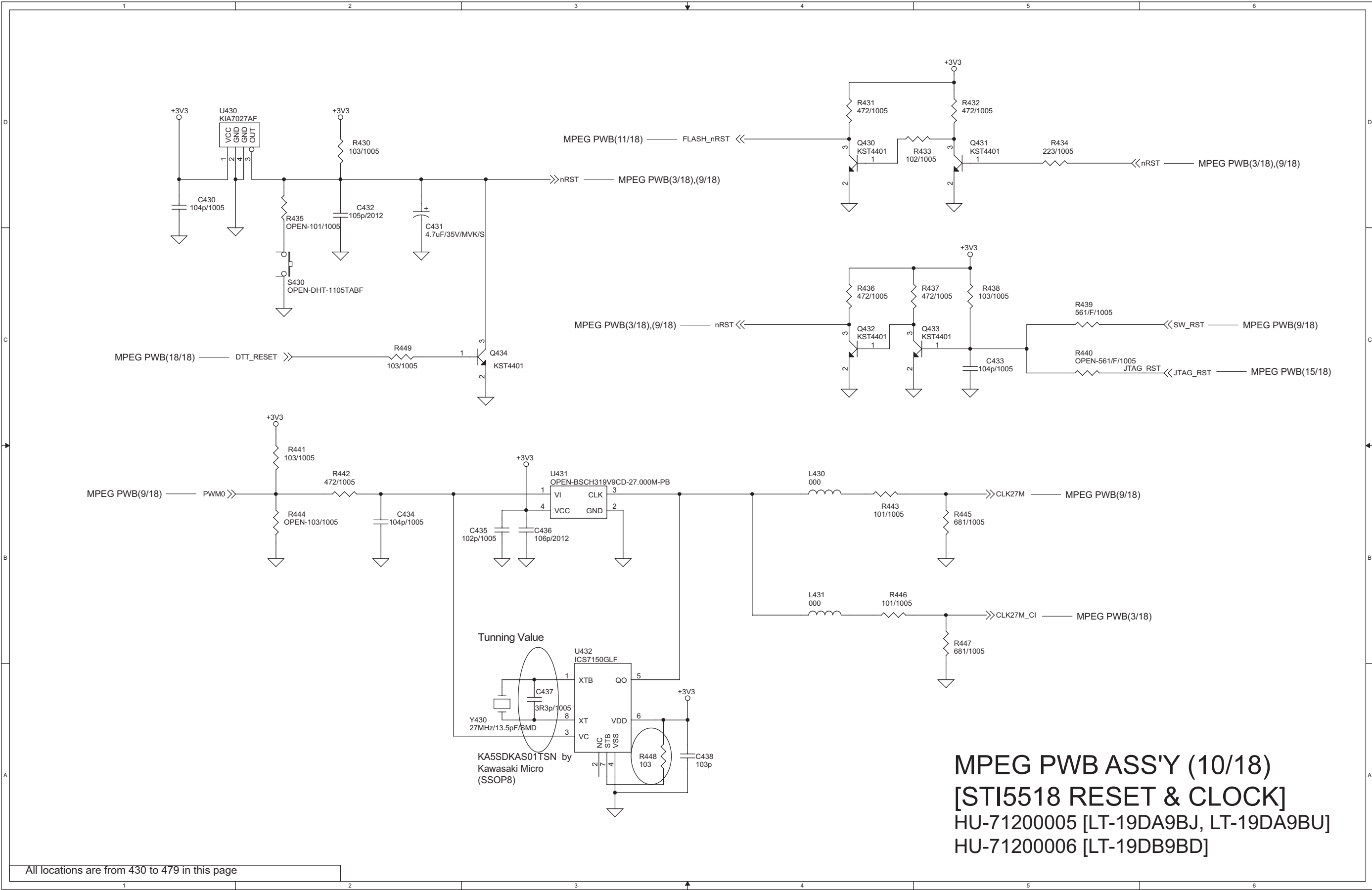
MPEG PWB ASS'Y (8/18)
[STi5518 Decoupling cap]
HU-71200005 [LT-19DA9BJ, LT-19DA9BU]
HU-71200006 [LT-19DB9BD]

All locations are from 330 to 379 in this page

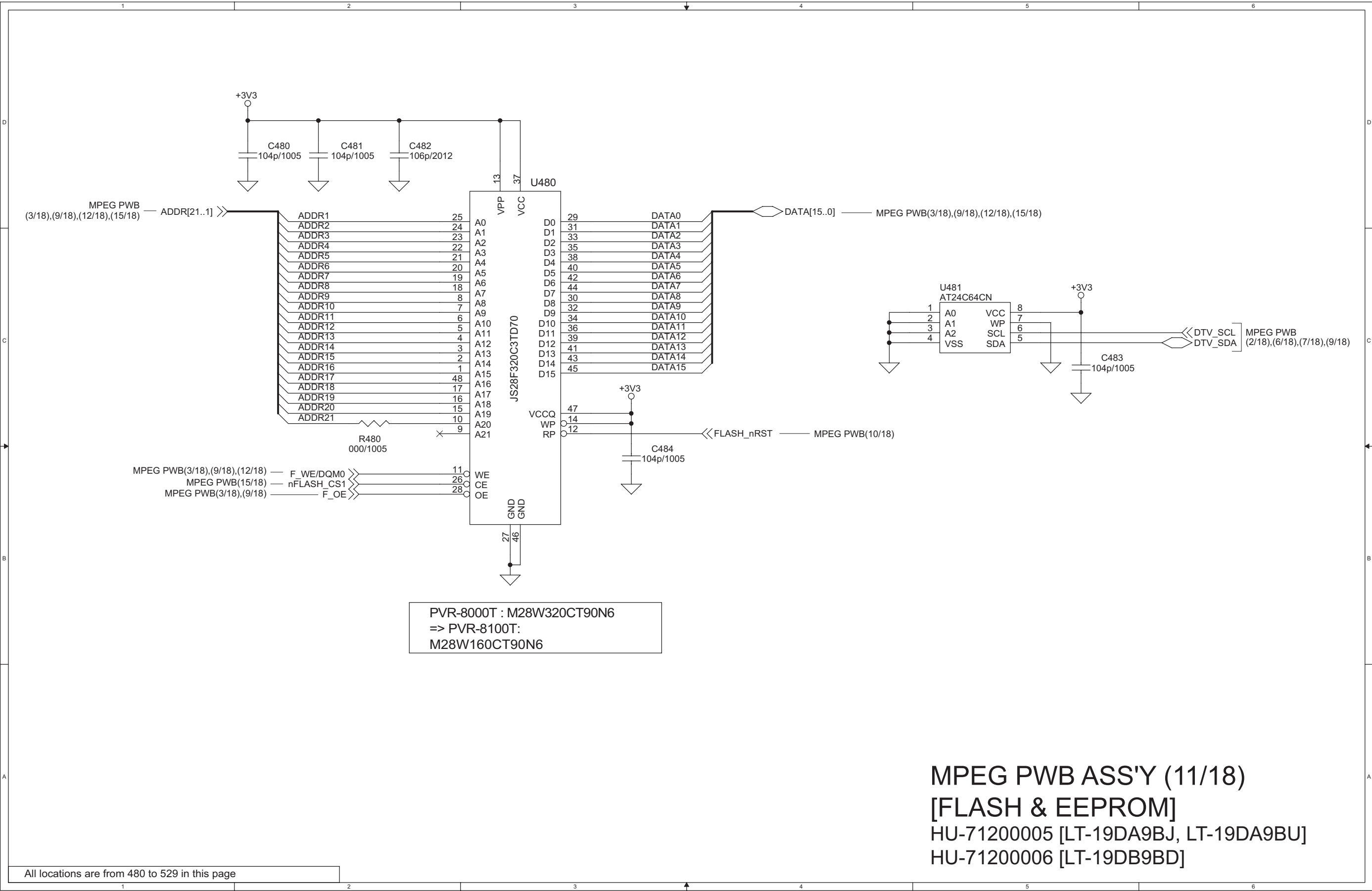
MPEG PWB CIRCUIT DIAGRAM (9/18) [STI5518BQC]

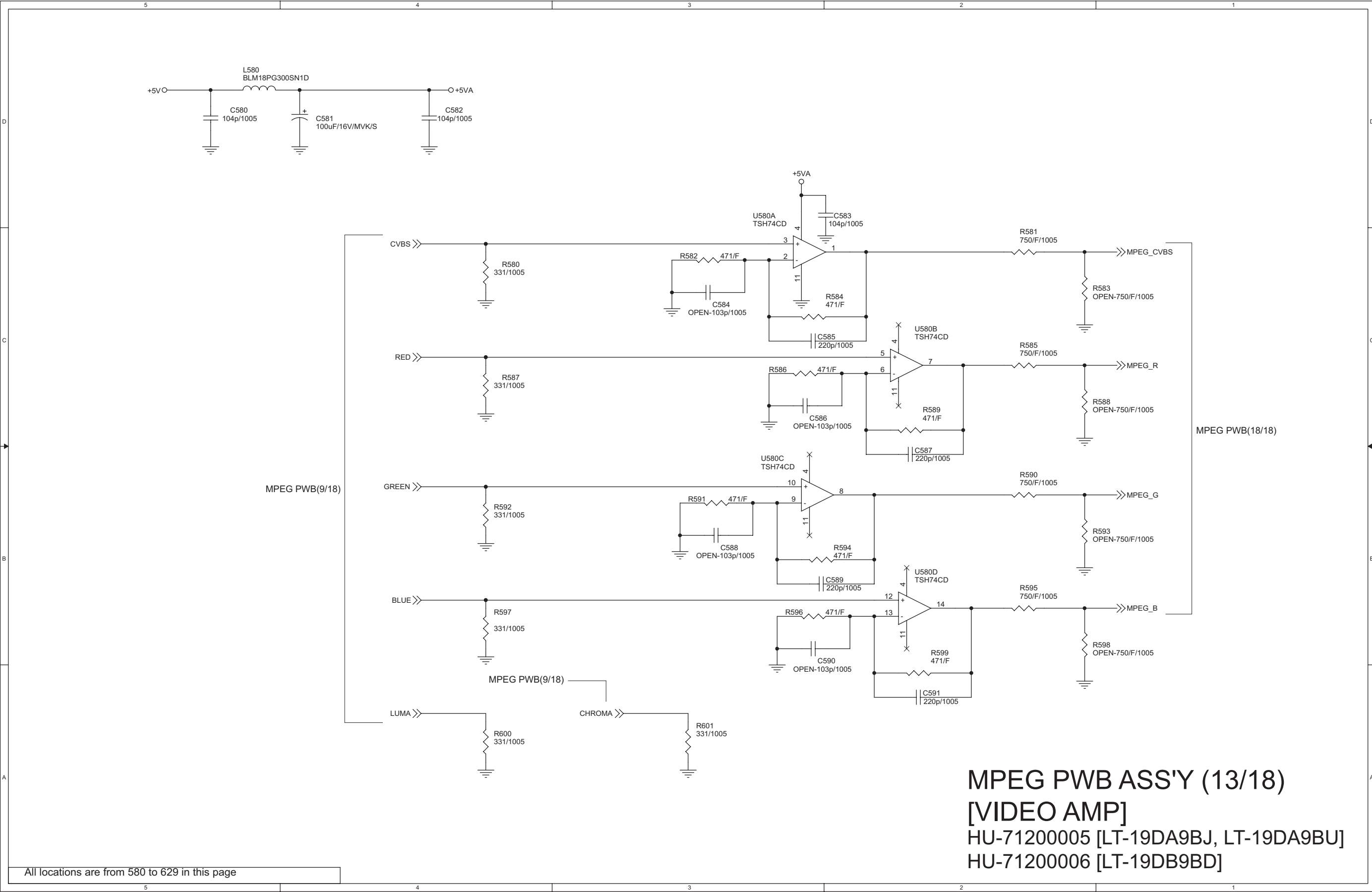


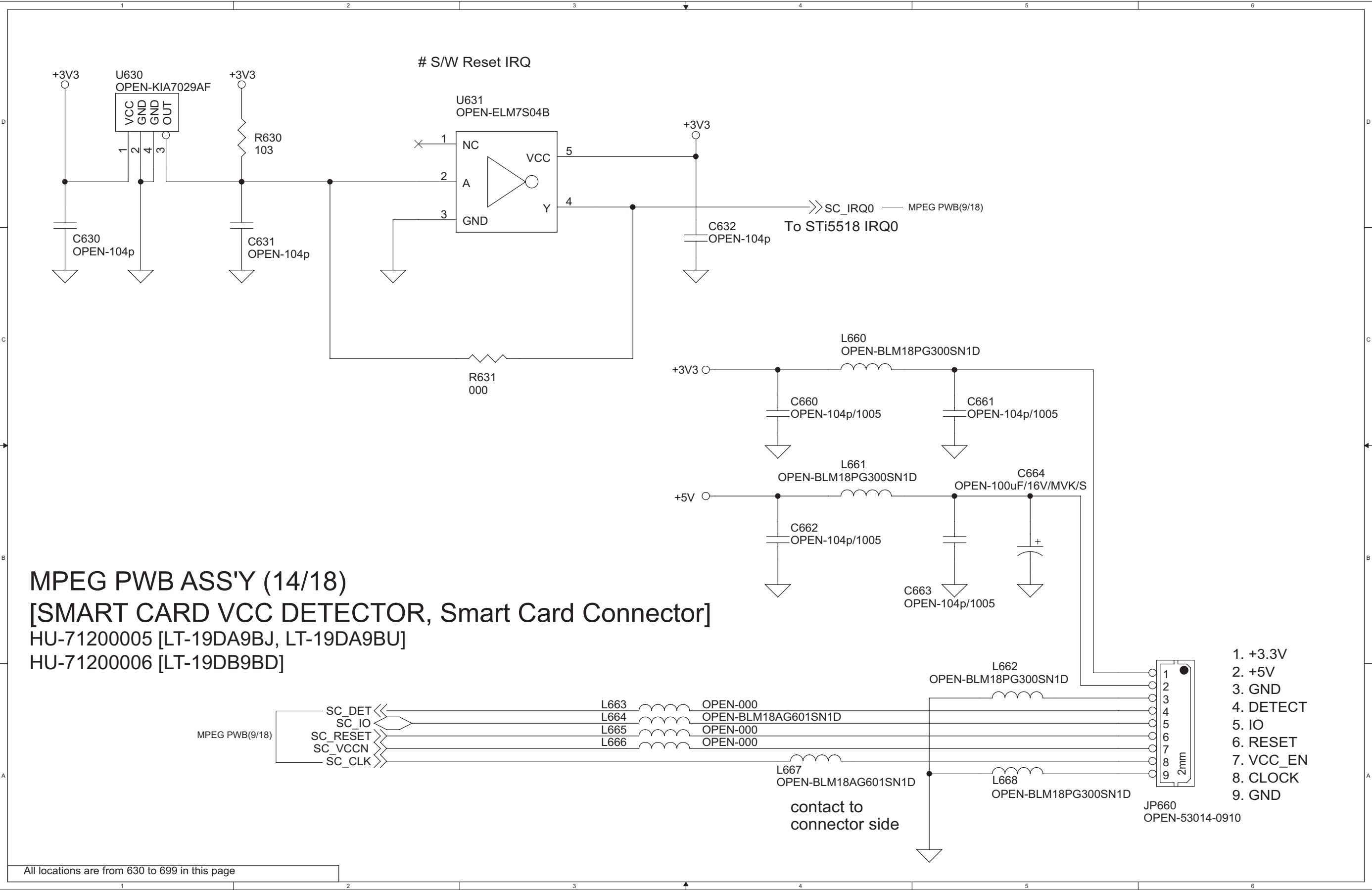
MPEG PWB CIRCUIT DIAGRAM (10/18) [STI5518 RESET & CLOCK]

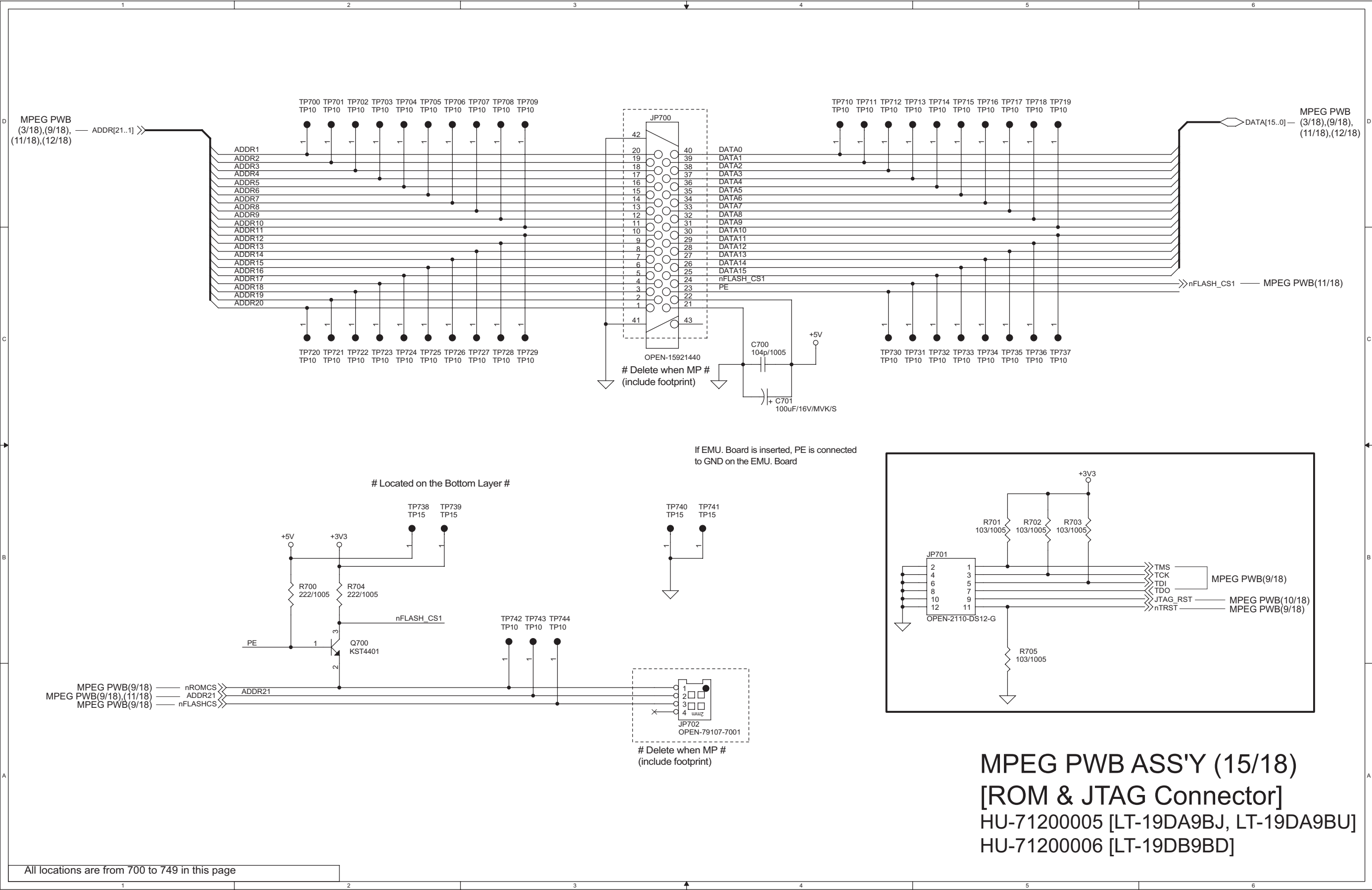


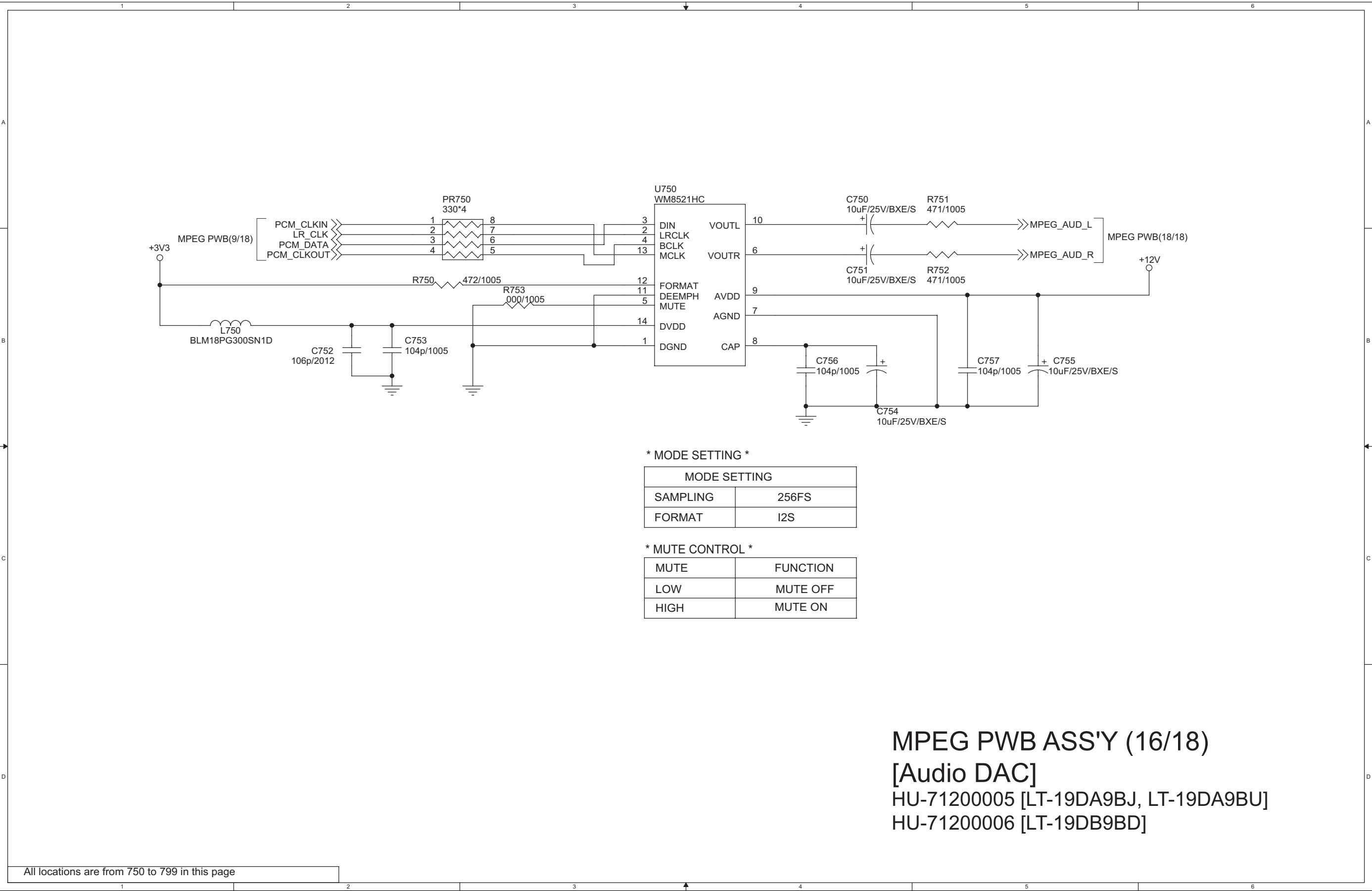
All locations are from 430 to 479 in this page

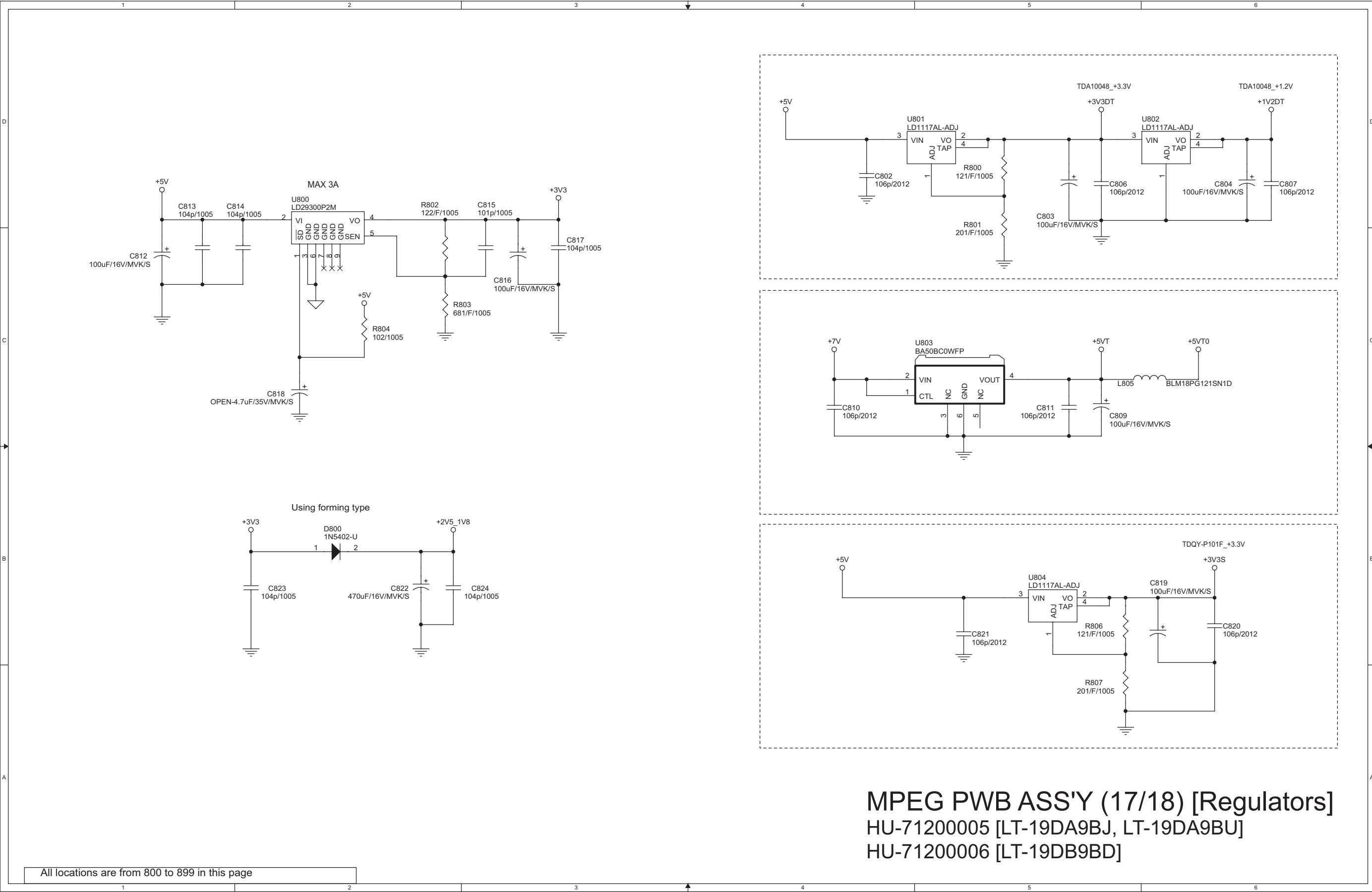




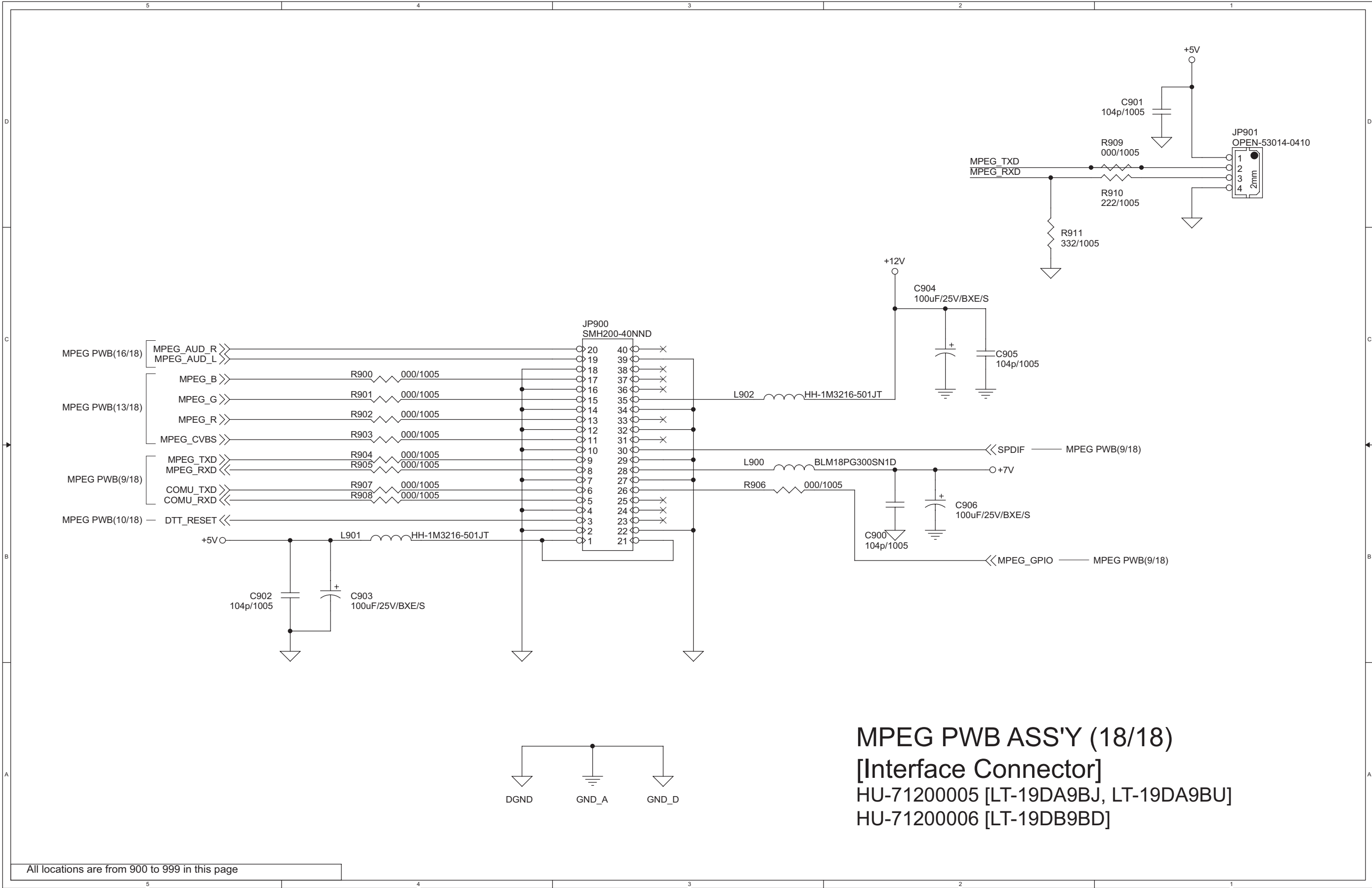






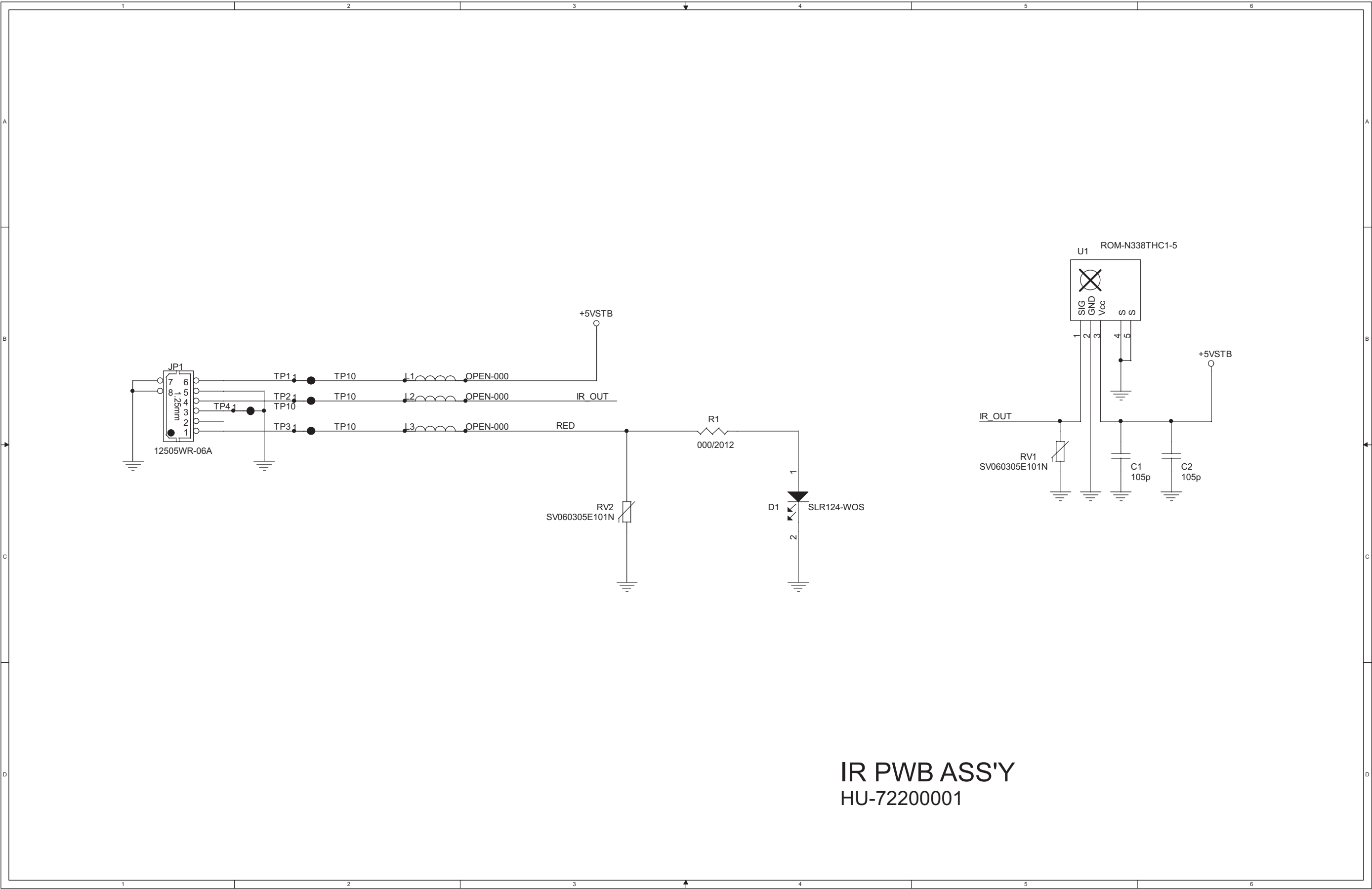


MPEG PWB ASS'Y (17/18) [Regulators]
HU-71200005 [LT-19DA9BJ, LT-19DA9BU]
HU-71200006 [LT-19DB9BD]



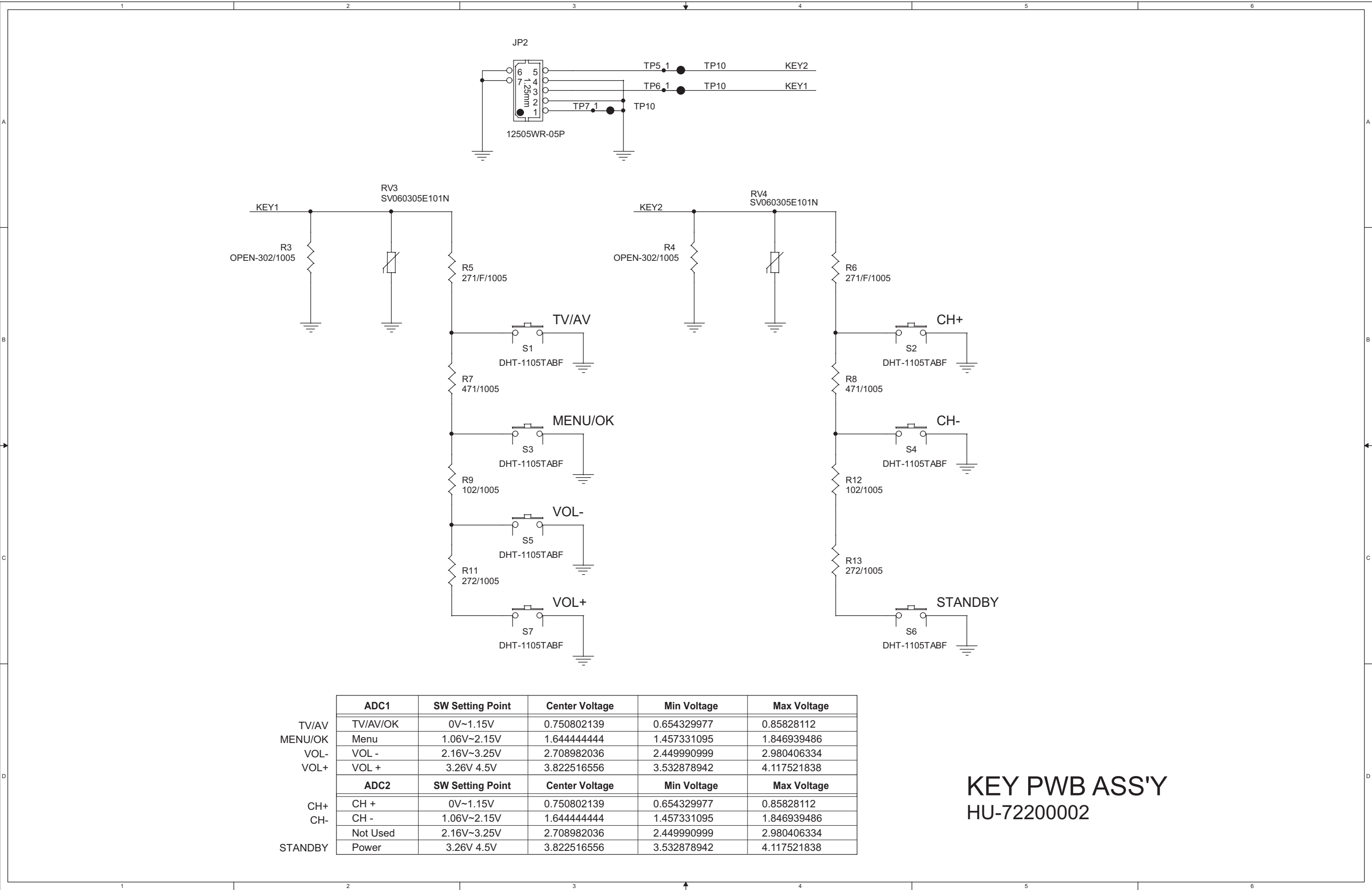
MPEG PWB ASS'Y (18/18)
[Interface Connector]
HU-71200005 [LT-19DA9BJ, LT-19DA9BU]
HU-71200006 [LT-19DB9BD]

IR PWB CIRCUIT DIAGRAM



IR PWB ASS'Y
HU-72200001

KEY PWB CIRCUIT DIAGRAM



PATTERN DIAGRAMS
MAIN PWB PATTERN [SOLDER SIDE]

