PHILIPS 42PF9966

MODEL

SERVICE MANUAL

FTP2.4E

AA

Service
Service
Service

Service Manual FHP plasma panels: 3122 785 14580
Service Manual SDI plasma panels: 3122 785 14990



ServiceManual

Contents **Page**

1. Technical Specifications, Connections, and Chassis Overview 2
2. Safety Instructions, Warnings, and Notes 5
3. Directions for Use 6
4. Mechanical Instructions 7
5. Service Modes, Error Codes, and Fault Finding 12
6. *Block Diagrams, Testpoint Overviews, and Waveforms*
   - Wiring Diagram 42 Inch FHP Step 23
   - Wiring Diagram 50 Inch SDI Step 24
   - Block Diagram Supply 42 Inch FHP 25
   - Block Diagram Video 26
   - Block Diagram Audio & Control 27
   - I2C IC's overview 28
   - Supply Lines Overview FHP 29
   - Supply Lines Overview SDI 30
7. *Circuit Diagrams and PWB Layouts* *Diagram* *PWB*
   - PDP Supply Panel: Filter Standby (A2) 31 36-41
   - PDP Supply Panel: Protection (A3) 32 36-41
   - PDP Supply Panel: Pre-Conditioner (A5) 33 36-41
   - PDP Supply Panel: LLC Supply (A6) 34 36-41
   - PDP Supply Panel: AUX Supply (A7) 35 36-41
   - Ambi Light (AL) 42 43
   - SSB: IF, I/O Video Processing (B2) 44 78-89
   - SSB: PICNIC (B3A) 45 78-89
   - SSB: (FEM) Falconic Embedded Memory (B3B) 46 78-89
   - SSB: Eagle (B3C) 47 78-89
   - SSB: Columbus (B3D) 48 78-89
   - SSB: FBX Supply (B3E) 49 78-89
   - SSB: HOP (B4) 50 78-89
   - SSB: OTC-Flash (B5A) 51 78-89
   - SSB: Backlight Control (B5B) 52 78-89
   - SSB: OTC-Flash (B5C) 52 78-89
   - SSB: Audio Demodulator (B6A) 53 78-89
   - SSB: Dolby Digital Decoder (B6B) 54 78-89
   - SSB: Dolby Pro Logic Processor (B6C) 55 78-89
   - SSB: Audio Delay (B6D) 56 78-89
   - SSB: DC/DC Convertor (B12) 57 78-89
   - SSB: Main Tuner (B13A) 58 78-89
   - SSB: Sub Tuner (B13B) 59 78-89
   - SSB: DC/DC Converter (B13C) 60 78-89
   - SSB: I/O1: MMC (B14A) 61 78-89
   - SSB: I/O2: Connections (B14B) 62 78-89
   - SSB: I/O3: Switch (B14C) 63 78-89
   - SSB: I/O4: Audio (B14D) 64 78-89
   - SSB: I/O: 5 (B14E) 65 78-89
   - SSB: I/O6: Digital Input (B14F) 66 78-89
   - SSB: I/O: 7 (B14G) 67 78-89
   - SSB: PIP HIP (B15A) 68 78-89
   - SSB: PIP Switch (B15B) 69 78-89
   - SSB: PIP Muppet (B15C) 70 78-89
   - SSB: HDI A/D Converter (B19A) 71 78-89
   - SSB: EPLD Control (B19B) 72 78-89
   - SSB: EPLD OSD (B19C) 73 78-89
   - SSB: EPLD I/O (B19D) 74 78-89
   - SSB: Backlight Control (B19E) 75 78-89
   - SSB: Screen Interface (B20) 76 78-89
   - SSB: Connection (B21) 77 78-89
   - PDP Audio Amplifier (C) 90 91
   - Side I/O Panel (D) 92 93
   - Top Control Panel (E) 94 95
   - SCART 3 Panel (H) 96 97
   - LED and Switch Panel (J) 98 99
8. Alignments 101
9. Circuit Descriptions, Abbreviation List, and IC Data Sheets 107
10. Spare Parts List 110
11. Revision List 123

©Copyright 2005 Philips Consumer Electronics B.V. Eindhoven, The Netherlands.
All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, or otherwise without the prior permission of Philips.

Published by EL 0564 TV Service Printed in The Netherlands Subject to modification EN 3122 785 15460

PHILIPS

1. Technical Specifications, Connections, and Chassis Overview

Index of this chapter:

1.1 Technical Specifications
1.2 Connections
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	:	Plasma, 16:9
Screen size	:	42” (106 cm), FHP
	:	50” (127 cm), SDI
Resolution (HxV pixels)	:	42" - 1024x1024i
	:	50" - 1366x768p
Contrast ratio	:	1000:1
Light output (cd/m^2)	:	42" - 1200
	:	50" - 1000
Viewing angle (HxV degrees)	:	160 x 160
Tuning system	:	PLL
Colour systems	:	PAL B/G, D/K, I
	:	SECAM B/G, D/K, L/L’
Supported computer formats	:	640x480
	:	800x600
	:	1024x768 (50”)
Supported video formats	:	640x480i - 1fH
	:	720x576i - 1fH
	:	640x480p - 2fH
	:	720x576p - 2fH
	:	1920x1080i - 2fH
	:	1920x1152i - 2fH
	:	1280x720p - 3fH
AV (playback only)	:	NTSC, PAL, SECAM
Presets/channels	:	100 presets
Tuner bands	:	UHF, VHF, S, H-band

1.1.2 Sound

Sound systems	:	AV stereo,
	:	FM/FM B/G(5.5-5.74),
	:	NICAM B/G(5.5-5.85)
	:	NICAM D/K(5.5-5.85),
	:	NICAM I (6.0-6.52)
Maximum power (W_{RMS})	:	2 x 15

1.1.3 Miscellaneous

Power supply:		
- Mains voltage (V_{AC})	:	220 - 240
- Mains frequency (Hz)	:	50 / 60
Ambient conditions:		
- Temperature range (°C)	:	+5 to +40
- Maximum humidity	:	90% R.H.
Power consumption		
- Normal operation (W)	:	42" - 257
	:	50" - 375
- Stand-by (W)	:	< 2
Dimensions (WxHxD cm)	:	42" - 111x78x10
	:	50" - 128x88x10
Weight (kg)	:	42" - 42, 50” - 58

1.2 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 I/O

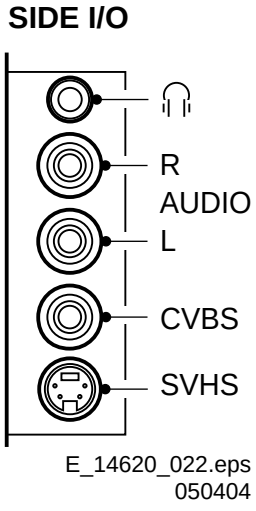


Figure 1-1 Side I/O connections

Mini Jack: Audio 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

SVHS (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

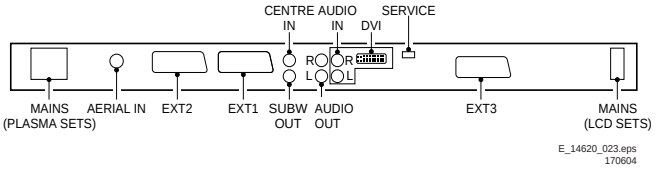
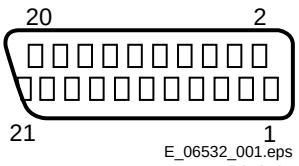


Figure 1-2 Rear connections

Aerial - In

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

EXT2: Video RGB/YC - In, CVBS - In/Out, Audio - In/Out



E_06532_001.eps
050404

Figure 1-3 SCART connector

1	- Audio R	0.5 V_{RMS} / 1 kohm	
2	- Audio R	0.5 V_{RMS} / 10 kohm	
3	- Audio L	0.5 V_{RMS} / 1 kohm	
4	- Ground Audio	Gnd	
5	- Ground Blue	Gnd	
6	- Audio L	0.5 V_{RMS} / 10 kohm	
7	- Vid. Blue-in/C-out	0.7 V_{PP} / 75 ohm	
8	- Function Select	0 - 2 V: INT 4.5 - 7 V: EXT 16:9 9.5 - 12 V: EXT 4:3	
9	- Ground Green	Gnd	
10	- Easylink P50	0 - 5 V / 4.7 kohm	
11	- Video Green	0.7 V_{PP} / 75 ohm	
12	- n.c.		
13	- Ground Red	Gnd	
14	- Ground P50	Gnd	
15	- Video Red/C	0.7 V_{PP} / 75 ohm	
16	- FBL	0 - 0.4 V: INT 1 - 3 V: EXT / 75 ohm	
17	- Ground Video	Gnd	
18	- Ground FBL	Gnd	
19	- Video CVBS	1 V_{PP} / 75 ohm	
20	- Vid. CVBS/Y-in	1 V_{PP} / 75 ohm	
21	- Shield	Gnd	

EXT1: Video RGB-in, CVBS - In/Out, Audio - In/Out

1	- Audio R	0.5 V_{RMS} / 1 kohm	
2	- Audio R	0.5 V_{RMS} / 10 kohm	
3	- Audio L	0.5 V_{RMS} / 1 kohm	
4	- Ground Audio	Gnd	
5	- Ground Blue	Gnd	
6	- Audio L	0.5 V_{RMS} / 10 kohm	
7	- Video Blue	0.7 V_{PP} / 75 ohm	
8	- Function Select	0 - 2 V: INT 4.5 - 7 V: EXT 16:9 9.5 - 12 V: EXT 4:3	
9	- Ground Green	Gnd	
10	- n.c.		
11	- Video Green	0.7 V_{PP} / 75 ohm	
12	- n.c.		
13	- Ground Red	Gnd	
14	- Ground Data	Gnd	
15	- Video Red	0.7 V_{PP} / 75 ohm	
16	- FBL	0 - 0.4 V: INT 1 - 3 V: EXT / 75 ohm	
17	- Ground Video	Gnd	
18	- Ground FBL	Gnd	
19	- Video CVBS	1 V_{PP} / 75 ohm	
20	- Video CVBS	1 V_{PP} / 75 ohm	
21	- Shield	Gnd	

Cinch: Sub woofer - Out, Centre - In

Bu	- Centre	0.5 V_{RMS} / 10 kohm	
Bk	- Sub woofer	0.5 V_{RMS} / 10 kohm	

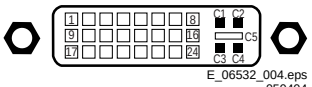
Cinch: Audio - Out

Rd	- Audio - R	0.5 V_{RMS} / 10 kohm	
Wh	- Audio - L	0.5 V_{RMS} / 10 kohm	

Cinch: DVI Audio - In

Rd	- Audio - R	0.5 V_{RMS} / 10 kohm	
Wh	- Audio - L	0.5 V_{RMS} / 10 kohm	

DVI-I: Digital/Analogue Video - In



E_06532_004.eps
050404

Figure 1-4 DVI-I connector

1	- D2-		
2	- D2+		
3	- Shield	Gnd	
4	- D4-		
5	- D4+		
6	- DDC_SCL	DDC clock	
7	- DDC_SDA	DDC data	
8	- V-sync	0 - 5 V TTL	
9	- D1-		
10	- D1+		
11	- Shield	Gnd	
12	- D3-		
13	- D3+		
14	- +5V		
15	- Ground	Gnd	
16	- HPD	Hot Plug Detect	
17	- D0-		
18	- D0+		
19	- Shield	Gnd	
20	- D5-		
21	- D5+		
22	- Shield	Gnd	
23	- CLK+		
24	- CLK-		
C1	- Video Red	0.7 V_{PP} / 75 ohm	
C2	- Video Green	0.7 V_{PP} / 75 ohm	
C3	- Video Blue	0.7 V_{PP} / 75 ohm	
C4	- H-sync	0 - 5 V TTL	
C5	- Ground	Gnd	

Service connector (ComPair)

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

EXT3: Video CVBS - In, Audio - In

1	- n.c.		
2	- Audio R	0.5 V_{RMS} / 10 kohm	
3	- n.c.		
4	- Ground Audio	Gnd	
5	- Ground Blue	Gnd	
6	- Audio L	0.5 V_{RMS} / 10 kohm	
7	- n.c.		
8	- Function Select	0 - 2 V: INT 4.5 - 7 V: EXT 16:9 9.5 - 12 V: EXT 4:3	
9	- Ground Green	Gnd	
10	- n.c.		
11	- n.c.		
12	- n.c.		
13	- Ground Red	Gnd	
14	- Ground Data	Gnd	
15	- n.c.		
16	- n.c.		
17	- Ground Video	Gnd	
18	- Ground FBL	Gnd	
19	- n.c.		
20	- Video CVBS	1 V_{PP} / 75 ohm	
21	- Shield	Gnd	

1.3 Chassis Overview

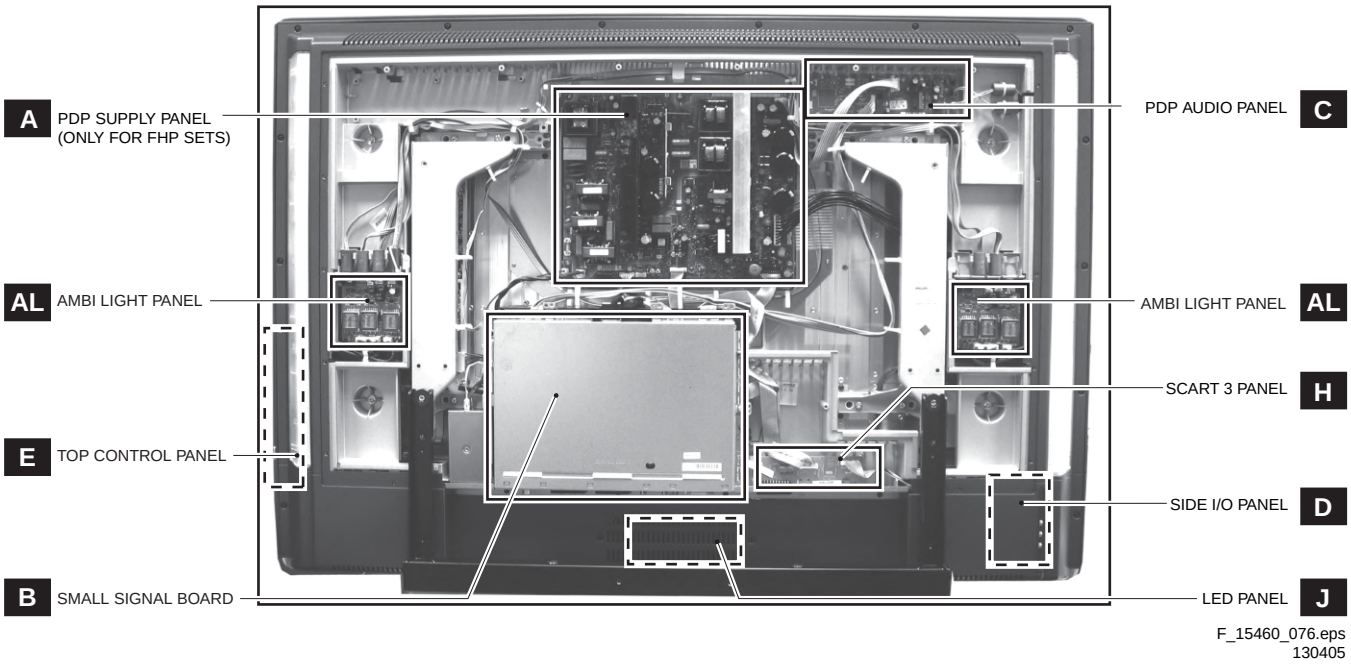


Figure 1-5 PWB location (photo from 42” FHP model)

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 TV 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 TV 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 TV. The reading should be between 4.5 Mohm and 12 Mohm.
  4. Switch "off" the TV, 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 TV by a wristband with resistance. Keep components and tools also at this same potential. Available ESD protection equipment:
  – Complete kit ESD3 (small tablemat, wristband, connection box, extension cable and earth cable) 4822 310 10671.
  – Wristband tester 4822 344 13999.
- 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 TV, 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.
- The semiconductors indicated in the circuit diagram and in the parts lists, are interchangeable per position with the semiconductors in the unit, irrespective of the type indication on these semiconductors.
- 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 (μ= x10^{-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 Rework on BGA (Ball Grid Array) ICs

General

Although (LF)BGA assembly yields are very high, there may still be a requirement for component rework. By rework, we mean the process of removing the component from the PWB and replacing it with a new component. If an (LF)BGA is removed from a PWB, the solder balls of the component are deformed drastically so the removed (LF)BGA has to be discarded.

Device Removal

As is the case with any component that, is being removed, it is essential when removing an (LF)BGA, that the board, tracks, solder lands, or surrounding components are not damaged. To remove an (LF)BGA, the board must be uniformly heated to a temperature close to the reflow soldering temperature. A uniform temperature reduces the risk of warping the PWB. To do this, we recommend that the board is heated until it is certain that all the joints are molten. Then carefully pull the component off the board with a vacuum nozzle. For the appropriate temperature profiles, see the IC data sheet.

Area Preparation

When the component has been removed, the vacant IC area must be cleaned before replacing the (LF)BGA.
Removing an IC often leaves varying amounts of solder on the mounting lands. This excessive solder can be removed with either a solder sucker or solder wick. The remaining flux can be removed with a brush and cleaning agent.
After the board is properly cleaned and inspected, apply flux on the solder lands and on the connection balls of the (LF)BGA.
Note: Do not apply solder paste, as this has been shown to result in problems during re-soldering.

Device Replacement
The last step in the repair process is to solder the new component on the board. Ideally, the (LF)BGA should be aligned under a microscope or magnifying glass. If this is not possible, try to align the (LF)BGA with any board markers. So as not to damage neighbouring components, it may be necessary to reduce some temperatures and times.

More Information
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 “Workshop Information”. Here you will find Information on how to deal with BGA-ICs.

2.3.4 Lead-free Solder

Philips CE is producing lead-free sets (PBF) from 1.1.2005 onwards.

Identification: The bottom line of a type plate gives a 14-digit serial number. Digits 5 and 6 refer to the production year, digits 7 and 8 refer to production week (in example below it is 1991 week 18).



E_06532_024.eps
230205

Figure 2-1 Serial number example

Regardless of the special lead-free logo (which is not always indicated), one must treat all sets from this date onwards according to the rules as described below.

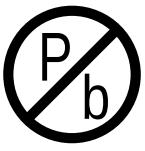


Figure 2-2 Lead-free logo

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 stabilise 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 stabilised 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.
- Use only original spare-parts listed in the Service-Manuals. Not listed standard material (commodities) has to be purchased at external companies.
- Special information for lead-free BGA ICs: these ICs will be delivered in so-called "dry-packaging" to protect the IC against moisture. This packaging may only be opened shortly before it is used (soldered). Otherwise the body of the IC gets "wet" inside and during the heating time the structure of the IC will be destroyed due to high (steam-) pressure inside the body. If the packaging was opened before usage, the IC has to be heated up for some hours (around 90°C) for drying (think of ESD-protection!).
  Do not re-use BGAs at all!
- For sets produced before 1.1.2005, containing leaded soldering tin and components, all needed spare parts will be available till the end of the service period. For the repair of such sets nothing changes.

In case of doubt whether the board is lead-free or not (or with mixed technologies), you can use the following method:

- Always use the highest temperature to solder, when using SAC305 (see also instructions below).
- De-solder thoroughly (clean solder joints to avoid the mixing of two alloys).

Caution: 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 "Workshop information".
For additional questions please contact your local repair help desk.

2.3.5 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 Position
4.3 Assy/PWB Removal
4.4 Plasma Panel / Glass Plate (Dis)Assembly
4.5 Set Re-assembly

Notes:

- Figures below can deviate slightly from the actual situation, due to the different set executions.
- All photo's are made of the 42" FHP model, however the 50" SDI model will not deviate much from it.
- Follow the disassemble instructions in described order.
- Be aware that the internal (gold coloured) frame is made of conducting material. So, be cautious during electrical measurements!

4.1 Cable Dressing

4.1.1 Chassis

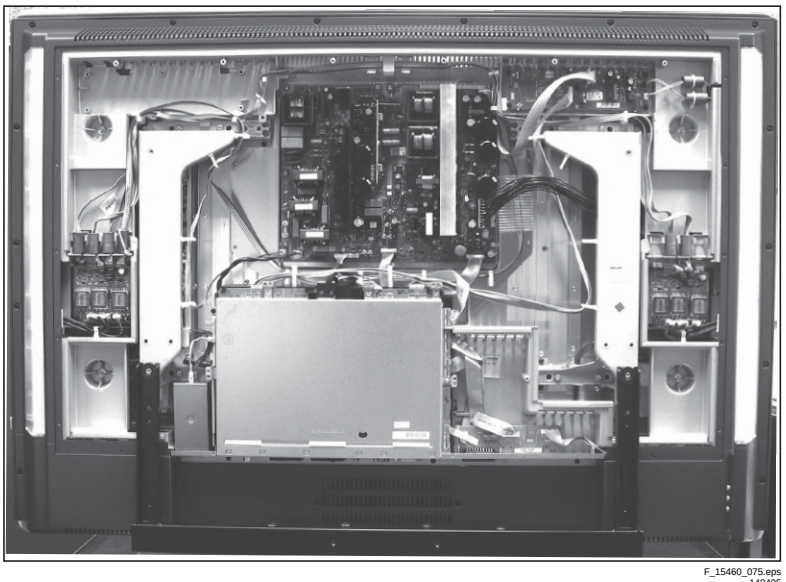


Figure 4-1 Chassis cable dressing

4.2 Service Position

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).

4.2.1 Foam Bars

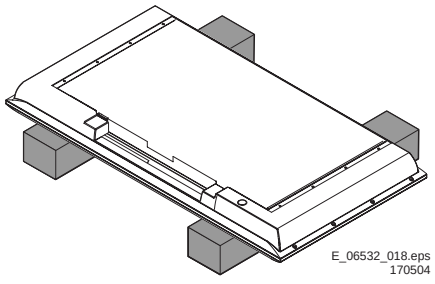


Figure 4-2 Foam bars

The foam bars (order code 3122 785 90580 for two pieces) can be used for all types and sizes of Flat TVs. 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 Aluminium Stands

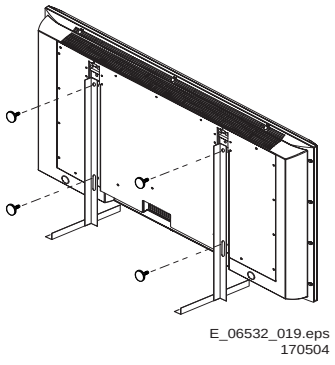


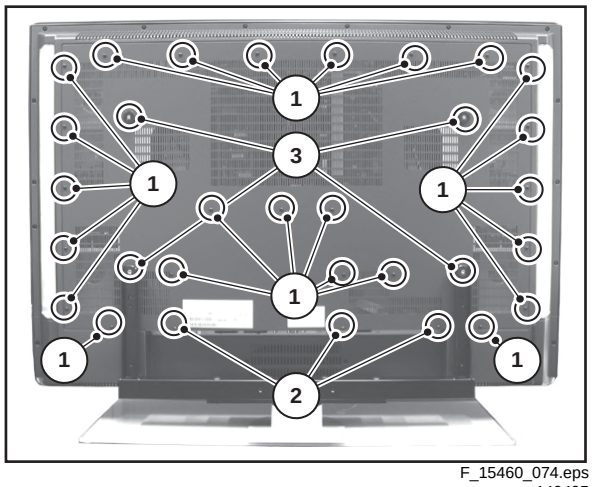
Figure 4-3 Aluminium stands (MkI)

The new (MkII) aluminium stands (order code 3122 785 90690) can also be used to do measurements, alignments, and duration tests. The stands can be (dis)mounted quick and easy by means of sliding them in/out the "mushrooms".
Important: For (older) FTV sets without these "mushrooms", it is obligatory to use the provided screws, otherwise it is possible to damage the monitor inside!.

4.3 Assy/PWB Removal

4.3.1 Metal Back Plate

Caution: Disconnect the mains power cord before you remove the metal back plate.

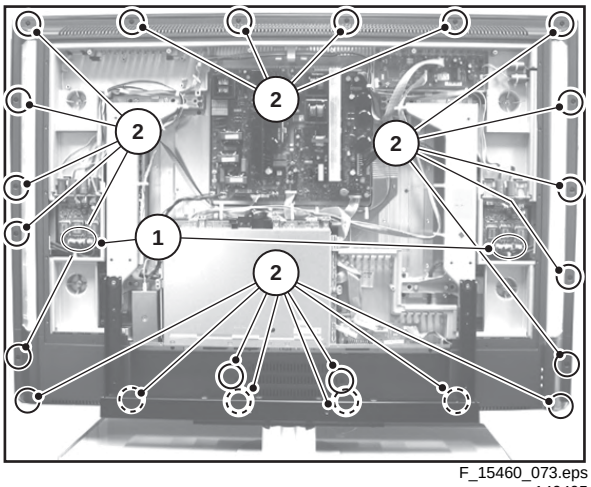


F_15460_074.eps
140405

Figure 4-4 Metal back plate

1. Place the TV set upside down on a table top, using the foam bars (see part "Foam Bars").
   Caution: do **not** put pressure on the display, but let the monitor lean on the speakers or the Front cover.
2. Remove all T10 parker screws (1) from the top, centre, and left and right sides of the back plate.
3. Remove all T10 tapping screws (2) from the bottom of the back plate.
4. Remove the four "mushrooms" (3) from the back plate.
5. Lift the back plate from the TV. Make sure that wires and flat foils are not damaged during the back plate removal.

4.3.2 Rear Cover

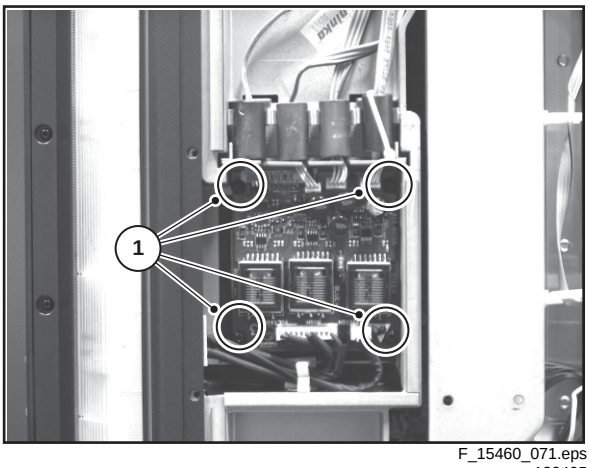


F_15460_073.eps
140405

Figure 4-5 Rear cover

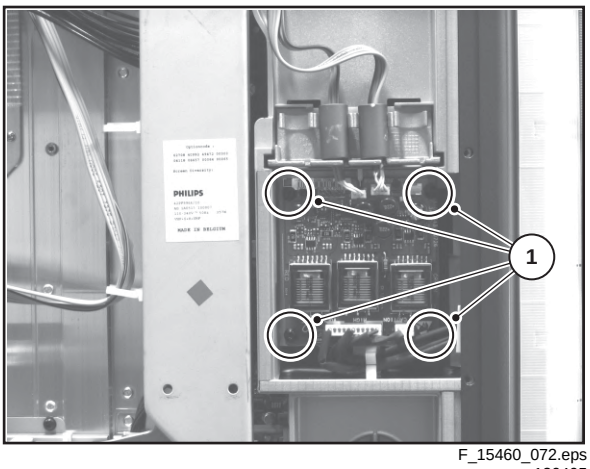
1. Disconnect all connectors (1) at both Ambient Light Inverters that go to the Ambient Lights in the rear cover.
2. Remove all T10 tapping screws (2) around the edges of the rear cover.
3. Lift the rear cover from the TV.

4.3.3 Ambient Light Panel(s)



F_15460_071.eps
130405

Figure 4-6 Ambient light inverter (left side)



F_15460_072.eps
130405

Figure 4-7 Ambient light inverter (right side)

Later models are equipped with two Ambient Light Inverter panels. For the earlier models with one panel, reference is made to the FTP2.2x Service Manual for the correct mechanical instructions.

1. Disconnect all cables from the Ambient Light Inverter panel.
2. Remove all mounting screws (1) from the Ambient Light Inverter panel.
3. Take out the Ambient Light Inverter panel.

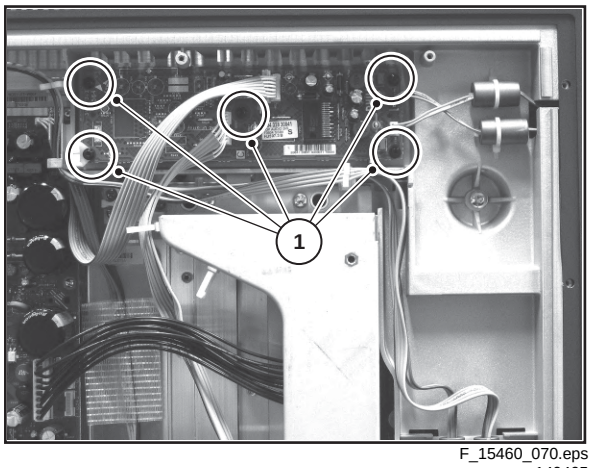
4.3.4 Power Supply Panel

1. Disconnect all cables from the Power Supply panel.
2. Remove all mounting screws from the Power Supply panel.
3. Take out the Power Supply panel.

4.3.5 SCART3 Panel

1. Disconnect all cables from the SCART3 panel.
2. Remove the two mounting screws (7) near the SCART3 at the connector plate (see figure "Connector plate").
3. Take out the SCART3 panel.

4.3.6 Audio Panel



F_15460_070.eps
140405

Figure 4-8 Audio panel

1. Disconnect all cables from the Audio panel.
2. Remove all mounting screws (1) from the Audio panel.
3. Take out the Audio panel.

4.3.7 Side I/O Panel

1. Disconnect the cable from the Side I/O panel.
2. Release the clamps and take out the Side I/O panel from its bracket.

4.3.8 Top / Side Control

1. Remove the mounting screws from the Top / Side Control panel bracket.
2. Disconnect the cable.
3. Release the clamps and take out the Top / Side Control panel.

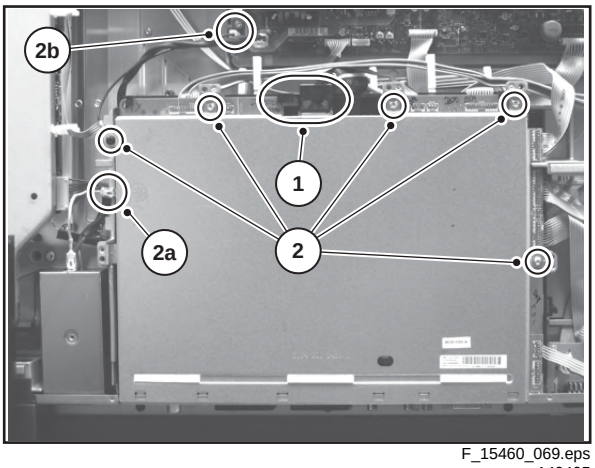
4.3.9 LED Panel

1. Disconnect all cables from the LED panel.
2. Remove the mounting screws from the LED panel.
3. Take out the LED panel.

4.3.10 Speakers

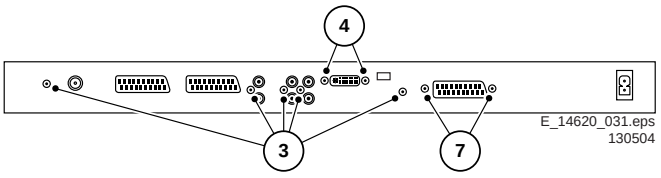
1. Remove all mounting screws.
2. After removing the cover plate, you can access the speakers.
3. Be sure that the foam that makes the unit airtight is not damaged.

4.3.11 SSB



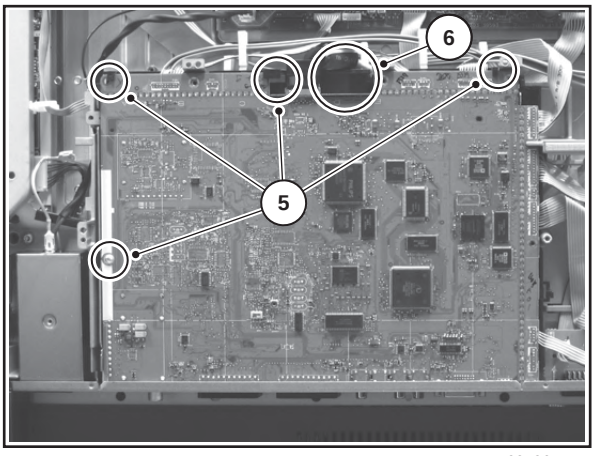
F_15460_069.eps
140405

Figure 4-9 SSB top shielding



E_14620_031.eps
130504

Figure 4-10 Connector plate

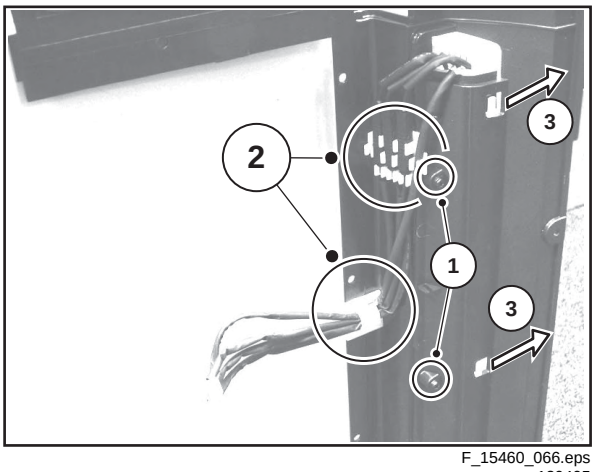


F_15460_067.eps
130405

Figure 4-11 SSB removal

1. Remove the LVDS locking bracket (1).
2. Remove all fixing screws (2).
3. Disconnect the grounding wire from the mains filter (2a).
4. Shift, and lift the shielding at the top. The panel hinges at the SCART side.
   Caution: do **not** damage the EMC shielding foam while you remove the shielding.
5. Remove mounting screws (3) from the connector plate. Use a 5 mm socket screwdriver to remove both DVI connector distance bolts (4).
6. Remove the mounting screws from the SSB (5).
7. Disconnect the LVDS cable (6).
8. Lift the SSB, disconnect all cables, and take out the SSB.

4.3.12 Ambient Lights



F_15460_066.eps
120405

Figure 4-12 Ambient light (partly shown)

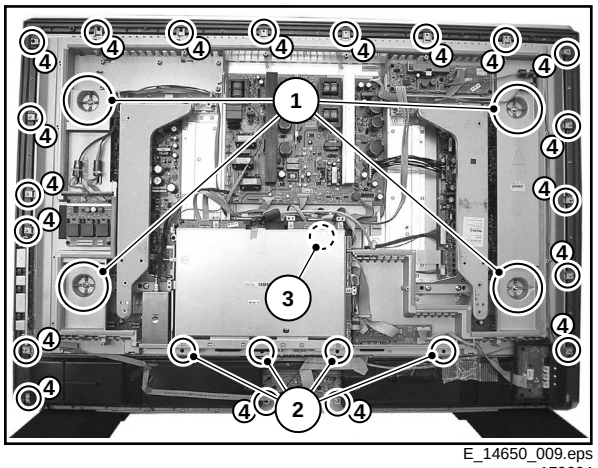
Ambient lights are located in the rear cover of the TV.

1. Unplug the connectors.
2. Remove all mounting Ambient Light screws (1).
3. Move the Ambient light unit to the side (3) and take out the unit.

4.4 Plasma Panel / Glass Plate (Dis)Assembly

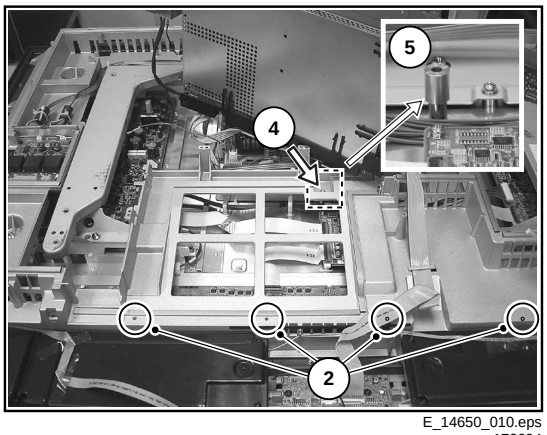
Important: Be sure to work in a dust free environment during the following activities. In addition, the use of (fabric) hand gloves is advised.

4.4.1 Plasma Display Panel



E_14650_009.eps
170604

Figure 4-13 Plasma panel removal



E_14650_010.eps
170604

Figure 4-14 Hidden screw

Disassembly

1. Place the TV set face down on the foam bars. Place the bars at the edges of the TV so they will support the front frame, and not only the glass plate!
2. Remove the four T25 screws (1) that hold the plasma panel.
   Note: In some models, the upper left T25 screw is hidden under the Ambient Light Inverter panel. Remove this panel to get access to it.
3. Remove the **fifth** T25 screw that is located near the SSB.
   Note: In some models, this fifth screw is hidden **under** the SSB. To get access, you have to remove the four T10 screws (2) that mount the "SSB connector plate" to the frame. Then, lift the complete SSB unit away, so you can remove the hidden screw (4).
4. Remove all T10 tapping screws around the frame (4).
5. Next step is to unplug the following connectors (see also Wiring Diagram in chapter 6):
   – Mains plug on PSU.
   – Audio panel supply plug on PSU.
   – LVDS plug on SSB (first remove the fixation clamp).
   – Ambilight supply plug on PSU.
   – SSB supply plugs on PSU.
   – Side/Top Control plug on LED panel.
   – Side I/O plug on LED panel.
   – SSB grounding wire.
   – Loosen all necessary cables from their clamps.
6. Lift the plastic frame together with all PWBs from the PDP panel.
7. Now the PDP (incl. the PSU panel) can be removed. Lift the panel at the two metal bars from the glass plate.
8. Before sending the plasma panel to the NSO for repair or exchange, remove the PSU panel **and the spacer** (5) that is placed upon the centre mounting stud.

Assembly

In order to centre the (new) plasma panel correctly w.r.t. the glass plate, do the following:

1. Place the (new) plasma panel face down on foam bars.
2. Also, place the front assy (front panel with glass plate) on two other foam bars.
3. Mount the plastic frame on the plasma panel.
   Important: Be sure that the spacer (order code 3104 301 62781) is placed upon the centre mounting stud (5).
4. Lift this module (frame and PDP) and place it onto the front assy.
5. Now follow the above described disassembly process in reverse order.

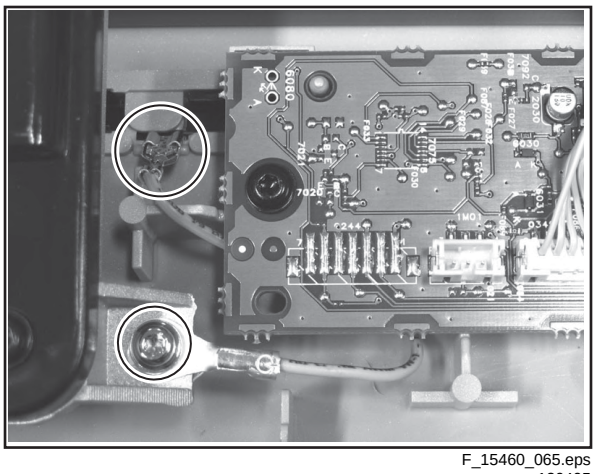
4.4.2 Glass Plate

1. Follow the above-described PDP disassembly instructions.
2. After removing the PDP, the glass plate is now accessible.

4.5 Set Re-assembly

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

Note: While re-assembling the TV, make sure that:
- All cables are placed and connected in their original position (see figure “Cable dressing”).
- EMC Shielding foam is intact.
- LVDS connector (SSB) is secured with plastic clamp.
- All "grounding" wires are re-connected:
  - Between metal speaker grid and frame (near the LED panel).
  - Between the Mains Filter and the SSB Top Shielding (see figure SSB Top shielding item 2a).
  - Between the SSB Top Shielding and the PSU (see figure SSB Top shielding item 2b).



F_15460_065.eps
120405

Figure 4-15 Grounding wire of metal speaker grid

5. Service Modes, Error Codes, and Fault Finding

Index of this chapter:

5.1 Test Points
5.2 Service Modes
5.3 Problems and Solving Tips (related to CSM)
5.4 ComPair
5.5 Error Codes
5.6 The Blinking LED Procedure
5.7 Protections
5.8 Repair tips
5.9 Software Downloading

5.1 Test Points

The chassis is equipped with test points printed on the circuit board assemblies.

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

5.2 Service Modes

Service Default Mode (SDM) and Service Alignment Mode (SAM) offer several features for the service technician, while the Customer Service Mode (CSM) is used for communication between a Philips Customer Care Centre (P3C) and a customer.

There is also the option of using ComPair, a hardware interface between a computer (see requirements below) and the TV chassis. It offers the ability of structured troubleshooting, test pattern generation, error code reading, software version read-out, and software upgrading.
Minimum requirements: a Pentium processor, Windows 95/ 98, and a CD-ROM drive (see also paragraph “ComPair”).

Remark: The silk screen printing is not correct for the SAM/ SDM indication. For the correct location of these pins, see figure ”Service pads”.

5.2.1 Service Default Mode (SDM)

Purpose
- To create a pre-defined setting, to get the same measurement results as given in this manual.
- To override SW protections.
- To start the blinking LED procedure.

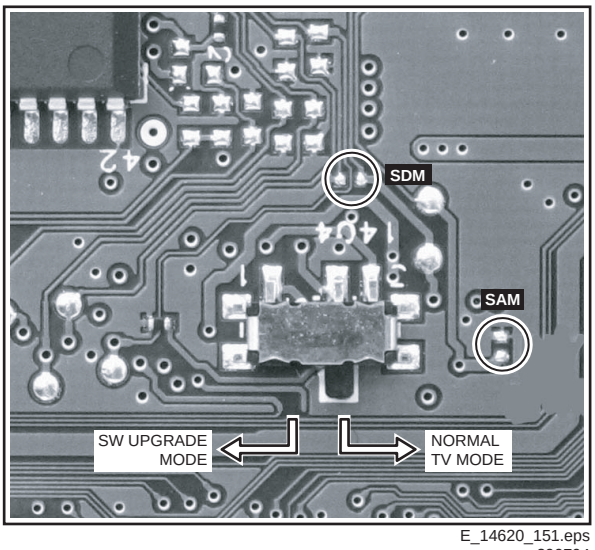
Specifications

Table 5-1 SDM default settings

Region	Freq. (MHz)	Default system
Europe, AP-PAL/Multi	475.25	PAL B/G
NAFTA, AP-NTSC, LATAM	61.25 (ch. 3)	NTSC M

- All picture settings at 50% (brightness, colour, contrast).
- All sound settings at 50%, except volume at 25%.
- All service-unfriendly modes (if present) are disabled, like:
  - (Sleep) timer.
  - Child/parental lock.
  - Blue mute.
  - Automatic volume limiter (AVL).
  - Auto switch-off (when no video signal was received for 10 minutes).
  - Skip/blank of non-favourite pre-sets.
  - Smart modes.
  - Auto store of personal presets.
  - Auto user menu time-out.

How to activate SDM
Use one of the following methods:
- Use the standard RC-transmitter and key in the code **“062596”**, directly followed by the “MENU” button.
  Note: It is possible that, together with the SDM, the main menu will appear. To switch it off, push the “MENU” button again.



E_14620_151.eps
290704

Figure 5-1 Service pads

- Short for a moment the two solder pads on the SSB, with the indication “SDM” (see figure ”Service pads”). Activation can be performed in all modes, except when the TV has a problem with the main microprocessor.
  Caution: If the SDM is activated via the pins, all the software-controlled protections are de-activated.
- Use the DST-emulation feature of ComPair.
- Use the “DEFAULT” button on the Dealer Service Tool (RC7150).

How to navigate
When you press the “MENU” button on the RC transmitter, the TV will toggle between the SDM and the normal user menu (with the SDM mode still active in the background).

How to exit SDM
Use one of the following methods:
- Switch the TV to STANDBY via the RC-transmitter.
- Press the “EXIT” button on the DST.
- Via a standard customer RC-transmitter: key in “00”-sequence.

5.2.2 Service Alignment Mode (SAM)

Purpose
- To perform (software) alignments.
- To change option settings.
- To easily identify the used software version.
- To view operation hours.
- To display (or clear) the error code buffer.

Specifications
- Operation hours counter.
- Software version.

- Option settings.
- Error buffer reading and erasing.
- Software alignments.

How to activate SAM

Use one of the following methods:

- Via a standard RC transmitter: key in the code **"062596"** directly followed by the "OSD [i+]" button. After activating SAM with this method a service warning will appear on the screen, you can continue by pressing any digit key on the RC.
- Short for a moment the two solder pads on the SSB with the indication "SAM" (see figure "Service pads"). Depending on the software version, it is possible that a service warning will appear. You can continue by pressing any digit key on the RC.
- Use the DST-emulation feature of ComPair.
- Press the ALIGN button on the DST while the TV is in the normal operation

After activating this mode, "SAM" will appear in the upper right corner of the screen.

Contents of SAM:

- **Operation Hours.** Displays the accumulated total of operation hours (not the stand-by hours).
- **Hardware Info.**
  - **ROM Version.** Displays the date of the software and the software version of the ROM
    Ex.: TX24EU_1.0_01234 = AAAABB_X.Y_NNNNN.
    - **AAAA**= the chassis name.
    - **BB**= the region: EU= Europe, AP= Asia Pacific PAL/Multi, AN= Asia Pacific NTSC, US= USA, LT= LATAM.
    - **X.Y**= the software version, where X is the main version number (different numbers are not compatible with one another) and Y is the sub version number (a higher number is always compatible with a lower number).
    - **NNNNN**= last five digits of 12nc code software.
  - **FBX Version.** Displays the software version of the FBX
  - **SW VERSION EPLD**. Displays the software version of the EPLD.
- **Errors.** (followed by maximal 10 errors). The most recent error is displayed at the upper left (for an error explanation see paragraph "Error Codes").
- **Defective Module.** Here the module that generates the error is displayed. If there are multiple errors in the buffer, which are not all generated by a single module, there is probably another defect. It will then display the message "UNKNOWN" here.
- **Reset Error Buffer.** When you press the "OK" button, the error buffer is reset.
- **Alignments.** This will activate the "ALIGNMENTS" sub-menu.
- **Dealer Options.** Extra features for the dealers.
- **Service Options.** Extra features for Service.
- **Initialise NVM.** When an NVM was corrupted (or replaced) in the former EM3 chassis, the microprocessor replaces the content with default data (to assure that the TV can operate). However, all pre-sets and alignment values are gone now, and option numbers are not correct. Therefore, this was a very drastic way. In this chassis, the procedure is implemented in another way: The moment the processor recognises a corrupted NVM, the "initialise NVM" line will be highlighted. Now, you can do two things (dependent of the service instructions at that moment):
  - Save the content of the NVM via ComPair for development analysis, **before** initialising. This will give the Philips Service department an extra possibility for diagnosis (e.g. when Development asks for this).
  - Initialise the NVM (same as in the past, however now it happens conscious).
- **Store.** All options and alignments are stored when pressing the "OK"-button
- **Functional Test.** All devices are tested via the "OK" button. Eventual errors are displayed in the error buffer. The error buffer is not erased, the content returns when this test is terminated.
- **Daily Menus.** With the "OK" button, you can go to the normal user menu. SAM is still active in the background. With the "MENU" button, you return from the user menu to SAM menu. This feature can be helpful to quickly change some settings in the user menu.
- **SW Maintenance.**
  - **Upgrade.** More info see paragraph Software downloading.
  - **Events.** Not useful for service purposes. In case of specific software problems, the development department can ask for this info.
  - **BDM Info.** Broadcast Debug Menu info. The purpose of this menu is to debug the broadcast, **not** the TV. The menu gives an overview of what is received on the current preset.

Following items are displayed:

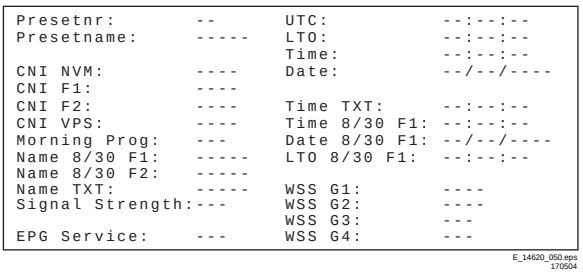


Figure 5-2 Broadcast debug menu overview

Table 5-2 Broadcast debug menu explanation

Item	Source	Description
Presetnr	Set	Preset number of the current selected preset.
Presetname	Set	Preset name of the current selected preset.
CNI NVM	Broadcaster	CNI number stored in NVM for the current preset.
CNI F1	Broadcaster	CNI number from transmitted Packet 8/30 Format 1.
CNI F2	Broadcaster	CNI number from transmitted Packet 8/30 Format 2.
CNI VPS	Broadcaster	CNI number from transmitted VPS line.
Morning Prog	Broadcaster	"ARD" or "ZDF" according to dedicated bit in 8/30 Format 1.
Name 8/30 F1	Broadcaster	Name extracted from status message of 8/30 Format 1.
Name 8/30 F2	Broadcaster	Name extracted from status message of 8/30 Format 2.
Name TXT	Broadcaster	Name extracted from TXT header.
Signal Strength	FBX	Noise figure measured for selected preset.
EPG Service	Set	EPG Service stored in NVM for current preset displayed as "TXT", "MCP", "SCP", "OCP".
UTC	Set	UTC (Universal Time Code formerly known as Greenwich Mean Time) used in the TV.
LTO	Set	LTO (Local Time Offset) used in the TV. Used by EPG for all NextView displays. (= Time TXT header - Time 8/30 F1)
Time	Set	Current time running in the TV. Was extracted at start-up, then maintained by software.
Date	Set	Current date running in the TV. Was extracted at start-up, then maintained by software.
Time TXT	Broadcaster	TXT header time from the selected preset.
Time 8/30 F1	Broadcaster	UTC time from 8/30 Format 1.
Date 8/30 F1	Broadcaster	Date from 8/30 Format 1.
LTO 8/30 F1	Broadcaster	LTO from 8/30 Format 1.
WSS G1	Broadcaster	WSS Group 1 (Aspect Ratio) bits 0 1 2 3
WSS G2	Broadcaster	WSS Group 2 (Enhanced Services) bits 4 5 6 7

Item	Source	Description
WSS G3	Broadcaster	WSS Group 3 (Subtitles) bits 8 9 10
WSS G4	Broadcaster	WSS Group 4 (Reserved) bits 11 12 13

How to navigate
- In SAM, you can select the menu items with the “CURSOR UP/DOWN” key on the RC-transmitter. The selected item will be highlighted. When not all menu items fit on the screen, move the “CURSOR UP/DOWN” key to display the next/previous menu items.
- With the “CURSOR LEFT/RIGHT” keys, it is possible to:
  – (De) activate the selected menu item.
  – Change the value of the selected menu item.
  – Activate the selected sub-menu.

How to exit SAM
Use one of the following methods:
- Press the “MENU” button on the RC-transmitter, or
- Switch the TV to STANDBY via the RC-transmitter, or
- Press the “EXIT” button on the DST.

5.2.3 Customer Service Mode (CSM)

Purpose
When a customer is having problems with his TV-set, he can call his dealer. The service technician can than ask the customer to activate the CSM, in order to identify the status of the TV. Now, the service technician can judge the severity of the complaint. In many cases, he can advise the customer how to solve the problem, or he can decide if it is necessary to visit the customer.
The CSM is a read only mode; therefore, modifications in this mode are not possible.

How to activate CSM
Use the following method:
Key in the code **“123654”** via the standard RC transmitter.

Note: Activation of the CSM is only possible if there is no (user) menu on the screen!

How to navigate
By means of the “CURSOR-DOWN/UP” knob on the RC-transmitter, you can navigate through the menus.

Contents of CSM

CUSTOMER SERVICE MENU 1
- **Software Version (example: TX24EU_1.0_01234).** Displays the built-in software version. In case of field problems related to software, software can be upgraded (for more details, see paragraph Software downloading). You will find details of the software versions in the chapter “Software Survey” of the “Product Survey - Colour Television” publication. This publication is generated four times a year.
- **Feature Box**. The 12NC-number of the built-in Feature Box software.
- **Set Type.** This information is very helpful for a help desk/ workshop as reference for further diagnosis. In this way, it is not necessary for the customer to look at the rear of the TV-set.
- **Code 1.** Gives the latest five errors of the error buffer. As soon as the built-in diagnose software has detected an error the buffer is adapted. The last occurred error is displayed on the left most position. Each error code is displayed as a 3-digit number. When less than 10 errors occur, the rest of the buffer is empty (000). See also paragraph Error Codes for a description.
- **Code 2.** Gives the first five errors of the error buffer. See also paragraph Error Codes for a description.
- **Volume.** Gives the last status of the volume as set by the customer. The value can vary from 0 (volume is minimum) to 100 (volume is maximum). Volume values can be changed via the volume key on the RC-transmitter.
- **Brightness.** Gives the last status of the brightness as set by the customer. The value can vary from 0 (brightness is minimum) to 100 (brightness is maximum). Brightness values can be changed via the “CURSOR LEFT” and “CURSOR RIGHT” keys on the RC-transmitter after pressing the “MENU” button and selecting “PICTURE” and “BRIGHTNESS”.
- **Contrast.** Gives the last status of the contrast as set by the customer. The value can vary from 0 (contrast is minimum) to 100 (contrast is maximum). Contrast values can be changed via “CURSOR LEFT” and “CURSOR RIGHT” keys on the RC-transmitter after pressing the “MENU” button and selecting “PICTURE” and “CONTRAST”.
- **Colour.** Gives the last status of the colour saturation, as set by the customer. The value can vary from 0 (colour is minimum) to 100 (colour is maximum). Colour values can be changed via “CURSOR LEFT” and “CURSOR RIGHT” keys on the RC-transmitter after pressing the “MENU” button and selecting “PICTURE” and “COLOUR”.
- **Hue.** Only relevant for NTSC-signals (e.g. some NTSC-DVD-discs).

CUSTOMER SERVICE MENU 2
- **Sharpness.** Gives the sharpness value. The value can vary from 0 (sharpness is minimum) to 7 (sharpness is maximum). In case of bad antenna signals, a too high value of the sharpness can result in a noisy picture. Sharpness values can be changed via the “CURSOR LEFT” and “CURSOR RIGHT” keys on the RC-transmitter after pressing the “MENU” button and selecting “PICTURE” and “SHARPNESS”.
- **Headphone Volume.** Gives the last status of the head phone volume, as set by the customer. The value can vary from 0 (volume is minimum) to 100 (volume is maximum). Head phone volume values can be changed via the “CURSOR LEFT” and “CURSOR RIGHT” keys on the RC-transmitter after pressing the “MENU” button and selecting “SOUND” and “HEADPHONE VOLUME”.
- **Dolby.** Indicates whether the received transmitter transmits Dolby sound (“ON”) or not (“OFF”). Attention: The presence of Dolby can only be tested by the software on the Dolby Signalling bit. If a Dolby transmission is received without a Dolby Signalling bit, this indicator will show “OFF” even though a Dolby transmission is received.
- **Surround Mode.** Indicates the by the customer selected surround mode (or automatically chosen mode). Possible values are “OFF”, “INCREDIBLE SURROUND” OR “DOLBY VIRTUAL”. These settings can be influenced after pressing the “MENU” button and selecting “SOUND” and SURROUND MODE”. It can also have been selected automatically by signalling bits (internal software).
- **Tuner Frequency.** Indicates the frequency the selected transmitter is tuned to. The tuner frequency can be changed via the “CURSOR LEFT” and “CURSOR RIGHT” keys for fine tune after opening the installation menu and selecting “INSTALL” and “MANUAL INSTALL”.
- **Digital Option.** Gives the selected digital mode, “PROGRESSIVE SCAN”, “MOVIE PLUS” or “PIXEL PLUS”. Change via “MENU”, “PICTURE”, “DIGITAL OPTIONS”.
- **Centre Trim.** Not applicable for this set.
- **TV System.** Gives information about the video system of the selected transmitter.
  – BG: PAL BG signal received.
  – DK: PAL DK signal received.
  – I: PAL I signal received.
  – L/La: SECAM L/La signals received.
  – M: NTSC M signal received with video carrier on 38.9 MHz.

CUSTOMER SERVICE MENU 3

- **Balance.** Indicates the balance settings, between “-50” and “+50”. Change via “MENU”, “SOUND”, and “BALANCE”. Not applicable for Dolby Pro Logic sets.
- **Centre Mode.** Not applicable for this TV.
- **DNR.** Gives the selected DNR setting (Dynamic Noise Reduction), “OFF”, “MINIMUM”, “MEDIUM”, or “MAXIMUM”. Change via “MENU”, “PICTURE”, “DNR”
- **Noise Figure.** Gives the noise ratio for the selected transmitter. This value can vary from 0 (good signal) to 127 (average signal) and to 255 (bad signal). For some software versions, the noise figure will only be valid when “Active Control” is set to “medium” or “maximum”.
- **Source.** Indicates which source is used and the video/ audio signal quality of the selected source.
  Example: Tuner, Video/NICAM) Source: “TUNER”, “EXT1”, “EXT2”, “EXT3”, “EXT4”, “SIDE”, “AV1”, “AV2”, “AV3” or “AV4”. Video signal quality: “VIDEO”, “S-VIDEO”, “RGB 1FH”, “YPBPR 1FH 480P”, “YPBPR 1FH 576P”, “YPBPR 1FH 1080I”, “YPBPR 2FH 480P”, “YPBPR 2FH 576P”, “YPBPR 2FH 1080I”, “RGB 2FH 480P”, “RGB 2FH 576P” or “RGB 2FH 1080I”. Audio signal quality: “STEREO”, “SPDIF 1”, “SPDIF 2”, or “SPDIF”.
- **Audio System.** Gives information about the audio system of the selected transmitter: “ANALOGUE MONO”, “ANALOGUE STEREO”, “PCM 2/0”, “DD 1/0”, “DD 2/0 LtRt”, “DD 2/0 L0R0”, “DD 2/1”, “DD 2/2”, “DD 3/0”, “DD 3/ 1”, “DD 3/2”, “DD 1+1”, “MPEG 1/0”, “MPEG 2/0”, “MPEG 2/0 LtRt”, “MPEG 2/1”, “MPEG 2/2”, “MPEG 3/0”, “MPEG 3/1”, “MPEG 3/2”, “MPEG 1+1” or “MPEG 2+2”.
- **Tuned Bit.** Gives information about the tuning method of the stored pre-set. If a channel is found via “automatic installation”, you will see the value “YES”. When you change this (automatically found) frequency via “fine tune” adjustment (installation menu - manual installation), the displayed value will change to “NO”. Therefore, when you see the value “NO” in this line, it is an indication that the received channel is a non-standard signal (e.g. of a VCR).
- **Surround Speakers.** Not applicable in this set.
- **On Timer.** Indicates if the “On Timer” is set “ON” or “OFF” and if the timer is “ON” also displays start time, start day and program number. Change via “MENU”, “TV”, “FEATURES”, and “ON TIMER”.
- **Preset Lock.** Indicates if the selected preset has a child lock: “LOCKED” or “UNLOCKED”. Change via “MENU”, “TV”, “FEATURES”, “CHILD LOCK”, and “CUSTOM LOCK”.

CUSTOMER SERVICE MENU 4

- **Child Lock.** Indicates the last status of the general child lock: “UNLOCK”, “LOCK”, or “CUSTOM LOCK”. Change via “MENU”, “TV”, “FEATURES”, “CHILD LOCK”, and “LOCK”.
- **Age Lock.** Indicates the last status of the EPG rating for child lock: “OFF”, “4 YEARS”, “6 YEARS”, “8 YEARS”, “10 YEARS”, “12 YEARS”, “14 YEARS” or “16 YEARS”. This is only displayed if child lock is set to “CUSTOM LOCK”
- **Lock After.** Indicates at what time the child lock is set: “OFF” or e.g. “18:45” (lock time). This is only displayed if child lock is set to “CUSTOM LOCK”
- **Category Lock.** Indicates the last status of the EPG theme child lock: “MOVIES”, “NEWS”, “SHOWS”, “SPORTS”, “CHILDREN”, “MUSIC”, “CULTURE”, or “SERIES”. This is only displayed if child lock is set to “CUSTOM LOCK”. It is possible that more than one value is shown.
- **Program Category.** Indicates the theme of the selected transmitter: “MOVIES”, “NEWS”, “SHOWS”, “SPORTS”, “CHILDREN”, “MUSIC”, “CULTURE”, or “SERIES”.
- **TV Ratings Lock.** Only applicable for US.
- **Movie Ratings Lock.** Only applicable for US.
- **V-Chip TV Status.** Only applicable for US.

CUSTOMER SERVICE MENU 5

- **V-Chip Movie Status.** Only applicable for US.
- **Options 1.** Gives the option codes of option group 1 as set in SAM (Service Alignment Mode).
- **Options 2.** Gives the option codes of option group 2 as set in SAM (Service Alignment Mode).
- **AVL.** Indicates the last status of AVL (Automatic Volume Level): “ON” or “OFF”. Change via “MENU”, “TV”, “SOUND”, “AVL”
- **Delta Volume.** Indicates the last status of the delta volume for the selected preset as set by the customer: from “-12” to “+12”. Change via “MENU”, “TV”, “SOUND”, “DELTA VOLUME”.
- **Front Spkr Dist.** Not applicable for this TV.
- **Front Spkr Dist.** Not applicable for this TV.

How to exit CSM

Use one of the following methods:

- After you press a key on the RC-transmitter (with exception of the “CHANNEL”, “VOLUME” and digit (0-9) keys), or
- After you switch the TV-set “OFF” with the mains switch.

Note: When you de-activate CSM, it is possible (depending on the software version) that the size of the picture changes. This can be solved by pushing “P+” and then “P-”.

5.3 Problems and Solving Tips (related to CSM)

Note: Below described problems are all related to the TV settings (visible in the CSM menu). The procedures to change the value (or status) of the different settings are described above. New value(s) are automatically stored.

5.3.1 Picture Problems

Snowy/noisy picture

1. Check in CSM line NOISE FIGURE. In case the value is "127" or higher, and the value is also high on other programs, check the aerial cable/aerial system. For some software versions, the noise figure will only be valid when “Active Control” is set to “medium” or “maximum”.
2. Check in CSM lines SHARPNESS and NOISE FIGURE. In case the value of line SHARPNESS is "3" or "4" and the value of line NOISE FIGURE is high ("127" or higher), decrease the "Sharpness” value.

Picture too dark

1. Press “Menu”, “TV”, “Picture”, “Smart Picture”. In case the picture improves, increase the “Brightness” or the “Contrast” value. The new value(s) are automatically stored (in “personal” pre-set) for all TV channels.
2. Check in CSM line BRIGHTNESS and CONTRAST. If the value of these lines is low (< "10"), increase the “Brightness” or the “Contrast” value via the user menu.

Picture too bright

1. Press “Menu”, “TV”, “Picture”, “Smart Picture”. In case the picture improves, decrease the “Brightness” or the “Contrast” value. The new value(s) are automatically stored (in “personal” pre-set) for all TV channels.
2. Check in CSM lines BRIGHTNESS and CONTRAST. If the value of these line is high (> 50), decrease the “Brightness” value or increase the “Contrast” value via the user menu.

White line around picture elements and text

1. Press “Menu”, “TV”, “Picture”, “Smart Picture”. In case the picture improves, decrease the “Sharpness” value. The new value is automatically stored (in “personal” pre-set) for all TV channels.
2. Check in CSM line “Sharpness”. If the value is high, decrease it. The new value is automatically stored for all TV channels.

No picture
Check in CSM line TUNED BIT. In case the value is “No”, install the required program again. Open the installation menu and perform manual installation.

No picture or unstable picture
A scrambled or decoded signal is received.

Black and white picture
Check in CSM line COLOUR. In case the value is low (< "10"), increase the “Colour” value via the user menu. The new value is automatically stored for all TV channels.

No colours/colour lines around picture elements or colours not correct or unstable picture
1. Check in CSM line TV SYSTEM. If a “strange” system pops up, something has gone wrong during installation. Re-install the channel.
2. If in CSM line TV SYSTEM is “L”, then the installed system for this pre-set is “France” (SECAM standard). if the country requires a PAL standard, “West Europe” is required. Install the required program again: open the installation menu and perform manual installation. Select system “West Europe”.

Menu text not sharp enough
1. Press “MENU”, “TV”, “PICTURE”, “SMART PICTURE”. In case picture improves, decrease the contrast value. The new value(s) are automatically stored for all TV channels.
2. Check line “Contrast”. If the value is high, decrease the contrast value.

5.3.2 Sound Problems

No sound from left and right speaker
Check line 6 “Volume”. The value is low. Increase the value of “Volume”. The new value(s) are automatically stored (in “personal” pre-set) for all TV channels.

5.4 ComPair

5.4.1 Introduction

ComPair (Computer Aided Repair) is a service tool for Philips Consumer Electronics products. ComPair is a further development on the European DST (service remote control), which allows faster and more accurate diagnostics. ComPair has three big advantages:
- ComPair helps you to quickly get an understanding on how to repair the chassis in a short time by guiding you systematically through the repair procedures.
- ComPair allows very detailed diagnostics (on I^2C level) and is therefore capable of accurately indicating problem areas. You do not have to know anything about I^2C commands yourself because ComPair takes care of this.
- ComPair speeds up the repair time since it can automatically communicate with the chassis (when the microprocessor is working) and all repair information is directly available. When ComPair is installed together with the SearchMan electronic manual of the defective chassis, schematics and PWBs are only a mouse click away.

5.4.2 Specifications

ComPair consists of a Windows based fault finding program and an interface box between PC and the (defective) product. The ComPair interface box is connected to the PC via a serial or RS232 cable.
For this chassis, the ComPair interface box and the TV communicate via a bi-directional service cable via the service connector.

The ComPair fault finding program is able to determine the problem of the defective television. ComPair can gather diagnostic information in two ways:
- Automatic (by communication with the television): ComPair can automatically read out the contents of the entire error buffer. Diagnosis is done on I^2C level. ComPair can access the I^2C bus of the television. ComPair can send and receive I^2C commands to the micro controller of the television. In this way, it is possible for ComPair to communicate (read and write) to devices on the I^2C buses of the TV-set.
- Manually (by asking questions to you): Automatic diagnosis is only possible if the micro controller of the television is working correctly and only to a certain extends. When this is not the case, ComPair will guide you through the fault finding tree by asking you questions (e.g. *Does the screen give a picture? Click on the correct answer: YES / NO*) and showing you examples (e.g. *Measure test-point I7 and click on the correct oscillogram you see on the oscilloscope*). You can answer by clicking on a link (e.g. text or a waveform picture) that will bring you to the next step in the fault finding process.

By a combination of automatic diagnostics and an interactive question / answer procedure, ComPair will enable you to find most problems in a fast and effective way.

Beside fault finding, ComPair provides some **additional features** like:
- Emulation of the Dealer Service Tool (DST), which is not supported any more.
- If both ComPair and SearchMan (Electronic Service Manual) are installed, all the schematics and the PWBs of the TV are available by clicking on the appropriate hyperlink.
  Example: *Measure the DC-voltage on capacitor C2568 (Schematic/Panel) at the Mono-carrier*.
  – Click on the “Panel” hyperlink to automatically show the PWB with a highlighted capacitor C2568.
  – Click on the “Schematic” hyperlink to automatically show the position of the highlighted capacitor.

5.4.3 Stepwise Start-up

Under normal circumstances, a fault in the power supply, or an error during start-up, will switch the television to protection mode. ComPair can take over the initialisation of the television. In this way, it is possible to distinguish which part of the start-up routine (hence which circuitry) is causing the problem. Take notice that the transition between two steps can take some time, so give the TV some time to reach a stable state. During the transition time, the LED can blink strangely.

Stepwise start-up explanation
This is realised via ComPair and is very helpful when a **protection** is activated (see also chapter “Protections”). The following diagram shows the start-up procedure of the TV. Every step of the stepwise start-up (also called trapped start-up) in the diagram corresponds with the number of times the LED blinks.

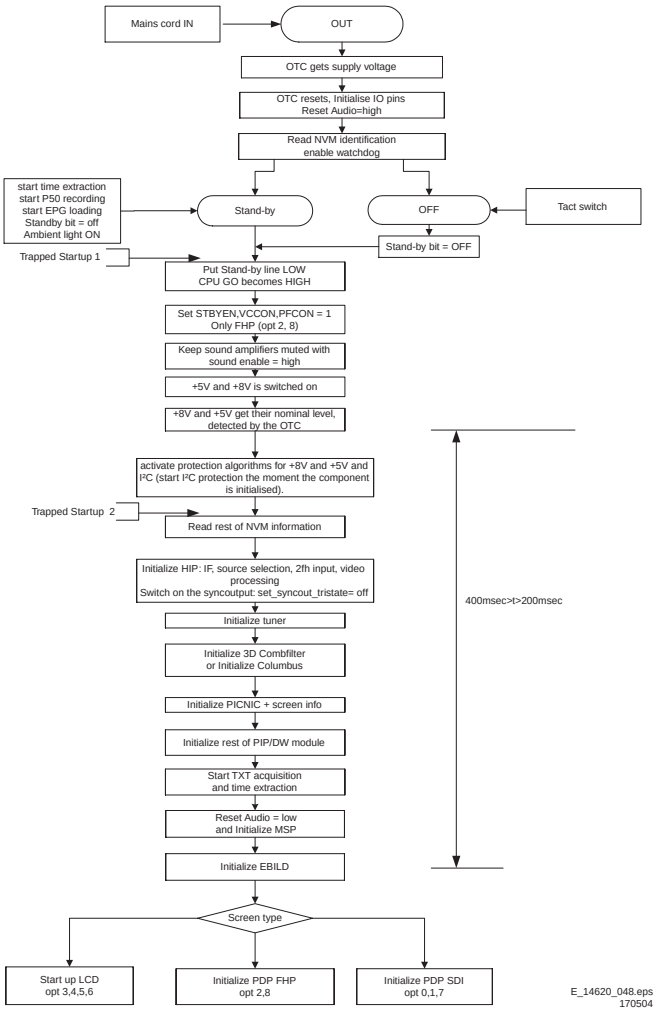


Figure 5-3 Stepwise start-up

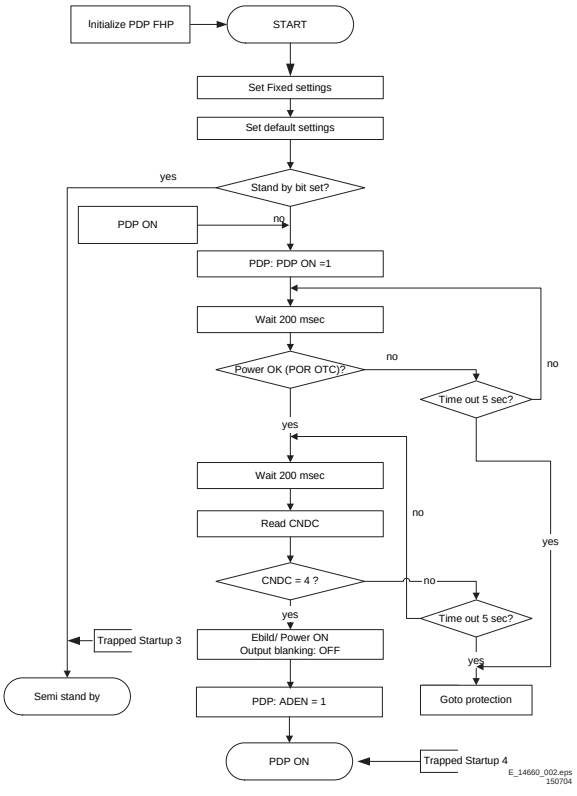


Figure 5-4 Stepwise start-up part 2: Initialise FHP

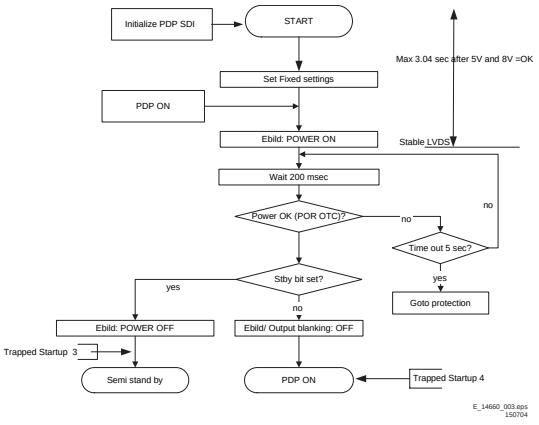


Figure 5-5 Stepwise start-up part 2: Initialise SDI (*)

Notes (*):

- When the TV is in stepwise mode and, due to stepping-up, a protection is activated, the TV will really go into protection (blinking LED). The TV will not leave the stepwise mode however. If state X is the state where the TV went to protection, stepwise start-up will return to state X-1. At state (X-1) diagnostic measurements can be performed. Also, in the short time the TV is in state X but not yet in protection, you can also do some measurements.
- Stepwise start-up can NOT be used for Samsung displays (SDI). The TV will not react in a proper way, due to other timing specifications.

5.4.4 How To Connect

This is described in the chassis fault finding database in ComPair.

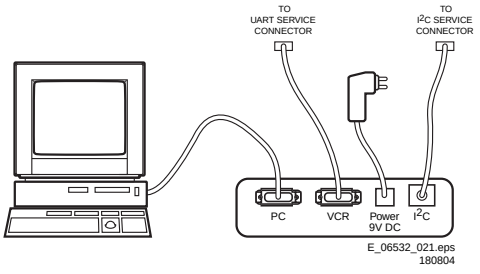


Figure 5-6 ComPair interface connection

5.4.5 How To Order

ComPair order codes (EU/AP/LATAM):

- Starter kit ComPair32/SearchMan32 software and ComPair interface (excl. transformer): 3122 785 90450.
- ComPair interface (excl. transformer): 4822 727 21631.
- Starter kit ComPair32 software (registration version): 3122 785 60040.
- Starter kit SearchMan32 software: 3122 785 60050.
- ComPair32 CD (update): 3122 785 60070 (year 2002), 3122 785 60110 (year 2003 onwards).
- SearchMan32 CD (update): 3122 785 60080 (year 2002), 3122 785 60120 (year 2003), 3122 785 60130 (year 2004).
- ComPair firmware upgrade IC: 3122 785 90510.
- Transformer (non-UK): 4822 727 21632.
- Transformer UK: 4822 727 21633.
- ComPair interface cable: 3122 785 90004.
- ComPair interface extension cable: 3139 131 03791.
- ComPair UART interface cable: 3122 785 90630.

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

5.5 Error Codes

5.5.1 Introduction

The error code buffer contains all detected errors since the last time the buffer was erased. The buffer is written from left to right, new errors are logged at the left side, and all other errors shift one position to the right.
When an error has occurred, the error is added to the list of errors, provided the list is not full or the error is a protection error.
When an error occurs and the error buffer is full, then the new error is not added, and the error buffer stays intact (history is maintained), except when the error is a protection error.
To prevent that an occasional error stays in the list forever, the error is removed from the list after 50+ operation hours.
When multiple errors occur (errors occurred within a short time span), there is a high probability that there is some relation between them.

5.5.2 How to read the Error Buffer

Use one of the following methods:
- On screen via the SAM (only if you have a picture). Examples:
  - **0 0 0 0 0**: No errors detected
  - **6 0 0 0 0**: Error code 6 is the last and only detected error
  - **9 6 0 0 0**: Error code 6 was first detected and error code 9 is the last detected error
- Via the blinking LED procedure (when you have no picture). See next paragraph.
- Via ComPair.

5.5.3 How to clear the Error Buffer

Use one of the following methods:
- By activation of the “RESET ERROR BUFFER” command in the SAM menu.
- With a normal RC, key in sequence “MUTE” followed by **“062599”** and “OK”.
- When you transmit the commands “DIAGNOSE” - “99” - “OK” with ComPair (or with a DST).
- If the content of the error buffer has not changed for 50+ hours, it resets automatically.

5.5.4 Error Codes

In case of non-intermittent faults, clear the error buffer before you begin the repair. This to ensure that old error codes are no longer present. Before clearing the buffer, write down the content, as this history can give you significant information.
If possible, check the entire contents of the error buffer. In some situations, an error code is only the result of another error code and not the actual cause (e.g., a fault in the protection detection circuitry can also lead to a protection).
There are various errors:
- I^2C device errors.
- I^2C bus errors.
- Protection errors.
- Errors not related to an I^2C device, but of importance:
  - **FEM (Falconic with Embedded Memory) (Error 26):** at start-up, after initialisation of the PICNIC, the presence of the FEM can be checked.

Table 5-3 Error Code Overview

Error	Device	Description	Def. item	Def. Module indication	Diagr.
1	M24Cxx	NVM, spontaneous blinking error 1	7011	-	B5a
3	SAA4978	PICNIC	7713	Feature Box	B3a
4	Supply 5 V	5V protection	-	+5V Supply	B5a
5	Supply 8 V	8V protection	-	+8V Supply	B5a
6	Slow I^2C bus blocked	Spontaneous blinking error 6	-	Slow I^2C Blocked	-
8	TDA932x	HIP High-end Input Processor	7323	Chroma IF IO	B2
13	UV1318/...	Tuner protection	1T01	Tuner	B13a
14	MSPxxxx	ITT sound processor	7A02	Audio module	B6a
18	Fast I^2C bus blocked	Spontaneous blinking error 18	-	Fast I^2C Blocked	-
21	M62320	I/O Expander	7P56	Video Dual Screen	B15b
26	SAA4998	FEM (Falconic with Embedded Memory)	7760	+3V (FBX) Supply	B3b
27	T6TX5	Eagle 1C	7720	+3V (FBX) Supply	B3c
32	M29W400xx	Flash Ram (EPG)	7012	EPG Memory	B5a
35	T6TU5	Columbus	7752	Video Control	B3d
55	DC/DC converter	One of the voltages is not ok + protection error	-	MSB	-
76	Audio supply	Audio supply protection	-	-	-
118	AD9883A	AD converter	7L01	HD	B19a
121	EPLD	EPLD error	7V01	Video control	B19d
Note: If error 3 or error 55 appears, sometimes error 16 is also logged. Error 16 is a non existing error.					

Note:
- Error codes 1, 6, or 18 are protection codes and in this case, supplies of some circuits will be switched “off”. Also, in protection, the LED will blink the number of times equivalent to the most recent error code.

5.6 The Blinking LED Procedure

5.6.1 Introduction

Via this procedure, you can make the contents of the error buffer visible via the front LED. This is especially useful for fault finding, when there is no picture.

When the SDM is activated, the front LED will show (blink) the contents of the error-buffer. Error-codes > 10 are shown as follows:
- A long blink of 750 ms (which is an indication of the decimal digit),
- A pause of 1.5 s,
- "n" short blinks (where "n" = 1 - 9),
- When all the error-codes are displayed, the sequence finishes with a LED blink of 3 s,
- The sequence starts again.

Note: For error codes >100, the first two digits (hundred-and-ten) are considered as one digit (one long blink)

Example: Error 12 9 6 121 0.
After activation of the SDM, the front LED will show:
- 1 long blink of 750 ms (which is an indication of the decimal digit) followed by a pause of 1.5 s,
- 2 short blinks followed by a pause of 3 s,
- 9 short blinks followed by a pause of 3 s,
- 6 short blinks followed by a pause of 3 s,
- 12 long blinks of 750 ms (which is an indication of "120") followed by a pause of 1.5 s,
- 1 short blink followed by a pause of 3 s,
- 1 long blink of 3 s to finish the sequence,
- The sequence starts again.

Note: If errors 1, 6, or 18 occur, the LED always gives the last occurred error even if the TV is NOT in service mode.

5.6.2 How to Activate

Use one of the following methods:
- Activate the SDM (only via soldering pads marked "SDM" on SSB, see figure "Service pads"). The blinking front LED will show the entire contents of the error buffer (this works in "normal operation" mode and in "protection" mode).
- Transmit the commands "MUTE" - **"062500"** - "OK" with a normal RC. The complete error buffer is shown. Take notice that it takes some seconds before the blinking LED starts.
- Transmit the commands "MUTE" - **"06250x"** - "OK" with a normal RC (where "x" is a number between 1 and 5). When x= 1 the last detected error is shown, x= 2 the second last error, etc.... Take notice that it takes some seconds before the blinking LED starts.
- "DIAGNOSE X" with the DST (where "x" is a number between 1 and 5). When x= 1 the last detected error is shown, x= 2 the second last error, etc.... When x = 0 all errors are shown.

5.7 Protections

Note: With Samsung PDP displays (SDI V4) boards it is possible that for some errors the blinking LED procedure does not start immediately (e.g. error 18). When the error occurs, the TV goes to protection and it is possible that you have to wait 30 seconds before the blinking LED procedure starts.

5.7.1 Introduction

This chassis has only one microprocessor (OTC), which remains active during Stand-by. This because power of the microprocessor and the attached memory chip set is coming from the 3V3 supply, which is derived from the 5V Stand-by-circuitry. Therefore, in both Power-on as in Stand-by mode, the microprocessor is connected to this power supply.

If a fault situation is detected, an error code will be generated and if necessary, the TV is put in protection mode. The protection mode is indicated by the blinking of the front LED at a frequency of 3 Hz (or by a coded blinking in special cases).

The content of the error buffer can be read via the service menu (SAM), the blinking LED procedure or via DST/ComPair.

To get a quick diagnosis, this chassis has three service-modes implemented:
- The **Customer Service Mode** (CSM).
- The **Service Default Mode** (SDM). Start-up of the TV in a predefined way.
- The **Service Alignment Mode** (SAM). In this mode, items of the TV can be adjusted via a menu.

You can activate both SDM and SAM modes via the "service pads" on the SSB (see figure "Service pads"), via an RC-transmitter (DST or standard RC), or via ComPair. It is not possible to activate the SAM in "stand-by"; the TV has to be in "normal operation" mode.

The "Protection Diagram" shows the structure of the protection system. See diagram below.

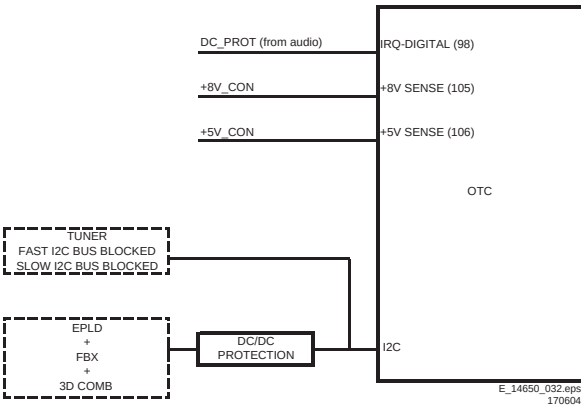


Figure 5-7 Protection diagram

There are several types of protections:
- I^2C related protections.
- OTC related protections (via polling on I/O pins or via algorithms).
- Hardware protection

All protections are explained below.

5.7.2 I^2C Related Protections

In normal operation, some registers of the I^2C controlled ICs are refreshed every 200 ms. During this sequence, the I^2C buses and the I^2C ICs are checked.
An I^2C protection will take place if the SDA and SCL lines are short-circuited to ground, or to each other. An I^2C error will also occur, if the power supply of the IC is missing.

DC/DC protection: When a 3V3 supply is short-circuited, the DC/DC converter switches "off" and goes in protection. The FBX, EPLD IC, and 3D comb IC have no supply voltage and give no acknowledge. In this case, the TV should go into protection. An error code is written in the NVM: DC/DC error.

FBX protection: the FBX protection is not available any more. It is replaced by the DC/DC protection.

5.7.3 OTC Related Protections

If a protection is detected at an OTC input, the OTC will start to scan all protection inputs every 200 ms for 5 times. If the protection on one of the inputs is still active after 1 s, the microprocessor will put the TV in the protection mode. Before the scanning is started, a so-called "ESD refresh" is carried out. This is done, because the interrupt on one of the inputs is possibly caused either by a flash or by ESD. As a flash or ESD can influence IC settings, the HIP, MSP, 3D Comb and wireless module (not used in this set) are initialised again, to ensure the normal picture and sound conditions of the TV.

8 V and 5 V protections: The microprocessor senses the presence of the 8 V and 5 V (via the "+5V_CON" and "+8V_CON" lines). If one (or both) of these voltages is (are) not present, an error code is stored in the error buffer of the NVM, and the TV is put in the protection mode.

Audio Supply protection: The OTC senses if the audio module is in protection via IRQ-DIGITAL (pin 98 of OTC). If this is the case, the OTC puts the TV in protection.

5.7.4 Hardware Protection

Short-circuiting the 3V3 supply from the DC/DC converter will shut down the DC/DC converter. The absence of the 3V3 supply line is also sensed via I^2C (see description Audio Supply protection above), this is useful if there is something wrong in the detection circuit of the DC/DC converter.

Audio DC Protection: This protection occurs when there is a DC voltage on the speakers. In that case, the Main Supply is switched "off". The Stand-by Supply is still working. For the Samsung SDI V4 displays, all internal supplies (except the 5V2), are switched "off" and the LED on the Samsung SDI V4 display (on PSU Alarm board) blinks 11 times., which means there is an overvoltage protection.

Repair tip: If there is an audio DC protection (DC voltage on your speakers), you will probably see error 18 blink. To be sure this is an audio DC protection, disconnect the cable between the SSB and the audio PWB and also the cable between the Main Supply and the Audio PWB. If the TV starts up, it is very likely that there is DC on the speakers. Check, and replace if necessary, the audio amplifiers.
Note: It is also possible that you have an Audio DC Protection because of an interruption in one or both speakers (the DC voltage that is still on the circuit can not disappear through the speakers).

5.8 Repair tips

5.8.1 Power Supply Unit (for Fujitsu - FHP - plasma displays)

Below a troubleshoot sequence for the **FHP** power supply is given (so this is **not** valid for the **SDI** power supply, this is explained further on).

Stand-by Supply
1. 400V present?
2. +9V_STDBY, +5V_STDBY, and 25V_HOT present?

Preconditioner
1. Relay 1450 and 1440 "on" = switch "on" and supply "on" (LATCH= "H" and STANDBY= "L").
2. 400V or rectified mains present on item 2616?
3. 40V present on item 2664?
4. 15V present on item 2662?

LLC Supply
1. 25V_HOT (from Stand-by supply) present?
2. 25V_HOT_SW (from Preconditioner) present?
3. 17V on pin 15 of item 7001 present?
4. Vcego= "H" and LATCH= "H"?
5. Vrs present? (Vrs=Vs/67).
6. Remark: Vs_unswitched = 65V when switch 7050 is open.

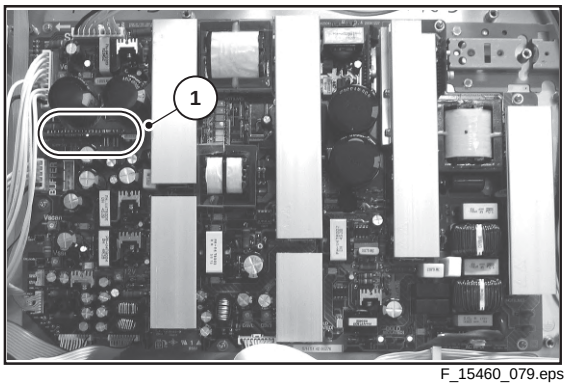
Va Supply
1. Vs_unswitched present?
2. 30V on item 3133 present?
3. Vsa_control= "L" (Vsago= "H" and Vs_lowlim= "H")
4. Vra present? (Vra=Va/48).

Vcc Supply
1. Vs_switched present?
2. Vccgo= "H"? (Vcego= "H").

Vs (switched)
1. 95V present on cathode of item 6054?
2. POK= "H" and Vsa_control= "L"? (POK= "H" when Vs, Va, Vcc, 12V, and 8V6 are above their lower limit)

5.8.2 Power Supply Unit (for Samsung - SDI - plasma displays)

This PSU is for Service a "black box". When defective (this can be traced via error-codes in the error buffer, or by strange phenomena), a new panel must be ordered and after receipt, the defective panel must be send for repair.



F_15460_079.eps
140405

Figure 5-8 SDI PSU Alarm board

A simple troubleshoot method for the SDI PSU is given below. When the TVis in protection check the LED on the PSU Alarm board (see (1) in figure "SDI PSU Alarm board"). In normal working mode, this LED is "on". However, if this LED is blinking, the PSU is in protection. See table:

Nr. of blinks	Fault Description	Remark
1	V_A block problem	Display voltages
2	12V block	
3	D5VL	Display voltage
4	D3V3	Display voltage
5	V_S	Display voltage
6	V_{CC}/V_G	Display voltage
7	V_{SET}	Display voltage
8	V_E	Display voltage
9	Thermal protection	
10	PFC_OK	Display voltage driving signal
11	OVP	Overvoltage protection OR DC-prot
12	Time_Over	A control signal to the PSU is missing after a certain time period
13	V_{SCAN}	Display voltage

5.8.3 3V3 Supply (DC/DC converter on the SSB)

As mentioned above, the DC/DC converter is switched "off" when something goes wrong (detection of a missing 3V3 supply at one of the devices supplied by the 3V3). Because of

this, the TV goes to protection (I^2C protection). Error code “55” is logged.
For further diagnoses, you need to overrule the I^2C protection: put the TV in Service Default Mode by means of the solder pads on the SSB (see figure “Service pads”).
The DC/DC converter is still not working because it is switched “off” by the 3V3_FAULT line (schematic B12). Now you have some possibilities:

1. First, measure the impedance over diode 6U06. In normal conditions, you should measure approximately 120 ohm (if possible, verify this with another set). If the impedance is much too low, do not try to start up the converter as mentioned below. Remind that if FET 7U03 is short-circuited, this will also influence your measurement.
2. Desolder coils 5U05 and 5U06, connect an external 3V3 supply at capacitor 2U23 (current limitation to 500 mA) and a second external 3V3 supply at capacitor 2U31 (current limitation to 800 mA). The normal working current of the 3V3_SIM line is approximately 400 mA and the normal working current for the 3V3_DCDCFBX line is approximately 700 mA. Therefore, if one of the currents exceeds their nominal value you can determine in which circuit the overload is situated. If the TV would start up and you have normal picture, there is probably no overload but a problem in the detection circuits.
3. If you do not have two external power supplies, you can do the following: Desolder coils 5U02, 5U03, and 5U04 (you must desolder all three, otherwise the circuit could be damaged), connect an external power supply of 3V3 at the cathode of diode 6U06. Make sure to limit the current of this external supply to approximately 1200 mA. If the supplied current exceeds 1100 mA (approximately normal working current) you can conclude that one of the devices supplied by 3V3 is short-circuited.
4. Another possibility is to force the converter to start up by short-circuiting (and keep short-circuited) resistor 3U25 (B12).
   Caution: Be aware that this can damage the TV. Even if you measure approximately 120 ohm over diode 6U06, there can still be something wrong in the converter itself. By short-circuiting resistor 3U25, the internal protection of the converter is disabled.

5.8.4 Protections

Activating SDM via the “service pads” will overrule the processor-controlled protections, but not the hardware protections. This means, that the A/D-input protections (5 and 8 V) and the I^2C “not-acknowledging” info of FBX + EPLD + 3D Comb and of the tuner are overruled.
Caution: When doing this, the service technician must know what he is doing, as it could lead to damaging the TV.

5.8.5 Repair tip table

Table 5-4 Repair tips

Phenomenon	Possible Cause	Repair tip
“F” in right corner of the screen and set is not reacting on remote control. The local keyboard is functioning.	TV is in factory mode.	Press MENU button on local keyboard for at least 3 seconds. Set will leave factory mode and function normally again.
No picture, LED blinking at 3 Hz.	Set is in protection due to various causes. For error codes see error-code list.	You have no picture, so: - Read the error buffer via ComPair (error buffer is accessible when set is in protection, ComPair-file will guide you to this). - Read the blinking LED information via standard remote command <mute>**06250x**<ok>. - Or you read the error code sequence via standard remote command <mute>**062500**<ok>. When you have found the error, check the circuitry related to the supply voltage and I^2C-communication or the circuitry that triggers the protection.
No picture, LED blinking with code 6-6-6 or 18-18-18.	No communication on slow I^2C- or fast I^2C-bus.	As processor cannot communicate with one of the 2 buses, the Stand-by-LED spontaneously starts blinking 6-6-6-etc. or 18-18-18-etc... If in the error buffer somewhere is an error 6 or 18, these will have the highest priority starting the mentioned blinking. Measure, dependent of the error on the I^2C-bus, which device is loading the bus (use I^2C-overview).
No picture, LED blinking with code 1-1-1.	No communication on NVM-I^2C bus to the uP.	As the uP cannot communicate with the NVM I^2C bus, it spontaneously starts blinking 1-1-1. **Note:** when there is no access to the NVM, a lot of picture setting can go wrong.
No RC-reception. Blue LED does not echo RC-commands.	uP circuitry or RC-receiver is defective.	In case the TV does react on a local keyboard operation, you must check the RC-receiver circuitry (diagram “J”).
Picture is not synchronised.	The sync is derived in the HIP.	Check crystals in the HIP circuit on bad contacts.
Picture is distorted.	Check video-path in Service Default Mode.	Investigate whether there is an error code present in the error buffer. In case there is one, check the I^2C-bus and/or supply lines (see overview supply lines). Measure and check signal path Tuner-HIP-FBX-EPLD.
Picture with horizontal stripes.	Pixel Plus processing is malfunctioning	Check functionality on circuitry (B3a, B3b, B3c and B3d) of PICNIC, FEM, EAGLE, COLUMBUS and/or field memories. **Tip:** the whole Pixel Plus chipset can be diagnosed via ComPair.
No NextView (EPG).	IC7012 defective or not powered.	Check circuitry around IC7012 on diagram “B5a”.
No Teletext.	IC7007 defective or not powered.	Check circuitry around IC7007 on diagram “B5a”.
Problems caused by EPG (Electronic Program Guide). The TV set "hangs".	Problems with NexTView EPG broadcasts.	To switch from EPG 2C3 to Teletext guide, press for 4 seconds, simultaneously the MENU button on the TV and digit 0 on the remote. The option settings for NexTView type and FlashRAM will not change.
NexTView EPG is not functioning only Teletext guide.	EPG version 2C3 is switched “off” during production.	To switch from Teletext guide to EPG 2C3, press for 4 seconds, simultaneously the MENU button on the TV and digit 1 on the remote. The option settings for NexTView type and Flashram will not change.
Various symptoms, due to missing local supply voltage.	An interrupted fuse, NFR-resistor or connection.	When no symptom or error code leads you to a specific circuitry, use the supply lines overview (see supply lines overview), for a quick scan of all supply lines.
No sound at the speakers but sound at monitor out.	Possible problem with the class D amplifier	Check circuitry around IC7700 on diagram “SA3” (LCD) or “C” (PDP).
No sound at the speakers but sound at monitor out.	Sound enable from OTC is HIGH, speakers are muted	Check pin 95 of OTC on diagram “B5a”.
No sound at the speakers not at monitor out, but sound at SCART 1 output.	POR line is low, anti plop circuit mutes the sound	Check pin 8 on connector 1739 on audio panel. Diagram “C” for PDP sets and diagram “SA3” for LCD sets
No sound from any output (except headphone)	Reset audio is high or MSP is not properly reset	Check pin 16 of MSP (diagram “B6a”) and circuitry around MSP.
No sound from the tuner but sound from any other input.	Problem with the delay line (PDP sets only)	Check circuitry on diagram “B6d”.

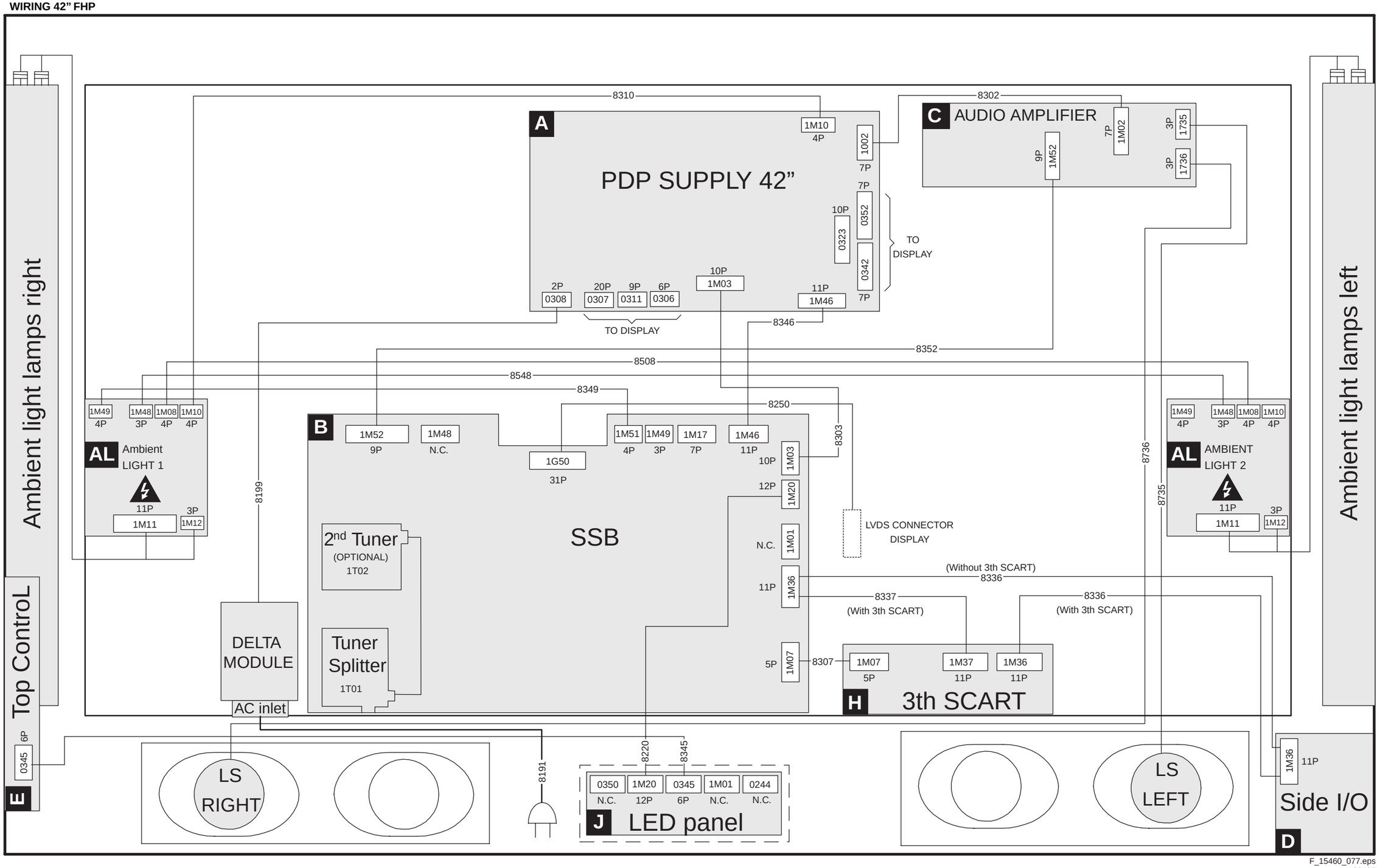
5.9 Software Downloading

In this chassis, you can **upgrade** the main software via ComPair without removing the back cover of the TV (it is possible that early production sets don't have a hole in the back plate, in this case you have to remove the back plate). The switch, which is needed for the software downloading procedure, can be reached through a gap in the back cover or the SSB shielding. The switch can be operated with a toothpick or something like that. Make sure that you do not damage the PWB with sharp objects. You can find more information on how this procedure works in the ComPair file. It is possible that not all sets are equipped with the hardware, needed to make software upgrading possible. To speed up the programming process the firmware of the ComPair interface can be upgraded. See paragraph "How To Order" for the order number.

6. Block Diagrams, Testpoint Overviews, and Waveforms

Wiring Diagram 42 Inch FHP Step

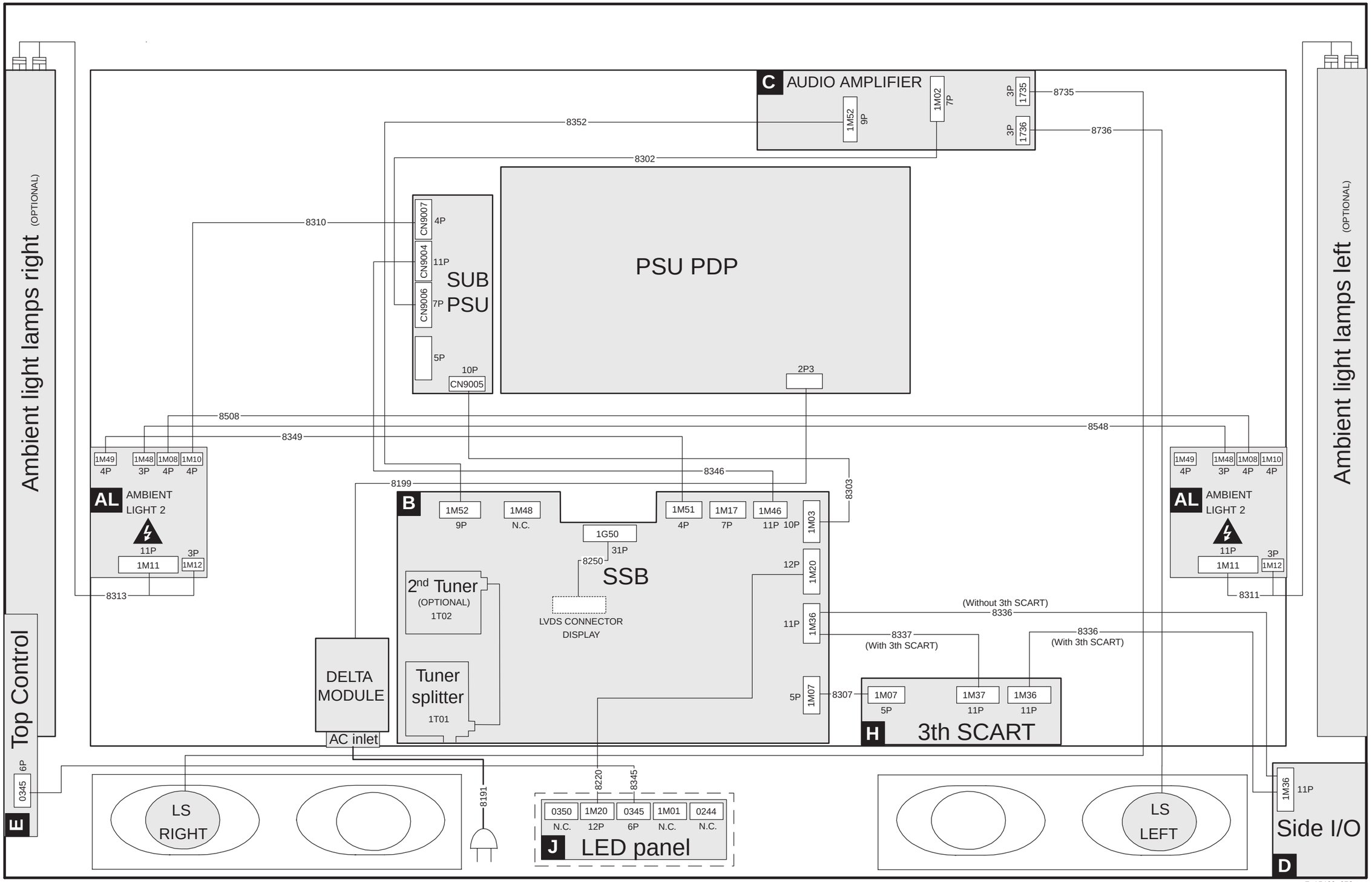
WIRING 42" FHP



F_15460_077.eps
130405

Wiring Diagram 50 Inch SDI Step

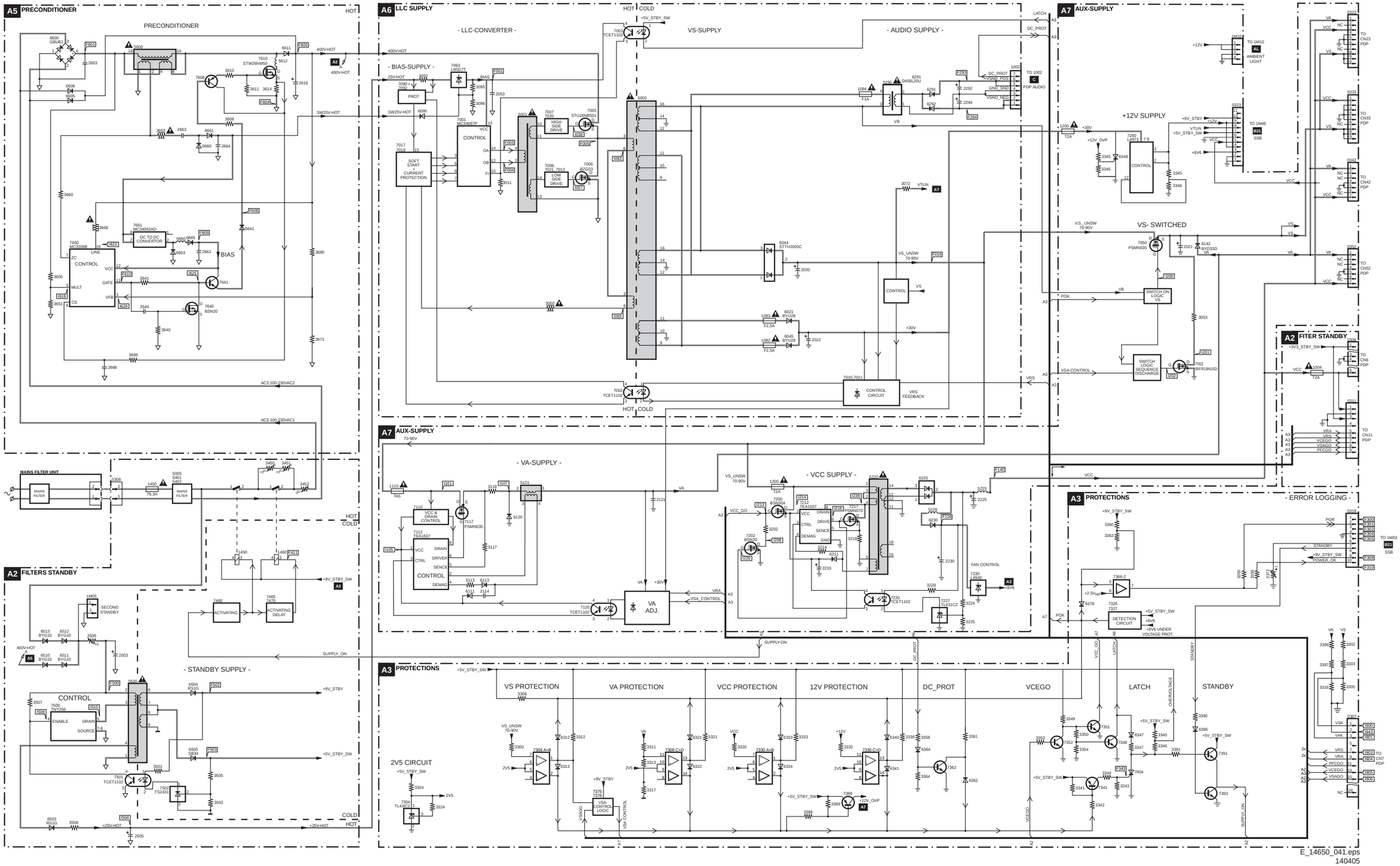
WIRING 50" SDI



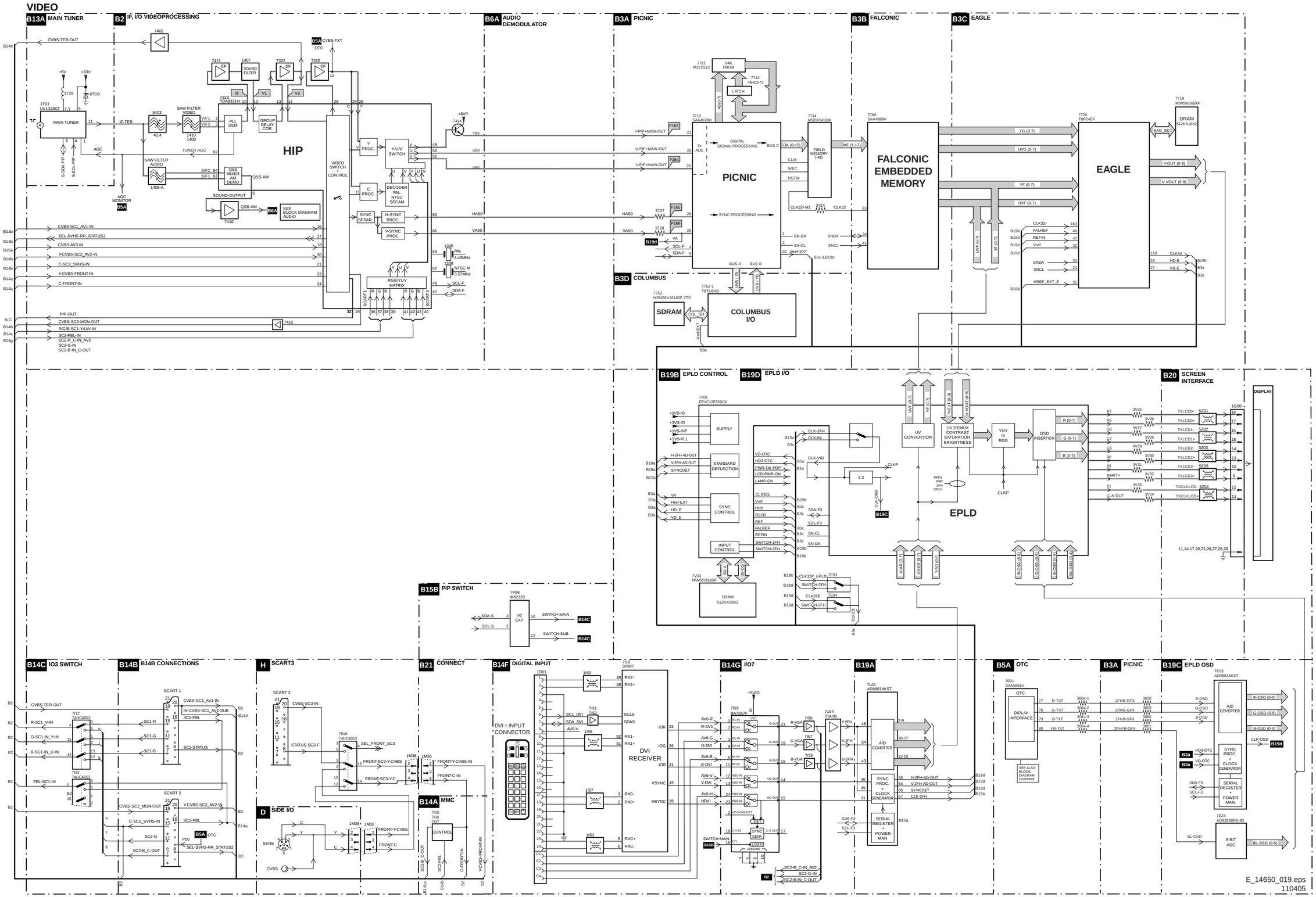
F_15460_078.eps
130405

Block Diagram Supply 42 Inch FHP

SUPPLY 42" FHP

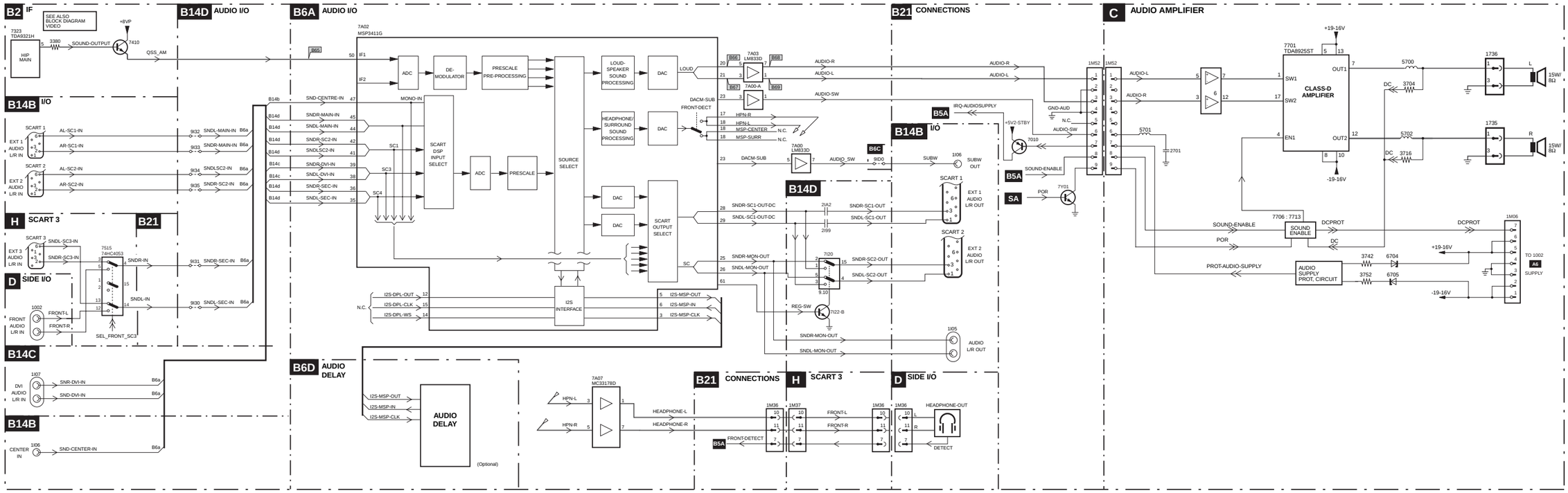


Block Diagram Video

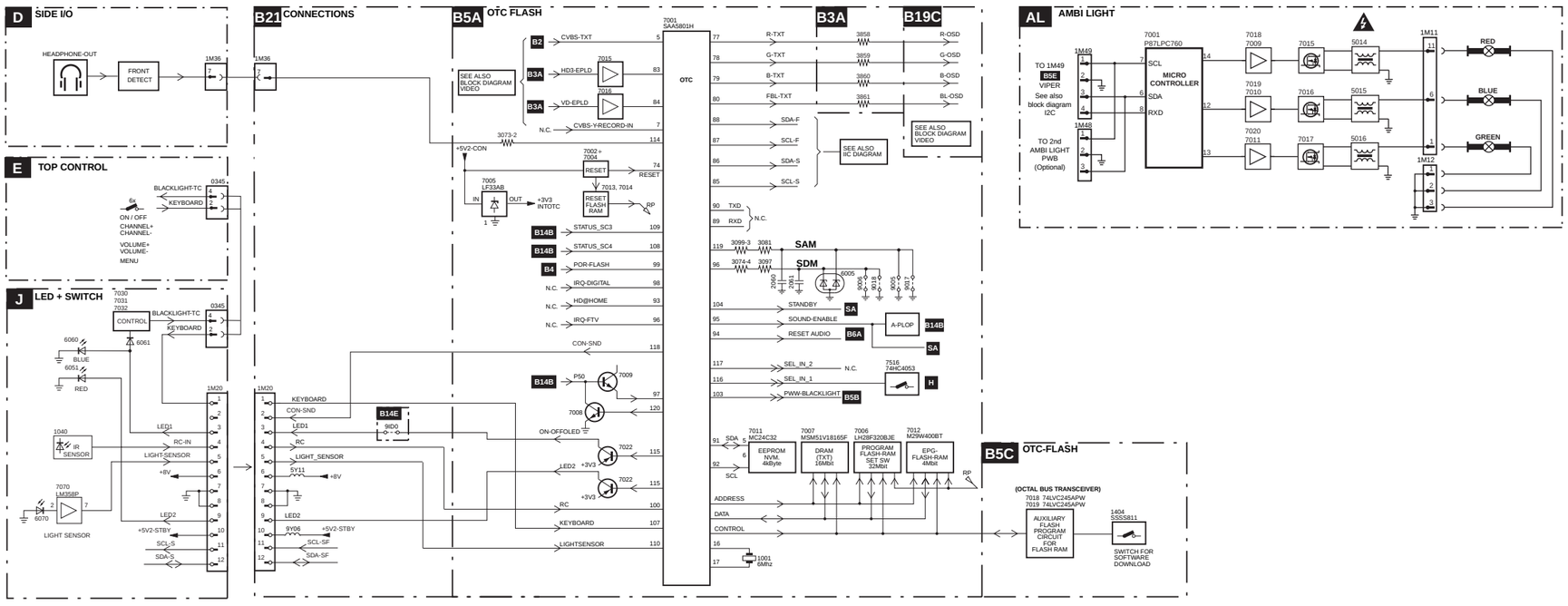


Block Diagram Audio & Control

AUDIO



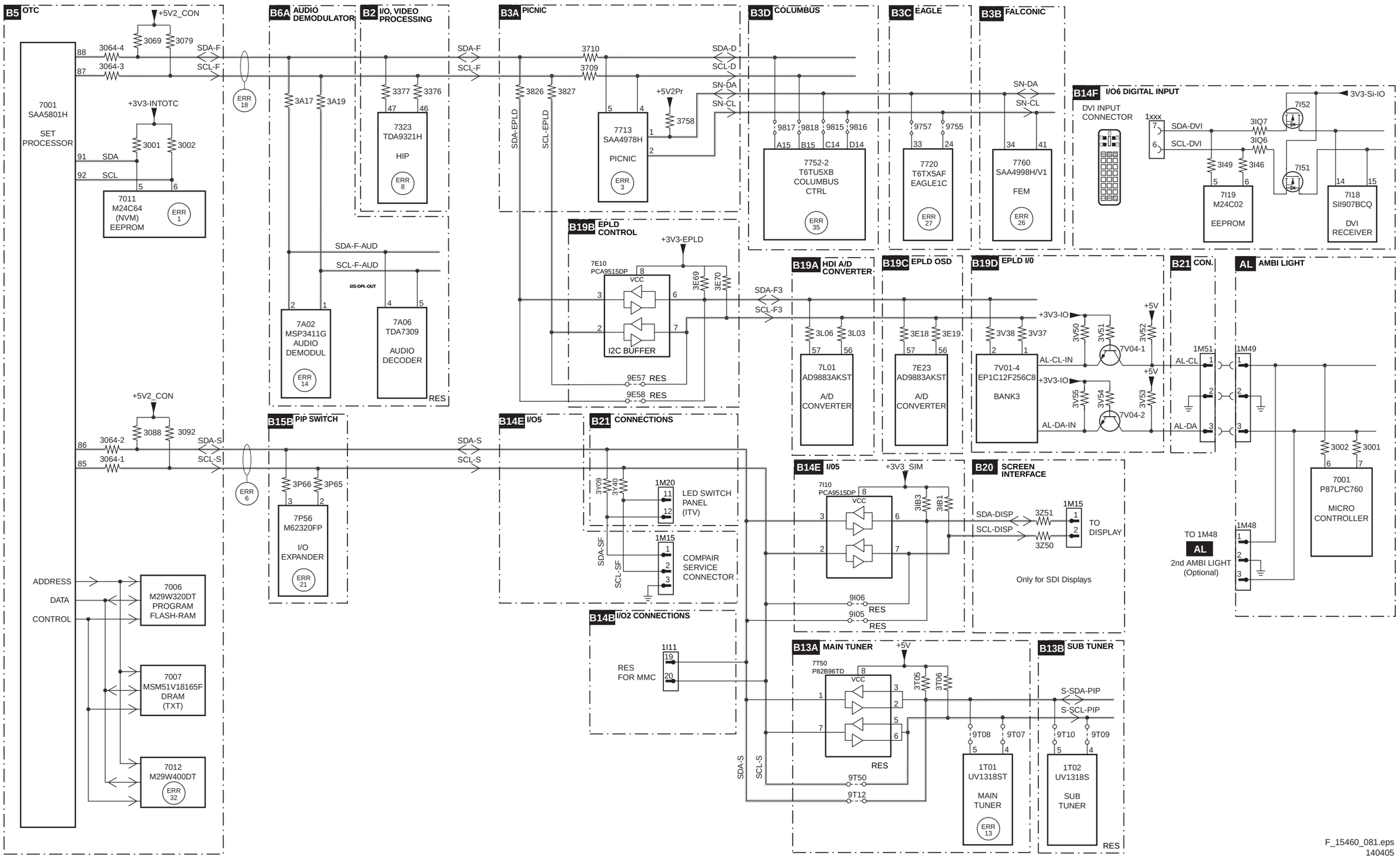
CONTROL



F_15460_080.eps
140405

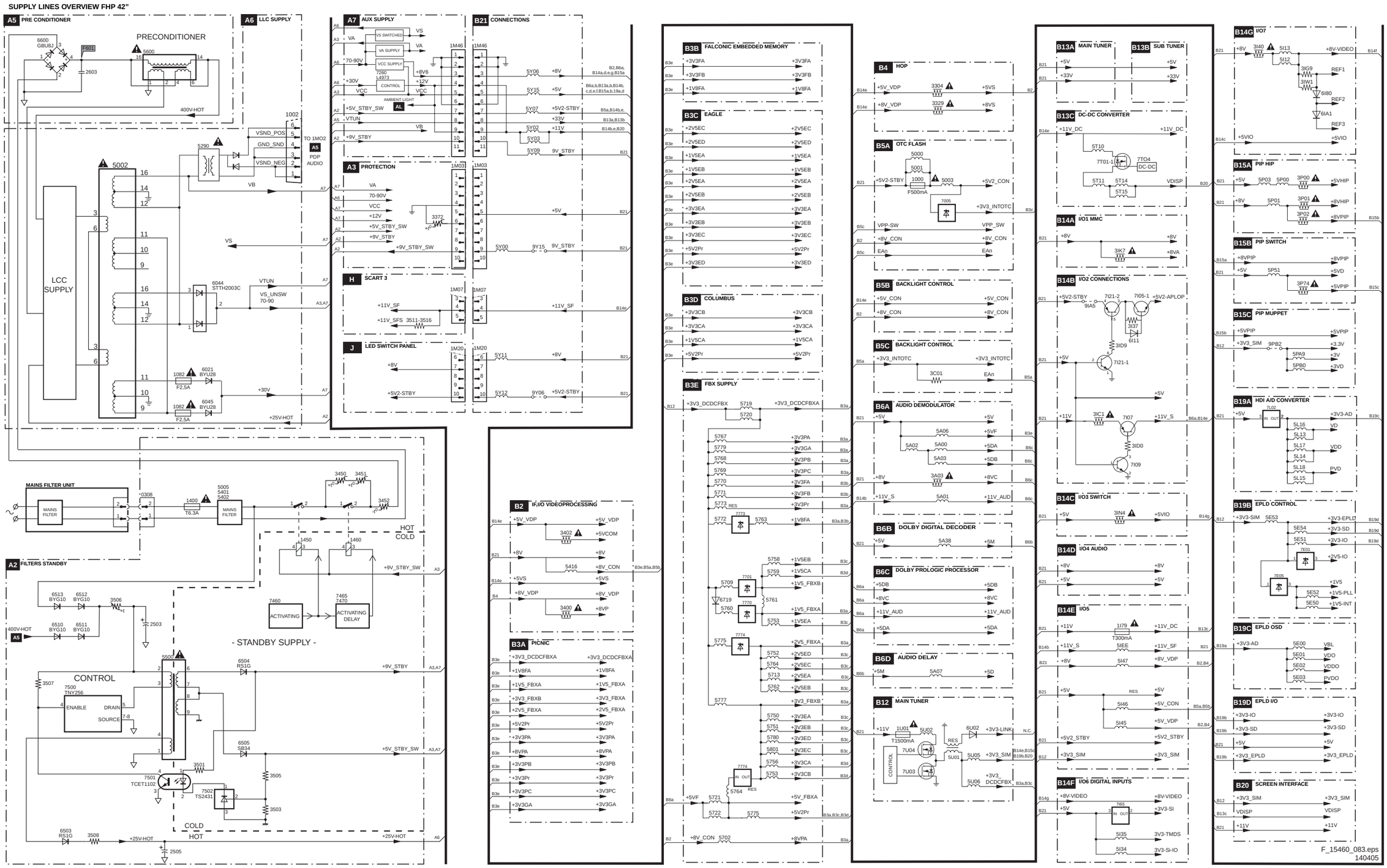
I2C IC's overview

IIC



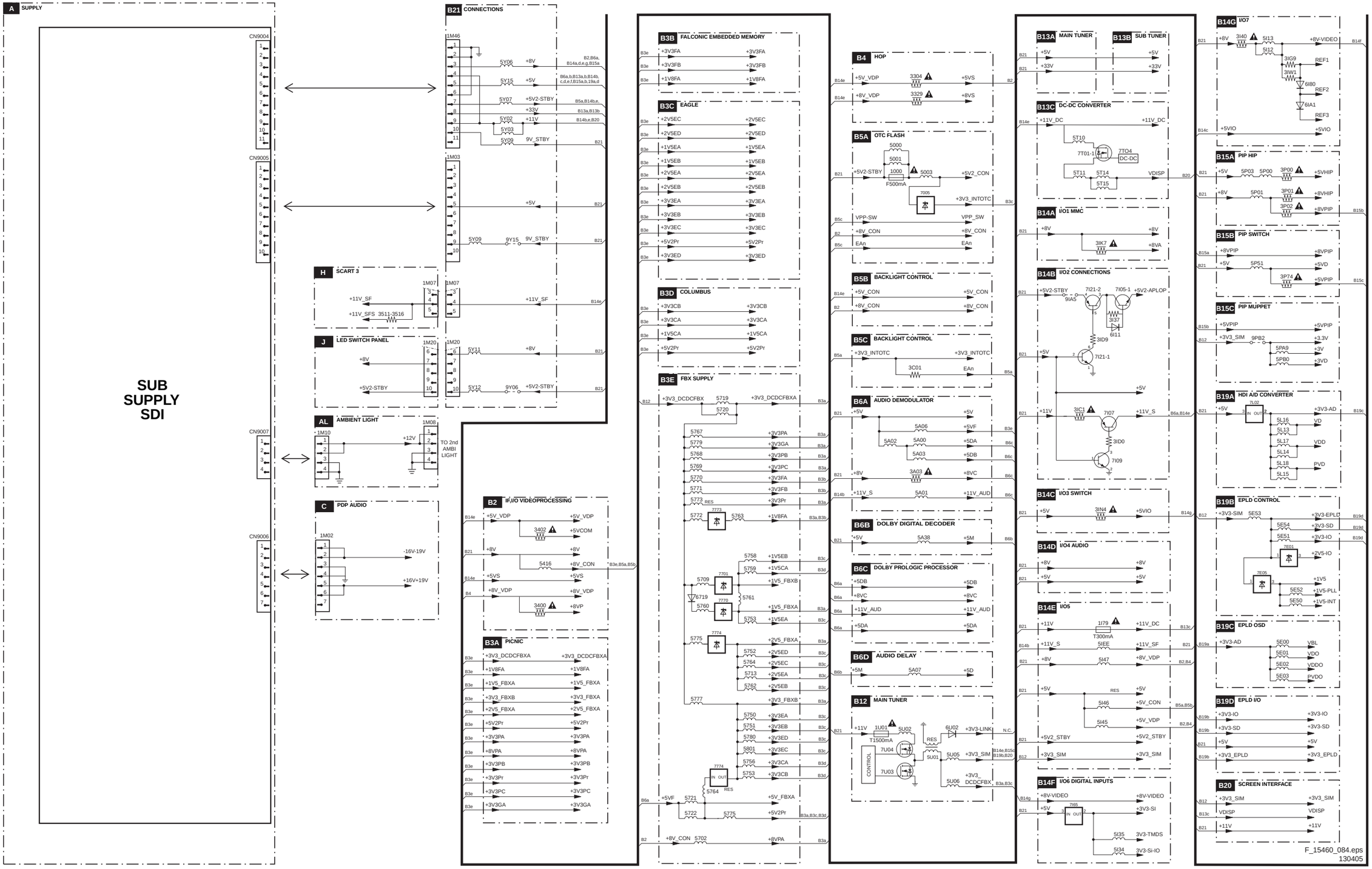
F_15460_081.eps
140405

Supply Lines Overview FHP



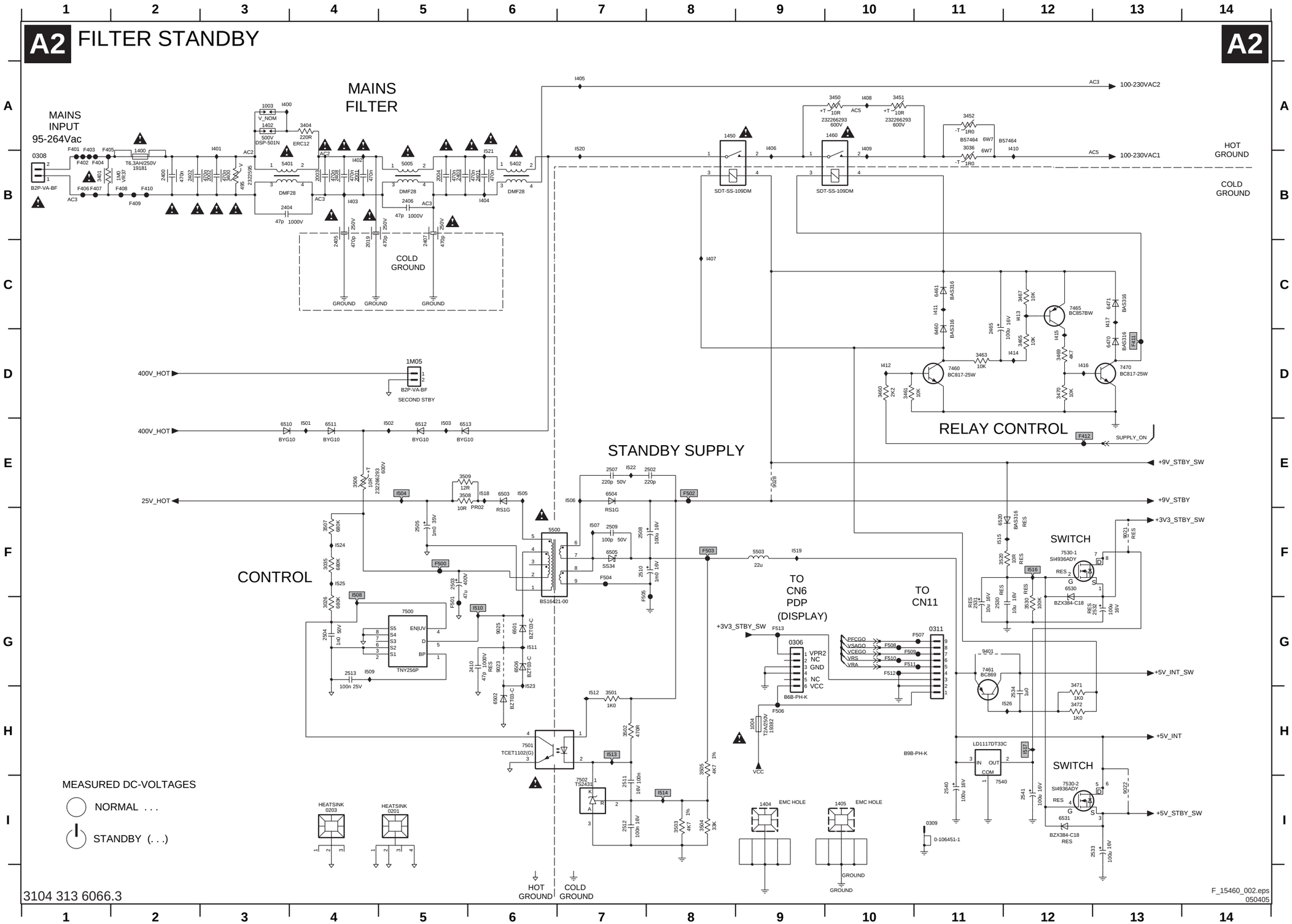
Supply Lines Overview SDI

SUPPLY LINES OVERVIEW SDI 42" / 50"



7. Circuit Diagrams and PWB Layouts

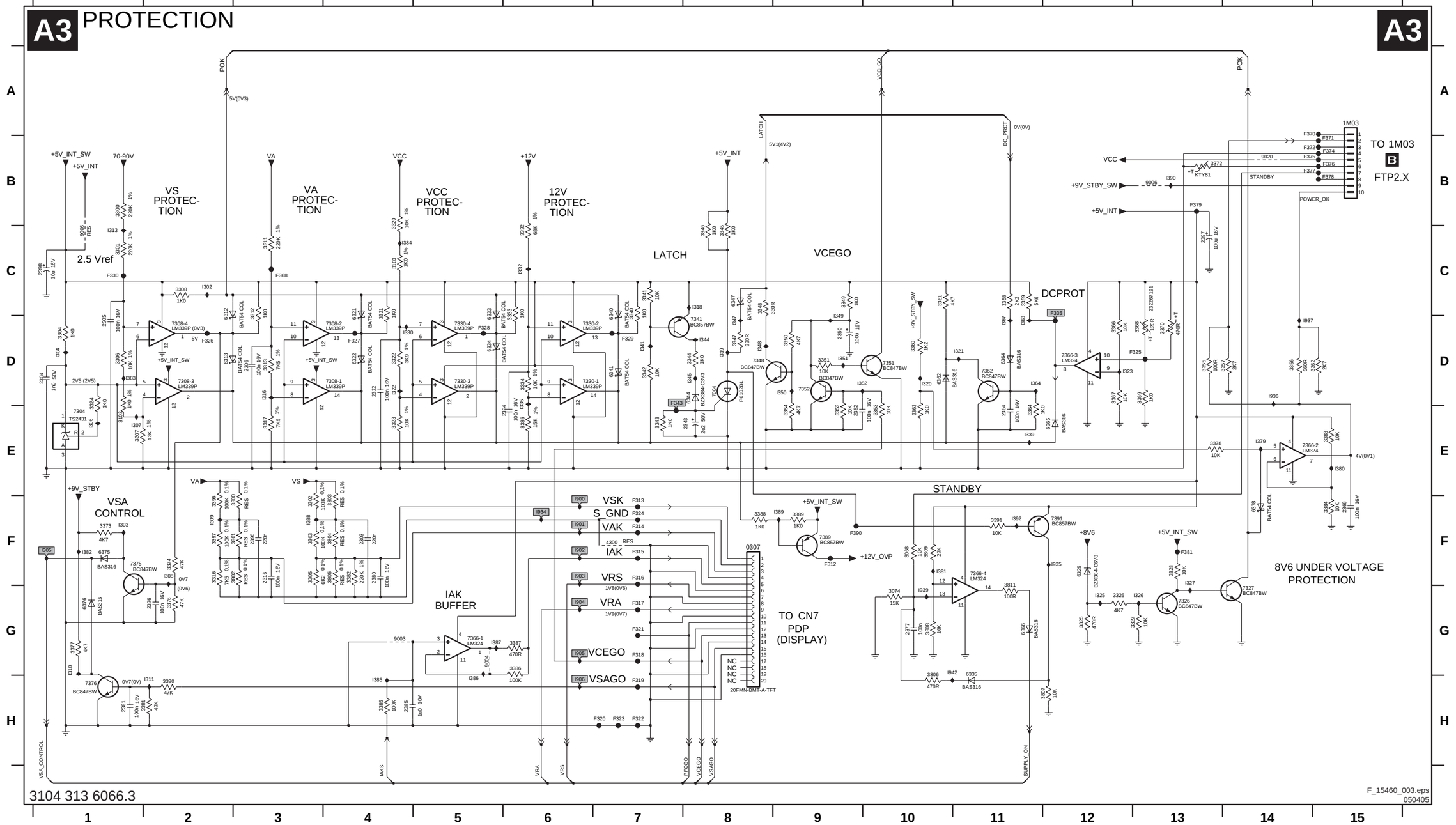
PDP Supply Panel: Filter Standby



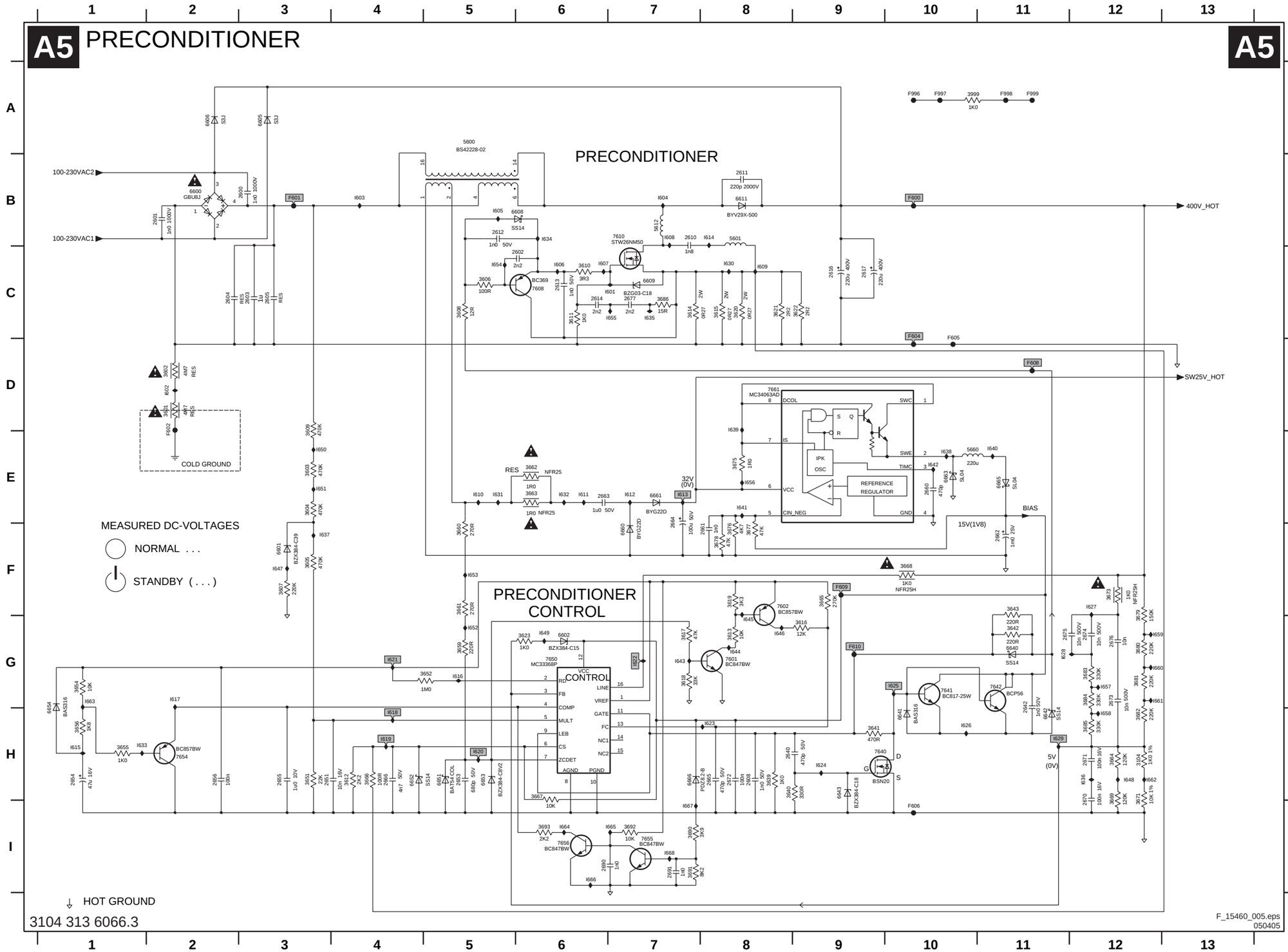
0201 I5	6530 F12
0203 I4	6531 I12
0306 G9	7460 D11
0308 B1	7461 G11
0309 I11	7465 C12
0311 G11	7470 D13
1003 A3	7500 G5
1004 H9	7501 H6
1400 B2	7502 I7
1402 A3	7530-1 F12
1404 I9	7530-2 I12
1405 I10	7540 I11
1450 A8	9021 F13
1460 A10	9022 I13
1M05 D5	9023 G6
2001 B4	9025 G6
2002 B3	9028 E9
2003 B4	9401 G11
2004 B5	F401 B1
2019 C4	F402 B1
2400 B2	F403 B1
2401 B6	F404 B1
2402 B2	F405 B1
2403 B5	F406 B1
2404 B3	F407 B1
2405 C4	F408 B2
2406 B5	F409 B2
2407 C5	F410 B2
2408 B4	F411 D13
2410 G6	F412 E12
2465 C11	F500 F5
2502 E8	F501 G5
2503 F5	F502 E8
2504 G4	F503 F8
2505 F5	F504 F7
2507 E7	F505 F7
2508 F7	F506 H9
2509 F7	F507 G11
2510 F7	F508 G10
2511 I7	F509 G10
2512 I7	F510 G10
2513 G4	F511 G10
2530 G11	F512 G10
2531 G11	F513 G9
2532 G13	I400 A3
2533 I13	I401 A3
2534 H12	I402 B4
2540 I11	I403 B4
2541 I12	I404 B6
3026 G4	I405 A7
3035 F4	I406 A9
3036 A11	I407 C8
3400 B3	I408 A10
3401 B1	I409 A10
3404 A4	I410 A12
3450 A10	I411 C11
3451 A10	I412 D10
3452 A11	I413 C12
3460 D10	I414 D12
3461 D10	I415 D12
3463 D11	I416 D12
3465 D12	I417 C13
3467 C12	I501 E4
3469 D12	I502 E5
3470 D12	I503 E5
3471 G12	I504 E5
3472 H12	I505 E6
3501 H7	I506 E7
3502 H7	I507 F7
3503 I8	I508 F4
3504 I8	I509 G4
3505 H8	I510 G6
3506 E4	I511 G6
3507 F4	I512 H7
3508 E5	I513 H7
3509 E5	I514 I8
3520 F11	I515 F11
3530 G12	I516 F12
5005 B5	I517 H12
5401 B3	I518 E6
5402 B6	I519 F9
5500 F6	I520 A7
5503 F9	I521 B6
6460 D11	I522 E7
6461 C11	I523 G6
6470 D13	I524 F4
6471 C13	I525 F4
6501 G6	I526 H12
6502 H6	
6503 E6	
6504 E7	
6505 F7	
6506 G6	
6510 E3	
6511 E4	
6512 E5	
6513 E5	
6520 F11	

PDP Supply Panel: Protection

0307 F8 1M03 A15 2303 F4 2304 D1 2305 D1 2306 D3 2316 F3 2322 D4 2324 E5
2343 E8 2350 D9 2352 E9 2364 E11 2366 F15 2376 G2 2377 G10 2380 F4 2381 H1
2385 H4 2396 F3 2397 C13 2398 C1 3068 F10 3074 G9 3102 E1 3103 C4 3300 B1
3301 C1 3302 F3 3303 F3 3304 D1 3305 F3 3307 E1 3308 C2 3311 C3
3312 C3 3313 D3 3316 F2 3317 E3 3320 B4 3321 C4 3322 D4 3323 E4 3324 D1
3325 G12 3326 G12 3327 G13 3328 F13 3332 C6 3333 C6 3334 D6 3335 E6 3340 C7
3341 C7 3342 D7 3343 E7 3344 D8 3345 C8 3346 C8 3347 D8 3348 C8 3349 C9
3350 D9 3351 D9 3352 E9 3353 E10 3354 E9 3355 D13 3356 D14 3357 D12 3358 D11
3359 C11 3360 D10 3361 C10 3362 D15 3363 E10 3364 E11 3366 D12 3367 D12 3368 D13
3369 D13 3370 D13 3372 B13 3373 F1 3374 F2 3376 G13 3378 F13 3380 H2
3381 H2 3382 F4 3383 E15 3384 F15 3385 H4 3386 G6 3387 G6 3388 F8 3389 F9
3391 F11 3396 F2 3397 F2 3800 F3 3801 F3 3802 F3 3803 F4 3804 F4 3805 F4
3806 H10 3807 H11 3808 G10 3809 F10 3811 G11 4300 F7 6312 E2 6321 C4
6322 D4 6325 F12 6333 C5 6334 D5 6335 H10 6340 C7 6341 D7 6344 D8 6347 C8
6362 D10 6364 D11 6365 E12 6366 G11 6375 F1 6376 G1 6378 F14 7004 D8 7304 E1
7308-1 D4 7308-2 D4 7308-3 D2 7308-4 D2 7326 G13 7327 G14 7330-1 D6 7330-2 D6 7330-3 D5
7330-4 D5 7341 D8 7348 D8 7351 D10 7352 D9 7362 D11 7366-1 G5 7366-2 E14 7366-3 D12
7366-4 F10 7375 F1 7376 H1 7389 F9 7391 F11 9003 G4 9004 G5 9005 C1 9006 B13
9020 B14 F312 F9 F313 F7 F314 F7 F315 F7 F316 F7 F317 G7 F318 G7 F319 H7
F320 H7 F321 G7 F322 H7 F323 H7 F324 F7 F325 D13 F326 D2 F327 D4 F328 D5
F329 D7 F330 C1 F335 C12 F343 D7 F368 C3 F371 B15 F372 B14 F374 B15
F375 B14 F376 B15 F377 B14 F378 B15 F379 B13 F381 F13 F390 F9 I302 C2
I303 F1 I304 D1 I305 F1 I306 E1 I307 E1 I308 F2 I309 G1 I310 G1 I311 H2
I313 C1 I316 D3 I318 C8 I319 D8 I320 D10 I321 D11 I322 D4 I323 D12 I325 G12
I326 G13 I327 F13 I330 D4 I332 C6 I335 D6 I339 E11 I341 D7 I344 D8 I345 D8
I347 D8 I348 C8 I349 C9 I350 D9 I351 D9 I352 D9 I363 D11 I364 D11 I367 D11
I371 B15 I379 E14 I380 E15 I384 C4 I385 H4 I386 H5 I387 G5 I388 F3
I389 F9 I390 B13 I392 F11 I900 F6 I901 F6 I902 F6 I903 F6 I904 G6 I905 G6
I906 H6 I934 F6 I935 F11 I936 D14 I937 D14 I939 G10 I942 G10



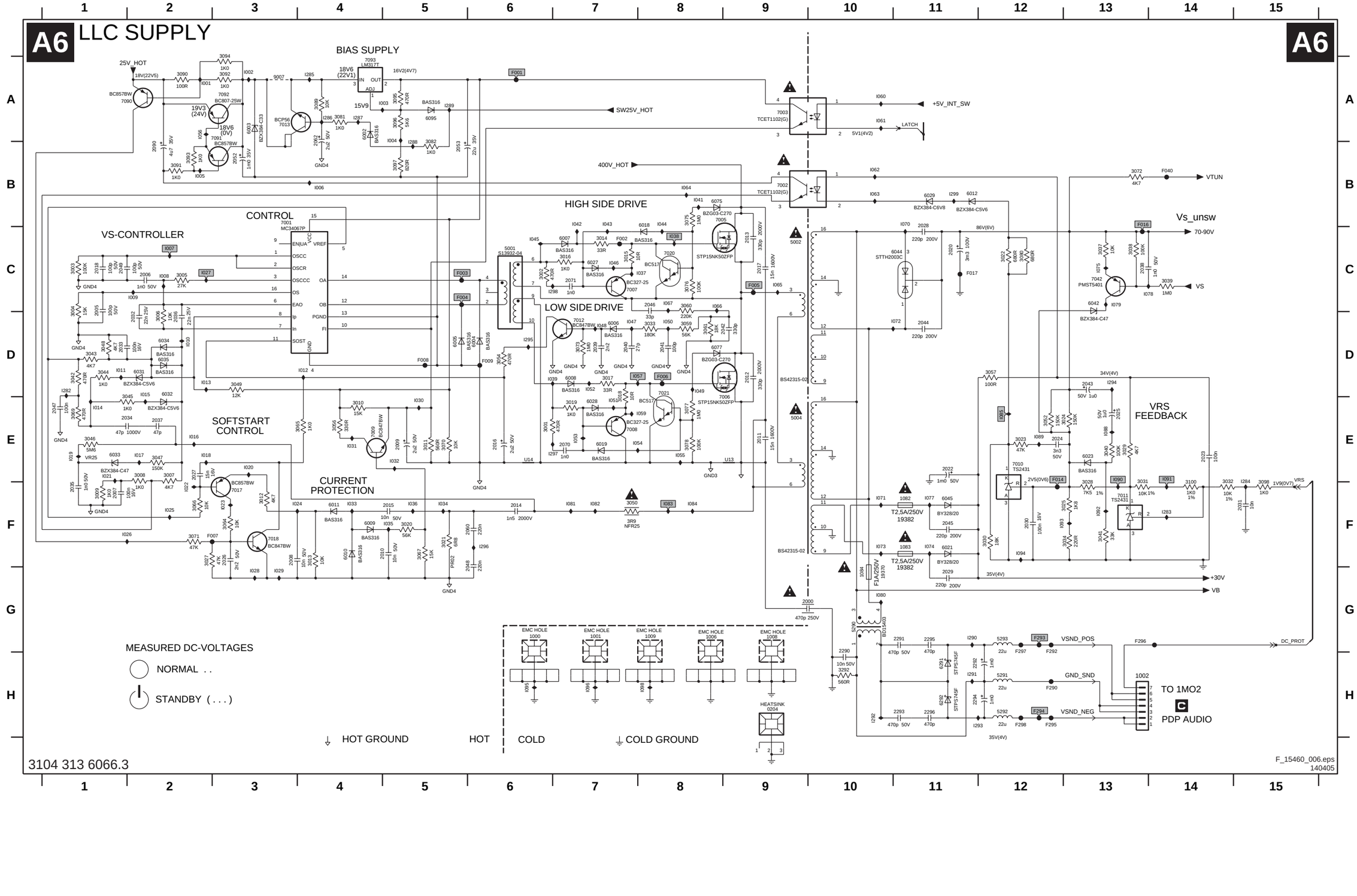
PDP Supply Panel: Pre-Conditioner



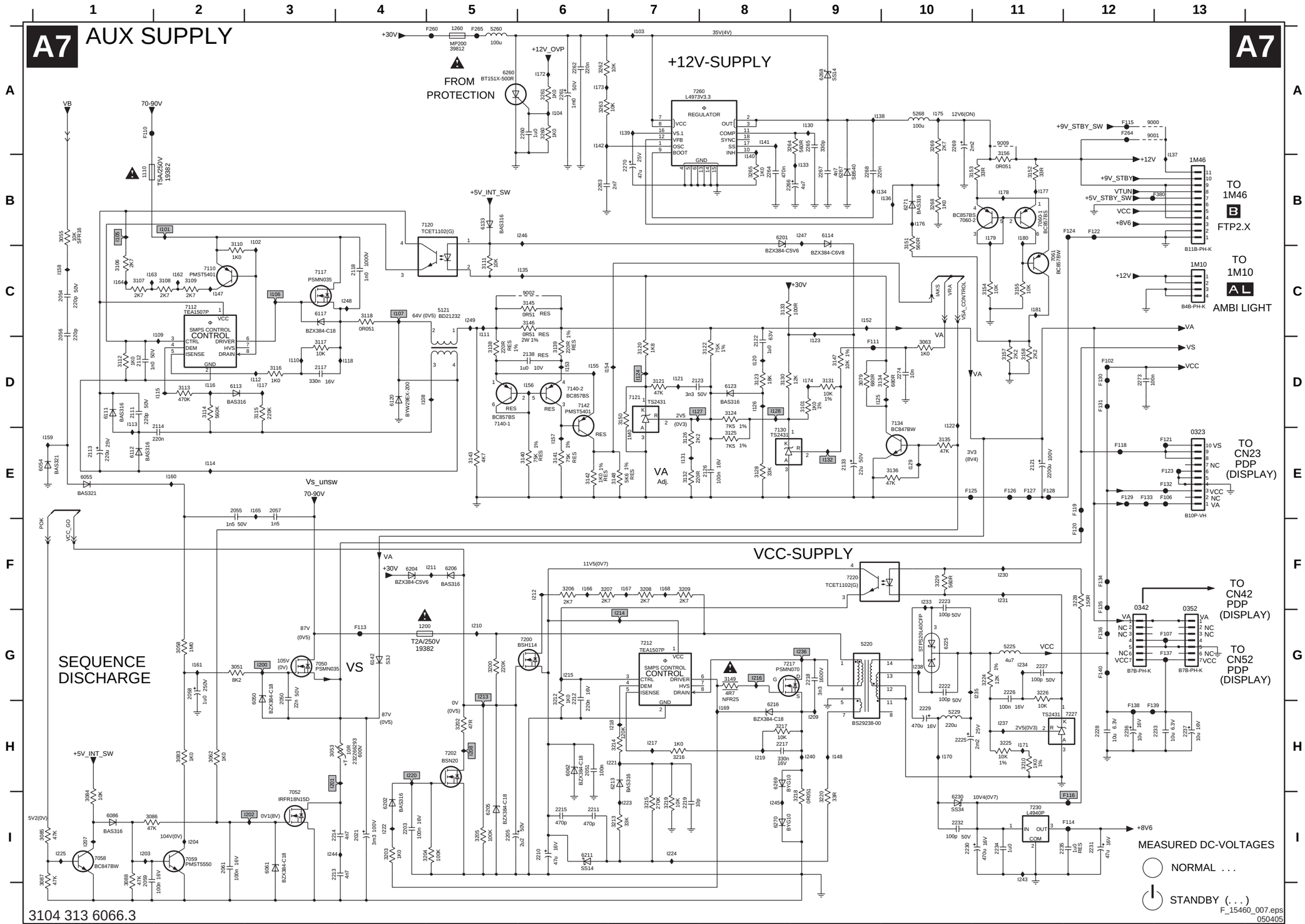
2600 B3	3690 I7	I643 G7
2601 B2	3691 I7	I644 G8
2602 C6	3692 I7	I645 G8
2603 C3	3693 I6	I646 G8
2604 C2	3999 A10	I647 F3
2605 C3	5600 A5	I648 H12
2608 H8	5601 B8	I649 G6
2610 B7	5612 B7	I650 E3
2611 B8	5660 E10	I651 E3
2612 B5	6600 B2	I652 G5
2613 C6	6601 F3	I653 F5
2614 C6	6602 G6	I654 C5
2616 C9	6605 A3	I655 C7
2617 C9	6606 A2	I656 E8
2640 H8	6608 B6	I657 G12
2642 G11	6609 C7	I658 H12
2651 H3	6611 B8	I659 G12
2653 H5	6640 G11	I660 G12
2654 H1	6641 H10	I661 G12
2655 H3	6642 H11	I662 H12
2656 H2	6643 H9	I663 G1
2660 E10	6651 H5	I664 I6
2661 F8	6652 H4	I665 I7
2662 F11	6653 H5	I666 I6
2663 E6	6654 G1	I667 I7
2664 E7	6660 F7	I668 I7
2665 H8	6661 E7	
2666 H4	6663 E10	
2670 H12	6665 E11	
2671 H12	6666 H7	
2672 H8	7601 G8	
2673 G12	7602 F8	
2674 G12	7608 C6	
2675 G11	7610 B7	
2676 G12	7640 H9	
2677 C7	7641 G10	
2690 I6	7642 G11	
2691 I7	7650 G6	
3104 H12	7654 H2	
3601 D2	7655 I7	
3602 D2	7656 I6	
3603 E3	7661 D8	
3604 E3	F600 B10	
3605 F3	F601 B3	
3606 C5	F602 D2	
3607 F3	F604 C10	
3608 C5	F605 D10	
3609 D3	F606 I10	
3610 C6	F608 D11	
3611 C6	F609 F9	
3612 H4	F610 G9	
3613 G8	F996 A10	
3614 C7	F997 A10	
3615 C8	F998 A11	
3616 G9	F999 A11	
3617 G7	I601 C7	
3618 G7	I602 D2	
3619 F8	I603 B4	
3620 C8	I604 B7	
3621 C8	I605 B5	
3622 C9	I606 C6	
3623 G6	I607 C6	
3639 H8	I608 B7	
3640 H8	I609 C8	
3641 H9	I610 E5	
3642 G11	I611 E6	
3643 F11	I612 E7	
3651 H3	I613 E7	
3652 G5	I614 B8	
3654 G1	I615 H1	
3655 H1	I616 G5	
3656 H1	I617 G2	
3659 G5	I618 H4	
3660 F5	I619 H4	
3661 F5	I620 H5	
3662 E6	I621 G4	
3663 E6	I622 G7	
3664 H12	I623 H8	
3665 F9	I624 H9	
3666 H4	I625 G10	
3667 H6	I626 H10	
3668 F10	I627 F12	
3669 H12	I628 G11	
3671 H12	I629 H11	
3673 F12	I630 C8	
3675 E8	I631 E5	
3676 F8	I632 E6	
3677 F8	I633 H1	
3678 F8	I634 B6	
3679 F12	I635 C7	
3680 G12	I636 H12	
3681 G12	I637 F3	
3682 H12	I638 E10	
3683 G12	I639 D8	
3684 G12	I640 E11	
3685 H12	I641 E8	
3686 C7	I642 E10	

PDP Supply Panel: LLC Supply

U13 E9	1083 F11	2012 D9	2024 E12	2034 E1	2044 D11	2070 E7	3001 E6	3011 E5	3021 F5	3032 F14	3044 D1	3057 D12	3071 F2	3089 A4	3100 F14	6003 A3	6018 C8	6034 D2	7001 B3	7012 D7	7093 A4	F009 D6	F296 G13	I008 C2	I018 E2	I028 G3	I038 C8	I049 D8	I060 A10	I072 D11	I083 F8	I095 H6	I289 A5	I299 B11
U14 E6	1084 G10	2013 C9	2025 E13	2035 F1	2045 F11	2071 C7	3002 C6	3012 F3	3022 C12	3033 D8	3045 E2	3059 D8	3072 B13	3090 A2	3292 H10	6004 D6	6019 E7	6035 D2	7002 B9	7013 A3	9007 A3	F014 E12	F297 H12	I009 C2	I019 E1	I029 G3	I039 D6	I050 D8	I061 A10	I073 F10	I084 F8	I096 H7	I290 G11	
0204 H9	2000 G9	2014 F6	2026 F3	2036 D2	2046 C8	2090 B2	3003 C1	3013 F4	3023 E12	3034 F13	3046 E1	3060 C8	3073 D7	3091 B2	5001 C6	6005 D5	6021 F11	6042 C13	7003 A9	7017 F3	F001 A6	F016 B13	F298 H12	I010 D2	I020 E3	I030 E5	I041 B8	I051 E7	I062 B10	I074 F11	I085 E12	I098 H8	I291 H11	
1000 G6	2005 C1	2015 F5	2027 E2	2037 E2	2047 E1	2290 H10	3004 C1	3014 C7	3024 E13	3037 C13	3047 E2	3061 D8	3075 B8	3092 A3	5002 C9	6006 D7	6023 E13	6044 C11	7005 B8	7018 F3	F002 C7	F017 C11	I001 A2	I011 D1	I021 E1	I031 E4	I042 B7	I052 D7	I063 B10	I075 C13	I088 E13	I282 D1	I292 H10	
1001 G7	2006 C2	2016 E6	2028 C11	2038 C13	2048 F6	2291 G11	3005 C2	3015 C7	3025 F13	3038 C13	3048 D1	3064 F3	3076 C8	3093 B2	5004 E9	6007 C7	6027 C7	6045 F11	7006 E8	7020 C8	F003 C5	F040 B14	I002 A3	I012 D4	I022 F2	I032 E5	I043 B7	I053 E7	I064 B8	I077 F11	I089 E12	I283 F14	I293 H11	
1002 H14	2007 F1	2017 C9	2029 G11	2039 D7	2049 C1	2292 H11	3006 D2	3016 C7	3027 F2	3039 C14	3049 D3	3065 E4	3077 E8	3094 A3	5290 G10	6008 D7	6028 E7	6075 B8	7007 C7	7021 D8	F004 C5	F290 H12	I003 A5	I013 D2	I023 F3	I033 F4	I044 B8	I054 E7	I065 C9	I078 C13	I090 E13	I284 E15	I294 D13	
1006 G8	2008 F3	2018 C1	2030 F12	2040 D7	2052 B3	2293 H11	3007 E2	3017 D7	3028 F13	3040 E13	3050 F7	3066 F2	3078 E8	3095 A5	5291 H12	6009 F4	6029 B11	6077 D8	7008 E7	7042 C13	F005 C9	F292 H12	I004 A5	I014 E1	I024 F3	I034 F5	I045 C6	I055 E8	I066 C8	I079 C13	I091 E14	I285 A4	I295 D6	
1008 G9	2009 E5	2020 C11	2031 F15	2041 D8	2053 B5	2294 H11	3008 E2	3018 D7	3029 E13	3041 F13	3052 E12	3067 F5	3080 C12	3096 A5	5292 H12	6010 F4	6031 D2	6095 A5	7009 E4	7090 A2	F006 D8	F293 G12	I005 B2	I015 D2	I025 F2	I035 F5	I046 C7	I056 A2	I067 C8	I080 G10	I092 F13	I286 A4	I296 F6	
1009 G8	2010 F5	2022 E11	2032 D2	2042 D9	2060 F6	2295 G11	3009 F1	3019 E7	3030 F12	3042 D1	3054 D6	3069 E1	3081 A4	3097 B5	5293 G12	6011 F4	6032 D2	6291 H11	7010 E12	7091 A3	F007 F3	F294 H12	I006 B4	I016 E2	I026 F1	I036 F5	I047 D7	I057 D7	I070 B11	I081 F7	I093 F12	I287 A4	I297 E7	
1082 F11	2011 E9	2023 E14	2033 D1	2043 D13	2062 A4	2296 H11	3010 E4	3020 F5	3031 F13	3043 D1	3056 E4	3070 E5	3082 B5	3098 F15	6002 A4	6012 B11	6033 E1	6292 H11	7011 F13	7092 A3	F008 D5	F295 H12	I007 C2	I017 E2	I027 C2	I037 C8	I048 D7	I059 E8	I071 F10	I082 F7	I094 F12	I288 B5	I298 C7	



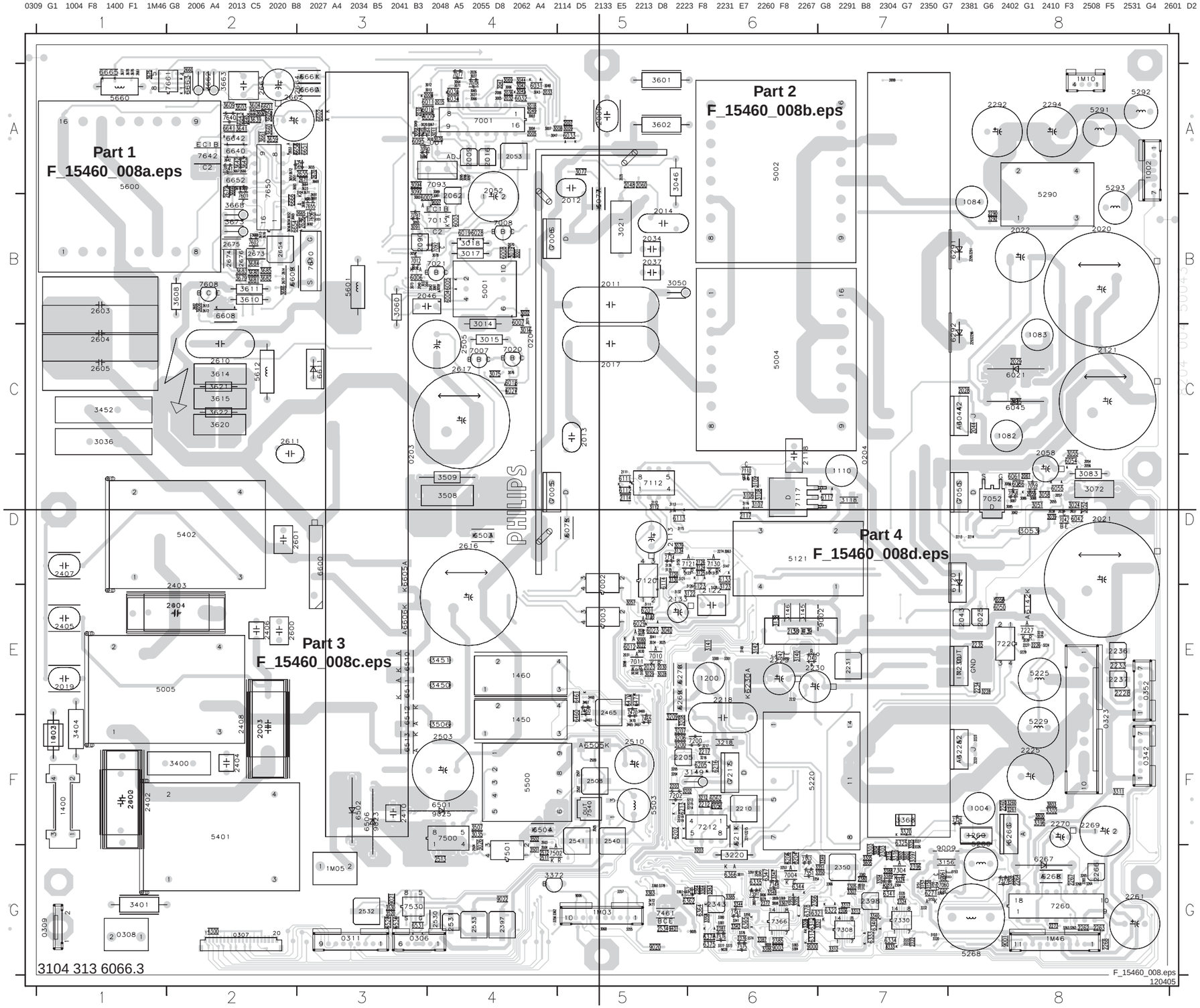
PDP Supply Panel: AUX Supply



0323 E13	3156 B11	F136 G12
0342 G12	3157 D11	F137 G13
0352 G13	3158 D11	F138 H12
1110 B1	3200 G5	F139 H12
1200 G4	3202 H5	F140 G12
1260 A5	3203 I4	F260 A5
1M10 C13	3204 I5	F264 A12
1M46 B13	3205 I5	F265 A5
2021 I4	3206 F6	F380 B13
2050 G3	3207 F6	I101 B2
2051 H6	3208 F7	I102 B3
2054 C1	3209 F7	I103 A7
2055 E2	3210 H11	I104 A6
2056 C1	3212 G6	I105 B1
2057 E3	3213 I7	I106 C3
2058 G2	3214 H7	I107 C4
2059 I1	3215 I7	I108 D4
2061 I2	3216 H7	I109 C2
2111 D1	3217 H8	I110 D3
2112 D1	3218 I9	I111 C5
2113 E1	3219 I7	I112 D3
2114 E2	3220 I9	I113 D1
2117 D3	3224 G11	I114 E2
2118 C4	3225 H11	I115 D2
2121 E11	3226 G11	I116 D2
2122 D8	3228 F12	I117 D3
2123 D7	3229 F10	I118 D4
2126 E8	3260 A6	I120 D8
2133 E9	3261 A6	I121 D7
2138 D6	3262 A6	I122 D10
2003 I4	3263 A6	I123 D9
2205 I5	3264 A9	I124 D7
2210 I6	3265 B8	I125 D9
2211 I6	3268 B10	I126 D8
2212 G6	3269 A10	I127 D7
2213 I4	5121 C5	I128 D8
2214 I4	5220 G9	I129 E10
2215 I6	5225 G11	I130 A9
2217 H8	5229 H10	I131 E7
2218 G9	5260 A5	I132 E9
2219 I7	5268 A10	I133 B9
2222 G10	6050 G3	I134 B10
2223 F10	6054 E1	I135 C6
2225 H10	6055 E1	I136 B10
2226 G11	6061 I3	I137 B13
2227 G11	6062 H6	I138 A9
2228 I2	6086 I1	I139 A7
2229 H10	6111 D1	I140 B8
2230 I10	6112 E1	I141 A8
2231 I12	6113 D2	I142 A6
2232 I10	6114 B9	I147 C2
2233 H13	6117 C3	I148 H9
2234 I11	6120 D4	I152 C9
2235 I12	6123 D8	I153 D6
2236 H12	6133 B5	I154 D6
2237 H13	6142 G4	I155 D6
2260 A6	6201 B8	I156 D6
2261 A6	6202 I4	I157 E6
2262 A6	6204 F4	I158 C1
2263 B6	6205 I5	I159 E1
2264 B8	6206 F5	I160 E2
2265 A9	6211 I6	I161 G2
2266 B8	6213 H7	I162 C2
2267 B9	6216 H8	I163 C1
2268 B9	6225 G10	I164 C1
2269 A10	6230 I10	I165 E3
2270 B7	6260 A5	I166 F6
2273 D12	6267 B9	I167 F7
2274 D10	6268 A9	I168 F7
3051 G2	6269 H8	I169 H8
3053 H3	6270 I8	I170 H10
3055 B1	6271 B10	I171 H11
3058 G2	7050 G3	I172 A6
3062 H2	7052 I3	I173 A6
3063 D10	7058 I1	I174 D9
3079 D9	7059 I2	I175 A10
3083 H2	7060-1 B11	I176 B10
3084 I1	7060-2 B11	I177 B11
3085 I1	7061 C11	I178 B11
3086 I1	7110 C2	I179 B11
3087 I1	7112 C2	I180 B11
3088 I1	7117 C3	I181 C11
3101 D9	7120 B5	I200 G3
3106 C1	7121 D7	I201 H3
3107 C1	7130 E8	I202 I3
3108 C2	7134 D10	I203 I1
3109 C2	7140-1 D5	I204 I2
3110 C2	7140-2 D6	I207 I1
3111 C5	7142 D6	I208 H5
3112 D1	7200 G6	I209 H9
3113 D2	7202 H5	I210 G5
3114 D2	7212 G7	I211 F5
3115 D3	7217 G8	I212 F6
3116 D3	7220 F9	I213 G5
3117 D3	7227 H12	I214 G7
3118 C4	7230 I11	I215 G6
3120 D7	7260 A8	I216 G8
3121 D7	9000 A12	I217 H7
3122 D8	9001 A12	I218 H7
3123 D8	9002 C6	I219 H8
3124 D8	9009 A11	I220 H4
3125 E8	F102 D12	I221 H7
3126 E7	F106 E13	I222 I4
3128 E8	F107 G13	I223 I7
3130 D8	F110 A1	I224 I7
3131 D9	F111 D9	I225 I1
3132 E7	F113 G4	I230 F11
3133 C8	F114 I12	I231 F11
3134 D10	F115 A12	I233 F10
3135 E10	F116 I12	I234 G11
3136 E10	F118 E12	I235 G11
3138 D6	F119 E12	I236 G9
3139 D6	F120 F12	I237 H11
3140 E6	F121 E13	I238 G10
3141 E6	F122 B12	I240 H9
3142 E6	F123 E13	I243 I11
3143 E5	F124 B12	I244 I3
3145 C6	F125 E10	I245 I8
3146 C6	F126 E11	I246 B6
3147 D9	F127 E11	I247 B9
3148 E7	F128 E11	I248 C4
3149 G8	F129 E12	I249 C5
3150 D7	F130 D12	
3151 B10	F131 D12	
3152 B11	F132 E13	
3153 B11	F133 E12	
3154 C11	F134 F12	
3155 C11	F135 F12	

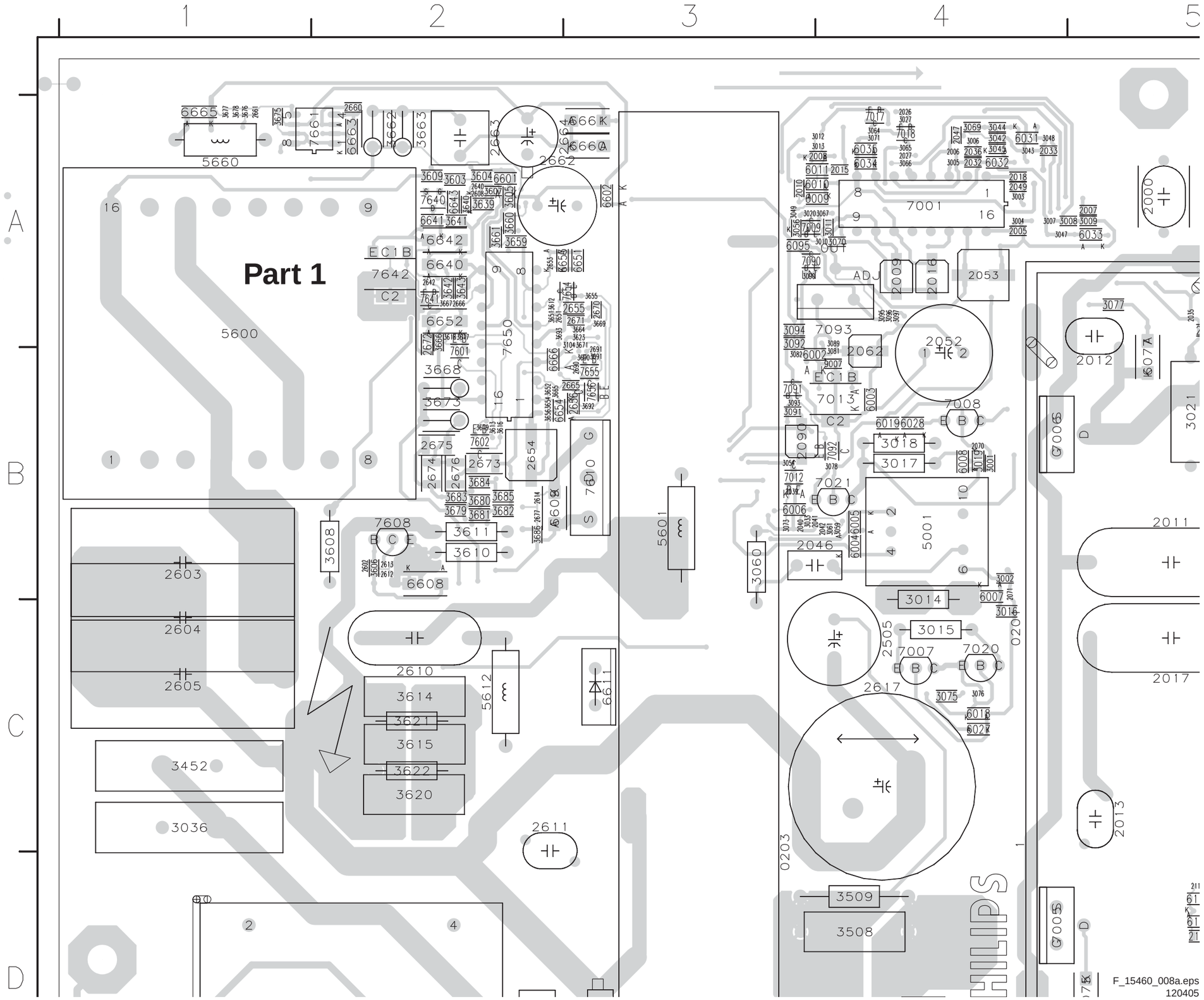
Layout PDP Supply Panel (Overview Top Side)

0201 B4 0311 G3 1082 C8 1402 F1 2000 A5 2007 A5 2014 B5 2021 D8 2028 C8 2035 A5 2042 B4 2049 A4 2056 D8 2070 B4 2117 D6 2138 E6 2214 D8 2225 F8 2232 E6 2261 G8 2268 G8 2292 A8 2305 G7 2352 G6 2385 G6 2403 E1 2465 E5 2509 F5 2532 G3
0203 D3 0323 F8 1083 B8 1450 F4 2001 E2 2008 A4 2015 A4 2022 B8 2029 C8 2036 A4 2043 E8 2050 E8 2057 D8 2071 B4 2118 C6 2203 F5 2215 F6 2226 E8 2233 E8 2262 G8 2269 F8 2293 C8 2306 G7 2364 G6 2396 G7 2404 F2 2502 F5 2510 F5 2533 G4
0204 D7 0342 F8 1084 A8 1460 E4 2002 G1 2009 A4 2016 A4 2023 E5 2030 E5 2037 B5 2044 C8 2051 F6 2058 C8 2090 B3 2121 C8 2205 F5 2217 F6 2227 E8 2234 E8 2263 G8 2270 G8 2294 A8 2316 G7 2366 G6 2397 G4 2405 E1 2503 F4 2511 G4 2534 G5
0306 G4 0352 E8 1110 D6 1M03 G5 2003 E2 2010 A3 2017 C5 2024 E5 2031 E5 2038 D8 2045 C8 2052 B4 2059 D8 2111 D5 2122 E6 2210 F6 2218 E6 2228 E8 2235 E8 2264 G8 2273 G8 2295 B8 2322 G7 2376 G6 2398 G7 2406 E2 2504 G4 2512 G4 2540 G5
0307 G2 1002 A8 1200 E6 1M05 G3 2004 E2 2011 B5 2018 A4 2025 E8 2032 A4 2039 B3 2046 B3 2053 A4 2060 A5 2112 D5 2123 D5 2211 F6 2219 F5 2229 E6 2236 E8 2265 G8 2274 D6 2296 C8 2324 G7 2377 G6 2400 G1 2407 D1 2505 B3 2513 G4 2541 G5
0308 G1 1003 F1 1260 F8 1M10 A8 2005 A4 2012 A5 2019 E1 2026 A4 2033 A4 2040 B3 2047 A4 2054 D8 2061 D8 2113 D5 2126 D6 2212 F6 2222 F8 2230 E6 2237 E8 2266 G8 2290 B8 2303 G7 2343 G6 2380 G7 2401 E1 2408 E2 2507 F5 2530 G4 2600 E2
0309 G1 1004 F8 1400 F1 1M46 G8 2006 A4 2013 C5 2020 B8 2027 A4 2034 B5 2041 B3 2048 A5 2055 D8 2062 A4 2114 D5 2133 E5 2213 D8 2223 F8 2231 E7 2260 F8 2267 G8 2291 B8 2304 G7 2350 G7 2381 G6 2402 G1 2410 F3 2508 F5 2531 G4 2601 D2

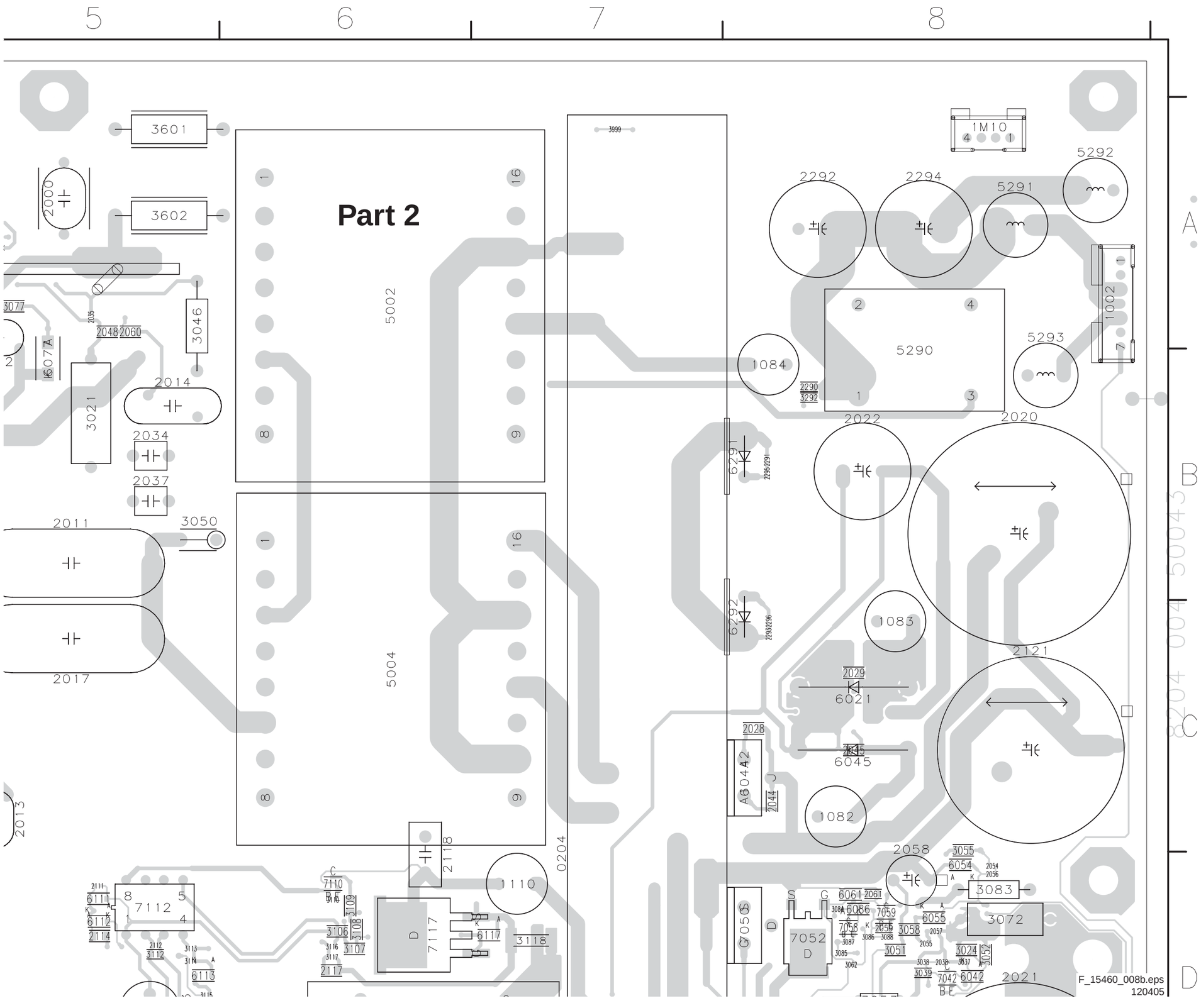


2602 B2 3077 A5 3304 G7 3615 C2 6061 D8 7060 G8
2603 B1 3078 B4 3305 G7 3616 B2 6062 F6 7061 G7
2604 C1 3079 D5 3306 G7 3617 A2 6075 D5 7090 A3
2605 C1 3080 E5 3307 G7 3618 A2 6077 B5 7091 B3
2608 A2 3081 B4 3308 G6 3619 B2 6086 D8 7092 B4
2610 C2 3082 B3 3311 F8 3620 C2 6095 A3 7093 A3
2611 D2 3083 D8 3312 G7 3621 C2 6111 D5 7110 D6
2612 B2 3084 D8 3313 G7 3622 C2 6112 D5 7112 D5
2613 B2 3085 D8 3316 G7 3623 A3 6113 D5 7117 D6
2614 B2 3086 D8 3317 G7 3639 A2 6114 E5 7120 D5
2616 D4 3087 D8 3320 G7 3640 A2 6117 D7 7121 D6
2617 C4 3088 D8 3321 G7 3641 A2 6120 D8 7130 D6
2640 A2 3089 A4 3322 G7 3642 A2 6123 D6 7134 D5
2642 A2 3090 A3 3323 G7 3643 A2 6133 D6 7140 E7
2651 A2 3091 B3 3324 G7 3651 A2 6142 E8 7142 E6
2653 A2 3092 A3 3325 F7 3652 B2 6201 E5 7200 F6
2654 B2 3093 B3 3326 G7 3654 B2 6202 F5 7202 F5
2655 A3 3094 A3 3327 F7 3655 A3 6204 G6 7212 G6
2656 B3 3095 A4 3328 G8 3656 B2 6205 F6 7217 F6
2660 A2 3096 A4 3332 G7 3659 A2 6206 G6 7220 E8
2661 A1 3097 A4 3333 G7 3660 A2 6211 F6 7227 E8
2662 A3 3098 E5 3334 G7 3661 A2 6213 F5 7230 E8
2663 A2 3100 E5 3335 G7 3662 A2 6216 F6 7260 G8
2664 A2 3101 D6 3340 G7 3663 A2 6225 F8 7304 G7
2665 B3 3102 G7 3341 G6 3664 A3 6230 E6 7308 G7
2666 A2 3103 G7 3342 G6 3665 B2 6260 F8 7326 F8
2670 A3 3104 A3 3343 G6 3666 A2 6267 G8 7327 G8
2671 A3 3106 D6 3344 G6 3667 A2 6268 G8 7330 G7
2672 A2 3107 D6 3345 G6 3668 B2 6269 E5 7341 G6
2673 B2 3108 D6 3346 G6 3669 A3 6270 E5 7348 G6
2674 B2 3109 D6 3347 G6 3671 A3 6271 G7 7351 G6
2675 B2 3110 D6 3348 G6 3673 B2 6291 B8 7352 G6
2676 B2 3111 E5 3349 G7 3675 A1 6292 B8 7362 G5
2677 B2 3112 D5 3350 G7 3676 A1 6312 G6 7366 G6
2690 B3 3113 D5 3351 G7 3677 A1 6313 G7 7375 G6
2691 B3 3114 D5 3352 G6 3678 A1 6321 G6 7376 G6
3001 B4 3115 D5 3353 G6 3679 B2 6322 G7 7389 G7
3002 B4 3116 D6 3354 G6 3680 B2 6325 F7 7391 G6
3003 A4 3117 D6 3355 G5 3681 B2 6333 G7 7460 E5
3004 A4 3118 D7 3356 G4 3682 B2 6334 G7 7461 G5
3005 A4 3120 D5 3357 G5 3683 B2 6335 G6 7465 F5
3006 A4 3121 D5 3358 G6 3684 B2 6340 G7 7470 E5
3007 A4 3122 E6 3359 G6 3685 B2 6341 G7 7500 G4
3008 A5 3123 E6 3360 G5 3686 B2 6344 G6 7501 G4
3009 A5 3124 D6 3361 G5 3690 B3 6347 G6 7502 G4
3010 A4 3125 D6 3362 G4 3691 B3 6362 G5 7530 G4
3011 A4 3126 E6 3363 G5 3692 B3 6364 G6 7540 F5
3012 A4 3128 E6 3364 G6 3693 A2 6365 G6 7601 B2
3013 A4 3130 D5 3366 G7 3800 F8 6366 G6 7602 B2
3014 C4 3131 D6 3367 G6 3801 G7 6375 G6 7608 B2
3015 C4 3132 E5 3368 F7 3802 G7 6376 G6 7610 B3
3016 C4 3133 E5 3369 G6 3803 F8 6378 G6 7640 A2
3017 B4 3134 D5 3370 F7 3804 G7 6460 F5 7641 A2
3018 B4 3135 D5 3372 G4 3805 G7 6461 E5 7642 A2
3019 B4 3136 D5 3373 G6 3806 G6 6470 E5 7650 A2
3020 A3 3138 E6 3374 G6 3807 G6 6471 E5 7654 A3
3021 B5 3139 E6 3376 G6 3808 G6 6501 F3 7655 B3
3022 E5 3140 E6 3377 G6 3809 G6 6502 F3 7656 B3
3023 E5 3141 E6 3378 G5 3811 G6 6503 D4 7661 A2
3024 D8 3142 E6 3380 G6 3999 A7 6504 F4 9000 G6
3025 E5 3143 E6 3381 G6 4300 G2 6505 F5 9001 G8
3026 G4 3145 E6 3382 G7 5001 B4 6506 F3 9002 E7
3027 A4 3146 E6 3383 G6 5002 A5 6510 E3 9003 G6
3028 E5 3147 D6 3384 G6 5004 C5 6511 E3 9004 G6
3029 E5 3148 E6 3385 G6 5005 E1 6512 E3 9005 G6
3030 E5 3149 F5 3386 G6 5121 D6 6513 F3 9006 G5
3031 E5 3150 D5 3387 G6 5220 E7 6520 G3 9007 B4
3032 E5 3151 G7 3388 G7 5225 E8 6530 G3 9009 G7
3033 B3 3152 G7 3389 G7 5229 E8 6531 G3 9020 G5
3034 E5 3153 G8 3391 G6 5260 G8 6600 E3 9021 G3
3035 F4 3154 G7 3396 F8 5268 G8 6601 A2 9022 G4
3036 D1 3155 G7 3397 G7 5290 A8 6602 A3 9023 F3
3037 D8 3156 G7 3400 F2 5291 A8 6605 D3 9025 F3
3038 D8 3157 G7 3401 G1 5292 A8 6606 E3 9028 G6
3039 D8 3158 G7 3404 E1 5293 A8 6608 B2 9401 G5
3040 E5 3200 F5 3450 E4 5401 F3 6609 B2
3041 E5 3202 F5 3451 E4 5402 D2 6611 C3
3042 A4 3203 G6 3452 C1 5500 F4 6640 A2
3043 A4 3204 F5 3460 E5 5503 F5 6641 A2
3044 A4 3205 F5 3461 E5 5600 B2 6642 A2
3045 A4 3206 F5 3463 F5 5601 B3 6643 A2
3046 A5 3207 F5 3465 F5 5612 C2 6651 A3
3047 A4 3208 F5 3467 F5 5660 A1 6652 A2
3048 A4 3209 F5 3469 E5 6002 A4 6653 A2
3049 A3 3210 E8 3470 F5 6003 B4 6654 B2
3050 B5 3212 F6 3471 G5 6004 B4 6660 A3
3051 D8 3213 F6 3472 G5 6005 B4 6661 A3
3052 D8 3214 F6 3501 G4 6006 B3 6663 A2
3053 D8 3215 F6 3502 F4 6007 C4 6665 A1
3054 B3 3216 F6 3503 F4 6008 B4 6666 B2
3055 C8 3217 F6 3504 G4 6009 A4 7001 A4
3056 A3 3218 F6 3505 F5 6010 A4 7002 D5
3057 E5 3219 F5 3506 E4 6011 A3 7003 E5
3058 D8 3220 G6 3507 F4 6012 E5 7004 G6
3059 B4 3224 E8 3508 D4 6018 C4 7005 D5
3060 B3 3225 E8 3509 D4 6019 B4 7006 B5
3061 B4 3226 E8 3520 G3 6021 C8 7007 C4
3062 D8 3228 E8 3530 G3 6023 E5 7008 B4
3063 D6 3229 E8 3601 A5 6027 C4 7009 A3
3064 A4 3260 F8 3602 A5 6028 B4 7010 E5
3065 A4 3261 F8 3603 A2 6029 E5 7011 E5
3066 A4 3262 G8 3604 A2 6031 A4 7012 B3
3067 A4 3263 G8 3605 A2 6032 A4 7013 B4
3068 G5 3264 G8 3606 B2 6033 A5 7017 A4
3069 A4 3265 G8 3607 A2 6034 A4 7018 A4
3070 A4 3268 G8 3608 B2 6035 A4 7020 C4
3071 A4 3269 G7 3609 A2 6042 D8 7021 B4
3072 D8 3292 B8 3610 B2 6044 C8 7042 D8
3073 B3 3300 E6 3611 B2 6045 C8 7050 D8
3074 G6 3301 E6 3612 A2 6050 E8 7052 D8
3075 C4 3302 F8 3613 B2 6054 D8 7058 D8
3076 C4 3303 G7 3614 C2 6055 D8 7059 D8

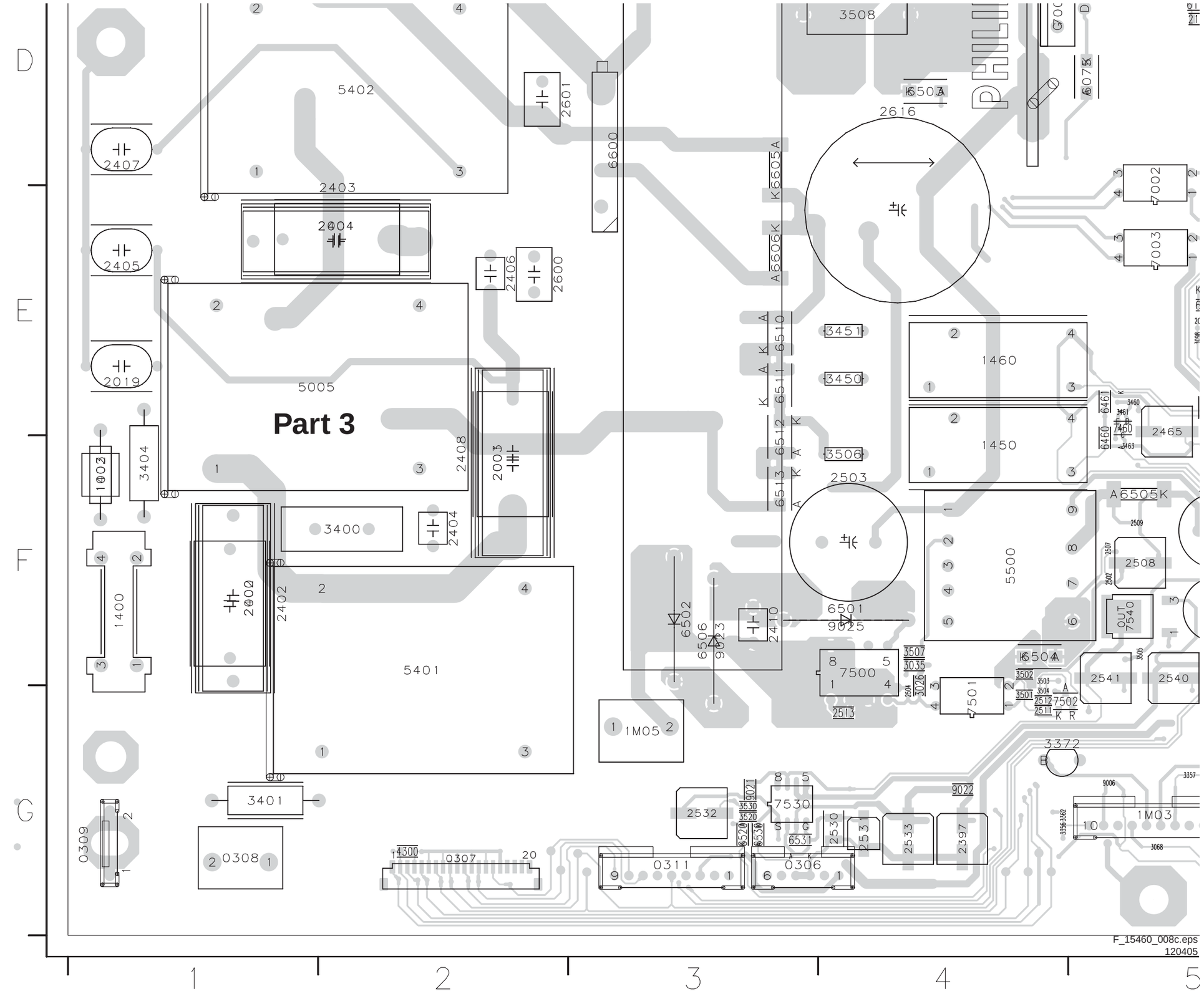
Layout PDP Supply Panel (Part 1 Top Side)



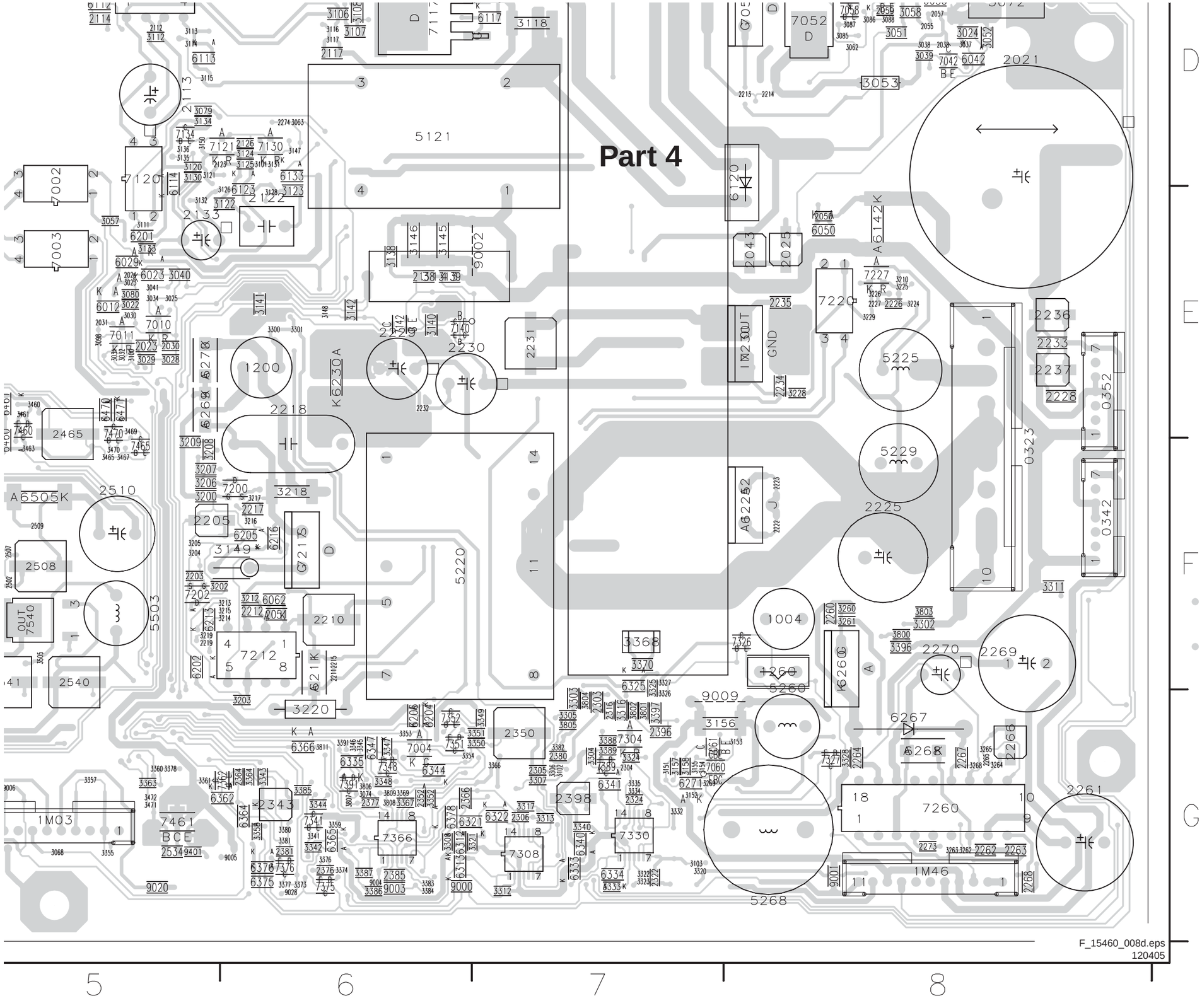
Layout PDP Supply Panel (Part 2 Top Side)



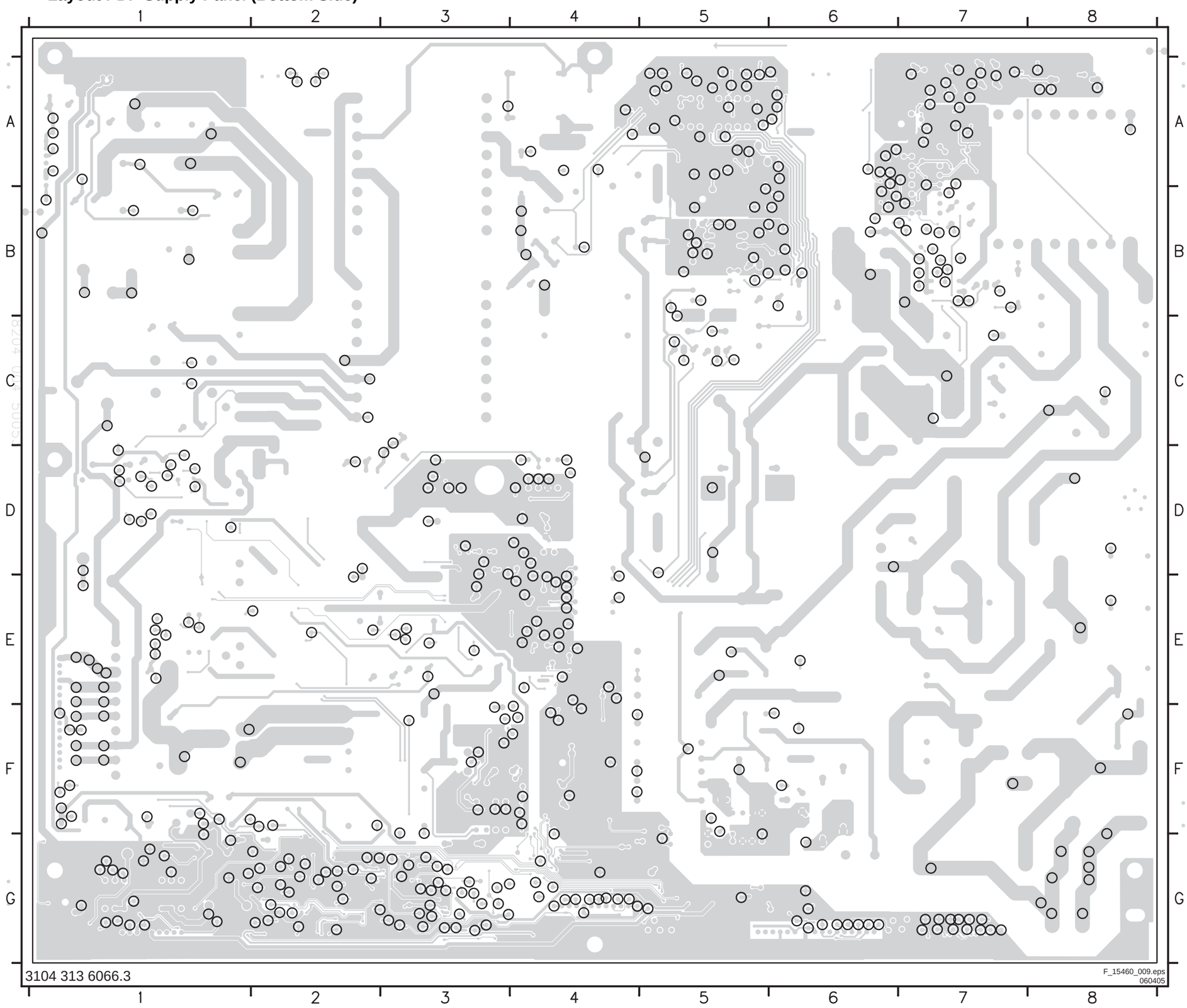
Layout PDP Supply Panel (Part 3 Top Side)



Layout PDP Supply Panel (Part 4 Top Side)

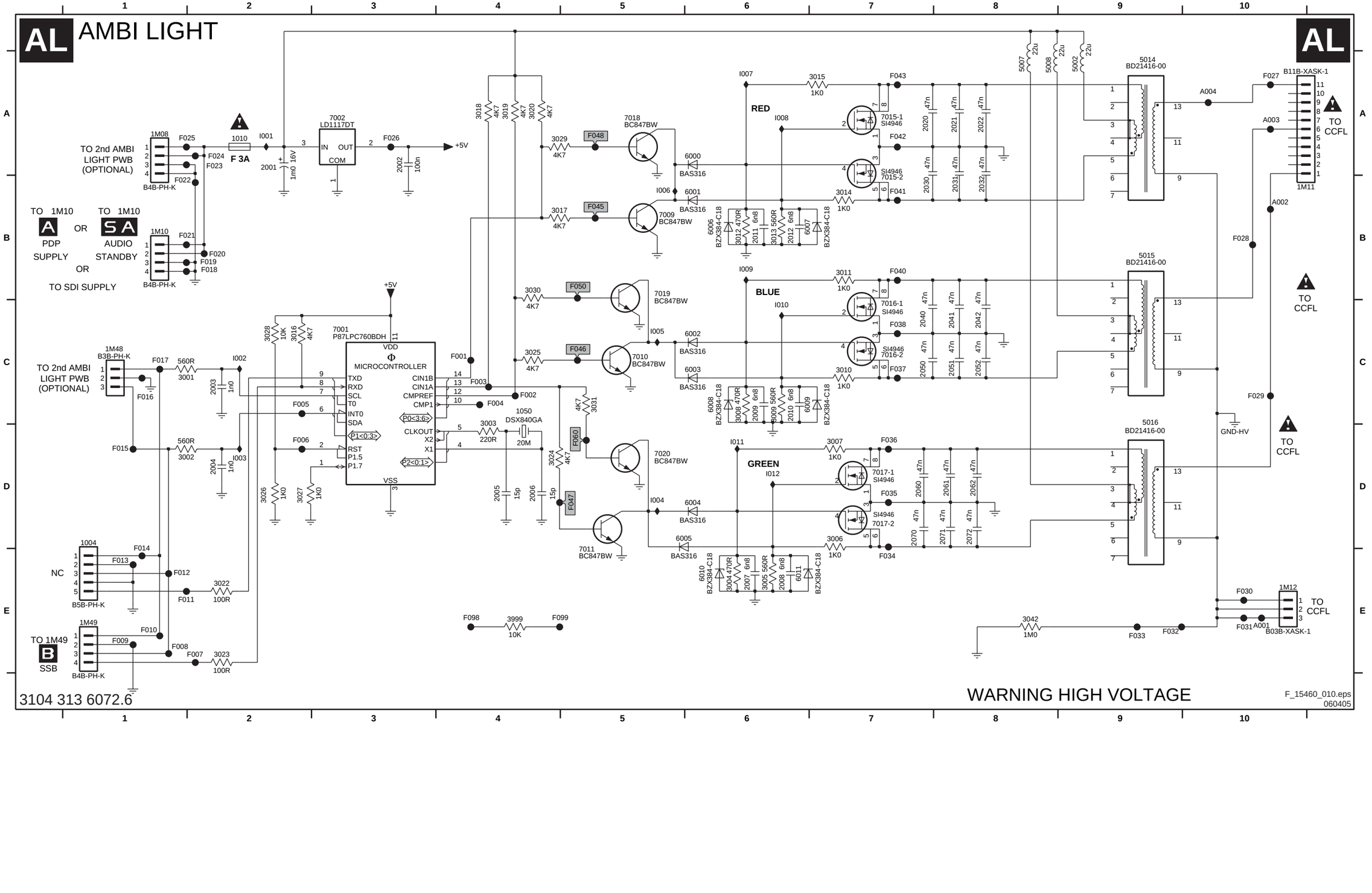


Layout PDP Supply Panel (Bottom Side)



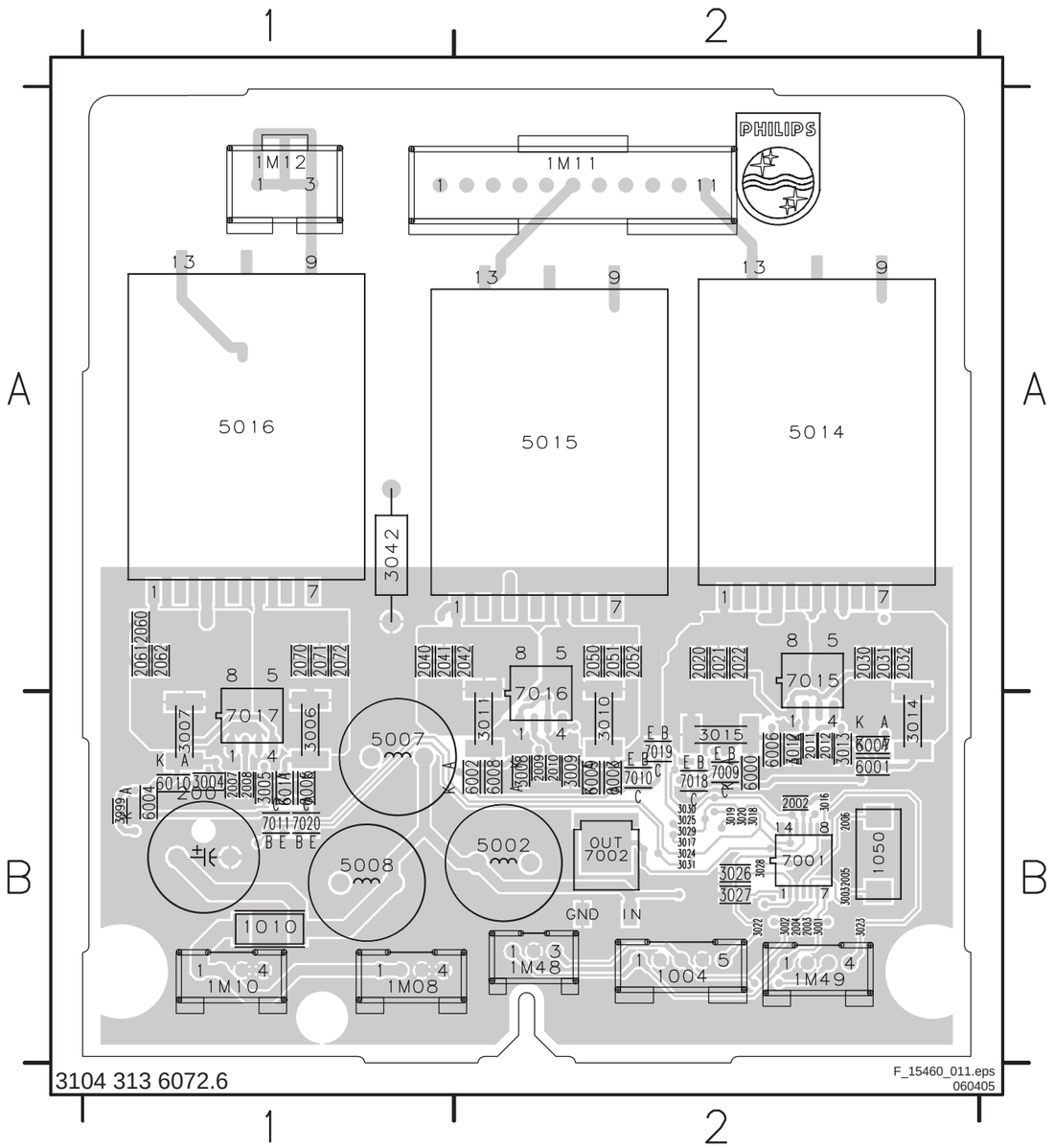
Ambi Light

1004 D1	2001 A2	2010 C6	2040 C7	2070 D7	3007 D7	3016 C2	3026 D2	5007 A8	6004 D6	7002 A3	7017-2 D7	F002 C4	F011 E1	F020 B2	F029 C10	F038 C7	F050 B5	I006 B5
1010 A2	2002 A3	2011 B6	2041 C8	2071 D8	3008 C6	3017 B4	3027 D2	5008 A8	6005 D5	7009 B5	7018 A5	F003 C4	F012 E1	F021 B1	F030 E10	F040 B7	F060 D5	I007 A6
1050 C4	2003 C2	2012 B6	2042 C8	2072 D8	3009 C6	3018 A4	3028 C2	5014 A9	6006 B6	7010 C5	7019 B5	F004 C4	F013 E1	F022 B1	F031 E10	F041 B7	F098 E4	I008 A6
1M08 A1	2004 D2	2020 A7	2050 C7	3001 C1	3010 C7	3019 A4	3029 A4	5015 B9	6007 B6	7011 E5	7020 D5	F005 C2	F014 E1	F023 A2	F032 E9	F042 A7	F099 E4	I009 B6
1M10 B1	2005 D4	2021 A8	2051 C8	3002 D1	3011 B7	3020 A4	3030 B4	5016 C9	6008 C6	7015-1 A7	A001 E10	F006 D2	F015 D1	F024 A2	F033 E9	F043 A7	I001 A2	I010 C6
1M11 B10	2006 D4	2022 A8	2052 C8	3003 D4	3012 B6	3022 E2	3031 C5	6000 A6	6009 C6	7015-2 A7	A002 B10	F007 E2	F016 C1	F025 A1	F034 E7	F045 B5	I002 C2	I011 D6
1M12 E10	2007 E6	2030 B7	2060 D7	3004 E6	3013 B6	3023 E2	3042 E8	6001 B6	6010 E6	7016-1 C7	A003 A10	F008 E1	F017 C1	F026 A3	F035 D7	F046 C5	I003 D2	I012 D6
1M48 C1	2008 E6	2031 B8	2061 D8	3005 E6	3014 B7	3024 D4	3999 E4	6002 C6	6011 E6	7016-2 C7	A004 A10	F009 E1	F018 B2	F027 A10	F036 D7	F047 D5	I004 D5	
1M49 E1	2009 C6	2032 B8	2062 D8	3006 D7	3015 A7	3025 C4	5002 A9	6003 C6	7001 C3	7017-1 D7	F001 C4	F010 E1	F019 B2	F028 B10	F037 C7	F048 A5	I005 C5	



Layout Ambi Light (Top Side)

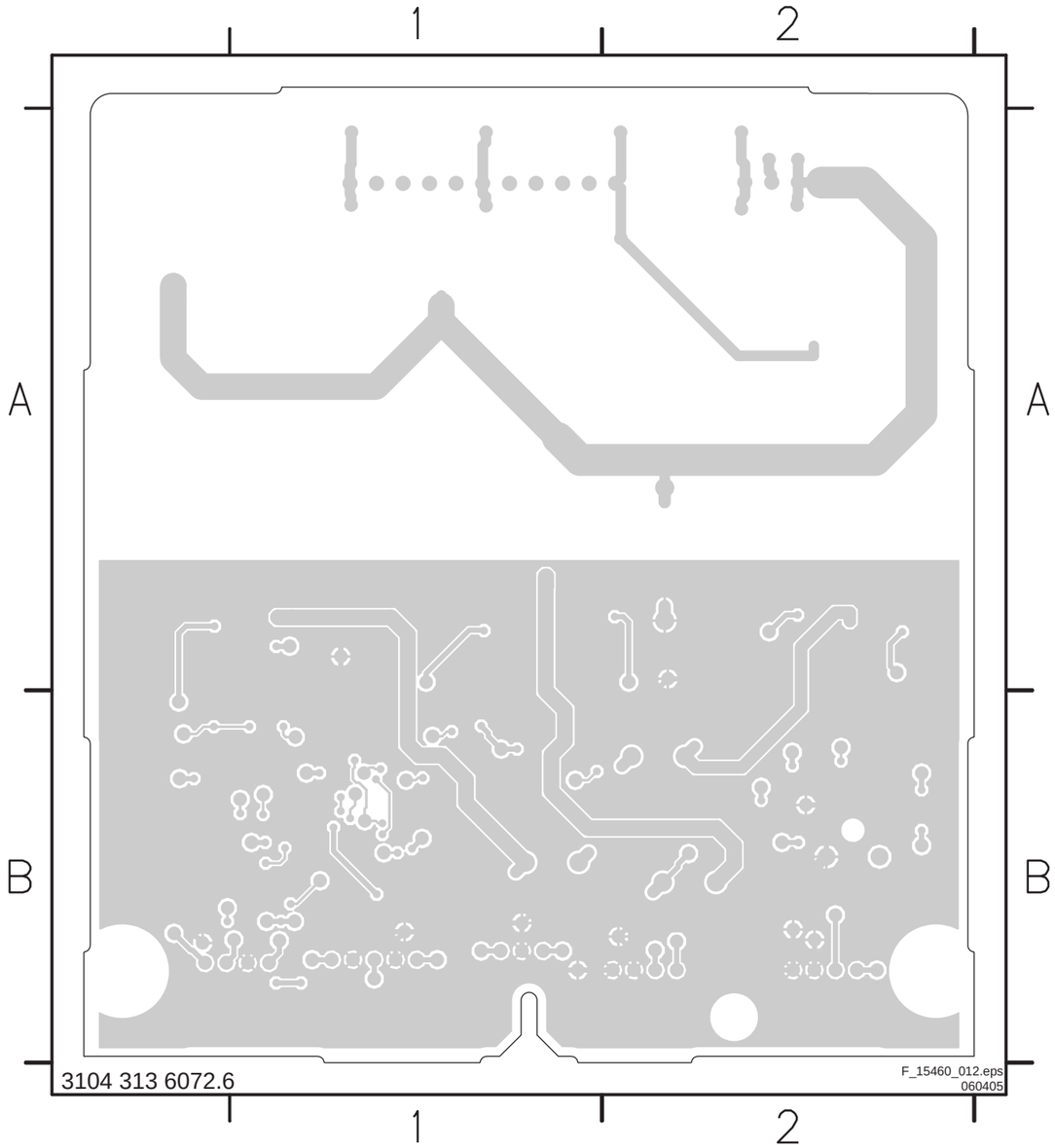
1004	B2	2001	B1	2010	B2	2040	A1	2070	A1	3007	B1	3016	B2	3026	B2	5007	B1	6004	B1	7002	B2	7020	B1
1010	B1	2002	B2	2011	B2	2041	A1	2071	A1	3008	B2	3017	B2	3027	B2	5008	B1	6005	B1	7009	B2		
1050	B2	2003	B2	2012	B2	2042	A2	2072	A1	3009	B2	3018	B2	3028	B2	5014	A2	6006	B2	7010	B2		
1M08	B1	2004	B2	2020	A2	2050	A2	3001	B2	3010	B2	3019	B2	3029	B2	5015	A1	6007	B2	7011	B1		
1M10	B1	2005	B2	2021	A2	2051	A2	3002	B2	3011	B2	3020	B2	3030	B2	5016	A1	6008	B2	7015	B2		
1M11	A2	2006	B2	2022	A2	2052	A2	3003	B2	3012	B2	3022	B2	3031	B2	6000	B2	6009	B2	7016	B2		
1M12	A1	2007	B1	2030	A2	2060	A1	3004	B1	3013	B2	3023	B2	3042	A1	6001	B2	6010	B1	7017	B1		
1M48	B2	2008	B1	2031	A2	2061	A1	3005	B1	3014	B2	3024	B2	3999	B1	6002	B2	6011	B1	7018	B2		
1M49	B2	2009	B2	2032	A2	2062	A1	3006	B1	3015	B2	3025	B2	5002	B2	6003	B2	7001	B2	7019	B2		



3104 313 6072.6

F_15460_011.eps
060405

Layout Ambi Light (Bottom Side)



3104 313 6072.6

F_15460_012.eps
060405

SSB: IF, I/O Video Processing

B2 IF,I/O VIDEOPROCESSING

B2

HIP

IF DEM

SUPPLY

CTRL

SYNC

I/O SWITCH

LUMA & CHROMA PROC.

OUTP SWITCH

SAW-FILTER AUDIO

SAW-FILTER-VIDEO

SAW-FILTER VIDEO

COIL 40.4 SUPPRESSION

GROUP DELAY COR.

MODULATOR COIL

SAND-CASTLE

FILTER TUNING

CLOCK GEN

2H/4H DELAY

ADAPTIVE COMB FILTER

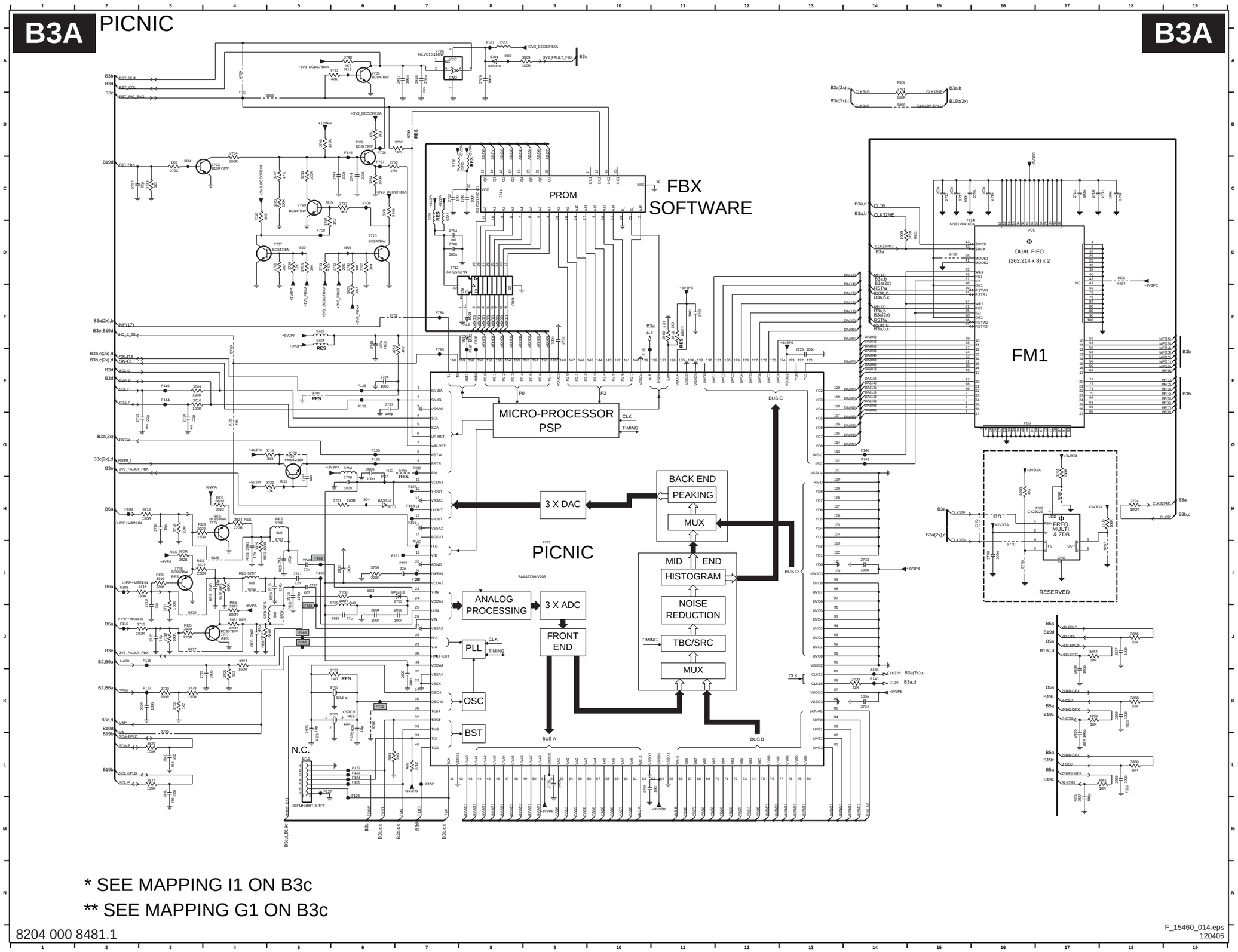
CLAMP

CLAMP

8204 000 8483.1

F_15460_013.eps 070405

SSB: PICNIC



1702 K6 3928 I3
1703 K6 3929 I3
1710 L5 3930 J3
2707 C2 3931 J4
2708 I16 3932 J4
2709 A8 3933 J4
2710 C17 5703 A8
2711 C17 5705 I6
2712 C15 5706 H5
2713 G2 5707 I4
2714 G3 5708 J4
2716 C16 5714 G6
2717 C15 5723 E5
2718 H3 5724 E5
2719 I3 5725 C8
2720 J3 5726 C7
2721 K3 5727 C7
2722 K3 5728 C7
2724 F6 6701 A8
2725 C16 6703 I7
2726 F13 6710 H6
2727 E11 7702 H17
2731 E9 7703 C4
2732 C7 7705 A6
2733 I14 7706 A7
2734 K14 7707 D5
2735 L9 7708 B6
2736 L10 7709 C5
2737 F6 7710 D6
2738 C18 7711 C8
2740 I5 7712 D7
2741 I5 7713 I9
2742 I5 7714 D16
2743 C6 7715 G5
2744 C6 7775 H4
2745 C8 7776 I3
2746 D7 7777 J4
2747 H5 9700 B7
2748 E6 9701 F5
2749 H6 9702 E6
2754 D7 9703 G7
2757 I7 9706 K6
2800 I6 9707 I5
2804 J6 9708 I4
2806 G6 9709 J5
2807 K7 9710 F4
2837 J18 9720 L3
2838 K17 9726 G4
2839 K18 9727 D18
2840 L3 9728 D15
2841 L3 9729 A4
2881 J6 9767 I18
2900 I4 9768 H17
2901 I4 9769 I16
2902 J4 9770 I16
2915 I5 9771 H16
2916 I5 9772 H16
2917 A7 9776 G5
2918 A7 9809 B5
2920 J7 9820 B14
2926 L17 9825 I4
2927 M17 9826 J3
2928 L18 9827 J3
2929 K6 A139 K14
2931 I5 F107 A8
2935 K5 F108 H2
3700 K14 F109 I2
3701 L6 F110 J2
3702 E11 F112 K3
3703 H16 F114 F3
3704 G17 F115 F3
3705 H18 F118 I7
3706 I6 F119 J3
3709 F3 F122 L6
3710 F3 F123 L6
3711 E11 F124 L6
3712 L7 F125 L6
3713 H3 F126 M6
3714 I3 F127 L5
3715 J3 F128 F6
3716 H3 F129 F6
3717 J3 F140 K14
3718 J3 F145 B6
3719 G5 F148 G14
3720 H5 F149 G14
3721 H6 F151 F10
3722 C3 F152 L7
3723 K6 F155 G6
3724 H18 F156 G6
3725 K4 F157 H7
3726 K3 F158 H7
3727 J4 F159 H7
3728 K3 F160 I7
3730 K3 F161 I7
3732 A6 F162 I5
3733 C3 F163 I5
3734 B4 F164 J5
3736 C5 F165 J5
3737 C6 F166 J5
3738 D5 F706 B6
3739 D5 F707 C6
3740 A6 F708 C6
3741 D5 F709 D5
3742 D6 F710 K6
3743 D6 F784 E7
3746 C6 F785 F7
3747 C5 F786 E8
3748 B5 F787 F8
3749 C4 F788 G7
3750 D6 I720 A4
3751 B6 I727 G6
3752 B7 I802 A8
3753 C6 I803 I6
3754 C6 I804 H6
3755 D5 I805 D6
3756 D5 I810 H5
3758 F7 I813 A6
3759 I6 I814 C3
3760 D15 I815 C5
3761 A14 I820 D5
3826 L3
3827 L3
3856 J18
3857 J17
3858 K18
3859 K17
3860 L18
3861 L18
3903 C5
3905 E6
3909 A9
3922 H3
3923 H4
3924 H4
3925 I4
3926 I4
3927 I3

F_15460_014.eps
120405

SSB: (FEM) Falconic Embedded Memory

B3B FEM
FALCONIC EMBEDDED MEMORY
B3B

FEM
7760
SAA4998H/V1

2723 G7
2875 B5
2876 B6
2877 B6
2878 D9
2879 E9
2880 G7
2882 H6
2883 H6
2884 H6
2885 F3
2886 D3
2887 B6
2888 B6
3876 C7
3880 F4
3881 F4
3882 F4
3883 F5
3884 G5
3885 E4
3886 E4
3887 E5
3888 E4
3889 E5
3890 E4
3891 E4
7760 E6
9808 C7
9810 F4
9811 G5

8204 000 8481.1

F_15460_015.eps
070405

SSB: Eagle

B3C EAGLE

B3C

EAGLE - IC

Φ VIDEO ENHANCEMENT PROCESSOR

Φ ZERO DELAY BUFFER CY2305SC-1

Φ DRAM 512K X 16 X 2 MSM56V16160F-6TS

8204 000 8481.1

F_15460_016.eps 070405

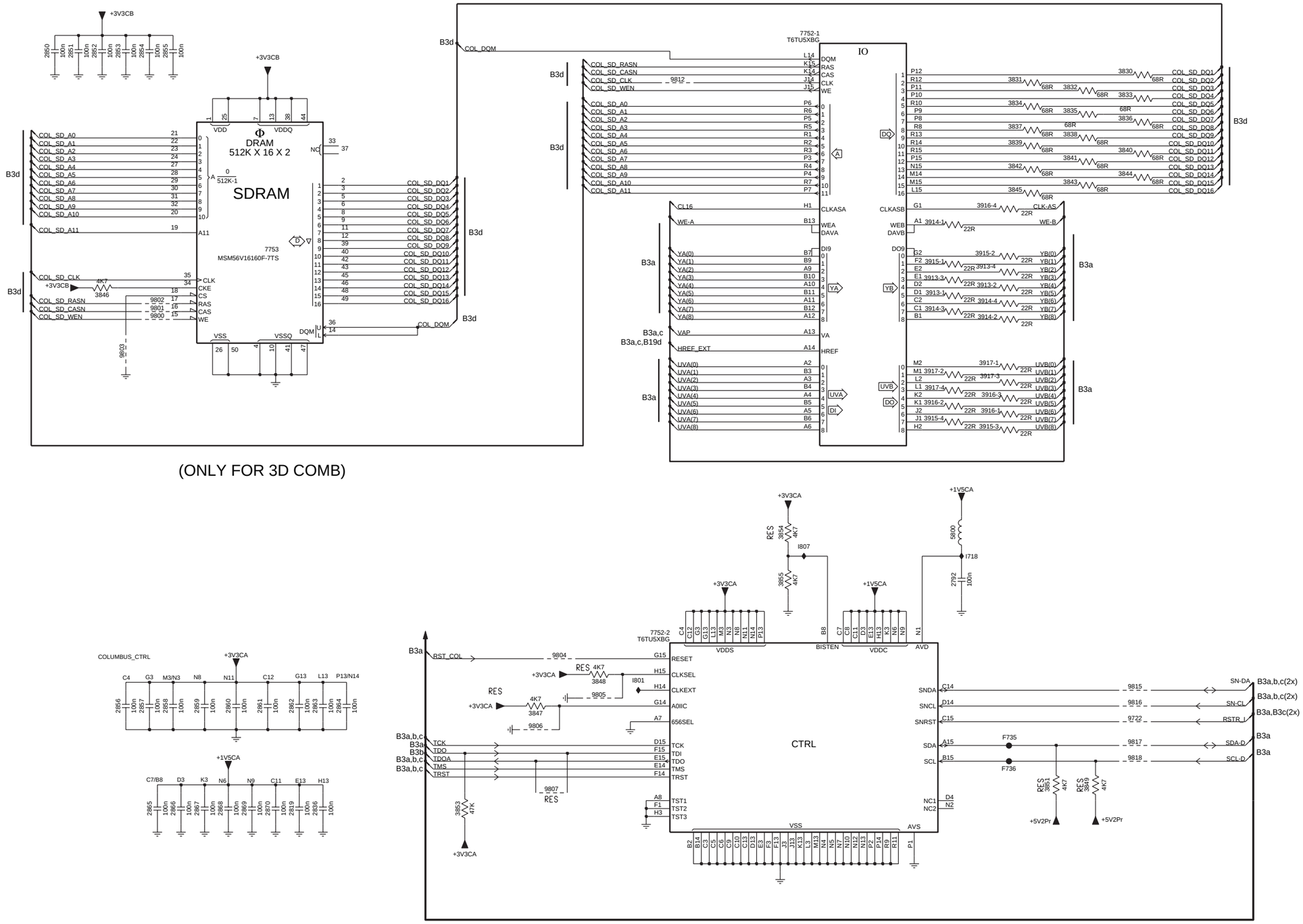
2750 B3	3803 E13	I733 F1
2751 B3	3804 D13	I734 G12
2752 B3	3811 H8	I735 D7
2753 B3	3812 H8	I736 C10
2755 B3	3814 H8	I806 H6
2756 B3	3815 H9	I808 E6
2758 A9	3817 H9	I809 E6
2759 B3	3818 H9	I811 E6
2760 B5	3819 H1	I812 E6
2761 B5	3820 H1	I816 G10
2762 B5	3821 F12	I817 E6
2763 B5	3822 F12	I818 E6
2764 B5	3823 F12	I819 D9
2765 A8	3824 G12	
2768 B4	3825 G12	
2769 B4	3850 H6	
2770 B4	3894 E7	
2771 B4	3895 B8	
2772 B4	3896 B8	
2773 B4	3897 A8	
2777 B4	3898 B10	
2778 B4	3900 H7	
2780 B4	3901 H6	
2781 B5	3902 H7	
2782 B5	3906 E11	
2784 B5	3911-1 G6	
2785 B5	3911-2 G7	
2786 D8	3911-3 G6	
2787 D9	3911-4 G7	
2788 F2	3912-1 G6	
2789 F2	3912-2 G7	
2790 F2	3912-3 G7	
2791 F2	3912-4 G6	
2793 F2	3918 G7	
2794 B4	3919 G6	
2795 B4	3921 G6	
2796 B4	7717 D8	
2797 B4	7718 D9	
2798 B4	7719 C11	
2799 B5	7720 C3	
2805 B3	7721 A8	
2808 B3	7725 F10	
2809 B3	9704 H2	
2812 B7	9705 H2	
2814 B10	9711 B10	
2815 A9	9712 E1	
2816 B10	9713 H12	
2821 B5	9714 H12	
2822 B5	9715 H6	
2823 E8	9716 F7	
2824 F2	9717 G12	
2825 E8	9718 G12	
2827 E8	9719 G12	
2830 B11	9721 H12	
2831 B11	9723 F1	
2832 B12	9730 C9	
2833 B12	9731 D8	
2834 B12	9732 C8	
2835 B12	9740 F2	
2925 H6	9750 D8	
2936 E11	9751 D9	
3729 B10	9752 D10	
3744 F11	9753 E6	
3745 G10	9754 E6	
3757 E8	9755 E2	
3762 C13	9756 E2	
3763 D13	9757 F2	
3764 D13	9758 F2	
3765 D9	9759 F6	
3766 D8	9760 F6	
3767 D13	9761 F6	
3768 D13	9762 F7	
3769 D13	9763 F1	
3770 D13	9764 F8	
3771 D7	9765 F2	
3772 D7	9766 F2	
3773 D7	9773 F6	
3774 D13	9774 G6	
3775 D13	9775 G6	
3776 D7	9777 F10	
3777 D13	9821 B10	
3778 D11	9822 B10	
3779 D13	9823 G7	
3780 D13	F714 C9	
3781 D13	F715 D9	
3782 D8	F718 F8	
3783 D9	F720 G10	
3784 D13	F765 H8	
3792 E7	F766 H8	
3793 F10	F767 H9	
3794 D7	I713 E2	
3795 E8	I714 E1	
3796 F7	I715 E6	
3797 F8	I716 F6	
3798 F1	I717 F8	
3799 F1	I719 F8	
3800 D7	I730 D8	
3801 E7	I731 E1	
3802 E8	I732 E1	

SSB: Columbus

B3D COLUMBUS

B3D

(ONLY FOR 3D COMB)



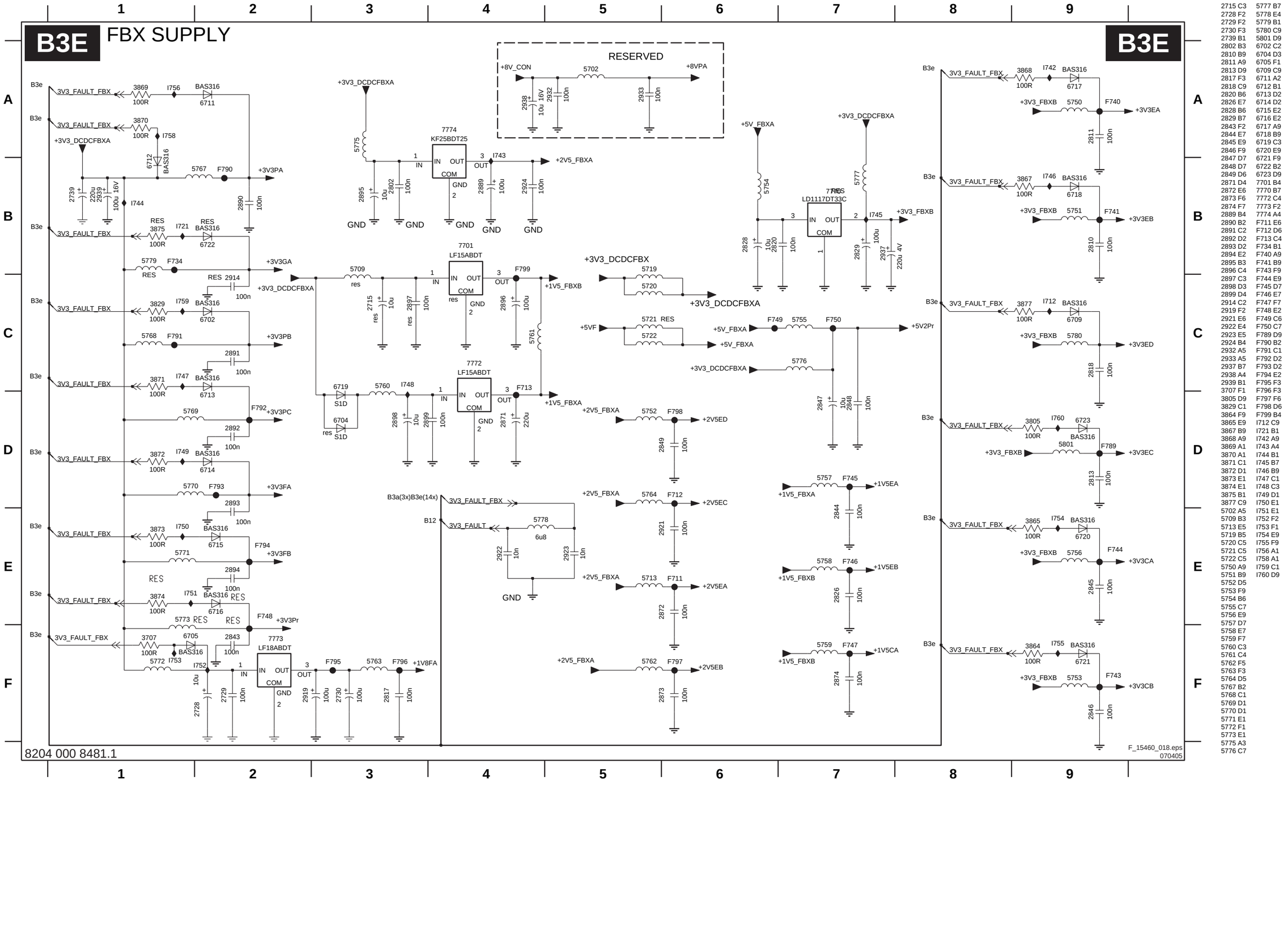
8204 000 8481.1

F_15460_017.eps
070405

2792 F9
2819 H3
2836 H3
2850 A1
2851 A1
2852 A1
2853 A2
2854 A2
2855 A2
2856 G2
2857 G2
2858 G2
2859 G2
2860 G3
2861 G3
2862 G3
2863 G3
2864 G4
2865 H2
2866 H2
2867 H2
2868 H2
2869 H3
2870 H3
3830 B11
3831 B10
3832 B10
3833 B11
3834 B10
3835 B10
3836 B11
3837 B10
3838 B10
3839 B10
3840 B11
3841 B10
3842 C10
3843 C10
3844 C11
3845 C10
3846 D1
3847 G5
3848 G6
3849 H10
3851 H10
3853 H5
3854 F8
3855 F8
3913-1 D9
3913-2 D9
3913-3 D9
3913-4 C9
3914-1 C9
3914-2 D9
3914-3 D9
3914-4 D9
3915-1 C9
3915-2 C9
3915-3 E9
3915-4 E9
3916-1 E9
3916-2 E9
3916-3 E9
3916-4 C9
3917-1 D9
3917-2 D9
3917-3 D9
3917-4 E9
5800 F9
7752-1 A8
7752-2 G7
7753 C3
9722 H11
9800 D2
9801 D2
9802 D2
9803 D2
9804 G6
9805 G6
9806 H5
9807 H5
9812 B7
9815 G11
9816 G11
9817 H11
9818 H11
F735 H10
F736 H10
I718 F9
I801 G6
I807 F8

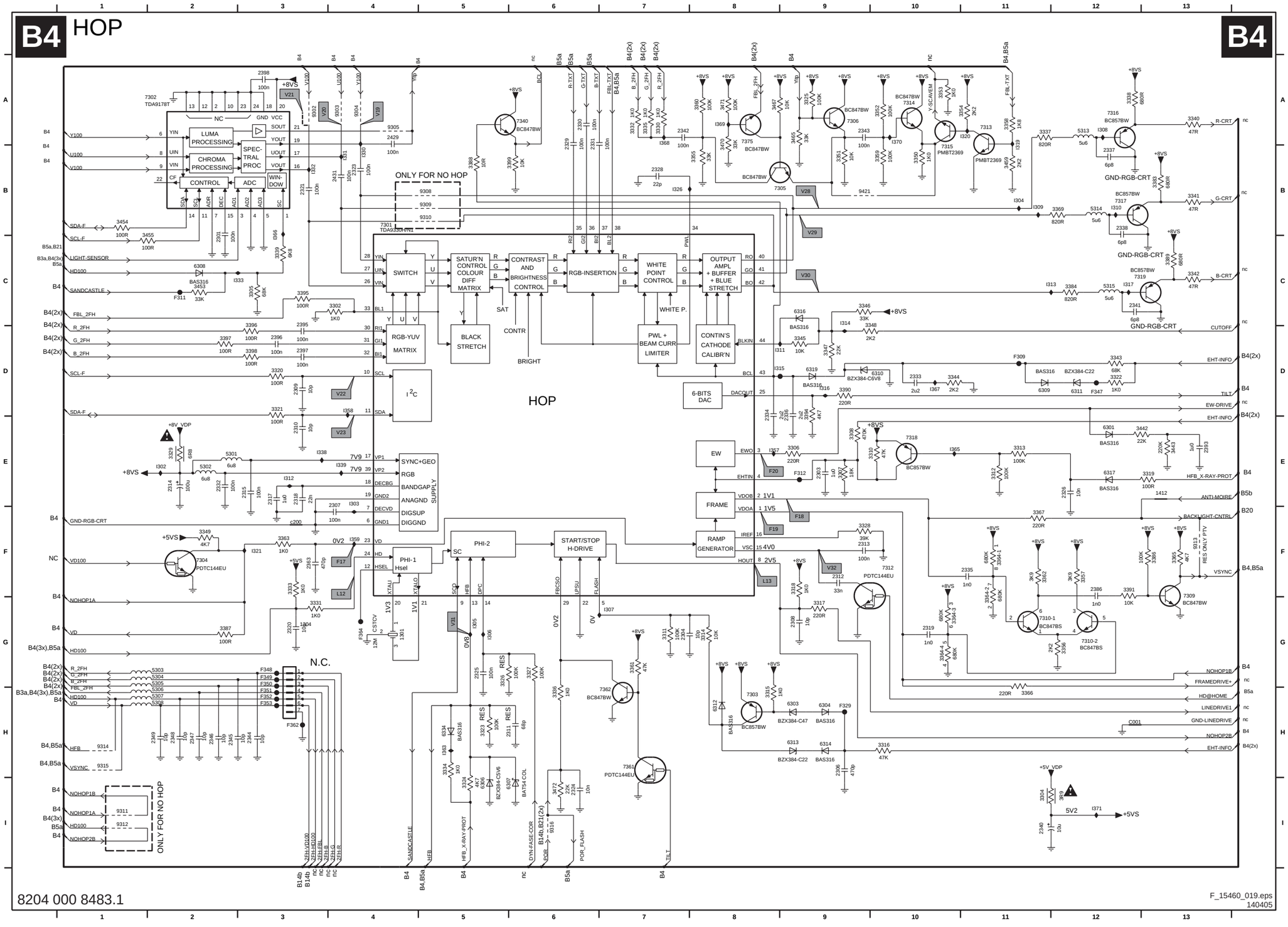
SSB: FBX Supply

B3E FBX SUPPLY



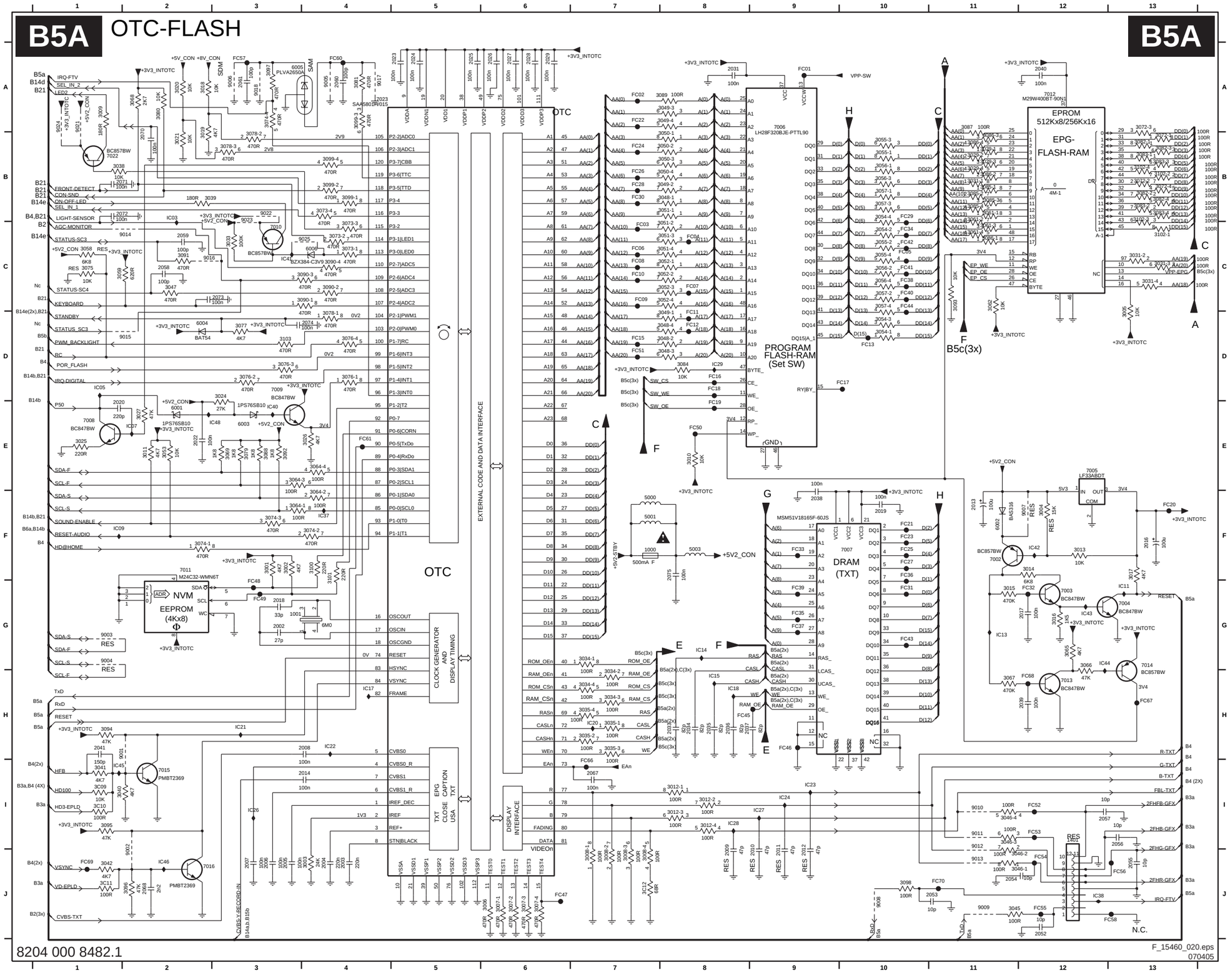
2715 C3	5777 B7	3707 F1	I744 B1	5719 B5	I754 E9	5762 F2	5776 C7		
2728 F2	5778 E4	3805 D9	I745 B7	5720 C5	I755 F9	5763 F3			
2729 F2	5779 B1	3829 C9	I746 B9	5721 C5	I756 A1	5764 D5			
2730 F3	5780 C9	3864 F9	I747 C1	5722 C5	I758 A1	5767 B2			
2739 B1	5801 D9	3865 E9	I748 C3	5750 A9	I759 C1	5768 C1			
2802 B3	6702 C2	3867 B9	I749 D1	5751 B9	I760 D9	5769 D1			
2810 B9	6704 D3	3868 A9	I751 E1	5752 D5		5770 D1			
2811 A9	6705 F1	3869 A1	I752 F1	5753 F9		5771 E1			
2813 D9	6709 C9	3870 A1	I753 F1	5754 B6		5772 F1			
2817 F3	6711 A2	3871 C1	I759 C1	5755 C7		5773 E1			
2818 C9	6712 B1	3872 D1	5702 A5	5756 E9		5775 A3			
2820 B6	6713 D2	3873 E1	5709 B3	5757 D7		5776 C7			
2826 E7	6714 D2	3874 E1	5713 E5	5758 E7					
2828 B6	6715 E2	3875 B1	5719 B5	5759 F7					
2829 B7	6716 E2	3877 C9	5720 C5	5760 C3					
2843 F2	6717 A9	3882 A5	5721 C5	5761 C4					
2844 E7	6718 B9	3885 B3	5722 C5	5762 F5					
2845 E9	6719 C3	3886 C4	5750 A9	5763 F3					
2846 F9	6720 E9	3887 C3	5751 B9	5764 D5					
2847 D7	6721 F9	3888 D3	5752 D5	5767 B2					
2848 D7	6722 B2	3899 D4	5753 F9	5768 C1					
2849 D6	6723 D9	3914 C2	5754 B6	5769 D1					
2871 D4	7701 B4	3919 F2	5755 C7	5770 D1					
2872 E6	7770 B7	3921 E6	5756 E9	5771 E1					
2873 F6	7772 C4	3922 D2	5757 D7	5772 F1					
2874 F7	7773 F2	3923 D2	5758 E7	5773 E1					
2889 B4	7774 A4	3924 E2	5759 F7	5775 A3					
2890 B2	7775 E6	3925 B3	5760 C3	5776 C7					
2891 C2	7776 E6	3926 C4	5761 C4						
2892 D2	7777 E6	3927 C3	5762 F5						
2893 D2	F734 B1	3928 D3	5763 F3						
2894 E2	F740 A9	3929 D4	5764 D5						
2895 B3	F741 B9	3932 E2	5767 B2						
2896 C4	F743 F9	3933 E2	5768 C1						
2897 C3	F744 E9	3934 F2	5769 D1						
2898 D3	F745 D7	3935 F3	5770 D1						
2899 D4	F746 E7	3936 F3	5771 E1						
2914 C2	F747 F7	3937 F3	5772 F1						
2919 F2	F748 E2	3938 A4	5773 E1						
2921 E6	F749 C6	3939 B1	5775 A3						
2922 E7	F750 C7	3707 F1	5776 C7						
2923 E5	F789 D9	3805 D9							
2924 B4	F790 B2	3829 C9							
2932 A5	F791 C1	3864 F9							
2933 A5	F792 D2	3865 E9							
2937 B7	F793 D2	3867 B9							
2938 A4	F794 E2	3868 A9							
2939 B1	F795 F3	3869 A1							
3707 F1	F796 F3	3870 A1							
3805 D9	F797 F6	3871 C1							
3829 C1	F798 D6	3872 D1							
3864 F9	F799 B4	3873 E1							
3865 E9	I712 C9	3874 E1							
3867 B9	I721 B1	3875 B1							
3868 A9	I742 A9	3877 C9							
3869 A1	I743 A4	5702 A5							
3870 A1	I744 B1	5709 B3							
3871 C1	I745 B7	5713 E5							
3872 D1	I746 B9	5719 B5							
3873 E1	I747 C1	5720 C5							
3874 E1	I748 C3	5721 C5							
3875 B1	I749 D1	5722 C5							
3877 C9	I750 E1	5750 A9							
5702 A5	I751 E1	5751 B9							
5709 B3	I752 F2	5752 D5							
5713 E5	I753 F1	5753 F9							
5719 B5	I754 E9	5754 B6							
5720 C5	I755 F9	5755 C7							
5721 C5	I756 A1	5756 E9							
5722 C5	I758 A1	5757 D7							
5750 A9	I759 C1	5758 E7							
5751 B9	I760 D9	5759 F7							
5752 D5		5760 C3							
5753 F9		5761 C4							
5754 B6		5762 F5							
5755 C7		5763 F3							
5756 E9		5764 D5							
5757 D7		5767 B2							
5758 E7		5768 C1							
5759 F7		5769 D1							
5760 C3		5770 D1							
5761 C4		5771 E1							
5762 F5		5772 F1							
5763 F3		5773 E1							
5764 D5		5775 A3							
5767 B2		5776 C7							
5768 C1									
5769 D1									
5770 D1									
5771 E1									
5772 F1									
5773 E1									
5775 A3									
5776 C7									

SSB: HOP



1301 G4	3342 C13	7314 A10
1304 G3	3343 D12	7315 A10
1412 E13	3344 D10	7316 A12
2301 B2	3345 D9	7317 B12
2303 E9	3346 C9	7318 E10
2304 G7	3347 D9	7319 C12
2306 H9	3348 D10	7340 A6
2307 F4	3349 F2	7361 H7
2308 G9	3350 B10	7362 H7
2309 D3	3351 B9	7375 A8
2310 E3	3352 A10	9302 A3
2311 H6	3353 A10	9303 A4
2312 F9	3354 A11	9304 A4
2313 F9	3355 B8	9305 A4
2314 E2	3356 G12	9308 B5
2315 E3	3357 F12	9309 B5
2317 E3	3358 A11	9310 B5
2318 E3	3359 B10	9311 I1
2319 G10	3360 A8	9312 I1
2320 G3	3361 G7	9313 F13
2321 B3	3362 F11	9314 H1
2323 B4	3363 F3	9315 H1
2324 I6	3364-1 F11	9316 I6
2325 G5	3364-2 F11	9421 B9
2326 E12	3364-3 G10	C001 H12
2328 B7	3364-4 G10	F309 D11
2329 A6	3365 F13	F311 C2
2330 A6	3366 H11	F312 E9
2331 A6	3367 F11	F329 H9
2332 E2	3369 B12	F347 D12
2333 D10	3383 B13	F348 G3
2334 D8	3384 C12	F349 G3
2335 F11	3386 F13	F350 G3
2336 D9	3387 G2	F351 H3
2337 B12	3388 B5	F352 H3
2338 B12	3389 C13	F353 H3
2340 I11	3390 D9	F362 H3
2341 C12	3391 F12	F364 F4
2342 A7	3394 D9	I302 E2
2343 A9	3395 C3	I303 E4
2344 H3	3396 D3	I304 B11
2345 H2	3397 D2	I305 G5
2346 H2	3398 D3	I306 G5
2347 H2	3399 B6	I307 G7
2348 H2	3442 E13	I308 A12
2349 H2	3443 E13	I309 B11
2363 F3	3453 C2	I310 B12
2386 F12	3454 B2	I311 D9
2393 E13	3455 C2	I312 E3
2395 D3	3459 B11	I313 C12
2396 D3	3465 A9	I314 C9
2397 D3	3467 A8	I315 D8
2398 A3	3470 A8	I316 D9
2429 A4	3471 A8	I317 C12
2431 B4	3472 I6	I319 A11
3302 C4	5301 E2	I320 A11
3304 I11	5302 E2	I321 F3
3305 C3	5303 G2	I326 B7
3306 E9	5304 G2	I330 B4
3307 E9	5305 G2	I331 B4
3308 E9	5306 H2	I332 B3
3310 E10	5307 H2	I333 C3
3311 G7	5308 H2	I338 E3
3312 E11	5313 A12	I339 E4
3313 E11	5314 B12	I357 E8
3314 G8	5315 C12	I358 D4
3315 H8	6301 E12	I359 F4
3316 H10	6303 H9	I363 H5
3317 G9	6304 H9	I365 E10
3318 F9	6306 I5	I366 B3
3319 E13	6307 I6	I367 D10
3320 D3	6308 C2	I368 A7
3321 D3	6309 D11	I369 A8
3322 D12	6310 D10	I370 A10
3323 H5	6311 D12	I371 I12
3324 I5	6312 H8	c200 F3
3325 A9	6313 H9	
3326 G5	6314 H9	
3327 G6	6316 C9	
3328 F9	6317 E12	
3329 E2	6319 D9	
3330 A7	6334 H5	
3331 G3	7301 B4	
3332 A7	7302 A1	
3333 F3	7303 H8	
3334 H5	7304 F2	
3335 A7	7305 B9	
3336 H6	7306 A9	
3337 A11	7309 G13	
3338 A12	7310-1 G11	
3339 C3	7310-2 G12	
3340 A13	7312 F10	
3341 B13	7313 A11	

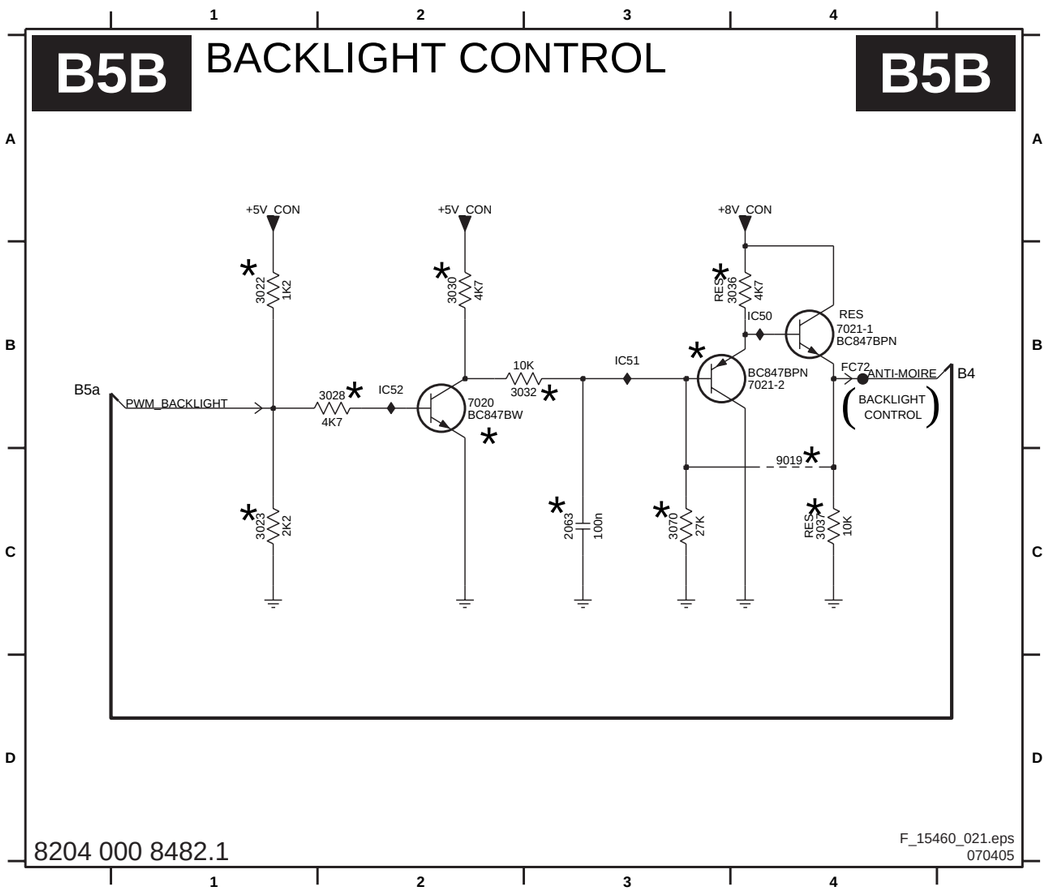
SSB: OTC-Flash



1000 F7	3031-1 B11	3078-1 D4	9017 A4	IC43 G12
1001 G3	3031-2 C13	3078-2 B3	9018 A3	IC44 G12
1401 I12	3031-3 C13	3078-3 B3	9021 A1	IC45 I1
2002 G3	3031-4 C13	3079 E3	9022 B3	IC46 J2
2003 J4	3033 C3	3080 A2	9023 B3	IC48 E3
2004 J4	3034-1 G7	3081 A4	9024 A1	
2005 J3	3034-2 H7	3082-1 B13	9025 C4	
2006 J3	3034-3 H7	3082-2 B13	FC01 A9	
2007 J3	3034-4 H7	3082-3 B13	FC02 A7	
2008 H4	3035-1 H7	3082-4 B13	FC03 C7	
2009 J8	3035-2 H7	3083-1 B13	FC04 C8	
2010 J9	3035-3 H7	3083-2 B13	FC05 C10	
2011 J9	3035-4 H7	3083-3 B13	FC06 C7	
2012 J9	3038 B1	3083-4 B13	FC07 C8	
2013 F11	3039 B2	3084 D8	FC08 C7	
2014 I4	3040 I1	3085-1 B11	FC09 C7	
2016 F13	3041 I1	3085-2 B11	FC10 C7	
2017 G12	3042 J1	3085-3 B11	FC11 D8	
2018 G3	3045 J11	3085-4 B11	FC12 D8	
2019 F10	3046-1 J12	3086-1 C11	FC13 D10	
2020 E1	3046-2 J12	3086-2 B11	FC15 D7	
2022 E2	3046-3 I11	3086-3 B11	FC16 D8	
2023 A5	3046-4 I11	3086-4 B11	FC17 D10	
2024 A5	3047 C2	3087 A11	FC18 D8	
2025 A5	3048-1 B8	3088 E3	FC19 E8	
2026 A6	3048-2 D8	3089 A8	FC20 F13	
2027 A6	3048-3 D8	3090-1 C4	FC21 F10	
2028 A6	3048-4 D8	3090-2 C4	FC22 A7	
2029 A6	3049-1 D8	3090-3 C4	FC23 F10	
2031 A8	3049-2 B8	3090-4 C4	FC24 B7	
2033 H8	3049-3 A8	3091 C2	FC25 F10	
2034 H8	3049-4 A8	3092 E3	FC26 B7	
2035 H8	3050-1 B8	3093 C11	FC27 F10	
2036 H8	3050-2 B8	3094 H1	FC28 B7	
2037 H8	3050-3 B8	3095 I1	FC29 B10	
2038 F9	3050-4 B8	3096 J2	FC30 B7	
2039 H12	3051-1 B8	3097 A3	FC31 G10	
2040 A12	3051-2 C8	3098 J10	FC32 G12	
2041 H1	3051-3 C8	3099-1 B4	FC33 F9	
2052 J12	3051-4 C8	3099-2 B4	FC34 C10	
2053 J11	3052-1 C8	3099-3 A4	FC35 G9	
2054 J11	3052-2 C8	3099-4 B4	FC36 F10	
2055 J13	3052-3 C8	3100 F4	FC37 G9	
2056 I13	3052-4 C8	3101 F4	FC38 C10	
2057 I12	3053 E2	3102-1 C13	FC39 G9	
2058 C2	3054-1 D10	3102-2 B13	FC40 C10	
2059 C2	3054-2 C10	3102-3 B13	FC41 C10	
2060 A4	3054-3 D10	3102-4 B13	FC42 C10	
2061 A3	3054-4 B10	3103 D3	FC43 G10	
2067 I7	3055-1 B10	3C09 I1	FC44 C10	
2068 J2	3055-2 C10	3C10 I1	FC45 H8	
2070 B2	3055-3 B10	3C11 J1	FC46 H9	
2071 B1	3055-4 C10	3C12 J7	FC47 J6	
2072 B1	3056-1 B10	5000 F7	FC48 G3	
2073 C3	3056-2 C10	5001 F7	FC49 G3	
2074 D4	3056-3 B10	5003 F8	FC50 E8	
2075 F8	3056-4 C10	6001 E2	FC51 D7	
3001 F3	3057-1 B10	6002 F11	FC52 I12	
3002 F3	3057-2 C10	6003 E3	FC53 I12	
3003 J4	3057-3 B10	6004 D2	FC54 J12	
3004 F12	3057-4 C10	6005 A3	FC55 J12	
3005 D13	3058 C1	6006 C4	FC56 J13	
3006 J6	3059 C1	7002 F11	FC57 A3	
3007-1 J6	3061-1 B11	7003 G12	FC58 J13	
3007-2 J6	3061-2 B11	7004 G13	FC60 A4	
3007-3 J6	3061-3 C11	7005 E12	FC61 E4	
3007-4 J6	3061-4 C11	7006 A9	FC66 I7	
3008-1 J7	3062 C11	7007 F10	FC67 H13	
3008-2 J7	3064-1 F3	7008 E1	FC68 H12	
3008-3 J7	3064-2 F4	7009 D3	FC69 J1	
3008-4 J7	3064-3 E3	7010 C3	FC70 J11	
3009 A1	3064-4 E4	7011 F2	IC03 B2	
3010 E8	3065 G12	7012 A12	IC05 D1	
3011 E2	3066 G12	7013 H12	IC07 E2	
3012-1 I8	3067 H11	7014 G13	IC09 F1	
3012-2 I8	3068 A2	7015 I2	IC11 G13	
3012-3 I8	3069 E3	7016 J2	IC13 G11	
3012-4 I8	3072-1 B13	7022 B1	IC14 G8	
3013 F12	3072-2 B13	7023 A4	IC15 H8	
3014 F12	3072-3 A13	9001 H2	IC17 H4	
3015 G11	3072-4 B13	9002 J2	IC18 H8	
3016 G12	3073-1 C4	9003 G1	IC20 H7	
3017 F13	3073-2 C4	9004 G1	IC21 H3	
3018 A2	3073-3 C4	9005 A4	IC22 H4	
3019 B2	3073-4 B4	9006 A3	IC23 I9	
3020 A2	3074-1 F2	9007 F12	IC24 I9	
3021 B2	3074-2 F4	9008 J10	IC26 I3	
3024 D3	3074-3 F3	9009 J11	IC27 I9	
3025 E1	3074-4 A3	9010 I11	IC28 I8	
3026 E4	3075 C1	9011 I11	IC29 D8	
3027 E2	3076-1 D4	9012 I11	IC37 F4	
3029-1 B11	3076-2 D3	9013 J11	IC38 J12	
3029-2 B11	3076-3 D3	9014 C2	IC40 E3	
3029-3 B11	3076-4 D4	9015 D2	IC41 C3	
3029-4 B11	3077 D3	9016 C2	IC42 F12	

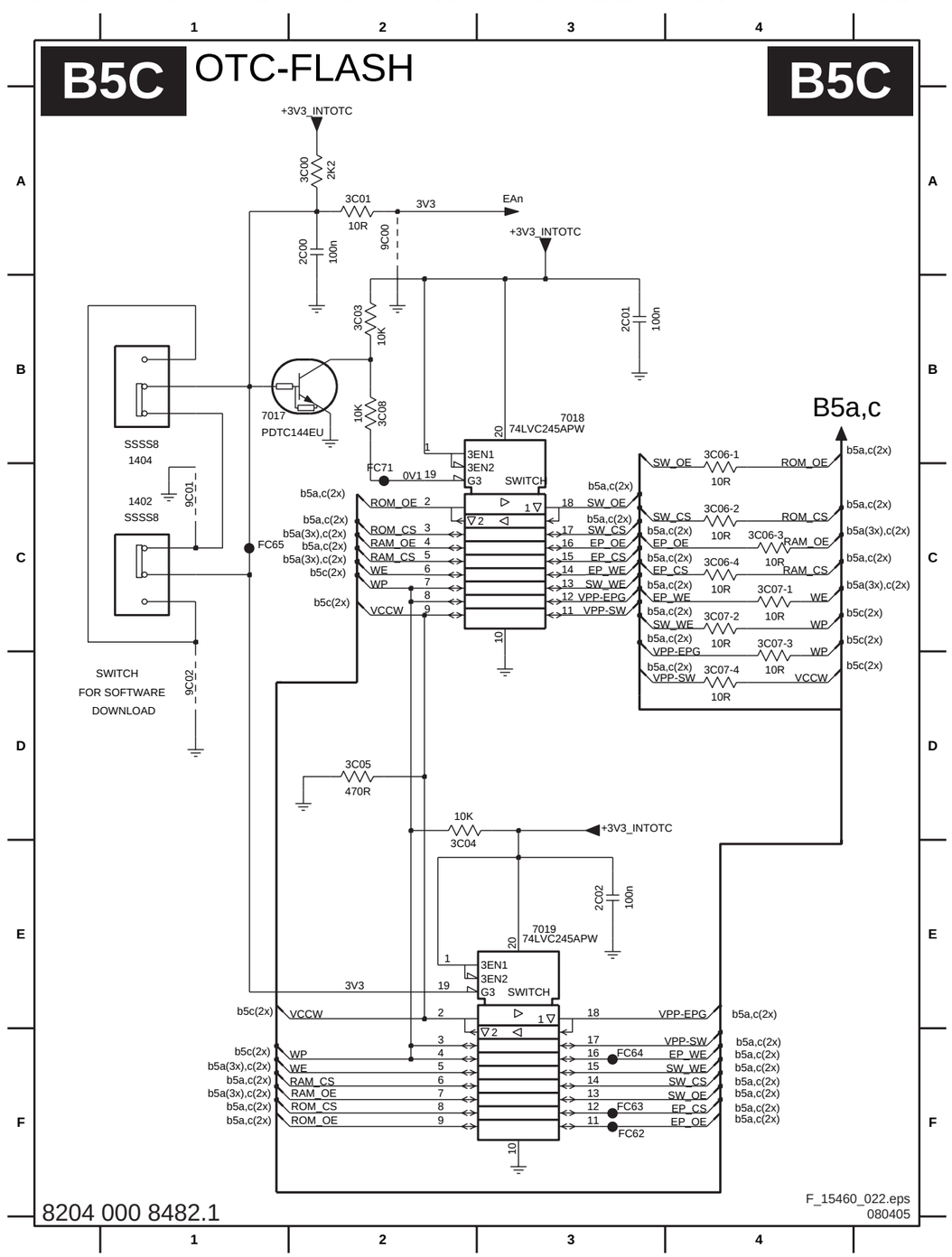
SSB: Backlight Control

2063 C3 3023 C1 3030 B2 3036 B4 3070 C3 7021-1 B4 9019 C4 IC50 B4 IC52 B2
3022 B1 3028 B2 3032 B2 3037 C4 7020 B2 7021-2 B4 FC72 B4 IC51 B3

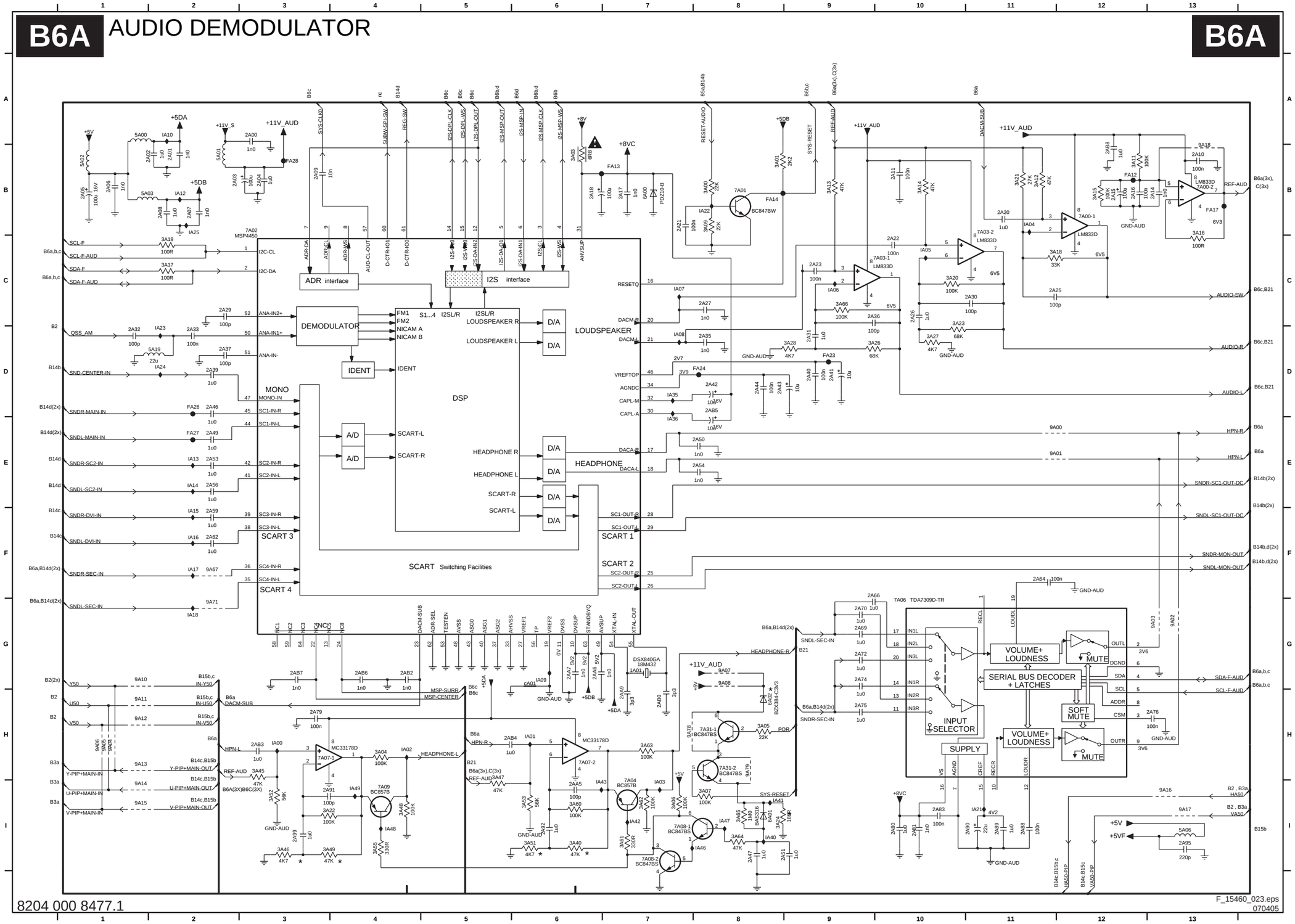


SSB: OTC-Flash

1402 C1 2C01 B3 3C01 A2 3C05 D2 3C06-3 C4 3C07-2 C4 3C08 B2 7019 E3 9C02 D1 FC64 F3
1404 B1 2C02 E3 3C03 B2 3C06-1 B4 3C06-4 C4 3C07-3 C4 7017 B1 9C00 A2 FC62 F3 FC65 C1
2C00 A2 3C00 A2 3C04 D2 3C06-2 C4 3C07-1 C4 3C07-4 D4 7018 B3 9C01 C1 FC63 F3 FC71 C2



SSB: Audio Demodulator



1A00 G7	3A15 B12	IA08 D7
1A01 G7	3A16 B13	IA09 G6
2A00 A3	3A17 C2	IA10 A2
2A01 B2	3A18 C11	IA12 B2
2A02 B2	3A19 C2	IA13 E2
2A03 B2	3A20 C10	IA14 E2
2A04 B3	3A21 B11	IA15 F2
2A05 B1	3A22 I3	IA16 F2
2A06 B1	3A23 C10	IA17 F2
2A07 B2	3A24 I8	IA18 G2
2A08 B2	3A26 D9	IA21 I11
2A09 B3	3A27 D10	IA22 B8
2A10 B13	3A28 D9	IA23 D2
2A11 B10	3A40 I6	IA24 D2
2A14 B13	3A45 H3	IA25 B2
2A15 B12	3A46 I3	IA35 D7
2A16 B12	3A47 H5	IA36 E7
2A17 B7	3A48 I4	IA40 I8
2A18 B6	3A49 I3	IA41 I8
2A20 B11	3A51 I6	IA42 I7
2A21 B7	3A52 I3	IA43 I6
2A22 C10	3A53 I6	IA46 I8
2A23 C9	3A55 I4	IA47 I8
2A25 C11	3A60 I6	IA48 I4
2A26 C10	3A61 I7	IA49 I4
2A27 C8	3A62 I7	cA01 G6
2A29 C2	3A63 H7	
2A30 C11	3A64 I8	
2A31 D9	3A65 I8	
2A32 D1	3A66 C9	
2A33 D2	5A00 A1	
2A35 D8	5A01 B2	
2A36 C9	5A02 B1	
2A37 D2	5A03 B1	
2A39 D2	5A06 I13	
2A40 D9	5A19 D2	
2A41 D9	6A00 B7	
2A42 D8	6A01 I8	
2A43 D8	6A02 H8	
2A44 D8	7A00-1 B12	
2A46 D2	7A00-2 B13	
2A47 I8	7A01 B8	
2A49 E2	7A02 B3	
2A50 E8	7A03-1 C9	
2A51 I9	7A03-2 B11	
2A53 E2	7A04 I7	
2A54 E8	7A06 G10	
2A56 E2	7A07-1 H3	
2A59 F2	7A07-2 H6	
2A62 F2	7A08-1 I7	
2A64 F11	7A08-2 I7	
2A66 F9	7A09 I4	
2A69 G9	7A31-1 H8	
2A70 G9	7A31-2 H8	
2A72 G9	9A00 E11	
2A74 G9	9A01 E11	
2A75 H9	9A02 G13	
2A76 H13	9A03 G13	
2A79 H3	9A04 H1	
2A80 I10	9A05 H1	
2A81 I10	9A06 H1	
2A83 I10	9A07 G8	
2A88 I11	9A08 G8	
2A89 I11	9A10 G1	
2A90 I11	9A11 H1	
2A91 I3	9A12 H1	
2A92 I6	9A13 H1	
2A95 I13	9A14 I1	
2AA9 I3	9A15 I1	
2AA5 I6	9A16 I13	
2AA6 G6	9A17 I13	
2AA7 G6	9A18 B13	
2AA9 H7	9A67 F2	
2AB0 H7	9A71 G2	
2AB2 G4	9A78 H7	
2AB3 H3	9A79 H8	
2AB4 H5	FA12 B12	
2AB5 D8	FA13 B7	
2AB6 G4	FA14 B8	
2AB7 G3	FA17 B13	
2AB8 B12	FA23 D9	
3A00 B8	FA24 D8	
3A01 B8	FA26 D2	
3A03 B6	FA27 E2	
3A04 H4	FA28 B3	
3A05 H8	IA00 H3	
3A06 I7	IA01 H6	
3A07 I8	IA02 H4	
3A09 B8	IA03 I7	
3A11 B12	IA04 B11	
3A12 B11	IA05 C10	
3A13 B9	IA06 C9	
3A14 B10	IA07 C7	

SSB: Dolby Digital Decoder

B6B DOLBY DIGITAL DECODER

B6B

DOLBY DIGITAL
AND
MPEG-1 LAYER-2
AUDIO DECODER

7A30
IC MAS3528E

+5M
2AC1 220p
2AD3 1u0
2AD5 1n0
2AD1 1u0
2AD0 1n0
2AD6 1n0
2AD4 1u0
XVDD 23
AVDD 8
VDD 2

5A38
2AF4 100n
2AF3 100u
+5V

18 PI4
24 PI8
28 PI12
29 PI13
30 SID_PI14
31 SII_PI15
32 SIC_PI16
33 PI17
34 PI18
35 PI19
41 _RTW
42 _RTR
43 _EOD
44 SYNC
17 SPDIFOUT
25 SOC
26 SOI
27 SOD
14 SOD1
15 SOD2
16 SOD3
13 CLKO
12 NC2
11 NC1
22 XVSS
7 AVSS
1 VSS

A2 A3 A4 A5 A6 A7 A8

B6c I2S-DD-CLK
B6c I2S-DD-WS
B6c I2S-DD-OUT

SID 21 I2S-MSP-OUT B6a,d
SII 20 I2S-MSP-WS B6a,d
SIC 19 I2S-MSP-CLK B6a

2AE2 1n0
IA71 2AE3 10n
2AE5 10n
IA72 3A74 75R
IA75 2AF0 10n
3A77 75R

36 _PCS
37 PR
39 SPREF 3V1
38 SPDI_1
40 SPDI_2
9 XTI
10 XTO
6 TE 4V9
5 _POR
4 SCL
3 SDA

SPDIF-IN1 B14b
SPDIF-BO-OUT B14b
SYS-CLK1 B6c
SYS-RESET B6a,C
SCL-F-AUD B6a(2x),C
SDA-F-AUD B6a(2x),C

2AC1 B4
2AD0 B6
2AD1 B6
2AD3 B4
2AD4 B6
2AD5 B5
2AD6 B6
2AE2 D8
2AE3 D7
2AE5 D7
2AF0 E6
2AF3 C8
2AF4 C7
3A74 D7
3A77 E7
5A38 B8
7A30 B4
IA71 D7
IA72 D7
IA75 D7

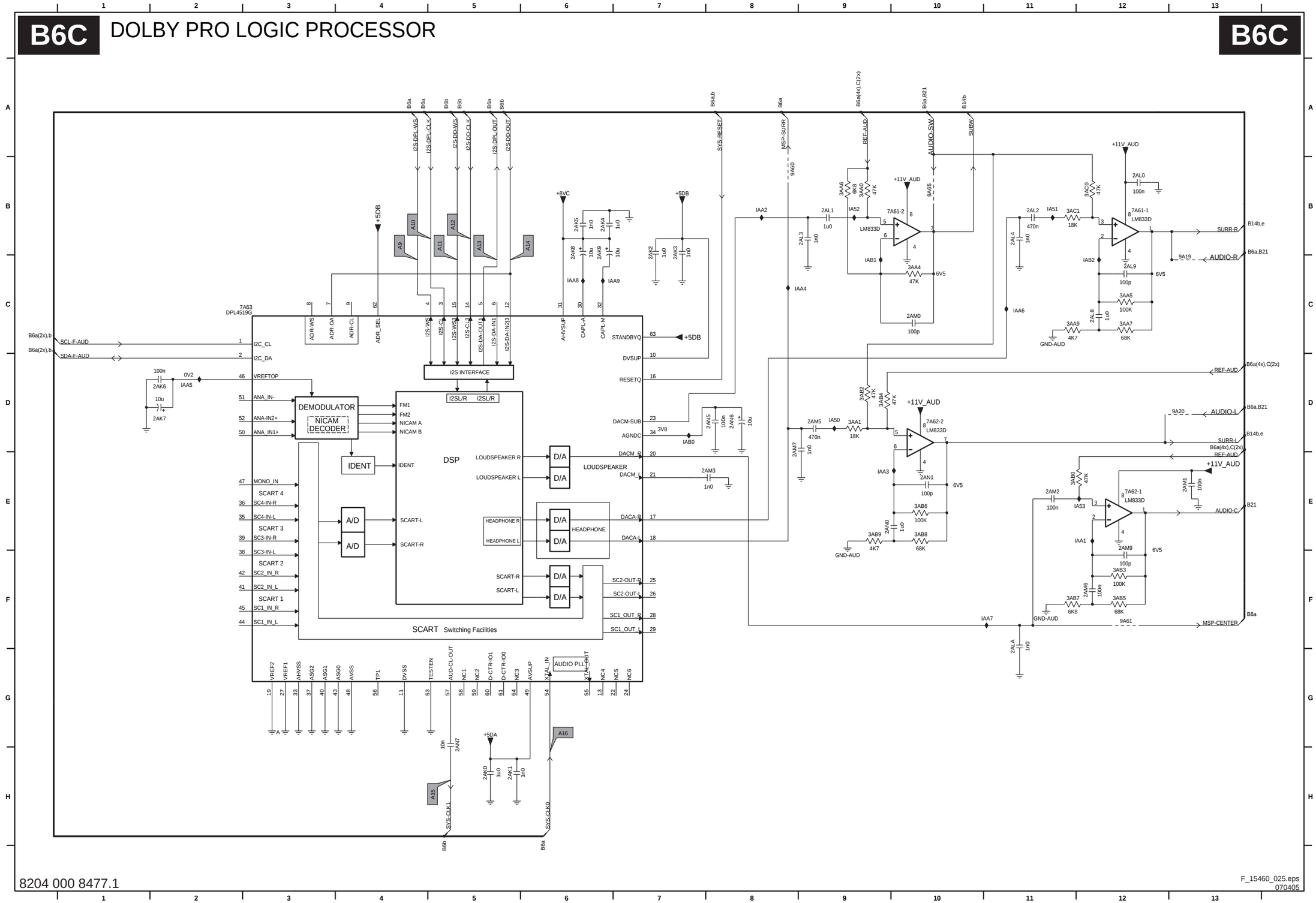
8204 000 8477.1

F_15460_024.eps
070405

SSB: Dolby Pro Logic Processor

B6C DOLBY PRO LOGIC PROCESSOR

B6C



8204 000 8477.1

F_15460_025.eps
070405

2AK0 G5
2AK1 G5
2AK2 B7
2AK3 B7
2AK4 B6
2AK5 B6
2AK6 D2
2AK7 D2
2AK8 B6
2AK9 B6
2AL0 B12
2AL1 B9
2AL2 B11
2AL3 B9
2AL4 B11
2AL8 C12
2AL9 C12
2ALA F11
2AM0 C10
2AM1 E13
2AM2 E11
2AM3 E7
2AM5 D9
2AM6 F12
2AM7 D8
2AM9 E12
2AN0 E9
2AN1 E10
2AN5 D7
2AN6 D8
2AN7 G5
3AA0 B9
3AA1 D9
3AA4 C10
3AA5 C12
3AA6 B9
3AA7 C12
3AA9 C11
3AB0 E11
3AB2 D9
3AB3 F12
3AB4 D9
3AB5 F12
3AB6 E10
3AB7 F11
3AB8 E10
3AB9 E9
3AC0 B12
3AC1 B11
7A61-A B12
7A61-B B10
7A62-A E12
7A62-B D10
7A63 C3
9A19 C13
9A20 D13
9A60 B8
9A61 F12
9A65 B10
IA50 D9
IA51 B11
IA52 B9
IA53 E12
IAA1 E12
IAA2 B8
IAA3 E9
IAA4 C9
IAA5 D2
IAA6 C11
IAA7 F11
IAA8 C6
IAA9 C7
IAB0 D7
IAB1 C9
IAB2 C12

SSB: Audio Delay

B6D AUDIO DELAY

B6D

2A12 B2
2A13 D2
2A19 F5
2A24 C7
2A34 C9
2A38 B9
2A45 B7
3A02 F5
3A67 E5
5A07 B9
7A11 A1
7A12 D1
7A13 E5
7A14 D7
7A15 D9
7A16 A5
9A21 D9
9A22 D9
9A23 D9
9A24 D9
9A25 F8
9A72 D9
9A73 D9
9A74 D9
9A75 D9
FA00 B9
FA01 E5
FA02 E5
FA03 D9
FA04 E6

7A11 M74HC590T
7A12 M74HC590T
7A16 CY7C199B-15ZC
7A13 BC847BW
7A14 74HCT573PW
7A15 74HCT573PW
+5D
+5M
2A12 100n
2A13 100n
2A45 100n
2A24 100n
2A34 100n
2A38 1u0
3A67 470R
3A02 47K
2A19 27p
5A07
FA00
FA01
FA02
FA03
FA04
9A72
9A73
9A74
9A75
9A21
9A22
9A23
9A24
9A25
I2S-MSP-CLK B6a,b
I2S-MSP-OUT B6a,b
I2S-MSP-IN B6a

8204 000 8477.1

F_15460_026.eps
070405

SSB: DC/DC Convertor

1U01 A1 2U01 C8 2U02 C2 2U03 C8 2U04 C8 2U05 C8 2U06 C8 2U07 C3 2U08 C8 2U09 D6 2U10 A3 2U11 E10 2U12 E7 2U13 E14 2U14 B5 2U15 A1 2U16 C2 2U17 D5 2U18 B2 2U19 H1 2U20 H4 2U21 B3 2U22 E8 2U23 C13 2U24 G8 2U25 H5 2U26 H6 2U27 D2 2U28 E2 2U29 C9 2U30 C1 2U31 D13 2U32 C1 2U33 F10 2U34 G11 2U35 H8 2U36 B6 2U37 B6 2U38 A3 2U39 F6 2U40 F3 2U41 F7 3U01 C14 3U02 B1 3U03 C1 3U04 C2 3U05 C3 3U06 C12 3U07 C9 3U08 C11 3U09 C4 3U10 D14 3U11 D4 3U12 G10 3U13 D7 3U14 D1 3U15 D14 3U16 D11 3U17 D7 3U18 E11 3U19 E8 3U20 E14 3U21 E2 3U22 E12 3U23 E14 3U24 G6 3U25 F2 3U26 H4 3U27 H10 3U28 E1 3U29 C2 3U30 C6 3U31 F9 3U32 H5 3U33 H10 3U34 D2 3U35 E2 3U36 B2 3U37 B2 3U38 G9 3U39 G9 3U40 G9 3U41 H1 3U42 H2 3U43 H2 3U44 H6 3U45 H7 3U46 C10 3U47 G5 3U51 A5 3U52 F10 3U53 F4 3U54 H7 3U55 E9 3U56 B6 3U57 F5 3U58 A6 3U59 G12 3U60 F4 3U61 F5 3U62 F6 3U63 F7 3U64 F7 3U65 H4 3U67 G5 3U68 G6 3U69 F6 5U01 B8 5U02 A2 5U03 A4 5U04 B5 5U05 C12 5U06 D12 5U07 D14 5U07 E3 6U01 A2 6U02 A2 6U03 A4 6U04 F7 6U05 B1 6U06 C9 6U07 D14 6U08 E3 6U09 E3 6U10 H1 6U11 H2 6U12 F9 6U13 E10 6U14 H8 6U15 C8 6U16 F7 6U17 D14 7U01 B2 7U02 C4 7U03 C7 7U04 C5 7U05 D9 7U06-A D12 7U06-B D12 7U07-1 G10 7U07-2 F8 7U08 D5 7U09 E1 7U10 G4 7U11 E3 7U12 H3 7U13-1 F5 7U13-2 F4 FU01 B2 FU02 C1 FU03 B9 FU04 B9 FU05 C8 FU06 G6 FU07 H1 FU08 C9 FU09 D13 IU01 B2 IU02 C1 IU03 D1 IU04 E3 IU05 D3 IU06 D4 IU07 D4 IU08 C4 IU09 B4 IU10 A4 IU11 A5 IU13 D8 IU14 D6 IU15 A8 IU16 C11 IU17 D9 IU18 D11 IU19 C14 IU20 D10 IU21 D14 IU22 E12 IU25 H4 IU26 E2 IU27 G3 IU28 H2 IU30 C3 IU31 C2 IU32 E10 IU34 H6 IU35 G7 IU36 G9 IU37 F8 IU38 G9 IU39 G9 IU40 G10 IU41 H9 IU42 C6 IU43 E10 IU44 F11 IU45 F9 IU46 F5 IU47 F6 cU01 H12

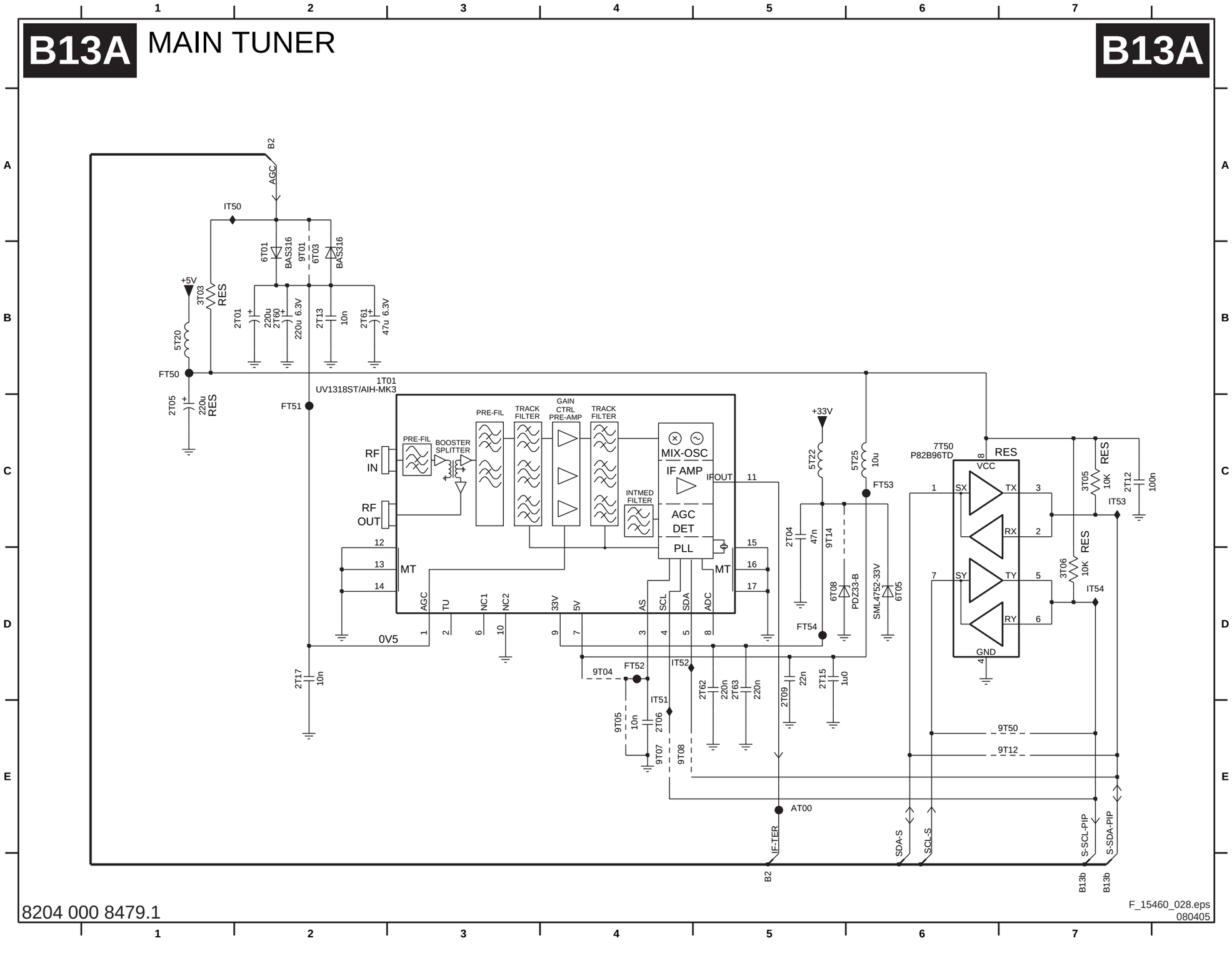
B12 DC/DC - CONVERTOR

B12

+11V
1U01 T 1500mA 420
5U02 10u
2U15 100u
6U01 BAS316
2U10 22u
2U38 220u 16V res
GND
21V6
IU10
6U03 BAS316
3U51 22R
IU11
2U03 1u0
6U04 BAS316
2U14 470n
2U04 470n
3U56 4K7
2U36 100n
2U37 2n2
GND_SUPPLY
3U57 10K
GND-ILINK
5U01 res
2U01 res
2n2
IU15
6U02 res
STPS2L30A
FU03
+3V3-ILINK
2U02 res 47u
FU04
GND-ILINK
IU09
5U03 10u
5U04
FU05
5U07
FU08
IU16
7U01 BC857B
IU01
21V4
3U02 1K0
6U05 BZX384-C12
2U18 120p
2U30 120p
3U03 33K
IU02
3U31 120R
3U30 120R
3U29 10R
3U04 120R
2U16 4n7
2U32 3n3
IU31
2U05 1n0
IU03
3U14 1K0
3U44 1M0
2U27 6n8
2U21 470n
7U02 BC857B
IU30
3U05 1K0
IU08
2U06 22u
2U07 82p
3U09 5K6
IU07
3U11 120R
IU05
IU06
2U17 470n
GND_SUPPLY
7U04 SI4410DY
SI4410DY 7U03
2U08 22u
BZG05C3V9
6U06
3U07 22R
2U29 330u 6.3V res
IU17
GND_SUPPLY
7U05 BC857BW
3U46 47K 1%
3U08 1K5 1%
3U06 470R
IU18
7U06-1 BC847BS
3U16 120R
IU20
2U11 1n0
3U18 1K0 1%
1V6
3V4
5U05 10u
+3V3_SIM
2U23 100u
5U06 10u
+3V3_DCDCFBX
FU09
2U31 100u
7U06-2 BC847BS
1V7
IU22
3U22 270R
3U01 1K0
3U70 1K0
IU19
6V9
6U07 PDZ6.8-B
6U17 PDZ6.8-B
3U10 1R0
3U15 3K3 1%
IU21
3U20 1K0 1%
2U13 220n
3U23 1R0
7U09 BC817-25
IU32
3U45 1M0
2U28 6n8
3U28 47K
3U21 47K
6U08 BAT54 COL
6U09 BAT54 COL
IU04
7U11 BC847BW
IU26
3U25 220K
7U08 BC817-25
IU14
3U17 4R7
IU13
2U12 10n
3U19 4K7
2U09 1n0
3U13 10K
3U55 1K0
PD28.2-B 6U13
IU43
IU45
3U53 18K
3U52 1K0
BZX384-C5V1 6U12
2U33 1u0
3U37 22K
IU37
7U07-2 BC847BPN
3U38 2K2
IU38
7U07-1 BC847BPN
IU44
3U12 22K
2U34 22n
3U40 150K
2U24 1n0
IU36
3U39 22K
IU39
IU40
3U58 1R0 res
3U59 1R0 res
cU01
GND
3U43 22K
FU06
3U24 22K
IU35
3V3_FAULT
B3e,B14a,B19b,B13c
IU27
7U10 BC847BW
7U12 BC847BW
IU28
0V7
FU07
6U10 BZX384-C15
3U32 18K
2U19 100n
6U11 BAS316
3U33 10K
2U20 1u0
3U34 330K
3U26 22K
2U25 100n
IU25
10K
3U42 10K
IU34
3U35 10K
2U22 1u0
2U26 100n
2U35 1u0
6U14 BAV99 COL
IU41
3U41 1K0
3U54 100R
7U13-1 BC847BPN
7U13-2 BC847BPN
IU46
3U65 1K0
IU47
3U63 2K2
2U39 100n
3U64 1K0
2U40 2n2
3U66 10K
2U41 6n8
BZX384-C5V1 6U16
3U67 100R
3U68 10K
3U69 1K0
2U42 47n
3U60 1K0
3U61 10K
3U62 1K0
BC847BPN 7U13-2
GND_SUPPLY
8204 000 8480.1
F_15460_027.eps 070405

SSB: Main Tuner

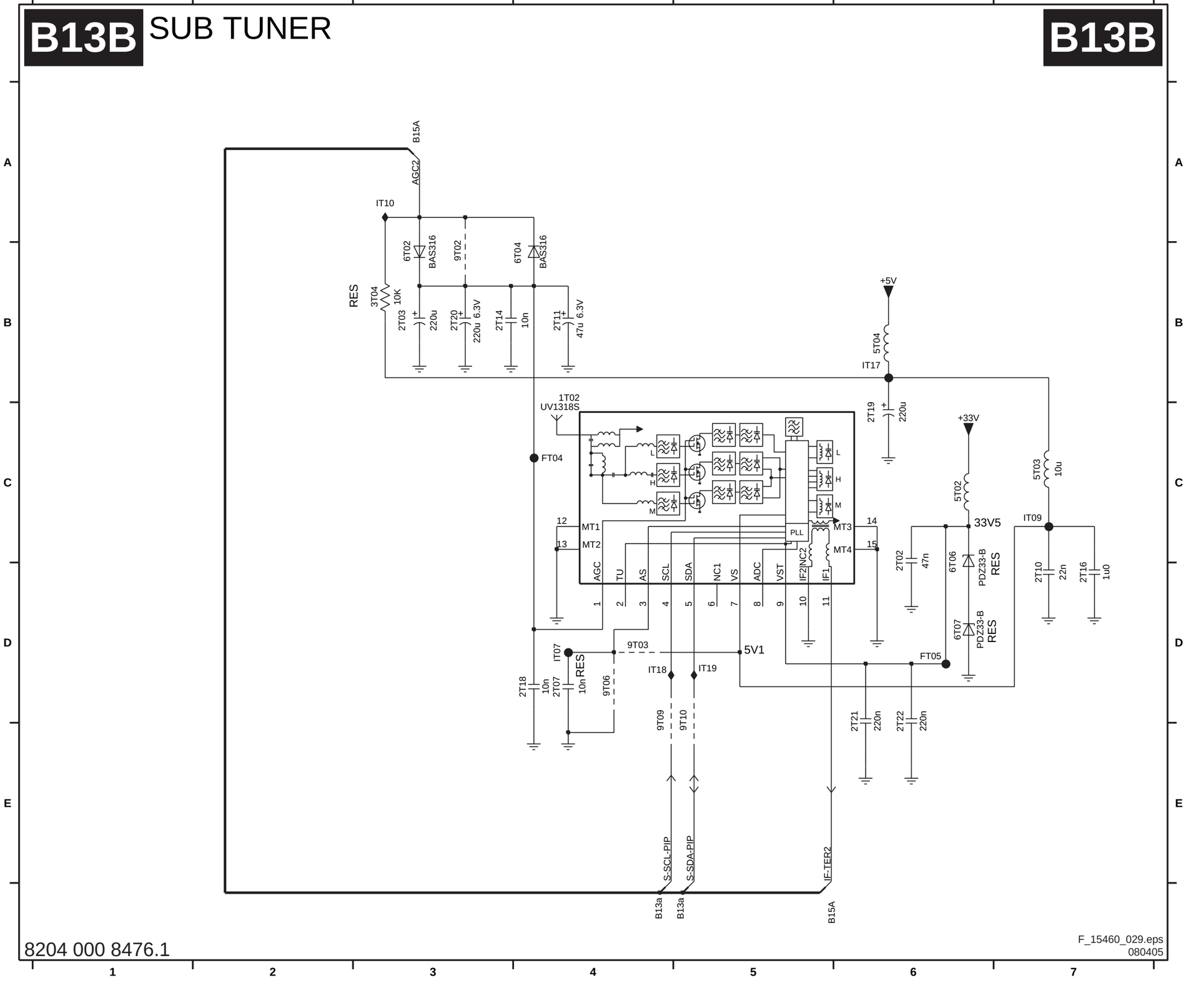
1T01 B3	2T05 C1	2T12 C7	2T17 D2	2T62 D5	3T05 C7	5T22 C5	6T03 B2	7T50 C6	9T05 E4	9T12 E7	AT00 E5	FT52 D4	IT50 A1	IT53 C7
2T01 B2	2T06 E4	2T13 B2	2T60 B2	2T63 D5	3T06 D7	5T25 C6	6T05 D6	9T01 B2	9T07 E4	9T14 C5	FT50 B1	FT53 C6	IT51 D4	IT54 D7
2T04 C5	2T09 D5	2T15 D5	2T61 B2	3T03 B1	5T20 B1	6T01 B2	6T08 D5	9T04 D4	9T08 E4	9T50 E7	FT51 C2	FT54 D5	IT52 D4	



SSB: Sub Tuner

B13B SUB TUNER

B13B

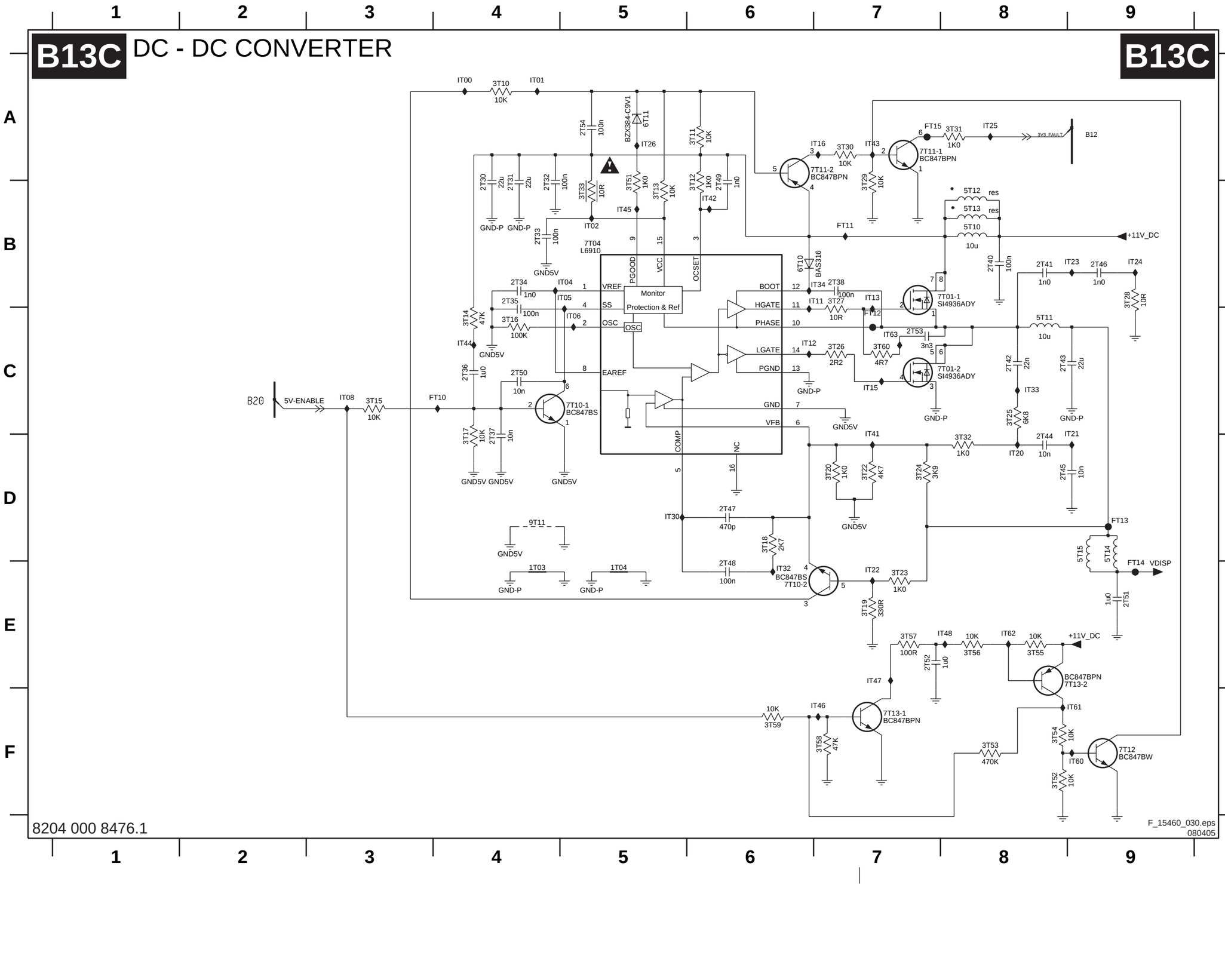


1T02 B4
2T02 C6
2T03 B3
2T07 D4
2T10 D7
2T11 B4
2T14 B3
2T16 D7
2T18 D4
2T19 C6
2T20 B3
2T21 D6
2T22 D6
3T04 B3
5T02 C6
5T03 C7
5T04 B6
6T02 B3
6T04 B4
6T06 C6
6T07 D6
9T02 B3
9T03 D4
9T06 D4
9T09 D4
9T10 D5
FT04 C4
FT05 D6
IT07 D4
IT09 C7
IT10 A3
IT17 B6
IT18 D4
IT19 D5

F_15460_029.eps
080405

SSB: DC/DC Converter

B13C DC - DC CONVERTER



1T03 E4	7T13-2 E8
1T04 E5	9T11 D4
2T30 B4	FT10 C4
2T31 B4	FT11 B7
2T32 B4	FT12 C7
2T33 B4	FT13 D9
2T34 B4	FT14 E9
2T35 B4	FT15 A7
2T36 C4	IT00 A4
2T37 D4	IT01 A4
2T38 B7	IT02 B5
2T40 B8	IT04 B5
2T41 B8	IT05 B5
2T42 C8	IT06 C5
2T43 C8	IT08 C3
2T44 D8	IT11 B7
2T45 D8	IT12 C6
2T46 B9	IT13 B7
2T47 D6	IT15 C7
2T48 E6	IT16 A7
2T49 B6	IT20 D8
2T50 C4	IT21 C9
2T51 E9	IT22 E7
2T52 E7	IT23 B9
2T53 C7	IT24 B9
2T54 A5	IT25 A8
3T10 A4	IT26 A5
3T11 A6	IT30 D5
3T12 B6	IT32 E6
3T13 B5	IT33 C8
3T14 C4	IT34 B7
3T15 C3	IT41 C7
3T16 C4	IT42 B6
3T17 D4	IT43 A7
3T18 D6	IT44 C4
3T19 E7	IT45 B5
3T20 D7	IT46 F7
3T22 D7	IT47 E7
3T23 E7	IT48 E7
3T24 D7	IT60 F9
3T25 C8	IT61 F9
3T26 C7	IT62 E8
3T27 B7	IT63 C7
3T28 B9	
3T29 B7	
3T30 A7	
3T31 A8	
3T32 D8	
3T33 B5	
3T51 B5	
3T52 F8	
3T53 F8	
3T54 F8	
3T55 E8	
3T56 E8	
3T57 E7	
3T58 F7	
3T59 F6	
3T60 C7	
5T10 B8	
5T11 C8	
5T12 B8	
5T13 B8	
5T14 D9	
5T15 D9	
6T10 B6	
6T11 A5	
7T01-1 B7	
7T01-2 C7	
7T04 B5	
7T10-1 C5	
7T10-2 E6	
7T11-1 A7	
7T11-2 A6	
7T12 F9	
7T13-1 F7	

SSB: I/O1: MMC

B14A I/O1: MMC

B14A

RESERVED FOR MMC

RES FOR MMC

8204 000 8478.1

F_15460_031.eps
080405

2I01 F4 9I96 B3
2I02 B3 II00 C4
2I03 C3 II01 B4
2I04 D3 II02 D4
2I05 D3 II03 D3
2I06 D3 II04 D4
2I07 F4 II05 D5
2I08 E5 II06 E6
2I55 I10 II07 C7
2I56 I10 II08 B6
2IA5 I4 II09 C7
2IA6 F7 II10 D7
2IE0 B5 II11 D6
2IG1 C9 II12 F6
2IJ0 F3 II13 C11
2IJ1 D3 II14 C10
2IJ2 F7 II15 C11
2IJ3 E8 II16 C9
2IJ4 C11 IIC0 I10
2IL0 B11 IIC1 G7
3I01 B4 IIC2 F7
3I02 C4 IIC3 F8
3I03 B3 IIC4 D12
3I04 C3 IIC5 B7
3I05 C3 IIC6 B5
3I06 B5 IIC7 B3
3I08 E9 IIC8 H4
3I09 E4 IIC9 C10
3I10 B6 IIG1 C11
3I11 B6 IIG2 D9
3I12 B7
3I13 C6
3I14 C7
3I15 C6
3I16 C7
3I17 D6
3I18 D7
3I19 D6
3I20 D6
3I21 F6
3I22 F6
3I23 E5
3I24 E5
3I25 E6
3I26 G7
3I27 F8
3IHG C12
3IJ8 D12
3IK4 D3
3IK5 F3
3IK7 H4
3IK8 E7
3IN1 B11
3IP0 B9
3IP1 D9
3IP2 D10
3IP3 C12
3IP4 C10
3IP5 B10
3IP6 B10
3IP7 C9
3IP8 B11
3IQ0 C11
3IQ1 C11
3IQ2 F8
3IQ3 G8
3IQ4 C11
3IT9 E10
5I01 I10
7I06 F8
7I24 C1
7I24 D5
7I35 D10
7I36 C10
7I37 C11
7I38 C11
7I60 G7
7I62 E11
9I00 A5
9I01 B5
9I02 F5
9I03 F5
9I15 F4
9I20 F7
9I21 G7
9I78 B5
9I95 B4

SSB: I/O2: Connections

B14B I/O 2: CONNECTIONS

B14B

SCART1

SCART2

RES

Multi Media Connector (MMC)

8204 000 8478.1

F_15460_032.eps
080405

1I01-1 A3	3I71 B5	6I52 D8	FI54 D8
1I01-2 E3	3I72 B6	6I53 F3	FI55 C8
1I02 C6	3I73 B5	6I54 F3	FI56 D8
1I03 D3	3I75 C5	6I55 F3	FI57 B8
1I04-1 A7	3I76 D5	6I56 G3	FI58 B8
1I04-2 E7	3I77 D6	6I57 G3	FI59 A8
1I05 F4	3I78 D6	6I58 H3	FI60 F4
1I06 I4	3I79 A8	6I59 H3	FI61 F3
1I08 D4	3I80 B8	6I60 H3	FI62 G3
1I09 H4	3I81 C8	6I61 H3	FI63 H3
1I11 F9	3I82 B8	6I62 I3	FI64 I3
1I34 A2	3I83 C8	6I68 E4	FI68 J3
1I35 B2	3I84 C8	6I69 I3	FI69 F8
1I36 C3	3I86 D8	6I70 J3	FI91 G1
1I37 B3	3I87 D8	6I75 C9	FI92 H1
1I38 A3	3I89 F2	6I77 E8	FI93 H1
1I39 A7	3I90 F3	6IA0 C3	FI94 I8
1I40 B7	3I91 F2	6IA7 I12	FI96 F8
1I41 C6	3I92 F3	7I01-1 C11	FIA9 F8
1I42 D6	3I94 G2	7I01-2 D11	FIC1 H8
1I43 D8	3I95 G3	7I02-1 E11	II25 A1
1I44 C8	3I96 H2	7I02-2 E11	II26 B1
1I45 C8	3I97 H3	7I03-1 G11	II27 C1
1I46 B8	3I98 J13	7I03-2 G11	II29 B4
1I47 A8	3I99 H2	7I04 F11	II32 A6
1I48 F4	3IA0 H3	7I05-1 H11	II33 B6
1I49 F4	3IA1 J13	7I05-2 I11	II34 D8
1I50 G4	3IA2 I2	7I07 B12	II35 B8
1I52 H4	3IA3 J2	7I09 B11	II36 B9
1I54 I4	3IA4 C11	7I21-1 F12	II37 A9
1I58 J3	3IA5 D11	7I21-2 E13	II38 E2
1I71 C2	3IA6 E11	7I44-1 J12	II41 H2
1I72 C2	3IA7 E11	7I44-2 I13	II42 H2
1I73 D2	3IA8 F11	7I49 H13	II43 I2
1I74 D2	3IA9 G11	7I50-1 J11	II44 I11
1I75 D7	3IB0 G11	7I50-2 I11	II45 I12
1I76 D8	3IB2 A4	9I04 I7	II46 B11
2I11 H11	3IB4 B11	9I08 H7	II47 B11
2I12 J12	3IB5 B11	9I09 G7	II48 B12
2I15 F13	3IC1 B12	9I10 I8	II49 B10
2I16 A1	3IC2 I13	9I11 H7	IIA0 C1
2I17 B1	3IC3 I13	9I12 I8	IIA1 A4
2I18 B4	3IC4 B4	9I13 I1	IIA2 B4
2I19 B4	3IC6 A9	9I16 C9	IIA3 C7
2I20 C4	3IC9 F12	9I17 D1	IIA4 G2
2I21 B6	3ID0 B12	9I18 D4	IIA5 F2
2I22 A6	3ID1 F13	9I19 D9	IIA9 I12
2I23 B9	3ID7 H12	9I22 I7	IIB0 I11
2I24 B9	3ID8 J10	9I39 B5	IID0 B12
2I25 C9	3IH1 H12	9I50 H11	IID1 H12
2I26 F2	3IK2 A9	9I51 F12	IID2 H10
2I27 F2	3IK3 B9	9I60 I7	IID3 I12
2I32 H2	3IT1 F2	9IA4 E12	IIG3 C11
2I36 J2	3IT2 G2	9IA5 E12	IIG4 D11
2I39 H11	3IT3 H2	9IA6 G13	IIG5 E11
2I46 B11	3IT4 I2	9IA7 G13	IIG6 E11
2I47 J13	3IW4 H13	9IB1 G6	IIG7 F11
2IA4 I12	3IW5 H13	9IB2 H6	IIG8 G11
2IC0 F1	3IZ0 F13	FI10 H9	IIG9 G11
2IC1 F1	6I11 H12	FI11 I8	IIH0 B12
2IC2 G1	6I12 I12	FI12 I8	IIH1 H13
2IC9 D6	6I13 I12	FI13 I8	IIH2 I11
2IH3 I13	6I22 A2	FI14 H8	
3I07 I11	6I23 A2	FI16 G8	
3I28 I1	6I24 B2	FI18 G8	
3I34 I11	6I25 B2	FI19 G8	
3I35 D9	6I26 C2	FI20 G8	
3I36 J11	6I27 C2	FI21 H8	
3I37 H12	6I28 D2	FI22 H8	
3I38 J11	6I29 D2	FI32 A2	
3I50 A1	6I30 A3	FI33 B2	
3I51 A2	6I31 B3	FI34 B2	
3I52 B1	6I32 B3	FI35 B2	
3I53 B2	6I33 B3	FI36 C2	
3I54 B1	6I35 D3	FI37 C2	
3I55 C2	6I36 D3	FI38 C2	
3I56 C1	6I37 A6	FI39 D2	
3I57 C2	6I38 A6	FI40 D2	
3I58 C1	6I39 B6	FI41 A3	
3I59 D2	6I40 B6	FI42 B3	
3I60 D2	6I41 C6	FI43 B3	
3I61 A4	6I42 C6	FI44 D3	
3I62 B4	6I43 D6	FI45 D3	
3I63 B4	6I44 D6	FI46 A6	
3I64 C4	6I45 A8	FI47 B7	
3I65 D4	6I46 B8	FI48 B7	
3I66 D3	6I47 B8	FI49 B7	
3I67 D3	6I48 B8	FI50 E8	
3I68 D4	6I49 C8	FI51 C7	
3I69 A5	6I50 C8	FI52 D6	
3I70 A6	6I51 D8	FI53 D7	

SSB: I/O3: Switch

B14C IO3: SWITCH

B14C

C-SC2_SVHS-IN
SC1-R
SC1-G
SC2-G
SC1-B
SC2-B_C-OUT
R-SC1_V-IN
SWITCH-MAIN
G-SC1-IN_Y-IN
B-SC1-IN_U-IN
+5VIO
74HC4053PW
BC857BW
BC384-C6V8
SNDR-DVI-IN
SNDL-DVI-IN
YKC21-3226
2FH

V-PIP+MAIN-OUT
Y-PIP+MAIN-OUT
U-PIP+MAIN-OUT
SUB-V
SUB-Y
SUB-U
SWITCH-SUB
R-VGA
G-VGA
B-VGA
TRI-STATE-DVI
RESERVED

SC2-FBL-IN
SC2-FBL
SC1-FBL
SWITCH-MAIN
FBL-SC1-IN
SC1-FBL-IN
SWITCH-SUB

VA50-PIP
HA50-PIP
VS-2FH
HS-2FH
TRI-STATE-DVI
RESERVED

8204 000 8478.1

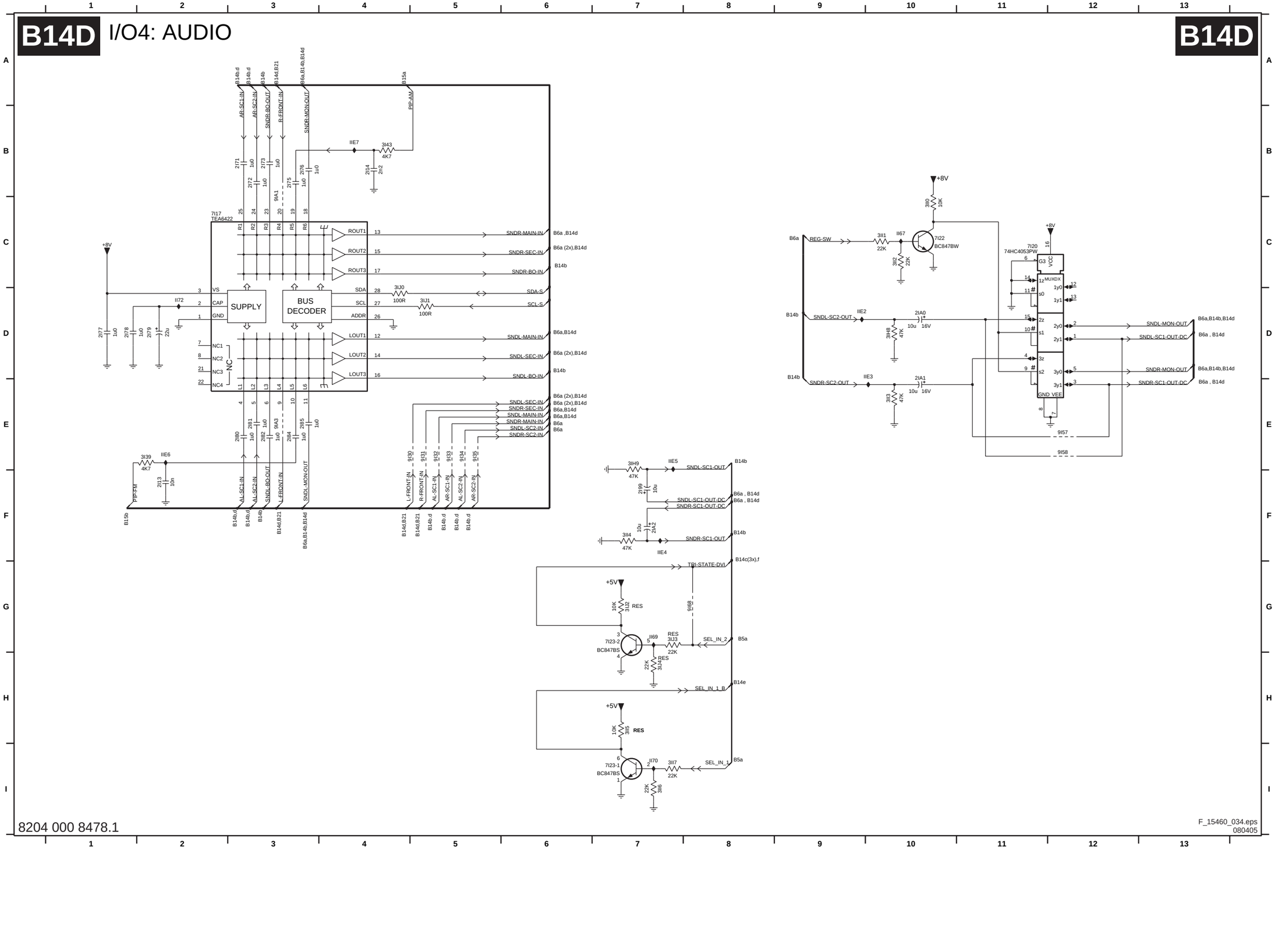
F_15460_033.eps
080405

1I07 I2 IIB3 H3
1I68 I2 IID8 G6
1I69 I3 IID9 G6
2I49 D7 IIE0 H6
2I50 D3 IIE1 H11
2I57 H2 IIH3 I8
2I58 H3
2IA9 E9
2IC3 D12
2IR0 H7
2IR1 H12
3I85 B1
3I93 C1
3IC8 B4
3ID5 B3
3ID9 C4
3IE2 G3
3IE3 G2
3IE7 D3
3IE9 G2
3IF5 G3
3IF6 H3
3IF7 H2
3IFA G6
3IFB H6
3IFC H6
3IFD H11
3IFE I8
3IFF G11
3IFL I8
3IH7 D4
3IL1 A8
3IL3 B8
3IL8 C8
3IM0 C8
3IM4 D8
3IN0 D8
3IN2 B2
3IN3 C2
3IN4 E9
3IN8 E3
3IO5 B11
3IO6 B11
3IP9 D1
3IS4 B2
6I90 H2
6I91 I2
6I92 H3
6I93 I3
7I12 D3
7I26 B8
7I27 B4
7I28 C8
7I29 D4
7I30 D8
7I31 E4
7I32 D12
7I33 C7
7I80 H7
7I81 H12
7I82 I8
9I25 D7
9I26 D7
9I27 D7
9I37 A7
9I41 A12
9I42 B11
9I59 A7
9I61 A7
9I62 E2
9I63 D2
9I64 D2
9I65 A2
9I66 A2
9I67 A2
9I79 A12
9I87 G6
9I89 G6
9I90 H6
9IA2 B11
9IF0 F7
9IF1 I7
9IF2 I7
9IF3 I12
9IF4 F12
FIB0 I2
FIB1 I3
II39 G12
II50 H2
II51 H3
IIB1 E9
IIB2 H2

SSB: I/O4: Audio

B14D I/O4: AUDIO

B14D



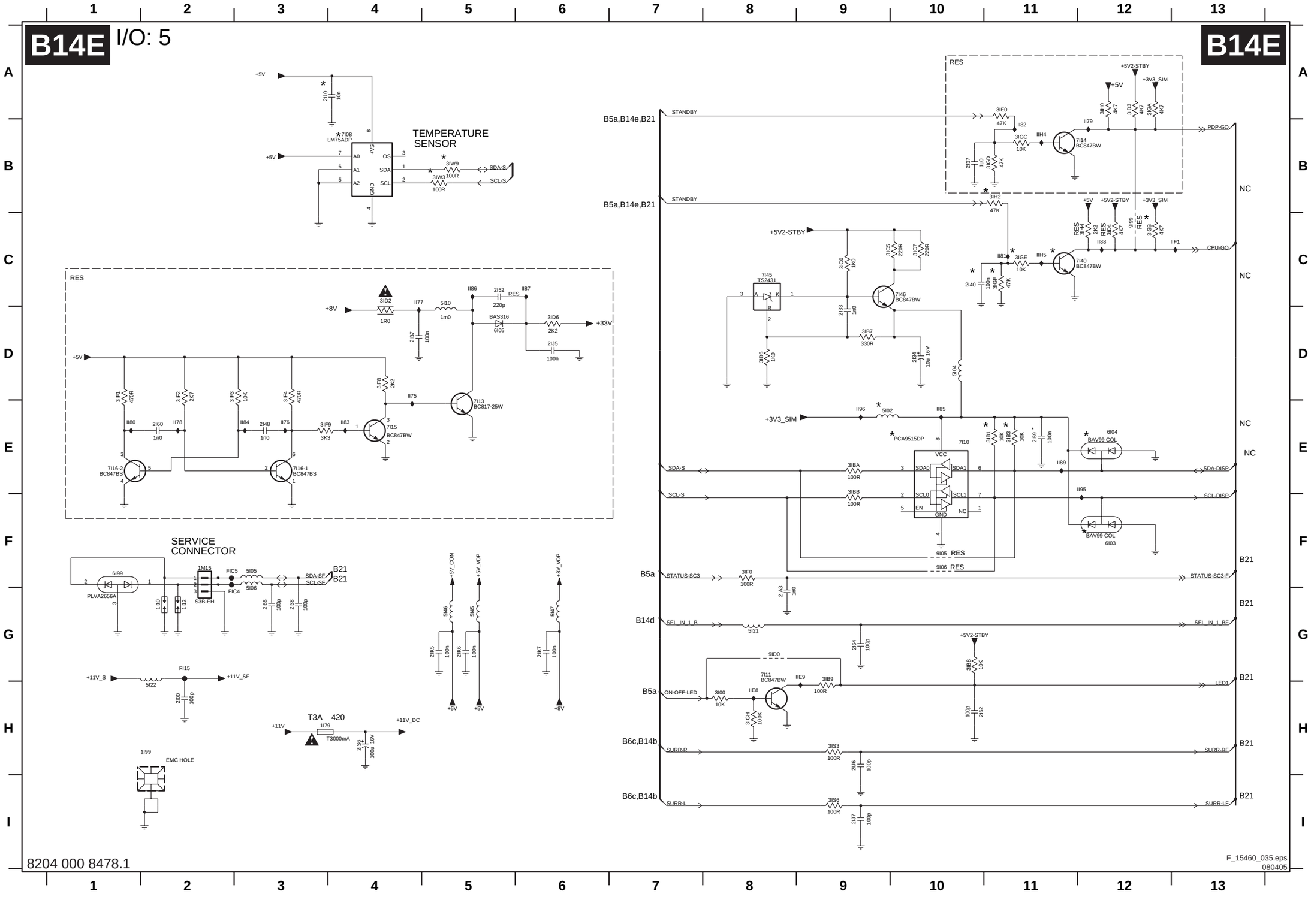
2I13 F2
2I14 B4
2I71 B3
2I72 B3
2I73 B3
2I75 B3
2I76 B3
2I77 D1
2I78 D1
2I79 D2
2I80 E3
2I81 E3
2I82 E3
2I84 E3
2I85 E3
2I99 F7
2IA0 D10
2IA1 E10
2IA2 F7
3I39 E2
3I43 B4
3IH8 D10
3IH9 E7
3II0 C10
3II1 C10
3II2 C10
3II3 E10
3II4 F7
3II5 H7
3II6 I7
3II7 I7
3IJ0 D4
3IJ1 D5
3IJ2 G7
3IJ3 G7
3IJ4 H7
7I17 C2
7I20 C12
7I22 C10
7I23-1 I7
7I23-2 G7
9I30 E5
9I31 E5
9I32 E5
9I33 E5
9I34 E5
9I35 E5
9I57 E12
9I58 E12
9I68 G8
9IA1 B3
9IA3 E3
II67 C10
II69 G7
II70 I7
II72 D2
IIE2 D9
IIE3 D10
IIE4 F7
IIE5 E7
IIE6 E2
IIE7 B4

8204 000 8478.1

F_15460_034.eps
080405

SSB: I/O: 5

1I10 G2	2I00 H2	2I38 G3	2I60 E2	2IB7 D4	2IK6 G5	3IB3 E11	3IBA E9	3ID2 C4	3IF0 F8	3IF8 D4	3IGD B11	3IH2 B11	3IW9 B5	5I10 C5	5I47 G6	7I08 B4	7I15 E4	7I46 C10	FI15 G2	II77 C4	II82 B11	II87 C6	IIE8 H8
1I12 G2	2I10 A3	2I40 C10	2I62 H10	2IJ5 D6	2IK7 G6	3IB6 D8	3IBB E9	3ID3 A12	3IF1 D1	3IF9 E3	3IGE C11	3IH4 C12	5I02 E9	5I21 G8	6I03 F12	7I10 E10	7I16-1 E3	9I05 F10	FIC4 G2	II78 E2	II83 E4	II88 C12	IIE9 G9
1I79 H3	2I33 D9	2I48 E3	2I64 G9	2IJ6 H9	2IS6 H4	3IB7 D9	3IC0 C9	3ID4 C12	3IF2 D2	3IGA A12	3IGF C11	3IS3 H9	5I04 D10	5I22 H2	6I04 E12	7I11 G8	7I16-2 E1	9I06 F10	FIC5 F2	II79 B12	II84 E3	II89 E11	IIF1 C13
1I99 H2	2I34 D10	2I52 C5	2I65 G3	2IJ7 I9	3I00 H8	3IB8 G10	3IC5 C9	3ID6 D6	3IF3 D2	3IGB C12	3IGH H8	3IS6 I9	5I05 F3	5I45 G5	6I05 D5	7I13 E5	7I40 C11	9I99 C12	II75 D4	II80 E1	II85 E10	II95 E12	IIH4 B11
1M15 F2	2I37 B10	2I59 E11	2IA3 G8	2IK5 G5	3IB1 E11	3IB9 G9	3IC7 C10	3IE0 A11	3IF4 D3	3IGC B11	3IH0 A12	3IW3 B5	5I06 G3	5I46 G5	6I99 F1	7I14 B11	7I45 C8	9ID0 G8	II76 E3	II81 C11	II86 C5	II96 E9	IIH5 C11



SSB: I/O6: Digital Input

B14F I/O6: DIGITAL INPUT

B14F

DVI INPUT CONNECTOR

DVI INPUT CONNECTOR

YKF45-7005 1D01-1

DVI RECEIVER

PANELLINK RECEIVER

HDCP CIPHER

FORMATTER

TRIPPLE 8-BIT DAC

7I65 LD1117DT33C

7I18 SII905CQ52

7I7 M24C02-WDW6 EEPROM (256x8)

BSH112

PLVA2656A

BC847BPN

BC847BW

BAV99 COL

BAS316

DLW21S

+5V

+3V3-SI

+8V-VIDEO

3V3-TMDS

3V3-SI-IO

VCC-SI

DVI-PWR-DOWN

SWITCH-MAIN

TRI-STATE-DVI

HOT PLUG

SCL_DVI

SDA_DVI

RX0+ RX0- RX1+ RX1- RX2+ RX2- RXC+ RXC-

H-DVI V-DVI B-DVI G-DVI R-DVI HS-DET

8204 000 8478.1

F_15460_036.eps 080405

1D01-1 D1	3IS5 I12
1D01-4 B6	3IT5 I14
1I14 D2	3IT6 I14
1I15 G2	3IV0 I9
1I16 G2	3IV1 J7
1I17 D8	3IV2 J7
1I18 D5	3IV3 J7
1I19 C5	5I30 D11
1I20 C4	5I31 D12
1I21 C3	5I32 D13
1I53 G4	5I33 D10
1I55 F2	5I34 D10
1I56 E3	5I35 F13
1I57 F4	5I36 H13
1I59 G4	5I37 H13
1I60 C2	5I38 I13
1I61 C2	5I39 H5
1I62 D2	5I40 C12
1I64 E2	5I41 E13
1I65 E2	6I01 D3
1I66 F2	6I06 D4
1I67 F2	6I07 C5
2I66 I12	6I08 C6
2I67 I13	6I09 C8
2I68 I13	6I14 F5
2I69 I13	6I15 F5
2I70 I14	6I16 F6
2I86 I14	6I17 F6
2I87 H13	6I18 F7
2I88 G13	6I19 F7
2I89 G13	6I20 E4
2I90 G12	6I21 E4
2I91 G12	6I63 I7
2I92 F13	6I64 I7
2I93 F13	6I65 I4
2I94 F12	6I66 J4
2I95 F12	7I18 F10
2I96 F13	7I19 I6
2I97 F9	7I51 I8
2I98 F9	7I52 I8
2IB0 A9	7I53-1 J8
2IB3 F9	7I53-2 I9
2IB5 F8	7I61 B10
2IB8 H5	7I64 B11
2IB9 H4	7I65 A9
2IC5 H6	9I07 F14
2IC6 D7	9I14 G14
2IC7 D6	9I85 G14
2IC8 E10	9IB3 B7
2IE1 E10	9ID1 B4
2IE2 E11	9ID2 B4
2IE3 D11	9ID3 B4
2IE4 D11	9ID4 B5
2IE5 D12	9ID5 B5
2IE6 E12	9ID6 B5
2IE7 E12	9ID7 B7
2IE8 D12	9ID8 B7
2IE9 D9	9ID9 B7
2IG2 D9	FI00 C2
2IG3 C10	FI01 C2
2IG4 C10	FI02 E2
2IG5 C11	FI03 E2
2IG6 C12	FI04 F2
2IG7 C13	FI05 F2
2IG8 C12	FI06 G2
2IG9 D13	FI07 G2
2IH1 H5	FI08 E2
2IH2 D13	FI09 E2
2IH4 D12	FI29 H14
2IH5 D11	FI30 G14
2IJ8 I8	FI70 D2
2IJ9 I9	FI71 D2
3I29 D4	FI72 I5
3I30 D4	FI73 I10
3I31 D5	FI74 I8
3I32 D6	FI75 H10
3I33 C7	FI76 C10
3I40 C7	FI77 H14
3I41 D8	FI78 H14
3I42 E2	FI79 I14
3I44 I4	FI80 B4
3I45 I4	FI81 C4
3I46 I5	FI82 C5
3I47 I5	FI83 C6
3I48 I5	FI84 C8
3I49 I7	FIC3 F2
3II8 B12	II60 B10
3II9 B11	II61 D11
3IK9 B9	II62 D11
3IQ5 I6	II63 D11
3IQ6 I7	II64 E11
3IQ7 I8	II65 E10
3IQ8 I9	II66 E10
3IQ9 I9	II68 B11
3IR0 I9	II92 E13
3IR1 I10	II93 G13
3IR2 H8	II94 G14
3IR3 H8	II97 F14
3IR4 H9	IIG0 J7
3IR5 G13	IIH6 I9
3IR6 H13	
3IR7 F13	
3IR8 F13	
3IR9 I13	
3IS0 I13	
3IS1 I13	

SSB: I/O: 7

B14G I/O: 7

HDI : RGB-YPbPr

RGB-OUTPUT SELECTION

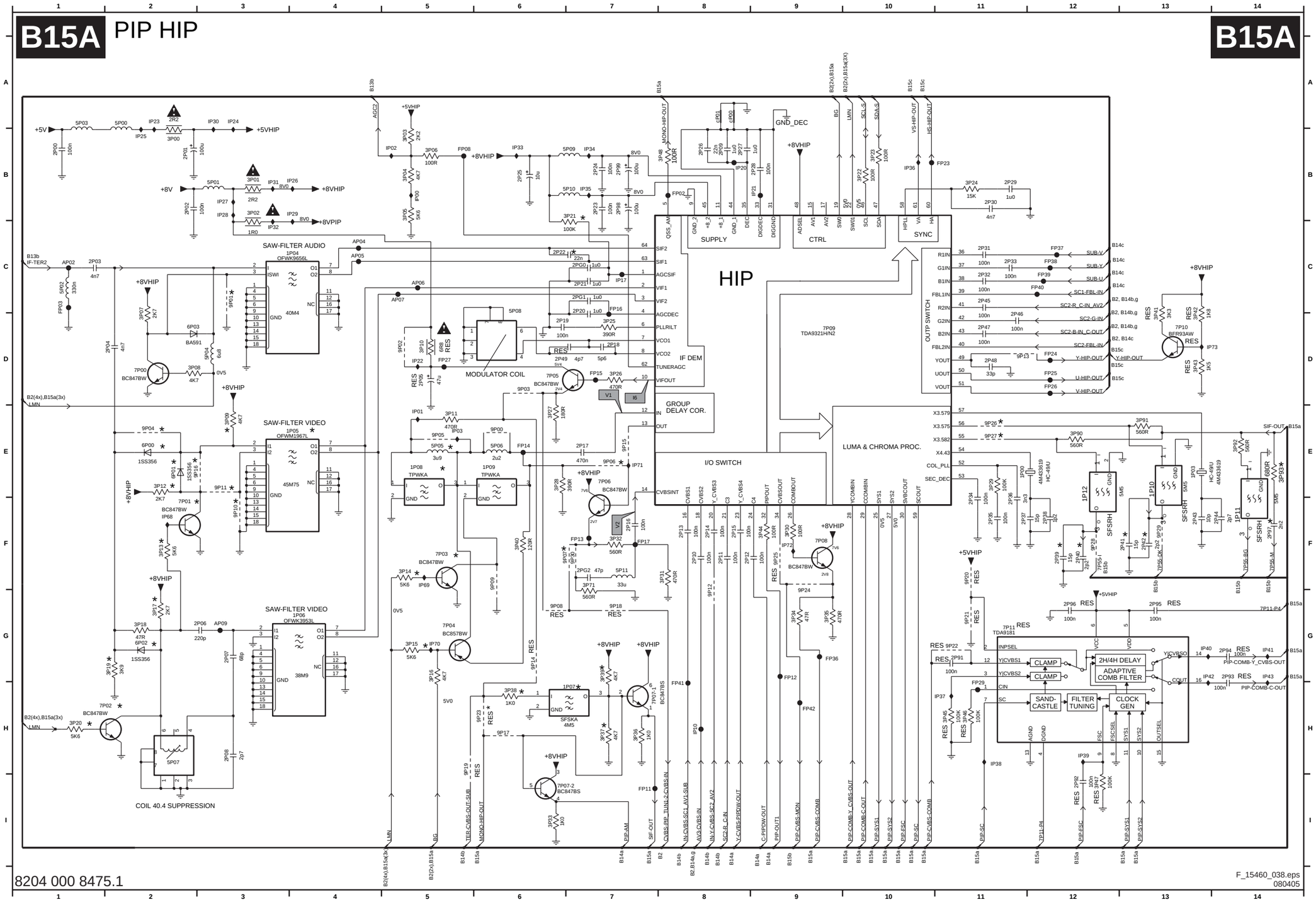
RESERVED

8204 000 8478.1

F_15460_037.eps
080405

2I09 I10
2IF0 I9
2IF1 F9
2IF2 D9
2IF3 B9
2IF4 H6
2IF5 H7
2IF6 A13
2IF8 D2
2IF9 D2
2IH6 D2
2IH7 D2
2IH8 C2
2IH9 C2
2IK1 C5
2IK2 H10
2IK3 H11
2IK4 I10
2IN8 E3
2IN9 E3
3IG0 G8
3IG1 F8
3IG3 E8
3IG4 D8
3IG6 C8
3IG7 C8
3IG9 H10
3IHA F9
3IHB E9
3IHC C9
3IJ6 C11
3IJ7 C12
3IK0 G3
3IT7 G3
3IT8 G3
3IU0 H5
3IU1 G13
3IU2 B13
3IU3 H13
3IU5 D11
3IU6 E12
3IU7 E12
3IU8 E13
3IU9 F11
3IV4 C7
3IV5 D6
3IV6 D6
3IV7 E13
3IV8 F11
3IV9 F13
3IW1 H10
3IW2 E11
3IW7 B11
3IW8 B11
3IZ0 F12
3IZ1 F12
3IZ2 F13
3IZ3 B11
3IZ4 B11
3IZ5 B11
3IZ6 C13
3IZ7 B12
3IZ8 B13
3IZ9 A12
5I12 H6
5I13 H6
5I42 E2
6I80 H10
6I81 I10
6IA1 H10
7I41 C12
7I54-A A13
7I54-B C13
7I54-C D13
7I54-D F13
7I55 C4
7I56 C8
7I57 D8
7I58 F8
9I23 B13
9I28 C12
9I29 B4
9I45 D11
9I49 F11
9I81 F4
9I84 E7
9I88 F4
9I91 B4
9I98 B4
FIB2 G2
FIB3 I10
FIB5 H6
FIB6 G13
FIB7 G13
FIB8 H10
FIB9 H10
FIC2 E2
II30 E3
II31 E3
IIB4 B11
IIB5 B12
IIB6 D11
IIB7 E12
IIB8 E11
IIB9 F12
IIF2 B6
IIF3 C6
IIF4 D6
IIF5 C8
IIF6 D8
IIF7 F8
IIH7 C12
IIH8 C11

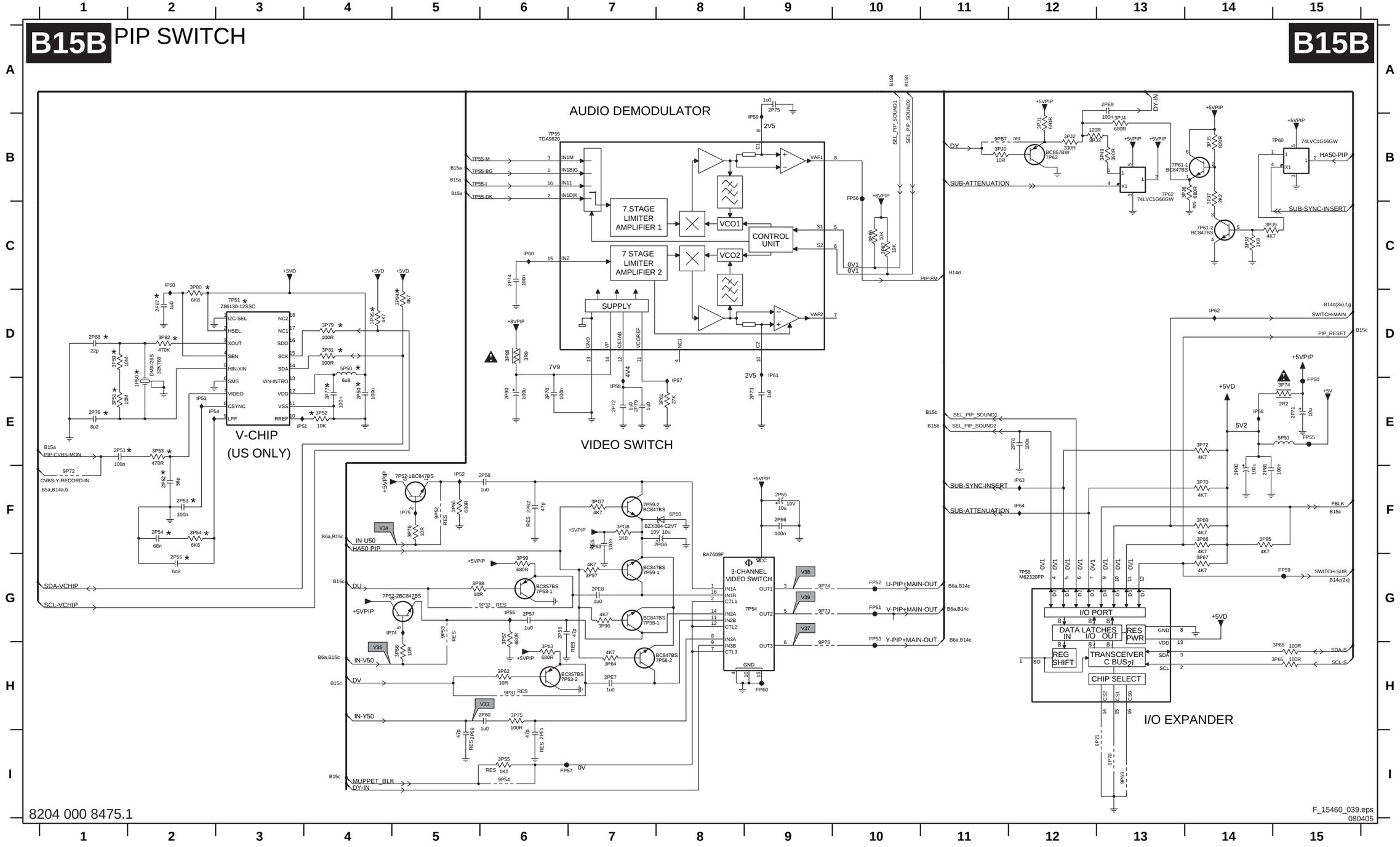
SSB: PIP HIP



1P00 E11	3P16 G5	9P22 G11	
1P03 E13	3P17 G2	9P23 H6	
1P04 C4	3P18 G2	9P24 G9	
1P05 E4	3P19 G2	9P25 F9	
1P06 G4	3P20 H1	9P26 E11	
1P07 H7	3P21 B7	9P27 E11	
1P08 E5	3P22 B10	9P28 F12	
1P09 E6	3P23 B10	9P29 F13	
1P10 E13	3P24 B11	9P30 F7	
1P11 F14	3P25 D7	AP02 C1	
1P12 E12	3P26 D7	AP04 C4	
2P00 B1	3P27 E6	AP05 C4	
2P01 B2	3P28 E6	AP06 C5	
2P02 B2	3P29 E11	AP07 C5	
2P03 C1	3P30 F9	AP09 G3	
2P04 D2	3P31 F8	FP02 B8	
2P05 D5	3P32 F7	FP03 C1	
2P06 G3	3P33 I6	FP08 B5	
2P07 G3	3P34 G9	FP11 I7	
2P08 H3	3P35 G9	FP12 G9	
2P09 B8	3P36 H7	FP13 F7	
2P10 F8	3P37 H7	FP14 E6	
2P11 F8	3P38 H6	FP15 D7	
2P12 F8	3P39 G7	FP16 C7	
2P13 F8	3P40 F6	FP17 F7	
2P14 F8	3P41 D13	FP23 B11	
2P15 F8	3P42 D13	FP24 D12	
2P16 F7	3P43 D13	FP25 D12	
2P17 E7	3P44 F9	FP26 D12	
2P18 D7	3P45 H11	FP27 D5	
2P19 D6	3P46 H11	FP29 H11	
2P20 C7	3P47 I12	FP36 G9	
2P21 C7	3P48 B8	FP37 C12	
2P22 C6	3P71 F7	FP38 C12	
2P23 B7	3P90 E12	FP39 C12	
2P24 B7	3P91 E13	FP40 C12	
2P25 B6	3P92 E14	FP41 H8	
2P26 B8	3P93 E14	FP42 H9	
2P27 B8	5P00 A2	IP00 B5	
2P28 B9	5P01 B3	IP01 E5	
2P29 B11	5P02 C1	IP02 B5	
2P30 B11	5P03 A1	IP03 E5	
2P31 C11	5P04 D3	IP10 H8	
2P32 C11	5P05 E5	IP17 C7	
2P33 C11	5P06 E6	IP20 B8	
2P34 F11	5P07 H2	IP21 B9	
2P35 F11	5P08 C6	IP22 D5	
2P36 F11	5P09 B7	IP23 A2	
2P37 F11	5P10 B7	IP24 A3	
2P38 F12	5P11 F7	IP25 B2	
2P39 F12	6P00 E2	IP26 B4	
2P40 F12	6P01 E2	IP27 B3	
2P41 F13	6P02 G2	IP28 B3	
2P42 F13	6P03 D2	IP29 B4	
2P43 F13	7P00 D2	IP30 A3	
2P44 F14	7P01 F2	IP31 B3	
2P45 C11	7P02 H1	IP32 C3	
2P46 D11	7P03 F5	IP33 B6	
2P47 D11	7P04 G5	IP34 B7	
2P48 D11	7P05 D6	IP35 B7	
2P49 D6	7P06 E7	IP36 B10	
2P91 G11	7P07-1 H7	IP37 H11	
2P92 I12	7P07-2 I6	IP38 H11	
2P93 G14	7P08 F9	IP39 H12	
2P94 G14	7P09 D9	IP40 G13	
2P95 G13	7P10 D13	IP41 G14	
2P96 G12	7P11 G11	IP42 G13	
2P97 F14	9P00 E6	IP43 G14	
2P98 B7	9P01 C3	IP68 F2	
2P99 B7	9P02 D5	IP69 F5	
2PG0 C7	9P03 D6	IP70 G5	
2PG1 C7	9P04 E2	IP71 E7	
2PG2 F7	9P05 E5	IP72 F9	
3P00 B2	9P06 E7	IP73 D14	
3P01 B3	9P07 F7	cP00 A8	
3P02 B3	9P08 G6	cP01 A8	
3P03 B5	9P09 F6		
3P04 B5	9P10 F3		
3P05 B5	9P11 E3		
3P06 B5	9P12 G8		
3P07 D2	9P13 D11		
3P08 D2	9P14 G6		
3P09 E3	9P15 E7		
3P10 D5	9P16 E3		
3P11 E5	9P17 H6		
3P12 E2	9P18 G7		
3P13 F2	9P19 H5		
3P14 F5	9P20 F11		
3P15 G5	9P21 G11		

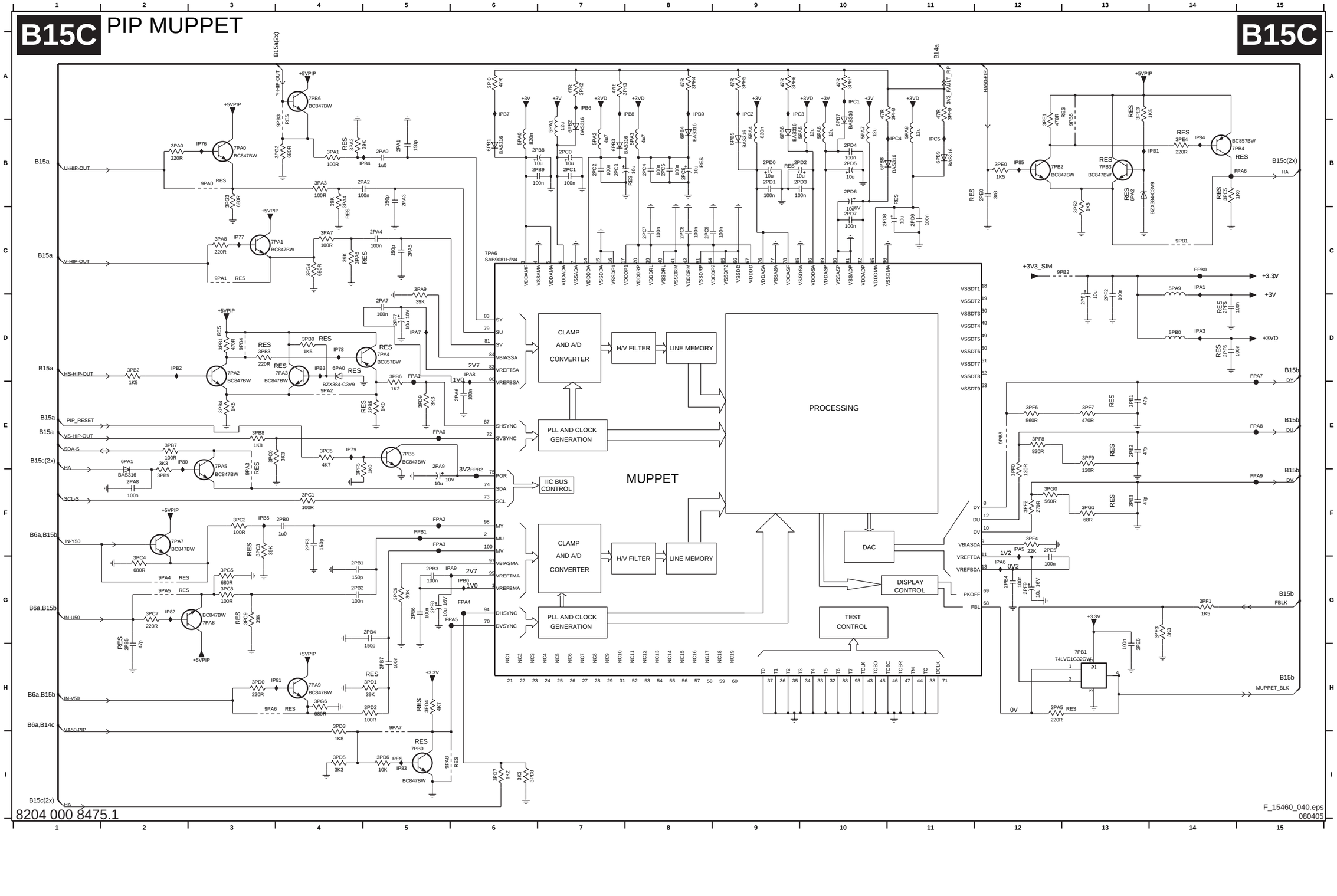
SSB: PIP Switch

1P50 E2	2P54 F2	2P59 I5	2P65 F9	2P73 E9	2P78 E12	2P88 D1	2PG6 F8	3P53 E2	3P60 F5	3P65 H15	3P70 F14	3P79 D4	3P86 C10	3P96 G7	3PG8 F7	3PJ4 B13	3PJ9 C14	7P52-1 F5	7P55 B6	7P59-2 F7	7P63 B12	9P54 I6	9P73 G9	FP51 G10	FP57 I6	IP52 F5	IP57 E8	IP62 D14
2P50 E4	2P55 G2	2P60 H6	2P66 F9	2P74 C6	2P79 E7	2P90 E6	3P49 B13	3P54 F2	3P61 E8	3P66 H15	3P72 E14	3P80 C2	3P87 C10	3P97 G7	3PJ0 B11	3PJ5 B14	7P52-2 G4	5P50 D4	7P56 G12	7P60 B15	9P31 H6	9P69 I13	9P74 G9	FP52 G10	FP59 G15	IP53 E2	IP58 E7	IP63 F12
2P51 E1	2P56 G6	2P61 I6	2P70 E6	2P75 A9	2P80 F14	2PE7 H7	3P50 D1	3P55 I6	3P62 H6	3P67 G14	3P74 E15	3P81 D4	3P88 D6	3P98 G5	3PJ1 B12	3PJ6 B14	7P53-1 G6	5P51 E15	7P58-1 G7	7P61-1 B14	9P32 G6	9P70 I13	9P75 H9	FP53 G10	FP60 H9	IP54 E2	IP59 B9	IP64 F12
2P52 F2	2P57 G6	2P62 F6	2P71 E15	2P76 E1	2P81 F14	2PE8 G7	3P51 E1	3P56 H5	3P63 H6	3P68 F14	3P75 H6	3P82 D2	3P94 D5	3P99 G6	3PJ2 B12	3PJ7 B14	7P53-2 H6	6P10 F8	7P58-2 H7	7P61-2 C14	9P52 F5	9P71 I13	9PB7 B11	FP55 E15	IP50 C2	IP55 G6	IP64 G4
2P53 F2	2P58 F6	2P63 F7	2P72 E7	2P77 E4	2P87 D2	2PE9 A13	3P52 E4	3P57 G6	3P64 H7	3P69 F14	3P76 F5	3P85 F14	3P95 D4	3PG7 F7	3PJ3 B12	3PJ8 C14	7P51 D3	7P54 G9	7P59-1 G7	7P62 B13	9P53 G5	9P72 F1	PB7 B11	FP56 E15	IP51 E3	IP56 E14	IP60 C6	IP75 F5



SSB: PIP Muppet

2PA0 B5	2PA7 D5	2PB4 G5	2PC1 B7	2PC8 C8	2PD5 B10	2PE2 E13	2PF3 F4	3PA1 B4	3PA8 C3	3PB5 E5	3PC2 F3	3PC9 G3	3PD6 I5	3PE3 A13	3PF4 F12	3PG1 F13	3PH3 A7	3PI0 A6	5PA6 B10	6PA2 B13	6PB7 B10	7PA4 D5	7PB1 H13	9PA1 C3	9PA8 I5	FPA0 E5	FPA7 D15	IP77 C3	IP84 B14	IPA8 D6	IPB5 F3	IPC3 A9
2PA1 B5	2PA8 F2	2PB5 H2	2PC2 B7	2PC9 C8	2PD6 B10	2PE3 F13	2PF5 D14	3PA2 B4	3PA9 C5	3PB6 D5	3PC3 F3	3PD0 H3	3PD7 I6	3PE4 B14	3PF5 F4	3PG2 B4	3PH4 A8	5PA0 B6	5PA7 B10	6PB1 B6	6PB8 B10	7PA5 E3	7PB2 B12	9PA2 E4	9PB1 C14	FPA1 D5	FPA8 E15	IP78 D4	IP85 B12	IPA9 G6	IPB6 A7	IPC4 B11
2PA2 B5	2PA9 E5	2PB6 G5	2PC3 B7	2PD0 B9	2PD7 C10	2PE4 G12	2PF6 D14	3PA3 B4	3PB0 D4	3PB7 E2	3PC4 G2	3PD1 H5	3PD8 I6	3PE5 B14	3PF6 E12	3PG3 B3	3PH5 A9	5PA1 B7	5PA8 B11	6PB2 B7	6PB9 B11	7PA6 C6	7PB3 B13	9PA3 F3	9PB2 C13	FPA2 F5	FPA9 F15	IP79 E4	IPA1 C14	IPB0 G6	IPB7 A6	IPC5 B11
2PA3 B5	2PB0 F4	2PB7 H5	2PC4 B8	2PD1 B9	2PD8 C10	2PE5 F12	2PF7 D5	3PA4 B4	3PB1 D3	3PB8 E3	3PC5 E4	3PD2 H5	3PD9 E5	3PF0 F12	3PF7 E13	3PG4 C4	3PH6 A9	5PA2 B7	5PA9 C14	6PB3 B7	7PA0 B3	7PA7 F2	7PB4 B14	9PA4 G2	9PB3 B4	FPA3 F5	FPB0 C14	IP80 E2	IPA3 D14	IPB1 B14	IPB8 A8	
2PA4 C5	2PB1 G4	2PB8 B7	2PC5 B8	2PD2 B10	2PD9 C11	2PE6 H13	2PF8 G5	3PA5 H12	3PB2 D2	3PB9 F2	3PC6 G5	3PD3 H4	3PE0 B12	3PF1 G14	3PF8 E12	3PG5 G3	3PH7 A10	5PA3 B8	5PB0 D14	6PB4 B8	7PA1 C3	7PA8 G3	7PB5 E5	9PA5 G2	9PB4 D3	FPA4 G6	FPB1 F5	IP81 H4	IPA5 F12	IPB2 D2	IPB9 A8	
2PA5 C5	2PB2 G4	2PB9 B7	2PC6 B8	2PD3 B10	2PE0 B12	2PF1 D13	2PF9 G12	3PA6 C4	3PB3 D3	3PC0 E3	3PC7 G2	3PD4 H5	3PE1 B12	3PF2 F12	3PF9 E13	3PG6 H4	3PH8 A11	5PA4 B9	6PA0 D4	6PB5 B9	7PA2 D3	7PA9 H4	7PB6 A4	9PA6 H3	9PB5 B13	FPA5 G6	FPB2 F6	IP82 G2	IPA6 G12	IPB3 D4	IPC1 A10	
2PA6 E6	2PB3 G5	2PC0 B7	2PC7 C8	2PD4 B10	2PE1 E13	2PF2 D13	3PA0 B2	3PA7 C4	3PB4 E3	3PC1 F4	3PC8 G3	3PD5 I4	3PE2 C13	3PF3 G14	3PG0 F12	3PH2 A7	3PH9 A11	5PA5 B10	6PA1 E2	6PB6 B9	7PA3 D4	7PB0 I5	9PA0 B3	9PA7 H5	9PB8 E12	FPA6 B15	IP76 B3	IP83 I5	IPA7 D5	IPB4 B5	IPC2 A9	



SSB: HDI A/D Converter

B19A HDI A/D CONVERTER

B19A

A/D CONVERTER

+3V3-AD
FL17
+5V
7L02 LD1117DT33C
IN OUT COM
FE02
5L16 5L13 5L17 5L14 5L18 5L15
IL10 VD
IL11 VDD
IL12 PVD

7L01 AD9883AKST
VDD PVD VD PVD
VDD VD PVD

B14g V-2FH AL06 3L04 100R 5L02 470n FL09 3L29 150R 2L52 47n 54 RAIN
B14g(2x)B19a Y-2FH AL07 3L05 100R 5L04 470n FL10 3L30 150R 2L57 47n 48 GAIN
B14g U-2FH AL08 3L11 100R 5L06 470n FL12 3L31 150R 2L54 47n 43 BAIN
2L11 100n IL06 37 MIDSCV

CLAMP A/D 8

B14c,g HS-2FH FL11 3L32 470R 30 HSYNC
B14c(2x) VS-2FH FL13 3L33 470R 31 VSYNC
B14g(2x),B19a Y-2FH 3L12 470R 2L56 1n0 49 SOGIN
38 CLAMP
29 COAST
33 FILT
SYNC PROCESSING AND CLOCK GENERATION

SERIAL REGISTER AND PWR MANAGMENT
REF REF-BYPASS 58 FL05 100n 2L25

PVD 2L31 47n IL07 2L26 33n 3L08 2K7 IL08 2L27 4n7 2L32 3n3
3L06 100R 3L03 100R VD IL09
57 SDA
56 SCL
55 A0

GND

ROUTA0 77 UV-AD-0
ROUTA1 76 UV-AD-1
ROUTA2 75 UV-AD-2
ROUTA3 74 UV-AD-3
ROUTA4 73 UV-AD-4
ROUTA5 72 UV-AD-5
ROUTA6 71 UV-AD-6
ROUTA7 70 UV-AD-7
B19d

GOUTA0 9 Y-AD-0
GOUTA1 8 Y-AD-1
GOUTA2 7 Y-AD-2
GOUTA3 6 Y-AD-3
GOUTA4 5 Y-AD-4
GOUTA5 4 Y-AD-5
GOUTA6 3 Y-AD-6
GOUTA7 2 Y-AD-7
B19d

BOUTA0 19 U-AD-0
BOUTA1 18 U-AD-1
BOUTA2 17 U-AD-2
BOUTA3 16 U-AD-3
BOUTA4 15 U-AD-4
BOUTA5 14 U-AD-5
BOUTA6 13 U-AD-6
BOUTA7 12 U-AD-7
B19d

HSOUT 66 FL15 H-2FH-AD-OUT B19d
VSOUT 64 FL03 V-2FH-AD-OUT B14g,B19d
SOGOUT 65 FL04 SYNCDET B19d
DATACK 67 AL02 CLK-2FH B19b

SDA-F3 B19b,d
SCL-F3 B19b,d

to EPLD

8204 000 8484.1

F_15460_041.eps
080405

2L00 B3 IL11 B5
2L01 A4 IL12 C5
2L02 A4
2L03 A4
2L04 A4
2L05 A4
2L06 A5
2L07 A5
2L08 C4
2L09 C4
2L10 A5
2L11 F6
2L12 B4
2L13 B4
2L14 B4
2L15 B4
2L16 B4
2L17 B5
2L18 E5
2L19 A1
2L20 C4
2L21 C4
2L25 H10
2L26 H2
2L27 H2
2L28 D3
2L29 E3
2L30 F3
2L31 H2
2L32 H2
2L33 A2
2L34 A3
2L48 D2
2L49 E2
2L50 F2
2L51 C3
2L52 C6
2L54 F6
2L56 G4
2L57 E6
2L58 A3
2L59 E5
2L60 G4
3L02 E5
3L03 H5
3L04 C2
3L05 E2
3L06 H5
3L08 H3
3L11 F2
3L12 G3
3L19 D4
3L20 E4
3L21 F4
3L28 G6
3L29 C4
3L30 E4
3L31 F4
3L32 G4
3L33 G5
5L02 C2
5L04 E2
5L06 F2
5L13 A3
5L14 B3
5L15 C3
5L16 A3
5L17 B3
5L18 B3
7L01 C6
7L02 A2
AL02 G10
AL06 C1
AL07 E1
AL08 F1
FE02 A3
FL03 G10
FL04 G10
FL05 H10
FL09 C3
FL10 E3
FL11 G4
FL12 F3
FL13 G4
FL15 G10
FL17 A1
IL06 F6
IL07 H3
IL08 H3
IL09 H6
IL10 A5

SSB: EPLD Control

B19B EPLD CONTROL **B19B**

FOR FACTORY USE ONLY

I2C BUFFER

FOR FACTORY USE ONLY

I2C BUFFER

1E02	B9	3E84	G10
1E04	G6	3E85	G12
2D03	E5	3E86	G11
2D04	F3	3E87	I11
2D09	G3	3E88	H5
2D10	G3	3E89	I5
2D11	G3	5E50	H5
2D12	G3	5E51	I5
2D15	I5	5E52	G5
2E01	G4	5E53	D6
2E03	G4	5E54	F5
2E06	G4	5E55	E11
2E41	F5	5E56	H11
2E42	F6	5E58	G8
2E43	F4	6E51	E5
2E49	E3	6E52	G5
2E50	E3	6E53	G5
2E51	E2	6E54	I5
2E52	G8	6E55	H5
2E54	G4	6E56	E12
2E55	H4	7E01	E5
2E56	H4	7E02	B2
2E57	H4	7E03	F11
2E58	H4	7E04	G11
2E59	H4	7E05	D3
2E62	H3	7E06	I12
2E65	H3	7E10	H8
2E66	H3	7E12-1	F3
2E67	H3	7E12-2	E2
2E68	I4	7E25	C3
2E69	I4	7E26	B3
2E70	I4	7E27	C3
2E71	I4	7V01-1	B5
2E72	I3	7V01-6	A12
2E73	I3	9E57	I8
2E74	I3	9E58	I8
2E75	I3	9E59	E5
2E77	I2	9E60	C7
2E78	I2	9E61	D7
2E79	F5	9E62	C7
2E80	F5	9E63	C7
2E81	I2	9E64	C7
2E82	G3	9E65	D7
2E83	G4	FE05	F5
2E84	B1	FE50	I10
2E86	E2	FE51	B8
2E87	E6	FE52	A9
2E88	A8	FE53	C7
2E89	B8	FE54	C9
2E90	B8	FE55	B8
2E91	C8	FE56	D6
2E92	B9	FE57	H4
2E93	G12	FE58	I4
2E94	E12	FE59	G3
2E95	I12	FE60	F3
2E96	B4	FE61	B9
2E97	C4	FE66	E2
2E98	C4	IE20	B4
3E00	B2	IE21	C3
3E01	B4	IE22	B3
3E02	C4	IE23	C4
3E03	D4	IE24	C4
3E20	F11	IE25	C3
3E21	H11	IE26	E2
3E50	B4	IE27	E2
3E51	B4	IE29	G5
3E52	B4	IE30	H5
3E53	B7	IE31	I5
3E54	G5	IE32	G5
3E55	E2	IE33	E12
3E56	E2	IE34	C3
3E57	E2	IE35	C4
3E58	G5	IE36	B4
3E59	B3	IE37	E5
3E60	A8		
3E61	E6		
3E62	D5		
3E63	B7		
3E64	B3		
3E69	H8		
3E70	H9		
3E73	B6		
3E74	I5		
3E77	A8		
3E78	A8		
3E79	B8		
3E80	C8		
3E81	E12		
3E82	F12		
3E83	F11		

8204 000 8484.1

F_15460_042.eps
080405

SSB: EPLD OSD

B19C EPLD OSD

B19C

A/D CONVERTER

7E24 AD9283BRS-50

7E23 AD9883AKST

B19d

B19d

8204 000 8484.1

F_15460_043.eps 080405

2E02 D1
2E04 D2
2E05 B4
2E07 A5
2E08 C5
2E09 A6
2E10 B5
2E11 B6
2E12 B6
2E13 B6
2E14 B6
2E15 B6
2E16 B5
2E17 B6
2E18 B6
2E19 B6
2E20 C6
2E21 D8
2E22 D7
2E23 E8
2E24 E7
2E25 F7
2E26 G7
2E27 G7
2E28 H4
2E29 H4
2E30 H4
2E32 F1
2E34 H4
2E35 I12
2E39 B1
2E48 G6
2E53 G6
3E04 D1
3E05 C1
3E06 D6
3E07 E6
3E08 F6
3E09 E1
3E10 E2
3E11 G6
3E12 G6
3E13 E1
3E14 G7
3E15 F1
3E16 H5
3E18 H7
3E19 H7
3E37 B1
3E90 D1
3E91 H12
5E00 A5
5E01 A5
5E02 B5
5E03 C5
7E22 E1
7E23 C8
7E24 B2
9E74 E2
9E78 B3
AL10 H12
FE01 G6
FE03 G6
FE04 H12
FL01 A4
IE00 H4
IE01 H5
IE03 E1
IE04 E2
IE05 F2
IL01 A7
IL02 B7
IL03 C7
IL05 G8

SSB: EPLD I/O

B19D EPLD I/O

B19D

7V01-2 EP1C12F256C8 — BANK 1

7V01-3 EP1C12F256C8 — BANK 2

7V01-4 EP1C12F256C8 — BANK 3

7V01-5 EP1C12F256C8 — BANK 4

7V02 DS90C385MTD — TTL PARALLEL-TO-LVDS

LVDS TRANSMITTER

7V03 MSM56V16160F-7T3 — DRAM 512K X 16 X 2

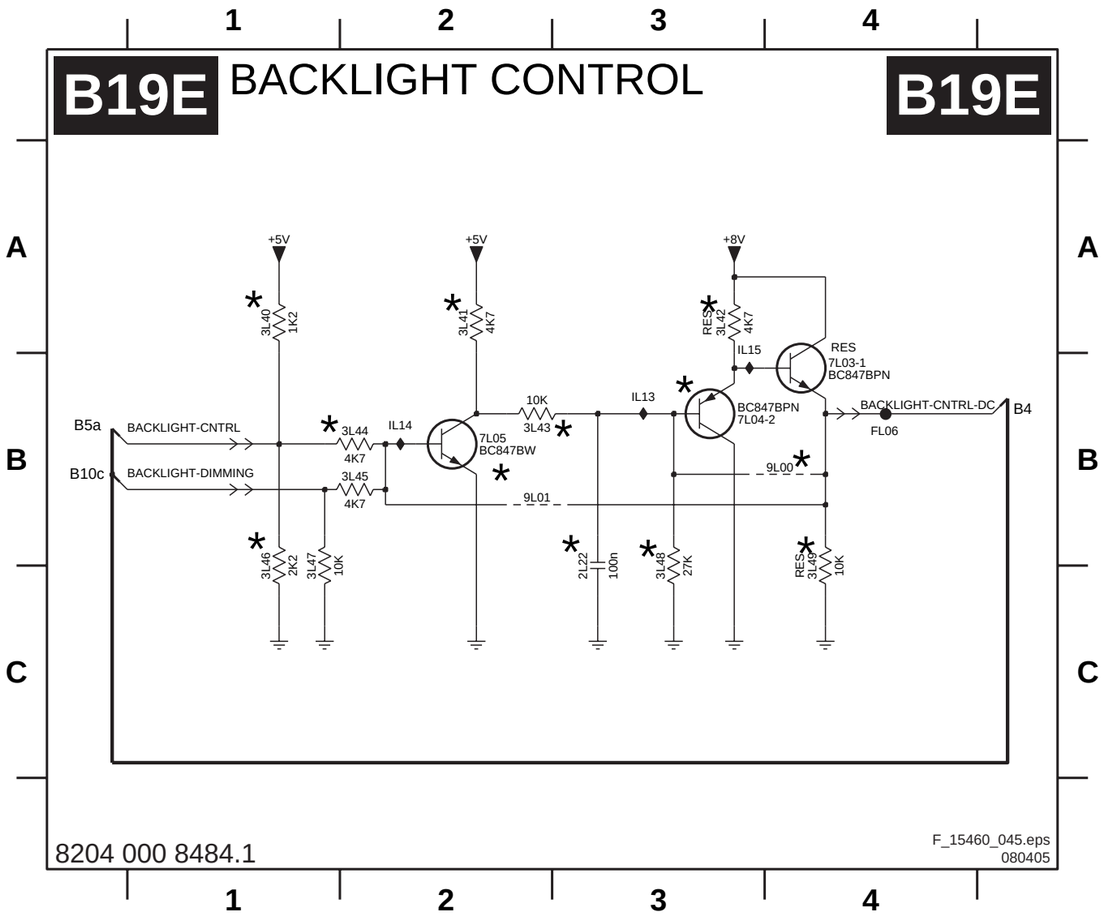
8204 000 8484.1

F_15460_044.eps 080405

2V06 B13 9E72 F8
2V07 A11 9E73 F8
2V08 A12 9E75 E3
2V09 A12 9E76 F3
2V10 A12 9E77 D8
2V11 E6 AV01 F9
2V12 D6 IV01 E3
2V16 C13 IV02 A14
2V17 C14 IV03 A14
2V18 D13 IV04 A11
2V19 D14 IV05 B7
2V20 E13
2V21 E14
2V22 G14
2V23 G14
2V24 G14
2V25 G14
3V01 H12
3V02 H12
3V07 G10
3V08 B13
3V14 A11
3V15 A14
3V16 A14
3V17 H12
3V18 I2
3V19 I12
3V20 I12
3V21-1 H8
3V21-2 H7
3V21-3 H8
3V21-4 G7
3V22-1 H8
3V22-2 H7
3V22-3 H8
3V22-4 H7
3V23-1 H7
3V23-2 H8
3V23-3 H7
3V23-4 H8
3V24-1 H7
3V24-2 H8
3V24-3 H7
3V24-4 I8
3V25 G12
3V26 H12
3V27 H11
3V28 H12
3V29 H11
3V30 H12
3V31 I11
3V32 I12
3V33 I11
3V34 I12
3V35 F6
3V36 B6
3V37 G2
3V38 G1
3V39 H5
3V40 H1
3V50 D5
3V51 D6
3V52 D6
3V53 E6
3V54 E6
3V55 E5
3V56 F5
3V57 F6
5V06 A12
5V07 A12
5V08 A13
6V01 A11
6V02 A13
6V03 A13
6V05 I2
6V06 D7
6V07 E7
7V01-2 A2
7V01-3 D2
7V01-4 G3
7V01-5 A7
7V02 B11
7V03 G6
7V04-1 D6
7V04-2 F6
7V06 F6
9E66 D8
9E67 E8
9E68 E8
9E69 E8
9E70 D8
9E71 E8

SSB: Backlight Control

2L22 B3
3L40 A1
3L41 A2
3L42 A3
3L43 B2
3L44 B2
3L45 B2
3L46 B1
3L47 B1
3L48 B3
3L49 B4
7L03-1 B4
7L04-2 B3
7L05 B2
9L00 B4
9L01 B2
FL06 B4
IL13 B3
IL14 B2
IL15 A3

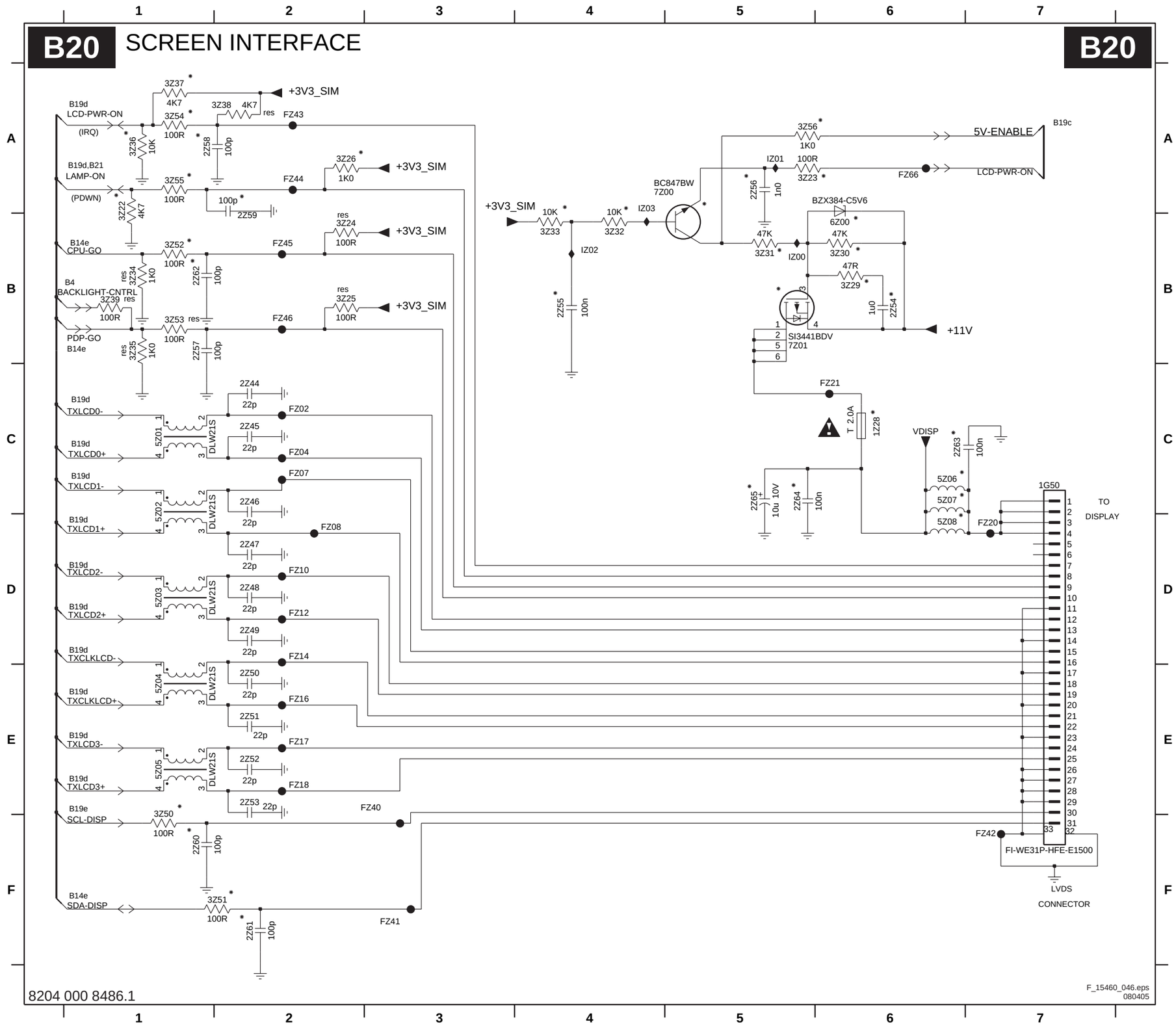


8204 000 8484.1

Personal Notes:

E_06532_012.eps
131004

SSB: Screen Interface



1G50 C7	5Z05 E1
2Z44 C2	5Z06 C6
2Z45 C2	5Z07 C6
2Z46 C2	5Z08 D6
2Z47 D2	6Z00 B6
2Z48 D2	7Z00 A4
2Z49 D2	7Z01 B5
2Z50 E2	FZ02 C2
2Z51 E2	FZ04 C2
2Z52 E2	FZ07 C2
2Z53 E2	FZ08 D2
2Z54 B6	FZ10 D2
2Z55 B4	FZ12 D2
2Z56 A5	FZ14 D2
2Z57 B1	FZ16 E2
2Z58 A1	FZ17 E2
2Z59 A2	FZ18 E2
2Z60 F1	FZ20 D7
2Z61 F2	FZ21 C6
2Z62 B1	FZ40 E3
2Z63 C6	FZ41 F3
2Z64 C5	FZ42 F7
2Z65 C5	FZ43 A2
3Z22 A1	FZ44 A2
3Z23 A5	FZ45 B2
3Z24 B2	FZ46 B2
3Z25 B2	FZ66 A6
3Z26 A2	IZ00 B5
3Z28 C6	IZ01 A5
3Z29 B6	IZ02 B4
3Z30 B6	IZ03 A4
3Z31 B5	
3Z32 B4	
3Z33 B4	
3Z34 B1	
3Z35 B1	
3Z36 A1	
3Z37 A1	
3Z38 A2	
3Z39 B1	
3Z50 F1	
3Z51 F2	
3Z52 B1	
3Z53 B1	
3Z54 A1	
3Z55 A1	
3Z56 A5	
5Z01 C1	
5Z02 C1	
5Z03 D1	
5Z04 E1	

SSB: Connection

1M01 D10	1M36 B15	1Y04 A10	1Y11 E4	1Y18 G4	1Y27 E8	1Y35 B15	2Y03 C3	2Y11 A5	2Y18 F6	2Y26 B13	2Y33 D13	2Y42 D7	2Y51 A8	3Y04 H4	3Y11 F6	3Y18 B13	3Y25 A7	3Y36 A8	5Y02 C3	5Y14 F6	5Y21 C8	9Y00 D9	9Y07 D3	9Y17 B5	1Y24 F3	1Y32 D9	1Y43 G7	1Y50 A13	1Y57 A9	1Y64 C8	1Y71 G9	1Y78 F8	FY87 F13
1M02 E7	1M46 A1	1Y05 A10	1Y12 F4	1Y21 E8	1Y28 D10	1Y37 B15	2Y04 C3	2Y12 G4	2Y19 F6	2Y27 B13	2Y34 A3	2Y43 A6	2Y52 G3	3Y05 G3	3Y12 F8	3Y19 C13	3Y27 H13	3Y37 F2	5Y03 C3	5Y15 A3	5Y22 C7	9Y01 G4	9Y09 D2	9Y00 A2	1Y25 F3	1Y37 E7	1Y44 F7	1Y51 B13	1Y58 A8	1Y65 A2	1Y72 G9	1Y79 F3	
1M03 E5	1M48 G14	1Y06 A10	1Y13 F4	1Y22 E8	1Y30 B15	1Y38 A10	2Y06 D2	2Y13 H3	2Y20 E6	2Y28 C13	2Y37 A8	2Y44 H13	2Y53 F9	3Y06 A5	3Y13 A5	3Y20 C12	3Y28 G13	3Y38 F3	5Y06 A3	5Y16 A13	5Y23 F9	9Y02 G6	9Y12 A5	9Y01 B2	1Y26 F3	1Y38 E7	1Y45 G7	1Y52 B14	1Y59 B8	1Y66 F10	1Y73 G9	1Y80 G14	
1M07 F10	1M49 F14	1Y07 A10	1Y14 F4	1Y23 E8	1Y31 B15	1Y39 A10	2Y07 E2	2Y14 G6	2Y21 E6	2Y29 C13	2Y38 A7	2Y45 G13	3Y00 D2	3Y07 G6	3Y14 G3	3Y21 D12	3Y30 E2	3Y39 G2	5Y07 B3	5Y17 B13	5Y01 B5	9Y03 F1	9Y13 B3	9Y03 B2	1Y27 F8	1Y39 F7	1Y46 B2	1Y53 B14	1Y60 B9	1Y67 F9	1Y74 A5	1Y81 H14	
1M09 G10	1M51 E14	1Y08 A10	1Y15 F4	1Y24 F8	1Y32 B15	2Y00 A3	2Y08 E2	2Y15 H6	2Y22 A5	2Y30 D13	2Y39 B7	2Y48 A5	3Y01 E2	3Y08 H3	3Y15 G2	3Y22 D12	3Y33 A6	3Y40 E6	5Y09 C3	5Y18 A7	7Y02 G3	9Y04 H2	9Y14 B1	1Y05 B1	1Y29 F4	1Y40 F7	1Y47 B2	1Y54 B14	1Y61 C7	1Y68 G9	1Y75 A5	1Y82 H7	
1M17 A4	1M52 A10	1Y09 B10	1Y16 F4	1Y25 F8	1Y33 B15	2Y01 B3	2Y09 F2	2Y16 H6	2Y23 D9	2Y31 D13	2Y40 C7	2Y49 F13	3Y02 E2	3Y09 E6	3Y16 G2	3Y23 D12	3Y34 E13	5Y00 G4	5Y11 G6	5Y19 B7	7Y03 G2	9Y05 G6	9Y15 B4	1Y22 E3	1Y30 G4	1Y41 F7	1Y48 A2	1Y55 B14	1Y62 C9	1Y69 G9	1Y76 G8	1Y85 A5	
1M20 F8	1Y02 A10	1Y10 E3	1Y17 F4	1Y26 E8	1Y34 B15	2Y02 B2	2Y10 H3	2Y17 G6	2Y25 A13	2Y32 D13	2Y41 C9	2Y50 F13	3Y03 F1	3Y10 F6	3Y17 B13	3Y24 B5	3Y35 F13	5Y01 G6	5Y12 H6	5Y20 B7	7Y04 H2	9Y06 H6	9Y16 B5	1Y23 E3	1Y31 H3	1Y42 F7	1Y49 A13	1Y56 A9	1Y63 C8	1Y70 G9	1Y77 F8	1Y86 E13	

B21 CONNECTION

B21

TO 1M46
5 A
AUDIO-STBY
OR
SDI SUPPLY

TO 1793
5 A
AUDIO-STBY
OR
C
PDP AUDIO

TO 1M37
H
SCART 3

TO 1M03
5 A
AUDIO-STBY
OR
SDI SUPPLY

TO 1M20
J
LED + SWITCH

TO 1M07
H
SCART 3

N.C.

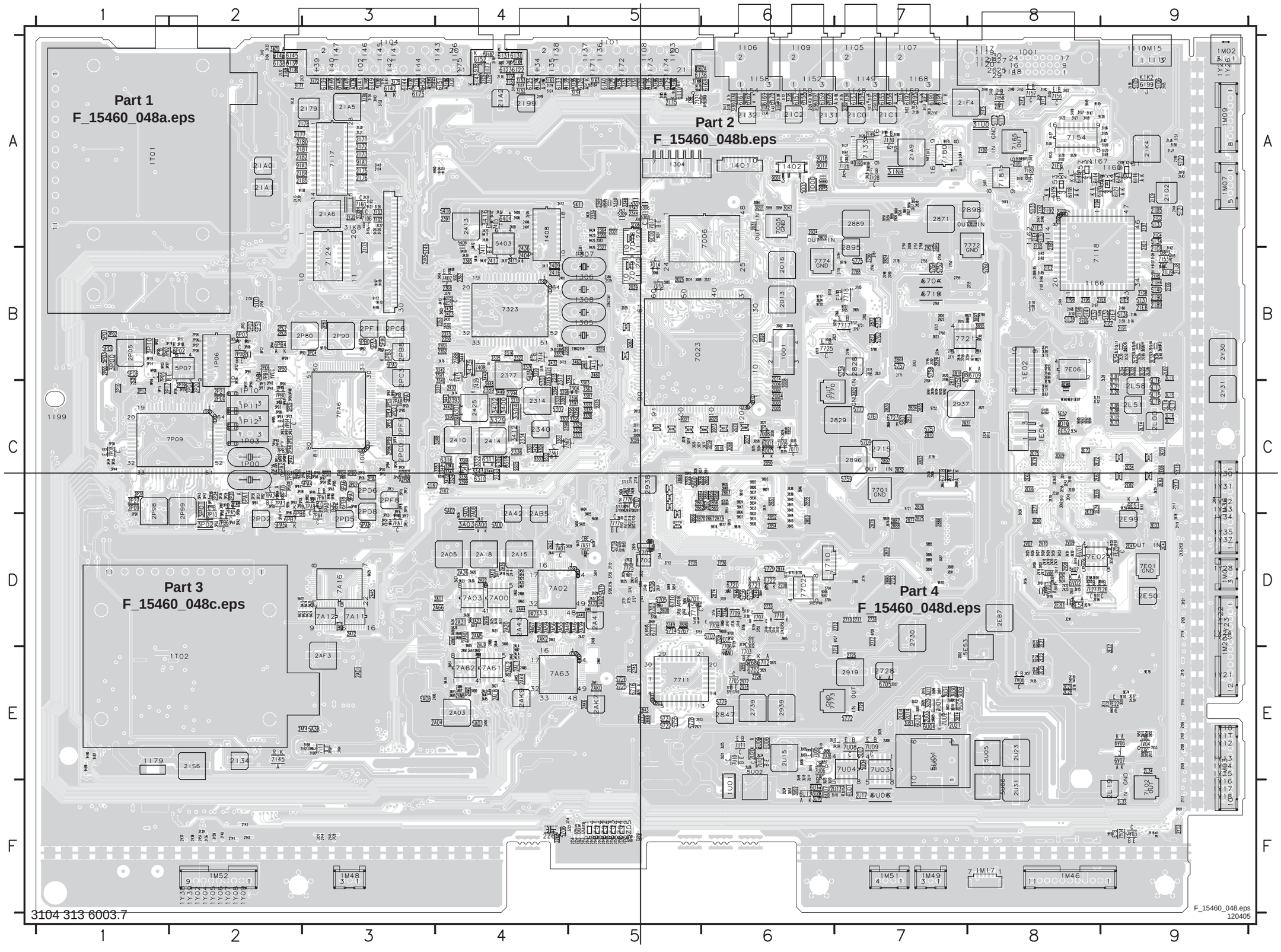
TO 1M01
J
LED + SWITCH

TO AL

8204 000 8485.1

F_15460_047.eps
110405

Layout SSB (Top Side Overview)

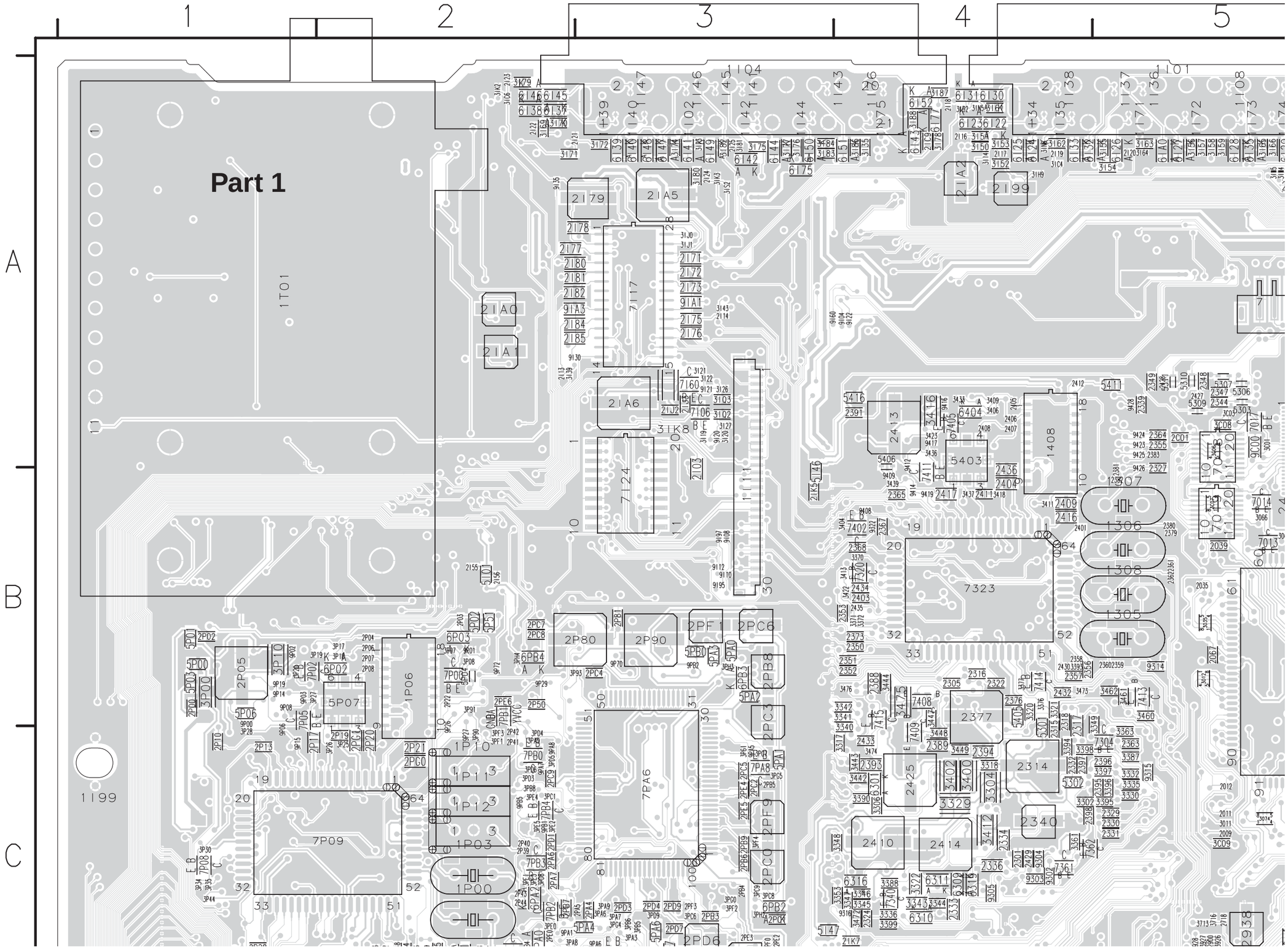


F_15460_048.eps
120405

Layout SSB Mapping (Top Side)

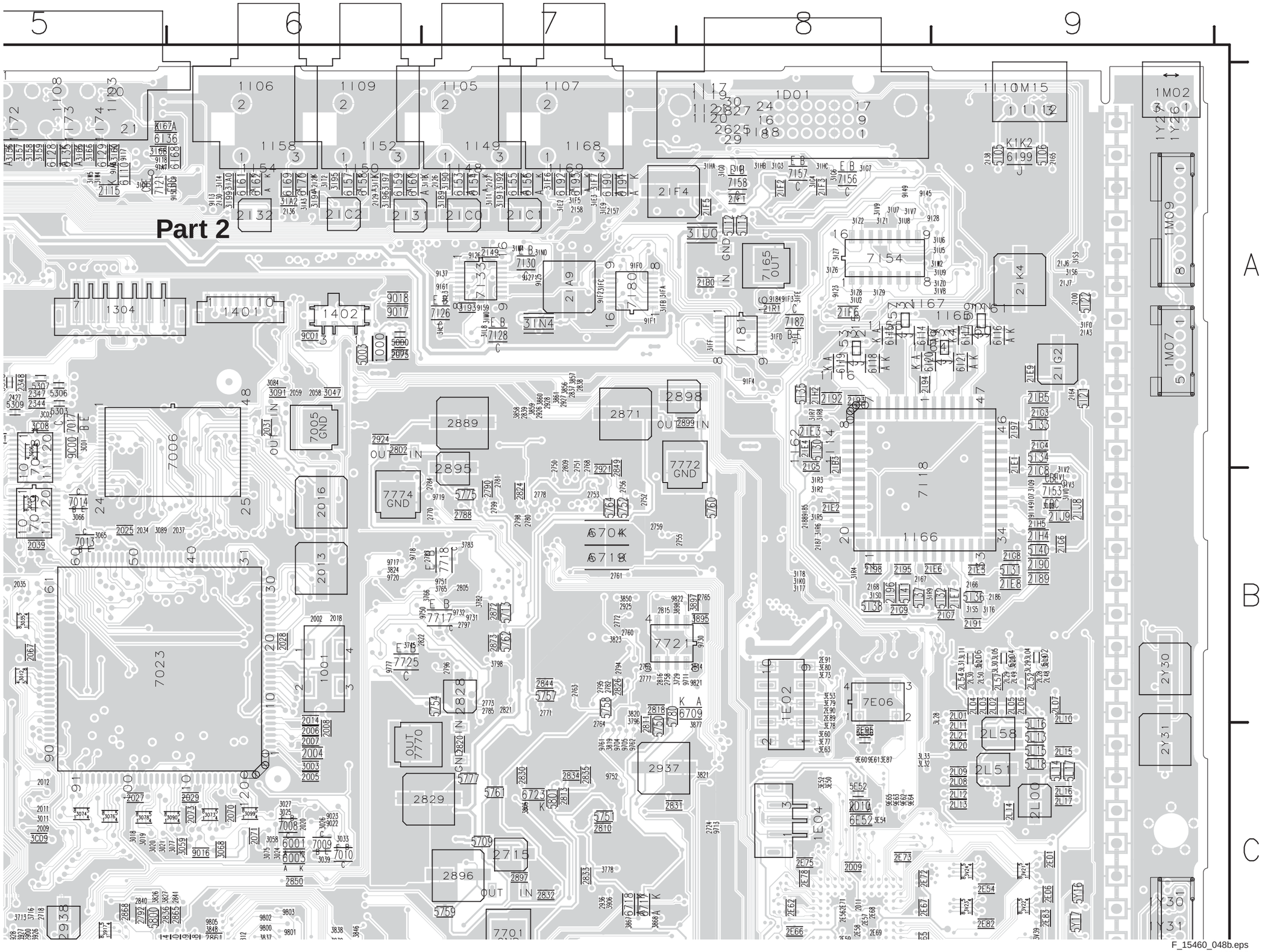
1000	A6	2357	B4	2780	B7	2925	B7	2E22	D8	2I98	B8	2P36	C2	2Y30	B9	3411	B4	3848	C6	3E16	E8	3IH9	A4	3PA2	D2	3V22	C9	5I05	A9	6I28	A5	7721	B7	9426	B5	9I49	A8
1001	B6	2358	B4	2781	B7	2926	A7	2E23	E8	2I99	A4	2P37	C2	2Y31	C9	3412	C4	3849	D5	3E37	E9	3IHA	A8	3PA3	C3	3V23	C9	5I06	A9	6I29	A5	7725	B6	9428	A5	9I51	A6
1304	A5	2359	B5	2782	B7	2927	A7	2E24	E8	2IA0	A2	2P38	C2	2Y32	D9	3413	B4	3850	B7	3E50	C8	3IHB	A8	3PA4	C3	3V24	C9	5I12	A8	6I30	A4	7770	C6	9700	D6	9I59	A7
1305	B5	2360	B5	2784	B7	2928	A7	2E25	E8	2IA1	A2	2P39	C2	2Y33	D9	3416	A4	3851	D5	3E52	C8	3IHC	A8	3PA5	C2	3V25	D8	5I13	A8	6I31	A4	7772	B8	9703	D5	9I60	A3
1306	B4	2361	B5	2785	B7	2929	D5	2E26	E8	2IA2	A4	2P40	C2	2Y37	F2	3418	B4	3853	C6	3E53	B8	3II4	A4	3PA6	C3	3V26	D8	5I21	A9	6I32	A4	7773	E6	9704	C7	9I61	A7
1307	B5	2362	B5	2787	B7	2931	D5	2E28	E8	2IA3	A9	2P41	C2	2Y38	F2	3422	B4	3854	C6	3E54	C8	3IJ0	A3	3PA7	C3	3V27	D8	5I22	A9	6I33	A4	7774	B6	9705	C7	9I84	A8
1308	B4	2363	C5	2788	B7	2935	D5	2E29	E8	2IA5	A3	2P42	C2	2Y39	F2	3423	A4	3855	C6	3E59	D9	3IJ1	A3	3PA8	C2	3V28	D8	5I30	A8	6I35	A5	7775	D5	9707	D5	9I85	B8
1401	A6	2364	A5	2790	B7	2936	C7	2E30	E8	2IA6	A3	2P43	C2	2Y40	F2	3433	A4	3856	A7	3E60	C8	3IK0	B8	3PA9	C3	3V29	D8	5I31	B9	6I36	A5	7776	C5	9708	C5	9I87	E1
1402	A6	2365	B4	2792	C5	2937	C7	2E32	E9	2IA9	A7	2P44	C2	2Y41	F2	3436	A4	3857	A7	3E61	C9	3IK2	A2	3PB0	C2	3V30	D8	5I32	B9	6I37	A2	7777	D5	9709	D5	9I89	E1
1408	A4	2367	B4	2794	B7	2938	C5	2E34	E8	2IB0	A8	2P48	C2	2Y42	F2	3437	B4	3858	A7	3E62	C8	3IK3	A3	3PB1	C2	3V31	D8	5I33	A9	6I38	A2	7A00	D4	9711	B8	9I90	E1
1702	D5	2368	B4	2795	B7	2939	E6	2E39	E9	2IB3	A8	2P50	B2	2Y43	F2	3439	B4	3859	A7	3E63	C8	3IK8	A3	3PB2	C2	3V32	D8	5I34	A9	6I39	A3	7A01	D4	9713	C8	9I95	B3
1703	D5	2373	B4	2796	B7	2A00	E4	2E41	D9	2IB5	A9	2P80	B2	2Y44	F3	3442	C4	3860	A7	3E64	D9	3IL1	A7	3PB3	C2	3V33	D8	5I35	A8	6I40	A3	7A02	D4	9717	B6	9I97	B3
1710	D7	2376	B4	2797	B7	2A02	D5	2E42	C8	2IC0	A7	2P81	B3	2Y45	F3	3443	C4	3861	A7	3E73	B8	3IL3	A7	3PB4	C2	3V34	D8	5I36	B9	6I41	A3	7A03	D4	9718	B6	9IA1	A3
1D01	A8	2377	B4	2798	B7	2A03	E4	2E43	D9	2IC1	A7	2P90	B3	2Y51	F2	3444	B4	3864	D6	3E74	D8	3IL8	A7	3PB5	C3	3V35	E8	5I37	B8	6I42	A3	7A11	D3	9719	B7	9IA3	A2
1E02	B8	2379	B5	2799	B7	2A04	E4	2E50	D9	2IC2	A6	2P98	C1	2Z44	F5	3447	B4	3865	D6	3E77	C8	3IM0	A7	3PB6	C3	3V36	C8	5I38	B8	6I43	A4	7A12	D3	9720	B6	9IA6	A5
1E04	C8	2380	B5	2800	D5	2A05	D4	2E54	C9	2IC8	B9	2P99	C2	2Z45	F5	3448	C4	3867	C7	3E78	C8	3IM4	A7	3PB7	C2	3V39	C9	5I40	B9	6I44	A3	7A16	D3	9721	C7	9IA7	A5
1I01	A5	2381	B5	2802	A6	2A06	D4	2E56	C8	2IC9	A4	2PA4	C3	2Z46	F5	3449	C4	3868	C7	3E79	B8	3IN0	A7	3PB8	C2	3V50	E9	5I41	B8	6I45	A2	7A31	D5	9722	D5	9ID0	E3
1I04	A4	2382	B5	2805	B7	2A08	C4	2E57	C8	2IE1	A9	2PA5	C3	2Z47	F5	3460	B5	3869	D5	3E80	B8	3IN4	A7	3PB9	C2	3V51	E9	5I46	B3	6I46	A2	7A61	E4	9727	D7	9IF0	A7
1I05	A7	2383	A5	2809	A7	2A09	D5	2E58	C8	2IE2	B8	2PA6	C2	2Z48	F5	3461	B5	3870	E6	3E87	C8	3IN5	A4	3PC1	C2	3V52	E9	5I47	C3	6I47	A3	7A62	E4	9728	D7	9IF1	A7
1I07	A7	2388	B4	2810	C7	2A10	D4	2E59	C8	2IE3	A8	2PA7	C2	2Z49	F5	3462	B5	3874	E5	3E91	D8	3IN6	A4	3PC2	D3	3V53	E9	5L02	B9	6I48	A3	7A63	E4	9729	D6	9IF2	A7
1I09	A6	2389	C4	2811	C7	2A11	D4	2E62	C8	2IE4	A8	2PA8	C2	2Z50	F5	3472	C4	3875	D6	3I00	E3	3IQ2	A3	3PC3	D3	3V54	E9	5L04	B9	6I49	A3	7E01	D9	9730	B8	9IF3	A8
1I11	B3	2391	A4	2813	C7	2A12	D3	2E65	C8	2IE5	B9	2PB3	C3	2Z51	F5	3473	B4	3876	D7	3I19	A3	3IQ3	A3	3PC4	D3	3V55	E9	5L06	B9	6I50	A3	7E02	D8	9731	B7	9IF4	A8
1I53	A8	2393	C4	2814	B8	2A13	D3	2E66	C8	2IE6	B9	2PB4	C3	2Z52	F5	3474	C4	3877	C8	3I20	A3	3IQ8	B9	3PC6	C3	3V56	D8	5L13	C9	6I51	A4	7E06	B8	9732	B7	9P00	B1
1I56	A9	2394	C4	2815	B7	2A14	D4	2E67	C8	2IE7	B9	2PB5	C3	2Z53	F5	3475	B4	3885	D7	3I21	A3	3IQ9	B9	3PC7	C3	3V57	E8	5L14	C9	6I52	A4	7E22	E9	9750	B7	9P01	B2
1I57	A8	2395	C5	2816	B7	2A15	D4	2E68	C8	2IE8	B9	2PB6	C3	2Z57	F5	3476	B4	3886	D7	3I22	A3	3IR2	B8	3PC8	C3	3Y04	C9	5L15	C9	6I53	A7	7E25	D9	9751	B7	9P02	B1
1I59	A9	2396	C5	2818	B7	2A16	D4	2E69	C8	2IE9	A9	2PB7	C2	2Z58	F5	3701	D6	3887	D7	3I26	A3	3IR3	B8	3PC9	C3	3Y15	F9	5L16	C9	6I54	A7	7E26	D9	9752	C7	9P03	B1
1I79	E1	2397	C4	2819	D6	2A17	D4	2E70	C8	2IF1	A8	2PB8	B3	2Z59	F5	3703	D6	3888	D7	3I27	A3	3IR4	B8	3PD0	C3	3Y16	F9	5L17	C9	6I55	A7	7E27	D8	9761	C7	9P06	C1
1M01	D9	2398	C4	2820	C7	2A18	D4	2E71	C8	2IF2	A8	2PB9	C3	2Z60	F5	3704	D6	3889	D7	3I35	A4	3IR5	B8	3PD1	C2	3Y17	C9	5L18	C9	6I56	A7	7I06	A3	9762	C7	9P08	B1
1M02	A9	2401	B4	2821	B7	2A20	D4	2E72	C8	2IF3	A8	2PC0	C3	2Z61	F5	3705	D6	3890	D7	3I39	A2	3IR6	B8	3PD2	C3	3Y18	D9	5P00	B1	6I57	A6	7I11	E3	9767	D6	9P13	C2
1M03	E9	2403	B4	2822	B6	2A21	D4	2E73	C8	2IF4	A7	2PC1	C3	2Z62	F5	3706	D5	3891	D7	3I43	A3	3IR7	A8	3PD3	C2	3Y19	D9	5P01	B1	6I58	A6	7I17	A3	9768	D6	9P14	B1
1M07	A9	2404	B4	2824	B7	2A22	D4	2E74	C8	2IF5	A8	2PC2	C3	2Z63	F4	3707	E7	3895	B8	3I50	A4	3IR8	A8	3PD4	C2	3Y27	F3	5P02	B2	6I59	A6	7I18	B9	9769	D6	9P15	C1
1M09	A9	2405	A4	2826	B7	2A23	D4	2E75	C8	2IF6	A8	2PC3	B3	2Z65	F4	3712	D5	3897	B8	3I51	A4	3IR9	B8	3PD5	C2	3Y28	F3	5P03	B1	6I60	A6	7I21	A6	9770	D6	9P19	B1
1M15	A9	2406	A4	2828	B7	2A25	D4	2E77	C8	2IG2	A9	2PC4	B3	3003	C6	3713	C5	3898	B8	3I52	A4	3IS0	B8	3PD6	C2	3Y36	F2	5P04	B2	6I61	A6	7I24	B3	9771	D6	9P26	C2
1M17	F8	2407	A4	2829	C7	2A26	D4	2E78	C8	2IG3	A9	2PC5	C3	3011	C5	3714	C5	3903	D6	3I53	A4	3IS2	A3	3PD8	C2	3Y39	F2	5P06	B1	6I62	A6	7I26	A7	9772	D6	9P27	C2
1M20	D9	2408	A4	2830	C7	2A27	D4	2E79	C8	2IG4	A9	2PC6	B3	3012	B5	3715	D5	3905	D6	3I54	A5	3IS3	A9	3PD9	C3	3Z22	F5	5P07	B2	6I68	A6	7I28	A7	9776	D5	9P29	B2
1M36	C9	2409	B4	2831	C7	2A29	D5	2E80	D8	2IG5	A8	2PC7	B2	3018	C5	3716	C5	3906	C7	3I55	A5	3IS5	B9	3PE0	C2	3Z34	F5	5P51	B2	6I69	A6	7I30	A7	9777	B6	9P70	B3
1M46	F8	2410	C4	2832	C7	2A30	D4	2E81	D8	2IG6	B9	2PC8	B2	3019	C5	3717	C5	3909	D5	3I56	A5	3IS6	A9	3PE1	C2	3Z35	F5	5PA0	B3	6I70	A6	7I33	A7	9800	C6	9P72	B2
1M48	F3	2411	B4	2833	C7	2A31	D4	2E82	C9	2IG7	B9	2PC9	C2	3020	C5	3718	D5	3913	D5	3I57	A5	3IT0	A7	3PE2	C2	3Z50	F5	5PA1	C3	6I75	A3	7I45	E2	9801	C6	9PA0	C3
1M49	F7	2412	A4	2834	C7	2A32	D5	2E83	C9	2IG8	B9	2PD1	C2	3021	C5	3719	D5	3914	D5	3I58	A5	3IT1	A7	3PE3	C2	3Z51	F5	5PA2	B3	6I77	A4	7I53	B9	9802	C6	9PA1	C2
1M51	F7	2413	A4	2835	C7	2A33	D5	2E87	D8	2IG9	B8	2PD2	D2	3024	C6	3720	D5	3915	C5	3I59	A5	3IT2	A6	3PE4	C2	3Z52	F5	5PA3	B3	6I90	A7	7I54	A8	9803	C6	9PA2	C3
1M52	F2	2414	C4	2836	C5	2A35	D4	2E89	B8	2IH2	A8	2PD3	C3	3025	C6	3721	D5	3916	C5	3I60	A5	3IT3	A6	3PE5	C2	3Z53	F5	5PA4	C3	6I91	A7	7I56	A8	9804	C6	9PA3	C2
1P00	C2	2416	B4	2837	A7	2A36	D4	2E90	B8	2IH4	B9	2PD4	C3	3026	C6	3722	D6	3917	C5	3I61	A4	3IT4	A6	3PF0	C3	3Z54	F4	5PA5	D2	6I92	A7	7I57	A8	9805	C6	9PA4	D3
1P03	C2	2417	B4	2838	A7	2A37	D5	2E91	B8	2IH5	B9	2PD5	D3	3027	C6	3723	D5	3922	D5	3I62	A4	3IT6	B9	3PF1	C2	3Z55	F5	5PA6	C3	6I93	A7	7I58	A8	9806	C6	9PA5	C3
1P06	B2	2425	C4	2839	A7	2A39	D5	2E95	C8	2IJ2	A3	2PD6	C3	3033	C6	3724	D7	3923	D5	3I63	A5	3IT7	B8	3PF2	C3	5000	A6	5PA7	C3	6I99	A9	7I60	A3	9807	D6	9PA6	C3
1P10	C2	2427	A5	2840	C5	2A40	D5	2E96	D8	2IJ3	A3	2PD7	C3	3035	B5	3725	D5	3924	D5	3I64	A5	3IT8	B8	3PF3	C2	5001	A6	5PA8	D3	6IA0	A5	7I65	A8	9808	D7	9PA7	C2
1P11	C2	2428	A5	2841	C6	2A41	D5	2E97	D9	2IJ6	A9	2PD8	C3	3039	C6	3726	D5	3925	D5	3I65	A5	3IU0	A8	3PF4	C3	5003	A6	5PB0	B3	6P02	B2	7I80	A7	9809	D6	9PA8	C2
1P12	C2	2429	C4	2843	E5	2A42	D4	2E98	D8	2IJ7	A9	2PD9	C3	3047	A6	3727	D5	3926	C5	3I66	A5	3IU2	A8	3PF6	C3	5301	C4	5U01	F7	6P03	B2	7I81	A8	9810	D7	9PB1	C2
1T01	A2	2430	B4	2844	B7	2A43	D4	2E99	D9	2IJ8	B9	2PE0	C2	3058	C6	3728	D5	3927	C5	3I67	A5	3IU5	A9	3PF7	D3	5302	C4	5U02	F6	6PA0	C2	7I82	A8	9812	C6	9PB2	B3
1T02	E2	2432	B4	2845	D6	2A44	D4	2I00	A9	2IJ9	B9	2PE1	D3	3059	C6	3729	B8	3928	C5	3I68	A5	3IU6	A9	3PF8	C3	5303	A5	5U03	E7	6PA1	C2	7L02	F9	9815	D6	9PB3	C2
1U01	F6	2433	C4	2846	D6	2A45	D3	2I03	B3	2IK4	A9	2PE2	C3	3065	B5	3730	D5	3929	C5	3I69	A2	3IU7	A8	3PF9	C3	5306	A5	5U04	E7	6PA2	C2	7P00	B2	9816	D6	9PB4	C2
2002	B6	2434	B4	2847	E6	2A46	D5	2I13	A2	2IK5	B3	2PE3	C3	3066	B5	3732	E6	3930	D5	3I70	A2	3IU8	A8	3PG0	C3	5307	A5	5U05	E8	6PB2	C3	7P02	B1	9817	D6	9PB5	C2
2004	C6	2435	B4	2848	E5	2A49	D4	2I14	A3	2IK7	C4	2PE4	C3	3068	C6	3733	D6	3931	D5	3I71	A2	3IU9	A9	3PG2	D2	5309	A5	5U06	F8	6PB3	B3	7P05	B1	9818	D6	9PB8	D3
2005	C6	2436	B4	2849	B7	2A50	D4	2I15	A5	2IR1	A8	2PE5	C3	3073	C6	3734	D6	3932	D5	3I72	A3	3IV0	B9	3PG3	C3	5310	A5	5U07	E7	6PB4	B2	7P08	C1	9821	B8	9Y01	F9
2006	C6	2707	D6	2850	C6	2A53	D4	2I16	A4	2IS6	E2	2PE6	B2	3074	C5	3736	D6	3933	D5	3I73	A3	3IV1	B9	3PG4	C3	5311	A5	5V06	D8	6PB6	D2	7P09	C2	9822	B8	9Y04	F9
2007	C6	2708	D6	2851	C6	2A54	D4	2I17	A4	2L00	C9	2PF1	B3	3075	C6	3737	D6	3A00	D5	3I74	A3	3IV2	B9	3PG5	C3	5403	A4	5V07	D8	6PB7	C2	7P10	C2	9825	D5		
2008	C6	2709	D6	2852	D6	2A56	D4	2I18	A4	2L01	B9	2PF3	C3	3076	C5	3738	D6	3A01	D5	3I75	A3	3IV3	B9	3PG6	C2	5405	B4	5V08	D8	6PB8	C3	7PA0	C3	9826	C5		
2009	C5	2710	D7	2853	D6	2A59	D4	2I19	A4	2L02	B9	2PF8	C3	3077	C6	3739	D6	3A03	D4	3I76	A3	3IV7	A8	3PH2	C3	5406	A4	5Y16	C9	6U01	F7	7PA1	C3	9827	D5		
2011	C5	2711	D7	2854	D6	2A62	D4	2I20	A5	2L03	B9	2PF9	C3	3078	C5	3740	E6	3A05	D5	3I77	A3	3IV8	A9	3PH3	B3	5411	A5	5Y17	C9	6U03	E7	7PA2	C2	9A04	C5		
2012	C5	2712	D7	2855	C6	2A66	D4	2I21	A2	2L04	B9	2PG0	C2	3084	A6	3741	D6	3A07	D5	3I78	A4	3IV9	A8	3PH4	B2	5416	A4	5Z01	F5	6U04	E7	7PA3	C2	9A05	D5		
2013	B6	2715	C7	2856	C6	2A76	D4	2I22	A2	2L05	B9	2PG1	C2	3089	B5	3742	D6	3A09	D5	3I79	A2	3IW2	A9	3PH6	C2	5703	D6	5Z02	F5	6U05	E7	7PA4	C3	9A06	D5		
2014	B6	2716	E7	2857	C6	2A95	E3	2I23	A2	2L06	B9	2U03	E7	3090	C6	3743	D6	3A11	D4	3I80	A3	3IW4	A5	3PH7	D2	5705	D5	5Z03	F5	6U06	F7	7PA5	C2	9A19	E4		
2016	B6	2717	D7	2858	C6	2AA6	D5	2I24	A3	2L07	B9	2U04	E7	3091	A6	3744	D5	3A12	D4	3I81	A3	3IW5	A5	3PH8	C3	5706	D5	5Z04	F5	6U07	F6	7PA6	C2	9A21	D2		
2018	B6	2718	C5	2859	C6	2AA7	D4	2I25	A3	2L08	C9	2U05	E7	3099	C6	3745	B6	3A13	D4	3I82	A3	3IZ0	A9	3U01	F6	5707	C5	5Z05	F5	6U08	E6	7PA7	D3	9A22	D3		
2020	C6	2719	C5	2860	C6	2AB2	D4	2I26	A7	2L09	C9	2U07	E7	3302	C4	3746	D6	3A14	D4	3I83	A3	3IZ1	A8	3U02	E7	5708	D5	5Z06	F4	6U09	E6	7PA8	C3	9A23	D3		
2025	B5	2720	D5	2861	C6	2AB5	D4	2I27	A7	2L10	B9	2U09	E7	3304	C4	3747	D6	3A15	D4	3I84	A3	3IZ2	A8	3U03	E7	5709	C7	6001	C6	6U13	F6	7PA9	C3	9A24	D3		
2027	C5	2721	D5	2862	C5	2AB6	D4	2I28	A6	2L11	C9	2U11	E6	3306	C4	3748	D6	3A16	D4	3I86	A4	3IZ6	A8	3U04	E7	5713	B7	6003	C6	6U17	F6	7PB0	C2	9A25	D3		
2028	B6	2722	D5	2863	C5	2AB7	D4	2I29	A6	2L12	C9	2U12	E6	3317	C4	3749	D6	3A18	D4	3I87	A4	3IZ7	A8	3U05	E7	5714	D5	6301	C4	6V01	D8	7PB1	B2	9A60	D4		
2029	C6	2723	D7	2864	C5	2AD1	E3	2I30	A6	2L13	C9	2U13	F7	3318	C4	3750	D6	3A20	D4	3I88	A4	3IZ8	A8	3U06	E6	5721	E5	6309	C4	6V02	D8	7PB2	C2	9A61	E4		
2031	A6	2724	C8	2865	C6	2AF3	E3	2I31	A7	2L14	C9	2U14	E7	3320	B4	3751	E6	3A21	D4	3I89	A7	3IZ9	A8	3U07	E6	5722	E5	6310	C4	6V03	D8	7PB3	C2	9A65	D4		
2034	B5	2725	E7	2866	D5	2AF4	E3	2I32	A6	2L15	C9	2U15	E6	3321	B4	3752	D6	3A23	D4	3I90	A7	3L04	B9	3U08	E6	5725	E5	6311	C4	6V06	E9	7PB4	C2	9A67	D4		
2035	B5	2726	E6	2867	D6	2AK0	E5	2I34	E2	2L16	C9	2U16	E7	3322	C4	3753	D5	3A26	D4	3I91	A7	3L05	B9	3U09	E7	5726	E5	6316	C4	6V07	E9	7PB6	D2	9A71	D4		
2037	B6	2728	E7	2868	C5	2AK1	E5	2I36	A6	2L17	C9	2U17	F7	3329	C4	3754	D6	3A27	D4	3I92	A7	3L11	B9	3U10	F7	5750	C7	6319	C4	7005	A6	7U01	E7	9A72	D2		
2039	B5	2729	E7	2869	C6	2AK2	D4	2I38	A9	2L19	F8	2U18	E7	3330	C5	3755	D6	3A28	D4	3I93	A7	3L19	B9	3U11	E7	5751	C7	6404	A4	7006	A6	7U02	E7	9A73	D2		
2058	A6	2730	D7	2870	D5	2AK3	D4	2I49	A7	2L20	C9	2U20	E6	3332	C5	3756	D6	3A66	D4	3I94	A6	3L20	B9	3U13	E7	5752	B7	6701	D5	7008	C6	7U03	E7	9A74	D3		
2059	A6	2732	E5	2871	A7	2AK4	E4	2I55	B2	2L21	C9	2U21	E7	3335	C5	3760	D7	3AA0	E4	3I95	A6	3L21	B9	3U14	E7	5753	D6	6702	E6	7009	C6	7U04	E7	9A75	D3		
2067	B5	2733	D6	2872	B7	2AK5	E4	2I56	B2	2L28	B9	2U23	E8	3336	C4	3765	B7	3AA1	E4	3I96	A6	3L28	B9	3U15	F7	5754	B7	6703	D5	7010	C6	7U05	E6	9A78	D5		
2070	C6	2735	D5	2873	B7	2AK6	E5	2I57	A7	2L29	B9	2U30	E7	3340	C4	3766	B7	3AA4	D4	3I97	A6	3L29	B9	3U16	E6	5755	E5	6704	B7	7013	B5	7U06	E6	9A79	D5		
2071	C6	2736	D6	2874	D6	2AK7	E5	2I58	A7	2L30	B9	2U31	F8	3341	B4	3778	C7	3AA5	E4	3I99	A6	3L30	B9	3U17	E7	5756	D6	6705	E7	7014	B5	7U08	E7	9C00	A5		
2073	C6	2738	D7	2875	D7	2AK9	E4	2I62	E3	2L33	F9	2U32	E7	3342	B4	3782	B7	3AA6	D4	3IA0	A6	3L31	B9	3U18	E6	5757	B7	6709	C8	7017	A5	7U09	E7	9C01	A6		
2075	A6	2739	E6	2876	C7	2AL0	D4	2I64	A9	2L34	E9	2U34	F6	3343	C4	3783	B7	3AA7	E4	3IA2	A6	3L32	C8	3U19	E6	5758	B7	6710	D5	7018	A5	7U10	E6	9E59	C9		
2301	C4	2740	D5	2877	D7	2AL1	E4	2I65	A9	2L48	B9	2U36	E6	3344	C4	3796	B7	3AA9	E4	3IA3	A6	3L33	C8	3U20	F6	5759	C7	6711	D5	7019	B5	7U11	E6	9E60	C8		
2305	B4	2741	D5	2878	D7	2AL2	E4	2I66	B9	2L49	B9	2V06	D8	3345	C4	3798	B7	3AB0	E4	3IB2	A4	3P00	C1	3U21	E6	5760	B8	6712	E6	7023	B5	7U12	E6	9E61	C8		
2314	C4	2742	D5	2879	D7	2AL3	E4	2I67	B8	2L50	B9	2V07	D8	3346	C4	3805	C7	3AB2	E4	3IB8	E3	3P01	C2	3U22	F6	5761	C7	6716	E5	7304	B5	7V04	E9	9E62	C8		
2315	C4	2743	D6	2880	D7	2AL4	D4	2I68	B8	2L51	C9	2V08	D8	3347	C4	3819	C7	3AB3	E4	3IB9	E3	3P02	D2	3U23	F6	5762	B7	6717	C7	7320	B4	7V06	E8	9E63	C8		
2316	B4	2744	D6	2881	D5	2AL8	E4	2I71	A3	2L52	B9	2V09	D8	3348	C4	3820	B7

Layout SSB (Top Side Part 1)



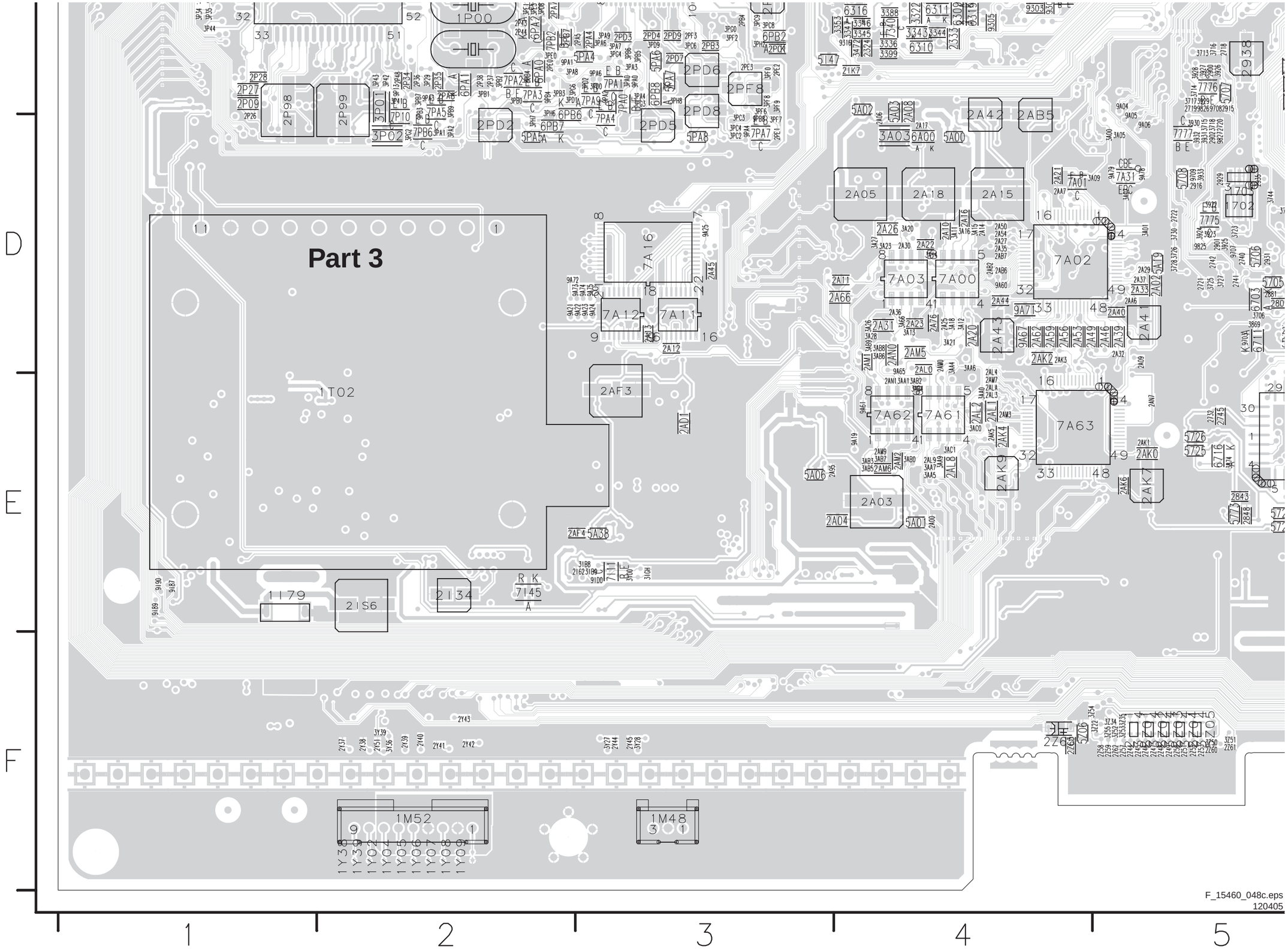
F_15460_048a.eps
080405

Layout SSB (Top Side Part 2)

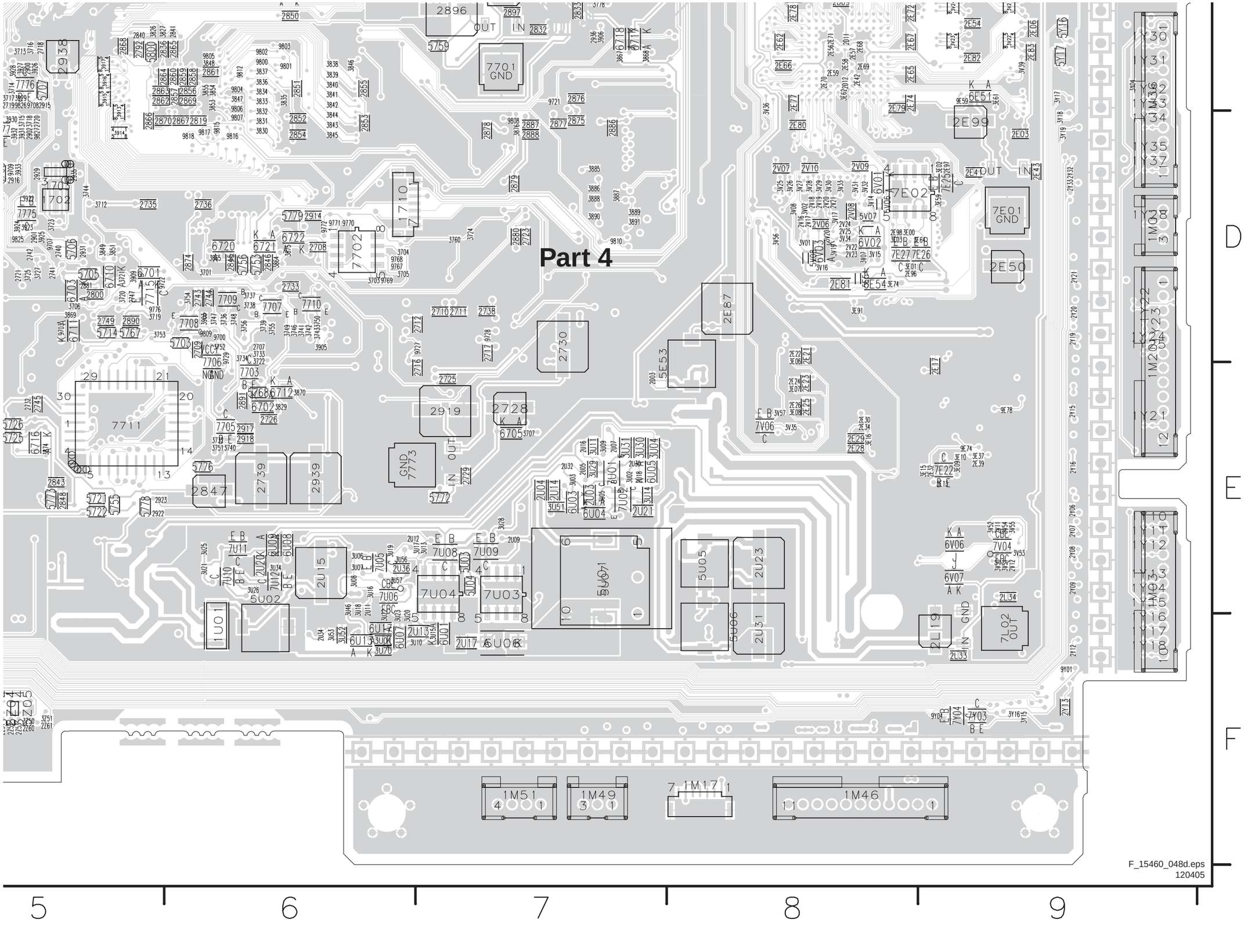


F_15460_048b.eps
120405

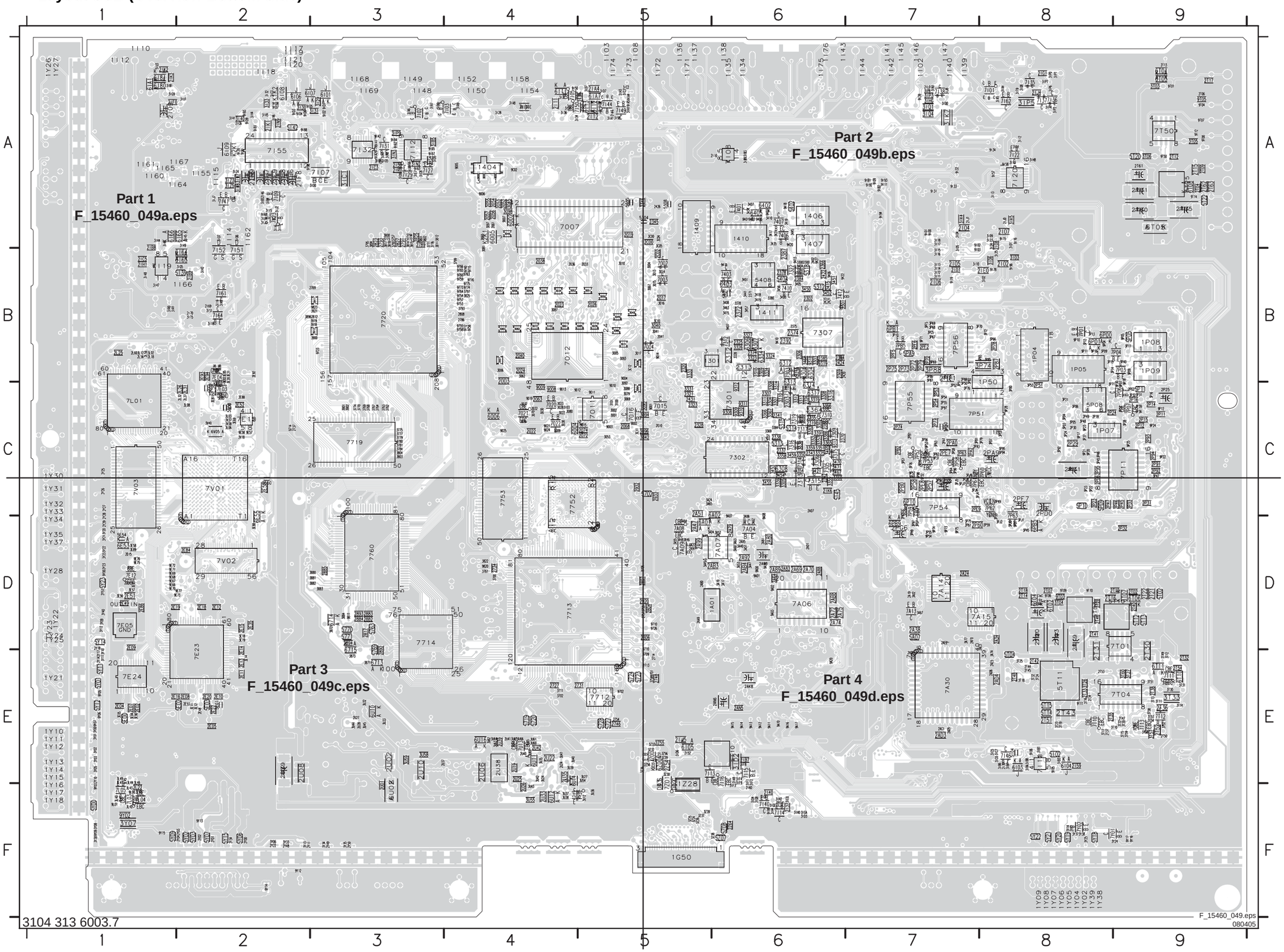
Layout SSB (Top Side Part 3)



Layout SSB (Top Side Part 4)



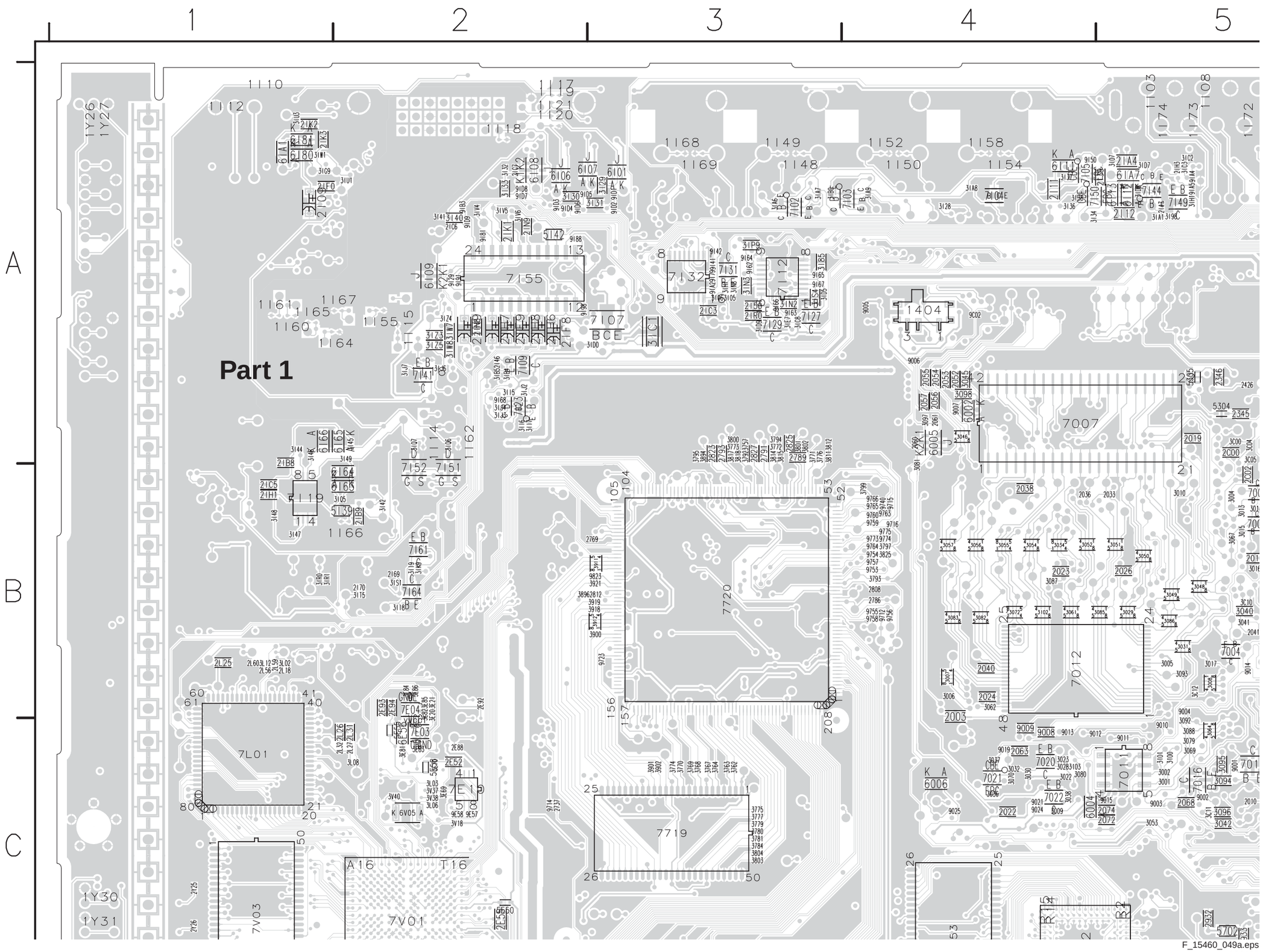
Layout SSB (Overview Bottom Side)



Layout SSB Mapping (Bottom Side)

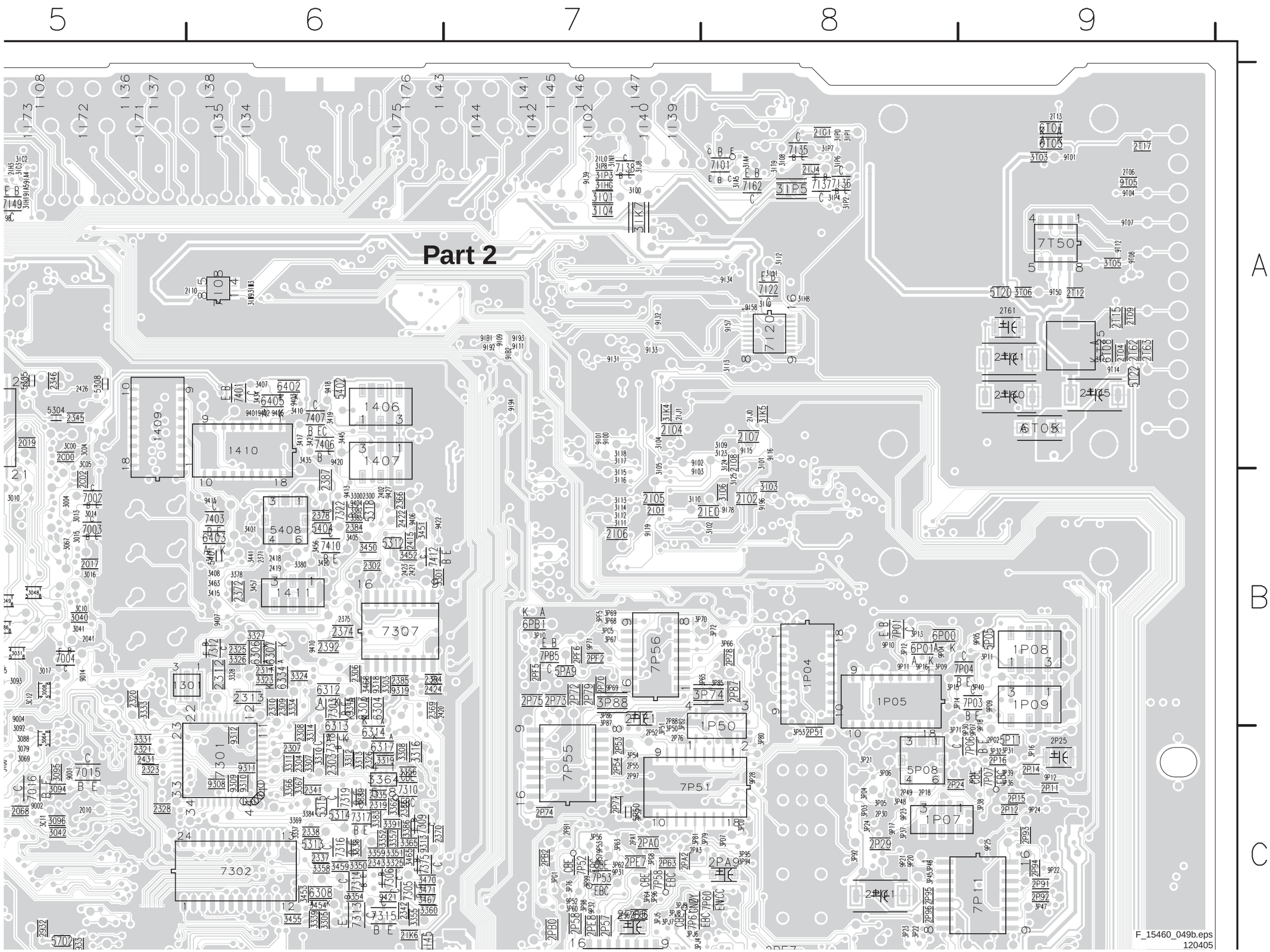
1301	B5	2804	D5	2I33	E8	2PA0	C7	2Y49	F3	3357	C6	3902	C3	3IA5	A8	3IW8	A2	3T04	D8	3Z37	F5	6I04	E8	7I09	A2	9418	A6	9IB1	A7
1404	A4	2806	D5	2I37	F6	2PA1	C7	2Y50	F3	3358	C6	3911	B3	3IA6	A3	3IW9	A6	3T05	A9	3Z38	F6	6I05	E5	7I10	E8	9420	A6	9IB2	A7
1406	A6	2807	D5	2I39	A5	2PA2	C7	2Y52	F8	3359	C6	3912	B3	3IA7	A3	3IZ3	A2	3T06	A9	3Z39	F5	6I06	A2	7I12	A3	9421	C6	9IB3	A2
1407	A6	2808	B4	2I40	F6	2PA3	C7	2Y53	D1	3360	C6	3918	B3	3IA8	A4	3IZ4	A2	3T10	E9	3Z56	E5	6I07	A3	7I13	E5	9422	B6	9ID1	A3
1409	A5	2812	B3	2I46	A2	2PA9	C8	2Z54	E5	3362	C6	3919	B3	3IA9	A4	3IZ5	A2	3T11	E9	5304	A5	6I08	A2	7I14	F6	9427	B6	9ID2	A3
1410	B6	2817	D3	2I47	A5	2PB0	C7	2Z55	E5	3364	C6	3921	B3	3IB0	A3	3L02	B1	3T12	E9	5305	A5	6I09	A2	7I15	E6	9701	E5	9ID3	A2
1411	B6	2823	A3	2I48	E6	2PB1	C7	2Z56	E5	3365	C6	3A02	D7	3IB1	E8	3L03	C2	3T13	E9	5308	A5	6I11	A4	7I16	E6	9702	E5	9ID4	A2
1A01	D5	2825	A3	2I50	A3	2PB2	C7	2Z64	F6	3366	C6	3A04	D5	3IB3	E8	3L06	C2	3T14	E9	5312	B6	6I12	A5	7I19	B1	9706	D5	9ID5	A2
1G50	F5	2827	A3	2I52	E5	2PD0	C8	3001	C5	3367	C6	3A06	D6	3IB4	A2	3L08	C2	3T15	E9	5313	C6	6I13	A5	7I20	A8	9710	D5	9ID6	A2
1P04	B8	2882	D3	2I59	E8	2PE7	C7	3002	C5	3369	C6	3A17	D6	3IB5	A2	3L12	B1	3T16	E8	5314	C6	6I63	B2	7I22	A8	9712	B4	9ID7	A2
1P05	C8	2883	D3	2I60	F6	2PE8	C7	3004	B5	3378	B6	3A19	D6	3IB6	E8	3L40	F1	3T17	E8	5315	C6	6I64	A2	7I23	A2	9714	C2	9ID8	A2
1P07	C8	2884	D3	2I69	B2	2PE9	C7	3005	B5	3380	B6	3A22	D5	3IB7	E8	3L41	F1	3T18	E8	5318	B6	6I65	A1	7I27	A3	9715	B4	9ID9	A2
1P08	B9	2885	D3	2I70	B2	2PF2	B7	3006	B4	3382	B6	3A24	C5	3IBA	E8	3L42	F1	3T19	E8	5401	B6	6I66	A2	7I29	A3	9716	B4	9L00	F1
1P09	C9	2892	E3	2IA4	A5	2PF5	B7	3007	B4	3383	C6	3A40	D6	3IBB	E8	3L43	F1	3T20	E9	5402	A6	6I80	A1	7I31	A3	9723	B3	9L01	F1
1Z28	E5	2893	D3	2IB7	E6	2PF6	B7	3008	B5	3384	C6	3A45	D5	3IC0	E8	3L44	E1	3T22	E9	5404	B6	6I81	A1	7I32	A3	9726	D5	9P04	B8
2003	B4	2894	D3	2IB8	A1	2PF7	C8	3009	C4	3385	B6	3A46	D5	3IC1	A3	3L45	E1	3T23	E8	5408	B6	6IA1	A1	7I35	A8	9740	B4	9P05	B9
2010	C5	2920	D5	2IB9	B2	2PG2	C9	3010	B5	3386	C6	3A47	D6	3IC2	A5	3L46	E1	3T24	E8	5702	C5	6IA7	A5	7I36	A8	9753	B4	9P07	C9
2017	B5	2932	C5	2IC3	A3	2PG6	D7	3013	B5	3389	C6	3A48	D5	3IC3	A5	3L47	E1	3T25	E8	5719	E4	6P00	B8	7I37	A8	9754	B4	9P09	B9
2019	A5	2933	C5	2IC5	B1	2T01	A9	3014	B5	3391	C6	3A49	D5	3IC5	E8	3L48	F1	3T26	E8	5720	E4	6P01	B8	7I38	A7	9755	B4	9P10	B8
2022	C4	2A01	D6	2IC6	A2	2T02	D9	3015	B5	3401	B6	3A51	D6	3IC7	E8	3L49	E1	3T27	E9	5723	E5	6P10	C7	7I40	F6	9756	B4	9P11	B8
2023	B4	2A07	C6	2IC7	A2	2T03	D8	3016	B5	3405	B6	3A52	D6	3IC8	A3	3P03	C8	3T28	D8	5724	E5	6PB1	B7	7I41	A2	9757	B4	9P12	C9
2024	B4	2A19	D7	2IE0	B8	2T04	A9	3017	B5	3407	A6	3A53	D6	3ID0	A3	3P04	C8	3T29	E9	5727	E5	6PB5	D8	7I44	A5	9758	B4	9P16	B8
2026	B5	2A24	D7	2IF0	A1	2T05	A9	3022	C4	3408	B6	3A55	D5	3ID2	E6	3P05	C8	3T30	E9	5728	E5	6PB9	D7	7I46	E8	9759	B4	9P17	C8
2033	B5	2A34	D8	2IF8	A2	2T06	A9	3023	C4	3410	A6	3A60	D6	3ID3	F6	3P06	C8	3T31	E9	5763	D3	6T01	A9	7I49	A5	9760	B4	9P18	B9
2036	B4	2A38	D7	2IF9	A2	2T07	D8	3028	C4	3414	B6	3A61	D6	3ID4	F6	3P09	B8	3T32	E8	5769	E3	6T02	D8	7I50	A5	9763	B4	9P20	C8
2038	B4	2A47	D5	2IG1	A8	2T09	A9	3029	B5	3415	B6	3A62	D6	3ID5	A3	3P11	B9	3T33	E9	5770	D3	6T03	A9	7I51	B2	9764	B4	9P21	C8
2040	B4	2A51	C5	2IH1	B1	2T10	D9	3030	C4	3417	A6	3A63	D6	3ID6	E5	3P12	B8	3T51	E9	5771	D3	6T04	D8	7I52	B2	9765	B4	9P22	C9
2041	B5	2A64	D6	2IH3	A5	2T11	D8	3031	B5	3419	A6	3A64	D5	3ID7	A5	3P13	B8	3T52	E9	5A07	D7	6T05	A9	7I55	A2	9766	B4	9P23	C8
2052	A4	2A69	D6	2IH6	A2	2T12	A9	3032	C4	3420	B6	3A65	C5	3ID8	A5	3P14	B8	3T53	E9	5E00	E1	6T06	D9	7I61	B2	9773	B4	9P24	C9
2053	A4	2A70	D6	2IH7	A2	2T13	A9	3034	B4	3421	A6	3A67	D7	3ID9	A3	3P15	B8	3T54	E9	5E01	E2	6T07	D9	7I62	A8	9774	B4	9P25	C9
2054	A4	2A72	D6	2IH8	A2	2T14	D8	3036	C4	3434	A6	3A74	E8	3IE0	F6	3P16	C9	3T55	E9	5E02	E2	6T08	A9	7I64	B2	9775	B4	9P28	C8
2055	A4	2A74	D6	2IH9	A2	2T15	A9	3037	C4	3435	A6	3A77	D7	3IE7	A3	3P21	C8	3T56	E9	5E03	E2	6T10	E9	7L01	B1	9811	D3	9P30	C9
2056	A4	2A75	D6	2IJ0	A8	2T16	D8	3038	C4	3441	B6	3C00	A5	3IF1	E6	3P22	C8	3T57	E9	5E50	C2	6T11	E9	7L03	F1	9820	D4	9P31	C7
2057	A4	2A79	D6	2IJ1	A7	2T17	A9	3040	B5	3445	A6	3C04	A5	3IF2	E6	3P23	C8	3T58	E9	5E54	D1	6U02	E3	7L04	F1	9823	B3	9P32	C7
2060	A4	2A80	D6	2IJ4	A8	2T18	D8	3041	B5	3450	B6	3C05	A5	3IF3	F6	3P24	C8	3T59	E9	5E55	C2	6U10	E3	7L05	E1	9A00	D6	9P52	C7
2061	A4	2A81	D6	2IJ5	E5	2T19	D8	3042	C5	3451	B6	3C10	B5	3IF4	E6	3P31	C9	3T60	E9	5E58	C2	6U11	E4	7P01	B8	9A01	D6	9P53	C7
2063	C4	2A83	D6	2IK1	A2	2T20	D8	3045	A4	3452	B6	3C11	C5	3IF8	E6	3P32	C9	3U12	F5	5I02	E8	6U12	F4	7P03	B9	9A02	D6	9P54	D7
2068	C5	2A88	D6	2IK2	A1	2T21	D9	3046	A4	3453	C6	3C12	B5	3IF9	E6	3P33	C9	3U24	E4	5I04	E8	6U14	E4	7P04	B9	9A03	D6	9P69	B7
2072	C5	2A89	D6	2IK3	A1	2T22	D9	3048	B5	3454	C6	3E04	E1	3IG9	A1	3P36	C9	3U27	E5	5I10	E6	6U16	E4	7P06	C9	9A07	D6	9P71	B7
2074	C5	2A90	D6	2IK6	C6	2T30	E9	3049	B5	3455	C6	3E05	E1	3IGA	F6	3P37	C8	3U32	E3	5I39	B2	6V05	C2	7P07	C9	9A08	D6	9P73	D7
2300	B6	2A91	D5	2IL0	A7	2T31	E8	3050	B5	3456	B6	3E11	E2	3IGB	F6	3P38	C9	3U33	E3	5I42	A2	6Z00	E5	7P11	C9	9A10	E6	9P74	D7
2302	B6	2A92	D6	2IN8	A2	2T32	E9	3051	B5	3457	B6	3E12	E2	3IGC	F6	3P39	C9	3U35	E4	5I45	C6	7002	B5	7P51	C7	9A11	E6	9P75	D7
2303	C6	2A99	D5	2IN9	A2	2T33	E8	3052	B4	3459	C6	3E14	E2	3IGD	F6	3P40	B9	3U36	F5	5P05	B9	7003	B5	7P52	C7	9A12	E6	9PB7	D8
2304	C6	2AA5	D6	2IR0	A3	2T34	E8	3053	C5	3463	B6	3E18	D2	3IGE	F6	3P45	C8	3U37	F4	5P08	C8	7004	B5	7P53	C7	9A13	E6	9T01	A9
2306	B6	2AA9	D5	2L18	B1	2T35	E8	3054	B4	3465	C6	3E19	D2	3IGF	F6	3P46	C8	3U38	F4	5P09	C8	7007	A5	7P54	C7	9A14	E6	9T02	D8
2307	C6	2AB0	D5	2L22	F1	2T36	E9	3055	B4	3467	C6	3E20	B2	3IH0	F6	3P47	C9	3U39	E4	5P10	C8	7011	C5	7P55	C7	9A15	E6	9T03	D8
2308	C6	2AB3	D6	2L25	B1	2T37	E8	3056	B4	3468	B6	3E21	B2	3IH1	A5	3P48	C8	3U40	E4	5P11	C9	7012	B4	7P56	B7	9A16	E6	9T04	A9
2309	B6	2AB4	D6	2L26	C2	2T38	E9	3057	B4	3470	C6	3E51	D1	3IH2	F6	3P49	C8	3U41	E4	5P50	C7	7015	C5	7P58	C7	9A17	E6	9T05	A9
2310	B6	2AB8	D6	2L27	C2	2T40	D9	3061	B4	3471	C6	3E55	D1	3IH4	F6	3P50	C7	3U42	E4	5PA9	B7	7016	C5	7P59	C7	9A18	D6	9T06	D8
2311	B6	2AC1	E7	2L31	C2	2T41	D8	3062	B4	3700	D4	3E56	D1	3IH7	A3	3P51	C7	3U43	F4	5T02	D9	7020	C4	7P60	C8	9A20	E6	9T07	A9
2312	B6	2AD0	E7	2L32	C2	2T42	E8	3064	C5	3702	E4	3E57	D1	3IH8	A8	3P52	C7	3U44	E3	5T03	D8	7021	C4	7P61	C8	9C02	A4	9T08	A9
2313	B6	2AD3	E7	2L56	B1	2T43	E8	3067	B5	3709	E5	3E58	D1	3IHG	A7	3P53	C8	3U45	E3	5T04	E8	7022	C4	7P62	C8	9E57	C2	9T09	D8
2319	C6	2AD4	E8	2L59	B1	2T44	E8	3069	C5	3710	D5	3E69	C2	3II0	A8	3P54	C7	3U54	E5	5T10	D9	7301	C6	7P63	D8	9E58	C2	9T10	D8
2320	B5	2AD5	E7	2L60	B1	2T45	E8	3070	C4	3711	E4	3E70	C2	3II1	A8	3P55	D7	3U55	F4	5T11	E8	7302	C6	7PB5	B7	9E66	D1	9T11	E8
2321	C5	2AD6	E8	2P01	C8	2T46	D8	3072	B4	3757	A3	3E81	C2	3II2	A8	3P56	C7	3U58	E3	5T12	D9	7303	B6	7T01	D9	9E67	D1	9T12	A9
2323	C5	2AE2	D7	2P11	C9	2T47	E9	3079	C5	3758	E5	3E82	B2	3II3	A8	3P57	C7	3U59	E3	5T13	D9	7305	C6	7T04	E9	9E68	D1	9T14	A9
2325	B6	2AE3	D8	2P12	C9	2T48	E8	3080	C4	3759	D5	3E83	C2	3II5	A2	3P60	C7	3U60	E4	5T14	E8	7306	C6	7T10	E8	9E69	D1	9T50	A9
2326	C6	2AE5	E8	2P14	C9	2T49	E9	3081	B4	3761	D4	3E84	B2	3II6	A2	3P62	C7	3U61	E4	5T15	E8	7307	B6	7T11	E9	9E70	D1	9Y00	D1
2328	C5	2AF0	D7	2P15	C9	2T50	E9	3082	B4	3762	C3	3E85	B2	3II7	A2	3P63	C7	3U62	E4	5T20	A9	7309	C6	7T12	E9	9E71	D1	9Y02	F1
2335	C6	2AK8	E6	2P16	C9	2T51	E8	3083	B4	3763	C3	3E86	B2	3II8	B2	3P64	C7	3U63	E4	5T22	A9	7310	C6	7T13	E9	9E72	D1	9Y03	F1
2337	C6	2AN5	E6	2P18	C8	2T52	E9	3085	B5	3764	C3	3E88	D2	3II9	B2	3P65	B8	3U64	E4	5T25	A9	7312	B6	7T50	A9	9E73	D2	9Y05	E1
2338	C6	2AN6	E6	2P23	C8	2T53	E8	3086	B5	3767	C3	3E89	D1	3IJ2	A2	3P66	B8	3U65	E4	5Y00	F1	7313	C6	7U07	F4	9E75	D1	9Y06	E1
2341	C6	2C00	A5	2P24	C8	2T54	E9	3087	B4	3768	C3	3E90	E1	3IJ3	A2	3P67	B7	3U66	E4	5Y01	E1	7314	C6	7U13	E4	9E76	D1	9Y07	E1
2342	C6	2C02	B5	2P25	C9	2T60	A9	3088	C5	3769	C3	3I01	A8	3IJ4	A2	3P68	B7	3U67	E4	5Y02	F2	7315	C6	7V01	C2	9E77	D2	9Y09	F1
2343	C6	2D04	D1	2P29	C8	2T61	A9	3092	C5	3770	C3	3I02	B8	3IJ6	A2	3P69	B7	3U68	E4	5Y03	F2	7316	C6	7V02	D2	9I00	A7	9Y12	F2
2345	A5	2D15	D1	2P30	C8	2T62	A9	3093	B5	3771	A3	3I03	B8	3IJ7	A2	3P70	B7	3U69	E4	5Y06	F2	7317	C6	7V03	C1	9I01	A7	9Y13	F2
2346	A5	2E02	E1	2P31	C9	2T63	A9	3094	C5	3772	A3	3I04	A7	3IJ8	A7	3P71	C8	3V18	C2	5Y07	F2	7318	C6	7Y01	F9	9I02	A7	9Y14	F2
2354	B6	2E04	E1	2P32	D9	2U01	F3	3095	C5	3773	A3	3I05	B7	3IK4	A7	3P72	B8	3V37	C2	5Y09	F1	7319	C6	7Y02	F8	9I03	B7	9Y15	F1
2366	B6	2E05	E2	2P33	C9	2U02	E3	3096	C5	3774	C3	3I06	B8	3IK5	A8	3P74	B7	3V38	C2	5Y11	E1	7322	B6	7Z00	E5	9I05	E8	9Y16	F9
2369	B6	2E07	E1	2P45	C9	2U06	E4	3097	A4	3775	C3	3I07	A5	3IK7	A7	3P75	D7	3V40	C2	5Y12	E1	7375	C6	7Z01	E5	9I06	E8	9Y17	F9
2370	C6	2E08	E2	2P46	C9	2U08	F2	3098	A4	3776	A3	3I08	A8	3IK9	B2	3P76	C7	3Y00	E1	5Y14	D1	7401	A6	9001	C5	9I09	A7		
2371	B6	2E09	D1	2P47	C8	2U10	F3	3100	C5	3777	C3	3I09	A8	3IN1	A7	3P79	C8	3Y01	E1	5Y15	F2	7403	B6	9002	C5	9I11	A7		
2372	B6	2E10	E2	2P49	C8	2U19	E4	3101	C5	3779	C3	3I10	B7	3IN2	A3	3P80	C8	3Y02	E1	5Y18	F8	7406	A6	9003	C5	9I15	A8		
2374	B6	2E11	E2	2P51	C8	2U22	E4	3102	B4	3780	C3	3I11	B7	3IN3	A3	3P81	C7	3Y03	E1	5Y19	F8	7407	A6	9004	B5	9I16	A8		
2375	B6	2E12	D2	2P52	C7	2U24	E4	3103	C4	3781	C3	3I12	B7	3IN8	A3	3P82	B7	3Y05	E1	5Y20	F8	7410	B6	9005	A4	9I19	B7		
2378	B6	2E13	E2	2P53	C7	2U25	E4	3300	B6	3784	C3	3I13	B7	3IO5	A3	3P85	B8	3Y06	F2	5Y21	F8	7412	B7	9006	A4	9I29	A2		
2384	B6	2E14	E2	2P54	C7	2U26	F4	3301	B6	3792	A3	3I14	B7	3IO6	A3	3P86	B7	3Y07	F1	5Y22	F8	7712	E5	9007	A4	9I31	A7		
2385	B6	2E15	D2	2P55	C7	2U27	E3	3303	B6	3793	B4	3I15	B7	3IP0	A8	3P87	B7	3Y08	F1	5Y23	D1	7713	D4	9008	C4	9I32	A7		
2386	C6	2E16	E1	2P56	C7	2U28	E3	3305	C6	3794	A3	3I16	B7	3IP1	A8	3P88	B7	3Y09	D1	5Z07	F6	7714	D3	9009	C4	9I33	A7		
2387	B6	2E18	D2	2P57	C7	2U29	F2	3307	C6	3795	A3	3I17	A7	3IP2	A8	3P92	C8	3Y10	E1	5Z08	F6	7719	C3	9010	C5	9I34	A8		
2392	B6	2E19	D1	2P58	C7	2U33	F4	3308	C6	3797	B4	3I18	A7	3IP3	A7	3P94	C8	3Y11	E1	6002	A4	7720	B3	9011	C5	9I39	A7		
2402	B6	2E20	E2	2P59	D8	2U35	E4	3310	C6	3799	B4	3I23	A8	3IP4	A8	3P95	C8	3Y12	D1	6004	C4	7752	C4	9012	C4	9I41	A3		
2415	B6	2E27	E2	2P60	D7	2U37	E3	3311	C6	3800	A3	3I24	A8	3IP5	A8	3P96	C7	3Y13	F2	6005	A4	7753	C4	9013	C4	9I42	A3		
2418	B6	2E35	D2	2P61	D7	2U38	E4	3312	C6	3801	A3	3I25	B8	3IP6	A8	3P97	D7	3Y14	F8	6006	C4	7760	D3	9014	B5	9I50	A4		
2419	B6	2E48	E2	2P62	D7	2U39	E4	3313	C6	3802	A3	3I28	A4	3IP7	A8	3P98	C7	3Y20	D1	6303	B6	7A04	D6	9015	C5	9I57	A8		
2420	B6	2E49	D1	2P63	C7	2U40	E4	3314	C6	3803	C3	3I29	A3	3IP8	A7	3P99	C7	3Y21	D1	6304	B6	7A06	D6	9019	C4	9I58	A8		
2421	B6	2E51	D1	2P65	C7	2U41	E4	3315	B6	3804	C3	3I30	A2	3IP9	A3	3PC0	C8	3Y22	D1	6306	B6	7A07	D6	9021	C4	9I62	A3		
2422	B6	2E52	C2	2P66	C7	2U42	E4	3316	C6	3811	A3	3I31	A3	3IQ0	A7	3PC5	B7	3Y23	D1	6307	B6	7A08	D5	9024	C4	9I63	A3		
2423	B6	2E53	E2	2P70	B7	2Y00	F2	3319	C6	3812	A3	3I32	A2	3IQ1	A7	3PD7	C8	3Y24	F9	6308	C6	7A09	D5	9025	C4	9I64	A3		
2424	B6	2E55	C2	2P71	C7	2Y01	F2	3323	B6	3814	A3	3I33	A2	3IQ4	A7	3PF5	B7	3Y25	F8	6312	B6	7A13	D7	9308	C6	9I65	A3		
2426	A5	2E84	D2	2P72	B7	2Y02	F2	3324	B6	3815	A3	3I34	A4	3IQ5	B2	3PG1	C7	3Y30	F1	6313	B6	7A14	D7	9309	C6	9I66	A3		
2431	C5	2E86	D1	2P73	B7	2Y03	F2	3325	C6	3817	A3	3I36	A4	3IQ6	A2	3PG7	D7	3Y33	F2	6314	C6	7A15	D8	9310	C6	9I67	A3		
2713	E5	2E88	C2	2P74	C7	2Y04	F2	3326	B6	3818	A3	3I37	A4	3IQ7	A2	3PG8	C7	3Y34	F3	6317	C6	7A30	E8	9311	C6	9I68	A2		
2714	E5	2E92	B2	2P75	B7	2Y10	E1	3327	B6	3822	D4	3I38	A4	3IR0	B1	3PH5	D8	3Y35	F3	6334	B6	7E03	B2	9312	C6	9I78	B8		
2727	E4	2E93	B2	2P76	C7	2Y11	F2	3328	B6	3825	B4	3I40	A2	3IR1	B1	3PH9	D7	3Y37	F8	6402	A6	7E04	C2	9313	C6	9I79	A3		
2731	E5	2E94	B2	2P77	C7	2Y14	E1	3331	C5	3871	E3	3I41	A2	3IS1	B2	3PI0	B7	3Y38	F8	6403	B6	7E05	D1	9318	B6	9I81	A2		
2734	D4	2I01	B7	2P78	B8	2Y17	E1	3333	B5	3872	D3	3I42	B2	3IS4	A3	3PJ0	D8	3Y40	D1	6405	A6	7E10	C2	9319	B6	9I88	A2		
2737	C2	2I02	B8	2P79	B7	2Y18	D1	3334	B6	3873	E3	3I44	A1	3IT5	B2	3PJ1	D8	3Z23	E5	6713	E3	7E12	D1	9401	A6	9I91	A2		
2746	E5	2I04	A7	2P87	B8	2Y22	F2	3337	C6	3880	D3	3I45	A2	3IT9	A8	3PJ2	D8	3Z24	F5	6714	D3	7E23	E2	9402	A6	9I92	A7		
2748	E5	2I05	B7	2P88	B7	2Y23	D1	3338	C6	3881	D3	3I46	A1	3IU1	A2	3PJ3	D8	3Z25	F5	6715	E3	7E24	E1	9403	A6	9I93	A7		
2754	E5	2I06	B7	2P91	C9	2Y25	C1	3339	C6	3882	D3	3I47	B1	3IU3	A1	3PJ4	C7	3Z26	F5	6A01	C5	7I01	A8	9404	B6	9I94	A7		
2757	D5	2I07	A8	2P92	C9	2Y26	C1	3350	C6	3883	D3	3I48	B1	3IV4	A2	3PJ5	C7	3Z29	E5	6A02	C6	7I02	A3	9405	A6	9I96	B8		
2769	B3	2I08	A8	2P93	C9	2Y27	C1	3351	C6	3884	D3	3I49	A2	3IV5	A2	3PJ6	C7	3Z30	E5	6E53	D1	7I03	A4	9406	B6	9I98	A2		
2786	B4	2I09	A1	2P94	C9	2Y28	D1	3352	C6	3894	A3	3I85	A3	3IV6	A2	3PJ7	C7	3Z31	E5	6E55	D2	7I04	A4	9407	B6	9I99	F6		
2789	A3	2I10	A6	2P95	C8	2Y29	D1	3354	C6	3896	B2	3I98	A5	3IW1	A1	3PJ8	C7	3Z32	E5	6E56	C2	7I05	A5	9410	B6	9IA2	A3		
2791	A3	2I11	A4	2P96	C8	2Y34	F2	3355	C6	3900	B3	3IA1	A5	3IW3	A6	3PJ9	C7	3Z33	E5	6I01	A3	7I07	A3	9413	B6	9IA4	A5		
2793	A3	2I12	A5	2P97	C7	2Y48	F2	3356	C6	3901	C3	3IA4	A8	3IW7	A2	3T03	A9	3Z36	E5	6I03	E8	7I08	A6	9415	B6	9IA5	A5

Layout SSB (Bottom Side Part 1)

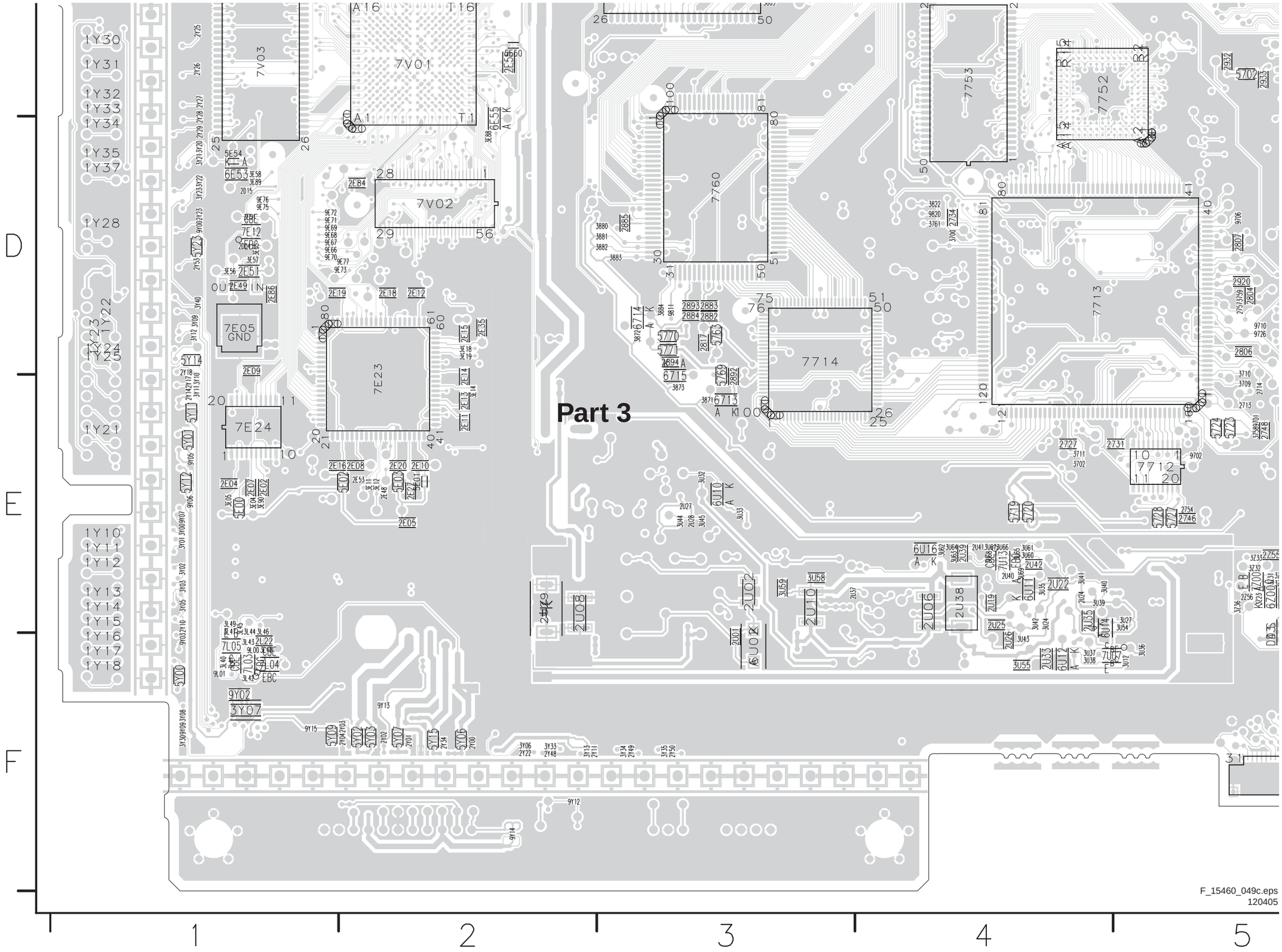


F_15460_049a.eps
120405

Layout SSB (Bottom Side Part 2)

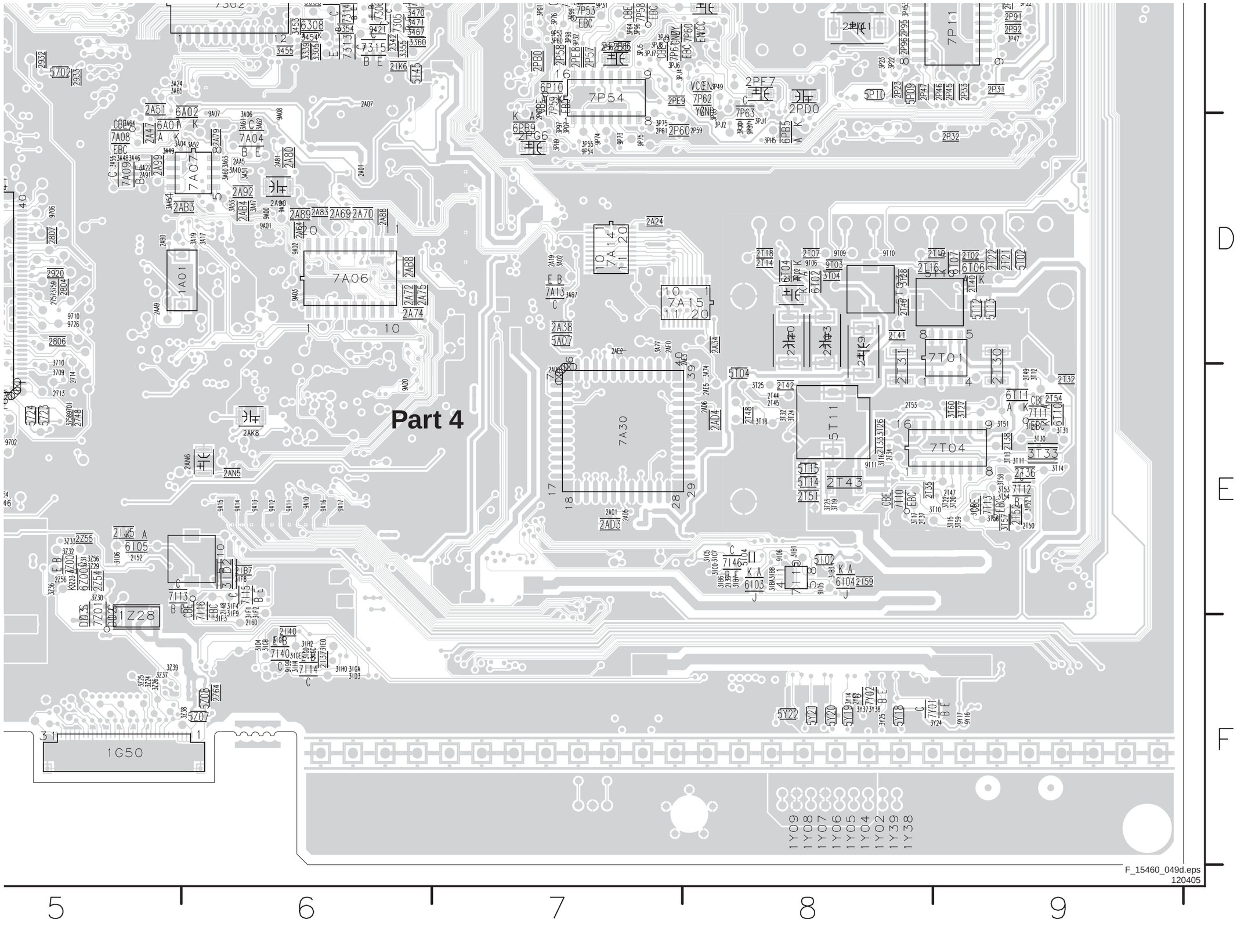


Layout SSB (Bottom Side Part 3)



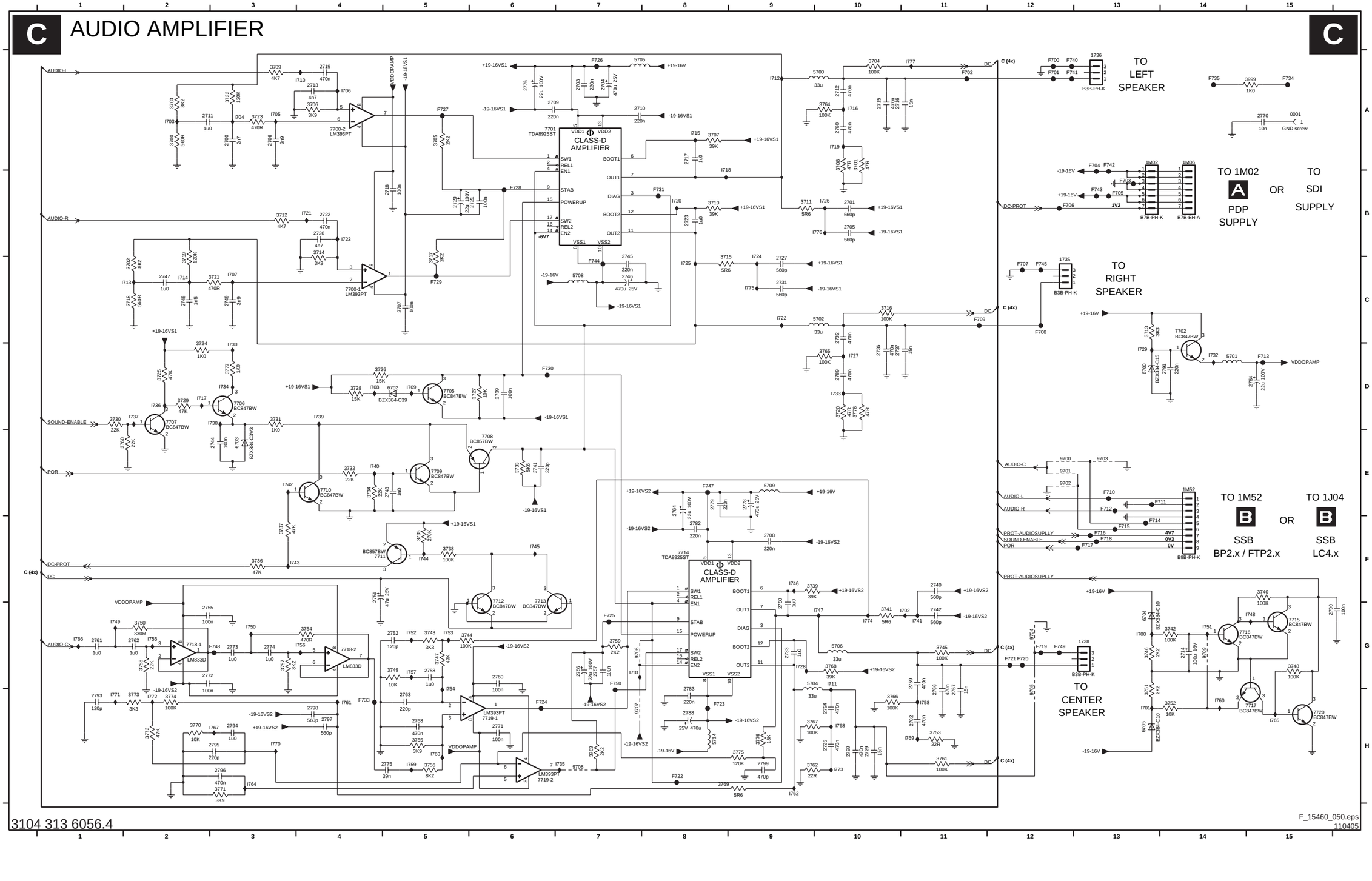
F_15460_049c.eps
120405

Layout SSB (Bottom Side Part 4)



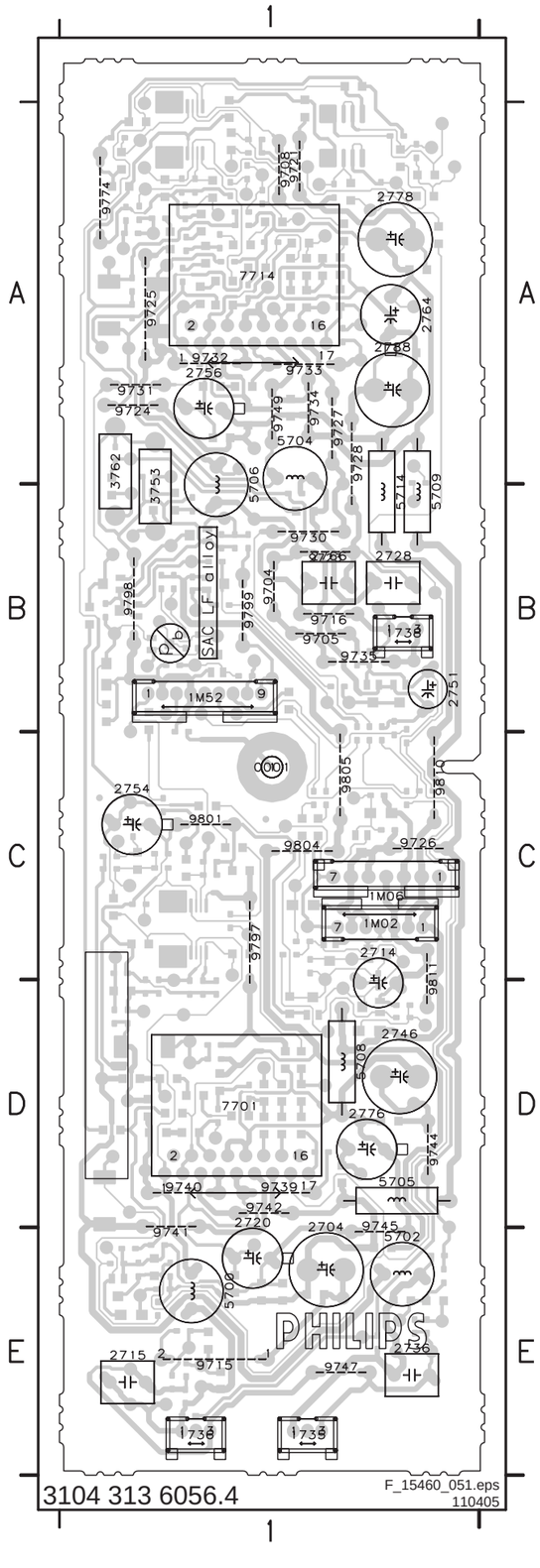
PDP Audio Amplifier

0001 A15 1735 C12 1736 A13 1738 G13 1M02 A13 1M06 A14 1M52 E14 2700 A3 2701 B10 2702 H11 2703 A7 2704 A7
2705 B10 2706 A3 2707 C5 2708 F9 2709 A4 2710 A7 2711 A2 2712 A10 2713 A4 2714 G14 2715 A10 2716 A10
2717 A8 2718 B5 2719 A4 2720 B5 2721 B6 2722 B4 2723 B8 2724 H10 2725 H10 2726 B4 2727 C9 2728 H10
2729 H10 2731 C9 2732 C10 2733 G9 2736 D10 2737 D10 2739 D6 2740 F11 2741 E6 2742 G11 2743 E5 2744 E3
2745 B7 2746 C7 2747 C2 2748 C2 2749 C3 2750 G9 2751 F4 2752 G5 2754 D15 2755 G2 2756 G7 2757 G7
2758 G5 2759 G11 2760 G6 2761 G1 2762 G2 2763 H5 2764 E8 2766 H11 2767 H11 2768 H5 2769 E8 2770 A15
2772 G2 2773 G3 2774 G3 2775 H5 2776 A6 2778 E9 2779 E8 2780 A10 2782 F8 2783 G8 2788 H8 2789 D10
2790 G15 2791 D14 2793 H1 2794 H3 2795 H3 2796 H3 2797 H4 2798 H4 2799 H9 3700 A2 3701 A10 3702 C2
3703 A2 3704 A10 3705 A5 3706 A4 3707 A8 3708 A10 3709 A3 3710 B8 3711 B9 3712 B3 3713 C13 3714 B4
3715 B8 3716 C10 3717 C5 3719 C2 3720 D10 3721 C3 3722 E4 3723 A3 3724 C2 3725 D2 3726 D4 3727 F3
3728 D4 3729 D2 3730 D1 3731 D3 3732 E4 3733 E6 3735 F5 3736 F3 3738 F5 3739 F9 3740 F15 3741 G10
3742 G14 3743 G5 3745 G11 3746 G13 3747 G5 3748 G15 3749 G5 3750 G2 3751 H13 3752 H14 3753 H7
3754 G4 3755 H5 3756 H5 3757 G3 3758 G2 3759 G7 3760 E2 3761 H11 3762 H9 3763 H7 3764 A10 3765 D5
3766 G10 3767 D2 3768 E6 3769 H8 3770 A10 3771 A10 3772 C13 3773 C13 3774 H2 3775 H9 3776 H9
3777 D3 3778 D10 3999 A15 5700 A10 5701 D10 5702 C10 5705 C9 5706 G10 5708 C7 5709 E9 5714 H8
6700 D13 6702 D5 6703 E3 6704 G13 6705 H13 6706 D12 7700-1 C4 7700-2 A4 7701 A7 7702 C14 7705 D5
7706 D3 7707 D2 7708 E6 7709 E5 7710 E4 7711 F5 7712 G6 7713 G6 7714 F8 7715 G15 7716 G14 7717 H14
7718-1 G2 7718-2 G4 7719-1 H6 7719-2 H6 7720 H15 9700 E12 9701 E12 9702 E12 9703 E13 9704 G12
9705 H12 9706 G7 9707 H7 9708 H7 9709 G14 F700 A12 F701 A12 F702 A11 F703 B13 F704 A13 F705 B13
F706 B12 F707 C12 F708 C12 F709 C11 F710 E13 F711 E14 F712 E13 F713 D15 F714 F13 F715 F13 F716 F13
F717 F13 F718 F13 F719 G12 F720 G12 F721 G12 F722 H8 F723 H8 F724 H6 F725 G7 F726 A7 F727 B13
F728 B6 F729 C5 F730 D6 F731 B8 F733 H4 F734 A15 F735 A14 F737 D2 F738 D4 F739 D4 F740 A12
F741 A12 F742 A13 F743 B13 F744 C7 F745 C12 F747 E8 F748 D4 F749 G12 F750 G7 I700 G13 I701 H13
I702 G11 I703 A2 I704 A3 I705 A3 I706 A4 I707 D2 I708 D4 I709 E5 I710 E4 I711 F5 I712 A11
I713 C2 I714 C2 I715 A8 I716 A10 I717 D2 I718 A8 I719 A10 I720 F5 I721 B4 I722 B4 I723 B4
I724 B9 I725 C8 I726 B10 I727 D10 I728 G9 I729 D13 I730 D3 I731 G7 I732 D14 I733 D10 I734 D3
I735 H7 I736 D2 I738 G4 I739 D4 I740 A12 I741 G11 I742 E3 I743 F3 I744 F5 I745 G7 I746 F9
I747 G5 I748 G15 I749 G1 I750 G3 I751 G14 I752 G5 I753 G5 I755 H15 I760 H14 I761 H4 I762 H9
I763 H5 I764 H3 I765 H5 I766 H10 I768 G9 I769 H11 I770 H3 I771 H5 I772 B10 I773 C9 I774 G10
I775 C9 I776 B10 I777 A11



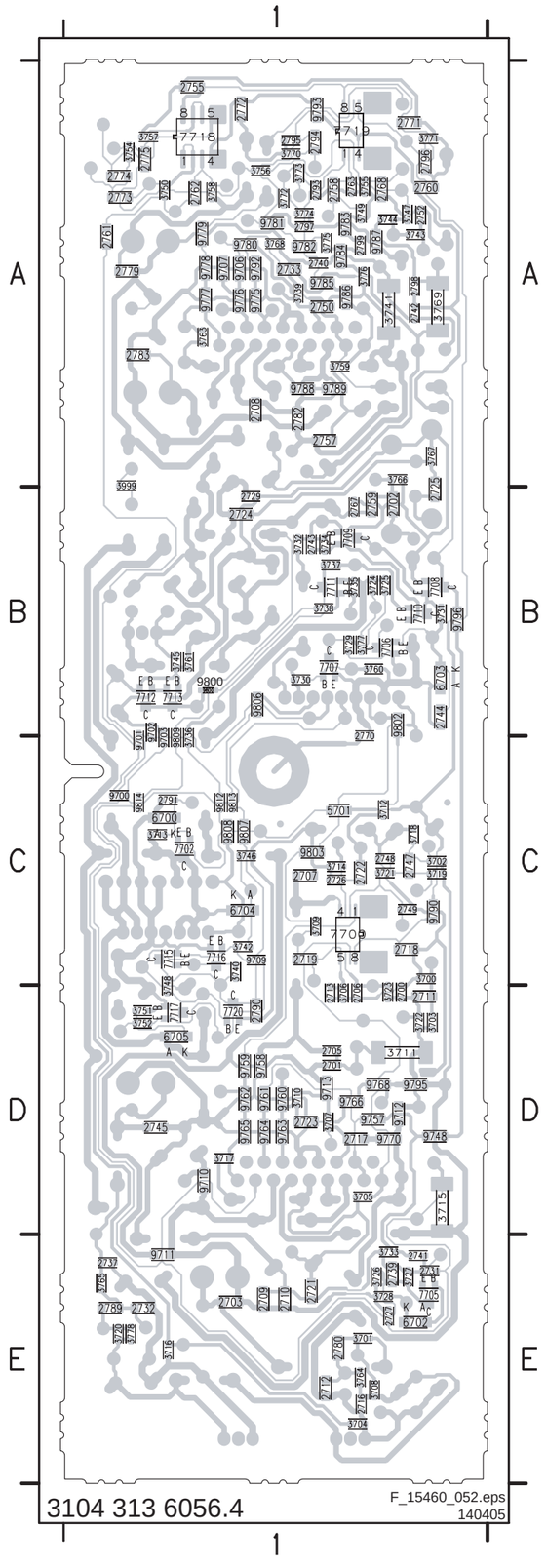
3104 313 6056.4

Layout PDP Audio Amplifier (Top Side)



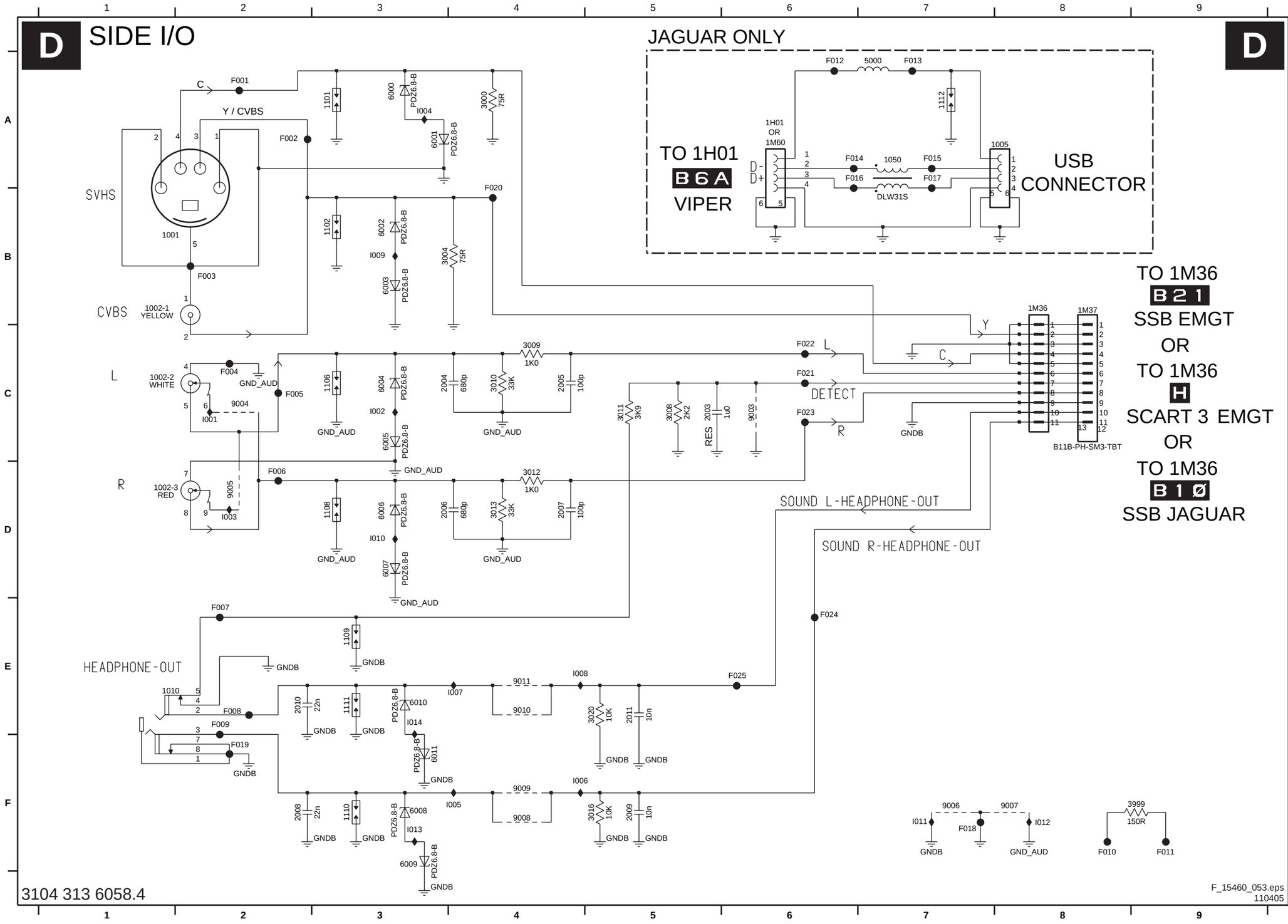
0001 C1
1735 E1
1736 E1
1738 B1
1M02 C1
1M06 C1
1M52 B1
2704 D1
2714 C1
2715 E1
2720 D1
2728 B1
2736 E1
2746 D1
2751 B1
2754 C1
2756 A1
2764 A1
2766 B1
2776 D1
2778 A1
2788 A1
3753 B1
3762 A1
5700 E1
5702 E1
5704 A1
5705 D1
5706 A1
5708 D1
5709 B1
5714 A1
7701 D1
7714 A1
9704 B1
9705 B1
9708 A1
9715 E1
9716 B1
9721 A1
9723 B1
9724 A1
9725 A1
9726 C1
9727 A1
9728 B1
9730 B1
9731 A1
9732 A1
9733 A1
9734 A1
9735 B1
9739 D1
9740 D1
9741 E1
9742 D1
9744 D1
9745 D1
9747 E1
9749 A1
9774 A1
9797 C1
9798 B1
9799 B1
9801 C1
9804 C1
9805 C1
9810 C1
9811 C1

Layout PDP Audio Amplifier (Bottom Side)



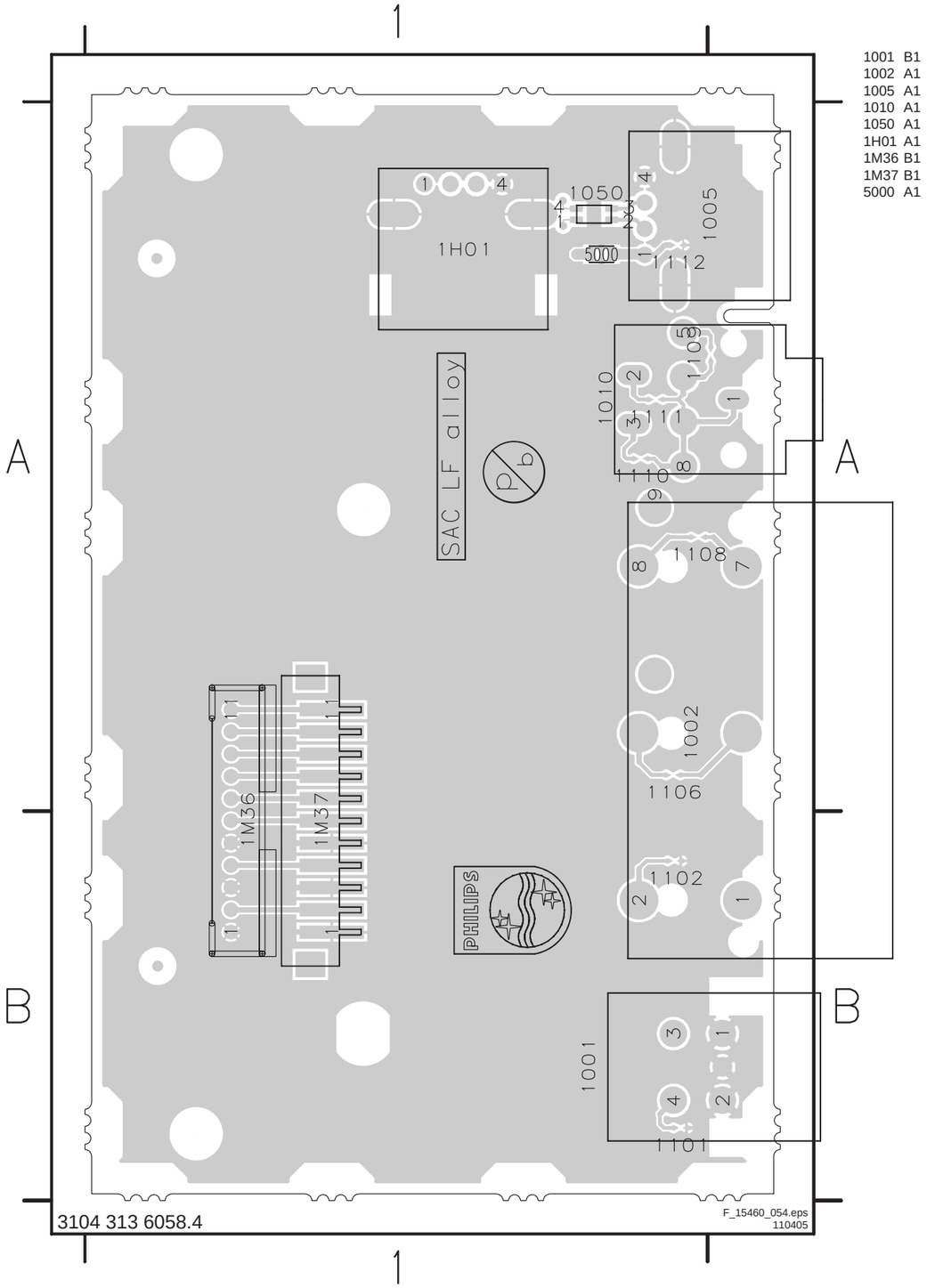
2700 D1
2701 D1
2702 B1
2703 E1
2705 D1
2706 D1
2707 C1
2708 A1
2709 E1
2710 E1
2711 D1
2712 E1
2713 D1
2716 E1
2717 D1
2718 C1
2719 C1
2721 E1
2722 C1
2723 D1
2724 B1
2725 B1
2726 C1
2727 E1
2729 B1
2731 E1
2732 E1
2733 A1
2737 E1
2739 E1
2740 A1
2741 E1
2742 A1
2743 B1
2744 B1
2745 D1
2747 C1
2748 C1
2749 C1
2750 A1
2752 A1
2755 A1
2757 A1
2758 A1
2759 B1
2760 A1
2761 A1
2762 A1
2763 A1
2767 B1
2768 A1
2770 B1
2771 A1
2772 A1
2773 A1
2774 A1
2775 A1
2779 A1
2780 E1
2782 A1
2783 A1
2789 E1
2790 D1
2791 C1
2793 A1
2794 A1
2795 A1
2796 A1
2797 A1
2798 A1
2799 A1
3700 C1
3701 E1
3702 C1
3703 D1
3704 E1
3705 D1
3706 D1
3707 D1
3708 E1
3709 C1
3710 D1
3711 D1
3712 C1
3713 C1
3714 C1
3715 D1
3716 E1
3717 D1
3718 C1
3719 C1
3720 E1
3721 C1
3722 D1
3723 D1
3724 B1
3725 B1
3726 E1
3727 E1
3728 E1
3729 B1
3730 B1
3731 B1
3732 B1
3733 E1
3734 B1
3735 B1
3736 C1
3737 B1
3738 B1
3739 A1
3740 C1
3741 A1
3742 C1
3743 A1
3744 A1
3745 B1
3746 C1
3747 A1
3748 D1
3749 A1
3750 A1
3751 D1
3752 D1
3754 A1
3755 A1
3756 A1
3757 A1
3758 A1
3759 A1
3760 B1
3761 B1
3763 A1
3764 E1
3765 E1
3766 A1
3767 A1
3768 A1
3769 A1
3770 A1
3771 A1
3772 A1
3773 A1
3774 A1
3775 A1
3776 A1
3777 B1
3778 E1
3999 A1
5701 C1
6700 C1
6702 E1
6703 B1
6704 C1
6705 D1
7700 C1
7702 C1
7705 E1
7706 B1
7707 B1
7708 B1
7709 B1
7710 B1
7711 B1
7712 B1
7713 B1
7715 C1
7716 C1
7717 D1
7718 A1
9700 C1
9701 C1
9702 B1
9703 C1
9706 A1
9707 A1
9709 C1
9710 D1
9711 E1
9712 D1
9713 D1
9748 D1
9757 D1
9758 D1
9759 D1
9760 D1
9761 D1
9762 D1
9763 D1
9764 D1
9765 D1
9766 D1
9768 D1
9770 D1
9775 A1
9776 A1
9777 A1
9778 A1
9779 A1
9780 A1
9781 A1
9782 A1
9783 A1
9784 A1
9785 A1
9786 A1
9787 A1
9788 A1
9789 A1
9790 C1
9792 A1
9793 A1
9795 D1
9796 B1
9800 B1
9802 B1
9803 C1
9806 B1
9807 C1
9808 C1
9809 C1
9812 C1
9813 C1
9814 C1

Side I/O Panel

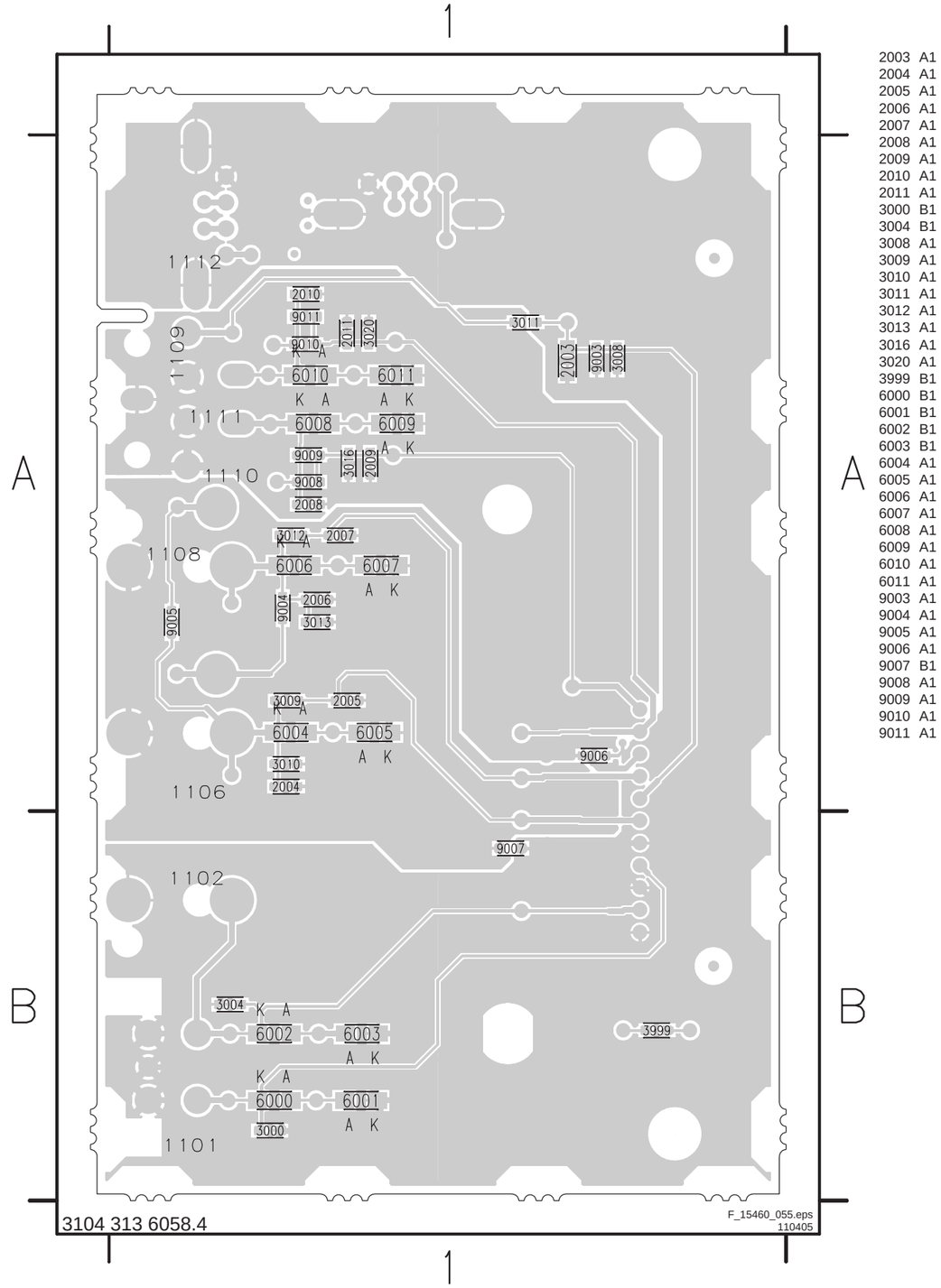


1001 B2
1002-1 B1
1002-2 C1
1002-3 D1
1005 A8
1010 E1
1050 A7
1101 A3
1102 B3
1106 C3
1108 D3
1109 E3
1110 F3
1111 E3
1112 A7
1H01 A6
1M36 B8
1M37 B8
2003 C5
2004 C3
2005 C4
2006 D3
2007 D4
2008 F2
2009 F5
2010 E2
2011 E5
3000 A4
3004 B3
3008 C5
3009 C4
3010 C4
3011 C5
3012 D4
3013 D4
3016 F5
3020 E5
3999 F9
5000 A7
6000 A3
6001 A3
6002 B3
6003 B3
6004 C3
6005 C3
6006 D3
6007 D3
6008 F3
6009 F3
6010 E3
6011 F3
9003 C6
9004 C2
9005 D2
9006 F7
9007 F8
9008 F4
9009 F4
9010 E4
9011 E4
F001 A2
F002 A2
F003 B2
F004 C2
F005 C2
F006 D2
F007 E2
F008 E2
F009 E2
F010 F8
F011 F9
F012 A6
F013 A7
F014 A6
F015 A7
F016 A6
F017 A7
F018 F7
F019 F2
F020 B4
F021 C6
F022 C6
F023 D6
F024 E6
F025 E6
I001 C2
I002 C3
I003 D2
I004 A3
I005 F4
I006 F4
I007 E4
I008 E4
I009 B3
I010 D3
I011 F7
I012 F8
I013 F3
I014 E3

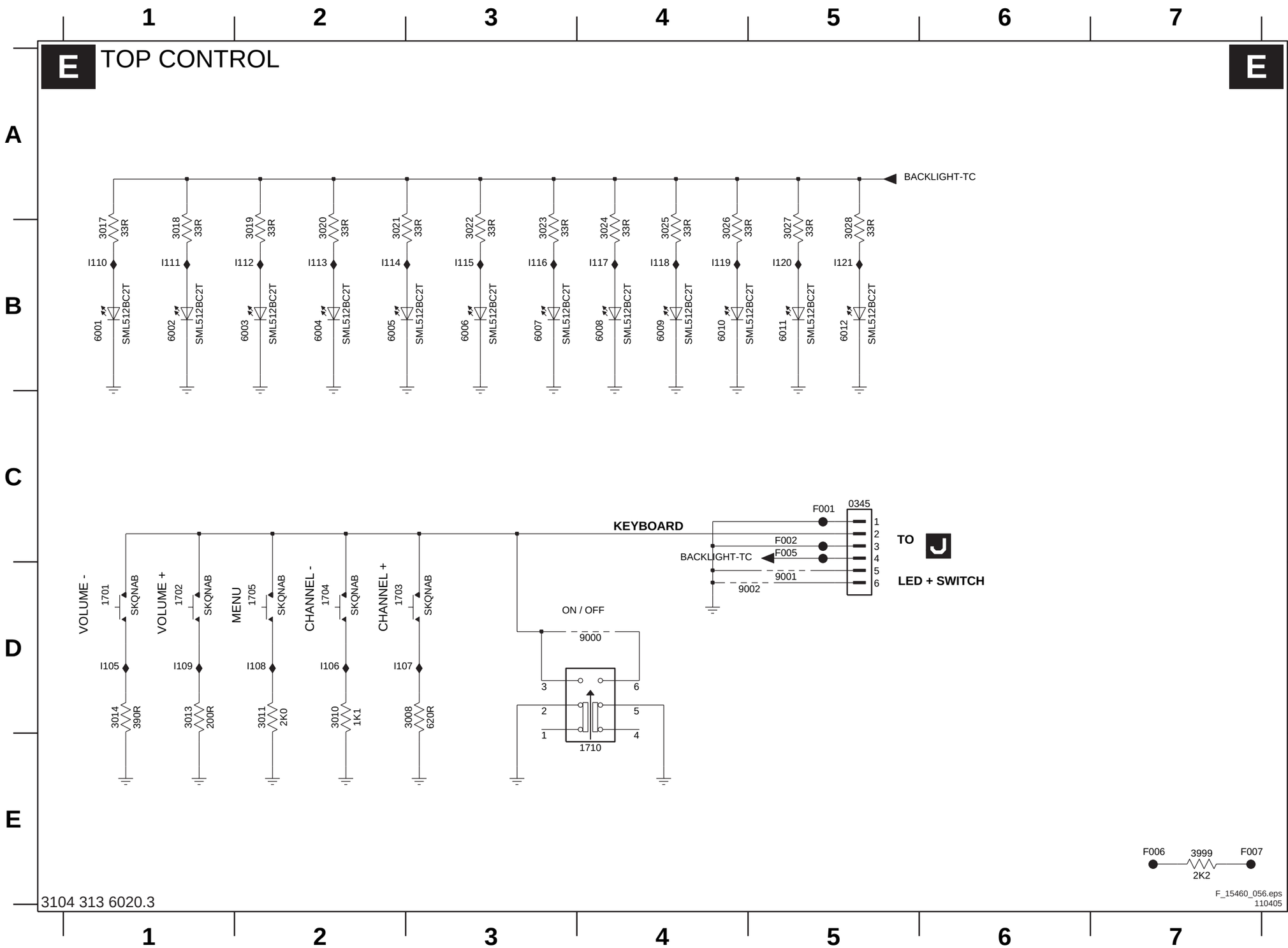
Layout Side I/O Panel (Top Side)



Layout Side I/O Panel (Bottom Side)



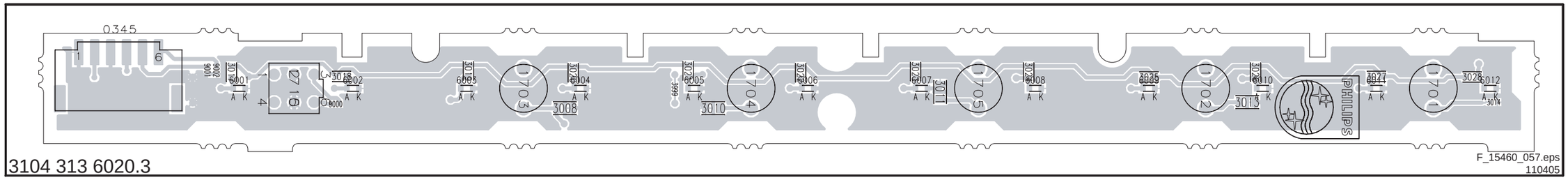
Top Control Panel



0345 C5 I121 B5
1701 D1
1702 D1
1703 D2
1704 D2
1705 D2
1710 E4
3008 D3
3010 D2
3011 D2
3013 D1
3014 D1
3017 B1
3018 B1
3019 B2
3020 B2
3021 B2
3022 B3
3023 B3
3024 B4
3025 B4
3026 B4
3027 B5
3028 B5
3999 E7
6001 B1
6002 B1
6003 B2
6004 B2
6005 B2
6006 B3
6007 B3
6008 B4
6009 B4
6010 B4
6011 B5
6012 B5
9000 D4
9001 D5
9002 D5
F001 C5
F002 C5
F005 C5
F006 E7
F007 E7
I105 D1
I106 D2
I107 D2
I108 D2
I109 D1
I110 B1
I111 B1
I112 B2
I113 B2
I114 B2
I115 B3
I116 B3
I117 B4
I118 B4
I119 B4
I120 B5

Layout Top Control Panel (Top Side)

0345 -- 1701 -- 1702 -- 1703 -- 1704 -- 1705 -- 1710 -- 3008 -- 3010 -- 3011 -- 3013 -- 3014 -- 3017 -- 3018 -- 3019 -- 3020 -- 3021 -- 3022 -- 3023 -- 3024 -- 3025 -- 3026 -- 3027 -- 3028 -- 3999 -- 6001 -- 6002 -- 6003 -- 6004 -- 6005 -- 6006 -- 6007 -- 6008 -- 6009 -- 6010 -- 6011 -- 6012 -- 9000 -- 9001 -- 9002



3104 313 6020.3

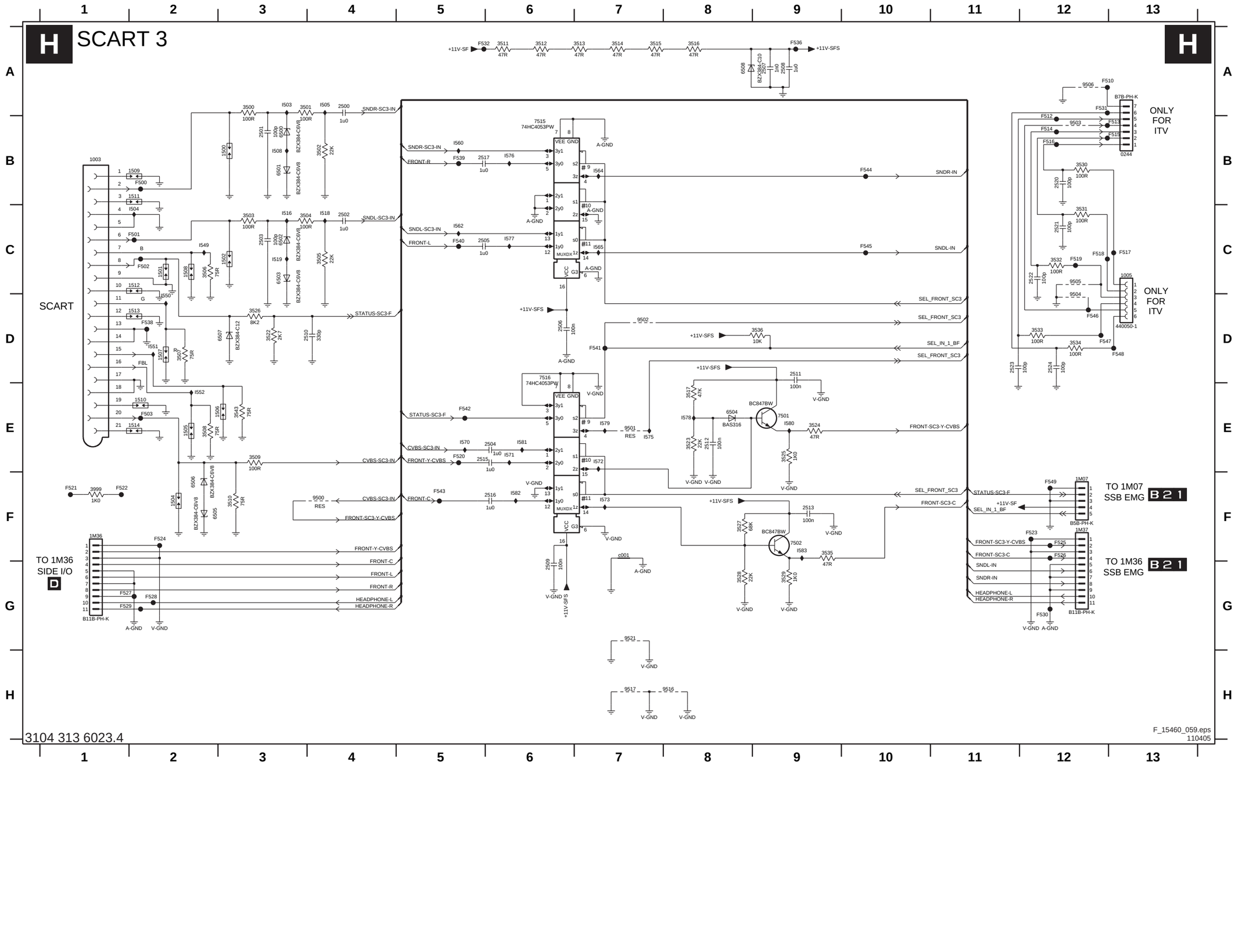
F_15460_057.eps
110405

Layout Top Control Panel (Bottom Side)

3104 313 6020.3

F_15460_058.eps
110405

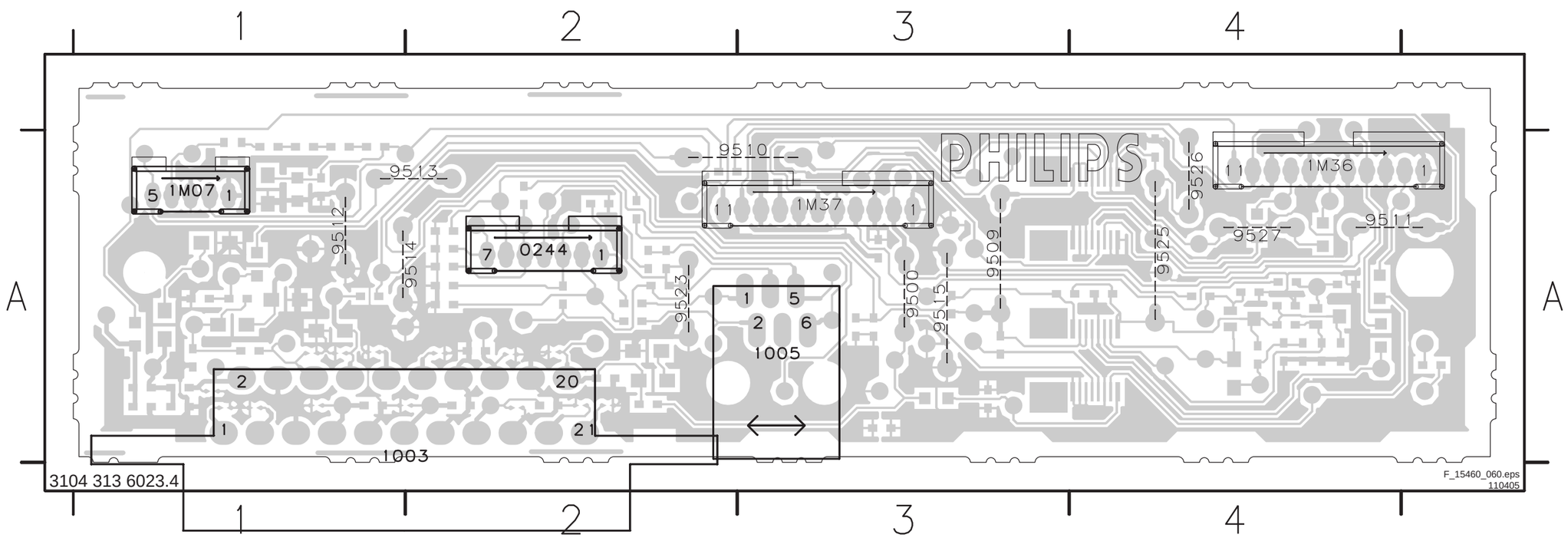
SCART 3 Panel



0244 B13	9516 H8
1003 B1	9517 H7
1005 C13	9521 G7
1500 B3	F500 B2
1501 C2	F501 C2
1502 C3	F502 C2
1504 F2	F503 E2
1505 E2	F510 A12
1506 E3	F512 B12
1507 D2	F513 B13
1508 C2	F514 B12
1509 B2	F515 B13
1510 E2	F516 B12
1511 B2	F517 C13
1512 C2	F518 C12
1513 D2	F519 C12
1514 E2	F520 E5
1M07 F12	F521 F1
1M36 F1	F522 F1
1M37 F12	F523 F12
2500 A4	F524 F2
2501 B3	F525 F12
2502 C4	F526 F12
2503 C3	F527 G1
2504 E6	F528 G2
2505 C5	F529 G1
2506 D6	F530 G12
2507 A9	F531 A12
2508 A9	F532 A5
2509 G6	F536 A9
2510 D4	F538 D2
2511 D9	F539 B5
2512 E8	F540 C5
2513 F9	F541 D7
2515 E5	F542 E5
2516 F6	F543 F5
2517 B5	F544 B10
2520 B12	F545 C10
2521 C12	F546 D12
2522 C12	F547 D12
2523 D11	F548 D13
2524 D12	F549 F12
3500 A3	I503 A3
3501 A3	I504 C2
3502 B4	I505 A4
3503 C3	I508 B3
3504 C3	I516 C3
3505 C4	I518 C4
3506 C2	I519 C3
3507 D2	I549 C2
3508 E2	I550 D2
3509 E3	I551 D2
3510 F3	I552 E2
3511 A6	I560 B5
3512 A6	I562 C5
3513 A7	I564 B7
3514 A7	I565 C7
3515 A7	I570 E5
3516 A8	I571 E6
3517 E8	I572 E7
3522 D3	I573 F7
3523 E8	I575 E7
3524 E9	I576 B6
3525 E9	I577 C6
3526 D3	I578 E8
3527 F8	I579 E7
3528 G8	I580 E9
3529 G9	I581 E6
3530 B12	I582 F6
3531 C12	I583 F9
3532 C12	c001 F7
3533 D12	
3534 D12	
3535 F9	
3536 D9	
3543 E3	
3999 F1	
6500 B3	
6501 B3	
6502 C3	
6503 C3	
6504 E8	
6505 F2	
6506 F2	
6507 D2	
6508 A8	
7501 E9	
7502 F9	
7515 B6	
7516 D6	
9500 F4	
9501 E7	
9502 D7	
9503 B12	
9504 D12	
9505 C12	
9506 A12	

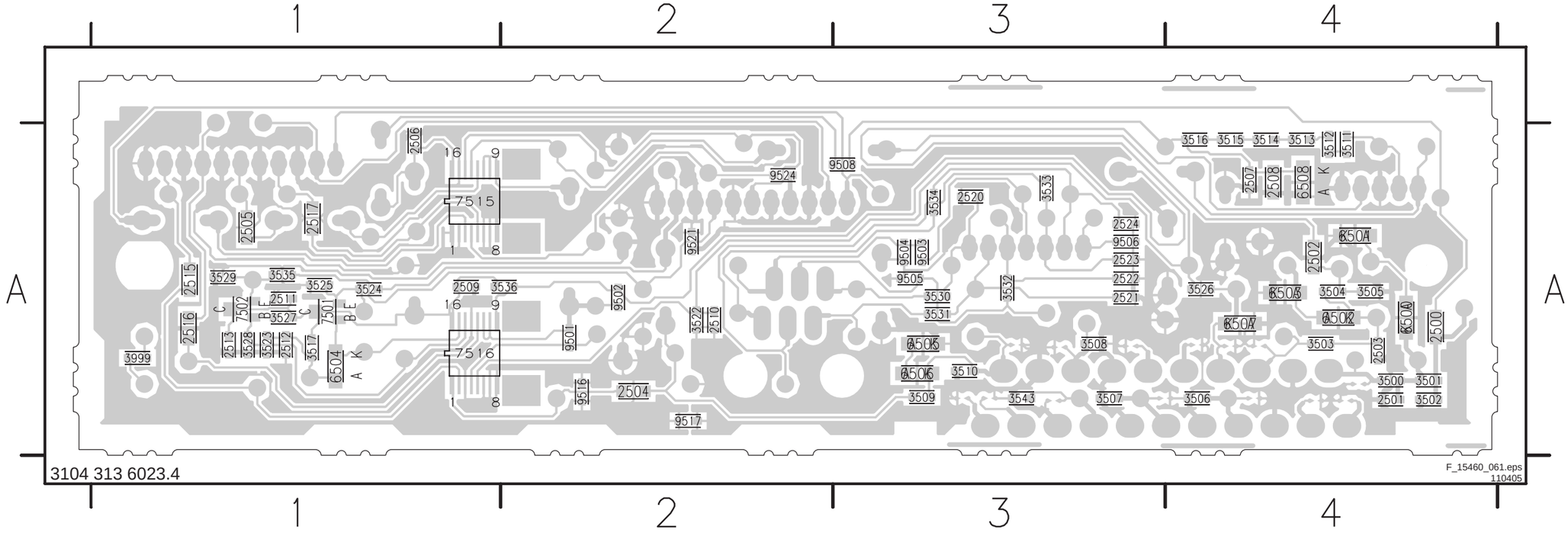
Layout SCART 3 Panel (Top Side)

0244 A2 1003 A1 1005 A3 1M07 A1 1M36 A4 1M37 A3 9500 A3 9509 A3 9510 A3 9511 A4 9512 A1 9513 A2 9514 A1 9515 A3 9523 A2 9525 A4 9526 A4 9527 A4



Layout SCART 3 Panel (Bottom Side)

2500 A4 2501 A4 2502 A4 2503 A4 2504 A2 2505 A1 2506 A1 2507 A4 2508 A4 2509 A1 2510 A2 2511 A1 2512 A1 2513 A1 2515 A1 2516 A1 2517 A1 2520 A3 2522 A3 2523 A3 2524 A3 3500 A4 3501 A4 3502 A4 3503 A4 3504 A4 3505 A4 3506 A4 3507 A3 3508 A3 3509 A3 3510 A3 3511 A4 3512 A4 3513 A4 3514 A4 3515 A4 3516 A4 3517 A1 3522 A2 3523 A1 3524 A1 3525 A1 3526 A4 3527 A1 3528 A3 3529 A3 3530 A3 3531 A3 3532 A3 3533 A3 3534 A3 3535 A1 3536 A2 3543 A3 3999 A1 6500 A4 6501 A4 6502 A4 6503 A4 6504 A1 6505 A3 6506 A3 6507 A4 6508 A4 7501 A1 7502 A1 7515 A2 7516 A2 9501 A2 9502 A2 9503 A3 9504 A3 9505 A3 9506 A3 9508 A3 9516 A2 9517 A2 9521 A2 9524 A2



LED and Switch Panel

J LED & SWITCH PANEL

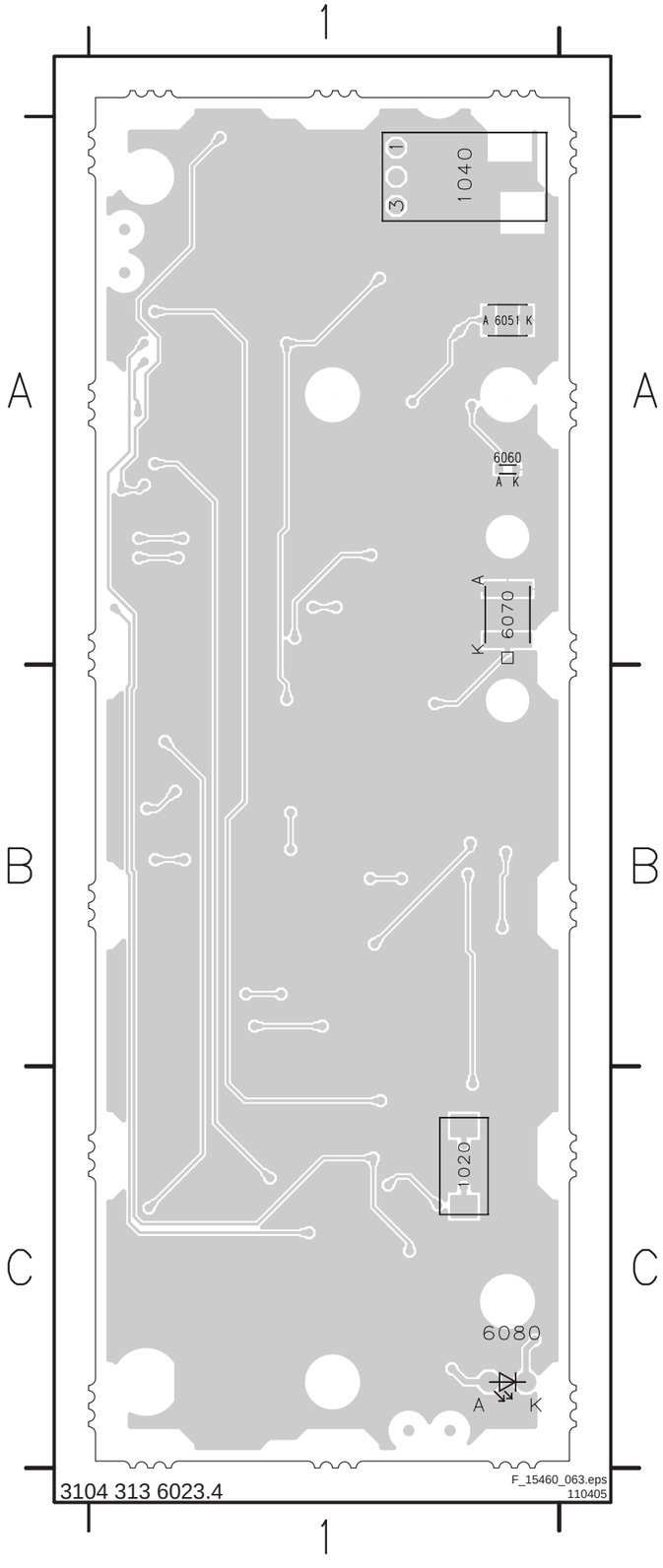
TO 1M20 B10 SSB JAGUAR OR B21 SSB EMG
TO 0244 D SIDE I/O
TO 1M01 B10 SSB JAGUAR OR B21 SSB EMG
TO 0345 E TOP CONTROL
TO 0350 PR PROXIMITY SENSOR

"BLUE"
"RED"
"PROXIMITY"
"IR RECEIVER"
"LED DIMMING"
"LIGHT SENSOR"

3104 313 6016.5
F_15460_062.eps
110405

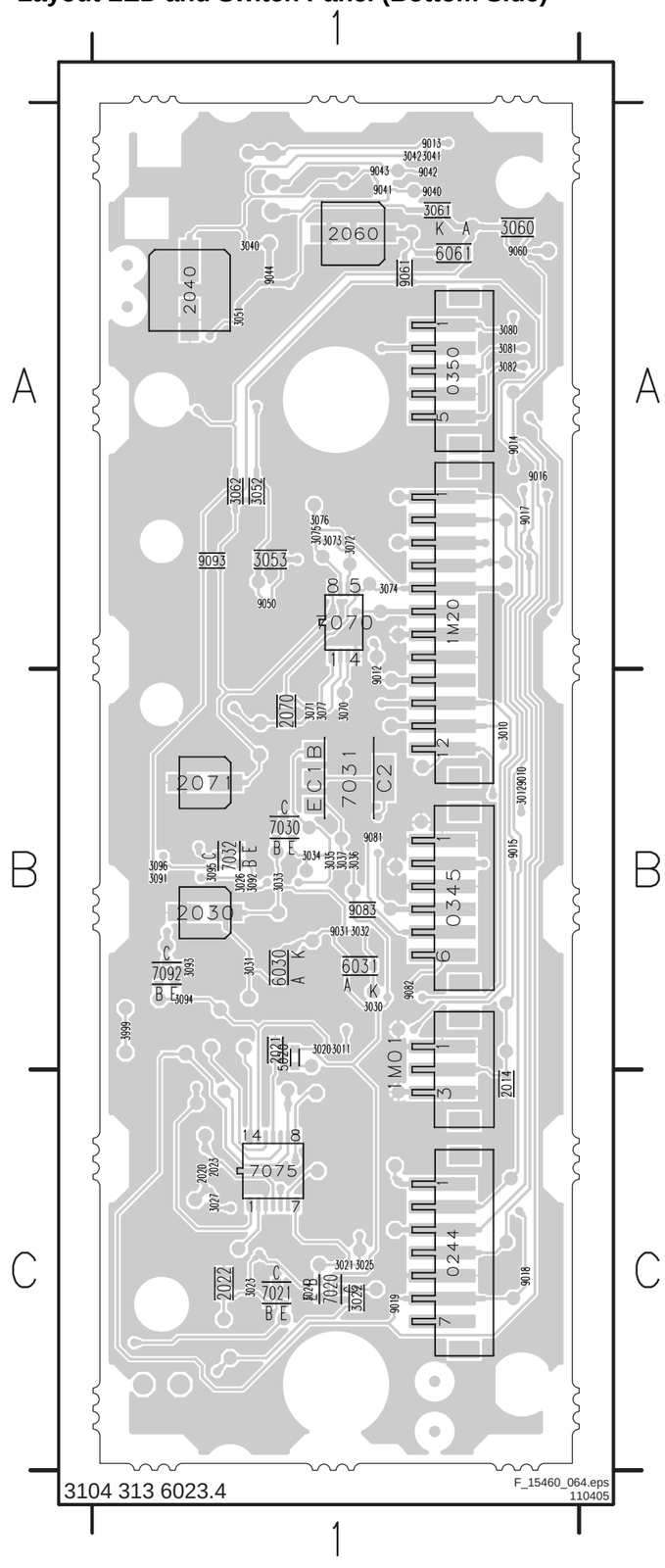
0244 C1 F018 B2
0345 B11 F019 B2
0350 C11 F020 B2
1020 E2 F021 D2
1040 F8 F027 E2
1M01 C1 F028 E2
1M20 A1 F029 E2
2014 D3 F030 E4
2020 F2 F031 D3
2021 E3 F032 E2
2022 F7 F033 F4
2023 F1 F038 I12
2030 I4 F039 I13
2040 F9 F083 B10
2060 C6 F084 B10
2070 F11 F086 B10
2071 G11 F087 C10
3010 B2 F088 B10
3011 A3 F089 B10
3012 B2 I019 E5
3020 E1 I020 C2
3021 E5 I021 E4
3022 E6 I022 C2
3023 E7 I023 C2
3024 E7 I024 C2
3025 E4 I025 C2
3026 F4 I026 F11
3027 E2 I027 E7
3030 H3 I028 F1
3031 H4 I029 F2
3032 I4 I030 E6
3033 H5 I031 E6
3034 H6 I032 E7
3035 H6 I033 I4
3036 H6 I034 G3
3037 H7 I035 E6
3040 E9 I036 F7
3041 G9 I037 H6
3042 F9 I038 H6
3051 B8 I039 H3
3052 B8 I040 H4
3053 C7 I041 G9
3060 C5 I042 G9
3061 B5 I043 F9
3062 B5 I044 E9
3070 G10 I045 F9
3071 F11 I046 E9
3072 G11 I047 F4
3073 G12 I048 H5
3074 F12 I049 H7
3075 F12 I051 D7
3076 G13 I052 B7
3077 G11 I061 C5
3080 C10 I062 B5
3081 C10 I063 C6
3082 C10 I064 D5
3091 H1 I071 F10
3092 G2 I072 F13
3093 H3 I073 G11
3094 G1 I074 G11
3095 I2 I075 F10
3096 H2 I076 F12
3999 I13 I093 G2
5020 D4 I094 G2
6030 H4 c001 E5
6031 I4
6051 C8
6061 B6
6070 G10
6080 E7
7020 E6
7021 F7
7030 H5
7031 H6
7032 I3
7070-1 F11
7070-2 F12
7075 E3
7092 H2
9010 C4
9012 B4
9013 E9
9014 C2
9015 A4
9016 A4
9017 A4
9018 C4
9019 C4
9031 H4
9040 G9
9041 F9
9042 G9
9043 F9
9044 E9
9050 C7
9060 C5
9061 B6
9081 B11
9082 B11
9083 C11
9093 H1
F010 A2
F011 A3
F012 A3
F013 B3
F014 B2
F015 A3
F016 B2
F017 A2

Layout LED and Switch Panel (Top Side)



1020 C1
1040 A1
6051 A1
6060 A1
6070 A1
6080 C1

Layout LED and Switch Panel (Bottom Side)



0244 C1
0345 B1
0350 A1
1M01 B1
1M20 A1
2014 C1
2020 C1
2021 B1
2022 C1
2023 C1
2030 B1
2040 A1
2060 A1
2070 B1
2071 B1
3010 B1
3011 B1
3012 B1
3020 B1
3021 C1
3022 C1
3023 C1
3024 C1
3025 C1
3026 B1
3027 C1
3030 B1
3031 B1
3032 B1
3033 B1
3034 B1
3035 B1
3036 B1
3037 B1
3040 A1
3041 A1
3042 A1
3051 A1
3052 A1
3053 A1
3060 A1
3061 A1
3062 A1
3070 B1
3071 B1
3072 A1
3073 A1
3074 A1
3075 A1
3076 A1
3077 B1
3080 A1
3081 A1
3082 A1
3091 B1
3092 B1
3093 B1
3094 B1
3095 B1
3096 B1
3999 B1
5020 B1
6030 B1
6031 B1
6061 A1
7020 C1
7021 C1
7030 B1
7031 B1
7032 B1
7070 A1
7075 C1
7092 B1
9010 B1
9012 B1
9013 A1
9014 A1
9015 B1
9016 A1
9017 A1
9018 C1
9019 C1
9031 B1
9040 A1
9041 A1
9042 A1
9043 A1
9044 A1
9050 A1
9060 A1
9061 A1
9081 B1
9082 B1
9083 B1
9093 A1

Personal Notes:

E_06532_013.eps
131004

8. Alignments

Index of this chapter:

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

8.1 General Alignment Conditions

8.1.1 Start 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 10 to 15 minutes.
- Measure voltages and waveforms in relation to chassis ground (with the exception of the voltages on the primary side of the power supply).
  Caution: never use heatsinks as ground.
- Test probe: Ri > 10 Mohm, Ci < 20 pF.
- Use an isolated trimmer/screwdriver to perform alignments.

8.1.2 Initial Settings

Perform all electrical adjustments with the following initial settings (via the "Active Control" button on the RC):

1. To avoid the working of the light sensor, set "Active Control" to "Off".
2. Set "Smart Picture" to "Eco/Natural".
3. Set "Active Display" to "Off"

8.1.3 Alignment Sequence

- First, set the correct options:
  - In SAM, select SERVICE OPTIONS -> OPT. NO,
  - Fill in the option settings according to the set sticker (see also paragraph "Option Settings"),
  - Select STORE OPTIONS and push "OK" on the remote control,
  - After storing, the set must be restarted!
- Warming up (> 10 minutes).
- White point alignment.

8.2 Hardware Alignments

No hardware alignments are necessary.

8.3 Software Alignments

Put the set in SAM mode (see the "Service Modes, Error Codes and Fault Finding" section). The SAM menu will now appear on the screen. Select ALIGNMENTS and go to one of the sub menus. The alignments are explained below.

Notes:

- All changes must be stored manually.
- If an empty EAROM (permanent memory) is detected, all settings are set to pre-programmed default values.

8.3.1 General

For the next alignments, supply the following test signals via a video generator to the RF input:

- **EU/AP-PAL** models: a PAL B/G TV-signal with a signal strength of at least 1 mV and a frequency of 475.25 MHz
- **US/AP-NTSC** models: an NTSC M/N TV-signal with a signal strength of at least 1 mV and a frequency of 61.25 MHz (channel 3).
- **LATAM** models: an NTSC M or PAL M TV-signal with a signal strength of at least 1 mV and a frequency of 61.25 MHz (channel 3).

Luma Gain
Fixed setting of "1".

Delta Luma Gain for Aux (only when a 2nd Tuner is present)
Fixed setting of "0 dB".

IF AFC
Alignment procedure:

1. During the IF AFC-parameter adjustment, one can see OSD feedback on the screen.
2. The OSD feedback can give four kinds of messages:
3. The first item ("IN/OUT") informs you whether you are in or out of the AFC-window.
4. The second item ("HIGH/LOW") informs you whether the AFC-frequency is too high or too low.

Table 8-1 AFC

AFC-window	AFC-frequency vs. reference
Out	High
In	High
[In]	[Low]
Out	Low

1. Adjust the IF AFC parameter until the **first** value is within the AFC window (= IN).
2. Next, adjust the IF AFC parameter until the **second** value is LOW.

IF LPRIME AFC (only for EU sets)
Same procedure as described above, but with SECAM L/L' signal source.

Tuner AGC
Measure the DC voltage on pin 1 of the (main) Tuner. You can adjust this voltage by adjusting the TUNER AGC item in the SAM menu. Alignment is correct when the DC voltage is just below 3.5 V.

IF AFC Tuner 2 (only when a 2nd Tuner is present)
Use the same procedure as described above (under IF AFC) with the set switched to the DW source.

IF LPRIME AFC Tuner 2 (only when a 2nd Tuner is present)
Use the same procedure as described above (under IF LPRIME AFC) with the set switched to the DW source.

Tuner AGC Tuner 2 (only when a 2nd Tuner is present)
Use the same procedure as described above (under TUNER AGC) with the set switched to the DW source. Measure on pin 1 of the DW Tuner.

Blend Intensity
Use this alignment when you replace the microcontroller, NVM, or the EBILD. It aligns the level of transparency of the menu-picture blended into the main-picture. Fixed setting of "16".

8.3.2 2FH ADC Alignment

Only necessary to align, when the A/D converter or NVM is replaced. Use the default values as mentioned in the table.

Table 8-2 "2fH ADC alignment"

Menu item	Value
Red Gain RGB	106
Blue Gain RGB	112
Green Gain RGB	133
Red Offset RGB	40
Blue Offset RGB	41
Green Offset RGB	43
Red Gain YPbPr *	115
Blue Gain YPbPr *	118
Green Gain YPbPr *	102
Red Offset YPbPr *	59
Blue Offset YPbPr *	56
Green Offset YPbPr *	35
* = only for sets with YPbPr input	

8.3.3 White Point

- Set ACTIVE CONTROL to "Off".
- In the TV -> PICTURE user menu set:
  - DYNAMIC CONTRAST to "Off".
  - COLOUR ENHANCEMENT to "Off".
  - DNR to "Off".
  - DIGITAL OPTIONS to "Pixel Plus 2".
  - CONTRAST to "100".
- Go to the SAM and select ALIGNMENTS -> WHITE POINT.

Method 1 (with colour analyser):
- Use a 100% white screen as input signal and set the following values:
  - COLOR TEMPERATURE: "Tint to be aligned".
  - WHITE POINT RED: "127".
  - WHITE POINT GREEN: "127".
  - WHITE POINT BLUE: "127".
  - RED BL OFFSET: "7"
  - GREEN BL OFFSET: "7".
- Measure with a calibrated (phosphor- independent) colour analyser (e.g. Minolta CA-210) in the centre of the screen. This measurement needs to be done in a dark environment.
- **Cut off alignment:** Adjust, by means of changing the value of one or both OFFSET's, to the correct x,y coordinates for the tint "NORMAL" (see table "White D alignment values"). Tolerance: dx,dy: ± 0.004.
- **White point alignment:** Adjust by means of decreasing the value of one or two white points, the correct x,y coordinates (see table "White D alignment values"). Tolerance: dx,dy: ± 0.004.
- Repeat this step for the other Colour Temperatures that need to be aligned.
- When finished press "Store" to store the aligned values to the NVM.

Table 8-3 White D alignment values

Colour Temp.	Cool	Normal	Warm
X	0.275	0.286	0.315
Y	0.291	0.301	0.335

Method 2 (without colour analyser):
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).
1. Select a COLOUR TEMPERATURE (e.g. COOL, NORMAL, or WARM).
2. Set the RED, GREEN and BLUE default values according to the values in the "Tint settings" table.
3. When finished press "Store" to store the aligned values to the NVM.

Table 8-4 Tint settings

	Cool		Normal		Warm	
	42"	50"	42"	50"	42"	50"
R	127	127	127	127	127	127
G	122	125	119	121	113	114
B	118	118	111	109	94	87

8.3.4 Lum. Del.

With this Luminance Delay alignment, you place the luminance information exactly on the chrominance information (brightness is pushed onto the colour). Use a colour bar / grey scale pattern as test signal.
- **LUM. DELAY PAL BG:** Apply a PAL BG colour bar / grey scale pattern as a test signal. Adjust this parameter until the transients of the colour part and black and white part of the test pattern are at the same position. Default value is "**7**".
- **LUM. DELAY PAL I:** Apply a PAL I colour bar/grey scale pattern as a test signal. Adjust this parameter until the transients of the colour part and black and white part of the test pattern are at the same position. Default value is "**9**".
- **LUM. DELAY SECAM:** Apply a SECAM colour bar/grey scale pattern as a test signal. Adjust this parameter until the transients of the colour part and black and white part of the test pattern are at the same position. Default value is "**9**".
- **LUM. DELAY BYPASS:** apply a NTSC colour bar/grey scale pattern as a test signal. Adjust this value until the transients of the colour and black and white part of the test area are at the same position. Default value is "**6**".

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 is only active after the TV is switched "off" and "on" again with the Mains switch (the EAROM is then read again).

8.4.2 Dealer Options

Table 8-5 Dealer options

Menu name	Subjects	Options	Description
Personal Options	Picture Mute	Yes	Picture (blue) mute active in case no picture detected
		No	Noise in case of no picture detected
	Virgin Mode	Yes	TV starts up (once) with language selection menu after mains switch "on" for the first time (virgin mode)
		No	TV does not starts up (once) with language selection menu after mains switch "on" for the first time (virgin mode)
	Auto Store Mode (only valid for EU and AP-PAL sets)	None	Autostore mode disabled (not in installation menu)
		PDC-VPS	Autostore mode via ATS (PDC/VPS) enabled
		TXT page	Autostore mode via ACI enabled
		PDC-VPS-TXT	Autostore mode via ACI or ATS enabled
	TXT Preference (only valid for EU and AP-PAL sets)	TOP	Preference to TOP Teletext
		FLOF	Preference to FLOF Teletext
	DVD door lock (only valid for sets with integrated DVD)	Yes	To disable the DVD tray opening function
		No	To enable the DVD tray opening function
	AmbiLight Demo	Yes	AmbiLight demo via "MENU" button enabled
		No	AmbiLight demo via "MENU" button disabled

8.4.3 Service Options

Select the sub menu's to set the initialisation codes (options) of the set via text menus.

Table 8-6 Service options

Menu-item	Subjects	Options	Description
Dual Screen	PIP/Dual Screen	Yes / No	Feature present / not present
	Text/EPG	Yes / No	Feature present / not present
	DS/PIP Tuner	Yes / No	Feature present / not present (only selectable if Dual Screen option is "on")
Teletext	Flash RAM (if present)	Yes / No	Flash RAM present / not present
	NexTView type	None	Feature not present
		Textguide only	Feature present, but only as text guide
		Nextview 2c3	Feature present, for countries that support NexTView
Display	Screen	Value "000"	42 inch PDP SDI
		Value "001"	50 inch PDP SDI
		Value "002"	42 inch PDP FHP
		Value "003"	30 inch LCD LPL
		Value "004"	37 inch LCD LPL
		Value "005"	42 inch LCD LPL
		Value "006"	32 inch LCD Sharp
		Value "007"	42 inch PDP SDI VGA
		Value "008"	37 inch PDP FHP
Video Repro	Feature box type	1050i/1250i	HD input
		Eagle 1B	"Eagle version 1B" present (Pixel Plus 1)
		Eagle 1C	"Eagle version 1C" present (Pixel Plus 2)
	Lightsensor	Yes / No	Feature present / not present
	3D Comb filter	Yes / No	Only selectable when Columbus is present
	Impr. Noise Red.	Yes / No	Only selectable when Columbus is present
	Pixel Plus Version	1	Standard PP: only selectable with Eagle 1C
		2	Improved PP: only selectable with Eagle 1C
	720p	Yes / No	Enable for high resolution displays
Source Selection	EXT3 1Fh (2003)	Yes / No	Not selectable
Audio Repro	Acoustic System	FTV Top	Cabinet design (xxPF9986 and xxPF9996 with NXT)
		Soft Wrap	Cabinet design (xxPF9956 and xxPF9966 stdrd)
		Wrap	Cabinet design (xxPF9956 and xxPF9966 stdrd)
		FTV2.3	Cabinet design (for future)
	AVL	On / Off	Enable / disable Automatic Volume Limiter
Miscellaneous	Home Cinema	Yes / No	Model with / without Home Cinema Link (EU only)
	Dimming Backlight	Yes / No	Enable / disable dimming backlight (not implemented yet)
	Integrated RC	Yes / No	Control pheripheral equipment via TV IR receiver (EU only)
	Tuner type	UV1316 / TEDE9	Model with Philips tuner / Alps tuner
	P50 DVD menu line	Yes / No	Enable / disable DVD control via user menu with TV RC (EU only)
	Hotel Mode	Yes / No	Enable / disable hotel mode
Option no.	Group 1		Group 1 option code overview (see set sticker)
	Group 2		Group 2 option code overview (see set sticker)

8.4.4 Opt. No. (Option numbers)

Select this sub menu to set all options at once (expressed in two long strings of numbers).

Table 8-7 Option number overview (subject to change)

Model Number	12 NC	Options Group 1	Options Group 2
42PF9966/12	8670 000 20646	62708 40992 49472 00000	05142 01537 00064 00065
42PF9966/10	8670 000 21597	62708 40992 49472 00000	05142 01537 00064 00065
50PF9966/12	8670 000 20653	62708 40992 49472 00000	04118 00513 00064 00065
50PF9966/10	8670 000 21598	62708 40992 49472 00000	05142 01537 00064 00065

An option number (or "option byte") represents a number of different options. When you change these numbers directly, you can set all options very quickly. All options are controlled via eight option numbers.
When the EAROM is replaced, all options will require resetting. To be certain that the factory settings are reproduced exactly, you must set both option number lines. You can find the correct option numbers on a sticker inside the TV set.

Example: The options sticker gives the following option numbers:
- 62708 40992 49472 00000
- 04118 00513 00064 00065

The first line (group 1) indicates hardware options 1 to 4, the second line (group 2) indicates software options 5 to 8.
Every 5-digit number represents 16 bits (so the maximum value will be 65536 if all options are set).
When all the correct options are set, the sum of the decimal values of each Option Byte (OB) will give the option number.
See next table for the option overview.

Table 8-8 Option overview

Byte	Bit (dec. value)	Subject	Options	Settings (in decimal values)	Remarks
1	0 (1)	Video Repro	Feauture Box Type	3= Eagle 1B, 4= Eagle 1C, 5= 1050i/1250i	
	1 (2)				
	2 (4)				
	3 (8)	Personal	Ambi Light Demo	0= Off, 8= On	
	4 (16)	Video Repro	Auto Scavem	0= No, 16= Yes	Only selectable for CRT sets.
	5 (32)		Improv. Noise Reduction	0= No, 32= Yes	Fixed to "Yes" in case Columbus is present
	6 (64)		Light Sensor	0= No, 64= Yes	
	7 (128)	Miscellaneous	Ambi Light	0= No, 128= Yes	
	8 (256)	Video Repro	Digital Option	0 (No)= Dig. Natural Motion (for PP1) or PixelPlus (for PP2), 256 (Yes)= PixelPlus (for PP1) or PixelPlus2 (for PP2)	This depends on the "Pixel Plus Version" option (see also Byte 1 - bit 14), and gives the info that is visible in the user menu.
	9 (512)		n.a.		
	10 (1024)	Source Selection	1152i	0= Off, 1024= On	
	11 (2048)	Video Repro	n.a.		
	12 (4096)		Signalling Bits	0= No, 4096= Yes	Fixed to: "Yes" in EU and AP-P, "No" for other versions.
	13 (8192)		3D Comb Filter	0= No (2D Comb), 8192= Yes (3D Comb)	
	14 (16384)		PP (Pixel Plus) Version	0= “1”, 16384= “2”	Only selectable when "Feature Box" option is "Eagle 1C". See also Byte 1- bit 8 "Digital Option".
	15 (32768)		720p	0= No, 32768= Yes	
2	0 (1)	Audio Repro	n.a.		
	1 (2)		Dolby Pro Logic	0= No, 2= Yes	
	2 (4)		Virtual Rear Speakers	0= No, 4= Yes	Fixed to: "Yes" for sets with Dolby Pro Logic.
	3 (8)		Cordless Rear Speakers	0= No, 8= Yes	Fixed to: "No" for all versions, except for EU.
	4 (16)		Dolby Digital	0= No, 16= Yes	When Dolby Digital is "Yes", the AVL (Byte 8 - bit 6) option must be "No".
	5 (32)		Virtual Dolby	0= No, 32= Yes	Fixed to: "No" in case the "Dolby Pro Logic" option (Byte 2 - Bit 1) unequals "none".
	6 (64)		Subwoofer	0= No Subwoofer present, 64= Subwoofer present.	
	7 (128)				
	8 (256)	Chassis/Region	Chassis	0= EM6, 256= EM5, 512 = EM3	FTx2.x= EM6
	9 (512)				
	10 (1024)				
	11 (2048)				
	12 (4096)	Teletext	n.a.		
	13 (8192)		Flash RAM	0= No, 8192= Yes	NexTView type 2C3 and 2 need a Flash RAM.
	14 (16384)		NexTView type	0= None, 16384= Textguide only, 32768= NexTView 2C3, 49152= NexTView 2	Only available for EU.
	15 (32768)				
3	0 (1)	n.a.	n.a.		
	1 (2)	n.a.	n.a.		
	2 (4)	n.a.	n.a.		
	3 (8)	n.a.	n.a.		
	4 (16)	Dual Screen	PIP/Dual Screen	0= No, 16= Yes	
	5 (32)		n.a.		
	6 (64)		TXT/EPG Dual Screen	0= No, 64= Yes.	Fixed to: "Off" for AP-N, US, and LA versions.
	7 (128)		n.a.		
	8 (256)	Display	CRT type (Aspect Ratio)	0= 4:3, 256= 16:9	
	9 (512)		Picture Rotation	0= No, 512= Yes	Only selectable for CRT sets.
	10 (1024)		Monitor	0= No, 1024= Yes	Reserved for Flat TV monitor.
	11 (2048)	Miscellaneous	Integrated Radio	0= No, 2048= Yes	
	12 (4096)		Stand Alone	0= No, 4096= Yes	Reserved for Flat TV monitor.
	13 (8192)		Integrated DVD	0= No, 8192= Yes	
	14 (16384)		Home Cinema	0= No, 16384= Yes	Fixed to: "No" in all versions except for EU.
	15 (32768)		Integraded RC	0= No, 32768= Yes	Fixed to: "No" in all versions except for EU.
4	0 (1)	Dual Screen	DS/PIP (Aux) Tuner	0= Aux Tuner not present, 1= Aux Tuner present	Only selectable in the EU version, provided the "PIP/Dual Screen" option is "Yes".
	1 (2)		DS/PIP (Aux) Tuner Type	0= UV1316, 2= TEDE9	
	2 (4)	Miscellaneous	38.0 (or China) IF	0= No, 4= Yes	Fixed to: "No" in all versions except for AP-P.
	3 (8)		Tuner Type	0= UV1316, 8= TEDE9	
	4 (16)	Teletext	n.a.		
	5 (32)		n.a.		
	6 (64)		n.a.		
	7 (128)		n.a.		
	8 (256)	Miscellaneous	Integrated Dig. Module	0= No, 256= Yes	
	9 (512)		Integrated HDD	0= No, 512= Yes	
	10 (1024)		n.a.		
	11 (2048)		n.a.		
	12 (4096)		Anti Aging	0= No, 4096= Yes	Fixed to: "Yes" for FTV.
	13 (8192)	Personal	DVD Door Lock	0= No, 8192= Yes	
	14 (16384)		n.a.		
	15 (32768)		n.a.		

Byte	Bit (dec. value)	Subject	Options	Settings (in decimal values)	Remarks
5	0 (1)	Personal	n.a.		
	1 (2)		Auto Store Mode	0= None, 2= PDC/VPS, 4= TXT Page, 6= PDC/VPS/TXT Page	Fixed to: "None" in the AP-N and US versions.
	2 (4)				
	3 (8)		2CS Korea	0= BTSC, 8= Korean Stereo	As the MSP can not automatically detect if Korean stereo (2CS) or BTSC is transmitted, this option is needed to tell the MSP what detection should be done.
	4 (16)		Blue (or Picture) Mute	0= No, 16 = Yes	
	5 (32)		n.a.		
	6 (64)		Virgin Mode	0= No, 64= Yes	
	7 (128)	Miscellaneous	Hotel Mode	0= No, 128= Yes	
	8 (256)	Personal	Flex TV Demo	0= No, 256= Yes	
	9 (512)		n.a.		
	10 (1024)		n.a.		
	11 (2048)		n.a.		
	12 (4096)		TXT Preference	0= Top, 4096= FLOF	Only available in the EU version.
	13 (8192)		n.a.		
	14 (16384)		n.a.		
	15 (32768)		n.a.		
6	0 (1)	Miscellaneous	P50 DVD Menu Line	0= No, 1= Yes	Fixed to: "No" in all versions except for EU.
	1 (2)		n.a.		
	2 (4)		n.a.		
	3 (8)		n.a.		
	4 (16)	Chassis/Region	Region	0= EU, 16= AP-P, 32= AP-N, 48= US, 64= Latam, 80= Australia	
	5 (32)				
	6 (64)				
	7 (128)				
	8 (256)	Display	Screen	"000" (0)= 42-inch PDP (SDI), "001" (256)= 50-inch PDP (SDI), "002" (512)= 42-inch PDP (FHP), "003" (768)= 30-inch LCD (LPL), , "004" (1024)= 37-inch LCD (LPL), "005" (1280)= 42-inch LCD (LPL), "006" (1536)= 32-inch LCD (Sharp), "007" (1792)= 42-inch PDP (SDI) VGA, "008" (2048)= 37-inch PDP (FHP).	Fixed to "0" in case of CRT.
	9 (512)				
	10 (1024)				
	11 (2048)				
	12 (4096)				
	13 (8192)				
	14 (16384)				
	15 (32768)				
7	0 (1)	Source Selection	EXT4 1fH	0= No, 1= Yes	
	1 (2)		EXT1 2fH	0= No, 2= Yes	
	2 (4)		n.a.		
	3 (8)		n.a.		
	4 (16)		n.a.		
	5 (32)		EXT3 1fH	0= No, 32= Yes	
	6 (64)		DVI/VGA	0= No, 64= Yes	
	7 (128)		HDMI (Europe)	0= No, 128= Yes	
	8 (256)		AV3 1fH	0= No, 256= Yes	
	9 (512)		AV1 2fH	0= No, 512= Yes	
	10 (1024)		AV2 2fH	0= No, 1024= Yes	
	11 (2048)		n.a.		
	12 (4096)		n.a.		
	13 (8192)		n.a.		
	14 (16384)		n.a.		
	15 (32768)		HDMI (Non- Europe)	0= No, 32768= Yes	
8	0 (1)	Audio Repro	Acoustic System	0= FTV-Top (499), 1= Soft Wrap (496, 498), 2= Wrap (496, 498), 3= FTV2.3 (505), 4= FL9 Monitor (n.a.), 5= FL10 (n.a.), 6= FL11 or FL11-upgr. (380, 382, 406, 425, 426, 534), 7= FL12 (296, 305, 395, 408, 428, 444), 8= FL14 (n.a.), 9= PV02 (462), 10= FL13A (456), 11= Soft Design Line (336, 383), 12= Tech Design Line (419), 14= FL13B (456), 15= Others	Used for setting dynamic audio parameters. Between brackets the styling numbers are mentioned as listed in the quarterly Product Survey.
	1 (2)				
	2 (4)				
	3 (8)				
	4 (16)	Miscellaneous	n.a.		
	5 (32)		Intelligent Lights	0= No, 32= Yes	
	6 (64)	Audio Repro	AVL	0= No, 64= Yes	Switch to "No" when Dolby Digital is present.
	7 (128)		1080i Screen	0= 2fH path, 128= 3fH path	
	8 (256)	Display	CRT Size	0= 28", 256= 32", 512= 36" MEC, 768= 29", 1024= 34", 1280= 38", 1536= 28" Mk2, 1792= 36" PH, 2048= 32" MEC, 2304= 32" PH, 2560= 30", 2816= 37", 3072= 42", 3328= 50", 3840= Others	
	9 (512)				
	10 (1024)				
	11 (2048)				
	12 (4096)		Anti Moire Filter	0= No, 4096= Yes	Only for CRT
	13 (8192)		Display Type	0= LCD (LPL), 8192= PDP, 16384= CRT, 24576= LCoS, 32768= PTV, 40960= LCD (AUO), 49152= LCD (Sharp)	
	14 (16384)				
	15 (32768)				

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

Index of this chapter:
9.1 Introduction
9.2 Abbreviation List

Note:
Only **new** (not recently published) circuits are described here. As this chassis does not contain any really new circuits, use the FTP2.2x manual for the circuit descriptions.

9.1 Introduction

This chassis contains, compared to its predecessor, the following **new/changed** features/components:

- **Small Signal Board** (SSB). Small layout changes and new software to support the 720p feature.
- **Dual Ambient Light inverter panels**: To reduce the heat dissipation and improve the efficiency, two separate CCFL inverter panels are introduced in some models.

The chassis consists of a full sized SSB, a Power Supply, and some smaller PWBs for Audio, I/O, and Control functions. The main functionalities are:

- **Power Supply**:
  - For **FHP** displays, this is an LLC power supply, based on the one used in the earlier plasma monitors (FMxx chassis). This supply (single sided) is built up very conventional, with hardly any surface mounted components on the copper side.
  - For **SDI** displays, this is a "black box" for Service (board/module swap).
- **SSB**: Core TV functionalities, being TXT/control, video and audio decoding, feature box, video featuring, and sync/geometry control. The SSB is a high tech module (four layer, 2 sides reflow technology, full SMC) with very high component density and full shielding for EMC-reasons. Despite this, it is designed in such a way, that repair on component level is possible. To achieve this, attention was paid to:
  - Clearance around surface mounted ICs (for replacing).
  - Detailed diagnostics and fault finding is possible via ComPair.
  - Software upgrading (only for main software) is possible via ComPair.

9.2 Abbreviation List

1080i	1080 visible lines, interlaced
1080p	1080 visible lines, progressive scan
2DNR	Spatial (2D) Noise Reduction
3DNR	Temporal (3D) Noise Reduction
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 sets directly from 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
ANR	Automatic Noise Reduction: one of the algorithms of Auto TV
AR	Aspect Ratio: 4 by 3 or 16 by 9
Artistic	See OTC 2.5: main processor
ASF	Auto Screen Fit: algorithm that adapts aspect ratio to remove horizontal black bars but without throwing away video information
ATV	See Auto TV
AUDIO_C	Audio Centre
AUDIO_L	Audio Left
AUDIO_R	Audio Right
AUDIO_SL	Audio Surround Left
AUDIO-SR	Audio surround right
AUDIO_SW	Audio Sub woofer
Auto TV	A hardware and software control system that measures picture content, and adapts image parameters in a dynamic way
B/G	Monochrome TV system. Sound carrier distance is 5.5 MHz. B= VHF-band, G= UHF-band
B-SC1-IN	Blue SCART1 in
B-SC2-IN	Blue SCART2 in
B-TXT	Blue teletext
CL	Constant Level: audio output to connect with an external amplifier
ComPair	Computer aided rePair
CSM	Customer Service Mode
CTI	Colour Transient Improvement: manipulates steepness of chroma transients
CVBS	Composite Video Blanking and Synchronisation
CVBS-TER	CVBS terrestrial
COLUMBUS	COLour LUMinance Baseband Universal Subsystem. IC performing noise reduction and 2D/3D comb filtering
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	Direction For Use: description for the end user
D/K	Monochrome TV system. Sound carrier distance is 6.5 MHz. D= VHF-band, K= UHF-band

DNR	Digital Noise Reduction: noise reduction feature of the box
DPL	Dolby ProLogic
DSP	Digital Signal Processing
DST	Dealer Service Tool: special remote control designed for dealers to enter e.g. service mode
DVD	Digital Versatile Disc
DVI(-d)(-i)	Digital Visual Interface (d= digital only) (i= integrated); a digital video interface to a display, designed to replace the analogue YPbPr or RGB interface
Eagle	Feature box IC performing peaking, zooming and sub pixel LTI in both horizontal and vertical direction, CTI and other colour features
EDID	Extended Display Identification Data (VESA standard)
EEPROM	Electrically Erasable and Programmable Read Only Memory
EHT	Extra High Tension
EPG	Electronic Program Guide: system used by broadcasters to transmit TV guide information (= NexTView)
EPLD	Erasable Programmable Logic Device
EU	EUrope
EXT	External (source), entering the set via SCART or via cinches
FALCONIC	SAA4992H, Feature Box IC performing Digital Natural Motion, 3DNR, and vertical zoom and vertical peaking
FBL	Fast Blanking: DC signal accompanying RGB signals
FBL-PIP	The fast blanking signal for PIP
FBL-TXT	The fast blanking signal for TXT. It has a higher priority than FBL-PIP
FBX	Feature Box: part of small signal / separate module which contains 100 Hz processing, extra featuring and AutoTV algorithms (FBX6= based on PICNIC, FBX7= based on PICNIC and Eagle)
FDS	Full Dual Screen
FEM	Falconic Embedded Memory; IC (SAA4998H) that is the successor of the SAA4993H with jagged line removal and embedded memory
FHP	Fujitsu Hitachi Plasma display Ltd.
FLOF	Full Level One Features, TXT standard
FLASH	Flash memory
FM	Field Memory or Frequency Modulation
G-TXT	Green teletext
HA	Horizontal Acquisition: horizontal sync pulse coming out of the HIP
HD at HOME	A signal from the OTC, to switch the HOP to the Pixel Plus standard (75 Hz frame)
HIP	High-end video Input Processor (TDA9320): video and chroma decoder of EM5E
HP	Head phone
I	Monochrome TV system. Sound carrier distance is 6.0 MHz. VHF- and UHF-band
I/O	Input/Output
I^2C	Inter IC bus (also called IIC)
IF	Intermediate Frequency
Interlaced	Scan mode where two fields are used to form one frame. Each field contains half the number of the total amount of lines. The fields are written in "pairs", causing line flicker
Last Status	The settings last chosen by the customer, 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
LCD	Liquid Crystal Display
LPL	LG-Philips LCD
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
LNA	Low Noise Adapter
LORE	LOcal REgression based noise reduction
LSP	Large signal panel
LVDS	Low Voltage Differential Signalling; Data transmission system for high speed and low EMI communication
M/N	Monochrome TV system. Sound carrier distance is 4.5 MHz. M= 525 lines @ 60 Hz, N= 625 lines @ 50 Hz
MUTE	Mute-Line
NC	Not Connected
NICAM	Near Instantaneously Companded Audio Multiplexing; This is a digital sound system, mainly used in Europe
NTSC	National Television Standard Committee; Colour system mainly used 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 e.g. alignments
O/C	Open Circuit
OSD	On Screen Display
OTC	On screen display Teletext and Control; also named Artistic (SAA5800)
P50	Project 50 communication: protocol between TV and peripherals
PAL	Phase Alternating Line; Colour system mainly used in West Europe (colour carrier= 4.433619 MHz) and South America (colour carrier PAL M= 3.575612 MHz and PAL N= 3.582056 MHz)
PCB	Printed Circuit Board
PDP	Plasma Display Panel
PFC	Power Factor Corrector (or Pre-conditioner)
PICNIC	Peripheral Integrated Combined Network IC (SAA4978): main IC for 100 Hz featuring and feature processing
PIP	Picture In Picture
PLL	Phase Locked Loop; Used for e.g. FST tuning systems. The customer can directly provide the desired frequency
POR	Power On Reset; Signal to reset the µP
Progressive Scan	Scan mode where all scan lines are displayed in one frame at the same time, creating a double vertical resolution.
PSU	Power Supply Unit
PWB	Printed Wiring Board
RAM	Random Access Memory
R-TXT	Red teletext
RC	Remote Control
RC5 / RC6	Signal protocol from the remote control receiver
RESET	Reset signal

RGB	Red, Green, and Blue colour space; 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
S/C	Short Circuit
SCL-F	Clock signal on fast I^2C bus
SD	Standard Definition
SDA-F	Data signal on fast I^2C bus
SDI	Samsung Display Industry
SECAM	SÉquence Couleur Avec Mémoire; Colour system mainly used in France and East Europe. The chroma is FM modulated and the R-Y and B-Y signals are transmitted line sequentially. Colour carriers= 4.406250 MHz and 4.250000 MHz
SIF	Sound Intermediate Frequency
SMD	Surface Mounted Device
SMPS	Switched Mode Power Supply
SNERT	Synchronous No parity Eight bit Reception and Transmit
SSB	Small Signal Board
STBY	Stand-by
SW	Sub woofer
SVGA	800x600 (4:3)
SVHS	Super Video Home System
TMDS	Transition Minimised Differential Signalling
TOP	Table Of Pages; TXT standard
TXT	Teletext
uP	Microprocessor
UV	Colour difference signals
UVSH	UHF, VHF, S-, and Hyper-band
VA	Vertical Acquisition
V-a	Addressing voltage for the plasma display
VDS	Virtual Dolby Surround
VESA	Video Electronics Standards Association
VFB	Vertical Flyback Pulse: vertical sync pulse coming from the Feature Box
VGA	Video Graphics Array; 640x480 (4:3)
VL	Variable Level out: processed audio output towards external amplifier
V-ra	Setting voltage for V_a
V-rs	Setting voltage for V_s
V-s	Sustain voltage for the plasma display
WSS	Wide Screen Signalling; used by broadcasters to transmit e.g. PALPLUS and 16:9 Aspect Ratio
WXGA	Wide eXtended Graphics Array; 1280x768 (15:9) or 1366x768 (16:9)
WYSIWYR	What You See Is What You Record: record selection that follows main picture and sound
XGA	Extended Graphics Array; 1024x768 (4:3)
XTAL	Quartz crystal
Y	Luminance signal
Y100	Y from Feature Box
YPbPr	This is a scaled version of the YUV colour space. Y= Luminance, Pb/Pr= Colour difference signals B-Y and R-Y, other amplitudes w.r.t. to YUV
Y-OUT	Luminance-signal to HOP IC
YUV	Colour space used by the NTSC and PAL video systems. Y is the luminance and U/V are the colour difference signals

10. Spare Parts List

Set Level

Various

0271	3104 303 12091	Thermal foam block
1004▲	8204 000 78201	S50HW-XD04 (SDI)
1004▲	9322 224 77682	FPF42C128128UD(FHP)
1088	3104 328 39552	CCFL inverter panel
1089	3104 328 39552	CCFL inverter panel
1175	2722 171 00259	Ambi light 500L (42")
1175	2722 171 00263	Ambi light 600R (50")
1176	2722 171 00257	Ambi light 500R (42")
1176	2722 171 00261	Ambi light 600R (50")
5213	2441 257 10002	Loudspeaker 8Ω 15W
5214	2441 257 10002	Loudspeaker 8Ω 15W
5215	2441 257 10003	Loudspeaker passive
5216	2441 257 10003	Loudspeaker passive
8202	3104 311 08651	Cable 9p/340/9p
8250	3104 311 08081	Cable 31p/350/30p
8250	3104 311 08841	Cable 31p/220/31p
8302	3104 311 08931	Cable 7p/1000/7p
8302	3104 311 10121	Cable 7p/280/7p
8310	3104 311 08671	Cable 4p/250/4p
8310	3104 311 10641	Cable 4p/820/4p
8323	3104 311 10361	Cable 10p/280/10p
8508	3104 311 10651	Cable 4p/1000/4p
8548	3104 311 10661	Cable 3p/1300/3p
8735	3104 311 09471	Cable 2p/1600/2p
8735	3104 311 10111	Cable 2p/1600/2p
8736	3104 311 09721	Cable 2p/820/2p
8736	3104 311 09851	Cable 2p/1700/2p
8911	3104 311 07911	Cable ring/180/ring

PDP Supply for FHP 42" [A]

Various

1004▲	9965 000 07788	Fuse 2A T 250V
1082▲	4822 071 52502	Fuse 2.5A
1083▲	4822 071 52502	Fuse 2.5A
1084▲	2422 086 10849	Fuse 1A F 250V
1110▲	4822 071 55002	Fuse 5A T 250V
1200▲	9965 000 07788	Fuse 2A T 250V
1260▲	4822 252 51186	Fuse 2A
1400▲	4822 253 30467	Fuse 6.3A
1402▲	4822 252 60151	Surge protect
1450▲	4822 280 10382	SDT-SS-109DM
1460▲	4822 280 10382	SDT-SS-109DM
1M05	2422 025 16374	Connector 2p m
1M10	2422 025 09406	Connector 4p m

⊣⊢

2000▲	2252 811 95017	470pF 10% 250V
2001▲	2222 338 22474	470nF 20% 275V
2005	2238 867 18101	100pF 1% 50V 0603
2006	2020 552 96618	1nF 10% 50V 0402
2007	2238 586 59812	100nF 20% 50V 0603
2008	5322 126 11583	10nF 10% 50V 0603
2010	5322 126 11583	10nF 10% 50V 0603
2011	2222 375 24153	15nF 5% 1kV
2012	4822 126 11254	330pF 10% 2kV
2013	4822 126 11254	330pF 10% 2kV
2014	4822 126 13862	1.5nF 10% 2kV
2015	5322 126 11583	10nF 10% 50V 0603
2017	2222 375 24153	15nF 5% 1kV
2018	2238 867 18101	100pF 1% 50V 0603
2019▲	2252 811 95017	470pF 10% 250V
2020	2020 024 90737	3300µF 20% 100V
2021	2020 024 90737	3300µF 20% 100V
2022	2020 021 91354	1000µF 20% 50V
2023	2222 580 15649	100nF 10% 50V 0805
2024	3198 035 03320	3.3nF 5% 50V 0402
2025	4822 124 12084	1µF 20% 50V
2026	2020 552 96623	2.2nF 10% 50V 0402
2027	2020 552 96631	15nF 10% 16V 0402
2028	2238 930 11541	220pF 5% 200V
2029	2238 930 11541	220pF 5% 200V
2030	2238 586 59812	100nF 20% 50V 0603
2031	2020 552 96628	10nF 10% 16V 0402
2032	2238 586 15641	22nF 10% 50V 0603
2033	2238 586 59812	100nF 20% 50V 0603
2034	4822 126 14525	47pF 5% 1kV
2035	2020 552 96618	1nF 10% 50V 0402
2036	2238 586 15641	22nF 10% 50V 0603
2037	4822 126 14525	47pF 5% 1kV
2038	2020 552 96618	1nF 10% 50V 0402
2039	2020 552 96623	2.2nF 10% 50V 0402
2040	3198 034 02790	47pF 1% 50V 0402
2041	2238 869 15101	100pF 5% 50V 0402
2042	3198 035 03310	330pF 5% 50V 0402
2043	4822 124 12084	1µF 20% 50V
2044	2238 930 11541	220pF 5% 200V
2045	2238 930 11541	220pF 5% 200V
2046	2252 568 08305	33pF 5% 500V
2047	2238 586 59812	100nF 20% 50V 0603
2048	2020 552 96683	220nF 10% 50V
2049	2238 867 18101	100pF 1% 50V 0603
2050	2238 586 15641	22nF 10% 50V 0603
2051	4822 122 33177	10nF 20% 50V
2052	4822 124 12056	1000µF 20% 35V
2053	2022 031 00308	22µF 20% 35V
2054	2238 869 15221	220pF 1% 50V 0402
2055	2020 552 96621	1.5nF 10% 50V 0402
2056	2238 869 15221	220pF 1% 50V 0402
2057	2020 552 96621	1.5nF 10% 50V 0402
2058	4822 124 41828	1µF 20% 250V
2059	2238 586 59812	100nF 20% 50V 0603
2060	2020 552 96683	220nF 10% 50V
2061	2238 586 59812	100nF 20% 50V 0603
2070	2020 552 96618	1nF 10% 50V 0402
2071	2020 552 96618	1nF 10% 50V 0402
2111	2238 869 15221	220pF 1% 50V 0402
2112	2020 552 96618	1nF 10% 50V 0402
2113	4822 124 12379	220µF 25V
2114	2020 552 96683	220nF 10% 50V
2118	4822 126 13449	1nF 10% 2kV
2121	2020 024 90736	2200µF 20% 100V
2122	4822 121 51319	1µF 10% 63V
2123	3198 035 03320	3.3nF 5% 50V 0402
2126	2238 586 59812	100nF 20% 50V 0603
2133	4822 124 81151	22µF 50V
2203	2238 586 59812	100nF 20% 50V 0603
2210	4822 124 80151	47µF 16V
2211	3198 035 04710	470pF 50V 0402
2212	2020 552 96326	220nF 10% 16V
2213	3198 035 14720	4.7nF 5% 25V 0402
2214	3198 035 14720	4.7nF 5% 25V 0402
2215	3198 035 04710	470pF 50V 0402
2218	2222 375 90141	3.3nF 1.6kV 5%
2222	2238 869 15101	100pF 5% 50V 0402
2223	2238 869 15101	100pF 5% 50V 0402
2225	2020 021 91551	2200µF 20% 25V
2226	2238 586 59812	100nF 20% 50V 0603
2227	2238 869 15101	100pF 5% 50V 0402
2229	2020 021 00036	470µF 20% 16V
2230	2020 021 00036	470µF 20% 16V
2231	4822 124 80151	47µF 16V
2232	2238 869 15101	100pF 5% 50V 0402
2234	2022 552 05679	1µF 10% 16V 0805
2236	4822 124 23002	10µF 16V
2237	4822 124 23002	10µF 16V
2263	2222 861 15272	2.7nF 5% 50V 0805
2264	4822 126 14583	470nF 10% 16V 0805
2265	3198 035 03310	330pF 5% 50V 0402
2267	5322 122 32531	100pF 5% 50V
2268	2020 552 96683	220nF 10% 50V
2269	4822 123 14025	2200µF 20% 16V
2270	4822 124 40433	47µF 20% 25V
2273	2238 586 59812	100nF 20% 50V 0603
2274	2020 552 96628	10nF 10% 16V 0402
2290	5322 126 11583	10nF 10% 50V 0603
2291	3198 035 04710	470pF 50V 0402
2293	3198 035 04710	470pF 50V 0402
2295	3198 035 04710	470pF 50V 0402
2296	3198 035 04710	470pF 50V 0402
2304	2020 552 96618	1nF 10% 50V 0402
2305	2238 586 59812	100nF 20% 50V 0603
2306	2238 586 59812	100nF 20% 50V 0603
2322	2238 586 59812	100nF 20% 50V 0603
2324	2238 586 59812	100nF 20% 50V 0603
2350	4822 124 12095	100µF 20% 16V
2352	2238 586 59812	100nF 20% 50V 0603
2364	2238 586 59812	100nF 20% 50V 0603
2376	2238 586 59812	100nF 20% 50V 0603
2377	2238 586 59812	100nF 20% 50V 0603
2381	2238 586 59812	100nF 20% 50V 0603
2397	4822 124 12095	100µF 20% 16V
2398	4822 124 23002	10µF 16V
2400▲	2222 338 22474	470nF 20% 275V
2401▲	2222 338 22474	470nF 20% 275V
2404	4822 126 14525	47pF 5% 1kV
2405▲	2252 811 95017	470pF 10% 250V
2406	4822 126 14525	47pF 5% 1kV
2407▲	2252 811 95017	470pF 10% 250V
2465	4822 124 12095	100µF 20% 16V
2502	2238 869 15101	100pF 5% 50V 0402
2503	2020 024 90708	47µF 400V 20%
2504	2020 552 96618	1nF 10% 50V 0402
2505	4822 124 12056	1000µF 20% 35V
2507	2238 869 15101	100pF 5% 50V 0402
2508	4822 124 12095	100µF 20% 16V
2509	2238 869 15101	100pF 5% 50V 0402
2510	2020 021 91506	1000µF 20% 16V
2511	2238 586 59812	100nF 20% 50V 0603
2512	2238 586 59812	100nF 20% 50V 0603
2513	2222 580 15649	100nF 10% 50V 0805
2532	4822 124 12095	100µF 20% 16V
2533	4822 124 12095	100µF 20% 16V
2534	2022 552 05679	1µF 10% 16V 0805
2540	4822 124 12095	100µF 20% 16V
2541	4822 124 12095	100µF 20% 16V
2600	4822 122 33799	1nF 10% 1kV
2601	4822 122 33799	1nF 10% 1kV
2602	2020 552 96623	2.2nF 10% 50V 0402
2603	2222 383 90136	1µF 5% 400V
2605	2222 383 90136	1µF 5% 400V
2608	2020 552 96618	1nF 10% 50V 0402
2610	4822 121 70584	1.8nF 5% 2kV
2611	4822 126 12263	220pF 10% 2kV
2612	2020 552 96618	1nF 10% 50V 0402
2614	2020 552 96623	2.2nF 10% 50V 0402
2616	4822 124 12415	220µF 20% 400V
2617	4822 124 12415	220µF 20% 400V
2640	3198 035 04710	470pF 50V 0402
2642	2020 552 96618	1nF 10% 50V 0402
2651	2020 552 96628	10nF 10% 16V 0402
2653	3198 035 06810	680pF 5% 50V 0402
2654	4822 124 80151	47µF 16V
2655	2022 552 05679	1µF 10% 16V 0805
2656	2222 580 15649	100nF 10% 50V 0805
2660	4822 126 13881	470pF 5% 50V
2661	2020 552 96618	1nF 10% 50V 0402
2662	4822 124 80061	1000µF 20% 25V
2663	4822 121 51319	1µF 10% 63V
2664	4822 124 40255	100µF 20% 63V
2665	4822 126 13881	470pF 5% 50V
2666	2020 552 96793	4.7nF 10% 50V 0402
2670	2238 586 59812	100nF 20% 50V 0603
2671	2238 586 59812	100nF 20% 50V 0603
2672	2222 580 15649	100nF 10% 50V 0805
2673	2020 558 90621	10nF 630V
2674	2020 558 90621	10nF 630V
2675	2020 558 90621	10nF 630V
2676	2020 558 90621	10nF 630V
2677	2020 552 96623	2.2nF 10% 50V 0402
2690	2020 552 96618	1nF 10% 50V 0402

⌐WW⌐

3001	4822 051 30471	47Ω 5% 0.062W
3002	4822 051 30471	47Ω 5% 0.062W
3003	4822 117 11297	100kΩ 5% 0.1W
3004	3198 031 01530	15kΩ 5% 0.01W 0402
3005	3198 031 02730	27kΩ 5% 0402
3006	4822 117 13606	10kΩ 5% 0.01W 0402
3007	3198 031 04720	4.7kΩ 5% 0402
3008	4822 051 30102	1kΩ 5% 0.062W
3009	4822 051 30102	1kΩ 5% 0.062W
3010	3198 031 01530	15kΩ 5% 0.01W 0402
3011	4822 051 30561	560Ω 5% 0.062W
3012	3198 031 04720	4.7kΩ 5% 0402
3013	4822 117 13606	10kΩ 5% 0.01W 0402
3014	4822 050 23309	33Ω 1% 0,6W
3015	4822 050 21009	10Ω 1% 0.6W
3016	4822 051 10102	1kΩ 2% 0.25W
3017	4822 050 23309	33Ω 1% 0,6W
3018	4822 050 21009	10Ω 1% 0.6W
3019	4822 051 10102	1kΩ 2% 0.25W
3020	3198 031 05630	56kΩ 5% 0402
3022	4822 051 30681	680Ω 5% 0.062W
3023	3198 031 04730	47Ω 5% 0402
3025	2322 706 71802	1.8kΩ 5% 0402
3027	3198 031 04730	47Ω 5% 0402
3028	2322 704 67502	7.5kΩ 1% 0.5W
3029	4822 051 30123	12kΩ 5% 0.1W
3030	3198 031 01830	18kΩ 5% 0.01W 0402
3031	2322 706 71003	10kΩ 5% 0402
3032	2322 706 71003	10kΩ 5% 0402
3033	2322 705 70184	180Ω 5% 0402
3034	4822 117 13596	220Ω 5% 0.01W 0402
3036	2122 612 00068	NTC 1Ω 20% 6W
3037	4822 117 13606	10kΩ 5% 0.01W 0402
3038	4822 117 11297	100kΩ 5% 0.1W

3039	4822 051 30105	1MΩ 5% 0.062W
3040	4822 117 10837	100kΩ 1% 0.1W
3041	4822 117 13603	33kΩ 5% 0402
3042	4822 051 30471	47Ω 5% 0.062W
3043	3198 031 04720	4.7kΩ 5% 0402
3044	4822 051 30102	1kΩ 5% 0.062W
3045	4822 051 30102	1kΩ 5% 0.062W
3047	3198 031 01540	150kΩ 5% 0402
3048	3198 031 04720	4.7kΩ 5% 0402
3049	3198 031 01230	12kΩ 5% 0402
3050▲	4822 052 10398	3.9Ω 5% 0,33W
3051	4822 051 20822	8.2kΩ 5% 0.1W
3053▲	2322 662 93131	PTC 10Ω
3054	4822 117 13543	470Ω 5% 0402
3055	4822 117 10833	10kΩ 1% 0.1W
3056	4822 051 30331	330Ω 5% 0.062W
3057	4822 051 30101	100Ω 5% 0.062W
3058	4822 051 20105	1MΩ 5% 0.1W
3059	3198 031 05630	56kΩ 5% 0402
3060	4822 050 22204	220kΩ 1% 0.6W
3061	3198 031 01830	18kΩ 5% 0.01W 0402
3062	4822 117 13548	1kΩ 5% 0402
3063	4822 117 13548	1kΩ 5% 0402
3064	4822 117 13606	10kΩ 5% 0.01W 0402
3065	4822 117 13548	1kΩ 5% 0402
3066	4822 117 13606	10kΩ 5% 0.01W 0402
3067	3198 031 01530	15kΩ 5% 0.01W 0402
3068	4822 117 13606	10kΩ 5% 0.01W 0402
3069	4822 051 30471	47Ω 5% 0.062W
3070	4822 051 30103	10kΩ 5% 0.062W
3071	3198 031 04730	47Ω 5% 0402
3073	3198 031 01050	1MΩ 5% 0402
3074	3198 031 01530	15kΩ 5% 0.01W 0402
3075	4822 051 20105	1MΩ 5% 0.1W
3076	4822 117 11297	100kΩ 5% 0.1W
3077	4822 051 20105	1MΩ 5% 0.1W
3078	4822 117 11297	100kΩ 5% 0.1W
3079	4822 051 30681	680Ω 5% 0.062W
3080	4822 051 30681	680Ω 5% 0.062W
3081	3198 031 01520	1.2kΩ 5% 0.01W 0402
3082	3198 031 01520	1.2kΩ 5% 0.01W 0402
3083	2312 915 11002	1kΩ 1% 0.5W
3084	4822 117 13606	10kΩ 5% 0.01W 0402
3085	3198 031 04730	47Ω 5% 0402
3086	3198 031 04730	47Ω 5% 0402
3087	3198 031 04730	47Ω 5% 0402
3088	3198 031 04730	47Ω 5% 0402
3089	4822 117 13606	10kΩ 5% 0.01W 0402
3090	4822 117 13545	100Ω 1% 0402
3091	4822 051 30102	1kΩ 5% 0.062W
3092	4822 051 10102	1kΩ 2% 0.25W
3093	4822 117 13548	1kΩ 5% 0402
3094	4822 051 10102	1kΩ 2% 0.25W
3095	4822 117 13543	470Ω 5% 0402
3096	3198 031 05620	5.6kΩ 5% 0.01W 0402
3097	3198 031 08210	820Ω 5% 0.5W
3098	4822 117 13548	1kΩ 5% 0402
3100	2322 706 71002	1kΩ 1% 0402
3101	2322 706 71002	1kΩ 1% 0402
3102	2322 706 71002	1kΩ 1% 0402
3103	2322 706 71002	1kΩ 1% 0402
3104	2322 706 71002	1kΩ 1% 0402
3106	4822 117 12955	2.7kΩ 1% 0.1W 0805
3107	4822 117 12955	2.7kΩ 1% 0.1W 0805
3108	4822 117 12955	2.7kΩ 1% 0.1W 0805
3109	4822 117 12955	2.7kΩ 1% 0.1W 0805
3110	4822 117 13548	1kΩ 5% 0402
3112	4822 051 30102	1kΩ 5% 0.062W
3114	2322 705 70564	560kΩ 5% 0402
3115	3198 031 02240	220kΩ 5% 0.1W 0402
3116	4822 117 13548	1kΩ 5% 0402
3117	4822 117 13606	10kΩ 5% 0.01W 0402
3118	2122 118 06084	0.051Ω 5% 1W 2512
3120	3198 021 31820	1.8kΩ 5% 0.062W 0603
3121	3198 031 04730	47Ω 5% 0402
3123	4822 117 10965	18kΩ 1% 0.1W
3124	2322 704 67502	7.5kΩ 1% 0.5W
3125	2322 704 67502	7.5kΩ 1% 0.5W
3126	2322 706 72202	2.2kΩ 5% 0402
3128	4822 117 13603	33kΩ 5% 0402
3130	4822 051 30123	12kΩ 5% 0.1W
3131	2322 706 71003	10kΩ 5% 0402
3132	4822 117 13596	220Ω 5% 0.01W 0402
3133	4822 051 30101	100Ω 5% 0.062W
3134	4822 051 30681	680Ω 5% 0.062W
3135	3198 031 04730	47Ω 5% 0402
3136	3198 031 04730	47Ω 5% 0402
3143	4822 053 12472	4.7kΩ 5% 3W
3147	2322 706 71003	10kΩ 5% 0402
3149▲	4822 052 10478	4.7Ω 5% 0.33W
3150	3198 031 01050	1MΩ 5% 0402
3200	3198 021 52240	220kΩ 5% 0805
3202	4822 051 30479	47Ω 5% 0.062W
3203	4822 051 30101	100Ω 5% 0.062W
3204	4822 117 11297	100kΩ 5% 0.1W
3205	4822 117 11297	100kΩ 5% 0.1W
3206	4822 117 12955	2.7kΩ 1% 0.1W 0805
3207	4822 117 12955	2.7kΩ 1% 0.1W 0805
3208	4822 117 12955	2.7kΩ 1% 0.1W 0805
3209	4822 117 12955	2.7kΩ 1% 0.1W 0805
3210	2322 706 71002	1kΩ 1% 0402
3212	4822 051 30102	1kΩ 5% 0.062W
3213	4822 117 13603	33kΩ 5% 0402
3214	2322 705 70124	120kΩ 5% 0402
3215	2322 705 70274	270kΩ 5% 0402
3216	4822 117 13548	1kΩ 5% 0402
3217	4822 117 13606	10kΩ 5% 0.01W 0402
3218	2122 118 06084	0.051Ω 5% 1W 2512
3219	4822 117 13606	10kΩ 5% 0.01W 0402
3220	4822 050 23309	33Ω 1% 0,6W
3224	2322 706 71203	12kΩ 5% 0402
3225	2322 706 71003	10kΩ 5% 0402
3226	4822 117 13606	10kΩ 5% 0.01W 0402
3228	4822 051 30151	150Ω 5% 0.062W
3262	2322 706 71003	10kΩ 5% 0402
3263	2322 706 71003	10kΩ 5% 0402
3265	4822 117 13548	1kΩ 5% 0402
3268	4822 117 13548	1kΩ 5% 0402
3269	3198 031 02720	2.7kΩ 5% 0.01W 0402
3292	4822 051 30561	560Ω 5% 0.062W
3300	2322 706 72204	220kΩ 5% 0402
3301	2322 706 72204	220kΩ 5% 0402
3304	4822 051 30102	1kΩ 5% 0.062W
3306	2322 706 71003	10kΩ 5% 0402
3307	5322 117 13028	12kΩ 1% 0.063W 0603
3308	4822 051 30102	1kΩ 5% 0.062W
3311	4822 117 13579	220kΩ 1% 0.1W 0805
3312	4822 051 30102	1kΩ 5% 0.062W
3313	2322 704 67502	7.5kΩ 1% 0.5W
3317	2322 704 67502	7.5kΩ 1% 0.5W
3320	2322 706 71003	10kΩ 5% 0402
3321	4822 051 30102	1kΩ 5% 0.062W
3322	2322 706 73902	3.9kΩ 1% 0402
3323	2322 706 71003	10kΩ 5% 0402
3324	4822 051 30102	1kΩ 5% 0.062W
3325	4822 051 30471	47Ω 5% 0.062W
3326	3198 031 04720	4.7kΩ 5% 0402
3327	4822 117 13606	10kΩ 5% 0.01W 0402
3328	4822 051 30103	10kΩ 5% 0.062W
3332	2322 706 76803	68kΩ 5% 0402
3333	4822 051 30102	1kΩ 5% 0.062W
3334	2322 706 71003	10kΩ 5% 0402
3335	2322 706 71503	15kΩ 5% 1W 0402
3340	4822 051 30102	1kΩ 5% 0.062W
3341	4822 117 13606	10kΩ 5% 0.01W 0402
3342	4822 051 30103	10kΩ 5% 0.062W
3343	4822 051 30102	1kΩ 5% 0.062W
3344	4822 051 30102	1kΩ 5% 0.062W
3345	4822 117 13548	1kΩ 5% 0402
3346	4822 117 13548	1kΩ 5% 0402
3347	4822 051 30331	330Ω 5% 0.062W
3348	4822 051 30331	330Ω 5% 0.062W
3349	4822 051 30102	1kΩ 5% 0.062W
3350	4822 051 30472	4.7Ω 5% 0.062W
3351	4822 051 30103	10kΩ 5% 0.062W
3352	4822 051 30103	10kΩ 5% 0.062W
3353	4822 117 13606	10kΩ 5% 0.01W 0402
3354	3198 031 04720	4.7kΩ 5% 0402
3358	4822 051 30222	2.2kΩ 5% 0.062W
3359	3198 031 05620	5.6kΩ 5% 0.01W 0402
3360	3198 031 01220	1.2kΩ 5% 0.01W 0402
3361	3198 031 04720	4.7kΩ 5% 0402
3362	3198 031 02720	2.7kΩ 5% 0.01W 0402
3363	4822 051 30102	1kΩ 5% 0.062W
3364	4822 051 30102	1kΩ 5% 0.062W
3366	4822 117 13606	10kΩ 5% 0.01W 0402
3367	4822 051 30103	10kΩ 5% 0.062W
3369	3198 031 04720	4.7kΩ 5% 0402
3370	2322 675 20907	PTC 470Ω 50% 25V 0805
3373	3198 031 04720	4.7kΩ 5% 0402
3374	3198 031 04730	47Ω 5% 0402
3376	3198 031 04730	47Ω 5% 0402
3377	3198 031 04720	4.7kΩ 5% 0402
3378	4822 117 13606	10kΩ 5% 0.01W 0402
3380	3198 031 04730	47Ω 5% 0402
3381	3198 031 04730	47Ω 5% 0402
3383	4822 117 13606	10kΩ 5% 0.01W 0402
3384	4822 117 13606	10kΩ 5% 0.01W 0402
3388	4822 051 30102	1kΩ 5% 0.062W
3389	4822 051 30102	1kΩ 5% 0.062W
3391	4822 117 13606	10kΩ 5% 0.01W 0402
3400▲	2122 550 00158	VDR 1mA 612V
3401▲	4822 117 10118	1MΩ 5% 0.5W
3404	4822 116 83872	220Ω 5% 0.5W
3450▲	2322 662 93131	PTC 10Ω
3451▲	2322 662 93131	PTC 10Ω
3452▲	2122 612 00068	NTC 1Ω 20% 6W
3460	4822 117 13602	2.2kΩ 5% 0.01W 0402
3461	4822 117 13606	10kΩ 5% 0.01W 0402
3463	4822 117 13606	10kΩ 5% 0.01W 0402
3465	4822 117 13606	10kΩ 5% 0.01W 0402
3467	4822 117 13606	10kΩ 5% 0.01W 0402
3469	3198 031 04720	4.7kΩ 5% 0402
3470	4822 117 13606	10kΩ 5% 0.01W 0402
3471▲	4822 117 13548	1kΩ 5% 0402
3472▲	4822 117 13548	1kΩ 5% 0402
3501	4822 051 30102	1kΩ 5% 0.062W
3502	4822 051 30471	47Ω 5% 0.062W
3503	2322 706 74702	4.7kΩ 5% 0402
3504	2322 706 73303	33kΩ 5% 0402
3505	2322 706 74702	4.7kΩ 5% 0402
3506▲	2322 662 93131	PTC 10Ω
3509	2312 915 11209	12Ω 1% 0.5W
3603	4822 051 20474	470kΩ 5% 0.1W
3604	4822 051 20474	470kΩ 5% 0.1W
3605	4822 051 20474	470kΩ 5% 0.1W
3606	4822 051 30101	100Ω 5% 0.062W
3607	4822 117 12891	220kΩ 1%
3608	2312 915 11209	12Ω 1% 0.5W
3609	4822 051 20474	470kΩ 5% 0.1W
3610	4822 050 23308	3.3Ω 1% 0.6W
3611	4822 050 21003	10kΩ 1% 0.6W
3613	4822 117 13606	10kΩ 5% 0.01W 0402
3614	2322 194 95001	0.27Ω 5% 2W
3615	2322 194 95001	0.27Ω 5% 2W
3616	3198 031 01230	12kΩ 5% 0402
3617	3198 031 04730	47Ω 5% 0402
3618	4822 117 13603	33kΩ 5% 0402
3619	3198 031 03320	3.3kΩ 5% 0402
3620	2322 194 95001	0.27Ω 5% 2W
3621	4822 050 22208	2.2Ω 1% 0,6W
3622	4822 050 22208	2.2Ω 1% 0,6W
3623	4822 117 13548	1kΩ 5% 0402
3639	4822 051 10102	1kΩ 2% 0.25W
3640	4822 051 30331	330Ω 5% 0.062W
3641	4822 051 20471	470Ω 5% 0.1W
3642	4822 117 11503	220Ω 1% 0.1W
3643	4822 117 11503	220Ω 1% 0.1W
3651	4822 117 13601	22kΩ 5% 0402
3652	3198 031 01050	1MΩ 5% 0402
3654	4822 117 13606	10kΩ 5% 0.01W 0402
3655	4822 117 13548	1kΩ 5% 0402
3656	3198 031 01820	1.8kΩ 5% 0.01W 0402
3659	4822 117 11503	220Ω 1% 0.1W
3660	4822 117 11504	270Ω 1% 0.1W
3661	4822 117 11504	270Ω 1% 0.1W
3663▲	4822 052 10108	1Ω 5% 0.33W
3664	2322 706 71204	120kΩ 5% 0402
3665	2322 705 70274	270kΩ 5% 0402
3666	4822 051 30101	100Ω 5% 0.062W
3668▲	4822 052 11102	1kΩ 5% 0.5W
3669	2322 706 71204	120kΩ 5% 0402
3671	2322 706 71003	10kΩ 5% 0402
3673▲	4822 052 11102	1kΩ 5% 0.5W
3675	2322 702 60158	1.5Ω
3676	2322 706 74702	4.7kΩ 5% 0402
3677	2322 706 74703	47kΩ 1% 0402
3678	3198 031 04730	47Ω 5% 0402
3680	4822 117 13579	220kΩ 1% 0.1W 0805
3681	4822 117 13579	220kΩ 1% 0.1W 0805
3682	4822 117 13579	220kΩ 1% 0.1W 0805
3683	4822 051 20334	330kΩ 5% 0.1W
3684	4822 051 20334	330kΩ 5% 0.1W
3685	4822 051 20334	330kΩ 5% 0.1W
3690	3198 031 03920	3.9kΩ 5% 0402
3691	3198 031 08220	8.2kΩ 5% 0.5W
3692	4822 117 13606	10kΩ 5% 0.01W 0402
3693	4822 117 13602	2.2kΩ 5% 0.01W 0402
3806	4822 117 13543	470Ω 5% 0402
3807	4822 117 13606	10kΩ 5% 0.01W 0402
3808	4822 117 13606	10kΩ 5% 0.01W 0402
3809	3198 031 02730	27kΩ 5% 0402
3811	4822 117 13545	100Ω 1% 0402
3999	4822 117 13548	1kΩ 5% 0402
9001	4822 051 20008	Jumper 0805
9003	4822 051 20008	Jumper 0805
9004	4822 117 13605	Jumper 0402
9020	4822 051 20008	Jumper 0805
9021	4822 051 20008	Jumper 0805
9022	4822 051 20008	Jumper 0805
9028	4822 117 13605	Jumper 0402

⎓

5001	2422 531 02444	Transf. S13932-04Y
5002▲	3104 308 21022	Transf. BS42315-02
5004▲	3104 308 21022	Transf. BS42315-02
5005▲	3122 138 38901	Mains filter CU28D3
5121	3104 308 20771	Bridge coil BD21232-00
5220	3104 308 20911	Transf. BS29238-00
5225	2422 536 00672	4.7µH 20%

5229	2422 536 00826	220µH 10%
5290	3104 308 21171	transf. BD15403-00
5291	4822 157 11737	22µH 10%
5292	4822 157 11737	22µH 10%
5293	4822 157 11737	22µH 10%
5401▲	3122 138 38901	Mains filter CU28D3
5402▲	3122 138 38901	Mains filter CU28D3
5500▲	2422 531 00075	Transf. BS16421-00
5503	4822 157 11737	22µH 10%
5600	3104 308 20821	Coil BS42228-00 B
5601	4822 157 11411	Bead 80Ω at 100MHz
5612	4822 157 11411	Bead 80Ω at 100MHz
5660	4822 157 51192	220µH 10%



6002	4822 130 11397	BAS316
6003	9340 548 71115	PDZ33B
6004	4822 130 11397	BAS316
6005	4822 130 11397	BAS316
6006	4822 130 11397	BAS316
6007	4822 130 11397	BAS316
6008	4822 130 11397	BAS316
6009	4822 130 11397	BAS316
6010	4822 130 11397	BAS316
6011	4822 130 11397	BAS316
6012	3198 020 55680	BZX384-C5V6
6018	4822 130 11397	BAS316
6019	4822 130 11397	BAS316
6021	4822 130 32961	BYV28-200
6023	4822 130 11397	BAS316
6027	4822 130 11397	BAS316
6028	4822 130 11397	BAS316
6029	4822 130 11416	PDZ6.8B
6031	3198 020 55680	BZX384-C5V6
6032	3198 020 55680	BZX384-C5V6
6033	9322 150 18685	BZX384-C47
6034	4822 130 11397	BAS316
6035	4822 130 11397	BAS316
6042	9322 150 18685	BZX384-C47
6044	9322 202 88687	STTH2003CFP
6045	4822 130 32961	BYV28-200
6050	4822 130 11152	UDZ18B
6054	9340 553 52115	BAS321
6055	9340 553 52115	BAS321
6061	4822 130 11152	UDZ18B
6062	4822 130 11152	UDZ18B
6075	9340 292 80135	BZG03-C270
6077	9340 292 80135	BZG03-C270
6086	4822 130 11397	BAS316
6111	4822 130 11397	BAS316
6112	4822 130 11397	BAS316
6113	4822 130 11397	BAS316
6114	4822 130 11416	PDZ6.8B
6117	4822 130 11152	UDZ18B
6120	9322 202 75687	BYW29FP-200
6123	4822 130 11397	BAS316
6133	4822 130 11397	BAS316
6142	9322 192 15668	SM S3J
6201	3198 020 55680	BZX384-C5V6
6202	4822 130 11397	BAS316
6204	3198 020 55680	BZX384-C5V6
6205	4822 130 11152	UDZ18B
6206	4822 130 11397	BAS316
6211	9322 202 55685	BYG22D
6213	4822 130 11397	BAS316
6216	4822 130 11152	UDZ18B
6225	9322 173 47687	STPS20L40CFP
6230	9322 155 79685	EC31QS04
6267	4822 130 82627	SB540
6268	9322 128 70685	SMSS14
6269	9322 099 61685	BYG10J
6270	9322 099 61685	BYG10J
6291	4822 130 11572	STPS8H100F
6292	4822 130 11572	STPS8H100F
6312	4822 130 80622	BAT54
6313	4822 130 80622	BAT54
6321	4822 130 80622	BAT54
6322	4822 130 80622	BAT54
6325	4822 130 11416	PDZ6.8B
6333	4822 130 80622	BAT54
6334	4822 130 80622	BAT54
6335	4822 130 11397	BAS316
6340	4822 130 80622	BAT54
6341	4822 130 80622	BAT54
6347	4822 130 80622	BAT54
6362	4822 130 11397	BAS316
6364	4822 130 11397	BAS316
6365	4822 130 11397	BAS316
6366	4822 130 11397	BAS316
6375	4822 130 11397	BAS316
6376	4822 130 11397	BAS316
6378	4822 130 80622	BAT54
6460	4822 130 11397	BAS316
6461	4822 130 11397	BAS316
6470	4822 130 11397	BAS316
6471	4822 130 11397	BAS316
6501	9322 218 64673	BZT03C200
6502	9322 218 64673	BZT03C200
6503	9322 176 76668	RS1J
6504	9322 176 76668	RS1J
6505	9322 155 79685	EC31QS04
6506	9322 218 64673	BZT03C200
6510	9322 099 61685	BYG10J
6511	9322 099 61685	BYG10J
6512	9322 099 61685	BYG10J
6513	9322 099 61685	BYG10J
6600	9322 177 84667	GBU8JL-7014
6601	9322 150 17685	BZX384-C39
6602	4822 130 11522	UDZ15B
6605	9322 192 15668	SM S3J
6606	9322 192 15668	SM S3J
6608	9322 128 70685	SMSS14
6609	9322 208 81685	BZG05C18
6611	3139 120 52021	BYV29X-500
6640	9322 128 70685	SMSS14
6641	4822 130 11397	BAS316
6642	9322 128 70685	SMSS14
6643	4822 130 11152	UDZ18B
6651	4822 130 80622	BAT54
6652	9322 128 70685	SMSS14
6653	4822 130 10837	UDZS8.2B
6654	4822 130 11397	BAS316
6660	9322 202 55685	BYG22D
6661	9322 202 55685	BYG22D
6663	9322 198 81685	SL04
6665	9322 198 81685	SL04
6666	4822 130 10837	UDZS8.2B



7001	9322 108 21682	MC34067P
7002▲	9322 149 04682	TCET1102
7003▲	9322 149 04682	TCET1102
7004	9322 192 17685	P0102BL
7005	9322 192 18687	STP15NK50ZFP
7006	9322 192 18687	STP15NK50ZFP
7007	4822 130 41246	BC327-25
7008	4822 130 41246	BC327-25
7009	3198 010 42310	BC847BW
7010	9322 192 16685	TS2431AI
7011	9322 192 16685	TS2431AI
7012	3198 010 42310	BC847BW
7013	5322 130 63033	BCP56
7017	3198 010 42320	BC857BW
7018	3198 010 42310	BC847BW
7020	9335 671 30126	BC517
7021	9335 671 30126	BC517
7042	9340 308 50135	PMST5401
7050	9340 557 16127	PSMN035-150P
7052	9340 557 58118	PSMN063-150D
7058	3198 010 42310	BC847BW
7059	9340 308 60135	PMST5550
7090	3198 010 42320	BC857BW
7091	3198 010 42320	BC857BW
7092	3198 010 44350	BC807-25W
7093	4822 209 80591	LM317T
7110	9340 308 50135	PMST5401
7112	9352 673 56112	TEA1507P/N1
7117	9340 557 17118	PSMN035-150B
7120▲	9322 149 04682	TCET1102
7121	9322 192 16685	TS2431AI
7130	9322 192 16685	TS2431AI
7134	3198 010 42310	BC847BW
7200	9340 565 06215	BSH114
7202	9965 000 04199	BSN20
7212	9352 673 56112	TEA1507P/N1
7217	9340 557 18127	PSMN070-200P
7220▲	9322 149 04682	TCET1102
7227	9322 192 16685	TS2431AI
7230	9322 205 64687	L4940P85
7260	9322 166 31682	L4973V3.3
7304	9322 192 16685	TS2431AI
7308	9322 213 35668	LM339P
7326	3198 010 42310	BC847BW
7327	3198 010 42310	BC847BW
7330	9322 213 35668	LM339P
7341	3198 010 42320	BC857BW
7348	3198 010 42310	BC847BW
7351	3198 010 42310	BC847BW
7352	3198 010 42310	BC847BW
7362	3198 010 42310	BC847BW
7366	9322 213 19668	LM324APW
7375	3198 010 42310	BC847BW
7376	3198 010 42310	BC847BW
7391	3198 010 42320	BC857BW
7460	9340 219 30115	BC817-25W
7461	4822 130 60142	BC869
7465	3198 010 42320	BC857BW
7470	9340 219 30115	BC817-25W
7500	9322 037 99682	TNY256P
7501▲	9322 149 04682	TCET1102
7502	9322 192 16685	TS2431AI
7540	4822 209 17398	LD1117DT33
7601	3198 010 42310	BC847BW
7602	3198 010 42320	BC857BW
7608	5322 130 44593	BC369
7610	9322 223 21687	STW29NK50Z
7640	9965 000 04199	BSN20
7641	9340 219 30115	BC817-25W
7650	9322 130 69682	MC33368P
7654	3198 010 42320	BC857BW
7655	3198 010 42310	BC847BW
7656	3198 010 42310	BC847BW
7661	5322 209 90529	MC34063AD

Ambi Light [AL]

Various

0615	3104 317 09401	SW (see Prod. Survey)
1010	2422 086 00657	Fuse 3A 125V F SMD
1050	2422 543 01431	Xtal 20MHz 16pF
1M08	2422 025 09406	Connector 4p m
1M10	2422 025 09406	Connector 4p m
1M11	2422 025 19068	Connector 11p m
1M12	2422 025 19069	Connector 3p m
1M48	2422 025 10768	Connector 3p m
1M49	2422 025 18884	Connector 4p m

2001	2020 012 00018	1000µF 20% 16V
2002	2238 586 59812	100nF 20% 50V 0603
2003	2020 552 96618	1nF 10% 50V 0402
2004	2020 552 96618	1nF 10% 50V 0402
2005	3198 034 01590	15pF 1% 50V 0402
2006	3198 034 01590	15pF 1% 50V 0402

3003	4822 117 13596	220Ω 5% 0.01W 0402
3004	4822 051 20471	470Ω 5% 0.1W
3005	4822 051 20561	560Ω 5% 0.1W
3006	2322 762 60102	1kΩ 5% 2512
3007	2322 762 60102	1kΩ 5% 2512
3008	4822 051 20471	470Ω 5% 0.1W
3009	4822 051 20561	560Ω 5% 0.1W
3010	2322 762 60102	1kΩ 5% 2512
3011	2322 762 60102	1kΩ 5% 2512
3012	4822 051 20471	470Ω 5% 0.1W
3013	4822 051 20561	560Ω 5% 0.1W
3014	2322 762 60102	1kΩ 5% 2512
3015	2322 762 60102	1kΩ 5% 2512
3016	3198 031 04720	4.7kΩ 5% 0402
3017	3198 031 04720	4.7kΩ 5% 0402
3018	3198 031 04720	4.7kΩ 5% 0402
3019	3198 031 04720	4.7kΩ 5% 0402
3020	3198 031 04720	4.7kΩ 5% 0402
3022	4822 117 13545	100Ω 1% 0402
3023	4822 117 13545	100Ω 1% 0402
3024	3198 031 04720	4.7kΩ 5% 0402
3025	3198 031 04720	4.7kΩ 5% 0402
3028	4822 117 13606	10kΩ 5% 0.01W 0402
3029	3198 031 04720	4.7kΩ 5% 0402
3030	3198 031 04720	4.7kΩ 5% 0402
3031	3198 031 04720	4.7kΩ 5% 0402
3042	4822 053 20105	1MΩ 5% 0.25W
3999	4822 051 30103	10kΩ 5% 0.062W

5002	2422 536 00923	22µH 10% LHL10
5007	2422 536 00923	22µH 10% LHL10
5008	2422 536 00923	22µH 10% LHL10
5014	3104 308 21271	Transf. BD21416-00
5015	3104 308 21271	Transf. BD21416-00
5016	3104 308 21271	Transf. BD21416-00



6000	4822 130 11397	BAS316
6001	4822 130 11397	BAS316
6002	4822 130 11397	BAS316
6003	4822 130 11397	BAS316
6004	4822 130 11397	BAS316

6005	4822 130 11397	BAS316
6006	4822 130 11152	UDZ18B
6007	4822 130 11152	UDZ18B
6008	4822 130 11152	UDZ18B
6009	4822 130 11152	UDZ18B
6010	4822 130 11152	UDZ18B
6011	4822 130 11152	UDZ18B



7001		For SW see item 0615
7002	9322 202 58668	LD1117DT50
7009	3198 010 42310	BC847BW
7010	3198 010 42310	BC847BW
7011	3198 010 42310	BC847BW
7015	9322 214 20668	SI4946EY
7016	9322 214 20668	SI4946EY
7017	9322 214 20668	SI4946EY
7018	3198 010 42310	BC847BW
7019	3198 010 42310	BC847BW
7020	3198 010 42310	BC847BW

Small Signal Board [B]

Various

0601	3104 317 09931	SW 42” (See Prod. Surv.)
0601	3104 317 07411	SW 50” (See Prod. Surv.)
0602	3104 317 09831	SW 42” (See Prod. Surv.)
0602	3104 317 09821	SW 50” (See Prod. Surv.)
0603	3104 317 06601	SW 42” (See Prod. Surv.)
0603	3104 317 06591	SW 50” (See Prod. Surv.)
0605	3104 317 47621	SW All (See Prod. Surv.)
1000	2422 086 11092	Fuse 500mA 50V F SMD
1001	2422 543 01497	Xtal 6Mhz 20pF
1003	2422 025 14911	Socket Euro 21p f
1003	2422 025 18256	Socket 21p f Bk
1062⚠	2422 549 00151	Socket 3p m
1305	2422 543 01488	Xtal 4.433619Mhz 20pF
1308	2422 543 01486	Xtal 3.579545Mhz 16pF
1404	2422 127 00543	Switch 1p 2pos
1407	2422 549 00458	Filter 5M5/5M74
1408	2422 549 44372	SAW 38.9MHz K3953L
1409	2422 549 44369	SAW 38.9MHz K9656L
1703	2422 540 00002	Resonator CSTCE*G52
1A01	2422 543 01059	Resonator 18MHz 12p
1D01	2422 033 00515	Socket DVI-I 29p f
1E02	2422 025 17274	Connector 10p m
1E04	2422 025 18738	Connector 3p m
1G50	2422 025 18427	Connector 31p f
1I01	2422 025 18133	Socket SCART
1I04	2422 025 18133	Socket SCART
1I05	2422 026 05539	Socket Cinch 2p f WhRd
1I06	2422 026 05527	Socket Cinch 2p f
1I07	2422 026 05054	Soc CINCH 2p f WhRd
1I53	2422 549 45325	Bead 67Ω at 100MHz
1I56	2422 549 45325	Bead 67Ω at 100MHz
1I57	2422 549 45325	Bead 67Ω at 100MHz
1I59	2422 549 45325	Bead 67Ω at 100MHz
1M01	2422 025 10768	Connector 3p m
1M03	2422 025 10771	Connector 10p m
1M07	4822 267 10637	Connector 5p
1M15	4822 267 10748	Connector 3p
1M20	2422 025 10772	Connector 12p m
1M36	2422 025 10655	Connector 11p m
1M37	2422 025 10655	Connector 11p m
1M51⚠	2422 025 18884	Connector 4p m
1M52	2422 025 10769	Connector 9p m
1T01	3139 147 22161	Tuner UV1318S/A I H N-3
1U01⚠	2422 086 11112	Fuse 1A T 125V
8220	3104 311 07291	Cable 12P/820/12P
8220	3104 311 08631	Cable12P/480/12P
8303	3104 311 06511	Cable 10p/280/10p
8303	3104 311 06701	Cable 10P/480/10P
8307	3104 311 05691	Cable 5p/100/5p
8321	3104 311 08731	Cable POSI/100/POSI
8336⚠	3104 311 03891	Cable 11P/340/11P
8336⚠	3104 311 06991	Cable 11P/280/11P
8337	3104 311 08621	Cable 11P/220/11P
8346	3104 311 07401	Cable 11P/180/11P
8346	3104 311 08031	Cable 11P/480/11P
8349	3104 311 10631	Cable 4p/1000/4p
8352⚠	3104 311 07941	Cable 9P/820/9P
8352	3104 311 10161	Cable 9p/1000/9p

⊣⊢

2002	3198 034 02790	47pF 1% 50V 0402
2003	2238 780 15654	220nF 10% 16V 0805
2004	2238 780 15654	220nF 10% 16V 0805
2005	2238 586 59812	100nF 20% 50V 0603
2006	2238 586 59812	100nF 20% 50V 0603
2007	2238 586 59812	100nF 20% 50V 0603
2008	2238 586 59812	100nF 20% 50V 0603
2013	2020 021 91557	100µF 20% 16V
2016	4822 124 12095	100µF 20% 16V
2017	2238 586 59812	100nF 20% 50V 0603
2018	4822 126 14324	33pF 5% 50V 0402
2019	2238 586 59812	100nF 20% 50V 0603
2020	3198 035 02210	220pF 5% 50V 0402
2022	2238 586 59812	100nF 20% 50V 0603
2023	2238 586 59812	100nF 20% 50V 0603
2024	2238 586 59812	100nF 20% 50V 0603
2025	2238 586 59812	100nF 20% 50V 0603
2026	2238 586 59812	100nF 20% 50V 0603
2027	2238 586 59812	100nF 20% 50V 0603
2028	2238 586 59812	100nF 20% 50V 0603
2029	2238 586 59812	100nF 20% 50V 0603
2031	2238 586 59812	100nF 20% 50V 0603
2033	2238 869 15829	82pF 5% 50V 0402
2034	2238 869 15829	82pF 5% 50V 0402
2035	2238 869 15829	82pF 5% 50V 0402
2036	2238 869 15829	82pF 5% 50V 0402
2037	2238 869 15829	82pF 5% 50V 0402
2038	2238 586 59812	100nF 20% 50V 0603
2039	2238 586 59812	100nF 20% 50V 0603
2040	2238 586 59812	100nF 20% 50V 0603
2067	2238 586 59812	100nF 20% 50V 0603
2072	2238 586 59812	100nF 20% 50V 0603
2073	3198 017 44740	470nF 10V 0603
2074	2238 586 59812	100nF 20% 50V 0603
2075	2238 586 59812	100nF 20% 50V 0603
2305	2238 586 59812	100nF 20% 50V 0603
2316	2238 586 59812	100nF 20% 50V 0603
2322	2238 586 59812	100nF 20% 50V 0603
2350	2238 586 59812	100nF 20% 50V 0603
2351	2238 586 59812	100nF 20% 50V 0603
2352	2238 586 59812	100nF 20% 50V 0603
2356	2238 586 59812	100nF 20% 50V 0603
2357	2238 586 59812	100nF 20% 50V 0603
2358	3198 035 03320	3.3nF 5% 50V 0402
2359	3198 034 01590	15pF 1% 50V 0402
2360	3198 034 01580	1.5pF 1% 50V 0402
2361	3198 034 01280	1.2pF 1% 50V 0402
2362	2238 869 15109	10pF 5% 50V 0402
2365	2238 586 59812	100nF 20% 50V 0603
2366	2238 586 59812	100nF 20% 50V 0603
2367	2238 586 59812	100nF 20% 50V 0603
2368	2238 586 59812	100nF 20% 50V 0603
2369	2238 586 59812	100nF 20% 50V 0603
2370	2238 586 59812	100nF 20% 50V 0603
2371	3198 035 14720	4.7nF 5% 25V 0402
2372	2022 552 05679	1µF 10% 16V 0805
2373	2238 586 59812	100nF 20% 50V 0603
2374	2022 552 05679	1µF 10% 16V 0805
2375	2238 787 15641	22nF 5% 16V 0402
2376	2238 586 59812	100nF 20% 50V 0603
2377	2020 021 91557	100µF 20% 16V
2378	2238 586 59812	100nF 20% 50V 0603
2384	2238 586 59812	100nF 20% 50V 0603
2387	2022 552 05679	1µF 10% 16V 0805
2391	2238 586 59812	100nF 20% 50V 0603
2392	2022 552 05679	1µF 10% 16V 0805
2394	2022 552 05679	1µF 10% 16V 0805
2403	2238 586 59812	100nF 20% 50V 0603
2404	2022 552 05679	1µF 10% 16V 0805
2405	3198 035 14720	4.7nF 5% 25V 0402
2406	4822 117 13605	Jumper 0402
2409	2022 552 05679	1µF 10% 16V 0805
2410	2020 021 91557	100µF 20% 16V
2411	2238 586 59812	100nF 20% 50V 0603
2412	3198 035 14720	4.7nF 5% 25V 0402
2414	2020 021 91557	100µF 20% 16V
2415	2238 586 59812	100nF 20% 50V 0603
2416	2022 552 05679	1µF 10% 16V 0805
2417	4822 126 14583	470nF 10% 16V 0805
2418	3198 034 05680	5.6pF 1% 50V 0402
2425	2020 021 91557	100µF 20% 16V
2430	4822 126 14324	33pF 5% 50V 0402
2432	2238 586 59812	100nF 20% 50V 0603
2433	2238 586 59812	100nF 20% 50V 0603
2434	2238 586 59812	100nF 20% 50V 0603
2435	2020 552 96618	1nF 10% 50V 0402
2436	2022 552 05679	1µF 10% 16V 0805
2500	2022 552 05679	1µF 10% 16V 0805
2501	2020 552 94427	100pF 5% 50V
2502	2022 552 05679	1µF 10% 16V 0805
2503	2020 552 94427	100pF 5% 50V
2504	2022 552 05679	1µF 10% 16V 0805
2505	2022 552 05679	1µF 10% 16V 0805
2506	2238 586 59812	100nF 20% 50V 0603
2507	5322 126 11578	1nF 10% 50V 0603
2508	2022 552 05679	1µF 10% 16V 0805
2509	2238 586 59812	100nF 20% 50V 0603
2510	4822 126 14241	330pF 0603 50V
2511	2238 586 59812	100nF 20% 50V 0603
2512	2238 586 59812	100nF 20% 50V 0603
2513	2238 586 59812	100nF 20% 50V 0603
2515	2022 552 05679	1µF 10% 16V 0805
2516	2022 552 05679	1µF 10% 16V 0805
2517	2022 552 05679	1µF 10% 16V 0805
2707	3198 034 02790	47pF 1% 50V 0402
2709	2238 586 59812	100nF 20% 50V 0603
2710	2238 586 59812	100nF 20% 50V 0603
2711	2238 586 59812	100nF 20% 50V 0603
2712	2238 586 59812	100nF 20% 50V 0603
2716	2238 586 59812	100nF 20% 50V 0603
2717	2238 586 59812	100nF 20% 50V 0603
2721	2238 869 15101	100pF 5% 50V 0402
2722	2238 869 15101	100pF 5% 50V 0402
2723	2238 586 59812	100nF 20% 50V 0603
2725	2238 586 59812	100nF 20% 50V 0603
2726	2238 586 59812	100nF 20% 50V 0603
2727	2238 586 59812	100nF 20% 50V 0603
2728	2020 021 91854	10µF 20% 16V
2729	2238 586 59812	100nF 20% 50V 0603
2730	2020 021 91557	100µF 20% 16V
2731	2238 586 59812	100nF 20% 50V 0603
2732	2020 552 96618	1nF 10% 50V 0402
2733	2238 586 59812	100nF 20% 50V 0603
2734	2238 586 59812	100nF 20% 50V 0603
2735	2238 586 59812	100nF 20% 50V 0603
2736	2238 586 59812	100nF 20% 50V 0603
2738	2238 586 59812	100nF 20% 50V 0603
2739	2020 021 91557	100µF 20% 16V
2740	2238 787 15641	22nF 5% 16V 0402
2741	2238 787 15641	22nF 5% 16V 0402
2742	2238 787 15641	22nF 5% 16V 0402
2743	2238 586 59812	100nF 20% 50V 0603
2744	2238 586 59812	100nF 20% 50V 0603
2745	2238 586 59812	100nF 20% 50V 0603
2746	2238 586 59812	100nF 20% 50V 0603
2748	2238 586 59812	100nF 20% 50V 0603
2749	2238 586 59812	100nF 20% 50V 0603
2750	2020 552 96618	1nF 10% 50V 0402
2751	2020 552 96618	1nF 10% 50V 0402
2752	2020 552 96618	1nF 10% 50V 0402
2753	2020 552 96618	1nF 10% 50V 0402
2754	2020 552 96618	1nF 10% 50V 0402
2755	2020 552 96618	1nF 10% 50V 0402
2756	2020 552 96618	1nF 10% 50V 0402
2757	2238 787 15641	22nF 5% 16V 0402
2759	2020 552 96618	1nF 10% 50V 0402
2760	2238 787 15641	22nF 5% 16V 0402
2761	2238 787 15641	22nF 5% 16V 0402
2762	2238 787 15641	22nF 5% 16V 0402
2763	2238 787 15641	22nF 5% 16V 0402
2764	2238 787 15641	22nF 5% 16V 0402
2768	2238 787 15641	22nF 5% 16V 0402
2769	2020 552 96618	1nF 10% 50V 0402
2770	2020 552 96618	1nF 10% 50V 0402
2771	2020 552 96618	1nF 10% 50V 0402
2772	2238 787 15641	22nF 5% 16V 0402
2773	2020 552 96618	1nF 10% 50V 0402
2777	2020 552 96618	1nF 10% 50V 0402
2778	2020 552 96618	1nF 10% 50V 0402
2780	2020 552 96618	1nF 10% 50V 0402
2781	2020 552 96618	1nF 10% 50V 0402
2782	2020 552 96618	1nF 10% 50V 0402
2784	2238 787 15641	22nF 5% 16V 0402
2785	2238 787 15641	22nF 5% 16V 0402
2788	2238 586 59812	100nF 20% 50V 0603
2789	2238 586 59812	100nF 20% 50V 0603
2790	2238 586 59812	100nF 20% 50V 0603
2791	2238 586 59812	100nF 20% 50V 0603
2792	2238 586 59812	100nF 20% 50V 0603
2793	2238 586 59812	100nF 20% 50V 0603
2794	2020 552 96618	1nF 10% 50V 0402
2795	2020 552 96618	1nF 10% 50V 0402
2796	2020 552 96618	1nF 10% 50V 0402
2797	2020 552 96618	1nF 10% 50V 0402
2798	2020 552 96618	1nF 10% 50V 0402
2799	2020 552 96618	1nF 10% 50V 0402
2800	2238 586 59812	100nF 20% 50V 0603
2802	2238 586 59812	100nF 20% 50V 0603
2804	2238 586 59812	100nF 20% 50V 0603
2805	2020 552 96618	1nF 10% 50V 0402
2806	2238 586 59812	100nF 20% 50V 0603
2807	2238 586 59812	100nF 20% 50V 0603
2808	2020 552 96618	1nF 10% 50V 0402
2809	2020 552 96618	1nF 10% 50V 0402
2810	2238 586 59812	100nF 20% 50V 0603
2811	2238 586 59812	100nF 20% 50V 0603
2812	3198 031 02290	22Ω 5% 0.1W 0402
2813	2238 586 59812	100nF 20% 50V 0603
2817	2238 586 59812	100nF 20% 50V 0603
2819	2238 586 59812	100nF 20% 50V 0603
2821	2238 787 15641	22nF 5% 16V 0402
2822	2238 787 15641	22nF 5% 16V 0402

2823	2238 586 59812	100nF 20% 50V 0603
2824	2238 586 59812	100nF 20% 50V 0603
2825	2238 586 59812	100nF 20% 50V 0603
2826	2238 586 59812	100nF 20% 50V 0603
2827	2238 586 59812	100nF 20% 50V 0603
2829	2020 021 91557	100µF 20% 16V
2830	2238 586 59812	100nF 20% 50V 0603
2831	2238 586 59812	100nF 20% 50V 0603
2832	2238 586 59812	100nF 20% 50V 0603
2833	2238 586 59812	100nF 20% 50V 0603
2834	2238 586 59812	100nF 20% 50V 0603
2835	2238 586 59812	100nF 20% 50V 0603
2836	2238 586 59812	100nF 20% 50V 0603
2837	2238 869 15101	100pF 5% 50V 0402
2838	2238 869 15101	100pF 5% 50V 0402
2843	2238 586 59812	100nF 20% 50V 0603
2844	2238 586 59812	100nF 20% 50V 0603
2845	2238 586 59812	100nF 20% 50V 0603
2846	2238 586 59812	100nF 20% 50V 0603
2849	2238 586 59812	100nF 20% 50V 0603
2850	2238 586 59812	100nF 20% 50V 0603
2851	2238 586 59812	100nF 20% 50V 0603
2852	2238 586 59812	100nF 20% 50V 0603
2853	2238 586 59812	100nF 20% 50V 0603
2854	2238 586 59812	100nF 20% 50V 0603
2855	2238 586 59812	100nF 20% 50V 0603
2856	2238 586 59812	100nF 20% 50V 0603
2857	2238 586 59812	100nF 20% 50V 0603
2858	2238 586 59812	100nF 20% 50V 0603
2859	2238 586 59812	100nF 20% 50V 0603
2860	2238 586 59812	100nF 20% 50V 0603
2861	2238 586 59812	100nF 20% 50V 0603
2862	2238 586 59812	100nF 20% 50V 0603
2863	2238 586 59812	100nF 20% 50V 0603
2864	2238 586 59812	100nF 20% 50V 0603
2865	2238 586 59812	100nF 20% 50V 0603
2866	2238 586 59812	100nF 20% 50V 0603
2867	2238 586 59812	100nF 20% 50V 0603
2868	2238 586 59812	100nF 20% 50V 0603
2869	2238 586 59812	100nF 20% 50V 0603
2870	2238 586 59812	100nF 20% 50V 0603
2871	2020 021 91557	100µF 20% 16V
2872	2238 586 59812	100nF 20% 50V 0603
2873	2238 586 59812	100nF 20% 50V 0603
2874	2238 586 59812	100nF 20% 50V 0603
2875	2238 586 59812	100nF 20% 50V 0603
2876	2238 586 59812	100nF 20% 50V 0603
2877	2238 586 59812	100nF 20% 50V 0603
2878	2238 586 59812	100nF 20% 50V 0603
2879	2238 586 59812	100nF 20% 50V 0603
2880	2238 586 59812	100nF 20% 50V 0603
2881	3198 034 02790	47pF 1% 50V 0402
2882	2238 586 59812	100nF 20% 50V 0603
2883	2238 586 59812	100nF 20% 50V 0603
2884	2238 586 59812	100nF 20% 50V 0603
2885	2238 586 59812	100nF 20% 50V 0603
2886	2238 586 59812	100nF 20% 50V 0603
2887	2238 586 59812	100nF 20% 50V 0603
2888	2238 586 59812	100nF 20% 50V 0603
2889	2020 021 91557	100µF 20% 16V
2890	2238 586 59812	100nF 20% 50V 0603
2891	2238 586 59812	100nF 20% 50V 0603
2892	2238 586 59812	100nF 20% 50V 0603
2893	2238 586 59812	100nF 20% 50V 0603
2894	2238 586 59812	100nF 20% 50V 0603
2895	2020 021 91854	10µF 20% 16V
2898	2020 021 91854	10µF 20% 16V
2899	2238 586 59812	100nF 20% 50V 0603
2900	3198 034 04790	27pF 1% 50V 0402
2901	3198 034 04790	27pF 1% 50V 0402
2902	3198 034 04790	27pF 1% 50V 0402
2915	3198 034 01510	150pF 1% 50V 0402
2916	3198 034 01510	150pF 1% 50V 0402
2917	2238 586 59812	100nF 20% 50V 0603
2919	2020 021 91557	100µF 20% 16V
2920	2238 586 59812	100nF 20% 50V 0603
2921	2238 586 59812	100nF 20% 50V 0603
2922	2020 552 96628	10nF 10% 16V 0402
2923	2020 552 96628	10nF 10% 16V 0402
2924	2238 586 59812	100nF 20% 50V 0603
2931	3198 034 01510	150pF 1% 50V 0402
2932	2238 586 59812	100nF 20% 50V 0603
2933	2238 586 59812	100nF 20% 50V 0603
2937	2020 021 91557	100µF 20% 16V
2938	2020 021 91854	10µF 20% 16V
2939	2020 021 91557	100µF 20% 16V
2A00	2020 552 96618	1nF 10% 50V 0402
2A01	2020 552 96618	1nF 10% 50V 0402
2A02	2022 552 05679	1µF 10% 16V 0805
2A03	2020 021 91557	100µF 20% 16V
2A04	2022 552 05679	1µF 10% 16V 0805
2A05	2020 021 91557	100µF 20% 16V
2A06	2020 552 96618	1nF 10% 50V 0402
2A07	2020 552 96618	1nF 10% 50V 0402
2A08	2022 552 05679	1µF 10% 16V 0805
2A10	2238 586 59812	100nF 20% 50V 0603
2A11	2238 586 59812	100nF 20% 50V 0603
2A12	2238 586 59812	100nF 20% 50V 0603
2A13	2238 586 59812	100nF 20% 50V 0603
2A14	2020 552 96618	1nF 10% 50V 0402
2A15	2020 021 91557	100µF 20% 16V
2A16	2238 586 59812	100nF 20% 50V 0603
2A17	2020 552 96618	1nF 10% 50V 0402
2A18	2020 021 91557	100µF 20% 16V
2A19	3198 034 02790	47pF 1% 50V 0402
2A20	2022 552 05679	1µF 10% 16V 0805
2A21	2238 586 59812	100nF 20% 50V 0603
2A22	2238 586 59812	100nF 20% 50V 0603
2A23	2238 586 59812	100nF 20% 50V 0603
2A24	2238 586 59812	100nF 20% 50V 0603
2A25	2238 869 15101	100pF 5% 50V 0402
2A26	2022 552 05679	1µF 10% 16V 0805
2A27	2020 552 96618	1nF 10% 50V 0402
2A29	2238 869 15101	100pF 5% 50V 0402
2A30	2238 869 15101	100pF 5% 50V 0402
2A31	2022 552 05679	1µF 10% 16V 0805
2A32	2238 869 15101	100pF 5% 50V 0402
2A33	2238 586 59812	100nF 20% 50V 0603
2A34	2238 586 59812	100nF 20% 50V 0603
2A35	2020 552 96618	1nF 10% 50V 0402
2A36	2238 869 15101	100pF 5% 50V 0402
2A37	2238 869 15101	100pF 5% 50V 0402
2A38	2022 552 05679	1µF 10% 16V 0805
2A39	2022 552 05679	1µF 10% 16V 0805
2A40	2238 586 59812	100nF 20% 50V 0603
2A41	2020 021 91854	10µF 20% 16V
2A42	2020 021 91854	10µF 20% 16V
2A43	2020 021 91854	10µF 20% 16V
2A44	2238 586 59812	100nF 20% 50V 0603
2A45	2238 586 59812	100nF 20% 50V 0603
2A46	2022 552 05679	1µF 10% 16V 0805
2A47	2022 552 05679	1µF 10% 16V 0805
2A49	2022 552 05679	1µF 10% 16V 0805
2A50	2020 552 96618	1nF 10% 50V 0402
2A53	2022 552 05679	1µF 10% 16V 0805
2A54	2020 552 96618	1nF 10% 50V 0402
2A56	2022 552 05679	1µF 10% 16V 0805
2A59	2022 552 05679	1µF 10% 16V 0805
2A62	2022 552 05679	1µF 10% 16V 0805
2A79	2238 586 59812	100nF 20% 50V 0603
2A91	2238 869 15101	100pF 5% 50V 0402
2A92	2022 552 05679	1µF 10% 16V 0805
2A95	3198 035 02210	220pF 5% 50V 0402
2A99	2022 552 05679	1µF 10% 16V 0805
2AA5	2238 869 15101	100pF 5% 50V 0402
2AA6	2020 552 96618	1nF 10% 50V 0402
2AA7	2020 552 96618	1nF 10% 50V 0402
2AA9	3198 034 05680	5.6pF 1% 50V 0402
2AB0	3198 034 05680	5.6pF 1% 50V 0402
2AB2	2020 552 96618	1nF 10% 50V 0402
2AB3	2022 552 05679	1µF 10% 16V 0805
2AB4	2022 552 05679	1µF 10% 16V 0805
2AB5	2020 021 91854	10µF 20% 16V
2AB6	2020 552 96618	1nF 10% 50V 0402
2AB7	2020 552 96618	1nF 10% 50V 0402
2AB8	2022 552 05679	1µF 10% 16V 0805
2AF3	4822 124 12095	100µF 20% 16V
2AF4	2238 586 59812	100nF 20% 50V 0603
2C00	2238 586 59812	100nF 20% 50V 0603
2C01	2238 586 59812	100nF 20% 50V 0603
2C02	2238 586 59812	100nF 20% 50V 0603
2D04	2020 552 96618	1nF 10% 50V 0402
2D09	2238 586 59812	100nF 20% 50V 0603
2D10	2022 552 05679	1µF 10% 16V 0805
2D11	2020 552 96628	10nF 10% 16V 0402
2D12	2020 552 96628	10nF 10% 16V 0402
2E01	2238 586 59812	100nF 20% 50V 0603
2E02	2238 586 59812	100nF 20% 50V 0603
2E03	2238 586 59812	100nF 20% 50V 0603
2E04	2238 586 59812	100nF 20% 50V 0603
2E06	2238 586 59812	100nF 20% 50V 0603
2E07	2238 586 59812	100nF 20% 50V 0603
2E08	2238 586 59812	100nF 20% 50V 0603
2E09	2238 586 59812	100nF 20% 50V 0603
2E10	2238 586 59812	100nF 20% 50V 0603
2E11	2238 586 59812	100nF 20% 50V 0603
2E12	2238 586 59812	100nF 20% 50V 0603
2E13	2238 586 59812	100nF 20% 50V 0603
2E14	2238 586 59812	100nF 20% 50V 0603
2E15	2238 586 59812	100nF 20% 50V 0603
2E16	2238 586 59812	100nF 20% 50V 0603
2E17	2238 586 59812	100nF 20% 50V 0603
2E18	2238 586 59812	100nF 20% 50V 0603
2E19	2238 586 59812	100nF 20% 50V 0603
2E20	2238 586 59812	100nF 20% 50V 0603
2E21	3198 017 34730	47nF 16V 0603
2E22	4822 126 14519	22pF 5% 50V 0402
2E23	3198 017 34730	47nF 16V 0603
2E24	4822 126 14519	22pF 5% 50V 0402
2E25	3198 017 34730	47nF 16V 0603
2E26	4822 126 14519	22pF 5% 50V 0402
2E27	2238 586 59812	100nF 20% 50V 0603
2E28	3198 017 34730	47nF 16V 0603
2E29	3198 017 33330	33nF 20% 16V 0603
2E34	3198 035 03320	3.3nF 5% 50V 0402
2E35	2238 586 59812	100nF 20% 50V 0603
2E39	2238 869 15109	10pF 5% 50V 0402
2E41	2238 586 59812	100nF 20% 50V 0603
2E42	2020 552 96628	10nF 10% 16V 0402
2E43	2238 586 59812	100nF 20% 50V 0603
2E49	2238 586 59812	100nF 20% 50V 0603
2E50	4822 124 81058	47µF 20% 4V
2E51	2022 552 05679	1µF 10% 16V 0805
2E52	2238 586 59812	100nF 20% 50V 0603
2E54	2238 586 59812	100nF 20% 50V 0603
2E55	2022 552 05679	1µF 10% 16V 0805
2E56	2020 552 96628	10nF 10% 16V 0402
2E57	2020 552 96628	10nF 10% 16V 0402
2E58	2020 552 96628	10nF 10% 16V 0402
2E59	2020 552 96628	10nF 10% 16V 0402
2E62	2238 586 59812	100nF 20% 50V 0603
2E65	2238 586 59812	100nF 20% 50V 0603
2E66	2238 586 59812	100nF 20% 50V 0603
2E67	2238 586 59812	100nF 20% 50V 0603
2E68	2020 552 96628	10nF 10% 16V 0402
2E69	2020 552 96628	10nF 10% 16V 0402
2E70	2020 552 96628	10nF 10% 16V 0402
2E71	2020 552 96628	10nF 10% 16V 0402
2E72	2238 586 59812	100nF 20% 50V 0603
2E73	2238 586 59812	100nF 20% 50V 0603
2E74	2238 586 59812	100nF 20% 50V 0603
2E75	2238 586 59812	100nF 20% 50V 0603
2E77	2238 586 59812	100nF 20% 50V 0603
2E78	2238 586 59812	100nF 20% 50V 0603
2E79	2238 586 59812	100nF 20% 50V 0603
2E80	2238 586 59812	100nF 20% 50V 0603
2E81	2022 552 05679	1µF 10% 16V 0805
2E82	2238 586 59812	100nF 20% 50V 0603
2E83	2238 586 59812	100nF 20% 50V 0603
2E84	2238 586 59812	100nF 20% 50V 0603
2E86	2238 586 59812	100nF 20% 50V 0603
2E87	4822 124 12095	100µF 20% 16V
2E93	2238 586 59812	100nF 20% 50V 0603
2E94	2238 586 59812	100nF 20% 50V 0603
2E96	2238 869 15101	100pF 5% 50V 0402
2E97	2238 869 15101	100pF 5% 50V 0402
2E98	2238 869 15101	100pF 5% 50V 0402
2E99	4822 124 81058	47µF 20% 4V
2I00	2238 869 15101	100pF 5% 50V 0402
2I11	2022 552 05679	1µF 10% 16V 0805
2I12	4822 126 14585	100nF 10% 0805 50V
2I15	2022 552 05679	1µF 10% 16V 0805
2I16	2238 869 15101	100pF 5% 50V 0402
2I17	2238 869 15101	100pF 5% 50V 0402
2I18	2238 869 15101	100pF 5% 50V 0402
2I19	2238 869 15101	100pF 5% 50V 0402
2I20	3198 035 03310	330pF 5% 50V 0402
2I21	2238 869 15101	100pF 5% 50V 0402
2I22	2238 869 15101	100pF 5% 50V 0402
2I23	2238 869 15101	100pF 5% 50V 0402
2I24	2238 869 15101	100pF 5% 50V 0402
2I25	3198 035 03310	330pF 5% 50V 0402
2I26	2238 869 15101	100pF 5% 50V 0402
2I27	2238 869 15101	100pF 5% 50V 0402
2I30	2238 869 15101	100pF 5% 50V 0402
2I32	4822 124 23002	10µF 16V
2I33	2020 552 96618	1nF 10% 50V 0402
2I34	4822 124 23002	10µF 16V
2I36	2238 869 15101	100pF 5% 50V 0402
2I38	2238 869 15101	100pF 5% 50V 0402
2I40	2238 586 59812	100nF 20% 50V 0603
2I46	2020 552 96618	1nF 10% 50V 0402
2I47	2020 552 96618	1nF 10% 50V 0402
2I50	2238 586 59812	100nF 20% 50V 0603
2I57	2238 869 15101	100pF 5% 50V 0402
2I58	2238 869 15101	100pF 5% 50V 0402
2I59	2238 586 59812	100nF 20% 50V 0603
2I64	2238 869 15101	100pF 5% 50V 0402
2I65	2238 869 15101	100pF 5% 50V 0402
2I69	4822 126 14324	33pF 5% 50V 0402
2I70	4822 126 14324	33pF 5% 50V 0402
2I86	4822 126 14324	33pF 5% 50V 0402
2I87	2238 869 15101	100pF 5% 50V 0402
2I88	2238 869 15101	100pF 5% 50V 0402
2I89	2022 552 05679	1µF 10% 16V 0805
2I90	2022 552 05679	1µF 10% 16V 0805
2I91	2238 586 59812	100nF 20% 50V 0603
2I92	2022 552 05679	1µF 10% 16V 0805
2I93	2238 586 59812	100nF 20% 50V 0603
2I94	2238 586 59812	100nF 20% 50V 0603
2I95	2238 586 59812	100nF 20% 50V 0603
2I96	2022 552 05679	1µF 10% 16V 0805

2I97	2238 586 59812	100nF 20% 50V 0603
2I98	2238 586 59812	100nF 20% 50V 0603
2I99	4822 124 23002	10µF 16V
2IA0	4822 124 23002	10µF 16V
2IA1	4822 124 23002	10µF 16V
2IA2	4822 124 23002	10µF 16V
2IA3	2020 552 96618	1nF 10% 50V 0402
2IA4	4822 126 14585	100nF 10% 0805 50V
2IA5	2020 021 91557	100µF 20% 16V
2IA9	2020 021 91557	100µF 20% 16V
2IB0	2238 586 59812	100nF 20% 50V 0603
2IB3	2238 586 59812	100nF 20% 50V 0603
2IB5	2022 552 05679	1µF 10% 16V 0805
2IB8	2238 586 59812	100nF 20% 50V 0603
2IB9	2238 586 59812	100nF 20% 50V 0603
2IC0	4822 124 23002	10µF 16V
2IC1	4822 124 23002	10µF 16V
2IC3	2238 586 59812	100nF 20% 50V 0603
2IC5	2238 586 59812	100nF 20% 50V 0603
2IC6	3198 034 04790	27pF 1% 50V 0402
2IC7	3198 034 04790	27pF 1% 50V 0402
2IC8	2022 552 05679	1µF 10% 16V 0805
2IC9	4822 126 13883	220pF 5% 50V
2IE1	2238 586 59812	100nF 20% 50V 0603
2IE2	2238 586 59812	100nF 20% 50V 0603
2IE3	2022 552 05679	1µF 10% 16V 0805
2IE4	2238 586 59812	100nF 20% 50V 0603
2IE5	2238 586 59812	100nF 20% 50V 0603
2IE6	2238 586 59812	100nF 20% 50V 0603
2IE7	2022 552 05679	1µF 10% 16V 0805
2IE8	2022 552 05679	1µF 10% 16V 0805
2IE9	2238 586 59812	100nF 20% 50V 0603
2IF1	2238 586 59812	100nF 20% 50V 0603
2IF2	2238 586 59812	100nF 20% 50V 0603
2IF3	2238 586 59812	100nF 20% 50V 0603
2IF4	4822 124 80151	47µF 16V
2IF5	2238 586 59812	100nF 20% 50V 0603
2IF8	4822 124 11946	22µF 20% 16V
2IF9	4822 124 11946	22µF 20% 16V
2IG1	2238 586 59812	100nF 20% 50V 0603
2IG2	5322 124 41945	22µF 20% 35V
2IG3	2238 586 59812	100nF 20% 50V 0603
2IG4	2238 586 59812	100nF 20% 50V 0603
2IG5	2238 586 59812	100nF 20% 50V 0603
2IG6	2238 586 59812	100nF 20% 50V 0603
2IG7	2238 586 59812	100nF 20% 50V 0603
2IG8	2238 586 59812	100nF 20% 50V 0603
2IG9	2238 586 59812	100nF 20% 50V 0603
2IH1	2238 586 59812	100nF 20% 50V 0603
2IH2	2238 586 59812	100nF 20% 50V 0603
2IH3	2020 552 96618	1nF 10% 50V 0402
2IH4	2022 552 05679	1µF 10% 16V 0805
2IH5	2238 586 59812	100nF 20% 50V 0603
2IH6	4822 124 11946	22µF 20% 16V
2IH7	4822 124 11946	22µF 20% 16V
2IH8	4822 124 11946	22µF 20% 16V
2IH9	4822 124 11946	22µF 20% 16V
2IJ4	2238 586 59812	100nF 20% 50V 0603
2IJ8	2022 552 05679	1µF 10% 16V 0805
2IJ9	2022 552 05679	1µF 10% 16V 0805
2IK1	2238 780 15654	220nF 10% 16V 0805
2IK5	2238 586 59812	100nF 20% 50V 0603
2IK6	2238 586 59812	100nF 20% 50V 0603
2IK7	2238 586 59812	100nF 20% 50V 0603
2IL0	2238 869 15109	10pF 5% 50V 0402
2IN8	2238 586 59812	100nF 20% 50V 0603
2IN9	2238 586 59812	100nF 20% 50V 0603
2L00	4822 124 23237	22µF 6.3V
2L01	2238 586 59812	100nF 20% 50V 0603
2L02	2238 586 59812	100nF 20% 50V 0603
2L03	2238 586 59812	100nF 20% 50V 0603
2L04	2238 586 59812	100nF 20% 50V 0603
2L05	2238 586 59812	100nF 20% 50V 0603
2L06	2238 586 59812	100nF 20% 50V 0603
2L07	2238 586 59812	100nF 20% 50V 0603
2L08	2238 586 59812	100nF 20% 50V 0603
2L09	2238 586 59812	100nF 20% 50V 0603
2L10	2238 586 59812	100nF 20% 50V 0603
2L11	2238 586 59812	100nF 20% 50V 0603
2L12	2238 586 59812	100nF 20% 50V 0603
2L13	2238 586 59812	100nF 20% 50V 0603
2L14	2238 586 59812	100nF 20% 50V 0603
2L15	2238 586 59812	100nF 20% 50V 0603
2L16	2238 586 59812	100nF 20% 50V 0603
2L17	2238 586 59812	100nF 20% 50V 0603
2L19	4822 124 23237	22µF 6.3V
2L20	2238 586 59812	100nF 20% 50V 0603
2L21	2238 586 59812	100nF 20% 50V 0603
2L25	2238 586 59812	100nF 20% 50V 0603
2L26	3198 017 33330	33nF 20% 16V 0603
2L27	3198 035 14720	4.7nF 5% 25V 0402
2L28	3198 034 03990	39pF 1% 50V 0402
2L29	3198 034 03990	39pF 1% 50V 0402
2L30	3198 034 03990	39pF 1% 50V 0402
2L31	3198 017 34730	47nF 16V 0603
2L32	3198 035 03320	3.3nF 5% 50V 0402
2L33	2238 586 59812	100nF 20% 50V 0603
2L34	2238 586 59812	100nF 20% 50V 0603
2L51	4822 124 23237	22µF 6.3V
2L52	3198 017 34730	47nF 16V 0603
2L54	3198 017 34730	47nF 16V 0603
2L56	2020 552 96618	1nF 10% 50V 0402
2L57	3198 017 34730	47nF 16V 0603
2L58	4822 124 23237	22µF 6.3V
2L60	3198 034 04790	27pF 1% 50V 0402
2P80	4822 124 12095	100µF 20% 16V
2P81	2238 586 59812	100nF 20% 50V 0603
2T01	3198 032 28210	220µF 20% 6.3V
2T04	2238 586 15641	22nF 10% 50V 0603
2T05	3198 032 28210	220µF 20% 6.3V
2T06	2020 552 96628	10nF 10% 16V 0402
2T09	3198 017 34730	47nF 16V 0603
2T12	2238 586 59812	100nF 20% 50V 0603
2T13	2020 552 96628	10nF 10% 16V 0402
2T15	2022 552 05679	1µF 10% 16V 0805
2T21	2020 552 96683	220nF 10% 50V
2T22	2020 552 96683	220nF 10% 50V
2T60	3198 032 28210	220µF 20% 6.3V
2T62	2020 552 96683	220nF 10% 50V
2T63	2020 552 96683	220nF 10% 50V
2U03	2022 552 05679	1µF 10% 16V 0805
2U04	4822 126 14583	470nF 10% 16V 0805
2U05	2020 552 96618	1nF 10% 50V 0402
2U06	2022 552 05635	22µF 10% 16V
2U07	2238 869 15829	82pF 5% 50V 0402
2U08	2022 552 05635	22µF 10% 16V
2U09	2020 552 96618	1nF 10% 50V 0402
2U10	2022 552 05635	22µF 10% 16V
2U11	2020 552 96618	1nF 10% 50V 0402
2U12	2020 552 96628	10nF 10% 16V 0402
2U13	2238 780 15654	220nF 10% 16V 0805
2U14	4822 126 14583	470nF 10% 16V 0805
2U15	4822 124 12095	100µF 20% 16V
2U16	3198 035 14720	4.7nF 5% 25V 0402
2U17	4822 126 14583	470nF 10% 16V 0805
2U18	3198 034 01210	120pF 1% 50V 0402
2U19	2238 586 59812	100nF 20% 50V 0603
2U20	2022 552 05679	1µF 10% 16V 0805
2U21	4822 126 14583	470nF 10% 16V 0805
2U22	2022 552 05679	1µF 10% 16V 0805
2U23	4822 124 12095	100µF 20% 16V
2U24	2020 552 96618	1nF 10% 50V 0402
2U25	2238 586 59812	100nF 20% 50V 0603
2U26	2238 586 59812	100nF 20% 50V 0603
2U27	3198 035 26820	6.8nF 10% 16V 0402
2U28	3198 035 26820	6.8nF 10% 16V 0402
2U30	3198 034 01210	120pF 1% 50V 0402
2U31	4822 124 12095	100µF 20% 16V
2U32	3198 035 03320	3.3nF 5% 50V 0402
2U33	2022 552 05679	1µF 10% 16V 0805
2U34	2238 787 15641	22nF 5% 16V 0402
2U35	2022 552 05679	1µF 10% 16V 0805
2U36	2238 586 59812	100nF 20% 50V 0603
2U37	2020 552 96623	2.2nF 10% 50V 0402
2U39	2238 586 59812	100nF 20% 50V 0603
2U40	2020 552 96623	2.2nF 10% 50V 0402
2U41	3198 035 26820	6.8nF 10% 16V 0402
2U42	3198 017 34730	47nF 16V 0603
2V11	3198 035 04710	470pF 50V 0402
2V12	3198 035 04710	470pF 50V 0402
2Y00	2238 869 15101	100pF 5% 50V 0402
2Y01	2238 869 15101	100pF 5% 50V 0402
2Y02	2238 869 15101	100pF 5% 50V 0402
2Y03	2238 869 15101	100pF 5% 50V 0402
2Y04	2238 869 15101	100pF 5% 50V 0402
2Y07	2238 869 15101	100pF 5% 50V 0402
2Y09	2238 869 15101	100pF 5% 50V 0402
2Y10	2238 869 15101	100pF 5% 50V 0402
2Y12	2238 869 15101	100pF 5% 50V 0402
2Y13	2238 586 59812	100nF 20% 50V 0603
2Y14	2238 869 15101	100pF 5% 50V 0402
2Y15	2238 869 15101	100pF 5% 50V 0402
2Y16	2238 869 15101	100pF 5% 50V 0402
2Y17	2238 869 15101	100pF 5% 50V 0402
2Y18	2238 869 15101	100pF 5% 50V 0402
2Y19	2238 869 15101	100pF 5% 50V 0402
2Y23	2238 869 15101	100pF 5% 50V 0402
2Y25	2238 869 15101	100pF 5% 50V 0402
2Y26	2238 869 15101	100pF 5% 50V 0402
2Y27	2020 552 96618	1nF 10% 50V 0402
2Y28	2020 552 96618	1nF 10% 50V 0402
2Y29	2020 552 96618	1nF 10% 50V 0402
2Y30	4822 124 12095	100µF 20% 16V
2Y31	4822 124 12095	100µF 20% 16V
2Y32	2020 552 96618	1nF 10% 50V 0402
2Y33	2020 552 96618	1nF 10% 50V 0402
2Y34	2238 869 15101	100pF 5% 50V 0402
2Y37	2238 869 15101	100pF 5% 50V 0402
2Y38	2238 869 15101	100pF 5% 50V 0402
2Y39	2238 869 15101	100pF 5% 50V 0402
2Y40	2238 869 15101	100pF 5% 50V 0402
2Y41	2238 869 15101	100pF 5% 50V 0402
2Y42	2238 869 15101	100pF 5% 50V 0402
2Y43	2238 869 15101	100pF 5% 50V 0402
2Y49	2238 869 15101	100pF 5% 50V 0402
2Y50	2238 869 15101	100pF 5% 50V 0402
2Y51	2238 869 15101	100pF 5% 50V 0402
2Y52	2238 787 15641	22nF 5% 16V 0402
2Y53	2238 869 15101	100pF 5% 50V 0402
2Z44	4822 126 14519	22pF 5% 50V 0402
2Z45	4822 126 14519	22pF 5% 50V 0402
2Z46	4822 126 14519	22pF 5% 50V 0402
2Z47	4822 126 14519	22pF 5% 50V 0402
2Z48	4822 126 14519	22pF 5% 50V 0402
2Z49	4822 126 14519	22pF 5% 50V 0402
2Z50	4822 126 14519	22pF 5% 50V 0402
2Z51	4822 126 14519	22pF 5% 50V 0402
2Z52	4822 126 14519	22pF 5% 50V 0402
2Z53	4822 126 14519	22pF 5% 50V 0402
2Z57	4822 117 13605	Jumper 0402
2Z58	2020 552 96628	10nF 10% 16V 0402
2Z58	2238 869 15101	100pF 5% 50V 0402
2Z59	2238 869 15101	100pF 5% 50V 0402
2Z60	2238 869 15101	100pF 5% 50V 0402
2Z61	2238 869 15101	100pF 5% 50V 0402
2Z62	2238 869 15101	100pF 5% 50V 0402

–/\/\/\–

3001	3198 031 04720	4.7kΩ 5% 0402
3002	3198 031 04720	4.7kΩ 5% 0402
3003	4822 117 13525	24kΩ 1% 0.62W 0603
3005	4822 117 13606	10kΩ 5% 0.01W 0402
3006	4822 117 13543	470Ω 5% 0402
3007	2350 033 10471	4 x 470Ω 5%
3008	2350 033 10101	4 x 100Ω 5%
3009	3198 031 01810	180Ω 5% 0402
3010	4822 117 13606	10kΩ 5% 0.01W 0402
3011	3198 031 04720	4.7kΩ 5% 0402
3012	2350 033 10101	4 x 100Ω 5%
3013	4822 117 13606	10kΩ 5% 0.01W 0402
3014	3198 031 06820	6.8kΩ 5% 0.01W 0402
3016	2322 706 71502	1.5kΩ 1% 0402
3017	3198 031 04720	4.7kΩ 5% 0402
3018	4822 117 13606	10kΩ 5% 0.01W 0402
3019	3198 031 04720	4.7kΩ 5% 0402
3020	4822 117 13606	10kΩ 5% 0.01W 0402
3021	4822 117 13606	10kΩ 5% 0.01W 0402
3024	3198 031 02730	27kΩ 5% 0402
3025	4822 117 13596	220Ω 5% 0.01W 0402
3026	3198 031 04720	4.7kΩ 5% 0402
3027	3198 031 04730	47Ω 5% 0402
3029	2350 033 10101	4 x 100Ω 5%
3031	2350 033 10101	4 x 100Ω 5%
3033	4822 117 11297	100kΩ 5% 0.1W
3034	2350 033 10101	4 x 100Ω 5%
3035	2350 033 10101	4 x 100Ω 5%
3038	4822 117 13606	10kΩ 5% 0.01W 0402
3039	4822 117 13597	330Ω 5% 0402 0.01W
3046	2350 033 10101	4 x 100Ω 5%
3048	2350 033 10101	4 x 100Ω 5%
3049	2350 033 10101	4 x 100Ω 5%
3050	2350 033 10101	4 x 100Ω 5%
3051	2350 033 10101	4 x 100Ω 5%
3052	2350 033 10101	4 x 100Ω 5%
3053	4822 117 13606	10kΩ 5% 0.01W 0402
3054	2350 033 10101	4 x 100Ω 5%
3055	2350 033 10101	4 x 100Ω 5%
3056	2350 033 10101	4 x 100Ω 5%
3057	2350 033 10101	4 x 100Ω 5%
3061	2350 033 10101	4 x 100Ω 5%
3062	4822 117 13606	10kΩ 5% 0.01W 0402
3064	2350 033 10101	4 x 100Ω 5%
3065	3198 031 04720	4.7kΩ 5% 0402
3066	3198 031 04730	47Ω 5% 0402
3068	4822 051 30472	4.7Ω 5% 0.062W
3069	3198 031 01820	1.8kΩ 5% 0.01W 0402
3072	2350 033 10101	4 x 100Ω 5%
3073	2350 033 10471	4 x 470Ω 5%
3074	2350 033 10471	4 x 470Ω 5%
3075	2020 552 96628	10nF 10% 16V 0402
3076	2350 033 10471	4 x 470Ω 5%
3077	3198 031 04720	4.7kΩ 5% 0402
3078	2350 033 10471	4 x 470Ω 5%
3079	3198 031 01820	1.8kΩ 5% 0.01W 0402
3080	4822 117 13606	10kΩ 5% 0.01W 0402
3081	4822 117 13543	470Ω 5% 0402
3082	2350 033 10101	4 x 100Ω 5%
3083	2350 033 10101	4 x 100Ω 5%
3084	4822 117 13606	10kΩ 5% 0.01W 0402
3085	2350 033 10101	4 x 100Ω 5%

3086	2350 033 10101	4 x 100Ω 5%
3087	4822 117 13545	100Ω 1% 0402
3088	3198 031 01820	1.8kΩ 5% 0.01W 0402
3089	4822 117 13545	100Ω 1% 0402
3090	2350 033 10471	4 x 470Ω 5%
3092	3198 031 01820	1.8kΩ 5% 0.01W 0402
3093	4822 117 13606	10kΩ 5% 0.01W 0402
3097	4822 117 13543	470Ω 5% 0402
3099	2350 033 10471	4 x 470Ω 5%
3100	4822 117 13596	220Ω 5% 0.01W 0402
3101	4822 117 13596	220Ω 5% 0.01W 0402
3102	2350 033 10101	4 x 100Ω 5%
3103	4822 117 13543	470Ω 5% 0402
3304	2322 750 63908	3.9Ω 5% Fuse 1206
3370	4822 117 13545	100Ω 1% 0402
3371	4822 117 13546	47Ω 5% 0402
3372	4822 117 13543	470Ω 5% 0402
3376	4822 117 13545	100Ω 1% 0402
3377	4822 117 13545	100Ω 1% 0402
3378	3198 031 01530	15kΩ 5% 0.01W 0402
3380	4822 117 13545	100Ω 1% 0402
3382	4822 117 13543	470Ω 5% 0402
3385	4822 117 13543	470Ω 5% 0402
3393	4822 117 11297	100kΩ 5% 0.1W
3400▲	4822 117 11152	4.7Ω 5%
3402▲	2322 750 63908	3.9Ω 5% Fuse 1206
3405	4822 117 13548	1kΩ 5% 0402
3408	4822 117 13545	100Ω 1% 0402
3411	3198 031 02720	2.7kΩ 5% 0.01W 0402
3412▲	4822 117 11152	4.7Ω 5%
3413	3198 031 02710	270Ω 5% 0.1W 0402
3414	3198 031 04720	4.7kΩ 5% 0402
3415	4822 117 13602	2.2kΩ 5% 0.01W 0402
3418	3198 031 03910	390Ω 1% 0402
3419	3198 031 03390	33Ω 1% 0402
3422	4822 117 13548	1kΩ 5% 0402
3435	3198 031 04720	4.7kΩ 5% 0402
3436	3198 031 01810	180Ω 5% 0402
3437	4822 117 13543	470Ω 5% 0402
3439	4822 117 13597	330Ω 5% 0402 0.01W
3441	3198 031 05620	5.6kΩ 5% 0.01W 0402
3445	4822 117 13543	470Ω 5% 0402
3463	3198 031 04720	4.7kΩ 5% 0402
3473	4822 117 13548	1kΩ 5% 0402
3474	3198 031 01090	10Ω 5% 0.01W 0402
3475▲	5322 117 11726	10Ω 5%
3500	4822 051 30101	100Ω 5% 0.062W
3501	4822 051 30101	100Ω 5% 0.062W
3502	4822 051 30223	22kΩ 5% 0.062W
3503	4822 051 30101	100Ω 5% 0.062W
3504	4822 051 30101	100Ω 5% 0.062W
3505	4822 051 30223	22kΩ 5% 0.062W
3506	4822 051 30759	75Ω 5% 0.062W
3507	4822 051 30759	75Ω 5% 0.062W
3508	4822 051 30759	75Ω 5% 0.062W
3509	4822 051 30101	100Ω 5% 0.062W
3510	4822 051 30759	75Ω 5% 0.062W
3511	4822 051 30479	47Ω 5% 0.062W
3512	4822 051 30479	47Ω 5% 0.062W
3513	4822 051 30479	47Ω 5% 0.062W
3514	4822 051 30479	47Ω 5% 0.062W
3515	4822 051 30479	47Ω 5% 0.062W
3516	4822 051 30479	47Ω 5% 0.062W
3517	4822 117 12925	47kΩ 1% 0.063W 0603
3522	4822 051 30272	2.7kΩ 5% 0.062W
3523	4822 051 30223	22kΩ 5% 0.062W
3524	4822 051 30479	47Ω 5% 0.062W
3525	4822 051 30102	1kΩ 5% 0.062W
3526	3198 021 38220	8.2kΩ 5% 0.062W 0603
3526	5322 117 13056	8.2kΩ 1% 0.063W 0603
3527	4822 051 30683	68kΩ 5% 0.062W
3528	4822 051 30223	22kΩ 5% 0.062W
3529	4822 051 30102	1kΩ 5% 0.062W
3535	4822 051 30479	47Ω 5% 0.062W
3536	4822 051 30103	10kΩ 5% 0.062W
3543	4822 051 30759	75Ω 5% 0.062W
3599	4822 051 30102	1kΩ 5% 0.062W
3700	3198 031 02290	22Ω 5% 0.1W 0402
3701	4822 117 13548	1kΩ 5% 0402
3702	3198 031 01090	10Ω 5% 0.01W 0402
3706	4822 117 13545	100Ω 1% 0402
3707	4822 117 13545	100Ω 1% 0402
3709	4822 117 13545	100Ω 1% 0402
3710	4822 117 13545	100Ω 1% 0402
3712	3198 031 04730	47Ω 5% 0402
3713	4822 117 13605	Jumper 0402
3714	4822 117 13605	Jumper 0402
3715	4822 117 13605	Jumper 0402
3721	4822 117 13545	100Ω 1% 0402
3722	4822 117 13548	1kΩ 5% 0402
3724	4822 117 13545	100Ω 1% 0402
3725	3198 031 03320	3.3kΩ 5% 0402
3726	3198 031 01220	1.2kΩ 5% 0.01W 0402
3727	3198 031 01510	150Ω 5% 0.01W 0402
3728	3198 031 01510	150Ω 5% 0.01W 0402
3729	4822 117 13605	Jumper 0402
3732	3198 031 04730	47Ω 5% 0402
3733	4822 117 13548	1kΩ 5% 0402
3734	4822 117 13545	100Ω 1% 0402
3736	4822 117 13545	100Ω 1% 0402
3737	4822 117 13548	1kΩ 5% 0402
3738	4822 117 13548	1kΩ 5% 0402
3739	3198 031 01230	12kΩ 5% 0402
3740	3198 031 04720	4.7kΩ 5% 0402
3742	4822 117 13601	22kΩ 5% 0402
3743	4822 117 13606	10kΩ 5% 0.01W 0402
3746	3198 031 03920	3.9kΩ 5% 0402
3747	3198 031 04730	47Ω 5% 0402
3748	2322 705 70124	120kΩ 5% 0402
3749	3198 031 03920	3.9kΩ 5% 0402
3750	3198 031 03920	3.9kΩ 5% 0402
3751	3198 031 03320	3.3kΩ 5% 0402
3752	4822 117 13605	Jumper 0402
3753	4822 117 13605	Jumper 0402
3754	4822 117 13545	100Ω 1% 0402
3755	3198 031 04720	4.7kΩ 5% 0402
3756	4822 117 13606	10kΩ 5% 0.01W 0402
3757	3198 031 01510	150Ω 5% 0.01W 0402
3758	3198 031 04720	4.7kΩ 5% 0402
3759	4822 117 13596	220Ω 5% 0.01W 0402
3762	3198 031 06890	68Ω 5% 0402
3763	3198 031 06890	68Ω 5% 0402
3764	3198 031 06890	68Ω 5% 0402
3766	4822 117 13548	1kΩ 5% 0402
3767	3198 031 06890	68Ω 5% 0402
3768	3198 031 06890	68Ω 5% 0402
3769	3198 031 06890	68Ω 5% 0402
3770	3198 031 06890	68Ω 5% 0402
3771	3198 031 07590	75Ω 5% 0402
3772	3198 031 07590	75Ω 5% 0402
3773	3198 031 07590	75Ω 5% 0402
3774	3198 031 06890	68Ω 5% 0402
3775	3198 031 06890	68Ω 5% 0402
3776	3198 031 07590	75Ω 5% 0402
3777	3198 031 06890	68Ω 5% 0402
3778	3198 031 04720	4.7kΩ 5% 0402
3779	3198 031 06890	68Ω 5% 0402
3780	3198 031 06890	68Ω 5% 0402
3781	3198 031 06890	68Ω 5% 0402
3782	4822 117 13548	1kΩ 5% 0402
3784	3198 031 06890	68Ω 5% 0402
3792	3198 031 01510	150Ω 5% 0.01W 0402
3793	4822 117 13602	2.2kΩ 5% 0.01W 0402
3794	3198 031 07590	75Ω 5% 0402
3795	3198 031 01510	150Ω 5% 0.01W 0402
3797	3198 031 04720	4.7kΩ 5% 0402
3800	3198 031 07590	75Ω 5% 0402
3801	3198 031 01510	150Ω 5% 0.01W 0402
3802	3198 031 01510	150Ω 5% 0.01W 0402
3803	3198 031 06890	68Ω 5% 0402
3804	3198 031 06890	68Ω 5% 0402
3805	4822 117 13545	100Ω 1% 0402
3811	3198 031 07590	75Ω 5% 0402
3812	3198 031 07590	75Ω 5% 0402
3814	3198 031 07590	75Ω 5% 0402
3815	3198 031 07590	75Ω 5% 0402
3817	3198 031 07590	75Ω 5% 0402
3818	3198 031 07590	75Ω 5% 0402
3820	3198 031 04720	4.7kΩ 5% 0402
3821	3198 031 03390	33Ω 1% 0402
3823	3198 031 06890	68Ω 5% 0402
3826	4822 117 13545	100Ω 1% 0402
3827	4822 117 13545	100Ω 1% 0402
3829	4822 117 13545	100Ω 1% 0402
3830	3198 031 06890	68Ω 5% 0402
3831	3198 031 06890	68Ω 5% 0402
3832	3198 031 06890	68Ω 5% 0402
3833	3198 031 06890	68Ω 5% 0402
3834	3198 031 06890	68Ω 5% 0402
3835	3198 031 06890	68Ω 5% 0402
3836	3198 031 06890	68Ω 5% 0402
3837	3198 031 06890	68Ω 5% 0402
3838	3198 031 06890	68Ω 5% 0402
3839	3198 031 06890	68Ω 5% 0402
3840	3198 031 06890	68Ω 5% 0402
3841	3198 031 06890	68Ω 5% 0402
3842	3198 031 06890	68Ω 5% 0402
3843	3198 031 06890	68Ω 5% 0402
3844	3198 031 06890	68Ω 5% 0402
3845	3198 031 06890	68Ω 5% 0402
3846	3198 031 04720	4.7kΩ 5% 0402
3853	3198 031 04730	47Ω 5% 0402
3855	3198 031 04720	4.7kΩ 5% 0402
3856	3198 031 01090	10Ω 5% 0.01W 0402
3857	3198 031 01090	10Ω 5% 0.01W 0402
3858	3198 031 01090	10Ω 5% 0.01W 0402
3859	3198 031 01090	10Ω 5% 0.01W 0402
3860	3198 031 01090	10Ω 5% 0.01W 0402
3861	3198 031 01090	10Ω 5% 0.01W 0402
3864	4822 117 13545	100Ω 1% 0402
3865	4822 117 13545	100Ω 1% 0402
3867	4822 117 13545	100Ω 1% 0402
3868	4822 117 13545	100Ω 1% 0402
3869	4822 117 13545	100Ω 1% 0402
3870	4822 117 13545	100Ω 1% 0402
3871	4822 117 13545	100Ω 1% 0402
3872	4822 117 13545	100Ω 1% 0402
3873	4822 117 13545	100Ω 1% 0402
3874	4822 117 13545	100Ω 1% 0402
3880	3198 031 04730	47Ω 5% 0402
3881	3198 031 04730	47Ω 5% 0402
3882	3198 031 04730	47Ω 5% 0402
3883	3198 031 04730	47Ω 5% 0402
3884	3198 031 04730	47Ω 5% 0402
3885	4822 117 13548	1kΩ 5% 0402
3886	4822 117 13548	1kΩ 5% 0402
3887	4822 117 13548	1kΩ 5% 0402
3888	4822 117 13548	1kΩ 5% 0402
3889	4822 117 13548	1kΩ 5% 0402
3890	4822 117 13548	1kΩ 5% 0402
3891	4822 117 13548	1kΩ 5% 0402
3894	3198 031 01510	150Ω 5% 0.01W 0402
3896	4822 117 13605	Jumper 0402
3900	3198 031 06890	68Ω 5% 0402
3901	3198 031 06890	68Ω 5% 0402
3902	3198 031 06890	68Ω 5% 0402
3903	4822 117 11297	100kΩ 5% 0.1W
3905	3198 031 04720	4.7kΩ 5% 0402
3909	4822 117 13545	100Ω 1% 0402
3911	2350 033 11689	4x 68Ω 5% Netw.
3912	2350 033 11689	4x 68Ω 5% Netw.
3913	2350 033 11229	4x 22Ω 5% Netw.
3914	2350 033 11229	4x 22Ω 5% Netw.
3915	2350 033 11229	4x 22Ω 5% Netw.
3916	2350 033 11229	4x 22Ω 5% Netw.
3917	2350 033 11229	4x 22Ω 5% Netw.
3918	3198 031 06890	68Ω 5% 0402
3919	3198 031 06890	68Ω 5% 0402
3921	3198 031 06890	68Ω 5% 0402
3922	4822 117 13596	220Ω 5% 0.01W 0402
3923	3198 031 06810	680Ω 5% 0.01W 0402
3924	4822 117 13596	220Ω 5% 0.01W 0402
3927	4822 117 13596	220Ω 5% 0.01W 0402
3928	3198 031 06810	680Ω 5% 0.01W 0402
3929	4822 117 13596	220Ω 5% 0.01W 0402
3930	4822 117 13596	220Ω 5% 0.01W 0402
3931	4822 117 13596	220Ω 5% 0.01W 0402
3932	3198 031 06810	680Ω 5% 0.01W 0402
3999	4822 051 30102	1kΩ 5% 0.062W
3A00	4822 117 13601	22kΩ 5% 0402
3A01	4822 117 13606	10kΩ 5% 0.01W 0402
3A02	3198 031 04730	47Ω 5% 0402
3A03▲	4822 117 13568	6.8Ω 5% 1206
3A04	4822 117 13601	22kΩ 5% 0402
3A05	4822 117 13601	22kΩ 5% 0402
3A06	4822 117 11297	100kΩ 5% 0.1W
3A07	4822 117 11297	100kΩ 5% 0.1W
3A09	4822 117 13601	22kΩ 5% 0402
3A11	4822 117 11297	100kΩ 5% 0.1W
3A12	3198 031 04730	47Ω 5% 0402
3A13	3198 031 04730	47Ω 5% 0402
3A14	3198 031 04730	47Ω 5% 0402
3A15	4822 117 11297	100kΩ 5% 0.1W
3A16	4822 117 13545	100Ω 1% 0402
3A17	4822 117 13545	100Ω 1% 0402
3A18	3198 031 06830	68kΩ 5% 0.01W 0402
3A19	4822 117 13545	100Ω 1% 0402
3A20	4822 117 11297	100kΩ 5% 0.1W
3A21	3198 031 06830	68kΩ 5% 0.01W 0402
3A22	4822 117 11297	100kΩ 5% 0.1W
3A23	3198 031 06830	68kΩ 5% 0.01W 0402
3A24	3198 031 06810	680Ω 5% 0.01W 0402
3A26	3198 031 06830	68kΩ 5% 0.01W 0402
3A27	3198 031 06820	6.8kΩ 5% 0.01W 0402
3A28	3198 031 06820	6.8kΩ 5% 0.01W 0402
3A40	3198 031 01830	18kΩ 5% 0.01W 0402
3A45	3198 031 04730	47Ω 5% 0402
3A46	3198 031 01530	15kΩ 5% 0.01W 0402
3A47	3198 031 04730	47Ω 5% 0402
3A49	3198 031 01830	18kΩ 5% 0.01W 0402
3A51	3198 031 01530	15kΩ 5% 0.01W 0402
3A52	3198 031 05630	56kΩ 5% 0402
3A53	3198 031 05630	56kΩ 5% 0402
3A55	4822 117 13597	330Ω 5% 0402 0.01W
3A60	4822 117 11297	100kΩ 5% 0.1W
3A61	4822 117 13597	330Ω 5% 0402 0.01W
3A63	4822 117 13601	22kΩ 5% 0402
3A64	3198 031 04730	47Ω 5% 0402
3A65	4822 117 11297	100kΩ 5% 0.1W
3A66	4822 117 11297	100kΩ 5% 0.1W
3A67	4822 117 13543	470Ω 5% 0402
3C00	4822 117 13602	2.2kΩ 5% 0.01W 0402

3C01	3198 031 01090	10Ω 5% 0.01W 0402
3C03	4822 117 13606	10kΩ 5% 0.01W 0402
3C04	4822 117 13606	10kΩ 5% 0.01W 0402
3C05	4822 117 13543	470Ω 5% 0402
3C08	4822 051 30103	10kΩ 5% 0.062W
3C10	4822 117 13545	100Ω 1% 0402
3C11	4822 117 13545	100Ω 1% 0402
3C12	3198 031 06890	68Ω 5% 0402
3E00	4822 117 13606	10kΩ 5% 0.01W 0402
3E01	4822 117 13548	1kΩ 5% 0402
3E02	4822 117 13548	1kΩ 5% 0402
3E03	4822 117 13548	1kΩ 5% 0402
3E04	4822 117 13548	1kΩ 5% 0402
3E05	3198 031 01520	1.2kΩ 5% 0.01W 0402
3E06	4822 117 13545	100Ω 1% 0402
3E07	4822 117 13545	100Ω 1% 0402
3E08	4822 117 13545	100Ω 1% 0402
3E11	4822 117 13543	470Ω 5% 0402
3E12	4822 117 13543	470Ω 5% 0402
3E14	4822 117 13548	1kΩ 5% 0402
3E16	3198 031 02720	2.7kΩ 5% 0.01W 0402
3E18	4822 117 13545	100Ω 1% 0402
3E19	4822 117 13545	100Ω 1% 0402
3E37	4822 117 13545	100Ω 1% 0402
3E50	4822 117 13606	10kΩ 5% 0.01W 0402
3E51	4822 117 13606	10kΩ 5% 0.01W 0402
3E52	4822 117 13606	10kΩ 5% 0.01W 0402
3E53	4822 117 13606	10kΩ 5% 0.01W 0402
3E54	4822 117 13546	47Ω 5% 0402
3E55	4822 117 13606	10kΩ 5% 0.01W 0402
3E56	4822 117 13603	33kΩ 5% 0402
3E57	4822 117 11297	100kΩ 5% 0.1W
3E58	4822 117 13546	47Ω 5% 0402
3E59	4822 117 13606	10kΩ 5% 0.01W 0402
3E61	4822 117 13546	47Ω 5% 0402
3E62	4822 117 13548	1kΩ 5% 0402
3E63	4822 117 13606	10kΩ 5% 0.01W 0402
3E64	4822 117 13606	10kΩ 5% 0.01W 0402
3E69	3198 031 04720	4.7kΩ 5% 0402
3E70	3198 031 04720	4.7kΩ 5% 0402
3E73	4822 117 13606	10kΩ 5% 0.01W 0402
3E74	4822 117 13546	47Ω 5% 0402
3E77	4822 117 13546	47Ω 5% 0402
3E78	4822 117 13546	47Ω 5% 0402
3E79	4822 117 13546	47Ω 5% 0402
3E80	4822 117 13546	47Ω 5% 0402
3E81	4822 117 13546	47Ω 5% 0402
3E82	3198 031 01090	10Ω 5% 0.01W 0402
3E83	3198 031 01090	10Ω 5% 0.01W 0402
3E84	3198 031 01090	10Ω 5% 0.01W 0402
3E85	3198 031 01090	10Ω 5% 0.01W 0402
3E86	3198 031 01090	10Ω 5% 0.01W 0402
3E88	4822 117 13546	47Ω 5% 0402
3E89	4822 117 13546	47Ω 5% 0402
3E90	3198 031 06890	68Ω 5% 0402
3E91	3198 031 03390	33Ω 1% 0402
3I07	4822 117 13606	10kΩ 5% 0.01W 0402
3I08	4822 117 13597	330Ω 5% 0402 0.01W
3I28	4822 117 13545	100Ω 1% 0402
3I29	4822 051 30759	75Ω 5% 0.062W
3I30	4822 051 30759	75Ω 5% 0.062W
3I31	4822 051 30759	75Ω 5% 0.062W
3I32	4822 117 13548	1kΩ 5% 0402
3I33	4822 051 30101	100Ω 5% 0.062W
3I34	4822 117 13606	10kΩ 5% 0.01W 0402
3I35	4822 051 30101	100Ω 5% 0.062W
3I36	4822 117 13601	22kΩ 5% 0402
3I37	4822 117 13601	22kΩ 5% 0402
3I38	4822 117 13601	22kΩ 5% 0402
3I40	4822 051 30101	100Ω 5% 0.062W
3I41	4822 117 13548	1kΩ 5% 0402
3I42	4822 117 13548	1kΩ 5% 0402
3I44	4822 117 13606	10kΩ 5% 0.01W 0402
3I45	3198 031 04730	47Ω 5% 0402
3I46	4822 117 13545	100Ω 1% 0402
3I47	4822 117 13602	2.2kΩ 5% 0.01W 0402
3I49	4822 117 13545	100Ω 1% 0402
3I50	4822 051 30271	270Ω 5% 0.062W
3I51	4822 051 30101	100Ω 5% 0.062W
3I52	4822 051 30271	270Ω 5% 0.062W
3I53	4822 051 30101	100Ω 5% 0.062W
3I54	4822 051 30101	100Ω 5% 0.062W
3I55	4822 051 30759	75Ω 5% 0.062W
3I56	4822 051 30101	100Ω 5% 0.062W
3I57	4822 051 30759	75Ω 5% 0.062W
3I58	4822 051 30101	100Ω 5% 0.062W
3I59	4822 051 30759	75Ω 5% 0.062W
3I60	4822 051 30759	75Ω 5% 0.062W
3I61	4822 051 30101	100Ω 5% 0.062W
3I62	4822 051 30101	100Ω 5% 0.062W
3I63	4822 051 30392	3.9Ω 5% 0.063W 0603
3I64	3198 031 08220	8.2kΩ 5% 0.5W
3I65	4822 051 30101	100Ω 5% 0.062W
3I66	4822 051 30759	75Ω 5% 0.062W
3I67	4822 051 30759	75Ω 5% 0.062W
3I68	4822 051 30101	100Ω 5% 0.062W
3I69	4822 051 30271	270Ω 5% 0.062W
3I70	4822 051 30101	100Ω 5% 0.062W
3I71	4822 051 30271	270Ω 5% 0.062W
3I72	4822 051 30101	100Ω 5% 0.062W
3I75	4822 051 30101	100Ω 5% 0.062W
3I76	4822 051 30101	100Ω 5% 0.062W
3I77	4822 051 30759	75Ω 5% 0.062W
3I78	4822 051 30759	75Ω 5% 0.062W
3I79	4822 051 30101	100Ω 5% 0.062W
3I80	4822 051 30101	100Ω 5% 0.062W
3I81	3198 031 08220	8.2kΩ 5% 0.5W
3I82	4822 051 30392	3.9Ω 5% 0.063W 0603
3I83	4822 051 30101	100Ω 5% 0.062W
3I84	4822 051 30759	75Ω 5% 0.062W
3I86	4822 051 30759	75Ω 5% 0.062W
3I87	4822 051 30101	100Ω 5% 0.062W
3I88	4822 051 30759	75Ω 5% 0.062W
3I89	4822 051 30271	270Ω 5% 0.062W
3I90	4822 051 30101	100Ω 5% 0.062W
3I91	4822 051 30271	270Ω 5% 0.062W
3I92	4822 051 30101	100Ω 5% 0.062W
3I98	4822 117 13605	Jumper 0402
3I99	4822 051 30271	270Ω 5% 0.062W
3IA0	4822 051 30101	100Ω 5% 0.062W
3IA2	4822 051 30101	100Ω 5% 0.062W
3IA3	4822 117 13601	22kΩ 5% 0402
3IA4	4822 117 13548	1kΩ 5% 0402
3IA5	4822 117 13548	1kΩ 5% 0402
3IA6	4822 117 13548	1kΩ 5% 0402
3IA7	4822 117 13548	1kΩ 5% 0402
3IA8	4822 117 13548	1kΩ 5% 0402
3IB1	4822 117 13606	10kΩ 5% 0.01W 0402
3IB2	4822 117 13545	100Ω 1% 0402
3IB3	4822 117 13606	10kΩ 5% 0.01W 0402
3IB4	4822 117 13601	22kΩ 5% 0402
3IB5	4822 117 13601	22kΩ 5% 0402
3IB6	4822 117 13548	1kΩ 5% 0402
3IB7	4822 117 13597	330Ω 5% 0402 0.01W
3IBA	4822 117 13545	100Ω 1% 0402
3IBB	4822 117 13545	100Ω 1% 0402
3IC0	4822 117 13548	1kΩ 5% 0402
3IC1▲	4822 117 13574	1.5Ω 5% 1206
3IC2	4822 117 13601	22kΩ 5% 0402
3IC3	4822 117 13601	22kΩ 5% 0402
3IC4	4822 117 13545	100Ω 1% 0402
3IC5	4822 117 13596	220Ω 5% 0.01W 0402
3IC6	4822 117 13545	100Ω 1% 0402
3IC7	4822 117 13596	220Ω 5% 0.01W 0402
3IC9	4822 117 13601	22kΩ 5% 0402
3ID0	3198 031 04720	4.7kΩ 5% 0402
3ID1	3198 031 01540	150kΩ 5% 0402
3ID4	3198 031 01230	12kΩ 5% 0402
3ID5	3198 031 01090	10Ω 5% 0.01W 0402
3ID7	4822 117 11297	100kΩ 5% 0.1W
3ID8	4822 117 11297	100kΩ 5% 0.1W
3IE2	4822 117 13545	100Ω 1% 0402
3IE3	4822 117 13545	100Ω 1% 0402
3IE7	3198 031 01090	10Ω 5% 0.01W 0402
3IE9	4822 117 13601	22kΩ 5% 0402
3IF0	4822 117 13545	100Ω 1% 0402
3IF5	4822 117 13601	22kΩ 5% 0402
3IF6	4822 051 30101	100Ω 5% 0.062W
3IF7	4822 051 30101	100Ω 5% 0.062W
3IG1	3198 031 01090	10Ω 5% 0.01W 0402
3IG4	3198 031 01090	10Ω 5% 0.01W 0402
3IG7	3198 031 01090	10Ω 5% 0.01W 0402
3IGE	4822 117 13606	10kΩ 5% 0.01W 0402
3IGF	3198 031 04730	47Ω 5% 0402
3IH1	3198 031 04730	47Ω 5% 0402
3IH2	3198 031 04730	47Ω 5% 0402
3IH8	3198 031 04730	47Ω 5% 0402
3IH9	3198 031 04730	47Ω 5% 0402
3IHA	4822 117 13545	100Ω 1% 0402
3IHB	4822 117 13545	100Ω 1% 0402
3IHC	4822 117 13545	100Ω 1% 0402
3IHG	3198 021 31820	1.8kΩ 5% 0.062W 0603
3II0	4822 117 13606	10kΩ 5% 0.01W 0402
3II1	4822 117 13601	22kΩ 5% 0402
3II2	4822 117 13601	22kΩ 5% 0402
3II3	3198 031 04730	47Ω 5% 0402
3II4	3198 031 04730	47Ω 5% 0402
3II6	4822 117 13601	22kΩ 5% 0402
3II7	4822 117 13601	22kΩ 5% 0402
3II9	4822 117 13548	1kΩ 5% 0402
3IJ8	4822 117 13548	1kΩ 5% 0402
3IK0	4822 117 13548	1kΩ 5% 0402
3IK2	4822 117 13601	22kΩ 5% 0402
3IK3	4822 117 13601	22kΩ 5% 0402
3IK7▲	4822 117 11152	4.7Ω 5%
3IN1	4822 117 13548	1kΩ 5% 0402
3IN4▲	4822 117 11748	Fuse 2.2Ω 5% 1206
3IN5	4822 117 13601	22kΩ 5% 0402
3IN6	4822 117 13601	22kΩ 5% 0402
3IN8	3198 031 01090	10Ω 5% 0.01W 0402
3IO5	4822 117 13606	10kΩ 5% 0.01W 0402
3IO6	4822 117 13606	10kΩ 5% 0.01W 0402
3IP0	3198 031 08220	8.2kΩ 5% 0.5W
3IP1	4822 117 13602	2.2kΩ 5% 0.01W 0402
3IP2	4822 117 13596	220Ω 5% 0.01W 0402
3IP3	4822 051 30759	75Ω 5% 0.062W
3IP4	3198 031 02710	270Ω 5% 0.1W 0402
3IP5▲	4822 117 11748	Fuse 2.2Ω 5% 1206
3IP6	4822 117 13548	1kΩ 5% 0402
3IP7	3198 031 02720	2.7kΩ 5% 0.01W 0402
3IP8	4822 117 13548	1kΩ 5% 0402
3IQ0	3198 031 01090	10Ω 5% 0.01W 0402
3IQ5	3198 031 04730	47Ω 5% 0402
3IQ6	4822 117 13545	100Ω 1% 0402
3IQ7	4822 117 13545	100Ω 1% 0402
3IQ8	3198 031 03320	3.3kΩ 5% 0402
3IQ9	4822 117 13548	1kΩ 5% 0402
3IR1	3198 031 02710	270Ω 5% 0.1W 0402
3IR2	3198 031 04720	4.7kΩ 5% 0402
3IR3	3198 031 04720	4.7kΩ 5% 0402
3IR4	4822 117 13545	100Ω 1% 0402
3IR5	4822 117 13546	47Ω 5% 0402
3IR6	4822 117 13546	47Ω 5% 0402
3IR7	4822 117 13543	470Ω 5% 0402
3IR8	3198 031 03320	3.3kΩ 5% 0402
3IR9	2322 706 71201	120Ω 1% 0402
3IS0	2322 706 71201	120Ω 1% 0402
3IS1	2322 706 71201	120Ω 1% 0402
3IS2	4822 117 13545	100Ω 1% 0402
3IS5	2322 706 71201	120Ω 1% 0402
3IT0	3198 031 04730	47Ω 5% 0402
3IT1	3198 031 04730	47Ω 5% 0402
3IT4	3198 031 04730	47Ω 5% 0402
3IT5	2322 706 71201	120Ω 1% 0402
3IT6	2322 706 71201	120Ω 1% 0402
3IT7	4822 117 13548	1kΩ 5% 0402
3IT8	4822 117 13548	1kΩ 5% 0402
3IT9	4822 117 13597	330Ω 5% 0402 0.01W
3IU0▲	4822 117 11748	Fuse 2.2Ω 5% 1206
3IV0	3198 031 08220	8.2kΩ 5% 0.5W
3IV1	4822 117 13548	1kΩ 5% 0402
3IV2	4822 117 13543	470Ω 5% 0402
3IV3	4822 117 13548	1kΩ 5% 0402
3L03	4822 117 13545	100Ω 1% 0402
3L04	4822 117 13545	100Ω 1% 0402
3L05	4822 117 13545	100Ω 1% 0402
3L06	4822 117 13545	100Ω 1% 0402
3L08	3198 031 02720	2.7kΩ 5% 0.01W 0402
3L11	4822 117 13545	100Ω 1% 0402
3L12	4822 117 13543	470Ω 5% 0402
3L28	4822 117 13543	470Ω 5% 0402
3L29	3198 031 01510	150Ω 5% 0.01W 0402
3L30	3198 031 01510	150Ω 5% 0.01W 0402
3L31	3198 031 01510	150Ω 5% 0.01W 0402
3L32	4822 117 13543	470Ω 5% 0402
3L33	4822 117 13543	470Ω 5% 0402
3P65	4822 117 13545	100Ω 1% 0402
3P66	4822 117 13545	100Ω 1% 0402
3P67	3198 031 04720	4.7kΩ 5% 0402
3P69	3198 031 04720	4.7kΩ 5% 0402
3P70	3198 031 04720	4.7kΩ 5% 0402
3P72	3198 031 04720	4.7kΩ 5% 0402
3U01	4822 051 30102	1kΩ 5% 0.062W
3U02	4822 117 13548	1kΩ 5% 0402
3U03	4822 117 13603	33kΩ 5% 0402
3U04	4822 051 20121	120Ω 5% 0.1W
3U05	4822 117 13548	1kΩ 5% 0402
3U06	4822 117 13543	470Ω 5% 0402
3U07	3198 031 02290	22Ω 5% 0.1W 0402
3U08	2322 706 71502	1.5kΩ 1% 0402
3U09	3198 031 05620	5.6kΩ 5% 0.01W 0402
3U10	4822 117 13596	220Ω 5% 0.01W 0402
3U12	4822 117 13601	22kΩ 5% 0402
3U13	4822 117 13606	10kΩ 5% 0.01W 0402
3U14	4822 051 30102	1kΩ 5% 0.062W
3U15	2322 706 73302	3.3kΩ 1% 0402
3U17	3198 031 04780	4.7Ω 5% 0402
3U18	2322 706 71002	1kΩ 1% 0402
3U19	3198 031 04720	4.7kΩ 5% 0402
3U20	2322 706 71002	1kΩ 1% 0402
3U21	3198 031 04730	47Ω 5% 0402
3U22	3198 031 02710	270Ω 5% 0.1W 0402
3U23	3198 031 01090	10Ω 5% 0.01W 0402
3U24	4822 117 13601	22kΩ 5% 0402
3U25	3198 031 02240	220kΩ 5% 0.1W 0402
3U26	4822 117 13601	22kΩ 5% 0402
3U27	4822 117 13601	22kΩ 5% 0402
3U28	3198 031 04730	47Ω 5% 0402
3U29	4822 051 30109	10Ω 5% 0.062W
3U30	4822 051 20121	120Ω 5% 0.1W
3U31	4822 051 20121	120Ω 5% 0.1W
3U32	3198 031 01830	18kΩ 5% 0.01W 0402

3U33	4822 117 13606	10kΩ 5% 0.01W 0402
3U35	4822 117 13606	10kΩ 5% 0.01W 0402
3U36	4822 117 13602	2.2kΩ 5% 0.01W 0402
3U37	4822 117 13601	22kΩ 5% 0402
3U38	4822 117 13602	2.2kΩ 5% 0.01W 0402
3U39	4822 117 13601	22kΩ 5% 0402
3U40	3198 031 01540	150kΩ 5% 0402
3U41	4822 117 13548	1kΩ 5% 0402
3U42	4822 117 13606	10kΩ 5% 0.01W 0402
3U43	4822 117 13601	22kΩ 5% 0402
3U44	3198 031 01050	1MΩ 5% 0402
3U45	3198 031 01050	1MΩ 5% 0402
3U46	2322 706 74703	47kΩ 1% 0402
3U51	9965 000 23109	22Ω 5% 0603
3U52	4822 051 30102	1kΩ 5% 0.062W
3U53	3198 031 01830	18kΩ 5% 0.01W 0402
3U54	4822 117 13545	100Ω 1% 0402
3U55	4822 051 30102	1kΩ 5% 0.062W
3U56	3198 031 04720	4.7kΩ 5% 0402
3U57	4822 117 13606	10kΩ 5% 0.01W 0402
3U60	4822 117 13548	1kΩ 5% 0402
3U61	4822 117 13606	10kΩ 5% 0.01W 0402
3U62	4822 117 13548	1kΩ 5% 0402
3U63	4822 117 13602	2.2kΩ 5% 0.01W 0402
3U64	4822 117 13548	1kΩ 5% 0402
3U65	4822 117 13548	1kΩ 5% 0402
3U66	4822 117 13606	10kΩ 5% 0.01W 0402
3U67	4822 117 13545	100Ω 1% 0402
3U68	4822 117 13606	10kΩ 5% 0.01W 0402
3U69	4822 117 13548	1kΩ 5% 0402
3U70	4822 051 30102	1kΩ 5% 0.062W
3V01	3198 031 01810	180Ω 5% 0402
3V02	3198 031 01810	180Ω 5% 0402
3V17	3198 031 01810	180Ω 5% 0402
3V19	3198 031 01810	180Ω 5% 0402
3V20	3198 031 01810	180Ω 5% 0402
3V21	2350 033 11689	4x 68Ω 5% Netw.
3V22	2350 033 11689	4x 68Ω 5% Netw.
3V23	2350 033 11689	4x 68Ω 5% Netw.
3V24	2350 033 11689	4x 68Ω 5% Netw.
3V25	3198 031 01810	180Ω 5% 0402
3V26	3198 031 01810	180Ω 5% 0402
3V27	3198 031 01810	180Ω 5% 0402
3V28	3198 031 01810	180Ω 5% 0402
3V29	3198 031 01810	180Ω 5% 0402
3V30	3198 031 01810	180Ω 5% 0402
3V31	3198 031 01810	180Ω 5% 0402
3V32	3198 031 01810	180Ω 5% 0402
3V33	3198 031 01810	180Ω 5% 0402
3V34	3198 031 01810	180Ω 5% 0402
3V35	4822 117 13545	100Ω 1% 0402
3V36	4822 117 13545	100Ω 1% 0402
3V37	4822 117 13545	100Ω 1% 0402
3V38	4822 117 13545	100Ω 1% 0402
3V39	3198 031 04720	4.7kΩ 5% 0402
3V40	4822 117 13545	100Ω 1% 0402
3V50	4822 117 13606	10kΩ 5% 0.01W 0402
3V51	4822 117 13606	10kΩ 5% 0.01W 0402
3V52	4822 117 13602	2.2kΩ 5% 0.01W 0402
3V53	4822 117 13602	2.2kΩ 5% 0.01W 0402
3V54	4822 117 13606	10kΩ 5% 0.01W 0402
3V55	4822 117 13606	10kΩ 5% 0.01W 0402
3V56	4822 117 13545	100Ω 1% 0402
3Y04	4822 117 13602	2.2kΩ 5% 0.01W 0402
3Y05	4822 117 13545	100Ω 1% 0402
3Y07▲	4822 117 11151	1Ω 5%
3Y08	3198 031 03320	3.3kΩ 5% 0402
3Y08	4822 117 13545	100Ω 1% 0402
3Y09	4822 117 13545	100Ω 1% 0402
3Y10	4822 117 13545	100Ω 1% 0402
3Y11	4822 117 13545	100Ω 1% 0402
3Y12	4822 117 13545	100Ω 1% 0402
3Y14	3198 031 04720	4.7kΩ 5% 0402
3Y15	4822 117 13606	10kΩ 5% 0.01W 0402
3Y16	3198 031 04720	4.7kΩ 5% 0402
3Y17	4822 117 13545	100Ω 1% 0402
3Y19	4822 117 13545	100Ω 1% 0402
3Y20	3198 031 06890	68Ω 5% 0402
3Y21	3198 031 06890	68Ω 5% 0402
3Y22	3198 031 06890	68Ω 5% 0402
3Y23	3198 031 06890	68Ω 5% 0402
3Y24	4822 117 11297	100kΩ 5% 0.1W
3Y25	4822 117 13545	100Ω 1% 0402
3Y30	3198 031 05620	5.6kΩ 5% 0.01W 0402
3Y34	4822 117 13545	100Ω 1% 0402
3Y35	4822 117 13545	100Ω 1% 0402
3Y36	4822 117 13545	100Ω 1% 0402
3Y37	3198 031 04720	4.7kΩ 5% 0402
3Y38	4822 117 13602	2.2kΩ 5% 0.01W 0402
3Y39	4822 117 13606	10kΩ 5% 0.01W 0402
3Y40	4822 117 13545	100Ω 1% 0402
3Z26	4822 117 13548	1kΩ 5% 0402
3Z34	4822 117 13601	22kΩ 5% 0402
3Z37	4822 117 13606	10kΩ 5% 0.01W 0402
3Z50	4822 117 13545	100Ω 1% 0402
3Z51	4822 117 13545	100Ω 1% 0402
3Z52	4822 117 13545	100Ω 1% 0402
3Z54	4822 117 13545	100Ω 1% 0402
3Z54	4822 117 13548	1kΩ 5% 0402
9001	4822 117 13605	Jumper 0402
9002	4822 117 13605	Jumper 0402
9007	4822 117 13605	Jumper 0402
9010	4822 117 13605	Jumper 0402
9011▲	4822 117 13605	Jumper 0402
9012	4822 117 13605	Jumper 0402
9013	4822 117 13605	Jumper 0402
9023	4822 117 13605	Jumper 0402
9024	4822 117 13605	Jumper 0402
9316	4822 117 13605	Jumper 0402
9322	4822 117 13605	Jumper 0402
9410	4822 117 13605	Jumper 0402
9413	4822 117 13605	Jumper 0402
9416	4822 117 13605	Jumper 0402
9417	4822 117 13605	Jumper 0402
9418	4822 117 13605	Jumper 0402
9419	4822 117 13605	Jumper 0402
9420	4822 117 13605	Jumper 0402
9423	4822 117 13605	Jumper 0402
9424	4822 117 13605	Jumper 0402
9425	4822 117 13605	Jumper 0402
9426	4822 117 13605	Jumper 0402
9427	4822 117 13545	100Ω 1% 0402
9428	4822 117 13605	Jumper 0402
9502	4822 051 30008	Jumper 0603
9508	4822 051 30008	Jumper 0603
9521	4822 051 30008	Jumper 0603
9524	4822 051 30008	Jumper 0603
9702	4822 117 13605	Jumper 0402
9704	4822 117 13605	Jumper 0402
9706	4822 117 13605	Jumper 0402
9707	2238 869 15189	18pF 5% 50V 0402
9708	2238 869 15189	18pF 5% 50V 0402
9709	2238 869 15189	18pF 5% 50V 0402
9710	4822 117 13605	Jumper 0402
9713	4822 117 13605	Jumper 0402
9714	4822 117 13605	Jumper 0402
9715	4822 117 13605	Jumper 0402
9716	4822 117 13605	Jumper 0402
9717	4822 117 13605	Jumper 0402
9718	4822 117 13605	Jumper 0402
9720	4822 117 13605	Jumper 0402
9721	4822 117 13605	Jumper 0402
9722	4822 117 13605	Jumper 0402
9723	4822 117 13605	Jumper 0402
9727	4822 117 13605	Jumper 0402
9728	4822 117 13605	Jumper 0402
9730	4822 117 13605	Jumper 0402
9732	4822 117 13605	Jumper 0402
9751	4822 117 13605	Jumper 0402
9752	4822 117 13605	Jumper 0402
9753	4822 117 13605	Jumper 0402
9754	4822 117 13605	Jumper 0402
9755	4822 117 13605	Jumper 0402
9756	4822 117 13605	Jumper 0402
9757	4822 117 13605	Jumper 0402
9758	4822 117 13605	Jumper 0402
9760	4822 117 13605	Jumper 0402
9761	4822 117 13605	Jumper 0402
9762	4822 117 13605	Jumper 0402
9763	4822 117 13605	Jumper 0402
9765	4822 117 13605	Jumper 0402
9766	4822 117 13605	Jumper 0402
9772	4822 117 13605	Jumper 0402
9773	4822 117 13605	Jumper 0402
9774	4822 117 13605	Jumper 0402
9775	4822 117 13605	Jumper 0402
9776	4822 117 13605	Jumper 0402
9777	4822 117 13605	Jumper 0402
9800	4822 117 13605	Jumper 0402
9801	4822 117 13605	Jumper 0402
9802	4822 117 13605	Jumper 0402
9803	4822 117 13605	Jumper 0402
9804	4822 117 13605	Jumper 0402
9805	4822 117 13605	Jumper 0402
9806	4822 117 13605	Jumper 0402
9808	4822 117 13605	Jumper 0402
9809	4822 117 13605	Jumper 0402
9811	4822 117 13605	Jumper 0402
9812	4822 117 13605	Jumper 0402
9815	4822 117 13605	Jumper 0402
9816	4822 117 13605	Jumper 0402
9817	4822 117 13605	Jumper 0402
9818	4822 117 13605	Jumper 0402
9820	4822 117 13605	Jumper 0402
9821	4822 117 13605	Jumper 0402
9822	4822 117 13605	Jumper 0402
9823	3198 031 06890	68Ω 5% 0402
9A00	4822 117 13605	Jumper 0402
9A01	4822 117 13605	Jumper 0402
9A04	4822 117 13605	Jumper 0402
9A05	4822 117 13605	Jumper 0402
9A06	4822 117 13605	Jumper 0402
9A07	4822 117 13605	Jumper 0402
9A22	4822 117 13605	Jumper 0402
9A65	4822 117 13605	Jumper 0402
9A67	4822 051 20008	Jumper 0805
9A71	4822 051 20008	Jumper 0805
9C02	4822 117 13605	Jumper 0402
9E60	4822 117 13605	Jumper 0402
9E62	4822 117 13605	Jumper 0402
9E65	4822 117 13605	Jumper 0402
9E66	4822 117 13605	Jumper 0402
9E67	4822 117 13605	Jumper 0402
9E68	4822 117 13605	Jumper 0402
9E69	4822 117 13605	Jumper 0402
9E70	4822 117 13605	Jumper 0402
9E71	4822 117 13605	Jumper 0402
9E72	4822 117 13605	Jumper 0402
9E73	4822 117 13605	Jumper 0402
9E74	4822 117 13605	Jumper 0402
9E76	4822 117 13605	Jumper 0402
9E77	4822 117 13605	Jumper 0402
9I00	4822 117 13605	Jumper 0402
9I02	4822 117 13605	Jumper 0402
9I07	4822 117 13605	Jumper 0402
9I15	4822 117 13605	Jumper 0402
9I28	4822 117 13605	Jumper 0402
9I30	4822 117 13605	Jumper 0402
9I31	4822 117 13605	Jumper 0402
9I32	4822 117 13605	Jumper 0402
9I33	4822 117 13605	Jumper 0402
9I34	4822 117 13605	Jumper 0402
9I35	4822 117 13605	Jumper 0402
9I39	4822 117 13605	Jumper 0402
9I45	4822 117 13605	Jumper 0402
9I49	4822 117 13605	Jumper 0402
9I68	4822 117 13605	Jumper 0402
9I85	4822 117 13605	Jumper 0402
9IA5	4822 117 13605	Jumper 0402
9ID0	4822 117 13605	Jumper 0402
9ID1	4822 117 13605	Jumper 0402
9ID3	4822 117 13605	Jumper 0402
9ID5	4822 117 13605	Jumper 0402
9ID8	4822 117 13605	Jumper 0402
9ID9	4822 117 13605	Jumper 0402
9P69	4822 117 13605	Jumper 0402
9P70	4822 117 13605	Jumper 0402
9P71	4822 117 13605	Jumper 0402
9T01	4822 117 13601	22kΩ 5% 0402
9T04	4822 117 13605	Jumper 0402
9T07	4822 117 13605	Jumper 0402
9T08	4822 117 13605	Jumper 0402
9T12	4822 117 13605	Jumper 0402
9T14	4822 117 13605	Jumper 0402
9T50	4822 117 13605	Jumper 0402
9Y00	3198 031 01090	10Ω 5% 0.01W 0402
9Y03	4822 117 13605	Jumper 0402
9Y05	4822 117 13605	Jumper 0402
9Y06	4822 117 13605	Jumper 0402
9Y09	4822 117 13605	Jumper 0402
9Y13	4822 117 13605	Jumper 0402
9Y15	4822 117 13605	Jumper 0402
9Y16	4822 117 13605	Jumper 0402

–〰–

5003	2422 549 43769	Bead 30Ω at 100MHz
5401	3198 018 56880	6.8µH 10% 0603
5404	4822 157 11506	Bead 120Ω at 100MHz
5405	4822 157 11506	Bead 120Ω at 100MHz
5406	3198 018 52280	2.2µF 10% 1008
5408	2422 549 00232	Trimmer 78MHz 5JKH
5416	4822 157 11716	Bead 30Ω at 100MHz
5702	4822 157 11716	Bead 30Ω at 100MHz
5703	4822 157 11716	Bead 30Ω at 100MHz
5713	4822 157 11716	Bead 30Ω at 100MHz
5714	4822 157 11716	Bead 30Ω at 100MHz
5719	4822 157 11716	Bead 30Ω at 100MHz
5720	4822 157 11716	Bead 30Ω at 100MHz
5724	4822 157 11716	Bead 30Ω at 100MHz
5725	4822 157 11716	Bead 30Ω at 100MHz
5727	4822 157 11716	Bead 30Ω at 100MHz
5750	4822 157 11716	Bead 30Ω at 100MHz
5751	4822 157 11716	Bead 30Ω at 100MHz
5752	4822 157 11716	Bead 30Ω at 100MHz
5753	4822 157 11716	Bead 30Ω at 100MHz
5756	4822 157 11716	Bead 30Ω at 100MHz
5757	4822 157 11716	Bead 30Ω at 100MHz
5758	4822 157 11716	Bead 30Ω at 100MHz
5759	4822 157 11716	Bead 30Ω at 100MHz
5760	4822 157 11716	Bead 30Ω at 100MHz

5761	4822 157 11716	Bead 30Ω at 100MHz
5762	4822 157 11716	Bead 30Ω at 100MHz
5763	4822 157 11716	Bead 30Ω at 100MHz
5764	4822 157 11716	Bead 30Ω at 100MHz
5767	4822 157 11716	Bead 30Ω at 100MHz
5768	4822 157 11716	Bead 30Ω at 100MHz
5769	4822 157 11716	Bead 30Ω at 100MHz
5770	4822 157 11716	Bead 30Ω at 100MHz
5771	4822 157 11716	Bead 30Ω at 100MHz
5772	4822 157 11716	Bead 30Ω at 100MHz
5773	4822 157 11716	Bead 30Ω at 100MHz
5775	4822 157 11716	Bead 30Ω at 100MHz
5777	4822 157 11716	Bead 30Ω at 100MHz
5800	4822 157 11716	Bead 30Ω at 100MHz
5801	4822 157 11716	Bead 30Ω at 100MHz
5A00	2422 549 44197	Bead 220Ω at 100MHz
5A01	2422 549 44197	Bead 220Ω at 100MHz
5A02	2422 549 44197	Bead 220Ω at 100MHz
5A03	2422 549 44197	Bead 220Ω at 100MHz
5A06	2422 549 44197	Bead 220Ω at 100MHz
5A07	2422 549 44197	Bead 220Ω at 100MHz
5A19	4822 157 11828	22µH 20% 0805
5A38	2422 549 44197	Bead 220Ω at 100MHz
5E00	4822 156 21729	Bead 1kΩ 100MHz 0805
5E01	2422 549 42896	Bead 120Ω 100MHz
5E02	4822 156 21729	Bead 1kΩ 100MHz 0805
5E03	4822 156 21729	Bead 1kΩ 100MHz 0805
5E50	4822 157 11499	Bead 60Ω at 100MHz
5E51	2422 549 42896	Bead 120Ω 100MHz
5E52	2422 549 43062	Bead 600Ω at 100MHz
5E53	2422 536 00779	10µH 20%
5E54	4822 157 11499	Bead 60Ω at 100MHz
5E55	2422 549 43062	Bead 600Ω at 100MHz
5E58	2422 549 43062	Bead 600Ω at 100MHz
5I02	4822 156 21729	Bead 1kΩ 100MHz 0805
5I04	3198 018 90050	Bead 1kΩ at 100MHz
5I05	4822 157 11716	Bead 30Ω at 100MHz
5I06	4822 157 11716	Bead 30Ω at 100MHz
5I12	4822 157 11716	Bead 30Ω at 100MHz
5I13	4822 157 11716	Bead 30Ω at 100MHz
5I21	4822 157 11716	Bead 30Ω at 100MHz
5I22	4822 157 11716	Bead 30Ω at 100MHz
5I30	4822 157 11716	Bead 30Ω at 100MHz
5I31	4822 157 11716	Bead 30Ω at 100MHz
5I32	4822 157 11716	Bead 30Ω at 100MHz
5I33	4822 157 11716	Bead 30Ω at 100MHz
5I34	4822 157 11716	Bead 30Ω at 100MHz
5I35	4822 157 11716	Bead 30Ω at 100MHz
5I39	4822 157 11716	Bead 30Ω at 100MHz
5I40	4822 157 11716	Bead 30Ω at 100MHz
5I41	4822 157 11716	Bead 30Ω at 100MHz
5I42	4822 156 21729	Bead 1kΩ 100MHz 0805
5I45	4822 157 11716	Bead 30Ω at 100MHz
5I46	4822 157 11716	Bead 30Ω at 100MHz
5I47	4822 157 11716	Bead 30Ω at 100MHz
5L02	3198 018 54770	0.47µF 10% 0603
5L04	3198 018 54770	0.47µF 10% 0603
5L06	3198 018 54770	0.47µF 10% 0603
5L13	4822 156 21729	Bead 1kΩ 100MHz 0805
5L14	4822 156 21729	Bead 1kΩ 100MHz 0805
5L15	4822 156 21729	Bead 1kΩ 100MHz 0805
5L16	4822 157 11716	Bead 30Ω at 100MHz
5L17	4822 157 11716	Bead 30Ω at 100MHz
5L18	4822 157 11716	Bead 30Ω at 100MHz
5P51	4822 157 11716	Bead 30Ω at 100MHz
5T20	4822 157 11716	Bead 30Ω at 100MHz
5T22	4822 157 11716	Bead 30Ω at 100MHz
5T25	2422 535 94134	10µH 20% 0805
5U01	3104 308 20661	Transf. BD13118-02
5U02	2422 536 00779	10µH 20%
5U03	2422 549 44197	Bead 220Ω at 100MHz
5U04	2422 549 44197	Bead 220Ω at 100MHz
5U05	2422 536 00779	10µH 20%
5U06	2422 536 00779	10µH 20%
5Y00	2422 549 44197	Bead 220Ω at 100MHz
5Y01	2422 549 44197	Bead 220Ω at 100MHz
5Y02	2422 549 44197	Bead 220Ω at 100MHz
5Y03	2422 549 44197	Bead 220Ω at 100MHz
5Y06	2422 549 44197	Bead 220Ω at 100MHz
5Y07	2422 549 44197	Bead 220Ω at 100MHz
5Y09	4822 157 11716	Bead 30Ω at 100MHz
5Y11	2422 549 44197	Bead 220Ω at 100MHz
5Y12	2422 549 44197	Bead 220Ω at 100MHz
5Y14	2422 549 44197	Bead 220Ω at 100MHz
5Y15	2422 549 44197	Bead 220Ω at 100MHz
5Y16	2422 549 44197	Bead 220Ω at 100MHz
5Y17	2422 549 44197	Bead 220Ω at 100MHz
5Y18	2422 549 44197	Bead 220Ω at 100MHz
5Y20	2422 549 44197	Bead 220Ω at 100MHz
5Y21	4822 117 10353	150Ω 1% 0.1W
5Y22	4822 117 10353	150Ω 1% 0.1W
5Y23	2422 549 44197	Bead 220Ω at 100MHz
5Z01	2422 549 45325	Bead 67Ω at 100MHz
5Z02	2422 549 45325	Bead 67Ω at 100MHz
5Z03	2422 549 45325	Bead 67Ω at 100MHz
5Z04	2422 549 45325	Bead 67Ω at 100MHz
5Z05	2422 549 45325	Bead 67Ω at 100MHz



6001	4822 130 80622	BAT54
6003	4822 130 80622	BAT54
6004	4822 130 80622	BAT54
6005	4822 130 11422	PLVA2650A
6006	4822 130 11564	UDZ3.9B
6403	9340 552 30115	BA591
6500	4822 130 11416	PDZ6.8B
6501	4822 130 11416	PDZ6.8B
6502	4822 130 11416	PDZ6.8B
6503	4822 130 11416	PDZ6.8B
6504	4822 130 11397	BAS316
6505	4822 130 11416	PDZ6.8B
6506	4822 130 11416	PDZ6.8B
6507	9322 129 41685	BZM55-C12
6508	4822 130 11551	UDZS10B
6701	4822 130 11397	BAS316
6702	4822 130 11397	BAS316
6703	4822 130 11397	BAS316
6705	4822 130 11397	BAS316
6710	4822 130 11397	BAS316
6711	4822 130 11397	BAS316
6712	4822 130 11397	BAS316
6713	4822 130 11397	BAS316
6714	4822 130 11397	BAS316
6715	4822 130 11397	BAS316
6716	4822 130 11397	BAS316
6717	4822 130 11397	BAS316
6718	4822 130 11397	BAS316
6719	9322 128 69685	S1D
6720	4822 130 11397	BAS316
6721	4822 130 11397	BAS316
6723	4822 130 11397	BAS316
6A00	4822 130 11551	UDZS10B
6A01	4822 130 11397	BAS316
6A02	9322 159 70685	MM3Z9V1
6E51	4822 130 11397	BAS316
6E52	4822 130 11397	BAS316
6E53	4822 130 11397	BAS316
6E54	4822 130 11397	BAS316
6E55	4822 130 11397	BAS316
6E56	4822 130 11397	BAS316
6I08	4822 130 11423	PLVA2656A
6I09	4822 130 11423	PLVA2656A
6I10	4822 130 11397	BAS316
6I11	4822 130 11397	BAS316
6I12	4822 130 11397	BAS316
6I13	4822 130 11397	BAS316
6I22	4822 130 11416	PDZ6.8B
6I23	4822 130 11416	PDZ6.8B
6I24	4822 130 11416	PDZ6.8B
6I25	4822 130 11416	PDZ6.8B
6I26	4822 130 11416	PDZ6.8B
6I27	4822 130 11416	PDZ6.8B
6I28	4822 130 11416	PDZ6.8B
6I29	4822 130 11416	PDZ6.8B
6I30	4822 130 11416	PDZ6.8B
6I31	4822 130 11416	PDZ6.8B
6I32	4822 130 11416	PDZ6.8B
6I33	4822 130 11416	PDZ6.8B
6I35	4822 130 11416	PDZ6.8B
6I36	4822 130 11416	PDZ6.8B
6I37	4822 130 11416	PDZ6.8B
6I38	4822 130 11416	PDZ6.8B
6I39	4822 130 11416	PDZ6.8B
6I40	4822 130 11416	PDZ6.8B
6I41	4822 130 11416	PDZ6.8B
6I42	4822 130 11416	PDZ6.8B
6I43	4822 130 11416	PDZ6.8B
6I44	4822 130 11416	PDZ6.8B
6I45	4822 130 11416	PDZ6.8B
6I46	4822 130 11416	PDZ6.8B
6I47	4822 130 11416	PDZ6.8B
6I48	4822 130 11416	PDZ6.8B
6I49	9322 129 41685	BZM55-C12
6I50	4822 130 11416	PDZ6.8B
6I51	4822 130 11416	PDZ6.8B
6I52	4822 130 11416	PDZ6.8B
6I53	4822 130 11416	PDZ6.8B
6I54	4822 130 11416	PDZ6.8B
6I55	4822 130 11416	PDZ6.8B
6I56	4822 130 11416	PDZ6.8B
6I61	4822 130 11416	PDZ6.8B
6I62	4822 130 11416	PDZ6.8B
6I63	4822 130 11397	BAS316
6I64	4822 130 11397	BAS316
6I65	4822 130 11397	BAS316
6I66	4822 130 11397	BAS316
6I68	4822 130 11416	PDZ6.8B
6I69	4822 130 11416	PDZ6.8B
6I70	4822 130 11416	PDZ6.8B
6I75	4822 130 11416	PDZ6.8B
6I77	4822 130 11416	PDZ6.8B
6I90	4822 130 11416	PDZ6.8B
6I91	4822 130 11416	PDZ6.8B
6I92	4822 130 11416	PDZ6.8B
6I93	4822 130 11416	PDZ6.8B
6I99	4822 130 11423	PLVA2656A
6IA0	9322 129 41685	BZM55-C12
6IA7	4822 130 11397	BAS316
6T01	4822 130 11397	BAS316
6T03	4822 130 11397	BAS316
6T08	9340 548 71115	PDZ33B
6U01	4822 130 11397	BAS316
6U03	4822 130 11397	BAS316
6U04	4822 130 11397	BAS316
6U05	9322 129 41685	BZM55-C12
6U06	9322 203 37685	BZG05C3V9
6U07	4822 130 11416	PDZ6.8B
6U08	4822 130 80622	BAT54
6U09	4822 130 80622	BAT54
6U10	4822 130 11522	UDZ15B
6U11	4822 130 11397	BAS316
6U12	9340 548 52115	PDZ5.1B
6U13	9340 548 58115	PDZ9.1B
6U16	9340 548 52115	PDZ5.1B
6U17	4822 130 11416	PDZ6.8B



7001	9352 684 81557	SAA5801H/015
7002	3198 010 42320	BC857BW
7003	3198 010 42310	BC847BW
7004	3198 010 42310	BC847BW
7005	9322 172 45668	LF33ABDT
7006		For SW see item 0601
7007	9322 200 55668	IS41LV16100-50K
7008	3198 010 42310	BC847BW
7009	3198 010 42310	BC847BW
7010	3198 010 42320	BC857BW
7011	9322 130 41668	M24C64-WMN6
7012	9322 199 93668	M29W400DT-55N6
7013	3198 010 42310	BC847BW
7014	3198 010 42320	BC857BW
7017	9340 310 30215	PDTC144ET
7018	9352 115 40118	74LVC245APW
7019	9352 115 40118	74LVC245APW
7022	3198 010 42320	BC857BW
7320	3198 010 42310	BC847BW
7322	3198 010 42310	BC847BW
7323	9352 625 24518	TDA9321H/N2
7402	3198 010 42310	BC847BW
7403	3198 010 42310	BC847BW
7407	3198 010 42320	BC857BW
7410	3198 010 42310	BC847BW
7411	3198 010 42310	BC847BW
7414	3198 010 42310	BC847BW
7415	3198 010 42310	BC847BW
7501	3198 010 42310	BC847BW
7502	3198 010 42310	BC847BW
7515	9351 869 40118	74HC4053PW
7516	9351 869 40118	74HC4053PW
7703	3198 010 42310	BC847BW
7705	3198 010 42310	BC847BW
7706	3198 010 70400	74LVC1G14GW
7707	3198 010 42310	BC847BW
7708	3198 010 42310	BC847BW
7709	3198 010 42310	BC847BW
7710	3198 010 42310	BC847BW
7711		For SW see item 0605
7712	9352 190 20118	74LVC573APW
7713	9352 688 09557	SAA4978H/V204
7714	9965 000 02179	MS81V04160-25TB
7717	4822 209 73852	PMBT2369
7719	9322 206 19672	MSM56V16160F-7T3-FG
7720	9322 211 71702	T6TX5AFG-0001
7752	9322 204 76671	T6TU5XBG-0001
7753	9322 206 19672	MSM56V16160F-7T3-FG
7760	9352 730 86557	SAA4998H/V1
7772	9322 170 14668	LF15ABDT
7773	9322 179 78668	LF18ABDT
7774	9322 142 88668	LF25CDT
7775	3198 010 42320	BC857BW
7776	3198 010 42320	BC857BW
7777	3198 010 42320	BC857BW
7A00	4822 209 30095	LM833D
7A01	3198 010 42310	BC847BW
7A02	9322 196 03702	MSP3411G-QI-B8V3
7A03	4822 209 30095	LM833D
7A04	4822 130 60373	BC856B
7A07	9322 183 05668	TS482ID

7A08	9340 425 20115	BC847BS
7A09	4822 130 60373	BC856B
7A11	9322 199 16668	M74HC590T
7A12	9322 199 16668	M74HC590T
7A13	3198 010 42310	BC847BW
7A14	9351 869 90118	74HCT573PW
7A15	9351 869 90118	74HCT573PW
7A16	9322 208 98668	M68AF031AM70N6
7A31	9340 425 20115	BC847BS
7E01	9322 142 88668	LF25CDT
7E02		For SW see item 0602
7E03	9352 687 21165	74LVC1G126GW
7E04	9352 687 20125	74LVC1G125GW
7E05	9322 170 14668	LF15ABDT
7E10	9352 759 98118	PCA9515ADP
7E12	9340 425 20115	BC847BS
7E23	9322 181 72671	AD9883AKST-110
7E24	9322 205 36668	AD9283BRSZ-50
7E25	3198 010 42320	BC857BW
7E26	3198 010 42320	BC857BW
7E27	3198 010 42320	BC857BW
7I01	9340 425 20115	BC847BS
7I02	9340 425 20115	BC847BS
7I03	9340 425 20115	BC847BS
7I04	3198 010 42310	BC847BW
7I05	9340 425 30115	BC847BPN
7I07	4822 130 60142	BC869
7I09	3198 010 42310	BC847BW
7I10	9352 759 98118	PCA9515ADP
7I12	9351 869 40118	74HC4053PW
7I18	9322 183 61682	SII907BCQ52
7I19		For SW see item 0603
7I20	9351 869 40118	74HC4053PW
7I21	9340 425 30115	BC847BPN
7I22	3198 010 42310	BC847BW
7I23	9340 425 20115	BC847BS
7I27	3198 010 42320	BC857BW
7I29	3198 010 42320	BC857BW
7I31	3198 010 42320	BC857BW
7I32	9351 869 40118	74HC4053PW
7I35	3198 010 42310	BC847BW
7I36	3198 010 42310	BC847BW
7I37	3198 010 42320	BC857BW
7I38	3198 010 42310	BC847BW
7I40	3198 010 42310	BC847BW
7I44	9340 425 20115	BC847BS
7I45	9322 192 16685	TS2431AI
7I46	3198 010 42310	BC847BW
7I49	9340 310 30215	PDTC144ET
7I50	9340 425 30115	BC847BPN
7I51	9340 560 35235	BSH112
7I52	9340 560 35235	BSH112
7I53	9340 425 30115	BC847BPN
7I55	4822 209 16095	BA7657F
7I56	3198 010 42310	BC847BW
7I57	3198 010 42310	BC847BW
7I58	3198 010 42310	BC847BW
7I62	3198 010 42310	BC847BW
7I65	4822 209 17398	LD1117DT33
7L01	9322 181 72671	AD9883AKST-110
7L02	4822 209 17398	LD1117DT33
7P56	4822 209 17345	M62320FP
7U01	4822 130 60373	BC856B
7U02	4822 130 60373	BC856B
7U03	9340 563 82518	SI4410DY
7U04	9340 563 82518	SI4410DY
7U05	3198 010 42320	BC857BW
7U06	9340 425 20115	BC847BS
7U07	9340 425 30115	BC847BPN
7U08	4822 130 42804	BC817-25
7U09	4822 130 42804	BC817-25
7U10	3198 010 42310	BC847BW
7U11	3198 010 42310	BC847BW
7U12	3198 010 42310	BC847BW
7U13	9340 425 30115	BC847BPN
7V01	9322 217 35671	EP1C12F256C8N
7V03	9322 206 19672	MSM56V16160F-7T3-FG
7V04	9340 425 20115	BC847BS
7Y01	9340 310 30215	PDTC144ET
7Y02	3198 010 42320	BC857BW
7Y03	9340 310 30215	PDTC144ET
7Y04	9340 310 30215	PDTC144ET

PDP Audio Panel [C]

Various

1735	4822 267 10918	Connector 3p
1736	2422 025 10768	Connector 3p m
1M02	4822 267 10618	Connector 7p
1M06	2422 025 11244	Connector 7p m
1M52	2422 025 10769	Connector 9p m

⊣⊢

2700	4822 126 14247	1.5nF 50V 0603
2701	4822 126 14249	560pF 10% 50V 0603
2703	2020 552 96683	220nF 10% 50V
2704	4822 124 11767	470µF 20% 25V
2705	4822 126 14249	560pF 10% 50V 0603
2706	5322 126 11579	3.3nF 10% 63V
2707	2222 580 15649	100nF 10% 50V 0805
2709	2020 552 96683	220nF 10% 50V
2710	2020 552 96683	220nF 10% 50V
2711	2022 552 05679	1µF 10% 16V 0805
2712	4822 126 14583	470nF 10% 16V 0805
2713	4822 126 13193	4.7nF 10% 63V
2715	4822 121 51252	470nF 5% 63V
2716	3198 017 31530	15nF 20% 50V 0603
2717	2022 552 05679	1µF 10% 16V 0805
2718	2222 580 15649	100nF 10% 50V 0805
2719	4822 126 14583	470nF 10% 16V 0805
2720	2020 021 91431	22µF 20% 100V
2721	2222 580 15649	100nF 10% 50V 0805
2722	4822 126 14583	470nF 10% 16V 0805
2723	2022 552 05679	1µF 10% 16V 0805
2726	4822 126 13193	4.7nF 10% 63V
2727	4822 126 14249	560pF 10% 50V 0603
2731	4822 126 14249	560pF 10% 50V 0603
2732	4822 126 14583	470nF 10% 16V 0805
2736	4822 121 51252	470nF 5% 63V
2737	3198 017 31530	15nF 20% 50V 0603
2739	2222 580 15649	100nF 10% 50V 0805
2741	4822 126 13883	220pF 5% 50V
2743	3198 016 31020	1nF 25V 0603
2744	2222 580 15649	100nF 10% 50V 0805
2745	2020 552 96683	220nF 10% 50V
2746	4822 124 11767	470µF 20% 25V
2747	2022 552 05679	1µF 10% 16V 0805
2748	4822 126 14247	1.5nF 50V 0603
2749	5322 126 11579	3.3nF 10% 63V
2751	4822 124 40433	47µF 20% 25V
2754	2020 021 91431	22µF 20% 100V
2770	3198 017 41050	1µF 10V 0603
2776	2020 021 91431	22µF 20% 100V
2780	4822 126 14583	470nF 10% 16V 0805
2789	4822 126 14583	470nF 10% 16V 0805
2790	2222 580 15649	100nF 10% 50V 0805
2791	4822 126 13879	220nF +80-20% 16V

⊣WW⊢

3700	4822 051 30561	560Ω 5% 0.062W
3701	4822 051 30479	47Ω 5% 0.062W
3702	3198 021 38220	8.2kΩ 5% 0.062W 0603
3703	3198 021 38220	8.2kΩ 5% 0.062W 0603
3704	4822 117 13632	100kΩ 1% 0603 0.62W
3705	4822 051 30222	2.2kΩ 5% 0.062W
3706	4822 051 30392	3.9Ω 5% 0.063W 0603
3707	4822 051 30393	39kΩ 5% 0.062W
3708	4822 051 30479	47Ω 5% 0.062W
3709	4822 051 30472	4.7Ω 5% 0.062W
3710	4822 051 30393	39kΩ 5% 0.062W
3711	2322 762 60568	5.6Ω 5% 5% 2512
3712	4822 051 30472	4.7Ω 5% 0.062W
3713	4822 051 30332	3.3Ω 5% 0.062W
3714	4822 051 30392	3.9Ω 5% 0.063W 0603
3715	2322 762 60568	5.6Ω 5% 5% 2512
3716	4822 117 13632	100kΩ 1% 0603 0.62W
3717	4822 051 30222	2.2kΩ 5% 0.062W
3718	4822 051 30561	560Ω 5% 0.062W
3719	4822 051 30124	120kΩ 5% 0.062W
3720	4822 051 30479	47Ω 5% 0.062W
3721	4822 051 30471	47Ω 5% 0.062W
3722	4822 051 30124	120kΩ 5% 0.062W
3723	4822 051 30471	47Ω 5% 0.062W
3724	4822 051 30102	1kΩ 5% 0.062W
3725	4822 117 12925	47kΩ 1% 0.063W 0603
3726	4822 051 30153	15kΩ 5% 0.062W
3727	4822 051 30103	10kΩ 5% 0.062W
3728	4822 051 30153	15kΩ 5% 0.062W
3729	4822 117 12925	47kΩ 1% 0.063W 0603
3730	4822 051 30223	22kΩ 5% 0.062W
3731	4822 051 30102	1kΩ 5% 0.062W
3732	4822 051 30223	22kΩ 5% 0.062W
3733	4822 051 30562	5.6kΩ 5% 0.063W 0603
3734	4822 051 30223	22kΩ 5% 0.062W
3735	4822 117 12889	270kΩ 1% 0.063W 0603
3736	4822 117 12925	47kΩ 1% 0.063W 0603
3737	4822 117 12925	47kΩ 1% 0.063W 0603
3738	4822 117 13632	100kΩ 1% 0603 0.62W
3740	4822 117 13632	100kΩ 1% 0603 0.62W
3742	4822 117 13632	100kΩ 1% 0603 0.62W
3746	4822 051 30222	2.2kΩ 5% 0.062W
3748	4822 117 13632	100kΩ 1% 0603 0.62W
3751	4822 051 30222	2.2kΩ 5% 0.062W
3752	4822 051 30103	10kΩ 5% 0.062W
3760	4822 051 30223	22kΩ 5% 0.062W
3764	4822 117 13632	100kΩ 1% 0603 0.62W
3765	4822 117 13632	100kΩ 1% 0603 0.62W
3777	4822 051 30102	1kΩ 5% 0.062W
3778	4822 051 30479	47Ω 5% 0.062W
3999	4822 051 30102	1kΩ 5% 0.062W
9710	4822 051 20008	Jumper 0805
9711	4822 051 20008	Jumper 0805
9712	4822 051 20008	Jumper 0805
9713	4822 051 20008	Jumper 0805
9748	4822 051 20008	Jumper 0805
9757	4822 051 20008	Jumper 0805
9758	4822 051 20008	Jumper 0805
9759	4822 051 20008	Jumper 0805
9760	4822 051 20008	Jumper 0805
9761	4822 051 20008	Jumper 0805
9762	4822 051 20008	Jumper 0805
9763	4822 051 20008	Jumper 0805
9764	4822 051 20008	Jumper 0805
9765	4822 051 20008	Jumper 0805
9766	4822 051 20008	Jumper 0805
9768	4822 051 20008	Jumper 0805
9770	4822 051 20008	Jumper 0805
9790	4822 051 20008	Jumper 0805
9795	4822 051 20008	Jumper 0805
9796	4822 051 20008	Jumper 0805
9806	4822 051 20008	Jumper 0805
9807	4822 051 20008	Jumper 0805
9808	4822 051 20008	Jumper 0805

⌐~~⌐

5700	2422 536 00942	33µH 20%
5701	4822 157 11716	Bead 30Ω at 100MHz
5702	2422 536 00942	33µH 20%
5705	4822 157 11411	Bead 80Ω at 100MHz
5708	4822 157 11411	Bead 80Ω at 100MHz

⊣▶⊢

6700	4822 130 11522	UDZ15B
6702	9322 150 18685	BZX384-C47
6703	4822 130 10838	UDZ3.3B
6704	4822 130 11551	UDZS10B
6705	4822 130 11551	UDZS10B



7700	9322 202 89668	LM393P
7701	9352 729 65112	TDA8925ST/N1
7702	3198 010 42310	BC847BW
7705	3198 010 42310	BC847BW
7706	3198 010 42310	BC847BW
7707	3198 010 42310	BC847BW
7708	3198 010 42320	BC857BW
7709	3198 010 42310	BC847BW
7710	3198 010 42310	BC847BW
7711	3198 010 42320	BC857BW
7712	3198 010 42310	BC847BW
7713	3198 010 42310	BC847BW
7715	3198 010 42310	BC847BW
7716	3198 010 42310	BC847BW
7717	3198 010 42310	BC847BW
7720	3198 010 42310	BC847BW

Side I/O Panel [D]

Various

0206	3104 308 12561	Side I/O bracket
1001	2422 026 05133	Connector SVHS 4p f
1002	4822 267 10975	Connector 3p
1010	4822 267 31014	Socket head phone
1016	3104 328 28881	Side I/O assy
1M36	2422 025 17179	Connector 11p m

⊣⊢

2003	2022 552 05679	1µF 10% 16V 0805
2004	3198 016 36810	680pF 25V 0603
2005	2020 552 94427	100pF 5% 50V
2006	3198 016 36810	680pF 25V 0603
2007	2020 552 94427	100pF 5% 50V
2008	2238 916 15641	22nF 10% 25V 0603
2009	5322 126 11583	10nF 10% 50V 0603
2010	2238 916 15641	22nF 10% 25V 0603
2011	5322 126 11583	10nF 10% 50V 0603

3000	4822 051 30759	75Ω 5% 0.062W
3004	4822 051 30759	75Ω 5% 0.062W
3008	4822 051 30222	2.2kΩ 5% 0.062W
3009	4822 051 30102	1kΩ 5% 0.062W
3010	4822 051 30333	33kΩ 5% 0.062W
3011	4822 051 30392	3.9Ω 5% 0.063W 0603
3012	4822 051 30102	1kΩ 5% 0.062W
3013	4822 051 30333	33kΩ 5% 0.062W
3016	4822 051 30103	10kΩ 5% 0.062W
3020	4822 051 30103	10kΩ 5% 0.062W
9004	4822 051 30008	Jumper 0603
9005	4822 051 30008	Jumper 0603
9006	4822 051 30008	Jumper 0603
9007	4822 051 30008	Jumper 0603
9008	4822 051 30008	Jumper 0603
9009	4822 051 30008	Jumper 0603
9010	4822 051 30008	Jumper 0603
9011	4822 051 30008	Jumper 0603

6000	4822 130 11416	PDZ6.8B
6001	4822 130 11416	PDZ6.8B
6002	4822 130 11416	PDZ6.8B
6003	4822 130 11416	PDZ6.8B
6004	4822 130 11416	PDZ6.8B
6005	4822 130 11416	PDZ6.8B
6006	4822 130 11416	PDZ6.8B
6007	4822 130 11416	PDZ6.8B
6008	4822 130 11416	PDZ6.8B
6009	4822 130 11416	PDZ6.8B
6010	4822 130 11416	PDZ6.8B
6011	4822 130 11416	PDZ6.8B

Top Control Assy [E]

Various

0049	3104 308 11601	Mains knob
0054	3104 308 11591	Mains knob frame
0345	2422 025 16544	Connector 6p m
1701	4822 276 13775	Switch
1702	4822 276 13775	Switch
1703	4822 276 13775	Switch
1704	4822 276 13775	Switch
1705	4822 276 13775	Switch
1710	4822 276 14007	Switch 2P 0.1A 12V
8345	3104 311 06941	Cable 6P/680/6P

3008	4822 117 10845	620Ω 1% 0.1W
3010	4822 117 11534	1.1kΩ 1% 0.1W
3011	4822 117 11951	2kΩ 1% 0.1W
3013	4822 117 13528	200Ω 1% 0.125W 0805
3014	3198 031 03910	390Ω 1% 0402
3017	4822 051 30339	33Ω 5% 0.062W
3018	4822 051 30339	33Ω 5% 0.062W
3019	4822 051 30339	33Ω 5% 0.062W
3020	4822 051 30339	33Ω 5% 0.062W
3021	4822 051 30339	33Ω 5% 0.062W
3022	4822 051 30339	33Ω 5% 0.062W
3023	4822 051 30339	33Ω 5% 0.062W
3024	4822 051 30339	33Ω 5% 0.062W
3025	4822 051 30339	33Ω 5% 0.062W
3026	4822 051 30339	33Ω 5% 0.062W
3027	4822 051 30339	33Ω 5% 0.062W
3028	4822 051 30339	33Ω 5% 0.062W
3999	4822 117 13602	2.2kΩ 5% 0.01W 0402
9000	4822 117 13605	Jumper 0402

6001	9322 198 19685	SML512BC2T
6002	9322 198 19685	SML512BC2T
6003	9322 198 19685	SML512BC2T
6004	9322 198 19685	SML512BC2T
6005	9322 198 19685	SML512BC2T
6006	9322 198 19685	SML512BC2T
6007	9322 198 19685	SML512BC2T
6008	9322 198 19685	SML512BC2T
6009	9322 198 19685	SML512BC2T
6010	9322 198 19685	SML512BC2T
6011	9322 198 19685	SML512BC2T
6012	9322 198 19685	SML512BC2T

SCART 3 [H]

Various

1003	2422 025 14911	Socket Euro 21p f
1M07	4822 267 10637	Connector 5p

2500	2022 552 05679	1µF 10% 16V 0805
2501	2020 552 94427	100pF 5% 50V
2502	2022 552 05679	1µF 10% 16V 0805
2503	2020 552 94427	100pF 5% 50V
2504	2022 552 05679	1µF 10% 16V 0805
2505	2022 552 05679	1µF 10% 16V 0805
2506	2238 586 59812	100nF 20% 50V 0603
2507	5322 126 11578	1nF 10% 50V 0603
2508	2022 552 05679	1µF 10% 16V 0805
2509	2238 586 59812	100nF 20% 50V 0603
2510	4822 126 14241	330pF 0603 50V
2511	2238 586 59812	100nF 20% 50V 0603
2512	2238 586 59812	100nF 20% 50V 0603
2513	2238 586 59812	100nF 20% 50V 0603
2515	2022 552 05679	1µF 10% 16V 0805
2516	2022 552 05679	1µF 10% 16V 0805
2517	2022 552 05679	1µF 10% 16V 0805

3500	4822 051 30101	100Ω 5% 0.062W
3501	4822 051 30101	100Ω 5% 0.062W
3502	4822 051 30223	22kΩ 5% 0.062W
3503	4822 051 30101	100Ω 5% 0.062W
3504	4822 051 30101	100Ω 5% 0.062W
3505	4822 051 30223	22kΩ 5% 0.062W
3506	4822 051 30759	75Ω 5% 0.062W
3507	4822 051 30759	75Ω 5% 0.062W
3508	4822 051 30759	75Ω 5% 0.062W
3509	4822 051 30101	100Ω 5% 0.062W
3510	4822 051 30759	75Ω 5% 0.062W
3511	4822 051 30479	47Ω 5% 0.062W
3512	4822 051 30479	47Ω 5% 0.062W
3513	4822 051 30479	47Ω 5% 0.062W
3514	4822 051 30479	47Ω 5% 0.062W
3515	4822 051 30479	47Ω 5% 0.062W
3516	4822 051 30479	47Ω 5% 0.062W
3517	4822 117 12925	47kΩ 1% 0.063W 0603
3522	4822 051 30272	2.7kΩ 5% 0.062W
3523	4822 051 30223	22kΩ 5% 0.062W
3524	4822 051 30479	47Ω 5% 0.062W
3525	4822 051 30102	1kΩ 5% 0.062W
3526	5322 117 13056	8.2kΩ 1% 0.063W 0603
3527	4822 051 30683	68kΩ 5% 0.062W
3528	4822 051 30223	22kΩ 5% 0.062W
3529	4822 051 30102	1kΩ 5% 0.062W
3535	4822 051 30479	47Ω 5% 0.062W
3536	4822 051 30103	10kΩ 5% 0.062W
3543	4822 051 30759	75Ω 5% 0.062W
3599	4822 051 30102	1kΩ 5% 0.062W
3999	4822 051 30102	1kΩ 5% 0.062W
9502	4822 051 30008	Jumper 0603
9508	4822 051 30008	Jumper 0603
9509	3198 036 90010	Wire 0.58mm
9510	3198 036 90010	Wire 0.58mm
9511	3198 036 90010	Wire 0.58mm
9512	3198 036 90010	Wire 0.58mm
9513	3198 036 90010	Wire 0.58mm
9514	3198 036 90010	Wire 0.58mm
9515	3198 036 90010	Wire 0.58mm
9521	4822 051 30008	Jumper 0603
9523	3198 036 90010	Wire 0.58mm
9524	4822 051 30008	Jumper 0603
9525	3198 036 90010	Wire 0.58mm
9526	3198 036 90010	Wire 0.58mm

6500	4822 130 11416	PDZ6.8B
6501	4822 130 11416	PDZ6.8B
6502	4822 130 11416	PDZ6.8B
6503	4822 130 11416	PDZ6.8B
6504	4822 130 11397	BAS316
6505	4822 130 11416	PDZ6.8B
6506	4822 130 11416	PDZ6.8B
6507	9340 548 61115	PDZ12B
6508	4822 130 11551	UDZS10B

7501	3198 010 42310	BC847BW
7502	3198 010 42310	BC847BW
7515	9351 869 40118	74HC4053PW
7516	9351 869 40118	74HC4053PW

LED Panel [J]

Various

0163	3122 124 36081	Day light filter
0345	2422 025 16961	Connector 6p m SMD
0345	2422 025 18741	Connector 6p m
1040	9322 206 81667	TSOP34836YA1
1M01	2422 025 17103	Connector 3p m SMD
1M01	2422 025 18738	Connector 3p m
1M20	2422 025 17441	Connector 12p m
1M20	2422 025 18736	Connector 12p m

2030	4822 124 23002	10µF 16V
2040	4822 124 12095	100µF 20% 16V
2060	5322 124 41945	22µF 20% 35V
2070	4822 126 14583	470nF 10% 16V 0805
2071	4822 124 23002	10µF 16V

3011	4822 117 13545	100Ω 1% 0402
3020	4822 117 13606	10kΩ 5% 0.01W 0402
3030	3198 031 04720	4.7kΩ 5% 0402
3031	4822 117 11297	100kΩ 5% 0.1W
3031	4822 117 12889	270kΩ 1% 0.063W 0603
3031	4822 117 13632	100kΩ 1% 0603 0.62W
3032	2322 705 70184	180Ω 5% 0402
3033	4822 051 30102	1kΩ 5% 0.062W
3033	4822 117 13548	1kΩ 5% 0402
3034	4822 117 13548	1kΩ 5% 0402
3035	3198 031 04720	4.7kΩ 5% 0402
3036	3198 031 02280	2.2Ω 5% 0.1W 0402
3037	3198 031 02280	2.2Ω 5% 0.1W 0402
3040	4822 117 13597	330Ω 5% 0402 0.01W
3041	4822 117 13606	10kΩ 5% 0.01W 0402
3042	3198 031 06820	6.8kΩ 5% 0.01W 0402
3051	4822 117 13597	330Ω 5% 0402 0.01W
3060	4822 117 13606	10kΩ 5% 0.01W 0402
3061	4822 051 30331	330Ω 5% 0.062W
3062	4822 117 11373	100Ω 1% 0805
3063	4822 117 13606	10kΩ 5% 0.01W 0402
3064	4822 117 11373	100Ω 1% 0805
3070	2322 705 70475	4.7MΩ 5% 0402
3071	2322 705 70475	4.7MΩ 5% 0402
3072	4822 117 13548	1kΩ 5% 0402
3073	3198 031 03320	3.3kΩ 5% 0402
3074	4822 117 13606	10kΩ 5% 0.01W 0402
3075	3198 031 04720	4.7kΩ 5% 0402
3076	3198 031 03320	3.3kΩ 5% 0402
3077	3198 031 03320	3.3kΩ 5% 0402
3078	3198 031 03320	3.3kΩ 5% 0402
3079	3198 031 03320	3.3kΩ 5% 0402
3091	4822 117 13606	10kΩ 5% 0.01W 0402
3093	4822 117 13606	10kΩ 5% 0.01W 0402
3096	4822 117 13606	10kΩ 5% 0.01W 0402
3999	3198 031 04720	4.7kΩ 5% 0402
9010	4822 117 13605	Jumper 0402
9012	4822 117 13605	Jumper 0402
9013	4822 117 13605	Jumper 0402
9014	4822 117 13605	Jumper 0402
9015	4822 117 13605	Jumper 0402
9016	4822 117 13605	Jumper 0402
9017	4822 117 13605	Jumper 0402
9019	4822 117 13605	Jumper 0402
9022	4822 051 30008	Jumper 0603
9024	4822 051 30008	Jumper 0603
9026	4822 117 13605	Jumper 0402
9027	4822 117 13605	Jumper 0402
9040	4822 117 13605	Jumper 0402
9041	4822 117 13605	Jumper 0402
9042	4822 117 13605	Jumper 0402
9043	4822 117 13605	Jumper 0402
9044	4822 117 13605	Jumper 0402
9050	4822 117 13605	Jumper 0402
9060	4822 117 13605	Jumper 0402
9081	4822 117 13605	Jumper 0402
9082	4822 117 13605	Jumper 0402



6030	4822 130 11397	BAS316
6031	4822 130 11397	BAS316
6051	4822 130 11395	TLMH3100
6051	4822 130 83915	TLMV3100
6060	9322 208 45685	SML512BC4TL
6061	4822 130 11397	BAS316
6070	9322 140 63685	TEMD5000



7030	3198 010 42320	BC857BW
7031	5322 130 62804	BCP53
7032	3198 010 42310	BC847BW
7060	3198 010 42310	BC847BW
7061	3198 010 42310	BC847BW
7070	9322 192 63668	LM358P

11. Revision List

Manual xxxx xxx xxxx.0

- First release.