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Service Manual

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PHILIPS

1. Technical Specifications, Connections, and Chassis Overview

Index of this chapter:

1.1 Technical Specifications
1.2 Connection Overview
1.3 Chassis Overview

Notes:

- Figures can deviate due to the different set executions.
- Specifications are indicative (subject to change).

1.1 Technical Specifications

1.1.1 Vision

Display type	:	LCD
Screen size	:	42" (107 cm), 16:9
	:	47" (120 cm), 16:9
	:	52" (132 cm), 16:9
Resolution (H × V pixels)	:	1920 × 1080 (42")
	:	1920 × 1080 (47")
	:	1920 × 1080 (52")
Dyn. contrast ratio	:	29000:1
	:	33000:1 (52" sets)
Min. light output (cd/m^2)	:	500
Typ. response time (ms)	:	5
	:	6 (52")
	:	3 (42PFL7403/93)
Viewing angle (H × V degrees)	:	178 × 178
	:	176 × 176 (52")
Tuning system	:	PLL
Presets/channels	:	99 presets
Tuner bands	:	VHF, UHF, S, H
TV Colour systems	:	PAL B/G, D/K, I
	:	SECAM B/G, D/K
Video playback	:	NTSC
	:	PAL
	:	SECAM
Supported computer formats	:	640 × 480 @ 60, 72, 75, 85 Hz
	:	800 × 600 @ 60, 72, 75, 85 Hz
	:	720 × 400 @ 70 Hz
	:	1280 × 768 @ 60 Hz
	:	1280 × 1024 @ 60 Hz
	:	1360 × 768 @ 60 Hz
Supported video formats	:	1080i @ 50, 60 Hz
	:	1080p @ 24, 25, 30, 50, 60 Hz
	:	480i @ 60 Hz
	:	480p @ 60 Hz
	:	576i @ 50 Hz
	:	576p @ 50 Hz
	:	720p @ 50, 60 Hz

1.1.2 Sound

Sound systems	:	stereo, BBE®
Maximum power (W_{RMS})	:	2 × 30

1.1.3 Miscellaneous

Power supply:

- Mains voltage (V_{AC})	:	100 - 240
- Mains frequency (Hz)	:	50 / 60

Ambient conditions:

- Temperature range (°C)	:	+5 to +40
- Maximum humidity	:	90% R.H.

Power consumption (values are indicative)

- Normal operation (W)	:	≈ 200 (42PFL5403/98, 42PFL7403/93, 42PFL5403/93)
	:	≈ 210 (42PFL7603/93, 42PFL7603/98)
	:	≈ 260 (47PFL5403/98)
	:	≈ 330 (52PFL5403/93)
- Stand-by (W)	:	< 0.15

Dimensions (W × H × D mm)	:	1046 × 645 × 88 (42")
	:	1046 × 645 × 108 (42PFL7603/xx)
	:	1163 × 712 × 104 (47")
	:	1302 × 798 × 116 (52")
Weight (kg)	:	20 (42")
	:	20.5 (42PFL7603/xx)
	:	26 (47")
	:	38 (52")

1.2 Connection Overview

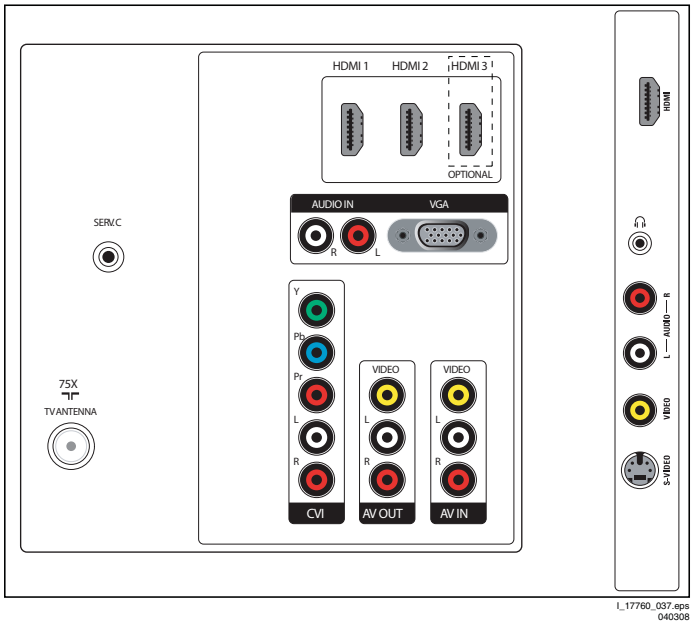

Figure 1-1 Side and rear I/O connections

Note: The following connector colour abbreviations are used (acc. to DIN/IEC 757): Bk= Black, Bu= Blue, Gn= Green, Gy= Grey, Rd= Red, Wh= White, and Ye= Yellow.

1.2.1 Side Connections

HDMI: Digital Video, Digital Audio - In

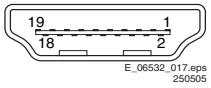

Figure 1-2 HDMI (type A) connector

1	- D2+	Data channel
2	- Shield	Gnd
3	- D2-	Data channel
4	- D1+	Data channel
5	- Shield	Gnd
6	- D1-	Data channel
7	- D0+	Data channel
8	- Shield	Gnd
9	- D0-	Data channel
10	- CLK+	Data channel
11	- Shield	Gnd
12	- CLK-	Data channel
13	- n.c.	
14	- n.c.	
15	- DDC_SCL	DDC clock
16	- DDC_SDA	DDC data
17	- Ground	Gnd
18	- +5V	
19	- HPD	Hot Plug Detect
20	- Ground	Gnd

Head phone - Out

Bk	- Head phone	32 - 600 ohm / 10 mW

Cinch: Video CVBS - In, Audio - In

Ye	- Video CVBS	1 V_{PP} / 75 ohm
Wh	- Audio L	0.5 V_{RMS} / 10 kohm
Rd	- Audio R	0.5 V_{RMS} / 10 kohm

S-Video (Hosiden): Video Y/C - In

1	- Ground Y	Gnd
2	- Ground C	Gnd
3	- Video Y	1 V_{PP} / 75 ohm
4	- Video C	0.3 V_{PP}P / 75 ohm

1.2.2 Rear Connections

Service Connector (ComPair)

1	- SDA-S	I^2C Data (0 - 5 V)
2	- SCL-S	I^2C Clock (0 - 5 V)
3	- Ground	Gnd

Aerial - In

-	- IEC-type (EU)	Coax, 75 ohm

HDMI1, 2 and 3 (optional): Digital Video, Digital Audio - In

1	- D2+	Data channel
2	- Shield	Gnd
3	- D2-	Data channel
4	- D1+	Data channel
5	- Shield	Gnd
6	- D1-	Data channel
7	- D0+	Data channel
8	- Shield	Gnd
9	- D0-	Data channel
10	- CLK+	Data channel
11	- Shield	Gnd
12	- CLK-	Data channel
13	- n.c.	
14	- n.c.	
15	- DDC_SCL	DDC clock
16	- DDC_SDA	DDC data
17	- Ground	Gnd
18	- +5V	
19	- HPD	Hot Plug Detect
20	- Ground	Gnd

PC: VGA: Video RGB - In, Cinch: Audio - In

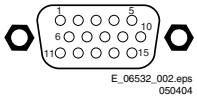

Figure 1-3 VGA Connector

1	- Video Red	0.7 V_{PP} / 75 ohm	⊕
2	- Video Green	0.7 V_{PP} / 75 ohm	⊕
3	- Video Blue	0.7 V_{PP} / 75 ohm	⊕
4	- n.c.		
5	- Ground	Gnd	⏚
6	- Ground Red	Gnd	⏚
7	- Ground Green	Gnd	⏚
8	- Ground Blue	Gnd	⏚
9	- +5V_{DC}	+5 V	⊕
10	- Ground Sync	Gnd	⏚
11	- n.c.		
12	- DDC_SDA	DDC data	⊕
13	- H-sync	0 - 5 V	⊕
14	- V-sync	0 - 5 V	⊕
15	- DDC_SCL	DDC clock	⊕
Wh	- Audio L	0.5 V_{RMS} / 10 kohm	⊕◎
Rd	- Audio R	0.5 V_{RMS} / 10 kohm	⊕◎

CVI: Cinch: Video YPbPr - In, Audio - In

Gn	- Video Y	1 V_{PP} / 75 ohm	⊕◎
Bu	- Video Pb	0.7 V_{PP} / 75 ohm	⊕◎
Rd	- Video Pr	0.7 V_{PP} / 75 ohm	⊕◎
Wh	- Audio L	0.5 V_{RMS} / 10 kohm	⊕◎
Rd	- Audio R	0.5 V_{RMS} / 10 kohm	⊕◎

AV Out: Cinch: Video CVBS - Out, Audio - Out

Ye	- Video CVBS	1 V_{PP} / 75 ohm	⊖◎
Wh	- Audio L	0.5 V_{RMS} /10 kohm	⊖◎
Rd	- Audio R	0.5 V_{RMS} / 10 kohm	⊖◎

AV In: Cinch: Video CVBS - In, Audio - In

Ye	- Video CVBS	1 V_{PP} / 75 ohm	⊕◎
Wh	- Audio L	0.5 V_{RMS} / 10 kohm	⊕◎
Rd	- Audio R	0.5 V_{RMS} / 10 kohm	⊕◎

1.3 Chassis Overview

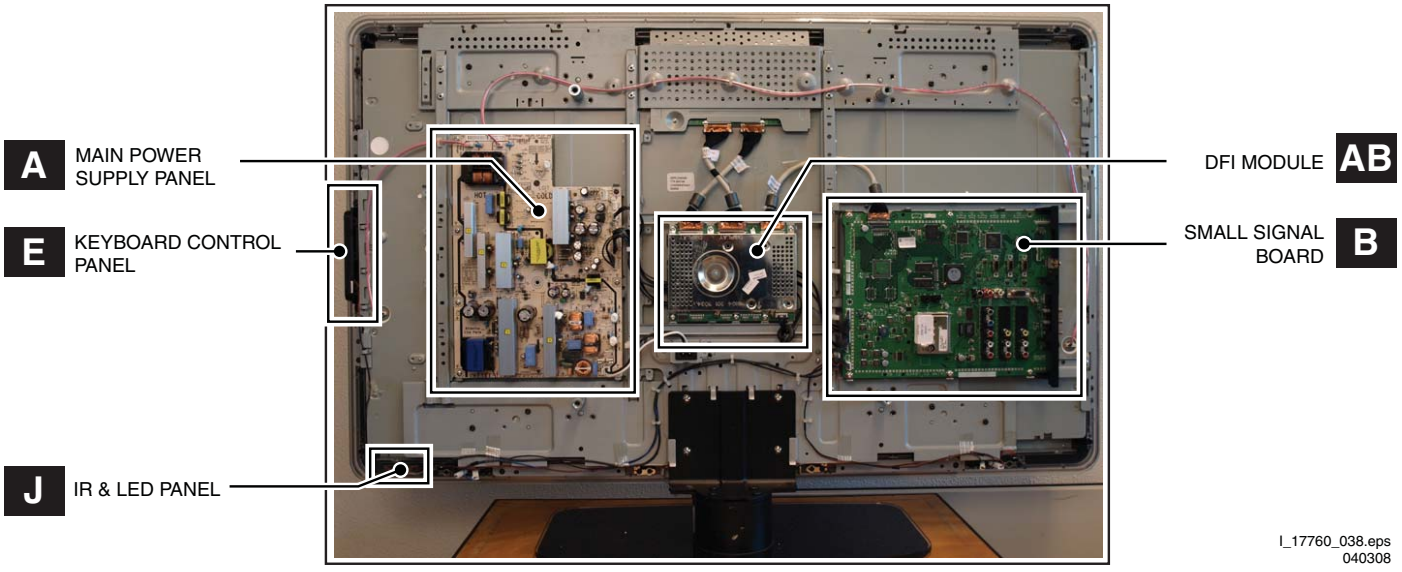

Figure 1-4 PWB/CBA locations

2. Safety Instructions, Warnings, and Notes

Index of this chapter:

2.1 Safety Instructions
2.2 Warnings
2.3 Notes

2.1 Safety Instructions

Safety regulations require the following **during** a repair:

- Connect the set to the Mains/AC Power via an isolation transformer (> 800 VA).
- Replace safety components, indicated by the symbol ⚠, only by components identical to the original ones. Any other component substitution (other than original type) may increase risk of fire or electrical shock hazard.

Safety regulations require that **after** a repair, the set must be returned in its original condition. Pay in particular attention to the following points:

- Route the wire trees correctly and fix them with the mounted cable clamps.
- Check the insulation of the Mains/AC Power lead for external damage.
- Check the strain relief of the Mains/AC Power cord for proper function.
- Check the electrical DC resistance between the Mains/AC Power plug and the secondary side (only for sets that have a Mains/AC Power isolated power supply):
  1. Unplug the Mains/AC Power cord and connect a wire between the two pins of the Mains/AC Power plug.
  2. Set the Mains/AC Power switch to the “on” position (keep the Mains/AC Power cord unplugged!).
  3. Measure the resistance value between the pins of the Mains/AC Power plug and the metal shielding of the tuner or the aerial connection on the set. The reading should be between 4.5 Mohm and 12 Mohm.
  4. Switch “off” the set, and remove the wire between the two pins of the Mains/AC Power plug.
- Check the cabinet for defects, to prevent touching of any inner parts by the customer.

2.2 Warnings

- All ICs and many other semiconductors are susceptible to electrostatic discharges (ESD ⚠). Careless handling during repair can reduce life drastically. Make sure that, during repair, you are connected with the same potential as the mass of the set by a wristband with resistance. Keep components and tools also at this same potential.
- Be careful during measurements in the high voltage section.
- Never replace modules or other components while the unit is switched “on”.
- When you align the set, use plastic rather than metal tools. This will prevent any short circuits and the danger of a circuit becoming unstable.

2.3 Notes

2.3.1 General

- Measure the voltages and waveforms with regard to the chassis (= tuner) ground (⏚), or hot ground (⏚), depending on the tested area of circuitry. The voltages and waveforms shown in the diagrams are indicative. Measure them in the Service Default Mode (see chapter 5) with a colour bar signal and stereo sound (L: 3 kHz, R: 1 kHz unless stated otherwise) and picture carrier at 475.25 MHz for PAL, or 61.25 MHz for NTSC (channel 3).
- Where necessary, measure the waveforms and voltages with (⊓) and without (⊼) aerial signal. Measure the voltages in the power supply section both in normal operation (⏻) and in stand-by (⏻). These values are indicated by means of the appropriate symbols.
- Manufactured under license from Dolby Laboratories. “Dolby”, “Pro Logic” and the “double-D symbol”, are trademarks of Dolby Laboratories.

2.3.2 Schematic Notes

- All resistor values are in ohms, and the value multiplier is often used to indicate the decimal point location (e.g. 2K2 indicates 2.2 kohm).
- Resistor values with no multiplier may be indicated with either an “E” or an “R” (e.g. 220E or 220R indicates 220 ohm).
- All capacitor values are given in micro-farads ($\mu = \times 10^{-6}$), nano-farads ($n = x10^{-9}$), or pico-farads ($p = x10^{-12}$).
- Capacitor values may also use the value multiplier as the decimal point indication (e.g. 2p2 indicates 2.2 pF).
- An “asterisk” (*) indicates component usage varies. Refer to the diversity tables for the correct values.
- The correct component values are listed in the Spare Parts List. Therefore, always check this list when there is any doubt.

2.3.3 BGA (Ball Grid Array) ICs

Introduction

For more information on how to handle BGA devices, visit this URL: *www.atyourservice.ce.philips.com* (needs subscription, not available for all regions). After login, select “Magazine”, then go to “Repair downloads”. Here you will find Information on how to deal with BGA-ICs.

BGA Temperature Profiles

For BGA-ICs, you **must** use the correct temperature-profile, which is coupled to the 12NC. For an overview of these profiles, visit the website *www.atyourservice.ce.philips.com* (needs subscription, but is not available for all regions)
You will find this and more technical information within the “Magazine”, chapter “Repair downloads”.
For additional questions please contact your local repair help desk.

2.3.4 Lead-free Soldering

Due to lead-free technology some rules have to be respected by the workshop during a repair:

- Use only lead-free soldering tin Philips SAC305 with order code 0622 149 00106. If lead-free solder paste is required, please contact the manufacturer of your soldering equipment. In general, use of solder paste within workshops should be avoided because paste is not easy to store and to handle.
- Use only adequate solder tools applicable for lead-free soldering tin. The solder tool must be able:
  - To reach a solder-tip temperature of at least 400°C.
  - To stabilize the adjusted temperature at the solder-tip.
  - To exchange solder-tips for different applications.
- Adjust your solder tool so that a temperature of around 360°C - 380°C is reached and stabilized at the solder joint. Heating time of the solder-joint should not exceed ~ 4 sec. Avoid temperatures above 400°C, otherwise wear-out of tips will increase drastically and flux-fluid will be destroyed. To avoid wear-out of tips, switch “off” unused equipment or reduce heat.
- Mix of lead-free soldering tin/parts with leaded soldering tin/parts is possible but PHILIPS recommends strongly **to**

avoid mixed regimes. If this cannot be avoided, carefully clear the solder-joint from old tin and re-solder with new tin.

2.3.5 Alternative BOM identification

The **third digit** in the serial number (example: AG**2**B0335000001) indicates the number of the alternative B.O.M. (Bill Of Materials) that has been used for producing the specific TV set. In general, it is possible that the same TV model on the market is produced with e.g. two different types of displays, coming from two different suppliers. This will then result in sets which have the same CTN (Commercial Type Number; e.g. 28PW9515/12) but which have a different B.O.M. number.
By looking at the third digit of the serial number, one can identify which B.O.M. is used for the TV set he is working with. If the third digit of the serial number contains the number “1” (example: AG**1**B033500001), then the TV set has been manufactured according to B.O.M. number 1. If the third digit is a “2” (example: AG**2**B0335000001), then the set has been produced according to B.O.M. no. 2. ***This is important for ordering the correct spare parts!***
For the third digit, the numbers 1...9 and the characters A...Z can be used, so in total: 9 plus 26= 35 different B.O.M.s can be indicated by the third digit of the serial number.

Identification: The bottom line of a type plate gives a 14-digit serial number. Digits 1 and 2 refer to the production centre (e.g. AG is Bruges), digit 3 refers to the B.O.M. code, digit 4 refers to the Service version change code, digits 5 and 6 refer to the production year, and digits 7 and 8 refer to production week (in example below it is 2006 week 17). The 6 last digits contain the serial number.

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Figure 2-1 Serial number (example)

2.3.6 Board Level Repair (BLR) or Component Level Repair (CLR)

If a board is defective, consult your repair procedure to decide if the board has to be exchanged or if it should be repaired on component level.
If your repair procedure says the board should be exchanged completely, do not solder on the defective board. Otherwise, it cannot be returned to the O.E.M. supplier for back charging!

2.3.7 Practical Service Precautions

- **It makes sense to avoid exposure to electrical shock.** While some sources are expected to have a possible dangerous impact, others of quite high potential are of limited current and are sometimes held in less regard.
- **Always respect voltages**. While some may not be dangerous in themselves, they can cause unexpected reactions that are best avoided. Before reaching into a powered TV set, it is best to test the high voltage insulation. It is easy to do, and is a good service precaution.

3. Directions for Use

You can download this information from the following websites:
http://www.philips.com/support
http://www.p4c.philips.com

4. Mechanical Instructions

Index of this chapter:

4.1 Cable Dressing
4.2 Service Positions
4.3 Assy/Panel Removal ME8 Styling
4.4 Set Re-assembly

Notes:

- Figures below can deviate slightly from the actual situation, due to the different set executions.
- Follow the disassemble instructions in described order.

4.1 Cable Dressing

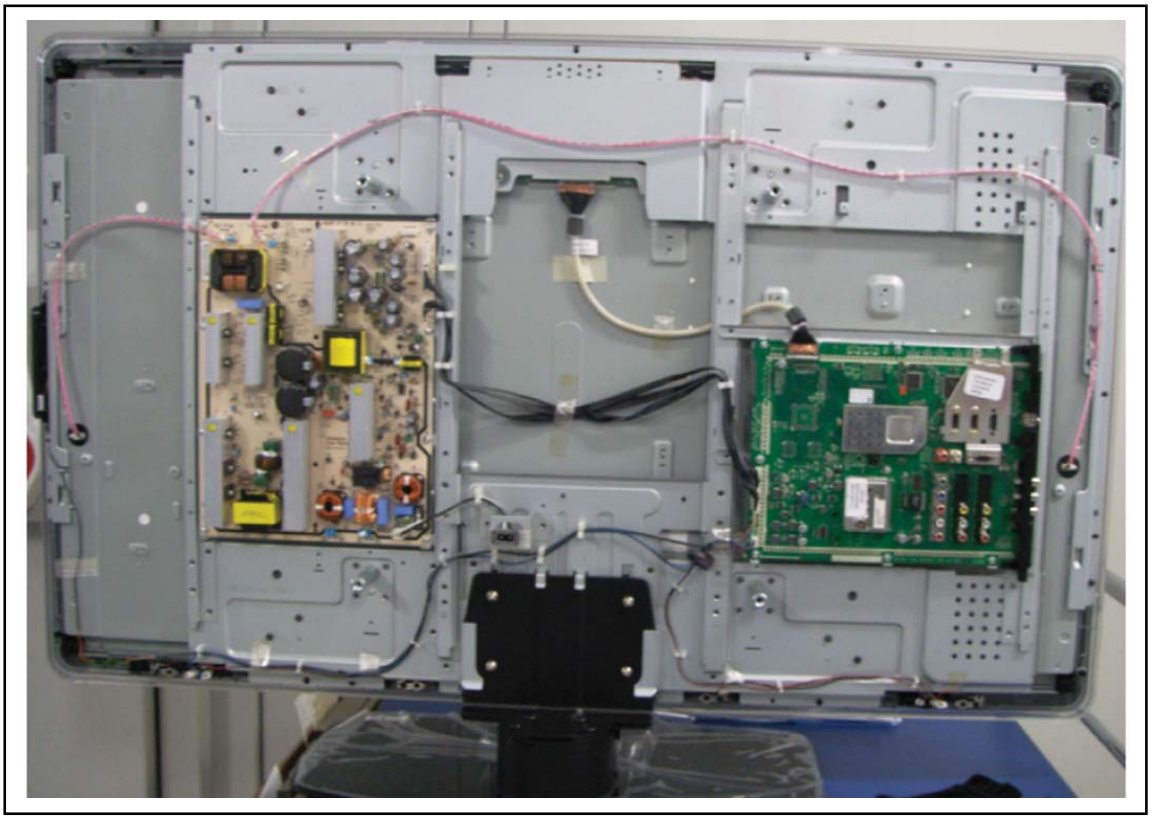

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Figure 4-1 Cable dressing 50 Hz basic sets

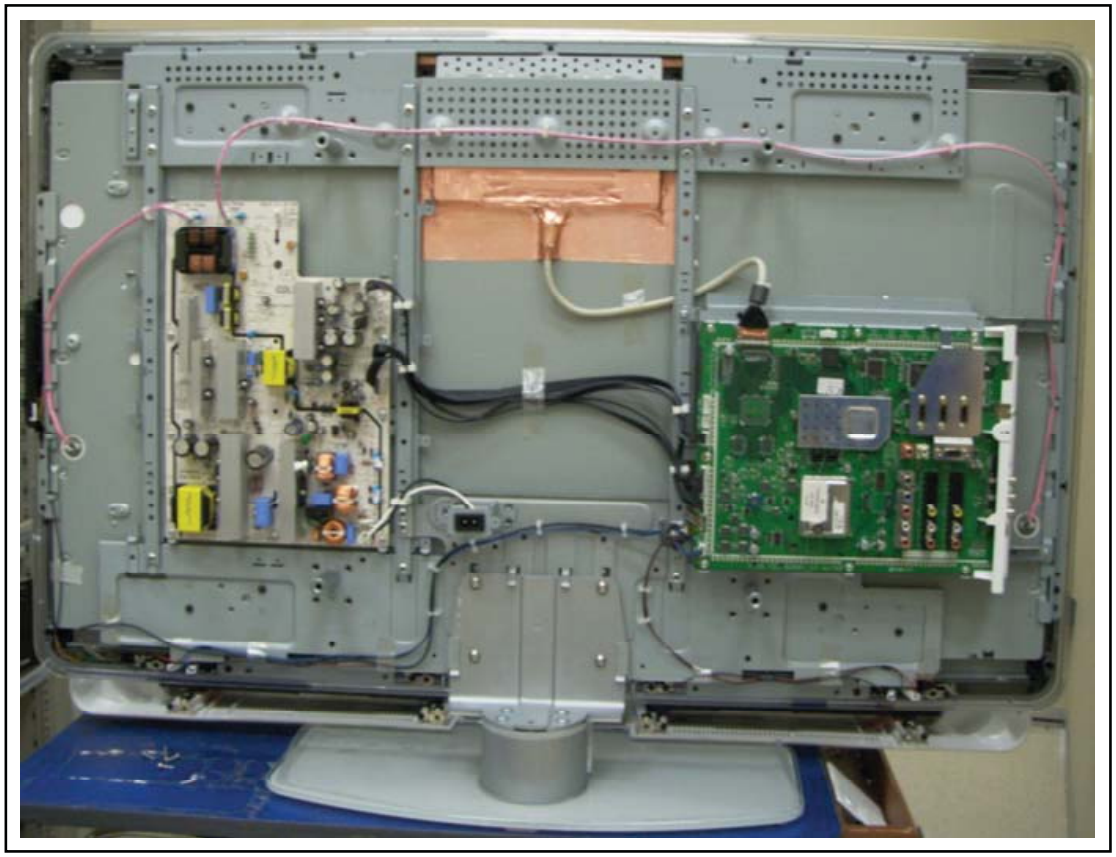

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Figure 4-2 Cable dressing 50 Hz with AmbiLight

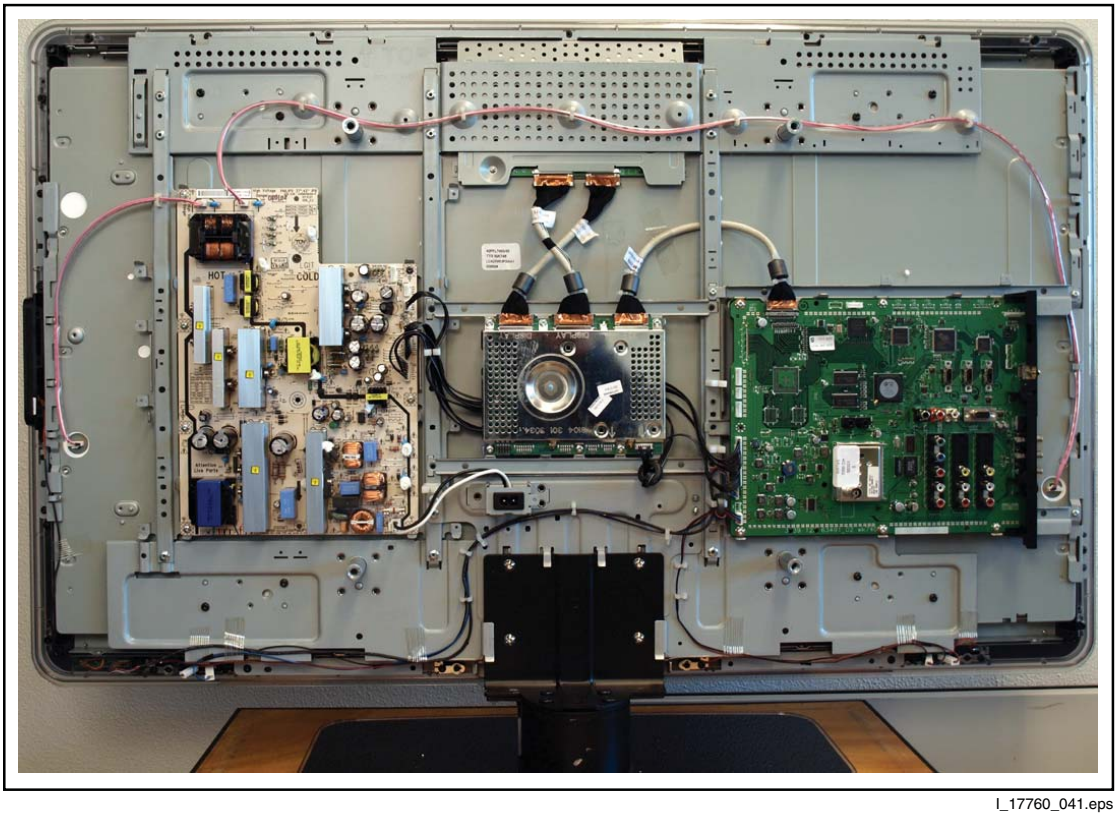

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Figure 4-3 Cable dressing 100 Hz sets with DFI panel

4.2 Service Positions

For easy servicing of this set, there are a few possibilities created:

- The buffers from the packaging.
- Foam bars (created for Service).
- Aluminium service stands (created for Service).

Note: the aluminium service stands can only be used when the set is equipped with so-called “mushrooms”. Otherwise use the original stand that comes with the set.

4.2.1 Foam Bars

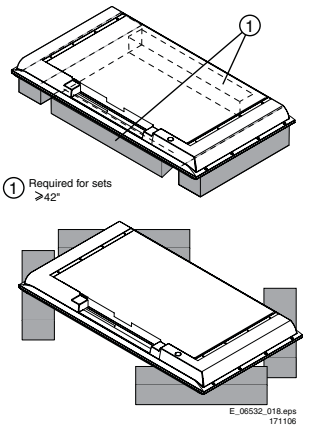

Figure 4-4 Foam bars

The foam bars (order code 3122 785 90580 for two pieces) can be used for all types and sizes of Flat TVs. See figure “Foam bars” for details.
Sets with a display of 42" and larger, require **four** foam bars [1]. Ensure that the foam bars are always supporting the cabinet and **never** only the display.
Caution: Failure to follow these guidelines can seriously damage the display!
By laying the TV face down on the (ESD protective) foam bars, a stable situation is created to perform measurements and alignments. By placing a mirror under the TV, you can monitor the screen.

4.2.2 Service Stands

The MkII aluminium Service Stands are **not** suitable for this chassis. Use the stands that come with the set instead.

4.3 Assy/Panel Removal ME8 Styling

4.3.1 Back Cover

Warning: Disconnect the mains power cord before you remove the back cover.
Note: it is **not** necessary to remove the stand while removing the back cover.

Warning: AmbiLight sets have an additional hatch located in the back cover. These are meant for disconnecting the flat cables to the AmbiLight units in the back cover, **before** the back cover is lifted from the set. The hatches are not always located at the same place for all sets, therefore the figures below are only meant as indication.
It is mandatory to locate these hatches first, open them, and unplug connectors behind. Lifting the back cover without having done so, could result in damaging the connectors inside!

Refer to next figures for details.

1. First remove the screws [1] from the back cover hatch and remove the hatch.
2. Then unplug connector(s) [3].
3. Remove the screws [2], gently lift the back cover from the set. Make sure that wires and flat coils are not damaged while lifting the back cover from the set.

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Figure 4-5 Back Cover Removal [1/2]

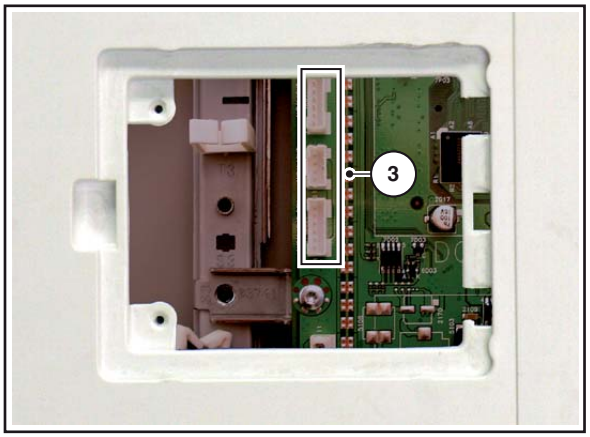

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Figure 4-6 Back Cover Removal [2/2]

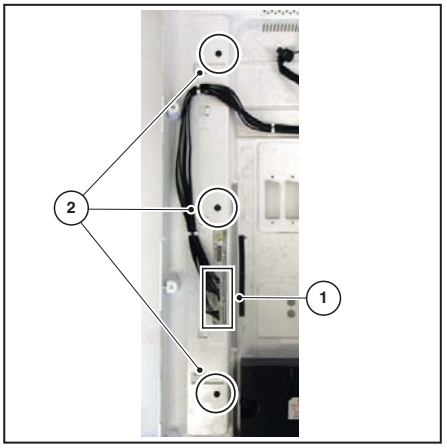

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Figure 4-7 Ambilight Unit

4.3.2 Ambilight (if present)

Refer to next figure for details.
1. Unplug the connectors [1].
2. Remove the screws [2].
3. Pull the unit sidewards from the back cover.

When defective, replace the whole unit.

4.3.3 Woofers

Refer to next figure for details.
1. Remove the screws [1] and [2] and lift the whole unit from the back cover.

Take the speakers out together with their casing. When defective, replace the whole unit.

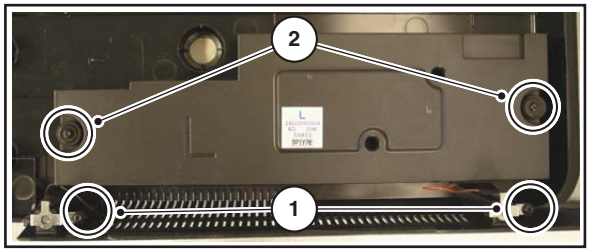

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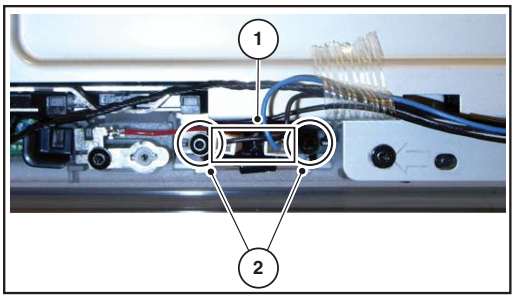
Figure 4-8 Woofer

4.3.4 Tweeters

Refer to next figure for details.
Warning: The speakers should never be connected or disconnected when the set is playing! This can damage the amplifiers on the SSB.
1. Remove the screws [1] and lift the whole unit from the back cover.

When defective, replace the whole unit.



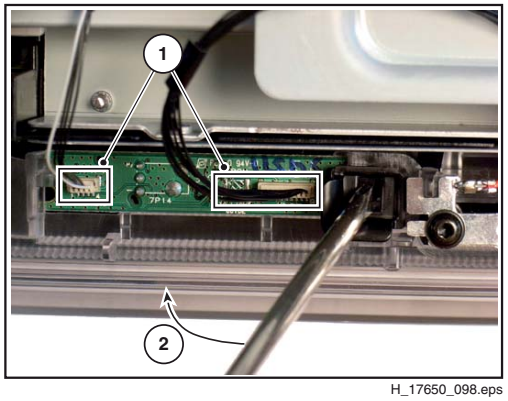
H_17650_095.eps
180108

Figure 4-9 Tweeter

4.3.5 IR & LED Board

Refer to next figure for details.
1. Unplug connectors [1].
2. Use a flat screw driver to release the clip by pushing it in the indicated direction [2].
3. Lift the board and take it out of the set.

When defective, replace the whole unit.



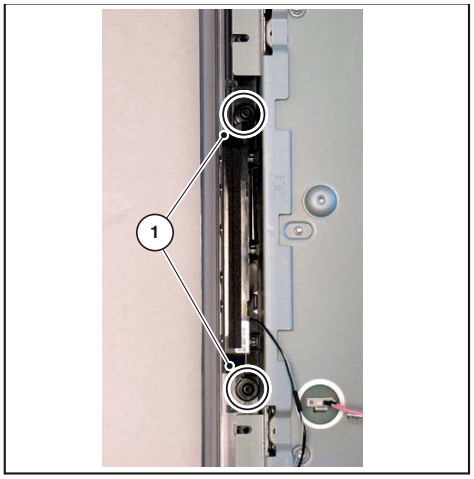
H_17650_098.eps
180108

Figure 4-10 IR & LED Board

4.3.6 Key Board

Refer to next figure for details.
1. Unplug the key board connector from the IR & LED board.
2. Remove the screws [1].
3. Lift the unit and take it out of the set.

When defective, replace the whole unit.

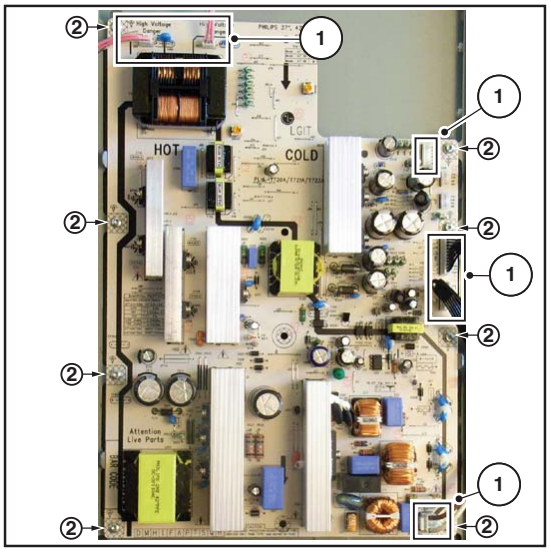


H_17650_094.eps
180108

Figure 4-11 Key Board

4.3.7 Display Supply Panel

Refer to next figure for details.
1. Unplug connectors [1].
2. Remove the fixation screws [2].
3. Take the board out.



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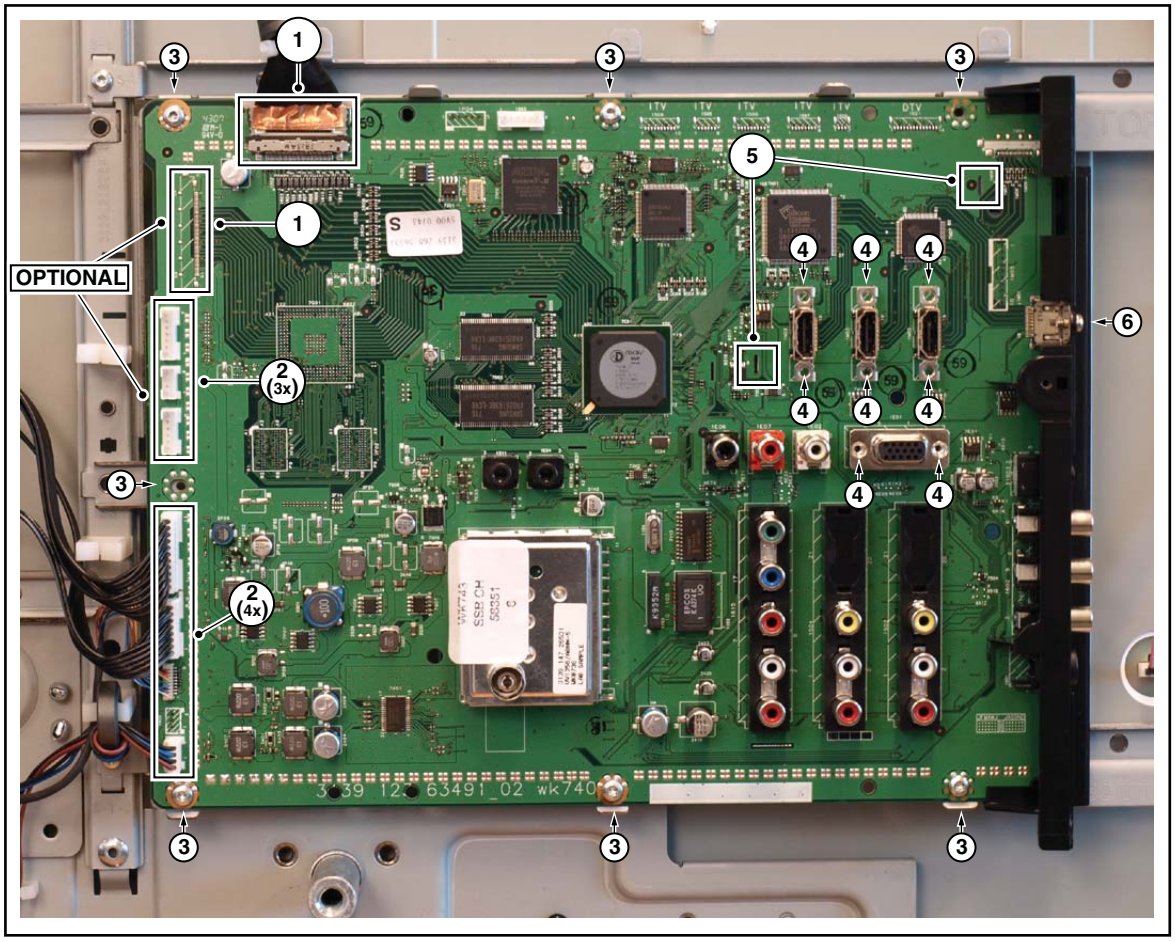
230108

Figure 4-12 Display Supply Panel

4.3.8 Small Signal Board (SSB)

Refer to next figure for details.
Caution: it is mandatory to remount all different screws at their original position during re-assembly. Failure to do so may result in damaging the SSB.
1. Unplug the LVDS connector(s) [1].
   Caution: be careful, as this is a very fragile connector!
2. Unplug the connectors [2].
3. Remove the screws [3].
4. The SSB can now be taken out of the set, together with the front shield and the side cover.
5. To remove the shield, remove the screws [4] and lift it of while releasing clips [5].
6. Remove screw [6] and slide the cover sidewards from the SSB.



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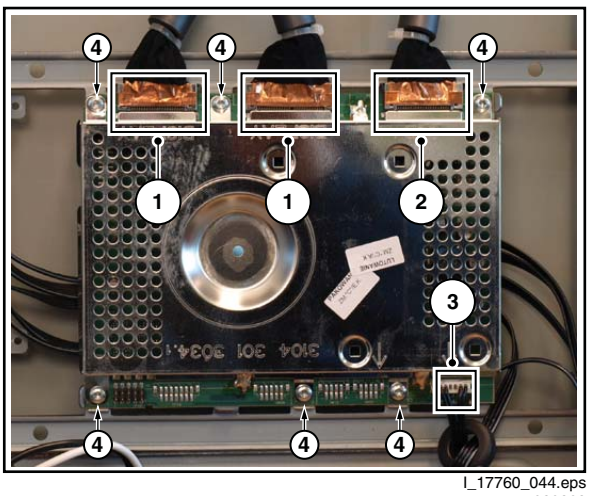
030308

Figure 4-13 Small Signal Board

4.3.9 Direct Frame Insertion (DFI) Panel

Refer to next figures or details.

1. **Mark** LVDS connectors [1] feeding the display, preventing mixing up during re-assembly.
   Caution: be careful, as these are very fragile connectors!
2. Unplug the LVDS connectors [1] [2].
3. Unplug the connector [3].
4. Remove the screws [4].
5. The DFI panel can now be taken out of the set.



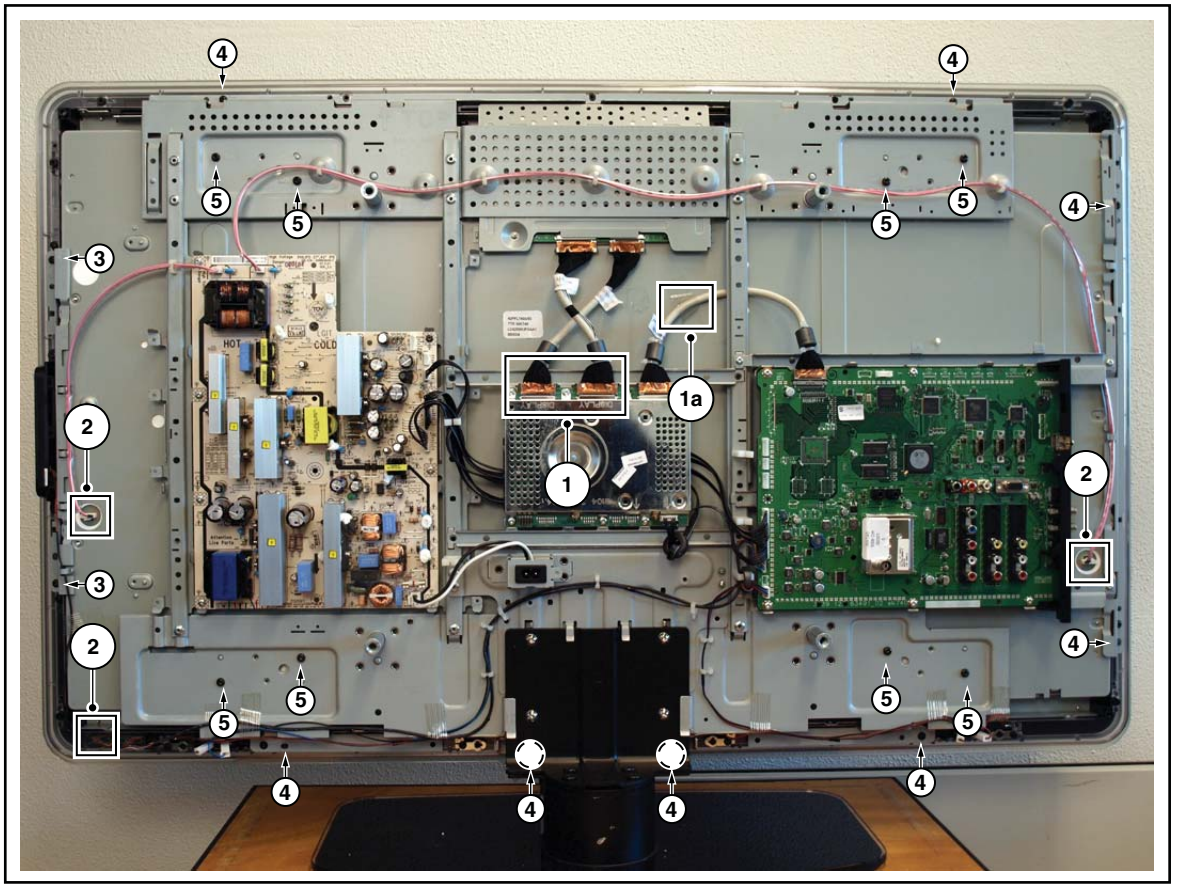
I_17760_044.eps
030308

Figure 4-14 DFI Panel

4.3.10 LCD Panel

Refer to next figures for details.

1. **Remove the stand.**
2. Unplug the LVDS connector(s) [1] and remove the adhesive tape [1a].
   Caution: be careful, as this is a very fragile connector!
3. Unplug the connectors [2].
4. Remove the fixation screws [3] from rim.
5. Take the rim from the set.
6. Remove the fixation screws [4] and [5].
7. Lift the subframe from the set.
8. The LCD panel can now be lifted from the front cabinet.



I_17760_045.eps
060308

Figure 4-15 LCD Panel

4.4 Set Re-assembly

To re-assemble the whole set, execute all processes in reverse order.

Notes:

- While re-assembling, make sure that all cables are placed and connected in their original position. See figure “Cable dressing”.
- Pay special attention not to damage the EMC foams. Ensure that EMC foams are mounted correctly (one is located above the LVDS connector on the display, between the LCD display and the metal sub-frame).

5. Service Modes, Error Codes, and Fault Finding

Index of this chapter:

5.1 Test Points
5.2 Service Modes
5.3 Service Tools
5.4 Error Codes
5.5 The Blinking LED Procedure
5.6 Software Upgrading
5.7 Fault Finding and Repair Tips

5.1 Test Points

In the chassis schematics and layout overviews, the test points (Fxxx) are mentioned. In the schematics, test points are indicated with a rectangular box around “Fxxx” or “Ixxx”, in the layout overviews with a “half-moon” sign.
As most signals are digital, it will be difficult to measure waveforms with a standard oscilloscope. Several key ICs are capable of generating test patterns, which can be controlled via ComPair. In this way it is possible to determine which part is defective.

Perform measurements under the following conditions:
- Service Default Mode.
- Video: Colour bar signal.
- Audio: 3 kHz left, 1 kHz right.

5.2 Service Modes

The Service Mode feature is split into four parts:
- Service Default Mode (SDM).
- Service Alignment Mode (SAM).
- Customer Service Mode (CSM).
- Digital Customer Service Mode (DCSM).
- Computer Aided Repair Mode (ComPair).

SDM and SAM offer features, which can be used by the Service engineer to repair/align a TV set. Some features are:
- A pre-defined situation to ensure measurements can be made under uniform conditions (SDM).
- Activates the blinking LED procedure for error identification when no picture is available (SDM).
- The possibility to overrule software protections when SDM was entered via the Service pins.
- Make alignments (e.g. white tone), (de)select options, enter options codes, reset the error buffer (SAM).
- Display information (“SDM” or “SAM” indication in upper right corner of screen, error buffer, software version, operating hours, options and option codes, sub menus).

The CSM is a Service Mode that can be enabled by the consumer. The CSM displays diagnosis information, which the customer can forward to the dealer or call centre. In CSM mode, “CSM”, is displayed in the top right corner of the screen. The information provided in CSM and the purpose of CSM is to:
- Increase the home repair hit rate.
- Decrease the number of nuisance calls.
- Solved customers' problem without home visit.

ComPair Mode is used for communication between a computer and a TV on I2C /UART level and can be used by a Service engineer to quickly diagnose the TV set by reading out error codes, read and write in NVMs, communicate with ICs and the uP (PWM, registers, etc.), and by making use of a fault finding database. It will also be possible to up and download the software of the TV set via I2C with help of ComPair. To do this, ComPair has to be connected to the TV set via the ComPair connector, which will be accessible through the rear of the set (without removing the rear cover).

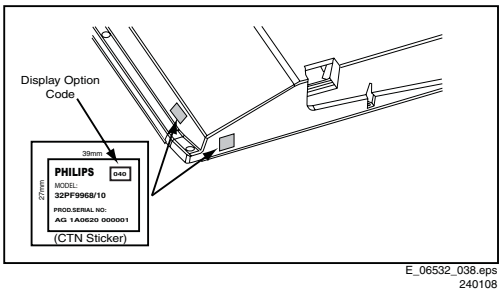
5.2.1 General

Some items are applicable to all Service Modes or are general. These are listed below.

Life Timer
During the life time cycle of the TV set, a timer is kept. It counts the normal operation hours (not the Stand-by hours). The actual value of the timer is displayed in SDM and CSM in a decimal value. Every two soft-resets increase the hour by +1.

Software Identification, Version, and Cluster
The software ID, version, and cluster will be shown in the main menu display of SDM, SAM, and CSM.
The screen will show: “**AAAABCD X.YY**”, where:
- **AAAA** is the chassis name: LC82.
- **B** is the region indication: E= Europe, A= AP/China, U= NAFTA, L= LATAM.
- **C** is the display indication: L= LCD, P= Plasma.
- **D** is the language/feature indication: 1= standard, H= 1080p full HD.
- **X** is the main version number: this is updated with a major change of specification (incompatible with the previous software version). Numbering will go from 1 - 9 and A - Z.
  - If the main version number changes, the new version number is written in the NVM.
  - If the main version number changes, the default settings are loaded.
- **YY** is the sub version number: this is updated with a minor change (backwards compatible with the previous versions) Numbering will go from 00 - 99.
  - If the sub version number changes, the new version number is written in the NVM.
  - If the NVM is fresh, the software identification, version, and cluster will be written to NVM.

Display Option Code Selection
When after an SSB or display exchange, the display option code is not set properly, it will result in a TV with “no display”. Therefore, **it is required** to set this display option code after such a repair.
To do so, press the following key sequence on a standard RC transmitter: “**062598**” directly followed by **MENU** and “**xxx**”, where “xxx” is a 3 digit decimal value of the panel type: see column “Display code” in table “Option code overview” (ch. 8), or see sticker on the side/bottom of the cabinet. When the value is accepted and stored in NVM, the set will switch to Stand-by, to indicate that the process has been completed.



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240108

Figure 5-1 Location of Display Option Code sticker

During this algorithm, the NVM-content must be filtered, because several items in the NVM are TV-related and not SSB-related (e.g. Model and Prod. S/N). Therefore, “Model” and “Prod. S/N” data is changed into “See Type Plate”.
In case a call centre or consumer reads “See Type Plate” in CSM mode, he needs to look to the side/bottom sticker to identify the set, for further actions.

5.2.2 Service Default Mode (SDM)

Purpose

Set the TV in SDM mode in order to be able to:

- Create a pre-defined setting for measurements to be made.
- Override software protections.
- Start the blinking LED procedure.
- Read the error buffer.
- Check the life timer.

Specifications

Table 5-1 SDM default settings

Region	Freq. (MHz)	Default syst.
Europe (except France), AP-PAL/-Multi	475.25	PAL B/G
France		SECAM L
NAFTA, AP-NTSC	61.25 (channel 3)	NTSC M
LATAM		PAL M

- Set linear video and audio settings to 50%, but volume to 25%. Stored user settings are not affected.
- All service-unfriendly modes (if present) are disabled, since they interfere with diagnosing/repairing a set. These service unfriendly modes are:
  - (Sleep) timer.
  - Blue mute/Wall paper.
  - Auto switch “off” (when there is no “ident” signal).
  - Hotel or hospital mode.
  - Child lock or parental lock (manual or via V-chip).
  - Skipping, blanking of “Not favourite”, “Skipped” or “Locked” presets/channels.
  - Automatic storing of Personal Preset or Last Status settings.
  - Automatic user menu time-out (menu switches back/ OFF automatically.
  - Auto Volume levelling (AVL).

How to Activate

To activate SDM, use **one** of the following methods:

- Press the following key sequence on the remote control transmitter: “**062596**” directly followed by the **MENU** button (do not allow the display to time out between entries while keying the sequence).
- Short one of the “Service” jumpers on the TV board during cold start (see Figures “Service jumper”). Then press the mains button (remove the short after start-up).
  Caution: Activating SDM by shorting “Service” jumpers will override the DC speaker protection (error 1), the General I2C error (error 4), and the Trident video processor error (error 5). When doing this, the service-technician must know exactly what he is doing, as it could damage the television set.

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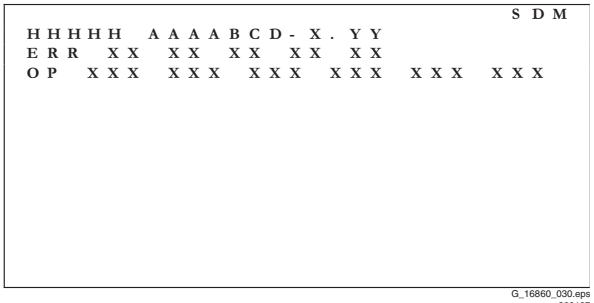
030308

Figure 5-2 Service jumper (SSB component side)

On Screen Menu

After activating SDM, the following screen is visible, with SDM in the upper right corner of the screen to indicate that the television is in Service Default Mode.



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260107

Figure 5-3 SDM menu

Menu explanation:

- **HHHHH**: Are the operating hours (in decimal).
- **AAAABCD-X.YY**: See paragraph “Service Modes” -> “General” -> “Software Identification, Version, and Cluster” for the SW name definition.
- **SDM**: The character “SDM” to indicate that the TV set is in Service mode.
- **ERR**: Shows all errors detected since the last time the buffer was erased. Five errors possible.
- **OP**: Used to read-out the option bytes. See “Options” in the Alignments section for a detailed description. Seven codes are possible.

How to Navigate

As this mode is read only, there is not much to navigate. To switch to other modes, use one of the following methods:

- Command MENU from the user remote will enter the normal user menu (brightness, contrast, colour, etc...) with “SDM” OSD remaining, and pressing MENU key again will return to the last status of SDM again.
- To prevent the OSD from interfering with measurements in SDM, command “OSD” (“STATUS” for NAFTA and LATAM) from the user remote will toggle the OSD “on/off” with “SDM” OSD remaining always “on”.
- Press the following key sequence on the remote control transmitter: “**062596**” directly followed by the **OSD/ STATUS/INFO/i+** button to switch to SAM (do not allow the display to time out between entries while keying the sequence).

How to Exit

Switch the set to STANDBY by pressing the mains button on the remote control transmitter or on the television set.
If you switch the television set "off" by removing the mains (i.e., unplugging the television), the television set will remain in SDM when mains is re-applied, and the error buffer is not cleared. The error buffer will only be cleared when the "clear" command is used in the SAM menu.

Note:

- If the TV is switched "off" by a power interrupt while in SDM, the TV will show up in the last status of SDM menu as soon as the power is supplied again. The error buffer will not be cleared.
- In case the set is in Factory mode by accident (with "F" displayed on screen), by pressing and hold "VOL-" and "CH-" together should leave Factory mode.

5.2.3 Service Alignment Mode (SAM)

Purpose

- To change option settings.
- To display / clear the error code buffer.
- To perform alignments.

Specifications

- Operation hours counter (maximum five digits displayed).
- Software version, error codes, and option settings display.
- Error buffer clearing.
- Option settings.
- Software alignments (Tuner, White Tone, and Audio).
- NVM Editor.
- ComPair Mode switching.
- Set the screen mode to full screen (all contents on screen are viewable).

How to Activate

To activate SAM, use one of the following methods:

- Press the following key sequence on the remote control transmitter: "**062596**" directly followed by the **OSD/ STATUS/INFO/i+** button (it depends on region which button is present on the RC). Do not allow the display to time out between entries while keying the sequence.
- Or via ComPair.

After entering SAM, the following screen is visible, with SAM in the upper right corner of the screen to indicate that the television is in Service Alignment Mode.

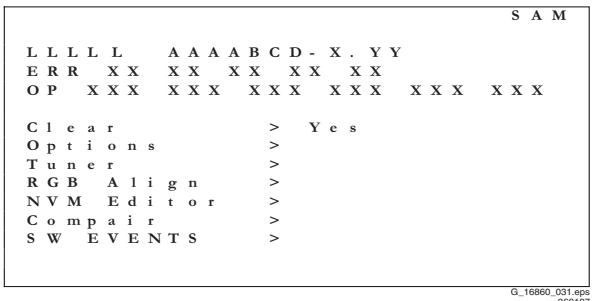

Figure 5-4 SAM menu

Menu explanation:

1. **LLLLL.** This represents the run timer. The run timer counts normal operation hours, but does not count Stand-by hours.
2. **AAAABCD-X.YY.** See paragraph "Service Modes" -> "General" -> "Software Identification, Version, and Cluster" for the SW name definition.
3. **SAM.** Indication of the Service Alignment Mode.
4. **ERR (ERRor buffer).** Shows all errors detected since the last time the buffer was erased. Five errors possible.
5. **OP (Option Bytes).** Used to read-out the option bytes. See "Options" in the Alignments section for a detailed description. Seven codes are possible.
6. **Clear.** Erases the contents of the error buffer. Select the CLEAR menu item and press the MENU RIGHT key. The content of the error buffer is cleared.
7. **Options.** Used to set the option bits. See "Options" in the "Alignments" chapter for a detailed description.
8. **Tuner.** Used to align the tuner. See "Tuner" in the "Alignments" chapter for a detailed description.
9. **RGB Align.** Used to align the White Tone. See "White Tone" in the "Alignments" chapter for a detailed description.
10. **NVM Editor.** Can be used to change the NVM data in the television set. See also paragraph "Fault Finding and Repair Tips" further on.
11. **ComPalr.** Can be used to switch the television to "In Application Programming" mode (IAP), for software uploading via ComPair. Read paragraph "Service Tools" -> "ComPair". **Caution:** When this mode is selected without ComPair connected, the TV will be blocked. Remove the AC power to reset the TV.
12. **SW Events.** Only to be used by development to monitor SW behaviour during stress test.

How to Navigate

- In the SAM menu, select menu items with the MENU UP/ DOWN keys on the remote control transmitter. The selected item will be indicated. When not all menu items fit on the screen, use the MENU UP/DOWN keys to display the next / previous menu items.
- With the MENU LEFT/RIGHT keys, it is possible to:
  - Activate the selected menu item.
  - Change the value of the selected menu item.
  - Activate the selected sub menu.
- When you press the MENU button twice while in top level SAM, the set will switch to the normal user menu (with the SAM mode still active in the background). To return to the SAM menu press the MENU button.
- Command **OSD/STATUS/INFO/i+** button from the user remote will toggle the OSD "on/off" with "SAM" OSD remaining always "on".
- Press the following key sequence on the remote control transmitter: "**062596**" directly followed by the **MENU** button to switch to SDM (do not allow the display to time out between entries while keying the sequence).

How to Store SAM Settings

To store the settings changed in SAM mode (except the OPTIONS settings), leave the top level SAM menu by using the POWER button on the remote control transmitter or the television set.

How to Exit

Switch the set to STANDBY by pressing the mains button on the remote control transmitter or the television set.

Note:

- When the TV is switched "off" by a power interrupt while in SAM, the TV will show up in "normal operation mode" as soon as the power is supplied again. The error buffer will not be cleared.
- In case the set is in Factory mode by accident (with "F" displayed on screen), by pressing and hold "VOL-" and "CH-" together should leave Factory mode.

5.2.4 Customer Service Mode (CSM)

Purpose

The Customer Service Mode shows error codes and information on the TV's operation settings. A call centre can instruct the customer (by telephone) to enter CSM in order to identify the status of the set. This helps them to diagnose problems and failures in the TV before making a service call. The CSM is a read-only mode; therefore, modifications are not possible in this mode.

Specifications

- Ignore "Service unfriendly modes".
- Line number for every line (to make CSM language independent).
- Set the screen mode to full screen (all contents on screen are viewable).
- After leaving the Customer Service Mode, the original settings are restored.
- Possibility to use "CH+" or "CH-" for channel surfing, or enter the specific channel number on the RC.

How to Activate

To activate CSM, press the following key sequence on the remote control transmitter: "**123654**" (do not allow the display to time out between entries while keying the sequence).

Upon entering the Customer Service Mode, the following screen will appear:

```
                                                    C S M
1     M O D E L  : 4 2 P F L 7 4 0 3 / 9 3
2     P R O D  S / N : A G 1 A 0 8 1 2 1 2 3 4 5 6
3     S W  I D  : L C 8 2 A L 1 - 1 . x x
4     O P       : X X X  X X X  X X X  X X X  X X X  X X X  X X X
5     C O D E S  : X X  X X  X X  X X  X X
6     S S B     : 3 1 3 9  1 2 3  6 3 4 9 1
7     N V M     : X X X X X X X X
8     F l a s h  D a t a : X X . X X . X X . X X
9     D I S P L A Y  :  xxxx xxx xxxxx
PAGE DOWN :
```

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Figure 5-5 CSM menu -1- (example)

```
                                                    C S M
10    T U N E R  : W E A K / G O O D / S T R O N G
11    S Y S T E M : P A L / N T S C / S E C A M
12    S O U N D  : M O N O / S T E R E O / N I C A M
13    H D A U    : Y E S / N O
14    F O R M A T : X X X X X X X X
15    DFR SW ID  : (*)
16    F P G A  F W : xx.xx.xx
17    :
18    :
PAGE UP :
```

(*) referring to bolt-on DFI SW ID

I_17760_026b.eps 120208

Figure 5-6 CSM menu -2- (example)

Menu Explanation

1. **MODEL.** Type number, e.g. 32PFL7762D/05. (*)
2. **PROD S/N.** Product serial no., e.g. AG1A0712123456. (*)
3. **SW ID.** Software cluster and version is displayed.
4. **OP.** Option code information.
5. **CODES.** Error buffer contents.
6. **SSB.** Indication of the SSB factory ID (= 12nc). (*)
7. **NVM.** The NVM software version no.
8. **Flash Data.** PQ (picture quality) and AQ (audio quality) data version. This is a sub set of the main SW.
9. **DISPLAY.** Indication of the display ID (=12 nc).
10. **TUNER.** Indicates the tuner signal condition: "Weak" when signal falls below threshold value, "Medium" when signal is at mid-range, and "Strong" when signal falls above threshold value.
11. **SYSTEM.** Gives information about the video system of the selected transmitter (PAL/SECAM/NTSC).
12. **SOUND.** Gives information about the audio system of the selected transmitter (MONO/STEREO/NICAM).
13. **HDAU.** HDMI audio stream detection. "YES" means audio stream detected. "NO" means no audio stream present. Only displayed when HDMI source is selected.
14. **FORMAT.** Gives information about the video format of the selected transmitter (480i/480p/720p/1080i).
15. **DFR SW ID.** Referring to bolt-on SW ID.
16. **FPGA FW.** Only applicable to sets with an FPGA.
17. **Reserved.**
18. **Reserved.**

(*) If an NVM IC is replaced or initialised, the Model Number, Serial Number, and SSB Code Number must be re-written to the NVM. ComPair will foresee in a possibility to do this.

How to Exit

To exit CSM, use one of the following methods:

- Press the MENU button twice, or POWER button on the remote control transmitter.
- Press the POWER button on the television set.

5.2.5 Digital Customer Service Mode (DCSM)

This section only applies to sets where the Digital bolt-on Module is mounted (China: CTNs ending with "D/93").

Detailed information will be published when these sets are actually on the market (not during this release of the Service Manual).

Purpose

The Digital Customer Service Mode shows how the Digital Module performs.

How to Activate

To activate DCSM:

1. Put the set in "digital mode".
2. Press "digital MENU" key on RC.
3. Press **"123654"** key sequence on RC (do not allow the display to time out between entries while keying the sequence).

How to Exit

To exit DCSM, press "digital MENU" key on RC.

5.3 Service Tools

5.3.1 ComPair

Introduction
ComPair (Computer Aided Repair) is a Service tool for Philips Consumer Electronics products. and offers the following:
1. ComPair helps you to quickly get an understanding on how to repair the chassis in a short and effective way.
2. ComPair allows very detailed diagnostics and is therefore capable of accurately indicating problem areas. You do not have to know anything about I2C or UART commands yourself, because ComPair takes care of this.
3. ComPair speeds up the repair time since it can automatically communicate with the chassis (when the uP is working) and all repair information is directly available.
4. ComPair features TV software up possibilities.

Specifications
ComPair consists of a Windows based fault finding program and an interface box between PC and the (defective) product. The (new) ComPair II interface box is connected **to the PC** via an USB cable. For the TV chassis, the ComPair interface box and the TV communicate via a bi-directional cable via the service connector(s).

How to Connect
This is described in the ComPair chassis fault finding database.

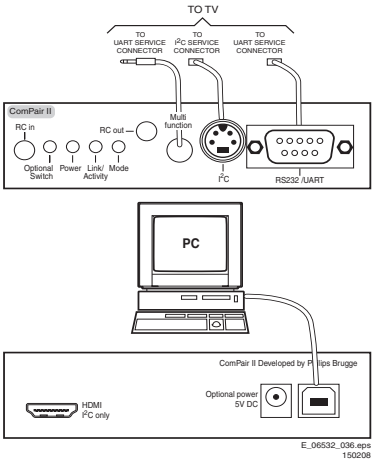


Figure 5-7 ComPair II interface connection

Caution: It is compulsory to connect the TV to the PC as shown in the picture above (with the ComPair interface in between), as the ComPair interface acts as a level shifter. If one connects the TV directly to the PC (via UART), ICs will be blown!

How to Order
ComPair II order codes:
- ComPair II interface: 3122 785 91020.
- ComPair32 CD (update): 3122 785 60160.
- ComPair UART interface cable: 3122 785 90630 (to be used for upgrading the MT8280 software) (applicable to sets where the DFI panel has been replaced by the on-board MT8280).
- ComPair I^2C interface cable: 9965 100 07325 (to be used for upgrading the Main software).

Note: If you encounter any problems, contact your local support desk.

5.3.2 LVDS Tool

Support of the LVDS Tool has been discontinued.

5.4 Error Codes

5.4.1 Introduction

Error codes are required to indicate failures in the TV set. In principle a unique error code is available for every:
- Activated protection.
- Failing I2C device.
- General I2C error.
- SDRAM failure.

The last errors, stored in the NVM, are shown in the Service menu's. This is called the error buffer.
The error code buffer contains all errors detected since the last time the buffer was erased. The buffer is written from left to right. When an error occurs that is not yet in the error code buffer, it is displayed at the left side and all other errors shift one position to the right.
An error will be added to the buffer if this error differs from any error in the buffer. The last found error is displayed on the left.
An error with a designated error code may **never** lead to a deadlock situation. This means that it must always be diagnosable (e.g. error buffer via OSD or blinking LED procedure, ComPair to read from the NVM).
In case a failure identified by an error code automatically results in other error codes (cause and effect), only the error code of the MAIN failure is displayed.

Example: In case of a failure of the I2C bus (CAUSE), the error code for a "General I2C failure" and "Protection errors" is displayed. The error codes for the single devices (EFFECT) is not displayed. All error codes are stored in the same error buffer (TV's NVM) except when the NVM itself is defective.

5.4.2 How to Read the Error Buffer

You can read the error buffer in 3 ways:
- On screen via the SAM/SDM/CSM (if you have a picture). Example:
  - ERROR: 0 0 0 0 0: No errors detected
  - ERROR: 6 0 0 0 0: Error code 6 is the last and only detected error
  - ERROR: 9 6 0 0 0: Error code 6 was detected first and error code 9 is the last detected (newest) error
- Via the blinking LED procedure (when you have no picture). See "The Blinking LED Procedure".
- Via ComPair.

5.4.3 Error Codes

In case of non-intermittent faults, write down the errors present in the error buffer and clear the error buffer before you begin the repair. This ensures that old error codes are no longer present.
If possible, check the entire contents of the error buffer. In some situations, an error code is only the result of another error and not the actual cause of the problem (for example, a fault in the protection detection circuitry can also lead to a protection).

Table 5-2 Error code overview

Error code[1)]	Description	Item no.	Remarks
0	No error.		
1	DC Protection of speakers.		
2	+12V protection error.		12V missing or “low”.
3	Reserved.		
4	General I2C error.		note 2
5	Trident Video Processor communication error.	7C01	When Trident IC is defective, error 10 and 14 might also be reported. Trident communicates via parallel bus, not via the I2C bus. The I2C bus of Trident is only used in ComPair mode.
6	I2C error while communicating with the NVM.	7L23	The TV will not start-up due to critical data not available from the NVM, but the LED will blink the error code.
7	I2C error while communicating with the Tuner.	1101	
8	I2C error while communicating with the IF Demodulator.	7113	
9	I2C error communicating with the Sound Processor.	7411	
10	SDRAM defective.	7D01	
11	I2C error while communicating with the HDMI IC.	7N01	
12	Brazil/China ISDTV digital bolt-on module communication failure		
13	Reserved		
14	SDRAM defective.	7D02	
15	Reserved		
16	Reserved		
17	I2C error while communicating with FPGA	7700 or external	
18	Reserved (iTV)		(iTV)
19	I2C error while communicating with bolt-on DFI		1080p 100Hz sets only
20	Reserved		
21	I2C error while communicating with the HDMI mux IC	7M07	
22	Reserved.		
23	Reserved.		

Notes
1. Some of the error codes reported are depending on the option code configurations.
2. This error means: no I2C device is responding to the particular I2C bus. Possible causes: SCL/SDA shorted to GND, SCL shorted to SDA, or SCL/SDA open (at uP pin). The internal bus of the Trident platform should not cause the entire system to halt as such an error can be reported.

5.4.4 How to Clear the Error Buffer

The error code buffer is cleared in the following cases:
- By using the CLEAR command in the SAM menu:
  - To enter SAM, press the following key sequence on the remote control transmitter: “**062596**” directly followed by the **OSD/STATUS/INFO/i+** button (do not allow the display to time out between entries while keying the sequence).
  - Make sure the menu item CLEAR is selected. Use the MENU UP/DOWN buttons, if necessary.
  - Press the MENU RIGHT button to clear the error buffer. The text on the right side of the “CLEAR” line will change from “CLEAR?” to “CLEARED”
- If the contents of the error buffer have not changed for 50 hours, the error buffer resets automatically.

Note: If you exit SAM by disconnecting the mains from the television set, the error buffer is not reset.

5.5 The Blinking LED Procedure

5.5.1 Introduction

The software is capable of identifying different kinds of errors. Because it is possible that more than one error can occur over time, an error buffer is available, which is capable of storing the last five errors that occurred. This is useful if the OSD is not working properly.

Errors can also be displayed by the blinking LED procedure. The method is to repeatedly let the front LED pulse with as many pulses as the error code number, followed by a period of 1.5 seconds in which the LED is “off”. Then this sequence is repeated.

Example (1): error code 4 will result in four times the sequence LED “on” for 0.25 seconds / LED “off” for 0.25 seconds. After this sequence, the LED will be “off” for 1.5 seconds. Any RC5 command terminates the sequence. Error code LED blinking is in red colour.

Example (2): the content of the error buffer is “**1 2 9 6 0 0**” After entering SDM, the following occurs:
- 1 long blink of 5 seconds to start the sequence,
- 12 short blinks followed by a pause of 1.5 seconds,
- 9 short blinks followed by a pause of 1.5 seconds,
- 6 short blinks followed by a pause of 1.5 seconds,
- 1 long blink of 1.5 seconds to finish the sequence,
- The sequence starts again with 12 short blinks.

5.5.2 Displaying the Entire Error Buffer

Additionally, the entire error buffer is displayed when Service Mode “SDM” is entered. In case the TV set is in protection or Stand-by: The blinking LED procedure sequence (as in SDM-mode in normal operation) must be triggered by the following RC sequence: “**MUTE” “062500” “OK**”.
In order to avoid confusion with RC5 signal reception blinking, this blinking procedure is terminated when a RC5 command is received.

To erase the error buffer, the RC command “**MUTE” “062599 “OK**” can be used.

5.6 Software Upgrading

In this chassis, the following SW “stacks” are used:
- TV main SW (processor and processor NVM).
- MT8280 software (sets where the DFI panel has been replaced by on-board MT8280).
- Digital Module software; only applies to sets where the Digital bolt-on Module is mounted (China: CTNs ending with “D/93”).

5.6.1 TV Main SW Upgrade

For instructions on how to upgrade the TV Main software, refer to ComPair.

5.6.2 MT8280 SW Upgrade

This paragraph only applies to sets where the DFI panel has been replaced by the on-board MT8280. The software for the MT8280 has to be flashed via a separate cable and -connector. See paragraph “Service Tools > ComPair” for the correct order number of this cable. For the location of the connector on the SSB, see figure “SSB top view” in chapter 9 “Circuit Descriptions, Abbreviation List, and IC Data Sheets”. Before the cable can be connected, a hatch in the backcover has to be removed (no need to remove the entire backcover).

For instructions on how to upgrade the MT8280 software, refer to ComPair.

5.6.3 Digital Module SW Upgrade

Detailed information will be published when these sets are actually on the market (not during this release of the Service Manual).

The software of the Digital Module can be flashed via USB.

5.7 Fault Finding and Repair Tips

Notes:
- It is assumed that the components are mounted correctly with correct values and no bad solder joints.
- Before any fault finding actions, check if the correct options are set.

5.7.1 NVM Editor

In some cases, it can be convenient if one directly can change the NVM contents. This can be done with the “NVM Editor” in SAM mode. With this option, single bytes can be changed.

Caution:
- **Do not change the NVM settings without understanding the function of each setting, because incorrect NVM settings may seriously hamper the correct functioning of the TV set!**
- Always write down the existing NVM settings, before changing the settings. This will enable you to return to the original settings, if the new settings turn out to be incorrect.

Table 5-3 NVM editor overview

	Hex	Dec	Description
.ADR	0x000A	10	Existing value
.VAL	0x0000	0	New value
.Store	Store?		

5.7.2 Load Default NVM Values

It is possible to download default values automatically into the NVM in case a blank NVM is placed or when the NVM first 20 address contents are “FF”. After the default values are downloaded, it is possible to start-up and to start aligning the TV set. To initiate a forced default download the following action has to be performed:
1. Switch “off” the TV set with the mains cord disconnected from the wall outlet (it does not matter if this is from “Stand-by” or “Off” situation).
2. Short-circuit the SDM jumpers on the SSB (keep short circuited).
3. Press “P+” or “CH+” on the local keyboard (and keep it pressed).
4. Reconnect the mains supply to the wall outlet.
5. Release the “P+” or “CH+” when the set is “on” or blue LED is blinking.

When the downloading has completed successfully, the set should be into Stand-by, i.e. red LED on.

Alternative method (1):
1. Go to SAM.
2. Select NVM Editor.
3. Select ADR (address) to 1 (dec).
4. Change the VAL (value) to 170 (dec).
5. Store the value.
6. Do a hard reset to make sure new default values took place.

Alternative method (2):
It is also possible to upload the default values to the NVM with ComPair in case the SW is changed, the NVM is replaced with a new (empty) one, or when the NVM content is corrupted. After replacing an EEPROM (or with a defective/no EEPROM), default settings should be used to enable the set to start-up and allow the Service Default Mode and Service Alignment Mode to be accessed.

5.7.3 Start-up/Shut-down Flowcharts

On the next pages you will find start-up and shut-down flowcharts, followed by a trouble shooting flowchart, which might be helpful during fault finding.
Please note that some events are only related to PDP sets, and therefore not applicable to this LCD chassis.

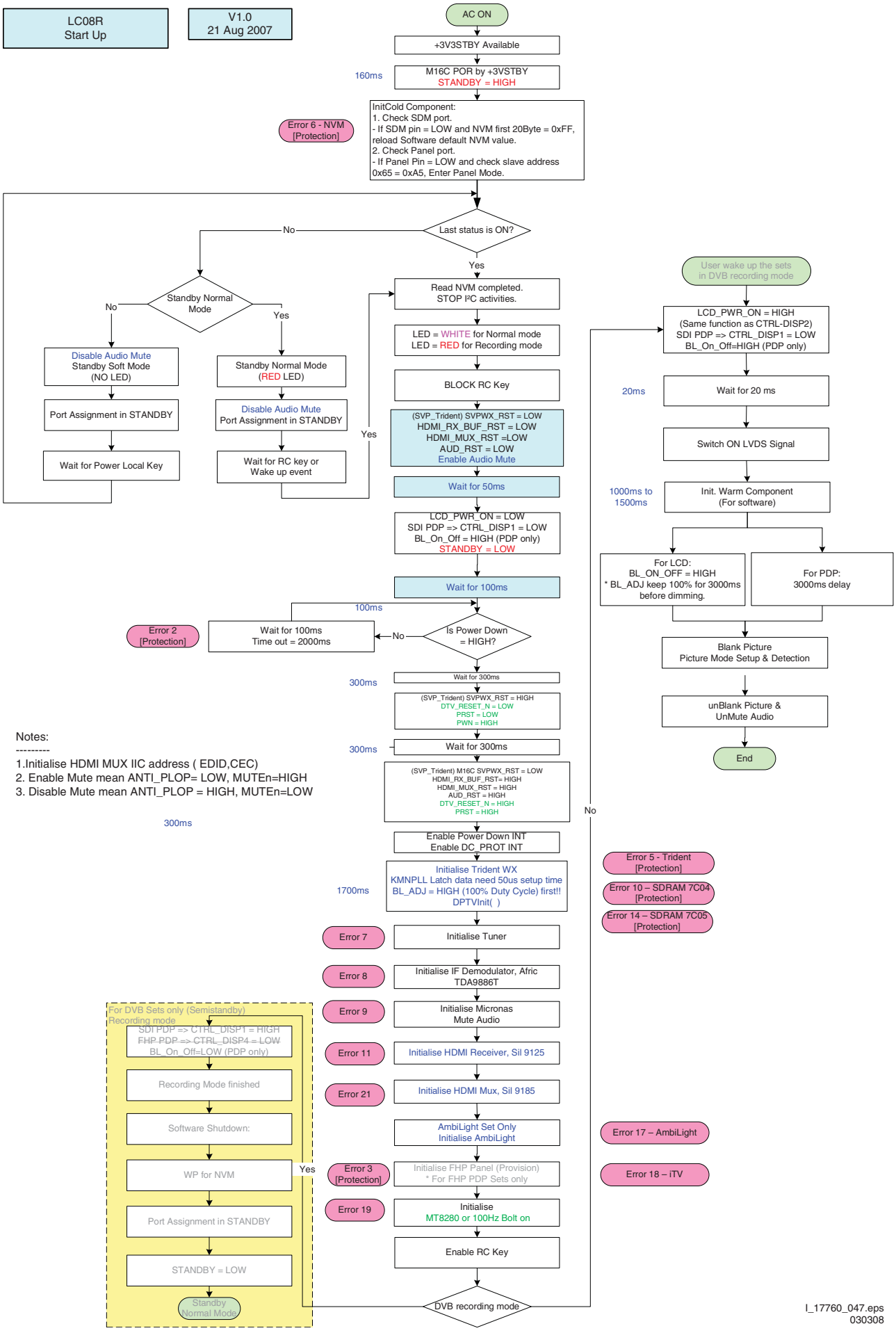


Figure 5-8 Start-up flowchart

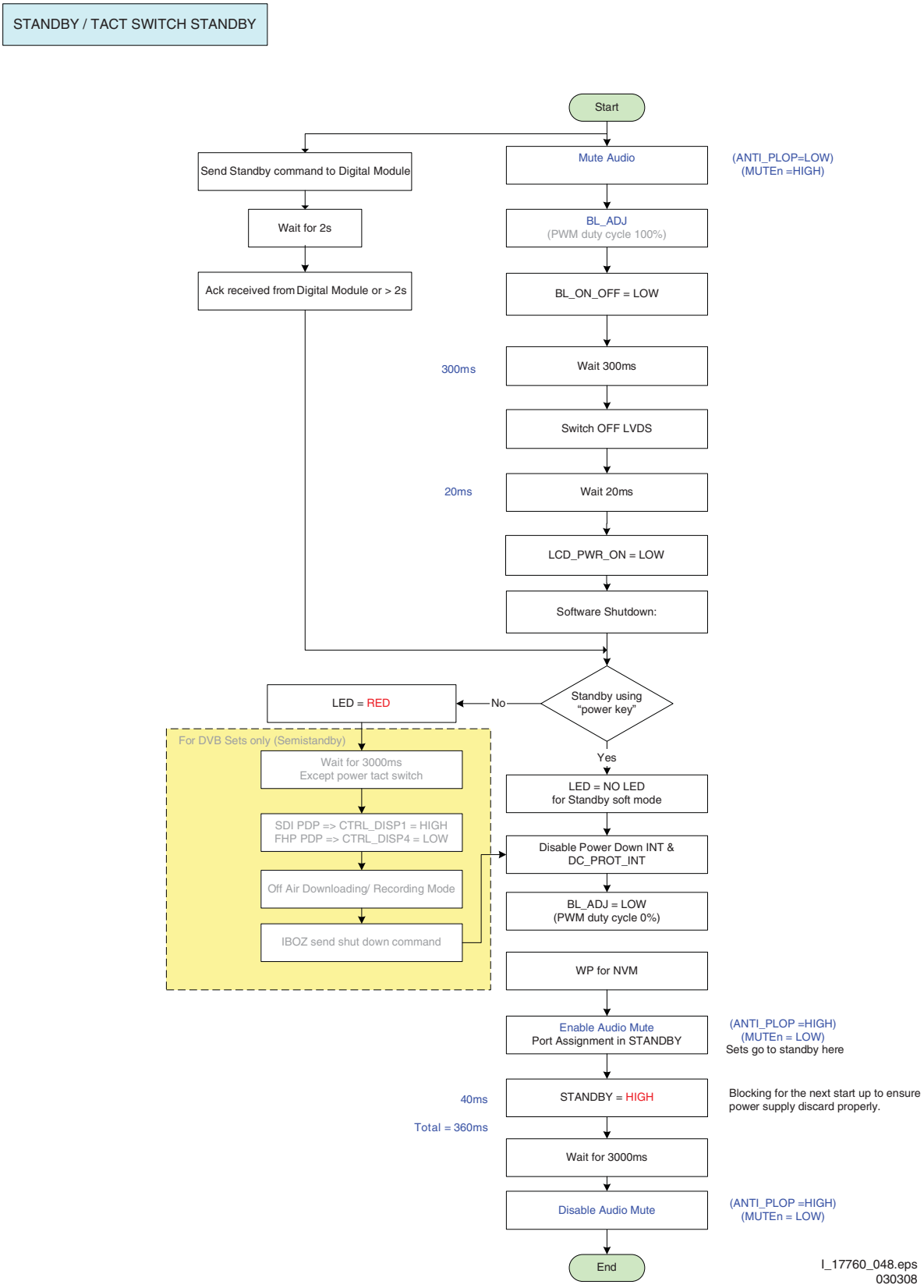
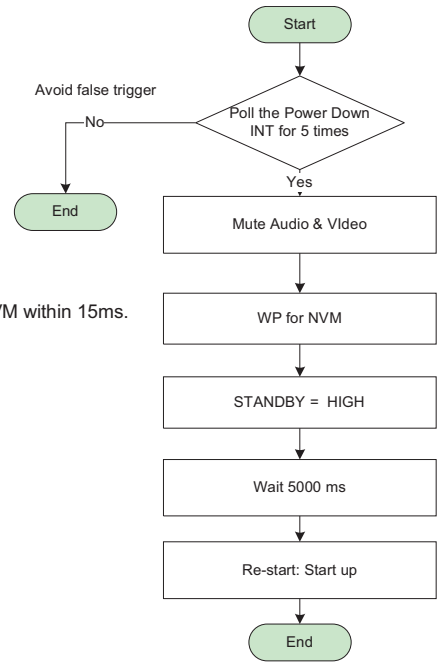


Figure 5-9 Stand-by / Tact Switch Stand-by flowchart

Power Down INT:
AC OFF or Transient INT



Notes:
1. Power Down INT will based on fall edge triggering
2. +3V3STBY will stay for 15ms, software must perform WP for NVM within 15ms.

DC_PROT INT

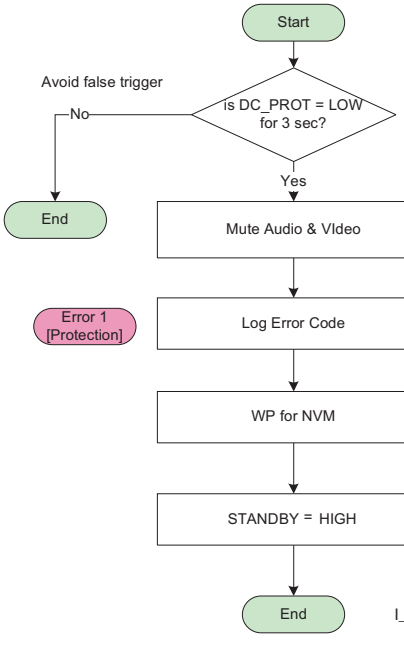


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Figure 5-10 Power Down & DC_PROT flowchart

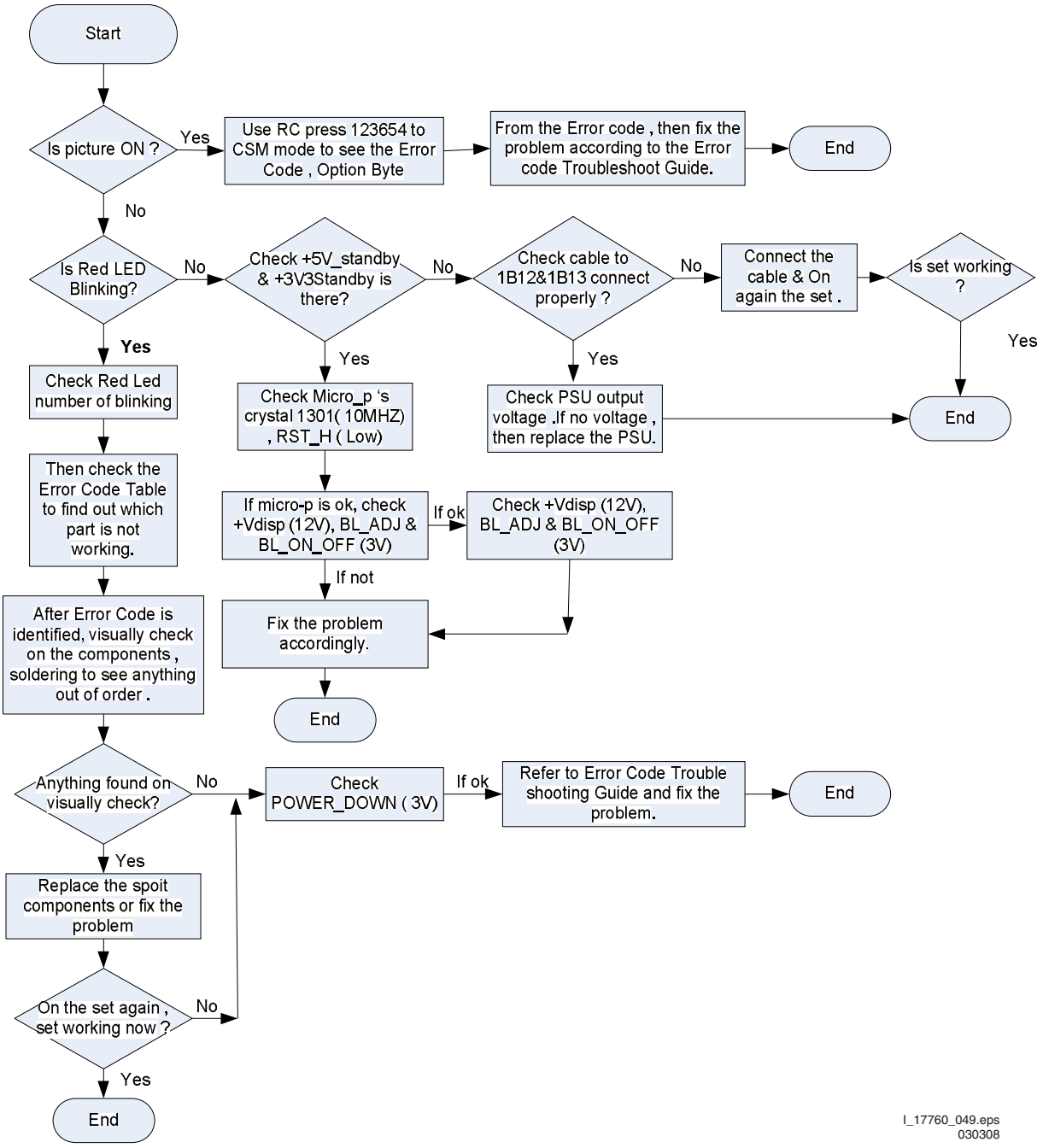

Figure 5-11 Troubleshooting flowchart

Personal Notes:

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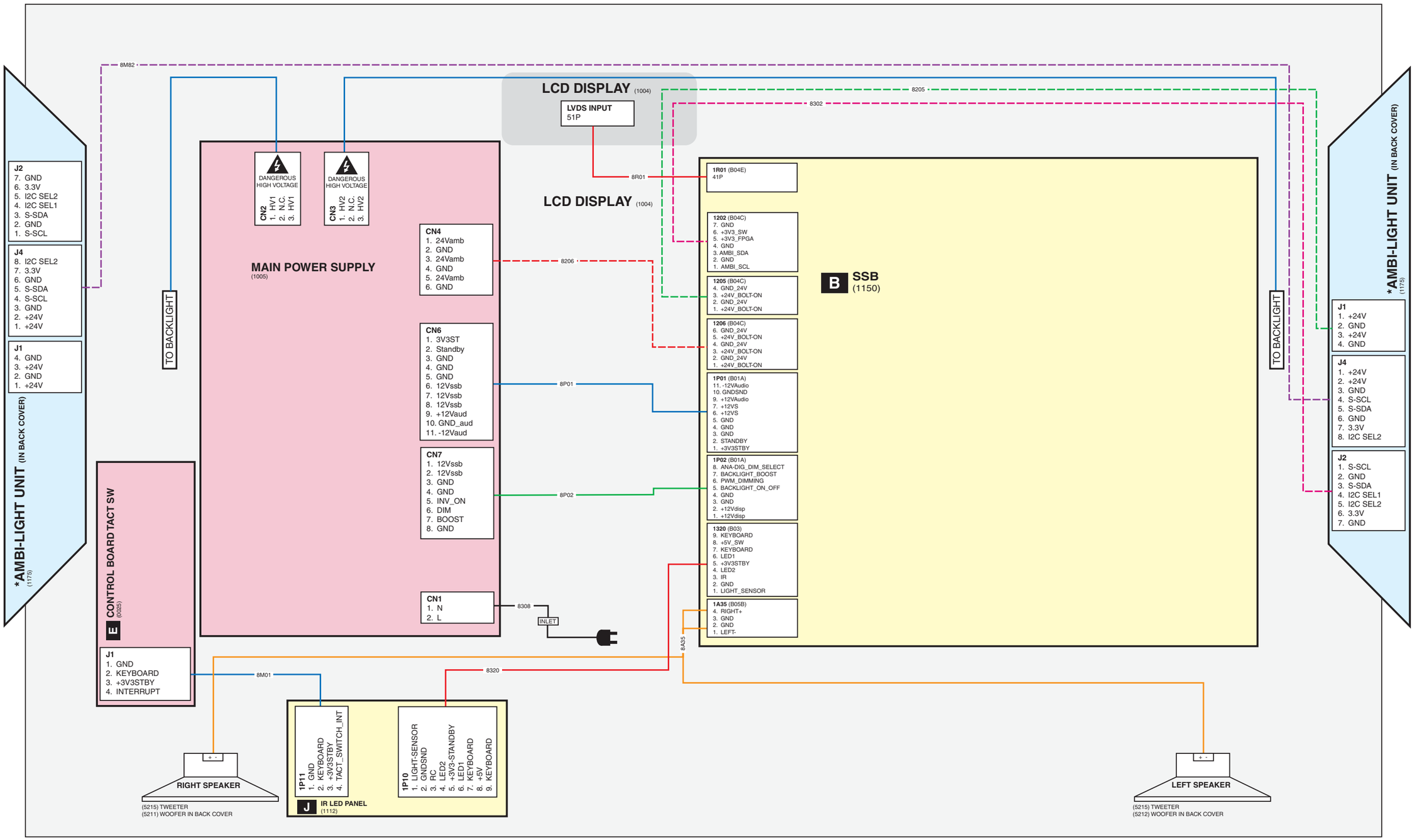
131004

6. Block Diagrams, Test Point Overview, and Waveforms

Wiring Diagram 42” 50Hz

WIRING DIAGRAM 42”- 47” 50Hz (STYLING ME8)



* AMBI-LIGHT UNITS ARE OPTIONAL

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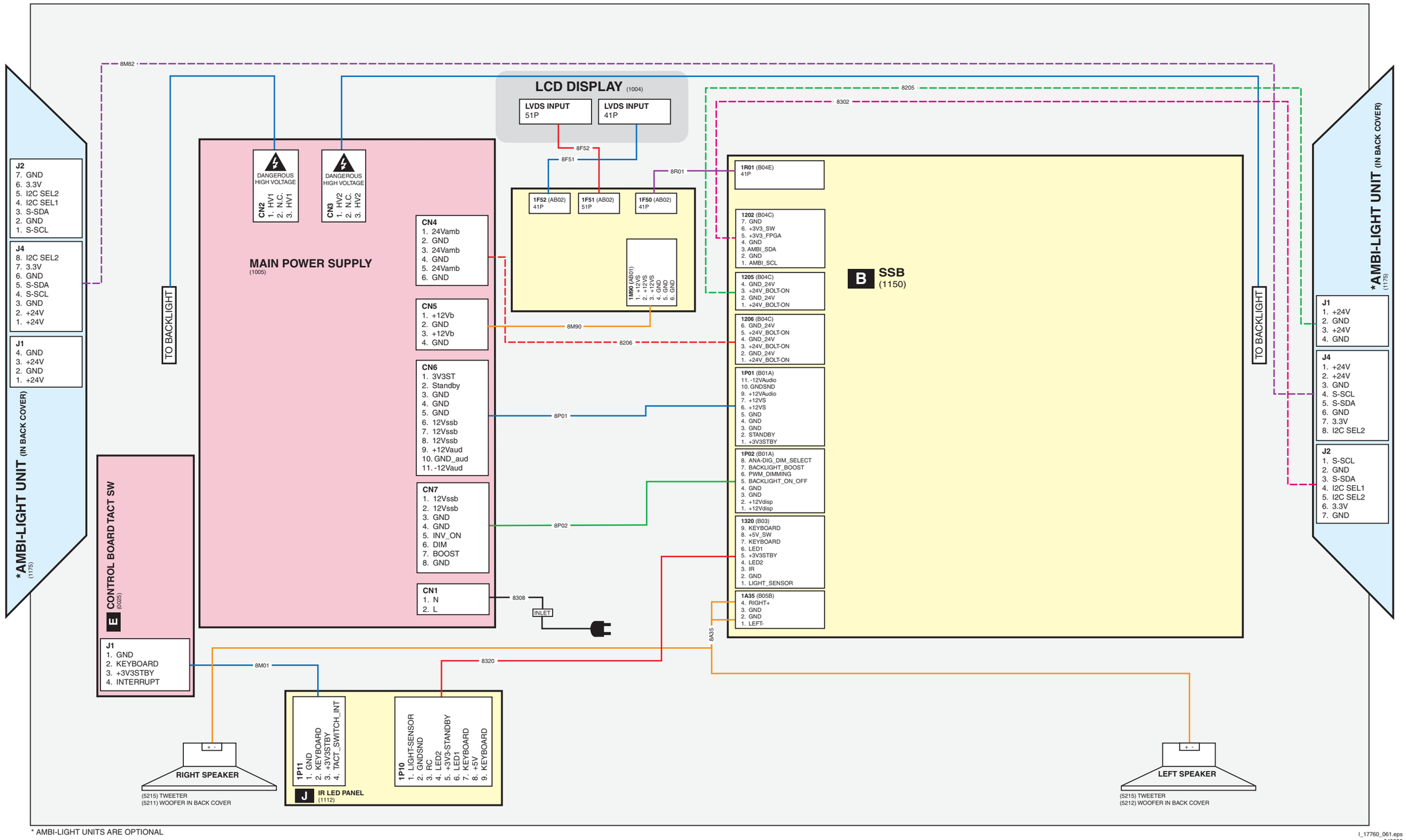
Wiring Diagram 42” 100Hz

WIRING DIAGRAM 42” 100Hz (STYLING ME8)



* AMBI-LIGHT UNITS ARE OPTIONAL

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Wiring Diagram 52”

WIRING 52”

Not available on time of publishing

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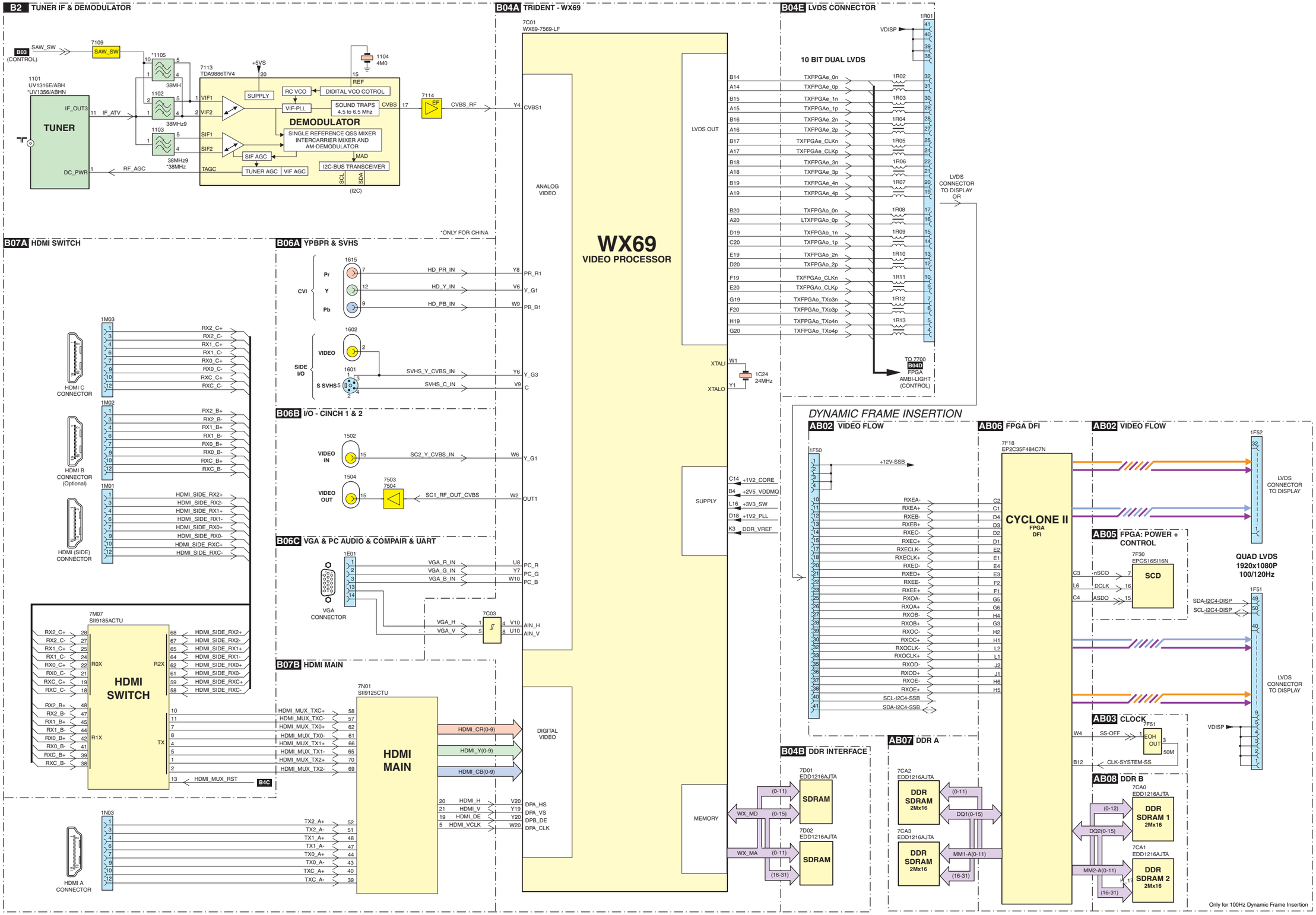
Block Diagram Video

VIDEO



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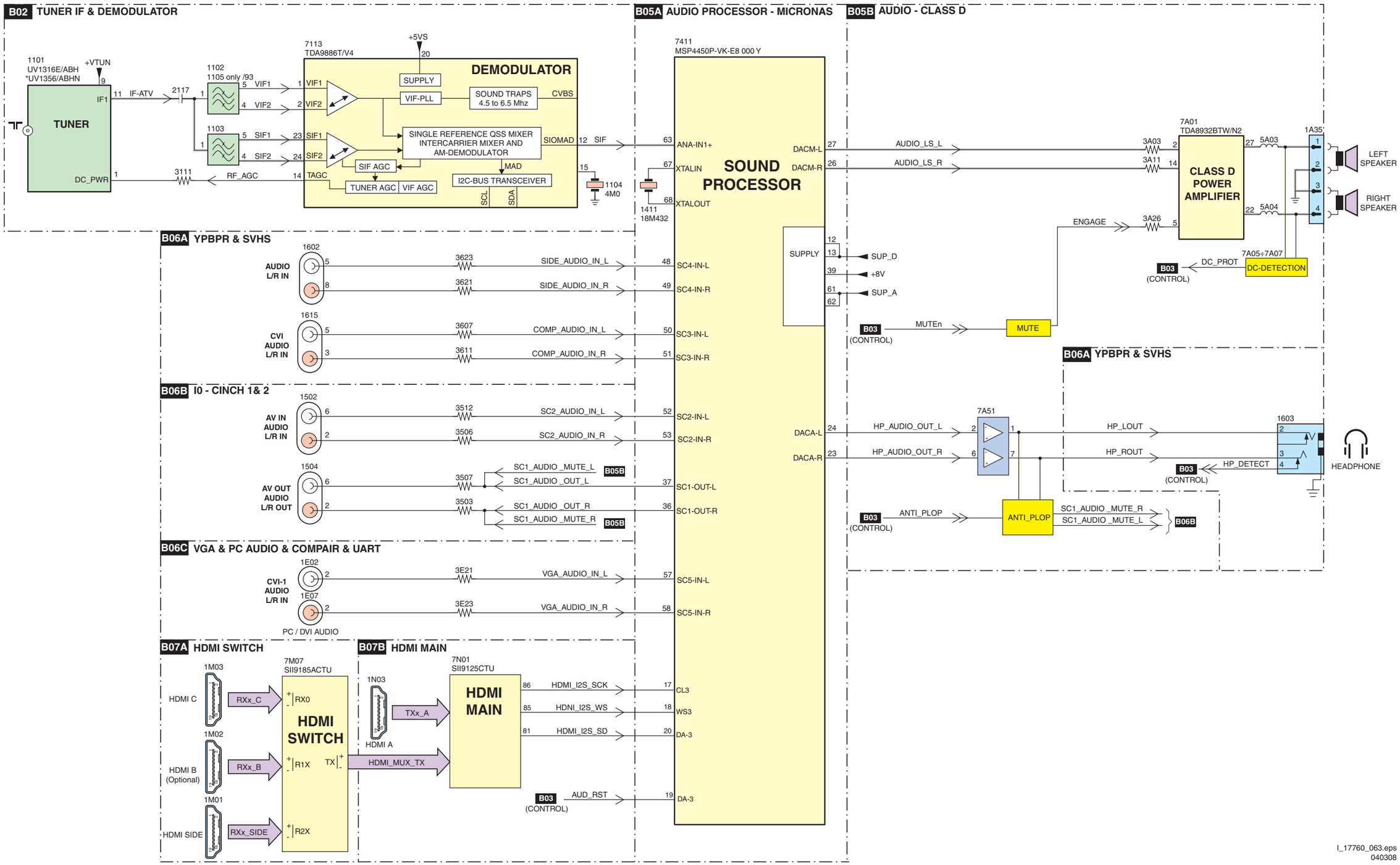
Block Diagram Audio

AUDIO



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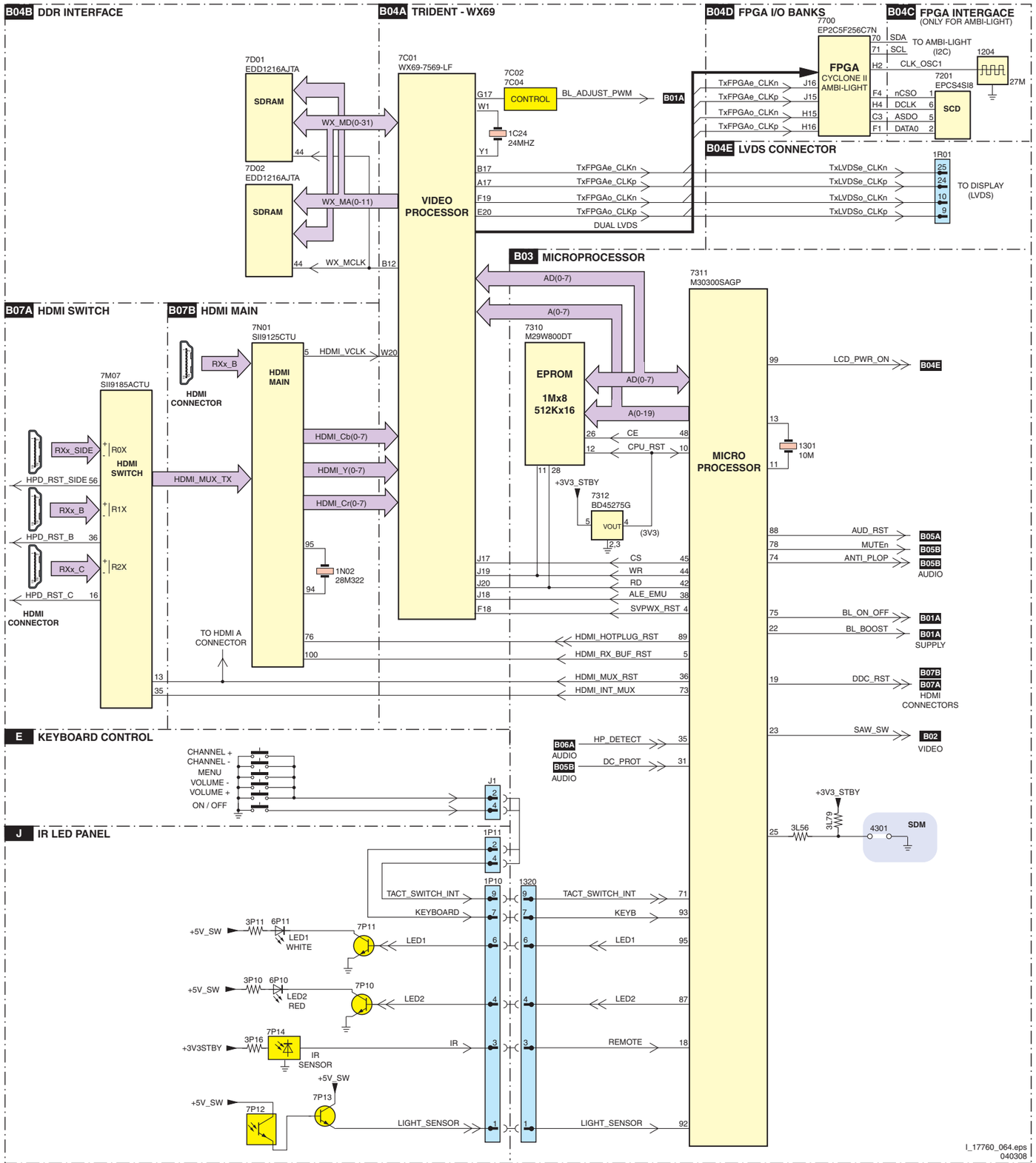
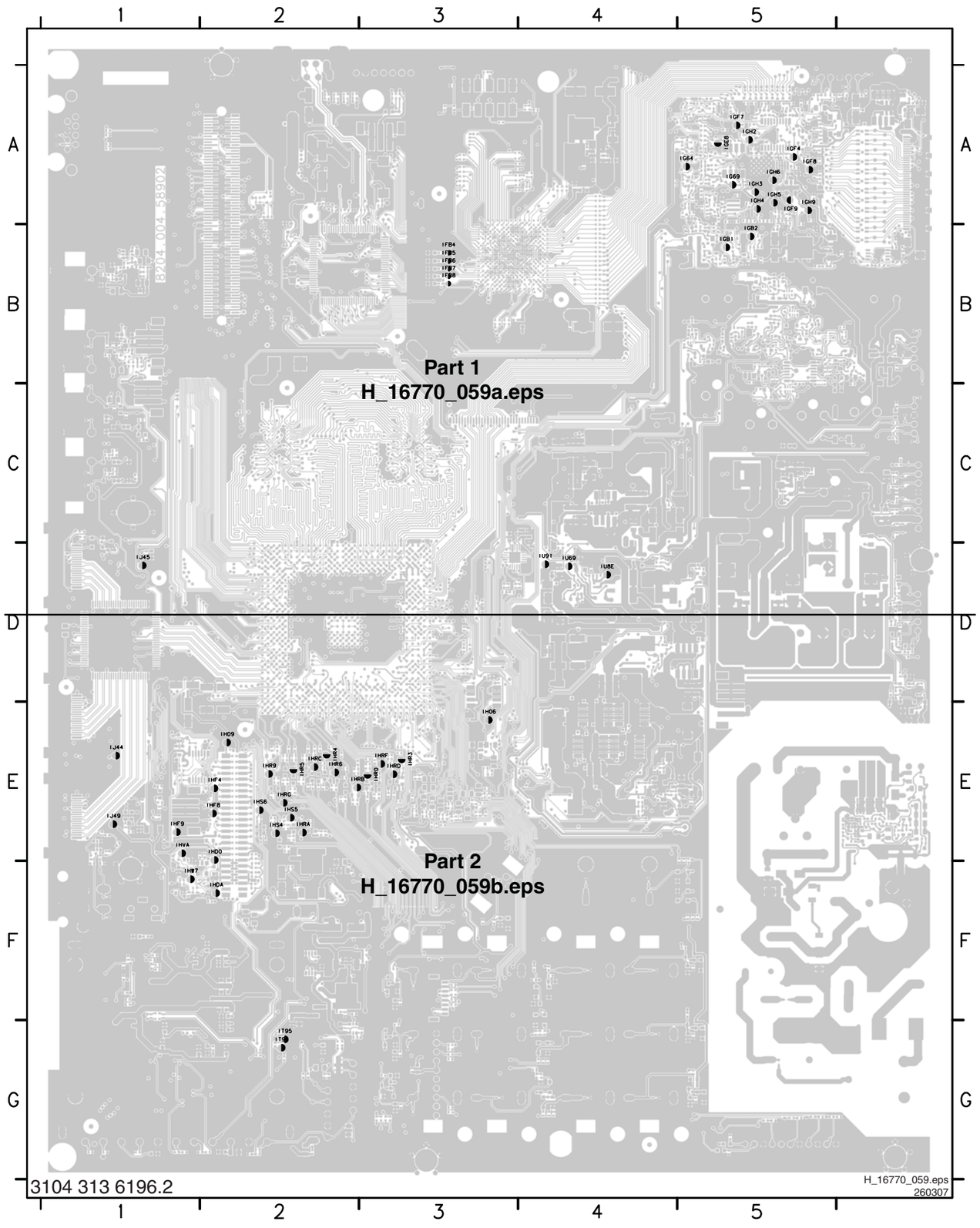
Block Diagram Control & Clock Signals

CONTROL & CLOCK SIGNALS



SSB: Test Points (Overview Top Side)



I705 D4
I706 D4
I707 E2
I708 E3
I709 E2
I710 E2
I711 E3
I712 E1
I713 F2
I714 E2
I715 A5
I716 A5
I717 A5
I718 B3
I719 B3
I720 B3
I721 B3
I722 B3
I723 E2
I724 E2
I725 E2
I726 A5
I727 A5
I728 A5
I729 A5
I730 A5
I731 A5
I732 G2
IFB4 B3
IFB5 B3
IFB6 B3
IFB7 B3
IFB8 B3
IG64 A5
IG64 A5
IG69 A5
IGB1 B5
IGB1 B5
IGB2 B5
IGB2 B5
IGE8 A5
IGE8 A5
IGF4 A5
IGF7 A5
IGF7 A5
IGF8 A5
IGF9 A5
IGH2 A5
IGH3 A5
IGH4 A5
IGH5 A5
IGH6 A5
IGH6 A5
IGH9 A5
IH06 E3
IH06 E3
IH09 E2
IH09 E2
IH09 E2
IHD0 E2
IHDA F2
IHF4 E2
IHF4 E2
IHF8 E2
IHF8 E2
IHF9 E1
IHR0 E3
IHR3 E3
IHR3 E3
IHR4 E2
IHR4 E2
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IHR5 E2
IHR6 E2
IHR9 E2
IHR9 E2
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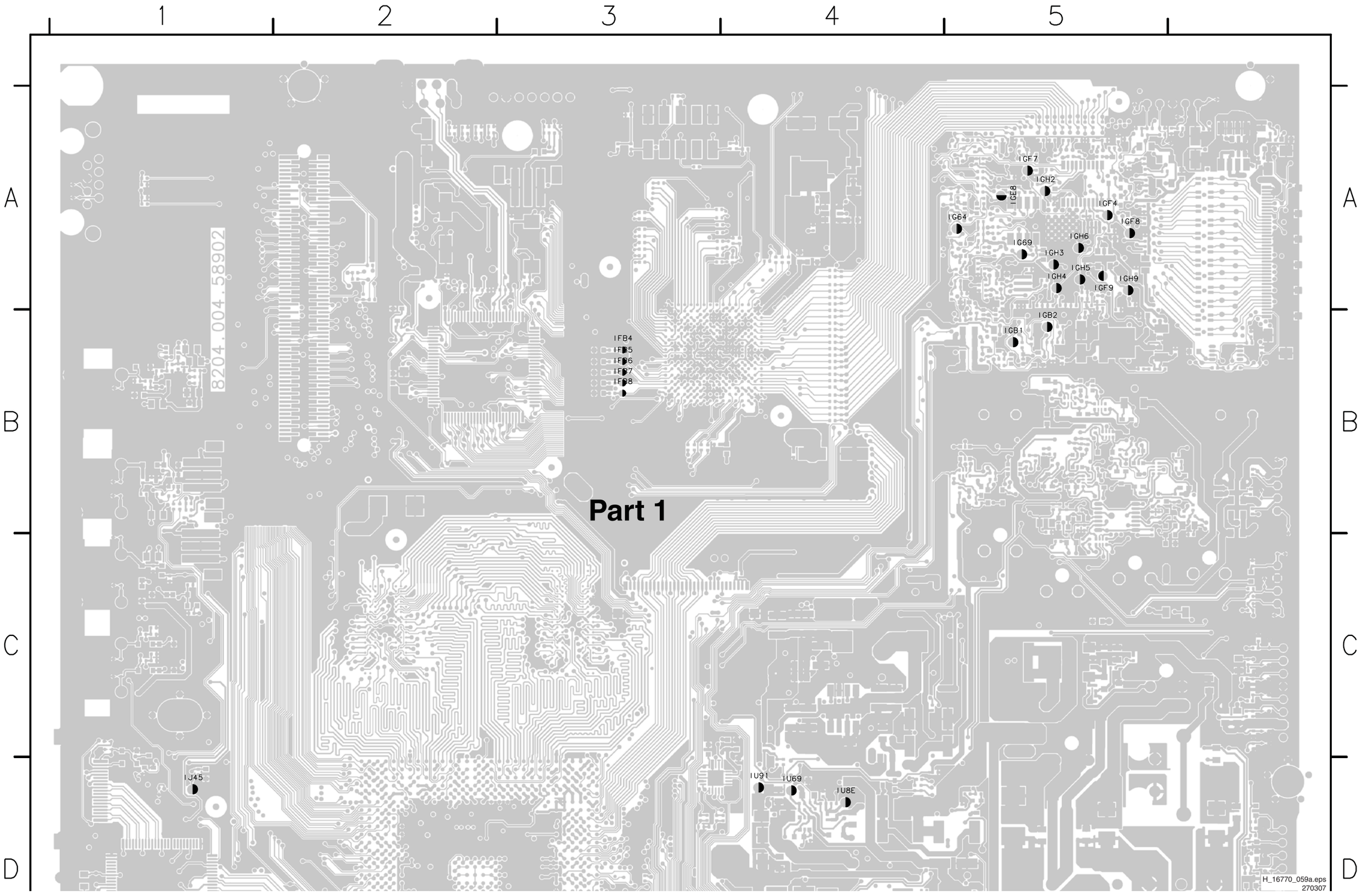
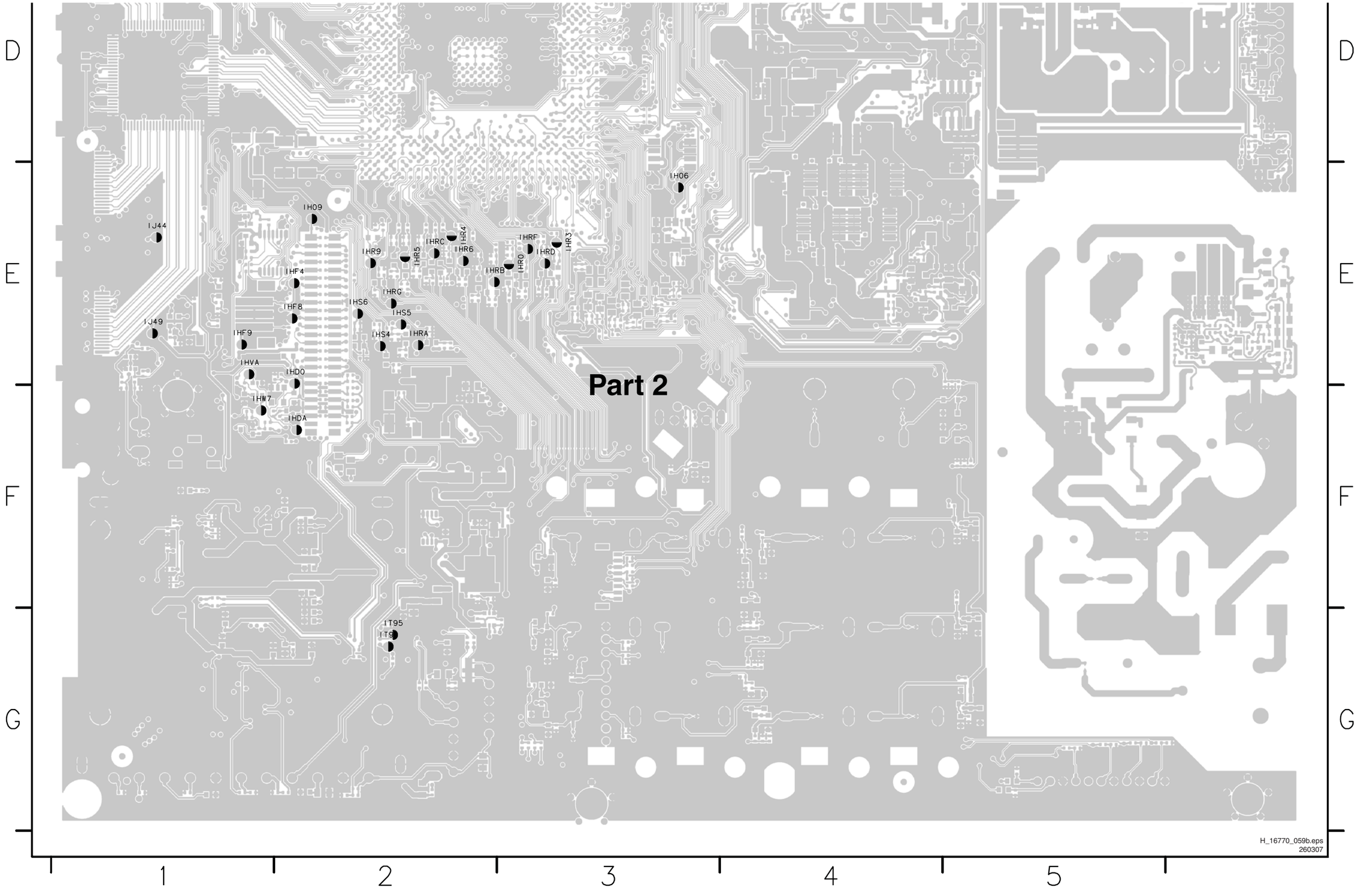
IHRB E2
IHRC E2
IHRD E3
IHRF E3
IHRF E3
IHRG E2
IHS4 E2
IHS4 E2
IHS5 E2
IHS6 E2
IHS6 E2
IHVA E1
IHVA E1
IHW7 F1
IHW7 F1
IJ44 E1
IJ44 E1
IJ45 D1
IJ45 D1
IJ49 E1
IJ49 E1
IT94 G2
IT94 G2
IT95 G2
IU69 D4
IU8E D4
IU91 D4
IU91 D4

SSB: Test Points (Part 1 Top Side)



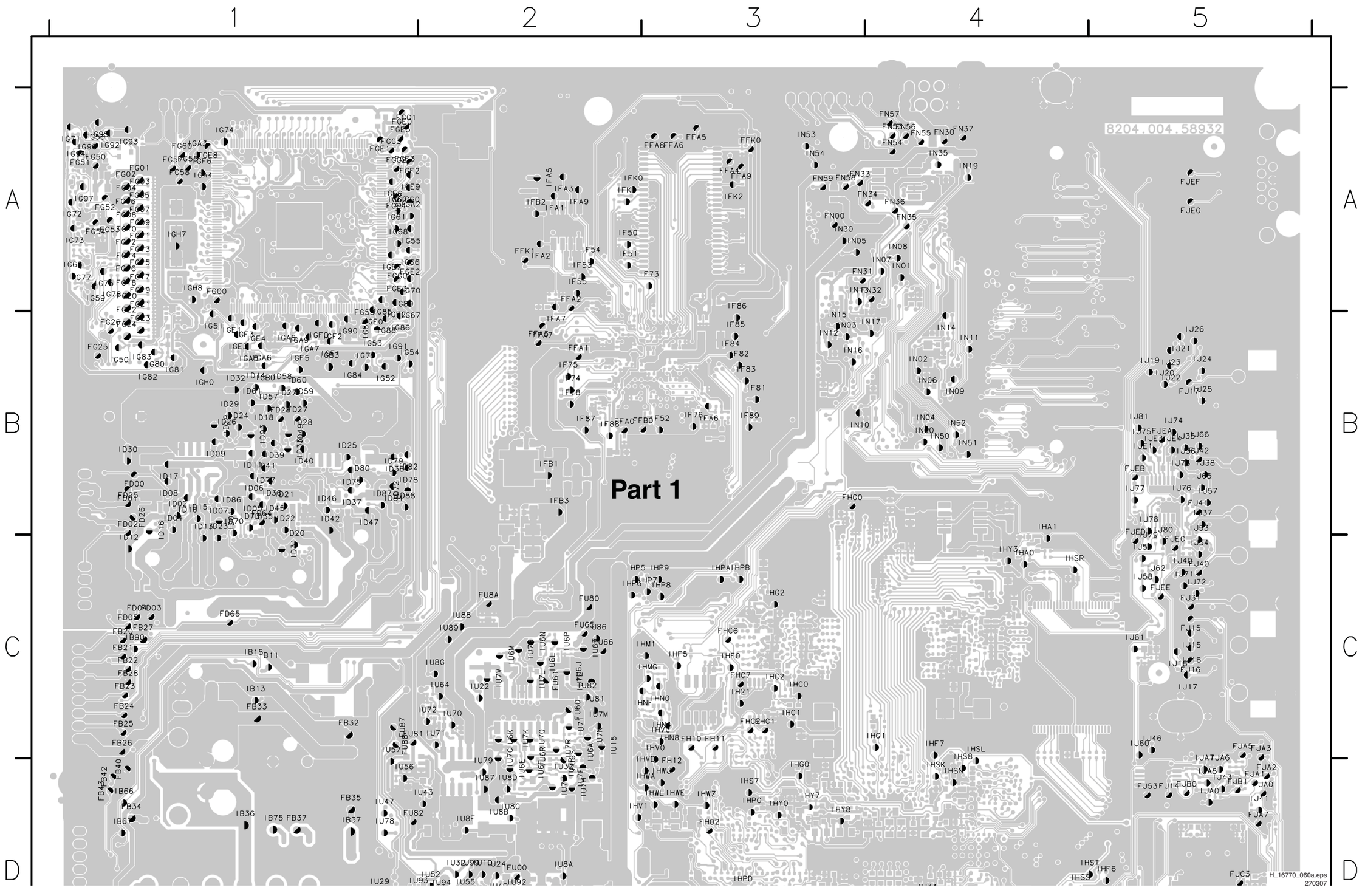
SSB: Test Points (Part 2 Top Side)



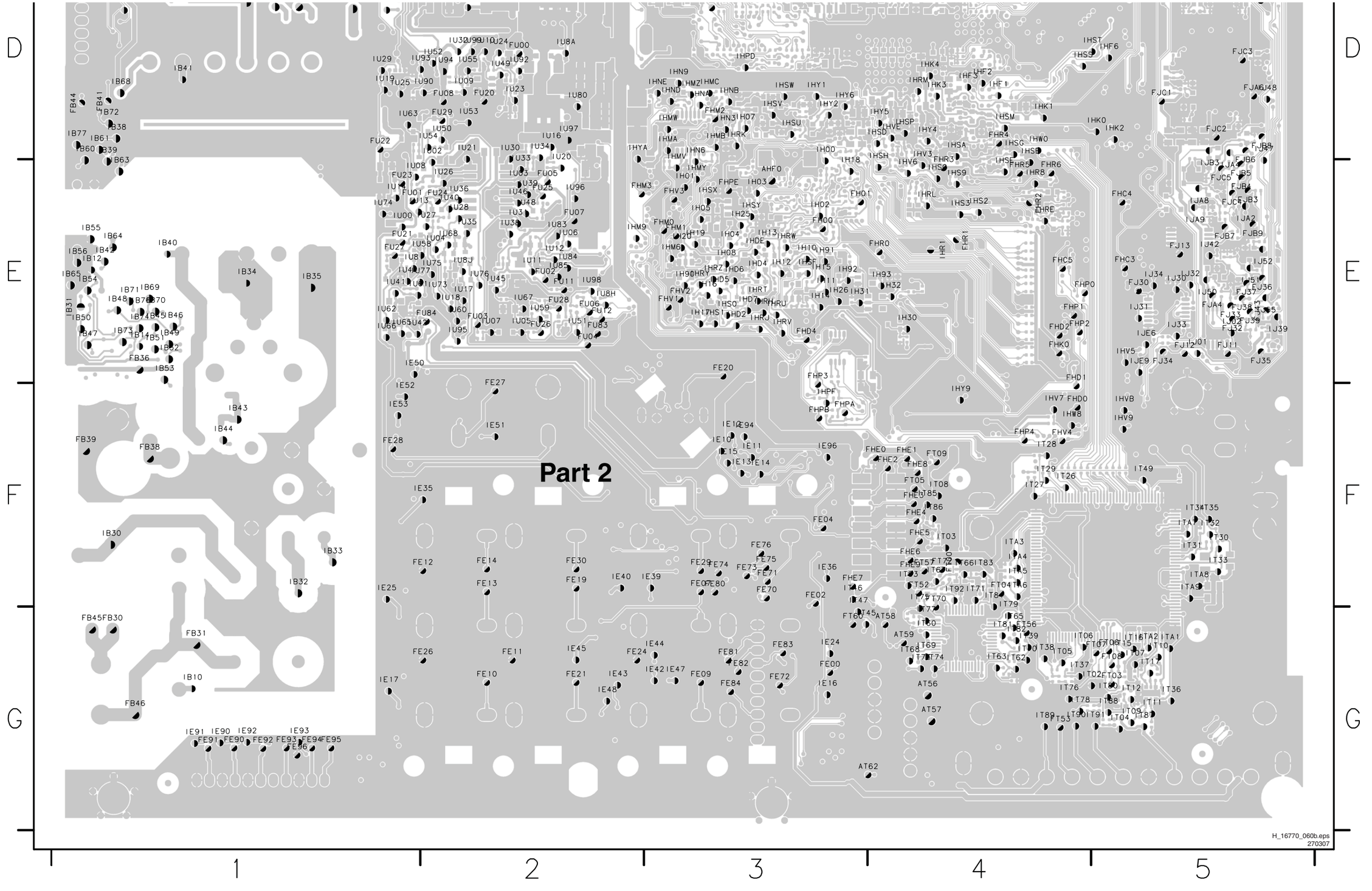
SSB: Test Points (Overview Bottom Side)

A1	E3	I20	B3	F138	D5	F262	D1	FFA1	B2	FJ32	E5	I117	E2	I241	F4	I365	D4	I489	E4	I613	B1	IB56	E1	IF82	B3	IHD2	E3	IJ01	E5	IT40	G4	IU71	C2
A2	G4	I21	B3	F139	C5	F263	D1	FFA2	A2	FJ33	E5	I118	E2	I242	G4	I366	D4	I490	E3	I614	B1	IB60	D1	IF83	B3	IHD4	E3	IJ02	E5	IT45	G3	IU72	C2
A3	G4	I22	B3	F140	E5	F264	D1	FFA3	B2	FJ34	E5	I119	C2	I243	G4	I367	C4	I491	E3	I615	B1	IB61	D1	IF84	B3	IHD5	E3	IJ15	C5	IT46	F3	IU73	E2
A4	G4	I23	B2	F141	C5	F265	D1	FFA4	A3	FJ35	E5	I120	C2	I244	G5	I368	D3	I492	E3	I616	B1	IB63	E1	IF85	B3	IHD6	E3	IJ16	C5	IT47	F3	IU74	E1
A5	G4	I24	B3	F142	D5	F266	C1	FFA5	A3	FJ36	E5	I121	D2	I245	G4	I369	D3	I493	A1	I617	B1	IB64	E1	IF86	A3	IHD7	E3	IJ17	C5	IT49	F5	IU75	E2
A6	G4	I25	B2	F143	D5	F267	C1	FFA6	A3	FJ37	E5	I122	D2	I246	G4	I370	D3	I494	A1	I618	B1	IB65	E1	IF87	B2	IHDE	E3	IJ18	C5	IT60	G4	IU76	E2
F1	E5	I26	B2	F144	D5	F268	C1	FFA7	B2	FJ38	E5	I123	D1	I247	G4	I371	D3	I495	B1	I619	B1	IB66	D1	IF88	B2	IHF0	C3	IJ19	B5	IT61	G4	IU77	E1
F2	A3	I27	A3	F145	D5	F269	C1	FFA8	A3	FJ39	E5	I124	E1	I248	G4	I372	D3	I496	A1	I620	B1	IB67	D1	IF89	B3	IHF1	D4	IJ20	B5	IT63	G4	IU78	D1
F3	B3	I28	A3	F146	E5	F270	C1	FFA9	A3	FJ40	C5	I125	E2	I249	G4	I373	D3	I497	B1	I621	B1	IB68	D1	IF8A	B3	IHF2	D4	IJ21	B5	IT65	G4	IU79	C2
F4	A3	I29	A2	F147	E5	F271	C1	FFB0	B3	FJ41	B5	I126	E2	I250	G4	I374	D3	I498	B1	I622	C1	IB69	E1	IF8B	B3	IHF3	D4	IJ22	B5	IT66	F4	IU7B	C2
F5	A3	I30	A2	F148	E5	F272	C1	FFK0	A3	FJ42	B5	I127	E1	I251	G4	I375	D3	I499	B1	I623	B1	IB70	E1	IF8C	B3	IHF4	C3	IJ23	B5	IT67	F4	IU7C	C2
F6	B2	I31	B3	F149	E5	F273	C1	FFK1	A2	FJ43	E5	I128	E2	I252	F4	I376	F4	I500	B1	I624	B1	IB71	E1	IF8D	B3	IHF5	C3	IJ24	B5	IT68	G4	IU7E	C2
F7	A3	I32	A2	F150	E5	F274	G1	FG00	A1	FJ53	D5	I129	D2	I253	G4	I377	D4	I501	B1	I625	B1	IB72	D1	IF8E	B3	IHF7	C4	IJ25	B5	IT69	G4	IU7F	D2
F8	A3	I33	A2	F151	E5	F275	G1	FG01	A1	FJA0	D5	I130	E1	I254	G4	I378	D4	I502	A1	I626	B1	IB73	E1	IF8F	B2	IHG0	D3	IJ26	B5	IT71	F4	IU7H	D2
F9	A3	I34	B1	F152	E5	F276	F1	FG02	A1	FJA1	D5	I131	C2	I255	F4	I379	D3	I503	A1	I627	B1	IB74	E1	IF8G	B3	IHG1	C4	IJ30	E5	IT73	G4	IU7J	D2
I1	A3	I35	B5	F153	E5	F277	F1	FG03	A1	FJA2	D5	I132	E2	I256	F4	I380	D3	I504	A1	I628	B1	IB75	D1	IF8H	B2	IHG2	C3	IJ31	E5	IT74	G4	IU7K	C2
I2	A2	I36	B5	F154	E5	F278	D1	FG04	A1	FJA3	C5	I133	E3	I257	G4	I381	F5	I505	B1	I629	C1	IB76	E1	IF8J	B2	IHK0	D5	IJ32	E5	IT75	F4	IU7L	C2
I3	A2	I37	B5	F155	D5	F279	E1	FG05	A1	FJA4	E5	I134	E4	I258	G4	I382	F5	I506	B1	I630	B1	IB77	D1	IFB3	B2	IHK1	D4	IJ33	E5	IT76	G4	IU7M	C2
I4	B2	I38	B5	F156	E5	F280	D1	FG06	A1	FJA5	C5	I135	E3	I259	G4	I383	F4	I507	A1	I631	B1	IB90	C1	IFK0	A2	IHK2	D5	IJ34	E5	IT77	G4	IU7N	C2
I5	A2	I39	B1	F157	E5	F281	D1	FG07	A1	FJA6	D5	I136	E4	I260	G4	I384	E4	I508	B1	I632	C1	ID01	B1	IFK1	A2	IHK3	D4	IJ35	B5	IT78	G4	IU7P	D2
I6	B2	I40	B5	F158	E5	F282	C1	FG08	A1	FJA7	D5	I137	E3	I261	F5	I385	E5	I509	A1	I633	B1	ID02	B1	IFK2	A3	IHK4	D4	IJ36	B5	IT79	F4	IU7Q	C2
I7	B3	I41	B5	F159	F4	F283	C1	FG09	A1	FJB0	D5	I138	E3	I262	G3	I386	E4	I510	B1	I634	B1	ID03	B1	IG50	B1	IHM1	C3	IJ37	B5	IT80	G5	IU7R	C2
I8	A2	I42	B5	F160	E3	F284	G1	FG10	A1	FJB1	D5	I139	C3	I263	F3	I387	D2	I511	B1	I635	B1	ID04	B1	IG51	B1	IHM2	E3	IJ38	B5	IT81	G4	IU7T	C2
I9	A2	I43	B5	F161	E3	F285	G1	FG11	A1	FJB3	E5	I140	E3	I264	G3	I388	D3	I512	B1	I636	B1	ID05	B1	IG52	B1	IHM9	E2	IJ39	E5	IT82	G4	IU7V	C2
F10	B2	I44	C5	F162	E3	F286	C1	FG12	A1	FJB4	E5	I141	E3	I265	G4	I389	E3	I513	B1	I637	B1	ID06	B1	IG53	B1	IHMA	D3	IJ40	C5	IT83	F4	IU80	D2
F11	A2	I45	C5	F163	E4	F287	B1	FG13	A1	FJB5	E5	I142	E3	I266	G4	I390	E3	I514	B1	I638	C1	ID07	B1	IG54	B1	IHMB	D3	IJ41	D5	IT84	F4	IU81	C2
F12	B2	I46	C5	F164	E4	F288	B1	FG14	A1	FJB6	E5	I143	E3	I267	G4	I391	D3	I515	B1	I639	C1	ID08	B1	IG55	A1	IHMC	D3	IJ42	E5	IT85	F4	IU82	C2
F13	B2	I47	C5	F165	D4	F289	B1	FG15	A1	FJB7	E5	I144	E3	I268	G4	I392	D3	I516	A1	I640	B1	ID09	B1	IG58	A1	IHMG	C3	IJ43	D5	IT86	F4	IU83	E2
F14	F2	I48	B5	F166	E4	F290	A1	FG16	A1	FJB8	D5	I145	E3	I269	G5	I393	D3	I517	A1	I641	B1	ID10	B1	IG59	A1	IHMV	D3	IJ46	C5	IT87	G5	IU84	E2
F15	F2	I49	C5	F167	E4	F291	A1	FG17	A1	FJB9	E5	I146	E3	I270	F5	I394	D5	I518	A1	I642	B1	ID11	B1	IG60	A1	IHMW	D3	IJ47	D5	IT88	G5	IU85	E2
F16	F2	I50	C5	F168	E4	F292	A1	FG18	A1	FJC1	D5	I147	E3	I271	F5	I395	D4	I519	A1	I643	B1	ID12	C1	IG61	A1	IHMY	E3	IJ48	D5	IT89	G4	IU86	C2
F17	G2	I51	B5	F169	E4	F293	A1	FG19	A1	FJC2	D5	I148	D3	I272	F5	I396	C4	I520	A1	I644	B1	ID13	B1	IG62	A1	IHMZ	D3	IJ50	E5	IT90	G4	IU87	D2
F18	G2	I52	B5	F170	E3	F294	A1	FG20	A1	FJC3	D5	I149	E3	I273	F5	I397	D4	I521	A1	I645	B1	ID14	B1	IG65	A1	IHN0	C3	IJ51	E5	IT91	G5	IU88	C2
F19	G3	I53	B5	F171	F3	F295	A1	FG21	A1	FJC4	E5	I150	E3	I274	F5	I398	D4	I522	A1	I646	B1	ID15	B1	IG66	A1	IHN3	D3	IJ52	E5	IT92	F4	IU89	C2
F20	F3	I54	B5	F172	F3	F296	A1	FG22	A1	FJC5	E5	I151	E3	I275	F5	I399	D4	I523	A1	I647	B1	ID16	B1	IG67	B1	IHN4	C3	IJ53	B5	IT93	F4	IU8A	D2
F21	F3	I55	B5	F173	F4	F297	A1	FG23	B1	FJEA	B5	I152	D3	I276	F4	I400	D4	I524	A1	I648	B1	ID17	B1	IG68	A1	IHN6	D3	IJ54	C5	ITA1	G5	IU8B	D2
F22	F3	I56	B5	F174	F3	F298	A1	FG24	B1	FJEB	B5	I153	E3	I277	F4	I401	D4	I525	B1	I649	B1	ID18	B1	IG70	A1	IHN8	C3	IJ55	E5	ITA2	G5	IU8C	D2
F23	G3	I57	C5	F175	E4	F299	A1	FG25	B1	FJEC	C5	I154	E3	I278	F4	I402	E4	I526	B1	I650	B1	ID19	B1	IG71	A1	IHN9	D3	IJ57	B5	ITA3	F4	IU8D	D2
F24	G1	I58	C5	F176	E4	F300	A1	FG26	B1	FJED	B5	I155	E3	I279	F4	I403	D4	I527	A1	I651	C1	ID20	B1	IG72	A1	IHNA	D3	IJ58	C5	ITA4	F4	IU8F	D2
F25	D2	I59	C5	F177	E4	F301	A1	FG50	A1	FJEE	C5	I156	E3	I280	G5	I404	E3	I528	B1	I652	D1	ID21	B1	IG73	A1	IHNB	D3	IJ59	C5	ITA5	F4	IU8G	C2
F26	G3	I60	C5	F178	E2	F302	A1	FG51	A1	FJEF	A5	I157	E3	I281	G5	I405	E4	I529	B1	I653	D1	ID22	B1	IG74	A1	IHND	D3	IJ60	C5	ITA6	F4	IU8H	E2
F27	G3	I61	C5	F179	D3	F303	A1	FG52	A1	FJEG	A5	I158	E3	I282	G5	I406	D4	I530	B1	I654	D1	ID23	B1	IG75	A1	IHNE	D3	IJ61	C5	ITA7	F5	IU8I	E1
F28	G3	I62	B5	F180	E3	F304	A1	FG53	A1	FJF0	A3	I159	D2	I283	G5	I407	E4	I531	A1	I655	E1	ID24	B1	IG77	A1	IHNF	D3	IJ62	C5	ITA8	F4	IU8J	E2
F29	G3	I63	B5	F181	E3	F305	A1	FG54	A1	FN30	A4	I160	E2	I284	G5	I408	E4	I532	B1	I656	E1	ID25	B1	IG78	A1	IHP5	C2	IJ65	B5	ITA9	F5	IU90	D2
F30	F3	I64	E2	F182	E4	F306	A1	FG55	A1	FN31	A3	I161	D2	I285	G5	I409	D4	I533	B1	I657	C1	ID26	B1	IG79	B1	IHP6	C2	IJ66	B5	IU00	E1	IU92	D2
F31	F3	I65	E2	F183	B3	F307	A1	FG56	A1	FN32	A4	I162	E2	I286	G5	I410	E4	I534	B1	I658	E1	ID27	B1	IG80	B1	IHP7	C3	IJ71	C5	IU02	D2	IU93	D2
F32	F3	I66	D2	F184	F4	F308	A1	FG57	A1	FN33	A3	I163	E2	I287	F4	I411	D4	I535	B1	I659	C1	ID28	B1	IG81	B1	IHP8	C3	IJ72	C5	IU03	E2	IU94	D2
F33	F3	I67	E2	F185	F4	FB20	C1	FG58	A1	FN34	A4	I164	D2	I288	G5	I412	D3	I536	B1	I660	E1	ID29	B1	IG82	B1	IHP9	C3	IJ73	B5	IU04	E2	IU95	E2
F34	F3	I68	E2	F186	F3	FB21	C1	FG59	B1	FN35	A4	I165	D2	I289	G4	I413	E4	I537	B1	I661	C1	ID30	B1	IG83	B1	IHPA	C3	IJ74	B5	IU05	E2	IU96	E2
F35	G3	I69	E2	F187	F4	FB22	C1	FG60	A1	FN36	A4	I166	D2	I290	G4	I414	E4	I538	A1	I662	G1	ID31	C1	IG84	B1	IHPB	C3	IJ75	B5	IU06	E2	IU97	D2
F36	F3	I70	E1	F188	F4	FB23	C1	FGE0	A1	FN37	A4	I167	E2	I291	G5	I415	E3	I539	A1	I663	B1	ID32	B1	IG85	B1	IHPD	D3	IJ76	B5	IU07	E2	IU98	E2
F37	F3	I71	D2	F189	F4	FB24	C1	FGE1	A1	FN53	A4	I168	E2	I292	F4	I416	E3	I540	A1	I664	A1	ID33	B1	IG86	B1	IHPF	F3	IJ77	B5	IU08	E1	IU99	D2
F38	F2	I72	C2	F190	F4	FB25	C1	FGE2	A1	FN54	A4	I169	E1	I293	G5	I417	E3	I541	A1	I665	D1	ID35	B1	IG87	B1	IHPG	D3	IJ78	B5	IU09	D2		
F39	F3	I73	C2	F191	F4	FB26	C1	FGE3	A1	FN55	A4	I170	E1	I294	A3	I418	E3	I542	A1	I666	E1	ID36	B1	IG88	B1	IHR1	E4	IJ79	C5	IU10	D2		
F40	D3	I74	C2	F192	F4	FB27	C1	FGE4	A1	FN56	A4	I171	D1	I295	A3	I419	E3	I543	A1	I667	D1	ID37	B1	IG89	A1	IHR8	E4	IJ80	B5	IU11	E2		
F41	E3	I75	C2	F193	F4	FB28	C1	FGE5	A1	FN57	A4	I172	E1	I296	B4	I420	E3	I544	A1	I668	E1	ID38	B1	IG90	B1	IHRE	E4	IJ81	B5	IU12	E2		
F42	E3	I76	D2	F194	E3	FB30	G1	FGE8	A1	FN58	A3	I173	E1	I297	B4	I421	E3	I545	A1	I669	E1	ID39	B1	IG91	B1	IHRH	E3	IJA0	D5	IU13	E1		
F43	A1	I77	D2	F195	E4	FB31	G1	FGF2	A1	FN59	A3	I174	E2	I298	B4	I422	E3	I546	A1	I670	D1	ID40	B1	IG92	A1	IHRJ	E3	IJA2	E5	IU14	E1		
F44	B5	I78	D2	F196	F4	FB32	C1	FGF3	A1	FT00	F4	I175	E2	I299	A4	I423	D4	I547	A1	I671	E1	ID41	B1	IG93	A1	IHRK	D3	IJA4	E5	IU15	C2		
F45	B5	I79	E1	F197	F4	FB33	C1	FGG0	A1	FT03	G5	I176	E2	I300	A3	I424	E4	I548	A1	I672	E1	ID42	B1	IG94	A1	IHRL	E4	IJA5	D5	IU16	D2		
F46	C5	I80	E2	F198	C3	FB34	D1	FGG1	A1	FT04	F4	I177	D1	I301	A4	I425	D3	I549	A1	I673	E1	ID45	B1	IG95	A1	IHRM	D4	IJA6	C5	IU17	E2		
F47	B5	I81	C2	F199	C3	FB35	D1	FGG2	A1	FT05	F4	I178	D1	I302	B4	I426	E3	I550	A1	I674	D1	ID46	B1	IG96	A1	IHRT	E3	IJA7	C5	IU18	E2		
F48	C5	I82	C2	F200	E4	FB36	E1	FGG3	A1	FT06	G5	I179	D2	I303	B3	I427	E3	I551	A1	I675	E1	ID47	B1	IG97	A1	IHRU	E3	IJA8	E5	IU19	D1		
F49	C5	I83	C2	F201	E5	FB37	D1	FH00	E3	FT07	G5	I180	D2	I304	B3	I428	E4	I552	A1	I676	E1	ID49	B1	IGA2	A1	IHRV	E3	IJA9	E5	IU20	D2		
F50	B1	I84	C2	F202	E5	FB38	F1	FH01	E3	FT08	G5	I181	D2	I305	B4	I429	E4	I553	A1	I677	E1	ID57	B1	IGA3	A1	IHRW	E3	IJB3	E5	IU21	D2		
F51	C5	I85	C2	F203	C3	FB39	F1	FH02	D3	FT52	F4	I182	D2	I306	A3	I430	E4	I554	A1	I678	D1	ID58	B1	IGA4	A1	IHRY	E3	IJE1	B5	IU22	C2		
F52	C2	I86	D2	F204	C3	FB40	D1	FH10	C3	FT52	F4	I183	E2	I307	B3	I431	D3	I555	B1	I679	E1	ID59	B1	IGA5	B1	IHZ	E3	IJE3	B5	IU23	D2		
F53	C1	I87	C2	F205	D3	FB41	D1	FH11	C3	FT53	G4	I184	D2	I308	B4	I432	F3	I556	B1	I680	E1	ID60	B1	IGA6	B1	IHS0	E3	IJE4	B5	IU24	D2		
F54	C1	I88	C2	F206	C3	FB42	D1	FH12	D3	FT56	G4	I185	E2	I309	B3	I433	D3	I557	B1	I681	E1	ID61	B1	IGA7	B1	IHS1	E3	IJE6	E5	IU25	D1		
F55	E2	I89	C2	F207	C3	FB43	D1	FHC1	C3	FT57	F4	I186	D1	I310	B4	I434	C3	I558	B1	I682	E1	ID70	B1	IGA8	B1	IHS2	E4	IJE9	E5	IU26	E2		
F56	E2	I90	C2	F208	A1	FB44	D1	FHC2	C3	FT60	G3	I187	E2	I311	A4	I435	C3	I559	B1	I683	E1	ID72	B1	IGA9	B1	IHS3	E4	IN00	B4	IU27	E2		
F57	D1	I91	D2	F209	A1	FB45	G1	FHC3	E5	FT70	F4	I188	E2	I312	A4	I436	C3	I560	F3	I684	E1	ID73	B1	IGB0	B1	IHS7	D3	IN01	A4	IU28	E2		
F58	C1	I92	D2	F210	A1	FB46	G1	FHC4	E5	FT72	F4	I189	E1	I313	B4	I437	C3	I561	F3	I685	E1	ID75	B1	IGB3	B1	IHS8	C4	IN02	B4	IU29	D1		
F59	C2	I93	D2	F211	A1	FD00	B1	FHC5	E4	FU00	D2	I190	E1	I314	A3	I438	C3	I562	G1	I686	E1	ID77	B1	IGE0	B1	IHS9	E4	IN03	B3	IU30	D2		
F60	C2	I94	D2	F212	A1	FD01	B1	FHC6	C3	FU01	E1	I191	E2	I315	B4	I439	C2	I563	G1	I687	E1	ID78	B1	IGE1	B1	IHSA	D4	IN04	B4	IU31	E2		
F61	C2	I95	C2	F213	A1	FD02	B1	FHC7	C3	FU02	E2	I192	E2	I316	B3	I440	C2	I564	G1	I688	E1	ID79	B1	IGE2	B1	IHSB	D4	IN05	A3	IU32	D2		
F62	C2	I96	D2	F214	A1	FD03	C1	FHD0	F4	FU03	E2	I193	E2	I317	B4	I441	C3	I565	G1	I689	E1	ID80	B1	IGE3	B1	IHSC	E4	IN06	B4	IU33	D2		
F63	C2	I97	C2	F215	A1	FD04	C1	FHD1	E4	FU04	E2	I194	E2	I318	A4	I442	D3	I566	F1	I690	E1	ID82	B1	IGE4	B1	IHSD	D4	IN07	A4	IU34	D2		
F64	D2	I98	C2	F216	A1	FD05	C1	FHD2	E4	FU05	E2	I195	E2	I319	B4	I443	D3	I567	F1	I691	E1	ID84	B1	IGE6	A1	IHSE	E4	IN08	A4	IU35	E2		
F65	D2	I99	C2	F217	A1	FD06	C1	FHD3	E4	FU06	E2	I196	D2	I320	E5	I444	D3	I568	F2	I692	E1	ID86	B1	IGE7	A1	IHSF	D3	IN09	B4	IU36	E2		
F66	E1	AHF0	E3	F218	A1	FD26	B1	FHE0	F4	FU07	E2	I197	E2	I321	E5	I445	D3	I569	E1	I693	F1	ID87	B1	IGE9	A1	IHSG	D4	IN10	B3	IU37	D2		
F67	E2	AT56	G4	F219	A1	FD27	B1	FHE1	F4	FU08	D2	I198	D2	I322	B5	I446	D3	I570	G2	I694	E1	ID88	B1	IGF0	B1	IHSH	D4	IN11	B4	IU38	E2		
F68	E2	AT57	G4	F220	A1	FD28	B1	FHE2	F4	FU11	E2	I199	E2	I323	B5	I447	C3	I571	G3	I695	E1	IE10	F3	IGF1	B1	IHSK	D4	IN12	B3	IU39	E2		
F69	E2	AT58	G4	F221	A1	FD64	B1	FHE3	F4	FU12	E2	I200	D2	I324	B5	I448	E3	I572	G2	I696	D1	IE11	F3	IGF2	B1	IHSL	C4	IN13	A3	IU40	E2		
F70	E1	AT59	G4	F222	B1	FD65	C1	FHE4	F4	FU20	D2	I201	D1	I325	D5	I449	C3	I573	G3	I697	D1	IE12	F3	IGF3	B1	IHSM	D4	IN14	B4	IU41	E1		
F71	D1	AT62	G4	F223	A1	FE00	G3	FHE5	F4	FU21	E1	I202	E2	I326	E5	I450	D3	I574	G2	I698	D1	IE13	F3	IGF5	B1	IHSN	D4	IN15	B3	IU42	E1		
F72	E1	F100	A3	F224	A1	FE02	F3	FHE6	F4	FU22	D1	I203	E2	I327	E5	I451	C3	I575	G3	I699	E1	IE14	F3	IGF6	A1	IHSP	D4	IN16	B3	IU43	D2		
F73	D2	F101	A3	F225	A1	FE04	F3	FHE7	F3	FU23	E1	I204	E2	I328	D5	I452	D3	I576	F2	I700	F1	IE15	F3	IGH0	B1	IHSR	C4	IN17	B4	IU44	E1		
F74	E2	F102	A4	F226	A1	FE07	F3	FHE8	F4	FU24	E2	I205	D1	I329	D5	I453	E3	I577	F3	I701	F1	IE16	G3	IGH7	A1	IHSS	D4	IN19	A4	IU45	E2		
F75	E2	F103	A4	F227	A1	FE09	G3	FHE9	F4	FU25	E2	I206	D2	I330	D5	I454	D3	I578	F3	I702	E1	IE17	G1	IGH8	A1	IHST	D5	IN30	A3	IU46	E2		
F76	D2	F104	A4	F228	A1	FE10	G2	FHG0	B3	FU26	E2	I207	D2	I331	D5	I455	E3	I579	F2	I703	F1	IE24	G3	IH00	D3	IHSU	D3	IN35	A4	IU47	D1		
F77	E2	F105	A4	F229	A1	FE11	G2	FHK0	E4	FU27	E1	I208	D2	I332	E5	I456	C3	I580	F1	I704	B5	IE25	F1	IH01	E3	IHSV	D3	IN50	B4	IU48	E2		
F78	E2	F106	A4	F230	A1	FE12	F2	FHM0	E3	FU28	E2	I209	E2	I333	D5	I457	D3	I581	G3	IB10	G1	IE26	F2	IH02	E3	IHSW	D3	IN51	B4	IU49	D2		
F79	E2	F107	A4	F231	A1	FE13	F2	FHM1	E3	FU29	D2	I210	D1	I334	C5	I458	D3	I582	G1	IB11	C1	IE36	F3	IH03	E3	IHSX	E3	IN52	B4	IU50	D2		
F80	E2	F108	A4	F232	B1	FE14	F2	FHM2	D3	FU60	C2	I211	E2	I335	C5	I459	D3	I583	G3	IB12	E1	IE39	F3	IH04	E3	IHSY	E3	IN53	A3	IU51	E2		
F81	E2	F109	A4	F233	B1	FE19	F2	FHM3	E2	FU61	C2	I212	E2	I336	B5	I460	E2	I584	F3	IB13	C1	IE40	F2	IH05	E3	IHV0	C3	IN54	A3	IU52	D2		
F82	E2	F110	A4	F234	A1	FE20	E3	FHP0	E4	FU65	C2	I213	D2	I337	B5	I461	E3	I585	F3	IB14	E1	IE42	G3	IH07	D3	IHV1	D2	IT02	G5	IU53	D2		
F83	E1	F111	A3	F235	A2	FE21	G2	FHP1	E4	FU66	C2	I214	E1	I338	B5	I462	C3	I586	F3	IB15	C1	IE43	G2	IH08	E3	IHV3	D4	IT03	F4	IU54	D2		
F84	D2	F112	A4	F236	G1	FE24	G2	FHP2	E4	FU6S	D2	I215	E1	I339	E5	I463	D4	I587	F3	IB30	F1	IE44	G3	IH10	E3	IHV5	E5	IT04	G5	IU55	D2		
F85	F4	F113	A3	F237	G1	FE26	G2	FHP3	E3	FU80	C2	I216	E2	I340	C5	I464	D4	I588	F3	IB31	E1	IE45	G2	IH11	E3	IHV6	E4	IT05	G4	IU56	D1		
F86	G4	F114	A4	F238	G1	FE27	E2	FHP4	F4	FU81	C1	I217	E2	I341	C5	I465	D5	I589	F3	IB32	F1	IE47	G3	IH12	E3	IHV7	F4	IT06	G4	IU57	C1		
F87	G3	F115	A3	F239	G1	FE28	F1	FHPA	F3	FU82	D1	I218	D2	I342	E5	I466	D4	I590	B1	IB33	F1	IE48	G2	IH13	E3	IHV9	F5	IT07	G5	IU58	E2		
F88	F4	F116	A5	F240	G1	FE29	F3	FHPB	F3	FU83	E2	I219	D2	I343	E5	I467	D5	I591	B1	IB34	E1	IE50	E1	IH14	E3	IHVB	F5	IT08	F4	IU59	E2		
F89	G4	F117	A5	F241	G1	FE30	F2	FHPE	E3	FU84	E2	I220	E1	I344	E5	I468	C3	I592	B1	IB35	E1	IE51	F2	IH15	E3	IHVC	C3	IT09	G5	IU60	E2		
F90	G4	F118	C5	F242	F1	FE70	F3	FHR0	E4	FU87	C1	I221	E2	I345	D5	I469	C4	I593	B1	IB36	D1	IE52	F1	IH16	E3	IHVD	D3	IT10	G5	IU61	E1		
F91	F4	F119	C5	F243	F2	FE71	F3	FHR1	E4	FU88	C1	I222	F5	I346	E5	I470	D3	I594	B1	IB37	D1	IE53	F1	IH17	E3	IHVE	D4	IT11	G5	IU62	E1		
F92	F4	F120	C5	F244	G2	FE72	G3	FHR2	E3	FU8A	C2	I223	F5	I347	C5	I471	C4	I595	B1	IB38	G1	IE54	G1	IH18	E3	IHVF	D4	IT12	G5	IU63	D1		
F93	G5	F121	B5	F245	G2	FE73	F3	FHR3	D4	I100	D2	I224	F5	I348	D5	I472	D5	I596	B1	IB39	D1	IE91

SSB: Test Points (Part 1 Bottom Side)



SSB: Test Points (Part 2 Bottom Side)



I2C IC Overview

I²C

B03 MICROPROCESSOR
7311 M30300SAGP
MICRO PROCESSOR
SDA2 28
SCL2 27
+3V3_STBY
3L76 3L75
IIC_SDA_up
IIC_SCL_up
ERR 04
3L54 3355
7L23 M24C64 NVM EEPROM ERR 06
3353
100 NVM_WC 7
7310 M29W800DT
EPROM 1Mx8 512Kx16
AD(0-7)
A(0-19)

B04C FPGA INTERFACE
B04D FPGA I/O BANKS
3202 3201
MAIN_SDA
MAIN_SCL
PE H1
7700 EP2C5F256C7N CYCLONE II FPGA AMBI-LIGHT ERR 17
F4 nCSO
H4 DCLK
C3 ASDO
F1 DATA0
7201 EPCS4SI8N SCD

B03 MICROPROCESSOR
7302 PCA9515ADP
+3V3_SW
3359 3360
IIC_SDA
IIC_SCL
7303 PCA9515ADP
3362 3361
IIC_SDA_SIDE
IIC_SCL_SIDE

B02 TUNER IF & DEMODULATOR
5120 5121
1101 UV1316E/ABH UV1356/ABHN TUNER ERR 07
3152 3151
7113 TDA9886T/V4 IF DEMODULATOR ERR 08

B05A AUDIO PROCESSOR - MICRONAS
3411 3410
7411 MSP4450L AUDIO PROCESSOR ERR 09

B04A TRIDENT - WX69
3C08 3C09
7C01 WX69-7569 VIDEO PROCESSOR ERR 05

B04B
7D01 EDD1216AJTA DRAM ERR 10
7D02 EDD1216AJTA DRAM ERR 14

B07A HDMI SWITCH
3M21 3M20
7M07 SII9185ACTU HDMI SWITCH ERR 21

B07B HDMI MAIN
3N40 3N39
7N01 SII9125CTU HDMI MAIN ERR 11
+5V_SW
3N43 3N42
DDC_SDAA
DDC_SCLA
1N03 HDMI A BACK
7N40 M24C02 EEPROM
HDMI CONNECTOR
+5V_SW
3M87 3M88
77 3M15 HDMI_MUX_TSDA
78 3M14 HDMI_MUX_TSCL

B06C VGA & PC AUDIO & COMPAIR & UART
COMPAIR SERVICE CONNECTOR
1E04 3E70 3E71
DC_5V
1E01 3E10 3E11
SDA_VGA
SCL_VGA
VGA CONNECTOR
7E01 M24C02 EEPROM 256x8

B04C FPGA INTERFACE
+3V3_FPGA
3206 3203 3204 3205
N2 AMBI_SDA
P3 AMBI_SCL
S_SDA
S_SCL
1202
TO AMBI-LIGHT MODULE (OPTIONAL)
ONLY FOR AMBILIGHT

B04E LVDS CONNECTOR
+3V3_STBY
3L98 3L97
XCIN 8
XCOUT 9
ERR 19
ITV_I2C_SDA
ITV_I2C_SDA
3R26 3R25
1R01
LVDS CONNECTOR TO DISPLAY OR TO DFI PANEL

DYNAMIC FRAME INSERTION (100Hz)
AB02 VIDEO-FLOW
AB09 DISPLAY INTERFACING
1F50
SDA-I2C4-SSB
SCL-I2C4-SSB
3F19 3F20
AB07 DDR A
SDA-I2C4
SCL-I2C4
AB06 FPGA DFI
3FA0 3F49
P2 P1
7F18 EP2C35F484C7N CYCLONE II (FPGA)
7CA2 EDD1216AJTA
7CA3 EDD1216AJTA
DDR SDRAM 2Mx16
DQ1
MM1-A
DQ2
MM2-A
7CA0 EDD1216AJTA
7CA1 EDD1216AJTA
DDR SDRAM 2Mx16
AB08 DDR B

IIC_SDA_SIDE
IIC_SCL_SIDE
+5V_SW
+5V_SW
+5V_SW
3M63 3M62
3M73 3M72
3M68 3M67
70 DDC_SDA_SIDE
71 DDC_SCL_SIDE
30 DDC_SDAC
31 DDC_SCLC
50 DDC_SDAB
51 DDC_SCLB
1M01 HDMI SIDE
1M03 HDMI C BACK
1M02 HDMI B BACK (Optional)
7M16 M24C02 EEPROM
7M18 M24C02 EEPROM
7M17 M24C02 EEPROM
HDMI CONNECTOR

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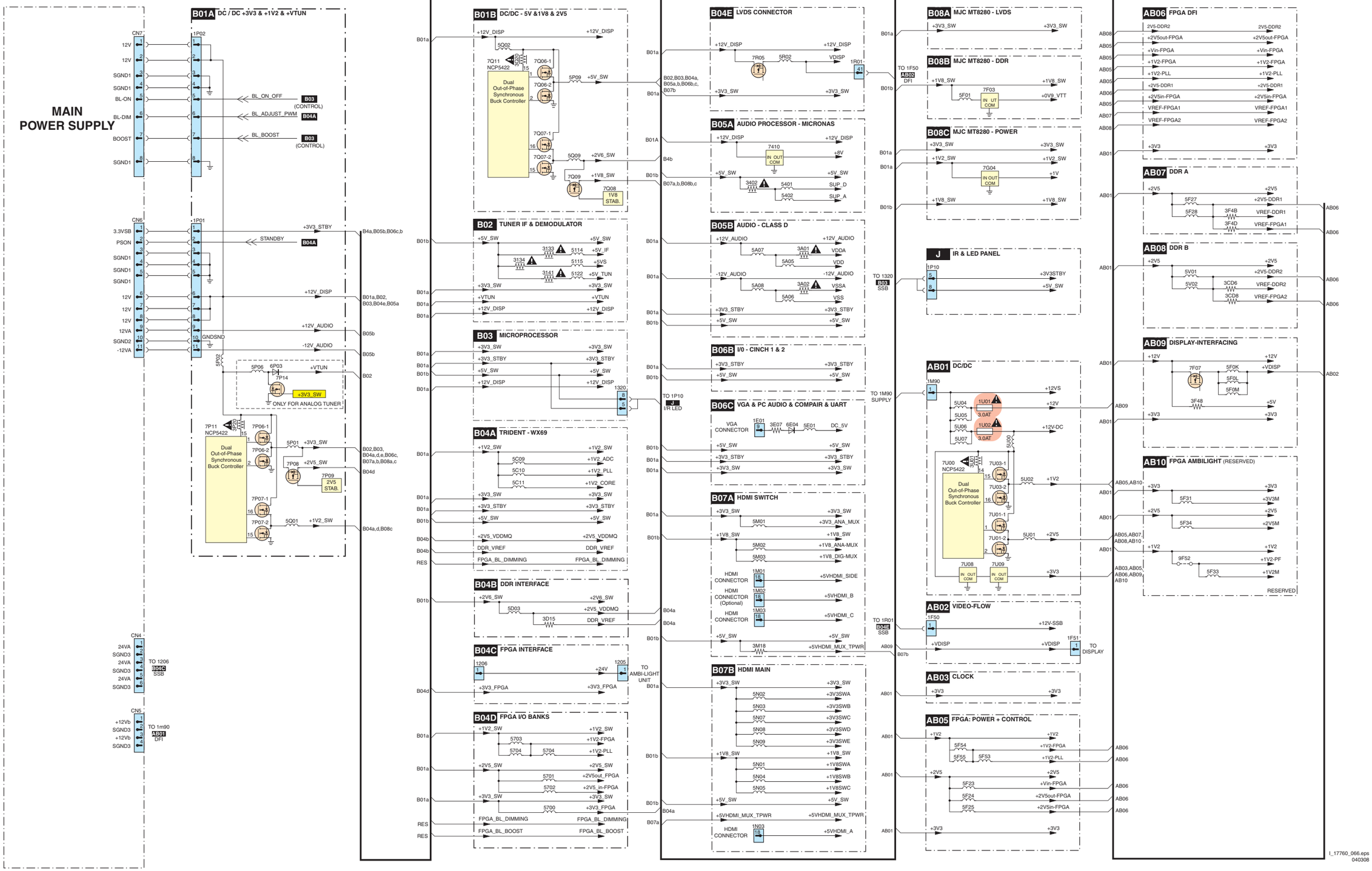
040308

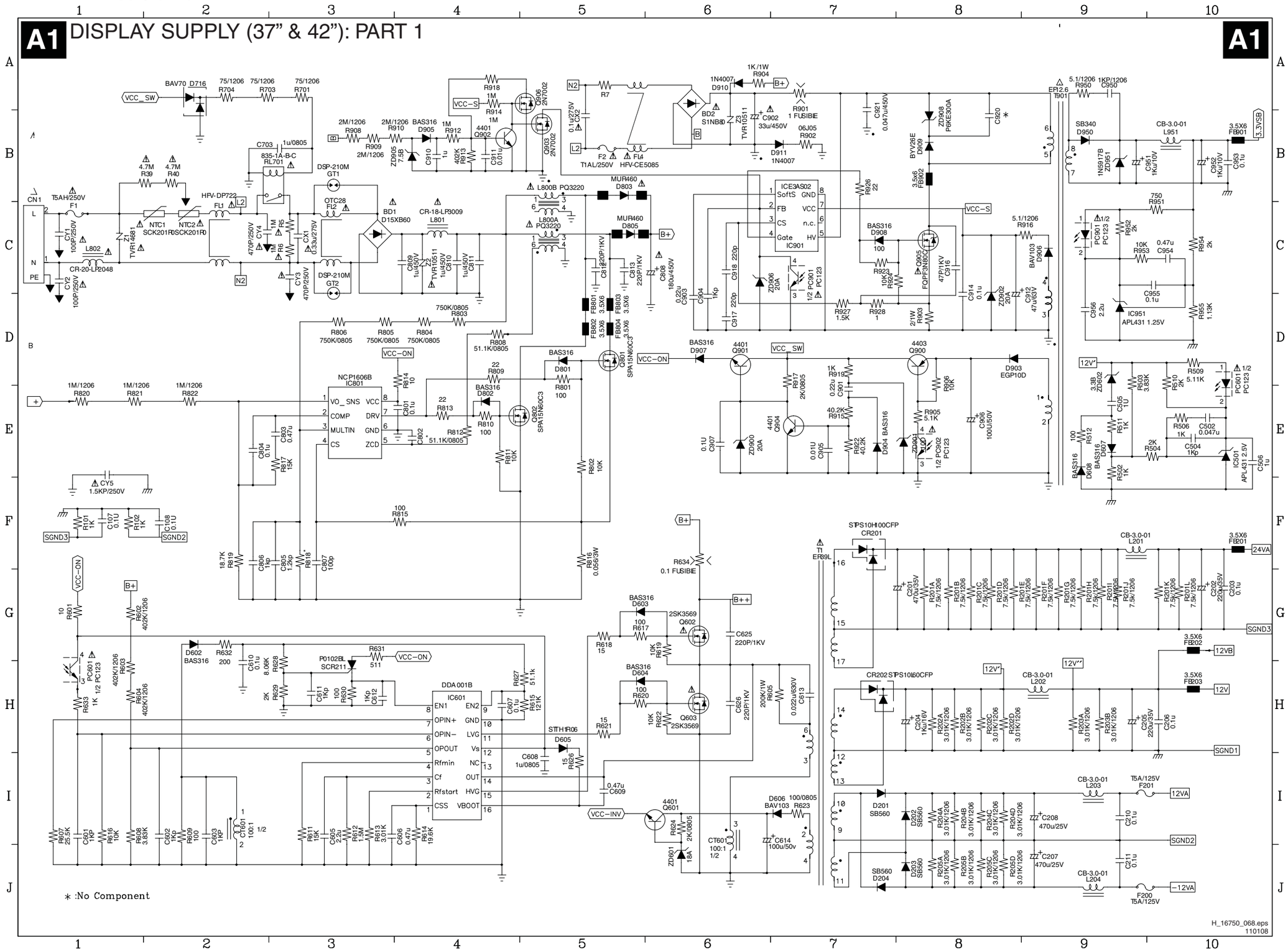
Supply Lines Overview

SUPPLY LINES OVERVIEW

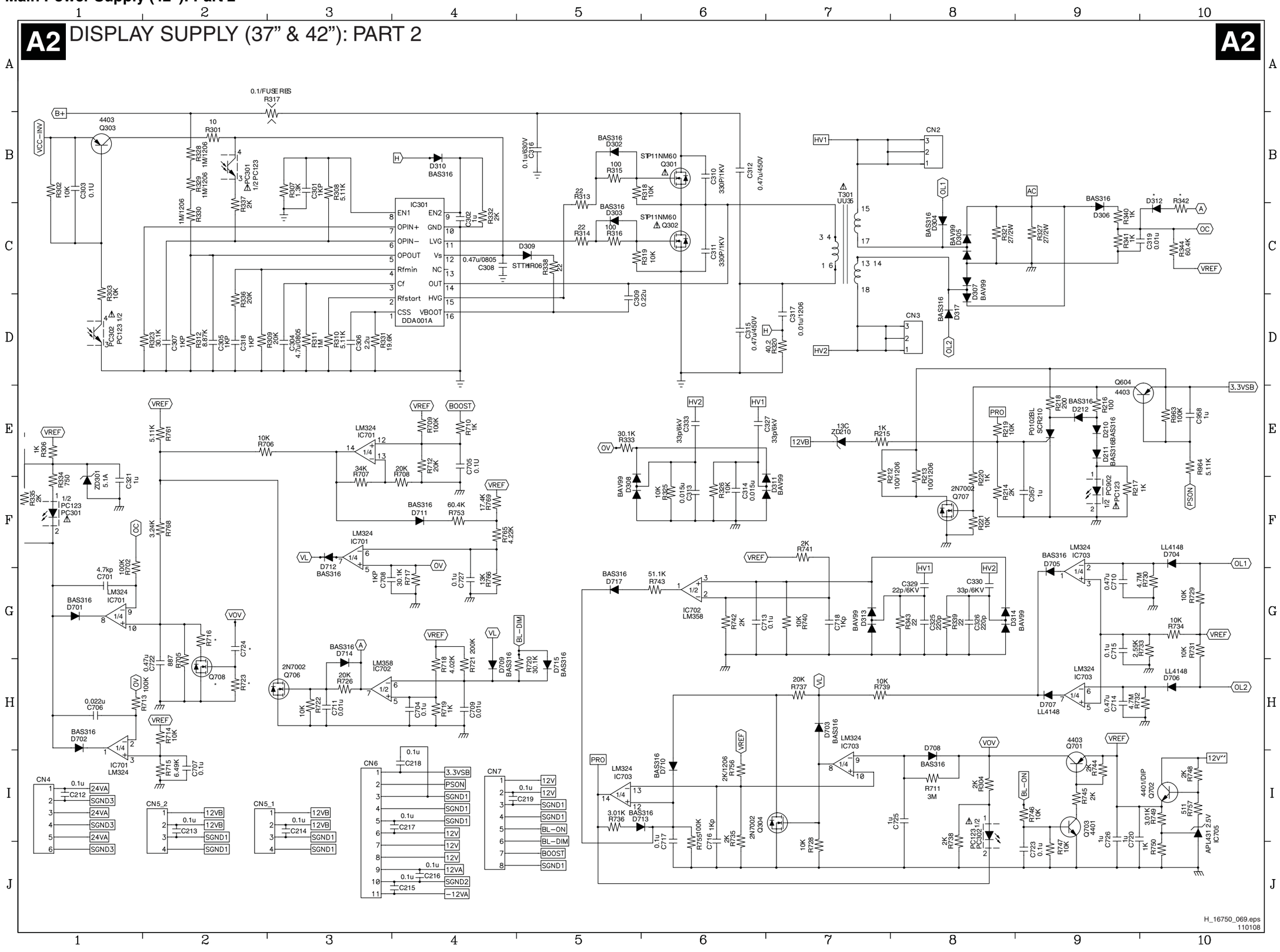


7. Circuit Diagrams and PWB Layouts

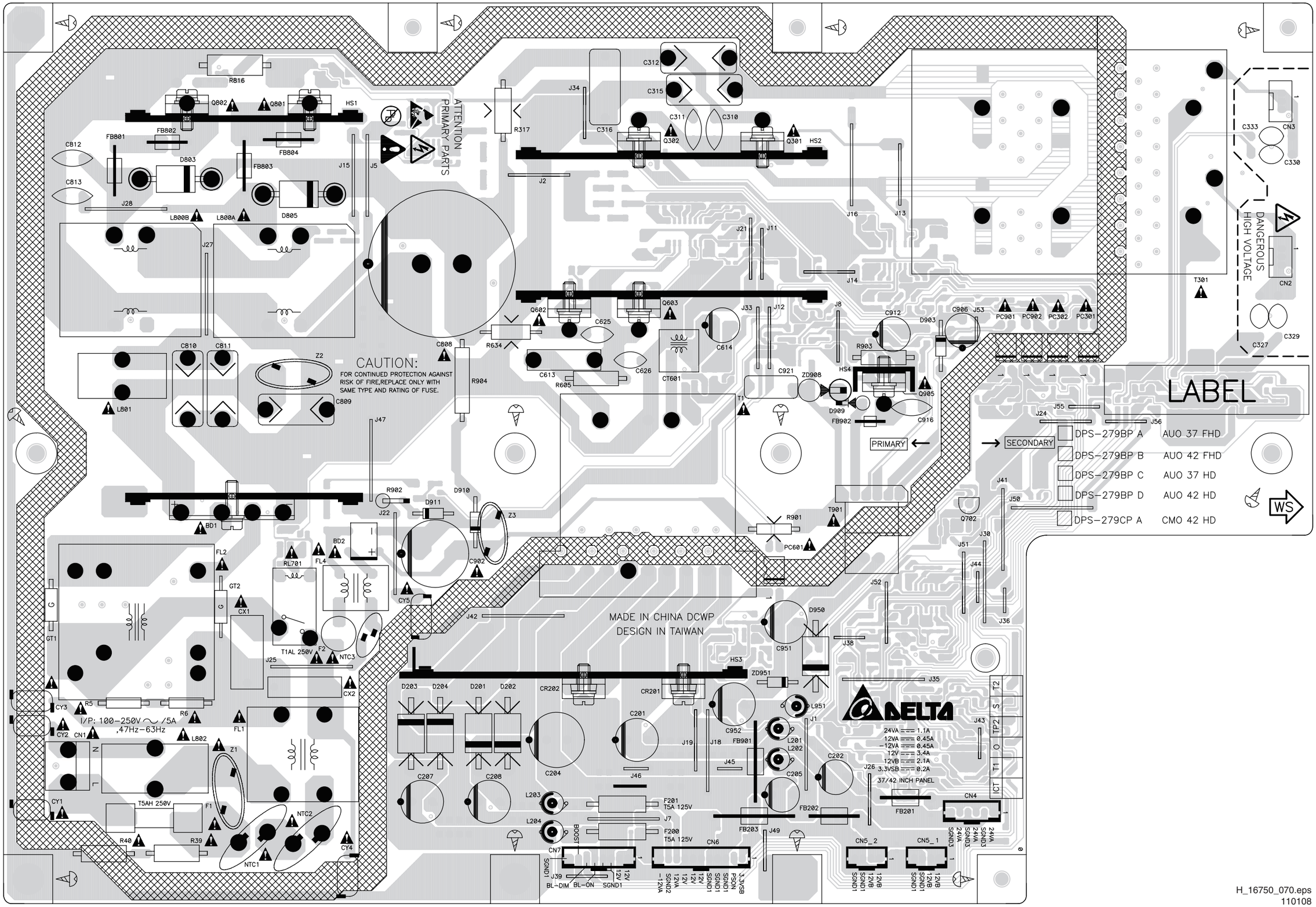
Main Power Supply (42”): Part 1



Main Power Supply (42”): Part 2



Layout Main Power Supply (42”) (Top Side)



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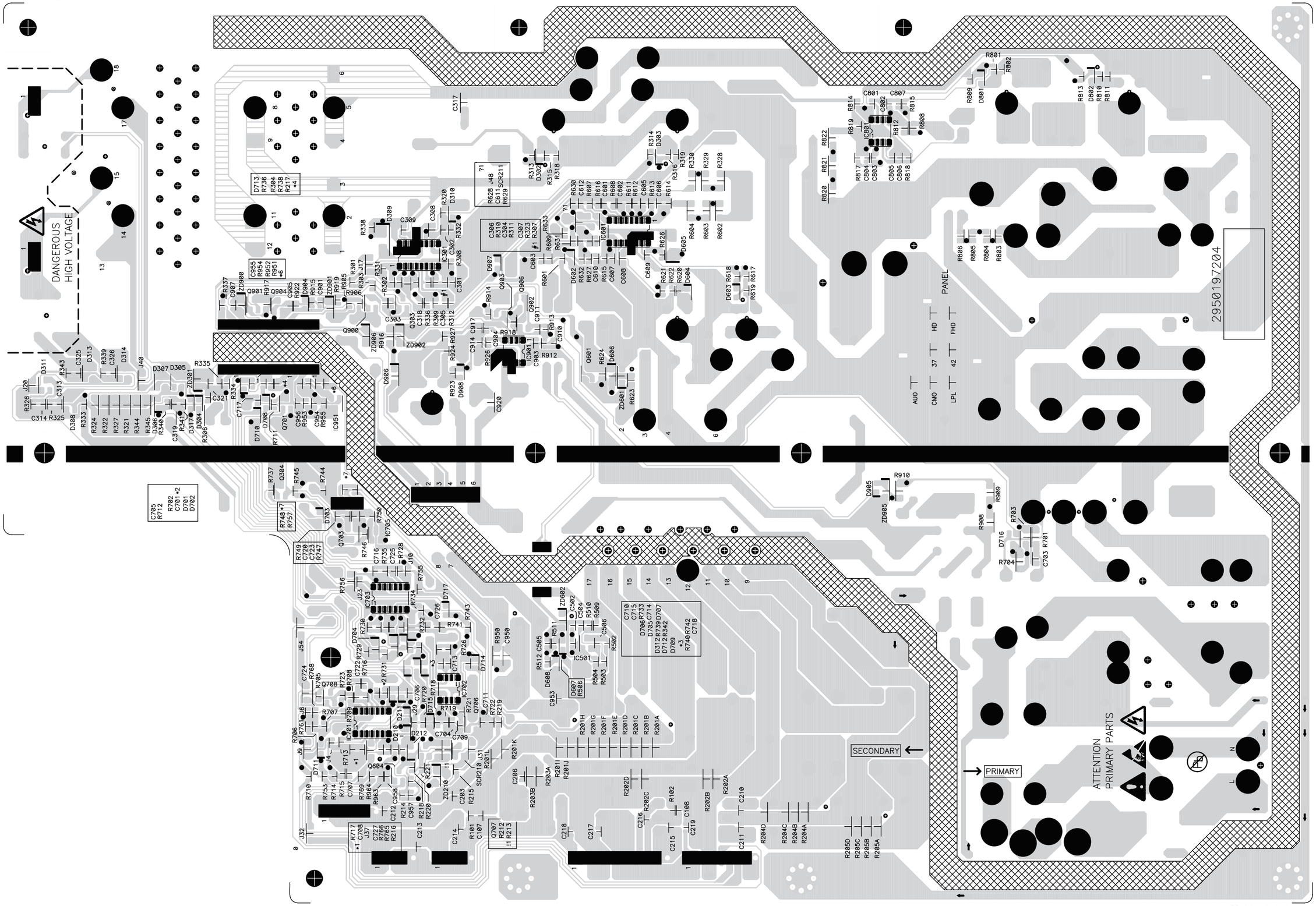
110108

Layout Main Power Supply (42”) (Bottom Side)



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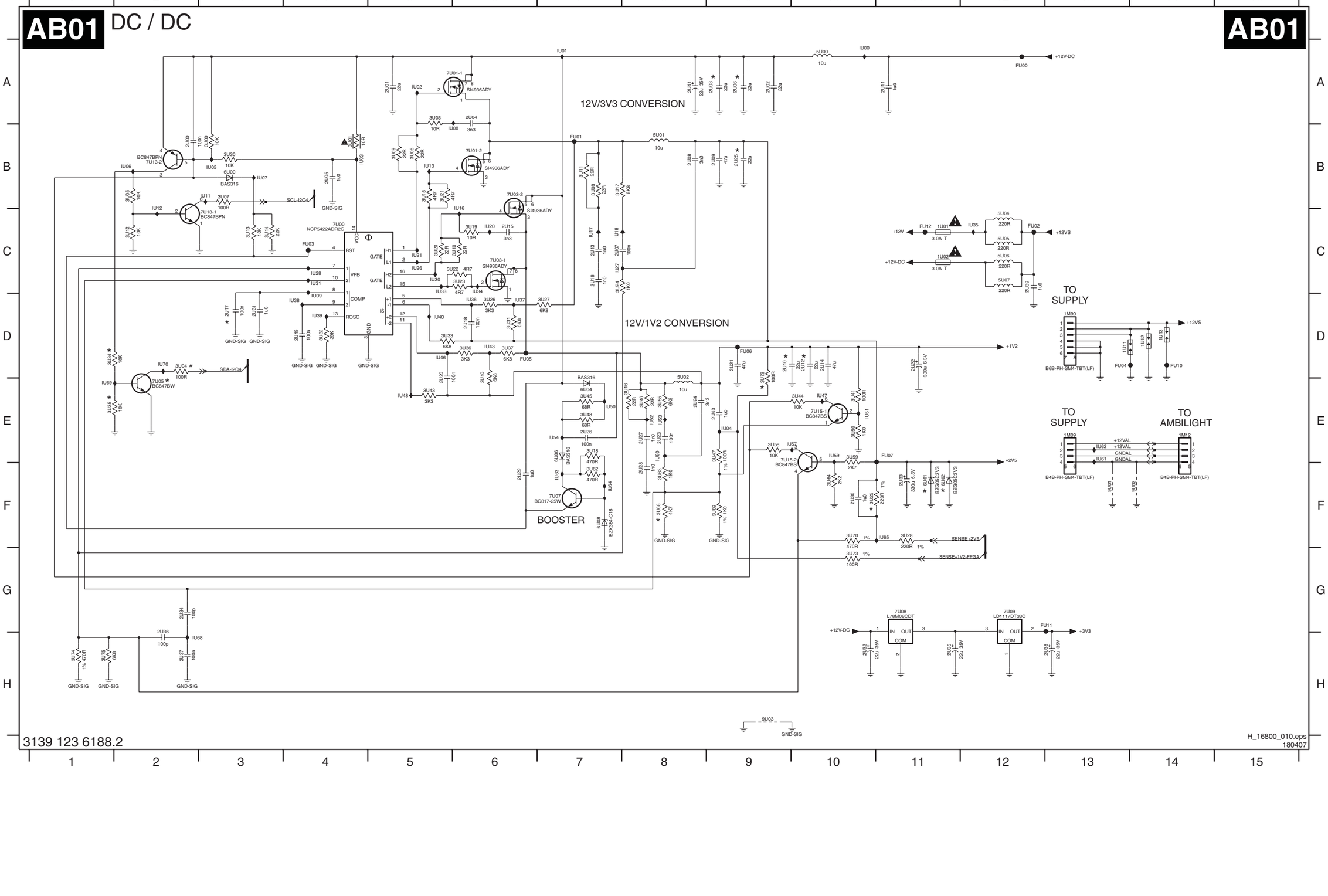
110108

DFI Panel: DC - DC

1M09 E13	1U13 D14	2U06 A9	2U13 C7	2U20 D5	2U27 E8	2U34 G2	2U41 A8	3U07 B3	3U14 C3	3U21 B5	3U28 F11	3U36 D6	3U46 E8	3U62 F7	3U73 G10	5U05 C12	6U06 E7	7U05 E2	7U15-2 E10	FU03 C4	FU12 C11	IU06 B2	IU16 B6	IU28 C4	IU37 D6	IU48 E5	IU59 E10	IU68 H2
1M12 E14	2U00 B2	2U07 C7	2U14 D10	2U21 D9	2U28 F8	2U35 H11	3U00 B3	3U08 B7	3U15 B5	3U22 C6	3U30 B3	3U37 D6	3U47 E9	3U63 F8	3U74 H1	5U06 C12	6U08 F7	7U07 F7	9U01 F13	FU04 D13	IU00 A10	IU07 B3	IU17 C7	IU30 C5	IU38 D4	IU50 E7	IU60 E8	IU69 E1
1M90 D13	2U01 A5	2U08 B8	2U15 C6	2U22 D11	2U29 F6	2U36 H2	3U01 B4	3U09 B5	3U16 E8	3U23 C6	3U31 D6	3U40 D6	3U48 E7	3U64 F10	3U75 H1	5U07 C12	6U00 C4	7U08 G11	9U02 F14	FU05 D6	IU01 A7	IU08 B6	IU18 C7	IU31 C4	IU39 D4	IU51 E10	IU61 E13	IU70 D2
1U01 C11	2U02 A9	2U09 B9	2U16 C7	2U23 E8	2U30 F10	2U37 H2	3U03 A5	3U10 C6	3U17 B7	3U24 C7	3U32 D4	3U41 E10	3U50 E10	3U68 F8	5U00 A10	6U00 B3	7U01-1 A5	7U09 G12	9U03 H9	FU06 D9	IU02 A5	IU09 D4	IU20 C6	IU33 C5	IU40 D5	IU52 E8	IU62 E13	
1U02 C11	2U03 A9	2U10 D9	2U17 D3	2U24 E8	2U31 D3	2U38 H13	3U04 D2	3U11 B7	3U18 E7	3U25 F10	3U33 D5	3U43 E5	3U55 E8	3U69 F9	5U01 B8	6U01 F11	7U01-2 B6	7U13-1 C3	FU00 A12	FU07 E11	IU03 B4	IU11 B3	IU21 C5	IU34 C6	IU43 D6	IU53 E8	IU63 F7	
1U11 D13	2U04 A6	2U11 A11	2U18 D6	2U25 B9	2U32 H10	2U39 C12	3U05 B2	3U12 C2	3U19 C6	3U26 D6	3U34 D1	3U44 E10	3U58 E9	3U70 F10	5U02 E8	6U02 F11	7U03-1 C6	7U13-2 B2	FU01 B7	FU10 D14	IU04 E9	IU12 B2	IU26 C5	IU35 C12	IU46 D5	IU54 E7	IU64 F7	
1U12 D14	2U05 B4	2U12 D10	2U19 D4	2U26 E7	2U33 F11	2U40 E9	3U06 B5	3U13 C3	3U20 C5	3U27 D7	3U35 E1	3U45 E7	3U59 E10	3U72 D9	5U04 C12	6U04 E7	7U03-2 B6	7U15-1 E10	FU02 C12	FU11 G13	IU05 B3	IU13 B5	IU27 C7	IU36 D6	IU47 E10	IU57 E12	IU65 F11	

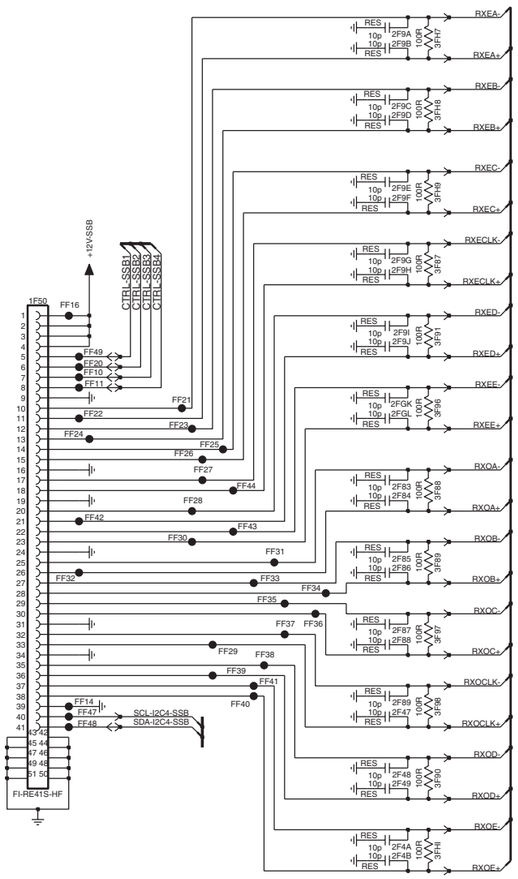


DFI Panel: Video Flow

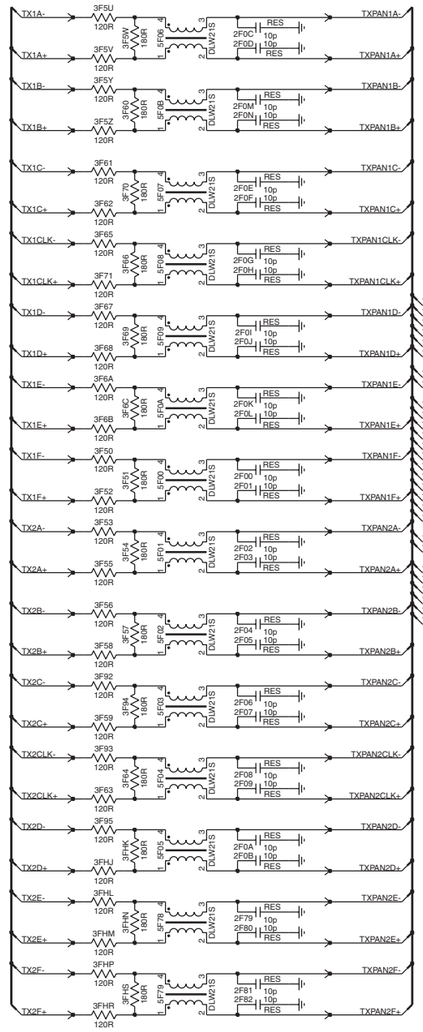
1F50 C1 2F06 F6 2F0F C6 2F0P B12 2F0Z D12 2F1J F12 2F1T H12 2F82 H6 2F9B B3 2FGK D3 3F57 F5 3F61 B5 3F6A D5 3F7N H11 3F8C B11 3F8M C11 3F8W E11 3F96 D3 3F9U F11 3FHJ G5 5F01 E6 5F0A D6 5F66 E11 FF00 D8 FF0D E9 FF0M D8 FF11 D1 FF1R D14 FF21 D2 FF2A E14 FF2R F8 FF35 F2 FF3E F14 FF48 F1
1F51 F15 2F07 F6 2F0G C6 2F0Q B12 2F1A D12 2F1K F12 2F47 F3 2F83 E3 2F9C B3 2FGL D3 3F58 F5 3F63 C5 3F6B D5 3F7P H11 3F8D B11 3F8N C11 3F8Y E11 3F97 F3 3F9W G11 3FHL H5 5F02 F6 5F0B B6 5F67 F11 FF01 E8 FF0E E9 FF0N D9 FF14 F1 FF1S D14 FF22 D1 FF2B E14 FF2S F8 FF36 F3 FF3F F14 FF49 D1
1F52 F9 2F08 G6 2F0H C6 2F0R B12 2F1B D12 2F1L G12 2F48 G3 2F84 E3 2F9D B3 3F50 D5 3F59 F5 3F64 C5 3F6C D5 3F7Q H11 3F8E B11 3F8P D11 3F8Z E11 3F98 F3 3F9X G11 3FHM H5 5F03 F6 5F0B B6 5F68 F11 FF02 E8 FF0F E8 FF0P D8 FF15 F14 FF1T D14 FF23 D2 FF2C E14 FF2T E8 FF37 F2 FF40 F2
2F00 E6 2F09 G6 2F0I D6 2F0S B12 2F1C E12 2F4M G12 2F49 G3 2F85 E3 2F9E C3 3F51 E5 3F5A A5 3F64 G5 3F70 C5 3F7R H11 3F8F B11 3F8Q D11 3F90 G3 3F9N E11 3F9Y G11 3FHM H5 5F04 G6 5F0C B6 5F69 F11 FF03 E8 FF0G C9 FF0Q D9 FF16 C1 FF1U D14 FF24 D1 FF2D E14 FF2U F8 FF38 F2 FF41 F2
2F01 E6 2F0A G6 2F0J D6 2F0T C12 2F1D E12 2F4N G12 2F4A G3 2F86 E3 2F9F C3 3F52 E5 3F5B B5 3F65 C5 3F6D D5 3F7S H11 3F8G B11 3F8R D11 3F91 D3 3F9P F11 3F9Z G11 3FHN H5 5F05 G6 5F0D C6 5F6A E11 FF04 E8 FF0H D8 FF17 D14 FF1V D14 FF25 D2 FF2E E14 FF30 E2 FF39 F2 FF42 E1
2F02 E6 2F0B G6 2F0K D6 2F0U C12 2F1E E12 2F1P G12 2F4B G3 2F87 F3 2F9G C3 3F53 E5 3F5W B5 3F66 C5 3F6E D5 3F7T H11 3F8H C11 3F8S D11 3F92 F5 3F9Q F11 3FH7 B3 3FHP H5 5F06 B6 5F6B B11 FF05 E9 FF0I D8 FF18 D14 FF1W D14 FF26 E2 FF2F E14 FF31 E2 FF3A E14 FF43 E2
2F03 E6 2F0C B6 2F0L D6 2F0V C12 2F1F E12 2F1Q H12 2F79 H6 2F88 F3 2F9H C3 3F54 E5 3F5Y B5 3F67 C5 3F6F D5 3F7U H11 3F8J C11 3F8K C11 3F8T D11 3F93 G5 3F9R F11 3FH8 B3 3FHR H5 5F07 C6 5F6C D11 FF00 A9 FF0J D9 FF19 D14 FF1X D14 FF27 E2 FF2G E14 FF32 E1 FF3B E14 FF44 E2
2F04 F6 2F0D B6 2F0M B6 2F0W C12 2F1G F12 2F1R H12 2F80 H6 2F89 F3 2F9I D3 3F55 E5 3F5Z B5 3F68 D5 3F6G D5 3F7V H11 3F8K C11 3F8U D11 3F94 F5 3F9S F11 3FH9 C3 3FHS H5 5F08 C6 5F6D D11 FF0B E9 FF0K D8 FF10 C14 FF1Y D14 FF28 E2 FF2H E14 FF33 E2 FF3C E14 FF46 C9
2F05 F6 2F0E C6 2F0N B6 2F0Y D12 2F1H F12 2F1S H12 2F81 H6 2F9A B3 3F5J D3 3F56 F5 3F60 B5 3F69 D5 3F7M H11 3F8B E11 3F8L C11 3F8V E11 3F95 G5 3F9T F11 3FHI G3 5F00 E6 5F09 D6 5F65 E11 FF0C E9 FF0L D9 FF10 D1 FF1Q D14 FF20 D1 FF29 F2 FF2Q E14 FF34 E3 FF3D F14 FF47 F1

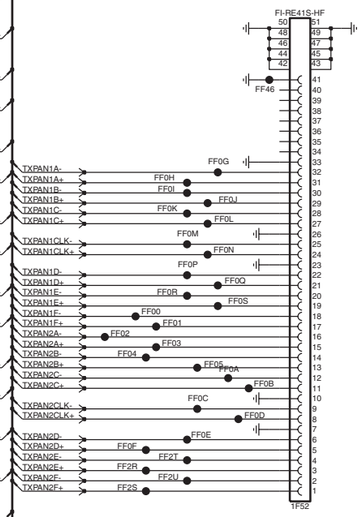
VIDEO-FLOW

AB02

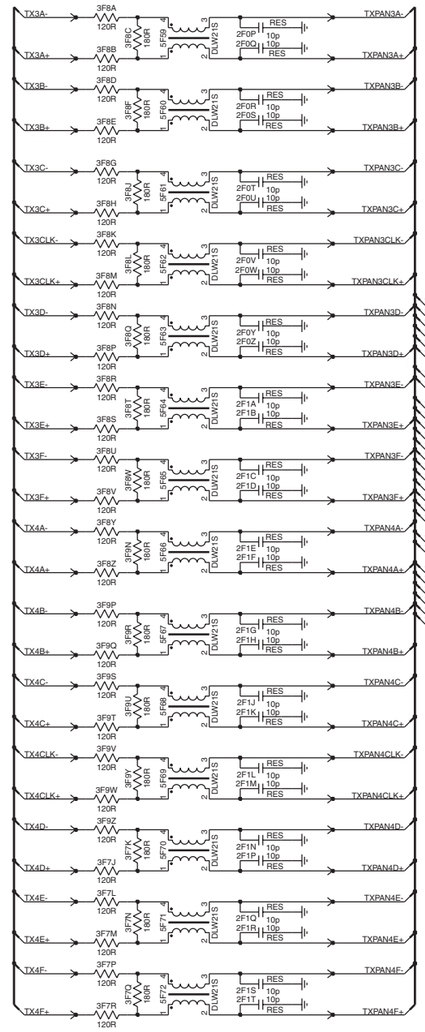


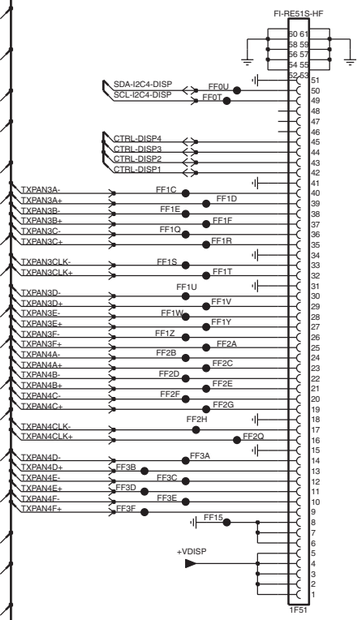
FROM SSB





TO DISPLAY





TO DISPLAY

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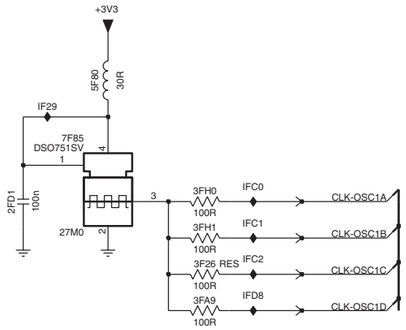
180407

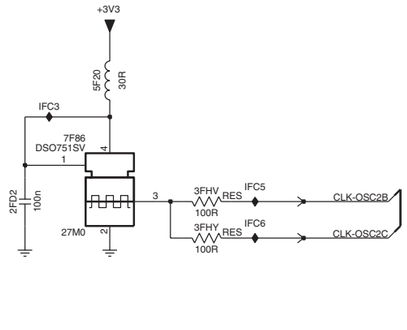
DFI Panel: Clock

AB03 CLOCK

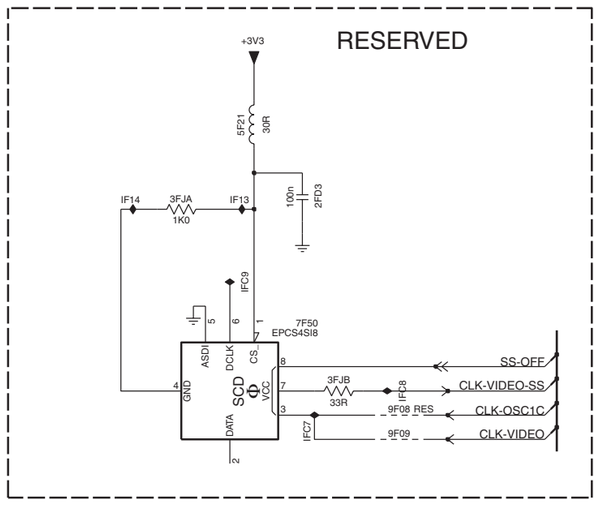
AB03

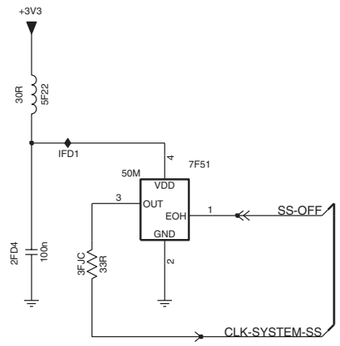


Video-clock RESERVED



RESERVED





1F30 1F31 1F32 1F33 1F34 1F35

1F40 1F41 1F42 1F43 1F44 1F45 1F46 1F47 1F48 1F49

2FD1 C3
2FD2 C6
2FD3 F3
2FD4 G5
3F26 C4
3FA9 D4
3FH0 C4
3FH1 C4
3FHV C7
3FHY C7
3FJA F2
3FJB G3
3FJC F6
5F20 B6
5F21 E3
5F22 F6
5F80 B3
7F50 G3
7F51 G6
7F85 C3
7F86 C6
9F08 G3
9F09 G3
IF13 F3
IF14 F2
IF29 B3
IFC0 C4
IFC1 C4
IFC2 C4
IFC3 B6
IFC5 C7
IFC6 C7
IFC7 G3
IFC8 G3
IFC9 F3
IFD1 G6
IFD8 D4

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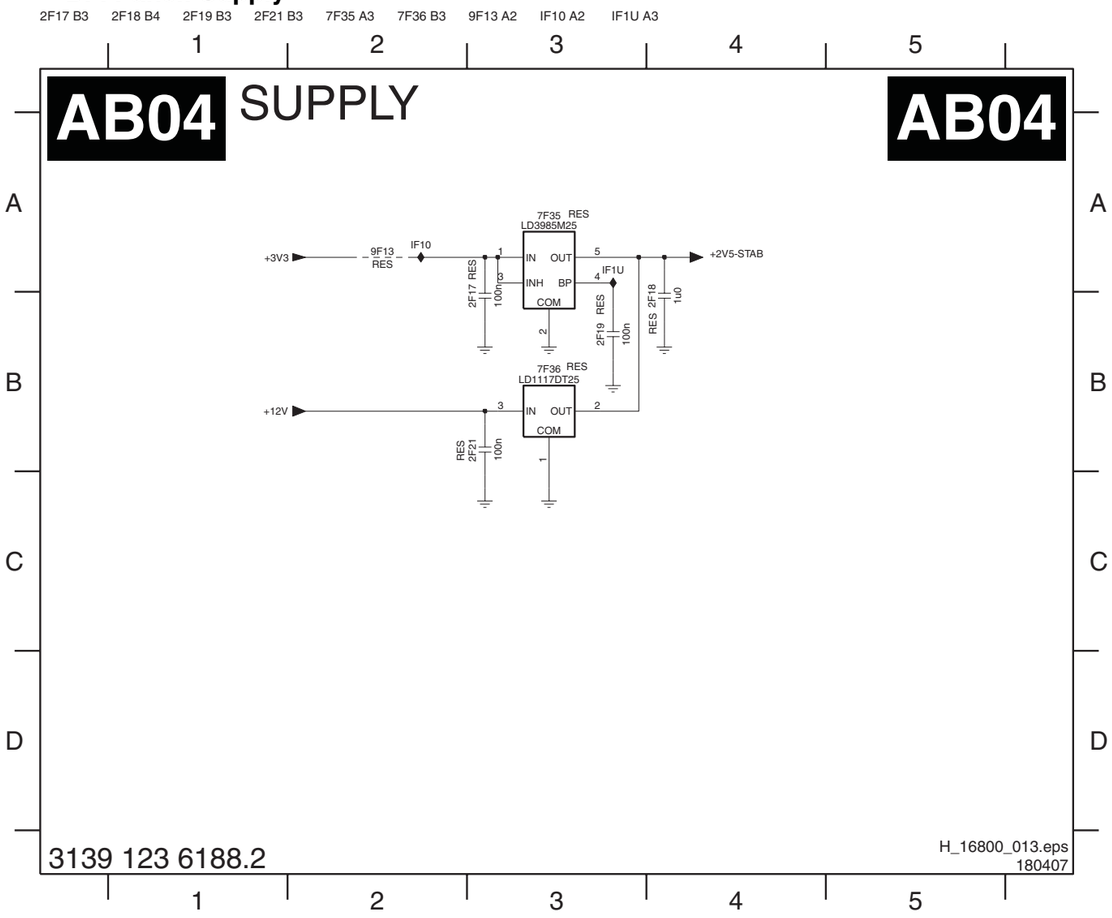
180407

DFI Panel: Supply



Personal Notes:

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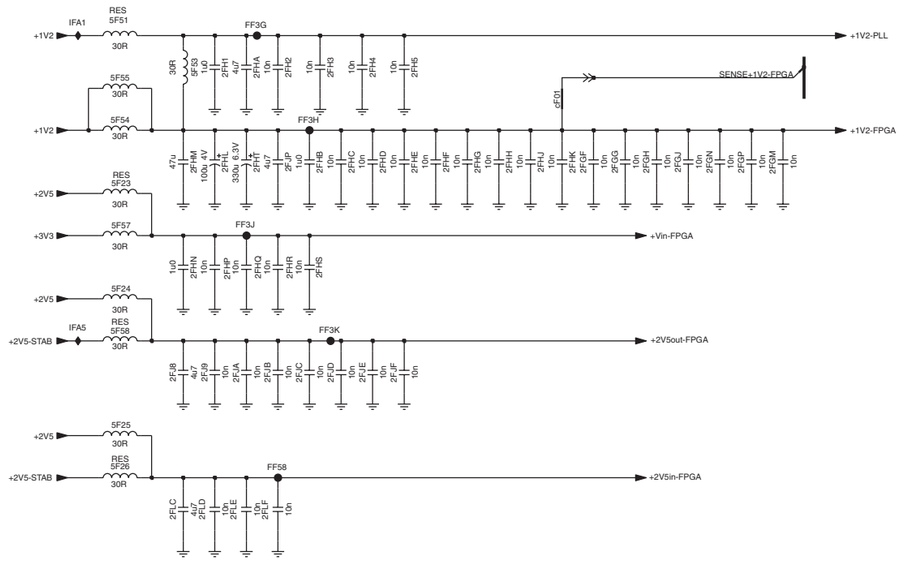
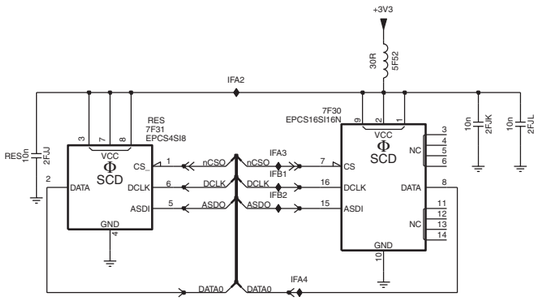
131004

DFI Panel: FPGA: Power & Control

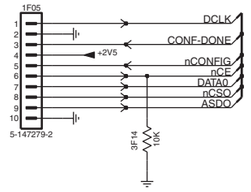
AB05 FPGA: POWER + CONTROL

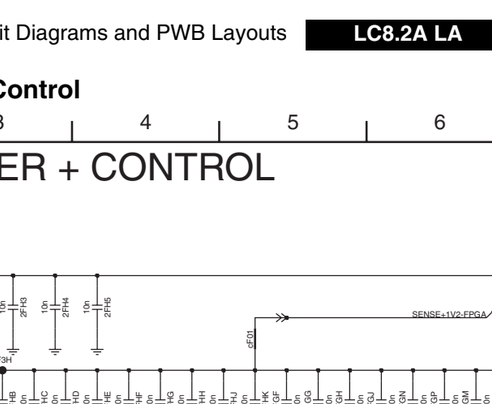
AB05

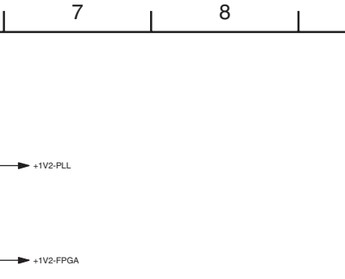


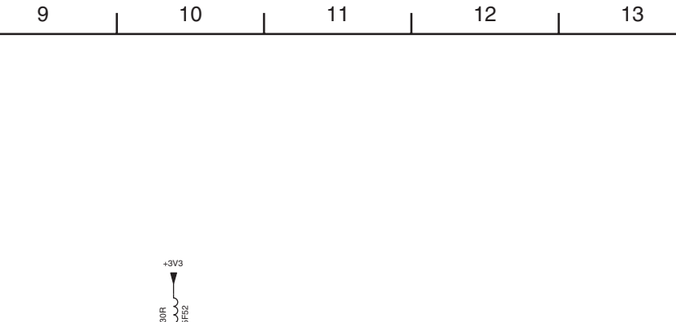


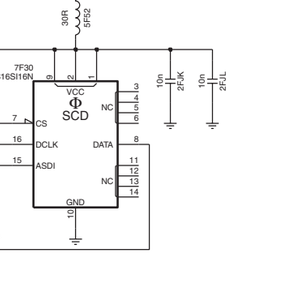
ACTIVE SERIAL DEBUG-CONNECTOR











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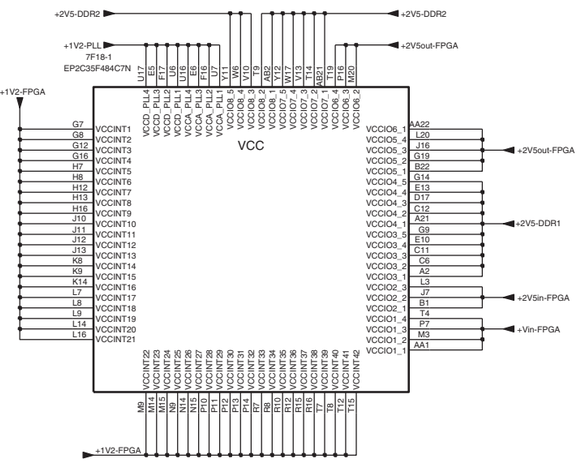
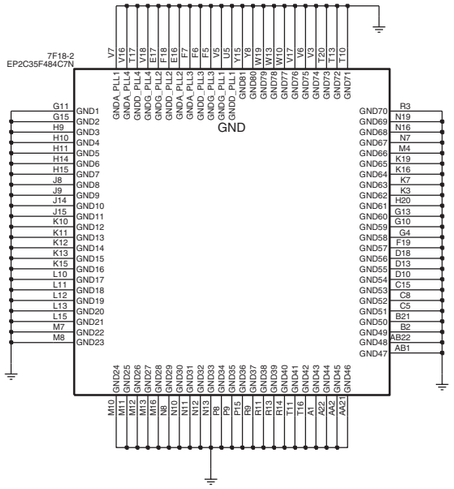
1F00 F13
1F05 C12
2FGF B5
2FGG B5
2FGH B5
2FGJ B6
2FGM B6
2FGN B6
2FGP B6
2FH1 A2
2FH2 A3
2FH3 A3
2FH4 A3
2FH5 A4
2FHA A3
2FHB B3
2FHC B3
2FHD B4
2FHE B4
2FHF B4
2FHG B4
2FHH B4
2FHJ B5
2FHK B5
2FHL B2
2FHM B2
2FHN C2
2FHP C2
2FHQ C3
2FHR C3
2FHS C3
2FHT B3
2FJ7 F13
2FJ8 C2
2FJ9 C2
2FJA C3
2FJB C3
2FJC C3
2FJD C3
2FJE C3
2FJF C4
2FJJ C8
2FJK C11
2FJL C11
2FJM F7
2FJN G8
2FJP B3
2FLC D2
2FLD D2
2FLE D2
2FLF D3
2FLG H12
2FLH H12
2FLJ H12
2FLK H12
2FLL H12
3F02 G4
3F04 G4
3F05 F10
3F06 G5
3F08 G6
3F10 G6
3F11 F7
3F14 D13
3F72 H11
3F73 I10
3F74 I10
3F75 I11
3F76 F7
3F78 F10
3F79 F10
3F80 G11
3F81 G9
3F82 G11
3F83 G7
3F84 G11
3F85 G11
3F86 G10
5F23 B2
5F24 C2
5F25 D2
5F26 D2
5F49 F12
5F50 F13
5F51 A2
5F52 B10
5F53 A2
5F54 B2
5F55 A2
5F57 B2
5F58 C2
6F30 I11
6F31 G4
6F32 G4
6F33 G5
6F34 G6
6F35 G6
7F30 B10
7F31 C8
7F32 I11
7F34-1 G9
7F34-2 G7
FF3G A3
FF3H B3
FF3J B3
FF3K C3
FF3L G11
FF3M G11
FF3N G11
FF3P G9
FF3Q G11
FF58 D3
FF59 G7
FF69 G11
IFA1 A1
IFA2 B9
IFA3 C9
IFA4 D9
IFA5 C1
IFA6 I10
IFA7 G8
IFA9 G7
IFB1 C9
IFB2 C9
IFB3 F4
IFB4 F4
IFB5 F5
IFB6 E6
IFB7 E6
cF01 B5

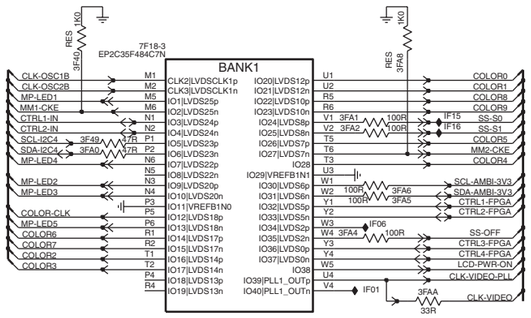
DFI Panel: FPGA: DFI

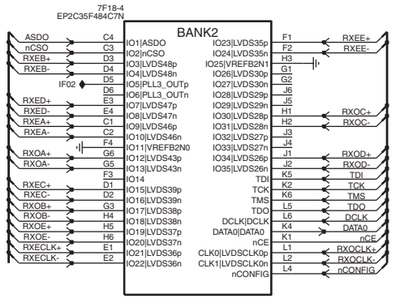
AB06 FPGA DFI

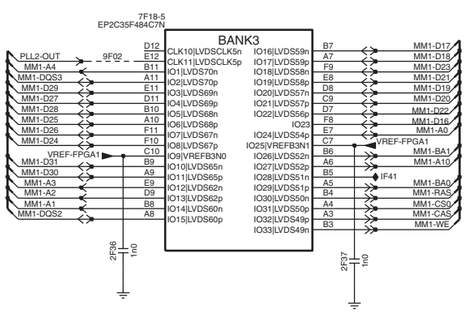
AB06

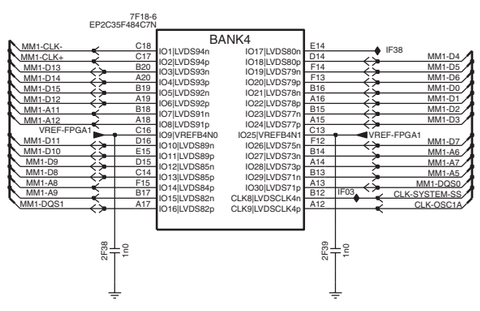


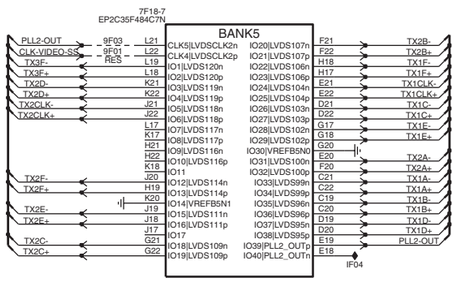


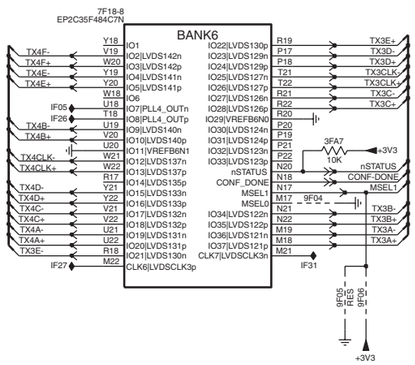


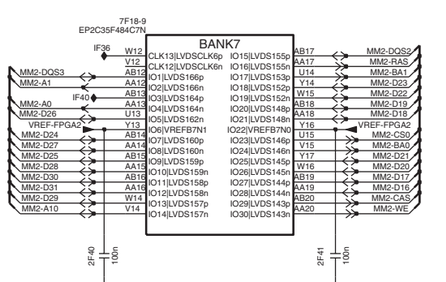


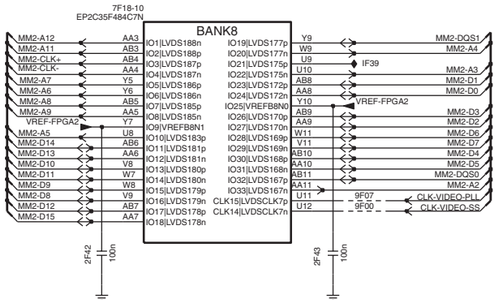








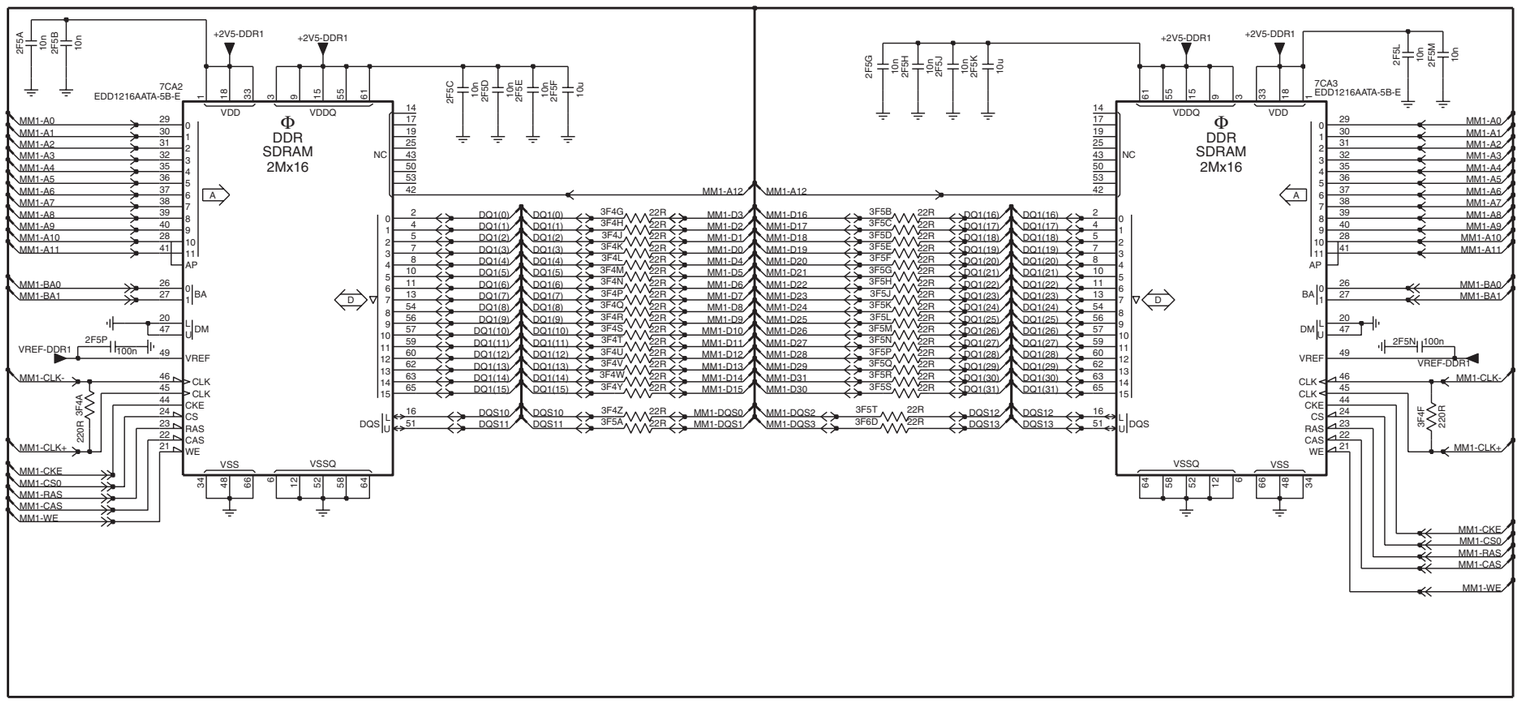




DFI Panel: DDR A

AB07 DDR A

AB07



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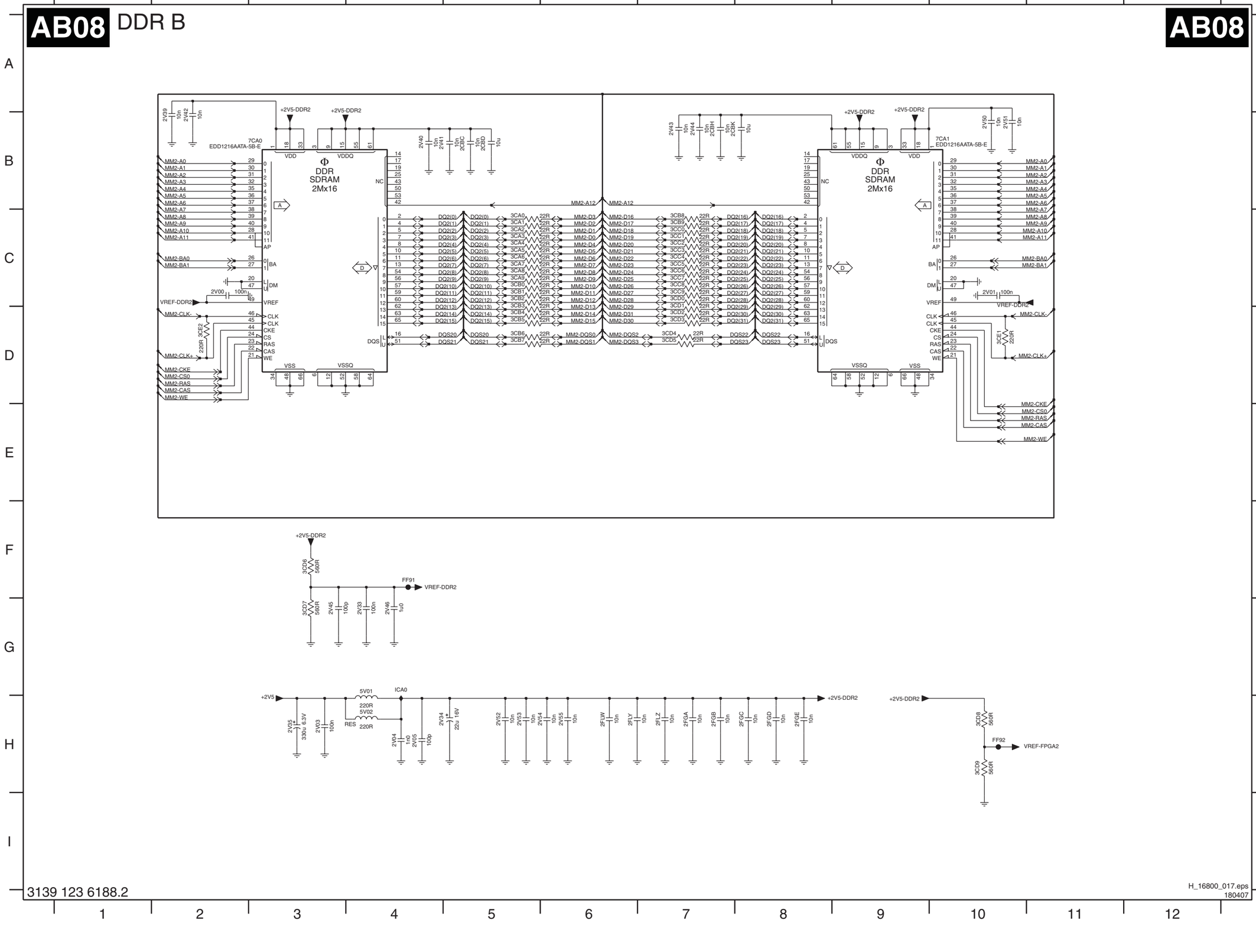
2F5A B2
2F5B B2
2F5C B5
2F5D B5
2F5E B5
2F5F B5
2F5G B7
2F5H B7
2F5J B7
2F5K B8
2F5L B10
2F5M B11
2F5N C10
2F5P C2
2F5Q G4
2F5R G4
2F5S G4
2F5T H3
2F5U H3
2F5W H4
2F5Y H4
2F5Z H5
2F6A H5
2F6B H5
2F6C H6
2F6D H6
2F6E G6
2F6F G6
2F6G G6
2FLM H6
2FLN H7
2FLP H7
2FLR H7
2FLS H8
2FLT H8
2FLU H8
2FLV H8
3F4A D2
3F4B F3
3F4C G3
3F4D F7
3F4E G7
3F4F D10
3F4G C5
3F4H C5
3F4J C5
3F4K C5
3F4L C5
3F4M C5
3F4N C5
3F4P C5
3F4Q C5
3F4R C5
3F4S C5
3F4T C5
3F4U D5
3F4V D5
3F4W D5
3F4Y D5
3F4Z D5
3F5A D5
3F5B C7
3F5C C7
3F5D C7
3F5E C7
3F5F C7
3F5G C7
3F5H C7
3F5J C7
3F5K C7
3F5L C7
3F5M C7
3F5N C7
3F5P D7
3F5Q D7
3F5R D7
3F5S D7
3F5T D7
3F6D D7
5F27 H4
5F28 H4
7CA2 B3
7CA3 B10
FF56 F6
IFD4 F4
IFD5 H4
cF02 H2

DFI Panel: DDR B

AB08 DDR B

AB08



2CBC B5
2CBD B5
2CBH B7
2CBK B7
2FGA H7
2FGB H7
2FGC H8
2FGD H8
2FGE H8
2FLW H6
2FLY H6
2FLZ H7
2V00 C2
2V01 C10
2V03 H3
2V04 H4
2V05 H4
2V33 G4
2V34 H4
2V35 H3
2V39 B2
2V40 B4
2V41 B5
2V42 B2
2V43 B7
2V44 B7
2V45 G3
2V46 G4
2V50 B10
2V51 B10
2V52 H5
2V53 H5
2V54 H6
2V55 H6
3CA0 C5
3CA1 C5
3CA2 C5
3CA3 C5
3CA4 C5
3CA5 C5
3CA6 C5
3CA7 C5
3CA8 C5
3CA9 C5
3CB0 C5
3CB1 C5
3CB2 C5
3CB3 D5
3CB4 D5
3CB5 D5
3CB6 D5
3CB7 D5
3CB8 C7
3CB9 C7
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3CC1 C7
3CC2 C7
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3CC6 C7
3CC7 C7
3CC8 C7
3CC9 C7
3CD0 C7
3CD1 D7
3CD2 D7
3CD3 D7
3CD4 D7
3CD5 D7
3CD6 F3
3CD7 G3
3CD8 H10
3CD9 H10
3CE1 D10
3CE2 D2
5V01 G4
5V02 H4
7CA0 B3
7CA1 B10
FF91 F4
FF92 H10
ICA0 G4

DFI Panel: Display Interfacing

1F04 D11 1F80 G13 1F81 G14 1F82 G14 1F83 G14 1M59 F15 2F2A D5 2F2B D3 2F2C B11 2F2D A12 2F2E F5 2F2F F6 2F2G F6 2F2H F5 2F2I B6 2F2K C13 2F2L C14 2F2P E11 2F2Q F11 2F30 G12 2F32 H9 2F33 F9 2F34 B8 2F35 C8 2F45 F12 2F46 D2 2F53 G2 2F78 F2 2F95 B1 3F13 G10 3F15 H12 3F16 H12 3F17 F10 3F1W C3 3F1Y D4 3F1Z D6 3F20 C8 3F21 D5 3F22 D3 3F23 B12 3F24 B11 3F25 E6 3F27 F5 3F28 F5 3F29 F5 3F2A E5 3F2B E5 3F2C E6 3F2D B6 3F2F E5 3F2S B13 3F2T B13 3F2V E5 3F31 E3 3F37 G11 3F38 F11 3F39 F11 3F3A G11 3F3B F11 3F3C G11 3F44 F12 3F45 G12 3F48 D2 3FH4 D10 3FH5 D11 3FJD F2 3FLB G2 5F0I B10 5F0J A10 5F0K B6 5F0L B6 5F0M B6 5F10 B2 5F11 B2 5F12 B2 5F13 F13 5F14 F13 5F15 F13 5F16 G13 5F17 G13 6F02 C3 6F04 B13 6F05 B12 6F07 B4 6F10 C3 7F05 C4 7F07 B4 7F08 C5 7F09-1 F11 7F09-2 G11 7F10 B10 9F16 H12 9F24 H3 9F26 H11 9F27 E13 9F28 F13 9F29 F13 9F2C D11 9F2G D11 9F2N F11 9F2P G11 9F2R F3 9F2S G3 9F2T H3 9F2U D11 9F2V E11 9F30 G13 9F31 G13 FF06 F12 FF07 F12 FF08 F13 FF09 H12 FF13 H13 FF17 E6 FF18 F6 FF19 F6 FF1A F6 FF1B B4 FF1A F6 FF1B B6 FF2P C2 IF07 D4 IF08 B4 IF09 D5 IF0A D5 IF0B B11 IF0C C11 IF0D B12 IF0E B13 IF0F C4 IF0G E4 IF0H D3 IF0K E2 IF0L F2 IF0M F2 IF0N F2 IF0P G2 IF1A B6 IF1B B6 IF1C F6 IF1D B6 IF93 C3 IF19 F11 IF1B G11 IF1C G11 IF1D G11

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

AB09 DISPLAY-INTERFACING

AB09

VDISP-SWITCH

+12V, +12V-SSB, 5F10 RES, 220R, 5F11 RES, 220R, 5F12 RES, 220R, 2F95 100n, 3F18 4K7, 6F10 SML-310, 7F07 SI4835BDY, RES 9F2I, 5F0K, 220R, 5F0L, 220R, 5F0M, 220R, FF1B, +VDISP, 2F2I 100n, 3F2D 2K2, 6F07 SML-310, 7F05 SI3441BDV, IF08, IF93, 3F1W 47K, 6F02 BZX384-C5V6, +5V, FF2P, 3F48 330R, BZX384-C4V7 6F09, 1u0 2F46, 3F22 47R, IF0H, 2F2B 1u0, IF07, 3F1Y 47K, IF0F, 7F08 BC847BW, IF0A, 3F21 10K, IF09, 3F1Z 10K, +3V3, 2F2A 100n

LCD-PWR-ON, 3F31 47R, IF0G, 3F2V 10K, +3V3

+3V3, 3F2A 47R, 3F2B 47R, 3F2C 47R, 3F25 47K

CTRL1-FPGA, IF0K, 3F2F 47R, FF17, CTRL-DISP1
CTRL2-FPGA, IF0L, 3F27 47R, FF18, CTRL-DISP2
CTRL3-FPGA, IF0M, 3F28 47R, FF19, CTRL-DISP3
CTRL4-FPGA, IF0N, 3F29 47R, FF1A, CTRL-DISP4

CTRL-SSB1, RES 3FJD 47R, IFD7, 9F2R, RES 2F78 100p
CTRL-SSB2, RES 3FLB 47R, IF0P, 9F2S, RES 2F53 100p
CTRL2-IN
CTRL1-IN
SCL-AMBI-3V3, 9F24
SDA-AMBI-3V3, 9F2T

2F2E 100p, 2F2H 100p, 2F2G 100p, 2F2F 100p

I2C-BUFFER *

SDA-I2C4-SSB, 3F19 47R, SDA-I2C4, 2F34 10p
SCL-I2C4-SSB, 3F20 47R, SCL-I2C4, 2F35 10p

+5V, 5F0J RES 120R, 2F2D RES 100n
+3V3, 5F0I RES 120R, IF0B, 9F2H RES, IF0E
7F10 PCA9515ADP RES, VCC, SDA0, SDA1, SCL0, SCL1, EN, GND, NC
2F2C 100n RES, 3F24 4K7 RES, 3F23 4K7 RES
6F05 BAV99 COL RES, 6F04 BAV99 COL RES
IF0S, IF0T, IF0D, IF0C
3F2S 47R, SDA-I2C4-DISP, SCL-I2C4-DISP
3F2T 47R, 2F2K 10p, 2F2L 10p
9F2F, 9F2G

RES 3FH4 47R, 3FH5 RES 47R, 9F2U, 9F2V RES, +5V, +3V3, 1F04, FOR DEBUG

AMBI-LIGHT BUFFER *

CTRL-SSB3, 2F53 100p RES, 3F17 RES 47R
SCL-AMBI-3V3
CTRL-SSB4, 2F52 100p RES, 3F13 RES 47R
SDA-AMBI-3V3

2F2P 470p, +3V3, 3F39 10K, 4K7 3F38, 7F09-1 BC847BS, IF18, IF19, 9F2N RES, +5V, 2K2 3F36, IF1A
2F2Q 470p, +3V3, 3F3A 10K, 4K7 3F3C, 7F09-2 BC847BS, IF1B, IF1C, 9F2P RES, +5V, 2K2 3F37, IF1D

3F44 100R, FF06, 3F45 100R

FF07, 2F45 100p, FF08, 2F50 100p, 3F15 100R RES, FF09, 9F16, 3F16 100R RES, FF13, 9F26

9F27 5F13 120R, 9F28 5F14 120R, 9F29 5F15 120R, 9F30 5F16 120R, 9F31 5F17 120R

1F80, 1F81, 1F82, 1F83

1M59, B5B-PH-SM4-TBT(LF), TO AMBI LIGHT

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DFI Panel: FPGA Ambilight

AB10 FPGA AMBILIGHT

AB10

XCF flash- RESERVED

FOR DEBUG

FOR FACTORY USE

HIGH=SPI flash
LOW=XCF flash

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180407

1F02 E12	7F01 C2
1F03 I5	7F60 E5
2F10 B3	7F61 H13
2F11 B4	7F62 G3
2F12 B4	7F65-1 F7
2F13 B4	7F65-2 A7
2F14 G9	7F65-3 A10
2F15 I13	7F65-4 E10
2F16 B3	7F65-5 A13
2F20 A2	9F36 H12
2F22 D2	9F37 H12
2F23 D3	9F40 G5
2F24 H13	9F41 B8
2F25 B2	9F42 F9
2F26 B3	9F43 I9
2F27 B3	9F44 F11
2F28 B3	9F45 F11
2F29 B2	9F46 F11
2F31 B2	9F51 G11
2F44 E14	9F52 C2
2F50 F14	9F53 C2
2F51 F14	9F54 C2
2F52 F14	9F55 G4
2F54 D3	FF50 F14
2F55 B2	FF51 I3
2F56 F14	FF52 H3
2F57 E5	FF53 H5
2F58 F11	FF54 H4
2F59 F3	FF55 H4
2F60 A2	FF60 A3
2F61 A2	FF61 B3
2F62 A3	FF62 B3
2F63 A3	FF63 H12
2F64 A3	FF64 I12
2F65 A3	FF65 I12
2F66 A3	FF66 I12
2F67 A4	FF67 I12
2F68 E4	FF68 I14
2F69 A4	FF80 F13
2F70 G5	FF81 E14
2F71 F12	FF82 F14
2F72 B3	FF83 F14
2F73 B3	FF84 F14
2F74 B2	FF85 F12
2F75 B2	IF12 C2
2F76 I4	IF48 F5
2F77 B3	IF49 I9
2F90 A4	IF52 A6
2F91 A4	IF53 H2
2F92 A4	IF54 I2
2F93 B3	IF55 I2
2F94 B4	IF56 I2
2F96 B4	IF57 I2
2F97 B4	IF61 C3
3F03 H9	IF69 H4
3F07 F11	IF71 G9
3F09 F11	IF72 G9
3F12 G11	IF73 H9
3F30 F8	IF74 B6
3F32 H2	IF75 G11
3F33 I2	IF76 H13
3F34 I2	IF77 A9
3F35 I2	IF78 A9
3F36 I2	IF79 B9
3F41 E12	
3F42 E13	
3F43 E13	
3F46 E13	
3F47 F14	
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3F6K H12	
3F6L I12	
3F6M H14	
3F6Q E2	
3F6R E2	
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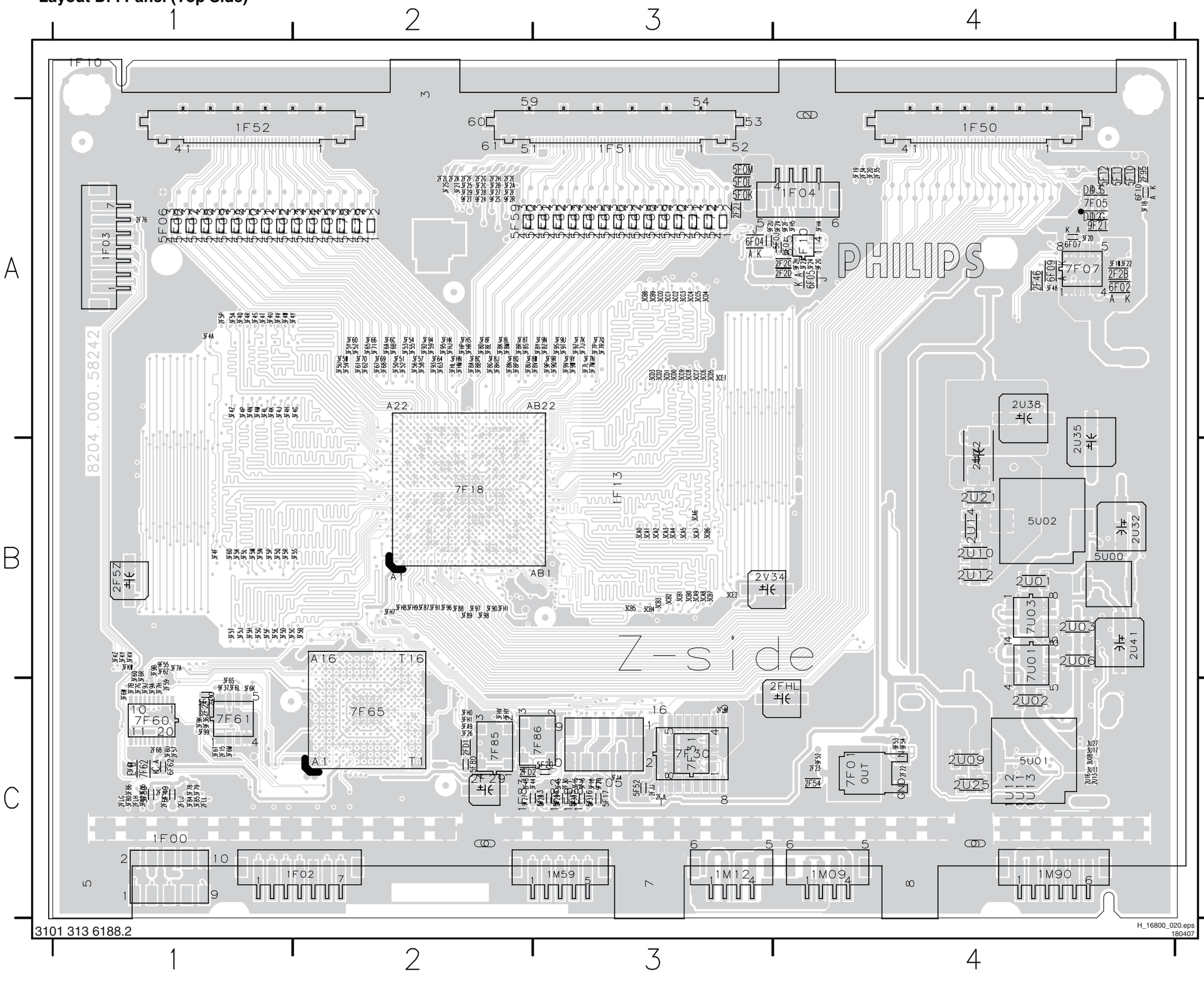
Layout DFI Panel (Top Side)



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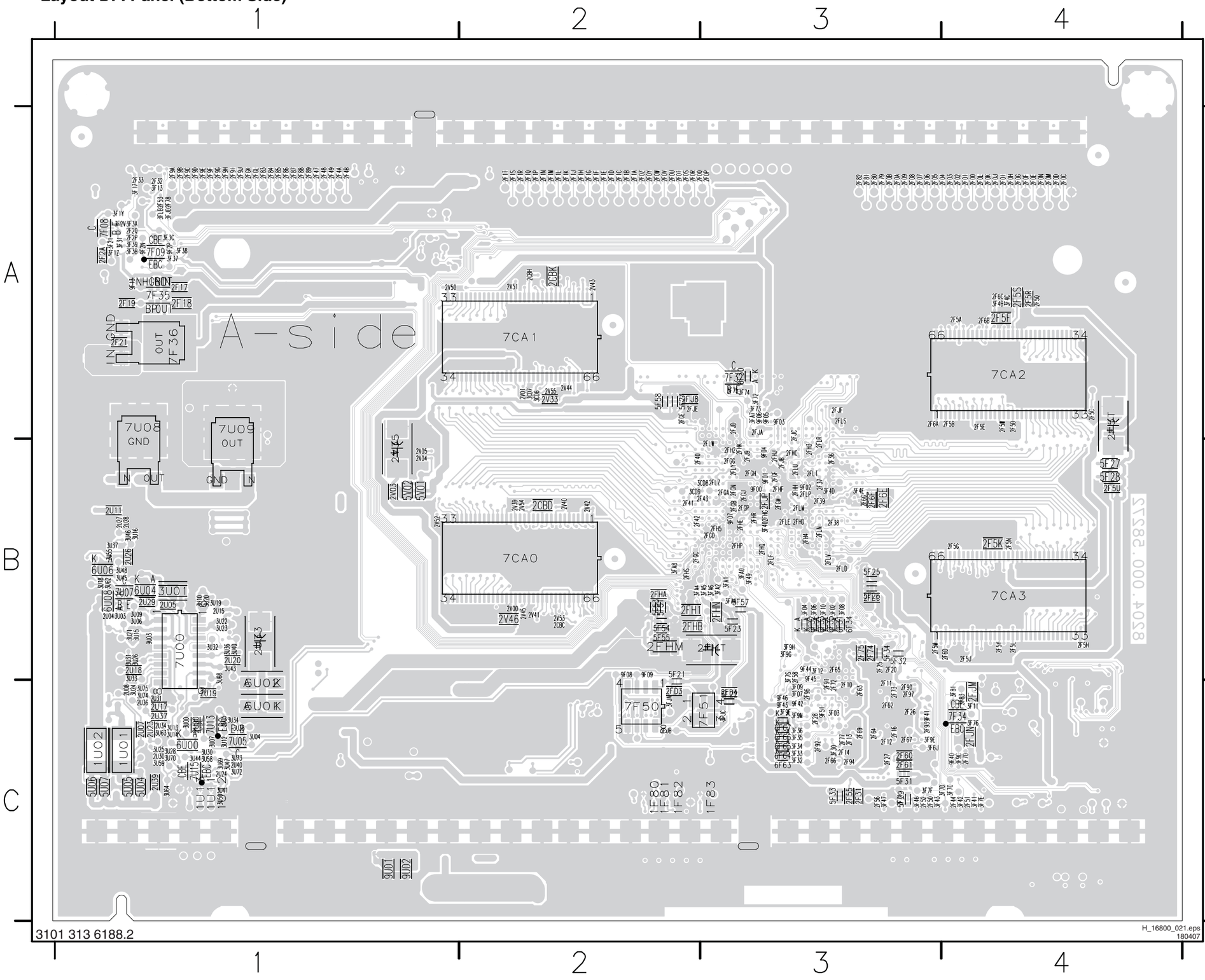
Layout DFI Panel (Bottom Side)



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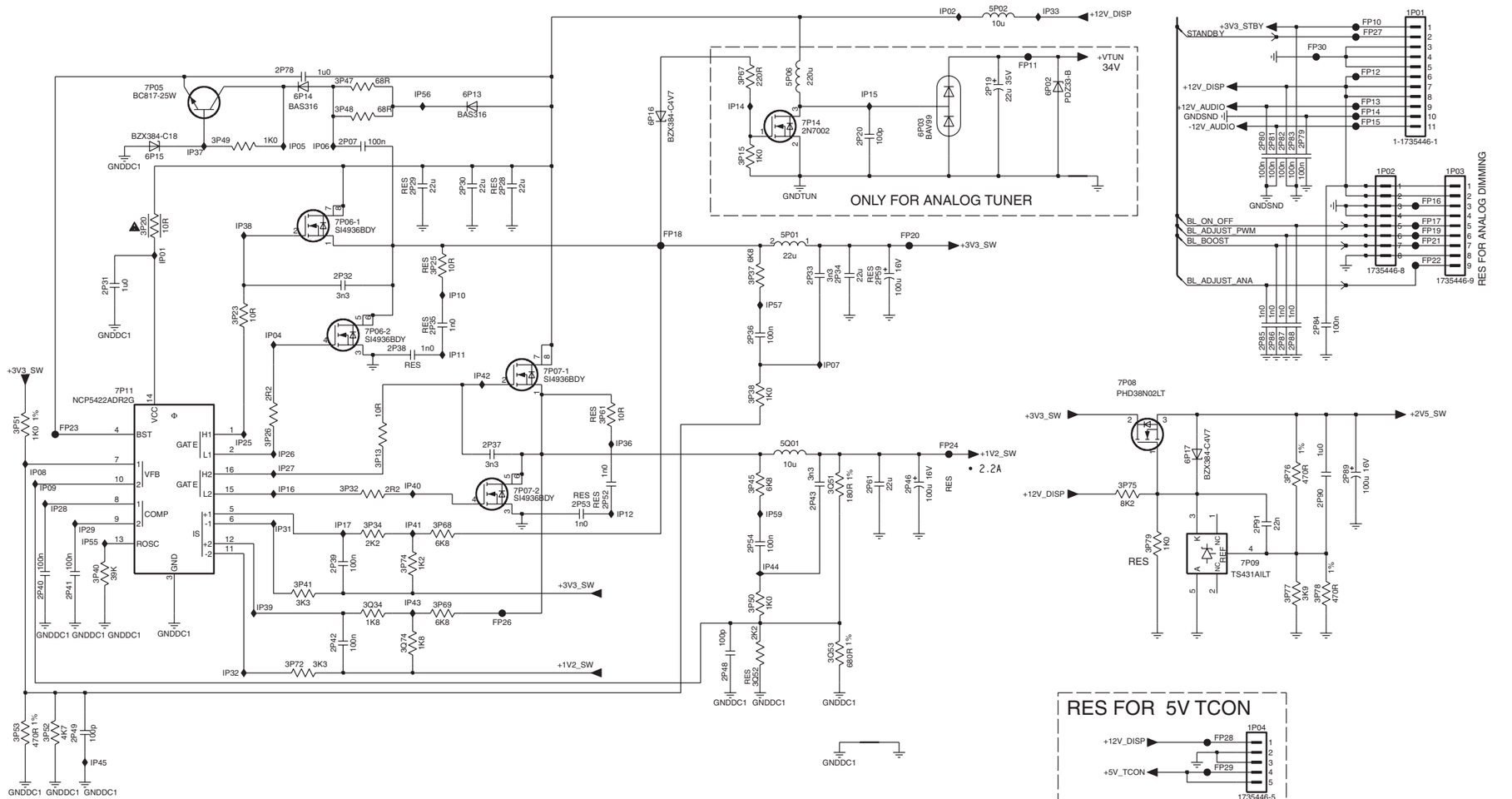
B01A DC/DC +3V3 & +1V2 & +VTUN

B01A



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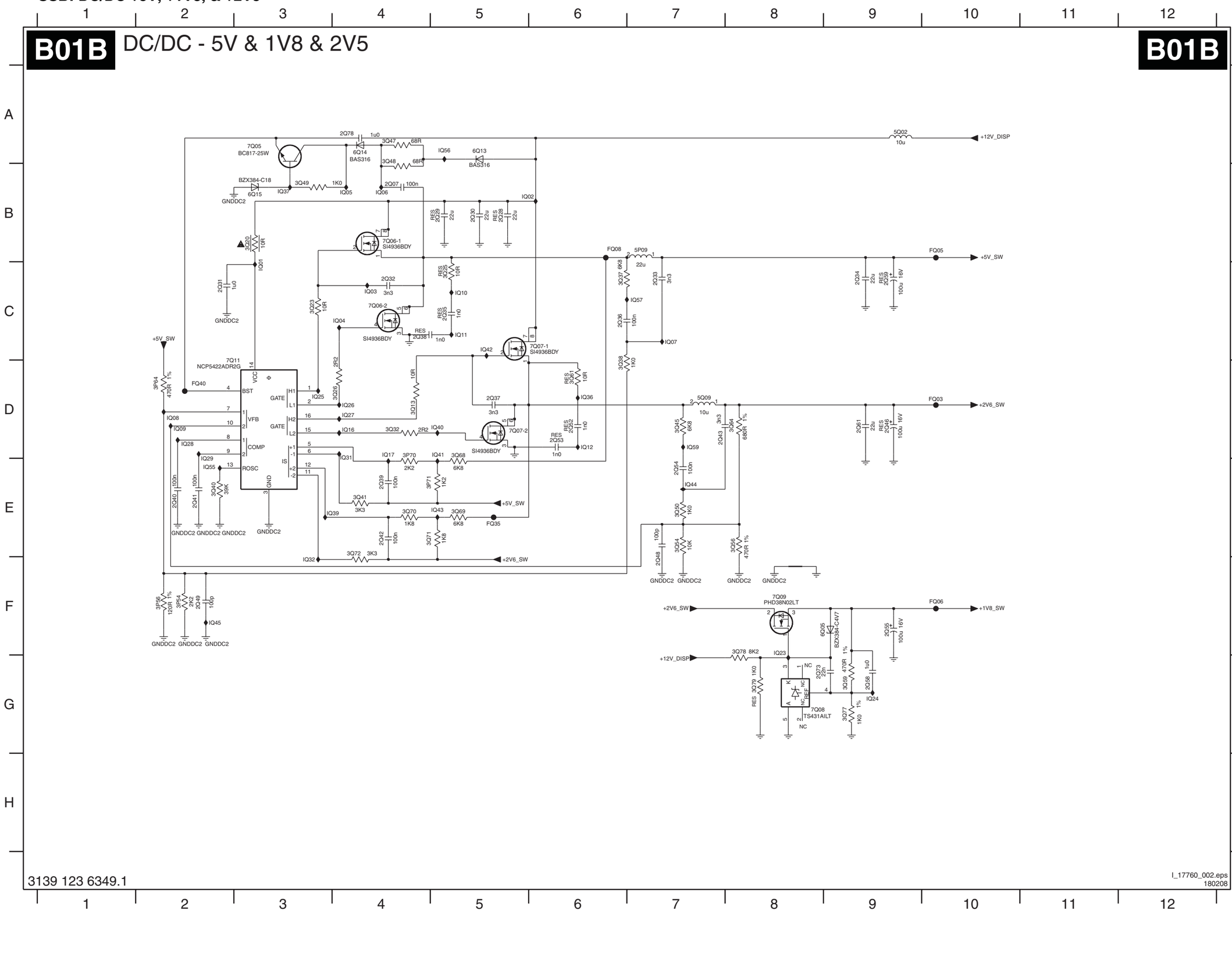
B01B DC/DC - 5V & 1V8 & 2V5

B01B



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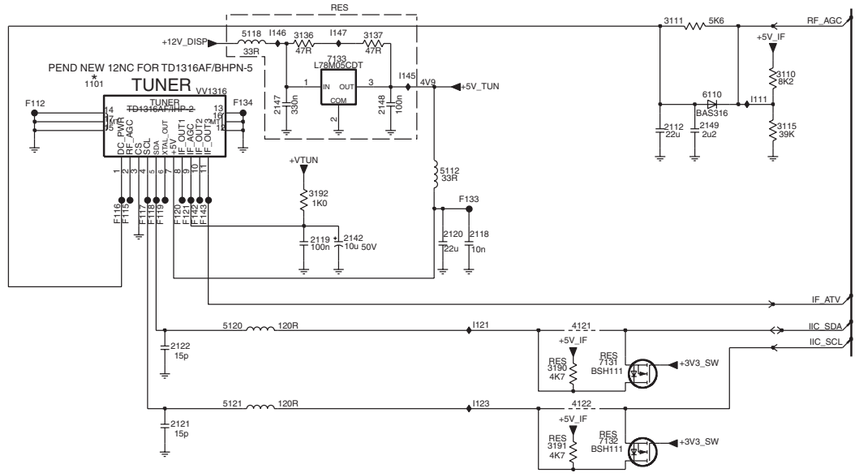
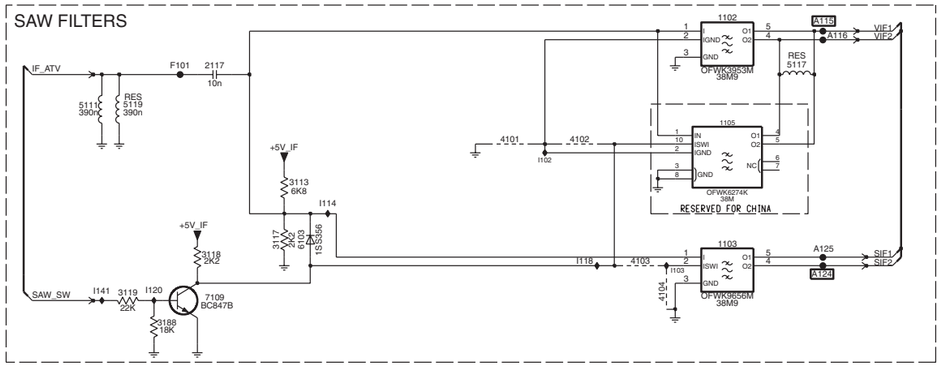
2Q28 B5 IQ32 F3
2Q29 B5 IQ36 D6
2Q30 B5 IQ37 B3
2Q31 C2 IQ39 E4
2Q32 C4 IQ40 D5
2Q33 C7 IQ41 D5
2Q34 C9 IQ42 C5
2Q35 C5 IQ43 E5
2Q36 C6 IQ44 E7
2Q37 D5 IQ45 F2
2Q38 C4 IQ55 E2
2Q39 E4 IQ56 A5
2Q40 E2 IQ57 C7
2Q41 E2 IQ59 D7
2Q42 E4
2Q43 D7
2Q46 D9
2Q48 F7
2Q49 F2
2Q52 D6
2Q53 D6
2Q54 E7
2Q55 F9
2Q58 G9
2Q59 C9
2Q61 D9
2Q73 G8
2Q78 A4
3P54 F2
3P56 F2
3P64 D2
3P70 D4
3P71 E4
3Q13 D4
3Q20 B3
3Q23 C3
3Q25 C5
3Q26 D4
3Q32 D4
3Q37 C6
3Q38 D6
3Q40 E2
3Q41 E4
3Q45 D7
3Q47 A4
3Q48 A4
3Q49 B3
3Q50 E7
3Q54 E7
3Q56 E8
3Q59 G9
3Q61 D6
3Q64 D8
3Q68 D5
3Q69 E5
3Q70 E4
3Q71 E4
3Q72 E4
3Q77 G9
3Q78 F8
3Q79 G8
5P09 B7
5Q02 A9
5Q09 D7
6Q05 F8
6Q13 A5
6Q14 A4
6Q15 B3
7Q05 A3
7Q06-1 B4
7Q06-2 C4
7Q07-1 C5
7Q07-2 D5
7Q08 G9
7Q09 F8
7Q11 D3
FQ03 D10
FQ05 B10
FQ06 F10
FQ08 B6
FQ35 E5
FQ40 D2
IQ01 C3
IQ02 B5
IQ03 C4
IQ04 C4
IQ05 B4
IQ06 B4
IQ07 C7
IQ08 D2
IQ09 D2
IQ10 C5
IQ11 C5
IQ12 D6
IQ16 D4
IQ17 D4
IQ23 F8
IQ24 G9
IQ25 D3
IQ26 D4
IQ27 D4
IQ28 D2
IQ29 E2

SSB: Tuner IF & Demodulator

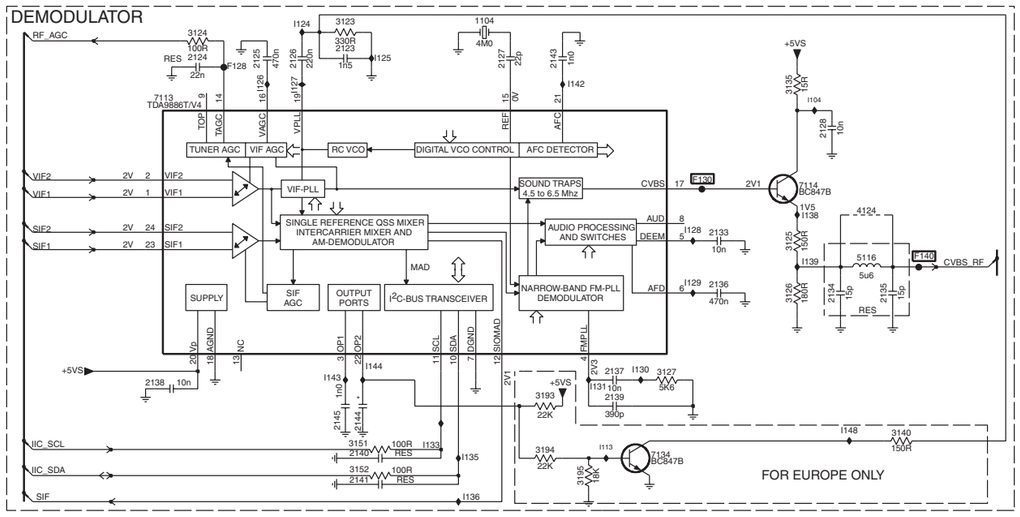
B02 TUNER IF & DEMODULATOR

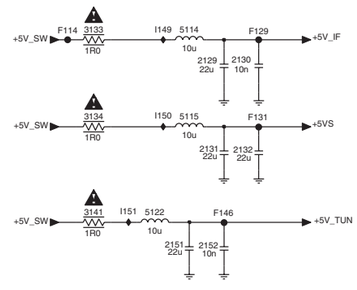
B02





	EUROPE	AP	CHINA	LATAM
1101	UV1316E	UV1316E	UV1356	UV1336
1102	K3953	K7257M	-	M1971M
1103	K9656M	K9362	K9352	-
1105	-	-	K6274k	-
4101	Y	-	Y	Y
4102	-	Y	-	-
4103	Y	-	-	-
4104	-	Y	Y	-
2144	-	10n	10n	10n
3193	22K	-	-	-
3194	22K	-	-	-
3195	18K	-	-	-
3140	150R	-	-	-
7134	BC847B	-	-	-





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180208

1101 B3
1102 B15
1103 D15
1104 F5
1105 C15
2112 C8
2117 B11
2118 D6
2119 D5
2120 D6
2121 E4
2122 D4
2123 F4
2124 F3
2125 F3
2126 F4
2127 F5
2128 G8
2129 I14
2130 I14
2131 I14
2132 I14
2133 H7
2134 H8
2135 H9
2136 H7
2137 I6
2138 I3
2139 I6
2140 J4
2141 J4
2142 D5
2143 F6
2144 I4
2145 I4
2147 B4
2148 B5
2149 C8
2151 J14
2152 J14
3110 B9
3111 B8
3113 C12
3115 C9
3117 D12
3118 D11
3119 D10
3123 F4
3124 F3
3125 H8
3126 H8
3127 I7
3133 H13
3134 I13
3135 G8
3136 B5
3137 B5
3140 J9
3141 J13
3151 J4
3152 J4
3188 D11
3190 E7
3191 E7
3192 C5
3193 I6
3194 J6
3195 J6
4101 C13
4102 C14
4103 D14
4104 D15
4121 D7
4122 E7
4124 H8
5111 B10
5112 C6
5114 H14
5115 I14
5116 H8
5117 B16
5118 B4
5119 B10
5120 D4
5121 E4
5122 J14
6103 D12
6110 B8
7109 D11
7113 G3
7114 G8
7131 E7
7132 E7
7133 B5
7134 J7
A115 B16
A116 B16
A124 D16
A125 D16
F101 B11
F112 C2
F114 H13
F115 C3
F116 C3
F117 C3
F118 C3
F119 C3
F120 C4
F121 C4
F128 F3
F129 H15
F130 G7
F131 I15
F133 C6
F134 B4
F140 H9
F142 C4
F143 C4
F146 J14
I102 C14
I103 D15
I104 G8
I111 B8
I113 J6
I114 C12
I118 D14
I120 D10
I121 D6
I123 E6
I124 F4
I125 F5
I126 G3
I127 G4
I128 H7
I129 H7
I130 I7
I131 I6
I133 J5
I135 J5
I136 J5
I137 C5
I138 H8
I139 H8
I141 D10
I142 G6
I143 I4
I144 I4
I145 B5
I146 B4
I147 B5
I148 I8
I149 H14
I150 I14
I151 J14

SSB: Micro Processor

B03 MICROPROCESSOR

B03

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TO / FROM IR/ LED & KEYBOARD

3139 123 6349.1

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180208

1301 C4	3L73 I3	I335 E4	
1306 J3	3L75 C9	I336 H6	
1307 K1	3L76 C9	I337 I4	
1308 K1	3L79 B9	I338 E4	
1309 K2	3L86 E1	I339 H6	
1310 K2	3L93 B10	I340 D7	
1312 J2	3L94 I4	I341 E6	
1313 K3	3L95 I3	I342 E6	
1320 J1	3L96 C7	I344 E6	
2310 B5	3L97 E10	I345 I2	
2311 A15	3L98 E10	I347 G13	
2312 B5	4301 B9	I349 I11	
2313 B5	4303 J5	I350 I11	
2314 C3	4304 H14	I351 G6	
2315 C2	4305 H14	I352 D4	
2316 C3	4306 G15	I353 D2	
2317 C2	4307 G15	I354 G6	
2318 D3	4309 K5	I356 G11	
2319 C13	4310 K4	I357 D6	
2320 I14	4313 C8	I358 E11	
2323 G2	4316 J13	I359 H6	
2324 B10	4317 H11	I360 E13	
2327 J4	4318 I11	I361 F15	
2328 K3	4323 G2	I362 D8	
2329 K3	4325 I12	I363 F15	
2330 K4	4326 I12	I364 D6	
2331 K4	5301 B5	I365 H4	
2332 K5	5302 A14	I366 F6	
2333 K4	5304 J4	I367 F6	
2334 K4	5306 E14	I368 H4	
2335 K5	5307 G13	I369 G15	
2336 K5	6301 C2	I370 G15	
2337 K5	6308 J4	I372 I15	
2338 F2	6309 K1	I373 J3	
2339 K5	6310 K2	I374 J5	
2340 K4	6311 K2	I375 J3	
2341 F13	6312 K2	I376 J5	
2342 J3	6313 J2	I380 F2	
2343 F7	6317 E1	I384 I4	
2344 F7	6318 F3	I387 C4	
2345 F7	6319 K3	I390 D6	
2346 F7	7301 E1	I393 F2	
2347 G13	7302 F14	I396 F6	
2348 I9	7303 G14	I397 F6	
2349 I10	7308 F2	I398 F6	
3300 D3	7310 B15	IL25 G2	
3301 G10	7311 C5	IL30 D7	
3302 E3	7312 C1	IL32 B10	
3303 C7	7314 B9	IL33 G8	
3305 E3	7317 F1	IL34 K4	
3306 B10	7322 D10	IL35 K5	
3307 B10	7323-1 H2	IL37 C8	
3308 D2	7323-2 G2	IL38 C7	
3310 C8	7L10 A10	IL39 E8	
3313 C7	7L23 I14	IL40 B10	
3314 C3	F302 C7	IL41 F3	
3315 C7	F303 H8	IL42 C6	
3316 C3	F305 G8	IL43 J5	
3317 C7	F309 H8		
3318 C3	F310 B14		
3319 C2	F311 B14		
3320 C7	F312 B16		
3321 C3	F313 B14		
3322 C7	F314 B16		
3324 C7	F315 B14		
3325 D1	F316 B16		
3326 C13	F317 B14		
3329 D7	F318 B16		
3330 C7	F319 B14		
3331 E3	F320 B16		
3332 E7	F321 B14		
3333 E12	F322 B16		
3336 C13	F323 C7		
3338 E3	F324 B14		
3339 E3	F325 B16		
3340 E3	F326 B14		
3341 E3	F327 B16		
3346 E7	F328 C14		
3347 C9	F329 C14		
3348 E7	F330 C1		
3349 C7	F331 C14		
3350 C6	F332 C14		
3351 C8	F333 C14		
3352 C8	F334 C14		
3353 I15	F335 C14		
3354 H7	F336 C14		
3355 I15	F337 C16		
3356 D11	F338 C14		
3357 D7	F339 C14		
3358 D10	F340 C14		
3359 F15	F341 C14		
3360 F15	F345 J14		
3361 G15	F350 F11		
3362 G15	F356 F11		
3380 E7	F357 J3		
3382 F7	F360 J1		
3384 H3	F361 E4		
3386 I3	F362 C6		
3387 E7	F363 I14		
3388 F6	F364 I14		
3389 J4	F365 I14		
3390 J4	F366 C14		
3391 J4	F367 C14		
3393 F2	F368 A15		
3394 J4	F369 D14		
3395 F2	F380 C3		
3396 D11	F381 C4		
3397 F6	F382 J3		
3398 B10	F383 J3		
3399 A9	F384 J3		
3L01 C8	F385 E4		
3L02 H7	F386 D6		
3L04 F3	F387 H4		
3L05 C7	F388 J2		
3L10 J5	I301 E4		
3L12 C8	I302 H4		
3L13 C8	I303 H4		
3L14 I13	I306 I4		
3L15 G2	I307 C6		
3L16 B10	I308 C6		
3L17 E3	I309 C6		
3L18 F7	I310 C6		
3L19 I9	I311 C6		
3L20 I9	I312 C4		
3L21 I10	I313 C6		
3L22 I10	I315 E6		
3L23 I7	I316 E6		
3L24 I7	I318 I13		
3L53 H7	I319 G6		
3L54 I15	I320 G6		
3L55 G7	I321 H6		
3L56 G7	I322 H6		
3L57 E3	I323 H6		
3L58 G7	I324 I6		
3L59 D7	I326 D6		
3L61 H7	I327 E2		
3L62 F7	I328 E2		
3L63 H7	I329 H4		
3L64 B8	I330 E2		
3L67 F6	I331 E4		
3L71 H3	I332 E2		
3L72 B10	I333 E4		

SSB: Trident WX69

B04A TRIDENT - WX69

B04A

Pin Name	Pin No	1(HIGH)	0(LOW)
WS	U12	Use ALE to latch Address	Use Falling Edges of WR#&RD# to latch Address(*)
SD0	V12	Use Rising Edge of WR# to latch data(*)	Use Falling Edge of WR# to latch dat a
SCK	Y11	I2C Slave Address=0x7E/7F(*)	I2C Slave Address=0x7C/7 D

Pin Name	Pin No	1(HIGH)	0(LOW)
DP_HS	P19	MPU in A/D Multiplix Mode	MPU in A/D Separate Mode(*)

"C00-"C99" & "V00 - V99"
MULTI 12NC : 3139_123_63481
SINGLE 12NC : 3139_123_63491

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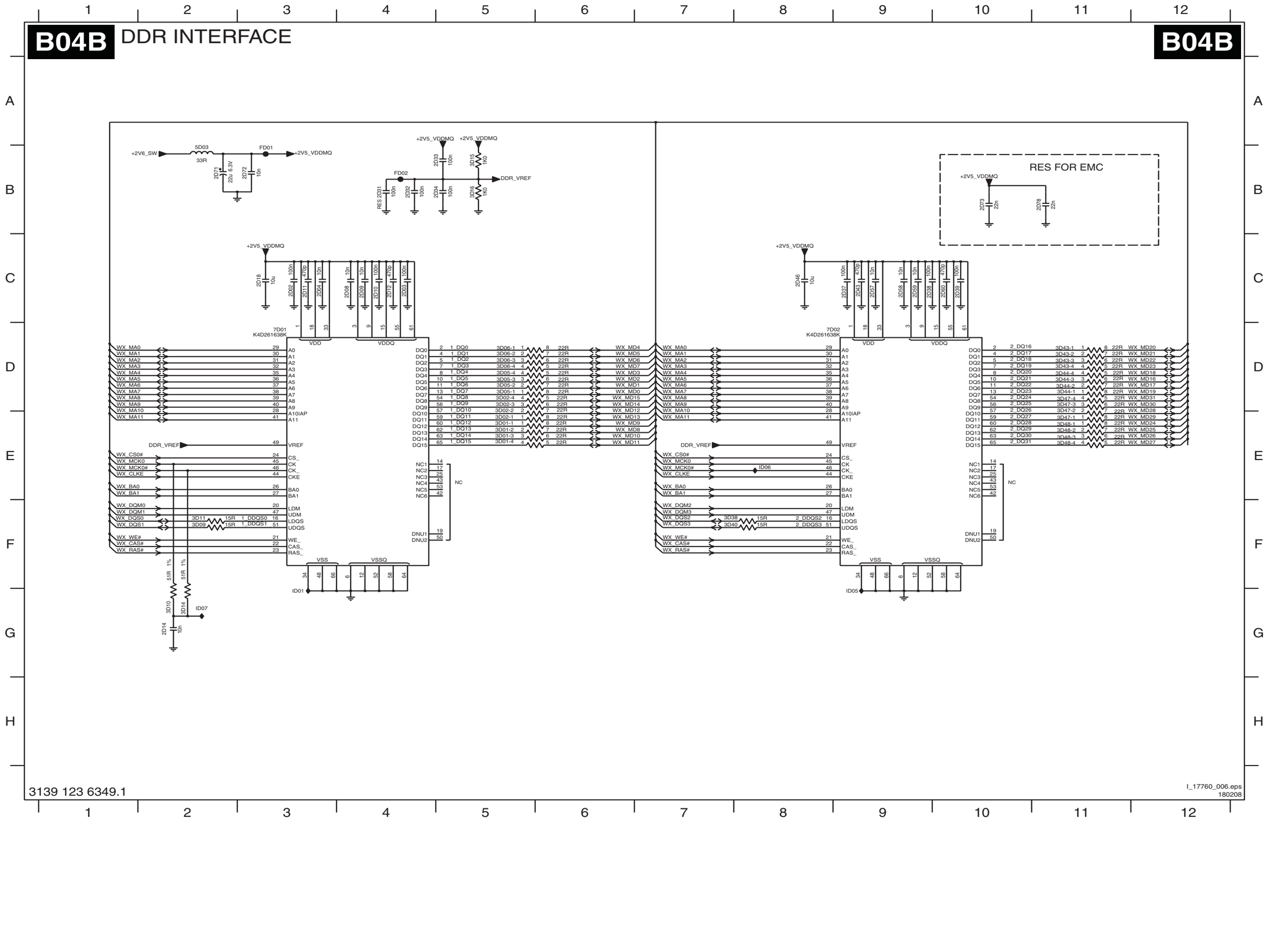
3139 123 6349.1

SSB: DDR Interface



2D02 C3
2D03 C4
2D04 C3
2D08 C4
2D09 C4
2D10 C4
2D11 C3
2D12 C4
2D14 G2
2D18 C3
2D31 B4
2D32 B4
2D33 B5
2D34 B5
2D37 C9
2D38 C9
2D39 C10
2D43 C9
2D46 C8
2D57 C9
2D58 C9
2D59 C9
2D60 C10
2D71 B2
2D72 B3
2D73 B10
2D78 B11
3D01-1 E5
3D01-2 E5
3D01-3 E5
3D01-4 E5
3D02-1 E5
3D02-2 E5
3D02-3 D5
3D02-4 D5
3D05-1 D5
3D05-2 D5
3D05-3 D5
3D05-4 D5
3D06-1 D5
3D06-2 D5
3D06-3 D5
3D06-4 D5
3D09 F2
3D10 G2
3D11 F2
3D14 G2
3D15 B5
3D16 B5
3D38 F7
3D40 F7
3D43-1 D11
3D43-2 D11
3D43-3 D11
3D43-4 D11
3D44-1 D11
3D44-2 D11
3D44-3 D11
3D44-4 D11
3D47-1 E11
3D47-2 E11
3D47-3 D11
3D47-4 D11
3D48-1 E11
3D48-2 E11
3D48-3 E11
3D48-4 E11
5D03 B2
7D01 D3
7D02 D9
FD01 B3
FD02 B4
ID01 G3
ID05 G9
ID06 E8
ID07 G2

SSB: FPGA Interface

B04C FPGA INTERFACE

B04C

+3V3_FPGA
5201 30R
I205
2211 10n
7201 EPCS4SI8
VCC
CS_
DCLK
ASDI
DATA
GND
SCD
F222
F223
F224
F227
nCSO
DCLK
ASDO
DATA0
+3V3_FPGA
5202 30R
I201
1204 DSO751SV
2214 10u
27M0
I232
3236 47R
F237
CLK_OSC1
+3V3_FPGA +3V3_FPGA
3231 1K0
RES 3232
TMS_FPGA
TDI_FPGA
TDO_FPGA
TCK_FPGA
F204
F228
F202
F225
3246 100R
3240 100R
3235 100R
3234 100R
F203 JTAG_TMS
F236 JTAG_TDI
F205 JTAG_TDO
F201 JTAG_TCK
F229
+3V3_FPGA
RES 3238 1K0
F238
1203
1735446-6
SOFTWARE DEBUGGER FOR PROGRAMMING FPGA (FOR DEVELOPMENT)

IIC_SCL_up
IIC_SDA_up
3201 100R
3202 100R
F207
F208
MAIN_SCL
MAIN_SDA
RES 2201 100p
RES 2202 100p

TO DRIVE IC AL DRIVERS
+3V3_FPGA
3204 1K5
3203 1K5
AMBI_SCL
AMBI_SDA
I209
F211
3205 100R
3206 100R
S_SCL
S_SDA
2204 1n0
2203 1n0
+3V3_FPGA +3V3_FPGA
+3V3_FPGA
4206
RES 4202
4201
I2S_SEL1
I207
I206
I2S_SEL2
4205
RES 4203
2215 100n
2216 100n
2217 100n
2218 100n
2219 100n
4204
1202
1735446-7

2 CONNECTORS OVERLAPPING 7PIN
RES FOR PWM AL DRIVER
F239
F240
I212
I213
3247 100R
3222 100R
3224 100R
3225 100R
3207 100R
3248 100R
I233
I234
ambi_pwm(0)
ambi_pwm(1)
ambi_pwm(2)
ambi_pwm(3)
ambi_pwm(4)
ambi_pwm(5)
2205 1n0
2206 1n0
2207 1n0
2208 1n0
2209 1n0
2210 1n0

1205
1735446-4
F210 +24V
1206
1735446-6
GNDDC24V
GNDDC24V
AMBILIGHT ONLY

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180208

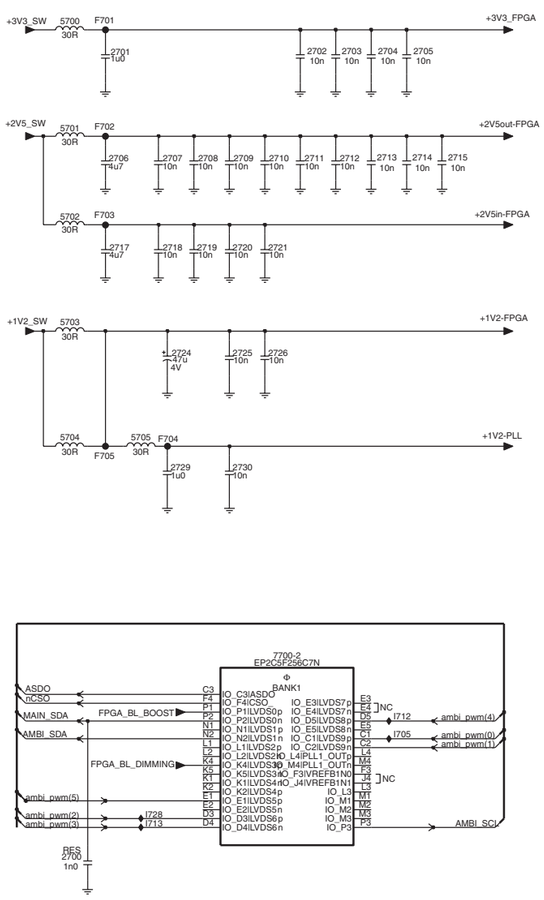
3139 123 6349.1

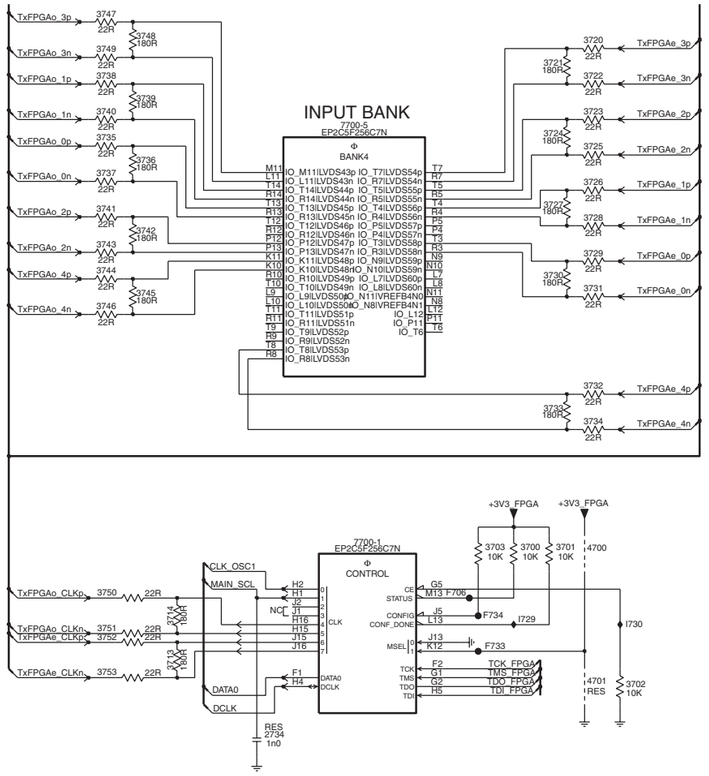
1202 E3 I209 D1
1203 C6 I212 E4
1204 B5 I213 F4
1205 E7 I232 B5
1206 E8 I233 E5
2201 D5 I234 F5
2202 D6
2203 E2
2204 E1
2205 F4
2206 F4
2207 F4
2208 F4
2209 F4
2210 F5
2211 B1
2214 B4
2215 F2
2216 F2
2217 F2
2218 F2
2219 F3
3201 C5
3202 D5
3203 D2
3204 D1
3205 D1
3206 D1
3207 F5
3222 E5
3224 E5
3225 E5
3231 B4
3232 B4
3234 C4
3235 C4
3236 B5
3238 C4
3240 C4
3246 C4
3247 E5
3248 F5
4201 E2
4202 E1
4203 F2
4204 F3
4205 F1
4206 E3
5201 A1
5202 A5
7201 B1
F201 C6
F202 C4
F203 C6
F204 C4
F205 C6
F207 C6
F208 D6
F210 E7
F211 D1
F222 B2
F223 B2
F224 B2
F225 C4
F227 C2
F228 C4
F229 C6
F236 C6
F237 B6
F238 E4
F238 C6
F239 E4
I201 A4
I205 B1
I206 F2
I207 F2

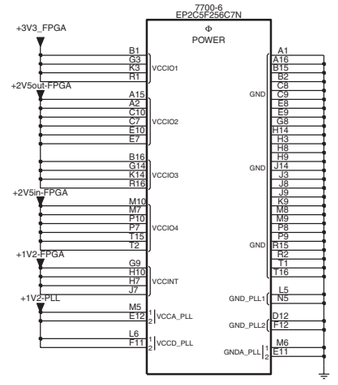
SSB: FPGA I/O Banks

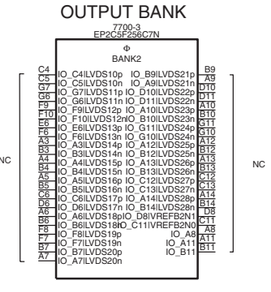
B04D FPGA I/O BANKS

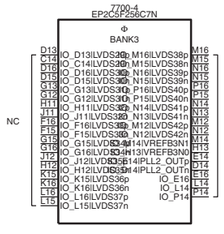
B04D

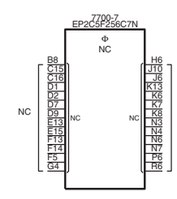












2700 I2
2701 B2
2702 B4
2703 B4
2704 B5
2705 B5
2706 C2
2707 C3
2708 C3
2709 C3
2710 C4
2711 C4
2712 C4
2713 C5
2714 C5
2715 C5
2717 D2
2718 D3
2719 D3
2720 D3
2721 D4
2724 E3
2725 E3
2726 E4
2729 F3
2730 F3
2734 H8
3700 F10
3701 F11
3702 G11
3703 F10
3713 G7
3714 G7
3720 B11
3721 B11
3722 B11
3723 C11
3724 C11
3725 C11
3726 C11
3727 C11
3728 D11
3729 D11
3730 D11
3731 D11
3732 E11
3733 E11
3734 E11
3735 C7
3736 C7
3737 C7
3738 B7
3739 C7
3740 C7
3741 D7
3742 D7
3743 D7
3744 D7
3745 D7
3746 D7
3747 B7
3748 B7
3749 B7
3750 G7
3751 G7
3752 G7
3753 G7
4700 F11
4701 G11
5700 B2
5701 C2
5702 D2
5703 D2
5704 E2
5705 E3
7700-1 F9
7700-2 G4
7700-3 H12
7700-4 I14
7700-5 C9
7700-6 E15
7700-7 I16
F701 B2
F702 C2
F703 D2
F704 E3
F705 F2
F706 G10
F733 G10
F734 G10
I705 H5
I712 H5
I713 H3
I728 H3
I729 G10
I730 G11

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SSB: LVDS Connector

B04E LVDS CONNECTOR

B04E

RES FOR DISPLAY I2C CONTROL

6R04 FR11 BZX384-C6V8
6R05 FR12 BZX384-C6V8
2R25 10p
2R26 10p
ITV_I2C_SDA 3R55 22R LVDS3_SDA_DISP
ITV_I2C_SCL 3R56 22R LVDS3_SCL_DISP

1108

CTRL_DISP1
LVDS_SEL
CTRL_DISP2
CTRL_DISP3
CTRL_DISP4

LVDS_A_TXo0n / LVDS_A_TXo0p — 1R14 DUM015 — FR14 FR16 FR18 FR20 FR22 FR24
LVDS_A_TXo1n / LVDS_A_TXo1p — 1R15 DUM015 — FR26 FR28
LVDS_A_TXo2n / LVDS_A_TXo2p — 1R16 DUM015 — FR30 FR32 FR33 FR35
LVDS_A_TXoCLKn / LVDS_A_TXoCLKp — 1R17 DUM015 — FR39 FR41 FR43 FR45 FR48 FR49
LVDS_A_TXe3n / LVDS_A_TXe3p — 1R18 DUM015 — FR53 FR54
LVDS_A_TXe4n / LVDS_A_TXe4p — 1R19 DUM015 — FR58 FR60 FR62 FR65
LVDS_A_TXo4n / LVDS_A_TXo4p — 1R25 DUM015
LVDS_A_TXe0n / LVDS_A_TXe0p — 1R20 DUM015
LVDS_A_TXe1n / LVDS_A_TXe1p — 1R21 DUM015
LVDS_A_TXe2n / LVDS_A_TXe2p — 1R22 DUM015
LVDS_A_TXeCLKn / LVDS_A_TXeCLKp — 1R23 DUM015
LVDS_A_TXo3n / LVDS_A_TXo3p — 1R24 DUM015

+VDISP — FR69 — 100n — 2R28 — FI-RE51S-HF

FROM MJC-LVDS 8280

FROM FPGA

LVDS_B_TXe0n / LVDS_B_TXe0p	TxFPGAe_0n / TxFPGAe_0p	4R31-1 / 4R31-2	1R02 DUM015
LVDS_B_TXe1n / LVDS_B_TXe1p	TxFPGAe_1n / TxFPGAe_1p	4R31-3 / 4R31-4	1R03 DUM015
LVDS_B_TXe2n / LVDS_B_TXe2p	TxFPGAe_2n / TxFPGAe_2p	4R32-1 / 4R32-2	1R04 DUM015
LVDS_B_TXeCLKn / LVDS_B_TXeCLKp	TxFPGAe_CLKn / TxFPGAe_CLKp	4R32-3 / 4R32-4	1R05 DUM015
LVDS_B_TXo3n / LVDS_B_TXo3p	TxFPGAe_3n / TxFPGAe_3p	4R34-1 / 4R34-2	1R06 DUM015
LVDS_B_TXe4n / LVDS_B_TXe4p	TxFPGAe_4n / TxFPGAe_4p	4R34-3 / 4R34-4	1R07 DUM015
LVDS_B_TXo0n / LVDS_B_TXo0p	TxFPGAo_0n / TxFPGAo_0p	4R35-1 / 4R35-2	1R08 DUM015
LVDS_B_TXo1n / LVDS_B_TXo1p	TxFPGAo_1n / TxFPGAo_1p	4R35-3 / 4R35-4	1R09 DUM015
LVDS_B_TXo2n / LVDS_B_TXo2p	TxFPGAo_2n / TxFPGAo_2p	4R36-1 / 4R36-2	1R10 DUM015
LVDS_B_TXoCLKn / LVDS_B_TXoCLKp	TxFPGAo_CLKn / TxFPGAo_CLKp	4R36-3 / 4R36-4	1R11 DUM015
LVDS_B_TXo3n / LVDS_B_TXo3p	TxFPGAo_3n / TxFPGAo_3p	4R33-1 / 4R33-2	1R12 DUM015
LVDS_B_TXo4n / LVDS_B_TXo4p	TxFPGAo_4n / TxFPGAo_4p	4R33-3 / 4R33-4	1R13 DUM015

LVDSe_0n … LVDSe_4p
LVDSo_0n … LVDSo_4p

+VDISP

1R01 FX15SC-41S-0.5SH

CTRL_DISP1 4R22
CTRL_DISP2 4R24
CTRL_DISP3 4R26
CTRL_DISP4 4R27

FR13 FR15 FR17 FR19 FR21 FR23 FR25 FR27 FR29 FR31 FR34 FR36 FR37 FR38 FR40 FR42 FR44 FR47 FR50 FR52 FR55 FR57 FR59 FR61

ITV_I2C_SCL 3R25 100R FR66
ITV_I2C_SDA 3R26 100R FR67
FR64
10p 2R61 RES 2R60 10p

SINGLE LVDS

+5V_TCON +12V_DISP
1R10 1R11 1R12 4R02 4R03 4R04
7R05 SI4835BDY IR08
5R01 RES 33R
5R02 33R
5R03 33R
FR10 +VDISP 12V1
IR01
3R10 47K
6R02 BZX384-C5V6
2R11 220u 25V
2R12 100n
3R12 47R IR02 2R10 1u0 IR06 3R13 47K
VDISP-SWITCH
IR04 0V
7R07 PDTC114ET
3V2
LCD

	+12V_DISP	+5V_TCON
4R02	Y	-
4R03	Y	-
4R04	Y	-
4R10	-	Y
4R11	-	Y
4R12	-	Y

+3V3_SW
5R07 RES 4K7
5R08 RES 4K7
5R09 RES 4K7
5R10 RES 4K7
5R11 RES 4K7
5R12 RES 4K7

CTRL_DISP1_up — 3R35 100R — FR46 — CTRL_DISP1
LCD_PWR_ON — IR10 — 3R52 100R — FR51 — CTRL_DISP2
STANDBY — 3R53 100R — FR56 — CTRL_DISP3
CTRL_DISP4_up — 3R54 100R — FR63 — CTRL_DISP4
FR67 — LVDS_SEL

*	LCD	PDP
3R35	--	100R
3R52	--	100R
3R53	--	100R
3R54	--	100R
4R05	Y	--
4R06	Y	--
4R07	Y	--
4R08	Y	--

* 1D50 DUM015 — 2D50 10nD — 2D51 10nD — 2D52 10nD — 2D53 10nD — 2D54 100n — * 1D51 DUM015 — 2D29 100n
PDP

	LGE	SDI	FHP	1080p
CTRL-DISP1		RESET Semi standby : H Normal and off : L		
CTRL-DISP2(LCD_PWR_on)	DISPEN On time : H Off time : Don't care		CPU-GO On time : H Off time : Don't care	
CTRL-DISP3(Rev_Standby)			PDWIN On time : H Off time : Don't care	
CTRL-DISP4			PDP-GO On time : H Semi standby : L Off time : Don't care	MAIN_RESET

*	8 Bit Single LVDS	10 Bit Single LVDS	8 Bit Dual LVDS	10 Bit Dual LVDS
1R02	--	--	Y	Y
1R03	--	--	Y	Y
1R04	--	--	Y	Y
1R05	--	--	Y	Y
1R06	--	--	Y	Y
1R07	--	--	--	Y
1R08	Y	Y	Y	Y
1R09	Y	Y	Y	Y
1R10	Y	Y	Y	Y
1R11	Y	Y	Y	Y
1R12	Y	Y	Y	Y
1R13	--	Y	--	Y

1108 C6 FR53 F5
1R01 E13 FR54 F5
1R02 D10 FR55 H12
1R03 D10 FR56 H16
1R04 E10 FR57 H12
1R05 E10 FR58 F5
1R06 F10 FR59 H12
1R07 F10 FR60 F5
1R08 G10 FR61 H12
1R09 G10 FR62 F5
1R10 G10 FR63 H16
1R11 H10 FR64 H13
1R12 H10 FR65 F5
1R13 I10 FR66 H13
1R14 D3 FR67 H16
1R15 D3 FR68 H13
1R16 E3 FR69 F6
1R17 E3 IR01 E15
1R18 E3 IR02 F14
1R19 F3 IR04 F15
1R20 F3 IR06 F15
1R21 G3 IR08 D15
1R22 G3 IR10 H15
1R23 H3
1R24 H3
1R25 F3
2R01 I13
2R02 I13
2R10 F15
2R11 E16
2R12 E16
2R20 I15
2R21 I15
2R23 I16
2R24 I16
2R25 C3
2R26 C3
2R28 G6
2R29 I16
3R10 E14
3R12 F14
3R13 F15
3R25 H12
3R26 H12
3R35 G15
3R48 G15
3R49 G15
3R50 G16
3R51 G16
3R52 H15
3R53 H15
3R54 H15
3R55 C3
3R56 C3
3R57 G16
4R02 D14
4R03 D14
4R04 D14
4R05 H15
4R06 H15
4R07 H15
4R08 H16
4R10 D14
4R11 D14
4R12 D14
4R22 F13
4R24 F13
4R26 F13
4R27 F13
4R31-1 D9
4R31-2 D9
4R31-3 D9
4R31-4 E9
4R32-1 E9
4R32-2 E9
4R32-3 E9
4R32-4 E9
4R33-1 H9
4R33-2 H9
4R33-3 I9
4R33-4 I9
4R34-1 F9
4R34-2 F9
4R34-3 F9
4R34-4 F9
4R35-1 F9
4R35-2 G9
4R35-3 G9
4R35-4 G9
4R36-1 G9
4R36-2 H9
4R36-3 H9
4R36-4 H9
4R43 H16
5R01 D16
5R02 D16
5R03 E16
6R02 E14
6R04 C3
6R05 C3
7R05 D15
7R07 F15
FR10 D16
FR11 C4
FR12 C4
FR13 F12
FR14 D5
FR15 F12
FR16 D5
FR17 F12
FR18 D5
FR19 F12
FR20 D5
FR21 F12
FR22 D5
FR23 F12
FR24 D5
FR25 F12
FR26 D5
FR27 F12
FR28 D5
FR29 G12
FR30 E5
FR31 G12
FR32 E5
FR33 E5
FR34 G12
FR35 E5
FR36 G12
FR37 G12
FR38 G12
FR39 E5
FR40 G12
FR41 E5
FR42 G12
FR43 E5
FR44 G12
FR45 E5
FR46 G16
FR47 G12
FR48 E5
FR49 E5
FR50 G12
FR51 H16
FR52 H12

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SSB: Audio Processor Micronas

B05A AUDIO PROCESSOR - MICRONAS

B05A

7410 L78L08ACU
+12V_DISP
6402 BAS316
F404
F401 +8V
+5V_SW
3402 1R0
5401 120R
SUP_D
2411 10u
RES 3403 1R0
+3V3_SW
5402 120R
SUP_A
2414 10u
SUP_A
F402
SUP_D
F403
7411 MSP4450L-VK-E8 000
SUP
DVSUP
2415 3p3
1411 18M432
XTALIN
XTALOUT
2416 3p3
AUD_RST
3428 100R
2419 100n
IIC_SCL
IIC_SDA
3410 100R
3411 100R
RES 2446 100p
RES 2447 100p
I412
I413
HDMI_I2S_SCK
HDMI_I2S_WS
I429
I430
HDMI_I2S_SD
I432
SIF
2432 56p
3416 470R
2448
4448
5403 22u
5404 12u
2449 180p
I420
2433 330p
2434 56p
2435 56p
I421
I422
I423
2436 10u
2445 100n
I424
SC1_AUDIO_IN_R
SC1_AUDIO_IN_L
SC2_AUDIO_IN_R
SC2_AUDIO_IN_L
COMP_AUDIO_IN_R
COMP_AUDIO_IN_L
SIDE_AUDIO_IN_R
SIDE_AUDIO_IN_L
VGA_AUDIO_IN_R
VGA_AUDIO_IN_L
Φ MULTISTANDARD SOUND PROCESSOR
AUD_CL_OUT
DACM
DACA
CAPL
DCTR_IO
SPDIF_OUT
SC1_OUT
SC2_OUT
SC3_OUT
NC
AUDIO_LS_R
AUDIO_LS_L
HP_AUDIO_OUT_R
HP_AUDIO_OUT_L
2418 330p
2417 330p
2420 10u 16V
I414
2423 10u 16V
I415
2421 330p
2422 330p
+8V
I416
I417
2424 2425 10u
I442 3417 100R
I443 3418 100R
SC1_AUDIO_OUT_R
SC1_AUDIO_OUT_L
I418
I419
2426 2427 10u
I444 3419 100R
I445 3420 100R
SC2_AUDIO_OUT_R
SC2_AUDIO_OUT_L
2428 100p
2429 100p
2430 100p
2431 100p
+5V_SW
3427 4K7
7412 ADG719BRTZ
SPST SWITCH
VDD
S2
D
S1
IN
GND
RES
2451 100n
I440
I438
I441
I437
4403
4402
I436
3423 1K2
I439
2450 RES 33p
SPDIF_OUT
SPDIF_IN
I446
VSS
VREF
AGNDC
I425
2437 10u
2438 100n

*	LA	AP	CH	EU
2432	33p	56p	56p	56p
2433	47p	330p	330p	330p
2434	47p	56p	56p	56p
2435	47p	56p	56p	56p
2448	150p	--	--	--
2449	180p	--	--	--
3416	2K2	--	--	--
4448	--	Y	Y	Y
5403	--	22u	22u	22u
5404	12u	--	--	--

"400-499"

MULTI 12NC: 3139 123 63421
SINGLE 12NC: 3139 123 63431

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1411 C4
2408 B5
2409 B5
2410 B5
2411 B3
2412 B4
2413 B6
2414 B3
2415 B3
2416 C3
2417 C8
2418 C8
2419 C3
2420 D7
2421 D8
2422 D8
2423 D7
2424 D8
2425 D8
2426 E8
2427 E8
2428 E7
2429 E7
2430 E8
2431 E8
2432 E3
2433 E4
2434 E4
2435 E4
2436 E4
2437 G5
2438 G5
2439 B4
2440 B4
2441 B5
2442 B5
2443 B6
2444 B7
2445 E4
2446 C3
2447 D3
2448 E2
2449 E3
2450 G9
2451 F7
3402 B2
3403 B2
3410 C3
3411 C3
3416 E3
3417 D9
3418 D9
3419 E9
3420 E9
3423 G8
3427 E8
3428 C3
4401 F7
4402 G7
4403 F7
4448 E3
5401 B2
5402 B2
5403 E3
5404 E3
6402 A3
7410 A4
7411 B5
7412 F8
F401 A5
F402 B5
F403 B6
F404 A4
I412 C4
I413 C4
I414 D7
I415 D7
I416 D7
I417 D7
I418 E7
I419 E7
I420 E3
I421 E4
I422 E4
I423 E4
I424 E4
I425 G5
I429 D3
I430 D3
I432 D3
I436 G7
I437 F8
I438 F7
I439 G9
I440 F7
I441 F7
I442 D9
I443 D9
I444 E9
I445 E9
I446 G8

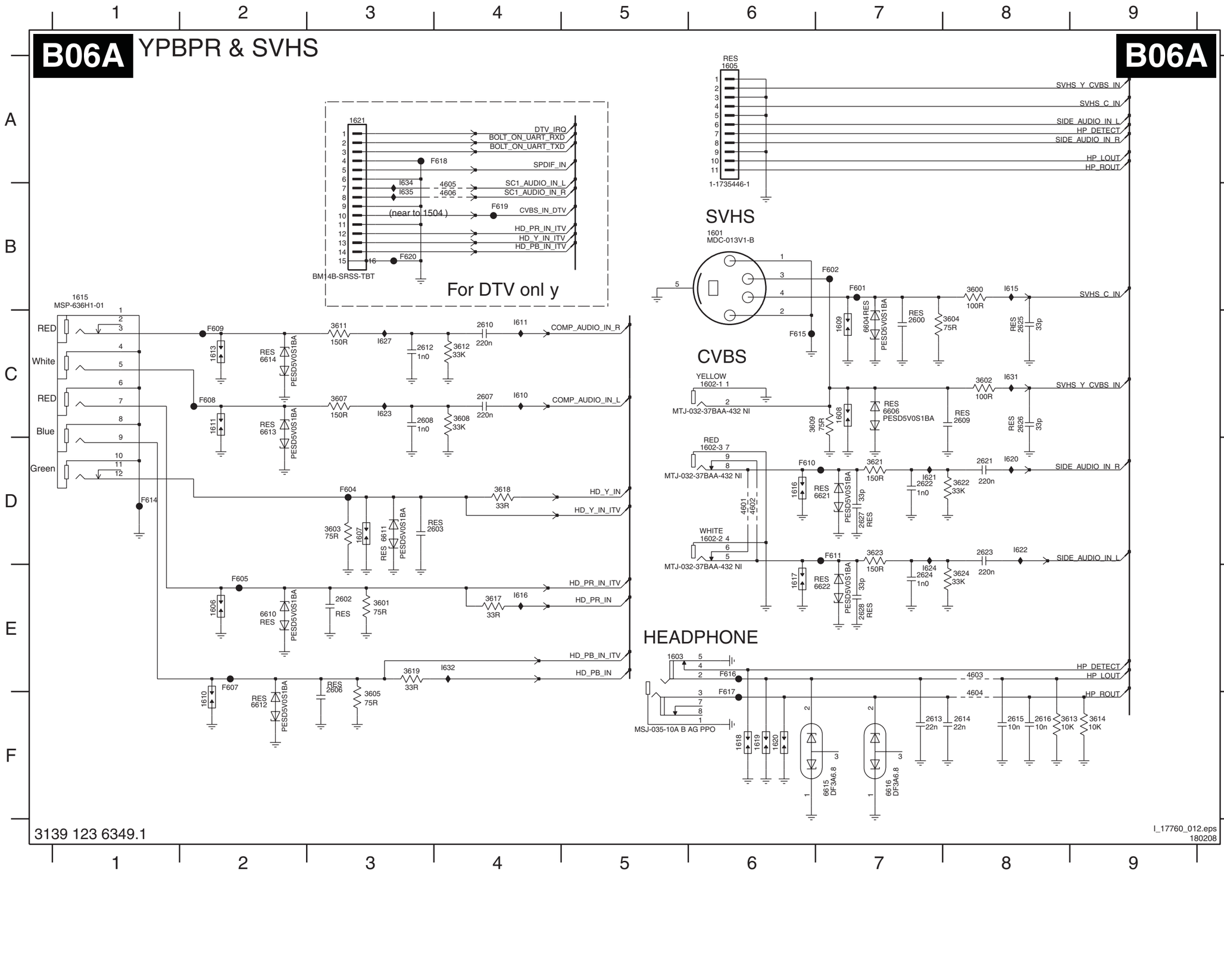
SSB: Audio Class-D

1A02 B15 2A10 C9 2A17 C12 2A24 D8 2A31 E11 2A38 E12 2A54 C4 2A61 F2 2A68 A3 3A03 C7 3A11 D7 3A28 E13 3A52 B5 3A59 C5 3A70 E3 3A77 G4 5A08 A8 7A51-1 B3 7A57 F4 FA05 C6 FA12 E6 IA14 A10 IA21 B1 IA28 C8 IA35 C7 IA42 D8 IA49 D14 IA56 E8 IA63 E5 IA70 F3
1A35 C15 2A11 C7 2A18 C10 2A25 D10 2A32 E8 2A40 E8 2A55 C3 2A62 A4 2A69 A7 3A04 C8 3A13 D8 3A29 D14 3A53 B2 3A60 D3 3A71 E4 4A51 E3 5A03 C11 7A51-2 C3 FA06 C6 FA13 E6 IA15 A5 IA22 B2 IA29 C11 IA36 C8 IA43 D8 IA50 D8 IA57 E3 IA64 E4 IA71 F5
2A01 A5 2A12 C8 2A19 D8 2A26 D12 2A33 F9 2A41 E14 2A48 C12 2A56 C4 2A63 A4 2A70 A7 3A05 C13 3A30 D14 3A54 B5 3A61 E2 3A72 F4 5A03 C11 7A52 E2 FA07 C15 IA16 A10 IA23 C13 IA30 C5 IA37 C10 IA44 D8 IA51 D8 IA58 E14 IA65 F5 IA72 F4
2A02 A10 2A13 C12 2A20 D7 2A27 D10 2A34 F9 2A45 C12 2A57 C2 2A64 A8 2A71 D13 3A06 C7 3A31 E15 3A55 C3 3A62 E2 3A73 F4 5A04 D11 7A53 F2 FA08 C15 IA17 B4 IA24 C13 IA31 C4 IA38 C8 IA45 D10 IA52 D12 IA59 E4 IA66 F4 IA73 F5
2A04 A5 2A14 C12 2A21 C11 2A28 D12 2A35 D11 2A51 B3 2A58 C4 2A65 A9 2A72 D13 3A07 C7 3A32 D7 3A56 C3 3A63 F2 3A74 G4 5A05 A5 7A54 D4 7A60 G4 FA09 D6 IA18 B5 IA25 C4 IA32 C10 IA39 C11 IA46 D10 IA53 E2 IA60 E8 IA67 F2 IA74 G4
2A08 B10 2A15 C7 2A22 D8 2A29 D8 2A36 E11 2A43 B4 2A52 B2 2A59 D2 2A66 A2 3A01 A5 3A08 D8 3A27 E8 3A33 E7 3A51 B3 3A57 C5 3A64 E4 3A75 G3 5A06 A9 7A55 E4 F901 B3 FA10 C15 IA12 A9 IA19 B5 IA26 C4 IA33 C1 IA40 D7 IA47 D10 IA54 E2 IA61 E12 IA68 F2 IA75 G3
2A09 C9 2A16 C7 2A23 D12 2A30 E10 2A37 C13 2A44 B4 2A53 B4 2A60 E1 2A67 A3 3A02 A9 3A09 C11 3A27 E13 3A51 B3 3A58 C2 3A69 E4 3A76 G4 5A07 A4 7A56 E4 F904 C3 FA11 C15 IA13 A5 IA20 B5 IA27 C4 IA34 D7 IA41 D7 IA48 D4 IA55 E14 IA62 E11 IA69 F1 IA76 G4

★	LCD	PDP
3A03	10K	6K8
3A04	12K	22K
3A06	10K	6K8
3A07	10K	6K8
3A08	12K	22K
3A11	10K	6K8

SSB: YPbPr & SVHS

B06A YPBPR & SVHS



1601 B6	6616 F7
1602-1 C6	6621 D7
1602-2 D6	6622 E7
1602-3 D6	F601 B7
1603 E5	F602 B7
1605 A6	F604 D3
1606 E2	F605 E2
1607 D3	F607 E2
1608 C7	F608 C2
1609 C7	F609 C2
1610 F2	F610 D6
1611 C2	F611 D7
1613 C2	F614 C1
1615-1 D1	F615 C6
1615-2 E1	F616 E6
1615-3 C1	F617 E6
1616 D6	F618 A4
1617 E6	F619 B4
1618 F6	F620 B3
1619 F6	I610 C4
1620 F6	I611 C4
1621 A3	I615 B8
2600 C7	I616 E4
2602 E3	I620 D8
2603 D4	I621 D7
2606 E3	I622 D8
2607 C4	I623 C3
2608 C3	I624 E7
2609 C8	I627 C3
2610 C4	I631 C8
2612 C3	I632 E4
2613 F7	I634 A3
2614 F8	I635 B3
2615 F8	
2616 F8	
2621 D8	
2622 D7	
2623 D8	
2624 E7	
2625 C8	
2626 C8	
2627 D7	
2628 E7	
3600 B8	
3601 E3	
3602 C8	
3603 D3	
3604 C8	
3605 F3	
3607 C3	
3608 C4	
3609 C6	
3611 C3	
3612 C4	
3613 F8	
3614 F9	
3617 E4	
3618 D4	
3619 E3	
3621 D7	
3622 D8	
3623 D7	
3624 E8	
4601 D6	
4602 D6	
4603 E8	
4604 F8	
4605 B4	
4606 B4	
6604 C7	
6606 C7	
6610 E2	
6611 D3	
6612 F2	
6613 C2	
6614 C2	
6615 F7	

SSB: I/O Cinch 1 & 2

B06B IO - CINCH 1 & 2

B06B

RES ITV_Connector A:
RES ITV-Connector B
RES ITV-Connector C
RES ITV-Connector D
RES ITV Connector E

CVI-2 / AV OUT
MTJ-505H-01 NI LF

CODE 2422 025 20251 IN ECM
AV IN
MTJ-505H-01 NI LF

TO BE REMOVED FOR ITV
RES FOR ROW
RES FOR ITV

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1500 C9	6515 F3
1501 C9	6516 G3
1502 D7	6517 H3
1503 D9	6518 C3
1504 C1	6519 C3
1505 A8	6520 E3
1506 A5	6521 G3
1507 A4	6522 C9
1508 A1	6523 C9
1509 A11	6524 E9
1510 E9	6525 G9
1511 D2	7500 G10
1512 E2	7502 G11
1513 E8	7503 I10
1514 E9	7504 I11
1515 F8	F346 A2
1516 E2	F347 A2
1517 E2	F348 A2
1518 G9	F349 A2
1519 F2	F351 A2
1520 G2	F352 A2
1521 H9	F353 A2
1522 G2	F354 B2
1523 H2	F510 D8
1524 H2	F511 C2
1531 C2	F512 D8
1532 D2	F513 C2
1533 E9	F514 D8
1534 C2	F515 C2
1535 D2	F516 D8
2502 C10	F517 C2
2506 C10	F518 D8
2508 B3	F519 D2
2509 D11	F520 D2
2512 D10	F521 D2
2514 C3	F522 D2
2515 C4	F523 F9
2517 D4	F524 E2
2518 D11	F525 E2
2520 E10	F526 F2
2521 D4	F527 F8
2523 D4	F528 F2
2524 F10	F529 F8
2525 G10	F530 H5
2526 G9	F531 E2
2527 F3	F532 E9
2528 E3	F534 B4
2529 F3	F535 C4
2530 H10	F536 C4
2531 G3	F537 D4
2533 I10	F538 E5
2534 I10	F539 E5
2535 H3	F540 F5
2536 G9	F541 F5
2538 H3	F542 G5
3500 B10	F543 C10
3502 C10	F544 D10
3503 B3	F612 B9
3506 D10	F613 B9
3507 C3	I510 B10
3508 D10	I512 C10
3510 C3	I517 D11
3511 D4	I520 D11
3512 D10	I528 G12
3513 E10	I530 G10
3514 D3	I533 H12
3515 D4	I541 D5
3516 E4	I543 G10
3517 E3	I544 G11
3518 E3	I545 E10
3519 G10	I548 I11
3520 E3	I549 I11
3521 G12	I550 G4
3522 G9	I551 G10
3523 F4	I552 G11
3524 I11	I553 I10
3525 G10	I554 I12
3526 F3	I556 H12
3528 F4	I557 F11
3529 H10	I558 I12
3530 G3	I562 A4
3531 H10	I563 B4
3532 G4	I564 B4
3533 G3	I565 A6
3535 H3	I567 A6
3536 H4	I568 A6
3537 I12	I570 B6
3538 G11	I571 B6
3540 I11	I572 A9
3545 H3	I573 A9
3546 H3	I574 A9
3550 E10	I575 A11
3551 E10	I576 A11
3552 F10	I577 F8
3553 F10	I578 I12
3554 I12	
3555 H12	
3559 B7	
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4509 C2	
4510 G2	
6501 D9	
6504 D3	
6505 E9	
6507 D3	
6509 F9	
6510 H9	
6511 H3	
6512 G4	
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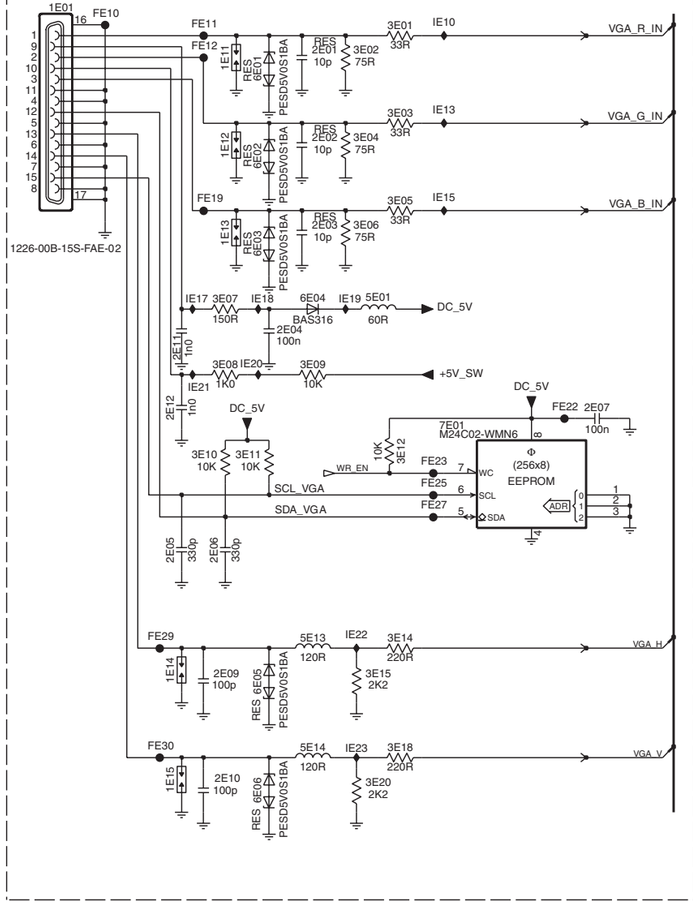
6514 E3	

SSB: VGA & PC Audio, ComPair, & UART

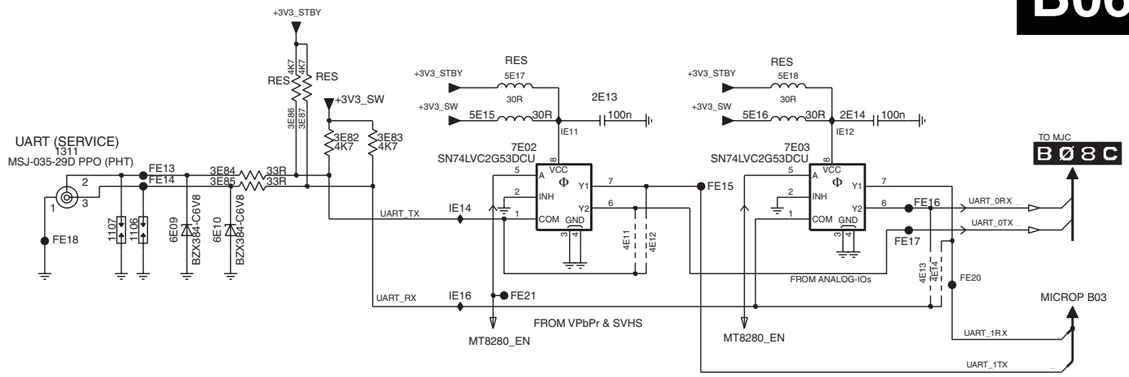
B06C VGA & PC AUDIO & COMPAIR & UART

B06C

VGA



UART (SERVICE)



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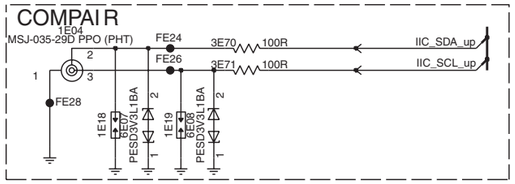
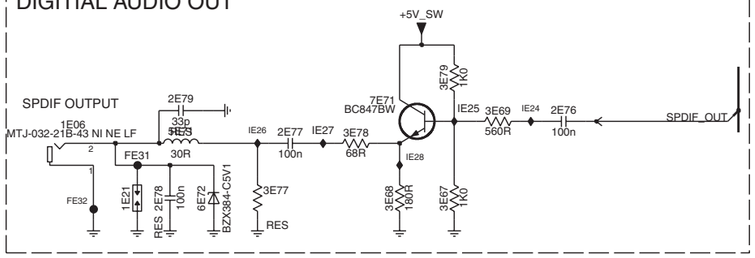
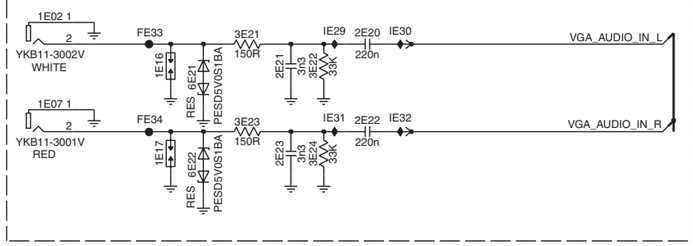
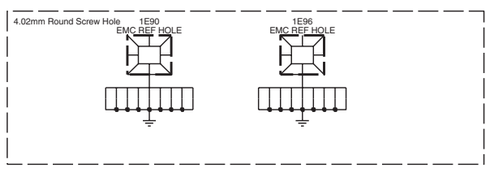


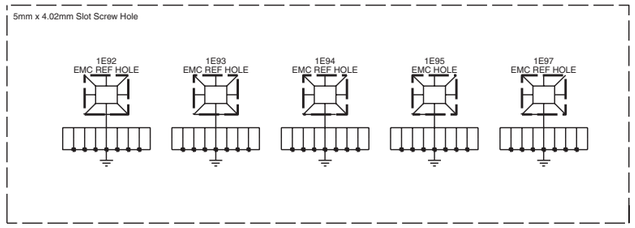
DIGITIAL AUDIO OUT



PC / DVI AUDIO







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1107 B7 7E03 A11
1311 A6 7E71 F8
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1E02 G1 FE11 A2
1E04 C6 FE12 A2
1E06 F6 FE13 A7
1E07 H1 FE14 A7
1E11 A2 FE15 B11
1E12 B2 FE16 B12
1E13 B2 FE17 B12
1E14 E2 FE18 B6
1E15 F2 FE19 B2
1E16 G2 FE20 B12
1E17 H2 FE21 B9
1E18 D7 FE22 D5
1E19 D7 FE23 D4
1E21 F7 FE24 D7
1E90 G7 FE25 D4
1E92 G10 FE26 D7
1E93 G11 FE27 D4
1E94 G11 FE28 D6
1E95 G12 FE29 E2
1E96 G8 FE30 F2
1E97 G13 FE31 F7
2E01 A3 FE32 F6
2E02 B3 FE33 G2
2E03 B3 FE34 H2
2E04 C3 IE10 A4
2E05 D2 IE11 A10
2E06 D2 IE12 A11
2E07 D5 IE13 B4
2E09 E2 IE14 B9
2E10 F2 IE15 B4
2E11 C2 IE16 B9
2E12 C2 IE17 C2
2E13 A10 IE18 C3
2E14 A11 IE19 C3
2E20 G3 IE20 C3
2E21 G3 IE21 C2
2E22 H3 IE22 E3
2E23 H3 IE23 F3
2E76 F10 IE24 F9
2E77 F8 IE25 F9
2E78 F7 IE26 F8
2E79 F7 IE27 F8
3E01 A4 IE28 F9
3E02 A3 IE29 G3
3E03 B4 IE30 G4
3E04 B3 IE31 H3
3E05 B4 IE32 H4
3E06 B3
3E07 C2
3E08 C2
3E09 C3
3E10 D2
3E11 D3
3E12 D4
3E14 E4
3E15 E3
3E18 F4
3E20 F3
3E21 G3
3E22 G3
3E23 H3
3E24 H3
3E67 F9
3E68 F8
3E69 F9
3E70 D7
3E71 D7
3E77 F8
3E78 F8
3E79 F9
3E82 A8
3E83 A8
3E84 A7
3E85 B7
3E86 A8
3E87 A8
4E11 B10
4E12 B10
4E13 B12
4E14 B12
5E01 C3
5E13 E3
5E14 F3
5E15 A9
5E16 A11
5E17 A9
5E18 A11
5E71 F7
6E01 A3
6E02 B3
6E03 B3
6E04 C3
6E05 E3
6E06 F3
6E07 D7
6E08 D7
6E09 B7
6E10 B7
6E21 H2
6E22 H2
6E72 F7
7E01 D4

SSB: HDMI Switch

B07A HDMI SWITCH

B07A

HDMI SIDE

HDMI B

HDMI C

HDMI D
BOLT ON DTV

HDMI SWITCH

1M01 A5 FM12 J6
1M02 E5 FM13 J6
1M03 I5 FM15 I6
1M04 G2 FM17 B14
1M05 A9 FM18 B14
1M06 E3 FM19 C14
1M07 E3 FM24 C6
1M08 F3 FM25 J7
1M09 F3 FM26 H7
2M01 B13 IM01 C7
2M02 B13 IM02 C7
2M03 B13 IM03 G7
2M04 B13 IM04 F7
2M05 B13 IM07 C7
2M06 B13 IM08 G7
2M07 C13 IM09 K7
2M08 C13 IM10 J7
2M09 C13 IM12 F9
2M10 C13 IM13 F12
2M15 B13 IM14 H12
2M16 B13 IM15 H12
2M17 B13 IM27 H12
2M19 B14 IM35 B12
2M20 B14 IM36 C12
2M21 B14 IM37 C6
2M46 D7 IM38 C6
2M47 H7 IM39 D6
2M48 K7 IM40 G6
2M50 C7 IM41 G6
2M51 C7 IM42 G6
2M52 F7 IM43 J6
2M53 F7 IM44 K6
2M54 J7 IM45 K6
2M55 J7 IM46 I9
2M56 E10 IM47 F4
2M57 E10 IM48 F4
3M03 C7 IM49 F4
3M04 C8 IM50 F4
3M07 F7
3M08 G8
3M09 G9
3M10 I9
3M11 I9
3M13 J7
3M14 H12
3M15 H12
3M18 F9
3M19 F9
3M20 E10
3M21 E10
3M31 J8
3M32 F12
3M33 D10
3M34 G9
3M35 B7
3M36 B7
3M37 F7
3M38 F7
3M39 J7
3M40 J7
3M61 D7
3M62 D7
3M63 D7
3M66 H7
3M67 H7
3M68 H7
3M71 K7
3M72 K7
3M73 K7
3M78 C6
3M79 C7
3M80 C6
3M81 G6
3M82 G7
3M83 G6
3M84 J6
3M85 K7
3M86 K6
3M87 I13
3M88 I13
4M01 F12
4M02 B12
4M05 H12
4M06 H12
4M10 C12
4M12 F12
4M20 D12
4M29 G12
4M30 H12
4M31 G12
4M32 D7
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4M37 C7
4M38 G7
4M39 G7
4M40 K7
4M41 K7
4M42 E4
4M43 E4
4M44 E4
4M45 F4
4M46 F4
4M47 F4
4M48 F4
4M49 F4
4M50 F4
4M51 F4
4M52 F4
4M53 F4
4M54 H7
5M01 C12
5M02 B12
5M03 B12
6M08 F13
6M13 G12
6M14 G12
6M15 H12
6M16 G12
6M17 G12
6M18 G12
6M19 D5
6M20 D5
6M21 G6
6M22 G5
6M23 K5
6M24 K5
7M02 C7
7M04 G7
7M07 F10
7M09 J7
7M16 D6
7M17 H6
7M18 K6
7M20 C6
7M21 G6
7M22 J6
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FM05 B6
FM06 E6
FM07 F6
FM08 F6
FM09 E2
FM10 F6
FM11 J6

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SSB: HDMI Main

B07B HDMI MAIN

HDMI A

"N00 ~ N99"

MULTIPLE 12NC : 3139_123_63481
SINGLE 12NC : 3139_123_63491

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180208

1N02 E5 3N47 E2
1N03 D2 3N48 F2
2N13 E5 3N49 F3
2N14 E5 3N50 E2
2N15 A10 3N51 F2
2N16 A10 3N52 F3
2N17 A10 4N05 A5
2N18 A10 4N06 B5
2N20 A10 4N07 C6
2N25 B10 4N08 C6
2N26 B10 4N14 F3
2N27 B11 4N15 F3
2N28 B10 5N01 A12
2N29 B10 5N02 A12
2N30 B11 5N03 B12
2N31 B10 5N04 C12
2N32 B11 5N05 C12
2N33 C11 5N06 D12
2N34 C10 5N07 D12
2N35 D11 5N08 E12
2N36 C11 5N09 F12
2N37 D11 6N41 A2
2N38 D10 6N42 B2
2N39 D10 7N01-1 B7
2N40 D11 7N01-2 B9
2N41 D10 7N01-3 F9
2N42 D10 7N40 B2
2N43 D10 7N43 F3
2N44 D11 7N44 F2
2N45 D10 FN10 A5
2N46 D11 FN11 B5
2N47 D11 FN12 B3
2N48 D10 FN13 B5
2N49 E11 FN14 B5
2N50 E11 FN15 C3
2N51 E10 FN16 D2
2N52 E10 FN17 E2
2N53 E11 FN18 F4
2N54 E10 IN10 A12
2N55 E11 IN11 A2
2N56 E11 IN12 A12
2N58 E11 IN13 B12
2N59 E10 IN14 C12
2N60 F10 IN15 C12
2N61 B10 IN16 D12
2N62 B11 IN17 D12
2N63 E10 IN18 E12
2N64 F11 IN19 E8
2N65 F8 IN20 E8
2N66 C10 IN21 E5
2N68 B3 IN22 E8
2N69 C5 IN23 E3
2N70 C5 IN24 E5
2N71 E3 IN25 F5
2N72 E3 IN26 F8
3N01 C7 IN27 F12
3N02-1 C7 IN28 F2
3N02-2 C7 IN29 F3
3N02-3 C7 IN30 F3
3N02-4 C7 IN31 F3
3N03 C7
3N04-1 D7
3N04-2 D7
3N04-3 D7
3N04-4 D7
3N05 D7
3N06-1 D7
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3N06-3 D7
3N06-4 D7
3N07 D7
3N08-1 C7
3N08-2 C7
3N08-3 C7
3N08-4 C7
3N09 D7
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3N11-4 E7
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3N12-2 E7
3N12-3 E7
3N12-4 E7
3N13 E7
3N14 E7
3N15 E7
3N16 F7
3N19 E5
3N20 F5
3N21 F5
3N22 E5
3N24 E5
3N33 B8
3N34 C6
3N37 A5
3N38 A5
3N39 C5
3N40 C5
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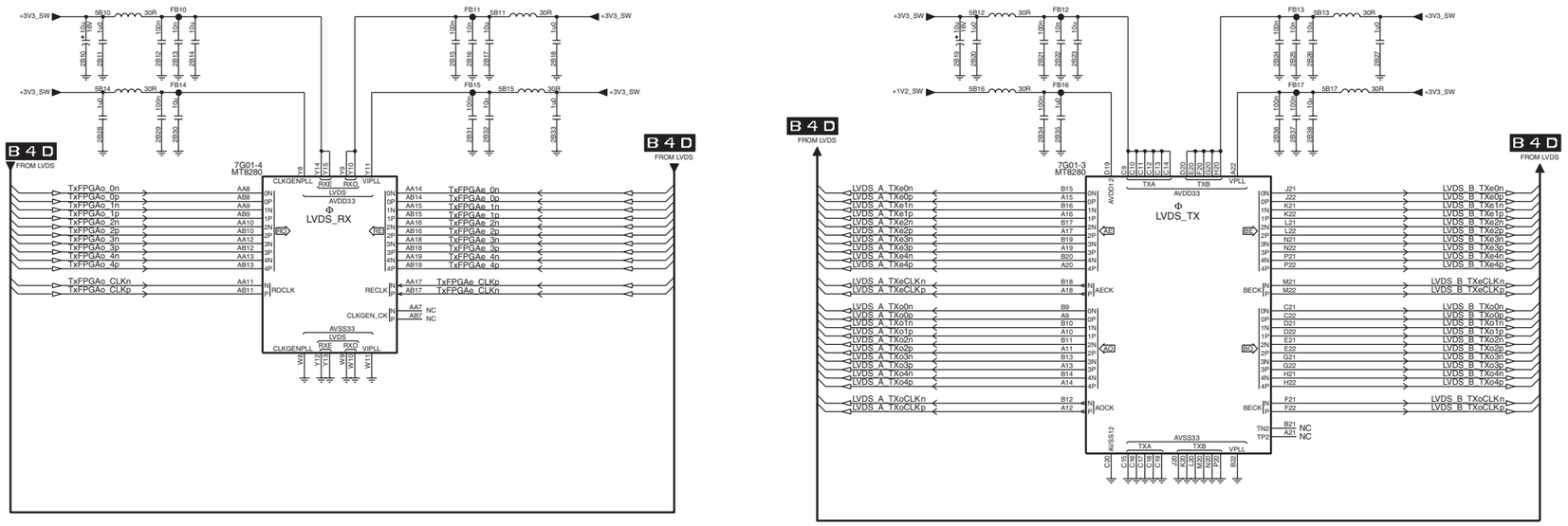
3N42 B2
3N43 B3
3N46 E2

SSB: MJC MT8280 LVDS

B08A MJC MT8280 - LVDS

B08A



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2B19 D10
2B20 D11
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2B22 D11
2B23 D11
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2B26 D13
2B27 D14
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2B29 E4
2B30 E4
2B31 E6
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2B33 E7
2B34 E11
2B35 E11
2B36 E13
2B37 E13
2B38 E13
3B01-1 E4
3B01-2 E4
3B01-3 E4
3B01-4 E4
3B02-1 F4
3B02-2 F4
3B02-3 E4
3B02-4 F4
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3B06-1 F6
3B06-2 F6
3B06-3 F6
3B06-4 F6
5B10 D3
5B11 D7
5B12 D11
5B13 D14
5B14 D3
5B15 D7
5B16 D11
5B17 D14
7G01-3 E12
7G01-4 E5
FB10 D4
FB11 D6
FB12 D11
FB13 D13
FB14 D4
FB15 D6
FB16 D11
FB17 D13

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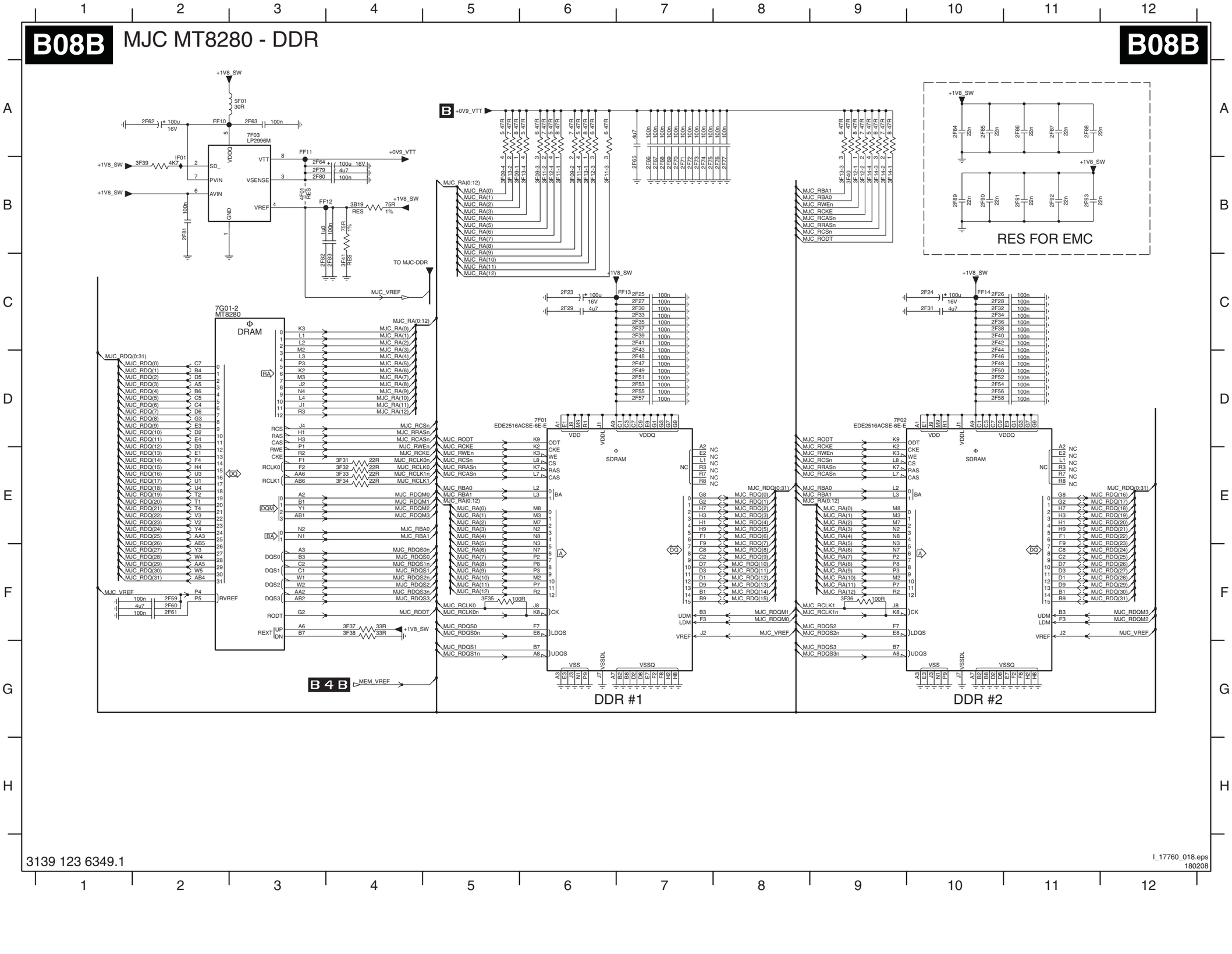
SSB: MJC MT8280 DDR

B08B MJC MT8280 - DDR **B08B**



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2F30 C7
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2F32 C10
2F33 C7
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2F41 C7
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2F49 D7
2F50 D10
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2F52 D10
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2F54 D10
2F55 D7
2F56 D10
2F57 D7
2F58 D10
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2F60 F2
2F61 F2
2F62 A2
2F63 A3
2F64 B3
2F65 B7
2F66 B7
2F67 B7
2F68 B7
2F69 B7
2F70 B7
2F71 B7
2F72 B7
2F73 B7
2F74 B7
2F75 B7
2F76 B8
2F77 B8
2F79 B3
2F80 B3
2F81 B2
2F82 C3
2F83 C4
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3F12-2 B9
3F12-3 B6
3F12-4 B6
3F13-1 B6
3F13-2 B5
3F13-3 B9
3F13-4 B6
3F14-1 B9
3F14-2 B9
3F14-3 B9
3F14-4 B9
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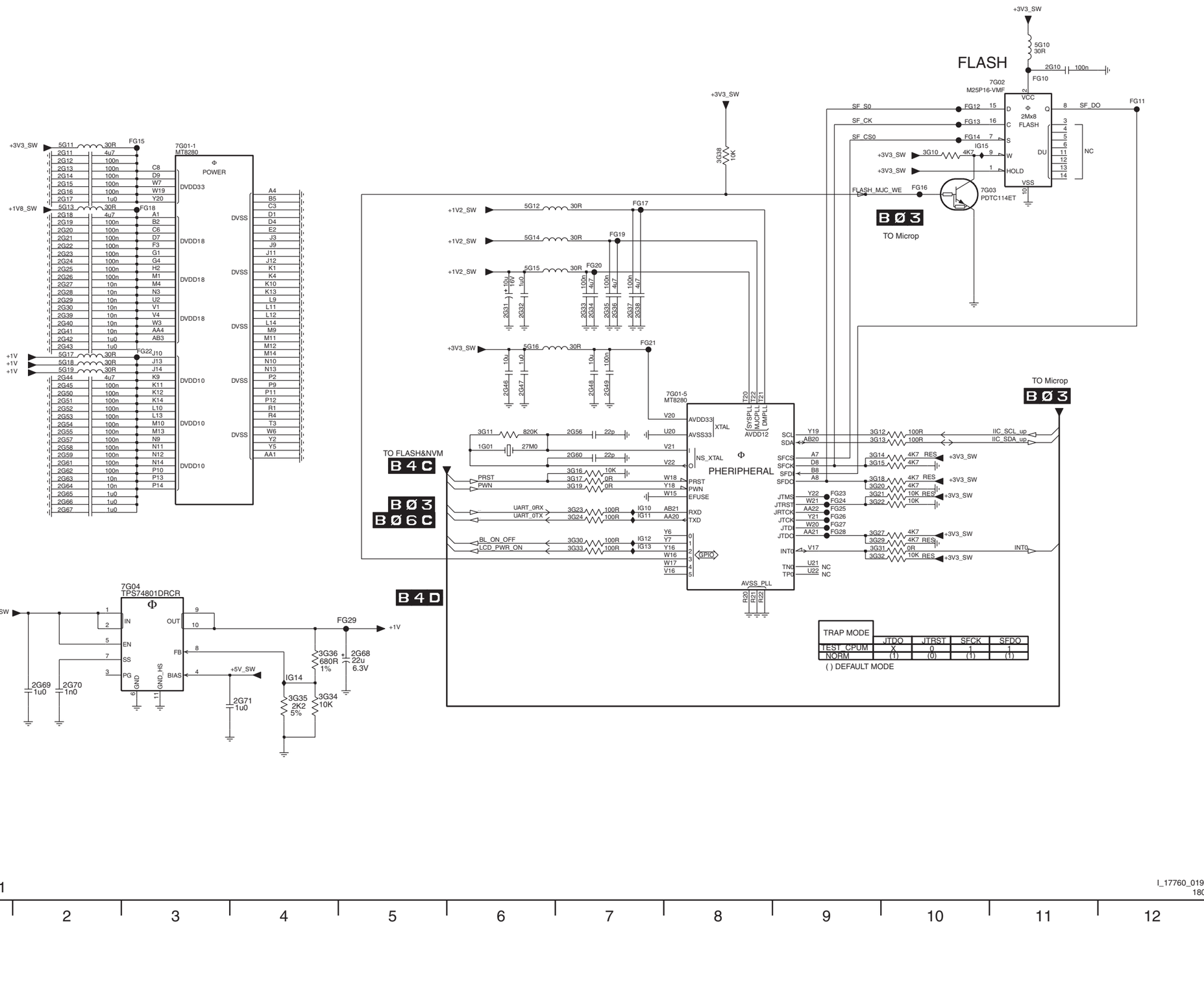
3F32 E4
3F33 E4
3F34 E4
3F35 F5
3F36 F9
3F37 F4
3F38 F4
3F39 B2
3F40 B9
3F41 C4
4F01 B3
5F01 A3

7F01 D6
7F02 D10
7F03 A3
7G01-2 C2
FF10 A2
FF11 A3
FF12 B4
FF13 C7
FF14 C10
IF01 B2

SSB: MJC MT8280 Power

B08C MJC MT8280 - POWER

B08C



TRAP MODE	JTDO	JTRST	SFCK	SFDO
TEST_CPUM	X	0	1	1
NORM	(1)	(0)	(1)	(1)

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1G01 E6
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2G11 B2
2G12 B2
2G13 B2
2G14 B2
2G15 B2
2G16 B2
2G17 B2
2G18 C2
2G19 C2
2G20 C2
2G21 C2
2G22 C2
2G23 C2
2G24 C2
2G25 C2
2G26 C2
2G27 C2
2G28 C2
2G29 C2
2G30 C2
2G31 C6
2G32 C6
2G33 C7
2G34 C7
2G35 C7
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2G37 C7
2G38 C7
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2G41 D2
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2G43 D2
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2G56 E7
2G57 E2
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2G60 E7
2G61 E2
2G62 E2
2G63 E2
2G64 E2
2G65 E2
2G66 E2
2G67 E2
2G68 G5
2G69 G2
2G70 G2
2G71 G4
3G10 B10
3G11 E6
3G12 E9
3G13 E9
3G14 E9
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3G23 E7
3G24 E7
3G27 F9
3G29 F9
3G30 F7
3G31 F9
3G32 F9
3G33 F7
3G34 G4
3G35 G4
3G36 G4
3G38 B8
5G10 A11
5G11 B2
5G12 C6
5G13 C2
5G14 C6
5G15 C6
5G16 D6
5G17 D2
5G18 D2
5G19 D2
7G01-1 B3
7G01-5 D8
7G02 A11
7G03 B10
7G04 F3
FG10 A11
FG11 B12
FG12 B10
FG13 B10
FG14 B10
FG15 B3
FG16 B10
FG17 B7
FG18 C3
FG19 C7
FG20 C7
FG21 D7
FG22 D3
FG23 E9
FG24 E9
FG25 E9
FG26 E9
FG27 E9
FG28 F9
FG29 F5
IG10 E7
IG11 E7
IG12 F7
IG13 F7
IG14 G4
IG15 B10

SSB: SRP List Explanation

Example

Net Name	*Diagram*
+12-15V	AP1 (4x)
+12-15V	AP4 (4x)
+12-15V	AP5 (12x)
+12-15V	AP6 (4x)
+12-15V	AP7 (8x)
+12V	AP1 (4x)
+12V_NF	AP1 (2x)
+12VAL	AP1 (2x)
+25VLP	AP1 (4x)
+25VLP	AP2 (1x)
+3V3-STANDBY	AP5 (3x)
+400V-F	AP1 (2x)
+400V-F	AP2 (2x)
+400V-F	AP3 (2x)
+5V2	AP1 (6x)
+5V2	AP2 (1x)
+5V2-NF	AP1 (1x)
+5V2-NF	AP2 (1x)
+5V-SW	AP1 (6x)
+5V-SW	AP2 (1x)
+8V6	AP1 (3x)
+AUX	AP1 (2x)
+AUX	AP2 (1x)
+DC-F	AP1 (2x)
+DC-F	AP3 (2x)
+SUB-SPEAKER	AP5 (1x)
+SUB-SPEAKER	AP6 (2x)
-12-15V	AP1 (4x)
-12-15V	AP4 (6x)
-12-15V	AP5 (14x)
-12-15V	AP6 (6x)
-12-15V	AP7 (8x)
AL-OFF	AP1 (2x)
AUDIO-L	AP4 (1x)
AUDIO-L	AP5 (1x)
AUDIO-PROT	AP5 (3x)
AUDIO-R	AP4 (1x)
AUDIO-R	AP5 (1x)
AUDIO-SW	AP5 (1x)
AUDIO-SW	AP7 (1x)
BOOST	AP1 (2x)
CPROT	AP4 (2x)
CPROT	AP5 (1x)
CPROT-SW	AP5 (1x)
CPROT-SW	AP6 (2x)
-DC-F	AP1 (2x)
-DC-F	AP3 (2x)
DC-PROT	AP1 (1x)
DC-PROT	AP5 (2x)
DIM-CONTROL	AP1 (2x)
FEEDBACK+SW	AP6 (2x)
FEEDBACK-L	AP4 (2x)
FEEDBACK-R	AP4 (2x)
FEEDBACK-SW	AP6 (2x)
GND-AL	AP1 (2x)
GNDHA	AP1 (40x)
GNDHA	AP2 (20x)
GNDHA	AP3 (2x)
GNDHOT	AP3 (2x)
GND-L	AP1 (2x)
GND-L	AP4 (4x)
GND-L	AP5 (34x)
GND-LL	AP4 (7x)
GND-LL	AP5 (1x)
GND-LR	AP4 (7x)
GND-LR	AP5 (1x)
GND-LSW	AP5 (1x)
GND-LSW	AP6 (15x)
GND-S	AP1 (11x)
GND-SA	AP4 (8x)
GND-SA	AP5 (2x)
GND-SA	AP6 (8x)
GND-SA	AP7 (6x)
GNDscrew	AP3 (2x)
GNDscrew	AP5 (2x)
GND-SSB	AP5 (3x)
GND-SSP	AP1 (51x)
GND-SSP	AP2 (15x)
IN+SW	AP6 (2x)
IN-L	AP4 (2x)
IN-R	AP4 (2x)
IN-SW	AP6 (2x)
INV-MUTE	AP4 (1x)
INV-MUTE	AP5 (1x)
INV-MUTE	AP6 (1x)
LEFT-SPEAKER	AP4 (1x)
LEFT-SPEAKER	AP5 (1x)
MUTE	AP4 (2x)
MUTE	AP5 (1x)
MUTE	AP6 (2x)
ON-OFF	AP1 (3x)
OUT	AP6 (1x)
OUT	AP7 (2x)
OUTN	AP6 (1x)
OUTN	AP7 (1x)
POWER-GOOD	AP1 (2x)
POWER-OK-PLATFORM	AP1 (2x)
RIGHT-SPEAKER	AP4 (1x)
RIGHT-SPEAKER	AP5 (1x)
SOUND-ENABLE	AP5 (3x)
STANDBY	AP1 (5x)
STANDBY	AP2 (1x)
-SUB-SPEAKER	AP5 (1x)
-SUB-SPEAKER	AP6 (2x)
V-CLAMP	AP1 (1x)
V-CLAMP	AP3 (2x)

1.1. Introduction

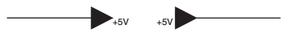
SRP (Service Reference Protocol) is a software tool that creates a list with all references to signal lines. The list contains references to the signals within all schematics of a PWB. It replaces the text references currently printed next to the signal names in the schematics. These printed references are created manually and are therefore not guaranteed to be 100% correct. In addition, in the current crowded schematics there is often none or very little place for these references.
Some of the PWB schematics will use SRP while others will still use the manual references. Either there will be an SRP reference list for a schematic, or there will be printed references in the schematic.

1.2. Non-SRP Schematics

There are several different signals available in a schematic:

1.2.1. Power Supply Lines

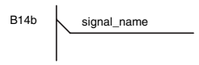
All power supply lines are available in the supply line overview (see chapter 6). In the schematics (see chapter 7) is not indicated where supplies are coming from or going to.
It is however indicated if a supply is incoming (created elsewhere), or outgoing (created or adapted in the current schematic).



Outgoing Incoming

1.2.2. Normal Signals

For normal signals, a schematic reference (e.g. B14b) is placed next to the signals.



1.2.3. Grounds

For normal and special grounds (e.g. GNDHOT or GND3V3 etc.), nothing is indicated.

1.3. SRP Schematics

SRP is a tool, which automatically creates a list with signal references, indicating on which schematic the signals are used.
A reference is created for all signals indicated with an SRP symbol, these symbols are:

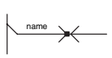
Power supply line.

Stand alone signal or switching line (used as less as possible).

Signal line into a wire tree.

Switching line into a wire tree.

Bi-directional line (e.g. SDA) into a wire tree.



Signal line into a wire tree, its direction depends on the circuit (e.g. ingoing for PDP, outgoing for LCD sets).

Remarks:

- When there is a black dot on the "signal direction arrow" it is an SRP symbol, so there will be a reference to the signal name in the SRP list.
- All references to normal grounds (Ground symbols without additional text) are not listed in the reference list, this to keep it concise.
- Signals that are not used in multiple schematics, but only once or several times in the same schematic, are included in the SRP reference list, but only with one reference.

Additional Tip:

When using the PDF service manual file, you can very easily search for signal names and follow the signal over all the schematics. In Adobe PDF reader:

- Select the signal name you want to search for, with the "Select text" tool.
- Copy and paste the signal name in the "Search PDF" tool.
- Search for all occurrences of the signal name.
- Now you can quickly jump between the different occurrences and follow the signal over all schematics. It is advised to "zoom in" to e.g. 150% to see clearly, which text is selected. Then you can zoom out, to get an overview of the complete schematic.

PS. It is recommended to use at least Adobe PDF (reader) version 6.x, due to better search possibilities in this version.

E_06532_031.eps
230606

Personal Notes:

SSB: SRP List Part 1

Netname	Schematic
+12V	B02A (1x)
+12V	B02B (2x)
+12V	B02C (2x)
+12V	B04A (1x)
+12V	B06B (1x)
+12V	B08C (1x)
+12V	B09A (6x)
+12V-DISP	B01B (1x)
+12V-DISP	B04O (1x)
+12V-DISP	B06B (1x)
+12VF	B02A (1x)
+12VF	B02B (1x)
+12VF	B02C (1x)
+12VS	B01A (2x)
+12VS	B02A (1x)
+12VS	B02B (1x)
+1V2	B02A (6x)
+1V2	B03A (3x)
+1V2	B04E (1x)
+1V2	B04P (8x)
+1V2-FPGA	B05C (14x)
+1V2-PLL	B05C (9x)
+1V2-STAB	B05B (2x)
+1V2-STANDBY	B02A (1x)
+1V2-STANDBY	B02B (1x)
+1V2-STANDBY	B04P (1x)
+1V4	B02C (1x)
+1V4	B05B (2x)
+1V5	B06C (2x)
+1V5-P3	B06C (2x)
+1V5-PLL	B06C (2x)
+1V5-RX	B06C (2x)
+1V5-TX	B06C (2x)
+1V8	B02A (1x)
+1V8	B04G (7x)
+1V8	B04P (2x)
+1V8-PNX	B04P (3x)
+2V5	B02C (2x)
+2V5	B04A (1x)
+2V5	B05B (1x)
+2V5out-FPGA	B05C (2x)
+2V5-P3	B06C (2x)
+2V5-PF	B06C (4x)
+2V5-PLL	B06C (2x)
+2V5-STAB	B05B (2x)
+2V5-TUN	B03A (5x)
+3V3	B02A (1x)
+3V3	B03A (6x)
+3V3	B03B (1x)
+3V3	B04A (1x)
+3V3	B04E (1x)
+3V3	B04L (1x)
+3V3	B04M (2x)
+3V3	B04P (2x)
+3V3	B04Q (1x)
+3V3	B05B (4x)
+3V3	B05C (1x)
+3V3	B05D (1x)
+3V3	B06B (9x)
+3V3	B06C (6x)
+3V3	B08B (1x)
+3V3	B08C (1x)
+3V3	B08F (1x)
+3V3	B10A (7x)
+3V3-ANA	B08F (3x)
+3V3-ATSC	B03A (11x)
+3V3-DIG	B08F (2x)
+3V3F	B02A (2x)
+3V3F	B02C (1x)
+3V3-FPGA	B05B (4x)
+3V3-FPGA	B05C (6x)
+3V3-NAND	B04Q (5x)
+3V3-P3	B06C (7x)
+3V3-PER	B04E (4x)
+3V3-PER	B04F (4x)
+3V3-PER	B04K (2x)
+3V3-PER	B04N (1x)
+3V3-PER	B04P (7x)
+3V3-SD1	B05D (3x)
+3V3-STANDBY	B02B (1x)
+3V3-STANDBY	B04A (17x)
+3V3-STANDBY	B04B (2x)
+3V3-STANDBY	B04C (2x)
+3V3-STANDBY	B04D (3x)
+3V3-STANDBY	B04E (2x)
+3V3-STANDBY	B04M (1x)
+3V3-STANDBY	B04P (1x)
+3V3-STANDBY	B06B (3x)
+3V3-STANDBY	B08A (2x)
+3V3-STANDBY	B08C (2x)
+3V3-STANDBY	B11A (1x)
+3V3-STANDBY	B11C (2x)
+3V3-UART	B08C (2x)
+5V-CON	B08D (3x)
+5V-CON	B08F (1x)
+5V-MUX	B08F (2x)
+5V-ON	B01B (1x)
+5V-ON	B02B (1x)
+5V-ON	B03A (1x)
+5V-ON	B03B (2x)
+5V-ON	B04A (1x)
+5V-ON	B06B (5x)
+5V-ON	B06C (1x)
+5V-ON	B10B (1x)
+5V-POD	B01B (1x)
+5V-POD	B02A (1x)
+5V-POD	B02B (1x)
+5V-POD	B10B (1x)
+5VS	B02B (1x)
+5VS	B04C (2x)
+5VS	B04D (1x)
+5VS	B04L (1x)
+5VS	B04M (1x)
+5VS	B08D (1x)
+5VS	B09A (1x)
+5VS	B10C (1x)
+5V-STANDBY	B01A (2x)
+5V-STANDBY	B02B (2x)
+5V-STANDBY	B06B (2x)
+8V2-PAS	B04I (1x)
+AUDIO-L	B11A (2x)
+AUDIO-L	B11A (3x)
+AUDIO-POWER	B01A (2x)
+AUDIO-POWER	B11A (3x)
+Vin-FPGA	B05C (2x)
+VTUN	B02B (2x)
4-MHz	B03B (2x)
ADAC(1)	B04I (1x)
ADAC(1)	B04L (1x)
ADAC(2)	B04I (1x)
ADAC(2)	B04L (1x)
ADAC(3)	B04L (1x)
ADAC(3)	B04M (1x)
ADAC(4)	B04L (1x)
ADAC(4)	B04M (1x)
ADAC(5)	B04I (1x)
ADAC(5)	B04L (1x)
ADAC(6)	B04I (1x)
ADAC(6)	B04L (1x)
ADAC(7)	B04I (1x)
ADAC(7)	B04L (3x)
ADAC(8)	B04I (1x)
ADAC(8)	B04L (3x)
AIN-5V	B08D (3x)
ALE	B04A (2x)
ALE	B04B (1x)
A-PLOP	B04M (1x)
A-PLOP	B08C (2x)
A-PLOP-HDPH	B04M (2x)
ARX0-	B08D (1x)
ARX0-	B08F (1x)
ARX0+	B08D (1x)
ARX0+	B08F (1x)
ARX1-	B08D (1x)
ARX1-	B08F (1x)
ARX1+	B08D (1x)
ARX1+	B08F (1x)
ARX2-	B08D (1x)
ARX2-	B08F (1x)
ARX2+	B08D (1x)
ARX2+	B08F (1x)
ARXC-	B08D (1x)
ARXC-	B08F (1x)
ARXC+	B08D (1x)
ARXC+	B08F (1x)
ARX-DDC-SCL	B08D (2x)
ARX-DDC-SDA	B08D (2x)
ARX-HOTPLUG	B08D (2x)
ASDO	B05B (1x)
ASDO	B05C (1x)
AUDIO-CL-L	B04I (1x)
AUDIO-CL-R	B04I (1x)
AUDIO-HDPH-L-AP	B04M (1x)
AUDIO-HDPH-L-AP	B09B (1x)
AUDIO-HDPH-R-AP	B04M (1x)
AUDIO-HDPH-R-AP	B09B (1x)
AUDIO-IN1-L	B04L (1x)
AUDIO-IN1-L	B09A (2x)
AUDIO-IN1-R	B04L (1x)
AUDIO-IN1-R	B09A (2x)
AUDIO-IN2-L	B04L (1x)
AUDIO-IN2-L	B09A (1x)
AUDIO-IN2-R	B04L (1x)
AUDIO-IN2-R	B09A (1x)
AUDIO-IN3-L	B04L (1x)
AUDIO-IN3-L	B09A (1x)
AUDIO-IN3-R	B04L (1x)
AUDIO-IN3-R	B09A (1x)
AUDIO-IN4-L	B04L (1x)
AUDIO-IN4-L	B08C (1x)
AUDIO-IN4-R	B04L (1x)
AUDIO-IN4-R	B08C (1x)
AUDIO-IN5-L	B04L (1x)
AUDIO-IN5-L	B09B (1x)
AUDIO-IN5-R	B04L (1x)
AUDIO-IN5-R	B09B (1x)
AUDIO-MUTE	B04A (1x)
AUDIO-MUTE	B11A (1x)
AUDIO-MUTE	B11C (2x)
AUDIO-OUT-L	B04I (1x)
AUDIO-OUT-L	B08C (1x)
AUDIO-OUT-R	B04I (1x)
AUDIO-OUT-R	B08C (1x)
-AUDIO-POWER	B01A (2x)
-AUDIO-POWER	B11A (3x)
AUDIO-PROT	B01A (1x)
AUDIO-PROT	B11A (1x)
AUDIO-PROT	B11C (1x)
-AUDIO-R	B04I (1x)
-AUDIO-R	B11A (2x)
AUDIO-RESET	B04A (1x)
AUDIO-RESET	B04B (1x)
AUDIO-RESET	B04M (1x)
AUDIO-VDD	B04I (7x)
AUDIO-VEE	B04I (7x)
AV1_C	B04K (1x)
AV1_C	B09A (1x)
AV1_PB	B04K (1x)
AV1_PB	B09A (1x)
AV1_PR	B04K (1x)
AV1_PR	B09A (1x)
AV1_Y	B04K (1x)
AV1_Y	B09A (1x)
AV1_Y-CVBS	B04K (1x)
AV1_Y-CVBS	B09A (1x)
AV1-BLK	B04B (1x)
AV1-BLK	B09A (1x)
AV1-STATUS	B04A (1x)
AV2_Y-CVBS	B04K (1x)
AV2_Y-CVBS	B09A (1x)
AV2-BLK	B04A (2x)
AV2-STATUS	B04A (1x)
AV3_PB	B04K (1x)
AV3_PB	B09A (1x)
AV3_PR	B04K (1x)
AV3_PR	B09A (1x)
AV3_Y	B04K (1x)
AV3_Y	B09A (1x)
AV4_PB	B04K (1x)
AV4_PR	B04K (1x)
AV4_Y	B04K (1x)
BACKLIGHT-BOOST	B01B (1x)
BACKLIGHT-BOOST	B06B (1x)
BACKLIGHT-CONTROL	B06B (1x)
BACKLIGHT-CONTROL	B06C (1x)
BACKLIGHT-OUT	B01B (1x)
BACKLIGHT-OUT	B06B (2x)
BIN-5V	B08D (3x)
BOLT-ON-IO	B04A (2x)
BOLT-ON-IO	B09A (1x)
BRX0-	B08D (1x)
BRX0-	B08F (1x)
BRX0+	B08D (1x)
BRX0+	B08F (1x)
BRX1-	B08D (1x)
BRX1-	B08F (1x)
BRX1+	B08D (1x)
BRX1+	B08F (1x)
BRX2-	B08D (1x)
BRX2-	B08F (1x)
BRX2+	B08D (1x)
BRX2+	B08F (1x)
BRXC-	B08D (1x)
BRXC-	B08F (1x)
BRXC+	B08D (1x)
BRXC+	B08F (1x)
BRX-DDC-SCL	B08D (2x)
BRX-DDC-SDA	B08D (2x)
BRX-HOTPLUG	B08D (2x)
B-VGA	B04K (1x)
CA-ADDEN	B04N (1x)
CA-CD1	B04N (1x)
CA-CD2	B04N (1x)
CA-CTRLEN_BOOTMODE	B04E (2x)
CA-DATADIR	B04N (1x)
CA-DATAEN	B04N (1x)
CA-INT	B04E (1x)
CA-MDI0	B04N (1x)
CA-MDI1	B04N (1x)
CA-MDI2	B04N (1x)
CA-MDI3	B04N (1x)
CA-MDI4	B04N (1x)
CA-MDI5	B04N (1x)
CA-MDI6	B04N (1x)
CA-MDI7	B04N (1x)
CA-MDO0	B04N (1x)
CA-MDO1	B04N (1x)
CA-MDO2	B04N (1x)
CA-MDO3	B04N (1x)
CA-MDO4	B04N (1x)
CA-MDO5	B04N (1x)
CA-MDO6	B04N (1x)
CA-MDO7	B04N (1x)
CA-MICLK	B04N (1x)
CA-MISTRT	B04N (1x)
CA-MIVAL	B04N (1x)
CA-MOCLK_VS2	B04N (1x)
CA-MOSTRT	B04N (1x)
CA-MOVAL	B04N (1x)
CA-OOBEN	B04N (1x)
CA-RST	B04N (1x)
CA-VCCEN	B04N (1x)
CA-VPPEN	B04N (1x)
CA-VS1	B04N (1x)
CEC-HDMI	B04A (2x)
CEC-HDMI	B04H (1x)
CEC-HDMI	B08D (1x)
CIN-5V	B08D (3x)
C-MON-OUT	B04K (1x)
C-MON-OUT	B09B (1x)
CONF-DONE	B05B (1x)
CONF-DONE	B05C (1x)
CRX0-	B08D (1x)
CRX0-	B08F (1x)
CRX0+	B08D (1x)
CRX0+	B08F (1x)
CRX1-	B08D (1x)
CRX1-	B08F (1x)
CRX1+	B08D (1x)
CRX1+	B08F (1x)
CRX2-	B08D (1x)
CRX2-	B08F (1x)
CRX2+	B08D (1x)
CRX2+	B08F (1x)
CRXC-	B08D (1x)
CRXC-	B08F (1x)
CRXC+	B08D (1x)
CRXC+	B08F (1x)
CRX-DDC-SCL	B08D (2x)
CRX-DDC-SDA	B08D (2x)
CRX-HOTPLUG	B08D (2x)
CTRL1-FPGA	B05C (1x)
CTRL1-FPGA	B06B (1x)
CTRL1-MIPS_LCD-PWR-ON	B04E (1x)
CTRL1-MIPS_LCD-PWR-ON	B06B (2x)
CTRL1-STBY_LAMP-ON	B04B (1x)
CTRL1-STBY_LAMP-ON	B06B (2x)
CTRL2-FPGA	B05C (1x)
CTRL2-FPGA	B06B (1x)
CTRL2-STBY_BACKLIGHT-CTRL_RESET-P3	B04A (2x)
CTRL2-STBY_BACKLIGHT-CTRL_RESET-P3	B06B (2x)
CTRL2-STBY_BACKLIGHT-CTRL_RESET-P3	B06C (1x)
CTRL3-FPGA	B05C (1x)
CTRL3-FPGA	B06B (1x)
CTRL3-STBY_POWER-OK-DISP	B04A (1x)
CTRL3-STBY_POWER-OK-DISP	B04B (1x)
CTRL3-STBY_POWER-OK-DISP	B06B (1x)
CTRL4-FPGA	B05C (1x)
CTRL4-FPGA	B06B (1x)
CTRL4-P3	B06B (1x)
CTRL4-P3	B06C (2x)
CTRL4-STBY_SELECT-PWM-ANA	B04B (1x)
CTRL4-STBY_SELECT-PWM-ANA	B06B (2x)
CTRL5-STBY_BACKLIGHT-BOOST	B04A (2x)
CTRL5-STBY_BACKLIGHT-BOOST	B06B (2x)
CTRL-DISP1	B06A (1x)
CTRL-DISP1	B06B (1x)
CTRL-DISP2	B06A (1x)
CTRL-DISP2	B06B (1x)
CTRL-DISP3	B06A (1x)
CTRL-DISP3	B06B (1x)
CTRL-DISP4	B06A (1x)
CTRL-DISP4	B06B (1x)
CVBS4	B03B (1x)
CVBS4	B04K (1x)
DATA0	B05B (1x)
DATA0	B05C (1x)
DCLK	B05B (1x)
DCLK	B05C (1x)
DC-SENSE	B11A (1x)
DC-SENSE	B11C (1x)
DDC-SCL	B04H (1x)
DDC-SCL	B08F (1x)
DDC-SDA	B04H (1x)
DDC-SDA	B08F (1x)
DDR2-A0	B04G (4x)
DDR2-A1	B04G (4x)
DDR2-A10	B04G (4x)
DDR2-A11	B04G (4x)
DDR2-A12	B04G (4x)
DDR2-A2	B04G (4x)
DDR2-A3	B04G (4x)
DDR2-A4	B04G (4x)
DDR2-A5	B04G (4x)
DDR2-A6	B04G (4x)
DDR2-A7	B04G (4x)
DDR2-A8	B04G (4x)
DDR2-A9	B04G (4x)
DDR2-BA0	B04G (4x)
DDR2-BA1	B04G (4x)
DDR2-CAS	B04G (4x)
DDR2-CKE	B04G (4x)
DDR2-CLK_N	B04G (4x)
DDR2-CLK_P	B04G (4x)
DDR2-CS	B04G (4x)
DDR2-D0	B04G (2x)
DDR2-D1	B04G (2x)
DDR2-D10	B04G (2x)
DDR2-D11	B04G (2x)
DDR2-D12	B04G (2x)
DDR2-D13	B04G (2x)
DDR2-D14	B04G (2x)
DDR2-D15	B04G (2x)
DDR2-D16	B04G (2x)
DDR2-D17	B04G (2x)
DDR2-D18	B04G (2x)
DDR2-D19	B04G (2x)
DDR2-D2	B04G (2x)
DDR2-D20	B04G (2x)
DDR2-D21	B04G (2x)
DDR2-D22	B04G (2x)
DDR2-D23	B04G (2x)
DDR2-D24	B04G (2x)
DDR2-D25	B04G (2x)
DDR2-D26	B04G (2x)
DDR2-D27	B04G (2x)
DDR2-D28	B04G (2x)
DDR2-D29	B04G (2x)
DDR2-D3	B04G (2x)
DDR2-D30	B04G (2x)
DDR2-D31	B04G (2x)
DDR2-D4	B04G (2x)
DDR2-D5	B04G (2x)
DDR2-D6	B04G (2x)
DDR2-D7	B04G (2x)
DDR2-D8	B04G (2x)
DDR2-D9	B04G (2x)
DDR2-DQM0	B04G (2x)
DDR2-DQM1	B04G (2x)
DDR2-DQM2	B04G (2x)
DDR2-DQM3	B04G (2x)
DDR2-DQS0_N	B04G (3x)
DDR2-DQS0_P	B04G (2x)
DDR2-DQS1_N	B04G (3x)
DDR2-DQS1_P	B04G (2x)
DDR2-DQS2_N	B04G (3x)
DDR2-DQS2_P	B04G (2x)
DDR2-DQS3_N	B04G (3x)
DDR2-DQS3_P	B04G (2x)
DDR2-ODT	B04G (4x)
DDR2-RAS	B04G (4x)
DDR2-VREF-CTRL	B04G (2x)
DDR2-VREF-DDR	B04G (3x)
DDR2-WE	B04G (4x)
DETECT-1V2-2V5-3V3	B04A (6x)
DETECT-5V-12V	B04A (1x)
DETECT-5V-12V	B04B (1x)
DV-B0_UART2-RX	B04O (1x)
DV-B0_UART2-RX	B05C (1x)
DV-B0_UART2-RX	B08C (1x)
DV-B0_UART2-RX	B09A (1x)
DV-B1_UART2-TX	B04O (1x)
DV-B1_UART2-TX	B05C (1x)
DV-B1_UART2-TX	B08C (1x)
DV-B1_UART2-TX	B09A (1x)
DV-B2_DEBUG-BREAK	B04B (1x)
DV-B2_DEBUG-BREAK	B04O (1x)
DV-B2_DEBUG-BREAK	B05C (1x)
DV-B3_AUDIO-MUTE	B04A (1x)
DV-B3_AUDIO-MUTE	B04O (1x)
DV-B3_AUDIO-MUTE	B05C (1x)
DV-B4_UV0	B04O (1x)
DV-B4_UV0	B05C (1x)
DV-B5_UV1	B04O (1x)
DV-B5_UV1	B05C (1x)
DV-B6_Y0	B04O (1x)
DV-B6_Y0	B05C (1x)
DV-B7_Y1	B04O (1x)
DV-B7_Y1	B05C (1x)
DV-CLK	B04O (1x)
DV-CLK	B05C (1x)
DV-CLK-PLL	B05C (3x)
DV-FF_DE	B04O (1x)
DV-FF_DE	B05C (1x)
DV-G0_UV2	B04O (1x)
DV-G0_UV2	B05C (1x)
DV-G1_UV3	B04O (1x)
DV-G1_UV3	B05C (1x)
DV-G2_UV4	B04O (1x)
DV-G2_UV4	B05C (1x)
DV-G3_UV5	B04O (1x)
DV-G3_UV5	B05C (1x)
DV-G4_UV6	B04O (1x)
DV-G4_UV6	B05C (1x)
DV-G5_UV7	B04O (1x)
DV-G5_UV7	B05C (1x)
DV-G6_UV8	B04O (1x)
DV-G6_UV8	B05C (1x)
DV-G7_UV9	B04O (1x)
DV-G7_UV9	B05C (1x)
DV-HS	B04O (1x)
DV-HS	B05C (1x)
DV-R0_Y2	B04O (1x)
DV-R0_Y2	B05C (1x)
DV-R1_Y3	B04O (1x)
DV-R1_Y3	B05C (1x)
DV-R2_Y4	B04O (1x)
DV-R2_Y4	B05C (1x)
DV-R3_Y5	B04O (1x)
DV-R3_Y5	B05C (1x)
DV-R4_Y6	B04O (1x)
DV-R4_Y6	B05C (1x)
DV-R5_Y7	B04O (1x)
DV-R5_Y7	B05C (1x)
DV-R6_Y8	B04O (1x)
DV-R6_Y8	B05C (1x)
DV-R7_Y9	B04O (1x)
DV-R7_Y9	B05C (1x)
DV-VS	B04O (1x)
DV-VS	B05C (1x)
EA	B04A (2x)
EA	B04B (1x)
EJTAG-DETECT	B03A (1x)
EJTAG-DETECT	B04B (1x)
EJTAG-TCK	B03A (1x)
EJTAG-TCK	B04E (1x)
EJTAG-TDI	B03A (1x)
EJTAG-TDI	B04E (1x)
EJTAG-TDO	B03A (1x)
EJTAG-TDO	B04E (1x)
EJTAG-TMS	B03A (1x)
EJTAG-TMS	B04E (1x)
EJTAG-TRSTN	B03A (1x)
EJTAG-TRSTN	B04E (1x)
ENABLE-1V2	B04B (6x)
ENABLE-3V3	B02A (1x)
ENABLE-3V3	B04B (1x)
FE-CLK	B03A (1x)
FE-CLK	B04N (1x)
FE-DATA0	B03A (1x)
FE-DATA0	B04N (1x)
FE-DATA1	B03A (1x)
FE-DATA1	B04N (1x)
FE-DATA2	B03A (1x)
FE-DATA2	B04N (1x)
FE-DATA3	B03A (1x)
FE-DATA3	B04N (1x)
FE-DATA4	B03A (1x)
FE-DATA4	B04N (1x)
FE-DATA5	B03A (1x)
FE-DATA5	B04N (1x)
FE-DATA6	B03A (1x)
FE-DATA6	B04N (1x)
FE-DATA7	B03A (1x)
FE-DATA7	B04N (1x)
FEEDBACK	B11A (3x)
FEEDBACK-LR	B11A (2x)
FEEDBACK-RL	B11A (2x)
FE-ERR	B03A (1x)
FE-ERR	B04N (2x)
FE-SOP	B03A (1x)
FE-SOP	B04N (1x)
FE-VALID	B03A (1x)
FE-VALID	B04N (1x)
FM-TRAP-SWITCH	B03A (1x)
FM-TRAP-SWITCH	B03B (1x)
FRONT_C	B04K (1x)
FRONT_C	B09B (1x)
FRONT_Y-CVBS	B04K (1x)
FRONT_Y-CVBS	B09B (1x)
GND1V4	B02C (7x)
GNDP	B01A (9x)
GND-RX	B06C (5x)
GND-SIG	B02A (15x)
GNDSND	B01A (1x)
GNDSND	B11A (16x)
GNDSND	B11C (8x)
GND-SPK	B11A (3x)
GND-TX	B06C (6x)
GNDV	B01A (7x)
G-VGA	B04K (1x)
HOT-PLUG	B04H (1x)
HOT-PLUG	B08D (3x)
H-SYNC-VGA	B04K (1x)
IF-FILTN1	B03B (1x)
IF-FILTP1	B03B (1x)
IF-N	B03B (1x)
IF-N	B04K (1x)
IF-OUT	B03B (2x)
IF-P	B03B (1x)
IF-P	B04K (1x)
IRQ-PCI	B04E (1x)
IRQ-PCI	B10A (2x)
IRQ-PNX5050	B08B (1x)
JTAG-TCK	B03A (1x)
JTAG-TCK	B06C (1x)
JTAG-TD-CON-PACIFIC	B06C (2x)
JTAG-TD-PACIFIC-PNX5050	B05B (1x)
JTAG-TD-PACIFIC-PNX5050	B06C (2x)
JTAG-TD-PNX5050-PNX8535	B04E (1x)
JTAG-TD-PNX5050-PNX8535	B05B (1x)
JTAG-TD-PNX8535-FE	B03A (1x)
JTAG-TD-PNX8535-FE	B04E (1x)
JTAG-TMS	B03A (1x)
JTAG-TMS	B06C (1x)
JTAG-TRST	B06C (1x)
KEYBOARD	B04A (2x)
KEYBOARD	B10C (1x)
LAMP-ON-OUT	B01B (1x)
LAMP-ON-OUT	B06B (1x)
LED1	B04A (1x)
LED1	B10C (1x)
LED1-3V3	B04A (1x)
LED1-3V3	B04B (1x)
LED2	B04A (1x)
LED2	B10C (1x)
LED2-3V3	B04A (3x)
LEFT-SPEAKER	B11A (2x)
LIGHT-SENSOR	B04A (1x)
LIGHT-SENSOR	B10C (1x)
MP-LED1	B05B (1x)
MP-LED1	B05C (1x)
MP-LED2	B05B (1x)
MP-LED2	B05C (1x)
MP-LED3	B05B (1x)
MP-LED3	B05C (1x)
MP-LED4	B05B (1x)
MP-LED4	B05C (1x)
MP-LED5	B05B (1x)
MP-LED5	B05C (1x)
MSEL1	B05C (2x)
MUTE	B11A (2x)
MUTE	B11C (1x)
NAND-AD(0)	B04Q (2x)
NAND-AD(1)	B04Q (2x)
NAND-AD(2)	B04Q (2x)
NAND-AD(3)	B04Q (2x)
NAND-AD(4)	B04Q (2x)
NAND-AD(5)	B04Q (2x)
NAND-AD(6)	B04Q (2x)
NAND-AD(7)	B04Q (2x)
NAND-ALE	B04Q (2x)
NAND-CLE	B04Q (2x)
NAND-REn	B04Q (2x)
NAND-WEn	B04Q (2x)
nCONFIG	B05B (1x)
nCONFIG	B05C (1x)
nCSO	B05B (1x)
nCSO	B05C (1x)
ON-MODE	B02B (1x)
ON-MODE	B04B (1x)
ON-MODE	B04D (1x)
ON-MODE	B05B (1x)
ON-MODE	B06B (1x)
ON-MODE	B11A (1x)
OVP	B02A (1x)
OVP	B02C (1x)
P0.0	B04A (2x)
P0.0	B04B (1x)
P0.1	B04A (2x)
P0.1	B04B (1x)
P0.2	B04A (2x)
P0.2	B04B (1x)
P0.3	B04A (2x)
P0.3	B04B (1x)
P0.4	B04A (2x)
P0.4	B04B (1x)
P0.5	B04A (2x)
P0.5	B04B (1x)
P0.6	B04A (2x)
P0.6	B04B (1x)
P0.7	B04A (2x)
P0.7	B04B (1x)
P2.0	B04A (2x)
P2.0	B04B (1x)
P2.1	B04A (2x)
P2.1	B04B (1x)
P2.2	B04A (2x)
P2.2	B04B (1x)
P2.3	B04A (2x)
P2.3	B04B (1x)
P2.4	B04A (2x)
P2.4	B04B (1x)
P2.5	B04A (2x)
P2.5	B04B (1x)
P2.6	B04A (2x)
P2.6	B04B (1x)
P2.7	B04A (2x)
P2.7	B04B (1x)
P3-VS	B06B (1x)
P3-VS	B06C (1x)

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SSB: SRP List Part 2

Netname	Schematic
PARX-DDC-SCL	B08D (1x)
PARX-DDC-SCL	B08F (1x)
PARX-DDC-SDA	B08D (1x)
PARX-DDC-SDA	B08F (1x)
PBRX-DDC-SCL	B08D (1x)
PBRX-DDC-SCL	B08F (1x)
PBRX-DDC-SDA	B08D (1x)
PBRX-DDC-SDA	B08F (1x)
PCEC-HDMI	B08D (4x)
PCI-AD0	B04F (1x)
PCI-AD0	B04Q (1x)
PCI-AD0	B08E (1x)
PCI-AD0	B10A (1x)
PCI-AD1	B04F (1x)
PCI-AD1	B04Q (1x)
PCI-AD1	B08E (1x)
PCI-AD1	B10A (1x)
PCI-AD10	B04F (1x)
PCI-AD10	B08E (1x)
PCI-AD10	B10A (1x)
PCI-AD11	B04F (1x)
PCI-AD11	B08E (1x)
PCI-AD11	B10A (1x)
PCI-AD12	B04F (1x)
PCI-AD12	B08E (1x)
PCI-AD12	B10A (1x)
PCI-AD13	B04F (1x)
PCI-AD13	B08E (1x)
PCI-AD13	B10A (1x)
PCI-AD14	B04F (1x)
PCI-AD14	B08E (1x)
PCI-AD14	B10A (1x)
PCI-AD15	B04F (1x)
PCI-AD15	B08E (1x)
PCI-AD15	B10A (1x)
PCI-AD16	B04F (1x)
PCI-AD16	B08E (1x)
PCI-AD16	B10A (1x)
PCI-AD17	B04F (1x)
PCI-AD17	B08E (1x)
PCI-AD17	B10A (1x)
PCI-AD18	B04F (1x)
PCI-AD18	B08E (1x)
PCI-AD18	B10A (1x)
PCI-AD19	B04F (1x)
PCI-AD19	B08E (1x)
PCI-AD19	B10A (1x)
PCI-AD2	B04F (1x)
PCI-AD2	B08E (1x)
PCI-AD2	B10A (1x)
PCI-AD20	B04F (1x)
PCI-AD20	B08E (1x)
PCI-AD20	B10A (1x)
PCI-AD21	B04F (1x)
PCI-AD21	B08E (1x)
PCI-AD21	B10A (1x)
PCI-AD22	B04F (1x)
PCI-AD22	B08E (1x)
PCI-AD22	B10A (2x)
PCI-AD23	B04F (1x)
PCI-AD23	B08E (1x)
PCI-AD23	B10A (1x)
PCI-AD24	B04F (2x)
PCI-AD24	B04Q (1x)
PCI-AD24	B08E (1x)
PCI-AD24	B10A (1x)
PCI-AD25	B04F (1x)
PCI-AD25	B04Q (1x)
PCI-AD25	B08E (1x)
PCI-AD25	B10A (1x)
PCI-AD26	B04F (1x)
PCI-AD26	B04Q (1x)
PCI-AD26	B08E (1x)
PCI-AD26	B10A (1x)
PCI-AD27	B04F (1x)
PCI-AD27	B04Q (1x)
PCI-AD27	B08E (1x)
PCI-AD27	B10A (1x)
PCI-AD28	B04F (1x)
PCI-AD28	B04Q (1x)
PCI-AD28	B08E (1x)
PCI-AD28	B10A (1x)
PCI-AD29	B04F (1x)
PCI-AD29	B04Q (1x)
PCI-AD29	B08E (1x)
PCI-AD29	B10A (1x)
PCI-AD3	B04F (1x)
PCI-AD3	B08E (1x)
PCI-AD3	B10A (1x)
PCI-AD30	B04F (1x)
PCI-AD30	B04Q (1x)
PCI-AD30	B08E (1x)
PCI-AD30	B10A (1x)
PCI-AD31	B04F (1x)
PCI-AD31	B04Q (1x)
PCI-AD31	B08E (1x)
PCI-AD31	B10A (1x)
PCI-AD4	B04F (1x)
PCI-AD4	B08E (1x)
PCI-AD4	B10A (1x)
PCI-AD5	B04F (1x)
PCI-AD5	B08E (1x)
PCI-AD5	B10A (1x)
PCI-AD6	B04F (1x)
PCI-AD6	B08E (1x)
PCI-AD6	B10A (1x)
PCI-AD7	B04F (1x)
PCI-AD7	B08E (1x)
PCI-AD7	B10A (1x)
PCI-AD8	B04F (1x)
PCI-AD8	B08E (1x)
PCI-AD8	B10A (1x)
PCI-AD9	B04F (1x)
PCI-AD9	B08E (1x)
PCI-AD9	B10A (1x)
PCI-CBE0	B04F (1x)
PCI-CBE0	B08E (1x)
PCI-CBE0	B10A (1x)
PCI-CBE1	B04F (1x)
PCI-CBE1	B04Q (1x)
PCI-CBE1	B08E (1x)
PCI-CBE1	B10A (1x)
PCI-CBE2	B04F (1x)
PCI-CBE2	B04Q (1x)
PCI-CBE2	B08E (1x)
PCI-CBE2	B10A (1x)
PCI-CBE3	B04F (1x)
PCI-CBE3	B08E (1x)
PCI-CBE3	B10A (1x)
PCI-CLK-DEBUG	B04E (2x)
PCI-CLK-DEBUG	B08E (1x)
PCI-CLK-OUT	B04E (3x)
PCI-CLK-PNX5050_CLK-MOP	B04E (2x)
PCI-CLK-PNX5050_CLK-MOP	B05C (1x)
PCI-CLK-PNX8535	B04E (2x)
PCI-CLK-PNX8535	B04F (1x)
PCI-CLK-USB20	B04E (2x)
PCI-CLK-USB20	B10A (1x)
PCI-DEVSEL	B04F (2x)
PCI-DEVSEL	B08E (1x)
PCI-DEVSEL	B10A (1x)
PCI-FRAME	B04F (2x)
PCI-FRAME	B08E (1x)
PCI-FRAME	B10A (1x)
PCI-GNT	B04F (2x)
PCI-GNT-B	B04F (2x)
PCI-GNT-DEBUG	B08B (1x)
PCI-GNT-PNX5050	B08B (1x)
PCI-GNT-PNX8535	B04F (1x)
PCI-GNT-PNX8535	B08B (2x)
PCI-GNT-PNX8535	B08E (1x)
PCI-GNT-USB20	B04F (1x)
PCI-GNT-USB20	B10A (2x)
PCI-INTA-OUT	B04F (1x)
PCI-INTA-OUT	B08B (1x)
PCI-INTA-OUT	B08E (1x)
PCI-IRDY	B04F (2x)
PCI-IRDY	B08E (1x)
PCI-IRDY	B10A (1x)
PCI-PAR	B04F (1x)
PCI-PAR	B08E (1x)
PCI-PAR	B10A (1x)
PCI-PERR	B04F (2x)
PCI-PERR	B08E (1x)
PCI-PERR	B10A (1x)
PCI-REQ	B04F (2x)
PCI-REQ-B	B04F (2x)
PCI-REQ-DEBUG	B08B (1x)
PCI-REQ-PNX5050	B08B (1x)
PCI-REQ-PNX8535	B04F (1x)
PCI-REQ-PNX8535	B08B (2x)
PCI-REQ-PNX8535	B08E (1x)
PCI-REQ-USB20	B04F (1x)
PCI-REQ-USB20	B10A (1x)
PCI-SERR	B04F (2x)
PCI-SERR	B08E (1x)
PCI-SERR	B10A (1x)
PCI-STOP	B04F (2x)
PCI-STOP	B08E (1x)
PCI-STOP	B10A (1x)
PCI-TRDY	B04F (2x)
PCI-TRDY	B08E (1x)
PCI-TRDY	B10A (1x)
PCRX-DDC-SCL	B08D (1x)
PCRX-DDC-SCL	B08F (1x)
PCRX-DDC-SDA	B08D (1x)
PCRX-DDC-SDA	B08F (1x)
POD-MODE	B02A (1x)
POD-MODE	B02B (1x)
POD-MODE	B04B (1x)
POD-MODE	B04D (1x)
POD-MODE	B06B (1x)
POWER-OK-DISPLAY	B01B (1x)
POWER-OK-DISPLAY	B04A (1x)
PROT-DC	B02A (1x)
PROT-DC	B02C (2x)
PSEN	B04A (2x)
PSEN	B04B (1x)
PWM-3	B06C (2x)
PWM-OR	B06C (2x)
RC	B04A (2x)
RC	B10C (1x)
REGIMBEAU_CVBS-SWITCH	B04B (1x)
REGIMBEAU_CVBS-SWITCH	B09B (1x)
RESET-NVM_WP-NANDFLASH	B04B (1x)
RESET-NVM_WP-NANDFLASH	B04C (1x)
RESET-NVM_WP-NANDFLASH	B04Q (1x)
RESET-NVM_WP-NANDFLASH-INV	B04Q (2x)
RESET-STBY	B04B (1x)
RESET-STBY	B04D (1x)
RESET-STBY-J	B04A (1x)
RESET-STBY-J	B04B (1x)
RESET-SYS-DETECT	B03A (1x)
RESET-SYS-DETECT	B04A (2x)
RESET-SYS-DETECT	B04E (2x)
RESET-SYS-DETECT	B08F (1x)
RESET-SYS-DETECT	B10A (1x)
RESET-USB20	B10A (2x)
RIGHT-SPEAKER	B11A (2x)
RREF-PNX8535	B04H (1x)
RREF-PNX8535	B04P (2x)
R-VGA	B04K (1x)
RX0-	B04H (1x)
RX0-	B08F (1x)
RX0+	B04H (1x)
RX0+	B08F (1x)
RX1-	B04H (1x)
RX1-	B08F (1x)
RX1+	B04H (1x)
RX1+	B08F (1x)
RX2-	B04H (1x)
RX2-	B08F (1x)
RX2+	B04H (1x)
RX2+	B08F (1x)
RXC-	B04H (1x)
RXC-	B08F (1x)
RXC+	B04H (1x)
RXC+	B08F (1x)
RXD	B04C (1x)
RXD	B08A (1x)
RXD	B08C (1x)
RXD2	B08C (1x)
RXD2	B09A (1x)
RXD-MIPS	B04C (1x)
RXD-MIPS	B04E (1x)
RXD-SERV	B08A (1x)
RXD-SERV	B08C (1x)
RXD-UP	B04A (2x)
RXD-UP	B04C (1x)
RxP3CLK	B06C (1x)
RxP3eA-_G7	B05A (1x)
RxP3eA-_G7	B06A (1x)
RxP3eA-_G7	B06C (1x)
RxP3eA+_G6	B05A (1x)
RxP3eA+_G6	B06A (1x)
RxP3eA+_G6	B06C (1x)
RxP3eB-_G5	B05A (1x)
RxP3eB-_G5	B06A (1x)
RxP3eB-_G5	B06C (1x)
RxP3eB+_G4	B05A (1x)
RxP3eB+_G4	B06A (1x)
RxP3eB+_G4	B06C (1x)
RxP3eC-_G3	B05A (1x)
RxP3eC-_G3	B06A (1x)
RxP3eC-_G3	B06C (1x)
RxP3eC+_G2	B05A (1x)
RxP3eC+_G2	B06A (1x)
RxP3eC+_G2	B06C (1x)
RxP3eCLK-_G0	B05A (1x)
RxP3eCLK-_G0	B06A (1x)
RxP3eCLK-_G0	B06C (1x)
RxP3eCLK+_G1	B05A (1x)
RxP3eCLK+_G1	B06A (1x)
RxP3eCLK+_G1	B06C (1x)
RxP3eD-_R9	B05A (1x)
RxP3eD-_R9	B06A (1x)
RxP3eD-_R9	B06C (1x)
RxP3eD+_R8	B05A (1x)
RxP3eD+_R8	B06A (1x)
RxP3eD+_R8	B06C (1x)
RxP3eE-_R7	B05A (1x)
RxP3eE-_R7	B06A (1x)
RxP3eE-_R7	B06C (1x)
RxP3eE+_R6	B05A (1x)
RxP3eE+_R6	B06A (1x)
RxP3eE+_R6	B06C (1x)
RxP3FF	B06C (1x)
RxP3HS_DE	B06C (1x)
RxP3oA-_B9	B05A (2x)
RxP3oA-_B9	B06A (1x)
RxP3oA-_B9	B06C (1x)
RxP3oA+_B8	B05A (2x)
RxP3oA+_B8	B06A (1x)
RxP3oA+_B8	B06C (1x)
RxP3oB-_B7	B05A (2x)
RxP3oB-_B7	B06A (1x)
RxP3oB-_B7	B06C (1x)
RxP3oB+_B6	B05A (2x)
RxP3oB+_B6	B06A (1x)
RxP3oB+_B6	B06C (1x)
RxP3oC-_B5	B05A (2x)
RxP3oC-_B5	B06A (1x)
RxP3oC-_B5	B06C (1x)
RxP3oC+_B4	B05A (2x)
RxP3oC+_B4	B06A (1x)
RxP3oC+_B4	B06C (1x)
RxP3oCLK-_B2	B05A (2x)
RxP3oCLK-_B2	B06A (1x)
RxP3oCLK-_B2	B06C (1x)
RxP3oCLK+_B3	B05A (2x)
RxP3oCLK+_B3	B06A (1x)
RxP3oCLK+_B3	B06C (1x)
RxP3oD-_B1	B05A (2x)
RxP3oD-_B1	B06A (1x)
RxP3oD-_B1	B06C (1x)
RxP3oD+_B0	B05A (2x)
RxP3oD+_B0	B06A (1x)
RxP3oD+_B0	B06C (1x)
RxP3oE-_G9	B05A (2x)
RxP3oE-_G9	B06A (1x)
RxP3oE-_G9	B06C (1x)
RxP3oE+_G8	B05A (2x)
RxP3oE+_G8	B06A (1x)
RxP3oE+_G8	B06C (1x)
RxP3R0	B06C (1x)
RxP3R1	B06C (1x)
RxP3R2	B06C (1x)
RxP3R3	B06C (1x)
RxP3R4	B06C (1x)
RxP3R5	B06C (1x)
RxP3VS	B06C (1x)
SCL1	B04E (2x)
SCL2	B04E (2x)
SCL-2	B04E (2x)
SCL3	B04E (2x)
SCL-AMBI	B01B (1x)
SCL-AMBI	B06B (2x)
SCL-AMBI-3V3	B05C (1x)
SCL-AMBI-3V3	B06B (1x)
SCL-AMBI-3V3	B06C (1x)
SCL-I2C4-DISP	B06A (1x)
SCL-I2C4-DISP	B06B (2x)
SCL-MUX2-BUF	B03B (2x)
SCL-SLAVE	B04E (2x)
SCL-SSB	B03A (1x)
SCL-SSB	B04E (4x)
SCL-SSB	B05C (1x)
SCL-SSB	B06C (1x)
SCL-SSB	B08F (1x)
SCL-SSB1	B03A (1x)
SCL-SSB1	B03B (1x)
SCL-SSB-MUX1	B04E (2x)
SCL-SSB-MUX1	B06B (1x)
SCL-SSB-MUX2	B03B (1x)
SCL-SSB-MUX2	B04E (2x)
SCL-UP-MIPS	B04A (3x)
SCL-UP-MIPS	B04C (1x)
SCL-UP-MIPS	B04E (2x)
SD1-A0	B05C (1x)
SD1-A0	B05D (1x)
SD1-A1	B05C (1x)
SD1-A1	B05D (1x)
SD1-A10	B05C (1x)
SD1-A10	B05D (1x)
SD1-A11	B05C (1x)
SD1-A11	B05D (1x)
SD1-A2	B05C (1x)
SD1-A2	B05D (1x)
SD1-A3	B05C (1x)
SD1-A3	B05D (1x)
SD1-A4	B05C (1x)
SD1-A4	B05D (1x)
SD1-A5	B05C (1x)
SD1-A5	B05D (1x)
SD1-A6	B05C (1x)
SD1-A6	B05D (1x)
SD1-A7	B05C (1x)
SD1-A7	B05D (1x)
SD1-A8	B05C (1x)
SD1-A8	B05D (1x)
SD1-A9	B05C (1x)
SD1-A9	B05D (1x)
SD1-CAS	B05C (1x)
SD1-CAS	B05D (1x)
SD1-CKE	B05C (1x)
SD1-CKE	B05D (1x)
SD1-CLK	B05C (1x)
SD1-CLK	B05D (1x)
SD1-CS	B05C (1x)
SD1-CS	B05D (1x)
SD1-DQ1	B05C (1x)
SD1-DQ1	B05D (1x)
SD1-DQ10	B05C (1x)
SD1-DQ10	B05D (1x)
SD1-DQ11	B05C (1x)
SD1-DQ11	B05D (1x)
SD1-DQ12	B05C (1x)
SD1-DQ12	B05D (1x)
SD1-DQ13	B05C (1x)
SD1-DQ13	B05D (1x)
SD1-DQ14	B05C (1x)
SD1-DQ14	B05D (1x)
SD1-DQ15	B05C (1x)
SD1-DQ15	B05D (1x)
SD1-DQ16	B05C (1x)
SD1-DQ16	B05D (1x)
SD1-DQ2	B05C (1x)
SD1-DQ2	B05D (1x)
SD1-DQ3	B05C (1x)
SD1-DQ3	B05D (1x)
SD1-DQ4	B05C (1x)
SD1-DQ4	B05D (1x)
SD1-DQ5	B05C (1x)
SD1-DQ5	B05D (1x)
SD1-DQ6	B05C (1x)
SD1-DQ6	B05D (1x)
SD1-DQ7	B05C (1x)
SD1-DQ7	B05D (1x)
SD1-DQ8	B05C (1x)
SD1-DQ8	B05D (1x)
SD1-DQ9	B05C (1x)
SD1-DQ9	B05D (1x)
SD1-DQM	B05C (1x)
SD1-DQM	B05D (1x)
SD1-RAS	B05C (1x)
SD1-RAS	B05D (1x)
SD1-WE	B05C (1x)
SD1-WE	B05D (1x)
SDA1	B04E (2x)
SDA2	B04E (2x)
SDA-2	B04E (2x)
SDA3	B04E (2x)
SDA-AMBI	B01B (1x)
SDA-AMBI	B06B (2x)
SDA-AMBI-3V3	B05C (1x)
SDA-AMBI-3V3	B06B (1x)
SDA-AMBI-3V3	B06C (1x)
SDA-I2C4-DISP	B06A (1x)
SDA-I2C4-DISP	B06B (2x)
SDA-MUX2-BUF	B03B (2x)
SDA-SLAVE	B04E (2x)
SDA-SSB	B03A (1x)
SDA-SSB	B04E (4x)
SDA-SSB	B05C (1x)
SDA-SSB	B06C (1x)
SDA-SSB	B08F (1x)
SDA-SSB1	B03A (1x)
SDA-SSB1	B03B (1x)
SDA-SSB-MUX1	B04E (2x)
SDA-SSB-MUX1	B06B (1x)
SDA-SSB-MUX2	B03B (1x)
SDA-SSB-MUX2	B04E (2x)
SDA-UP-MIPS	B04A (3x)
SDA-UP-MIPS	B04C (1x)
SDA-UP-MIPS	B04E (2x)
SDM	B04A (3x)
SENSE+1V2-PNX8535	B04A (4x)
SENSE+1V2-PNX8535	B04P (4x)
SENSE+1V4	B04A (1x)
SENSE+1V4	B05B (1x)
SENSE+1V8	B04P (4x)
SPDIF-IN1	B04L (1x)
SPDIF-IN1	B08B (1x)
SPDIF-OUT	B04L (1x)
SPDIF-OUT	B08B (1x)
SPI	B08B (1x)
SPI	B08C (1x)
SPI-CLK	B04A (2x)
SPI-CSB	B04A (2x)
SPI-OUT	B08B (1x)
SPI-OUT	B08C (1x)
SPI-PROG	B04A (3x)
SPI-SDI	B04A (3x)
SPI-SDO	B04A (2x)
SPI-WP	B04A (3x)
STANDBY	B01B (1x)
STANDBY	B04D (1x)
SUPPLY-FAULT	B02A (1x)
SUPPLY-FAULT	B02C (1x)
SUPPLY-FAULT	B04A (2x)
TCK	B05B (1x)
TCK	B05C (1x)
TDA-IF-AGC	B03A (1x)
TDA-IF-AGC	B03B (1x)
TDA-IF-IN-N	B03A (1x)
TDA-IF-IN-N	B03B (1x)
TDA-IF-IN-P	B03A (1x)
TDA-IF-IN-P	B03B (1x)
TDI	B05B (1x)
TDI	B05C (1x)
TDO	B05B (1x)
TDO	B05C (1x)
TMS	B05B (1x)
TMS	B05C (1x)
TUN-AGC	B03B (2x)
TUN-AGC-MON	B03A (1x)
TUN-AGC-MON	B03B (1x)
TUN-TDA-SCL	B03A (1x)
TUN-TDA-SCL	B03B (1x)
TUN-TDA-SDA	B03A (1x)
TUN-TDA-SDA	B03B (1x)
Tx8535oA-	B04O (2x)
Tx8535oA-	B05A (1x)
Tx8535oA+	B04O (2x)
Tx8535oA+	B05A (1x)
Tx8535oB-	B04O (2x)
Tx8535oB-	B05A (1x)
Tx8535oB+	B04O (2x)
Tx8535oB+	B05A (1x)
Tx8535oC-	B04O (2x)
Tx8535oC-	B05A (1x)
Tx8535oC+	B04O (2x)
Tx8535oC+	B05A (1x)
Tx8535oCLK-	B04O (2x)
Tx8535oCLK-	B05A (1x)
Tx8535oCLK+	B04O (2x)
Tx8535oCLK+	B05A (1x)
Tx8535oD-	B04O (2x)
Tx8535oD-	B05A (1x)
Tx8535oD+	B04O (2x)
Tx8535oD+	B05A (1x)
Tx8535oE-	B04O (2x)
Tx8535oE-	B05A (1x)
Tx8535oE+	B04O (2x)
Tx8535oE+	B05A (1x)
TXD	B04C (1x)
TXD	B08A (1x)
TXD	B08C (1x)
TXD2	B08C (1x)
TXD2	B09A (1x)
TXD-MIPS	B04C (1x)
TXD-MIPS	B04E (1x)
TXD-SERV	B08A (1x)
TXD-SERV	B08C (1x)
TXD-UP	B04A (2x)
TXD-UP	B04C (1x)
TXEA-	B06A (1x)
TXEA-	B06C (1x)
TXEA+	B06A (1x)
TXEA+	B06C (1x)
TXEB-	B06A (1x)
TXEB-	B06C (1x)
TXEB+	B06A (1x)
TXEB+	B06C (1x)
TXEC-	B06A (1x)
TXEC-	B06C (1x)
TXEC+	B06A (1x)
TXEC+	B06C (1x)
TXECLK-	B06A (1x)
TXECLK-	B06C (1x)
TXECLK+	B06A (1x)
TXECLK+	B06C (1x)
TXED-	B06A (1x)
TXED+	B06A (1x)
TXED+	B06C (1x)
TXEE-	B06A (1x)
TXEE-	B06C (1x)
TXEE+	B06A (1x)
TXEE+	B06C (1x)
TxFPGAeA-	B05A (1x)
TxFPGAeA-	B05C (1x)
TxFPGAeA+	B05A (1x)
TxFPGAeA+	B05C (1x)
TxFPGAeB-	B05A (1x)
TxFPGAeB-	B05C (1x)
TxFPGAeB+	B05A (1x)
TxFPGAeB+	B05C (1x)
TxFPGAeC-	B05A (1x)
TxFPGAeC-	B05C (1x)
TxFPGAeC+	B05A (1x)
TxFPGAeC+	B05C (1x)
TxFPGAeCLK-	B05A (1x)
TxFPGAeCLK-	B05C (1x)
TxFPGAeCLK+	B05A (1x)
TxFPGAeCLK+	B05C (1x)
TxFPGAeD-	B05A (1x)
TxFPGAeD-	B05C (1x)
TxFPGAeD+	B05A (1x)
TxFPGAeD+	B05C (1x)
TxFPGAeE-	B05A (1x)
TxFPGAeE-	B05C (1x)
TxFPGAeE+	B05A (1x)
TxFPGAeE+	B05C (1x)
TxFPGAoA-	B05A (1x)
TxFPGAoA-	B05C (1x)
TxFPGAoA+	B05A (1x)
TxFPGAoA+	B05C (1x)
TxFPGAoB-	B05A (1x)
TxFPGAoB-	B05C (1x)
TxFPGAoB+	B05A (1x)
TxFPGAoB+	B05C (1x)
TxFPGAoC-	B05A (1x)
TxFPGAoC-	B05C (1x)
TxFPGAoC+	B05A (1x)
TxFPGAoC+	B05C (1x)
TxFPGAoCLK-	B05A (1x)
TxFPGAoCLK-	B05C (1x)
TxFPGAoCLK+	B05A (1x)
TxFPGAoCLK+	B05C (1x)
TxFPGAoD-	B05A (1x)
TxFPGAoD-	B05C (1x)
TxFPGAoD+	B05A (1x)
TxFPGAoD+	B05C (1x)
TxFPGAoE-	B05A (1x)
TxFPGAoE-	B05C (1x)
TxFPGAoE+	B05A (1x)
TxFPGAoE+	B05C (1x)
TXOA-	B06A (1x)
TXOA-	B06C (1x)
TXOA+	B06A (1x)
TXOA+	B06C (1x)
TXOB-	B06A (1x)
TXOB-	B06C (1x)
TXOB+	B06A (1x)
TXOB+	B06C (1x)
TXOC-	B06A (1x)
TXOC-	B06C (1x)
TXOC+	B06A (1x)
TXOC+	B06C (1x)
TXOCLK-	B06A (1x)
TXOCLK-	B06C (1x)
TXOCLK+	B06A (1x)
TXOCLK+	B06C (1x)
TXOD-	B06A (1x)
TXOD-	B06C (1x)
TXOD+	B06A (1x)
TXOD+	B06C (1x)
TXOE-	B06A (1x)
TXOE-	B06C (1x)
TXOE+	B06A (1x)
TXOE+	B06C (1x)
UART-SWITCH	B04B (1x)
UART-SWITCH	B04C (1x)
UART-SWITCH	B08C (1x)
UART-SWITCHn	B04C (2x)
USB20-1-DM	B10A (2x)
USB20-1-DM	B10B (1x)
USB20-1-DP	B10A (2x)
USB20-1-DP	B10B (1x)
USB20-2-DM	B10A (2x)
USB20-2-DP	B10A (2x)
USB20-OC1	B10A (2x)
USB20-OC1	B10B (1x)
USB20-OC2	B10A (2x)
USB20-OC2	B10B (1x)
USB20-PWE1	B10A (1x)
USB20-PWE1	B10B (1x)
USB20-PWE2	B10A (1x)
USB20-PWE2	B10B (1x)
V1	B03B (2x)
V2	B03B (2x)
VDDA-ADC	B04P (2x)
VDDA-AUDIO	B04L (2x)
VDDA-AUDIO	B04P (2x)
VDDA-DAC	B04P (2x)
VDDA-LVDS	B04O (1x)
VDDA-LVDS	B04P (2x)
VDISP	B06A (1x)
VDISP	B06B (1x)
VN	B02B (4x)
VN	B04I (2x)
VN	B11A (6x)
VN	B11C (6x)
VNN	B11A (1x)
VNN	B11C (2x)
VP	B02B (4x)
VP	B04I (2x)
VP	B11A (10x)
VP	B11C (8x)
VPP	B11A (1x)
VPP	B11C (1x)
VSW	B02A (1x)
VSW	B02B (1x)
V-SYNC-VGA	B04K (1x)
VTT-TERM-DDR	B04G (2x)
XIO-ACK	B04F (1x)
XIO-ACK	B04Q (2x)
XIO-AD25	B04F (1x)
XIO-SEL-NAND	B04F (1x)
XIO-SEL-NAND	B04Q (2x)
Y-CVBS-MON-OUT	B04K (1x)
Y-CVBS-MONOUT	B08C (2x)
Y-CVBS-MON-OUT	B08C (1x)
Y-CVBS-MON-OUT_SC	B08C (2x)

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Layout Small Signal Board (Overview Top Side)

1101 E3 1102 E5 1103 E5 1104 D5 1105 E5 1106 D4 1107 C4 1108 A1 1202 B1 1203 A4 1204 A3 1205 C1
1206 C1 1301 A5 1311 D4 1320 E1 1500 E7 1501 E7 1502 E7 1503 E7 1504 E7 1505 A5 1506 A6 1507 A6
1508 A5 1509 A7 1510 E7 1511 E7 1512 E7 1513 E7 1514 E7 1515 E7 1516 E7 1517 E7 1518 D7 1519 E7
1520 E7 1521 D7 1522 E7 1523 D7 1524 D7 1531 E7 1532 E7 1533 E7 1534 E7 1535 E7 1601 E8 1602 D8
1603 D8 1605 D8 1606 E6 1607 D6 1608 E8 1609 E8 1610 E6 1611 E6 1613 E6 1615 E6 1616 D8 1617 E8
1618 C8 1619 C8 1620 D8 1621 A7 1A02 F1 1A35 F1 1C24 C5 1E01 D7 1E02 C6 1E03 B7 1E04 D4 1E06 C6
1E07 C6 1E14 C7 1E15 C7 1E16 C6 1E17 C6 1E18 C4 1E19 D4 1E21 C6 1G01 B2 1M01 B8 1M02 B7 1M03 B7
1M04 A8 1M05 B8 1M06 A8 1M07 A8 1M08 A8 1M09 A8 1N02 A6 1P01 D1 1P02 E1 1P03 E1 1P04 A3 1R01 A2
1R02 A2 1R03 A2 1R04 A2 1R05 A2 1R06 A2 1R07 A2 1R08 A2 1R09 A2 1R10 A2 1R11 A2 1R12 A2 1R13 A2
1R14 B1 1R15 B1 1R16 B1 1R17 A1 1R18 A1 1R19 A1 1R20 A1 1R21 A1 1R22 A1 1R23 A1 1R24 A1 1R25 A1
2117 D5 2127 D5 2142 D4 2205 B1 2206 B1 2207 B1 2208 B1 2209 B1 2210 B1 2211 A3 2214 A3 2215 B1
2216 C1 2217 B1 2218 B1 2219 B1 2314 A5 2315 A6 2316 A5 2317 A6 2323 A5 2324 A5 2338 B6 2341 C5
2343 A5 2344 A5 2345 A5 2346 A5 2347 C6 2409 F6 2410 F5 2423 E5 2436 F5 2445 E5
2613 C8 2614 D8 2615 C8 2616 D8 2724 A4 2A01 F2 2A02 F2 2A04 F2 2A08 F2 2A09 F2 2A11 F3
2A12 F3 2A14 F1 2A15 F3 2A16 E3 2A17 F1 2A18 F3 2A19 E3 2A20 E3 2A22 F3 2A23 F1 2A28 F1
2A29 F2 2A30 F2 2A32 F3 2A33 F2 2A34 F2 2A40 F3 2A53 D8 2A58 D8 2A62 F1 2A63 F2 2A67 F2 2A68 F2
2A69 F2 2A70 F2 2A71 F1 2A72 F1 2B10 B2 2B19 C1 2B20 C1 2C01 C5 2C02 C5 2C03 C5 2C04 C5 2C05 C5
2C06 C5 2C08 C5 2C09 C5 2C10 C5 2C11 C5 2C12 C5 2C13 C5 2C15 C5 2C17 C5 2C18 C5 2C19 C5 2C78 C5
2C79 C5 2C80 C5 2C81 C5 2C83 C5 2C94 C5 2C95 C5 2D31 C4 2D32 C4 2D71 B3 2D72 B3 2E09 D7 2E10 D7
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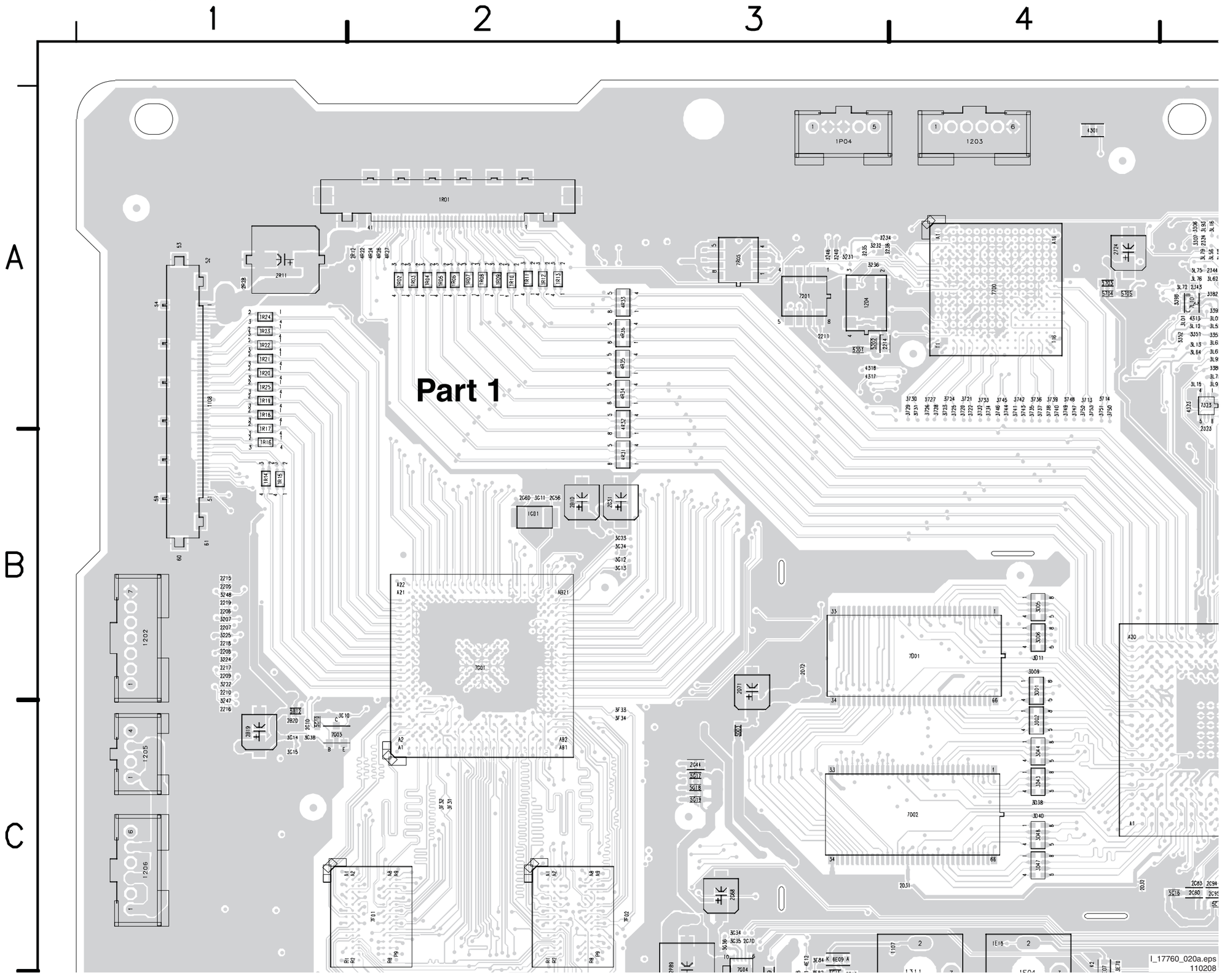

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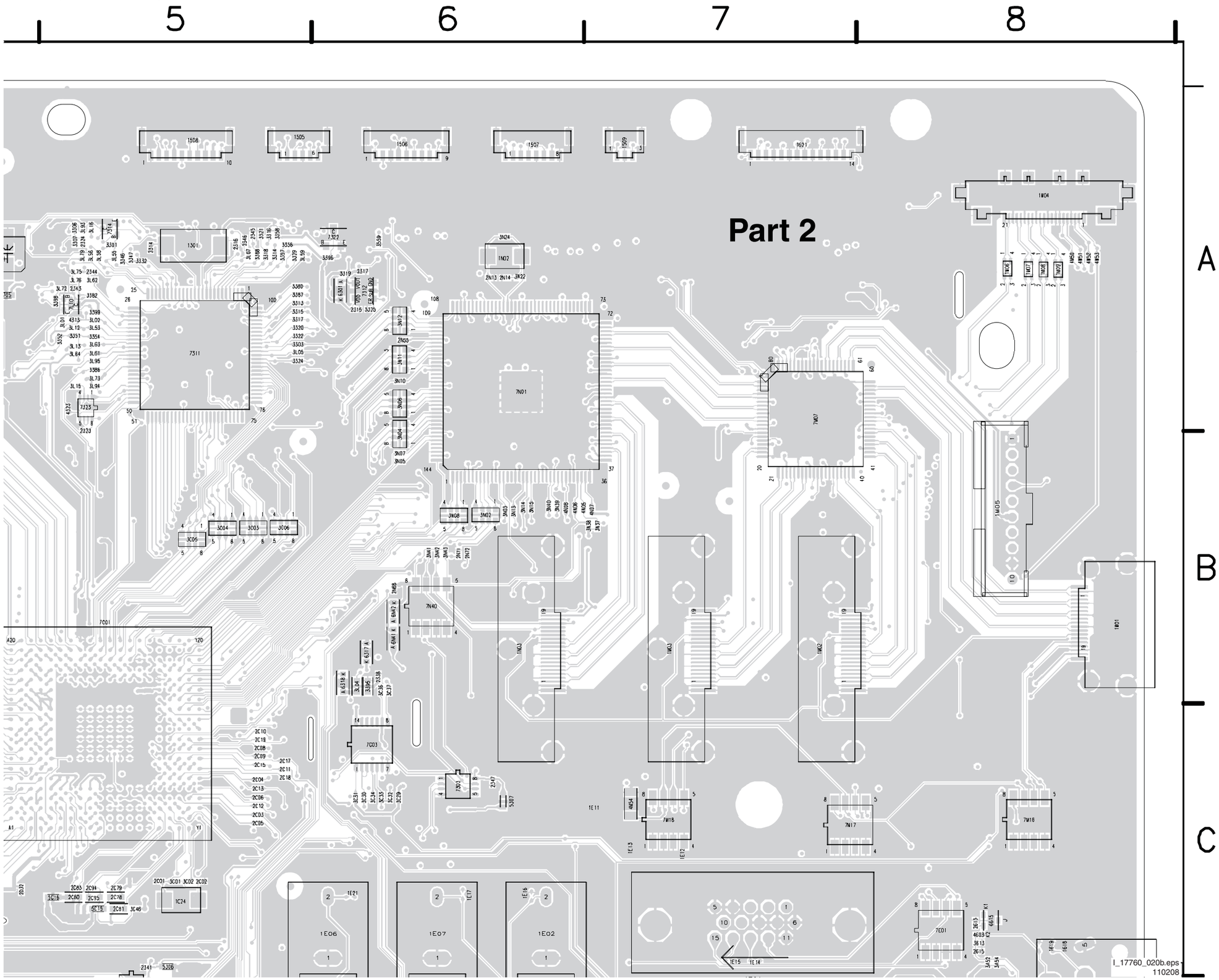

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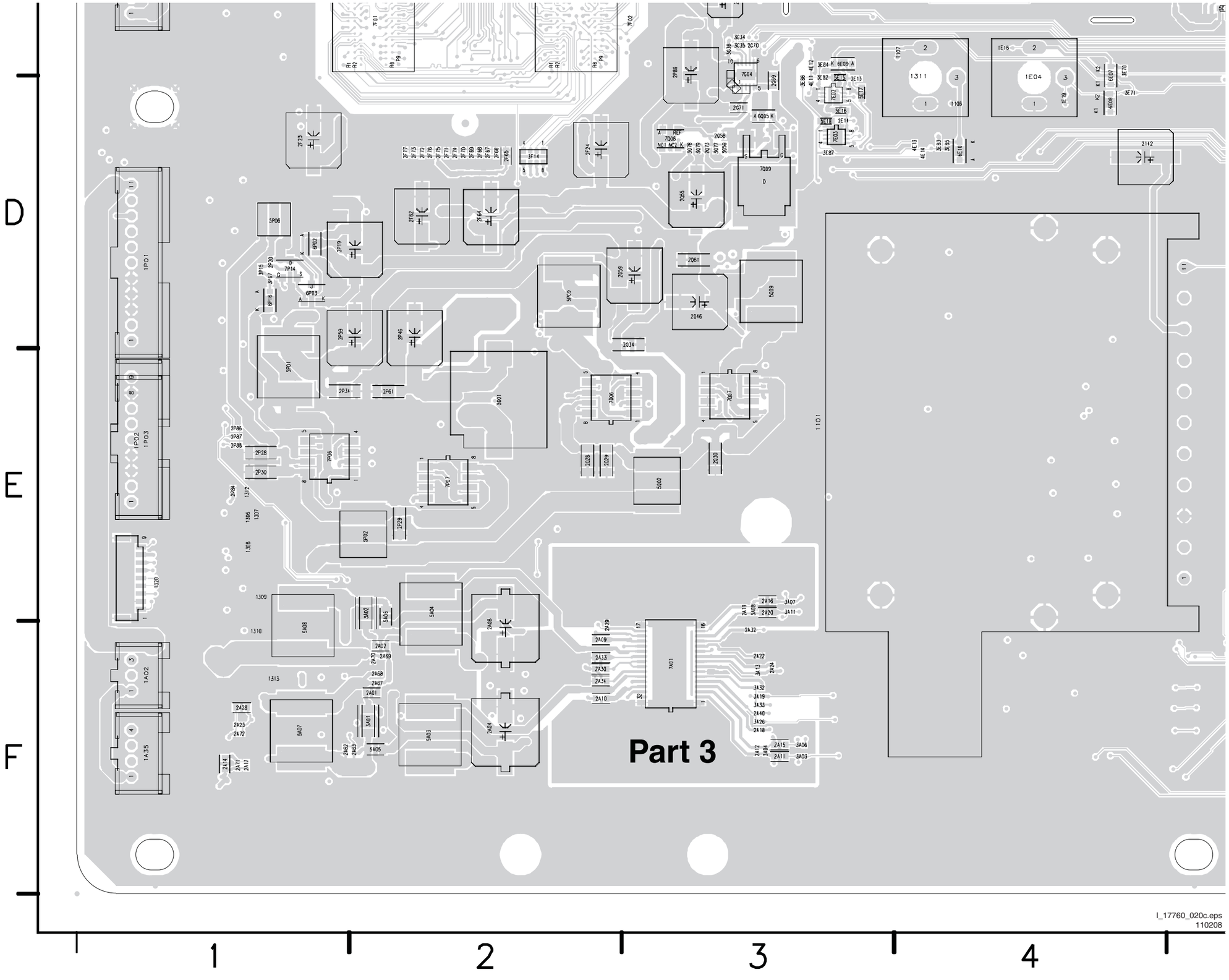

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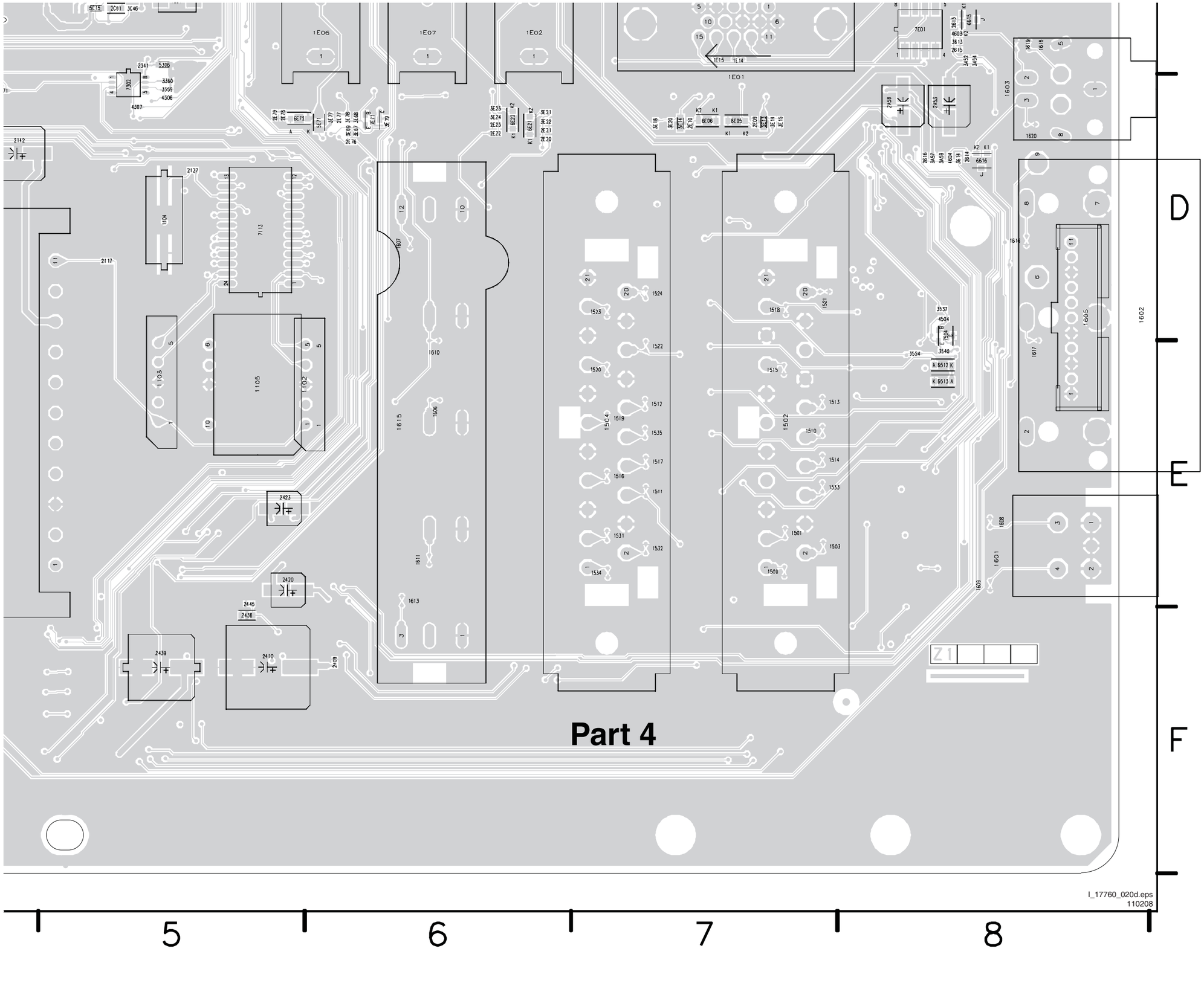

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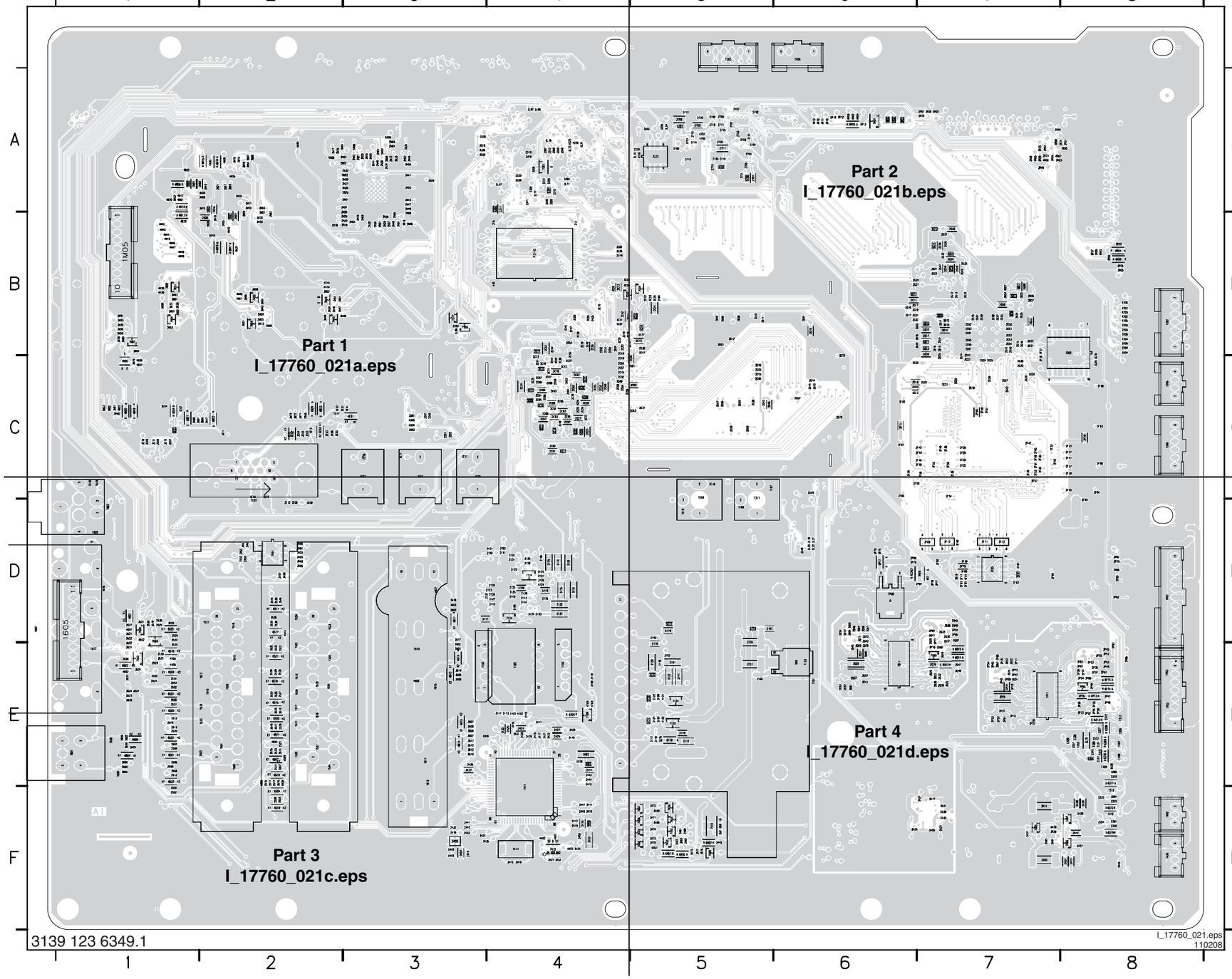

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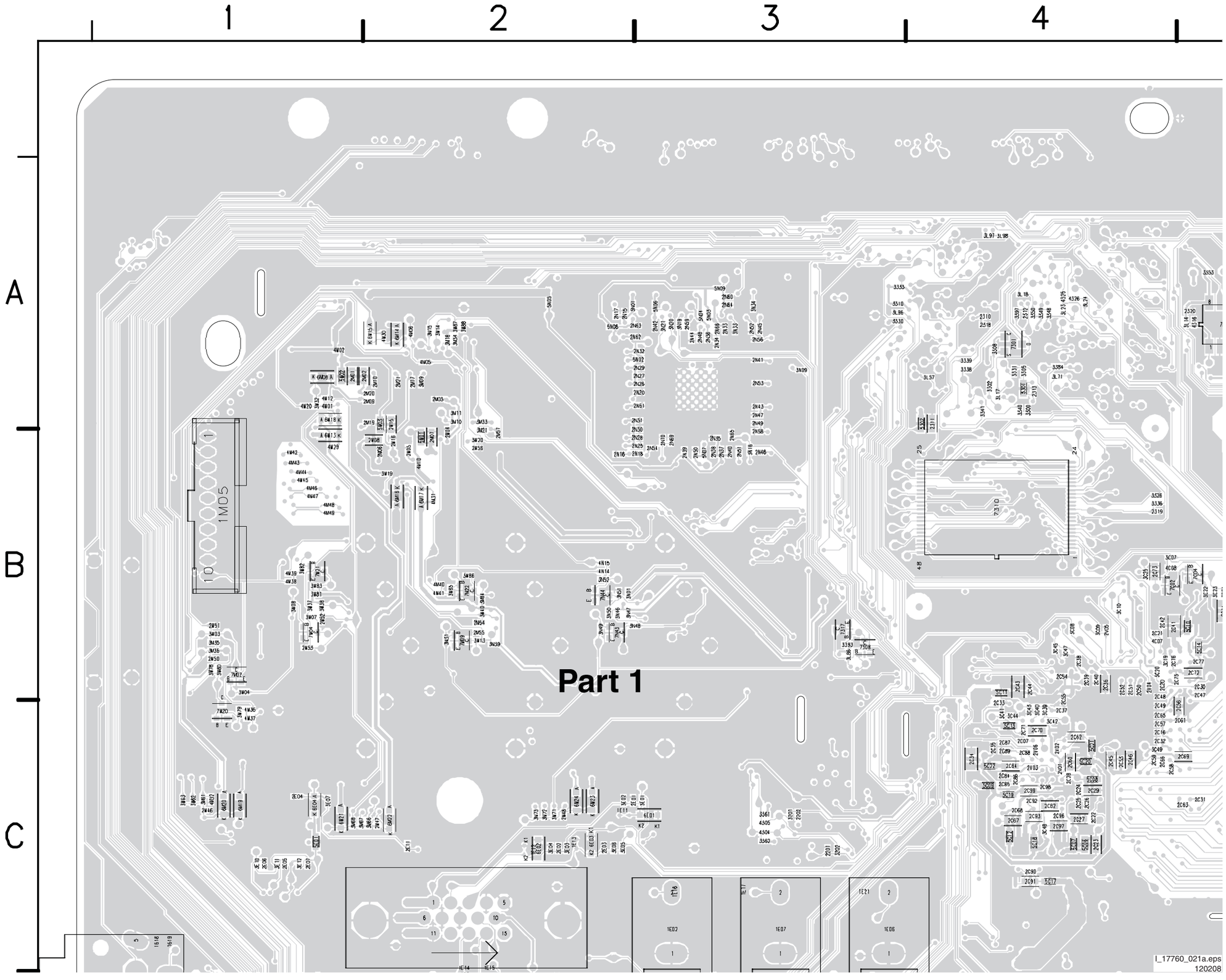
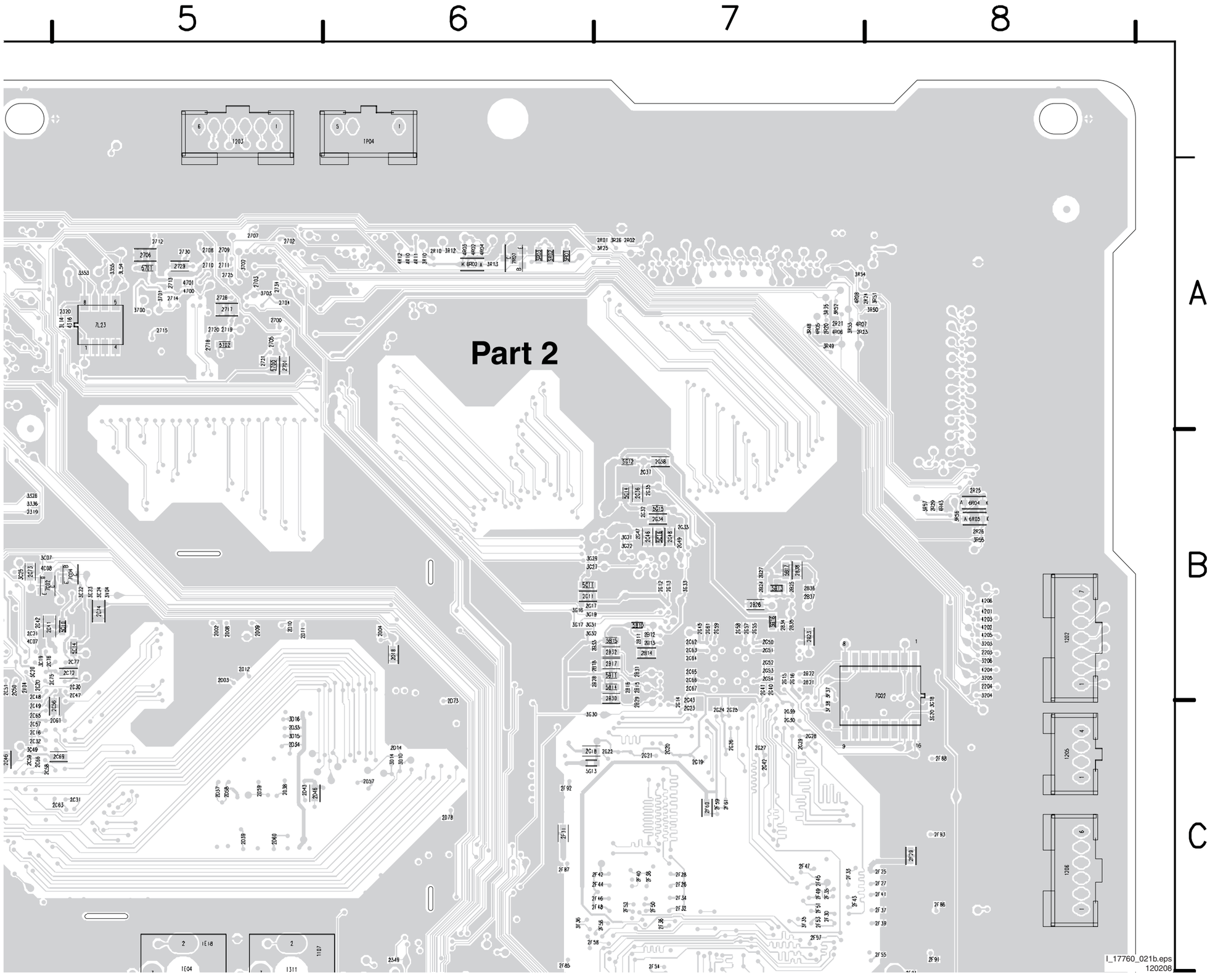
3338 A4 3C25 B4 3P23 E8 4M32 C1 6614 E3
3339 A4 3C39 C4 3P25 E8 4M36 C1 6621 D1
3340 A4 3C40 C4 3P26 E8 4M37 C1 6622 E1
3341 A4 3C41 C4 3P32 E7 4M38 B1 6A51 F5
3348 A4 3C42 C4 3P34 E8 4M39 B1 6A52 F5
3349 A4 3C43 C4 3P37 E8 4M40 B2 6E01 C3
3350 A4 3C44 C4 3P38 E8 4M41 B2 6E02 C2
3353 A5 3C45 B4 3P40 E7 4M42 B1 6E03 C2
3355 A5 3C47 B4 3P41 E8 4M43 B1 6E04 C1
3361 C3 3C48 C4 3P45 E7 4M44 B1 6M08 A1
3362 C3 3C49 C4 3P47 E8 4M45 B1 6M13 B1
3384 A4 3D10 C6 3P48 E8 4M46 B1 6M14 A2
3389 E8 3D14 C6 3P49 E8 4M47 B1 6M15 A2
3390 E8 3D15 C5 3P50 E7 4M48 B1 6M16 B2
3391 F8 3D16 C5 3P51 E8 4M49 B1 6M17 B2
3393 B3 3E01 C3 3P52 E8 4N14 B2 6M18 A1
3394 F8 3E02 C2 3P53 E8 4N15 B2 6M19 C1
3397 A4 3E03 C2 3P54 D7 4R02 A6 6M20 C1
3402 E4 3E04 C2 3P56 D7 4R03 A6 6M21 C1
3403 F4 3E05 C2 3P61 E7 4R04 A6 6M22 C2
3410 F4 3E06 C2 3P64 D7 4R05 A7 6M23 C2
3411 F4 3E07 C1 3P68 E8 4R06 A7 6M24 C2
3416 F3 3E08 D2 3P69 E7 4R07 A7 6P13 E8
3417 E4 3E09 D2 3P70 E7 4R08 A7 6P14 E8
3418 E4 3E10 C1 3P71 D7 4R10 A6 6P15 E8
3419 E4 3E11 C1 3P72 E7 4R11 A6 6P17 D6
3420 E4 3E12 C1 3P74 E8 4R12 A6 6Q13 E7
3423 F4 3F09 D7 3P75 D6 4R43 B8 6Q14 E7
3427 F4 3F11 D7 3P76 D6 5111 D5 6Q15 E7
3428 E4 3F12 D7 3P77 D7 5112 E5 6R02 A6
3500 F1 3F13 D7 3P78 D7 5114 D4 6R04 B8
3502 E1 3F35 C7 3P79 D6 5115 D4 6R05 B8
3503 F2 3F36 C6 3Q13 E6 5116 D4 7109 E4
3506 E1 3F37 B7 3Q20 E6 5117 D3 7114 D4
3507 E2 3F38 C7 3Q23 E7 5118 D5 7131 E5
3508 E1 3F39 D7 3Q25 E7 5119 D5 7132 E5
3510 E2 3F40 D7 3Q26 E7 5120 E5 7133 E6
3511 E2 3F41 D7 3Q32 E6 5121 E5 7134 D4
3512 E1 3G16 B6 3Q34 E7 5122 E5 7301 A4

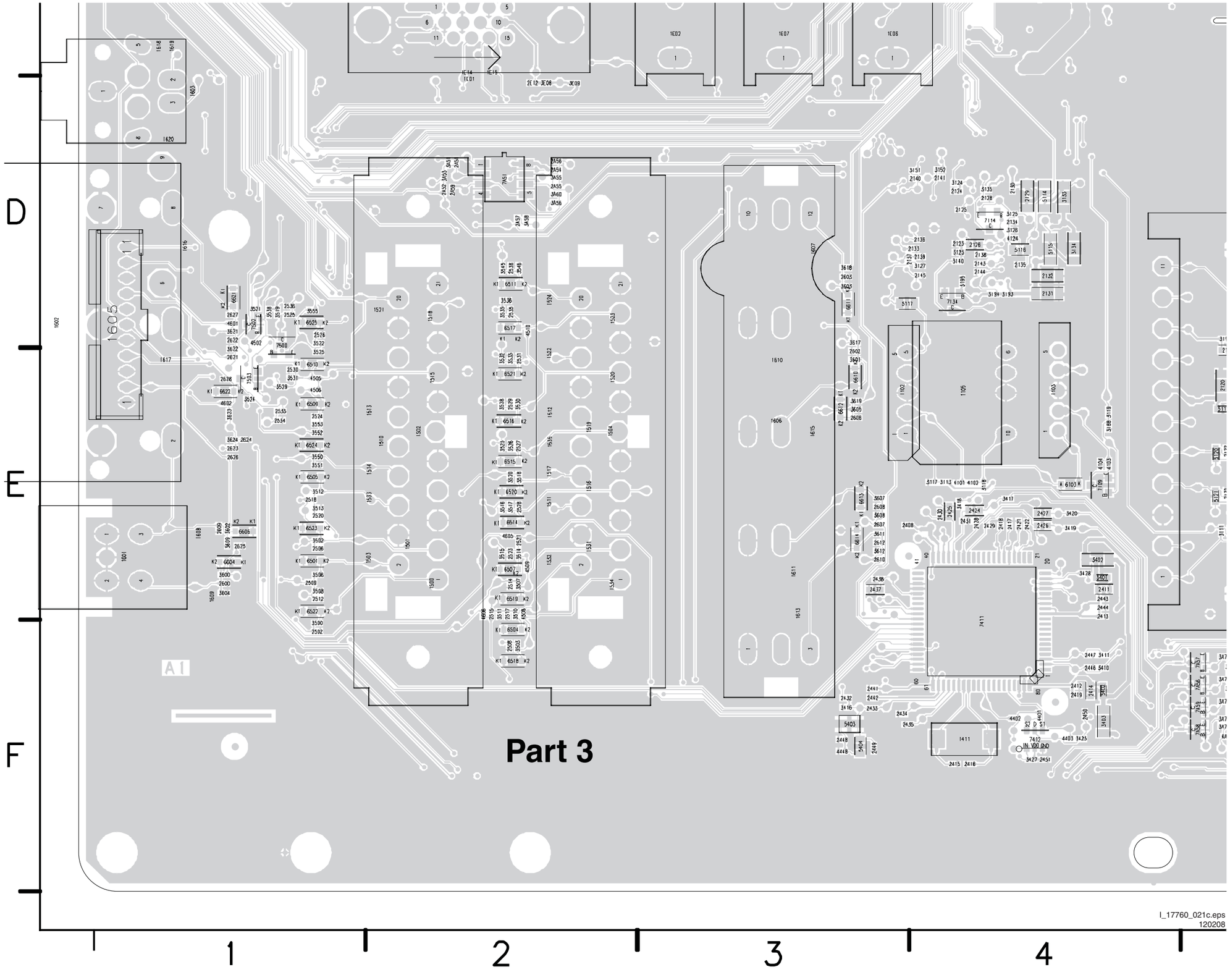
Layout Small Signal Board (Part 1 Bottom Side)



Layout Small Signal Board (Part 2 Bottom Side)



Layout Small Signal Board (Part 3 Bottom Side)



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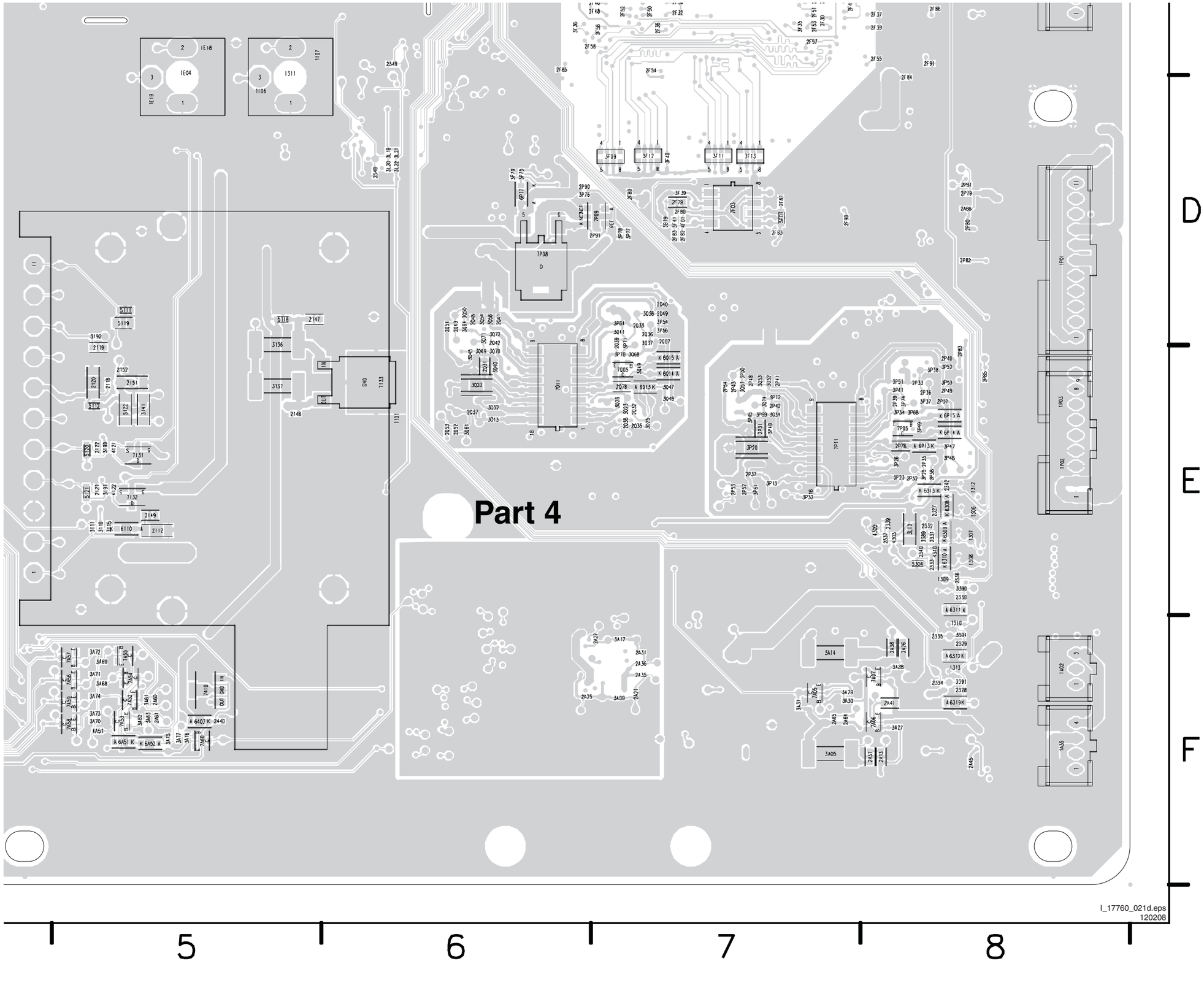
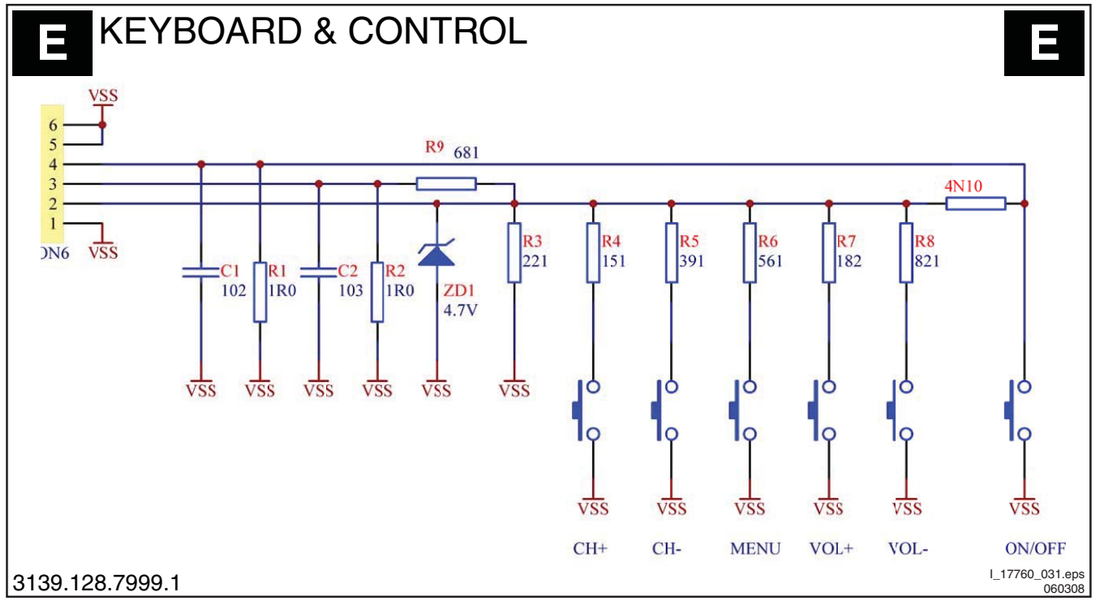
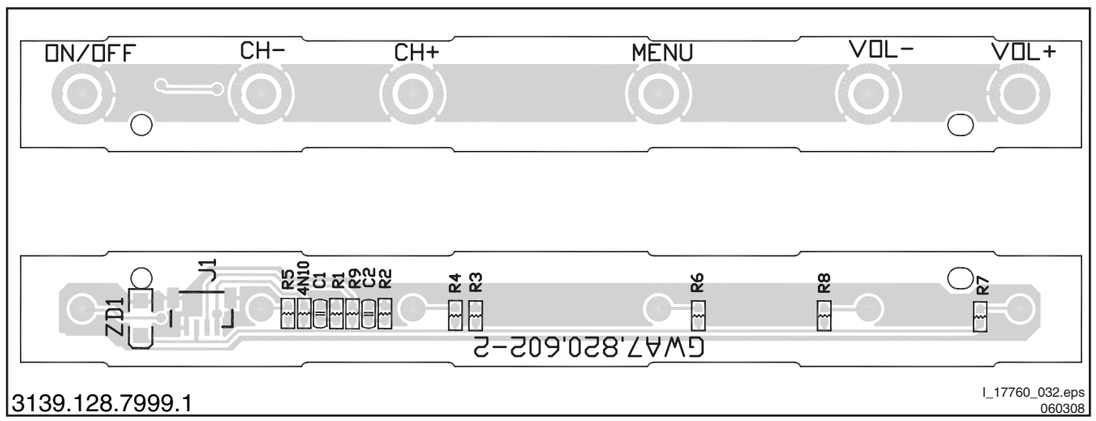
Layout Small Signal Board (Part 4 Bottom Side)



Keyboard Control Panel



Layout Keyboard Control Panel



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IR / LED Panel

IR & LED PANEL

TO ME8 LIGHT GUIDE
1P09
BM03B-SRSS-TBT
RES
+3V3STBY

TO ME8 SSB
1P10
BM09B-SRSS-TBT
FP10
FP20
FP11
FP12
FP13
FP14
FP15
FP16
FP17
+3V3STBY
+5V_SW
1-F7
LIGHT_SENSOR
IR
1-D8
LED2
1-D6
LED1
KEYBOARD
TACT_SWITCH_INT

FROM ME8 KEYB
1P11
BM04B-SRSS-TBT
+3V3STBY
FP18
KEYBOARD
TACT_SWITCH_INT

+3V3STBY +3V3STBY
3P08 680R RES
3P07 680R RES

"WHITE"
+5V_SW
3P11 8K2
IP10
19-113/T7D-CS2T2B2-3T
6P11
3P13 270R
3P12 270R
IP22
TSML1020
6P12
RES
SAME LOCATION WITH 701 2
IP12
4P01 RES
4P02 (RES FOR BDS)
LED1
1-D5
3P15 10K
IP14
7P11 BC847BW
3P27 10K

"RED"
+3V3STBY
3P10 1K8
IP11
SML-512
6P10
IP13
IP15
7P10 BC847BW
3P14 10K
3P28 10K
1-C5
LED2

"IR RECEIVER"
7P14
GP1UE260RKVF
VS
OUT
GND
+3V3STBY
3P16 100R
IP16
3P19 6K8
2P10 10u
3P17 0R
IP20
3P23 100K
IR
1-C5

LIGHT_SENSOR
1-C5
+5V_SW
3P09 22K
2P11 10u
2P12 10u
2P13 10u
3P25 39K

+5V_SW
7P13 BC847BW
IP17
3P20 10K
IP19
3P24 10K

"LIGHT SENSOR"
+5V_SW +5V_SW
7P12
TEMT6000X01
3P18 100K
IP18
3P21 270K
IP21
3P26 270K
3P22 10K

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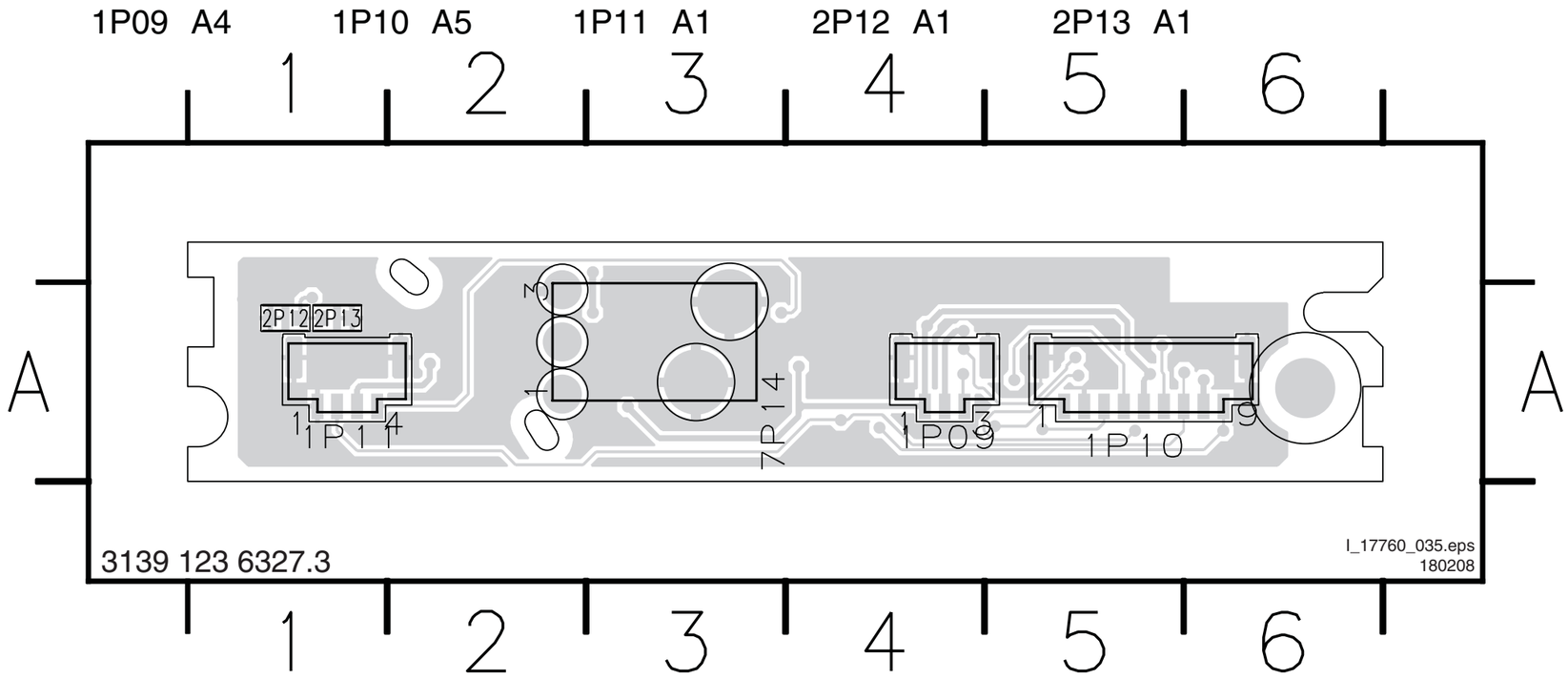
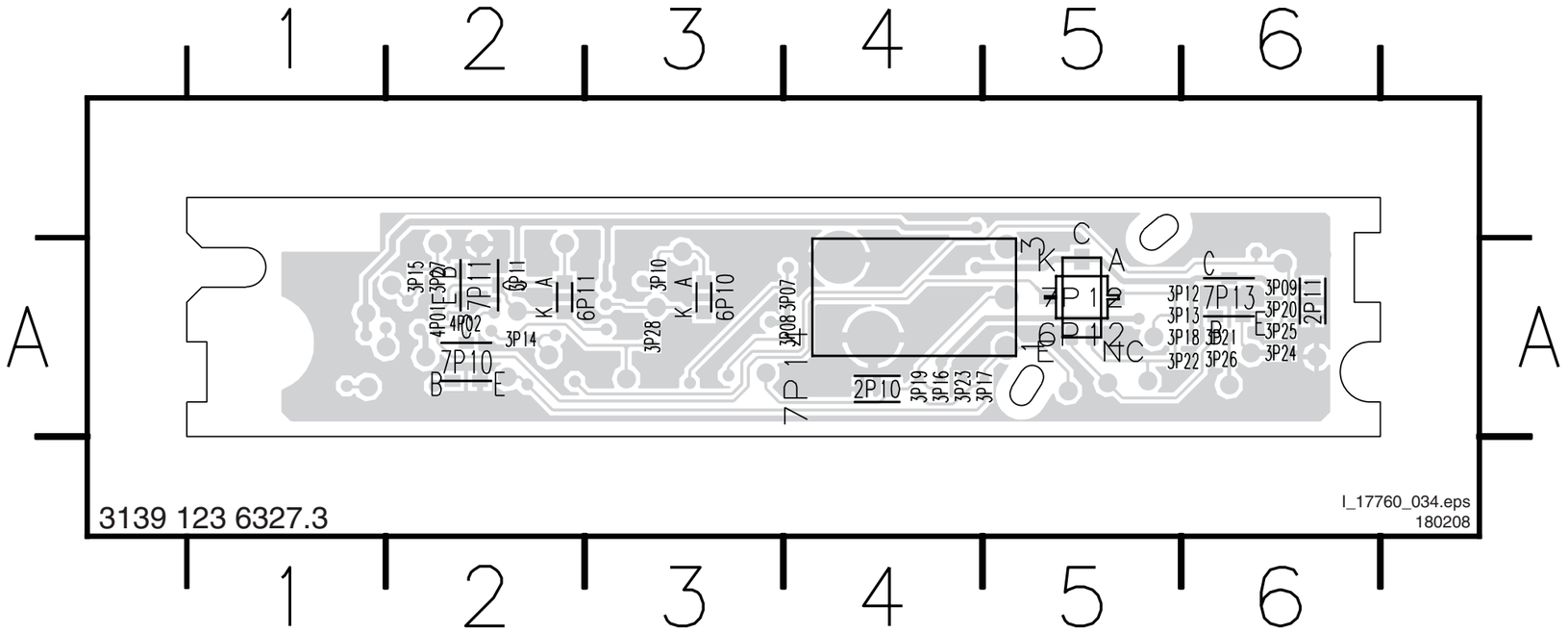
1P09 A1
1P10 B1
1P11 C1
2P10 E5
2P11 E5
2P12 E6
2P13 E6
3P07 C3
3P08 C2
3P09 D6
3P10 A7
3P11 A5
3P12 A6
3P13 A6
3P14 B6
3P15 B4
3P16 D4
3P17 E5
3P18 D8
3P19 E4
3P20 E6
3P21 E8
3P22 E8
3P23 E4
3P24 E7
3P25 E6
3P26 E8
3P27 B5
3P28 B6
4P01 B5
4P02 B6
6P10 A7
6P11 A5
6P12 A6
7P10 B7
7P11 B5
7P12 D8
7P13 E7
7P14 E3
FP10 B1
FP11 B1
FP12 B1
FP13 B1
FP14 B1
FP15 B1
FP16 B1
FP17 B1
FP18 C1
FP20 B1
IP10 A5
IP11 A7
IP12 B5
IP13 B7
IP14 B4
IP15 B6
IP16 D5
IP17 E7
IP18 E8
IP19 E7
IP20 E4
IP21 E8
IP22 A6

Layout Front IR / LED Panel (Top Side)



Layout Front IR / LED Panel (Bottom Side)

2P10 A4	3P09 A6	3P13 A6	3P17 A5	3P21 A6	3P25 A6	4P01 A2	6P12 A5	7P13 A6
2P11 A6	3P10 A3	3P14 A2	3P18 A6	3P22 A6	3P26 A6	4P02 A2	7P10 A2	7P14 A4
3P07 A4	3P11 A2	3P15 A2	3P19 A4	3P23 A4	3P27 A2	6P10 A3	7P11 A2	
3P08 A4	3P12 A6	3P16 A4	3P20 A6	3P24 A6	3P28 A3	6P11 A3	7P12 A5	



Personal Notes:

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8. Alignments

Index of this chapter:

8.1 General Alignment Conditions
8.2 Hardware Alignments
8.3 Software Alignments
8.4 Option Settings

Note: Figures below can deviate slightly from the actual situation, due to the different set executions.

General: The Service Default Mode (SDM) and Service Alignment Mode (SAM) are described in chapter 5. Menu navigation is done with the CURSOR UP, DOWN, LEFT or RIGHT keys of the remote control transmitter.

8.1 General Alignment Conditions

Perform all electrical adjustments under the following conditions:

- Power supply voltage (depends on region):
  - AP-NTSC: 120 V_{AC} or 230 V_{AC} / 50 Hz (± 10%).
  - AP-PAL-multi: 120 - 230 V_{AC} / 50 Hz (± 10%).
  - EU: 230 V_{AC} / 50 Hz (± 10%).
  - LATAM-NTSC: 120 - 230 V_{AC} / 50 Hz (± 10%).
  - US: 120 V_{AC} / 60 Hz (± 10%).
- Connect the set to the mains via an isolation transformer with low internal resistance.
- Allow the set to warm up for approximately 15 minutes.
- Measure voltages and waveforms in relation to correct ground (e.g. measure audio signals in relation to AUDIO_GND).
  Caution: It is not allowed to use heatsinks as ground.
- Test probe: Ri > 10 Mohm, Ci < 20 pF.
- Use an isolated trimmer/screwdriver to perform alignments.

8.2 Hardware Alignments

There are no hardware alignments foreseen for this chassis, but below find an overview of the most important DC voltages on the SSB. These can be used for checking proper functioning of the DC/DC converters.

Description	Test Point	Specifications (V)			Diagram
		Min.	Typ.	Max.	
+12V_DISP	FP12	11.4	12.0	12.6	B01A_DC-DC
+VTUN	FP11	30	33	36	B01A_DC-DC
+3V3_STBY	FP10	3.20	3.30	3.40	B01A_DC-DC
+3V3+SW	FP20	3.13	3.3	3.46	B01A_DC-DC
+1V2_SW	FP24	1.18	1.25	1.31	B01A_DC-DC
+5V_SW	FQ05	4.85	5.10	5.35	B01B_DC-DC
+1V8_SW	FQ06	1.72	1.82	5.25	B01B_DC-DC
+2V5_SW	FQ03	2.38	2.5	2.62	B01B_DC-DC
+5V_IF	F129	4.75	5	5.25	B02_TUNER_IF
+5VS	F131	4.75	5	5.25	B02_TUNER_IF
+5V_TUN	F146	4.75	5	5.25	B02_TUNER_IF
+1V2_ADC	FC04	1.14	1.2	1.26	B04A_TRIDENT
+1V2_PLL	FC05	1.14	1.2	1.26	B04A_TRIDENT
+1V2_CORE	FC06	1.14	1.2	1.26	B04A_TRIDENT
+2V5_VDDMQ	FD01	2.38	2.5	2.62	B04B_DDR
+VDISP	FR10	11.4	12.0	12.6	B04E_LVDS
+8V	F401	7.60	8.00	8.40	B05A_AUDIOPROCESSOR

8.3 Software Alignments

With the software alignments of the Service Alignment Mode (SAM) the Tuner and RGB settings can be aligned.
To store the data: Use the RC button “Menu” to switch to the main menu and next, switch to “Stand-by” mode.

8.3.1 Tuner Adjustment (RF AGC Take Over Point)

Purpose: To keep the tuner output signal constant as the input signal amplitude varies.

This chassis comes with the UV13x6(x) tuner. No alignment is necessary, as the AGC alignment is done automatically (standard value: “15”). However in case of problems use the following method (use multi meter and RF generator):

- Apply a vision IF carrier of 38.9 (China: 38.0) MHz (105 dBµV = 178 mVrms) to test point F143 (input via 50 ohm coaxial cable terminated with an RC network of series 10 nF with 120 ohm to ground).
- Measure voltage on test point F116.
- Adjust AGC (via SAM menu: TUNER -> AGC), until voltage on test point F116 is 3.3 +0.5/-1.0 V.
- Store settings and quit SAM.

8.3.2 RGB Alignment

Before alignment, choose “TV MENU” -> “Picture” and set:

- “Brightness” to “50”.
- “Colour” to “50”.
- “Contrast” to “100”.

White Tone Alignment:

- Activate SAM.
- Select “RGB Align.” -> “White Tone” and choose a colour temperature.
- Use a 100% white screen as input signal and set the following values:
  - All “White point” values initial to “256”.
  - All “BlackL Offset” values to “0”.

In case you have a colour analyser:

- Measure with a calibrated (phosphor- independent) colour analyser (e.g. Minolta CA-210) in the centre of the screen. Consequently, the measurement needs to be done in a dark environment.
- Adjust the correct x, y coordinates (while holding one of the White point registers R, G or B on “256”) by means of decreasing the value of one or two other white points to the correct x, y coordinates (see table “White D alignment values”). Tolerance: dx: ± 0.004, dy: ± 0.004.
- Repeat this step for the other colour Temperatures that need to be aligned.
- When finished return to the SAM root menu and press STANDBY on the RC to store the aligned values to the NVM.

Table 8-1 White D alignment values

Value	Cool (11000 K)	Normal (9000 K)	Warm (6500 K)
x	0.278	0.289	0.314
y	0.278	0.291	0.319

If you do **not** have a colour analyser, you can use the default values. This is the next best solution. The default values are average values coming from production (statistics).

- Set the RED, GREEN and BLUE default values per temperature according to the values in the “Tint settings” table.
- When finished return to the SAM root menu and press STANDBY on the RC to store the aligned values to the NVM.

Table 8-2 Tint settings

Alignment	42"	47"	52"
WARM_RED	128*	128*	128*
WARM_GREEN	120*	120*	120*
WARM_BLUE	110*	110*	110*
NORMAL_RED	125*	125*	125*
NORMAL_GREEN	128*	128*	128*
NORMAL_BLUE	120*	120*	120*
COOL_RED	110*	110*	110*
COOL_GREEN	118*	118*	118*
COOL_BLUE	140*	140*	140*

Note: **These values were not available at the time of writing, therefore they come from an early production sample (for indication only). As soon as the production data become available, a Service Info or Service Manual update will be issued via the appropriate channels.*

Black Level Offset Alignment
- Activate SAM.
- Select “RGB Align.” -> “BlackL Offset” and choose a colour.
- Set all “BlackL Offset” values to “0”.
- When finished return to the SAM root menu and press STANDBY on the RC to store the aligned values to the NVM.

Note: For models with “Pixel Plus”, the “Black Offset” (black level offset) should NOT be changed in SAM. These offset values of RGB should be set to “0”, and should **NOT** be adjusted. Any adjustment of these values will affect the low light white balance.

ADC YPbPr Gray Scale Alignment
When the grey scale is not correct, use this alignment:
- Activate SAM.
- Select “NVM Editor”.
- Enter address “26(dec)” (ADR).
- Set value (VAL) to “197(dec) ± 25”.
- Store (STORE) the value.

8.4 Option Settings

8.4.1 Introduction

The microprocessor communicates with a large number of I^2C ICs in the set. To ensure good communication and to make digital diagnosis possible, the microprocessor has to know which ICs to address. The presence/absence of these specific ICs (or functions) is made known by the option codes.

Notes:
- After changing the option(s), save them with the STORE command.
- The new option setting becomes active after the TV is switched “off” and “on” again with the mains switch (the EAROM is then read again).

8.4.2 How To Set Option Codes

When the NVM is replaced, all options will require resetting. To be certain that the factory settings are reproduced exactly, you must set all option numbers. You can find the correct option numbers in table “Option Codes OP1...OP7” below.

How to Change Options Codes
An option code (or “option byte”) represents eight different options (bits). When you change these numbers directly, you can set all options very quickly. All options are controlled via seven option bytes (OP1... OP7).
Activate SAM and select “Options”. Now you can select the option byte (OP1 to OP7) with the CURSOR UP/ DOWN keys, and enter the new 3 digit (decimal) value. For the correct factory default settings, see the next table “Option codes OP1...OP7“. For more detailed information, see the second table “Option codes at bit level“. If an option is set (value “1”), it represents a certain decimal value.
When all the correct options (bits) are set, the sum of the decimal values of each Option Byte (OP) will give the option code.

Table 8-3 Option code overview

CTN	Option Code	Display Code
42PFL5403/93	192 085 162 249 073 229 129	130
42PFL5403/98	128 085 170 249 073 228 129	130
42PFL7403/93	192 085 226 249 073 229 129	134*
42PFL7603/93	192 117 226 249 073 229 130	130
42PFL7603/98	128 117 234 249 073 228 130	130
47PFL5403/98	128 085 170 249 073 228 129	135
52PFL5403/93	192 085 162 249 073 229 129	098

Note: **for 42PFL7403/93, in future releases of the software, the display code will be changed into “142” for the same panel. Check the Philips Service website for details.*

Option Bit Overview
Below find an overview of the Option Codes on **bit** level.

Table 8-4 Option codes at bit level (OP1-OP7)

Option Byte & Bit	Dec. Value	Option Name	Description
Byte OP1			
Bit 7 (MSB)	128	BBE	ON = BBE is available; OFF = BBE is not available
Bit 6	64	CHINA	ON = SW is for CHINA only; OFF = SW is for Non-China AP cluster
Bit 5	32	DTV_CHINA	ON = DTV_CHINA will be available (Reserved); OFF = DTV_CHINA will not be available
Bit 4	16	DTV_EU	ON = DTV will be available; OFF = DTV will not be available
Bit 3	8	UK_PNP	ON = UK PNP is available (for analogue TV only); OFF = UK PNP is not available (for analogue TV only)
Bit 2	4	VIRGIN_MODE	ON = Virgin Mode (PNP) is available; OFF = Virgin Mode (PNP) is not available
Bit 1	2	ACI	ON = ACI is available; OFF = ACI is not available
Bit 0 (LSB)	1	ATS	ON = ATS is available; OFF = ATS is not available
Byte OP2			
Bit 7 (MSB)	128	1080P	ON = 1080p is available; OFF = 1080p is not available
Bit 6	64	LIGHT_SENSOR	ON = Light Sensor is available; OFF = Light Sensor is not available
Bit 5	32	AMBILIGHT	ON = Ambilight Feature will be available; OFF = Ambilight Feature will not be available
Bit 4	16	BACKLIGHT_DIMMING	ON = Backlight Dimming is available; OFF = Backlight Dimming is not available
Bit 3	8	HUE	ON = Hue is available; OFF = Hue is not available
Bit 2	4	2D3DCF	ON = 3D Comb Filter is available; OFF = 2D Comb Filter is available
Bit 1	2	WSSB	ON = WSS is available; OFF = WSS is not available
Bit 0 (LSB)	1	WIDE_SCREEN	ON = TV is 16x9 set; OFF = TV is 4x3 set
Byte OP3			
Bit 7 (MSB)	128	CVI1	ON=CVI1 (YPbPr) (For ROW)
Bit 6	64	HDMI3	ON = HDMI3 (rear) is available; OFF = HDMI3 (rear) is not available
Bit 5	32	HDMI4	ON = HDMI4 (side) is available; OFF = HDMI4 (side) is not available
Bit 4	16	VCHIP	ON = VChip is available; OFF = VChip is not available
Bit 3	8	VIDEO_TEXT	ON = Video-TXT is available; OFF = Video-TXT is not available
Bit 2	4	STEREO_DBX	ON = Stereo DBX detection is available (LATAM); OFF = Stereo DBX detection is not available
Bit 1	2	STEREO_NICAM_2CS	ON = Stereo NICAM 2CS detection is available (EU/AP/China); OFF = Stereo NICAM 2CS detection is not available
Bit 0 (LSB)	1	LIP_SYNC	ON = Lip Sync is available; OFF = Lip Sync is not available
Byte OP4			
Bit 7 (MSB)	128	HDMI2	ON = HDMI2 is available; OFF = HDMI2 is not available
Bit 6	64	HDMI1	ON = HDMI1 is available; OFF = HDMI1 is not available
Bit 5	32	VGA	ON = VGA is available; OFF = VGA is not available
Bit 4	16	SVHS3	ON = SVHS3 is available; OFF = SVHS3 is not available
Bit 3	8	AV3	ON = AV3 is available; OFF = AV3 is not available
Bit 2	4	CVI	ON = CVI is available; OFF = CVI is not available
Bit 1	2	SVHS2	ON = SVHS2 is available; OFF = SVHS2 is not available
Bit 0 (LSB)	1	AV2	ON = AV2 is available; OFF = AV2 is not available
Byte OP5			
Bit 7 (MSB)	128	NVM_CHECK	ON = NVM (range) checking is available; OFF = NVM (range) checking is not available
Bit 6	64	DNM	ON = DNM is available; OFF = DNM is not available
Bit 5	32	SUBWOOFER	ON = Sub woofer is available; OFF = Sub woofer is not available
Bit 4	16	MP_ALIGN	ON = Using multi-point alignment for Gamma & White Point; OFF = Using old way for Gamma (pre-defined) & WP alignment
Bit 3	8	SYS_RECVRY	ON = System Recovery is available; OFF = System Recovery is not available
Bit 2	4	ED_HD_DNM	ON = DNM not available on ED and HD signal; OFF = DNM available on ED and HD signal
Bit 1	2	HOTEL	ON = Hotel/BDS is available; OFF = Hotel/BDS is not available
Bit 0 (LSB)	1	SS_DEMO	ON = Split Screen Demo is available; OFF = Split Screen Demo is not available
Byte OP6			
Bit 7 (MSB)	128	BACKLIGHT_BOOST	ON = iLAB Backlight boost feature is available; OFF = iLAB Backlight boost feature is not available
Bit 6	64	STATIC _DIMMING	ON = iLAB Static Dimming feature is available; OFF = iLAB Static Dimming feature is not available
Bit 5	32	CEC	ON = CEC feature available; OFF = CEC feature not available
Bit 4	16	AUTO_HDMI	ON = Auto HDMI feature available; OFF = Auto HDMI feature not available
Bit 3	8	TUNER PROFILE	0 = ATV_EU_PHILIPS UV1318S/AIH-3; 1 = ATV_EU_Panasonic EN57K28G3F; 2 = DTV_EU_PHILIPS TD1316AF/IHP-2; 3 = Not Used (Reserved); 4 = ATV_AP_PHILIPS UV1316E/AIH-4; 5 = ATV_CHINA_PHILIPS UV1356; 6 = ATV_CHINA_ALPS TEDE9-286B; 7 = ATV_CHINA_Tuner2 (Reserved); 8 = ATV_LATAM_PHILIPS UV1338/AIH-4; 9 = ATV_LATAM_PHILIPS UV1336; 10 = DTV_CHINA_Tuner1 (Reserved); 11 = DTV_CHINA_Tuner2 (Reserved); 12 = Not Used (Reserved); 13 = Not Used (Reserved); 14 = Not Used (Reserved); 15 = Not Used (Reserved)
Bit 2	4		
Bit 1	2		
Bit 0 (LSB)	1		
Byte OP7			
Bit 7 (MSB)	128	OPC_VOL_UP_UNMUTE	ON = Volume Up key will unmute the TV; OFF = Volume Up key will not unmute the TV
Bit 6	64	Reserved	Not Used (Reserved)
Bit 5	32	OPC_DTV_LATAM	ON = Brazil Digital available; OFF = Brazil Digital not available
Bit 4	16	CABINET PROFILE	0 = All flat response; 1 = ME8 42/47/52 Basic; 2 = ME8 42/47/52 AMBL; 3- 16 = Reserved
Bit 3	8		
Bit 2	4		
Bit 1	2		
Bit 0 (LSB)	1		

9. Circuit Descriptions, Abbreviation List, and IC Data Sheets

Index of this chapter:

9.1 Introduction
9.2 LCD Power Supply
9.3 DC/DC converters
9.4 Front-End
9.5 Video Processing
9.6 Audio Processing
9.7 HDMI
9.8 Abbreviation List
9.9 IC Data Sheets

Notes:

- Only **new** circuits (circuits that are not published recently) are described.
- Figures can deviate slightly from the actual situation, due to different set executions.
- For a good understanding of the following circuit descriptions, please use the Wiring, Block (chapter 6) and Circuit Diagrams (chapter 7). Where necessary, you will find a separate drawing for clarification.

9.1 Introduction

The LC8.2A LA chassis (development name “LC08R”) is a new chassis using a Trident chipset. It covers screen sizes of 42", 47" and 52" with a new styling called “ME8”.

Main key components are:

- Trident WX69 video processor
- SiL9125CTU HDMI processor
- SiL9185ACTU HDMI switch
- UV1316 tuner and TDA9886 demodulator
- Additional (optional) DFI panel including CYCLONE II FPGA (EP2C35F48C7N) (for 100 Hz 1080p applications). In due time this DFI panel will be replaced by an on-board Mediatek solution.

Main features are:

- **Video**: Video processing is performed by the Trident video processor SVP WX69 (item 7C01), which supports
  - Digital Natural Motion for HD (HD DNM)
  - MPEG Artifact Reduction
  - 4-field Motion Adaptive De-Interlacing technology (MADI).
- **Audio**: introducing BBE® technology for increased speech intelligibility and music performance.
- **China:** Support of Digital Multimedia Broadcast - Terrestrial/Handheld (DMB-TH), the Chinese digital television terrestrial/handheld broadcasting system standard.

Refer to figure “LC08R Architecture” for details.

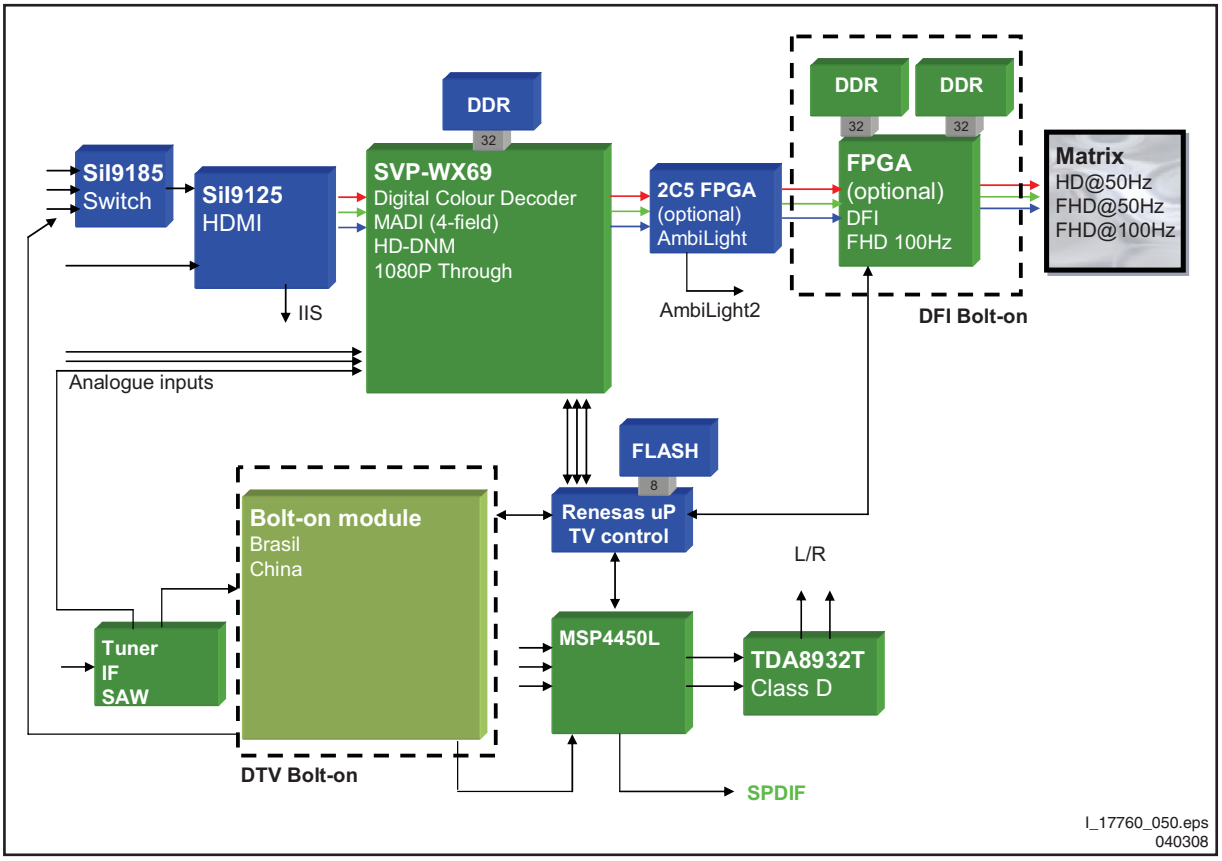

Figure 9-1 LC08R Architecture

9.1.1 SSB Cell Layout

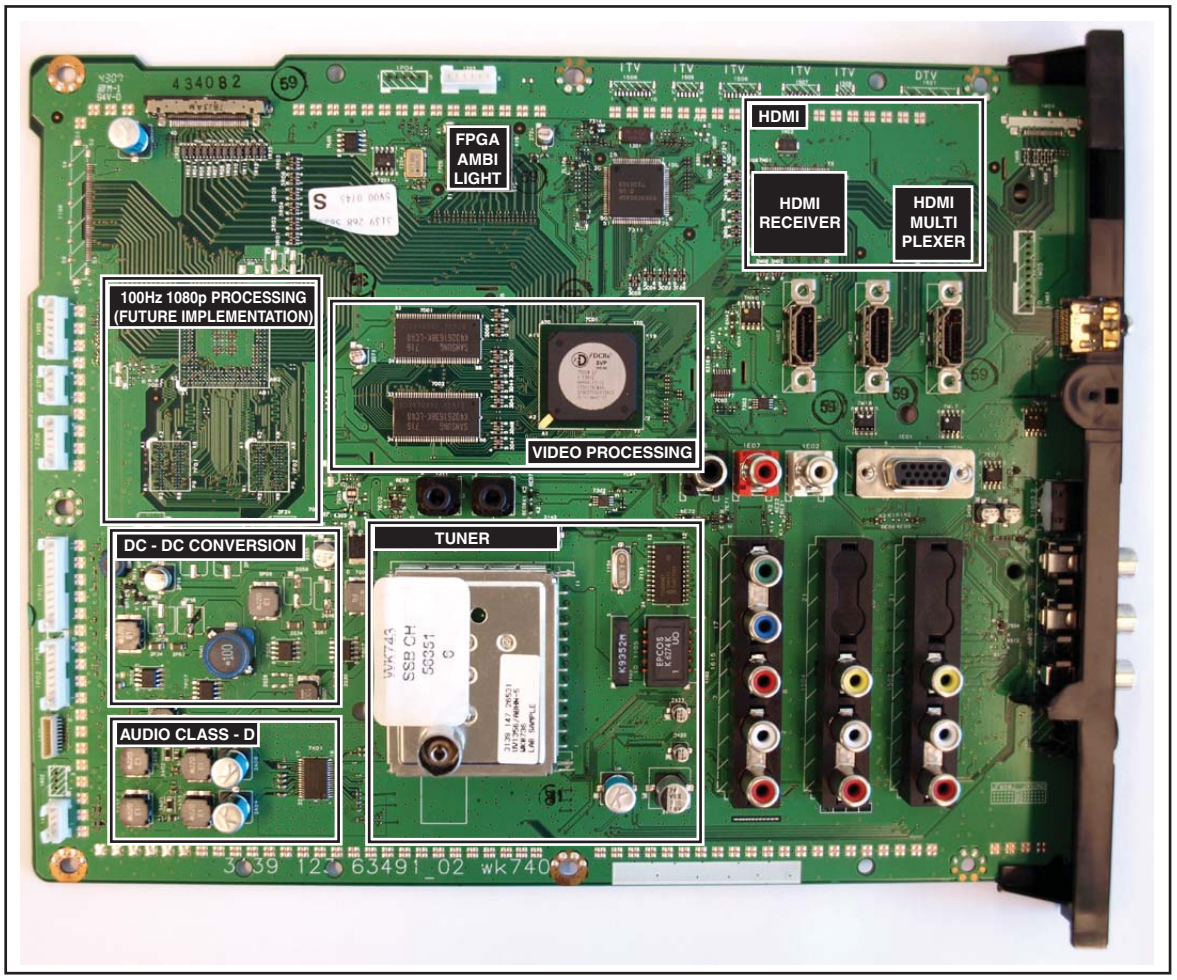

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Figure 9-2 SSB top view

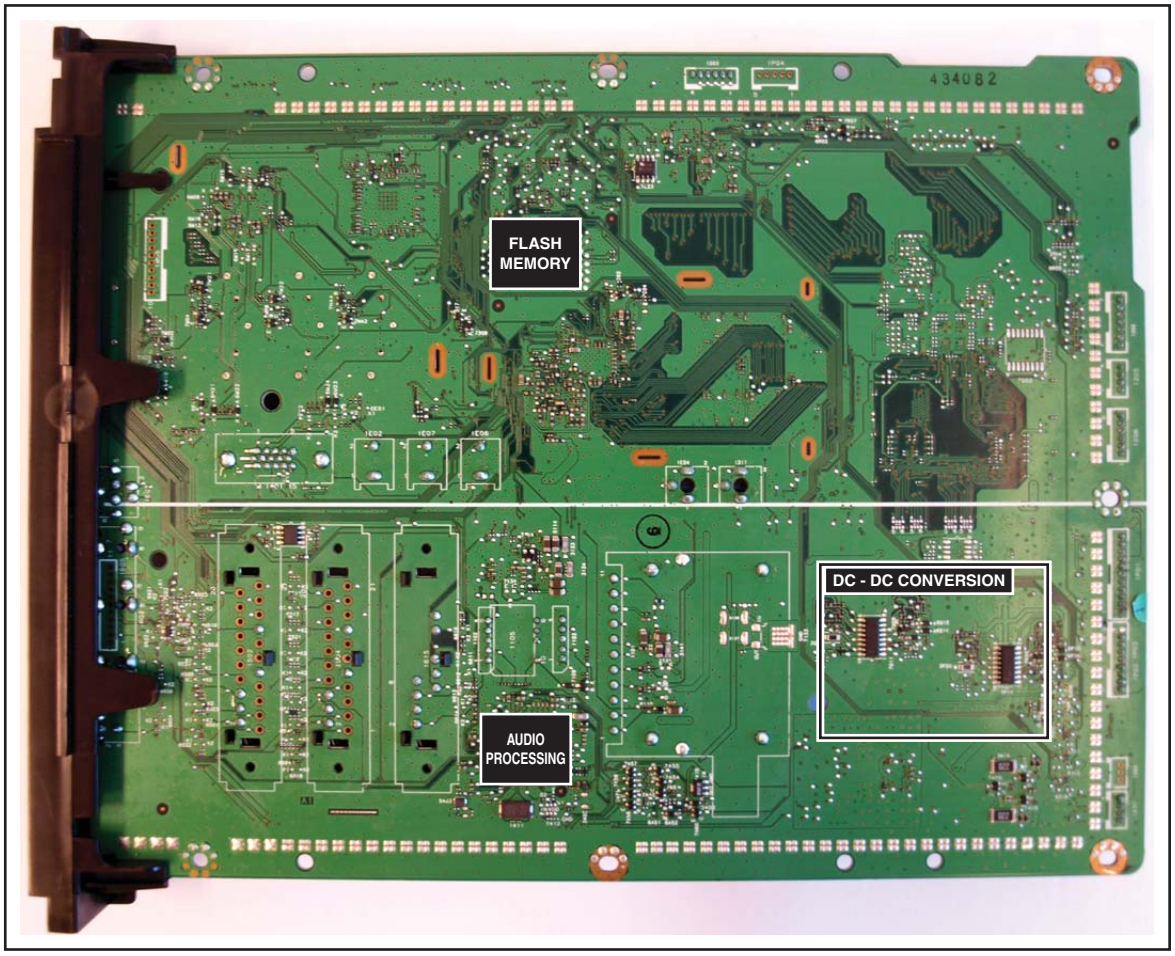

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Figure 9-3 SSB bottom view

9.2 LCD Power Supply

The Power Supply Unit (PSU) in this chassis is a buy-in and is a black-box for Service. When defective, a new panel must be ordered and the defective panel must be returned for repair, unless the main fuse of the unit is broken. Always replace the fuse with one with the correct specifications! This part is commonly available in the regular market.

Different PSUs are used in this chassis:
- 42" sets use an “LG” PSU (LGIT PLHL-T721A or -T720A)
- 47" sets use an “LG” PSU (LGIT PLHL-T722A)
- 52" sets use a “Delta” PSU (DPS-411AP A).

The 42" and 47" Power Supply Units deliver the high voltage to drive the backlight units (no inverters needed). In addition, all Power Supply Units deliver the following voltages to the chassis:
- +3V3$_{STBY}$ to SSB
- +12 V$_{display}$ to SSB
- +12 V$_{audio}$ and -12 V$_{audio}$ to SSB
- +12 V to DC-DC converters to SSB
- +12 V to Bolt-on Supply (where applicable) to SSB
- +24 V to Bolt-on Supply (where applicable) to SSB.

9.3 DC/DC converters

On-board DC-DC converters convert the +12 V coming from the PSU and deliver the following voltages:
- +5 V (+5V$_{tuner}$)
- +VTUN
- +5 V (+5V_SW)
- +3.3 V (+3V3_SW)
- +2.5 V (+2V5_SW)
- +1.8 V (+1V8_SW)
- +1.2 V (+1V2_SW)
- +8 V (+8V)

The following diagram shows the power supply architecture of the SSB:

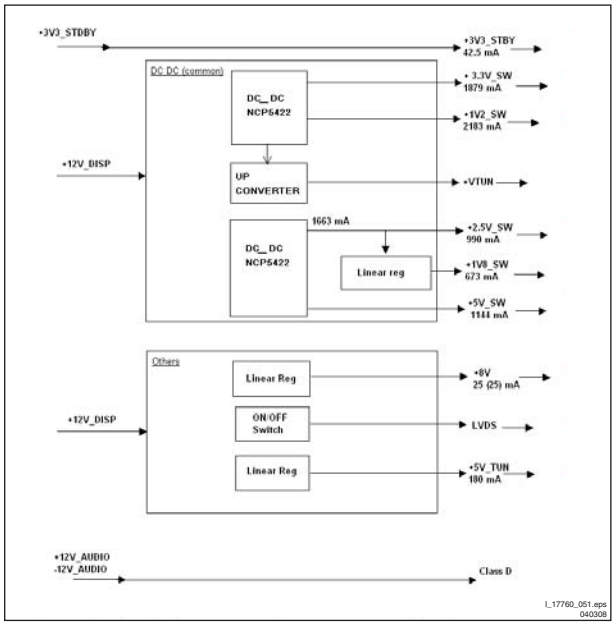


Figure 9-4 Power Supply Architecture

9.4 Front-End

9.4.1 Tuner Diversity

The following analogue tuners/splitters are used:
- AP: UV1316E tuner.
- China: UV1356 tuner.
- China Digital: UV1356 tuner with UV1356L splitter (optional).

A switchable video SAW filter is used to switch between systems M (signal SAW_SW = logic 0) and B, G, D, K, I (signal SAW_SW = logic 1).

Refer to figure “Front-end implementation” for details.

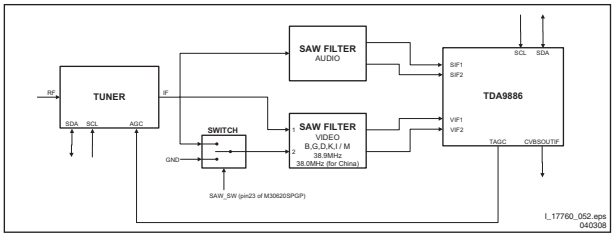


Figure 9-5 Front-end implementation

9.5 Video Processing

The video processing is completely handled by the Trident SVP WX69 video processor which features:
- Intergrated HDMI receiver with HDCP up to 162 MHz (UXGA) with XVYCC Colour Space support
- 30-bit digital input supporting HDMI 1.3 RGB 10-bit applications
- Integrated 7th Generation Motion and Edge Adaptive De-interlacing
- Integrated ADC
- Scan Rate Conversion improvement
- PC Auto Tune
- Dual 8/10 LVDS transmitter
- Advanced 7th Generation Cubic-4 Image Scaling Engine
- DNR-Digital Temporal and Spatial Noise Reduction Filter
- Advanced Chroma Processing
- Judder Free Nature Motion Controller
- Perfect Colour Management
- Real Colour Reproducer
- Dynamic Contrast Improvement
- Integrated 7th Generation Motion Adaptive 3D Digital Comb Video Decoder with Programmable Filter
- Inverse Colour Space Conversion
- Mosquito NR and Block NR with No Details Lost
- Interlaced and Progressive Scan Refresh
- Frame Rate Conversion
- PWM
- Fast Blank
- Teletext
- Memory Interface
- DCRe Advanced Image Processing
- Multi Screen Display Modes
- OSD and VBI/Closed Caption
- Advanced OSD Engine

9.5.1 System Overview

Refer to figure “System Overview” for details.

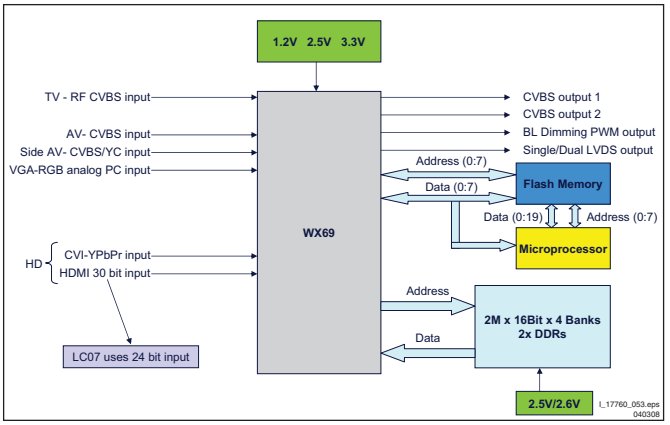


Figure 9-6 System Overview

9.5.2 Video Application

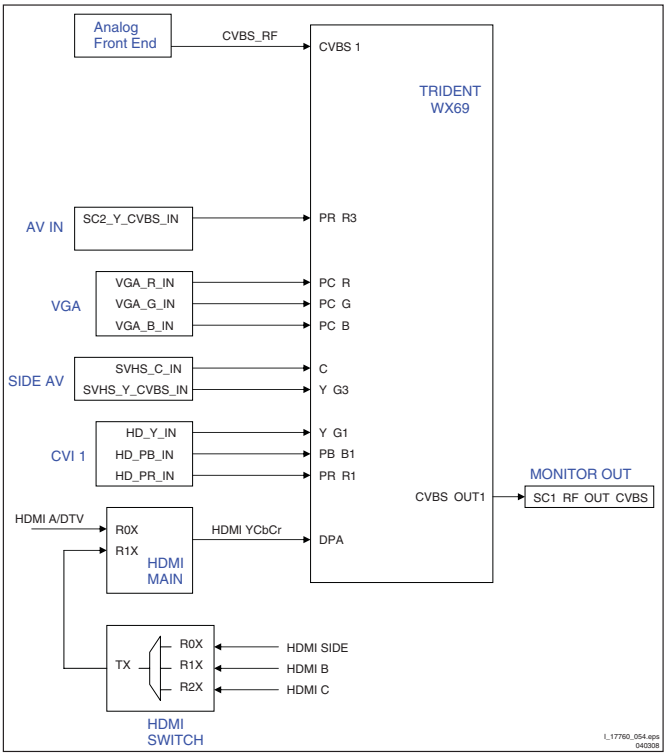


Figure 9-7 Block diagram video processing

"Block diagram video processing" shows the input and output signals to and from the Trident Video Processor.

During analogue reception, a CVBS signal coming from the analogue front-end is fed to the video processor via pin CVBS1.

The video processor also interfaces the (side-) AV inputs, VGA, CVI (HD) and HDMI input. Through the CVBS OUT connector, a monitor output is foreseen.

9.5.3 Dynamic Frame Insertion (DFI)

In order to obtain 1080p @ 100 Hz, the same DFI panel is used as in Q528.1A LA Service Manual.

Refer to figure "DFI implementation" for the LC08-specific implementation of the DFI panel.

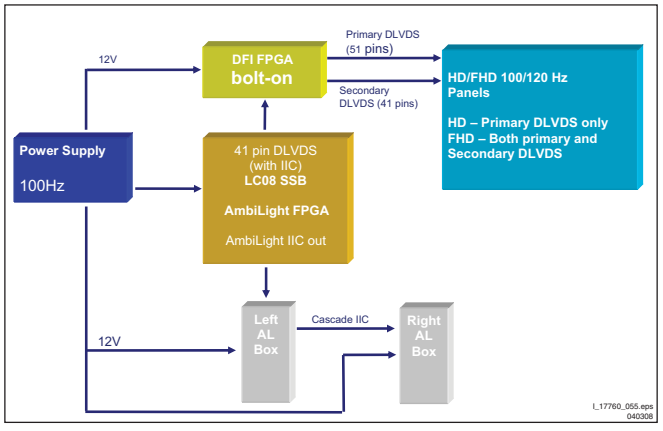


Figure 9-8 DFI implementation

Please not that in due time the DFI panel will be replaced by an on-board Mediatek solution.

9.6 Audio Processing

Refer to the LC7.1A LA Service Manual.

For additional (future) China DTV implementation, refer to figure "Block diagram audio processing".

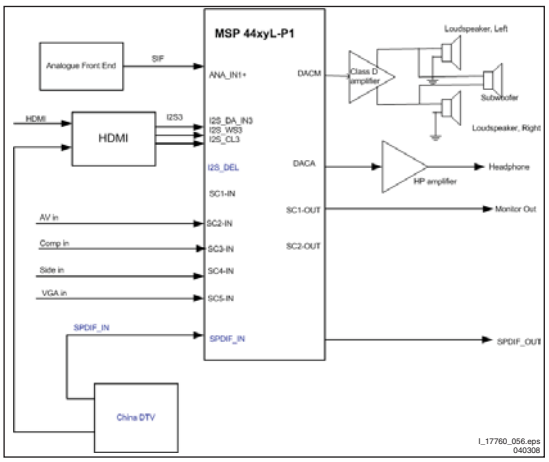


Figure 9-9 Block diagram audio processing

9.7 HDMI

9.7.1 Introduction

Refer to the LC7.1A LA Service Manual.

9.7.2 Implementation

The main HDMI receiver which is used is the Sil 9125 (Silicon Image) third generation HDMI receiver (item 7N01 on the SSB). In addition, the Sil 9185 HDMI switch (item 7M07) is used for switching between the 3 HDMI inputs. Refer to figure "HDMI implementation" for details.

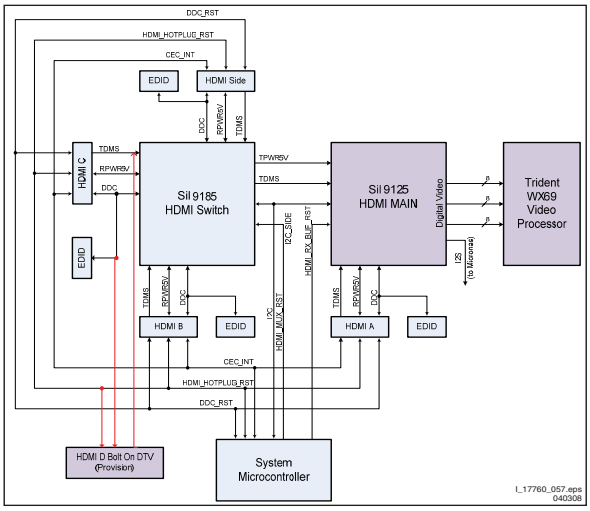


Figure 9-10 HDMI implementation

When the HDMI receiver Sil9125 receives either RGB or YCbCr 4:2:2 input signals, it will convert these signals to 24-36-bit YCbCr 4:4:4 output signals. When it receives an YCbCr 4:4:4 input signal, it will just bypass this signal to the Trident WX69 video processor.

9.8 Abbreviation List

1080i	1080 visible lines, interlaced
1080p	1080 visible lines, progressive scan
2CS	2 Carrier Sound
2DNR	Spatial (2D) Noise Reduction
3DNR	Temporal (3D) Noise Reduction
480i	480 visible lines, interlaced
480p	480 visible lines, progressive scan
AARA	Automatic Aspect Ratio Adaptation: algorithm that adapts aspect ratio to remove horizontal black bars; keeping up the original aspect ratio
ACI	Automatic Channel Installation: algorithm that installs TV channels directly from a cable network by means of a predefined TXT page
ADC	analogue to Digital Converter
AFC	Automatic Frequency Control: control signal used to tune to the correct frequency
AGC	Automatic Gain Control: algorithm that controls the video input of the feature box
AM	Amplitude Modulation
AUO	Acer Unipack Optronics
AP	Asia Pacific
AR	Aspect Ratio: 4 by 3 or 16 by 9
ASD	Automatic Standard Detection
AV	Audio Video
B/G	Monochrome TV system. Sound carrier distance is 5.5 MHz
BTSC	Broadcast Television System Committee
CAM	Conditional Access Module
CBA	Circuit Board Assembly (or PWB)
CEC	Consumer Electronics Control bus; remote control bus on HDMI connections
CI	Common Interface; E.g PCMCIA slot for a CAM in a set top box
CL	Constant Level: audio output to connect with an external amplifier
CLUT	Colour Look Up Table
ComPair	Computer aided rePair
COFDM	Coded Orthogonal Frequency Division Multiplexing; A multiplexing technique that distributes the data to be transmitted over many carriers
CSM	Customer Service Mode
CVBS	Composite Video Blanking and Synchronisation
CVBS-MON	CVBS monitor signal
CVBS-TER-OUT	CVBS terrestrial out
CVI	Component Video Input
DAC	Digital to analogue Converter
DBE	Dynamic Bass Enhancement: extra low frequency amplification
DDC	Display Data Channel; is a part of the “Plug and Play” feature
DFU	Directions For Use: owner's manual
DMB-TH	Digital Multimedia Broadcast - Terrestrial/Hand-held (Chinese digital television terrestrial/hand-held broadcasting system standard)
DNR	Dynamic Noise Reduction
DRAM	Dynamic RAM
DSP	Digital Signal Processing
DST	Dealer Service Tool: special (European) remote control designed for service technicians
DTS	Digital Theatre Sound
DVB(T)	Digital Video Broadcast; An MPEG2 based standard for transmitting digital audio and video. T= Terrestrial
DVD	Digital Versatile Disc
DVI	Digital Visual Interface
DW	Double Window
ED	Enhanced Definition: 480p, 576p
EDID	Extended Display Identification Data (VESA standard)
EEPROM	Electrically Erasable and Programmable Read Only Memory
EU	EUrope
EXT	EXTernal (source), entering the set by SCART or by cinches (jacks)
FBL	Fast Blanking: DC signal accompanying RGB signals
FBL-TXT	Fast Blanking Teletext
FLASH	FLASH memory
FM	Field Memory / Frequency Modulation
FMR	FM Radio
FRC	Frame Rate Converter
FTV	Flat TeleVision
H	H_sync to the module
HD	High Definition: 720p, 1080i, 1080p
HD DNM	Digital Natural Motion for High-Definition TV
HDCP	High-bandwidth Digital Content Protection; A “key” encoded into the HDMI/DVI signal that prevents video data piracy. If a source is HDCP coded and connected via HDMI/DVI without the proper HDCP decoding, the picture is put into a “snow vision” mode or changed to a low resolution. For normal content distribution, the source and the display device must be enabled for HDCP “software key” decoding
HDMI	High Definition Multimedia Interface, digital audio and video interface
HP	Head Phone
I	Monochrome TV system. Sound carrier distance is 6.0 MHz
I2C	Integrated IC bus
I2S	Integrated IC Sound bus
IBO(Z)	Intelligent Bolt On module. Z= Zapper; module for DVB reception.
IC	Integrated Circuit
IF	Intermediate Frequency
IR	Infra Red
IRQ	Interrupt ReQuest
Last Status	The settings last chosen by the customer and read and stored in RAM or in the NVM. They are called at start-up of the set to configure it according the customers wishes
LATAM	LATin AMerica
LC08	Philips chassis name for LCD TV 2008 project
LCD	Liquid Crystal Display
LED	Light Emitting Diode
L/L'	Monochrome TV system. Sound carrier distance is 6.5 MHz. L' is Band I, L is all bands except for Band I
LPL	LG Philips LCD
LS	Loud Speaker
LVDS	Low Voltage Differential Signalling, data transmission system for high speed and low EMI communication.
MADI	Motion Adaptive De-Interlacing
M/N	Monochrome TV system. Sound carrier distance is 4.5 MHz
MOSFET	Metal Oxide Semiconductor Field Effect Transistor
MPEG	Motion Pictures Experts Group

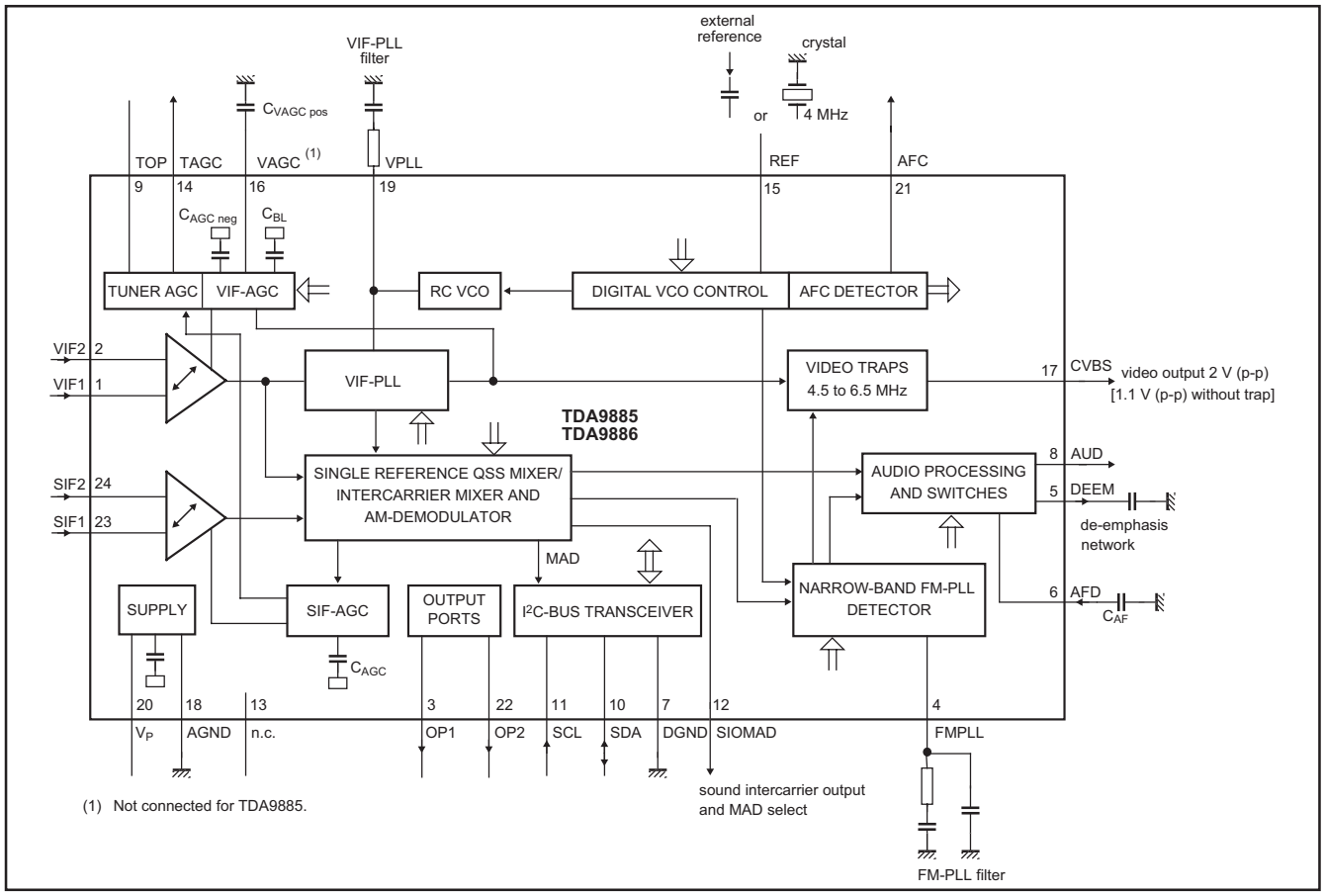
MSP	Multi-standard Sound Processor: ITT sound decoder
MUTE	MUTE Line
NAFTA	North American Free Trade Association: Trade agreement between Canada, USA and Mexico
NC	Not Connected
NICAM	Near Instantaneous Compounded Audio Multiplexing. This is a digital sound system, used mainly in Europe.
NTSC	National Television Standard Committee. Colour system used mainly in North America and Japan. Colour carrier NTSC M/N = 3.579545 MHz, NTSC 4.43 = 4.433619 MHz (this is a VCR norm, it is not transmitted off-air)
NVM	Non Volatile Memory: IC containing TV related data (for example, options)
O/C	Open Circuit
ON/OFF LED	On/Off control signal for the LED
OAD	Over the Air Download
OSD	On Screen Display
PAL	Phase Alternating Line. Colour system used mainly in Western Europe (colour carrier = 4.433619 MHz) and South America (colour carrier PAL M = 3.575612 MHz and PAL N = 3.582056 MHz)
PC	Personal Computer
PCB	Printed Circuit Board (or PWB)
PDP	Plasma Display Panel
PIG	Picture In Graphic
PIP	Picture In Picture
PLL	Phase Locked Loop. Used, for example, in FST tuning systems. The customer can directly provide the desired frequency
PSU	Power Supply Unit
PWB	Printed Wiring Board (or PCB)
RAM	Random Access Memory
RC	Remote Control transmitter
RC5 (6)	Remote Control system 5 (6), the signal from the remote control receiver
RF	Radio Frequency
RGB	Red, Green, and Blue. The primary colour signals for TV. By mixing levels of R, G, and B, all colours (Y/C) are reproduced.
RGBHV	Red, Green, Blue, Horizontal sync, and Vertical sync
ROM	Read Only Memory
SAM	Service Alignment Mode
SC	SandCastle: two-level pulse derived from sync signals
SC1-OUT	SCART output of the MSP audio IC
SC2-OUT	SCART output of the MSP audio IC
S/C	Short Circuit
SCL	Clock signal on I2C bus
SD	Standard Definition: 480i, 576i
SDA	Data signal on I2C bus
SDI	Samsung Display Industry
SDM	Service Default Mode
SDRAM	Synchronous DRAM
SECAM	SEequence Couleur Avec Memoire. Colour system used mainly in France and Eastern Europe. Colour carriers = 4.406250 MHz and 4.250000 MHz
SIF	Sound Intermediate Frequency
SMPS	Switch Mode Power Supply
SND	SouND
SOPS	Self Oscillating Power Supply
S/PDIF	Sony Philips Digital InterFace
SRAM	Static RAM
SSB	Small Signal Board
STBY	Stand-by
SVHS	Super Video Home System
SW	Sub Woofer / SoftWare / Switch
THD	Total Harmonic Distortion
TXT	TeleteXT
uP	Microprocessor
VL	Variable Level out: processed audio output toward external amplifier
VCR	Video Cassette Recorder
VGA	Video Graphics Array
WD	Watch Dog
WYSIWYR	What You See Is What You Record: record selection that follows main picture and sound
XTAL	Quartz crystal
YPbPr	Component video (Y= Luminance, Pb/Pr= Colour difference signals B-Y and R-Y, other amplitudes w.r.t. to YUV)
Y/C	Video related signals: Y consists of luminance signal, blanking level and sync; C consists of colour signal.
Y-OUT	Luminance-signal
YUV	Baseband component video (Y= Luminance, U/V= Colour difference signals)

9.9 IC Data Sheets

This section shows the internal block diagrams and pin layouts of ICs that are drawn as “black boxes” in the electrical diagrams (with the exception of “memory” and “logic” ICs).

9.9.1 Diagram B03, Type TDA9886T (IC7113), IF-PLL demodulator

Block Diagram



Pin Configuration

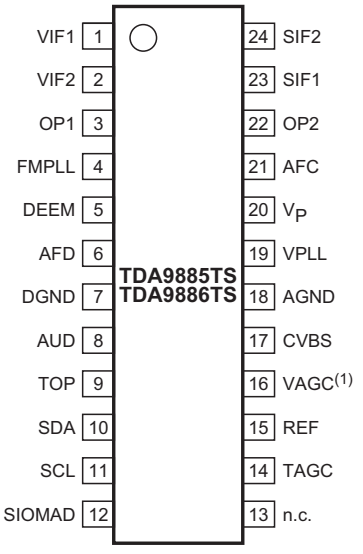


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Figure 9-11 Internal block diagram and pin configuration

9.9.2 Diagram B07A, Type SIL9185 (IC7M07), HDMI switch

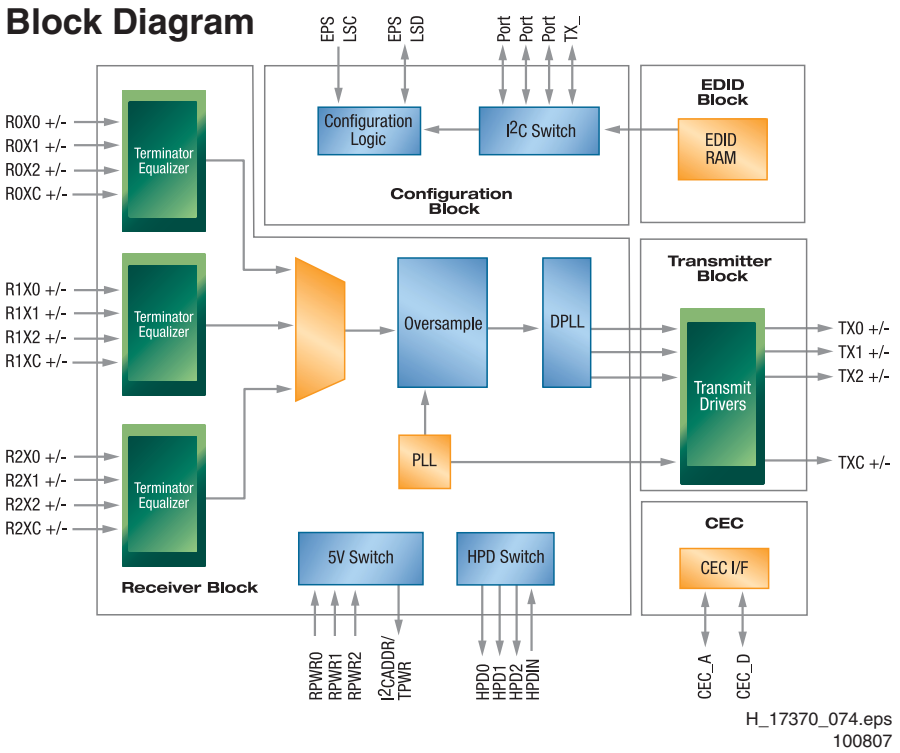


Figure 9-12 Internal block diagram and pin configuration

9.9.3 Diagram B07B, Type SIL9125 (IC7N01), HDMI receiver

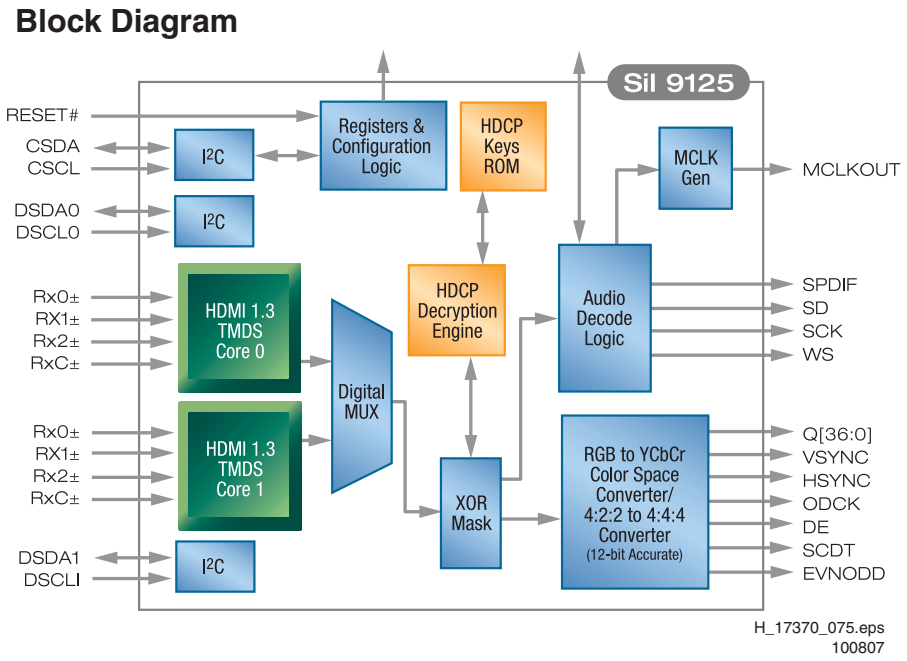
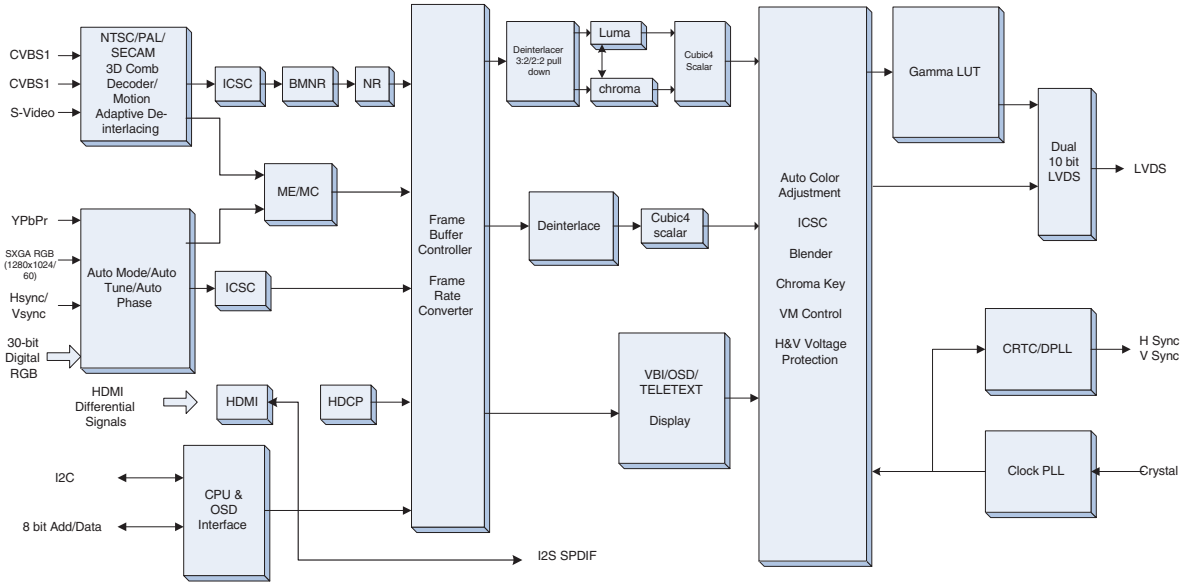


Figure 9-13 Internal block diagram and pin configuration

9.9.4 Diagram B04A, Type SVP WX69 (IC7C01), Trident Video processor

Block Diagram



Pin Configuration

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
A	MD27	MD26	MD25	MD23	MD21	DQM2	MD19	MD12	DQM1	MD7	MD6	DQM0	MD2	TA1P	TB1P	TC1P	TCLK1P	TD1P	TE1P	TA2P	A
B	DQM3	DQS3	VSS	VDDM	MD22	DQS2	MD18	MD13	DQS1	MD8	MD5	DQS0	MD1	TA1M	TB1M	TC1M	TCLK1M	TD1M	TE1M	TA2M	B
C	MD28	MD29	MD30	VDDM	MD24	VSS	MD17	MD14	VSS	MD9	MD4	VSS	MD0	VDDC	VDDC	LVDSVSSO	LVDSVDDO	LVDSVSSO	LVDSVSSO	TB2P	C
D	MCK0	VSS	MD31	VDDM	VDDM	MD20	MD16	MD15	MD11	MD10	VDDM	MD3	VDDC	VDDC	VDDC	LVDSVDDC	LVDSVDDO	LVDSVDDP	TB2M	TC2P	D
E	MCK0#	VDDR	MVREF	VSSR	VDDM	VDDM	VSSR	VDDR	VDDM	VDDM	VDDM	VDDM	VDDC	VDDC	VDDC	LVDSVSSA	LVDSVDDA	LVDSVSSP	TC2M	TCLK2P	E
F	MA11	MA10	MA9	MA8	VDDM		VDDC-8	VDDM-10	VSS-5	Signal-50	Tap total-	73				VSSF	TESTMODE	RESET	TCLK2M	TD2P	F
G	MA4	MA5	MA6	MA7	VDDM	VDDM-3			SVP_UL_WX 336					VDDH-4		VDDC	PWM0	INTN	TD2M	TE2P	G
H	MA3	MA2	MA1	MA0	VDDC	VSS-1		VSS	VSS	VSS	VSS	VSS	VSS	VDDC-5		VDDC	SDA	SCL	TE2M	VSS	H
J	CAS#	RAS#	CS1#	CS0#	VDDC	VDDC-3		VSS	VSS	VSS	VSS	VSS	VSS	VSS-2		VDDC	CPU_CS	ALE	WR#	RD#	J
K	WE#	CLKE	BA0	BA1	VDDC	Signal-51		VSS	VSS	VSS	VSS	VSS	VSS	Signal-84		VDDC	AD4	AD5	AD6	AD7	K
L	RXC+	RXC-	TMDS_GND	PVCC	VSS	TMDS_GND-5		VSS	VSS	VSS	VSS	VSS	VSS	Right total-	95	VDDH	AD0	AD1	AD2	AD3	L
M	RX0+	RX0-	TMDS_GND	AVCC	ANTSTO	Left total-	63	VSS	VSS	VSS	VSS	VSS	VSS			VDDH	ADDR7	ADDR6	ADDR5	ADDR4	M
N	RX1+	RX1-	TMDS_GND	AVCC	AVCC			VSS	VSS	VSS	VSS	VSS	VSS	VSSM-3		VDDH	ADDR0	ADDR1	ADDR2	ADDR3	N
P	RX2+	RX2-	TMDS_GND	AVCC	AVSS33_AUDIO	Total Balk-	336							VSS-33		VDDH	VS	VSS	HS	Rsvd (MC)	P
R	TMDS_GND	PDVDD	PAVSS2	PLF2	AVDD33_AUDIO			VDDC-2	VDDH-2	Signal-65	Bat total-	69		center Total -	36	VDDC	VDDH	VDDH	DPB_9	DPB_8	R
T	PDVSS	PAVSS1	PAVDD1	PAVDD2	AVSS_ADC1	AVSS_ADC4	AVSS_ADC2	AVDD_ADC3	AVSS_ADC3	PWRSV	DSCL	VDDH	VDDH	VDDC	VDDC	VSS	DPB_10	DPB_11	DPB_CLK	DPB_12	T
U	PAVDD	MLF1	AVDD3_OUTBUF	FB2	AVDD_ADC1	AVDD_ADC4	AVDD_ADC2	PC_R	AVDD3_ADC2	AIN_VS	DSDA	WS	DPA_22	DPA_15	DPA_14	DPA_8	DPA_7	DPB_15	DPB_14	DPB_13	U
V	PAVSS	CVBS_OUT2	AVDD3_BG_ASS	FS1	AVDD3_ADC2	Y_G1	REXT	PR_R3	C	AIN_HS	SCDT	SD0	DPA_21	DPA_16	DPA_13	DPA_9	DPA_6	DPA_1	DPB_HS	DPB_VS	V
W	XTALI	CVBS_OUT1	AVSS_BG_ASS	FS2	AVDD3_ADC2	Y_G2	AVDD3_ADC2	PR_R2	PB_B1	PC_B	AUDIOCLK	SPDIF	DPA_20	DPA_17	DPA_12	DPA_10	DPA_5	DPA_2	DPA_0	DPB_DE	W
Y	XTALO	AVSS_OUTBUF	AVDD3_ADC1	CVBS1	FB1	Y_G3	PC_G	PR_R1	PB_B2	PB_B3	SCK	DPA_23	DPA_19	DPA_18	DPA_CLK	DPA_11	DPA_4	DPA_3	DPA_HS	DPA_VS	Y
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	

I_17760_036.eps
260208

Figure 9-14 Internal block diagram

9.9.5 Diagram B05A, Type MSP4450P (IC7411), Micronas Sound Processor

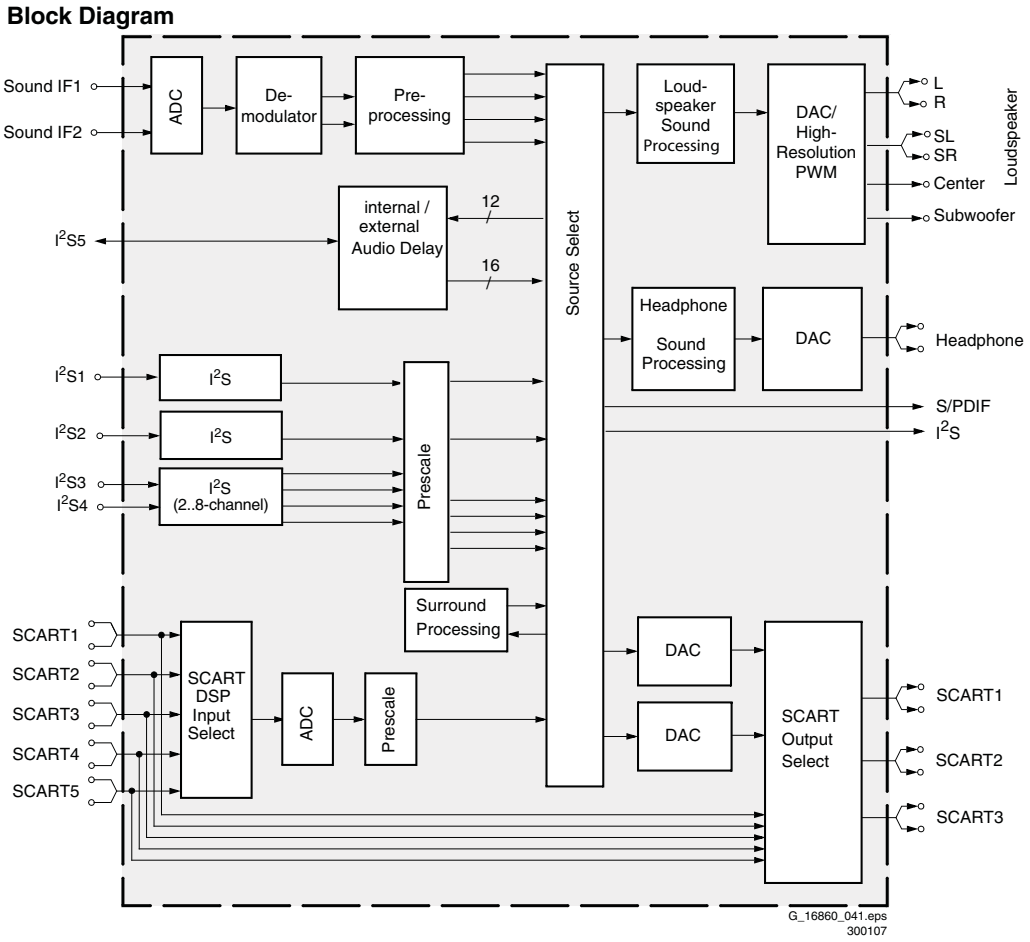
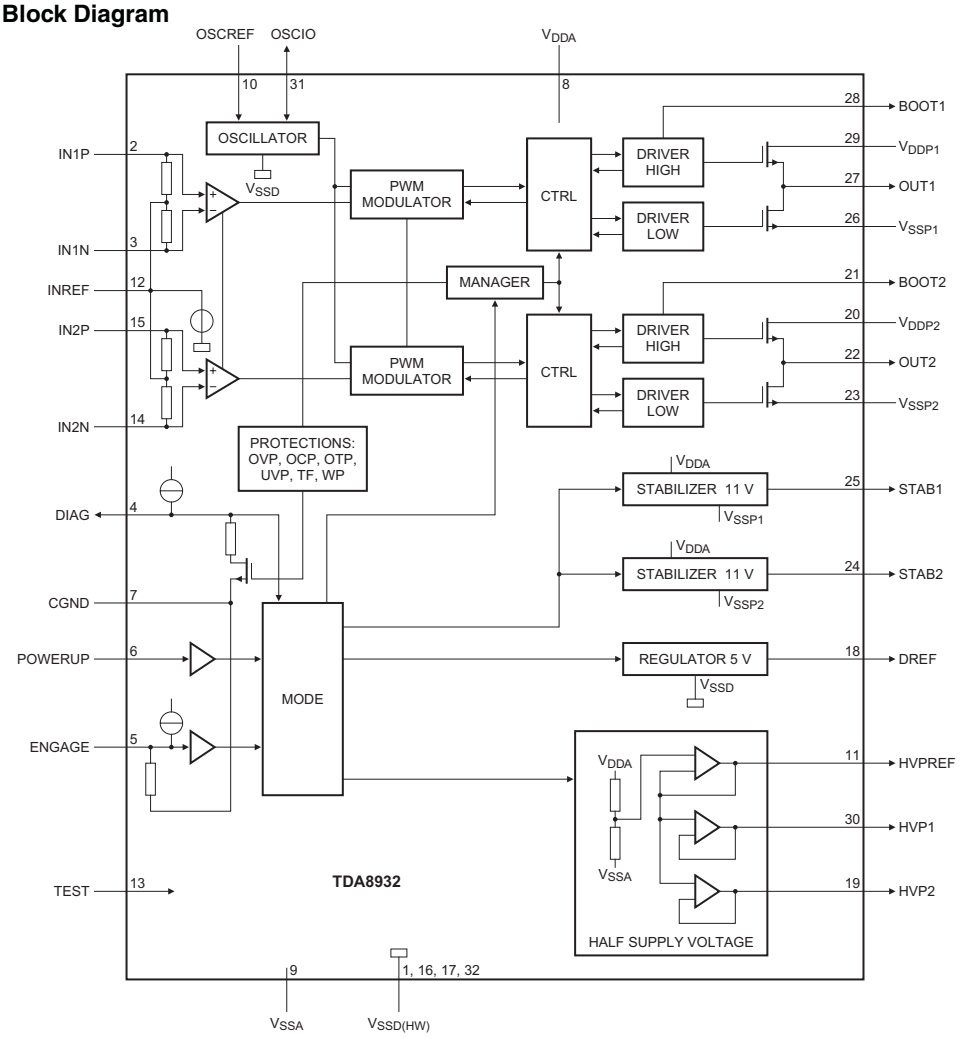


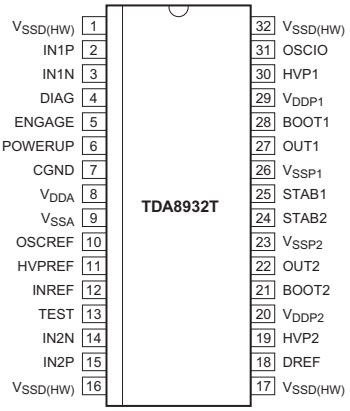
Figure 9-15 Internal block diagram

9.9.6 Diagram B05B, Type TDA8932T (IC7A01), Audio Amplifier

Block Diagram



Pin Configuration



G_16860_045.eps
300107

Figure 9-16 Internal block diagram and pin configuration

10. Spare Parts List

Sets Listed per Model Number (CTN)

42PFL5403/93

0815	Main SW	See website
0816	Main NVM SW	See website
0821	HDMI A SW	See website
0822	HDMI C SW	See website
0824	HDMI S SW	See website
0835	VGA SW	See website
0025	9965 100 11963	Keyb. & Control assy [E]
1004	9965 100 11964	42" LCD LC420WUE
1005	9965 100 11962	Power Supply assy
1112	9965 100 11826	IR & LED assy [J]
1150	9965 100 11975	Service SSB assy [B]
8320	9965 100 11971	Cable 9p/820/9p
8A35	9965 100 11972	Cable 04p/480+680/2x2ft
8R01	9965 100 11965	LVDS cable

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5211	9965 100 11957	Speaker R
5212	9965 100 11956	Speaker L
5215	9965 100 11961	Loudsp. 4Ω 20W Tw

42PFL7403/93

0815	Main SW	See website
0816	Main NVM SW	See website
0821	HDMI A SW	See website
0822	HDMI C SW	See website
0823	HDMI B SW	See website
0824	HDMI S SW	See website
0835	VGA SW	See website
0025	9965 100 11963	Keyb. & Control assy [E]
1004	9965 100 12167	42" LCD LC420WUF
1005	9965 100 11962	Power Supply assy
1112	9965 100 11826	IR & LED assy [J]
1130	9965 100 12173	DFI assy [AB]
1150	9965 100 12183	Service SSB assy [B]
8320	9965 100 11971	Cable 9p/820/9p
8A35	9965 100 11972	Cable 04p/480+680/2x2ft
8F51	9965 100 12170	LVDS cable
8F52	9965 100 12171	LVDS cable
8M90	9965 100 12169	Cable 4p/480/6p
8R01	9965 100 12168	LVDS cable

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5211	9965 100 11957	Speaker R
5212	9965 100 11956	Speaker L
5215	9965 100 11961	Loudsp. 4Ω 20W Tw

DFI Panel [AB]

Various

0800	DFI SW	See website
1U01	9965 100 12178	Fuse NO452 3A
1U02	9965 100 12178	Fuse NO452 3A

⊣⊢

2CBC	9965 100 11905	10nF 10% 16V
2CBD	9965 100 12204	10µF 10% 6.3V
2CBH	9965 100 11905	10nF 10% 16V
2CBK	9965 100 12204	10µF 10% 6.3V
2F2A	9965 000 27286	100nF 10% 50V 0603
2F2B	9965 000 30587	1µF 20% 16V
2F2I	9965 000 27286	100nF 10% 50V 0603
2F2K	9965 100 12208	10pF 5% 50V
2F2L	9965 100 12208	10pF 5% 50V
2F34	9965 100 12208	10pF 5% 50V
2F35	9965 100 12208	10pF 5% 50V
2F36	9965 100 11890	1nF 10% 50V 0402
2F37	9965 100 11890	1nF 10% 50V 0402
2F38	9965 100 11890	1nF 10% 50V 0402
2F39	9965 100 11890	1nF 10% 50V 0402
2F40	9965 100 11890	1nF 10% 50V 0402
2F41	9965 100 11890	1nF 10% 50V 0402
2F42	9965 100 11890	1nF 10% 50V 0402
2F43	9965 100 11890	1nF 10% 50V 0402
2F53	9965 100 11888	100pF 5% 50V 0402
2F5A	9965 100 11905	10nF 10% 16V
2F5B	9965 100 11905	10nF 10% 16V
2F5C	9965 100 11905	10nF 10% 16V
2F5D	9965 100 11905	10nF 10% 16V
2F5E	9965 100 11905	10nF 10% 16V
2F5F	9965 100 12204	10µF 10% 6.3V
2F5G	9965 100 11905	10nF 10% 16V
2F5H	9965 100 11905	10nF 10% 16V
2F5J	9965 100 11905	10nF 10% 16V
2F5K	9965 100 12204	10µF 10% 6.3V
2F5L	9965 100 11905	10nF 10% 16V
2F5M	9965 100 11905	10nF 10% 16V
2F5N	9965 100 11906	100nF 16V 0402
2F5P	9965 100 11906	100nF 16V 0402
2F5Q	9965 100 11888	100pF 5% 50V 0402
2F5R	9965 000 27286	100nF 10% 50V 0603
2F5S	9965 000 30587	1µF 20% 16V
2F5T	9965 100 12206	330µF 20% 6.3V
2F5U	9965 000 27286	100nF 10% 50V 0603
2F5W	9965 100 11905	10nF 10% 16V
2F5Y	9965 100 11905	10nF 10% 16V
2F5Z	9965 000 33000	22µF 20% 16V
2F6A	9965 100 11905	10nF 10% 16V
2F6B	9965 100 11905	10nF 10% 16V
2F6C	9965 100 11905	10nF 10% 16V
2F6D	9965 100 11905	10nF 10% 16V
2F6E	9965 000 30587	1µF 20% 16V
2F6F	9965 000 27286	100nF 10% 50V 0603
2F6G	9965 100 11888	100pF 5% 50V 0402
2F78	9965 100 11888	100pF 5% 50V 0402
2F95	9965 000 27286	100nF 10% 50V 0603
2FD4	9965 000 27286	100nF 10% 50V 0603
2FGA	9965 100 11905	10nF 10% 16V
2FGB	9965 100 11905	10nF 10% 16V
2FGC	9965 100 11905	10nF 10% 16V
2FGD	9965 100 11905	10nF 10% 16V
2FGE	9965 100 11905	10nF 10% 16V
2FGF	9965 100 11906	100nF 16V 0402
2FGG	9965 100 11905	10nF 10% 16V
2FGH	9965 100 11906	100nF 16V 0402
2FGJ	9965 100 11905	10nF 10% 16V
2FGM	9965 100 11906	100nF 16V 0402
2FGN	9965 100 11905	10nF 10% 16V
2FGP	9965 100 11906	100nF 16V 0402
2FH1	9965 000 30587	1µF 20% 16V
2FH2	9965 100 11905	10nF 10% 16V
2FH3	9965 100 11905	10nF 10% 16V
2FH4	9965 100 11905	10nF 10% 16V
2FH5	9965 100 11905	10nF 10% 16V
2FHA	9965 100 12203	4.7µF 10% 6.3V
2FHB	9965 000 30587	1µF 20% 16V
2FHC	9965 100 11905	10nF 10% 16V
2FHD	9965 100 11905	10nF 10% 16V
2FHE	9965 100 11905	10nF 10% 16V
2FHF	9965 100 11905	10nF 10% 16V
2FHG	9965 100 11905	10nF 10% 16V
2FHH	9965 100 11905	10nF 10% 16V
2FHJ	9965 100 11905	10nF 10% 16V
2FHK	9965 100 11905	10nF 10% 16V
2FHL	9965 100 12179	100µF 20% 4V
2FHM	9965 100 12207	47µF 20% 6.3V
2FHN	9965 000 30587	1µF 20% 16V
2FHP	9965 100 11905	10nF 10% 16V
2FHQ	9965 100 11905	10nF 10% 16V
2FHR	9965 100 11905	10nF 10% 16V
2FHS	9965 100 11905	10nF 10% 16V
2FJ7	9965 100 11905	10nF 10% 16V
2FJ8	9965 100 12203	4.7µF 10% 6.3V
2FJ9	9965 100 11906	100nF 16V 0402
2FJA	9965 100 11906	100nF 16V 0402
2FJB	9965 100 11906	100nF 16V 0402
2FJC	9965 100 11906	100nF 16V 0402
2FJD	9965 100 11906	100nF 16V 0402
2FJE	9965 100 11906	100nF 16V 0402
2FJF	9965 100 11906	100nF 16V 0402
2FJK	9965 100 11905	10nF 10% 16V
2FJL	9965 100 11905	10nF 10% 16V
2FJP	9965 100 12203	4.7µF 10% 6.3V
2FLC	9965 100 12203	4.7µF 10% 6.3V
2FLD	9965 100 11906	100nF 16V 0402
2FLE	9965 100 11906	100nF 16V 0402
2FLF	9965 100 11906	100nF 16V 0402
2FLG	9965 100 11888	100pF 5% 50V 0402
2FLH	9965 100 11888	100pF 5% 50V 0402
2FLJ	9965 100 11888	100pF 5% 50V 0402
2FLK	9965 100 11905	10nF 10% 16V
2FLL	9965 100 11888	100pF 5% 50V 0402
2FLM	9965 100 11905	10nF 10% 16V
2FLN	9965 100 11905	10nF 10% 16V
2FLP	9965 100 11905	10nF 10% 16V
2FLR	9965 100 11905	10nF 10% 16V
2FLS	9965 100 11905	10nF 10% 16V
2FLT	9965 100 11905	10nF 10% 16V
2FLU	9965 100 11905	10nF 10% 16V
2FLV	9965 100 11905	10nF 10% 16V
2FLW	9965 100 11905	10nF 10% 16V
2FLY	9965 100 11905	10nF 10% 16V
2FLZ	9965 100 11905	10nF 10% 16V
2U00	9965 000 27286	100nF 10% 50V 0603
2U01	9965 100 12205	22µF 10% 16V
2U02	9965 100 12205	22µF 10% 16V
2U04	9965 100 11900	3.3nF 10% 50V
2U05	9965 100 11844	1µF 10% 16V
2U07	9965 000 27286	100nF 10% 50V 0603
2U08	9965 100 11900	3.3nF 10% 50V
2U09	9965 100 12207	47µF 20% 6.3V
2U11	9965 100 11844	1µF 10% 16V
2U13	9965 100 11890	1nF 10% 50V 0402
2U14	9965 100 12207	47µF 20% 6.3V
2U15	9965 100 11900	3.3nF 10% 50V
2U16	9965 100 11890	1nF 10% 50V 0402
2U18	9965 000 27286	100nF 10% 50V 0603
2U19	9965 000 27286	100nF 10% 50V 0603
2U20	9965 000 27286	100nF 10% 50V 0603
2U23	9965 000 27286	100nF 10% 50V 0603
2U24	9965 100 11900	3.3nF 10% 50V
2U26	9965 000 27286	100nF 10% 50V 0603
2U27	9965 100 11890	1nF 10% 50V 0402
2U28	9965 100 11890	1nF 10% 50V 0402
2U29	9965 100 11844	1µF 10% 16V
2U30	9965 100 11910	1µF 10% 6.3V
2U31	9965 100 11910	1µF 10% 6.3V
2U32	9965 100 11917	22µF 20% 35V
2U34	9965 100 11888	100pF 5% 50V 0402
2U35	9965 100 11917	22µF 20% 35V
2U36	9965 100 11888	100pF 5% 50V 0402
2U37	9965 000 27286	100nF 10% 50V 0603
2U38	9965 100 11917	22µF 20% 35V
2U39	9965 100 11844	1µF 10% 16V
2U40	9965 100 11910	1µF 10% 6.3V
2U41	9965 100 11917	22µF 20% 35V
2V00	9965 100 11906	100nF 16V 0402
2V01	9965 100 11906	100nF 16V 0402
2V03	9965 000 27286	100nF 10% 50V 0603
2V04	9965 100 11890	1nF 10% 50V 0402
2V05	9965 100 11888	100pF 5% 50V 0402
2V33	9965 000 27286	100nF 10% 50V 0603
2V34	9965 000 33000	22µF 20% 16V
2V35	9965 100 12206	330µF 20% 6.3V
2V39	9965 100 11905	10nF 10% 16V
2V40	9965 100 11905	10nF 10% 16V
2V41	9965 100 11905	10nF 10% 16V
2V42	9965 100 11905	10nF 10% 16V
2V43	9965 100 11905	10nF 10% 16V
2V44	9965 100 11905	10nF 10% 16V
2V45	9965 100 11888	100pF 5% 50V 0402
2V46	9965 000 30587	1µF 20% 16V
2V50	9965 100 11905	10nF 10% 16V
2V51	9965 100 11905	10nF 10% 16V
2V52	9965 100 11905	10nF 10% 16V
2V53	9965 100 11905	10nF 10% 16V
2V54	9965 100 11905	10nF 10% 16V
2V55	9965 100 11905	10nF 10% 16V

–WW–

3CA0	9965 100 11858	22Ω 5% 1/16W
3CA1	9965 100 11858	22Ω 5% 1/16W
3CA2	9965 100 11858	22Ω 5% 1/16W
3CA3	9965 100 11858	22Ω 5% 1/16W
3CA4	9965 100 11858	22Ω 5% 1/16W
3CA5	9965 100 11858	22Ω 5% 1/16W
3CA6	9965 100 11858	22Ω 5% 1/16W
3CA7	9965 100 11858	22Ω 5% 1/16W
3CA8	9965 100 11858	22Ω 5% 1/16W
3CA9	9965 100 11858	22Ω 5% 1/16W
3CB0	9965 100 11858	22Ω 5% 1/16W
3CB1	9965 100 11858	22Ω 5% 1/16W
3CB2	9965 100 11858	22Ω 5% 1/16W
3CB3	9965 100 11858	22Ω 5% 1/16W
3CB4	9965 100 11858	22Ω 5% 1/16W
3CB5	9965 100 11858	22Ω 5% 1/16W
3CB6	9965 100 11858	22Ω 5% 1/16W
3CB7	9965 100 11858	22Ω 5% 1/16W
3CB8	9965 100 11858	22Ω 5% 1/16W
3CB9	9965 100 11858	22Ω 5% 1/16W
3CC0	9965 100 11858	22Ω 5% 1/16W
3CC1	9965 100 11858	22Ω 5% 1/16W
3CC2	9965 100 11858	22Ω 5% 1/16W
3CC3	9965 100 11858	22Ω 5% 1/16W

3CC4	9965 100 11858	22Ω 5% 1/16W
3CC5	9965 100 11858	22Ω 5% 1/16W
3CC6	9965 100 11858	22Ω 5% 1/16W
3CC7	9965 100 11858	22Ω 5% 1/16W
3CC8	9965 100 11858	22Ω 5% 1/16W
3CC9	9965 100 11858	22Ω 5% 1/16W
3CD0	9965 100 11858	22Ω 5% 1/16W
3CD1	9965 100 11858	22Ω 5% 1/16W
3CD2	9965 100 11858	22Ω 5% 1/16W
3CD3	9965 100 11858	22Ω 5% 1/16W
3CD4	9965 100 11858	22Ω 5% 1/16W
3CD5	9965 100 11858	22Ω 5% 1/16W
3CD6	9965 100 12202	560Ω 1% 1/16W
3CD7	9965 100 12202	560Ω 1% 1/16W
3CD8	9965 100 12202	560Ω 1% 1/16W
3CD9	9965 100 12202	560Ω 1% 1/16W
3CE1	9965 100 11859	220Ω 5% 1/16W
3CE2	9965 100 11859	220Ω 5% 1/16W
3F02	9965 100 11870	470Ω 5% 1/16W
3F04	9965 100 11870	470Ω 5% 1/16W
3F06	9965 100 11870	470Ω 5% 1/16W
3F08	9965 100 11870	470Ω 5% 1/16W
3F10	9965 100 11870	470Ω 5% 1/16W
3F14	9965 100 11834	10kΩ 5% 1/16W
3F18	9965 100 11871	4.7kΩ 5% 1/16W
3F19	9965 100 11868	47Ω 5% 1/16W
3F1W	9965 100 11872	47kΩ 5% 1/16W
3F1Y	9965 100 11872	47kΩ 5% 1/16W
3F1Z	9965 100 11834	10kΩ 5% 1/16W
3F20	9965 100 11868	47Ω 5% 1/16W
3F21	9965 100 11834	10kΩ 5% 1/16W
3F22	9965 100 11868	47Ω 5% 1/16W
3F2D	9965 100 11860	2.2kΩ 5% 1/16W
3F2V	9965 100 11834	10kΩ 5% 1/16W
3F31	9965 100 11868	47Ω 5% 1/16W
3F49	9965 100 11868	47Ω 5% 1/16W
3F4A	9965 100 11859	220Ω 5% 1/16W
3F4B	9965 100 12202	560Ω 1% 1/16W
3F4C	9965 100 12202	560Ω 1% 1/16W
3F4D	9965 100 12202	560Ω 1% 1/16W
3F4E	9965 100 12202	560Ω 1% 1/16W
3F4F	9965 100 11859	220Ω 5% 1/16W
3F4G	9965 100 11858	22Ω 5% 1/16W
3F4H	9965 100 11858	22Ω 5% 1/16W
3F4J	9965 100 11858	22Ω 5% 1/16W
3F4K	9965 100 11858	22Ω 5% 1/16W
3F4L	9965 100 11858	22Ω 5% 1/16W
3F4M	9965 100 11858	22Ω 5% 1/16W
3F4N	9965 100 11858	22Ω 5% 1/16W
3F4P	9965 100 11858	22Ω 5% 1/16W
3F4Q	9965 100 11858	22Ω 5% 1/16W
3F4R	9965 100 11858	22Ω 5% 1/16W
3F4S	9965 100 11858	22Ω 5% 1/16W
3F4T	9965 100 11858	22Ω 5% 1/16W
3F4U	9965 100 11858	22Ω 5% 1/16W
3F4V	9965 100 11858	22Ω 5% 1/16W
3F4W	9965 100 11858	22Ω 5% 1/16W
3F4Y	9965 100 11858	22Ω 5% 1/16W
3F4Z	9965 100 11858	22Ω 5% 1/16W
3F50	9965 100 11855	180Ω 5% 1/16W
3F51	9965 100 11852	150Ω 5% 1/16W
3F52	9965 100 11855	180Ω 5% 1/16W
3F53	9965 100 11855	180Ω 5% 1/16W
3F54	9965 100 11852	150Ω 5% 1/16W
3F55	9965 100 11855	180Ω 5% 1/16W
3F56	9965 100 11855	180Ω 5% 1/16W
3F57	9965 100 11852	150Ω 5% 1/16W
3F58	9965 100 11855	180Ω 5% 1/16W
3F59	9965 100 11855	180Ω 5% 1/16W
3F5A	9965 100 11858	22Ω 5% 1/16W
3F5B	9965 100 11858	22Ω 5% 1/16W
3F5C	9965 100 11858	22Ω 5% 1/16W
3F5D	9965 100 11858	22Ω 5% 1/16W
3F5E	9965 100 11858	22Ω 5% 1/16W
3F5F	9965 100 11858	22Ω 5% 1/16W
3F5G	9965 100 11858	22Ω 5% 1/16W
3F5H	9965 100 11858	22Ω 5% 1/16W
3F5J	9965 100 11858	22Ω 5% 1/16W
3F5K	9965 100 11858	22Ω 5% 1/16W
3F5L	9965 100 11858	22Ω 5% 1/16W
3F5M	9965 100 11858	22Ω 5% 1/16W
3F5N	9965 100 11858	22Ω 5% 1/16W
3F5P	9965 100 11858	22Ω 5% 1/16W
3F5Q	9965 100 11858	22Ω 5% 1/16W
3F5R	9965 100 11858	22Ω 5% 1/16W
3F5S	9965 100 11858	22Ω 5% 1/16W
3F5T	9965 100 11858	22Ω 5% 1/16W
3F5U	9965 100 11855	180Ω 5% 1/16W
3F5V	9965 100 11855	180Ω 5% 1/16W
3F5W	9965 100 11852	150Ω 5% 1/16W
3F5Y	9965 100 11855	180Ω 5% 1/16W
3F5Z	9965 100 11855	180Ω 5% 1/16W
3F60	9965 100 11852	150Ω 5% 1/16W
3F61	9965 100 11855	180Ω 5% 1/16W
3F62	9965 100 11855	180Ω 5% 1/16W
3F63	9965 100 11855	180Ω 5% 1/16W
3F64	9965 100 11852	150Ω 5% 1/16W
3F65	9965 100 11855	180Ω 5% 1/16W
3F66	9965 100 11852	150Ω 5% 1/16W
3F67	9965 100 11855	180Ω 5% 1/16W
3F68	9965 100 11855	180Ω 5% 1/16W
3F69	9965 100 11852	150Ω 5% 1/16W
3F6A	9965 100 11855	180Ω 5% 1/16W
3F6B	9965 100 11855	180Ω 5% 1/16W
3F6C	9965 100 11852	150Ω 5% 1/16W
3F6D	9965 100 11858	22Ω 5% 1/16W
3F70	9965 100 11852	150Ω 5% 1/16W
3F71	9965 100 11855	180Ω 5% 1/16W
3F72	9965 100 11866	3.3kΩ 5% 1/16W
3F73	9965 100 11834	10kΩ 5% 1/16W
3F74	9965 100 11835	100kΩ 5% 1/16W
3F75	9965 100 11835	100kΩ 5% 1/16W
3F78	9965 100 12011	1kΩ 5% 1/16W
3F79	9965 100 12011	1kΩ 5% 1/16W
3F7J	9965 100 11855	180Ω 5% 1/16W
3F7K	9965 100 11852	150Ω 5% 1/16W
3F7L	9965 100 11855	180Ω 5% 1/16W
3F7M	9965 100 11855	180Ω 5% 1/16W
3F7N	9965 100 11852	150Ω 5% 1/16W
3F7P	9965 100 11855	180Ω 5% 1/16W
3F7Q	9965 100 11852	150Ω 5% 1/16W
3F7R	9965 100 11855	180Ω 5% 1/16W
3F80	9965 100 11833	100Ω 5% 1/16W
3F81	9965 100 11834	10kΩ 5% 1/16W
3F82	9965 100 11833	100Ω 5% 1/16W
3F84	9965 100 11833	100Ω 5% 1/16W
3F85	9965 100 11833	100Ω 5% 1/16W
3F86	9965 100 12011	1kΩ 5% 1/16W
3F87	9965 100 11833	100Ω 5% 1/16W
3F88	9965 100 11833	100Ω 5% 1/16W
3F89	9965 100 11833	100Ω 5% 1/16W
3F8A	9965 100 11855	180Ω 5% 1/16W
3F8B	9965 100 11855	180Ω 5% 1/16W
3F8C	9965 100 11852	150Ω 5% 1/16W
3F8D	9965 100 11855	180Ω 5% 1/16W
3F8E	9965 100 11855	180Ω 5% 1/16W
3F8F	9965 100 11852	150Ω 5% 1/16W
3F8G	9965 100 11855	180Ω 5% 1/16W
3F8H	9965 100 11855	180Ω 5% 1/16W
3F8J	9965 100 11852	150Ω 5% 1/16W
3F8K	9965 100 11855	180Ω 5% 1/16W
3F8L	9965 100 11852	150Ω 5% 1/16W
3F8M	9965 100 11855	180Ω 5% 1/16W
3F8N	9965 100 11855	180Ω 5% 1/16W
3F8P	9965 100 11855	180Ω 5% 1/16W
3F8Q	9965 100 11852	150Ω 5% 1/16W
3F8R	9965 100 11855	180Ω 5% 1/16W
3F8S	9965 100 11855	180Ω 5% 1/16W
3F8T	9965 100 11852	150Ω 5% 1/16W
3F8U	9965 100 11855	180Ω 5% 1/16W
3F8V	9965 100 11855	180Ω 5% 1/16W
3F8W	9965 100 11852	150Ω 5% 1/16W
3F8Y	9965 100 11855	180Ω 5% 1/16W
3F8Z	9965 100 11855	180Ω 5% 1/16W
3F90	9965 100 11833	100Ω 5% 1/16W
3F91	9965 100 11833	100Ω 5% 1/16W
3F92	9965 100 11855	180Ω 5% 1/16W
3F93	9965 100 11855	180Ω 5% 1/16W
3F94	9965 100 11852	150Ω 5% 1/16W
3F95	9965 100 11855	180Ω 5% 1/16W
3F96	9965 100 11833	100Ω 5% 1/16W
3F97	9965 100 11833	100Ω 5% 1/16W
3F98	9965 100 11833	100Ω 5% 1/16W
3F9N	9965 100 11852	150Ω 5% 1/16W
3F9P	9965 100 11855	180Ω 5% 1/16W
3F9Q	9965 100 11855	180Ω 5% 1/16W
3F9R	9965 100 11852	150Ω 5% 1/16W
3F9S	9965 100 11855	180Ω 5% 1/16W
3F9T	9965 100 11855	180Ω 5% 1/16W
3F9U	9965 100 11852	150Ω 5% 1/16W
3F9V	9965 100 11855	180Ω 5% 1/16W
3F9W	9965 100 11855	180Ω 5% 1/16W
3F9Y	9965 100 11852	150Ω 5% 1/16W
3F9Z	9965 100 11855	180Ω 5% 1/16W
3FA0	9965 100 11868	47Ω 5% 1/16W
3FA1	9965 100 11833	100Ω 5% 1/16W
3FA2	9965 100 11833	100Ω 5% 1/16W
3FA4	9965 100 11833	100Ω 5% 1/16W
3FA5	9965 100 11833	100Ω 5% 1/16W
3FA6	9965 100 11833	100Ω 5% 1/16W
3FA7	9965 100 11834	10kΩ 5% 1/16W
3FH4	9965 100 11868	47Ω 5% 1/16W
3FH5	9965 100 11868	47Ω 5% 1/16W
3FH7	9965 100 11833	100Ω 5% 1/16W
3FH8	9965 100 11833	100Ω 5% 1/16W
3FH9	9965 100 11833	100Ω 5% 1/16W
3FHI	9965 100 11833	100Ω 5% 1/16W
3FHJ	9965 100 11855	180Ω 5% 1/16W
3FHK	9965 100 11852	150Ω 5% 1/16W
3FHL	9965 100 11855	180Ω 5% 1/16W
3FHM	9965 100 11855	180Ω 5% 1/16W
3FHN	9965 100 11852	150Ω 5% 1/16W
3FHP	9965 100 11855	180Ω 5% 1/16W
3FHR	9965 100 11855	180Ω 5% 1/16W
3FHS	9965 100 11852	150Ω 5% 1/16W
3FJC	9965 100 11864	33Ω 5% 1/16W
3U00	9965 100 11834	10kΩ 5% 1/16W
3U01	9965 100 12006	10Ω 1/8W Fusible
3U03	9965 100 11832	0Ω 5% 1/16W
3U05	9965 100 11834	10kΩ 5% 1/16W
3U06	9965 100 11858	22Ω 5% 1/16W
3U07	9965 100 11833	100Ω 5% 1/16W
3U08	9965 100 11858	22Ω 5% 1/16W
3U09	9965 100 11858	22Ω 5% 1/16W
3U10	9965 100 11858	22Ω 5% 1/16W
3U11	9965 100 11858	22Ω 5% 1/16W
3U12	9965 100 11834	10kΩ 5% 1/16W
3U13	9965 100 11834	10kΩ 5% 1/16W
3U14	9965 100 11861	22kΩ 5% 1/16W
3U15	9965 100 12201	4.7Ω 1/16W
3U16	9965 100 11858	22Ω 5% 1/16W
3U17	9965 100 11840	6.8kΩ 5% 1/16W
3U18	9965 100 11870	470Ω 5% 1/16W
3U19	9965 100 11832	0Ω 5% 1/16W
3U20	9965 100 11858	22Ω 5% 1/16W
3U21	9965 100 12201	4.7Ω 1/16W
3U22	9965 100 12201	4.7Ω 1/16W
3U23	9965 100 12201	4.7Ω 1/16W
3U24	9965 100 12011	1kΩ 5% 1/16W
3U26	9965 100 11866	3.3kΩ 5% 1/16W
3U27	9965 100 11840	6.8kΩ 5% 1/16W
3U28	9965 100 12199	220Ω 1% 1/16W
3U30	9965 100 11834	10kΩ 5% 1/16W
3U31	9965 100 11840	6.8kΩ 5% 1/16W
3U32	9965 100 11838	39kΩ 5% 1/16W
3U33	9965 100 11840	6.8kΩ 5% 1/16W
3U36	9965 100 11866	3.3kΩ 5% 1/16W
3U37	9965 100 11840	6.8kΩ 5% 1/16W
3U40	9965 100 11840	6.8kΩ 5% 1/16W
3U41	9965 100 11833	100Ω 5% 1/16W
3U43	9965 100 11866	3.3kΩ 5% 1/16W
3U44	9965 100 11834	10kΩ 5% 1/16W
3U45	9965 100 11875	68Ω 5% 1/16W
3U46	9965 100 11858	22Ω 5% 1/16W
3U47	9965 100 12198	100Ω 1% 1/16W
3U48	9965 100 11875	68Ω 5% 1/16W
3U50	9965 100 12011	1kΩ 5% 1/16W
3U55	9965 100 11840	6.8kΩ 5% 1/16W
3U58	9965 100 11834	10kΩ 5% 1/16W
3U59	9965 100 12200	2.7kΩ 5% 1/16W
3U62	9965 100 11870	470Ω 5% 1/16W
3U63	9965 100 12011	1kΩ 5% 1/16W
3U64	9965 100 11860	2.2kΩ 5% 1/16W
3U69	9965 100 12010	1kΩ 1% 1/16W
3U70	9965 100 11869	470Ω 1% 1/16W
3U73	9965 100 12198	100Ω 1% 1/16W
3U74	9965 100 11869	470Ω 1% 1/16W
3U75	9965 100 11840	6.8kΩ 5% 1/16W
9F00	9965 100 11832	0Ω 5% 1/16W
9F01	9965 100 11832	0Ω 5% 1/16W
9F02	9965 100 11832	0Ω 5% 1/16W
9F03	9965 100 11832	0Ω 5% 1/16W
9F04	9965 100 11832	0Ω 5% 1/16W
9F06	9965 100 11832	0Ω 5% 1/16W
9F07	9965 100 11832	0Ω 5% 1/16W
9F2U	9965 100 11832	0Ω 5% 1/16W
9U03	9965 100 11832	0Ω 5% 1/16W

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5F00	9965 100 11920	DLW21SN670SQ2L
5F01	9965 100 11920	DLW21SN670SQ2L
5F02	9965 100 11920	DLW21SN670SQ2L
5F03	9965 100 11920	DLW21SN670SQ2L
5F04	9965 100 11920	DLW21SN670SQ2L
5F05	9965 100 11920	DLW21SN670SQ2L
5F06	9965 100 11920	DLW21SN670SQ2L
5F07	9965 100 11920	DLW21SN670SQ2L
5F08	9965 100 11920	DLW21SN670SQ2L
5F09	9965 100 11920	DLW21SN670SQ2L
5F0A	9965 100 11920	DLW21SN670SQ2L
5F0B	9965 100 11920	DLW21SN670SQ2L
5F0K	9965 100 12209	Bead 220Ω
5F0L	9965 100 12209	Bead 220Ω
5F0M	9965 100 12209	Bead 220Ω
5F22	9965 000 30799	Bead 30Ω 25%
5F23	9965 000 30799	Bead 30Ω 25%
5F24	9965 000 30799	Bead 30Ω 25%
5F25	9965 000 30799	Bead 30Ω 25%
5F27	9965 100 12209	Bead 220Ω
5F28	9965 100 12209	Bead 220Ω

5F50	9965 000 30799	Bead 30Ω 25%
5F52	9965 000 30799	Bead 30Ω 25%
5F53	9965 000 30799	Bead 30Ω 25%
5F54	9965 000 30799	Bead 30Ω 25%
5F55	9965 000 30799	Bead 30Ω 25%
5F59	9965 100 11920	DLW21SN670SQ2L
5F60	9965 100 11920	DLW21SN670SQ2L
5F61	9965 100 11920	DLW21SN670SQ2L
5F62	9965 100 11920	DLW21SN670SQ2L
5F63	9965 100 11920	DLW21SN670SQ2L
5F64	9965 100 11920	DLW21SN670SQ2L
5F65	9965 100 11920	DLW21SN670SQ2L
5F66	9965 100 11920	DLW21SN670SQ2L
5F67	9965 100 11920	DLW21SN670SQ2L
5F68	9965 100 11920	DLW21SN670SQ2L
5F69	9965 100 11920	DLW21SN670SQ2L
5F70	9965 100 11920	DLW21SN670SQ2L
5F71	9965 100 11920	DLW21SN670SQ2L
5F72	9965 100 11920	DLW21SN670SQ2L
5F78	9965 100 11920	DLW21SN670SQ2L
5F79	9965 100 11920	DLW21SN670SQ2L
5U00	9965 100 12210	Coil 20%
5U01	9965 100 11930	Coil 10µH
5U02	9965 100 11930	Coil 10µH
5U04	9965 100 12209	Bead 220Ω
5U05	9965 100 12209	Bead 220Ω
5U06	9965 100 12209	Bead 220Ω
5U07	9965 100 12209	Bead 220Ω
5V01	9965 100 12209	Bead 220Ω
5V02	9965 100 12209	Bead 220Ω

6F07	9965 100 12197	LED SML310MTT86
6F10	9965 100 12197	LED SML310MTT86
6F30	9965 100 12197	LED SML310MTT86
6F31	9965 100 12197	LED SML310MTT86
6F32	9965 100 12197	LED SML310MTT86
6F33	9965 100 12197	LED SML310MTT86
6F34	9965 100 12197	LED SML310MTT86
6F35	9965 100 12197	LED SML310MTT86
6U00	9965 100 06098	BAS316 115
6U04	9965 100 06098	BAS316 115
6U06	9965 100 06098	BAS316 115
6U08	9965 000 29866	Diode

7CA0	9965 100 12195	EDD1216AJ
7CA1	9965 100 12195	EDD1216AJ
7CA2	9965 100 12195	EDD1216AJ
7CA3	9965 100 12195	EDD1216AJ
7F07	9965 100 11984	SI4835BDY
7F08	9965 100 11829	BC847BW
7F18	9965 100 12177	EPC35F484CTN
7F30	9965 100 12180	EPCS16SI16N
7F32	9965 100 11829	BC847BW
7F51	9965 100 12176	CY25701LXC051T
7U00	9965 100 11990	NCP5422ADR2
7U01	9965 100 11985	SI4936BDY
7U03	9965 100 11985	SI4936BDY
7U07	9965 100 11986	BC817-25W
7U08	9965 100 12196	L78M08CDT LDO 8V
7U09	9965 100 12175	LD1117DT33
7U13	9965 000 30761	BC847BPN
7U15	9965 100 12174	BC847BS

Small Signal Board [B]

Various

0231	9965 100 11950	HDMI & VGA connector
1101	9965 100 11949	Tuner UV1356/ABHN-5
1103	9965 000 31906	SAW Filt. K9352M
1104	9965 100 11937	Xtal 4MHz 20p
1105	9965 000 31905	SAW Filt. K6274K
1301	9965 100 11933	10MHz 12p NX8045R
1320	9965 100 11843	HS 9p 242202517766
1411	9965 100 11934	Xtal 18M432 12p
1502	9965 100 11941	MTJ-505H2-02NIFELF
1504	9965 100 11941	MTJ-505H2-02NIFELF
1601	9965 100 11944	SVI SOCKET SDZ-W56
1602	9965 100 11943	AV socket
1603	9965 000 30127	Earphone socket
1615	9965 100 11942	RCA socket
1C24	9965 100 11935	24MHz 18p NX5032
1E01	9965 100 11945	VGA socket
1E02	9965 000 34543	RCA socket Wh
1E04	9965 100 11940	MSJ-035-29D PP0(PHT)
1E07	9965 000 34544	RCA socket Rd
1M01	9965 100 11938	HDMI 19p f
1M02	9965 100 11939	HDMI 19p f
1M03	9965 100 11939	HDMI 19p f
1N02	9965 100 11936	NX5032
1N03	9965 100 11939	HDMI 19p f
1R02	9965 100 11920	DLW21SN670SQ2L
1R03	9965 100 11920	DLW21SN670SQ2L
1R04	9965 100 11920	DLW21SN670SQ2L
1R05	9965 100 11920	DLW21SN670SQ2L
1R06	9965 100 11920	DLW21SN670SQ2L
1R07	9965 100 11920	DLW21SN670SQ2L
1R08	9965 100 11920	DLW21SN670SQ2L
1R09	9965 100 11920	DLW21SN670SQ2L
1R10	9965 100 11920	DLW21SN670SQ2L
1R11	9965 100 11920	DLW21SN670SQ2L
1R12	9965 100 11920	DLW21SN670SQ2L
1R13	9965 100 11920	DLW21SN670SQ2L

2112	9965 100 11883	22µF 16V 1206
2117	9965 100 11905	10nF 10% 16V
2118	9965 100 11905	10nF 10% 16V
2119	9965 000 27286	100nF 10% 50V 0603
2120	9965 100 11883	22µF 16V 1206
2121	9965 100 11891	15pF 5% 50V
2122	9965 100 11891	15pF 5% 50V
2123	9965 100 11892	1500pF 50V 0402
2125	9965 100 11887	470nF 10V 0402
2126	9965 000 32991	220nF 10% 10V
2127	9965 100 11895	22pF 5% 50V
2128	9965 100 11905	10nF 10% 16V
2129	9965 100 11883	22µF 16V 1206
2130	9965 100 11905	10nF 10% 16V
2131	9965 100 11883	22µF 16V 1206
2132	9965 100 11883	22µF 16V 1206
2133	9965 100 11905	10nF 10% 16V
2136	9965 100 11887	470nF 10V 0402
2137	9965 100 11905	10nF 10% 16V
2138	9965 100 11905	10nF 10% 16V
2139	9965 100 11902	390pF 5% 50V
2142	9965 100 11913	10µF 20% 50V
2143	9965 100 11890	1nF 10% 50V 0402
2144	9965 100 11905	10nF 10% 16V
2145	9965 100 11890	1nF 10% 50V 0402
2149	9965 100 11881	2.2µF 10% 10V
2151	9965 100 11883	22µF 16V 1206
2152	9965 100 11905	10nF 10% 16V
2310	9965 100 11906	100nF 16V 0402
2311	9965 100 11841	10µF 6.3V 0603
2312	9965 100 11906	100nF 16V 0402
2313	9965 100 11906	100nF 16V 0402
2314	9965 100 11891	15pF 5% 50V
2315	9965 100 11906	100nF 16V 0402
2316	9965 100 11891	15pF 5% 50V
2317	9965 100 11906	100nF 16V 0402
2318	9965 100 11906	100nF 16V 0402
2320	9965 100 11906	100nF 16V 0402
2323	9965 100 11906	100nF 16V 0402
2324	9965 100 11910	1µF 10% 6.3V
2327	9965 100 11905	10nF 10% 16V
2328	9965 100 11890	1nF 10% 50V 0402
2329	9965 100 11890	1nF 10% 50V 0402
2330	9965 100 11890	1nF 10% 50V 0402
2331	9965 100 11890	1nF 10% 50V 0402
2332	9965 100 11890	1nF 10% 50V 0402
2333	9965 100 11890	1nF 10% 50V 0402
2334	9965 100 11890	1nF 10% 50V 0402
2335	9965 100 11890	1nF 10% 50V 0402
2336	9965 100 11890	1nF 10% 50V 0402
2337	9965 100 11890	1nF 10% 50V 0402
2338	9965 100 11886	220nF 10% 10V 0402
2341	9965 100 11906	100nF 16V 0402
2342	9965 100 11905	10nF 10% 16V
2347	9965 100 11906	100nF 16V 0402
2408	9965 100 11903	47pF 10% 50V 0402
2409	9965 100 11892	1500pF 50V 0402
2410	9965 100 11915	330µF 20% 16V
2411	9965 100 11841	10µF 6.3V 0603
2412	9965 100 11896	220pF 10% 50V
2413	9965 100 11896	220pF 10% 50V
2414	9965 100 11841	10µF 6.3V 0603
2415	9965 100 11901	3.3pF 10% 50V
2416	9965 100 11901	3.3pF 10% 50V
2417	9965 100 11899	330pF 10% 50V 0402
2418	9965 100 11899	330pF 10% 50V 0402
2419	9965 100 11907	100nF 20% 16V
2420	9965 000 30748	10µF 20% 16V
2421	9965 100 11899	330pF 10% 50V 0402
2422	9965 100 11899	330pF 10% 50V 0402
2423	9965 000 30748	10µF 20% 16V
2424	9965 100 11841	10µF 6.3V 0603
2425	9965 100 11841	10µF 6.3V 0603
2426	9965 100 11841	10µF 6.3V 0603
2427	9965 100 11841	10µF 6.3V 0603
2428	9965 100 11888	100pF 5% 50V 0402
2429	9965 100 11888	100pF 5% 50V 0402
2430	9965 100 11888	100pF 5% 50V 0402
2431	9965 100 11888	100pF 5% 50V 0402
2432	9965 100 11904	56pF 5% 50V 0402
2433	9965 100 11898	330pF 50V 0402
2434	9965 100 11904	56pF 5% 50V 0402
2435	9965 100 11904	56pF 5% 50V 0402
2436	9965 100 11841	10µF 6.3V 0603
2437	9965 100 11841	10µF 6.3V 0603
2438	9965 100 11907	100nF 20% 16V
2439	9965 100 11916	220µF 20% 25V
2440	9965 100 11907	100nF 20% 16V
2441	9965 100 11892	1500pF 50V 0402
2442	9965 100 11903	47pF 10% 50V 0402
2443	9965 100 11892	1500pF 50V 0402
2444	9965 100 11903	47pF 10% 50V 0402
2445	9965 100 11907	100nF 20% 16V
2508	9965 100 11899	330pF 10% 50V 0402
2509	9965 100 11911	220nF 10% 6V3 0402
2512	9965 100 11890	1nF 10% 50V 0402
2514	9965 100 11898	330pF 50V 0402
2518	9965 100 11911	220nF 10% 6V3 0402
2520	9965 100 11890	1nF 10% 50V 0402
2533	9965 100 11911	220nF 10% 6V3 0402
2534	9965 100 11911	220nF 10% 6V3 0402
2607	9965 100 11911	220nF 10% 6V3 0402
2608	9965 100 11890	1nF 10% 50V 0402
2610	9965 100 11911	220nF 10% 6V3 0402
2612	9965 100 11890	1nF 10% 50V 0402
2613	9965 100 11909	22nF 10% 25V
2614	9965 100 11909	22nF 10% 25V
2615	9965 100 11905	10nF 10% 16V
2616	9965 100 11905	10nF 10% 16V
2621	9965 100 11911	220nF 10% 6V3 0402
2622	9965 100 11890	1nF 10% 50V 0402
2623	9965 100 11911	220nF 10% 6V3 0402
2624	9965 100 11890	1nF 10% 50V 0402
2A01	9965 000 24622	100nF +80/20% 25V
2A02	9965 000 24622	100nF +80/20% 25V
2A04	9965 100 11916	220µF 20% 25V
2A08	9965 100 11916	220µF 20% 25V
2A09	9965 000 24622	100nF +80/20% 25V
2A10	9965 000 24622	100nF +80/20% 25V
2A11	9965 100 11845	1µF 10% 25V
2A12	9965 100 11896	220pF 10% 50V
2A13	9965 000 27287	220nF+80/-20% 16V
2A14	9965 100 11846	470nF 10% 25V
2A15	9965 100 11845	1µF 10% 25V
2A16	9965 100 11845	1µF 10% 25V
2A17	9965 100 11890	1nF 10% 50V 0402
2A18	9965 100 11890	1nF 10% 50V 0402
2A19	9965 100 11896	220pF 10% 50V
2A20	9965 100 11845	1µF 10% 25V
2A21	9965 100 11890	1nF 10% 50V 0402
2A22	9965 100 11906	100nF 16V 0402
2A23	9965 100 11890	1nF 10% 50V 0402
2A24	9965 100 11906	100nF 16V 0402
2A25	9965 100 11893	15nF 50V 0402
2A26	9965 000 27287	220nF+80/-20% 16V
2A27	9965 100 11893	15nF 50V 0402
2A28	9965 100 11846	470nF 10% 25V
2A29	9965 100 11906	100nF 16V 0402
2A30	9965 000 24622	100nF +80/20% 25V
2A31	9965 100 11890	1nF 10% 50V 0402
2A32	9965 100 11890	1nF 10% 50V 0402
2A33	9965 000 24622	100nF +80/20% 25V
2A34	9965 000 24622	100nF +80/20% 25V
2A35	9965 100 11890	1nF 10% 50V 0402
2A36	9965 100 11890	1nF 10% 50V 0402
2A37	9965 000 27287	220nF+80/-20% 16V
2A38	9965 000 27287	220nF+80/-20% 16V
2A40	9965 100 11912	470nF 6.3V 0402
2A41	9965 100 11845	1µF 10% 25V
2A45	9965 100 11890	1nF 10% 50V 0402
2A51	9965 100 11897	33pF 5% 50V
2A52	9965 100 11912	470nF 6.3V 0402
2A53	9965 100 11919	47µF 20% 6.3V
2A54	9965 100 11911	220nF 10% 6V3 0402
2A55	9965 100 11897	33pF 5% 50V
2A56	9965 100 11911	220nF 10% 6V3 0402
2A57	9965 100 11912	470nF 6.3V 0402
2A58	9965 100 11919	47µF 20% 6.3V
2A59	9965 100 11912	470nF 6.3V 0402
2A60	9965 100 11910	1µF 10% 6.3V
2A63	9965 100 11890	1nF 10% 50V 0402
2A65	9965 100 11890	1nF 10% 50V 0402
2A67	9965 100 11908	10nF 10% 25V 10%
2A68	9965 100 11890	1nF 10% 50V 0402
2A69	9965 100 11908	10nF 10% 25V 10%
2A70	9965 100 11890	1nF 10% 50V 0402
2A71	9965 100 11890	1nF 10% 50V 0402
2A72	9965 100 11890	1nF 10% 50V 0402

2C01	9965 100 11894	18pF 5% 50V
2C02	9965 100 11894	18pF 5% 50V
2C03	9965 100 11885	100nF 10% 10V
2C04	9965 100 11885	100nF 10% 10V
2C05	9965 100 11885	100nF 10% 10V
2C06	9965 100 11885	100nF 10% 10V
2C07	9965 100 11885	100nF 10% 10V
2C08	9965 100 11885	100nF 10% 10V
2C09	9965 100 11885	100nF 10% 10V
2C10	9965 100 11885	100nF 10% 10V
2C11	9965 100 11885	100nF 10% 10V
2C12	9965 100 11885	100nF 10% 10V
2C13	9965 100 11885	100nF 10% 10V
2C15	9965 100 11885	100nF 10% 10V
2C16	9965 100 11885	100nF 10% 10V
2C17	9965 100 11885	100nF 10% 10V
2C18	9965 100 11885	100nF 10% 10V
2C19	9965 100 11885	100nF 10% 10V
2C20	9965 100 11885	100nF 10% 10V
2C21	9965 100 11885	100nF 10% 10V
2C22	9965 100 11885	100nF 10% 10V
2C23	9965 100 11841	10µF 6.3V 0603
2C24	9965 100 11885	100nF 10% 10V
2C25	9965 100 11885	100nF 10% 10V
2C26	9965 100 11885	100nF 10% 10V
2C27	9965 100 11841	10µF 6.3V 0603
2C28	9965 100 11885	100nF 10% 10V
2C29	9965 100 11841	10µF 6.3V 0603
2C30	9965 100 11885	100nF 10% 10V
2C31	9965 100 11885	100nF 10% 10V
2C32	9965 100 11885	100nF 10% 10V
2C33	9965 100 11907	100nF 20% 16V
2C34	9965 100 11847	22µF 20% 6.3V
2C35	9965 100 11885	100nF 10% 10V
2C36	9965 100 11841	10µF 6.3V 0603
2C37	9965 100 11885	100nF 10% 10V
2C38	9965 100 11885	100nF 10% 10V
2C39	9965 100 11885	100nF 10% 10V
2C40	9965 100 11885	100nF 10% 10V
2C41	9965 100 11847	22µF 20% 6.3V
2C42	9965 100 11885	100nF 10% 10V
2C43	9965 100 11847	22µF 20% 6.3V
2C44	9965 100 11885	100nF 10% 10V
2C45	9965 100 11841	10µF 6.3V 0603
2C46	9965 100 11841	10µF 6.3V 0603
2C47	9965 100 11885	100nF 10% 10V
2C48	9965 100 11885	100nF 10% 10V
2C49	9965 100 11885	100nF 10% 10V
2C50	9965 100 11885	100nF 10% 10V
2C51	9965 100 11885	100nF 10% 10V
2C52	9965 100 11885	100nF 10% 10V
2C53	9965 100 11885	100nF 10% 10V
2C54	9965 100 11885	100nF 10% 10V
2C55	9965 100 11885	100nF 10% 10V
2C56	9965 100 11841	10µF 6.3V 0603
2C57	9965 100 11885	100nF 10% 10V
2C58	9965 100 11885	100nF 10% 10V
2C59	9965 100 11885	100nF 10% 10V
2C60	9965 100 11841	10µF 6.3V 0603
2C61	9965 100 11885	100nF 10% 10V
2C62	9965 100 11841	10µF 6.3V 0603
2C63	9965 100 11885	100nF 10% 10V
2C64	9965 100 11841	10µF 6.3V 0603
2C65	9965 100 11903	47pF 10% 50V 0402
2C66	9965 100 11903	47pF 10% 50V 0402
2C67	9965 100 11841	10µF 6.3V 0603
2C68	9965 100 11885	100nF 10% 10V
2C70	9965 100 11841	10µF 6.3V 0603
2C71	9965 100 11885	100nF 10% 10V
2C72	9965 100 11841	10µF 6.3V 0603
2C75	9965 100 11885	100nF 10% 10V
2C76	9965 100 11885	100nF 10% 10V
2C77	9965 100 11885	100nF 10% 10V
2C78	9965 100 11841	10µF 6.3V 0603
2C79	9965 100 11885	100nF 10% 10V
2C80	9965 100 11841	10µF 6.3V 0603
2C81	9965 100 11882	2700pF 10% 50V 0603
2C82	9965 100 11882	2700pF 10% 50V 0603
2C83	9965 100 11885	100nF 10% 10V
2C84	9965 100 11888	100pF 5% 50V 0402
2C85	9965 100 11888	100pF 5% 50V 0402
2C86	9965 100 11888	100pF 5% 50V 0402
2C87	9965 100 11888	100pF 5% 50V 0402
2C88	9965 100 11888	100pF 5% 50V 0402
2C89	9965 100 11888	100pF 5% 50V 0402
2C90	9965 100 11885	100nF 10% 10V
2C91	9965 100 11841	10µF 6.3V 0603
2C92	9965 100 11885	100nF 10% 10V
2C93	9965 100 11841	10µF 6.3V 0603
2C94	9965 100 11885	100nF 10% 10V
2C95	9965 100 11841	10µF 6.3V 0603
2C96	9965 100 11885	100nF 10% 10V
2C97	9965 100 11841	10µF 6.3V 0603
2C98	9965 100 11885	100nF 10% 10V
2C99	9965 100 11841	10µF 6.3V 0603
2D02	9965 100 11885	100nF 10% 10V
2D03	9965 100 11885	100nF 10% 10V
2D04	9965 100 11908	10nF 10% 25V 10%
2D08	9965 100 11908	10nF 10% 25V 10%
2D09	9965 100 11908	10nF 10% 25V 10%
2D10	9965 100 11885	100nF 10% 10V
2D11	9965 100 11903	47pF 10% 50V 0402
2D12	9965 100 11903	47pF 10% 50V 0402
2D14	9965 100 11905	10nF 10% 16V
2D18	9965 100 11841	10µF 6.3V 0603
2D32	9965 100 11885	100nF 10% 10V
2D33	9965 100 11885	100nF 10% 10V
2D34	9965 100 11885	100nF 10% 10V
2D37	9965 100 11885	100nF 10% 10V
2D38	9965 100 11885	100nF 10% 10V
2D39	9965 100 11885	100nF 10% 10V
2D43	9965 100 11903	47pF 10% 50V 0402
2D46	9965 100 11841	10µF 6.3V 0603
2D57	9965 100 11905	10nF 10% 16V
2D58	9965 100 11905	10nF 10% 16V
2D59	9965 100 11905	10nF 10% 16V
2D60	9965 100 11903	47pF 10% 50V 0402
2D71	9965 100 11918	22µF 20% 6.3V
2D72	9965 100 11905	10nF 10% 16V
2E04	9965 100 11906	100nF 16V 0402
2E05	9965 100 11899	330pF 10% 50V 0402
2E06	9965 100 11899	330pF 10% 50V 0402
2E07	9965 100 11906	100nF 16V 0402
2E09	9965 100 11888	100pF 5% 50V 0402
2E10	9965 100 11888	100pF 5% 50V 0402
2E11	9965 100 11890	1nF 10% 50V 0402
2E12	9965 100 11890	1nF 10% 50V 0402
2E20	9965 100 11911	220nF 10% 6V3 0402
2E21	9965 100 11900	3.3nF 10% 50V
2E22	9965 100 11911	220nF 10% 6V3 0402
2E23	9965 100 11900	3.3nF 10% 50V
2M01	9965 100 11841	10µF 6.3V 0603
2M02	9965 100 11841	10µF 6.3V 0603
2M03	9965 100 11885	100nF 10% 10V
2M04	9965 100 11885	100nF 10% 10V
2M05	9965 100 11885	100nF 10% 10V
2M06	9965 100 11885	100nF 10% 10V
2M07	9965 100 11841	10µF 6.3V 0603
2M08	9965 100 11841	10µF 6.3V 0603
2M09	9965 100 11885	100nF 10% 10V
2M10	9965 100 11885	100nF 10% 10V
2M15	9965 100 11841	10µF 6.3V 0603
2M16	9965 100 11885	100nF 10% 10V
2M17	9965 100 11885	100nF 10% 10V
2M19	9965 100 11885	100nF 10% 10V
2M20	9965 100 11885	100nF 10% 10V
2M21	9965 100 11885	100nF 10% 10V
2M46	9965 100 11906	100nF 16V 0402
2M47	9965 100 11906	100nF 16V 0402
2M48	9965 100 11906	100nF 16V 0402
2N13	9965 100 11894	18pF 5% 50V
2N14	9965 100 11894	18pF 5% 50V
2N15	9965 100 11889	1000pF 50V 0402
2N16	9965 100 11885	100nF 10% 10V
2N17	9965 100 11885	100nF 10% 10V
2N18	9965 100 11889	1000pF 50V 0402
2N20	9965 100 11885	100nF 10% 10V
2N25	9965 100 11889	1000pF 50V 0402
2N26	9965 100 11889	1000pF 50V 0402
2N27	9965 100 11885	100nF 10% 10V
2N28	9965 100 11889	1000pF 50V 0402
2N29	9965 100 11889	1000pF 50V 0402
2N30	9965 100 11885	100nF 10% 10V
2N31	9965 100 11889	1000pF 50V 0402
2N32	9965 100 11889	1000pF 50V 0402
2N33	9965 100 11885	100nF 10% 10V
2N34	9965 100 11889	1000pF 50V 0402
2N35	9965 100 11885	100nF 10% 10V
2N36	9965 100 11885	100nF 10% 10V
2N37	9965 100 11885	100nF 10% 10V
2N38	9965 100 11889	1000pF 50V 0402
2N39	9965 100 11889	1000pF 50V 0402
2N40	9965 100 11885	100nF 10% 10V
2N41	9965 100 11889	1000pF 50V 0402
2N42	9965 100 11889	1000pF 50V 0402
2N43	9965 100 11889	1000pF 50V 0402
2N44	9965 100 11885	100nF 10% 10V
2N45	9965 100 11889	1000pF 50V 0402
2N46	9965 100 11889	1000pF 50V 0402
2N47	9965 100 11885	100nF 10% 10V
2N48	9965 100 11889	1000pF 50V 0402
2N49	9965 100 11889	1000pF 50V 0402
2N50	9965 100 11885	100nF 10% 10V
2N51	9965 100 11889	1000pF 50V 0402
2N52	9965 100 11889	1000pF 50V 0402
2N53	9965 100 11885	100nF 10% 10V
2N54	9965 100 11889	1000pF 50V 0402
2N55	9965 100 11889	1000pF 50V 0402
2N56	9965 100 11885	100nF 10% 10V
2N58	9965 100 11889	1000pF 50V 0402
2N59	9965 100 11889	1000pF 50V 0402
2N60	9965 100 11889	1000pF 50V 0402
2N61	9965 100 11889	1000pF 50V 0402
2N62	9965 100 11889	1000pF 50V 0402
2N63	9965 100 11889	1000pF 50V 0402
2N64	9965 100 11885	100nF 10% 10V
2N66	9965 100 11889	1000pF 50V 0402
2N68	9965 100 11906	100nF 16V 0402
2P07	9965 100 11906	100nF 16V 0402
2P19	9965 100 11917	22µF 20% 35V
2P20	9965 100 11888	100pF 5% 50V 0402
2P29	9965 100 11883	22µF 16V 1206
2P31	9965 100 11844	1µF 10% 16V
2P32	9965 100 11900	3.3nF 10% 50V
2P33	9965 100 11900	3.3nF 10% 50V
2P34	9965 100 11884	47µF 20% 6.3V 1206
2P36	9965 100 11906	100nF 16V 0402
2P37	9965 100 11900	3.3nF 10% 50V
2P39	9965 100 11906	100nF 16V 0402
2P40	9965 100 11906	100nF 16V 0402
2P41	9965 100 11906	100nF 16V 0402
2P42	9965 100 11906	100nF 16V 0402
2P43	9965 100 11900	3.3nF 10% 50V
2P48	9965 100 11888	100pF 5% 50V 0402
2P49	9965 100 11888	100pF 5% 50V 0402
2P54	9965 100 11906	100nF 16V 0402
2P59	9965 100 11914	100µF 16V +/-20%
2P61	9965 100 11883	22µF 16V 1206
2P78	9965 100 11844	1µF 10% 16V
2P79	9965 100 11906	100nF 16V 0402
2P80	9965 100 11906	100nF 16V 0402
2P81	9965 100 11906	100nF 16V 0402
2P82	9965 100 11906	100nF 16V 0402
2P83	9965 100 11906	100nF 16V 0402
2P84	9965 100 11906	100nF 16V 0402
2P85	9965 100 11890	1nF 10% 50V 0402
2P86	9965 100 11890	1nF 10% 50V 0402
2P87	9965 100 11890	1nF 10% 50V 0402
2P88	9965 100 11890	1nF 10% 50V 0402
2P89	9965 100 11914	100µF 16V +/-20%
2P91	9965 100 11909	22nF 10% 25V
2Q07	9965 100 11906	100nF 16V 0402
2Q30	9965 100 11883	22µF 16V 1206
2Q31	9965 100 11844	1µF 10% 16V
2Q32	9965 100 11900	3.3nF 10% 50V
2Q33	9965 100 11900	3.3nF 10% 50V
2Q34	9965 100 11883	22µF 16V 1206
2Q36	9965 100 11906	100nF 16V 0402
2Q37	9965 100 11900	3.3nF 10% 50V
2Q39	9965 100 11906	100nF 16V 0402
2Q40	9965 100 11906	100nF 16V 0402
2Q41	9965 100 11906	100nF 16V 0402
2Q42	9965 100 11906	100nF 16V 0402
2Q43	9965 100 11900	3.3nF 10% 50V
2Q48	9965 100 11888	100pF 5% 50V 0402
2Q49	9965 100 11888	100pF 5% 50V 0402
2Q54	9965 100 11906	100nF 16V 0402
2Q55	9965 100 11914	100µF 16V +/-20%
2Q58	9965 100 11910	1µF 10% 6.3V
2Q61	9965 100 11883	22µF 16V 1206
2Q73	9965 100 11909	22nF 10% 25V
2Q78	9965 100 11844	1µF 10% 16V
2R10	9965 100 11910	1µF 10% 6.3V
2R11	9965 100 11916	220µF 20% 25V
2R12	9965 100 11906	100nF 16V 0402
2V01	9965 100 11885	100nF 10% 10V
2V02	9965 100 11885	100nF 10% 10V
2V03	9965 100 11885	100nF 10% 10V
2V06	9965 100 11885	100nF 10% 10V

–WW–

3110	9965 100 11839	8200Ω 5% 1/16W
3111	9965 100 11874	5.6kΩ 5% 1/16W
3113	9965 100 11840	6.8kΩ 5% 1/16W
3115	9965 100 11838	39kΩ 5% 1/16W
3117	9965 100 11860	2.2kΩ 5% 1/16W
3118	9965 100 11860	2.2kΩ 5% 1/16W
3119	9965 100 11861	22kΩ 5% 1/16W
3123	9965 100 11865	330Ω 5% 1/16W
3124	9965 100 11833	100Ω 5% 1/16W
3125	9965 100 11852	150Ω 5% 1/16W
3126	9965 100 11855	180Ω 5% 1/16W
3127	9965 100 11874	5.6kΩ 5% 1/16W
3133	9965 100 12007	1Ω 1/8W Fusible
3134	9965 100 12007	1Ω 1/8W Fusible
3135	9965 100 11851	15Ω 5% 1/16W
3141	9965 100 12007	1Ω 1/8W Fusible
3151	9965 100 11833	100Ω 5% 1/16W
3152	9965 100 11833	100Ω 5% 1/16W
3188	9965 100 11857	18kΩ 5% 1/16W

3192	9965 100 12011	1kΩ 5% 1/16W
3300	9965 100 12015	1200Ω 5% 1/16W
3302	9965 100 11833	100Ω 5% 1/16W
3303	9965 100 11833	100Ω 5% 1/16W
3305	9965 100 11834	10kΩ 5% 1/16W
3306	9965 100 12011	1kΩ 5% 1/16W
3308	9965 100 11946	27kΩ 5% 1/16W
3310	9965 100 12012	680Ω 5% 1/16W
3313	9965 100 11865	330Ω 5% 1/16W
3314	9965 100 11834	10kΩ 5% 1/16W
3315	9965 100 11833	100Ω 5% 1/16W
3316	9965 100 11834	10kΩ 5% 1/16W
3317	9965 100 11865	330Ω 5% 1/16W
3318	9965 100 11833	100Ω 5% 1/16W
3319	9965 100 11834	10kΩ 5% 1/16W
3320	9965 100 11833	100Ω 5% 1/16W
3322	9965 100 11833	100Ω 5% 1/16W
3324	9965 100 11865	330Ω 5% 1/16W
3325	9965 100 11834	10kΩ 5% 1/16W
3329	9965 100 11833	100Ω 5% 1/16W
3331	9965 100 11833	100Ω 5% 1/16W
3332	9965 100 11833	100Ω 5% 1/16W
3336	9965 100 11833	100Ω 5% 1/16W
3338	9965 100 11833	100Ω 5% 1/16W
3339	9965 100 11833	100Ω 5% 1/16W
3340	9965 100 11833	100Ω 5% 1/16W
3341	9965 100 11871	4.7kΩ 5% 1/16W
3346	9965 100 11833	100Ω 5% 1/16W
3347	9965 100 11834	10kΩ 5% 1/16W
3348	9965 100 11868	47Ω 5% 1/16W
3349	9965 100 11834	10kΩ 5% 1/16W
3350	9965 100 11834	10kΩ 5% 1/16W
3351	9965 100 11866	3.3kΩ 5% 1/16W
3352	9965 100 11866	3.3kΩ 5% 1/16W
3353	9965 100 11834	10kΩ 5% 1/16W
3354	9965 100 11833	100Ω 5% 1/16W
3355	9965 100 11833	100Ω 5% 1/16W
3357	9965 100 11833	100Ω 5% 1/16W
3358	9965 100 11860	2.2kΩ 5% 1/16W
3359	9965 100 11871	4.7kΩ 5% 1/16W
3360	9965 100 11871	4.7kΩ 5% 1/16W
3361	9965 100 11866	3.3kΩ 5% 1/16W
3362	9965 100 11866	3.3kΩ 5% 1/16W
3380	9965 100 11833	100Ω 5% 1/16W
3382	9965 100 11833	100Ω 5% 1/16W
3384	9965 100 11858	22Ω 5% 1/16W
3386	9965 100 11833	100Ω 5% 1/16W
3387	9965 100 11833	100Ω 5% 1/16W
3388	9965 100 11833	100Ω 5% 1/16W
3389	9965 100 11868	47Ω 5% 1/16W
3390	9965 100 11868	47Ω 5% 1/16W
3391	9965 100 11868	47Ω 5% 1/16W
3393	9965 100 11853	15kΩ 5% 1/16W
3394	9965 100 11868	47Ω 5% 1/16W
3395	9965 000 32042	1.5kΩ 5% 1/10W
3397	9965 100 11872	47kΩ 5% 1/16W
3398	9965 100 11835	100kΩ 5% 1/16W
3399	9965 100 11834	10kΩ 5% 1/16W
3402	9965 100 12007	1Ω 1/8W Fusible
3410	9965 100 11833	100Ω 5% 1/16W
3411	9965 100 11833	100Ω 5% 1/16W
3417	9965 100 11833	100Ω 5% 1/16W
3418	9965 100 11833	100Ω 5% 1/16W
3419	9965 100 11833	100Ω 5% 1/16W
3420	9965 100 11833	100Ω 5% 1/16W
3423	9965 100 12015	1200Ω 5% 1/16W
3428	9965 100 11833	100Ω 5% 1/16W
3503	9965 100 11852	150Ω 5% 1/16W
3506	9965 100 11852	150Ω 5% 1/16W
3507	9965 100 11852	150Ω 5% 1/16W
3508	9965 100 11867	33kΩ 5% 1/16W
3512	9965 100 11852	150Ω 5% 1/16W
3513	9965 100 11867	33kΩ 5% 1/16W
3524	9965 100 11851	15Ω 5% 1/16W
3529	9965 100 11833	100Ω 5% 1/16W
3531	9965 100 11877	75Ω 5% 1/16W
3535	9965 100 11875	68Ω 5% 1/16W
3536	9965 100 12011	1kΩ 5% 1/16W
3537	9965 100 12011	1kΩ 5% 1/16W
3540	9965 100 11871	4.7kΩ 5% 1/16W
3600	9965 100 11833	100Ω 5% 1/16W
3601	9965 100 11877	75Ω 5% 1/16W
3602	9965 100 11833	100Ω 5% 1/16W
3603	9965 100 11877	75Ω 5% 1/16W
3604	9965 100 11877	75Ω 5% 1/16W
3605	9965 100 11877	75Ω 5% 1/16W
3607	9965 100 11852	150Ω 5% 1/16W
3608	9965 100 11867	33kΩ 5% 1/16W
3609	9965 100 11877	75Ω 5% 1/16W
3611	9965 100 11852	150Ω 5% 1/16W
3612	9965 100 11867	33kΩ 5% 1/16W
3613	9965 100 11834	10kΩ 5% 1/16W
3614	9965 100 11834	10kΩ 5% 1/16W
3617	9965 100 11833	100Ω 5% 1/16W
3618	9965 100 11833	100Ω 5% 1/16W
3619	9965 100 11833	100Ω 5% 1/16W
3621	9965 100 11852	150Ω 5% 1/16W
3622	9965 100 11867	33kΩ 5% 1/16W
3623	9965 100 11852	150Ω 5% 1/16W
3624	9965 100 11867	33kΩ 5% 1/16W
3A01	9965 100 12006	10Ω 1/8W Fusible
3A02	9965 100 12006	10Ω 1/8W Fusible
3A03	9965 100 11834	10kΩ 5% 1/16W
3A04	9965 100 11849	12kΩ 5% 1/16W
3A05	9965 100 12008	22Ω 1W 2512
3A06	9965 100 11834	10kΩ 5% 1/16W
3A07	9965 100 11834	10kΩ 5% 1/16W
3A08	9965 100 11849	12kΩ 5% 1/16W
3A09	9965 100 12009	10Ω 5% 1/16W
3A11	9965 100 11834	10kΩ 5% 1/16W
3A13	9965 100 11838	39kΩ 5% 1/16W
3A14	9965 100 12008	22Ω 1W 2512
3A17	9965 100 12009	10Ω 5% 1/16W
3A26	9965 100 11871	4.7kΩ 5% 1/16W
3A27	9965 100 11862	220KΩ 5% 1/16W
3A28	9965 100 11862	220KΩ 5% 1/16W
3A29	9965 100 11872	47kΩ 5% 1/16W
3A30	9965 100 11872	47kΩ 5% 1/16W
3A31	9965 100 11834	10kΩ 5% 1/16W
3A32	9965 100 11872	47kΩ 5% 1/16W
3A33	9965 100 11849	12kΩ 5% 1/16W
3A51	9965 100 11850	120kΩ 1/16W 0402
3A53	9965 100 11872	47kΩ 5% 1/16W
3A54	9965 100 11864	33Ω 5% 1/16W
3A55	9965 100 11850	120kΩ 1/16W 0402
3A56	9965 100 11835	100kΩ 5% 1/16W
3A58	9965 100 11872	47kΩ 5% 1/16W
3A59	9965 100 11864	33Ω 5% 1/16W
3A60	9965 100 11835	100kΩ 5% 1/16W
3A61	9965 100 11871	4.7kΩ 5% 1/16W
3A68	9965 100 12011	1kΩ 5% 1/16W
3A69	9965 100 12011	1kΩ 5% 1/16W
3A70	9965 100 11834	10kΩ 5% 1/16W
3A71	9965 100 12011	1kΩ 5% 1/16W
3A72	9965 100 12011	1kΩ 5% 1/16W
3A73	9965 100 12011	1kΩ 5% 1/16W
3A74	9965 100 12011	1kΩ 5% 1/16W
3A76	9965 100 11834	10kΩ 5% 1/16W
3A77	9965 100 11861	22kΩ 5% 1/16W
3C01	9965 100 12014	1MΩ 5% 1/16W
3C02	9965 100 11864	33Ω 5% 1/16W
3C03	9965 100 11878	4x100Ω
3C04	9965 100 11878	4x100Ω
3C05	9965 100 11878	4x100Ω
3C06	9965 100 11878	4x100Ω
3C08	9965 100 11833	100Ω 5% 1/16W
3C09	9965 100 11833	100Ω 5% 1/16W
3C10	9965 100 11858	22Ω 5% 1/16W
3C19	9965 100 11870	470Ω 5% 1/16W
3C20	9965 100 12011	1kΩ 5% 1/16W
3C22	9965 100 11871	4.7kΩ 5% 1/16W
3C23	9965 100 11859	220Ω 5% 1/16W
3C25	9965 100 11834	10kΩ 5% 1/16W
3C31	9965 100 11858	22Ω 5% 1/16W
3C33	9965 100 11858	22Ω 5% 1/16W
3C34	9965 100 11858	22Ω 5% 1/16W
3C37	9965 100 11858	22Ω 5% 1/16W
3C40	9965 100 11871	4.7kΩ 5% 1/16W
3C41	9965 100 11871	4.7kΩ 5% 1/16W
3C42	9965 100 11871	4.7kΩ 5% 1/16W
3C46	9965 100 11858	22Ω 5% 1/16W
3C47	9965 100 11871	4.7kΩ 5% 1/16W
3C48	9965 100 11858	22Ω 5% 1/16W
3C49	9965 100 11832	0Ω 5% 1/16W
3D01	9965 100 11879	4x22Ω
3D02	9965 100 11879	4x22Ω
3D05	9965 100 11879	4x22Ω
3D06	9965 100 11879	4x22Ω
3D09	9965 100 11851	15Ω 5% 1/16W
3D10	9965 100 11873	51Ω 1% 1/16W
3D11	9965 100 11851	15Ω 5% 1/16W
3D14	9965 100 11873	51Ω 1% 1/16W
3D15	9965 100 12011	1kΩ 5% 1/16W
3D16	9965 100 12011	1kΩ 5% 1/16W
3D38	9965 100 11851	15Ω 5% 1/16W
3D40	9965 100 11851	15Ω 5% 1/16W
3D43	9965 100 11879	4x22Ω
3D44	9965 100 11879	4x22Ω
3D47	9965 100 11879	4x22Ω
3D48	9965 100 11879	4x22Ω
3E01	9965 100 11864	33Ω 5% 1/16W
3E02	9965 100 11877	75Ω 5% 1/16W
3E03	9965 100 11864	33Ω 5% 1/16W
3E04	9965 100 11877	75Ω 5% 1/16W
3E05	9965 100 11864	33Ω 5% 1/16W
3E06	9965 100 11877	75Ω 5% 1/16W
3E07	9965 100 11852	150Ω 5% 1/16W
3E08	9965 100 12011	1kΩ 5% 1/16W
3E09	9965 100 11834	10kΩ 5% 1/16W
3E10	9965 100 11834	10kΩ 5% 1/16W
3E11	9965 100 11834	10kΩ 5% 1/16W
3E12	9965 100 11834	10kΩ 5% 1/16W
3E14	9965 100 11859	220Ω 5% 1/16W
3E15	9965 100 11860	2.2kΩ 5% 1/16W
3E18	9965 100 11859	220Ω 5% 1/16W
3E20	9965 100 11860	2.2kΩ 5% 1/16W
3E21	9965 100 11852	150Ω 5% 1/16W
3E22	9965 100 11867	33kΩ 5% 1/16W
3E23	9965 100 11852	150Ω 5% 1/16W
3E24	9965 100 11867	33kΩ 5% 1/16W
3E70	9965 100 11833	100Ω 5% 1/16W
3E71	9965 100 11833	100Ω 5% 1/16W
3L01	9965 100 11871	4.7kΩ 5% 1/16W
3L02	9965 100 11833	100Ω 5% 1/16W
3L04	9965 000 32042	1.5kΩ 5% 1/10W
3L05	9965 100 11833	100Ω 5% 1/16W
3L10	9965 100 12007	1Ω 1/8W Fusible
3L15	9965 100 11865	330Ω 5% 1/16W
3L16	9965 100 12011	1kΩ 5% 1/16W
3L17	9965 100 11833	100Ω 5% 1/16W
3L18	9965 100 11833	100Ω 5% 1/16W
3L20	9965 100 12011	1kΩ 5% 1/16W
3L22	9965 100 12011	1kΩ 5% 1/16W
3L23	9965 100 11833	100Ω 5% 1/16W
3L24	9965 100 11833	100Ω 5% 1/16W
3L53	9965 100 11833	100Ω 5% 1/16W
3L54	9965 100 11833	100Ω 5% 1/16W
3L55	9965 100 11834	10kΩ 5% 1/16W
3L56	9965 100 11833	100Ω 5% 1/16W
3L57	9965 100 11833	100Ω 5% 1/16W
3L58	9965 100 11833	100Ω 5% 1/16W
3L59	9965 100 11833	100Ω 5% 1/16W
3L61	9965 100 11833	100Ω 5% 1/16W
3L62	9965 100 11833	100Ω 5% 1/16W
3L63	9965 100 11833	100Ω 5% 1/16W
3L64	9965 100 11834	10kΩ 5% 1/16W
3L67	9965 100 11833	100Ω 5% 1/16W
3L71	9965 100 11858	22Ω 5% 1/16W
3L72	9965 100 11872	47kΩ 5% 1/16W
3L73	9965 100 11872	47kΩ 5% 1/16W
3L75	9965 100 11860	2.2kΩ 5% 1/16W
3L76	9965 100 11860	2.2kΩ 5% 1/16W
3L79	9965 100 11834	10kΩ 5% 1/16W
3L86	9965 100 11861	22kΩ 5% 1/16W
3L94	9965 100 11871	4.7kΩ 5% 1/16W
3L95	9965 100 11871	4.7kΩ 5% 1/16W
3L97	9965 100 11871	4.7kΩ 5% 1/16W
3L98	9965 100 11871	4.7kΩ 5% 1/16W
3M03	9965 100 11833	100Ω 5% 1/16W
3M04	9965 100 11860	2.2kΩ 5% 1/16W
3M07	9965 100 11833	100Ω 5% 1/16W
3M08	9965 100 11860	2.2kΩ 5% 1/16W
3M09	9965 100 11871	4.7kΩ 5% 1/16W
3M10	9965 100 11870	470Ω 5% 1/16W
3M13	9965 100 11833	100Ω 5% 1/16W
3M14	9965 100 11833	100Ω 5% 1/16W
3M15	9965 100 11833	100Ω 5% 1/16W
3M19	9965 100 11871	4.7kΩ 5% 1/16W
3M20	9965 100 11833	100Ω 5% 1/16W
3M21	9965 100 11833	100Ω 5% 1/16W
3M31	9965 100 11860	2.2kΩ 5% 1/16W
3M34	9965 100 11871	4.7kΩ 5% 1/16W
3M61	9965 100 11871	4.7kΩ 5% 1/16W
3M62	9965 100 11872	47kΩ 5% 1/16W
3M63	9965 100 11872	47kΩ 5% 1/16W
3M66	9965 100 11871	4.7kΩ 5% 1/16W
3M67	9965 100 11872	47kΩ 5% 1/16W
3M68	9965 100 11872	47kΩ 5% 1/16W
3M71	9965 100 11871	4.7kΩ 5% 1/16W
3M72	9965 100 11872	47kΩ 5% 1/16W
3M73	9965 100 11872	47kΩ 5% 1/16W
3M78	9965 100 12011	1kΩ 5% 1/16W
3M79	9965 100 11860	2.2kΩ 5% 1/16W
3M80	9965 100 11835	100kΩ 5% 1/16W
3M81	9965 100 12011	1kΩ 5% 1/16W
3M82	9965 100 11860	2.2kΩ 5% 1/16W
3M83	9965 100 11835	100kΩ 5% 1/16W
3M84	9965 100 12011	1kΩ 5% 1/16W
3M85	9965 100 11860	2.2kΩ 5% 1/16W
3M86	9965 100 11835	100kΩ 5% 1/16W
3M87	9965 100 11872	47kΩ 5% 1/16W
3M88	9965 100 11872	47kΩ 5% 1/16W
3N01	9965 100 11864	33Ω 5% 1/16W
3N02	9965 100 11880	4x33Ω 5% 0603
3N03	9965 100 11864	33Ω 5% 1/16W
3N04	9965 100 11880	4x33Ω 5% 0603
3N05	9965 100 11864	33Ω 5% 1/16W
3N06	9965 100 11880	4x33Ω 5% 0603
3N07	9965 100 11864	33Ω 5% 1/16W
3N08	9965 100 11880	4x33Ω 5% 0603
3N09	9965 100 11864	33Ω 5% 1/16W
3N10	9965 100 11864	33Ω 5% 1/16W

3N11	9965 100 11880	4x33Ω 5% 0603
3N12	9965 100 11880	4x33Ω 5% 0603
3N13	9965 100 11864	33Ω 5% 1/16W
3N14	9965 100 11864	33Ω 5% 1/16W
3N15	9965 100 11864	33Ω 5% 1/16W
3N16	9965 100 11864	33Ω 5% 1/16W
3N19	9965 100 11864	33Ω 5% 1/16W
3N20	9965 100 11864	33Ω 5% 1/16W
3N21	9965 100 11864	33Ω 5% 1/16W
3N22	9965 100 11864	33Ω 5% 1/16W
3N24	9965 100 12014	1MΩ 5% 1/16W
3N33	9965 100 11871	4.7kΩ 5% 1/16W
3N34	9965 100 11871	4.7kΩ 5% 1/16W
3N39	9965 100 11833	100Ω 5% 1/16W
3N40	9965 100 11833	100Ω 5% 1/16W
3N41	9965 100 11871	4.7kΩ 5% 1/16W
3N42	9965 100 11872	47kΩ 5% 1/16W
3N43	9965 100 11872	47kΩ 5% 1/16W
3N48	9965 100 11833	100Ω 5% 1/16W
3N49	9965 100 11860	2.2kΩ 5% 1/16W
3N50	9965 100 12011	1kΩ 5% 1/16W
3N51	9965 100 11835	100kΩ 5% 1/16W
3N52	9965 100 11860	2.2kΩ 5% 1/16W
3P13	9965 100 12009	10Ω 5% 1/16W
3P15	9965 100 12011	1kΩ 5% 1/16W
3P20	9965 100 12006	10Ω 1/8W Fusible
3P23	9965 100 12009	10Ω 5% 1/16W
3P26	9965 100 11863	2.2Ω 5% 1/16W
3P32	9965 100 11863	2.2Ω 5% 1/16W
3P34	9965 100 11860	2.2kΩ 5% 1/16W
3P37	9965 100 11840	6.8kΩ 5% 1/16W
3P38	9965 100 12011	1kΩ 5% 1/16W
3P40	9965 100 11838	39kΩ 5% 1/16W
3P41	9965 100 11866	3.3kΩ 5% 1/16W
3P45	9965 100 11840	6.8kΩ 5% 1/16W
3P47	9965 100 11875	68Ω 5% 1/16W
3P48	9965 100 11875	68Ω 5% 1/16W
3P49	9965 100 12011	1kΩ 5% 1/16W
3P50	9965 100 12011	1kΩ 5% 1/16W
3P51	9965 100 12010	1kΩ 1% 1/16W
3P52	9965 100 11871	4.7kΩ 5% 1/16W
3P53	9965 100 11869	470Ω 1% 1/16W
3P54	9965 100 11860	2.2kΩ 5% 1/16W
3P56	9965 100 11980	120Ω 1/16W 0402
3P64	9965 100 11869	470Ω 1% 1/16W
3P67	9965 100 11859	220Ω 5% 1/16W
3P68	9965 100 11840	6.8kΩ 5% 1/16W
3P69	9965 100 11840	6.8kΩ 5% 1/16W
3P70	9965 100 11860	2.2kΩ 5% 1/16W
3P71	9965 100 12015	1200Ω 5% 1/16W
3P72	9965 100 11866	3.3kΩ 5% 1/16W
3P74	9965 100 12015	1200Ω 5% 1/16W
3P75	9965 100 11839	8200Ω 5% 1/16W
3P76	9965 100 11869	470Ω 1% 1/16W
3P77	9965 100 11857	18kΩ 5% 1/16W
3P78	9965 100 11869	470Ω 1% 1/16W
3Q13	9965 100 12009	10Ω 5% 1/16W
3Q20	9965 100 12006	10Ω 1/8W Fusible
3Q23	9965 100 12009	10Ω 5% 1/16W
3Q26	9965 100 11863	2.2Ω 5% 1/16W
3Q32	9965 100 11863	2.2Ω 5% 1/16W
3Q34	9965 100 11837	1800Ω 5% 1/16W
3Q37	9965 100 11840	6.8kΩ 5% 1/16W
3Q38	9965 100 12011	1kΩ 5% 1/16W
3Q40	9965 100 11838	39kΩ 5% 1/16W
3Q41	9965 100 11866	3.3kΩ 5% 1/16W
3Q45	9965 100 11840	6.8kΩ 5% 1/16W
3Q47	9965 100 11875	68Ω 5% 1/16W
3Q48	9965 100 11875	68Ω 5% 1/16W
3Q49	9965 100 12011	1kΩ 5% 1/16W
3Q50	9965 100 12011	1kΩ 5% 1/16W
3Q51	9965 100 11854	270Ω 1/16W 0402
3Q53	9965 100 11876	680Ω 1% 1/16W
3Q54	9965 100 12013	3.9kΩ 5% 1/16W
3Q56	9965 100 11869	470Ω 1% 1/16W
3Q59	9965 100 11869	470Ω 1% 1/16W
3Q64	9965 100 11876	680Ω 1% 1/16W
3Q68	9965 100 11840	6.8kΩ 5% 1/16W
3Q69	9965 100 11840	6.8kΩ 5% 1/16W
3Q70	9965 100 11837	1800Ω 5% 1/16W
3Q71	9965 100 11837	1800Ω 5% 1/16W
3Q72	9965 100 11866	3.3kΩ 5% 1/16W
3Q74	9965 100 11856	7.5kΩ 5% 0402
3Q77	9965 100 12010	1kΩ 1% 1/16W
3Q78	9965 100 11839	8200Ω 5% 1/16W
3R10	9965 100 11872	47kΩ 5% 1/16W
3R12	9965 100 11868	47Ω 5% 1/16W
3R13	9965 100 11872	47kΩ 5% 1/16W
3R25	9965 100 11833	100Ω 5% 1/16W
3R26	9965 100 11833	100Ω 5% 1/16W
3V04	9965 100 11833	100Ω 5% 1/16W
4101	9965 100 11832	0Ω 5% 1/16W
4104	9965 100 11832	0Ω 5% 1/16W
4121	9965 100 11832	0Ω 5% 1/16W
4122	9965 100 11832	0Ω 5% 1/16W
4124	9965 100 11832	0Ω 5% 1/16W
4309	9965 100 11832	0Ω 5% 1/16W
4310	9965 100 11832	0Ω 5% 1/16W
4316	9965 100 11832	0Ω 5% 1/16W
4317	9965 100 11832	0Ω 5% 1/16W
4318	9965 100 11832	0Ω 5% 1/16W
4325	9965 100 11832	0Ω 5% 1/16W
4326	9965 100 11832	0Ω 5% 1/16W
4402	9965 100 11832	0Ω 5% 1/16W
4403	9965 100 11832	0Ω 5% 1/16W
4448	9965 100 11832	0Ω 5% 1/16W
4505	9965 100 11832	0Ω 5% 1/16W
4508	9965 100 11832	0Ω 5% 1/16W
4509	9965 100 11832	0Ω 5% 1/16W
4510	9965 100 11832	0Ω 5% 1/16W
4601	9965 100 11832	0Ω 5% 1/16W
4602	9965 100 11832	0Ω 5% 1/16W
4603	9965 100 11832	0Ω 5% 1/16W
4604	9965 100 11832	0Ω 5% 1/16W
4C07	9965 100 11832	0Ω 5% 1/16W
4M02	9965 100 11832	0Ω 5% 1/16W
4M05	9965 100 11832	0Ω 5% 1/16W
4M10	9965 100 11832	0Ω 5% 1/16W
4M20	9965 100 11832	0Ω 5% 1/16W
4M29	9965 100 11832	0Ω 5% 1/16W
4M30	9965 100 11832	0Ω 5% 1/16W
4M31	9965 100 11832	0Ω 5% 1/16W
4M37	9965 100 11832	0Ω 5% 1/16W
4M39	9965 100 11832	0Ω 5% 1/16W
4M41	9965 100 11832	0Ω 5% 1/16W
4N05	9965 100 11832	0Ω 5% 1/16W
4N06	9965 100 11832	0Ω 5% 1/16W
4N07	9965 100 11832	0Ω 5% 1/16W
4N08	9965 100 11832	0Ω 5% 1/16W
4N14	9965 100 11832	0Ω 5% 1/16W
4R02	9965 100 11832	0Ω 5% 1/16W
4R03	9965 100 11832	0Ω 5% 1/16W
4R04	9965 100 11832	0Ω 5% 1/16W
4R05	9965 100 11832	0Ω 5% 1/16W
4R06	9965 100 11832	0Ω 5% 1/16W
4R07	9965 100 11832	0Ω 5% 1/16W
4R08	9965 100 11832	0Ω 5% 1/16W
4R22	9965 100 11832	0Ω 5% 1/16W
4R24	9965 100 11832	0Ω 5% 1/16W
4R26	9965 100 11832	0Ω 5% 1/16W
4R27	9965 100 11832	0Ω 5% 1/16W
4R31	9965 000 32478	0Ω
4R32	9965 000 32478	0Ω
4R33	9965 000 32478	0Ω
4R34	9965 000 32478	0Ω
4R35	9965 000 32478	0Ω
4R36	9965 000 32478	0Ω
4R43	9965 100 11832	0Ω 5% 1/16W

5111	9965 100 11921	39nH 5%
5112	9965 100 11923	BLM18PG330SNID
5114	9965 100 11926	LB3218T100K
5115	9965 100 11926	LB3218T100K
5120	9965 000 31899	Bead 120Ω 25% SMD
5121	9965 000 31899	Bead 120Ω 25% SMD
5122	9965 100 11926	LB3218T100K
5301	9965 100 11924	BLM18PG600SNID
5302	9965 100 11924	BLM18PG600SNID
5304	9965 100 11922	BLM18PG221SNID
5306	9965 000 30799	Bead 30Ω 25%
5307	9965 000 30799	Bead 30Ω 25%
5401	9965 000 31899	Bead 120Ω 25% SMD
5402	9965 000 31899	Bead 120Ω 25% SMD
5403	9965 100 11928	22µH 5% 1008
5A03	9965 100 11932	NR8040T220M 22µH
5A04	9965 100 11932	NR8040T220M 22µH
5A05	9965 000 30750	Bead 30Ω 25%
5A06	9965 000 30750	Bead 30Ω 25%
5A07	9965 100 11932	NR8040T220M 22µH
5A08	9965 100 11932	NR8040T220M 22µH
5C06	9965 100 11923	BLM18PG330SNID
5C07	9965 100 11923	BLM18PG330SNID
5C08	9965 100 11923	BLM18PG330SNID
5C09	9965 100 11923	BLM18PG330SNID
5C10	9965 100 11923	BLM18PG330SNID
5C11	9965 100 11923	BLM18PG330SNID
5C12	9965 100 11923	BLM18PG330SNID
5C13	9965 100 11923	BLM18PG330SNID
5C14	9965 100 11923	BLM18PG330SNID
5C15	9965 100 11923	BLM18PG330SNID
5C16	9965 100 11923	BLM18PG330SNID
5C17	9965 100 11923	BLM18PG330SNID
5C18	9965 100 11923	BLM18PG330SNID
5C19	9965 100 11923	BLM18PG330SNID
5C20	9965 100 11923	BLM18PG330SNID
5C21	9965 100 11923	BLM18PG330SNID
5C22	9965 100 11923	BLM18PG330SNID
5D03	9965 100 11923	BLM18PG330SNID
5E01	9965 100 11924	BLM18PG600SNID
5E13	9965 000 31899	Bead 120Ω 25% SMD
5E14	9965 000 31899	Bead 120Ω 25% SMD
5M01	9965 100 11923	BLM18PG330SNID
5M02	9965 100 11923	BLM18PG330SNID
5M03	9965 100 11923	BLM18PG330SNID
5N01	9965 100 11929	Bead 120Ω 25% 0402
5N02	9965 100 11929	Bead 120Ω 25% 0402
5N03	9965 100 11929	Bead 120Ω 25% 0402
5N04	9965 100 11929	Bead 120Ω 25% 0402
5N05	9965 100 11929	Bead 120Ω 25% 0402
5N06	9965 100 11929	Bead 120Ω 25% 0402
5N07	9965 100 11929	Bead 120Ω 25% 0402
5N08	9965 100 11929	Bead 120Ω 25% 0402
5N09	9965 100 11929	Bead 120Ω 25% 0402
5P01	9965 100 11932	NR8040T220M 22µH
5P02	9965 100 11927	10µH 20%
5P06	9965 100 11925	220µH 20%
5P09	9965 100 11932	NR8040T220M 22µH
5Q01	9965 100 11930	Coil 10µH
5Q02	9965 100 11927	10µH 20%
5Q09	9965 100 11931	NR8040T100M 10µH
5R02	9965 100 11923	BLM18PG330SNID
5R03	9965 100 11923	BLM18PG330SNID

6103	9965 000 28507	1SS356
6110	9965 100 06098	BAS316 115
6301	9965 100 06098	BAS316 115
6318	9965 100 11981	PDZ8.2B
6402	9965 100 06098	BAS316 115
6615	9965 100 11976	DF3A6.8FUT1
6616	9965 100 11976	DF3A6.8FUT1
6A52	9965 100 06098	BAS316 115
6E04	9965 100 06098	BAS316 115
6E07	9965 100 11977	PESD3V3LIBA
6E08	9965 100 11977	PESD3V3LIBA
6M19	9965 000 28620	Diode 934045390115
6M20	9965 000 28620	Diode 934045390115
6M21	9965 000 28620	Diode 934045390115
6M22	9965 000 28620	Diode 934045390115
6M23	9965 000 28620	Diode 934045390115
6M24	9965 000 28620	Diode 934045390115
6N41	9965 000 28620	Diode 934045390115
6N42	9965 000 28620	Diode 934045390115
6P02	9965 100 11979	PDZ33B
6P03	9965 000 29774	BAV99
6P13	9965 100 06098	BAS316 115
6P14	9965 100 06098	BAS316 115
6P15	9965 100 11978	PDZ18B
6P16	9965 000 32015	BZX384-C4V7
6P17	9965 000 32015	BZX384-C4V7
6Q05	9965 000 32015	BZX384-C4V7
6Q13	9965 100 06098	BAS316 115
6Q14	9965 100 06098	BAS316 115
6Q15	9965 100 11978	PDZ18B
6R02	9965 100 06114	SMBZX384-C5V6 115

7109	9965 100 06100	BC847B
7113	9965 100 12002	TDA9886T/V3
7114	9965 100 06100	BC847B
7301	9965 100 11947	BSH111
7302	9965 100 11993	PCA9515ADP
7303	9965 100 11993	PCA9515ADP
7308	9965 100 11829	BC847BW
7310		For SW see item 0815
7311	9965 100 11998	M30300SAGP
7312	9965 100 11994	BD45275G
7314	9965 100 11829	BC847BW
7317	9965 100 11829	BC847BW
7323	9965 100 11999	NL27WZ08USG
7410	9965 100 11995	L78L08ACUTR
7411	9965 100 11948	MSP4450L-P2
7503	9965 100 06100	BC847B
7504	9965 100 11987	BC857BW
7A01	9965 100 12001	TDA832BTW
7A05	9965 100 11987	BC857BW
7A06	9965 100 11829	BC847BW
7A07	9965 100 11829	BC847BW
7A51	9965 100 12004	TS482IDT
7A52	9965 100 11987	BC857BW
7A54	9965 100 11829	BC847BW
7A55	9965 100 11829	BC847BW
7A56	9965 100 11829	BC847BW
7A57	9965 100 11829	BC847BW
7A58	9965 100 11829	BC847BW

7A59	9965 100 11829	BC847BW
7A60	9965 100 11829	BC847BW
7C01	9965 100 12005	WX69-7569-LF
7C02	9965 100 11829	BC847BW
7C03	9965 100 11992	74LCX14T
7C04	9965 100 11829	BC847BW
7D01	9965 100 11991	EDD1216AJTA-4B-E
7D02	9965 100 11991	EDD1216AJTA-4B-E
7E01		For SW see item 0835
7L10	9965 100 11829	BC847BW
7L23		For SW see item 0816
7M02	9965 100 11829	BC847BW
7M04	9965 100 11829	BC847BW
7M07	9965 100 12000	SII9185ACTU
7M09	9965 100 11829	BC847BW
7M16		For SW see item 0824
7M17		For SW see item 0823
7M18		For SW see item 0822
7M20	9965 100 11829	BC847BW
7M21	9965 100 11829	BC847BW
7M22	9965 100 11829	BC847BW
7N01	9965 100 11989	SII9125CTU
7N40		For SW see item 0821
7N43	9965 100 11829	BC847BW
7N44	9965 100 11829	BC847BW
7P05	9965 100 11986	BC817-25W
7P06	9965 100 11985	SI4936BDY
7P07	9965 100 11985	SI4936BDY
7P08	9965 100 11983	PHD38N02LT
7P09	9965 100 12003	TS431AI/L271
7P11	9965 100 11990	NCP5422ADR2
7P14	9965 100 11982	2N7002
7Q05	9965 100 11986	BC817-25W
7Q06	9965 100 11985	SI4936BDY
7Q07	9965 100 11985	SI4936BDY
7Q08	9965 100 12003	TS431AI/L271
7Q09	9965 100 11983	PHD38N02LT
7Q11	9965 100 11990	NCP5422ADR2
7R05	9965 100 11984	SI4835BDY
7R07	9965 100 06123	PDTC114ET

IR & LED Panel [J]

Various

1P10	9965 100 11843	HS 9p 242202517766
1P11	9965 100 11842	HS 4p 242202517764

⊣⊢

2P10	9965 100 11841	10µF 6.3V 0603
2P11	9965 100 11841	10µF 6.3V 0603
2P12	9965 100 11841	10µF 6.3V 0603

⊣WW⊢

3P10	9965 100 11837	1.8kΩ 5% 1/16W
3P11	9965 100 11839	8.2kΩ 5% 1/16W
3P14	9965 100 11834	10kΩ 5% 1/16W
3P15	9965 100 11834	10kΩ 5% 1/16W
3P16	9965 100 11833	100Ω 5% 1/16W
3P17	9965 100 11832	0Ω 5% 1/16W
3P18	9965 100 11835	100kΩ 5% 1/16W
3P19	9965 100 11840	6.8kΩ 5% 1/16W
3P20	9965 100 11834	10kΩ 5% 1/16W
3P21	9965 100 11836	270kΩ 5% 0402
3P22	9965 100 11834	10kΩ 5% 1/16W
3P23	9965 100 11835	100kΩ 5% 1/16W
3P24	9965 100 11834	10kΩ 5% 1/16W
3P25	9965 100 11838	39kΩ 5% 1/16W
3P26	9965 100 11836	270kΩ 5% 0402
3P27	9965 100 11834	10kΩ 5% 1/16W
3P28	9965 100 11834	10kΩ 5% 1/16W

⊣▷|⊢

6P10	9965 100 11830	LED (0603 Rd)
6P11	9965 100 11831	LED (0603 Wh)

7P10	9965 100 11829	BC847BW
7P11	9965 100 11829	BC847BW
7P12	9965 100 11828	TEMT6000x01
7P13	9965 100 11829	BC847BW
7P14	9965 100 11827	IR GP1UE260RKVF

11. Revision List

Manual xxxx xxx xxxx.0

- First release.

Manual xxxx xxx xxxx.1

- **Chapter 7:** Main Power Supply replaced.