Colour Television

Chassis

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Service Manual

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PHILIPS

1. Revision List

Manual xxxx xxx xxxx.0
- First release.

Manual xxxx xxx xxxx.1
- All chapters: added new model numbers, seeTable 2-1.
- Chapter 9: added a block diagram for sets with Sharp Forward Integration.
- Chapter 10: added schematic diagrams for sets with Sharp Forward Integration.

Manual xxxx xxx xxxx.2
- All chapters: added new model number, seeTable 2-1.
- Chapter 2, 2.3.2 Rear Connections: added remark on availability of Audio/Video Out on SCART 1 and 2.
- Chapter 6: updated Table 6-3 Option Code overview (for all screensizes).
- Chapter 9: added a block diagram for 37" sets with LGD Forward Integration.
- Chapter 10: added schematic diagrams for 37" sets with LGD Forward Integration.

Manual xxxx xxx xxxx.3
- Chapter 5, Updated flowchart SSB replacement see section 5.8.12 SSB Replacement.
- Chapter 5 an 6, Updated SSB identification in 5.2.3 Customer Service Mode (CSM) as well as in see section 6.5.1 SSB identification.
- Chapter 8: Added Figure 8-9 and Figure 8-10, Block diagrams and pin configuration of BUF16821 and BD8162EKV.

2. Technical Specifications and Connections

Index of this chapter:

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

2.1 Technical Specifications

For on-line product support please use the links in Table 2-1. Here is product information available, as well as getting started, user manuals, frequently asked questions and software & drivers.

Table 2-1 Described Model numbers

CTN	Styling	Published in:
32PFL5604H/12 (LGD)	P & S	3122 785 18440
32PFL5604H/12 (Sharp)		3122 785 18441
32PFL5624H/12 (LGD)		3122 785 18441
32PFL5624H/12 (Sharp)		3122 785 18441
37PFL5604H/12 (LGD)		3122 785 18442
42PFL5604H/12 (LGD)		3122 785 18440
42PFL5624H/12 (LGD)		3122 785 18441

2.2 Directions for Use

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

2.3 Connections

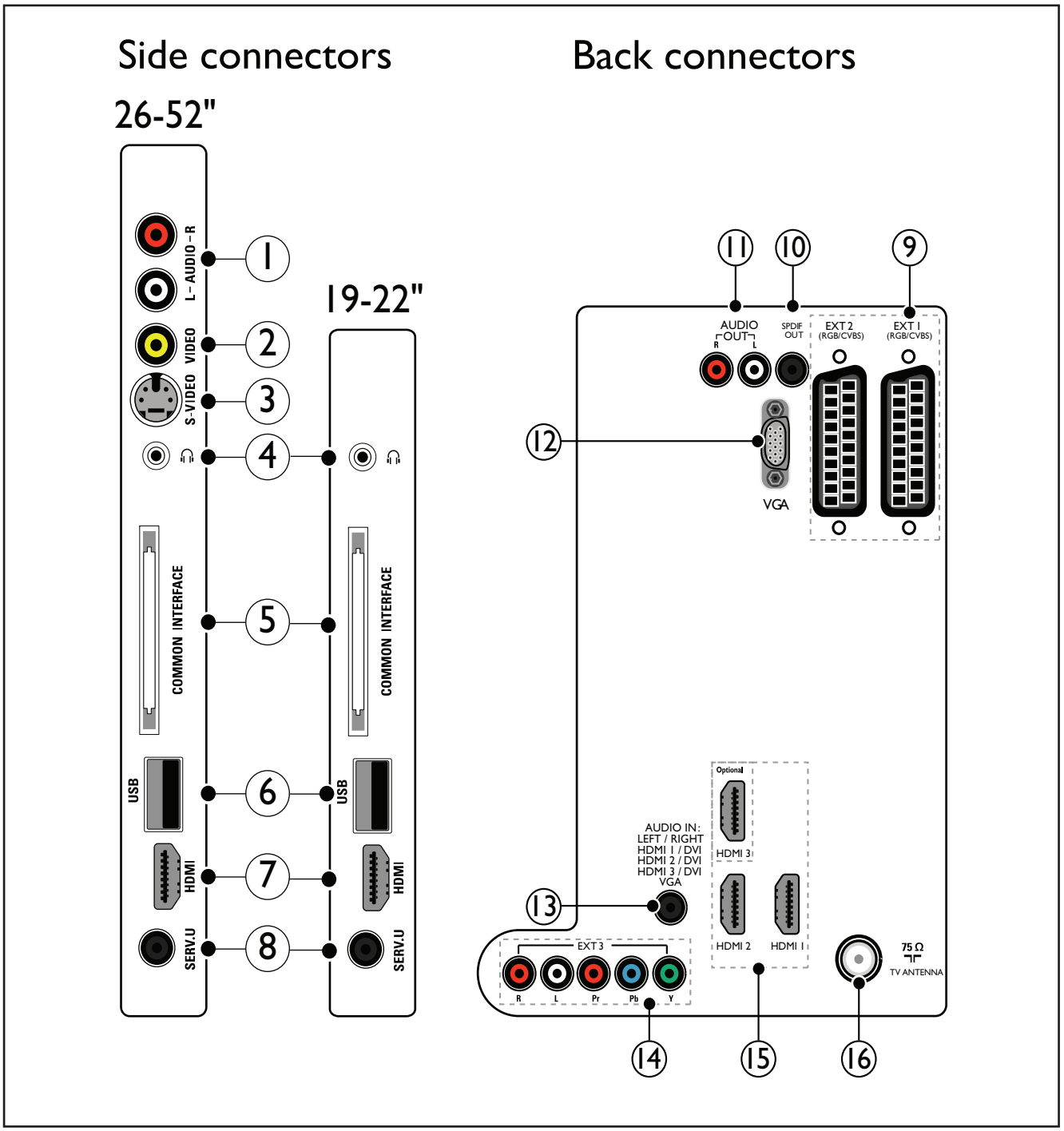

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Figure 2-1 Connection overview

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

2.3.1 Side Connections

1 - Cinch: Audio - In

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

2 - Cinch: Video CVBS - In

Ye - Video CVBS	1 V_{PP} / 75 Ω	

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

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

4 - Head phone (Output)

Bk - Head phone	32 - 600 Ω / 10 mW	

5 - Common Interface

68p - See diagram B05C SSB: PCMCIA		

6 - USB2.0

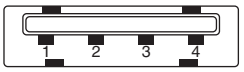

Figure 2-2 USB (type A)

1	- +5V		
2	- Data (-)		
3	- Data (+)		
4	- Ground	Gnd	

7 - HDMI: Digital Video, Digital Audio - In (see connector 15)

8 - Service Connector (UART)

1	- Ground	Gnd	
2	- UART_TX	Transmit	
3	- UART_RX	Receive	

2.3.2 Rear Connections

9 - EXT1/2: Video RGB - In, CVBS - In/Out, Audio - In/Out (*)

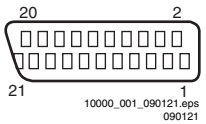

Figure 2-3 SCART connector

1	- Audio R (*)	0.5 V_{RMS} / 1 kΩ	
2	- Audio R	0.5 V_{RMS} / 10 kΩ	
3	- Audio L (*)	0.5 V_{RMS} / 1 kΩ	
4	- Ground Audio	Gnd	
5	- Ground Blue	Gnd	
6	- Audio L	0.5 V_{RMS} / 10 kΩ	
7	- Video Blue	0.7 V_{PP} / 75 Ω	
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 Ω	
12	- n.c.		
13	- Ground Red	Gnd	
14	- Ground P50	Gnd	
15	- Video Red	0.7 V_{PP} / 75 Ω	
16	- Status/FBL	0 - 0.4 V: INT 1 - 3 V: EXT / 75 Ω	
17	- Ground Video	Gnd	
18	- Ground FBL	Gnd	
19	- Video CVBS/Y (*)	1 V_{PP} / 75 Ω	
20	- Video CVBS	1 V_{PP} / 75 Ω	
21	- Shield	Gnd	

(*) **Note:** The AV output on SCART 1 or 2 will be enabled (SW controlled) for analogue RF channels only, if the decoder is turned “on” in the Menu: select Setup -> Installation -> Decoder -> Status: select SCART 1 or 2 -> Channel: select any analogue channel.

10 - Cinch: S/PDIF - Out

Bk	- Coaxial	0.4 - 0.6V_{PP} / 75 Ω	

11 - Cinch: Audio - Out

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

12 - VGA: Video RGB - In

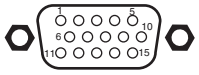

Figure 2-4 VGA Connector

1	- Video Red	0.7 V_{PP} / 75 Ω	
2	- Video Green	0.7 V_{PP} / 75 Ω	
3	- Video Blue	0.7 V_{PP} / 75 Ω	
4	- n.c.		
5	- Ground	Gnd	
6	- Ground Red	Gnd	
7	- Ground Green	Gnd	
8	- Ground Blue	Gnd	
9	- +5V_{DC}	+5 V	
10	- Ground Sync	Gnd	
11	- n.c.		
12	- DDC_SDA	DDC data	
13	- H-sync	0 - 5 V	
14	- V-sync	0 - 5 V	
15	- DDC_SCL	DDC clock	

13 - Mini Jack: Audio - In

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

14 - EXT3: Cinch: Video YPbPr - In, Audio - In

Gn	- Video Y	1 V_{PP} / 75 Ω	
Bu	- Video Pb	0.7 V_{PP} / 75 Ω	
Rd	- Video Pr	0.7 V_{PP} / 75 Ω	
Rd	- Audio - R	0.5 V_{RMS} / 10 kΩ	
Wh	- Audio - L	0.5 V_{RMS} / 10 kΩ	

15 - HDMI 1, 2 & 3 Digital Video, Digital Audio - In

Figure 2-5 HDMI (type A) connector

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

16 - Aerial - In

-	- IEC-type (EU)	Coax, 75 Ω	

2.4 Chassis Overview

Refer to chapter 9. Block Diagrams for PWB/CBA locations.

3. Precautions, Notes, and Abbreviation List

Index of this chapter:

3.1 Safety Instructions

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

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

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

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

3.2 Warnings

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

3.3 Notes

3.3.1 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 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.

3.3.2 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 kΩ).
- Resistor values with no multiplier may be indicated with either an “E” or an “R” (e.g. 220E or 220R indicates 220 Ω).
- All capacitor values are given in micro-farads ($\mu = \times 10^{-6}$), nano-farads ($n = \times 10^{-9}$), or pico-farads ($p = \times 10^{-12}$).
- 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 on the Philips Spare Parts Web Portal.

3.3.3 Spare Parts

For the latest spare part overview, consult your Philips Spare Part web portal.

3.3.4 BGA (Ball Grid Array) ICs

Introduction

For more information on how to handle BGA devices, visit this URL: http://www.atyourservice-magazine.com. Select “Magazine”, then go to “Repair downloads”. Here you will find Information on how to deal with BGA-ICs.

BGA Temperature Profiles

For BGA-ICs, you **must** use the correct temperature-profile. Where applicable and available, this profile is added to the IC Data Sheet information section in this manual.

3.3.5 Lead-free Soldering

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

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

3.3.6 Alternative BOM identification

It should be noted that on the European Service website, “Alternative BOM” is referred to as “Design variant”.

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

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

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Figure 3-1 Serial number (example)

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

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

3.3.8 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.

3.4 Abbreviation List

0/6/12	SCART switch control signal on A/V board. 0 = loop through (AUX to TV), 6 = play 16 : 9 format, 12 = play 4 : 3 format
AARA	Automatic Aspect Ratio Adaptation: algorithm that adapts aspect ratio to remove horizontal black bars; keeps the original aspect ratio
ACI	Automatic Channel Installation: algorithm that installs TV channels directly from a cable network by means of a predefined TXT page
ADC	Analogue to Digital Converter
AFC	Automatic Frequency Control: control signal used to tune to the correct frequency
AGC	Automatic Gain Control: algorithm that controls the video input of the feature box
AM	Amplitude Modulation
AP	Asia Pacific
AR	Aspect Ratio: 4 by 3 or 16 by 9
ASF	Auto Screen Fit: algorithm that adapts aspect ratio to remove horizontal black bars without discarding video information
ATSC	Advanced Television Systems Committee, the digital TV standard in the USA
ATV	See Auto TV
Auto TV	A hardware and software control system that measures picture content, and adapts image parameters in a dynamic way
AV	External Audio Video
AVC	Audio Video Controller
AVIP	Audio Video Input Processor
B/G	Monochrome TV system. Sound carrier distance is 5.5 MHz
BDS	Business Display Solutions (iTV)
BLR	Board-Level Repair
BTSC	Broadcast Television Standard Committee. Multiplex FM stereo sound system, originating from the USA and used e.g. in LATAM and AP-NTSC countries
B-TXT	Blue TeleteXT
C	Centre channel (audio)
CEC	Consumer Electronics Control bus: remote control bus on HDMI connections
CL	Constant Level: audio output to connect with an external amplifier
CLR	Component Level Repair
ComPair	Computer aided rePair
CP	Connected Planet / Copy Protection
CSM	Customer Service Mode
CTI	Color Transient Improvement: manipulates steepness of chroma transients
CVBS	Composite Video Blanking and Synchronization
DAC	Digital to Analogue Converter
DBE	Dynamic Bass Enhancement: extra low frequency amplification
DCM	Data Communication Module. Also referred to as System Card or Smartcard (for iTV).
DDC	See "E-DDC"
D/K	Monochrome TV system. Sound carrier distance is 6.5 MHz
DFI	Dynamic Frame Insertion

DFU	Directions For Use: owner's manual
DMR	Digital Media Reader: card reader
DMSD	Digital Multi Standard Decoding
DNM	Digital Natural Motion
DNR	Digital Noise Reduction: noise reduction feature of the set
DRAM	Dynamic RAM
DRM	Digital Rights Management
DSP	Digital Signal Processing
DST	Dealer Service Tool: special remote control designed for service technicians
DTCP	Digital Transmission Content Protection; A protocol for protecting digital audio/video content that is traversing a high speed serial bus, such as IEEE-1394
DVB-C	Digital Video Broadcast - Cable
DVB-T	Digital Video Broadcast - Terrestrial
DVD	Digital Versatile Disc
DVI(-d)	Digital Visual Interface (d= digital only)
E-DDC	Enhanced Display Data Channel (VESA standard for communication channel and display). Using E-DDC, the video source can read the EDID information form the display.
EDID	Extended Display Identification Data (VESA standard)
EEPROM	Electrically Erasable and Programmable Read Only Memory
EMI	Electro Magnetic Interference
EPG	Electronic Program Guide
EPLD	Erasable Programmable Logic Device
EU	Europe
EXT	EXTernal (source), entering the set by SCART or by cinches (jacks)
FDS	Full Dual Screen (same as FDW)
FDW	Full Dual Window (same as FDS)
FLASH	FLASH memory
FM	Field Memory or Frequency Modulation
FPGA	Field-Programmable Gate Array
FTV	Flat TeleVision
Gb/s	Giga bits per second
G-TXT	Green TeleteXT
H	H_sync to the module
HD	High Definition
HDD	Hard Disk Drive
HDCP	High-bandwidth Digital Content Protection: A “key” encoded into the HDMI/DVI signal that prevents video data piracy. If a source is HDCP coded and connected via HDMI/DVI without the proper HDCP decoding, the picture is put into a “snow vision” mode or changed to a low resolution. For normal content distribution the source and the display device must be enabled for HDCP “software key” decoding.
HDMI	High Definition Multimedia Interface
HP	HeadPhone
I	Monochrome TV system. Sound carrier distance is 6.0 MHz
I^2C	Inter IC bus
I^2D	Inter IC Data bus
I^2S	Inter IC Sound bus
IF	Intermediate Frequency
IR	Infra Red
IRQ	Interrupt Request
ITU-656	The ITU Radio communication Sector (ITU-R) is a standards body subcommittee of the International Telecommunication Union relating to radio communication. ITU-656 (a.k.a. SDI), is a digitized video format used for broadcast grade video. Uncompressed digital component or digital composite signals can be used. The SDI signal is self-synchronizing, uses 8 bit or 10 bit data words, and has a maximum data rate of 270 Mbit/s, with a minimum bandwidth of 135 MHz.
ITV	Institutional TeleVision; TV sets for hotels, hospitals etc.
LS	Last Status; The settings last chosen by the customer and read and stored in RAM or in the NVM. They are called at start-up of the set to configure it according to the customer's preferences
LATAM	Latin America
LCD	Liquid Crystal Display
LED	Light Emitting Diode
L/L'	Monochrome TV system. Sound carrier distance is 6.5 MHz. L' is Band I, L is all bands except for Band I
LPL	LG.Philips LCD (supplier)
LS	Loudspeaker
LVDS	Low Voltage Differential Signalling
Mbps	Mega bits per second
M/N	Monochrome TV system. Sound carrier distance is 4.5 MHz
MHEG	Part of a set of international standards related to the presentation of multimedia information, standardised by the Multimedia and Hypermedia Experts Group. It is commonly used as a language to describe interactive television services
MIPS	Microprocessor without Interlocked Pipeline-Stages; A RISC-based microprocessor
MOP	Matrix Output Processor
MOSFET	Metal Oxide Silicon Field Effect Transistor, switching device
MPEG	Motion Pictures Experts Group
MPIF	Multi Platform InterFace
MUTE	MUTE Line
MTV	Mainstream TV: TV-mode with Consumer TV features enabled (iTV)
NC	Not Connected
NICAM	Near Instantaneous Compounded Audio Multiplexing. This is a digital sound system, mainly used in Europe.
NTC	Negative Temperature Coefficient, non-linear resistor
NTSC	National Television Standard Committee. Color system mainly used in North America and Japan. Color 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 such as alignments
O/C	Open Circuit
OSD	On Screen Display
OAD	Over the Air Download. Method of software upgrade via RF transmission. Upgrade software is broadcasted in TS with TV channels.
OTC	On screen display Teletext and Control; also called Artistic (SAA5800)
P50	Project 50: communication protocol between TV and peripherals
PAL	Phase Alternating Line. Color system mainly used in West Europe (color carrier= 4.433619 MHz) and South America (color carrier PAL M=

	3.575612 MHz and PAL N= 3.582056 MHz)
PCB	Printed Circuit Board (same as “PWB”)
PCM	Pulse Code Modulation
PDP	Plasma Display Panel
PFC	Power Factor Corrector (or Pre-conditioner)
PIP	Picture In Picture
PLL	Phase Locked Loop. Used for e.g. FST tuning systems. The customer can give directly the desired frequency
POD	Point Of Deployment: a removable CAM module, implementing the CA system for a host (e.g. a TV-set)
POR	Power On Reset, signal to reset the uP
PSDL	Power Supply for Direct view LED backlight with 2D-dimming
PSL	Power Supply with integrated LED drivers
PSLS	Power Supply with integrated LED drivers with added Scanning functionality
PTC	Positive Temperature Coefficient, non-linear resistor
PWB	Printed Wiring Board (same as “PCB”)
PWM	Pulse Width Modulation
QRC	Quasi Resonant Converter
QTNR	Quality Temporal Noise Reduction
QVCP	Quality Video Composition Processor
RAM	Random Access Memory
RGB	Red, Green, and Blue. The primary color signals for TV. By mixing levels of R, G, and B, all colors (Y/C) are reproduced.
RC	Remote Control
RC5 / RC6	Signal protocol from the remote control receiver
RESET	RESET signal
ROM	Read Only Memory
RSDS	Reduced Swing Differential Signalling data interface
R-TXT	Red TeleteXT
SAM	Service Alignment Mode
S/C	Short Circuit
SCART	Syndicat des Constructeurs d'Appareils Radiorécepteurs et Téléviseurs
SCL	Serial Clock I^2C
SCL-F	CLock Signal on Fast I^2C bus
SD	Standard Definition
SDA	Serial Data I^2C
SDA-F	DAta Signal on Fast I^2C bus
SDI	Serial Digital Interface, see “ITU-656”
SDRAM	Synchronous DRAM
SECAM	SEequence Couleur Avec Mémoire. Color system mainly used in France and East Europe. Color carriers= 4.406250 MHz and 4.250000 MHz
SIF	Sound Intermediate Frequency
SMPS	Switched Mode Power Supply
SoC	System on Chip
SOG	Sync On Green
SOPS	Self Oscillating Power Supply
SPI	Serial Peripheral Interface bus; a 4-wire synchronous serial data link standard
S/PDIF	Sony Philips Digital InterFace
SRAM	Static RAM
SRP	Service Reference Protocol
SSB	Small Signal Board
SSC	Spread Spectrum Clocking, used to reduce the effects of EMI
STB	Set Top Box
STBY	STand-BY
SVGA	800 × 600 (4:3)
SVHS	Super Video Home System
SW	Software
SWAN	Spatial temporal Weighted Averaging Noise reduction
SXGA	1280 × 1024
TFT	Thin Film Transistor
THD	Total Harmonic Distortion
TMDS	Transmission Minimized Differential Signalling
TS	Transport Stream
TXT	TeleteXT
TXT-DW	Dual Window with TeleteXT
UI	User Interface
uP	Microprocessor
UXGA	1600 × 1200 (4:3)
V	V-sync to the module
VESA	Video Electronics Standards Association
VGA	640 × 480 (4:3)
VL	Variable Level out: processed audio output toward external amplifier
VSB	Vestigial Side Band; modulation method
WYSIWYR	What You See Is What You Record: record selection that follows main picture and sound
WXGA	1280 × 768 (15:9)
XTAL	Quartz crystal
XGA	1024 × 768 (4:3)
Y	Luminance signal
Y/C	Luminance (Y) and Chrominance (C) signal
YPbPr	Component video. Luminance and scaled color difference signals (B-Y and R-Y)
YUV	Component video

4. Mechanical Instructions

Index of this chapter:

Notes:

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

4.1 Cable Dressing

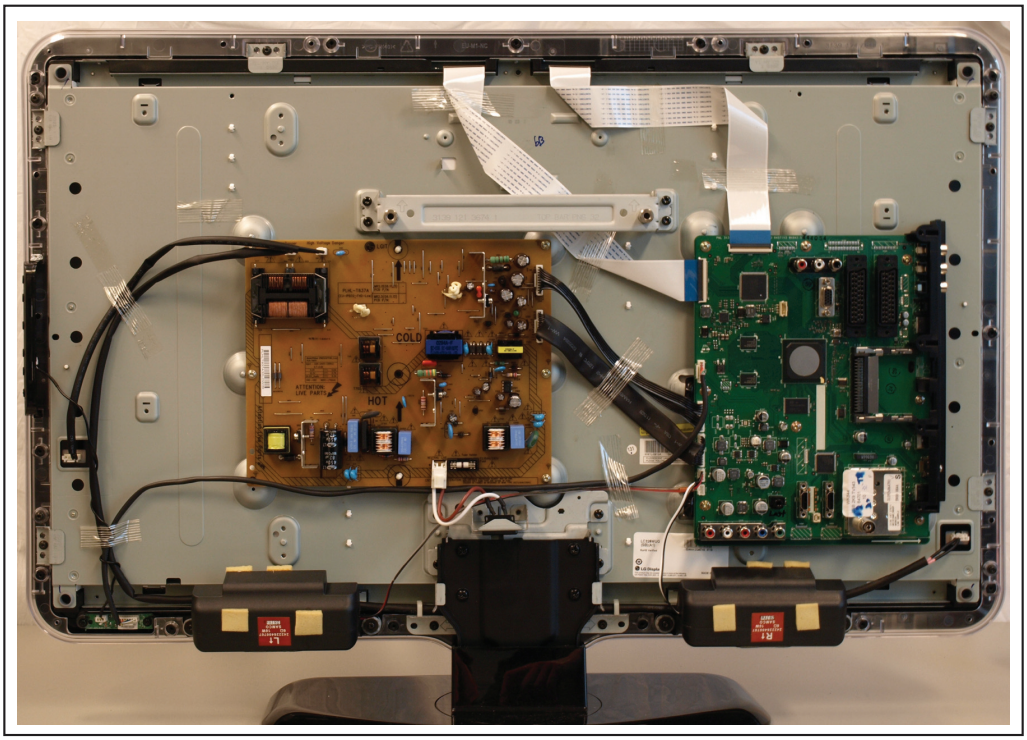

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Figure 4-1 Cable dressing 32" with LGD display

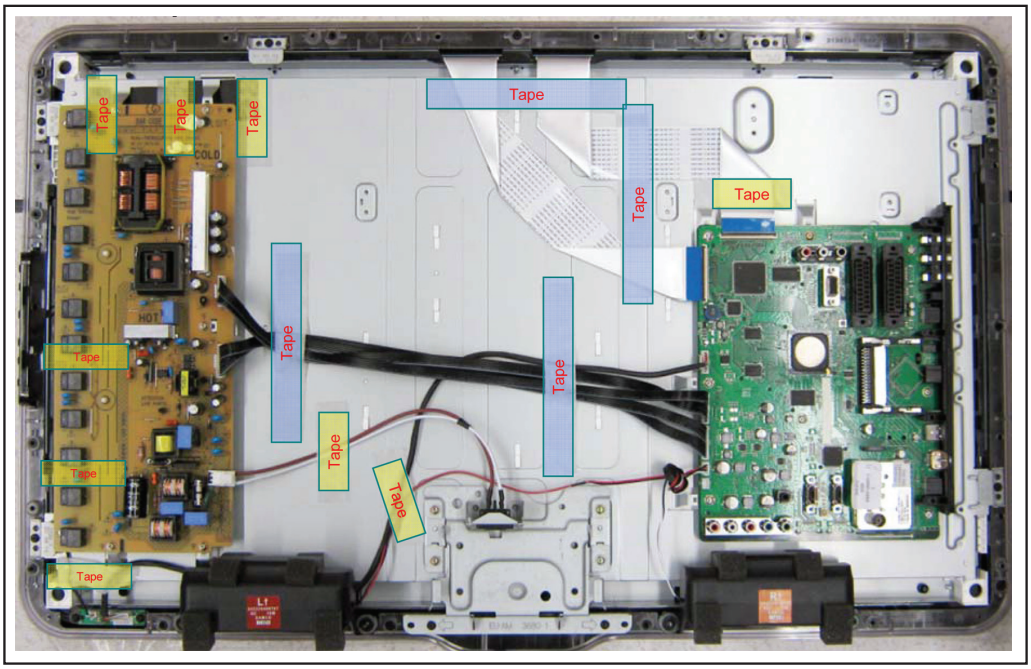

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Figure 4-2 Cable dressing 32" with Sharp display

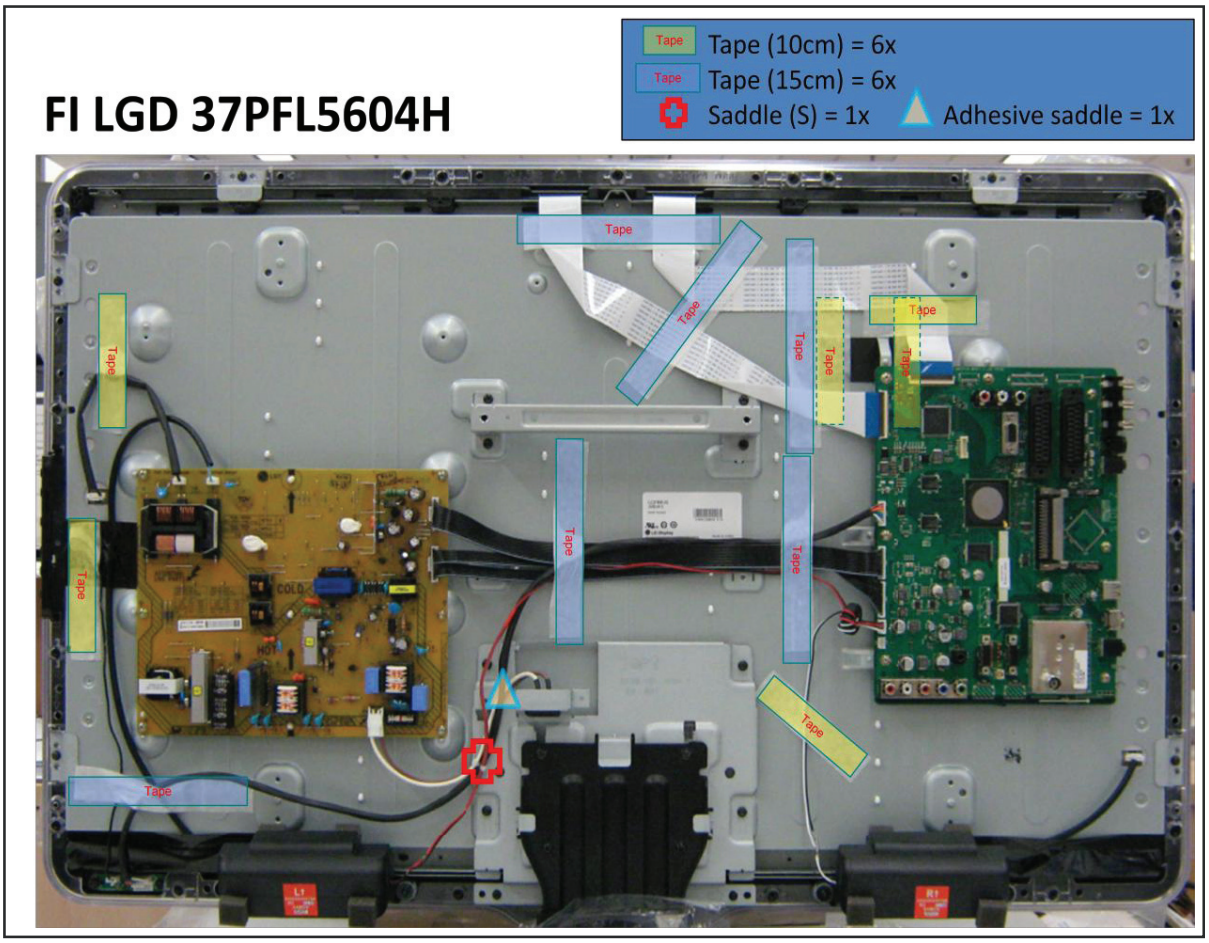

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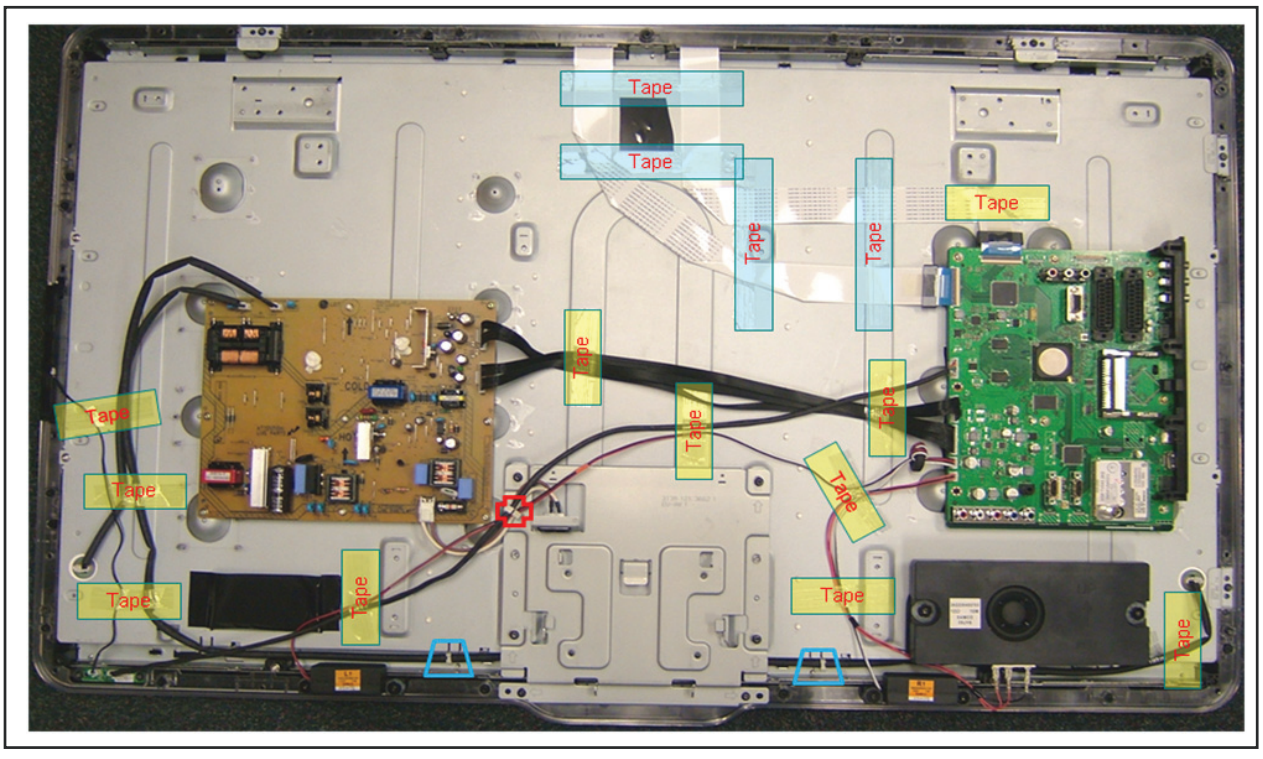
Figure 4-3 Cable dressing 37" with LGD display



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090220

Figure 4-4 Cable dressing 42" with LGD display

4.2 Service Positions

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

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

4.2.1 Foam Bars

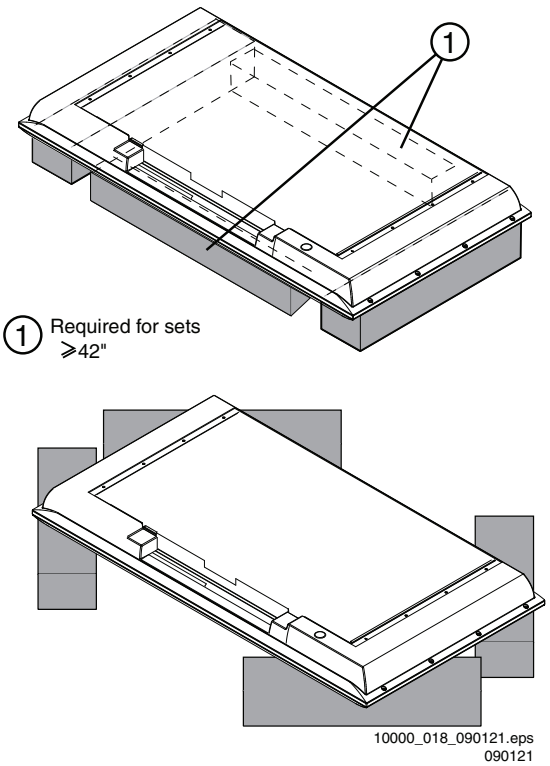

Figure 4-5 Foam bars

The foam bars (order code 3122 785 90580 for two pieces) can be used for all types and sizes of Flat TVs.
See figure Figure 4-5 for details. Sets with a display of 42" and larger, require **four** foam bars [1]. Ensure that the foam bars are always supporting the cabinet and **never** only the display.
Caution: Failure to follow these guidelines can seriously damage the display!
By laying the TV face down on the (ESD protective) foam bars, a stable situation is created to perform measurements and alignments. By placing a mirror under the TV, you can monitor the screen.

4.3 Assy/Panel Removal

4.3.1 Rear Cover

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

1. Remove all screws of the rear cover.
2. Lift the rear cover from the TV. Make sure that wires and flat coils are not damaged while lifting the rear cover from the set.

4.3.2 Speakers

Each speaker unit is mounted with two screws. A sticker on the the unit indicates if it is the right (“R”) or left (“L”) box, seen from the backside of the set, and a arrow points to the bottom of the set.
When defective, replace the whole unit.

4.3.3 IR & LED Board

1. Unplug the connectors leading to the SSB and IR & LED Board.
2. Lift the board and take it out.

When defective, replace the whole unit.

4.3.4 Key Board Control Panel

1. Unplug the key board connector from the IR & LED board.
2. Release the clamp on the topside using a screwdriver.
3. Lift the unit and take it out of the set.

When defective, replace the whole unit.

4.3.5 Main Supply Panel

1. Unplug all connectors.
2. Remove the fixation screws.
3. Take the board out.

When defective, replace the whole unit.

4.3.6 Small Signal Board (SSB)

Caution: It is mandatory to remount screws at their original position during re-assembly. Failure to do so may result in damaging the SSB.
Refer to Figure 4-6 for details.

1. Release both LVDS foils. For each foil a clip must be turned downwards before the foil can be released. When remounting, make sure the cable fits correctly in the clamps of the connector [1].
2. Unplug all other connectors.
3. Remove all screws that hold the board.
4. The SSB can now be taken out of the set, together with the side cover.
5. To remove the side cover, push the clamp with a screwdriver in the middle of the cover and pull the cover sidewards from the SSB.

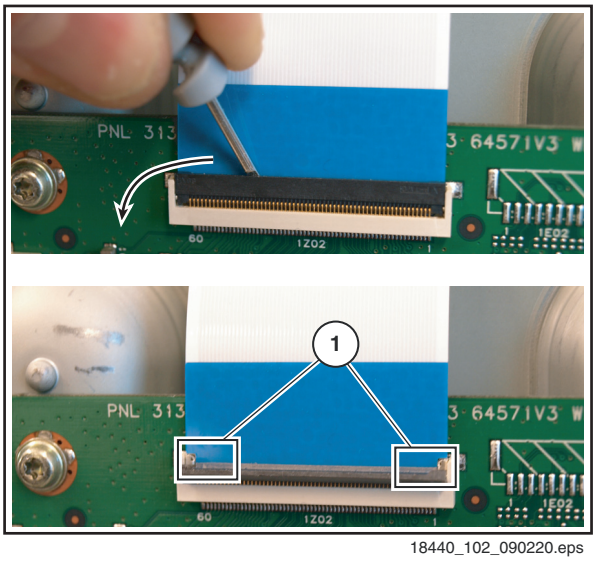

Figure 4-6 LVDS foil release

4.3.7 LCD Panel

Refer to Figure 4-7 for details. As every screen size has a (slightly) different mechanical construction (some have the boards directly mounted on the LCD display, others use brackets), we only describe one model. Disassembly method of other LCD panels is similar to the one described below.

1. Remove the Main Supply Panel and Small SIgnal Board as earlier described.
2. Unplug the connectors to and from the Speakers, IR & LED Board and Key Board Control Panel.
3. Remove the stand [1].
4. Release the subframe of the stand [2].
5. Remove the brackets [3] that secure the LCD Panel.
6. The LCD panel can now be lifted from the front cabinet.

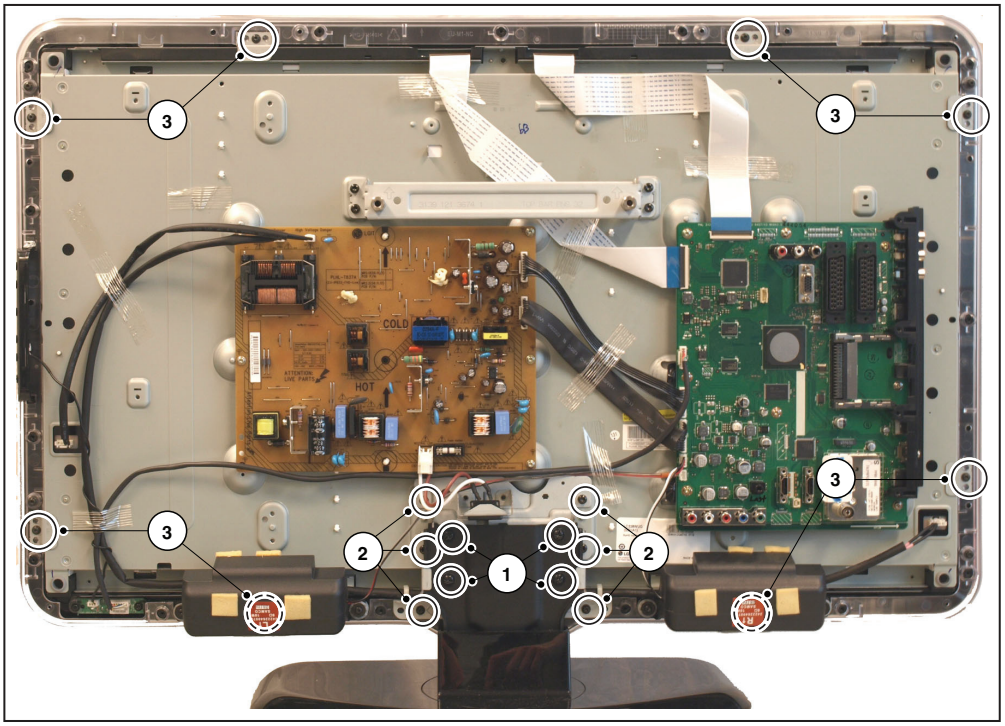

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Figure 4-7 LCD Panel removal (sets with LGD display)

4.4 Set Re-assembly

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

Notes:

- While re-assembling, make sure that all cables are placed and connected in their original position.
  See also 4.1 Cable Dressing and Figure 4-8

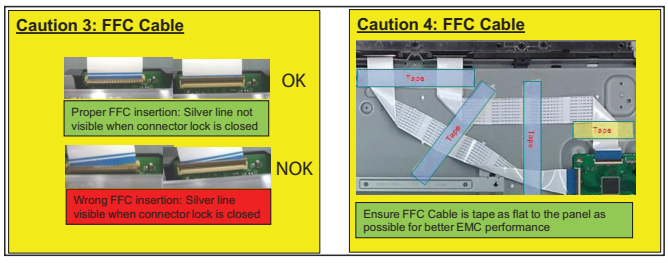

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Figure 4-8 FFC cable insertion and taping

- Ensure that EMC foams (where present) are not damaged and are (re)mounted correctly.
- For 37” models:
  - After exchange of the LCD panel, a foam must be placed on the LCD panel. This foam is to support the pressure from top HDMI during connecting of a HDMI cable. See Figure 4-9.
  - Please replace the tapes that prevent light leakage. See Figure 4-10.

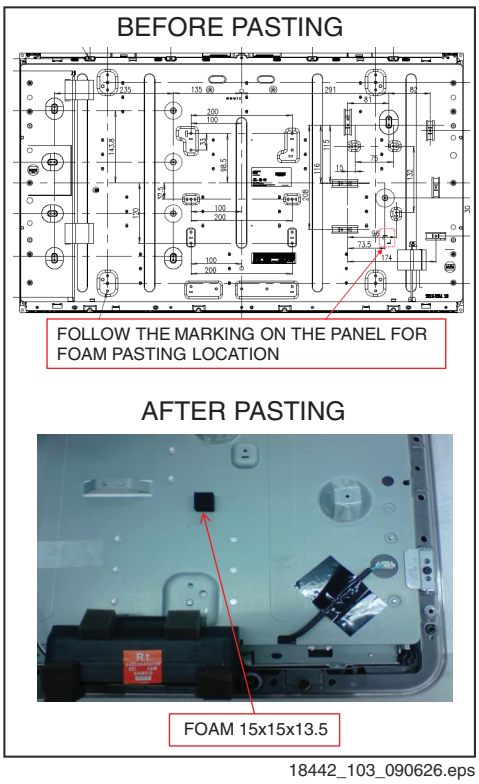

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Figure 4-9 Foam pasting location (only for 37” model)

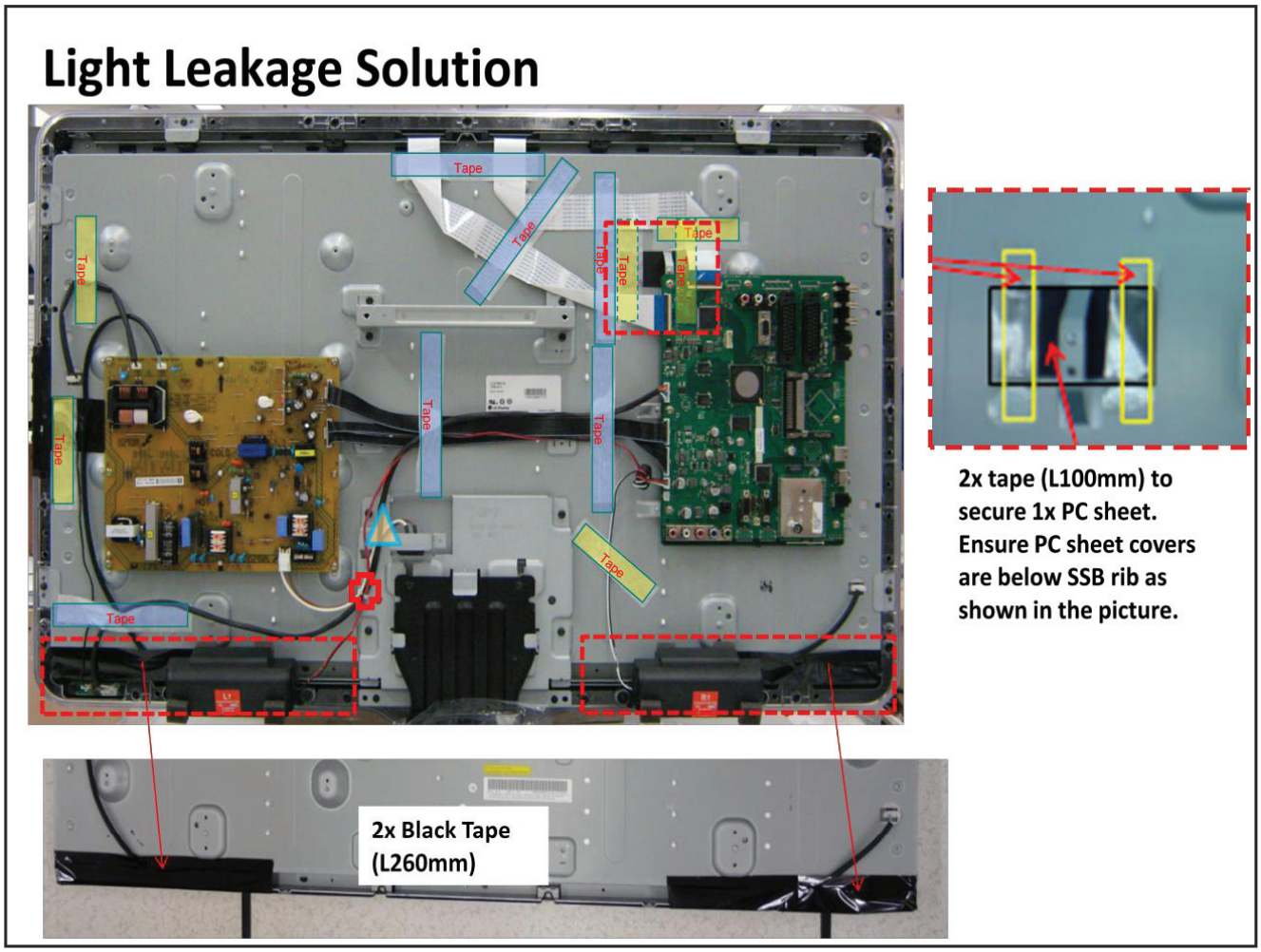

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Figure 4-10 Light leakage solution (only for 37" model)

5. Service Modes, Error Codes, and Fault Finding

Index of this chapter:

5.1 Test Points

As most signals are digital, it will be difficult to measure waveforms with a standard oscilloscope. However, several key ICs are capable of generating test patterns, which can be controlled via ComPair. In this way it is possible to determine which part is defective.

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

5.2 Service Modes

Service Default mode (SDM) and Service Alignment Mode (SAM) offers several features for the service technician, while the Customer Service Mode (CSM) is used for communication between the call centre and the customer.

This chassis also offers the option of using ComPair, a hardware interface between a computer and the TV chassis. It offers the abilities of structured troubleshooting, error code reading, and software version read-out for all chassis. (see also section 5.4.1 ComPair).

Note: For the new model range, a new remote control (RC) is used with some renamed buttons. This has an impact on the activation of the Service modes. For instance the old “MENU” button is now called “HOME” (or is indicated by a “house” icon).

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 detected by stand-by processor and make the TV start up to the step just before protection (a sort of automatic step by step start up). See section 5.3 Step by step Start-up.
- To start the blinking LED procedure where only layer 2 errors are displayed (see also section 5.5 Error Codes).

Specifications

Table 5-1 SDM default settings

Region	Freq. (MHz)	Default system
Europe, AP(PAL/Multi)	475.25	PAL B/G
Europe, AP DVB-T	546.00 PID Video: 0B 06 PID PCR: 0B 06 PID Audio: 0B 07	DVB-T

- 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.
  - Picture mute (blue mute or black mute).
  - Automatic volume levelling (AVL).
  - Skip/blank of non-favourite pre-sets.

How to Activate SDM

For this chassis there are two kinds of SDM: an **analog SDM** and a **digital SDM**. Tuning will happen according to Table 5-1.
- **Analog SDM**: use the standard RC-transmitter and key in the code “062596”, directly followed by the “MENU” (or HOME) button.
  Note: It is possible that, together with the SDM, the main menu will appear. To switch it “off”, push the “MENU” (or HOME) button again.
- **Digital SDM**: use the standard RC-transmitter and key in the code “062593”, directly followed by the “MENU” (or HOME) button.
  Note: It is possible that, together with the SDM, the main menu will appear. To switch it “off”, push the “MENU” (or HOME) button again.
- **Analog SDM** can also be activated by, on the SSB, shorting for a moment the solder pads SDM [1] (see Figure 5-1).

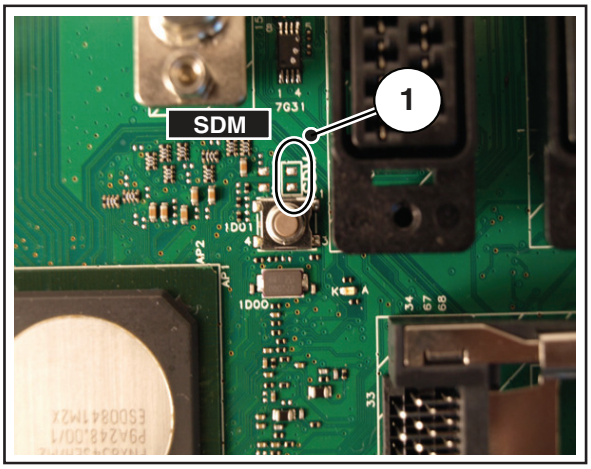

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Figure 5-1 Service mode pads

After activating this mode, “SDM” will appear in the upper right corner of the screen (when a picture is available).

How to Navigate

When the “MENU” (or HOME) button is pressed on the RC transmitter, the set 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 set to STAND-BY via the RC-transmitter.
- 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.

How to Activate SAM

Via a standard RC transmitter: key in the code “062596” directly followed by the “INFO” or “I+” button. After activating SAM with this method a service warning will appear on the screen, continue by pressing the red button on the RC.

Contents of SAM (see also Table 6-4):

- **Hardware Information**
  - **A. SW Version.** Displays the software version of the main software (**example:** Q5431-0.26.2.0= AAAaB_X.Y.W.Z).
    - **AAAA**= the chassis name, where “a” indicates the chip version: e.g. TV543/**3**2= Q54**3**, TV543/**8**2= Q54**8, Q543/92= Q549**.
    - **B**= the SW branch version. This is a sequential number (this is no longer the region indication, as the software is now multi-region).
    - **X.Y.W.Z**= the software version, where X is the main version number (different numbers are not compatible with one another) and Y.W.Z is the sub version number (a higher number is always compatible with a lower number).
  - **B. SBY PROC Version.** Displays the software version of the stand-by processor.
  - **C. Production Code**. Displays the production code of the TV, this is the serial number as printed on the back of the TV set. Note that if an NVM is replaced or is initialized after corruption, this production code has to be re-written to NVM. ComPair will foresee in a possibility to do this.
- **Operation Hours.** Displays the accumulated total of operation hours (not the stand-by hours). Every time the TV is switched “on/off”, 0.5 hours is added to this number.
- **Errors** (followed by maximum 10 errors). The most recent error is displayed at the upper left (for an error explanation see section 5.5 Error Codes).
- **Reset Error Buffer.** When “cursor right” (or the “OK button) is pressed and then the “OK” button is pressed, the error buffer is reset.
- **Alignments.** This will activate the “ALIGNMENTS” sub-menu. See chapter 6. Alignments.
- **Dealer Options.** Extra features for the dealers. See Table 6-4.
- **Options.** Extra features for Service. For more information regarding option codes, see chapter 6. Alignments.
  Note that if the option code numbers are changed, these have to be confirmed with pressing the “OK” button before the options are stored. Otherwise changes will be lost.
- **Initialize NVM.** The moment the processor recognizes a corrupted NVM, the “initialize NVM” line will be highlighted. Now, two things can be done (dependent of the service instructions at that moment):
  - Save the content of the NVM via ComPair for development analysis, **before** initializing. This will give the Service department an extra possibility for diagnosis (e.g. when Development asks for this).
  - Initialize the NVM.

- **Note**: When the NVM is corrupted, or replaced, there is a high possibility that no picture appears because the display code is not correct. So, before initializing the NVM via the SAM, a picture is necessary and therefore the correct display option has to be entered.
  Refer to chapter 6. Alignments for details. To adapt this option, it’s advised to use ComPair (the correct HEX values for the options can be found in chapter 8 “Alignments”) or a method via a standard RC (described below).

Changing the display option via a standard RC: Key in the code “062598” directly followed by the “MENU” (or HOME) button and “XXX” (where XXX is the 3 digit decimal display code as mentioned in Table 6-3. Make sure to key in all three digits, also the leading zero’s. If the above action is successful, the front LED will go out as an indication that the RC sequence was correct. After the display option is changed in the NVM, the TV will go to the Stand-by mode. If the NVM was corrupted or empty before this action, it will be initialized first (loaded with default values). This initializing can take up to 20 seconds.

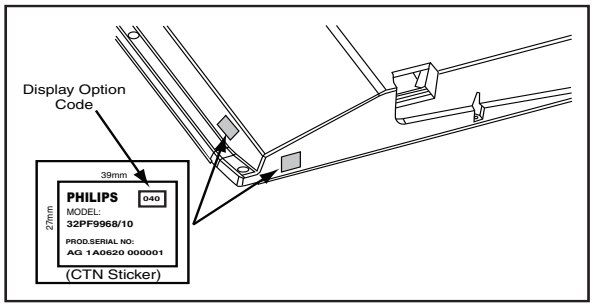

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Figure 5-2 Location of Display Option Code sticker

- **Store - go right.** All options and alignments are stored when pressing “cursor right” (or the “OK” button) and then the “OK”-button.
- **SW Maintenance.**
  - **SW Events.** Not useful for Service purposes. In case of specific software problems, the development department can ask for this information.
  - **HW Events.** Not useful for Service purposes. In case of specific software problems, the development department can ask for this information.
- **Test settings.** For development purposes only.
- **Development file versions.** Not useful for Service purposes, this information is only used by the development department.
- **Upload to USB.** To upload several settings from the TV to an USB stick, which is connected to the SSB. The items are “Channel list”, “Personal settings”, “Option codes”, “Display-related alignments” and “History list”. **First a directory “repair” has to be created in the root of the USB stick.** To upload the settings select each item separately, press “cursor right” (or the “OK button), confirm with “OK” and wait until “Done” appears. In case the download to the USB stick was not successful “Failure” will appear. In this case, check if the USB stick is connected properly and if the directory “repair” is present in the root of the USB stick. Now the settings are stored onto the USB stick and can be used to download onto another TV or other SSB. Uploading is of course only possible if the software is running and if a picture is available. This method is created to be able to save the customer’s TV settings and to store them into another SSB.
- **Download from USB.** To download several settings from the USB stick to the TV. Same way of working as with uploading. To make sure that the download of the channel list from USB to the TV is executed properly, it is necessary to restart the TV and tune to a valid preset if necessary.
  Note: The “History list item” can not be downloaded from USB to the TV. This is a “read-only” item. In case of specific problems, the development department can ask for this information.

How to Navigate

- In SAM, the menu items can be selected with the “CURSOR UP/DOWN” key (or the scroll wheel) 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 (or the scroll wheel), it is possible to:
  – (De) activate the selected menu item.
  – (De) activate the selected sub menu.
- With the “OK” key, it is possible to activate the selected action.

How to Exit SAM
Use one of the following methods:
- Switch the set to STAND-BY via the RC-transmitter.
- Via a standard RC-transmitter, key in “00” sequence, or select the “BACK” key.

5.2.3 Customer Service Mode (CSM)

Purpose
When a customer is having problems with his TV-set, he can call his dealer or the Customer Helpdesk. The service technician can then ask the customer to activate the CSM, in order to identify the status of the set. 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.
When CSM is activated, the layer 1 error is displayed via blinking LED. Only the latest error is displayed. (see also section 5.5 Error Codes).

When CSM is activated and there is a USB stick connected to the TV, the software will dump the complete CSM content to the USB stick. The file (Csm.txt) will be saved in the root of the USB stick. This information can be handy if no information is displayed.

Only for Q548.1:
When in the Q548.1 chassis CSM is activated, a test pattern will be displayed during 5 s.: 1 s. blue, 1 s. green, and 1 s. red, then again 1 s. blue and 1 s. green. This test pattern is generated by the PNX5100.
So if this test pattern is shown, it could be determined that the back end video chain (PNX5100, LVDS, and display) of the SSB is working.
For LED backlight TV sets, the test pattern is build as follows: 1 s. blue, 1 s. green, 1 s. red (generated by the PNX5100) and further on with 3 seconds RGB pattern from the LED Dimming Panel.

How to Activate CSM
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 (or the scroll wheel) on the RC-transmitter, can be navigated through the menus.

Contents of CSM
The contents are displayed on three pages: General, Software versions, and Quality items. However, these group names itself are not shown anywhere in the CSM menu.

General
- **Set Type.** This information is very helpful for a helpdesk/ 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. Note that if an NVM is replaced or is initialized after corruption, this set type has to be re-written to NVM. ComPair will foresee in a possibility to do this.
- **Production Code.** Displays the production code (the serial number) of the TV. Note that if an NVM is replaced or is initialized after corruption, this production code has to be re-written to NVM. ComPair will foresee a in possibility to do this.
- **Installed date.** Indicates the date of the first installation of the TV. This date is acquired via time extraction.
- **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).
- **12NC SSB.** Gives an identification of the SSB as stored in NVM. Note that if an NVM is replaced or is initialized after corruption, this identification number has to be re-written to NVM. ComPair will foresee in a possibility to do this. For more information on the identification of the SSB see 6.5.1 SSB identification.
- **12NC display.** Shows the 12NC of the display
- **12NC supply.** Shows the 12NC of the supply.
- **12NC “fan board”.** Shows the 12NC of the “fan board”-module (for sets with LED backlight).
- **12NC “LED Dimming Panel”.** Shows the 12NC of the LED dimming Panel (for sets with LED backlight).

Software versions
- **Current main SW.** Displays the built-in main software version. In case of field problems related to software, software can be upgraded. As this software is consumer upgradeable, it will also be published on the Internet. Example: Q5431E_1.2.3.4.
- **Stand-by SW.** Displays the built-in stand-by processor software version. Upgrading this software will be possible via ComPair or via USB (see section Software Upgrading). Example: STDBY_1.2.3.4.
- **MOP ambient light SW.** Displays the MOP ambient light EPLD SW.
- **MPEG4 software.** Displays the MPEG4 software (for sets with MPEG4).
- **PNX5100 boot NVM.** Displays the SW-version that is used in the PNX5100 boot NVM (for sets with PNX5100).
- **LED Dimming SW.** Displays the LED dimming EPLD SW (for sets with LED backlight).

Quality items
- **Signal quality.** Poor/average/good
- **Child lock.** Not active/active. This is a combined item for locks. If any lock (Preset lock, child lock, lock after or parental lock) is active, the item shall show “active”.
- **HDMI HDCP key.** Indicates of the HDMI keys (or HDCP keys) are valid or not. In case these keys are not valid and the consumer wants to make use of the HDMI functionality, the SSB has to be replaced.
- **Ethernet MAC address.** Not applicable.
- **Wireless MAC address.** Not applicable.
- **BDS key.** Indicates if the “BDS level 1” key is valid or not.
- **CI slot present.** If the common interface module is detected the result will be “YES”, else “NO”.
- **HDMI input format.** The detected input format of the HDMI.
- **HDMI audio input stream.** The HDMI audio input stream is displayed: present / not present.
- **HDMI video input stream.** The HDMI video input stream is displayed: present / not present.

How to Exit CSM
Press the “MENU” (or HOME) button twice on the RC-transmitter.

5.3 Step by step Start-up

When the TV is in a protection state due to an error detected by stand-by software (error blinking is displayed) **and** SDM is activated via short cutting the pins on the SSB, the TV starts up until it reaches the situation just before protection. So, this is a kind of automatic step by step start-up. In combination with the start-up diagrams below, it is shown which supplies are present at a certain moment. Important to know is, that if e.g. the 3V3 detection fails and thus layer 2 error = 18 is blinking while the TV is restarted via SDM, the Stand-by Processor will enable the 3V3, but the TV set will not go to protection now. The TV will stay in this situation until it is reset (Mains/AC Power supply interrupted).

Caution: in case the start-up in this mode with a faulty FET 7101-1 is done, all ICs supplied by the +3V3 could be destroyed, due to over voltage (12V on 3V3-line). It is recommended to measure first the FET 7101-1 or others FETs on short-circuit before activating SDM via the service pads.

The abbreviations “SP” and “MP” in the figures stand for:

- SP: protection or error detected by the **S**tand-by **P**rocessor.
- MP: protection or error detected by the MIPS **M**ain **P**rocessor.

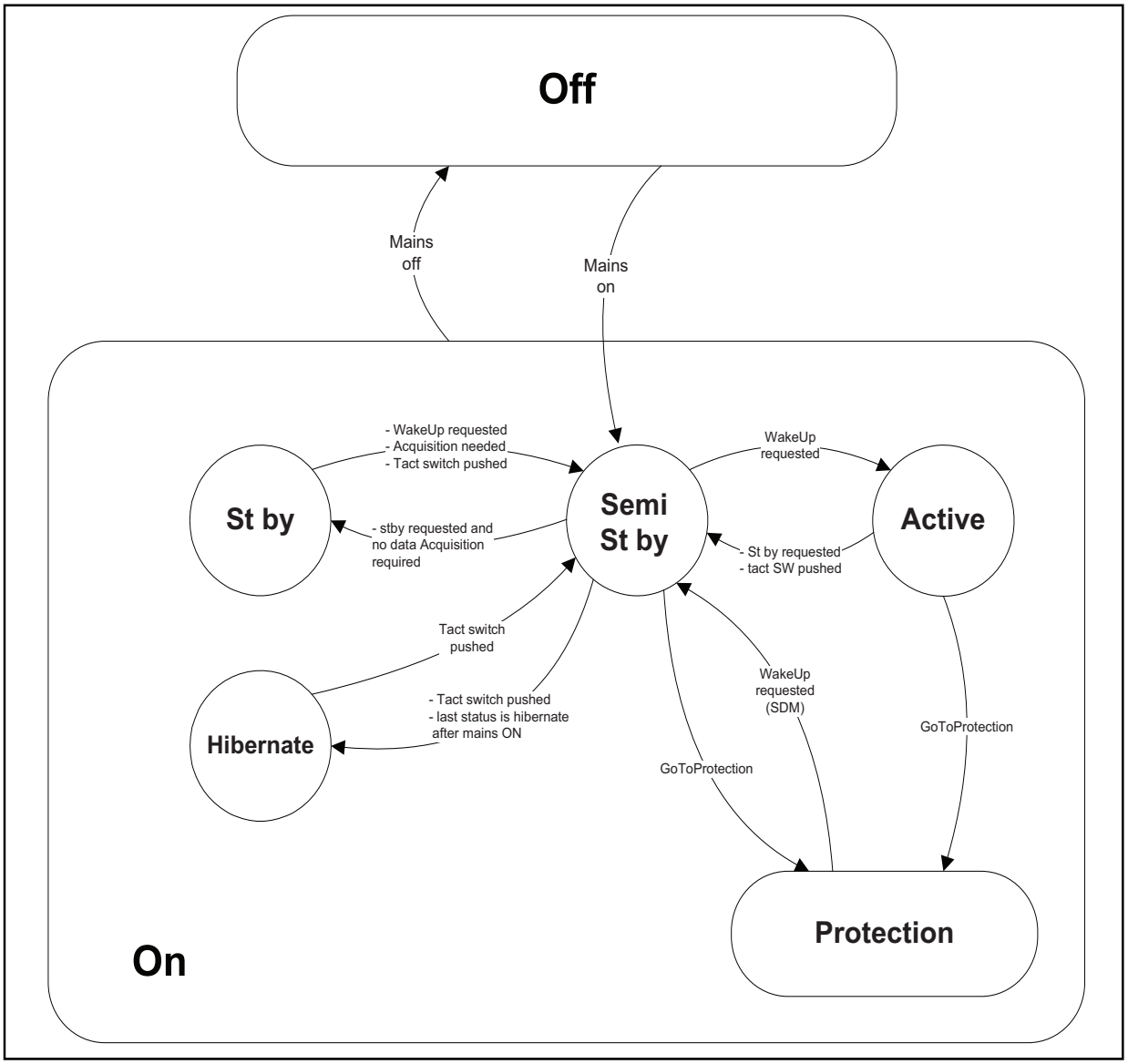

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Figure 5-3 Transition diagram

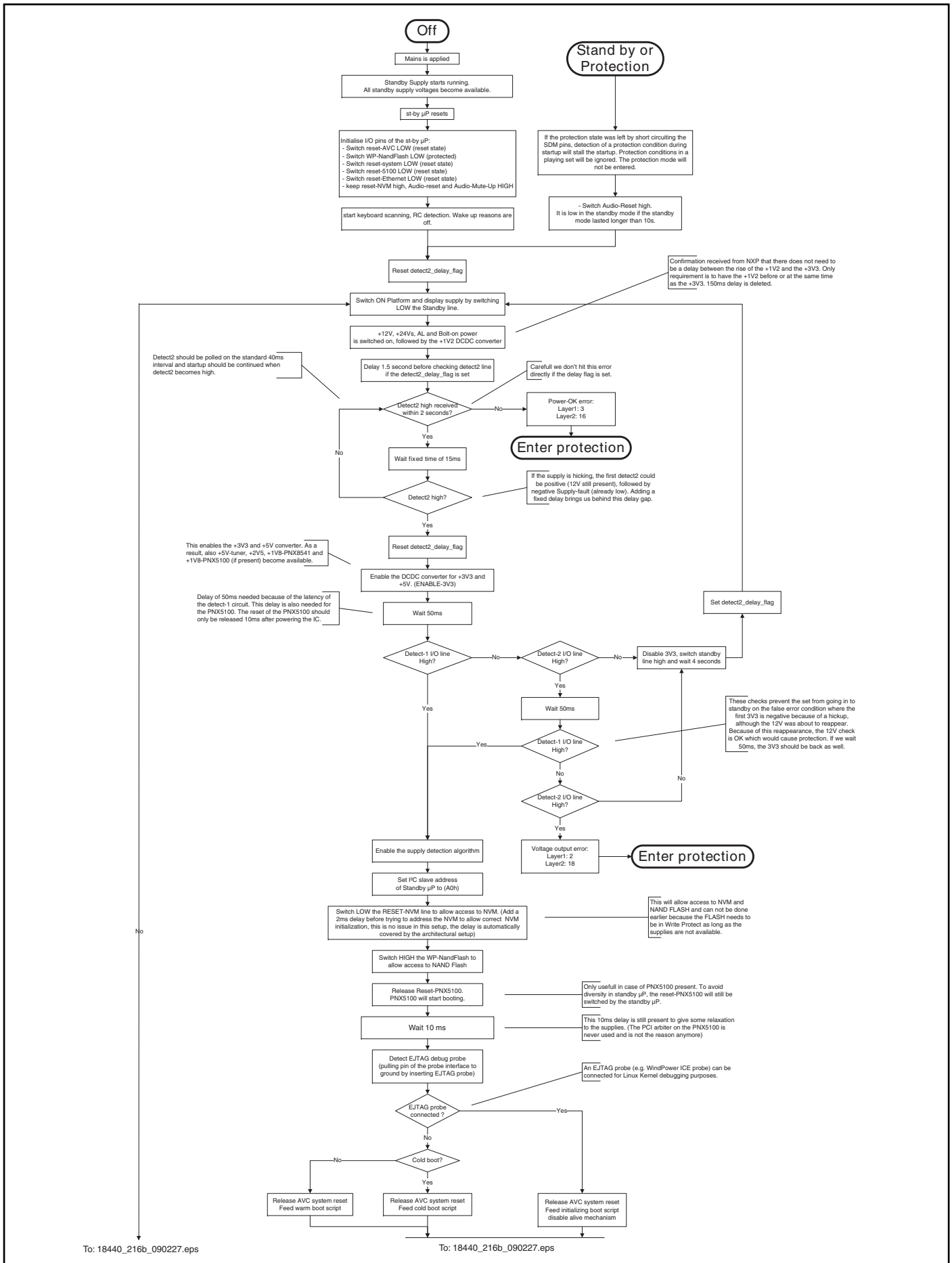

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Figure 5-4 "Off/Stand-by" to "Semi Stand-by" flowchart (part 1)

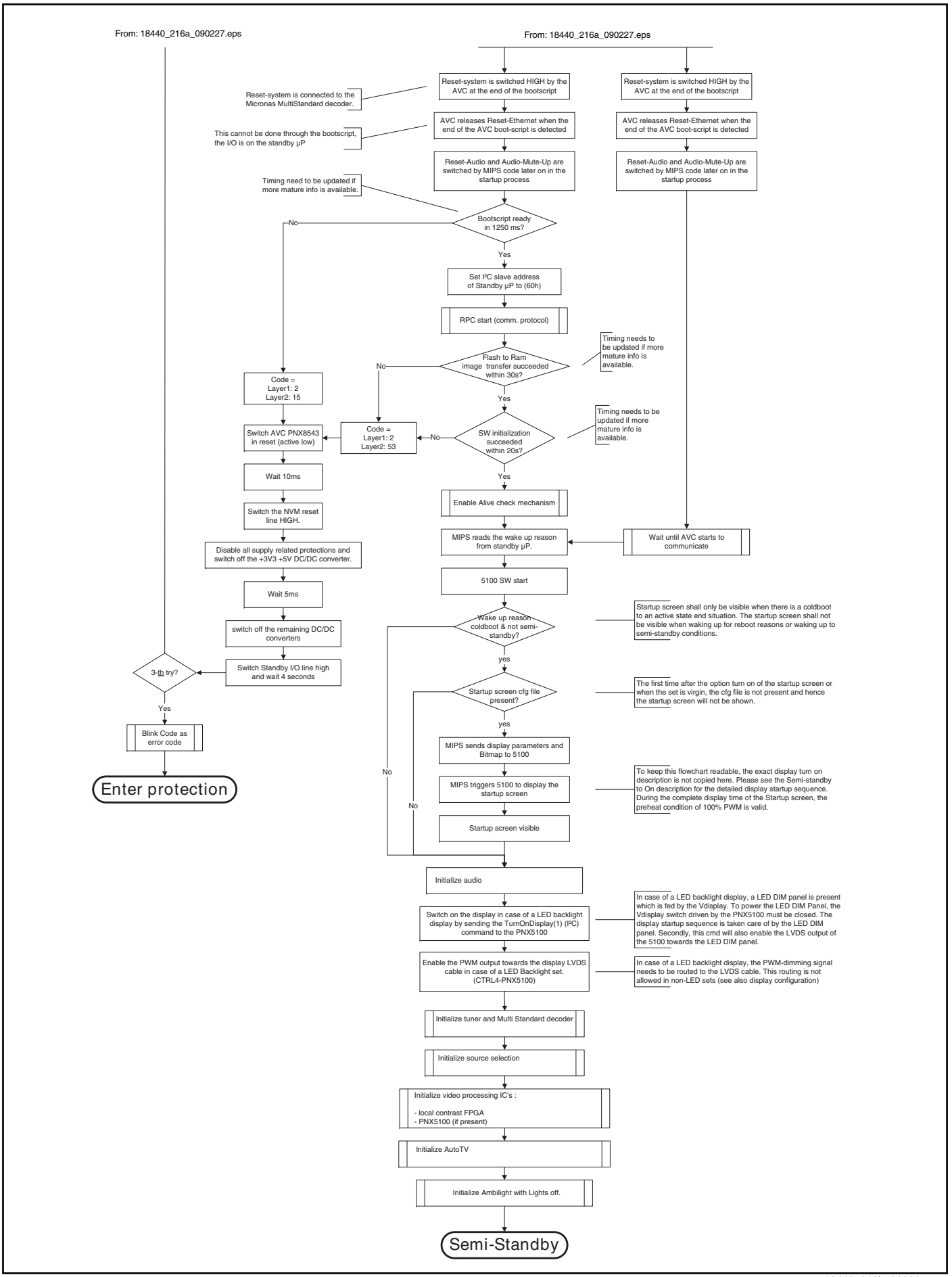

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Figure 5-5 "Off/Stand-by" to "Semi Stand-by" flowchart (part 2)

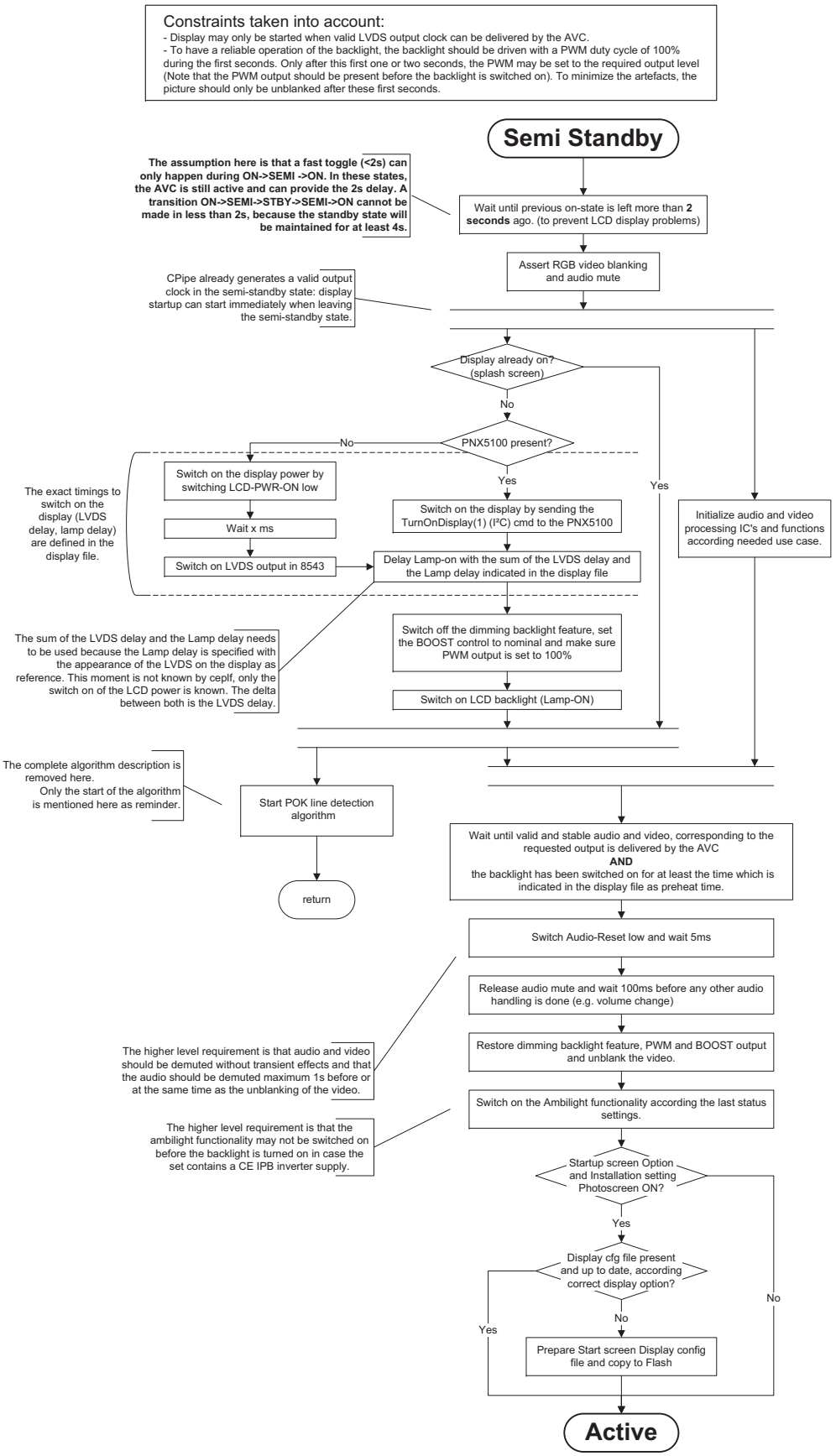

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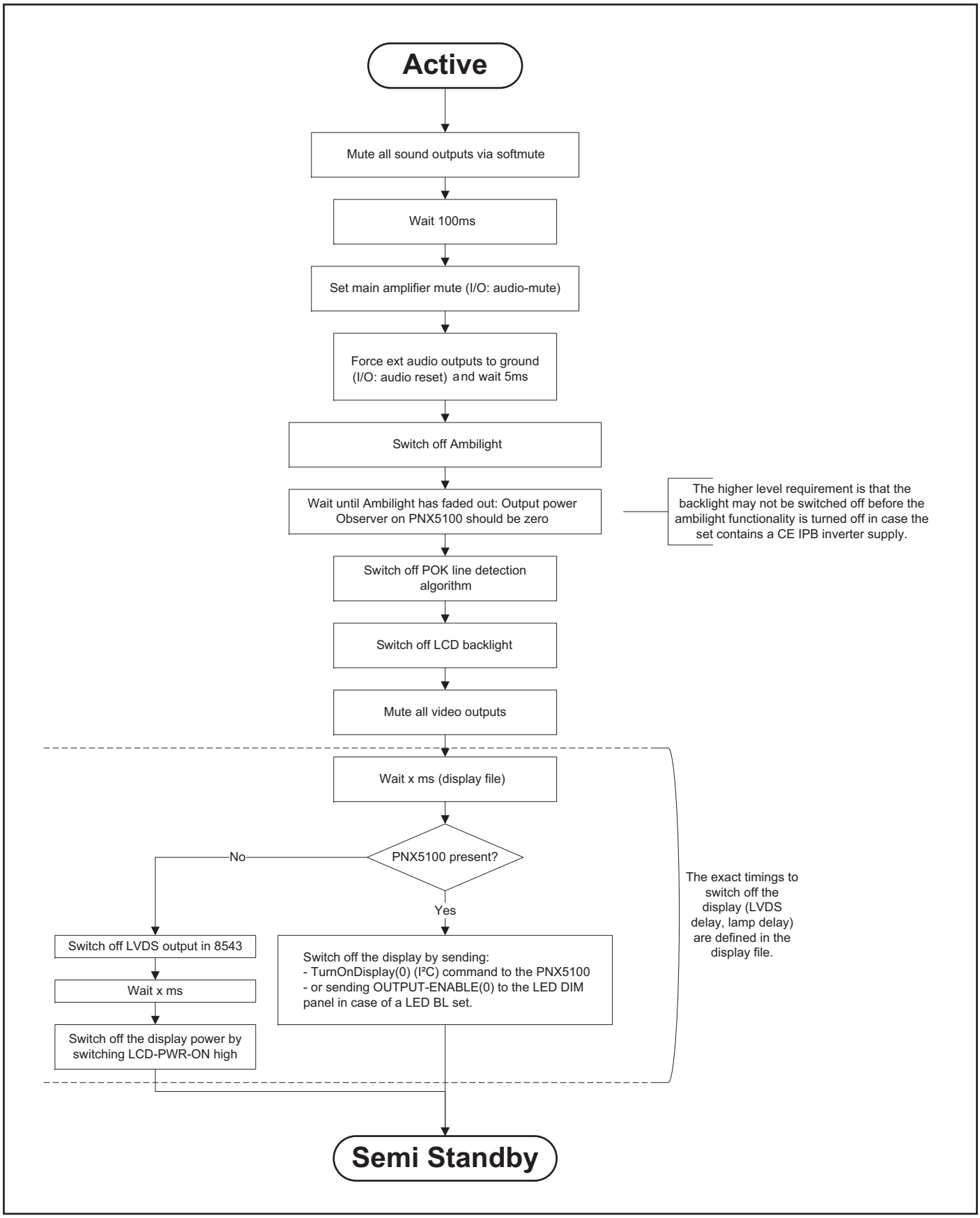
Figure 5-6 “Semi Stand-by” to “Active” flowchart



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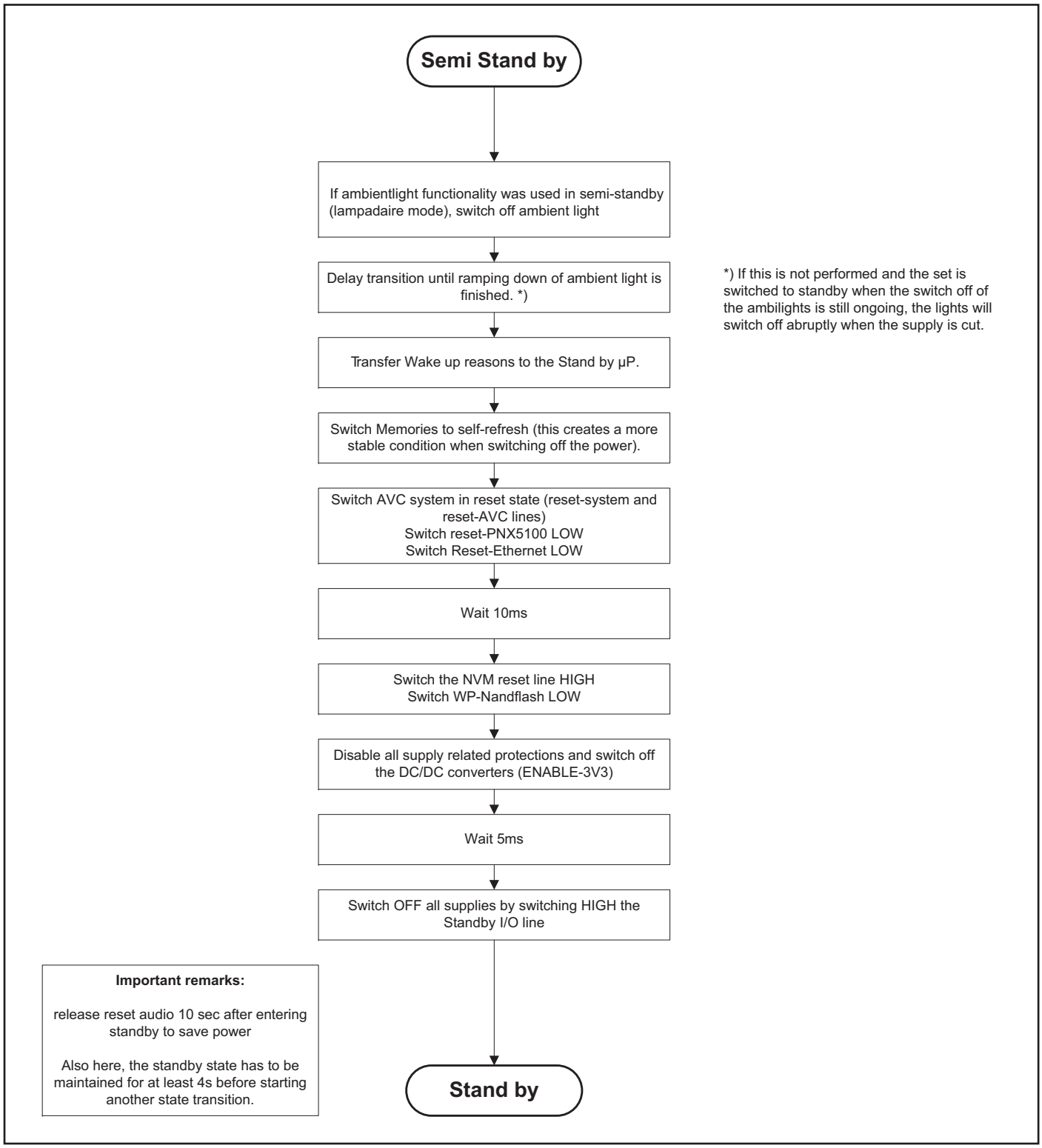
091112

Figure 5-7 "Active" to "Semi Stand-by" flowchart



18440_220_090227.eps
091112

Figure 5-8 “Semi Stand-by” to “Stand-by” flowchart

5.4 Service Tools

5.4.1 ComPair

Introduction

ComPair (Computer Aided Repair) is a Service tool for Philips Consumer Electronics products. and offers the following:

1. ComPair helps to quickly get an understanding on how to repair the chassis in a short and effective way.
2. ComPair allows very detailed diagnostics and is therefore capable of accurately indicating problem areas. No knowledge on I²C or UART commands is necessary, because ComPair takes care of this.
3. ComPair speeds up the repair time since it can automatically communicate with the chassis (when the uP is working) and all repair information is directly available.
4. ComPair features TV software up possibilities.

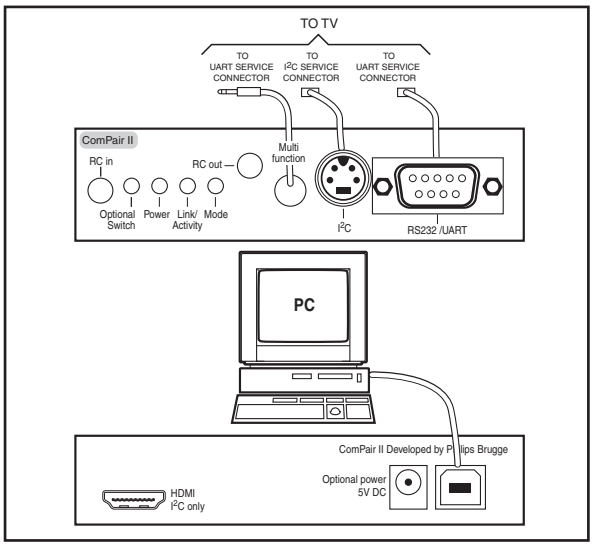
Specifications

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

The ComPair fault finding program is able to determine the problem of the defective television, by a combination of automatic diagnostics and an interactive question/answer procedure.

How to Connect

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



10000_036_090121.eps
091118

Figure 5-9 ComPair II interface connection

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

How to Order

ComPair II order codes:

- ComPair II interface: 3122 785 91020.
- Software is available via the Philips Service web portal.
- ComPair serial interface cable for Q52x.x. (using 3.5 mm Mini Jack connectors): 3138 188 75051.

Note: When having problems, please 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 occurs, it is added to the list of errors, provided the list is not full. 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).

To prevent that an occasional error stays in the list forever, the error is removed from the list after more than 50 hrs. of operation.

When multiple errors occur (errors occurred within a short time span), there is a high probability that there is some relation between them.

New in this chassis is the way errors can be displayed:

There is a simple blinking LED procedure for board level repair (home repair) so called LAYER 1 errors next to the existing errors which are LAYER 2 errors (see Table 5-3).

- LAYER 1 errors are one digit errors
- LAYER 2 errors are two digit errors.

- In protection mode.
  - From consumer mode: **LAYER 1.**
  - From SDM mode: **LAYER 2**.
- Fatal errors, if I²C bus is blocked and the set re-boots, CSM and SAM are not selectable.
  - From consumer mode: **LAYER 1.**
  - From SDM mode: **LAYER 2**.
    Important remark:
    For all errors detected by MIPS which are fatal => rebooting of the TV set (reboot starts after LAYER 1 error blinking), one should short the solder paths at start-up from the power OFF state by mains interruption and not via the power button to trigger the SDM via the hardware pins.
- In CSM mode
  - When entering CSM: error **LAYER 1** will be displayed by blinking LED. Only the latest error is shown.
- In SDM mode
  - When SDM is entered via Remote Control code or the hardware pins, **LAYER 2** is displayed via blinking LED.
- In the ON state
  - In “Display error mode”, set with the RC commands “mute_06250X _OK” **LAYER 2** errors are displayed via blinking LED.
- Error display on screen.
  - In CSM no error codes are displayed on screen.
  - In SAM the complete error list is shown.

Basically there are three kinds of errors:

- **Errors detected by the Stand-by software which lead to protection.** These errors will always lead to protection and an automatic start of the blinking LED LAYER 1 error. (see section 5.6 The Blinking LED Procedure).
- **Errors detected by the Stand-by software which not lead to protection**. In this case the front LED should blink the involved error. See also section Extra Information. Note that it can take up several minutes before the TV starts blinking the error (e.g. LAYER 1 error = 2, LAYER 2 error = 15 or 53).
- **Errors detected by main software (MIPS).** In this case the error will be logged into the error buffer and can be read out via ComPair, via blinking LED method LAYER 1-2 error, or in case picture is visible, via SAM.

5.5.2 How to Read the Error Buffer

Use one of the following methods:
- On screen via the SAM (only when a picture is visible). E.g.:
  - **00 00 00 00 00**: No errors detected
  - **23 00 00 00 00**: Error code 23 is the last and only detected error.
  - **37 23 00 00 00**: Error code 23 was first detected and error code 37 is the last detected error.
  - Note that no protection errors can be logged in the error buffer.
- Via the blinking LED procedure. See section 5.5.3 How to Clear the Error Buffer.
- 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".
- If the content of the error buffer has not changed for 50+ hours, it resets automatically.

5.5.4 Error Buffer

In case of non-intermittent faults, clear the error buffer before starting to repair (**before** clearing the buffer, write down the content, as this history can give significant information). This to ensure that old error codes are no longer present.
If possible, check the entire contents of the error buffer. In some situations, an error code is only the result of another error code and not the actual cause (e.g. a fault in the protection detection circuitry can also lead to a protection).

There are several mechanisms of error detection:
- Via error bits in the status registers of ICs.
- Via polling on I/O pins going to the stand-by processor.
- Via sensing of analogue values on the stand-by processor or the PNX8543.
- Via a "not acknowledge" of an I²C communication.

Take notice that some errors need several minutes before they start blinking or before they will be logged. So in case of problems wait 2 minutes from start-up onwards, and then check if the front LED is blinking or if an error is logged.

Table 5-2 Layer 1 code overview (multi chassis overview)

LAYER 1 codes		
SSB	2	
Display supply	3	
Platform supply	4	Only for display option 196 and 197
Fan	7	
AmbiLight or DC/DC or 3D LED dim panel	8	

Table 5-3 Error code overview (multi chassis overview)

Description	LAYER 1 error	LAYER 2 error	Monitored	Medium	Error/Prot.	EB: in Error Buffer BL: Blinking LED	Device	Defective board	Special Remarks
Main NVM	2	0	MIPS	I²C1	E	x	STM24C128	SSB	TV shut down with red LED blinking 2.
Temp. protection	3	12	MIPS	I²C4	P	BL/EB		Supply	
I²C3	2	13	MIPS	I²C3	E	BL/EB	SSB	SSB	TV is rebooting endlessly with red LED blinking "2".
I²C2	2	14	MIPS	I²C2	E	BL/EB	SSB	SSB	
PNX does not boot (HW cause) PNX 5100 does not boot	2	15	St-by µP	I²C1	P	BL	SSB	SSB	TV is rebooting endlessly with red LED blinking "2"
12V	3	16	St-by µP	I/O	P	BL		Supply	TV shut down with red LED blinking "3".
12V	3	16	St-by µP	I/O	P	BL		Platform Supply	
Inverter or display supply	3	17	Mips	I/O	E	EB		Supply	TV still in normal operation mode, but without backlights. Enter CSM Layer 1 red LED blinking "3".
Only for display option 196 and 197	4	17	Mips	I/O	E	EB		Display Supply	
1V2, 1V2, 3V3, 5V to low	2	18	St-by µP	I/O	P	BL		SSB	TV shut down with red LED blinking "2".
PNX 5100	2	21	MIPS	I²C3	E	EB	PNX 5100	SSB	TV is rebooting endlessly, with red LED blinking "2" (shown every 20 second).
HDMI MUX	2	23	MIPS	I²C3	E	EB	TDA9996	SSB	Activate CSM red LED blinking "2".
I²C switch	2	24	Mips	I²C2	E	EB	PCA9540	SSB	
Boot-NVM PNX5100	2	25	MIPS	I²C3	E	EB	STM24C08	SSB	TV is rebooting endlessly, with red LED blinking "2" (shown every minute).
Multi Standard demodulator (Micronas IF)	2	27	MIPS	I²C3	E	EB	DRX3616K DRX3626K	SSB	TV is in normal operation but without video displayed (RF).
ARM (AL)	8	28	MIPS	I²C3	E	EB	NXP LPC2103	AL mod. or DC/DC	TV is in normal operation but without AMBILIGHT "on".
FPGA (Local contrast)	2	29	MIPS	I²C3	E	EB	Altera	SSB	
Tuner1	2	34	MIPS	I²C3	E	EB	UV1783S HD1816	SSB	TV is in normal operation but without video displayed (RF).
FAN I²C expander	7	41	MIPS	I²C2	E	EB	PCA 9533	FAN mod.	
T× sensor	7	42	MIPS	I²C2	E	EB	LM 75	T×sensor	
FAN 1	7	43	MIPS	I²C2	E	EB		FAN	
FAN 2	7	44	MIPS	I²C2	E	EB		FAN	
MIPS does not boot (SW cause)	2	53	St-by µP	I²C1	P	BL	PNX8543	SSB	TV is rebooting endlessly with white LED blinking.
Display	5	64	MIPS	I²C2	E	BL/EB	Altera	Display	
FPGA LED dim 2D	2	65	MIPS	I²C3	E	EB	Xilinx	SSB	
FPGA LED dim 3D	8	65	MIPS	I²C2	E	EB	Altera	SSB	

Extra Information

- **Rebooting.** When a TV is constantly rebooting due to internal problems, most of the time no errors will be logged or blinked. This rebooting can be recognized via a ComPair interface and Hyperterminal (for Hyperterminal settings, see section 5.8.6 UART Logging). It's shown that the loggings which are generated by the main software keep continuing. In this case diagnose has to be done via ComPair.
- **Main NVM**. When there is no I²C communication towards the main NVM, LAYER 1 error = "2" will be displayed via the blinking LED procedure. In SDM, LAYER 2 error can be "19". Check the logging for keywords like "I²C bus blocked".
- **Error 13 (I²C bus 3 blocked)**. When this error occurs, the TV will constantly reboot due to the blocked bus. The best way for further diagnosis here, is to use ComPair.
- **Error 15 (PNX8543 doesn't boot)**. Indicates that the main processor was not able to read his boot script. This error will point to a hardware problem around the PNX8543 (supplies not OK, PNX 8543 completely dead, I²C link between PNX and Stand-by Processor broken, etc....). When error 15 occurs it is also possible that I²C2 bus is blocked (NVM). I²C2 can be indicated in the schematics as follows: SCL-UP-MIPS, SDA-UP-MIPS, SCL-2 or SDA-2. Other root causes for this error can be due to hardware problems with: NVM PNX5100, PNX5100 itself, or DDRs.
- **Error 16 (12V)**. This voltage is made in the power supply and results in protection (LAYER 1 error = "3"). When SDM is activated we see blinking LED LAYER 2 error = "16".
- **Error 17 (POK)**. The display is switched "on" with the signal "Lamp On". If the inverter starts (or 24V display is OK) the POK line becomes "high". If the POK line is not "high", the set backlight will be switched "off" and "on" again for 3 times (start-up). If the set POK line becomes "high" after the retries, no error is logged; if the POK stays "low", error is logged: LAYER 1 error = "3", LAYER 2 error = "17". No protection is required, the start-up goes on.
- **Error 18 (1V2-3V3-5V too low)**. All these supplies are generated by the DC/DC supply on the SSB. If one of these supplies is too low, protection occurs and blinking LED LAYER 1 error = "2" will be displayed automatically. In SDM this gives LAYER 2 error = "18".
- **Error 21 (PNX 5100)**. When there is no I²C communication towards the PNX5100 after start-up (power "off" by disconnection of the mains cord), LAYER 2 error will blink continuously via the blinking LED procedure in SDM. (start-up the TV with the solder paths short to activate SDM).
- **Error 23 (HDMI)**. When there is no I²C communication towards the HDMI multiplexer after start up, LAYER 2 error = "23" will be logged and displayed via the blinking LED procedure if SDM is switched "on".
- **Error 25 (Boot-NVM PNX5100)**. When there is no I²C communication towards the PNX5100 NVM after start-up, TV is rebooting endlessly with blinking LAYER 1 error = 2 (shown every minute). When SDM is activated we see blinking LED LAYER 2 error = "25".
- **Error 27 (Multi Standard demodulator)**. When there is no I²C communication towards the Multi Standard demodulator after start up, LAYER 2 error = "27" will be logged and displayed via the blinking LED procedure when SDM is switched "on".
- **Error 28 (FPGA ambilight)**. When there is no I²C communication towards the FPGA ambilight after start up, LAYER 2 error = "28" will be logged and displayed via the blinking LED procedure if SDM is switched "on". Note that it can take up several minutes before the TV starts blinking LAYER 1 error = "2" in CSM or in SDM, LAYER 2 error = "28".
- **Error 34 (Tuner)**. When there is no I²C communication towards the tuner after start up, LAYER 2 error = "34" will be logged and displayed via the blinking LED procedure when SDM is switched on.
- **Error 53**. This error will indicate that the PNX8543 has read his boot script (when this would have failed, error 15 would blink) but initialization was never completed because of hardware problems (NAND flash,...) or software initialization problems. Possible cause could be that there is no valid software loaded (try to upgrade to the latest main software version). Note that it can take up to 2 minutes before the TV starts blinking LAYER 1 error = "2" or in SDM, LAYER 2 error = "53".

5.6 The Blinking LED Procedure

5.6.1 Introduction

The blinking LED procedure can be split up into two situations:

- Blinking LED procedure LAYER 1 error. In this case the error is automatically blinked when the TV is put in CSM. This will be only one digit error, namely the one that is referring to the defective board (see table 5-3 Error code overview (multi chassis overview)) which causes the failure of the TV. This approach will especially be used for home repair and call centres. The aim here is to have service diagnosis from a distance.
- Blinking LED procedure LAYER 2 error. Via this procedure, the contents of the error buffer can be made visible via the front LED. In this case the error contains 2 digits (see table 5-3 Error code overview (multi chassis overview)) and will be displayed when SDM (hardware pins) is activated. This is especially useful for fault finding and gives more details regarding the failure of the defective board.

Important remark:
For all errors detected by MIPS which are fatal (rebooting of the TV set, with reboot starts after LAYER 1 error blinking), one should short the SDM solder paths at start-up from the power OFF state by mains interruption and not via the power button, to trigger the SDM via the hardware pins.

When one of the blinking LED procedures is activated, the front LED will show (blink) the contents of the error-buffer. Error codes greater then 10 are shown as follows:

1. "n" long blinks (where "n" = 1 to 9) indicating decimal digit
2. A pause of 1.5 s
3. "n" short blinks (where "n"= 1 to 9)
4. A pause of approximately 3 s,
5. When all the error codes are displayed, the sequence finishes with a LED blink of 3 s
6. The sequence starts again.

Example: Error 12 8 6 0 0.
After activation of the SDM, the front LED will show:

1. One long blink of 750 ms (which is an indication of the decimal digit) followed by a pause of 1.5 s
2. Two short blinks of 250 ms followed by a pause of 3 s
3. Eight short blinks followed by a pause of 3 s
4. Six short blinks followed by a pause of 3 s
5. One long blink of 3 s to finish the sequence
6. The sequence starts again.

5.6.2 How to Activate

Use one of the following methods:

- **Activate the CSM**. The blinking front LED will show only the latest layer 1 error, this works in "normal operation" mode or automatically when the error/protection is monitored by the stand-by processor. At the time of this release, this layer 1 error blinking was not working as expected.
  In case no picture is shown and there is no LED blinking, read the logging to detect whether "error devices" are mentioned. (see section 5.8.6 UART Logging).
- **Activate the SDM**. The blinking front LED will show the entire contents of the layer 2 error buffer, this works in "normal operation" mode or when SDM (via hardware pins) is activated when the tv set is in protection.

Important remark:
For all errors detected by MIPS which are fatal => rebooting of the TV set (reboot starts after LAYER 1 error blinking), one should short the solder paths at start-up from the power OFF state by mains interruption and not via the power button to trigger the SDM via the hardware pins.

- **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.

5.7 Protections

5.7.1 Software Protections

Most of the protections and errors use either the stand-by microprocessor or the MIPS controller as detection device. Since in these cases, checking of observers, polling of ADCs, and filtering of input values are all heavily software based, these protections are referred to as software protections. There are several types of software related protections, solving a variety of fault conditions:

- **Protections related to supplies:** check of the 12V, +5V, +3V3 and 1V2.
- **Protections related to breakdown of the safety check mechanism.** E.g. since the protection detections are done by means of software, failing of the software will have to initiate a protection mode since safety cannot be guaranteed any more.

Remark on the Supply Errors
The detection of a supply dip or supply loss during the normal playing of the set does not lead to a protection, but to a cold reboot of the set. If the supply is still missing after the reboot, the TV will go to protection.

Protections during Start-up
During TV start-up, some voltages and IC observers are actively monitored to be able to optimise the start-up speed, and to assure good operation of all components. If these monitors do not respond in a defined way, this indicates a malfunction of the system and leads to a protection. As the observers are only used during start-up, they are described in the start-up flow in detail (see section 5.3 Step by step Start-up).

5.7.2 Hardware Protections

The only real hardware protection in this chassis appears in case of an audio problem e.g. DC voltage on the speakers. The audio protection circuit pulls the "supply-fault" low and the tv set will blink LAYER 1 error = 2 or in SDM, LAYER 2 error = 19. **Be very careful** to overrule this protection via SDM (not to cause damage to the Class D audio amplifier). Check audio part first before activating via SDM. **In case one of the speakers is not connected, the protection can also be triggered.**

Repair Tips

- It is also possible that the set has an audio DC protection because of an interruption in one or both speakers (the DC voltage that is still on the circuit cannot disappear through the speakers).
  Caution: (Dis)connecting the speakers during the ON state of the TV can damage the audio amplifier.

5.7.3 Important remark regarding the blinking LED indication

As for the blinking LED indication, the blinking LED of layer 1 error displaying can be switched "off" by pushing the power button on the keyboard.
This condition is not valid after the set was unpowered (via mains interruption). The blinking LED starts again and can only be switched "off" by unplugging the mains connection.
This can be explained by the fact that the MIPS can not load the keyboard functionality from software during the start-up and does not recognise the keyboard commands at this time.

5.8 Fault Finding and Repair Tips

Read also section "5.5 Error Codes, 5.5.4 Error Buffer, Extra Information".

5.8.1 Ambilight

Due to degeneration process of the AmbiLights, there can be a difference in the colour and/or light output of the spare ambilight module in comparison with the originals ones contained in the TV set. Via ComPair, the light output can be adjusted.

5.8.2 CSM

When CSM is activated and there is a USB stick connected to the TV, the software will dump the complete CSM content to the USB stick. The file (Csm.txt) will be saved in the root of the USB stick. If this mechanism works it can be concluded that a large part of the operating system is already working (MIPS, USB...)

5.8.3 Exit "Factory Mode"

When an "F" is displayed in the screen's right corner, this means the set is in "Factory" mode, and it normally happens after a new SSB is mounted. To exit this mode, push the "VOLUME minus" button on the TV's local keyboard for 10 seconds (this disables the continuous mode).
Then push the "SOURCE" button on the TV's local keyboard for 10 seconds until the "F" disappears from the screen.

5.8.4 DC/DC Converter

Introduction

- The best way to find a failure in the DC-DC converters is to check their starting-up sequence at "power-on via the mains cord", presuming that the stand-by microprocessor is operational.
- If the input voltage of DC-DC converters is around 12.7 V (measured on decoupling capacitors 2107 and 2123 and the enable signals are "low" (active), then the output voltages should have their normal values. The +12V and +5VPOD supplies start-up first (enabled by PODMODE signal from the stand-by microprocessor). There is a supplementary condition for 12V to start-up: if the +5V-POD does not start up due to a local defect, then +12V will not be available as well. The +5V-ON supply is enabled by the ONMODE signal (coming also from the stand-by microprocessor). The +1V2 supply starts up when the +12V appears, then at least 100 ms later, the +3V3 will be activated via the ENABLE-3V3 signal from the stand-by microprocessor. If the +12V value is less than 10 V, the last enumerated voltages will not show up due to the under-voltage detection circuit 7105-1 + 6101 and surrounding components. Furthermore, if the +12V is less than 8 V, then also the +1V2 will not be available. The +5V5-TUN generator 7202 (present only for the analogue version of China platforms) will start to operate as soon as the 12V (PSU) is present.

- The consumption of controller IC 7103 is around 19 mA (that means almost 200 mV drop voltage across resistor 3108).
- The current capability of DC-DC converters is quite high (short-circuit current is 7 to 10 A).
- The DETECT1 signal (active “low”) is an internal protection (error 18) of the DC-DC convertor and will occur if the output voltage of any DC-DC convertor is out of limits (10% of the normal value).

Fault Finding

- **Symptom:** +1V2 not present (even for a short while ~10 ms)
  - Check 12 V availability (resistor 3108, MOS-FETs 7101 and 7102), value of +12 V, and surrounding components)
  - Check the voltage on pin 9 (1.5 V),
  - Check for +1V2 output voltage short-circuit to GND that can generate pulsed over-currents 7...10 A through coil 5103.
  - Check the over-current detection circuit (2106 or 3131 interrupted).
- **Symptom:** +1V2 present for about 100ms, +3V3 not rising.
  - Check the ENABLE-3V3 signal (active “low”),
  - Check the voltage on pin 8 (1.5 V),
  - Check the under-voltage detection circuit (the voltage on collector of transistor 7105-1 should be less than 0.8 V),
  - Check for output voltages short-circuits to GND (+3V3) that can generate pulsed over currents 7...10 A through coil 5101,
  - Check the over-current detection circuit (2105 or 3127 interrupted).
- **Symptom:** +1V2 OK, +3V3 present for about 100 ms. **Possible cause:** SUPPLY-FAULT line stays “low” even though the +3V3 and +1V2 is available - the stand-by microprocessor is detecting that and switching “off” all supply voltages.
  - Check the drop voltage across resistor 3108 (they could be too high, meaning a defective controller IC or MOS-FETs),
  - Check if the boost voltage on pin 4 of controller IC 7103 is less than 14 V (should be 19 V),
  - Check if +1V2 or +3V3 are higher than their normal values - that can be due to defective DC feedback of the respective DC-DC convertor (ex. 3152, 3144).
- **Symptom:** +1V2 and +3V3 show a high level of ripple voltage (audible noise can come from the filtering coils 5101, 5103). **Possible cause:** instability of the frequency and/or duty cycle of a DC-DC converter or stabiliser.
  - Check the resistor 3164, capacitors 2102 and 2103, input and output decoupling capacitors.
  - Check AC feedback circuits (2120, 2129, 3141, 3153, 2110, 2114 and 3135).
- **Symptom:** +1V2, +3V3 ok, no +5V5-TUN (analogue sets only). **Possible cause:** the “+5V5-TUN GENERATOR” circuit (7202 and surroundings components) is defective: check transistor 7202 (it has to have gate voltage pulses of about 10 V amplitude and drain voltage pulses of about 35 V amplitude) and surrounding components. A high consumption (more than 6 mA) from +5V5-TUN voltage can cause also +5V5-TUN voltage to be too low or zero.

Note: when a pair of power MOSFETs (7101 or 7102) becomes defective, the controller IC 7103 should be replaced as well

5.8.5 Fan self test (only for sets with LED backlight)

In case fans are present, a software test can be done by pushing the red coloured button on the remote control while the TV set is in CSM. Exit CSM and check the status of the fans in the error buffer by entering SAM (062596 + info button on the RC). In case of failure (fully red screen) more detailed information is available in the error buffer (error 41, 42, 43, 44).

5.8.6 UART Logging

When something is wrong with the TV set (f.i.the set is rebooting) checking the UART logging using hyperterminal can be done to find more information. Hyperterminal is a standard Windows application. It can be found via Programs, Accessories, Communications, Hyperterminal. Connect a “ComPair UART”-cable (3138 188 75051) from the Service connector in the TV set, **via the ComPair interface (this is compulsory, otherwise ICs are blown in the PC)**, to the “COMx”-port of the PC. After start-up of Hyperterminal, fill in a name (f.i. “logging”) in the “Connection Description” box, then apply the following settings:

1. COMx
2. Bits per second = 115200
3. Data bits = 8
4. Parity = none
5. Stop bits = 1
6. Flow control = none

During the start-up of the TV set, the logging will be displayed. This is also the case during rebooting of the TV set (the same logging appears time after time). Also available in the logging is the “Display Option Code” (useful when there is no picture), look for item “DisplayRawNumber” in the beginning of the logging.

Tip: When there is no picture available during reboot, it is possible to check for “error devices” in the logging (LAYER 2 error). This can be very helpful to determine the failure cause of the reboot. For protection state, there is no logging.

5.8.7 Loudspeakers

Make sure that the volume is set to minimum during disconnecting the speakers in the “on” state of the TV. The audio amplifier can be damaged by disconnecting the speakers during “on” state of the set! Sometimes the set can go into protection, but that is not always the case.

5.8.8 Tuner

Attention: In case the tuner is replaced, always check the tuner options!

5.8.9 Display option code

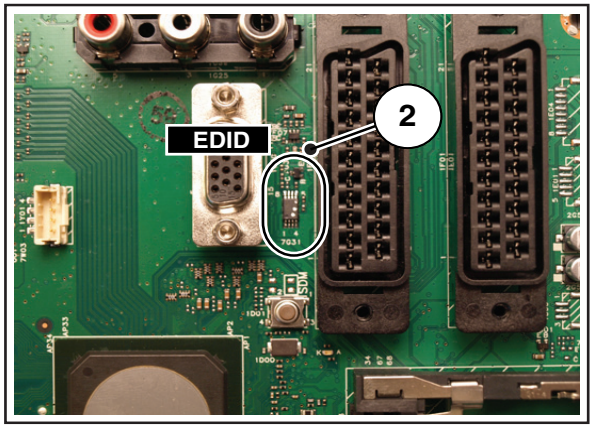
Attention: In case the SSB is replaced, always check the display option code in SAM, even when picture is available. Performance with the incorrect display option code can lead to unwanted side-effects for certain conditions.
See also Table 6-3 for the code.

5.8.10 Upgrade HDMI EDID NVM

To upgrade the HDMI EDID, see ComPair for further instructions.

5.8.11 Upgrade VGA EDID NVM

To upgrade the VGA EDID NVM, pin 7 of the EDID NVM [2] has to be short circuited to ground. See ComPair for further instructions.

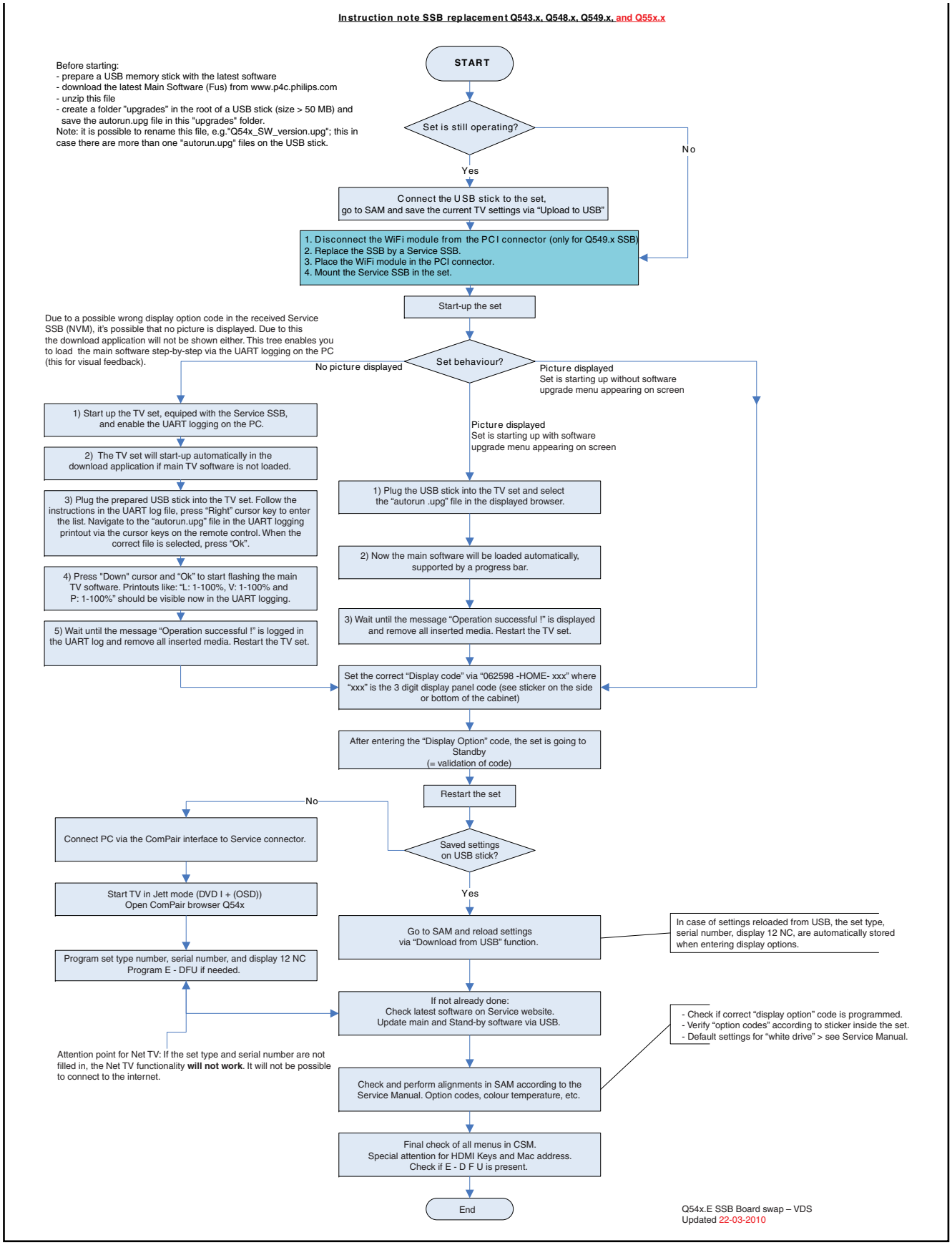


18440_201_090225.eps
090306

Figure 5-10 VGA EDID NVM

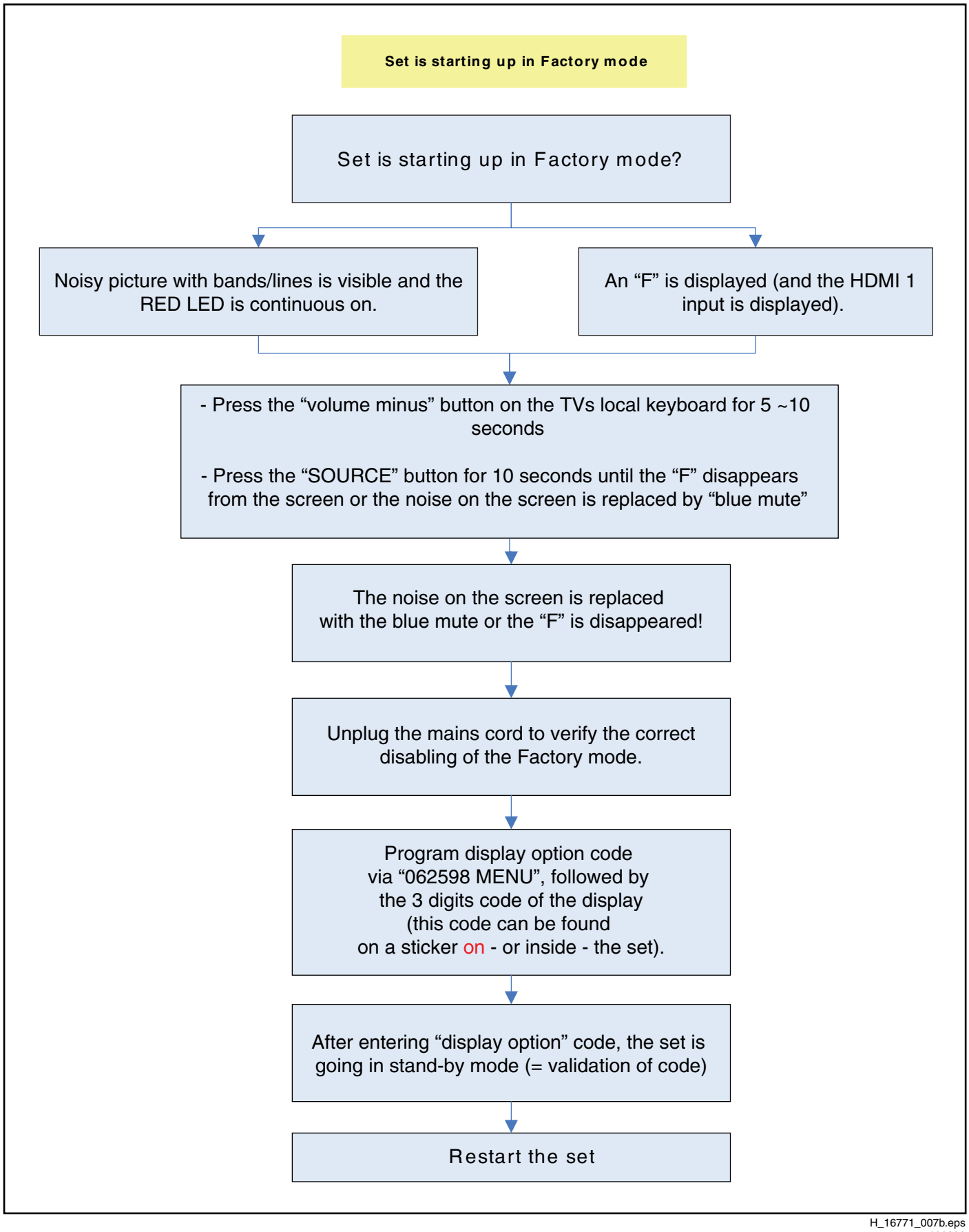
5.8.12 SSB Replacement

Follow the instructions in the flowchart in case a SSB has to be exchanged. See Figure 5-11 and Figure 5-12.



H_16771_007a.eps
100402

Figure 5-11 SSB replacement flowchart [1/2]



H_16771_007b.eps
100322

Figure 5-12 SSB replacement flowchart [1/2]

5.9 Software Upgrading

5.9.1 Introduction

The set software and security keys are stored in a NAND-Flash, which is connected to the PNX8543 via the PCI bus.

It is possible **for the user** to upgrade the **main** software via the USB port. This allows replacement of a software image in a stand alone set, without the need of an E-JTAG debugger. A description on how to upgrade the main software can be found in the DFU.

Important: When the NAND-Flash must be replaced, a new SSB must be ordered, due to the presence of the security keys! (copy protection keys, MAC address, ...).
Perform the following actions after SSB replacement:
1. Set the correct option codes (see sticker inside the TV).
2. Update the TV software (see the DFU for instructions).
3. Perform the alignments as described in section Reset of Repaired SSB.
4. Check in CSM if the HDMI keys are valid.

For the correct order number of a new SSB, always refer to the Spare Parts list, available on the Philips Spare Part web portal.

5.9.2 Main Software Upgrade

- The “UpgradeAll.upg” file is only used in the factory.
- The “FlashUtils.upg” file is only used by Service centres that are allowed to do component level repair on the SSB.

Automatic Software Upgrade
In “normal” conditions, so when there is no major problem with the TV, the main software and the default software upgrade application can be upgraded with the “AUTORUN.UPG” (FUS part of the one-zip file: e.g. FUS _Q5431E_ 1.25.5.0_commercial.zip). This can also be done by the consumers themselves, but they will have to get their software from the commercial Philips website or via the Software Update Assistant in the user menu (see DFU). The “autorun.upg” file must be placed in the root of the USB stick.
How to upgrade:
1. Copy “AUTORUN.UPG” to the root of the USB stick.
2. Insert USB stick in the set while the set is in ON MODE. The set will restart and the upgrading will start automatically. As soon as the programming is finished, a message is shown to remove the USB stick and restart the set.

Manual Software Upgrade
In case that the software upgrade application does not start automatically, it can also be started manually.
How to start the software upgrade application manually:
1. Disconnect the TV from the Mains/AC Power.
2. Press the “OK” button on a Philips TV remote control or a Philips DVD RC-6 remote control (it is also possible to use a TV remote in “DVD” mode). Keep the “OK” button pressed while reconnecting the TV to the Mains/AC Power.
3. The software upgrade application will start.

Attention!
In case the download application has been started **manually**, the “autorun.upg” will maybe not be recognized.
What to do in this case:
1. Create a directory “UPGRADES” on the USB stick.
2. Rename the “autorun.upg” to something else, e.g. to “software.upg”. Do not use long or complicated names, keep it simple. Make sure that “AUTORUN.UPG” is no longer present in the root of the USB stick.
3. Copy the renamed “upg” file into this directory.
4. Insert USB stick into the TV.
5. The renamed “upg” file will be visible and selectable in the upgrade application.

Back-up Software Upgrade Application
If the default software upgrade application does not start (could be due to a corrupted boot 2 sector) via the above described method, try activating the “back-up software upgrade application”.
How to start the “back-up software upgrade application” manually:
1. Disconnect the TV from the Mains/AC Power.
2. Press the “INFO”-button on a Philips remote control or “CURSOR DOWN” button on a Philips DVD RC-6 remote control (it is also possible to use a TV remote in “DVD” mode). Keep the “INFO”-button (or “cursor down” button) pressed while reconnecting the TV to the Mains/AC Power.
3. The software upgrade application will start.

5.9.3 Stand-by Software Upgrade via USB

In this chassis it is possible to upgrade the Stand-by software via a USB stick. The method is similar to upgrading the main software via USB.
Use the following steps:
1. Create a directory “UPGRADES” on the USB stick.
2. Copy the Stand-by software (part of the one-zip file, e.g. StandbySW_CFT69_84.0.0.0.upg) into this directory.
3. Insert the USB stick into the TV.
4. Start the download application manually (see section Manual Software Upgrade.
5. Select the appropriate file and press the “red” button to upgrade.

5.9.4 Content and Usage of the One-Zip Software File

Below the content of the One-Zip file is explained, and instructions on how and when to use it.

File name	Description
907.5_PnSEsticker.zip	Contains the E-sticker data. Not to be used by Service technicians.
cabinet_TV543_x.x.x.x.zip	Contains acoustic parameters per cabinet. Not to be used by Service technicians.
ceisp2padll_P2PAD_x.x.x.x.zip	Not to be used by Service technicians. For ComPair development only.
display_TV543_x.x.x.x.zip	Not to be used by Service technicians.
EJTAGDownload_Q5431_x.x.x.x.zip	Only used by service centra which are allowed to do Component Level Repair.
Factory_Q5431_x.x.x.x.zip	Only for production purposes, not to be used by Service technicians.
FlashUtils_Q5431_x.x.x.x.zip	Not to be used by Service technicians.
FUS_Q5431_x.x.x.x.zip	Contains the “autorun.upg” which is needed to upgrade the TV main software and the software download application.
HDMI_FHD_EDID_Q5431_x.x.x.x.zip	Contains the EDID content of the different (FHD) HDMI NVM’s. See ComPair for further instructions.
HDMI_HD_EDID_Q5431_x.x.x.x.zip	Contains the EDID content of the different (HD) HDMI NVM’s. See ComPair for further instructions.
lightGuide_TV543_x.x.x.x.zip	Not to be used by Service technicians.
OAD_Q5431_x.x.x.x.zip	Not to be used by Service technicians.
Pgamma_xxxxxxxx_Q5431_x.x.x.x.zip	Contains NVM data for the specific display control board. Not to be used by Service technicians.
PQ_Q5431_x.x.x.x.zip	Not to be used by Service technicians.
processNVM_Q5431_x.x.x.x.zip	Default NVM content. Must be programmed via ComPair.
StandbySW_CFT69_x.x.x.x.zip	Contains the Stand-by software in “upg” and “hex” format.
	- The “StandbySW_xxxxx_prod.upg” file can be used to upgrade the Stand-by software via USB.
	- The “StandbySW_xxxxx.hex” file can be used to upgrade the Stand-by software via ComPair.
	- The files “StandbySW_xxxxx_exhex.hex” and “StandbySW_xxxxx_dev.upg” may not be used by Service technicians (only for development purposes).

File name	Description
Tcon_xxxxxxxx_Q5431_x.x.x.x.zip	Contains NVM data for the specific display control board. Not to be used by Service technicians.
UpgradeAll_Q5431_x.x.x.x.zip	Only for production purposes, not to be used by Service technicians. Caution: **Never try to use this file, because it will overwrite the HDCP keys!**
UpgradeExe_Q5431_x.x.x.x.zip	Only for production purposes, not to be used by Service technicians.
VGA_FHD_EDID_TV543_x.x.x.x.zip	Contains the EDID content of the different (FHD) VGA NVM. See ComPair for further instructions.
VGA_HD_EDID_TV543_x.x.x.x.zip	Contains the EDID content of the different (HD) VGA NVM. See ComPair for further instructions.

6. Alignments

Index of this chapter:

6.1 General Alignment Conditions

Perform all electrical adjustments under the following conditions:

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

6.1.1 Alignment Sequence

- First, set the correct options:
  - In SAM, select “Options”, and then “Option numbers”.
  - Fill in the option settings for “Group 1” and “Group 2” according to the set sticker (see also section Option Settings).
  - Press OK on the remote control before the cursor is moved to the left.
  - In submenu “Option numbers” select “Store” and press OK on the RC.
- OR:
  - In main menu, select “Store” again and press OK on the RC.
  - Switch the set to Stand-by.
- Warming up (>15 minutes).

6.2 Hardware Alignments

Not applicable.

6.3 Software Alignments

Put the set in SAM mode (see chapter 5. Service Modes, Error Codes, and Fault Finding). The SAM menu will now appear on the screen. Select ALIGNMENTS and go to one of the sub menus. The alignments are explained below.
The following items can be aligned:

- Tuner AGC.
- White point.

To store the data:

- Press OK on the RC **before the cursor is moved to the left**.
- In main menu select “Store” and press OK on the RC.
- Press MENU on the RC to switch back to the main menu.
- Switch the set to stand-by mode.

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 TV-signal with a signal strength of at least 1 mV and a frequency of 61.25 MHz (channel 3).

6.3.1 Tuner AGC (RF AGC Take Over Point Adjustment)

Purpose: To keep the tuner output signal constant as the input signal amplitude varies.
No alignment is necessary, as the AGC alignment is done automatically (standard value: “64”).
Store settings and exit SAM.

6.3.2 White Point

- Set “Active control” to “Off”.
- Choose “TV menu”, “TV Settings” and then “Picture” and set picture settings as follows:

Picture Setting	
Dynamic backlight	Off
Dynamic Contrast	Off
Colour Enhancement	Off
Picture Format	Un scaled
Light Sensor	Off
Brightness	50
Colour	0
Contrast	100

- Go to the SAM and select “Alignments”-> “White point”.

White point alignment LCD screens:

- Use a 100% white screen as input signal and set the following values:
  - “Colour temperature”: “Normal”.
  - All “White point” values to: “127”.
  - “Red BL offset” values to “7”.
  - “Green BL offset” values to “7”.

In case you have a colour analyser:

- Measure with a calibrated contactless colour analyser in the centre of the screen. Consequently, the measurement needs to be done in a dark environment.
- Adjust the correct x, y coordinates (while holding one of the White point registers R, G or B on 127) by means of decreasing the value of one or two other white points to the correct x, y coordinates (see Table 6-1). Tolerance: dx: ± 0.004, dy: ± 0.004.
- Repeat this step for the other colour temperatures that need to be aligned.
- When finished press OK on the RC and then press STORE (in the SAM root menu) to store the aligned values to the NVM.
- Restore the initial picture settings after the alignments.

Table 6-1 White D alignment values

Colour Temperature	x	y
Cool (11000K)	0.276	0.282
Normal (9000K)	0.287	0.296
Warm (6500K)	0.313	0.329

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.

- Select a COLOUR TEMPERATURE (e.g. COOL, NORMAL, or WARM).
- Set the RED, GREEN and BLUE default values according to the values in Table 6-2.
- When finished press OK on the RC, then press STORE (in the SAM root menu) to store the aligned values to the NVM.
- Restore the initial picture settings after the alignments.

Table 6-2 White tone default settings

White Tone	32"			37"			42"			Black level offset	
Colour Temp	R	G	B	R	G	B	R	G	B	R	G
Cool	127	105	122	127	102	85	122	122	127	7	7
Normal	127	103	102	127	107	105	127	122	112	7	7
Warm	127	94	68	127	91	51	127	111	70	7	7

6.3.3 LCD Panel Flicker Alignment

Note: This is only necessary for Forward Integration models (sets that have the LCD Timing Controller (TCON) located on the SSB).

See ComPair for further instructions.

6.4 Option Settings

6.4.1 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 PNX5100 ICs (back-end advanced video picture improvement IC which offers motion estimation and compensation features (commercially called HDNM) plus integrated Ambilight control) is made known by the option codes.

Notes:

- After changing the option(s), save them by pressing the OK button on the RC before the cursor is moved to the left, select STORE in the SAM root menu and press OK on the RC.
- The new option setting is only active after the TV is switched “off” / “stand-by” and “on” again with the mains switch (the NVM is then read again).

6.4.2 Dealer Options

For dealer options, in SAM select “Dealer options”.
See Table 6-4.

6.4.3 (Service) Options

Select the sub menu's to set the initialisation codes (options) of the model number via text menus. See Table 6-4.

6.4.4 Opt. No. (Option numbers)

Select this sub menu to set all options at once (expressed in two long strings of numbers).
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 NVM 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 and in Table 6-3.
Example: The options sticker gives the following option numbers:

- 08192 00133 01387 45160
- 12232 04256 00164 00000

The first line (group 1) indicates hardware options 1 to 4, the second line (group 2) indicate 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 Table 6-3 for the options.

Diversity
Not all sets with the same Commercial Type Number (CTN) necessarily have the same option code!
Use of Alternative BOM An alternative BOM number usually indicates the use of an alternative display or power supply. This results in another display code thus in another Option code. For the power supply there is no difference.
Refer to 3. Precautions, Notes, and Abbreviation List.

6.4.5 Option Code Overview

Table 6-3 Option and display code overview

CTN (Alt. BOM#)	Options Group 1	Options Group 2	Display code
32PFL5604H/12 (Alt. BOM 1)	08192 00133 01387 45160	14280 12448 00164 00000	200
32PFL5604H/12 (Alt. BOM 2)	08192 00133 01387 45160	14279 12448 00164 00000	199
32PFL5624H/12 (Alt. BOM 1)	08192 00134 01387 45160	14280 12448 00164 00000	200
32PFL5624H/12 (Alt. BOM 2)	08192 00134 01387 45160	14279 12448 00164 00000	199
37PFL5604H/12 (Alt. BOM 2)	08192 00133 01387 45160	14295 12448 00164 00000	215
42PFL5604H/12	08192 00135 01387 45160	14282 12448 00164 00000	202
42PFL5624H/12	08192 00136 01387 45160	14282 12448 00164 00000	202

Important: after having edited the option numbers as described above, you **must press OK** on the remote control **before the cursor is moved to the left**!

6.5 Reset of Repaired SSB

A very important issue towards a repaired SSB from a service repair shop implies the reset of the NVM on the SSB.
A repaired SSB in service should get the service Set type “00PF0000000000” and Production code “000000000000000”. Also the virgin bit is to be set. To set all this, you can use the ComPair tool.
In case of a display replacement, reset the “Operation hours” to “0”, or to the operation hours of the replacement display.

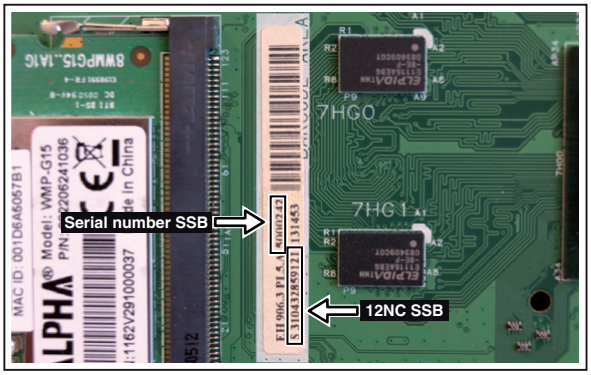
6.5.1 SSB identification

When ordering a new SSB, please use the correct ordering number. The 12nc SSB can be found on a sticker on the SSB (see Figure 6-1). The 12 nc SSB is preceeded with an “S”. The ordering number of a “Service SSB” is the same as the ordering number of a “Factory SSB”.

The identification number of the SSB, as stored in NVM, consists of fourteen characters and is built up as follows:

- seven last characters of the 12NC of the SSB itself
- the serial number of the SSB, which consists of seven digits.

The serial number SSB and 12nc SSB both can be found on a sticker on the SSB (see Figure 6-1).



18441_200_090429.eps
091208

Figure 6-1 SSB identification

6.6 Total Overview SAM modes

Table 6-4 SAM mode overview

Main Menu	Sub-menu 1	Sub-menu 2	Sub-menu 3	Description
Hardware Information	A. SW VERSION	e.g. “Q5431_0.26.10.0”		Display TV & Stand-by SW version and CTN serial number.
	B. Stand-by processor version	e.g. “STDBY_84.69.0.0”		
	C. Production code	e.g. “See type plate”		
Operation hours				Displays the accumulated total of operation hours.TV switched “on/off” & every 0.5 hours is increase one
Error				Displayed the most recent error.
Reset error buffer				Clears all content in the error buffer.
Alignment	Tuner AGC			RF-AGC Take over point adjustment (AGC default value is 64)
	White point	Colour temperature	Normal	3 difference modes of colour temperature can be selected
			Warn	
			Cool	
		White point red		LCD White Point Alignment. For values, see Table 6-1.
		White point green		
		White point blue		
		Red black level offset		
		Green black level offset		
Dealer options	Picture mute	Off/On		Select Picture mute On/Off. Picture is muted / not muted in case no input signal is detected at input connectors.
	Virgin mode	Off/On		Select Virgin mode On/Off. TV starts up / does not start up (once) with a language selection menu after the mains switch is turned “on” for the first time (virgin mode)
	E-sticker	Off/On		Select E-sticker On/Off (USP's on-screen)
	Auto store mode	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
Options	Digital broadcast	DVB	Off/On	Select DVB On/Off
		DVB - T installation	Off/On or Country dependent	Select DVB T installation On/Off or by country
		DVB - T light	Off/On	Select DVB T light On/Off
		DVB - C	Off/On	Select DVB C On/Off
		DVB - C installation	Off/On or Country dependent	Select DVB C installation On/Off or by country
		Over the air download	Off/On or Country dependent	Select Over the air download On/Off or by country
		8 days EPG	Off/On	Select 8 day EPG On/Off
	Digital features	USB	Off/On	Select USB On/Off
		Ethernet	Off/On	Select Ethernet On/Off
		Wi-Fi	Off/On	Select Wi-Fi On/Off
		DLNA	Off/On	Select DLNA On/Off
		On-line service	Off	On-line service is Off
		PTP (Picture Transfer Protocol)	Off/On	Select PTP On/Off
		Update assistant	Off/On	Select Update assistant On/Off
		Internet software update	Off	Internet software update is Off
	Display	Screen	201 / LCD LGD WUE SBA1 37"	Displayed the panel code & type model.
		LightGuide	Off/On	Select LightGuide On/Off
		Display fans	Not present/Present	Select Display fans Present/Not present.
		Temperature sensor	No sensor	N.A
		Temperature LUT	0	N.A
		E-box & monitor	Off/On	Select E-box & monitor On/Off
	Video reproduction	Picture processing	None/PNX5100	Select Picture processing None/PNX5100 (Q543.xE chassis).
		MOP local contrast	Off/On	Select MOP local contrast On/Off
		Light sensor	Off/On	Select Light sensor On/Off
		Light sensor type	0/1/2/3	Select Light sensor type form 0 to 3 (for difference styling).
		Pixel Plus type	Pixel Plus HD	Select type of picture improvement.
			Perfect Pixel HD	
			Pixel Precise HD	
			Pixel Plus HD (used in Q543.xE)	
			Pixel Precise HD (used in Q548.1E)	
		Ambilight	None,	Select type of Ambilight modules use.
			2 sided 2/2	For 8400 series only
			2 sided 4/4	
			3 sided 2/3/2	
			3 sided 4/3/4	
			3 sided 4/5/4	
			4 sided 4/3/4/3	
		Ambilight technology	LED/Future use	Ambilight technology LED is in use.
		MOP ambilight	Off/On	Select MOP ambilight On/Off

Main Menu	Sub-menu 1	Sub-menu 2	Sub-menu 3	Description
	Audio reproduction	Acoustic system		Cabinet design used for setting dynamic audio parameters.
	Source selection	EXT1/AV1 type	SCART CBVS RGB LR	Select input source when connected with external equipment.
			CVBS Y/C YPbPr LR	
			CVBS Y/C YPbPr HV LR	
			(CVBS) YPbPr LR	
		EXT2/AV2 type	SCART CBVS RGB LR	Select input source when connected with external equipment.
			CVBS Y/C LR	
			(CVBS) YPbPr LR	
			CVBS Y/C LR	
		EXT3/AV3 type	None	Select input source when connected with external equipment.
			CVBS	
			CVBS LR	
			YPbPr	
			YPbPr LR	
			YPbPr HV LR	
		VGA	Off/On	Select VGA On/Off
		SIDE I/O	Off/On	Select SIDE I/O On/Off
		HDMI 1	Off/On	Select HDMI 1 On/Off
		HDMI 2	Off/On	Select HDMI 2 On/Off
		HDMI 3	Off/On	Select HDMI 3 On/Off
		HDMI 4	Off/On	Select HDMI 4 On/Off
		HDMI side	Off/On	Select HDMI side On/Off
		HDMI CEC	Off/On	Select HDMI CEC On/Off
		HDMI CEC RC pass through	Off/On	Select HDMI CEC RC pass through On/Off
		HDMI CEC Pixel Plus link	Off/On	Select Pixel Plus link On/Off
	Miscellaneous	Region	Europe/AP-PAL-MULTI/Australia	Select Region/country.
		Tuner type	HD1816-MK1/TD1716-MK4/ TD1716-MK3/HD1816-MK2	Select type of Tuner used.
		System RC support	Off/On	Select System RC support On/Off.
		Embedded user manual	Off/On	Select Embedded user manual On/Off.
		Start-up screen	Off/On	Select Start-up screen On/Off.
		Wallpaper	Off/On	Select Wallpaper On/Off.
		Hotel mode	Off	Hotel mode is Off.
Option number	Group 1	e.g. “08192.02181.01387.45160”		The first line (group 1) indicates hardware options 1 to 4.
	Group 2	e.g. “10185.12448.00164.00000”		The second line (group 2) indicates software options 5 to 8.
	Store			Store after changing.
Initialise NVM				N.A
Store				Select Store in the SAM root menu after making **any** changes.
Software maintenance	Software events	Display		Display information is for development purposes.
		Clear		
		Test reboot		
		Test reboot is to restart the TV.		
	Hardware events	Display		Display information is for development purposes.
		Clear		
Operation hours display		0003		In case the display must be swapped for repair, you can reset the “Display operation hours” to “0”. So, this one does keeps up the lifetime of the display itself (mainly to compensate the degeneration behaviour).
Test setting	Digital information	QAM modulation: 64-QAM		Display information is for development purposes.
		Symbol rate: 23:29		
		Original network ID: 12817		
		Network ID:12817		
		Transport stream ID: 2		
		Service ID: 3		
		Hierarchical modulation: 0		
		Selected video PID: 35		
		Selected main audio PID: 99		
		Selected 2nd audio PID: -1		
	Install start frequency	000		Install start frequency from 0 MHz
	Install end frequency	999		Install end frequency as 999 MHz
	Default install frequency			
	Installation	Digital only		Select Digital only or Digital + Analogue before installation.
		Digital + Analogue		

Main Menu	Sub-menu 1	Sub-menu 2	Sub-menu 3	Description
Development file versions	Development 1 file version	Display parameters DISPT 4.0.8.11		Display information is for development purposes.
		Acoustics parameters ACSTS 3.0.6.1		
		PQF - Fixed settings 1 “4.54.34.32.34”		
		PQS - Profile set 1 “4.57.34.32.34”		
		PQU - User styles 1 “4.56.34.32.34”		
	Development 2 file version	12NC one zip software		Display information is for development purposes.
		Initial main software		
		NVM version Q5431_0.4.3.0		
		Flash units SW Q5431_0.16.48.24		
Upload to USB	Channel list			To upload several settings from the TV to an USB stick
	Personal settings			
	Option codes			
	Display-related alignment			
	History list			
Download from USB	Channel list			To download several settings from the USB stick to the TV.
	Personal settings			
	Option codes			
	Display-related alignment			

7. Circuit Descriptions

Index of this chapter:

Notes:

- Only **new** circuits (circuits that are not published recently) are described.
- Figures can deviate slightly from the actual situation, due to different set executions.
- For a good understanding of the following circuit descriptions, please use the wiring, block (see chapter 9. Block Diagrams) and circuit diagrams (see chapter 10. Circuit Diagrams and PWB Layouts).Where necessary, you will find a separate drawing for clarification.

7.1 Introduction

The Q543.3E LA chassis (platform name TV543/32) is a derivative from the Q522.2E LA chassis (platform TV522).

Main difference with the previous platform is the presence of the Timing Controller (TCON) on the SSB instead of on the LCD Panel.

7.1.1 Implementation

Key components of this chassis are:

- PNX8543 Digital Colour Decoder
- R8J01070FT Timing Controller
- HD1816AF Hybrid Tuner
- DRX3926K Demodulator
- TDA9996 HDMI Switch
- TPA3123D2PWP Class D Power Amplifier.

7.1.2 TV543 Architecture Overview

- For details about the chassis block diagrams refer to chapter 9. Block Diagrams. An overview of the TV543 architecture can be found in Figure 7-1.

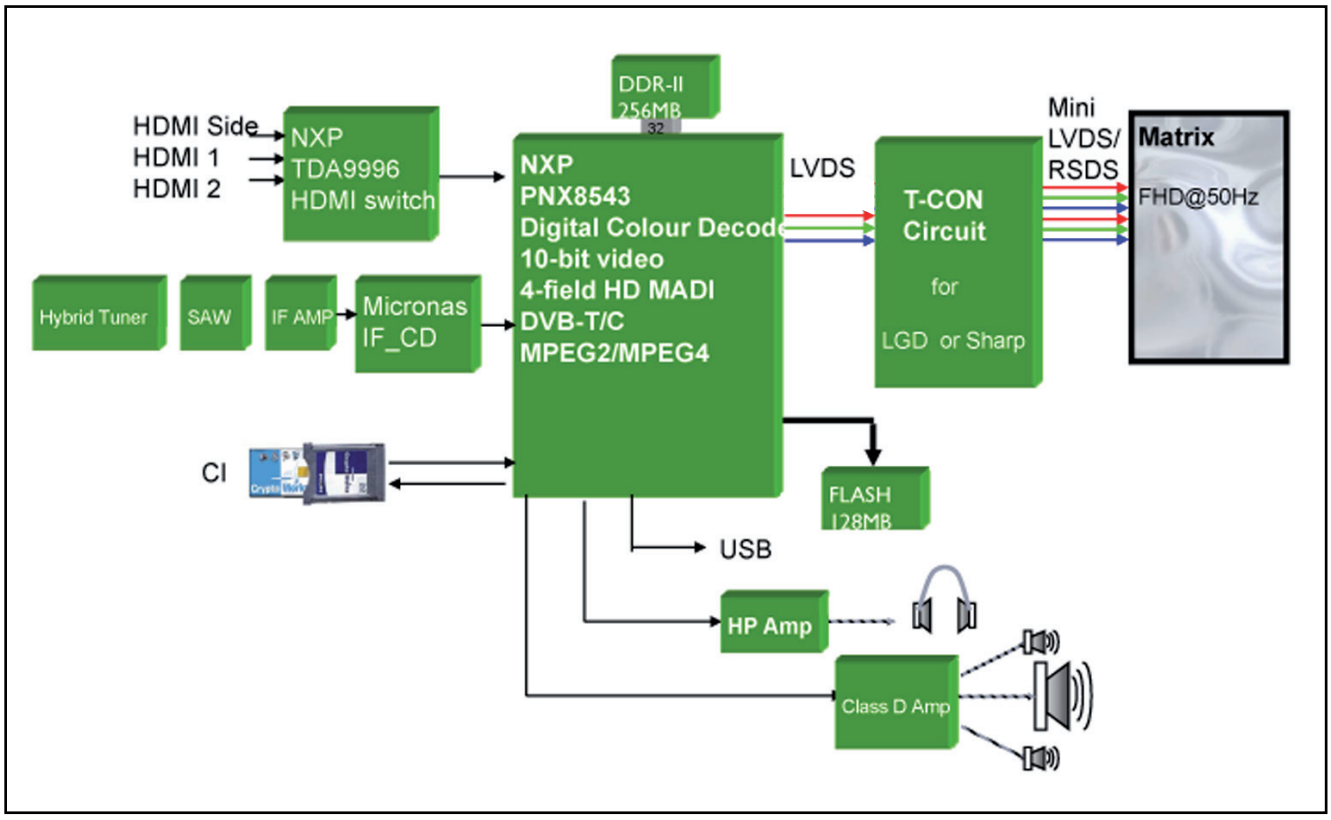


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Figure 7-1 Architecture of TV543/32 Forward Integration platform

7.1.3 SSB Cell Layout

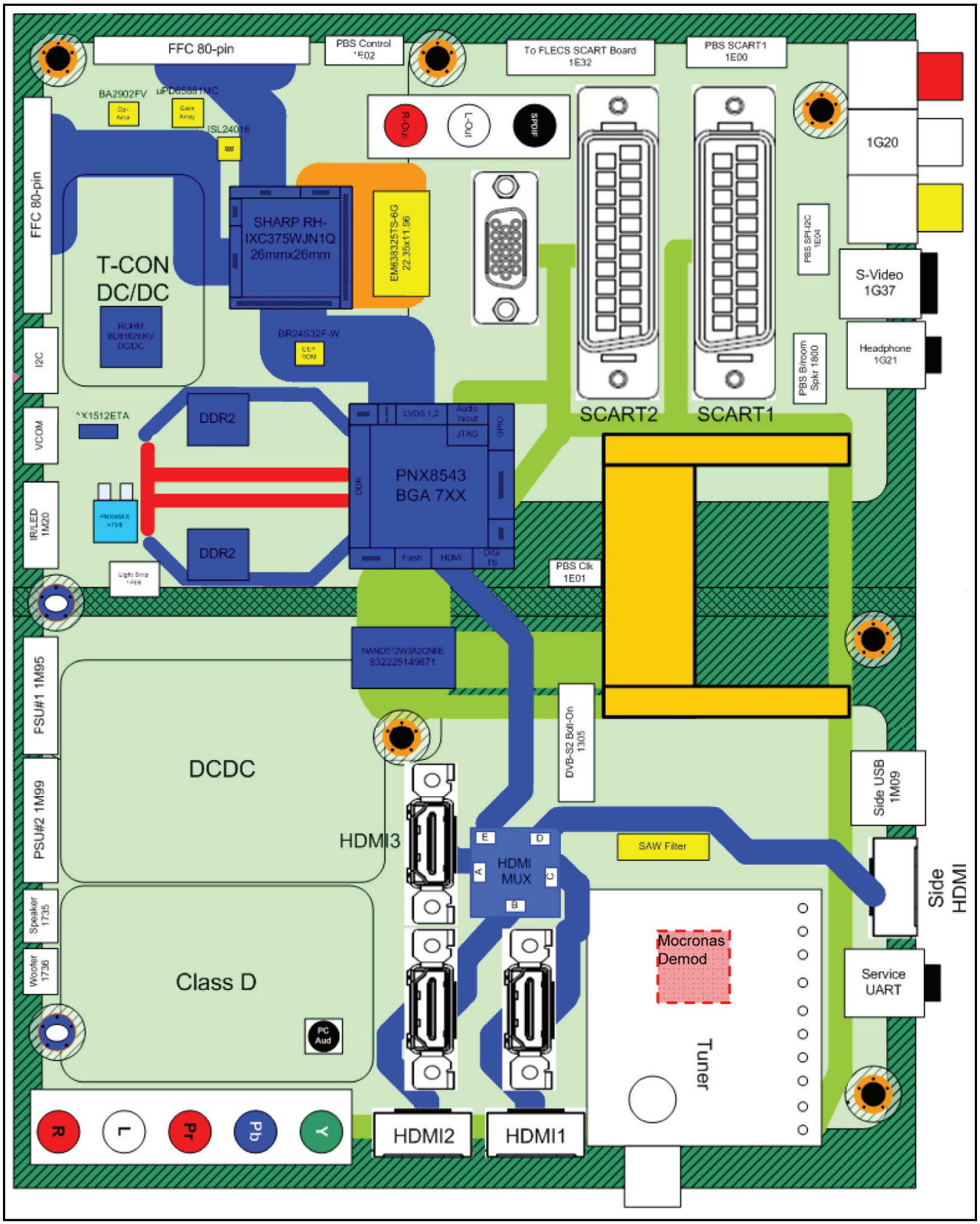

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Figure 7-2 SSB layout cells (top view)

7.2 Power Supply

All power supplies described below are a black box for Service. When defective, a new board must be ordered and the defective one must be returned, unless the main fuse of the board is broken. Always replace a defective fuse with one with the correct specifications! This part is available in the regular market.
Consult the Service Spare Parts website for the order codes of the boards.

7.2.1 Specifications

The only type of power supply used in the TV543 Forward Integration platform is the Integrated Power Board (IPB) - incl. inverter.

In this manual, no detailed information is available because of design protection issues.

7.2.2 Diversity

Below find an overview of the different PSUs that are used:

Table 7-1 Supply diversity

Supplier	PSU	Model	Input Voltage Range
LGIT	PLHL-T837A	32" LGD display	High Mains (198 to 265 V_{AC})
LGIT	PLHL-T813A	42" LGD display	High Mains (198 to 265 V_{AC})
LGIT	PLHL-T808A	32" Sharp display	High Mains (198 to 265 V_{AC})
tbd	tbd	42" Sharp display	tbd

It should be noted that for different display manufacturers, different PSUs are used. When ordering a new PSU, always check which LCD panel is used in the set, and order the correct PSU!

7.2.3 Application

An application diagram can be found below:

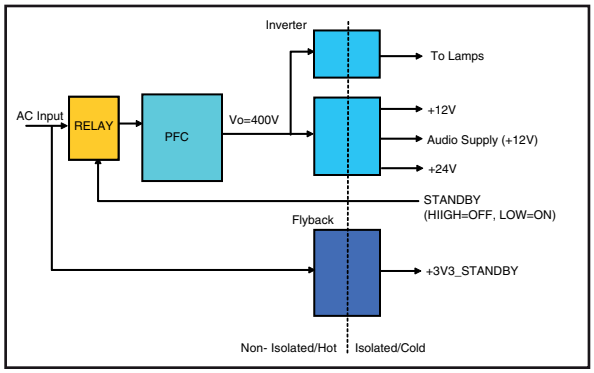

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Figure 7-3 Application Integrated Power Board

7.2.4 Power Supply Timing

The STANDBY signal controls the on-mode voltages +12V, $+V_{snd}$ and +24V. During chassis cold start from AC mains, +12V can be expected to be stable within 1.0 seconds, while for a warm start, i.e. wake up from stand-by power state, this timing becomes 0.5 seconds maximum. During AC switch off, stand-by power +3V3-STANDBY decay is at least 20 ms but not more than 5.0 seconds compared to +12V. Refer to Figure 7-4:

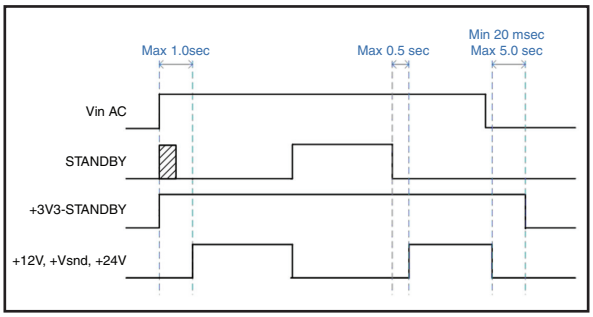

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Figure 7-4 PSU Timing Diagram

7.2.5 Power Supply Protection

Power supply protection is implemented via the stand-by controller of the PNX8543 via the following signals:
- POWER-OK: signal from PSU to indicate if the supply output from the IPB is normal
- DETECT1: signal to indicate if the +5V, +3V3 and +1V2 voltages on the chassis are present
- DETECT2: signal to indicate if the +12V voltage on the chassis is present.

7.3 DC-DC Converter

Input power is obtained from the IPB module via the following voltages:
- +3V3-STANDBY (stand-by-mode only)
- +12V (on-mode)
- $+V_{snd}$ (audio power) (on-mode)
- +24V (bolt-on power) (on-mode).

Control is achieved by the PNX8543 controller via the STANDBY signal.

Audio power is specifically for audio supply usage only and does not go through any DC conversion.

Below find a block diagram of the on-board DC-DC converters.

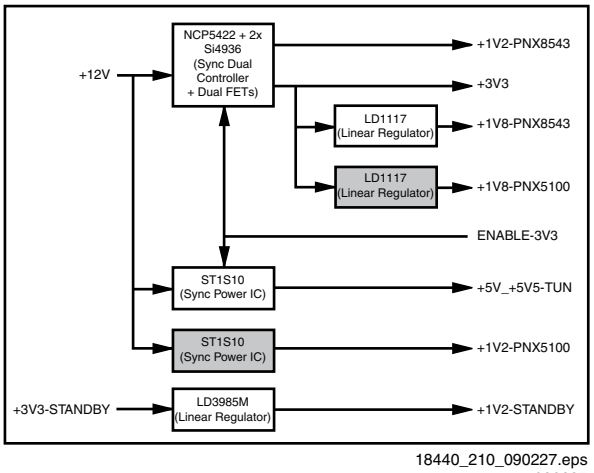

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Figure 7-5 DC-DC converters

7.4 Front-End

The Front-End consist of the following key components:

- Tuner HD1816AF
- IF demodulator DRX3926K
- AGC amplifier UPC3221GV
- SAW filter 36M125.

Below find a block diagram of the front-end application.

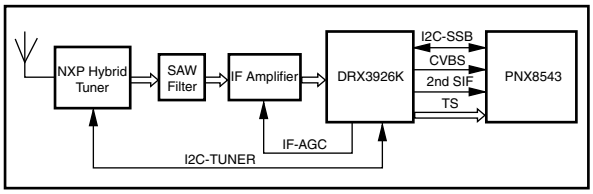

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Figure 7-6 Front-End block diagram

The DRX3926K is a multi-standard demodulator supporting DVB-C, DVB-T and analogue standards. The demodulated digital stream is fed into the parallel transport stream data ports of the PNX8543. The demodulated analogue signal in the form of CVBS is connected to the analogue video CVBS/Y input channel, while the SIF is connected via the SSIF2 positive input port.

7.5 HDMI

In this platform, the TDA9996 HDMI multiplexer is implemented. The EDID contents are no longer stored in a separate EEPROM, but directly in the multiplexer. Each input has its own physical sub address: the first 253 bytes are common, where the last 3 bytes define the specific input. The EDID contents are, at +5V power-up, downloaded to RAM. The following figures show the HDMI input configuration and EDID control.

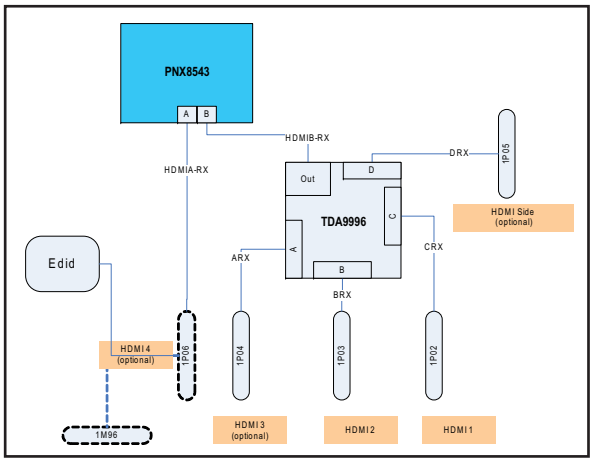

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Figure 7-7 HDMI input configuration

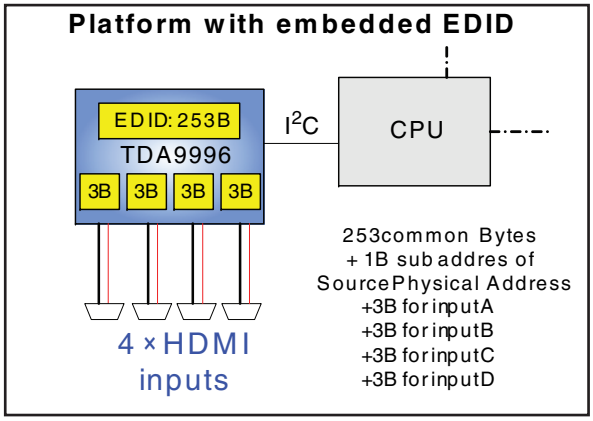

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Figure 7-8 EDID control (embedded EDID)

Some delta's w.r.t. TDA9996 compared to earlier chassis/ platforms are:

- +5V detection mechanism
- stable clock detection mechanism
- integrated EDID
- RT control
- HPD control
- TMDS output control
- CEC control
- new hot-plug control for PNX8543 for 5th HDMI input
- new EDID structure: EDID stored in TDA9996, therefore there are no EDID pins on the SSB. Only in the event of a 5th HDMI input, an additional EEPROM is foreseen, as was implemented in previous platforms.

Some delta's with respect to PNX8543 compared to earlier chassis/platforms are:

- 2 HDMI inputs (A & B)
- HDMI deep colour RGB/YCbCr 4:4:1 10/12 bit detection.

After replacement of the TDA9996 HDMI multiplexer, the default I^2C address should be reprogrammed from C0 to CE, and the HDMI EDIDs should be reprogrammed as well. Both actions should be executed via ComPair.

7.6 Video and Audio Processing - PNX8543

The PNX8543 is the main audio and video processor (or System-on-Chip) for this platform. It is a member of the PNX85xx SoC family (described in earlier chassis) with the addition of the MPEG4 functionality; the separate STi710x MPEG4 decoder is no longer implemented in this platform.

The PNX8543 handles the digital and analogue audio- and video decoding and processing. The processor is a MIPS32 general purpose CPU and a 8051-based TV controller for power management and user event handling.

- For a functional diagram of the PNX8543, refer to Figure 7-9.

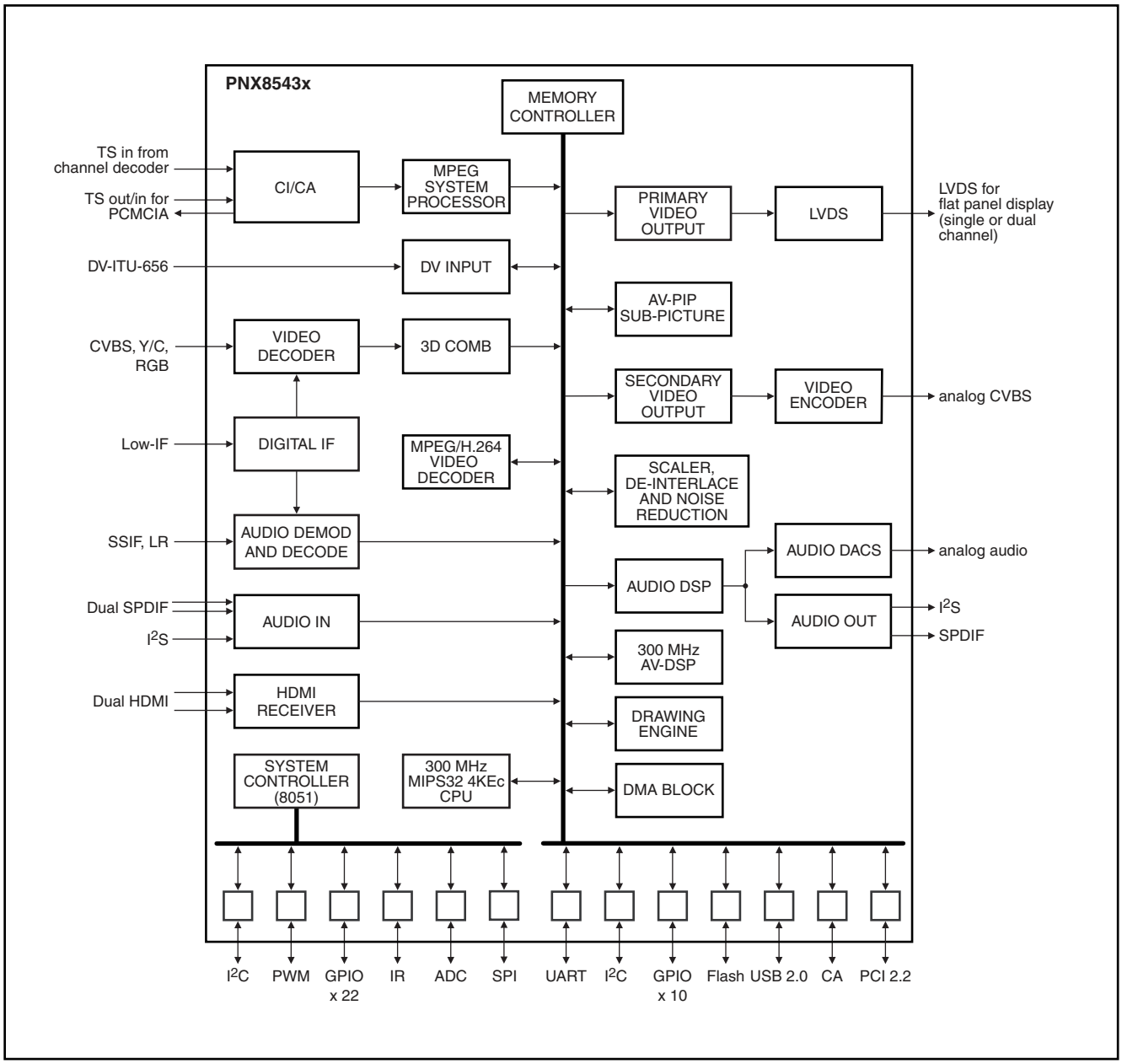

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Figure 7-9 PNX8543 functional diagram

7.6.1 Video Subsystem

Refer to Figure 7-10 for the main video interfaces for the PNX8543 and the video signal flow between blocks and memory.

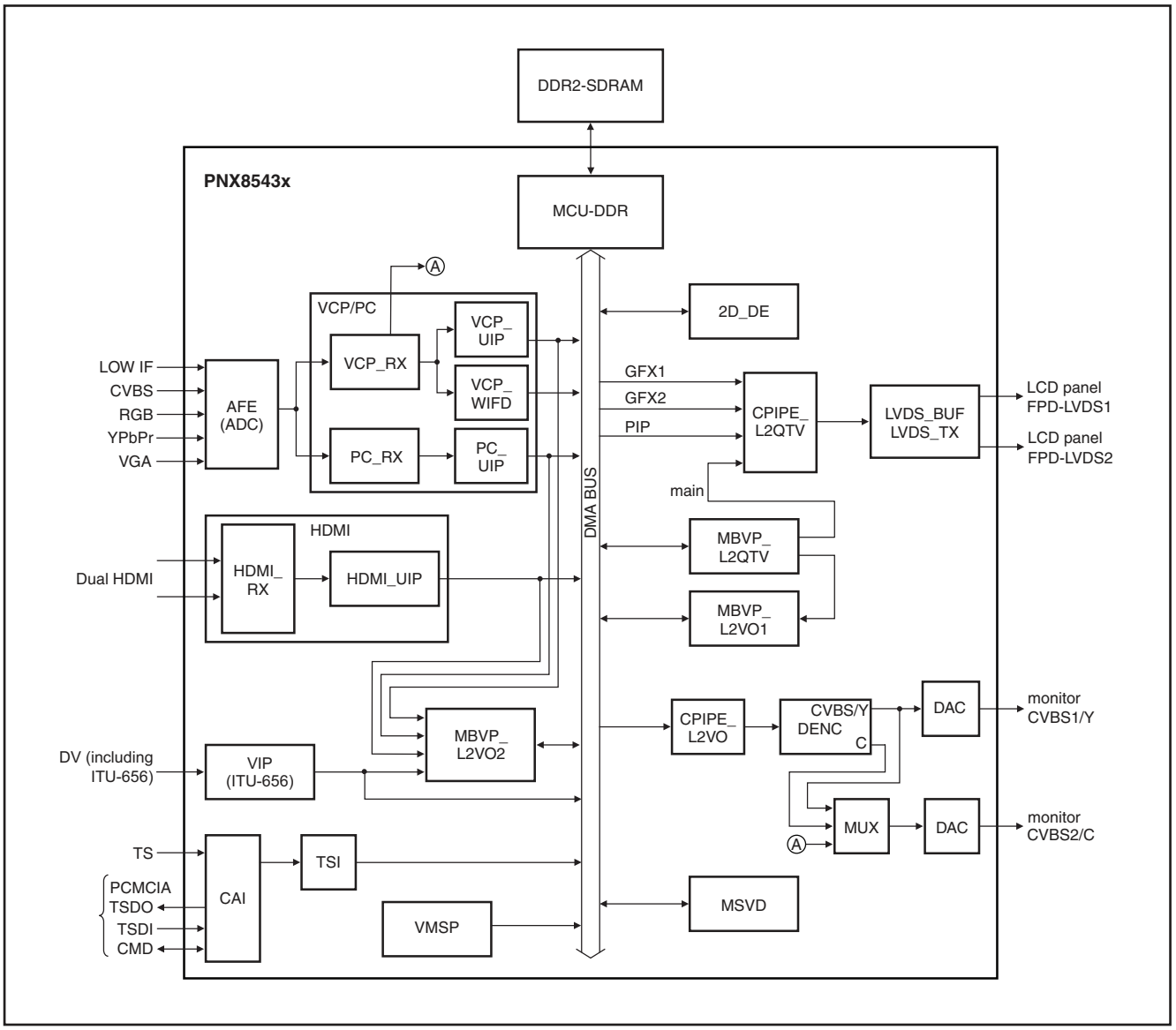

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Figure 7-10 PNX8543 video flow diagram

The Video Subsystem consist of the following blocks:

- Analogue Front-End (AFE) block
- Video and PC Capture (VPC/PC) pipe
- HDMI Receiver interface
- Memory-Based Video Processor MBVP)
- Video Composition Pipe (CPIPE)
- Memory Based Video Processor (MBVP) VO-1
- Memory Based Video Processor (MBVP) VO-2
- Video Composition Pipe (CPIPE)
- Dual Flat Panel Display-LVDS (FPD-LVDS)
- Digital Encoder (DENC)
- Digital Video VIP
- 2D graphics block.

7.6.2 Audio Subsystem

Refer to Figure 7-11 for the main audio interfaces for the PNX8543 and the audio signal flow between blocks and memory.

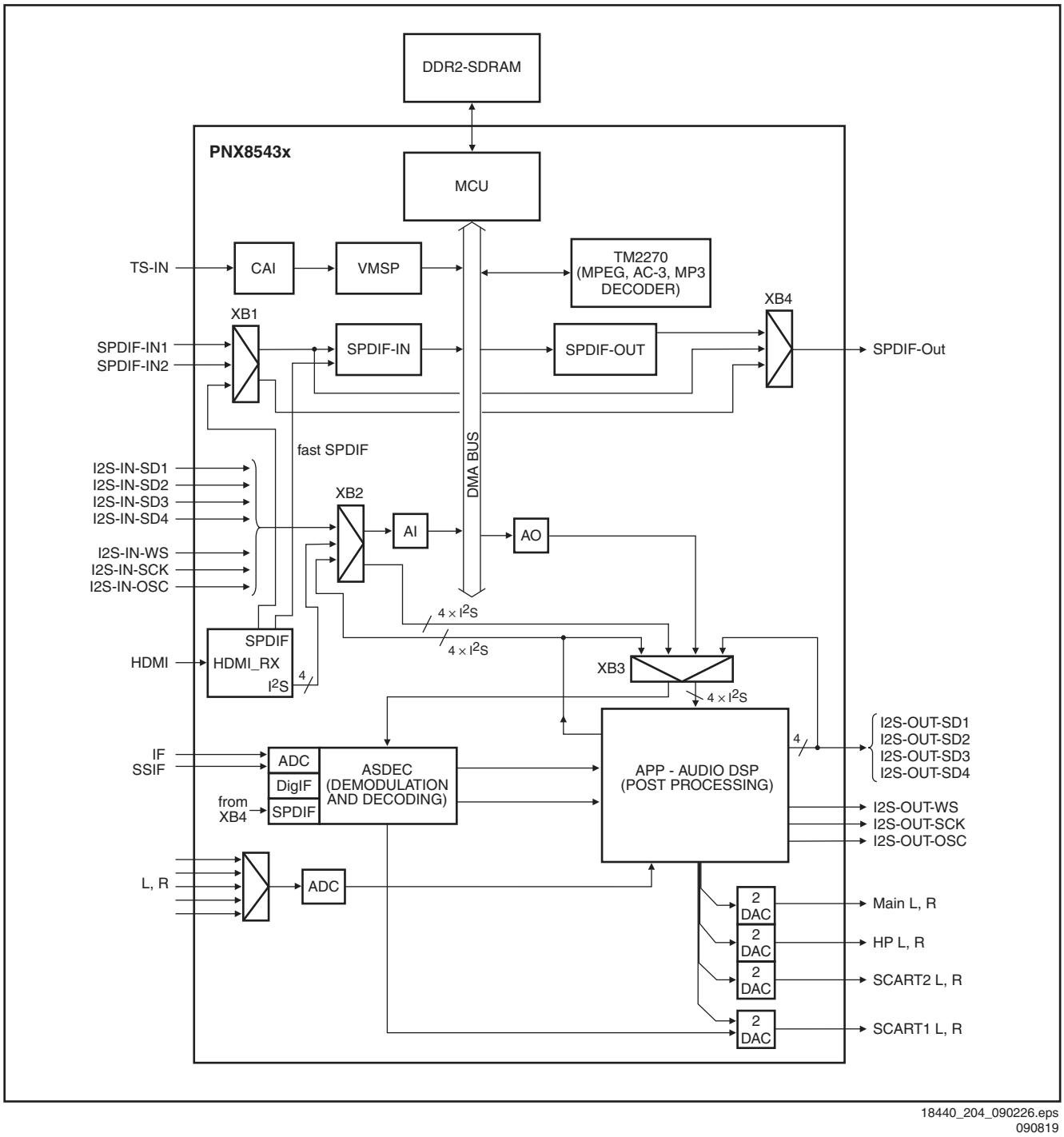

Figure 7-11 PNX8543 audio flow diagram

The Audio Subsystem consist of the following blocks:

- Analogue Audio Front End (AAFE) used to capture Baseband Audio Inputs and to sample Secondary Sound IF (SSIF) directly or via Low-IF input
- HDMI Receiver interface block
- SPDIF input block
- Audio Input (AI) block
- Audio Output (AO) block
- Demodulation & Decoding (ASDEC) DSP for decoding all analogue terrestrial TV sound standards
- Audio Post-Processing (APP) block
- Digital Audio decoder.

7.6.3 Connectivity and Compute Subsystem

Refer to Figure 7-12 for the connectivity and compute subsystem.

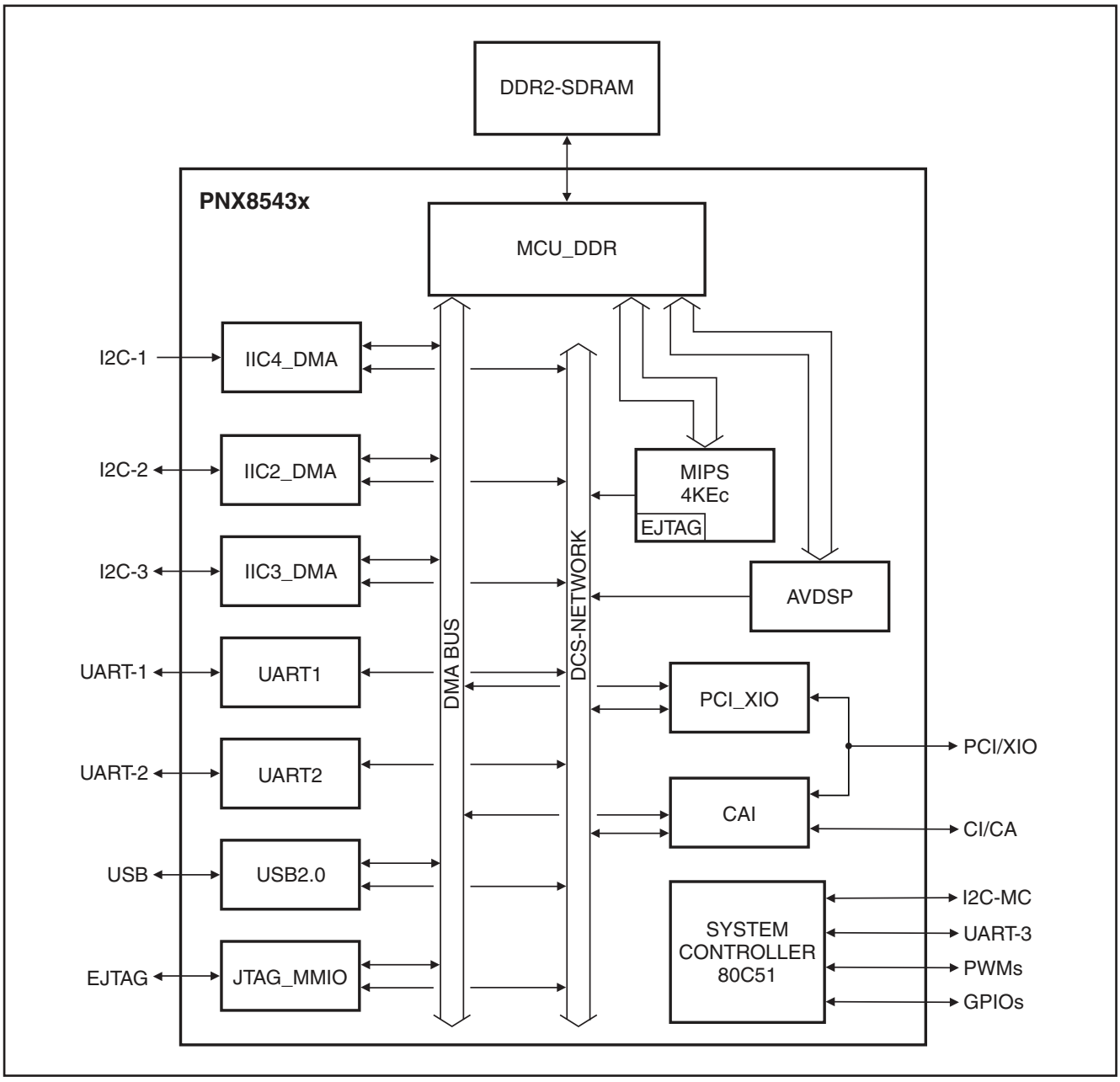

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Figure 7-12 PNX8543 connectivity and compute subsystem

The Connectivity Subsystem consists of:
- PCI/XIO interface
- USB2.0 interface
- Three 2-wire UARTs
- Four Master/Slave I^2C interfaces
- Common Interface/Conditional Access Interface.

The Computing Subsystem consists of:
- 32-bit MIPS RISC core
- Enhanced JTAG (EJTAG) block inside the MIPS
- JTAG_MMIO blocks
- TV controller
- Audio/Video DSP (AV_DSP)
- Memory Control Unit (MCU).

7.6.4 Service Notice - FLASH RAM / PNX8543 exchange

The FLASH RAM (item 7M00) and/or PNX8543 (item 7600) can only be exchanged by an authorised central workshop with dedicated programming tools. Due to the presence of (CI+) keys in the components, **unauthorised exchange of these components will always result in a defective board**.

7.7 Back-End - On-board Timing Controller (TCON)

In this platform, the Timing Controller (TCON) does not come together with the LCD panel, but is integrated into the SSB. The following figure shows the generic block diagram.

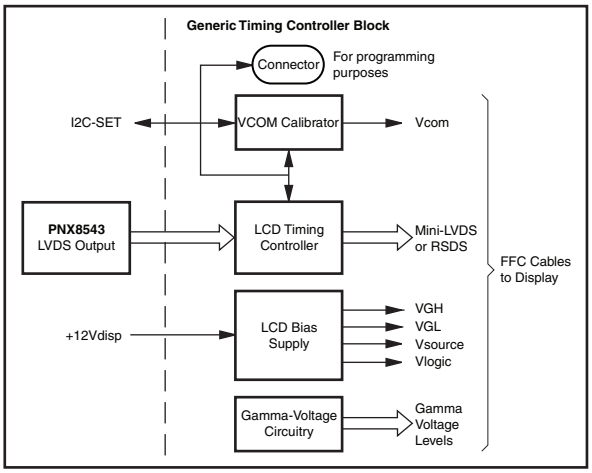

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Figure 7-13 Block diagram Timing Controller

A Timing Controller is a key element in the “make-up” of an LCD module. It forms the control centre, where it routes and re-formats the data to column drivers on the LCD module.

Until now, the TCON was usually integrated into the LCD panel and implemented through the use of ASIC devices, which makes it impossible to re-use the TCON in other LCD panel designs. Along with TCONs, discrete LVDS devices, using the LVDS protocol, were also required for interface and control of the LCD module.

A “new generation” of (programmable) Timing Controllers has been designed which can be used on multiple LCD panel designs. They can support non-standard resolutions and different LCD panel configurations from various LCD manufacturers. These TCON offer higher levels of integration and, in addition, a new high-speed low voltage differential interface protocol between the TCON and Column Driver (CD) has been developed, called Reduced Swing Different Signalling (RSDS). The use of this protocol offers higher data transfer rates.

In this chassis, such a “new generation” programmable TCON has been implemented. The inputs to the TCON are the LVDS output from the PNX8543 and the +12V display supply. The TCON converts the LVDS signal into the required format:

- mini-LVDS signals for LGD LCD panels, or
- RSDS signals for Sharp LCD panels.

The LCD bias supply block generates the bias voltages VG_H and VG_L, as well as the source voltage V_{source} and logic voltage V_{logic} for the LCD panel.

The output signal of the VCOM Calibrator, V_{com}, is a reference voltage for Liquid Crystal Driving. This can be aligned to minimize flicker on the display resulting from non-symmetrical voltages that aligns the liquid crystals. Both Sharp and LGD TCONs use a programmable VCOM Calibrator IC for V_{com} adjustment. The adjusted VCOM data will be stored inside on-chip memory and will be automatically recalled during each power-up. For instructions on how to program the TCON and set the correct value of the reference voltage, refer to ComPair.

It should be noted that in this platform the use of the TCON is display-related: the use of a different branded LCD panel automatically implies the use of another TCON, thus another SSB.

For trouble shooting, below find an overview of the DC voltages used on the TCON circuitry.

Table 7-2 DC voltages

Signal	Display		Destination
	LG	Sharp	
VG_H	+25 V	+35 V	to gate drivers (high voltage)
VG_L	-6 V	-6 V	to gate drivers (low voltage)
V_{CC}	+3.3 V	+3.3 V	timing controller IC supply voltage
V_{CC}	+1.2 V	+1.5 V	timing controller IC supply voltage
V_{ref}	+16 V	+15.2 V	gamma reference voltage
V_{DD}	+16 V	+15.6 V	source driver supply
MV_{LS}	-	+9 V	MPD IC supply voltage

7.8 Common Interface CI+

Together with this platform, an extension to the Common Interface (CI) Conditional Access system is added, called CI+.

CI+ or Common Interface Plus is a specification that extends the Common Interface (DVB-CI) as described in the digital broadcasting standard DVB.

The weakness of the conventional CI module used in a Conditional Access system was the absence of a Copy Protection mechanism, as decrypted content could be sent over the PCMCIA interface unscrambled. With the CI+ extension, a form of copy protection is established between the Conditional Access Module (CAM) and the Integrated Digital Television (IDTV). The security mechanisms in CI+ are derived/copied from POD (with the exception of Out Of Band (OOB) used in US CA systems). For more information about conventional CA systems using a CI module, refer to the BJ3.0E L/PA or BL2.xU Service Manual.

The CI+ standard is downwards compatible with the existing CI standard.

The following figure shows the implementation of the CI+ Conditional Access system in the TV543 platform.

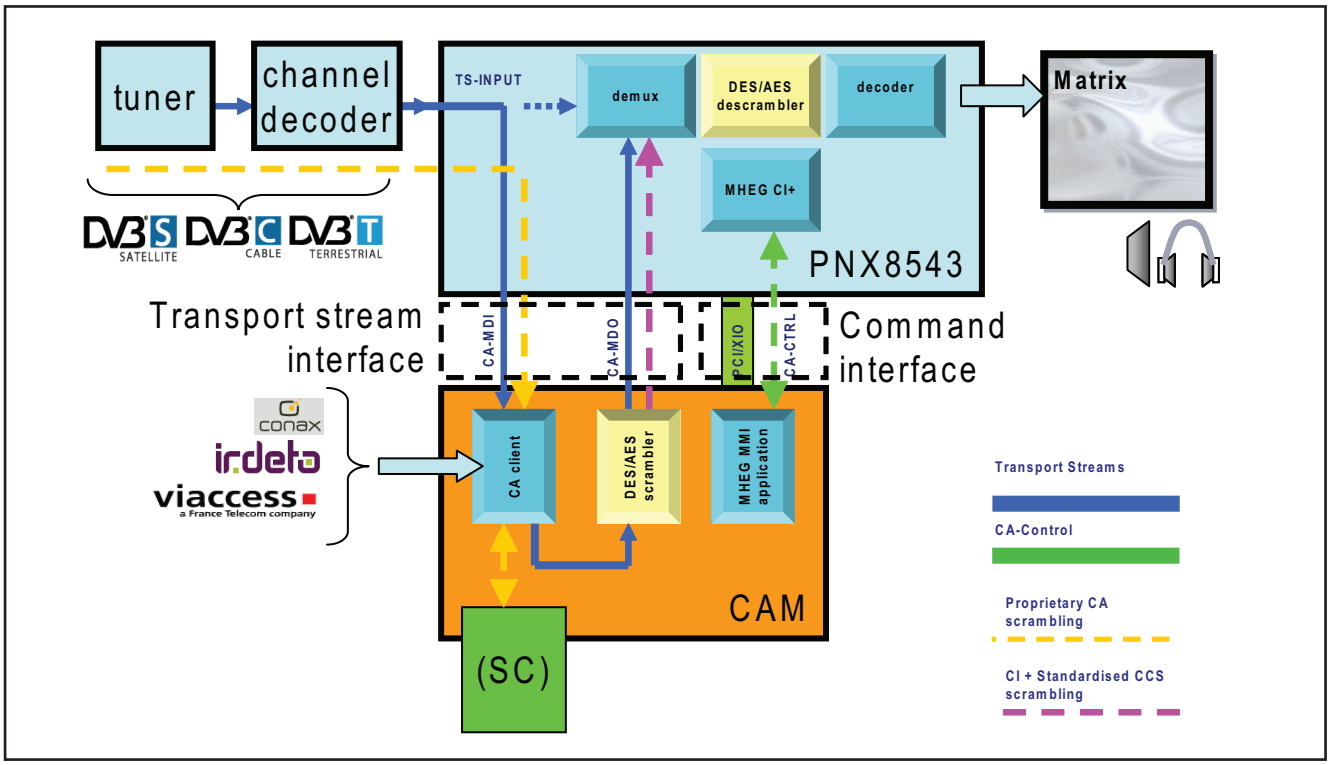

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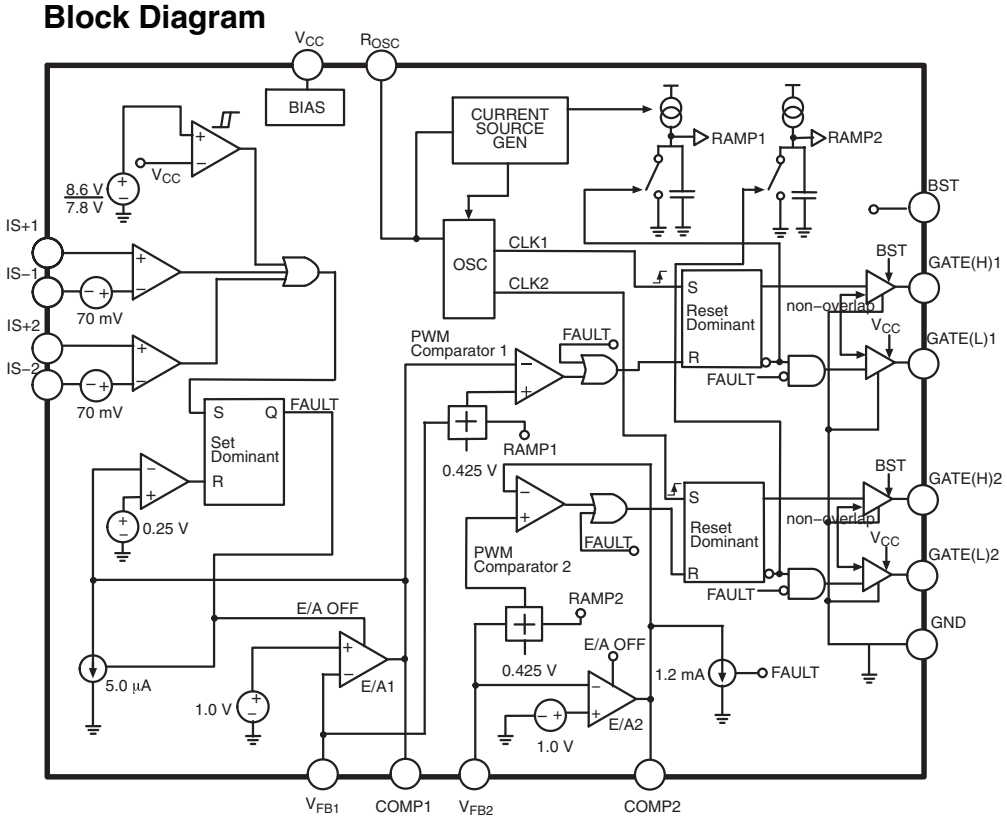
Figure 7-14 CI+ Conditional Access implementation

8. IC Data Sheets

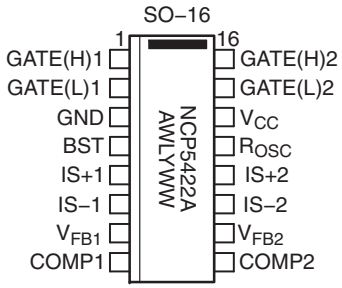
This chapter shows the internal block diagrams and pin configurations of ICs that are drawn as “black boxes” in the electrical diagrams (with the exception of “memory” and “logic” ICs).

8.1 Diagram SSB: DC/DC +3V3 +1V2 B01A, NCP5422AD (IC 7103)

Block Diagram



Pin Configuration



A = Assembly Location
WL = Wafer Lot
Y = Year
WW = Work Week

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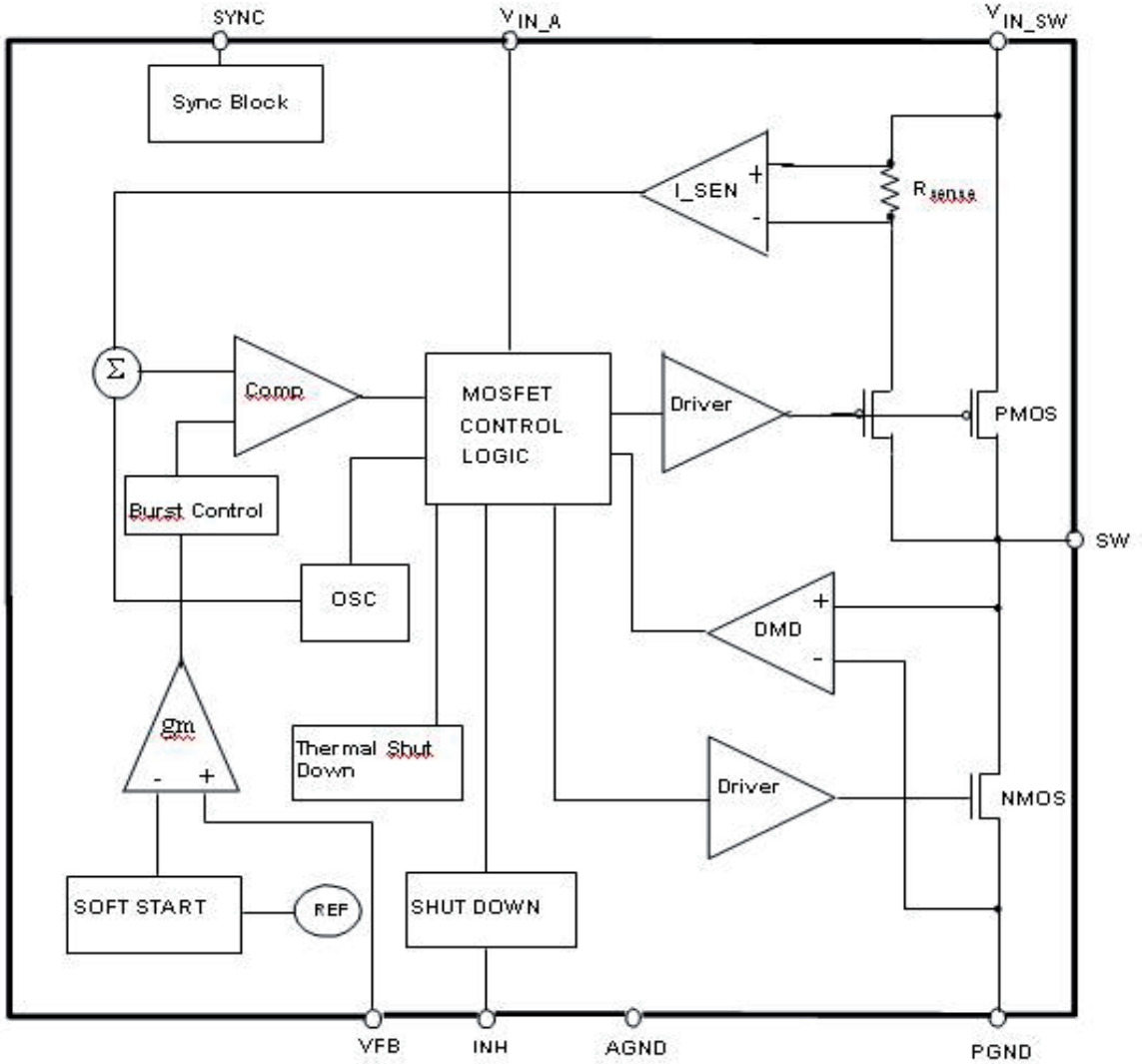
240505

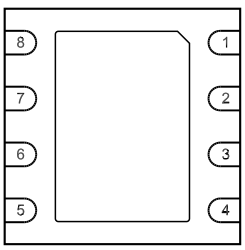
Figure 8-1 Internal block diagram and pin configuration

8.2 Diagram SSB: DC/DC +3V3 +1V2 Stand-by B01B, ST1S10PH (IC 7202/7222)

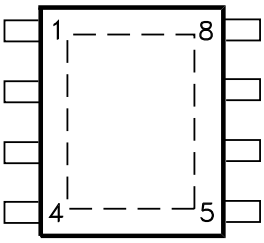
Block diagram



Pinning information



DFN8 (4 × 4)



PowerSO-8

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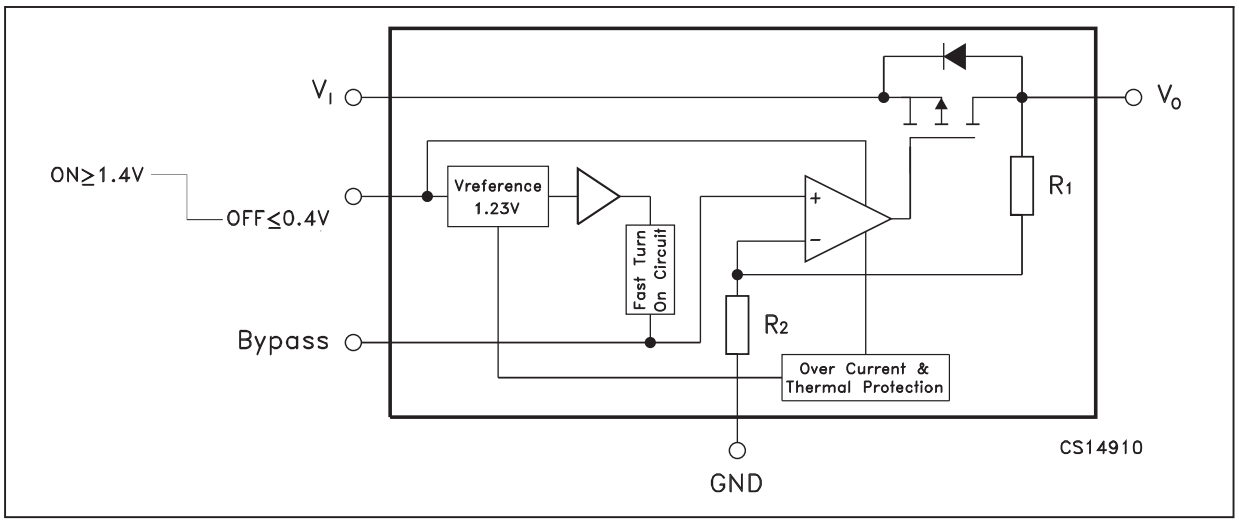
100402

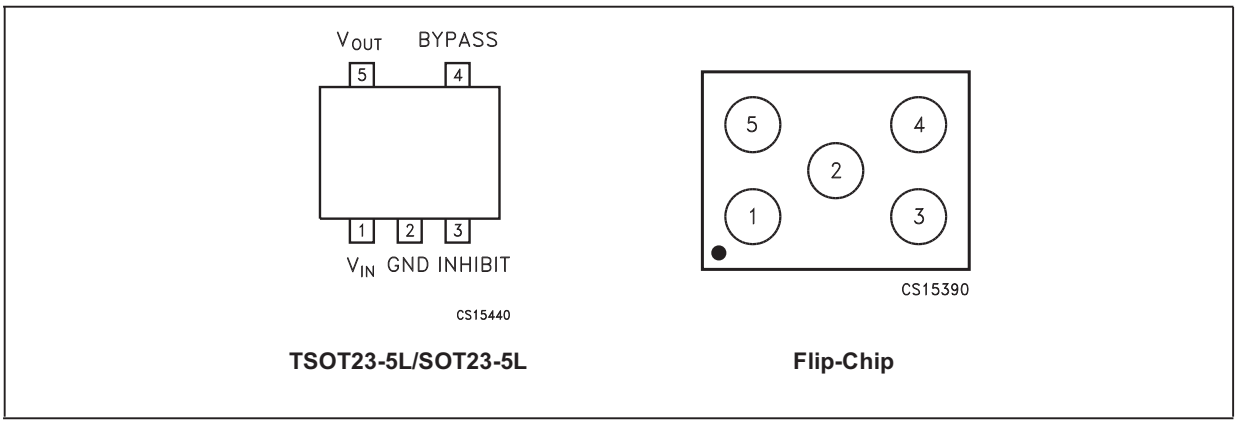
Figure 8-2 Internal block diagram and pin configuration

8.3 Diagram SSB: DC/DC +3V3 +1V2 Stand-by B01B, LD3985M (IC 7201)

Block Diagram



Pin Configuration



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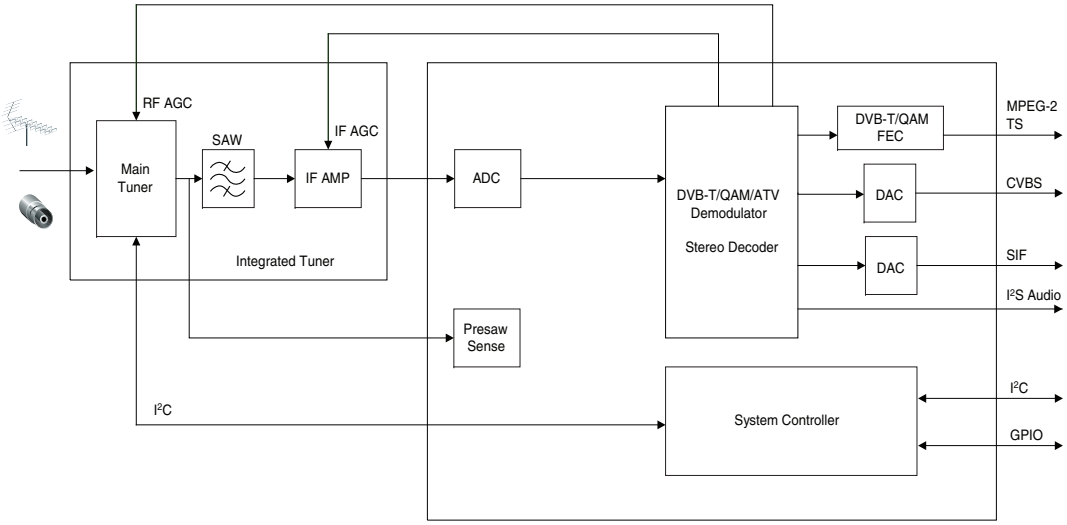
020206

Figure 8-3 Internal block diagram and pin configuration

8.4 Diagram SSB: Front End B02A, DRX3926K (IC 7303)

Block Diagram



Pin Configuration

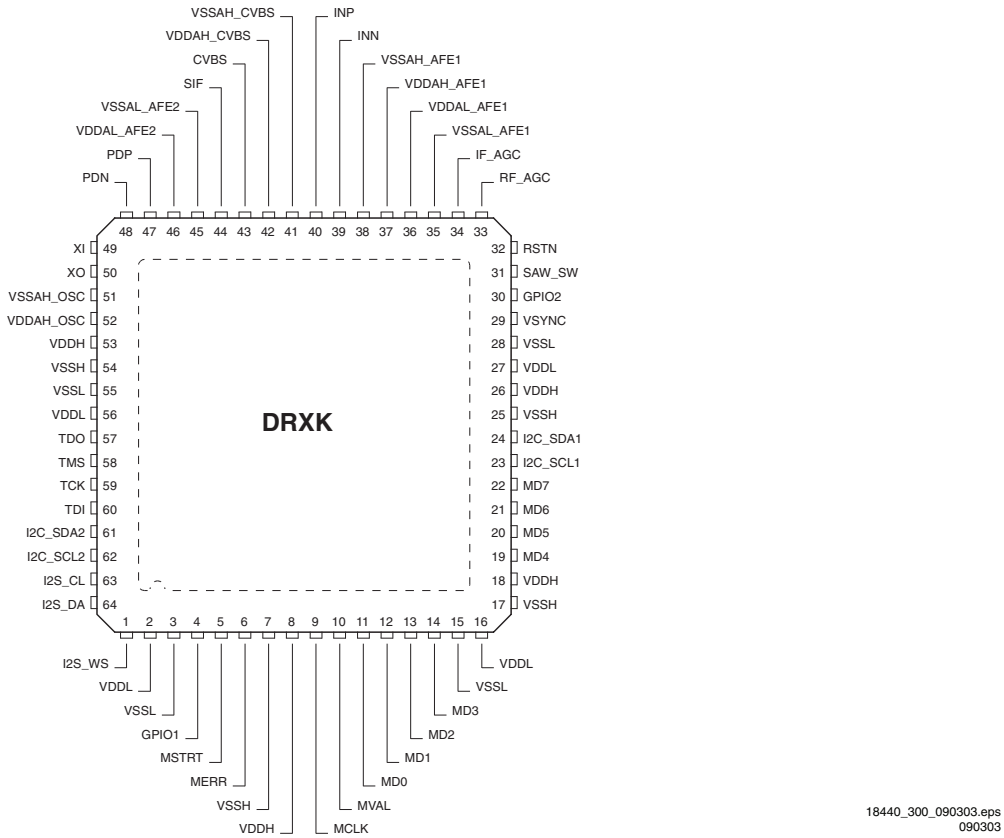
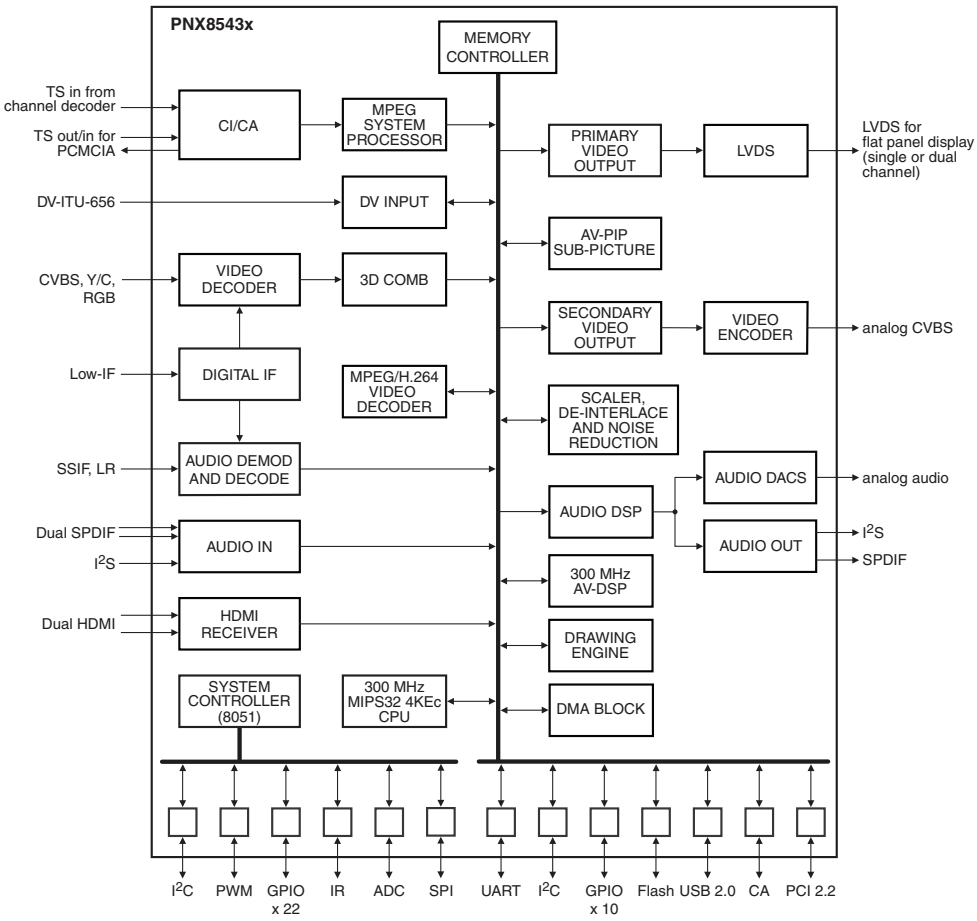


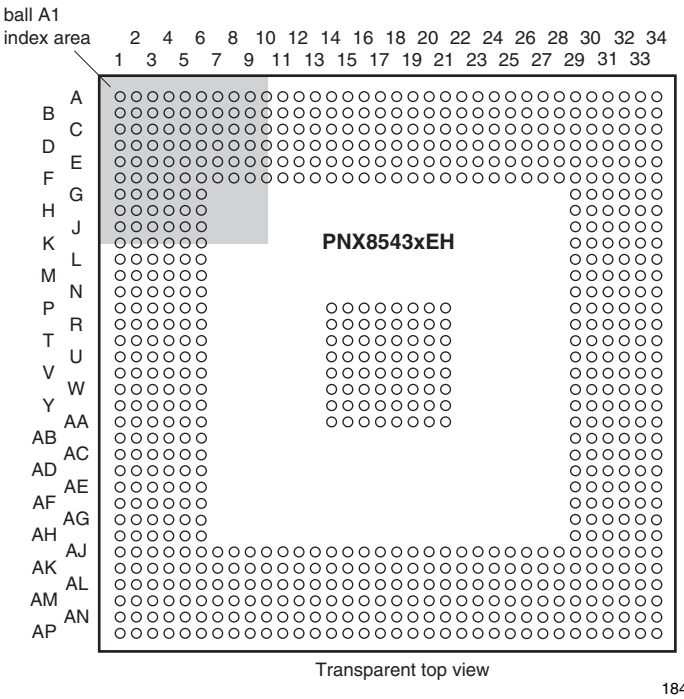
Figure 8-4 Pin configuration

8.5 Diagram SSB: PNX8543 Power B03A, PNX8543 (IC7600)

Block Diagram



Pin Configuration



Transparent top view

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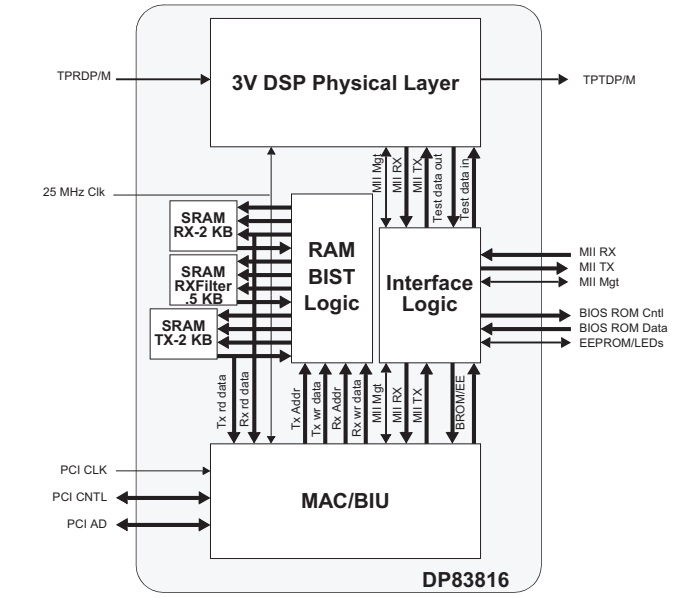
090303

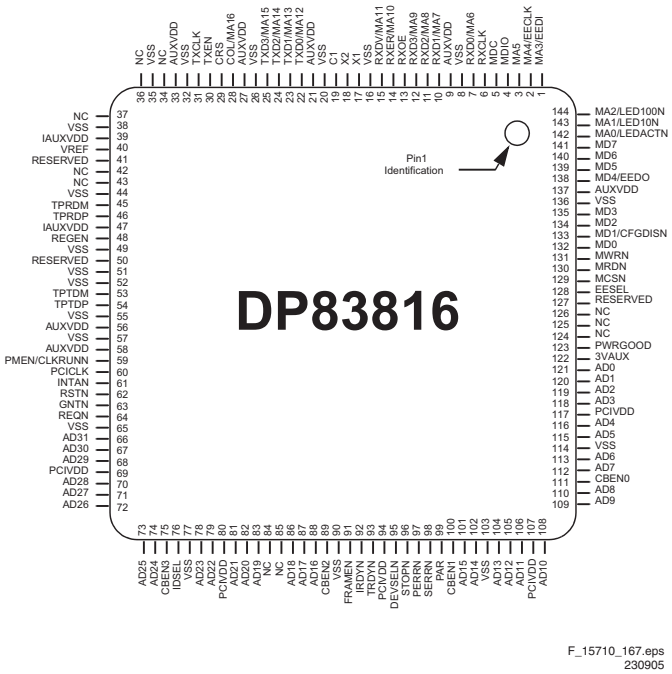
Figure 8-5 Internal block diagram and pin configuration

8.6 Diagram SSB: Ethernet B05B, DP83816 (IC7N04)

Block Diagram



Pin Configuration



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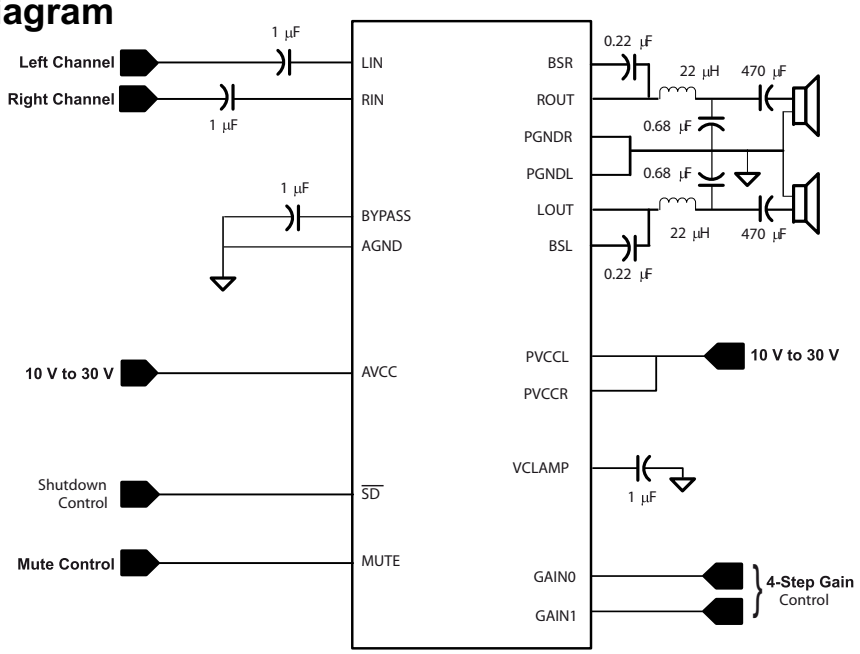
230905

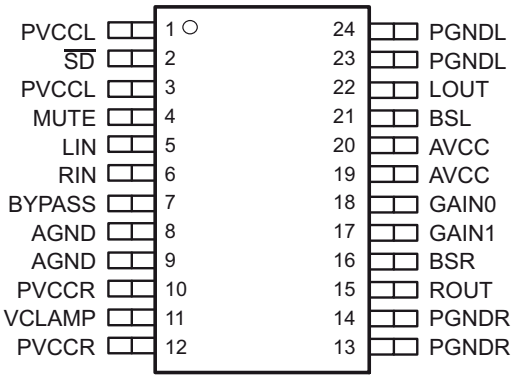
Figure 8-6 Internal block diagram and pin configuration

8.7 Diagram SSB: Class-D B06A, TPA3123D (IC 7L10)

Block diagram



Pinning information



TERMINAL		I/O/P	DESCRIPTION
NAME	24-PIN (PWP)		
$\overline{SD}$	2	I	Shutdown signal for IC (low = disabled, high = operational). TTL logic levels with compliance to AVCC
RIN	6	I	Audio input for right channel
LIN	5	I	Audio input for left channel
GAIN0	18	I	Gain select least-significant bit. TTL logic levels with compliance to AVCC
GAIN1	17	I	Gain select most-significant bit. TTL logic levels with compliance to AVCC
MUTE	4	I	Mute signal for quick disable/enable of outputs (high = outputs switch at 50% duty cycle, low = outputs enabled). TTL logic levels with compliance to AVCC
BSL	21	I/O	Bootstrap I/O for left channel
PVCCL	1, 3	P	Power supply for left-channel H-bridge, not internally connected to PVCCR or AVCC
LOUT	22	O	Class-D 1/2-H-bridge positive output for left channel
PGNDL	23, 24	P	Power ground for left-channel H-bridge
VCLAMP	11	P	Internally generated voltage supply for bootstrap capacitors
BSR	16	I/O	Bootstrap I/O for right channel
ROUT	15	O	Class-D 1/2-H-bridge negative output for right channel
PGNDR	13, 14	P	Power ground for right-channel H-bridge.
PVCCR	10, 12	P	Power supply for right-channel H-bridge, not connected to PVCCL or AVCC
AGND	9	P	Analog ground for digital/analog cells in core
AGND	8	P	Analog ground for analog cells in core
BYPASS	7	O	Reference for preamplifier inputs. Nominally equal to AVCC/8. Also controls start-up time via external capacitor sizing.
AVCC	19, 20	P	High-voltage analog power supply. Not internally connected to PVCCR or PVCCL
Thermal pad	Die pad	P	Connect to ground. Thermal pad should be soldered down on all applications to properly secure device to printed wiring board.

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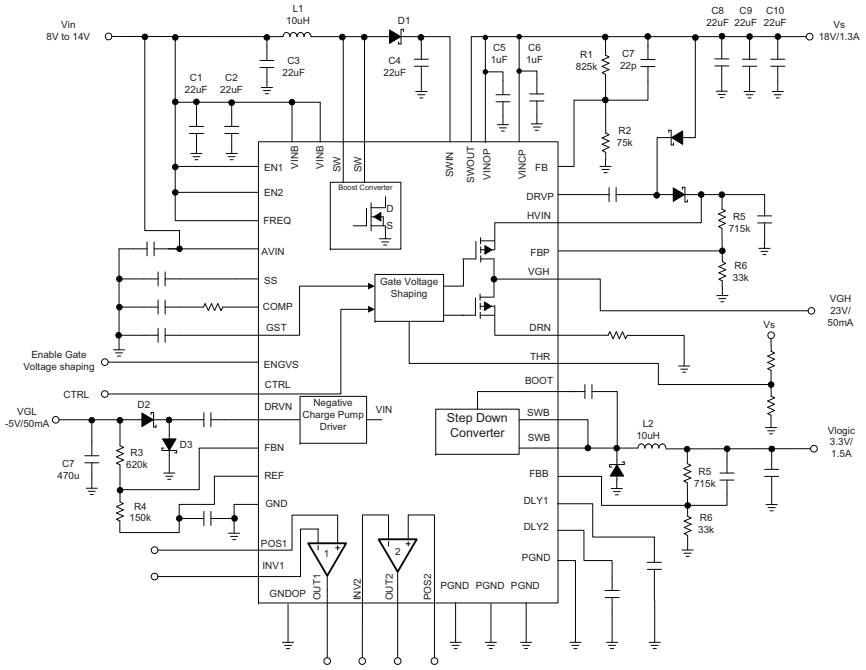
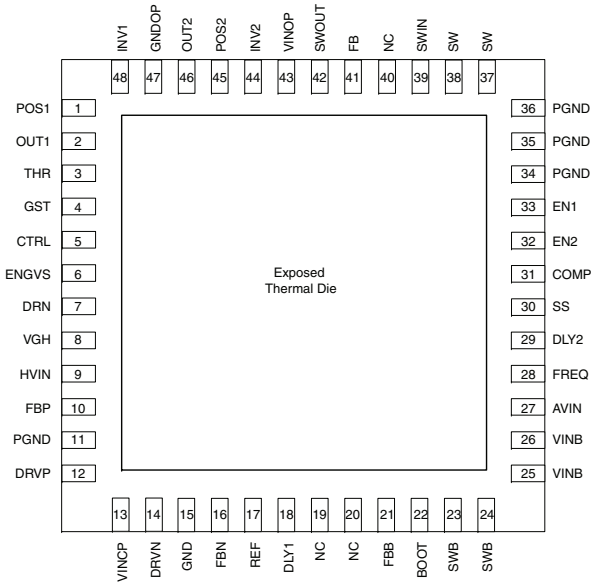
Figure 8-7 Internal block diagram and pin configuration

8.8 Diagram SSB: T-Con DC/DC (LGD panel) B09A, TPS65162RGZR (IC 7W02)

Block Diagram



Pin Configuration



Top View

Note: The thermally enhance Power Pad is connected to PGND

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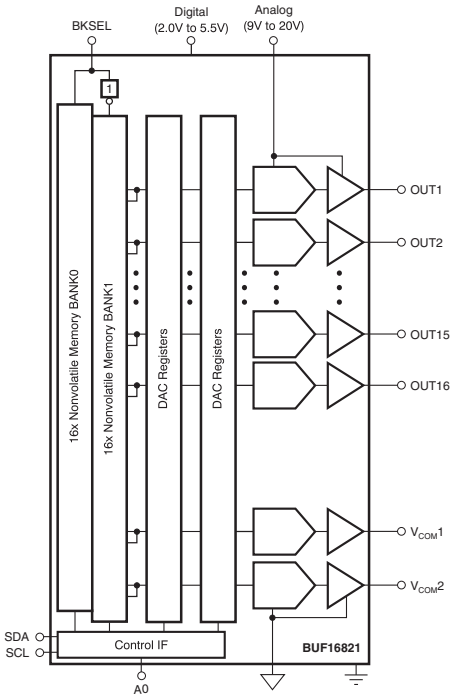
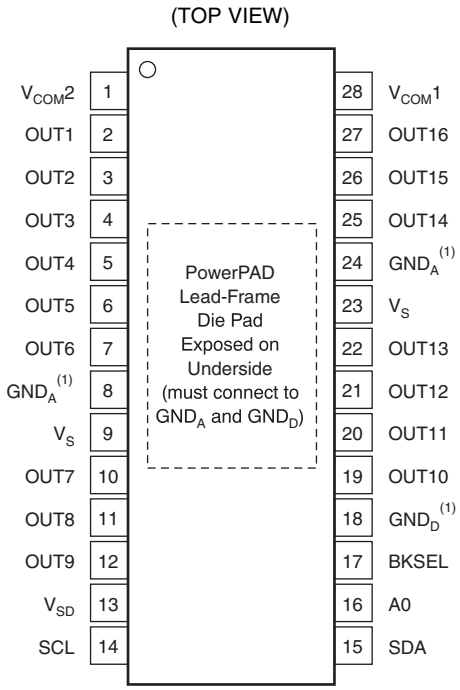
Figure 8-8 Typical application schematic and pin configuration

8.9 Diagram SSB: T-Con DC/DC (LGD panel) B09A, BUF16821 (IC 7W01)

Block Diagram



Pin configuration



NOTE: (1) GND_A and GND_D must be connected together.

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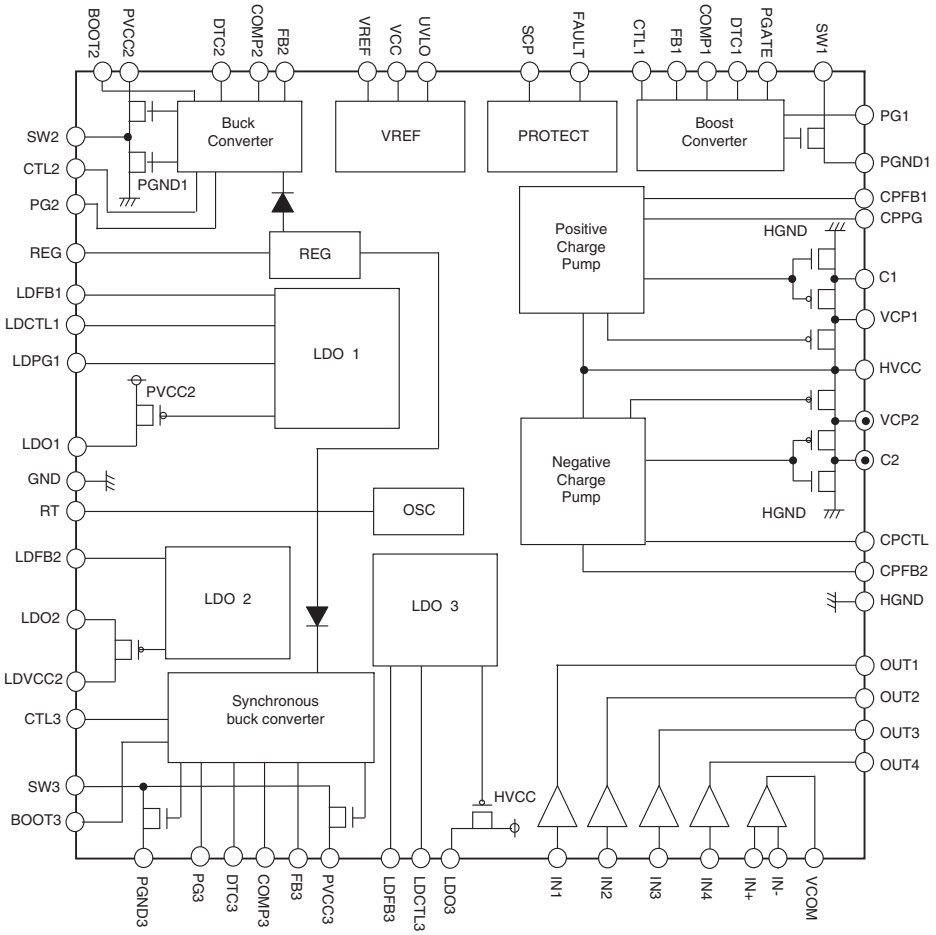
Figure 8-9 Block Diagram and pin configuration

8.10 Diagram SSB: T-Con DC/DC (Sharp panel) B09A, BD8162EKV (IC 7T01-1)

Block Diagram



Pin configuration

Number	Name	Description
1	PGND3	Ground
2	PG3	Power Good Output 3
3	DTC3	Duty Control Input 3
4	COMP3	Error Amp Output 3
5	FB3	Feed Back Input 3
6	PVCC3	Power Supply Input
7	LDFB3	LDO Feed Back Input 3
8	LDCTL3	LDO3 Control Input
9	LDO3	LDO Output 3
10	IN1	AMP Input 1
11	IN2	AMP Input 2
12	IN3	AMP Input 3
13	IN4	AMP Input 4
14	IN+	COM Input +
15	IN-	COM Input -
16	VCOM	COM Output
17	OUT4	AMP Output 4
18	OUT3	AMP Output 3
19	OUT2	AMP Output 2
20	OUT1	AMP Output 1
21	HGND	Ground
22	CPFB2	Charge Pump Feed Back Input 2
23	CPCTL	CP Control Input
24	C2	Charge Pump Input
25	VCP2	Charge Pump LDO Output 2
26	HVCC	CP Control Input
27	VCP1	Charge Pump Input 2
28	C1	Charge Pump LDO Output 2
29	CPPG	CP Power Good Output
30	CPFB1	Charge Pump Feed Back Input 1
31	PGND1	Ground
32	PG1	Power Good Output 1

Number	Name	Description
33	SW1	Power Switch Output 1
34	PGATE	Pch Gate Drive Output
35	DTC1	Duty Control Input 1
36	COMP1	Error Amp Output 1
37	FB1	Feed Back Input 1
38	CTL1	Control Input 1
39	FAULT	Protect Detection Output
40	SCP	Short Protection Current Output
41	UVLO	UVLO Input
42	VCC	Power Supply Input
43	VREF	Reference Voltage Output
44	FB2	Feed Back Input 2
45	COMP2	Error Amp Output 2
46	DTC2	Duty Control Input 2
47	PVCC2	Power Supply Input
48	BOOT2	Boot Strap Terminal 2
49	SW2	Power Switch Output 2
50	CTL2	Control Input 2
51	PG2	Power Good Output 2
52	REG	Boot Strap Regulator Output
53	LDFB1	LDO Feed Back Input 1
54	LDCTL1	LDO1 Control Input
55	LDPG1	LDO1 Power Good Output
56	LDO1	LDO Output 1
57	GND	Ground
58	RT	Connect Resistor for Frequency Setup
59	LDFB2	LDO Feed Back Input 2
60	LDO2	LDO Output 2
61	LDVCC2	Power Supply Input
62	CTL3	Control Input 3
63	SW3	Power Switch Output 3
64	BOOT3	Boot Strap Terminal 3

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Figure 8-10 Block Diagram and pin configuration

8.11 Diagram SSB: T-Con Control (LGD panel) B09B, R8J01070FT (IC 7Y01)

Block Diagram

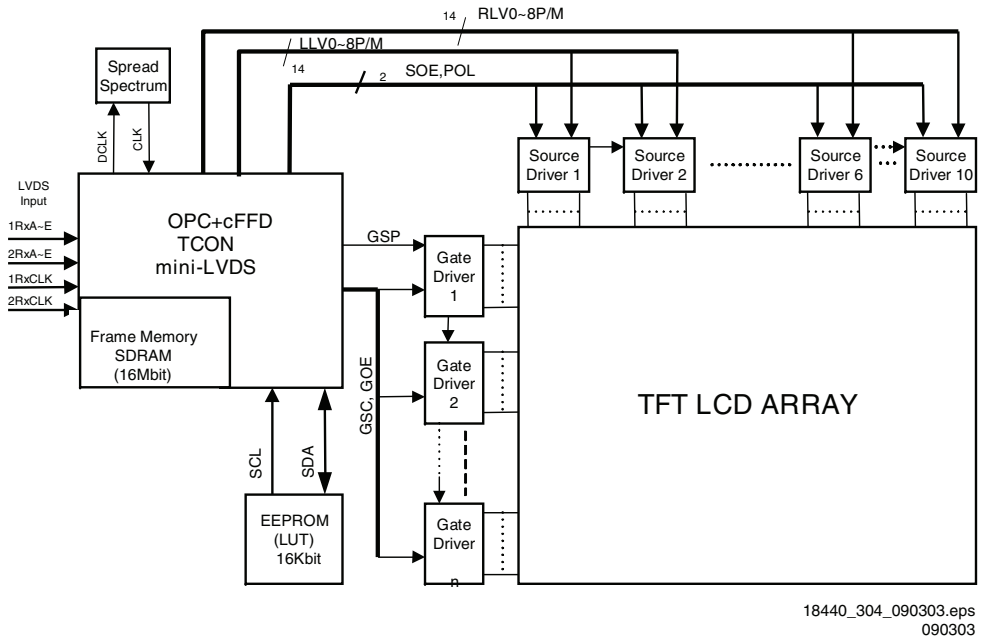
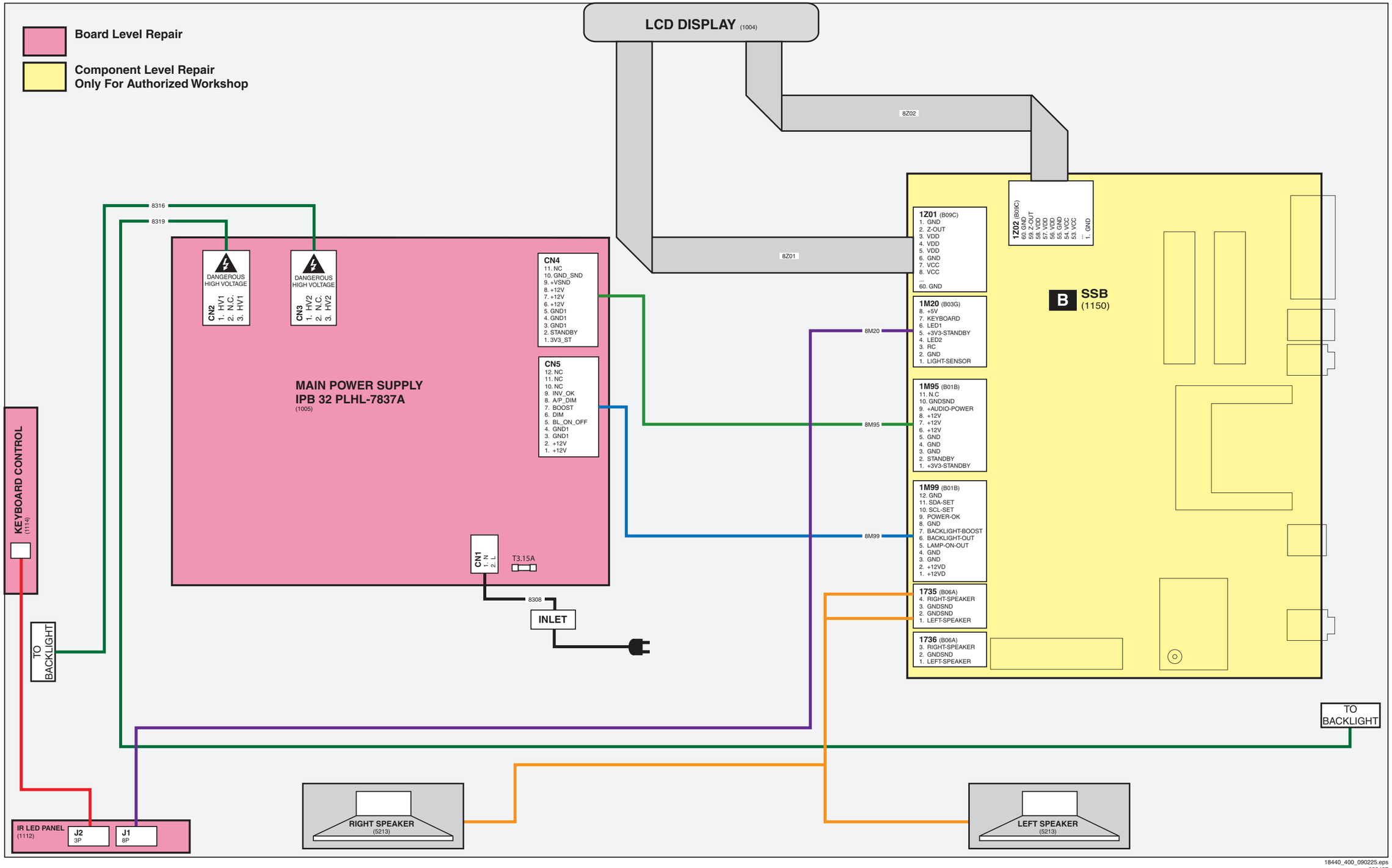


Figure 8-11 Internal block diagram

9. Block Diagrams

Wiring Diagram 32" LGD Forward Int. (P&S)

WIRING DIAGRAM 32" LG FORWARD INTEGRATION (P&S)



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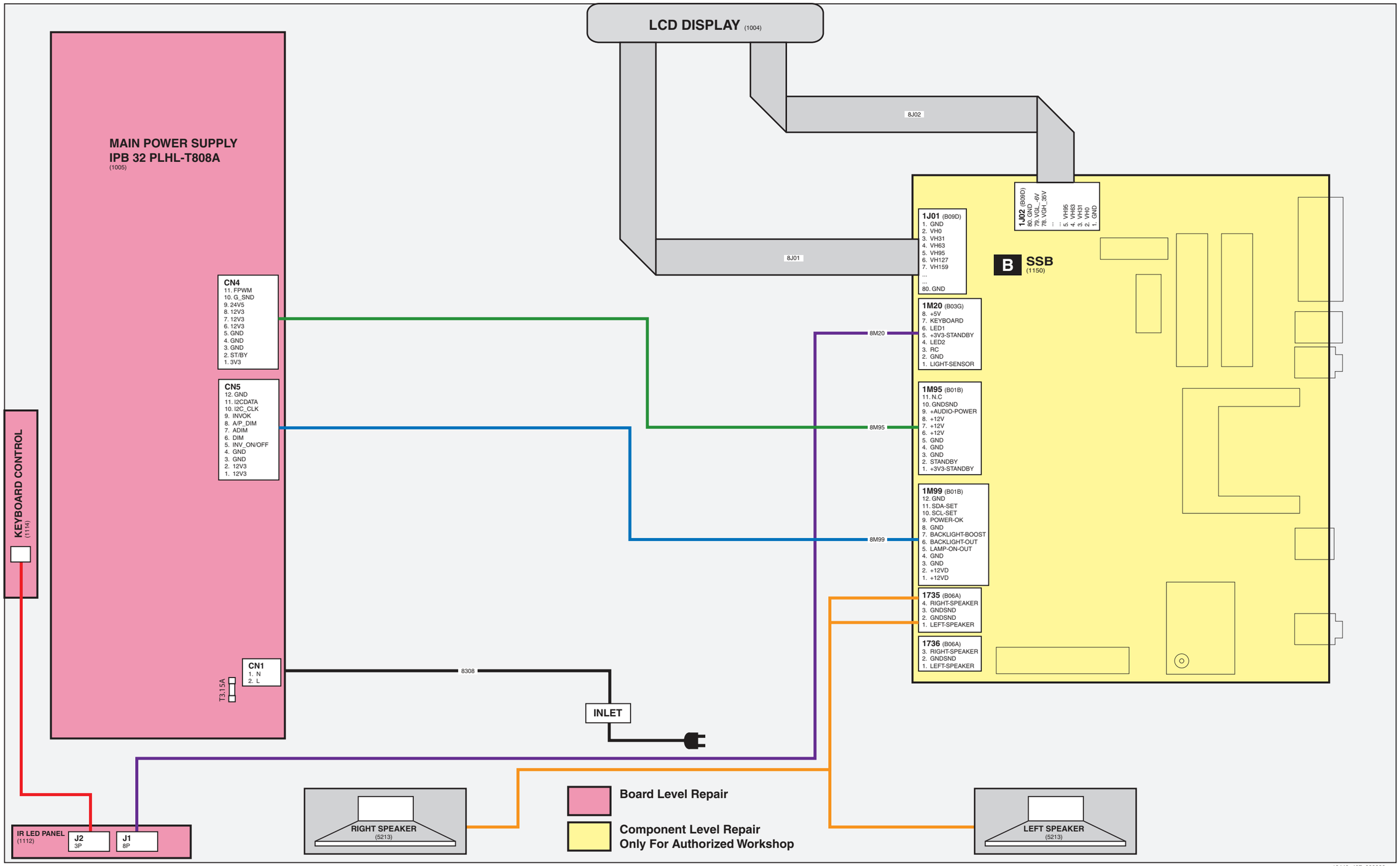
Wiring Diagram 32" Sharp Forward Int. (P&S)

WIRING DIAGRAM 32" SHARP FORWARD INTEGRATION (P&S)



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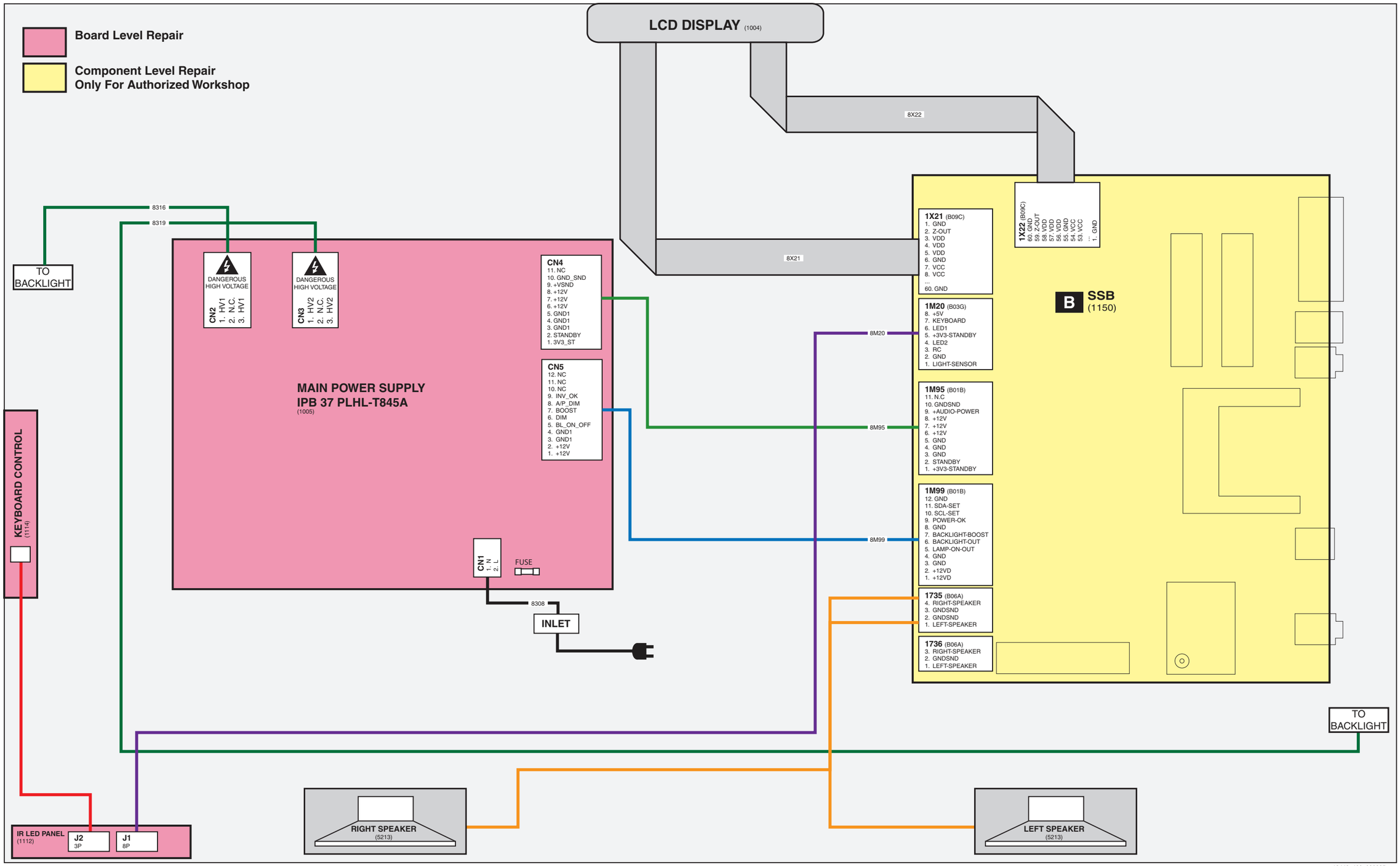
Wiring Diagram 37" LGD Forward Int. (P&S)

WIRING DIAGRAM 37" LG FORWARD INTEGRATION (P&S)



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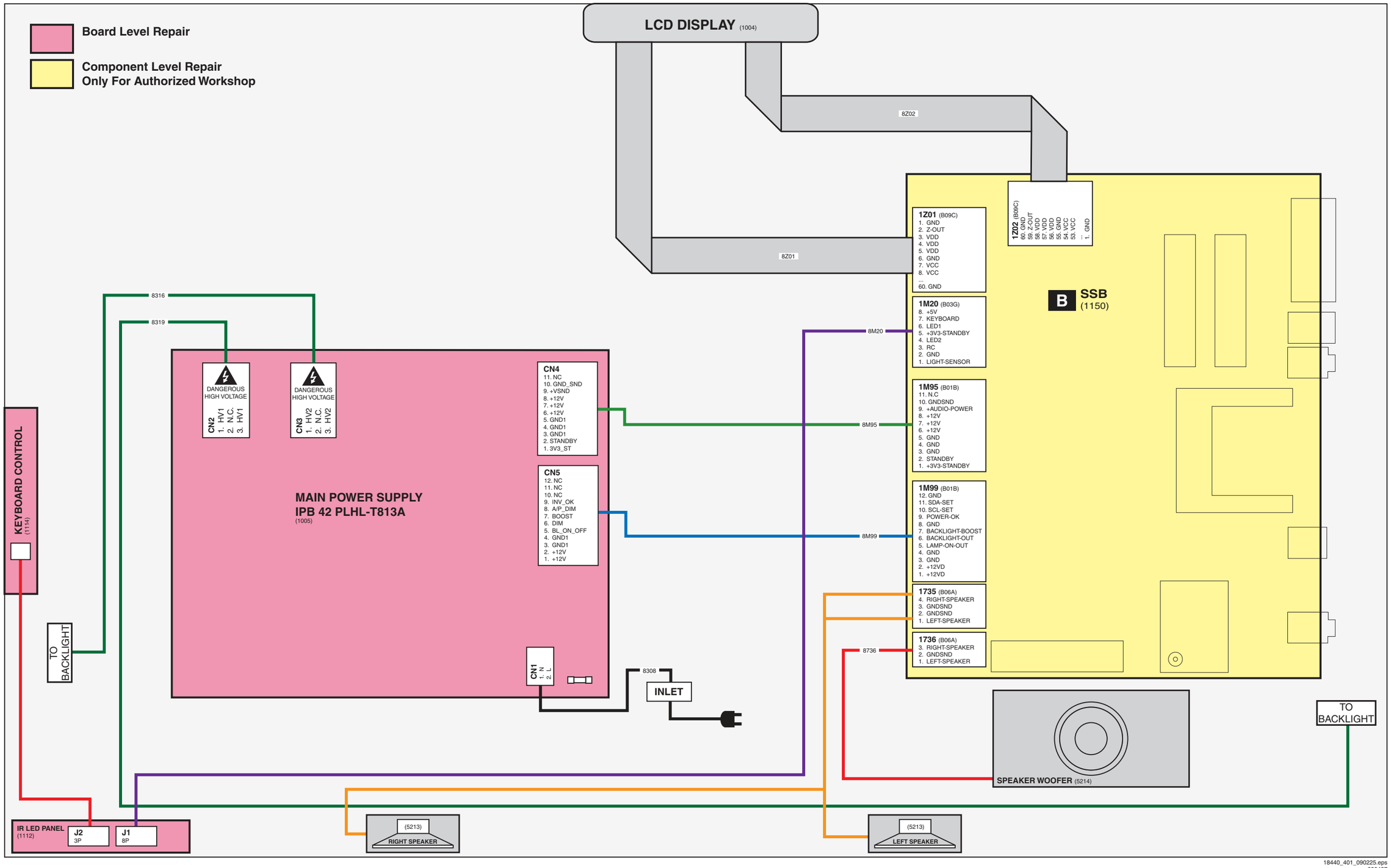
Wiring Diagram 42" LGD Forward Int. (P&S)

WIRING DIAGRAM 42" LG FORWARD INTEGRATION (P&S)



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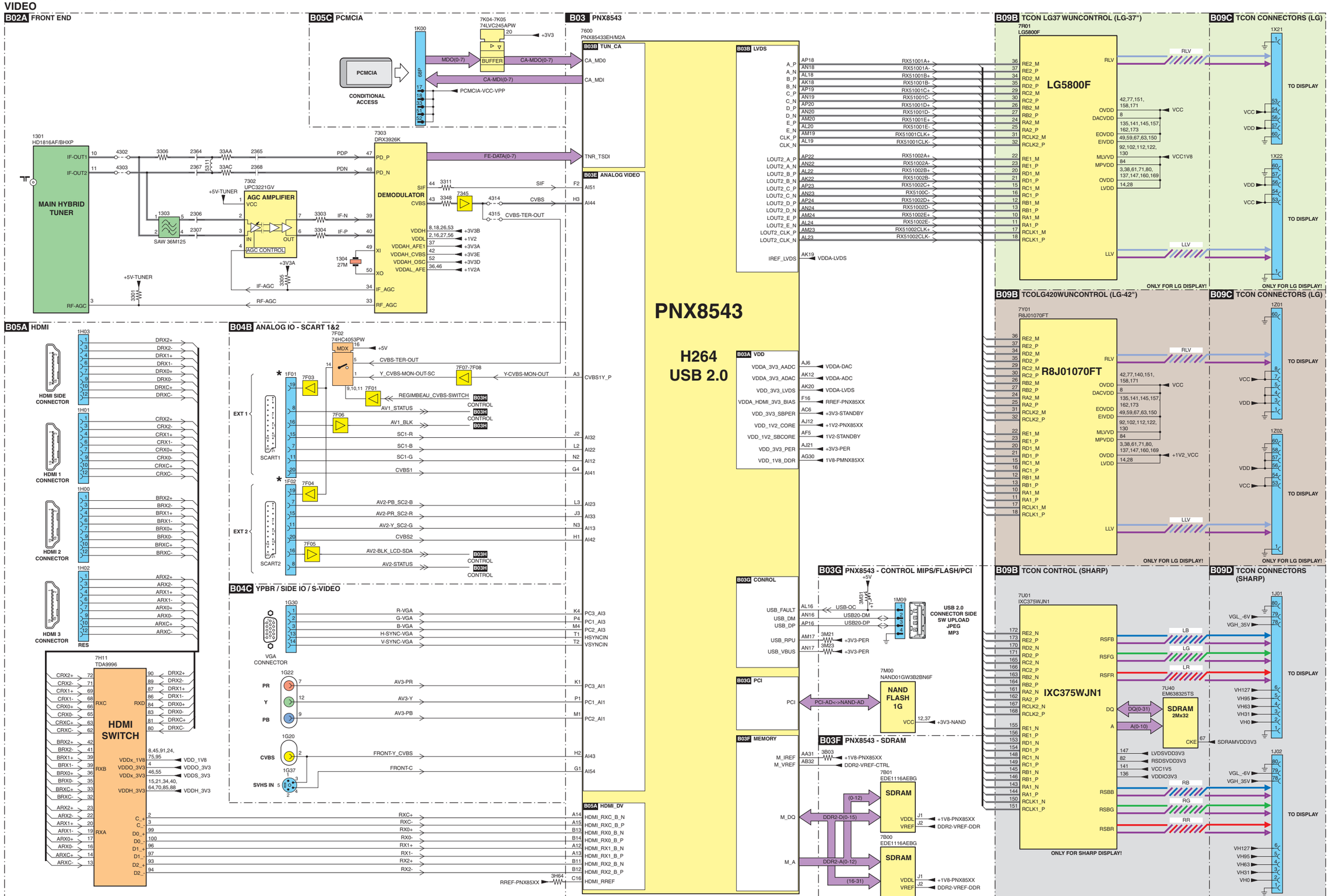
Block Diagram Video

VIDEO



* Note: The AV output on SCART 1 or 2 will be enabled (SW controlled) for analogue RF channels only, if the decoder is turned "on" in the Menu: select Setup -> Installation -> Decoder -> Status: select SCART 1 or 2 -> Channel: select any analogue channel.

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Block Diagram Audio

AUDIO

B02A FRONT END

B05C PCMCIA

B03 PNX8543

B06A CLASS-D

B05A HDMI

B04B ANALOG - SCART 1&2

B03C PNX8543 - AUDIO AMPLIFIER

B04C YPBR / SIDE IO / S-VIDEO

B03C PNX8543 - CONTROL MIPS/FLASH/PCI

B03F PNX8543 - SDRAM

PNX8543

H264
USB 2.0

* Note: The AV output on SCART 1 or 2 will be enabled (SW controlled) for analogue RF channels only, if the decoder is turned "on" in the Menu: select Setup -> Installation -> Decoder -> Status: select SCART 1 or 2 -> Channel: select any analogue channel.

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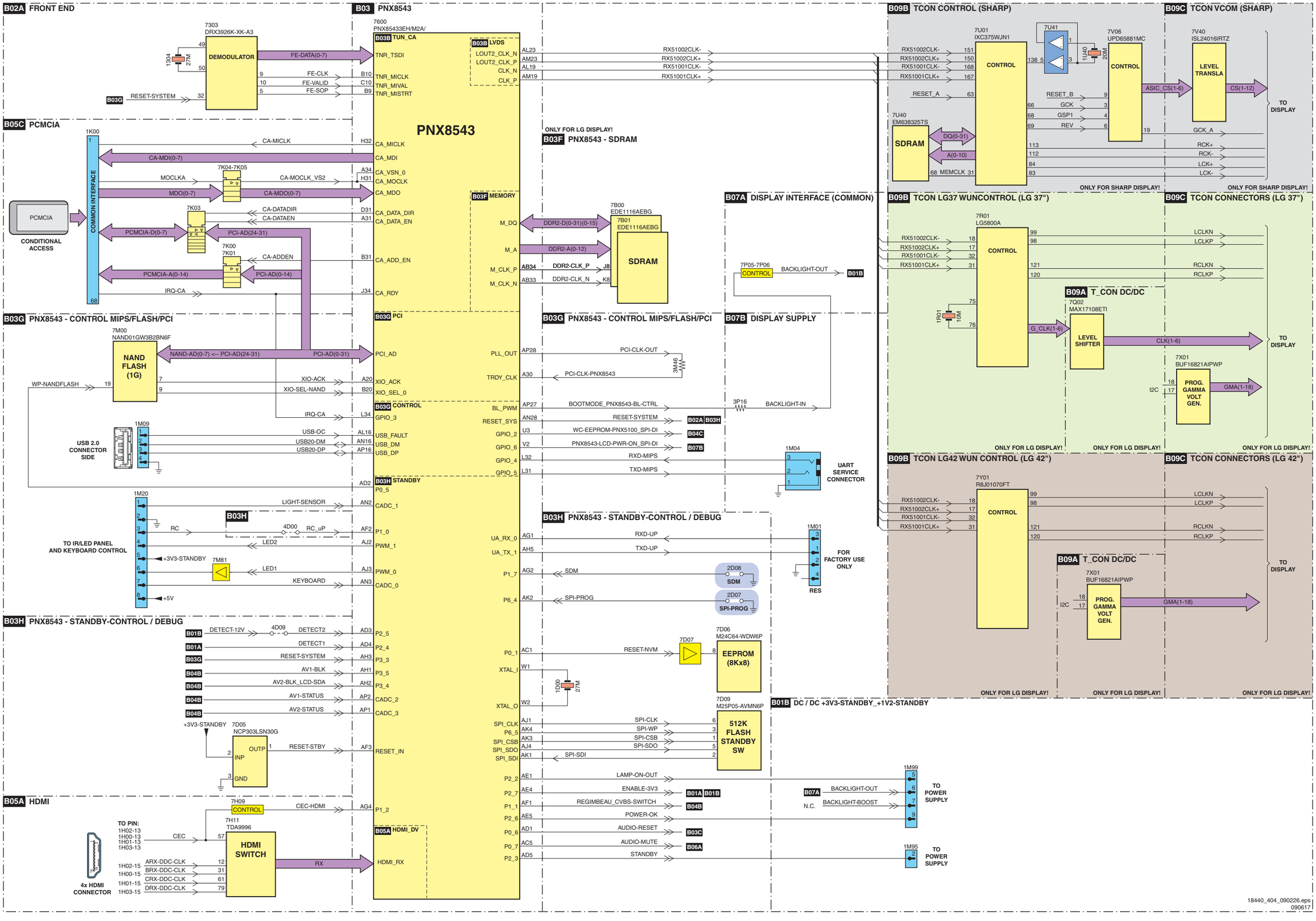
Block Diagram Control & Clock Signals

CONTROL + CLOCK SIGNALS



Block Diagram I²C

I²C

B03G PNX8543 - CONTROL MIPS/FLASH/PCI

7600
PNX85433EH/M2A

PNX8543

SSB BUS
400 kHz

SDA 3 G32 SDA3 3M19
SCL 3 D33 SCL3 3M18

+3V3-PER 3M27 3M26

ERR 13

B03F PNX8543 - SDRAM

B03F
MEMORY
M_DQ DDR2-D
M_A DDR2-A

7B01
EDE1116AEBG
7B00
EDE1116AEBG
SDRAM

B05A
HDMI_DV
DDC_SDA_B D15 DDC-SDA
DDC_SCL_B C15 DDC-SCL

B03G PNX8543 - CONTROL MIPS/FLASH/PCI

B03G
PCI
PCI_AD PCI-AD

7M00
NAND01GW3B2
FLASH 1G

B05A HDMI

SDA-SSB
SCL-SSB

3H66 3H65
7H11
TDA9996
HDMI MUX
ERR 23

+5V 3H01 3H02

ARX-5V 3H08 3H07
ARX-DDC-DAT
ARX-DDC-CLK
RES
1H02 HDMI CONNECTOR 3

BRX-5V 3H10 3H09
BRX-DDC-DAT
BRX-DDC-CLK
1H00 HDMI CONNECTOR 2

CRX-5V 3H14 3H13
CRX-DDC-DAT
CRX-DDC-CLK
1H01 HDMI CONNECTOR 1

DRX-5V 3H12 3H11
DRX-DDC-DAT
DRX-DDC-CLK
1H03 HDMI CONNECTOR SIDE

B02A FRIONT END

3399 3398
7303
DRX3926K-XK
DEMODULATOR
MICRONAS
ERR 27

+3V3B 3398 3365
TUNER BUS
400 kHz
SDA-TUNER
SCL-TUNER

3317 3316
1301
HD1816AF
MAIN TUNER
ERR 34

B09B TCON LG37 WUNCONTROL (LG 37")

7R05 7R06 VCOM-SDA VCOM-SCL
VCC

ONLY FOR LG DISPLAY!

B09C TCON CONNECTORS (LG 37")

4R06 4R07 RES
7X01
BUF16821AIPWP
BUFFER

ONLY FOR LG DISPLAY!

B09B TCON LG37 WUNCONTROL (LG 37")

VCC 3R45 3R44
7R01
LG5800F
CONTROL
7R04
M24C16
EEPROM
2Kx8
3R56 3R55
3R43 3R42
WP1
PI_3
B03H
1R02
SDA SCL RES

ONLY FOR LG DISPLAY!

B01B DC / DC +3V3-STANDBY_+1V2-STANDBY

SET BUS
100 kHz

+3V3-PER 3M93 3M92
SDA 2 B33 SDA2 3M91 SDA-SET
SCL 2 D32 SCL2 3M90 SCL-SET

ERR 14

STANDBY BUS
400 kHz

+3V3-PER 3M25 3M24
SDA 1 H33 SDA1 3M15 SDA-UP-MIPS
SCL 1 F33 SCL1 3M14 SCL-UP-MIPS

4202 4201 1M99 11 10
TO POWER SUPPLY

B04C YPBR / SIDE IO / S-VIDEO

1G30
VGA CONNECTOR

+5V 3G60 3G56
DATA-SDA
CLK-SCL
3G61 3G58

B03G WC-EEPROM-PNX5100_SPI-DI

7G32
3G63 +3V3
RES

7G31
M24C02
EEPROM
256x8
DDC

B09B TCON LG42 WUNCONTROL (LG 42")

7Y04 7Y05 VCOM-SDA VCOM-SCL
VCC

ONLY FOR LG DISPLAY!

B09A T_CON DC/DC (LG 42")

4W27 4W28 RES
7W01
BUF16821AIPWP
BUFFER

ONLY FOR LG DISPLAY!

B09B TCON LG42 WUNCONTROL (LG 42")

VCC 3Y03 3Y02
7Y01
R8J01070FT
CONTROL
7Y03
M24C16
EEPROM
2Kx8
3Y42 3Y41
3Y40 3Y45
WP1
PI_3
B03H
1Y01
SDA SCL RES

ONLY FOR LG DISPLAY!

B03H PNX8543 - STANDBY - CONTROL / DEBUG

+3V3-STANDBY 3D39 3D38
RES

B03H
STANDBY
MC_SDA AK5 3D46 SDA-UP-MIPS
MC_SCL AL5 3D45 SCL-UP-MIPS
PO_1 AC1 RESET-NVM 3D56-1
+3V3-PER 3D56-2 7D07
7D06
M24C64
EEPROM
(NVM)
7D09
M25P05
512K
FLASH
ERR 53

+3V3-STANDBY 3D21 3D22
UA_RX_0 AG1 RXD-UP
UA_TX_1 AH5 TXD-UP
3M74 3M73
1M01
FOR FACTORY USE ONLY
RES

B03G PNX8543 - CONTROL MIPS/FLASH/PCI

B04A BOLT-ON

+3V3-PER 3M09 3M10
GPIO_4 L32 RXD-MIPS
GPIO_5 L31 TXD-MIPS
4E18 RXD
4E19 TXD
3M76 3M75
1M04
UART SERVICE CONNECTOR

VCOM_WP

B09C TCON VCOM (SHARP)

+3V3_VCC 3V21 3V22
7V07 7V08
7V21
STVM100DC6
VCOM CALIBRATOR
3V50

ONLY FOR SHARP DISPLAY!

B09B TCON CONTROL (SHARP)

VCOM-SDA
VCOM-SCL
SDA
SCL
7U01
IXC375WJN1
CONTROL
7U40
EM638325TS
SDRAM
DQ(0-31)
A(0-10)

ONLY FOR SHARP DISPLAY!

B09D TCON CONNECTORS (SHARP)

4J21 4J22 RES
3J24 3J25
ROM_VCC2 3J22 3J23 3J70
7J70
BR24S32F
EEPROM
4Kx8
ROM_VCC2 3J70
+3V3_VCC 3J46
VCOM_WP
RESET_A
PI_3
B09B
B03H
1J03
RES

ONLY FOR SHARP DISPLAY!

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Supply Lines Overview

SUPPLY LINES OVERVIEW

MAIN POWER SUPPLY

B01B DC / DC +3V3-STANDBY_+1V2-STANDBY

CN5: +12V, +12V, GND1, GND1, BL-ON_OFF, DIM, BOOST, A/P_DIM, INV_OK
1M99: +12VD; LAMP-ON-OUT → B03H CONTROL; BACKLIGHT-OUT → B07A CONTROL; BACKLIGHT-BOOST → N.C.; POWER-OK → B03H CONTROL

CN4: 3V3_ST, STANDBY, GND1, GND1, +12V, +12V, +12V, +VSND, GND_SND, N.C.
1M95: +3V3-STANDBY (7201 IN OUT COM), +1V2-STANDBY; STANDBY → B03H CONTROL; +12V; 5203 7202 VOLT. REG. 5204 6217 +5V; +5V5-TUN; 5221 7222 VOLT. REG. +1V2-PNX5100; +AUDIO-POWER; N.C.

N.C. → SENCE+1V2-PNX5100 → SENCE+1V2-PNX5100

B01A DC / DC +3V3_+1V2

SENSE+1V2-PNX85XX → SENSE+1V2-PNX85XX
+12V → +12V; 5104 → +12VF
7103 NCP5422ADG: Dual Synchronous Step-Down Controller; 3109; 7101-1, 7101-2 12V/3V3 COVERSION → 5101 → +3V3
7102-1, 7102-2 12V/1V2 COVERSION → 5105 +3V3F; 5103 → +1V2-PNX85XX

CN2: HV1, N.C., HV1 → TO DISPLAY
CN3: HV2, N.C., HV2 → TO DISPLAY

B02A FRONT END

+3V3 → 7308 IN OUT COM → +1V2; 5304 → +1V2A
+5V → 7309 IN OUT COM → 3V3B; 5307 → 3V3A; 5306 → 3V3D; 5305 → 3V3E
+5V5-TUN → 7307 IN OUT COM → +5V-TUNER
7315 3389 ANTENNA-SUPPLY
+12V → +12V; RES

B03A PNX8543 - POWER

+1V2-PNX85XX → +1V2-PNX85XX; SENSE+1V2-PNX85XX
+1V2-STANDBY → +1V2-STANDBY
+3F → +3V3F; 7601 IN OUT COM → +1V8-PNX85XX
+3V3-STANDBY → +3V3-STANDBY
+3V3 → +3V3; 5612 → +3V3-PER; 5600 → RREF-PNX85xx; 5615 → VDDA-LVDS
VDDA-AUDIO → VDDA-AUDIO; 5621 → VDDA-DAC; 5622 → VDDA-ADC

B03B PNX8543 - VIDEO STREAMS/LVDS OUTPUT

VDDA-LVDS → VDDA-LVDS
+3V3-PER → +3V3-PER

B03C PNX8543 - AUDIO AMPLIFIER

+AUDIO-POWER → +AUDIO-POWER; 4801 RES; 3819 7801 AUDIO-VDD; 7802 CONTROL
+3V3 → +3V3

B03D PNX8543 - AUDIO

+3V3 → +3V3
+5V → +5V; 7900 IN OUT COM → VDDA-AUDIO
VDDA-DAC → VDDA-DAC

B03F PNX8543 - SDRAM

+1V8-PNX85XX → +1V8-PNX85XX; 3B47 3B48 DDR2-VREF-CTRL, DDR2-VREF-DDR

B03G PNX8543 - CONTROL MIPS/FLASH/PCI

+3V3 → +3V3; 5M00 → +3V3-NAND
+3V3-PER → +3V3-PER
+3V3-STANDBY → +3V3-STANDBY
+5V → +5V; 1M20; 5M84, 5M88

B03H PNX8543 - STANDBY-CONTROL/DEBUG

+1V2-PNX85XX → +1V2-PNX8541
+1V2-PNX5100 → +1V2-PNX5100
+3V3-STANDBY → +3V3-STANDBY
+3V3 → +3V3
+3V3-PER → +3V3-PER
+5V → +5V

B04A BOLT-ON

+3V3-STANDBY → +3V3-STANDBY
+5V → +5V
+12V → +12V; RES

B04B ANALOG IO - SCART 1&2

+3V3 → +3V3
+5V → +5V

B04C YPBR / SIDE IO / S-VIDEO

+3V3 → +3V3
+5V → +5V

B05A HDMI

+3V3 → +3V3
5H01 VDDQ_3V3; 5H06 VDDS_3V3; 5H03 VDDH_3V3
+1V8-PNX85XX → +1V8-PNX85XX; 5H00 VDD_1V8
+3V3-STANDBY → +3V3-STANDBY
+5V → +5V
RREF-PMX85XX → RREF-PMX85XX
HDMI 3 CONNECTOR 1H02 → ARX-5V
HDMI 2 CONNECTOR 1H00 → BRX-5V
HDMI SIDE CONNECTOR 1H03 → DRX-5V
HDMI 1 CONNECTOR 1H01 → CRX-5V

B05B ETHERNET

+3V3 → +3V3
5N06 +3V3-ET-DIG; 5N07 +3V3-ET-ANA

B05C PCMCIA

+3V3 → +3V3
5K00 → +3V3_BUF
+5V → +5V
3K00 → PCMCIA-VCC-VPP

B06A CLASS-D

+AUDIO-POWER → +AUDIO-POWER

B07A DISPLAY INTERFACING (COMMOM)

+3V3 → +3V3
+5V → +5V
4P26 4P28 4P38 RES → +VDISP-IN
4P29 4P30 4P37 → +12VD

TO IR/LED PANEL

B07B DISPLAY SUPPLY

+3V3 → +3V3
+VDISP-IN → +VDISP-IN
7P02 5P02 → +VDISP-OUT
7P03 PNX8543-LCD-PWR-ON_SPI-DI

B09a LG, B09c SHARP

B09A T_CON DC/DC (LG-37")

+VDISP-OUT → +VDISP-OUT
7Q03 TPS65161PWP: LCD BIAS SUPPLY
5Q20 6Q20 → VDD_O; 7Q04 → VDD
5Q23 6Q23 GD → VGH
5Q23 6Q24 → VGL
5Q21 → VCC
7Q05 IN OUT COM → VCC1V8
ONLY FOR LG DISPLAY!

B09B TCON LG 37 WUNCONTROL (LG-37")

VCC1V8 → VCC1V8
VCC → VCC
ONLY FOR LG DISPLAY!

B09C TCON CONNECTORS (LG-37")

VCC → VCC
VDD → VDD
ONLY FOR LG DISPLAY!

B09A T_CON DC/DC (LG-42")

+VDISP-OUT → +VDISP-OUT
7W02 TPS65162RGZ: LCD BIAS SUPPLY
5W20 6W20 → VDD_D
VDD
5W21 → VCC
7W03 IN OUT COM → +1V2_VCC
ONLY FOR LG DISPLAY!

B09B TCONLG420WUNCONTROL (LG-42")

+1V2_VCC → +1V2_VCC
VCC → VCC
ONLY FOR LG DISPLAY!

B09C TCON CONNECTORS (LG-42")

VCC → VCC
VDD → VDD
ONLY FOR LG DISPLAY!

B09A TCON DC/DC (SHARP)

VCOM → VCOM
+VDISP-OUT → +VDISP-OUT
7T01 BD8162AEKV: SUPPLY
7T08/7T09 CONTROL → VGH_35V
MVLS
VCC_1V5
VH63
VL63
VH31_247
VL31_247
VREF
3T05 3T04 VGL_-6V
6T03 5T02 VLS_15V6, +3V3_VCC
3T13 VH255
ONLY FOR SHARP DISPLAY!

B09B TCON CONTROL (SHARP)

+3V3_VCC → +3V3_VCC
5U02 RSDSVDD3V3; 5U03 LVDSVDD3V3; 5U04 VDDIO3V3; 5U40 SDRAMVDD3V3
7U42 ROM_VCC2
VCC_1V5 → VCC_1V5; 5U01 VCC1V5
ONLY FOR SHARP DISPLAY!

B09C TCON VCOM (SHARP)

VLS_15V6 → VLS_15V6
VH255 → VH255
3V01 3V02 3V04 3V05 7V01 → VH191, VH127, VH0, VL0
MVLS → MVLS
7V40 SL24016IRTZ: LEVEL TRANSLATOR; 3V40 3V44 → VL127, VL191
7V21 STVM100DC: VCOM CALIBR; 4V21 4V22 → VCIN
7V02 3V26 3V27 → VCOM
+VDISP-OUT → +VDISP-OUT
+3V3_VCC → +3V3_VCC
VL63 → VL63
VH63 → VH63
VH31_247 → VH31_247; 4V02 → VH31
VL31_247 → VL31_247; 4V04 → VL31
ONLY FOR SHARP DISPLAY!

B09D TCON CONNECTORS (SHARP)

+3V3_VCC → +3V3_VCC
VGL_-6V → VGL_-6V
VGH_35V → VGH_35V
VCOM → VCOM
VL0 → VL0
VL31 → VL31
VL63 → VL63
VL95 → VL95
VL127 → VL127
VL159 → VL159
VL191 → VL191
VL247 → VL247
VLS_15V6 → VLS_15V6
VH255 → VH255
VH247 → VH247
VH191 → VH191
VH159 → VH159
VH127 → VH127
VH95 → VH95
VH63 → VH63
VH31 → VH31
VH0 → VH0
ROM_VCC2 → ROM_VCC2
ONLY FOR SHARP DISPLAY!

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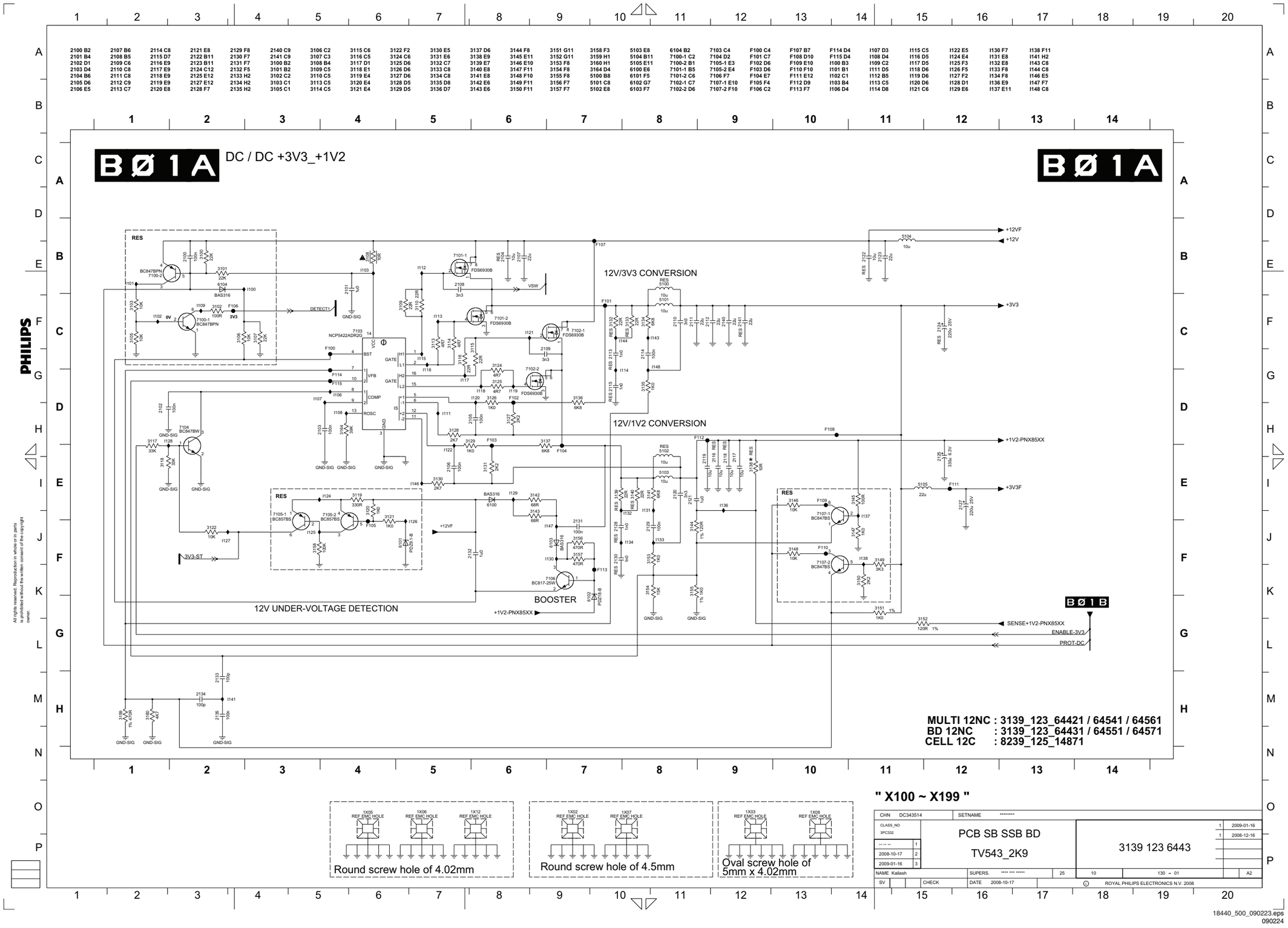
090617

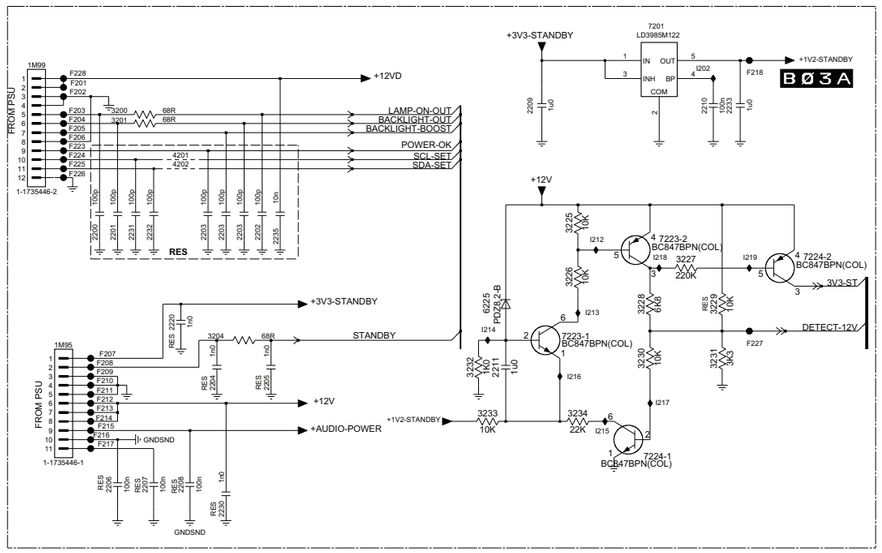
10. Circuit Diagrams and PWB Layouts

SSB: DC/DC +3V3 +1V2

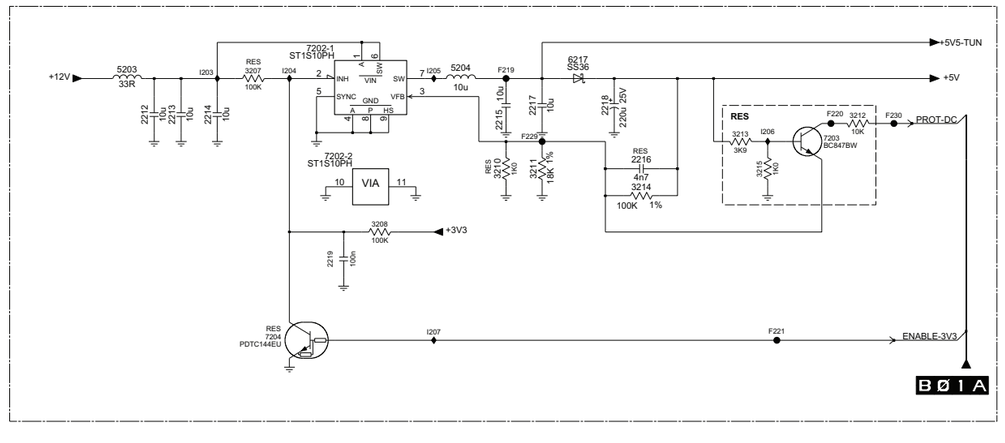


SSB: DC/DC +3V3 +1V2 Stand-by

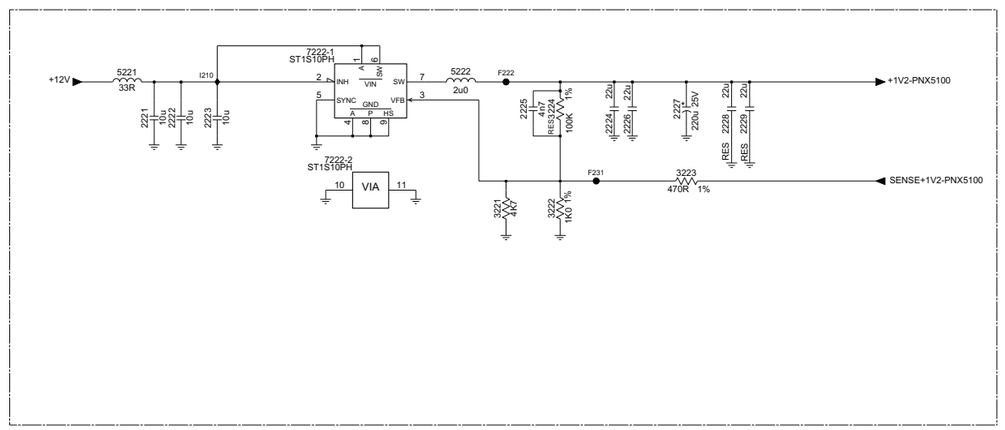
B Ø 1 B DC / DC +3V3-STANDBY_+1V2-STANDBY



DC / DC



DC / DC



MULTI 12NC : 3139_123_64421 / 64541 / 64561
BD 12NC : 3139_123_64431 / 64551 / 64571
CELL 12C : 8239_125_14871

" X200 ~ X299 "

CHN DC343514	SETNAME ********		
CLASS_NO 3PC332	PCB SB SSB BD	3139 123 6443	1 2009-01-16
-- -- -- 1	TV543_2K9		1 2008-12-16
2008-10-17 2			
2009-01-16 3			
NAME Kailash	SUPERS. **** *** *****	25 10 130 ~ 02	A2
SV CHECK	DATE 2008-10-17	© ROYAL PHILIPS ELECTRONICS N.V. 2008	

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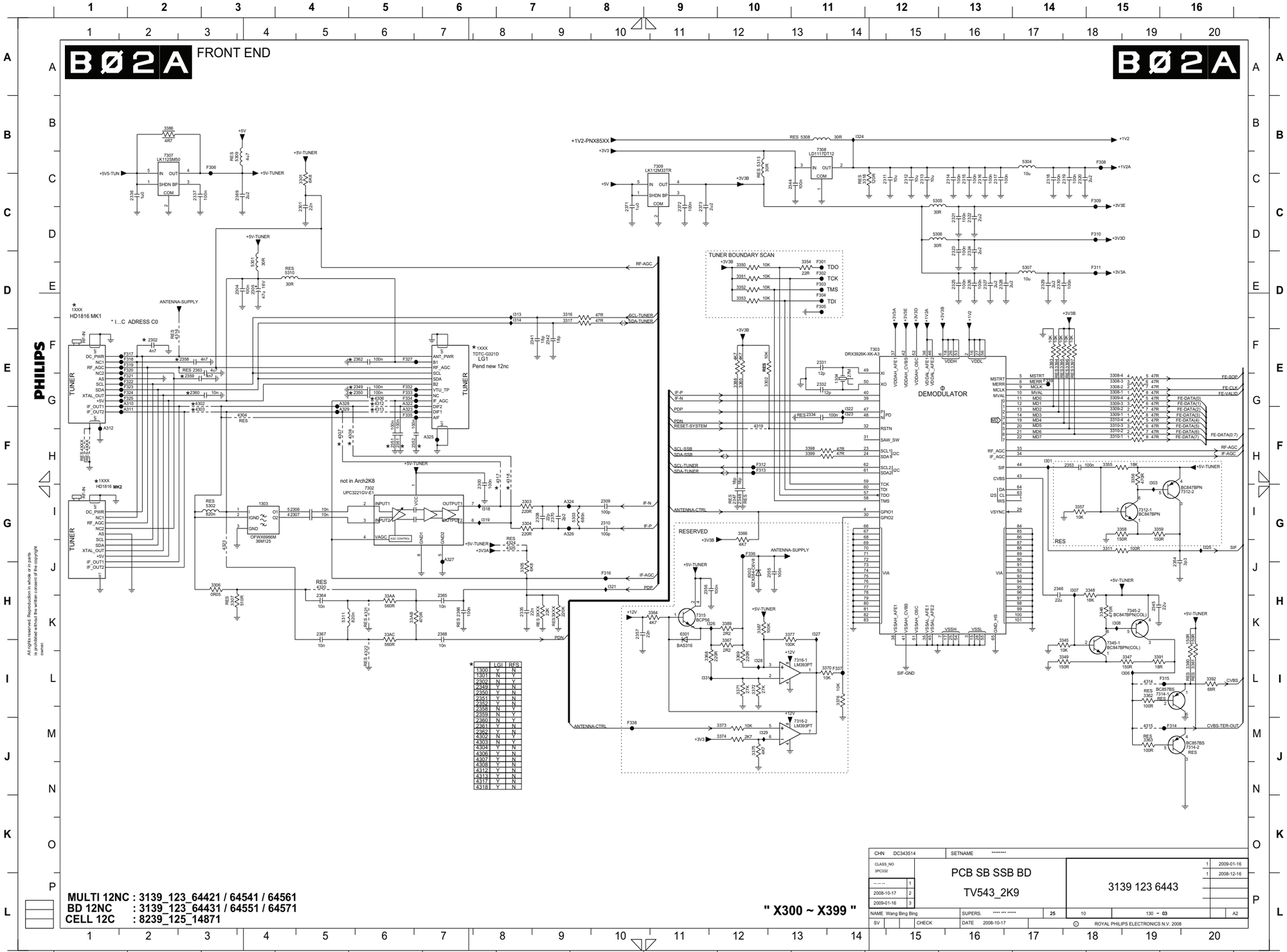
SSB: Front End



	LGI	RES
1300	Y	N
1301	N	Y
2302	N	Y
2349	Y	N
2350	Y	N
2351	Y	N
2352	Y	N
2358	N	Y
2359	N	Y
2360	N	Y
2361	Y	N
2362	Y	N
4302	N	Y
4303	N	Y
4304	Y	N
4306	Y	N
4307	Y	N
4308	Y	N
4312	Y	N
4313	Y	N
4317	Y	N
4318	Y	N

1300 E6	3398 F11
1301 D1	3399 F11
1303 G3	33AA H5
1304 E11	33AB H5
1306 F1	33AC H5
2300 F6	4302 E2
2301 C4	4303 F2
2302 E2	4304 F3
2304 D3	4306 E5
2305 D3	4307 F4
2306 G4	4308 F5
2307 G4	4312 E5
2308 G7	4313 F5
2309 G8	4314 I15
2310 G8	4315 J15
2311 C12	4316 E2
2312 C12	4317 F7
2313 C12	4318 F7
2314 C13	4319 F10
2315 C13	4320 H4
2316 C13	4321 H5
2317 C13	4322 I5
2318 C14	4323 G3
2319 C14	4324 G7
2320 C14	4325 G7
2321 C13	4326 F1
2322 C13	4327 F1
2323 C13	5301 D3
2324 C13	5302 G3
2325 D13	5303 G8
2326 D13	5304 B14
2327 D13	5305 C12
2328 D13	5306 C12
2329 D14	5307 D14
2330 D14	5308 B11
2331 E11	5309 B3
2332 E11	5310 D4
2334 F11	5311 H4
2335 H7	5313 B10
2336 C2	6301 H9
2337 C2	6302 H10
2341 E7	7302 G5
2342 E7	7303 E12
2344 C11	7307 B2
2345 H15	7308 B11
2346 H14	7309 B9
2347 G10	7312-1 G15
2348 G10	7312-2 G16
2349 E5	7314-1 I15
2350 E5	7314-2 J16
2351 F5	7315 H9
2352 F5	7316-1 I11
2353 F14	7316-2 J11
2354 G16	7345-1 I15
2355 H10	7345-2 H15
2356 H9	A310 E2
2357 H8	A311 F2
2358 E2	A312 F1
2359 E2	A322 E5
2360 E2	A323 F5
2361 F5	A324 G7
2362 E5	A325 F6
2363 E2	A326 G7
2364 H4	A327 G6
2365 H6	A328 E4
2366 H6	A329 F4
2367 H4	F301 D11
2368 H6	F302 D11
2369 C3	F303 D11
2370 G7	F304 D11
2371 C8	F305 D11
2372 C9	F306 B3
2373 C9	F308 B15
3301 C4	F309 C15
3302 E10	F310 C15
3303 G7	F311 D15
3304 G7	F312 F10
3305 H7	F313 F10
3306 H3	F314 J16
3307 H3	F315 I16
3308-1 E15	F316 H8
3308-2 E15	F317 E2
3308-3 E15	F318 E2
3308-4 E15	F319 E2
3309-1 F15	F320 E2
3309-2 F15	F321 E2
3309-3 E15	F322 E2
3309-4 E15	F323 E2
3310-1 F15	F324 E2
3310-2 F15	F325 E2
3310-3 F15	F327 E5
3310-4 F15	F332 E5
3311 G15	F333 E5
3312 H7	F334 E5
3313 H7	F335 F5
3316 D7	F336 G10
3317 D7	F337 I11
3318 C12	F338 J8
3345 I14	F339 E14
3346 H15	I301 F14
3347 I15	I303 F15
3348 H15	I306 I15
3349 I14	I307 H14
3350 D10	I308 H15
3351 D10	I313 D7
3352 D10	I314 D7
3353 D10	I318 G6
3354 D11	I319 G6
3355 F15	I321 H8
3356 F15	I322 F11
3357 G14	I323 F11
3358 G15	I324 B11
3359 G15	I325 G16
3360 I16	I326 H9
3361 I16	I327 H11
3362 I15	I328 I10
3363 J15	I329 J10
3364 H9	I331 I9
3365 E10	
3366 G10	
3367 I10	
3368 I9	
3369 I10	
3370 I11	
3371 I10	
3372 I10	
3373 J10	
3374 J10	
3375 J10	
3376 I11	
3377 H10	
3386 B2	
3387 H10	
3388 E10	
3389 H10	
3391 I15	
3392 I16	
3393 E14	
3394 E14	
3395 E14	
3396 E14	
3397 E14	

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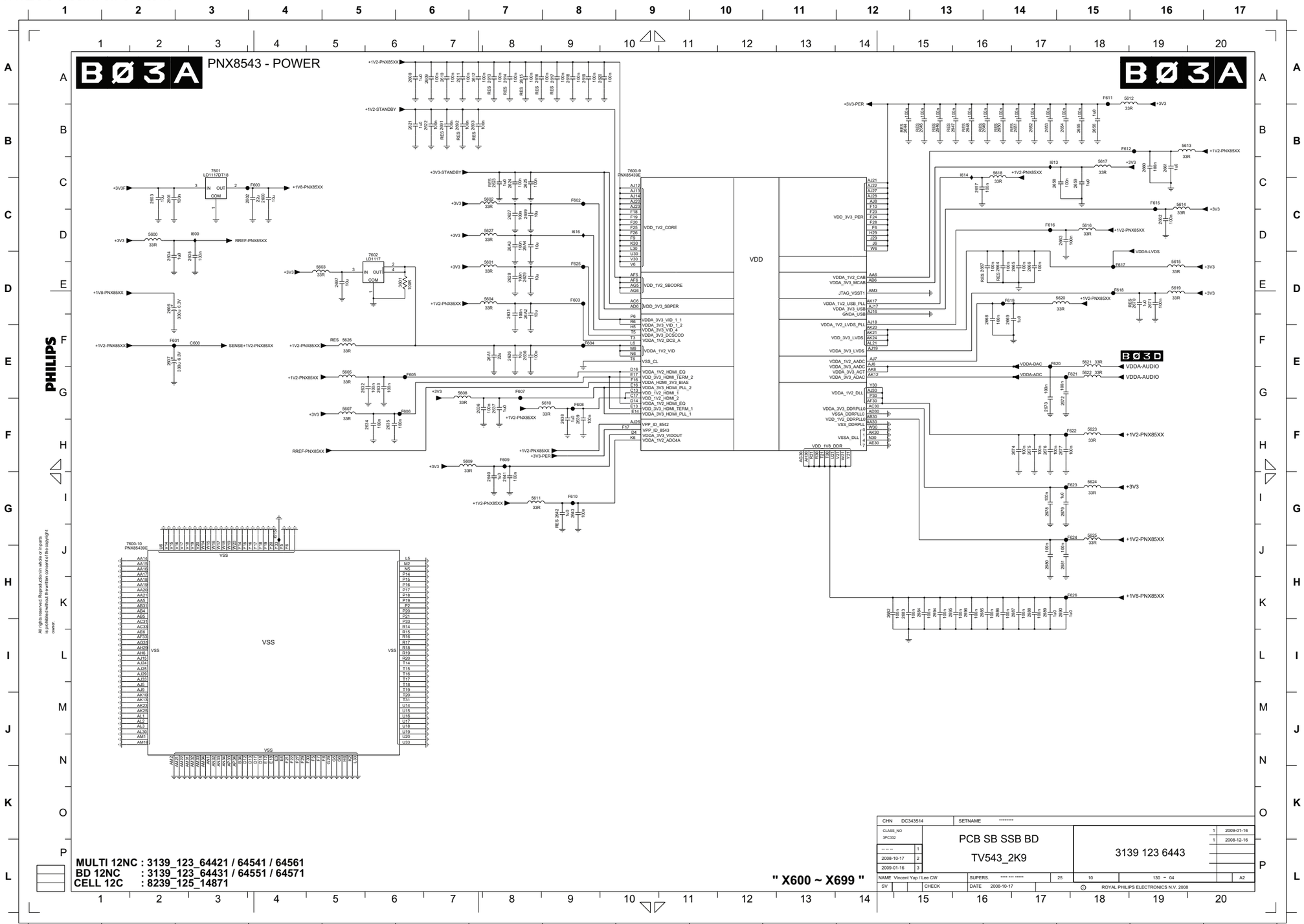
SSB: PNX8543 Power



2600 C4 2601 C2 2602 C4 2603 C2 2604 D2 2605 D3 2606 D2 2607 E2 2608 A6 2609 A6 2610 A6 2611 A6 2612 A7 2613 A7 2614 A7 2615 A7 2616 A7 2617 A8 2618 A8 2619 A8 2620 A8 2621 B6 2622 B6 2623 C7 2624 C7 2625 C7 2626 E7 2627 C7 2628 D7 2629 D7 2630 E7 2631 D7 2632 E5 2633 E5 2634 F5 2635 F5 2636 F7 2637 F7 2638 F8 2639 F8 2640 G7 2641 G7 2642 G8 2643 G8 2644 B12 2645 B13 2646 B13 2647 B13 2648 B13 2649 B13 2650 B14 2651 B14 2652 B14 2654 B15 2655 B15 2656 B15 2657 C13 2658 C14 2659 C15 2660 B16 2661 B16 2662 C16 2663 C15 2664 D14 2665 D14 2666 D14 2667 D14 2668 D14 2669 D14 2670 D16 2671 D16 2672 F15 2673 F14 2674 F14 2675 F14 2676 F14 2677 F15 2678 G14 2679 G15 2680 H14 2681 H15 2682 H12 2683 H12 2684 H13 2685 H13 2686 H14 2687 H14 2688 H14 2689 H14 2690 H15 2691 B6 2692 B6 2693 B7 2694 H13 2695 H13 2696 H13 2697 D5 2699 C7 26A1 E7 26A2 D7 26A3 C7 26A4 C7 3601 D6 5600 C2 5601 D7 5602 C7 5603 D4 5604 D7 5605 E5 5607 F5 5608 E6 5609 F6 5610 F8 5611 G7 5612 A15 5613 B16 5614 C16 5615 D16 5616 C15 5617 B15 5618 B14 5619 D16 5620 D15 5621 E15 5622 E15 5623 F15 5624 G15 5625 G15 5626 E5 5627 C7 7600-16 G2 7600-9 B9 7601 B3 7602 D5 C600 E3 F600 C4 F601 E2 F602 C8 F603 D8 F604 E8 F605 E6 F606 F6 F607 E7 F608 F8 F609 F7 F610 G8 F611 A15 F612 B15 F615 C16 F616 C14 F617 D15 F618 D15 F619 D14 F620 E14 F621 E15 F622 F15 F623 G15 F624 G15 F625 D8 F626 H15 I600 C3 I613 B14 I614 B13 I615 G4 I616 C8

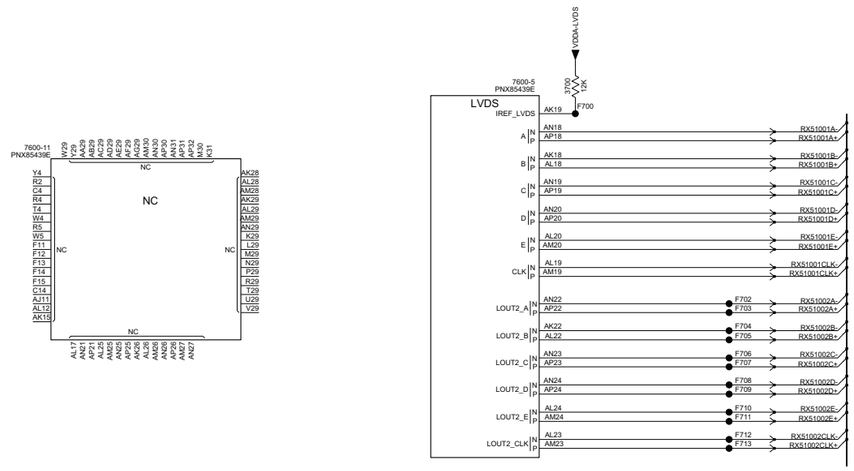
18440_503_090223.eps
090224

SSB: PNX8543 LVDS Output

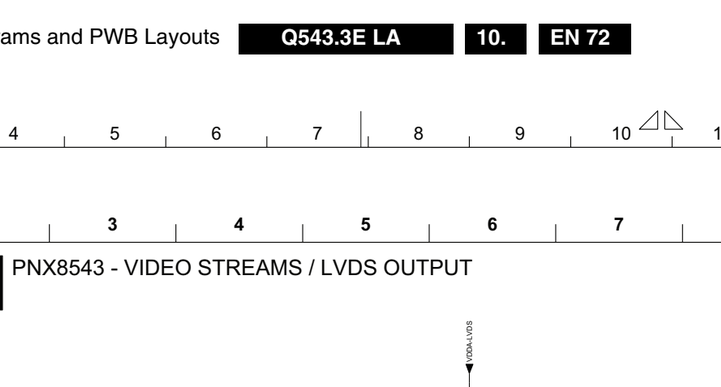
B Ø 3 B PNX8543 - VIDEO STREAMS / LVDS OUTPUT

B Ø 3 B

3700 B6
3707-1 F6
3707-2 F6
3707-3 F6
3707-4 F6
3708-1 F6
3708-2 F6
3708-3 F6
3708-4 F6
3709-1 F8
3709-2 G8
3709-3 F6
3709-4 G6
3710 G7
3711 H1
3714 H2
4700 H6
4701 H2
4702 G4
7600-11 B2
7600-12 F5
7600-5 B5
F700 B6
F701 H2
F702 C7
F703 C7
F704 D7
F705 D7
F706 D7
F707 D7
F708 D7
F709 D7
F710 D7
F711 D7
F712 D7
F713 E7



B Ø 5 C



B Ø 2 C

B Ø 5 C

MULTI 12NC : 3139_123_64421 / 64541 / 64561
BD 12NC : 3139_123_64431 / 64551 / 64571
CELL 12C : 8239_125_14871

" X700 ~ X799 "

CHN DC343514	SETNAME ********		
CLASS_NO 3PC332	PCB SB SSB BD	3139 123 6443	1 2009-01-16
– – – 1	TV543_2K9		1 2008-12-16
2008-10-17 2			
2009-01-16 3			
NAME Vincent Yap / Lee CW	SUPERS. **** *** *****	25	10 130 ~ 05 A2
SV CHECK	DATE 2008-10-17		

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090224

SSB: PNX8543 Audio Amplifier

B Ø 3 C

PNX8543 - AUDIO AMPLIFIER

B Ø 1 B

+AUDIO-POWER

AUDIO-VDD

RESERVED FOR ITV

BATHROOM SPEAKER

ADAC(7) ADAC(8) ADAC(5) ADAC(6) ADAC(3) ADAC(4)

AUDIO-CL-L AUDIO-CL-R AUDIO-OUT-L AUDIO-OUT-R

AUDIO-RESET

HP_LOUT HP_ROUT

A-PLOP A-STBY

MULTI 12NC : 3139_123_64421 / 64541 / 64561
BD 12NC : 3139_123_64431 / 64551 / 64571
CELL 12C : 8239_125_14871

" X800 ~ X899 "

CHN DC343514	SETNAME ********		
CLASS_NO 3PC332	PCB SB SSB BD	3139 123 6443	1 2009-01-16
-- -- -- 1	TV543_2K9		1 2008-12-16
2008-10-17 2			
2009-01-16 3			
NAME Hor Siew Lee	SUPERS. **** *** *****	25	10 130 ~ 06 A2
SV CHECK	DATE 2008-10-17		

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090224

1800 G1 I850 H9
2800 B2 I851 H9
2806 A8
2808 C8
2809 E8
2810 F8
2811 D7
2812 E7
2822 C12
2823 B8
2824 G2
2825 G2
2826 A7
2827 B7
2830 D7
2831 E7
2832 H6
2833 H6
2834 G8
2835 G7
2836 G7
2837 H6
3810 F2
3811 F3
3812 F3
3813 F4
3814 G2
3815 G3
3816-1 B8
3816-2 B7
3816-3 C7
3816-4 C8
3817-1 D7
3817-2 D8
3817-3 F7
3817-4 F8
3818 B2
3819-1 B3
3819-2 B3
3819-3 C3
3819-4 C3
3820 C2
3821 G1
3822 G1
3830-1 B13
3830-2 C13
3830-3 C11
3830-4 C11
3831 A9
3832 C9
3833 B12
3834 E9
3835-1 H6
3835-2 G7
3835-3 F7
3835-4 H6
3839 H7
3840 D9
3841 C11
4801 A3
6801 B2
7801 B4
7802 C3
7803-1 A8
7803-2 B8
7803-3 D8
7803-4 E8
7807-1 C12
7807-2 C14
7808 F2
7809 F3
7830 G7
F800 G1
F801 G2
F802 G2
F803 B9
F804 D9
F805 E9
F808 C11
F809 A9
F811 C14
F812 B4
I810 F2
I811 F3
I812 F4
I813 F3
I814 A7
I815 B7
I816 D7
I817 E7
I818 B2
I819 B3
I821 C2
I822 C3
I823 C3
I833 A7
I835 B7
I836 D7
I837 E7
I839 C12
I840 C13
I845 H6
I846 H6
I847 H7
I848 H7
I849 H7

SSB: PNX8543 Audio

B Ø 3 D PNX8543 - AUDIO

B Ø 3 D

AUDIO-IN1-L
AUDIO-IN1-R
AUDIO-IN2-L
AUDIO-IN2-R
AUDIO-IN3-L
AUDIO-IN3-R
AUDIO-IN4-L
AUDIO-IN4-R
AUDIO-IN5-L
AUDIO-IN5-R

	FLAVORS 22"	FLAVORS 32"/42"	PnS SS	OTHERS
4901 & 4902	YES	X	X	X
4903 & 4904	X	X	YES	X
4905 & 4906	YES	YES	X	X
3904	X	33K	33K	33K
3905	X	33K	33K	33K
3903	15K	22K	33K	33K
3923	220K	100K	33K	33K
3924	X	X	22K	33K
3925	X	X	100K	33K
3926	X	33K	X	33K
3927	X	33K	X	33K

B Ø 3 A

B Ø 3 C

B Ø 4 C

MULTI 12NC : 3139_123_64421 / 64541 / 64561
BD 12NC : 3139_123_64431 / 64551 / 64571
CELL 12C : 8239_125_14871

" X900 ~ X999"

CHN DC343514	SETNAME ********		
CLASS_NO 3PC332	PCB SB SSB BD TV543_2K9	3139 123 6443	1 2009-01-16 / 1 2008-12-16
– – – – 1 / 2008-10-17 2 / 2009-01-16 3			
NAME Hor Siew Lee	SUPERS. **** *** ***** 25	10 130 ~ 07	A2
SV CHECK	DATE 2008-10-17	© ROYAL PHILIPS ELECTRONICS N.V. 2008	

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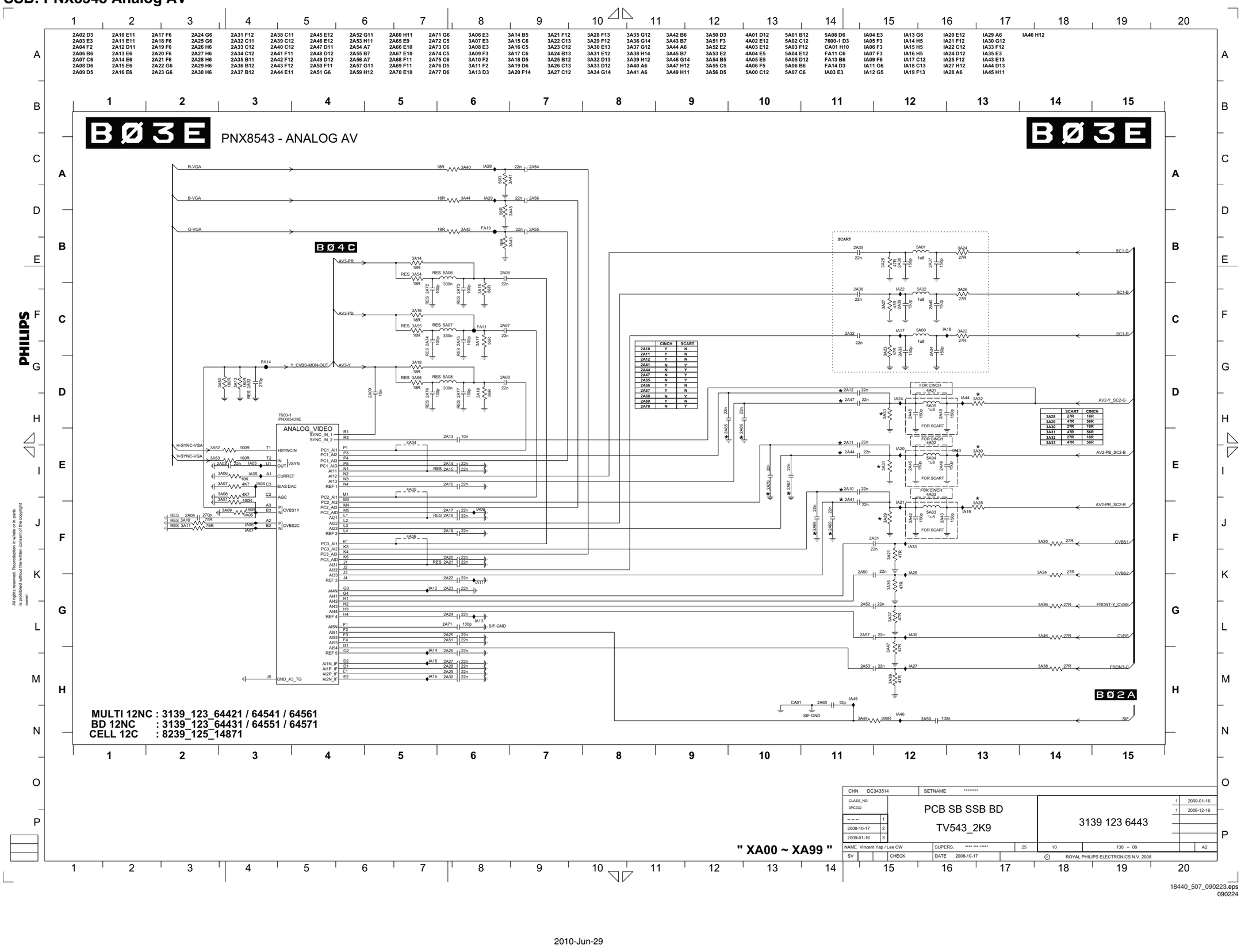
090224

2900 B5
2901 B5
2902 B5
2903 C5
2904 C5
2905 D5
2906 D5
2907 E5
2908 E5
2909 E5
2910-1 B7
2910-2 B7
2910-3 C7
2910-4 C7
2912 C7
2915-1 C9
2915-2 C9
2915-3 C9
2915-4 C9
2919 C10
2920 C10
2921 C11
2922 E11
2923 E11
2924 G5
2925 G6
2926 A4
2927 B4
2928 B4
2929 C4
2930 C4
2931 C4
2932 D4
2933 D4
2934 E4
2935 E4
2936 E11
2937 E11
2938 E11
2939 E12
3900-1 B2
3900-2 B3
3900-3 A3
3900-4 A2
3903-2 C2
3903-4 C2
3904-3 C2
3904-4 B2
3905-3 C3
3905-4 B3
3906 G6
3907 G6
3908 G6
3909 C11
3910 C11
3911-1 F9
3911-2 F9
3911-3 D9
3911-4 D9
3912-1 E9
3912-2 E9
3912-3 E9
3912-4 D9
3913 F9
3914 F9
3915 F9
3923-1 D3
3923-4 C3
3924-1 D2
3924-2 D2
3925-1 D3
3925-2 E3
3926-1 E2
3926-2 E2
3927-1 E3
3927-2 E3
3932 F6
3933 F6
4901 B4
4902 C4
4903 D3
4904 E4
4905 C4
4906 D4
5900 B7
5901 C10
5902 B7
6900 E2
6901 D2
7600-7 C7
7900 B11
F901 C10
F902 F10
I901 A4
I902 B4
I903 B4
I904 C4
I905 C4
I906 C4
I907 D4
I908 D4
I909 E4
I910 E4
I911 C9
I913 C11
I914 C7
I916 B7
I917 F7
I918 F7
I919 G7
I920 F9
I921 B7
I922 C10

SSB: PNX8543 Analog AV

2A02 D3	2A10 E11	2A17 F6	2A24 G6	2A31 F12	2A38 C11	2A45 E12	2A52 G11	2A60 H11	2A71 G6	3A06 E3	3A14 B5	3A21 F12	3A28 F13	3A35 G12	3A42 B6	3A50 D3	4A01 D12	5A01 B12	5A08 D6	IA04 E3	IA13 G6	IA20 E12	IA29 A6	IA46 H12
2A03 E3	2A11 E11	2A18 F6	2A25 G6	2A32 C11	2A39 C12	2A46 E12	2A53 H11	2A65 E9	2A72 C5	3A07 E3	3A15 C6	3A22 C13	3A29 F12	3A36 G14	3A43 B7	3A51 F3	4A02 E12	5A02 C12	7600-1 D3	IA05 F3	IA14 H5	IA21 F12	IA30 G12	
2A04 F2	2A12 D11	2A19 F6	2A26 H6	2A33 C12	2A40 C12	2A47 D11	2A54 A7	2A66 E10	2A73 C6	3A08 E3	3A16 C5	3A23 C12	3A30 E13	3A37 G12	3A44 A6	3A52 E2	4A03 E12	5A03 F12	CA01 H10	IA06 F3	IA15 H5	IA22 C12	IA33 F12	
2A06 B6	2A13 E6	2A20 F6	2A27 H6	2A34 C12	2A41 F11	2A48 D12	2A55 B7	2A67 E10	2A74 C5	3A09 F3	3A17 C6	3A24 B13	3A31 E12	3A38 H14	3A45 B7	3A53 E2	4A04 E5	5A04 E12	FA11 C6	IA07 F3	IA16 H5	IA24 D12	IA35 E3	
2A07 C6	2A14 E6	2A21 F6	2A28 H6	2A35 B11	2A42 F12	2A49 D12	2A56 A7	2A68 F11	2A75 C6	3A10 F2	3A18 D5	3A25 B12	3A32 D13	3A39 H12	3A46 G14	3A54 B5	4A05 E5	5A05 D12	FA13 B6	IA09 F6	IA17 C12	IA25 F12	IA43 E13	
2A08 D6	2A15 E6	2A22 G6	2A29 H6	2A36 B12	2A43 F12	2A50 F11	2A57 G11	2A69 F11	2A76 D5	3A11 F2	3A19 D6	3A26 C13	3A33 D12	3A40 A6	3A47 H12	3A55 C5	4A06 F5	5A06 B6	FA14 D3	IA11 G6	IA18 C13	IA27 H12	IA44 D13	
2A09 D5	2A16 E6	2A23 G6	2A30 H6	2A37 B12	2A44 E11	2A51 G6	2A59 H12	2A70 E10	2A77 D6	3A13 D3	3A20 F14	3A27 C12	3A34 G14	3A41 A6	3A49 H11	3A56 D5	5A00 C12	5A07 C6	IA03 E3	IA12 G5	IA19 F13	IA28 A6	IA45 H11	



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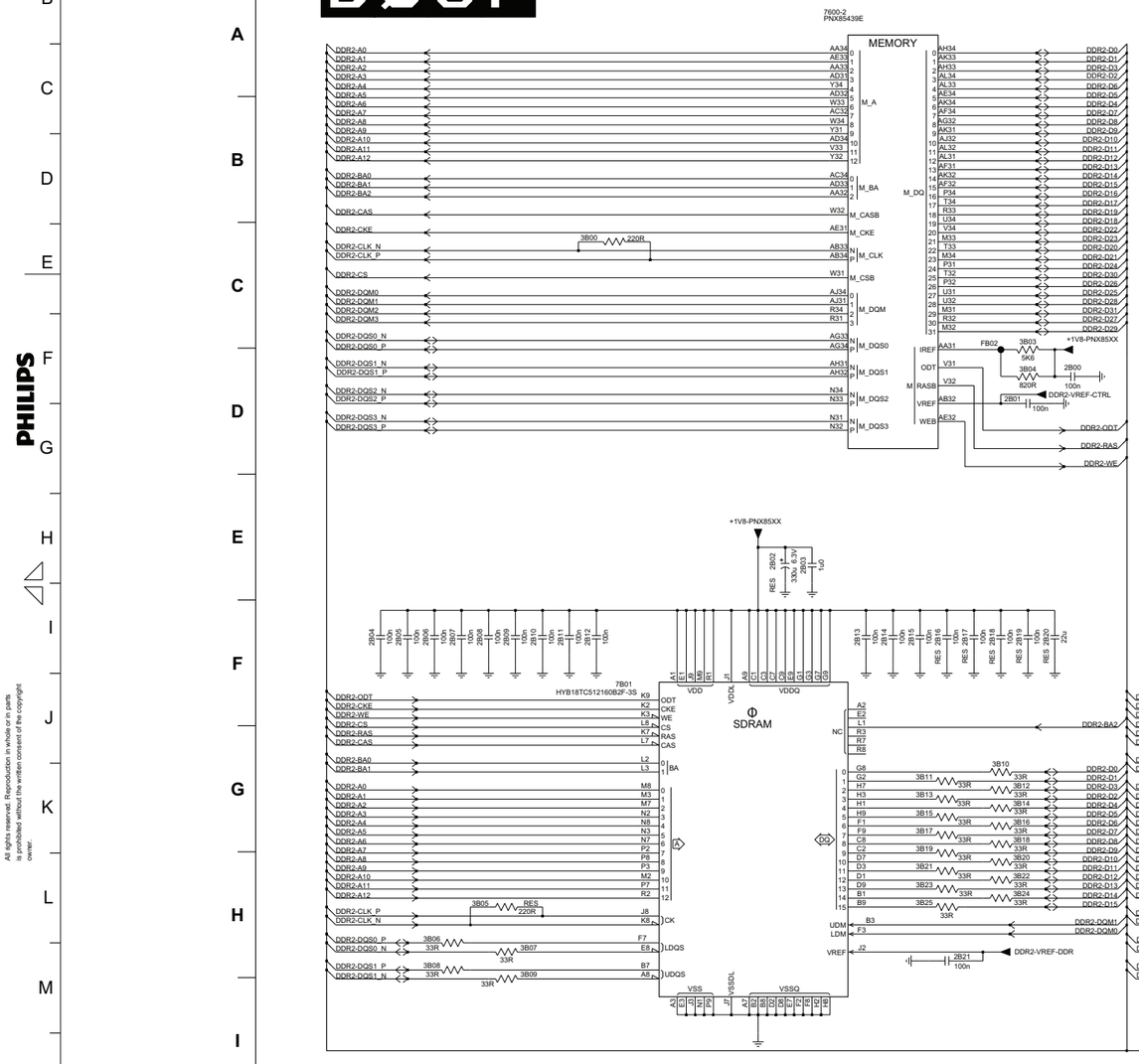
SSB: PNX8543 SDRAM

B Ø 3 F PNX8543 - SDRAM



MULTI 12NC : 3139_123_64421 / 64541 / 64561
BD 12NC : 3139_123_64431 / 64551 / 64571
CELL 12C : 8239_125_14871

" XB00 ~ XB99 "

CHN DC343514	SETNAME ********		
CLASS_NO 3PC332	PCB SB SSB BD TV543_2K9	3139 123 6443	1 2009-01-16
– – – 1			1 2008-12-16
2008-10-17 2			
2009-01-16 3			
NAME Vincent Yap / Lee CW	SUPERS. **** *** *****	25 10 130 – 09	A2
SV CHECK	DATE 2008-10-17	© ROYAL PHILIPS ELECTRONICS N.V. 2008	

2B00 D7
2B01 D6
2B02 E5
2B03 E5
2B04 F1
2B05 F2
2B06 F2
2B07 F2
2B08 F2
2B09 F2
2B10 F3
2B11 F3
2B12 F3
2B13 F5
2B14 F5
2B15 F6
2B16 F6
2B17 F6
2B18 F6
2B19 F6
2B20 F7
2B21 H6
2B22 B10
2B23 E10
2B24 E10
2B25 F8
2B26 F8
2B27 F8
2B28 F8
2B29 F8
2B30 F9
2B31 F9
2B32 F9
2B33 F9
2B34 F11
2B35 F11
2B36 F12
2B37 F12
2B38 F12
2B39 F12
2B40 F12
2B41 F13
2B42 H12
3B00 C3
3B03 C7
3B04 D7
3B05 H2
3B06 H2
3B07 H3
3B08 H2
3B09 H3
3B10 G6
3B11 G6
3B12 G6
3B13 G6
3B14 G6
3B15 G6
3B16 G6
3B17 G6
3B18 G6
3B19 G6
3B20 H6
3B21 H6
3B22 H6
3B23 H6
3B24 H6
3B25 H6
3B26 H8
3B27 H8
3B28 H9
3B29 H8
3B30 H9
3B31 G12
3B32 G12
3B33 G12
3B34 G12
3B35 G12
3B36 G12
3B37 G12
3B38 G12
3B39 G12
3B40 G12
3B41 H12
3B42 H12
3B43 H12
3B44 H12
3B45 H12
3B46 H12
3B47 B10
3B48 B12
3B49 B10
3B50 B12
7600-2 A5
7B00 F10
7B01 F3
FB00 B11
FB01 B10
FB02 C6

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SSB: PNX8543 Control MIPS/Flash/PCI

B03G

PNX8543 - CONTROL MIPS/FLASH/PCI

B03G

PHILIPS

CONTROL

USB

USB CONNECTOR

PCI

FLASH

RESERVED

DEBUG / RS232 INTERFACE

FOR UART SERVICE CONNECTOR

LIGHT_SENSOR

TO LED PANEL

FOR LIGHT GUIDE

FOR BOUNDARY SCAN

FOR FACTORY USE ONLY

RESERVED FOR DISPLAY

	/32	/82
3M30	N.S.	27R
3M43	N.S.	N.S.
3M46	0R	27R

MULTI 12NC : 3139_123_64421 / 64541 / 64561
BD 12NC : 3139_123_64431 / 64551 / 64571
CELL 12C : 8239_125_14871

" XM00 ~ XM99 "

CHN DC343514	SETNAME ********		
CLASS_NO 3PC332	PCB SB SSB BD TV543_2K9	3139 123 6443	1 2009-01-16 1 2008-12-16
-- -- -- 1			
2008-10-17 2			
2009-01-16 3			
NAME She King Chuang	SUPERS. **** *** *****	25	10 130 ~ 10 A2
SV CHECK	DATE 2008-10-17	© ROYAL PHILIPS ELECTRONICS N.V. 2008	

1M01 J4
1M03 J17
1M04 K4
1M09 D10
1M20 J11
1P09 I12
2M00 C8
2M01 C8
2M02 C9
2M03 C9
2M04 C9
2M05 D9
2M10 C16
2M11 C17
2M12 G15
2M16 D9
2M17 G10
2M18 G10
2M19 H11
2M20 H11
2M21 H11
2M86 K9
2M87 K9
2M88 J9
2M89 J9
2M90 I9
2M91 I9
2M92 K2
2M93 K3
2M95 I8
3M00 B4
3M01-1 C2
3M01-2 B2
3M01-3 B2
3M01-4 B2
3M05 C2
3M06 B4
3M07 C2
3M08 C2
3M09 C2
3M10 C2
3M11 C2
3M12 D2
3M13 D2
3M14 D4
3M15 D4
3M16 D4
3M17 E4
3M18 E4
3M19 E4
3M20 C6
3M21 D6
3M22 D6
3M23 D6
3M24 D6
3M25 D6
3M26 E6
3M27 E6
3M29 G6
3M30 G11
3M31 C8
3M32 D8
3M33 D8
3M34 F6
3M35 H7
3M36-1 E8
3M36-2 E8
3M36-3 E8
3M36-4 E8
3M37-2 F9
3M37-3 F9
3M37-4 F9
3M38-2 G8
3M38-3 G8
3M39 H11
3M40 H9
3M41 H11
3M42 H11
3M43 G11
3M44-1 I14
3M44-2 I14
3M44-3 I14
3M44-4 I14
3M45 K14
3M46 G11
3M47 K15
3M54-1 F13
3M54-2 F13
3M54-3 F13
3M54-4 F13
3M58-1 D13
3M58-2 D13
3M58-3 D13
3M58-4 D13
3M59-1 D13
3M59-2 D13
3M59-3 D13
3M59-4 D13
3M66 D13
3M67 E13
3M68 C13
3M70 J14
3M71 J15
3M72 K14
3M73 J3
3M74 J3
3M75 K3
3M76 K3
3M77 C2
3M78 C2
3M79 I6
3M80 J6
3M81 K6
3M82 I8
3M83 I8
3M84 J7
3M85 C2
3M86 I9
3M87 I9
3M88 J8
3M89 K9
3M90 E4
3M91 E4
3M92 E6
3M93 E6
3M94 C7
3M95 C7
3M96 J8
3M97 K7
3M98 K9
3M99 J8
4M02 B5
4M03 C4
4M05 H15
4M06 H15
4M83 K7
4M84 J7
4M88 J9
5M00 C13
5M01 C9
5M80 J10
5M81 J10
5M82 J10
5M83 J10
5M84 J10
5M85 J10
5M87 J10
5M88 J10
6M00 K4
6M01 J3
6M02 J4
6M03 K3
6M04 E8
6M05 E9
7600-3 E6
7600-8 B5
7M00 C15
7M01 G15
7M02 G10
7M80 J8
7M81 K8
FM00 J10
FM01 J10
FM02 J10
FM03 J10
FM04 J10
FM05 J10
FM06 J10
FM07 J10
FM08 E9
FM09 E9
FM10 E9
FM11 J16
FM12 J16
FM13 J16
FM14 J16
FM15 J16
FM16 J16
FM17 J16
FM21 J4
FM22 J3
FM23 K3
FM24 K3
FM25 K4
FM28 B4
FM33 C15
FM34 E6
FM35 E6
FM36 D8
FM37 J4
FM38 E9
FM39 B4
FM40 C5
FM41 C5
FM42 C5
FM43 C5
FM45 E14
IM07 F7
IM08 G6
IM13 E15
IM14 E15
IM18 C8
IM19 D5
IM20 F6
IM21 C5
IM23 C6
IM24 D6
IM25 D6
IM26 D6
IM28 H6
IM31 H10
IM32 H11
IM33 H11
IM34 H11
IM35 I12
IM84 K7
IM85 J7
IM86 I8
IM87 I8
IM88 J8
IM89 K8
IM90 K8

SSB: PNX8543 Stand-by Control/Debug

B Ø 3 H — PNX8543 - STANDBY-CONTROL / DEBUG — B Ø 3 H

PHILIPS

MULTI 12NC : 3139_123_64421 / 64541 / 64561
BD 12NC : 3139_123_64431 / 64551 / 64571
CELL 12C : 8239_125_14871

" XD00 ~ XD99 "

CHN DC343514	SETNAME ********		
CLASS_NO 3PC332	PCB SB SSB BD		1 2009-01-16
– – – 1	TV543_2K9	3139 123 6443	1 2008-12-16
2008-10-17 2			
2009-01-16 3			
NAME She King Chuang	SUPERS. **** *** *****	25	10 130 – 11 A2
SV CHECK	DATE 2008-10-17		

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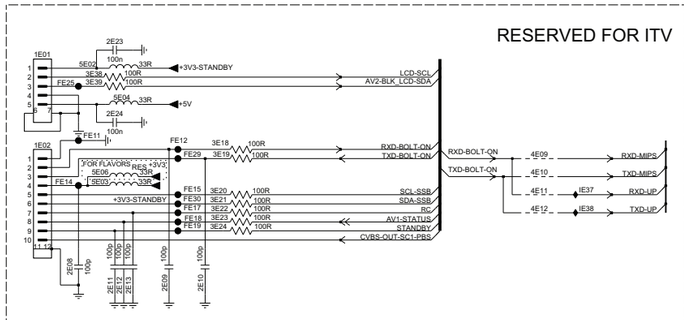
1D00 A3
1D01 H13
2D00 A3
2D01 A3
2D02 D2
2D03 G5
2D04 A10
2D05 C12
2D06 E13
2D07 H14
2D08 I14
2D09 B3
2D14 B7
2D15 F8
2D16 F9
2D17 B7
3D00 B2
3D01 B2
3D02 B2
3D03 B2
3D04 B2
3D05 B2
3D06 B2
3D07 B2
3D08 B2
3D09 C2
3D10 C2
3D11 C2
3D12 C2
3D13 C2
3D14 C2
3D15 C2
3D16 C2
3D17 C2
3D18 C2
3D19 C2
3D20 C2
3D21 D2
3D22 D2
3D23 D2
3D24 D2
3D25 D2
3D26 E2
3D27 E2
3D28-1 F4
3D28-2 F5
3D29 F3
3D30 F3
3D33 G3
3D34 G3
3D35 H3
3D36 H2
3D37 A7
3D38 A7
3D39 A7
3D40 A7
3D41 A7
3D42 A8
3D43 A8
3D44 A8
3D45 B7
3D46 B7
3D47 B7
3D48 B7
3D49 B7
3D50 C7
3D51 C7
3D52 C4
3D56-1 E12
3D56-2 E12
3D56-3 E12
3D56-4 E13
3D57 H11
3D58 C13
3D62 H2
3D63 F7
3D64 F9
3D65 F8
3D66 F8
3D67 I3
4D00 A2
4D01 A2
4D02 A2
4D06 C11
4D07 C11
4D08 H4
4D09 E7
6D00 H11
6D01 G3
6D02 F9
7600-6 A5
7D00-1 F4
7D00-2 G4
7D01 F5
7D02-1 H4
7D02-2 H4
7D05 C12
7D06 E12
7D07 E13
7D08 I11
7D09 A10
7D10 F7
FD00 A4
FD02 C14
FD03 C11
FD04 E12
FD05 E11
FD06 F13
FD07 F14
FD08 F13
FD09 H13
FD10 I13
FD11 E13
FD12 E7
FD13 B9
FD14 B11
FD15 B9
FD16 B9
FD17 B9
FD18 H14
FD19 B4
FD20 B4
FD21 C4
FD22 D2
ID17 F4
ID18 F3
ID19 F4
ID20 G3
ID22 H4
ID23 H3
ID31 F12
ID40 A1
ID44 F8
ID45 F8
ID46 F9
ID47 F2
ID49 G2
ID50 H2
ID51 H4
ID52 B4

SSB: Bolt-on

B Ø 4 A BOLT-ON

B Ø 4 A

RESERVED FOR ITV



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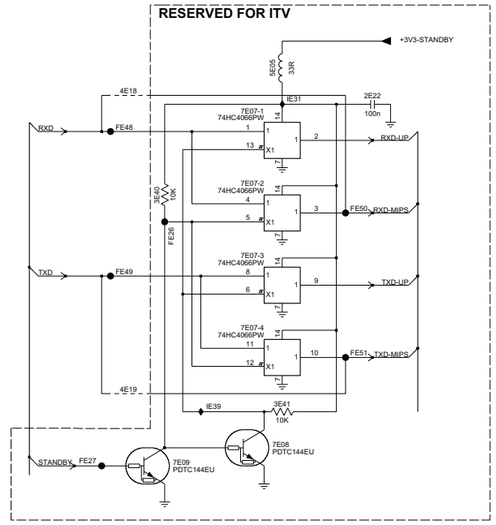
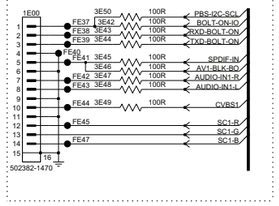
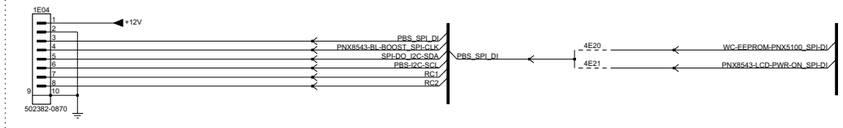


RESERVED FOR ITV / DVS-S BOLT ON



RESERVED FOR ITV



MULTI 12NC : 3139_123_64421 / 64541 / 64561
BD 12NC : 3139_123_64431 / 64551 / 64571
CELL 12C : 8239_125_14871

1E00 B11
1E01 A1
1E02 B1
1E04 G1
2E08 C1
2E09 C2
2E10 C2
2E11 C1
2E12 C2
2E13 C2
2E22 B9
2E23 A2
2E24 B2
3E18 B2
3E19 B2
3E20 C2
3E21 C2
3E22 C2
3E23 C2
3E24 C2
3E38 B1
3E39 B1
3E40 C8
3E41 D9
3E42 B12
3E43 B12
3E44 B12
3E45 B12
3E46 B12
3E47 B12
3E48 B12
3E49 B12
3E50 B12
4E09 B5
4E10 B5
4E11 C5
4E12 C5
4E18 B7
4E19 D7
4E20 G5
4E21 G5
5E02 B1
5E03 B1
5E04 B2
5E05 B9
5E06 B1
7E07-1 B8
7E07-2 C8
7E07-3 C8
7E07-4 D8
7E08 E9
7E09 E8
FE11 B1
FE12 B2
FE14 B1
FE15 C2
FE17 C2
FE18 C2
FE19 C2
FE25 B1
FE26 C8
FE27 E7
FE29 B2
FE30 C2
FE37 B11
FE38 B11
FE39 B11
FE40 B11
FE41 B11
FE42 B11
FE43 B11
FE44 B11
FE45 B11
FE47 C11
FE48 B7
FE49 C7
FE50 C9
FE51 D9
IE31 B9
IE37 C5
IE38 C5
IE39 D8

" XE00 ~ XE99 "

CHN DC343514	SETNAME ********		
CLASS_NO 3PC332	PCB SB SSB BD TV543_2K9	3139 123 6443	1 2009-01-16 / 1 2008-12-16
-- -- -- 1 / 2008-10-17 2 / 2009-01-16 3			
NAME Vincent Yap / Lee CW	SUPERS. **** *** *****	25	10 — 130 – 12 — A2
SV — CHECK ********	DATE 2008-10-17		

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SSB: Analog IO - SCART 1 & 2

B Ø 4 B — ANALOG IO - SCART 1 & 2

B Ø 4 B

B Ø 3 D

PHILIPS

SCART2 (AV2) 1F02

SCART1 (AV1) 1F01

MRC-021H-09 PC

FLAVORS

1E32 CON_STND_MAL_N40_M2

SCART

FOR CINCH

FOR SCART

AP-SCART-OUT-R
AP-SCART-OUT-L
AUDIO-IN2-R
AUDIO-IN2-L
A-PLOP
AUDIO-CL-R
AUDIO-CL-L
REGIMBEAU_CVBS-SWITCH
AV2-PB_SC2-B
AV2-STATUS
Y_CVBS-MON-OUT-SC
CVBS-TER-OUT
AV2-Y_SC2-G
CVBS-OUT-SC1-PBS
AV2-PR_SC2-R
AV2-BLK_LCD-SDA
CVBS-OUT-SC1
CVBS2
CVBS-OUT-SC2
Y_CVBS-MON-OUT
AUDIO-IN1-R
AUDIO-IN1-L
AV1-BLK-BO
AV1-BLK
CVBS1
SC1-R
SC1-G
SC1-B
AV1-STATUS
CVBS-OUT-SC1

MULTI 12NC : 3139_123_64421 / 64541 / 64561
BD 12NC : 3139_123_64431 / 64551 / 64571
CELL 12C : 8239_125_14871

" XF00 ~ XF99 "

CHN DC343514		SETNAME ********	
CLASS_NO 3PC332	PCB SB SSB BD	3139 123 6443	1 2009-01-16
-- -- -- 1	TV543_2K9		1 2008-10-17
2008-10-17 2			
2009-01-16 3			
NAME Vincent Yap / Lee CW	SUPERS. **** *** *****	25 10 130 ~ 13	A2
SV CHECK	DATE 2008-10-17	ROYAL PHILIPS ELECTRONICS N.V. 2008	

1E32 C11
1F00 B7
1F01 D17
1F02 D9
1F03 D7
1F04 E7
1F05 F7
1F06 G7
1F07 H7
1F08 I8
1F09 J7
1F10 K7
1F11 B15
1F12 C15
1F13 C15
1F14 D15
1F15 E14
1F16 F14
1F17 G14
1F18 H14
1F19 I15
1F20 J16
1F21 K16
1F22 C7
1F23 D7
2F00 D3
2F01 B4
2F02 C4
2F03 E2
2F04 I3
2F05 J3
2F06 B8
2F07 B6
2F08 C8
2F09 C6
2F10 C7
2F11 D6
2F12 D7
2F13 D6
2F14 E6
2F15 F6
2F16 G6
2F17 H6
2F18 I7
2F19 J7
2F20 B15
2F21 B14
2F22 C15
2F23 C14
2F24 C15
2F25 C14
2F26 D15
2F27 D14
2F28 E15
2F29 F13
2F30 G15
2F31 H15
2F33 I14
2F34 J15
2F35 I9
2F36 I10
2F37 I10
2F38 J9
2F39 J12
2F42 F15
2F43 F7
2F44 K7
2F45 K16
3F00 B3
3F01 B2
3F02 C3
3F03 C2
3F04 D3
3F05 I2
3F06 I2
3F07 J2
3F08 K2
3F09 B6
3F10 B6
3F11 C6
3F13 C6
3F14 D6
3F15 D6
3F18 F6
3F19 F6
3F20 H4
3F22 I7
3F23 I7
3F24 I8
3F26 J5
3F27 B14
3F28 B13
3F29 C14
3F31 C14
3F32 C13
3F33 D14
3F36 F14
3F37 F14
3F40 I14
3F41 I15
3F42 I15
3F44 J14
3F45 I11
3F46 I11
3F47 I12
3F48 J10
3F49 J11
3F50 J11
3F51 J11
3F52 J9
3F53 J12
4F00 J3
4F01 J9
4F03 D8
4F04 E8
4F05 H13
4F06 J13
4F07 H6
5F00 I9
6F00 B7
6F01 C7
6F02 C7
6F03 D7
6F04 E7
6F05 F7
6F06 G7
6F07 H7
6F08 I7
6F09 J6
6F10 K6
6F11 B15
6F12 C15
6F13 C15
6F14 D15
6F15 E15
6F16 F15
6F17 G15
6F18 H15
6F19 I15
6F20 J15
6F21 K15
7F00-1 B3
7F00-2 C3
7F01 E4
7F02 E2
7F03 I2
7F04 K2
7F05 I7
7F06 I14
7F07-1 J11
7F07-2 J10
7F08 J9
7F00 C4
FF01 B8
FF02 C8
FF03 C8
FF04 E7
FF05 E8
FF06 F8
FF08 F8
FF09 G8
FF10 G8
FF11 G8
FF12 G8
FF13 G8
FF14 D16
FF15 D16
FF16 E16
FF17 E16
FF18 E16
FF19 E16
FF20 F16
FF21 F16
FF22 F16
FF23 G16
FF24 G16
FF25 G16
FF26 B4
FF27 I3
FF28 J3
FF29 C6
FF30 D6
FF31 F6
FF32 H6
FF33 I6
FF34 H13
FF35 F13
FF36 D13
FF37 C13
FF38 E4
FF39 I14
IF00 B4
IF01 C4
IF02 B3
IF03 C3
IF04 J2
IF06 F3
IF12 I2
IF14 J2
IF16 I7
IF25 I14
IF26 I11
IF27 I10
IF28 J11
IF29 J12
IF30 J9
IF31 J10
IF32 J11

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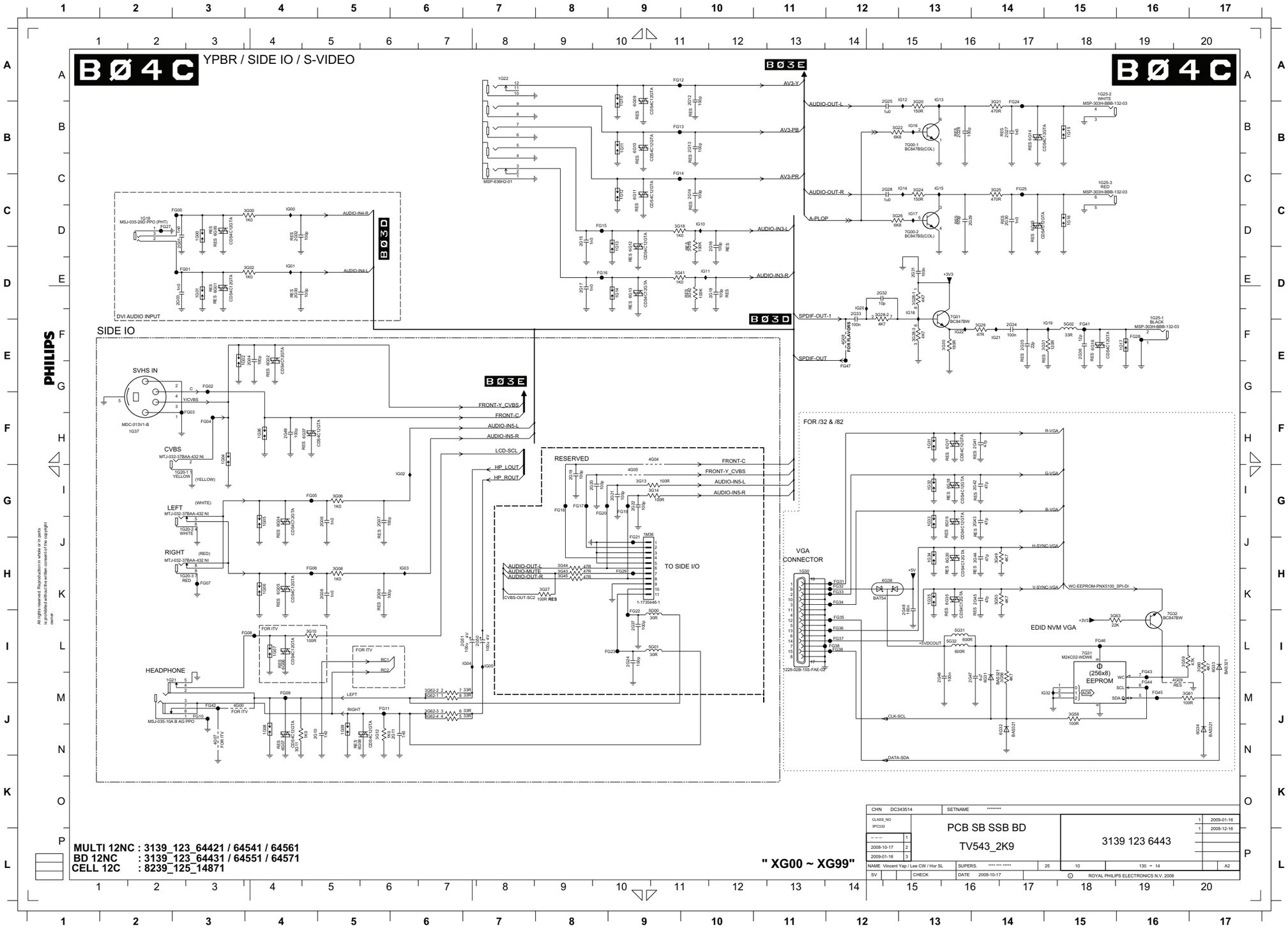
090224

SSB: YPbPr / Side I/O / S-video



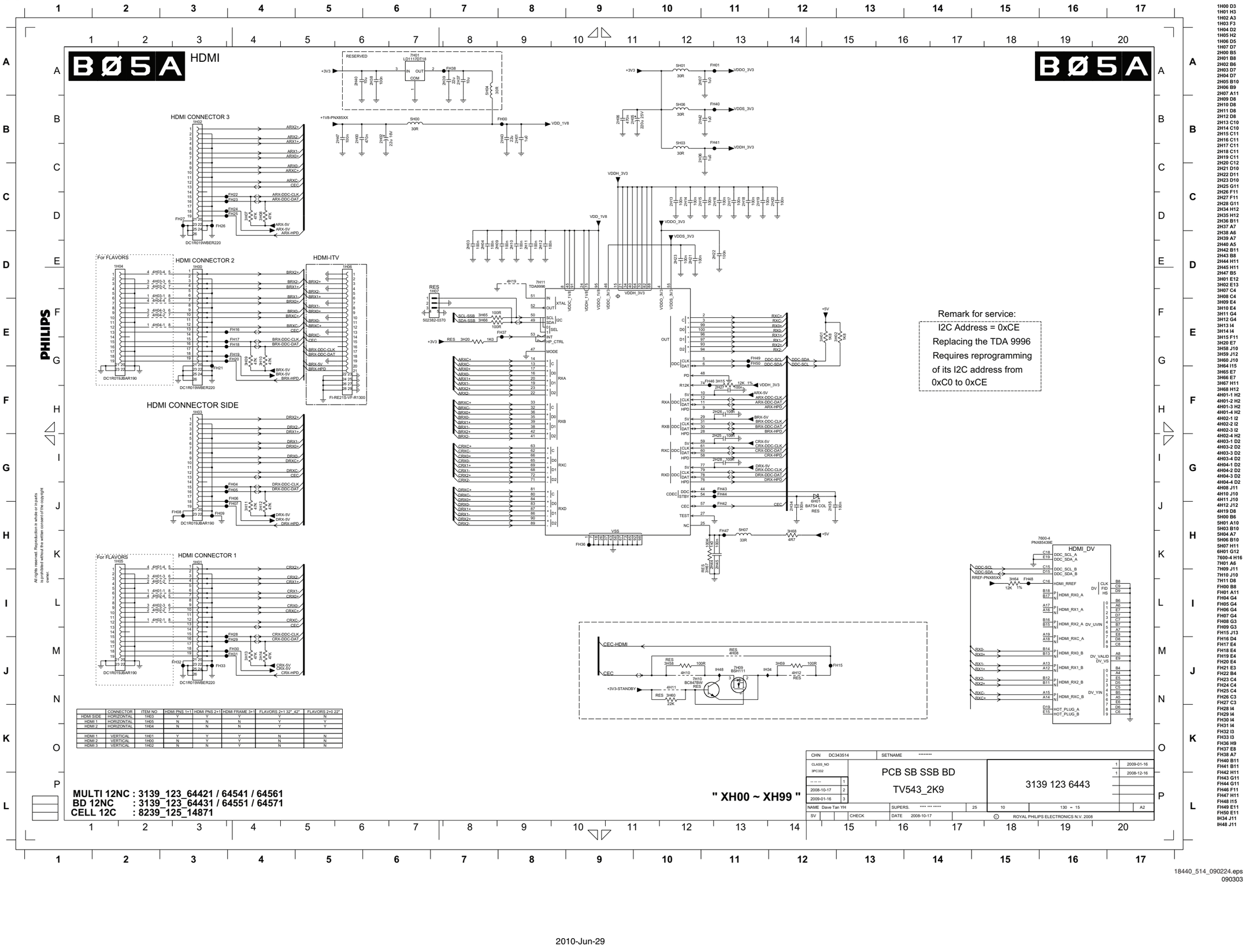
MULTI 12NC : 3139_123_64421 / 64541 / 64561
BD 12NC : 3139_123_64431 / 64551 / 64571
CELL 12C : 8239_125_14871

CHN DC343514	SETNAME ********		
CLASS_NO 3PC332	PCB SB SSB BD TV543_2K9	3139 123 6443	1 2009-01-16 1 2008-12-16
– – – 1			
2008-10-17 2			
2009-01-16 3			
NAME Vincent Yap / Lee CW / Hor SL	SUPERS. **** *** *****	25 10 130 ~ 14	A2
SV CHECK	DATE 2008-10-17	© ROYAL PHILIPS ELECTRONICS N.V. 2008	

1G00 C3
1G01 D3
1G02 E3
1G04 F3
1G05 G4
1G06 H4
1G07 I4
1G08 J4
1G09 J5
1G10 A9
1G11 B9
1G12 C9
1G13 C9
1G14 D9
1G15 B15
1G16 C15
1G17 E16
1G18 C2
1G20-1 G3
1G20-2 G3
1G20-3 H3
1G21 I2
1G22 A7
1G25-1 D16
1G25-2 A15
1G25-3 C15
1G30 H11
1G31 F13
1G32 G13
1G33 G13
1G34 H13
1G35 H13
1G36 F4
1G37 F2
1M36 G9
2G00 D4
2G01 C3
2G02 C4
2G03 D3
2G04 E4
2G06 G5
2G07 G5
2G08 H5
2G09 H5
2G10 J4
2G11 J6
2G12 A10
2G13 B10
2G14 C10
2G15 C8
2G16 C10
2G17 D8
2G18 D10
2G19 G8
2G20 G8
2G21 G9
2G22 G9
2G24 I9
2G25 B12
2G26 B13
2G27 B14
2G28 C12
2G29 C13
2G30 C14
2G31 D13
2G32 D12
2G33 D12
2G34 E14
2G35 E14
2G36 E15
2G37 I9
2G41 F14
2G42 G14
2G43 G14
2G44 H14
2G45 H14
2G46 I13
2G47 I14
2G48 H13
2G49 F4
2G50 I7
2G51 I7
3G00 C4
3G02 D4
3G06 G5
3G08 H5
3G10 I4
3G11 J4
3G12 J5
3G13 G9
3G14 G9
3G18 C9
3G19 C10
3G20 B13
3G21 B14
3G22 B12
3G24 C13
3G25 C14
3G26 C12
3G27 H8
3G28-1 D13
3G28-3 E13
3G28-4 D12
3G29 E14
3G30 E13
3G31 E15
3G41 D9
3G42 D10
3G43 H8
3G44 H8
3G45 H8
3G49 H14
3G50 H14
3G56 I14
3G58 J15
3G59 I16
3G60 I17
3G61 J16
3G62-1 J6
3G62-2 J6
3G62-3 J6
3G62-4 J6
3G63 I15
4G00 J3
4G04 F9
4G05 G9
4G07 J3
4G08 E12
4G09 I16
5G00 I9
5G01 I9
5G02 E15
5G31 I13
5G32 I13
6G00 C3
6G01 D3
6G02 E4
6G04 G4
6G05 H4
6G06 I4
6G07 J4
6G08 J5
6G09 A9
6G10 B9
6G11 C9
6G12 C9
6G13 D9
6G14 B14
6G15 C14
6G16 E15
6G17 F13
6G18 G13
6G19 G13
6G20 H13
6G31 I14
6G32 J14
6G33 I17
6G34 J17
6G35 H13
6G36 H12
6G37 F4
7G00-1 B13
7G00-2 C13
7G01 D13
FG00 C3
FG01 D3
FG02 E3
FG03 F3
FG04 F3
FG05 G4
FG06 H4
FG07 H3
FG08 I4
FG09 J4
FG10 J3
FG11 J5
FG12 A9
FG13 B9
FG14 C9
FG15 C8
FG16 D8
FG17 G8
FG18 G8
FG19 G9
FG20 G8
FG21 H9
FG22 I9
FG23 I9
FG24 B14
FG25 C14
FG27 C2
FG28 E16
FG29 H9
FG31 H12
FG32 H12
FG33 H12
FG34 H12
FG35 I12
FG36 I12
FG37 I12
FG38 I12
FG39 I12
FG41 E15
FG42 J3
FG43 I16
FG44 J16
FG45 I16
FG47 C12
IG00 C4
IG01 D4
IG02 G6
IG03 H6
IG04 I7
IG05 I7
IG10 C10
IG11 D10
IG12 A13
IG13 A13
IG14 C13
IG15 C13
IG16 B13
IG17 C13
IG18 D13
IG19 E15
IG20 D12
IG21 E14
IG22 E13
IG32 J15

18440_513_090224.eps
090224

SSB: HDMI



	CONNECTOR	ITEM NO	HDMI PNS 1+1	HDMI PNS 2+1	HDMI FRAME 3+1	FLAVORS 2+1 32" 42"	FLAVORS 2+0 22"
HDMI SIDE	HORIZONTAL	1H03	Y	Y	Y	N	N
HDMI 1	HORIZONTAL	1H05	N	N	N	Y	Y
HDMI 2	HORIZONTAL	1H04	N	N	N	Y	Y
HDMI 1	VERTICAL	1H01	Y	Y	Y	N	N
HDMI 2	VERTICAL	1H00	N	Y	Y	N	N
HDMI 3	VERTICAL	1H02	N	N	Y	N	N

18440_514_090224.eps
090303

SSB: Ethernet

B Ø 5 B

ETHERNET

B Ø 5 B

MacPhyter II
10/100 Mb/s

ETHERNET CONNECTOR

MULTI 12NC : 3139_123_64421 / 64541 / 64561
BD 12NC : 3139_123_64431 / 64551 / 64571
CELL 12C : 8239_125_14871

1N00 B11
1N02 D8
2N0K D8
2N0L D8
2N0M E3
2N0N H4
2N0P D11
2N0Q D10
2N0R B9
2N0S C8
2N0T B10
2N0U B9
2N0V E10
2N0W E11
2N0Y D13
2N0Z D13
2N10 D12
2N11 D12
2N12 D12
2N13 D12
2N14 D12
2N15 D11
2N16 D11
2N17 D11
2N1B H3
2N1C H3
3N0F C7
3N0G D3
3N0H C7
3N0J F8
3N0K F9
3N0L-1 A8
3N0L-2 A9
3N0L-3 A8
3N0L-4 A8
3N0N-1 A9
3N0N-2 A9
3N0N-3 A9
3N0N-4 A9
3N0T-1 C9
3N0T-2 C9
3N0T-3 C9
3N0T-4 C9
3N0V C8
3N0W E8
3N0Y E1
5N06 C10
5N07 D10
6N00 F8
6N01 F8
7N04-1 B3
7N04-2 H7
IN01 C3
IN05 B10
IN06 B10
IN07 B10
IN08 B10
IN09 C11
IN0A F9
IN0B F9
IN0C E3
IN0K E7
IN0M C7
IN0N H3
IN0P A9
IN0T C8
IN0V C8
IN0W F7
IN0Y F7
IN0Z F7
IN10 F8
IN15 B10
IN16 B10
IN17 C11
IN18 D11
IN19 D1

CHN DC343514	SETNAME ********		
CLASS_NO 3PC332	PCB SB SSB BD	3139 123 6443	1 2009-01-16
-- -- -- 1	TV543_2K9		1 2008-12-16
2008-10-17 2			
2009-01-16 3			
NAME Dave Tan YH	SUPERS. **** *** ***** 25	10 130 – 16	A2
SV CHECK	DATE 2008-10-17	© ROYAL PHILIPS ELECTRONICS N.V. 2008	

18440_515_090224.eps
090224

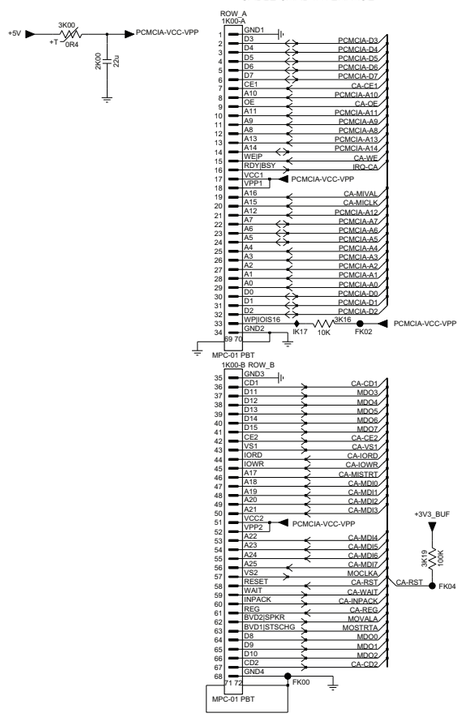
SSB: PCMCIA

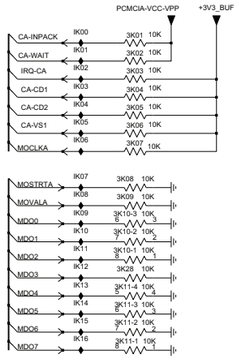
B05C PCMCIA

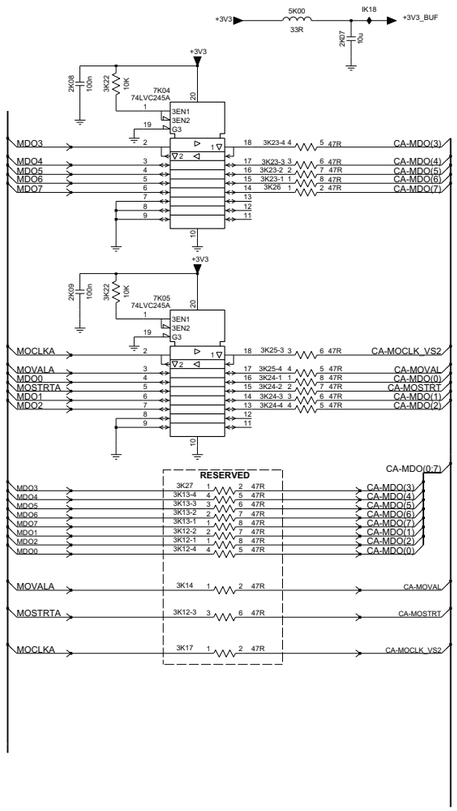
POD : SUPPLY / CONTROL

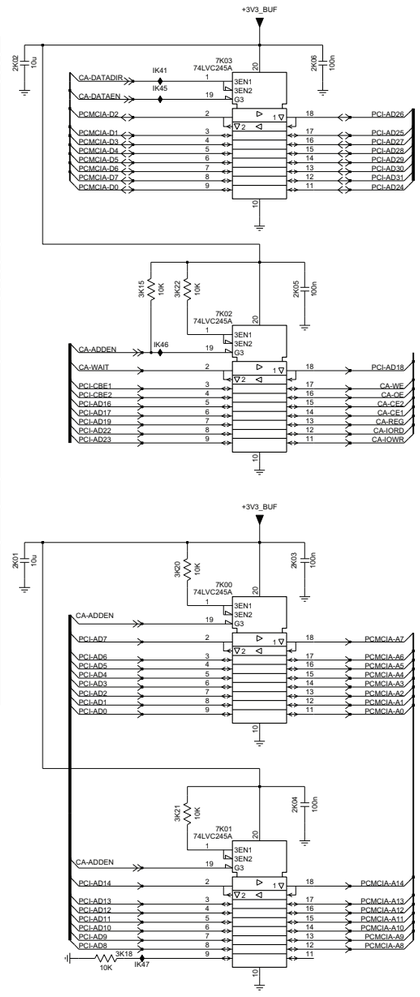
(POD IS THE EQUIVALENT OF COMMON INTERFACE)

CABLE CARD INTERFACE









MULTI 12NC : 3139_123_64421 / 64541 / 64561
BD 12NC : 3139_123_64431 / 64551 / 64571
CELL 12C : 8239_125_14871

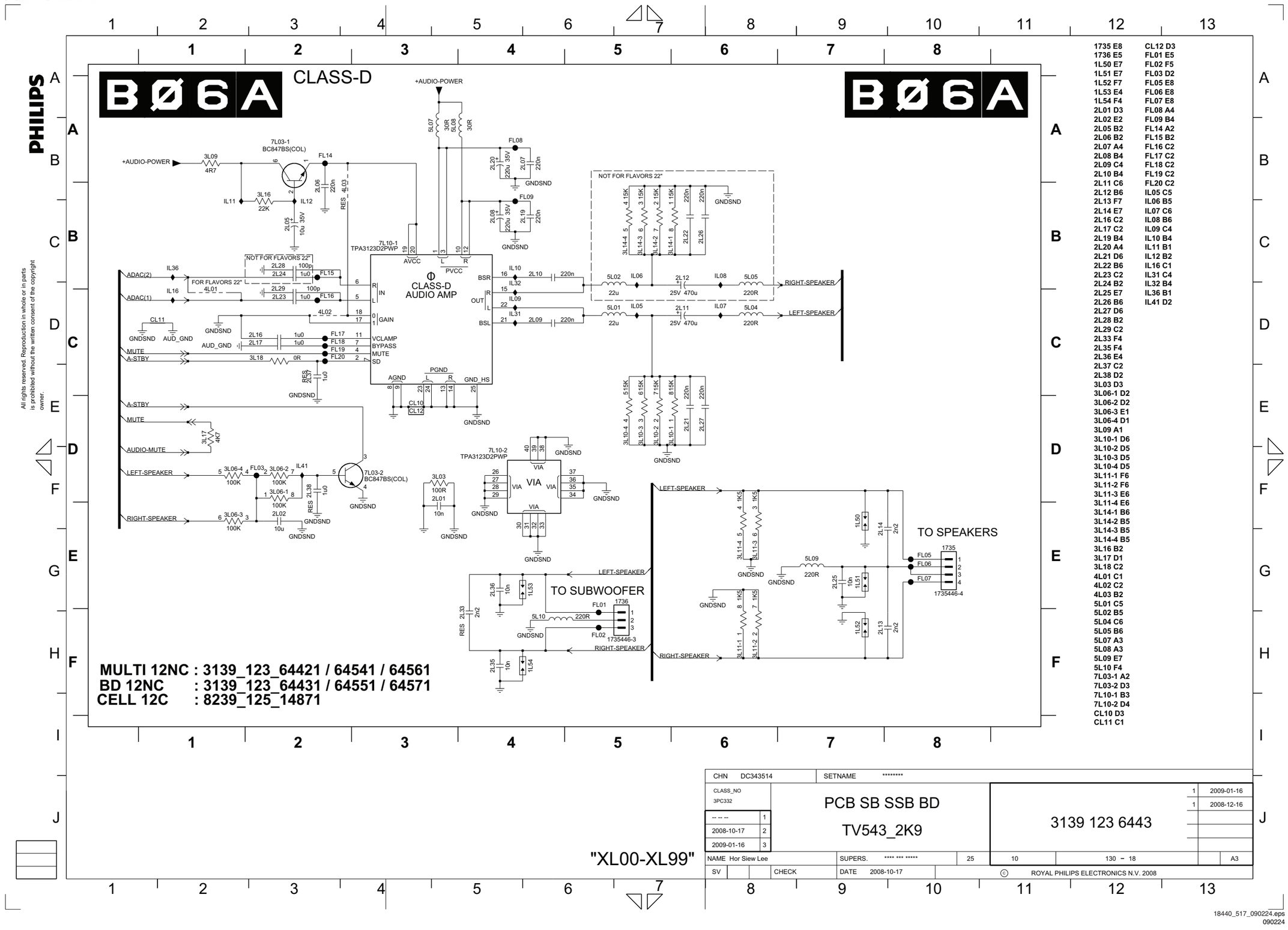
" XK00 ~ XK99 "

1K00-A B2
1K00-B D2
2K00 B1
2K01 E10
2K02 A10
2K03 E12
2K04 G12
2K05 C12
2K06 A13
2K07 A9
2K08 A7
2K09 B7
3K00 B1
3K01 C5
3K02 C5
3K03 C5
3K04 C5
3K05 C5
3K06 C5
3K07 C5
3K08 D5
3K09 D5
3K10-1 D5
3K10-2 D5
3K10-3 D5
3K11-1 E5
3K11-2 E5
3K11-3 E5
3K11-4 E5
3K12-1 D8
3K12-2 D8
3K12-3 E8
3K12-4 E8
3K13-1 D8
3K13-2 D8
3K13-3 D8
3K13-4 D8
3K14 E8
3K15 C11
3K16 D3
3K17 E8
3K18 H11
3K19 F4
3K20 E11
3K21 G11
3K22 C11
3K23-1 B9
3K23-2 B9
3K23-3 A9
3K23-4 A9
3K24-1 C9
3K24-2 C9
3K24-3 C9
3K24-4 C9
3K25-3 C9
3K25-4 C9
3K26 B9
3K27 D8
3K28 D5
3K29 A7
3K30 B7
5K00 A9
7K00 F12
7K01 H12
7K02 C12
7K03 A12
7K04 A8
7K05 C8
FK00 G3
FK02 D3
FK04 F4
IK00 C5
IK01 C5
IK02 C5
IK03 C5
IK04 C5
IK05 C5
IK06 C5
IK07 D5
IK08 D5
IK09 D5
IK10 D5
IK11 D5
IK12 D5
IK13 E5
IK14 E5
IK15 E5
IK16 E5
IK17 D3
IK18 A9
IK41 B11
IK45 B11
IK46 D11
IK47 H11

CHN DC343514	SETNAME ********		
CLASS_NO 3PC332	PCB SB SSB BD TV543_2K9	3139 123 6443	1 2009-01-16 / 1 2008-12-16
-- -- -- 1 / 2008-10-17 2 / 2009-01-16 3			
NAME Li LingHuan	SUPERS. **** *** ***** 25	10	130 ~ 17 A2
SV CHECK	DATE 2008-10-17	© ROYAL PHILIPS ELECTRONICS N.V. 2008	

18440_516_090224.eps
090224

SSB: Class-D



MULTI 12NC : 3139_123_64421 / 64541 / 64561
BD 12NC : 3139_123_64431 / 64551 / 64571
CELL 12C : 8239_125_14871

"XL00-XL99"

1735 E8
1736 E5
1L50 E7
1L51 E7
1L52 F7
1L53 E4
1L54 F4
2L01 D3
2L02 E2
2L05 B2
2L06 B2
2L07 A4
2L08 B4
2L09 C4
2L10 B4
2L11 C6
2L12 B6
2L13 F7
2L14 E7
2L16 C2
2L17 C2
2L19 B4
2L20 A4
2L21 D6
2L22 B6
2L23 C2
2L24 B2
2L25 E7
2L26 B6
2L27 D6
2L28 B2
2L29 C2
2L33 F4
2L35 F4
2L36 E4
2L37 C2
2L38 D2
3L03 D3
3L06-1 D2
3L06-2 D2
3L06-3 E1
3L06-4 D1
3L09 A1
3L10-1 D6
3L10-2 D5
3L10-3 D5
3L10-4 D5
3L11-1 F6
3L11-2 F6
3L11-3 E6
3L11-4 E6
3L14-1 B6
3L14-2 B5
3L14-3 B5
3L14-4 B5
3L16 B2
3L17 D1
3L18 C2
4L01 C1
4L02 C2
4L03 B2
5L01 C5
5L02 B5
5L04 C6
5L05 B6
5L07 A3
5L08 A3
5L09 E7
5L10 F4
7L03-1 A2
7L03-2 D3
7L10-1 B3
7L10-2 D4
CL10 D3
CL11 C1
CL12 D3
FL01 E5
FL02 F5
FL03 D2
FL05 E8
FL06 E8
FL07 E8
FL08 A4
FL09 B4
FL14 A2
FL15 B2
FL16 C2
FL17 C2
FL18 C2
FL19 C2
FL20 C2
IL05 C5
IL06 B5
IL07 C6
IL08 B6
IL09 C4
IL10 B4
IL11 B1
IL12 B2
IL16 C1
IL31 C4
IL32 B4
IL36 B1
IL41 D2

CHN DC343514		SETNAME ********	
CLASS_NO 3PC332	PCB SB SSB BD TV543_2K9	3139 123 6443	1 2009-01-16 / 1 2008-12-16
-- -- -- 1 / 2008-10-17 2 / 2009-01-16 3			
NAME Hor Siew Lee	SUPERS. **** *** *****	25	10 / 130 – 18 / A3
SV / CHECK	DATE 2008-10-17		

18440_517_090224.eps
090224

SSB: Display Interface (Common)

B Ø 7 A DISPLAY INTERFACE (COMMON) **B Ø 7 A**

TO B Ø 7 B

RESERVED FOR +5V TCON
+5V — FP84 — 4P26 — FP85 — +VDISP-IN
2P82 1u 22u
4P28
4P39
+12VD — 4P29
4P30
4P31

FROM B Ø 7 B

BACKLIGHT-BOOST-IN

RESERVED
+3V3
+12VD
RES 3P29 10K
3P30 27K
3P35 47K
IP16
IP18
7P08-1 BC847BPN(COL)
7P08-2 BC847BPN(COL)
3P31 12K
IP17
3P32 4K7
IP19
2P88 470p
RES 3P33 2K2
7P07 BC847BW
IP20
RES 3P34 1K0
RES 4P40
BACKLIGHT-BOOST
2P89 1u0
3P36 15K
3P37 1K0

FROM B Ø 7 B

BACKLIGHT-IN

+3V3
3P17 4K7
3P18 220R
RES 4P38
7P05 BC847BW
IP10
BACKLIGHT-OUT
7P06 BC847BW
IP11
IP12

MULTI 12NC : 3139_123_64421 / 64541 / 64561
BD 12NC : 3139_123_64431 / 64551 / 64571
CELL 12C : 8239_125_14871

" XP00 ~ XP99 "

2P82 B1
2P88 C2
2P89 D3
3P17 C8
3P18 C9
3P29 C3
3P30 C3
3P31 C4
3P32 C2
3P33 C3
3P34 D3
3P35 C4
3P36 D4
3P37 D5
4P26 A1
4P28 B1
4P29 B1
4P30 B1
4P31 B1
4P38 D8
4P39 B1
4P40 D4
7P05 C9
7P06 D8
7P07 C3
7P08-1 C5
7P08-2 C4
FP84 A1
FP99 A2
IP10 C9
IP11 D9
IP12 D8
IP16 C4
IP17 C4
IP18 C3
IP19 C3
IP20 D2

CHN DC343514	SETNAME ********		
CLASS_NO 3PC332	PCB SB SSB BD TV543_2K9	3139 123 6443	1 2009-01-16 / 1 2008-12-16
-- -- -- 1 / 2008-10-17 2 / 2009-01-16 3			
NAME Vincent Yap / Lee CW	SUPERS. **** *** *****	25	10 / 130 – 19 / A2
SV / CHECK	DATE 2008-10-17	© ROYAL PHILIPS ELECTRONICS N.V. 2008	

18440_518_090224.eps
090224

SSB: Display Supply (LGD panel)

B Ø 7 B DISPLAY SUPPLY
(only applicable for sets with LGD panel)

B Ø 7 B

FROM B Ø 7 A

+VDISP-IN
PDTA114EU 7P04
7P01 SI4835BDY RES
7P02 SI3441BDV
7P11 PDTC114EU
3P10 47R
2P84 1u0
3P09-2 47K
6P02 BZX384-C5V6
3P09-1 47K
7P03 BC847BW
3P09-4 47K
3P09-3 47K
+3V3
RES_4P01 5P01 30R
RES_4P02 5P02 30R
FP29 +VDISP-OUT
3P13 2K2
6P01 SML-310
RES FOR DEVT PURPOSE
2P95 220u 25V
2P83 10u 16V
2P85 10n

VDISP-SWITCH

PNX8543-LCD-PWR-ON_SPI-DI
cP03
3P11 100R
3P12 2K2
+3V3

TO B Ø 7 A

PNX8543-BL-BOOST_SPI-CLK
BOOTMODE_PNX8543-BL-CTRL
RES_4P34
3P16 10K
BACKLIGHT-BOOST-IN
BACKLIGHT-IN

MULTI 12NC : 3139_123_64571
BD 12NC : 3139_123_64561
CELL 12NC : 8239_125_14831

1X01 REF EMC HOLE
Round screw hole of 4.5mm

FP01 FP02 FP15 FP16 FP17 FP18 FP19 FP20 FP21 FP22 FP23 FP24 FP25 FP26 FP27 FP31 FP32 FP41 FP42 FP49 FP50 FP53 FP54 FP55 FP56 FP57 FP58 FP59 FP60 FP61 FP62 FP63 FP64 FP65 FP66 FP67 FP68 FP69 FP70 FP71 FP72 FP73 FP74 FP75 FP76 FP77 FP78 FP79 FP80 FP83 FP86 FC60 FC61 FC81 FC82 FC84 FC85 FC86 FC87 FC88 FP28 FC90 FC02 FC06 FCJ0 FCD9 FCD0 FCD1 FCD2 FCD3 FCD4 FCD8 FCD7 FCE8 FPA2 FPA3 FPA4 FPA5 FPA8 FPA9 FPB5 FPC1 FPC2 FPC3 FPF0 FPF1 FPD5 FPD6 FPD8 FPD9 FU11 FJA1 FJA2 FJA3 FV11 FV12 FV13 FT01 FT02 FT03 FT04 FT06 FT07 FJ63 FJ07 FJA4 FJA5 FPE4 FJ99 FYBA FPG1 FPF2 FPG3 FPG4 FPG5 FPG6

Common Test - Jig

" XP00 ~ XP99 "

2P83 B4
2P84 C3
2P85 D5
2P95 B4
3P09-1 C4
3P09-2 C3
3P09-3 C5
3P09-4 C5
3P10 C2
3P11 D4
3P12 D4
3P13 B4
3P16 C8
4P01 A5
4P02 B5
4P34 C8
5P01 B5
5P02 B5
6P01 B5
6P02 C3
7P01 B2
7P02 B3
7P03 C4
7P04 B2
7P11 C1
FP29 B5
cP03 D2

CHN DC344178		SETNAME ********	
CLASS_NO 3PC332		PCB SB SSB PNS 42FHD LGD TV543	3139 123 6457
-- -- --	1		
-- -- --	2		
2009-01-16	3		1 2009-01-16
NAME FOO JW		SUPERS. **** *** *****	23 10 130 ~ 20 A3
SV CHECK		DATE 2009-01-16	© ROYAL PHILIPS ELECTRONICS N.V. 2009

18440_530_090224.eps
090427

SSB: T-Con DC/DC (LGD panel)

B Ø 9 A T_CON DC/DC
(only applicable for sets with LGD panel)

B Ø 9 A

*	42"	32"
ITEM NO	VALUE	VALUE
2W35	22N	1N5
3W01	7K5 1%	8K2 1%
3W20	5K6 1%	6K2 1%
3W21	5K6 1%	2K 1%
3W22	1K 1%	1K6 1%
3W23	220K 1%	330K 1%
3W24	-	220K 1%
3W25	47K 1%	75K 1%
3W31	180R 1%	200R 1%
3W34	9K1 1%	33K 1%
3W35	36K 1%	10K 1%
3W36	330K 1%	56K 1%
3W37	82K 1%	6K2 1%
3W38	560R 1%	910R 1%
3W39	3K 1%	910R 1%
3W40	4K7 1%	5K6 1%
3W41	3K9 1%	5K1 1%
3W42	680R 1%	1K2 1%
3W43	620R 1%	470R 1%
3W45	47K 1%	22K 1%
3W46	24K 1%	6K8 1%
3W47	4K7 1%	2K4 1%
3W49	100R 1%	0R
3W51	3K 1%	2K 1%
3W52	3K 1%	2K 1%

MULTI 12NC : 3139_123_64571
BD 12NC : 3139_123_64561
CELL 12NC : 8239_125_14831

LDO BLOCK

"W00 - W99"

CHN DC 344178	SETNAME		
CLASS_NO 3PC332	PCB SB SSB PNS 42FHD LGD TV543	3139 123 6457	1 2009-01-16
-- -- -- 1			
-- -- -- 2			
2009-01-16 3			
NAME FOO JW	SUPERS. 23	10	130 ~ 21 A2
SV CHECK	DATE 2009-01-16		

2W01 D8 FW04 D12
2W02 D8 cW01 E13
2W03 D8
2W04 D9
2W05 D9
2W06 D9
2W07 D10
2W08 I11
2W10 I12
2W11 A10
2W12 A11
2W20 C6
2W21 C6
2W22 C6
2W23 E2
2W24 E2
2W25 E2
2W26 E4
2W27 E4
2W28 F3
2W29 F6
2W30 F6
2W31 F6
2W32 F6
2W33 F7
2W34 G5
2W35 G5
2W36 G5
2W37 G4
2W38 E9
2W39 E9
2W40 E8
2W41 E8
2W42 G7
2W43 H7
2W44 H7
2W45 G9
2W46 G10
2W47 G10
2W48 G11
2W49 G11
2W50 G9
2W51 G11
2W52 G12
2W53 D11
2W54 C3
2W55 C3
2W56 C4
2W57 C3
2W58 C4
2W59 C4
2W60 C4
2W61 C5
2W62 C5
2W63 A10
3W01 D10
3W03 A8
3W04 B8
3W20 F5
3W21 F5
3W22 E1
3W23 E3
3W24 E3
3W25 E3
3W26 F5
3W27 F5
3W28 G5
3W29 H4
3W30 H4
3W31 D8
3W32 E10
3W33 E10
3W34 E10
3W35 E10
3W36 F9
3W37 F9
3W38 G7
3W39 G8
3W40 G10
3W41 G10
3W42 H10
3W43 H10
3W44 G12
3W45 D11
3W46 D11
3W47 D11
3W48 I11
3W49 D3
3W50 A11
3W51 H4
3W52 H5
4W01 A8
4W02 A8
4W03 B8
4W04 B8
4W21 G5
4W22 G4
4W23 G5
4W24 G5
4W27 A8
4W28 A8
5W20 C5
5W21 G9
6W20 C6
6W21 D3
6W22 D9
6W23 G9
7W01 A11
7W02-1 F6
7W02-2 I6
7W03 I11
FW01 D1
FW02 C12
FW03 C12

18440_531_090224.eps
090427

SSB: T-Con Control (LGD panel)

B Ø 9 B

TCONLG420WUNCONTROL
(only applicable for sets with LGD panel)

B Ø 9 B

MULTI 12NC : 3139_123_64571
BD 12NC : 3139_123_64561
CELL 12NC : 8239_125_14831

ITEM NO	42" VALUE	32" VALUE
3Y06	1K 1%	100R 1%
3Y07	-	10K 1%
3Y33	1K 1%	4K7 1%

"Y00 - Y79"

CHN DC 344178	SETNAME		
CLASS_NO 3PC332	PCB SB SSB PNS 42FHD LGD TV543	3139 123 6457	1 2009-01-16
-- -- -- 1			
-- -- -- 2			
2009-01-16 3			
NAME FOO JW	SUPERS. 23	10	130 - 22 A2
SV CHECK	DATE 2009-01-16	© ROYAL PHILIPS ELECTRONICS N.V. 2009	

1Y01 F12 7Y05 G13
2Y01 B2 FY01 A12
2Y02 B2 FY02 G8
2Y03 A7 FY03 F11
2Y04 B7 FY04 G11
2Y05 B7 FY05 G11
2Y06 C7 FY06 G14
2Y07 C7 FY07 G14
2Y08 D7
2Y09 D7
2Y10 A10
2Y11 A11
2Y12 A11
2Y13 A11
2Y14 A11
2Y15 A11
2Y16 A12
2Y17 A12
2Y18 B9
2Y19 B10
2Y20 B10
2Y21 B10
2Y22 B10
2Y23 B10
2Y24 B11
2Y25 B11
2Y26 B11
2Y27 B11
2Y28 B12
2Y29 B12
2Y30 C12
2Y31 C13
2Y32 C13
2Y33 C13
2Y34 C13
2Y35 C14
2Y36 B8
2Y37 B8
2Y38 B9
2Y39 B9
2Y40 B9
2Y41 B9
2Y42 A10
2Y43 A10
2Y44 A10
2Y50 G8
2Y51 G11
2Y52 G11
2Y53 F10
3Y01 A1
3Y02 B2
3Y03 B2
3Y06 C2
3Y07 C2
3Y08 D1
3Y09 D1
3Y10 E1
3Y11 E1
3Y12 E1
3Y13 F1
3Y14 F1
3Y15 F1
3Y16 G1
3Y17 G1
3Y18 H1
3Y19 H1
3Y22 B4
3Y23 A7
3Y24 A7
3Y25 B7
3Y26 B7
3Y27 C7
3Y30 F6
3Y31 F6
3Y32 G6
3Y33 G6
3Y34 G7
3Y35 G7
3Y36 G8
3Y37 G7
3Y38 G8
3Y40 F11
3Y41 G11
3Y42 G11
3Y43 B1
3Y44 F11
3Y45 G11
3Y46 F14
4Y02 G6
4Y05 F13
4Y06 F13
4Y07 F13
4Y09 D7
4Y10 B12
4Y11 B12
4Y12 C7
4Y13 D7
4Y14 G14
7Y01-1 A3
7Y01-2 C10
7Y01-3 C9
7Y02 G8
7Y03 F9
7Y04 G13

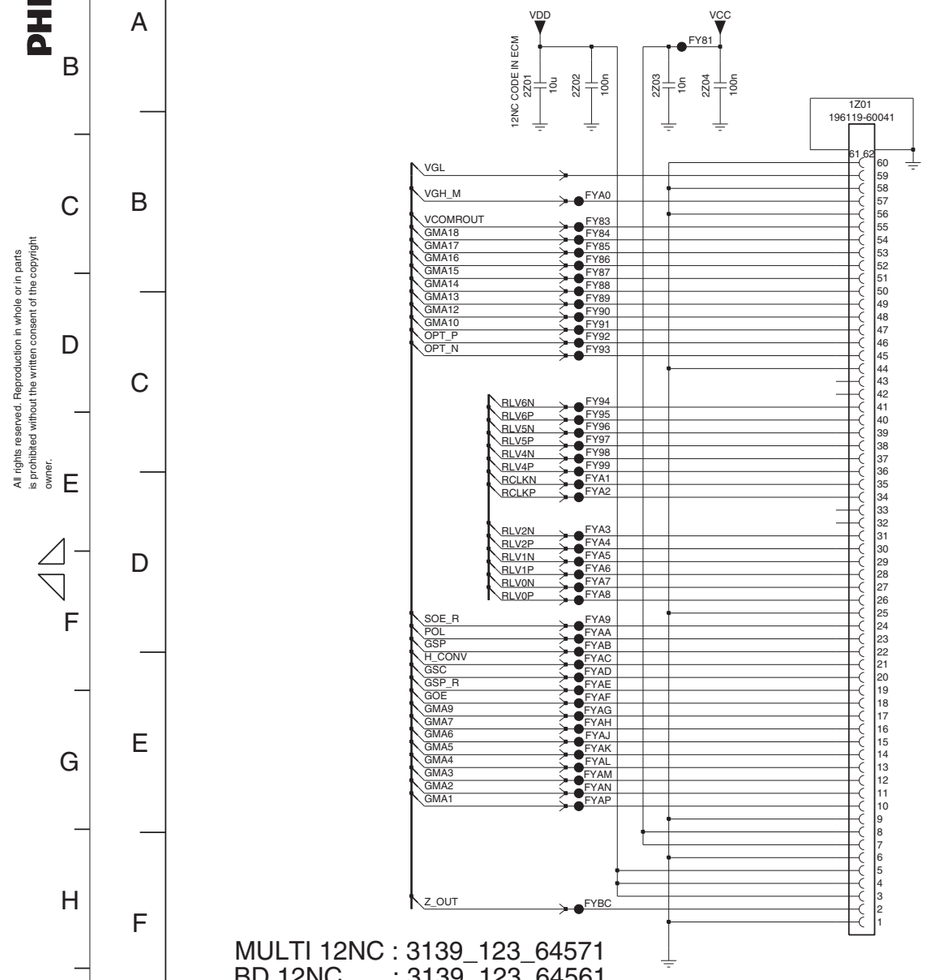
18440_532_090224.eps
090427

SSB: T-Con Connectors (LGD panel)

PHILIPS

B Ø 9 C

TCON CONNECTORS
(only applicable for sets with LGD panel)



1Z01 A4
1Z02 A7
2Z01 A2
2Z02 A2
2Z03 A3
2Z04 A3
2Z05 A6
2Z06 A6
2Z07 A6
2Z09 A6
FY81 A3
FY83 B3
FY84 B3
FY85 B3
FY86 B3
FY87 B3
FY88 B3
FY89 C3
FY90 C3
FY91 C3
FY92 C3
FY93 C3
FY94 C3
FY95 C3
FY96 C3
FY97 C3
FY98 C3
FY99 C3
FYA0 B3
FYA1 D3
FYA2 D3
FYA3 D3
FYA4 D3
FYA5 D3
FYA6 D3
FYA7 D3
FYA8 D3
FYA9 D3
FYAA D3
FYAB D3
FYAC E3
FYAD E3
FYAE E3
FYAF E3
FYAG E3
FYAH E3
FYAJ E3
FYAK E3
FYAL E3
FYAM E3
FYAN E3
FYAP E3
FYAR C6
FYAT C6
FYAU C6
FYAV C6
FYAW D6
FYAY D6
FYAZ D6
FYB0 F6
FYB1 D6
FYB2 D6
FYB3 D6
FYB4 D6
FYB5 D6
FYB6 D6
FYB7 D6
FYB8 D6
FYB9 F6
FYBB A7
FYBC F3

MULTI 12NC : 3139_123_64571
BD 12NC : 3139_123_64561
CELL 12NC : 8239_125_14831

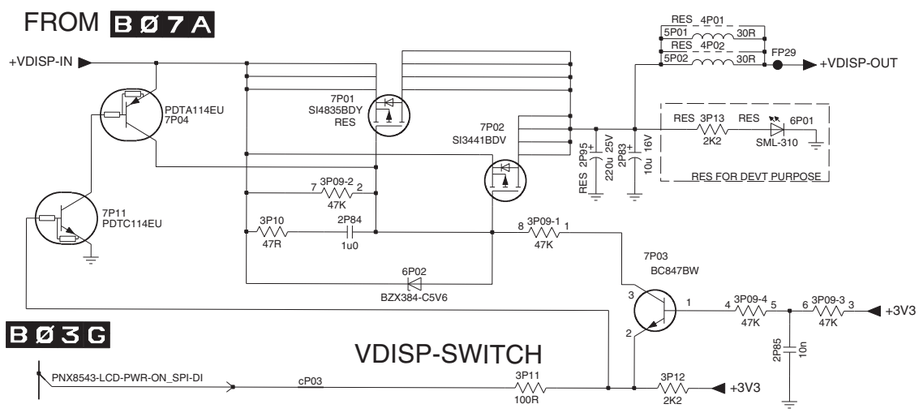
"Y80 - Y99"
"YA0 - YBZ"

CHN DC 344178		SETNAME	
CLASS_NO 3PC332	PCB SB SSB PNS 42FHD LGD TV543	3139 123 6457	1 2009-01-16
-- -- -- 1			
-- -- -- 2			
2009-01-16 3			
NAME FOO JW	SUPERS. 23	10	130 – 23 A3
SV CHECK	DATE 2009-01-16	© ROYAL PHILIPS ELECTRONICS N.V. 2009	

18440_533_090224.eps
090427

SSB: Display Supply (Sharp panel)

B Ø 7 B DISPLAY SUPPLY
(only applicable for sets with Sharp panel)



MULTI 12NC : 3139_123_64541
BD 12NC : 3139_123_64551

B Ø 7 B

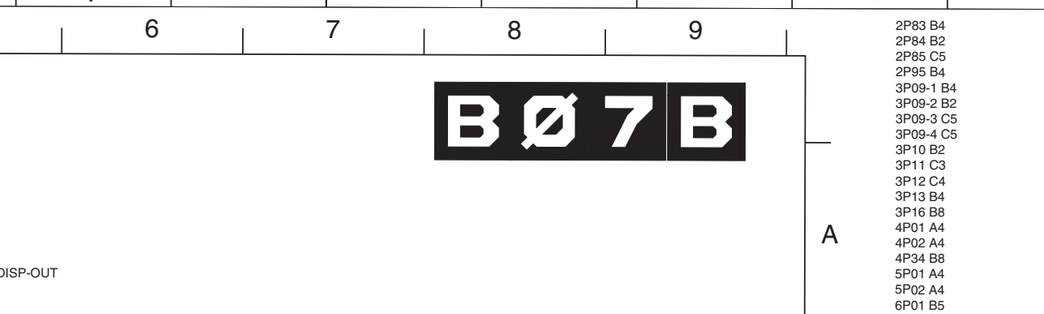
TO **B Ø 7 A**

B Ø 3 G

PNX8543-BL-BOOST_SPI-CLK — RES_4P34 — BACKLIGHT-BOOST-IN
BOOTMODE_PNX8543-BL-CTRL — 3P16 10K — BACKLIGHT-IN

2P83 B4
2P84 B2
2P85 C5
2P95 B4
3P09-1 B4
3P09-2 B2
3P09-3 C5
3P09-4 C5
3P10 B2
3P11 C3
3P12 C4
3P13 B4
3P16 B8
4P01 A4
4P02 A4
4P34 B8
5P01 A4
5P02 A4
6P01 B5
6P02 B3
7P01 A2
7P02 B3
7P03 B4
7P04 B1
7P11 B1
FP29 A5
cP03 C2

Round screw hole of 4.5mm



Common Test - Jig

" XP00 ~ XP99 "

CHN DC 376227	SETNAME ********		
CLASS_NO 3PC332	TV 543 2K9	1	2009-02-25
-- -- -- 1	PCB SB SSB PNS 32FHD SHP		
-- -- -- 2		3139 123 6455	
2009-02-25 3			
NAME FOO JW	SUPERS. ***** *** *****	24	10 / 130 – 20 / A3
SV / CHECK	DATE 2009-02-25		

18440_525_090427.eps
090427

SSB: T-Con DC/DC (Sharp panel)

B Ø 9 A

TCON DC/DC
(only applicable for sets with Sharp panel)

MULTI 12NC : 3139_123_64541
BD 12NC : 3139_123_64551

2T01 C6
2T02 C7
2T03 D2
2T04 F8
2T05 C6
2T06 C1
2T07 C2
2T08 F1
2T09 F1
2T10 G2
2T11 I12
2T12 B8
2T13 F12
2T14 F11
2T15 B8
2T16 F12
2T17 B8
2T18 F5
2T19 F6
2T20 D13
2T21 E8
2T22 E11
2T23 F6
2T24 E10
2T25 E10
2T26 D1
2T27 D1
2T28 D1
2T29 E2
2T30 B7
2T31 C9
2T32 C9
2T33 C9
2T34 E8
2T35 C9
2T36 B11
2T37 B11
2T38 C12
2T39 E1
2T40 E1
2T41 F2
2T42 H11
2T43 F8
2T44 H11
2T45 G11
2T46 G11
2T47 H6
2T48 H6
2T49 H4
2T50 I6
2T51 I4
2T52 H7
2T53 E9
2T54 D1
3T00 E11
3T01 C6
3T02 C1
3T03 C2
3T04 C2
3T05 D2
3T06 F2
3T07 F2
3T08 G2
3T09 H12
3T10 I11
3T11 I12
3T12 E13
3T13 E11
3T14 F12
3T15 E6
3T16 F12
3T17 F12
3T18 F6
3T19 F6
3T20 D2
3T21 D2
3T22 E2
3T23 C8
3T24 C8
3T25 B12
3T26 B12
3T27 C12
3T28 E2
3T29 E2
3T30 E2
3T31 F2
3T32 H10
3T33 H11
3T34 H10
3T35 H11
3T36 G10
3T37 G11
3T38 G10
3T39 G11
3T40 H5
3T41 H6
3T42 I5
3T43 I6
3T44 H8
3T45 I8
3T46 B11
3T47 I5
3T48 I5
3T49 F6
3T50 F6
3T51 C8
4T01 F12
4T02 E7
4T03 H6
4T04 H8
4T05 H1
4T06 H1
4T07 I1
4T08 H8
5T01 E10
5T02 E3
5T03 H5
5T04 H1
5T05 I1
5T06 I1
6T01 C3
6T02 H5
6T03 E10
6T04 E3
6T05 H8
7T01-1 C7
7T01-2 B5
7T05 I12
7T06 I8
7T07 H5
7T08 H7
7T09 H8
7T10 E13
FT01 B13
FT02 B7
FT03 H9
FT04 E13
FT06 C1
FT07 D9

"T00 ~ T99"

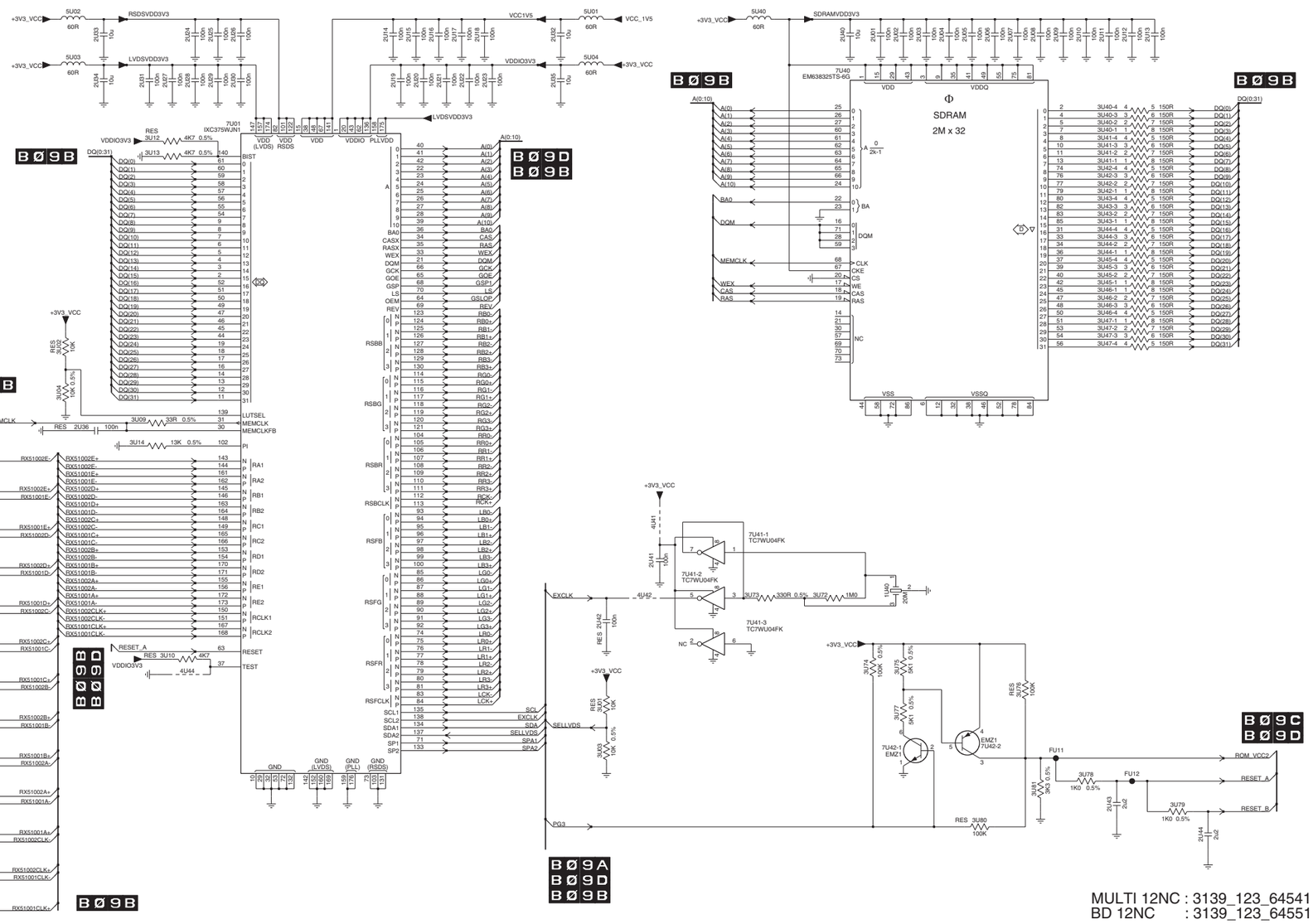
CHN DC 376227		SETNAME	
CLASS_NO 3PC332		TV 543 2K9	1 2009-02-25
-- -- --	1	PCB SB SSB PNS 32FHD SHP	3139 123 6455
-- -- --	2		
2009-02-25	3		
NAME FOO JW		SUPERS. 24	10 130 - 21 A2
SV		CHECK DATE 2009-02-25	© ROYAL PHILIPS ELECTRONICS N.V. 2009

18440_526_090427.eps
090427

SSB: T-Con Control (Sharp panel)

B Ø 9 B

TCON CONTROL
(only applicable for sets with Sharp panel)



MULTI 12NC : 3139_123_64541
BD 12NC : 3139_123_64551

"U00 ~ U99"

1U40 G10 7U41-3 G8
2U01 A9 7U42-1 H10
2U02 A10 7U42-2 H10
2U03 A10 FU11 H11
2U04 A10 FU12 H12
2U05 A10
2U06 A10
2U07 A11
2U08 A11
2U09 A11
2U10 A11
2U11 A12
2U12 A12
2U13 A12
2U14 A5
2U15 A5
2U16 A5
2U17 A5
2U18 A6
2U19 B5
2U20 B5
2U21 B5
2U22 B6
2U23 B6
2U24 A3
2U25 A3
2U26 A3
2U27 B3
2U28 B3
2U29 B3
2U30 B3
2U31 B3
2U32 A6
2U33 A2
2U34 B2
2U35 B6
2U36 E2
2U40 A9
2U41 F7
2U42 G7
2U43 I12
2U44 I12
3U01 H7
3U02 D2
3U03 H7
3U04 E2
3U09 E2
3U10 G3
3U12 B3
3U13 C3
3U14 E2
3U15 F1
3U16 F1
3U17 F1
3U18 G1
3U19 G1
3U20 G1
3U21 H1
3U22 H1
3U23 H1
3U24 I1
3U25 I1
3U26 I1
3U40-1 B12
3U40-2 B12
3U40-3 B12
3U40-4 B12
3U41-1 C12
3U41-2 C12
3U41-3 C12
3U41-4 B12
3U42-1 C12
3U42-2 C12
3U42-3 C12
3U42-4 C12
3U43-1 C12
3U43-2 C12
3U43-3 C12
3U43-4 C12
3U44-1 D12
3U44-2 C12
3U44-3 C12
3U44-4 C12
3U45-1 D12
3U45-2 D12
3U45-3 D12
3U45-4 D12
3U46-1 D12
3U46-2 D12
3U46-3 D12
3U46-4 D12
3U47-1 D12
3U47-2 D12
3U47-3 D12
3U47-4 D12
3U72 G9
3U73 G8
3U74 G9
3U75 G10
3U76 H11
3U77 H10
3U78 H11
3U79 I12
3U80 I10
3U81 I11
4U41 F7
4U42 G7
4U44 G3
5U01 A7
5U02 A2
5U03 B2
5U04 B7
5U40 A8
7U01 B3
7U40 B9
7U41-1 F8
7U41-2 G8

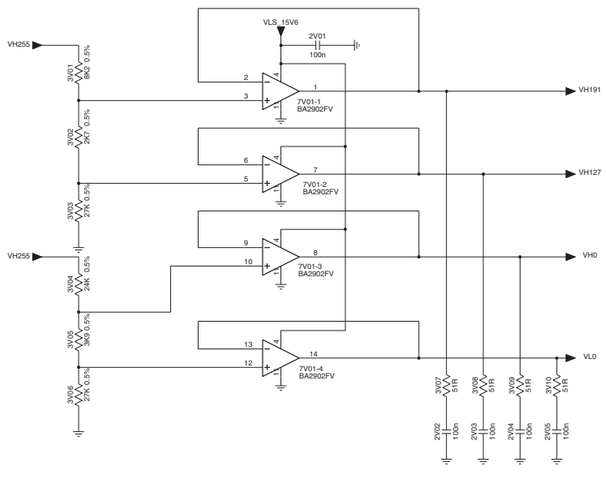
CHN DC 376227	SETNAME		
CLASS_NO 3PC332	TV 543 2K9		1 2009-02-25
-- -- -- 1	PCB SB SSB PNS 32FHD SHP	3139 123 6455	
-- -- -- 2			
2009-02-25 3			
NAME FOO JW	SUPERS. 24	10	130 ~ 22 A2
SV CHECK	DATE 2009-02-25		

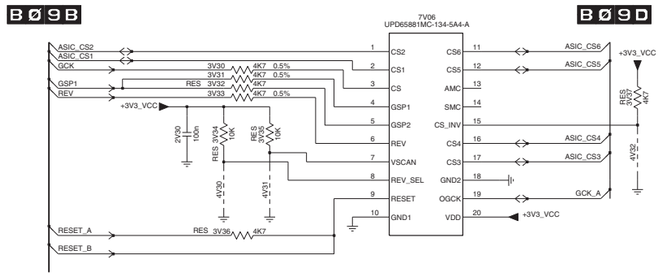
18440_527_090427.eps
090427

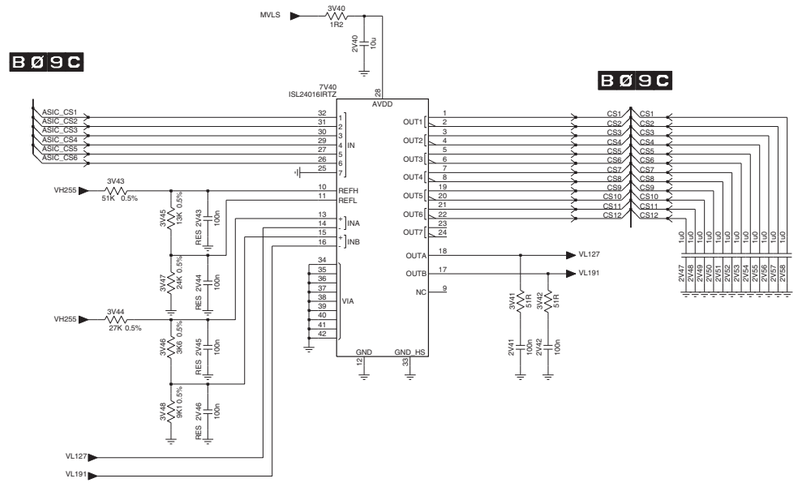
SSB: T-Con VCOM (Sharp panel)

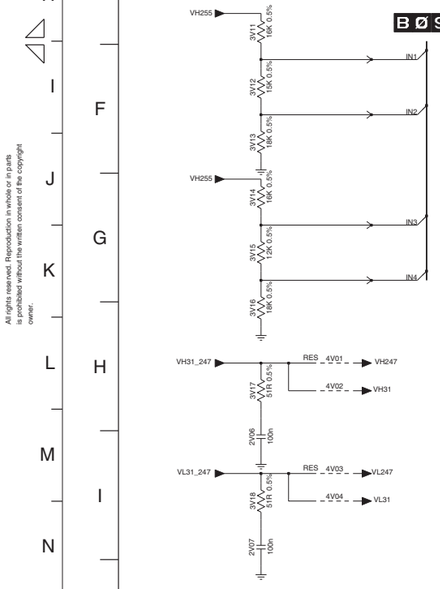
B Ø 9 C

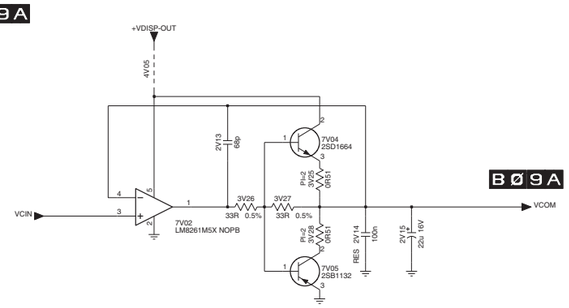
TCON VCOM
(only applicable for sets with Sharp panel)

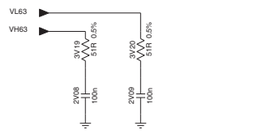


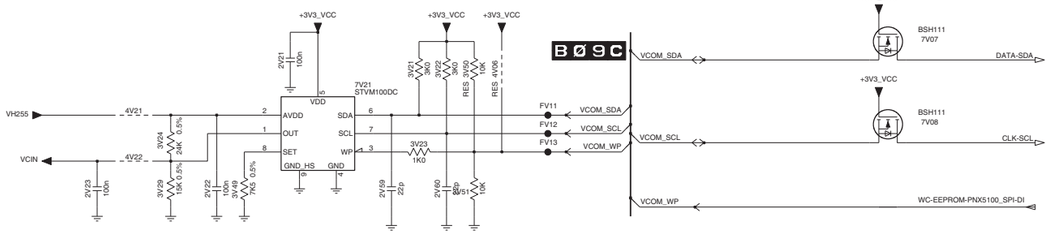












2V01 B3
2V02 E4
2V03 E4
2V04 E4
2V05 E5
2V06 I1
2V07 I1
2V08 I4
2V09 I5
2V13 F4
2V14 G5
2V15 G6
2V21 H8
2V22 I7
2V23 I6
2V30 B7
2V40 D10
2V41 F11
2V42 F12
2V43 E9
2V44 E9
2V45 F9
2V46 F9
2V47 E13
2V48 E13
2V49 E13
2V50 E13
2V51 E13
2V52 E13
2V53 E13
2V54 E13
2V55 E13
2V56 E13
2V57 E13
2V58 E13
2V59 I9
2V60 I9
3V01 B1
3V02 B1
3V03 C1
3V04 C1
3V05 D1
3V06 D1
3V07 D4
3V08 D4
3V09 D4
3V10 D5
3V11 E1
3V12 F1
3V13 F1
3V14 G1
3V15 G1
3V16 H1
3V17 H1
3V18 I1
3V19 I4
3V20 I5
3V21 H9
3V22 H9
3V23 I9
3V24 I7
3V25 G5
3V26 G4
3V27 G5
3V28 G5
3V29 I7
3V30 A7
3V31 A7
3V32 A7
3V33 A7
3V34 B7
3V35 B8
3V36 B7
3V37 A10
3V40 C10
3V41 F11
3V42 F12
3V43 E8
3V44 F8
3V45 E9
3V46 F9
3V47 E9
3V48 F9
3V49 I7
3V50 H9
3V51 I9
4V01 H2
4V02 H2
4V03 I2
4V04 I2
4V05 F4
4V06 H9
4V21 H7
4V22 I7
4V30 B7
4V31 B8
4V32 B10
7V01-1 B3
7V01-2 C3
7V01-3 C3
7V01-4 D3
7V02 G4
7V04 F5
7V05 G5
7V06 A9
7V07 H13
7V08 H13
7V21 H8
7V40 D10
FV11 H10
FV12 H10
FV13 I10

MULTI 12NC : 3139_123_64541
BD 12NC : 3139_123_64551

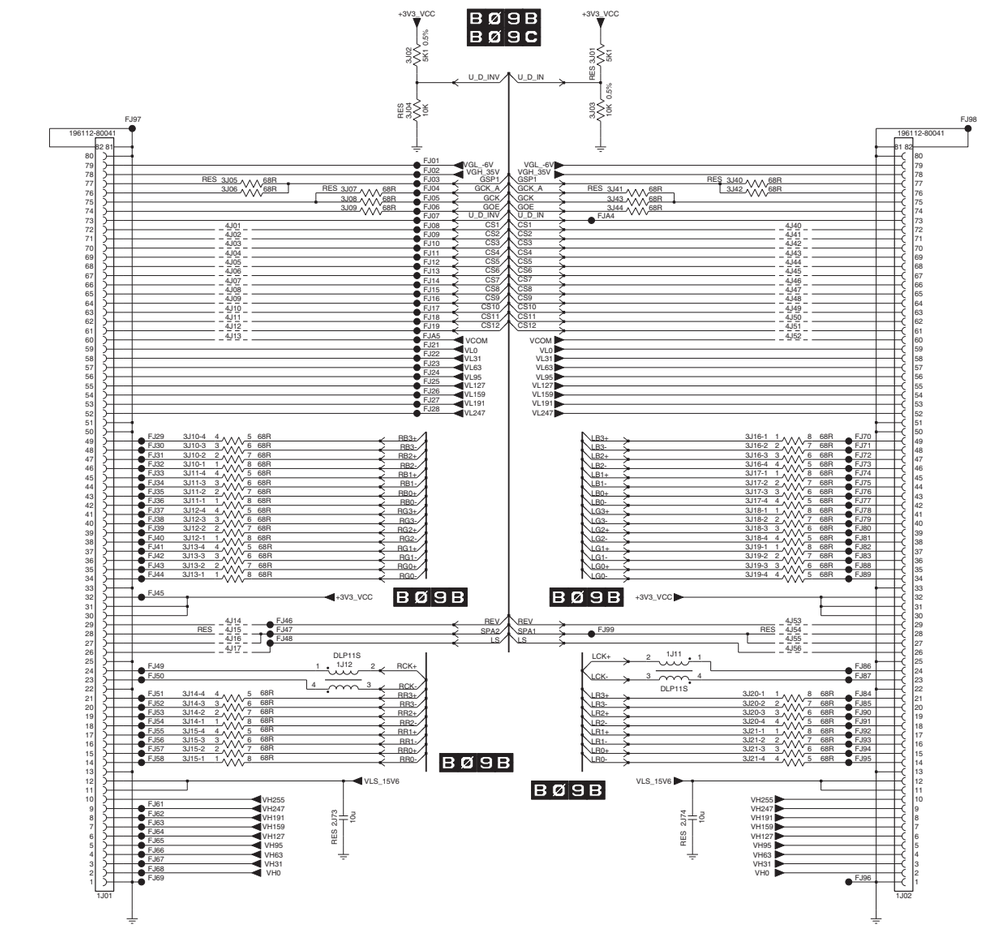
"V00 ~ V99"

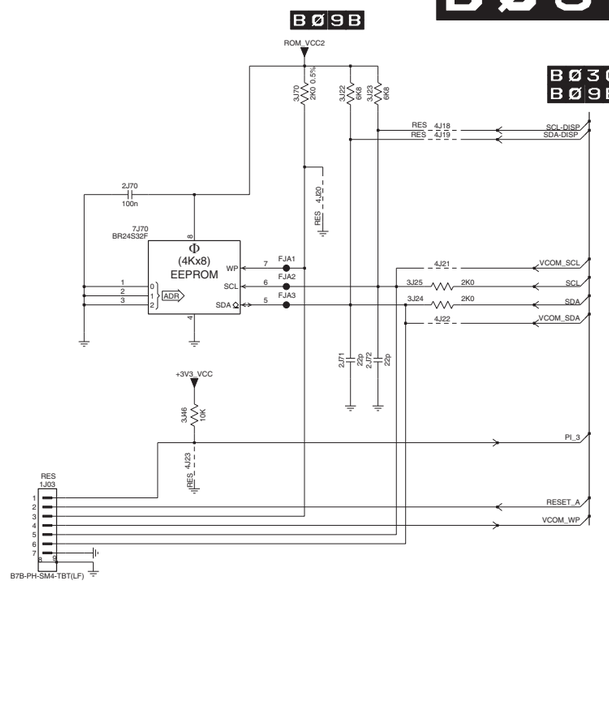
CHN DC 376227	SETNAME		
CLASS_NO 3PC332	TV 543 2K9	3139 123 6455	1 2009-02-25
-- -- -- 1	PCB SB SSB PNS 32FHD SHP		
-- -- -- 2			
2009-02-25 3			
NAME FOO JW	SUPERS. 24	10	130 ~ 23 A2
SV CHECK	DATE 2009-02-25	© ROYAL PHILIPS ELECTRONICS N.V. 2009	

18440_528_090427.eps
090427

SSB: T-Con Connectors (Sharp panel)

B Ø 9 D TCON CONNECTORS
(only applicable for sets with Sharp panel)





MULTI 12NC : 3139_123_64541
BD 12NC : 3139_123_64551

1JU01 G1 1JU02 G7 1JU03 D9 1JU11 E6 1JU12 F3 2JU70 B9 2JU71 C11 2JU72 C11 2JU73 G3 2JU74 G6 3JU01 A5 3JU02 A4 3JU03 A5 3JU04 A4 3JU05 B2 3JU06 B2 3JU07 B3 3JU08 B3 3JU09 B3 3JU10-1 D2 3JU10-2 D2 3JU10-3 D2 3JU10-4 D2 3JU11-1 D2 3JU11-2 D2 3JU11-3 D2 3JU11-4 D2 3JU12-1 E2 3JU12-2 E2 3JU12-3 E2 3JU13-1 E2 3JU13-2 E2 3JU13-3 E2 3JU13-4 E2 3JU14-1 F2 3JU14-2 F2 3JU14-3 F2 3JU14-4 F2 3JU15-1 F2 3JU15-2 F2 3JU15-3 F2 3JU15-4 F2 3JU16-1 D6 3JU16-2 D6 3JU16-3 D6 3JU16-4 D6 3JU17-1 D6 3JU17-2 D6 3JU17-3 D6 3JU17-4 D6 3JU18-1 D6 3JU18-2 D6 3JU18-3 E6 3JU18-4 E6 3JU19-1 E6 3JU19-2 E6 3JU19-3 E6 3JU19-4 E6 3JU20-1 F6 3JU20-2 F6 3JU20-3 F6 3JU20-4 F6 3JU21-1 F6 3JU21-2 F6 3JU21-3 F6 3JU21-4 F6 3JU22 A11 3JU23 A11 3JU24 C12 3JU25 C12 3JU40 B6 3JU41 B5 3JU42 B6 3JU43 B5 3JU44 B5 3JU46 D10 3JU70 A11 4JU01 B2 4JU02 B2 4JU03 B2 4JU04 B2 4JU05 B2 4JU06 C2 4JU07 C2 4JU08 C2 4JU09 C2 4JU10 C2 4JU11 C2 4JU12 C2 4JU13 C2 4JU14 E2 4JU15 E2 4JU16 E2 4JU17 E2 4JU18 A12 4JU19 B12 4JU20 B11 4JU21 C12 4JU22 C12 4JU23 D10 4JU40 B7 4JU41 B7 4JU42 B7 4JU43 B7 4JU44 B7 4JU45 C7 4JU46 C7 4JU47 C7 4JU48 C7 4JU49 C7 4JU50 C7 4JU51 C7 4JU52 C7 4JU53 E7 4JU54 E7 4JU55 E7 4JU56 E7 7JU70 B10 FJU01 B4 FJU02 B4 FJU03 B4 FJU04 B4 FJU05 B4 FJU06 B4 FJU07 B4 FJU08 B4 FJU09 B4 FJU10 B4 FJU11 B4 FJU12 B4 FJU13 C4 FJU14 C4 FJU15 C4 FJU16 C4 FJU17 C4 FJU18 C4 FJU19 C4 FJU21 C4 FJU22 C4 FJU23 C4 FJU24 C4 FJU25 C4 FJU26 C4 FJU27 D4 FJU28 D4 FJU29 D2 FJU30 D2 FJU31 D2 FJU32 D2 FJU33 D2 FJU34 D2 FJU35 D2 FJU36 D2 FJU37 D2 FJU38 D2 FJU39 E2 FJU40 E2 FJU41 E2 FJU42 E2 FJU43 E2 FJU44 E2 FJU45 E2 FJU46 E3 FJU47 E3 FJU48 E3 FJU49 F2 FJU50 F2 FJU51 F2 FJU52 F2 FJU53 F2 FJU54 F2 FJU55 F2 FJU56 F2 FJU58 F2 FJU59 H13 FJU61 G2 FJU62 G2 FJU63 G2 FJU64 G2 FJU65 G2 FJU66 G2 FJU67 G2 FJU68 G2 FJU69 G2 FJU70 D7 FJU71 D7 FJU72 D7 FJU73 D7 FJU74 D7 FJU75 D7 FJU76 D7 FJU77 D7 FJU78 D7 FJU79 D7 FJU80 E7 FJU81 E7 FJU82 E7 FJU83 E7 FJU84 F7 FJU85 F7 FJU86 F7 FJU87 F7 FJU88 E7 FJU89 E7 FJU90 F7 FJU91 F7 FJU92 F7 FJU93 F7 FJU94 F7 FJU95 F7 FJU96 G7 FJU97 A1 FJU98 A8 FJU99 E5 FJA1 B11 FJA2 C11 FJA3 C11 FJA4 B5 FJA5 C4

"J00 ~ J99"

CHN DC 376227	SETNAME		
CLASS_NO 3PC32	TV 543 2K9		1 2009-02-25
-- -- -- 1	PCB SB SSB PNS 32FHD SHP	3139 123 6455	
-- -- -- 2			
2009-02-25 3			
NAME FOO JW	SUPERS. 24	10 130 – 24	*** A2
SV MGr	CHECK ********	DATE 2009-02-25	© ROYAL PHILIPS ELECTRONICS N.V. 2009

18440_529_090427.eps
090427

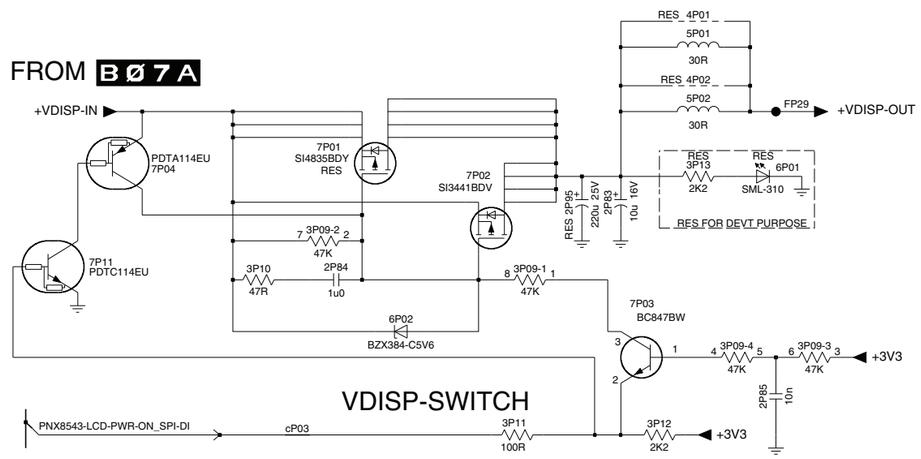
SSB: Display Supply (37" LGD panel)

B Ø 7 B

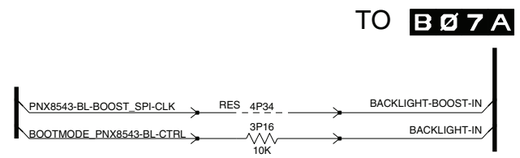
DISPLAY SUPPLY
(only applicabale fro sets with 37" LGD panel)

B Ø 7 B

FROM B Ø 7 A

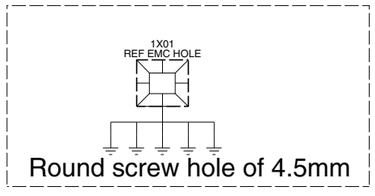


TO B Ø 7 A

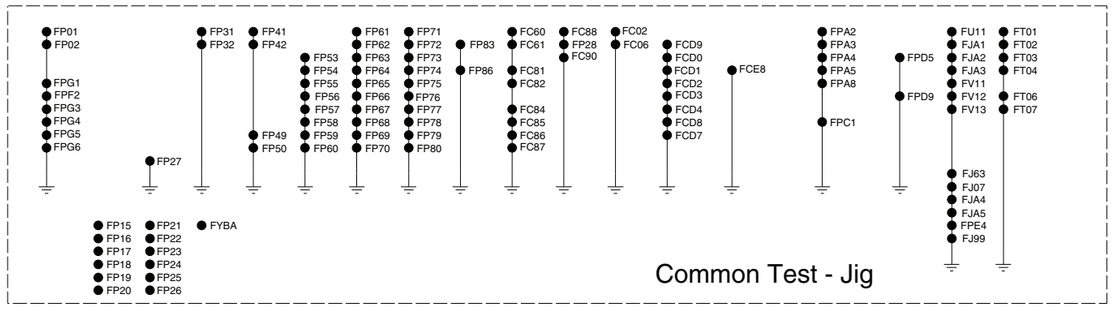


MULTI 12NC : 3139_123_64721
BD 12NC : 3139_123_64731
CELL 12NC : 8239_125_14921

2P83 B4
2P84 C2
2P85 C5
2P95 B4
3P09-1 C4
3P09-2 B2
3P09-3 C5
3P09-4 C5
3P10 C2
3P11 D3
3P12 D4
3P13 B4
3P16 C8
4P01 A4
4P02 B4
4P34 C8
5P01 A4
5P02 B4
6P01 B5
6P02 C3
7P01 B2
7P02 B3
7P03 C4
7P04 B1
7P11 C1
FP29 B5
cP03 D2



Round screw hole of 4.5mm



Common Test - Jig

" XP00 ~ XP99 "

CHN DC 387980	SETNAME ********		
CLASS_NO 3PC332	PCB SB SSB PNS 37FHD LGD TV543	3139 123 6473	1 2009-05-06
-- -- -- 1			
-- -- -- 2			
2009-05-06 3			
NAME FOO JW	SUPERS. 23	10	130 - 20 A3
SV CHECK	DATE 2009-05-06	© ROYAL PHILIPS ELECTRONICS N.V. 2009	

18442_503_090623.eps
090623

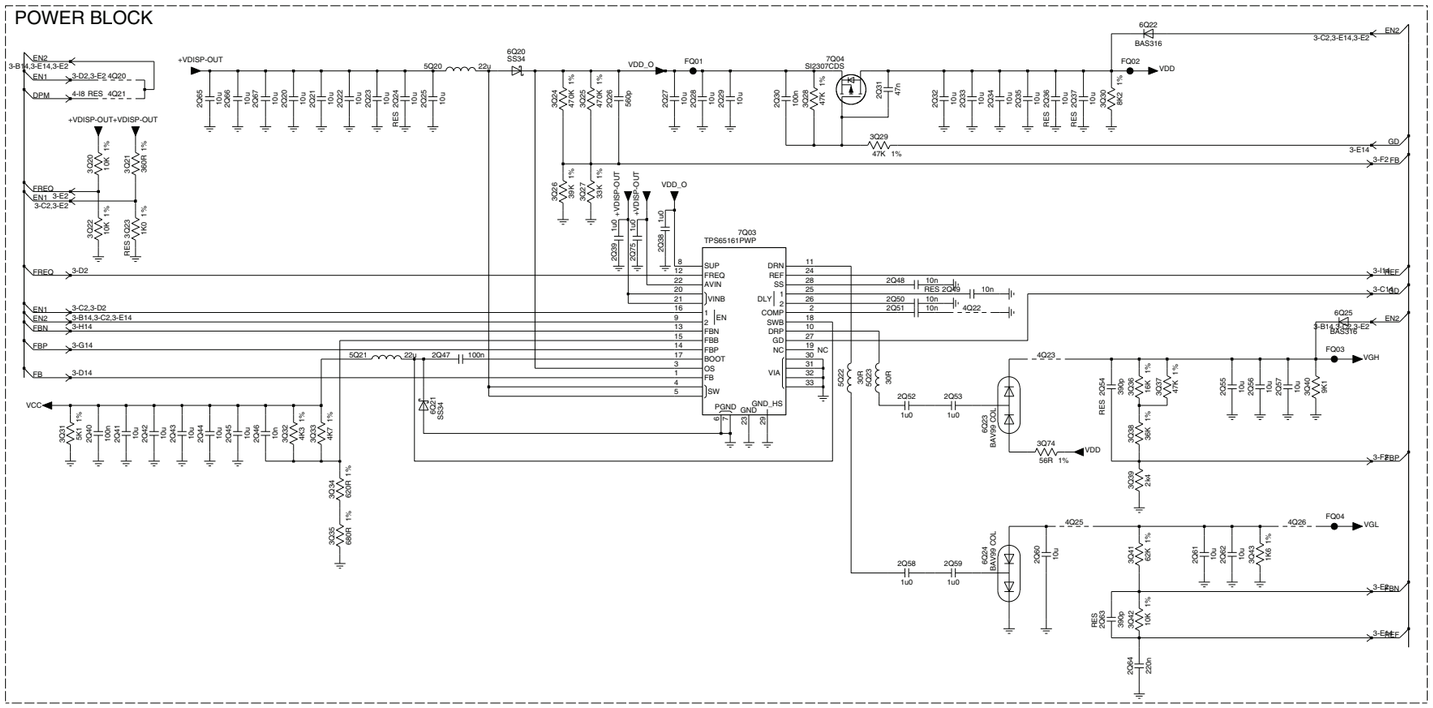
SSB: T-Con DC/DC (37" LGD panel)

B Ø 9 A T_CON DC/DC

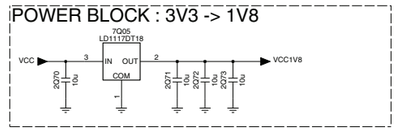
(only applicable for sets with 37" LGD panel)

B Ø 9 A

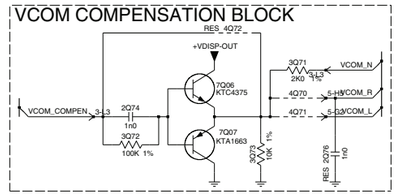
POWER BLOCK



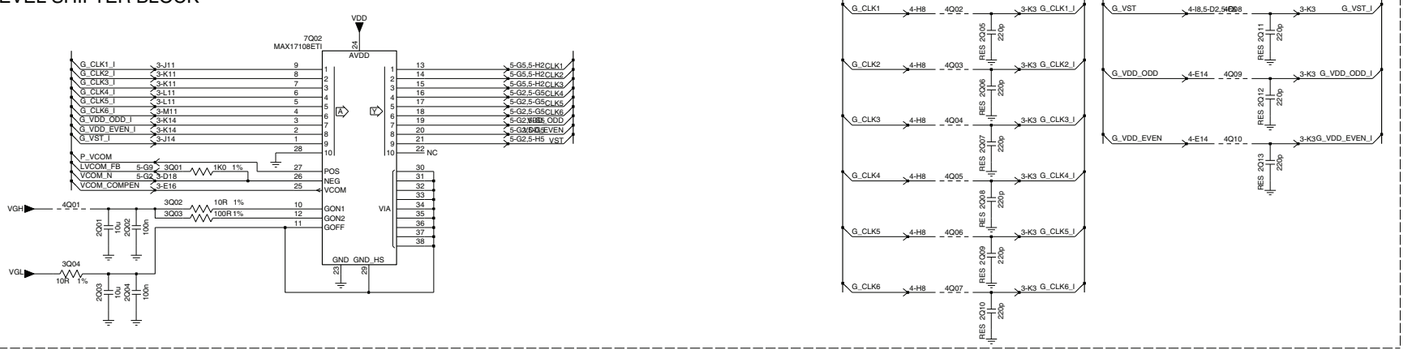
POWER BLOCK : 3V3 -> 1V8



VCOM COMPENSATION BLOCK



LEVEL SHIFTER BLOCK



MULTI 12NC : 3139_123_64731
BD 12NC : 3139_123_64721
CELL 12NC : 8239_125_14921

"Q00 - Q99"

CHN DC 387980		SETNAME	
CLASS_NO 3PC332		PCB SB SSB PNS 37FHD LGD TV543	3139 123 6473
– – –	1		
– – –	2		
2009-05-06	3		1 2009-05-06
NAME FOO JW	SUPERS. 23	10	130 ~ 21 A2
SV CHECK	DATE 2009-05-06	© ROYAL PHILIPS ELECTRONICS N.V. 2008	

2Q01 H1
2Q02 H2
2Q03 I1
2Q04 I2
2Q05 G8
2Q06 G8
2Q07 H8
2Q08 H8
2Q09 H8
2Q10 I8
2Q11 G10
2Q12 G10
2Q13 H10
2Q20 B3
2Q21 B3
2Q22 B3
2Q23 B3
2Q24 B3
2Q25 B4
2Q26 B5
2Q27 B6
2Q28 B6
2Q29 B6
2Q30 B6
2Q31 B7
2Q32 B8
2Q33 B8
2Q34 B8
2Q35 B8
2Q36 B8
2Q37 B9
2Q38 C6
2Q39 C5
2Q40 D1
2Q41 D1
2Q42 D2
2Q43 D2
2Q44 D2
2Q45 D2
2Q46 D2
2Q47 D4
2Q48 C7
2Q49 C8
2Q50 C7
2Q51 C7
2Q52 D7
2Q53 D8
2Q54 D9
2Q55 D10
2Q56 D10
2Q57 D10
2Q58 E7
2Q59 E8
2Q60 E8
2Q61 E10
2Q62 E10
2Q63 F9
2Q64 F9
2Q65 B2
2Q66 B2
2Q67 B2
2Q70 A12
2Q71 A13
2Q72 A13
2Q73 A13
2Q74 C12
2Q75 C5
2Q76 C14
3Q01 H2
3Q02 H2
3Q03 H2
3Q04 I1
3Q20 B1
3Q21 B1
3Q22 C1
3Q23 C1
3Q24 B5
3Q25 B5
3Q26 B5
3Q27 B5
3Q28 B7
3Q29 B7
3Q30 B9
3Q31 D1
3Q32 D3
3Q33 D3
3Q34 E3
3Q35 E3
3Q36 D9
3Q37 D9
3Q38 D9
3Q39 E9
3Q40 D10
3Q41 E9
3Q42 F9
3Q43 E10
3Q71 B14
3Q72 C12
3Q73 C13
3Q74 D8
4Q01 H1
4Q02 G8
4Q03 G8
4Q04 G8
4Q05 H8
4Q06 H8
4Q07 I8
4Q08 G10
4Q09 G10
4Q10 H10
4Q20 A1
4Q21 B1
4Q22 C8
4Q23 D8
4Q25 E9
4Q26 E10
4Q70 C14
4Q71 C14
4Q72 B13
5Q20 A4
5Q21 D3
5Q22 D7
5Q23 D7
6Q20 A4
6Q21 D4
6Q22 A9
6Q23 D8
6Q24 E8
6Q25 C11
7Q02 G3
7Q03 C6
7Q04 A7
7Q05 A12
7Q06 C13
7Q07 C13
FQ01 A6
FQ02 A9
FQ03 D11
FQ04 E11

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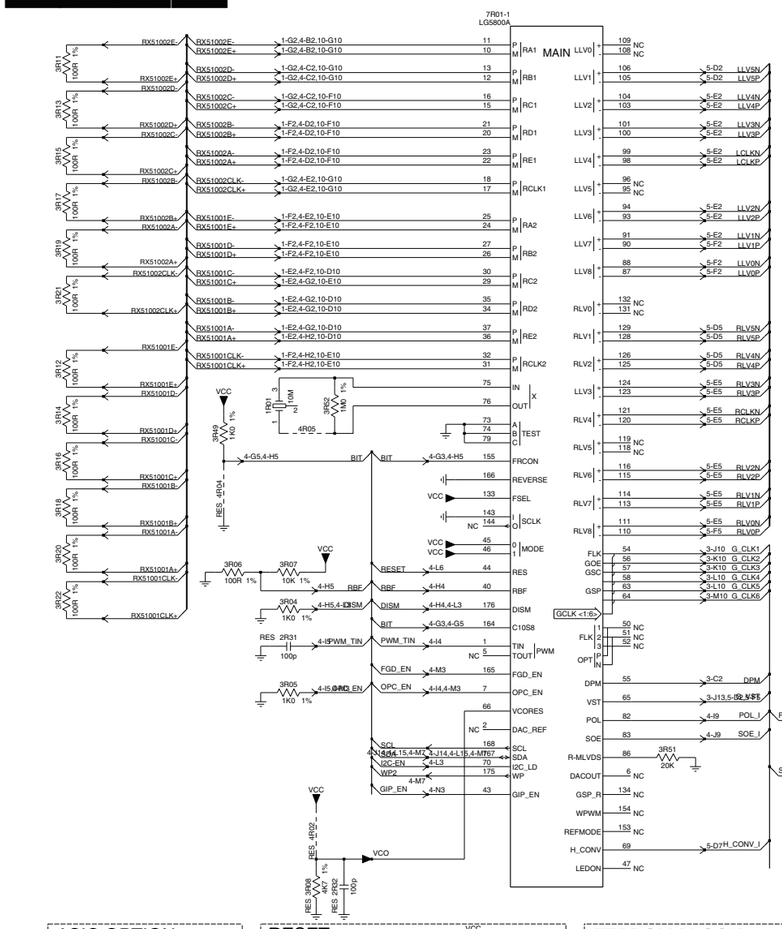
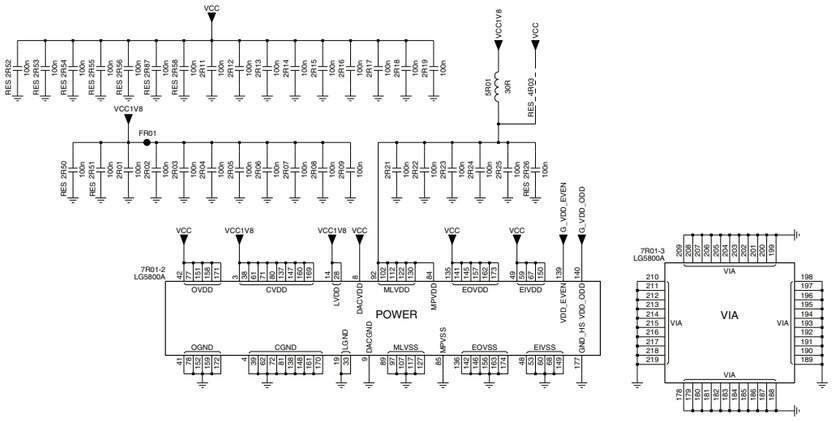
090623

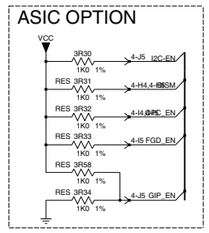
SSB: T-Con LG Control (37" LGD panel)

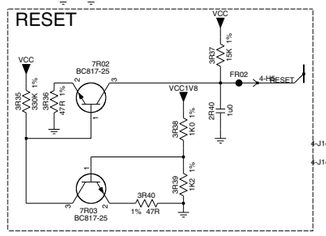
B Ø 9 B

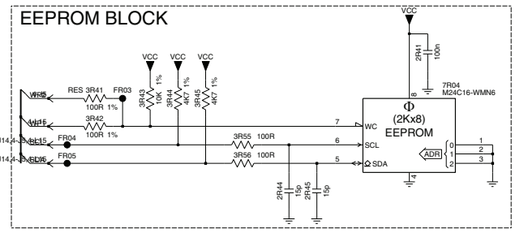
TCON LG 37 WUNCONTROL
(only applicable for sets with 37" LGD panel)

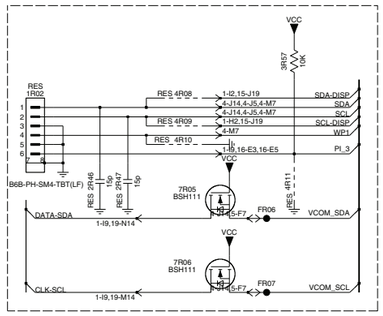












MULTI 12NC : 3139_123_64731
BD 12NC : 3139_123_64721
CELL 12NC : 8239_125_14921

CHN DC 387980	SETNAME		
CLASS_NO 3PC332	PCB SB SSB PNS 37FHD LGD TV543	3139 123 6473	1 2009-05-06
-- -- -- 1 -- -- -- 2 2009-05-06 3			
NAME FOO JW	SUPERS. 23	10	130 - 22 A2
SV	CHECK	DATE 2009-05-06	© ROYAL PHILIPS ELECTRONICS N.V. 2008

"R00 - R79"

1R01 D2
1R02 H10
2R01 B7
2R02 B7
2R03 B8
2R04 B8
2R05 B8
2R06 B8
2R07 B9
2R08 B9
2R09 B9
2R11 A8
2R12 A8
2R13 A8
2R14 A9
2R15 A9
2R16 A9
2R17 A9
2R18 A9
2R19 A10
2R21 B9
2R22 B10
2R23 B10
2R24 B10
2R25 B10
2R26 B10
2R31 E2
2R32 G3
2R40 H4
2R41 H8
2R42 G7
2R43 F7
2R44 I7
2R45 I7
2R46 H10
2R47 H10
2R50 B7
2R51 B7
2R52 A6
2R53 A7
2R54 A7
2R55 A7
2R56 A7
2R58 A8
2R87 A7
3R04 E2
3R05 F2
3R06 E2
3R07 E2
3R08 G3
3R11 A1
3R12 C1
3R13 A1
3R14 D1
3R15 B1
3R16 D1
3R17 B1
3R18 D1
3R19 B1
3R20 E1
3R21 C1
3R22 E1
3R30 H1
3R31 H1
3R32 H1
3R33 I1
3R34 I1
3R35 H2
3R36 H3
3R37 H4
3R38 I4
3R39 I4
3R40 I3
3R41 H5
3R42 I5
3R43 H6
3R44 H6
3R45 H6
3R47 F7
3R48 F7
3R49 D2
3R51 F5
3R52 D3
3R55 I7
3R56 I7
3R57 G12
3R58 I1
4R02 G3
4R03 A10
4R04 D2
4R05 D3
4R06 G11
4R07 G11
4R08 H11
4R09 H11
4R10 H11
4R11 H12
5R01 A10
7R01-1 A4
7R01-2 C8
7R01-3 C11
7R02 H3
7R03 I3
7R04 H8
7R05 H11
7R06 I11
FR01 B7
FR02 H4
FR03 H6
FR04 I5
FR05 I5
FR06 I12
FR07 I12

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090623

SSB: T-Con Connectors (37" LGD panel)

PHILIPS

B Ø 9 C

TCON CONNECTORS
(only applicable for sets with 37" LGD panel)

1X22 196119-60041

1X21 196119-60041

P-GAMMA BLOCK

7X01 BUF16821AIPWP

Common Test Jig

MULTI 12NC : 3139_123_64731
BD 12NC : 3139_123_64721
CELL 12NC : 8239_125_14921

"S00 - S99"

CHN DC 387980	SETNAME
CLASS_NO 3PC332	PCB SB SSB PNS 37FHD LGD TV543
-- -- -- 1	
-- -- -- 2	
2009-05-06 3	
NAME FOO JW	SUPERS. 23 10 130 - 23 A3
SV CHECK	DATE 2009-05-06

3139 123 6473

1 2009-05-06

1X21 A3 FXAY C2
1X22 A1 FXAZ D2
2X01 A4 FXB0 E2
2X02 A3 FXB1 D2
2X03 A4 FXB2 D2
2X04 A4 FXB3 D2
2X05 A1 FXB4 D2
2X06 A1 FXB5 D2
2X07 A2 FXB6 D2
2X09 A2 FXB7 D2
2X10 D6 FXB8 D2
2X11 D6 FXB9 E2
2X12 F2 FXBB A1
3X01 A5 FXBC B2
3X02 B5
3X03 B5
3X10 D5
3X11 D5
3X12 F7
3X13 F7
3X14 F7
3X15 D7
4X01 B5
4X02 C5
4X10 C5
4X11 E5
4X12 E5
7X01 D6
FX72 F2
FX73 F2
FX74 F2
FX75 F2
FX76 E2
FX77 E2
FX78 E2
FX79 C2
FX80 C2
FX81 A2
FX83 F4
FX84 B2
FX85 B2
FX86 B2
FX87 B2
FX88 C2
FX89 C2
FX92 E2
FX93 E2
FX94 C4
FX95 C4
FX96 C4
FX97 C4
FX98 C4
FX99 C4
FXA0 E2
FXA1 C4
FXA2 C4
FXA3 D4
FXA4 D4
FXA5 D4
FXA6 D4
FXA7 D4
FXA8 D4
FXA9 D4
FXAA D2
FXAC C2
FXAG D2
FXAH E2
FXAJ E2
FXAK E2
FXAL E2
FXAM E2
FXAR C2
FXAT C2
FXAU C2
FXAV C2
FXAW C2

18442_502_090623.eps
090623

SSB: SRP List Explanation

Example

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

1.1. Introduction

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

1.2. Non-SRP Schematics

There are several different signals available in a schematic:

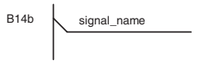
1.2.1. Power Supply Lines

All power supply lines are available in the supply line overview (see chapter 9). In the schematics (see chapter 10) is not indicated where supplies are coming from or going to.
It is however indicated if a supply is incoming (created elsewhere), or outgoing (created or adapted in the current schematic).

Outgoing Incoming

1.2.2. Normal Signals

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



1.2.3. Grounds

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

1.3. SRP Schematics

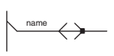
SRP is a tool, which automatically creates a list with signal references, indicating on which schematic the signals are used.
A reference is created for all signals indicated with an SRP symbol, these symbols are:

Power supply line.

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

Signal line into a wire tree.

Switching line into a wire tree.



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

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

Remarks:

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

Additional Tip:

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

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

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

10000_031_090121.eps
100323

Personal Notes:

10000

SSB: SRP List Part 1 (LGD panel)

Netname	Diagram
+12V	B01A (1×)
+12V	B01B (4×)
+12V	B02A (3×)
+12V	B04A (1×)
+12VD	B01B (1×)
+12VD	B07A (2×)
+12VF	B01A (2×)
+1V2	B02A (2×)
+1V2_VCC	B09A (1×)
+1V2_VCC	B09B (4×)
+1V2A	B02A (2×)
+1V2-PNX5100	B01B (1×)
+1V2-PNX5100	B03H (1×)
+1V2-PNX85XX	B01A (2×)
+1V2-PNX85XX	B02A (1×)
+1V2-PNX85XX	B03A (14×)
+1V2-PNX85XX	B03H (1×)
+1V2-STANDBY	B01B (2×)
+1V2-STANDBY	B03A (1×)
+1V8-PNX85XX	B03A (3×)
+1V8-PNX85XX	B03F (5×)
+1V8-PNX85XX	B05A (1×)
+3V3	B01A (1×)
+3V3	B01B (1×)
+3V3	B02A (2×)
+3V3	B03A (14×)
+3V3	B03C (1×)
+3V3	B03D (1×)
+3V3	B03G (11×)
+3V3	B03H (1×)
+3V3	B04A (1×)
+3V3	B04B (3×)
+3V3	B04C (2×)
+3V3	B05A (3×)
+3V3	B05B (2×)
+3V3	B05C (3×)
+3V3	B07A (2×)
+3V3	B07B (2×)
+3V3_BUF	B05C (5×)
+3V3A	B02A (3×)
+3V3B	B02A (6×)
+3V3D	B02A (2×)
+3V3E	B02A (2×)
+3V3-ET-ANA	B05B (4×)
+3V3-ET-DIG	B05B (3×)
+3V3F	B01A (2×)
+3V3F	B03A (1×)
+3V3-NAND	B03G (5×)
+3V3-PER	B03A (2×)
+3V3-PER	B03G (12×)
+3V3-PER	B03H (3×)
+3V3-STANDBY	B01B (2×)
+3V3-STANDBY	B03A (1×)
+3V3-STANDBY	B03G (3×)
+3V3-STANDBY	B03H (12×)
+3V3-STANDBY	B04A (3×)
+3V3-STANDBY	B05A (1×)
+5V	B01B (1×)
+5V	B02A (2×)
+5V	B03D (1×)
+5V	B03G (4×)
+5V	B03H (1×)
+5V	B04A (1×)
+5V	B04B (6×)
+5V	B04C (1×)
+5V	B05A (2×)
+5V	B05C (1×)
+5V	B07A (1×)
+5V5-TUN	B01B (1×)
+5V5-TUN	B02A (1×)
+5V-TUNER	B02A (10×)
+AUDIO-POWER	B01B (1×)
+AUDIO-POWER	B03C (2×)
+AUDIO-POWER	B06A (2×)
+VDISP-IN	B07A (1×)
+VDISP-IN	B07B (1×)
+VDISP-OUT	B07B (1×)
+VDISP-OUT	B09A (4×)
3V3-ST	B01A (1×)
3V3-ST	B01B (1×)
ADAC(1)	B03D (2×)
ADAC(1)	B06A (1×)
ADAC(2)	B03D (2×)
ADAC(2)	B06A (1×)
ADAC(3)	B03C (2×)
ADAC(3)	B03D (2×)
ADAC(4)	B03C (2×)
ADAC(4)	B03D (2×)
ADAC(5)	B03C (1×)
ADAC(5)	B03D (1×)
ADAC(6)	B03C (1×)
ADAC(6)	B03D (1×)
ADAC(7)	B03C (1×)
ADAC(7)	B03D (3×)
ADAC(8)	B03C (1×)
ADAC(8)	B03D (3×)
ALE	B03H (1×)
ANTENNA-CTRL	B02A (2×)
ANTENNA-SUPPLY	B02A (2×)
A-PLOP	B03C (1×)
A-PLOP	B04B (1×)
A-PLOP	B04C (2×)
AP-SCART-OUT-L	B04B (5×)
AP-SCART-OUT-R	B04B (5×)
ARX0-	B05A (2×)
ARX0+	B05A (2×)
ARX1-	B05A (2×)
ARX1+	B05A (2×)
ARX2-	B05A (2×)
ARX2+	B05A (2×)
ARX-5V	B05A (3×)
ARXC-	B05A (2×)
ARXC+	B05A (2×)
ARX-DDC-CLK	B05A (2×)
ARX-DDC-DAT	B05A (2×)
ARX-HPD	B05A (2×)
A-STBY	B03C (1×)
A-STBY	B06A (2×)
AUD_GND	B03D (4×)
AUD_GND	B06A (2×)
AUDIO-CL-L	B03C (1×)
AUDIO-CL-L	B04B (1×)
AUDIO-CL-R	B03C (1×)
AUDIO-CL-R	B04B (1×)
AUDIO-IN1-L	B03D (1×)
AUDIO-IN1-L	B04A (1×)
AUDIO-IN1-L	B04B (2×)
AUDIO-IN1-R	B03D (1×)
AUDIO-IN1-R	B04A (1×)
AUDIO-IN1-R	B04B (2×)
AUDIO-IN2-L	B03D (1×)
AUDIO-IN2-L	B04B (2×)
AUDIO-IN2-R	B03D (1×)
AUDIO-IN2-R	B04B (2×)
AUDIO-IN3-L	B03D (1×)
AUDIO-IN3-L	B04C (1×)
AUDIO-IN3-R	B03D (1×)
AUDIO-IN3-R	B04C (1×)
AUDIO-IN4-L	B03D (1×)
AUDIO-IN4-L	B04C (1×)
AUDIO-IN4-R	B03D (1×)
AUDIO-IN4-R	B04C (1×)
AUDIO-IN5-L	B03D (1×)
AUDIO-IN5-L	B04C (2×)
AUDIO-IN5-R	B03D (1×)
AUDIO-IN5-R	B04C (2×)
AUDIO-MUTE	B03H (2×)
AUDIO-MUTE	B04C (1×)
AUDIO-MUTE	B06A (1×)
AUDIO-OUT-L	B03C (1×)
AUDIO-OUT-L	B04C (1×)
AUDIO-OUT-R	B03C (1×)
AUDIO-OUT-R	B04C (1×)
AUDIO-RESET	B03C (2×)
AUDIO-RESET	B03H (2×)
AUDIO-VDD	B03C (7×)
AV1-BLK	B03H (1×)
AV1-BLK	B04B (1×)
AV1-BLK-BO	B04A (1×)
AV1-BLK-BO	B04B (2×)
AV1-STATUS	B03H (1×)
AV1-STATUS	B04A (1×)
AV1-STATUS	B04B (2×)
AV2-BLK_LCD-SDA	B03H (1×)
AV2-BLK_LCD-SDA	B04A (1×)
AV2-BLK_LCD-SDA	B04B (2×)
AV2-PB_SC2-B	B03E (1×)
AV2-PB_SC2-B	B04B (2×)
AV2-PR_SC2-R	B03E (1×)
AV2-PR_SC2-R	B04B (2×)
AV2-STATUS	B03H (1×)
AV2-STATUS	B04B (2×)
AV2-Y_SC2-G	B03E (1×)
AV2-Y_SC2-G	B04B (2×)
AV3-PB	B03E (1×)
AV3-PB	B04C (1×)
AV3-PR	B03E (1×)
AV3-PR	B04C (1×)
AV3-Y	B03E (1×)
AV3-Y	B04C (1×)
BACKLIGHT-BOOST	B01B (1×)
BACKLIGHT-BOOST	B07A (1×)
BACKLIGHT-BOOST-IN	B07A (1×)
BACKLIGHT-BOOST-IN	B07B (1×)
BACKLIGHT-IN	B07A (1×)
BACKLIGHT-IN	B07B (1×)
BACKLIGHT-OUT	B01B (1×)
BACKLIGHT-OUT	B07A (1×)
BOLT-ON-IO	B03H (2×)
BOLT-ON-IO	B04A (1×)
BOLT-ON-TS-ENn	B03H (2×)
BOOTMODE_PNX8543-BL-CTRL	B03G (1×)
BOOTMODE_PNX8543-BL-CTRL	B07B (1×)
BRX0-	B05A (2×)
BRX0+	B05A (2×)
BRX1-	B05A (2×)
BRX1+	B05A (2×)
BRX2-	B05A (2×)
BRX2+	B05A (2×)
BRX-5V	B05A (3×)
BRXC-	B05A (2×)
BRXC+	B05A (2×)
BRX-DDC-CLK	B05A (2×)
BRX-DDC-DAT	B05A (2×)
BRX-HPD	B05A (2×)
B-VGA	B03E (1×)
B-VGA	B04C (1×)
C10S8	B09B (2×)
CA-ADDEN	B03B (1×)
CA-ADDEN	B05C (3×)
CA-CD1	B03B (1×)
CA-CD1	B05C (2×)
CA-CD2	B03B (1×)
CA-CD2	B05C (2×)
CA-CE1	B05C (2×)
CA-CE2	B05C (2×)
CA-DATADIR	B03B (1×)
CA-DATADIR	B05C (1×)
CA-DATAEN	B03B (1×)
CA-DATAEN	B05C (1×)
CA-INPACK	B05C (2×)
CA-IORD	B05C (2×)
CA-IOWR	B05C (2×)
CA-MDI0	B03B (1×)
CA-MDI0	B05C (1×)
CA-MDI1	B03B (1×)
CA-MDI1	B05C (1×)
CA-MDI2	B03B (1×)
CA-MDI2	B05C (1×)
CA-MDI3	B03B (1×)
CA-MDI3	B05C (1×)
CA-MDI4	B03B (1×)
CA-MDI4	B05C (1×)
CA-MDI5	B03B (1×)
CA-MDI5	B05C (1×)
CA-MDI6	B03B (1×)
CA-MDI6	B05C (1×)
CA-MDI7	B03B (1×)
CA-MDI7	B05C (1×)
CA-MDO(0)	B03B (1×)
CA-MDO(0)	B05C (1×)
CA-MDO(1)	B03B (1×)
CA-MDO(1)	B05C (1×)
CA-MDO(2)	B03B (1×)
CA-MDO(2)	B05C (1×)
CA-MDO(3)	B03B (1×)
CA-MDO(3)	B05C (1×)
CA-MDO(4)	B03B (1×)
CA-MDO(4)	B05C (1×)
CA-MDO(5)	B03B (1×)
CA-MDO(5)	B05C (1×)
CA-MDO(6)	B03B (1×)
CA-MDO(6)	B05C (1×)
CA-MDO(7)	B03B (1×)
CA-MDO(7)	B05C (1×)
CA-MICLK	B03B (1×)
CA-MICLK	B05C (1×)
CA-MISTRT	B03B (1×)
CA-MISTRT	B05C (1×)
CA-MIVAL	B03B (1×)
CA-MIVAL	B05C (1×)
CA-MOCLK_VS2	B03B (2×)
CA-MOCLK_VS2	B05C (1×)
CA-MOSTRT	B03B (1×)
CA-MOSTRT	B05C (1×)
CA-MOVAL	B03B (1×)
CA-MOVAL	B05C (1×)
CA-OE	B05C (2×)
CA-REG	B05C (2×)
CA-RST	B03B (1×)
CA-RST	B05C (1×)
CA-VS1	B03B (1×)
CA-VS1	B05C (2×)
CA-WAIT	B05C (3×)
CA-WE	B05C (2×)
CEC	B05A (6×)
CEC-HDMI	B03H (2×)
CEC-HDMI	B05A (1×)
CLK-SCL	B04C (1×)
CLK-SCL	B09B (1×)
CRX0-	B05A (2×)
CRX0+	B05A (2×)
CRX1-	B05A (2×)
CRX1+	B05A (2×)
CRX2-	B05A (2×)
CRX2+	B05A (2×)
CRX-5V	B05A (3×)
CRXC-	B05A (2×)
CRXC+	B05A (2×)
CRX-DDC-CLK	B05A (2×)
CRX-DDC-DAT	B05A (2×)
CRX-HPD	B05A (2×)
CVBS	B02A (1×)
CVBS	B03E (1×)
CVBS1	B03E (1×)
CVBS1	B04A (1×)
CVBS1	B04B (2×)
CVBS2	B03E (1×)
CVBS2	B04B (2×)
CVBS-OUT-SC1	B04B (3×)
CVBS-OUT-SC1-PBS	B04A (1×)
CVBS-OUT-SC1-PBS	B04B (1×)
CVBS-OUT-SC2	B04B (2×)
CVBS-OUT-SC2	B04C (1×)
CVBS-TER-OUT	B02A (1×)
CVBS-TER-OUT	B04B (1×)
DATA-SDA	B04C (1×)
DATA-SDA	B09B (1×)
DDC-SCL	B05A (3×)
DDC-SDA	B05A (3×)
DDR2-A0	B03F (3×)
DDR2-A1	B03F (3×)
DDR2-A10	B03F (3×)
DDR2-A11	B03F (3×)
DDR2-A12	B03F (3×)
DDR2-A2	B03F (3×)
DDR2-A3	B03F (3×)
DDR2-A4	B03F (3×)
DDR2-A5	B03F (3×)
DDR2-A6	B03F (3×)
DDR2-A7	B03F (3×)
DDR2-A8	B03F (3×)
DDR2-A9	B03F (3×)
DDR2-BA0	B03F (3×)
DDR2-BA1	B03F (3×)
DDR2-BA2	B03F (3×)
DDR2-CAS	B03F (3×)
DDR2-CKE	B03F (3×)
DDR2-CLK_N	B03F (3×)
DDR2-CLK_P	B03F (3×)
DDR2-CS	B03F (3×)
DDR2-D0	B03F (2×)
DDR2-D1	B03F (2×)
DDR2-D10	B03F (2×)
DDR2-D11	B03F (2×)
DDR2-D12	B03F (2×)
DDR2-D13	B03F (2×)
DDR2-D14	B03F (2×)
DDR2-D15	B03F (2×)
DDR2-D16	B03F (2×)
DDR2-D17	B03F (2×)
DDR2-D18	B03F (2×)
DDR2-D19	B03F (2×)
DDR2-D2	B03F (2×)
DDR2-D20	B03F (2×)
DDR2-D21	B03F (2×)
DDR2-D22	B03F (2×)
DDR2-D23	B03F (2×)
DDR2-D24	B03F (2×)
DDR2-D25	B03F (2×)
DDR2-D26	B03F (2×)
DDR2-D27	B03F (2×)
DDR2-D28	B03F (2×)
DDR2-D29	B03F (2×)
DDR2-D3	B03F (2×)
DDR2-D30	B03F (2×)
DDR2-D31	B03F (2×)
DDR2-D4	B03F (2×)
DDR2-D5	B03F (2×)
DDR2-D6	B03F (2×)
DDR2-D7	B03F (2×)
DDR2-D8	B03F (2×)
DDR2-D9	B03F (2×)
DDR2-DQM0	B03F (2×)
DDR2-DQM1	B03F (2×)
DDR2-DQM2	B03F (2×)
DDR2-DQM3	B03F (2×)
DDR2-DQS0_N	B03F (2×)
DDR2-DQS0_P	B03F (2×)
DDR2-DQS1_N	B03F (2×)
DDR2-DQS1_P	B03F (2×)
DDR2-DQS2_N	B03F (2×)
DDR2-DQS2_P	B03F (2×)
DDR2-DQS3_N	B03F (2×)
DDR2-DQS3_P	B03F (2×)
DDR2-ODT	B03F (3×)
DDR2-RAS	B03F (3×)
DDR2-VREF-CTRL	B03F (2×)
DDR2-VREF-DDR	B03F (3×)
DDR2-WE	B03F (3×)
DETECT1	B01A (1×)
DETECT1	B03H (3×)
DETECT-12V	B01B (1×)
DETECT-12V	B03H (1×)
DETECT2	B03H (3×)
DISM	B09B (2×)
DPM	B09A (2×)
DPM	B09B (1×)
DRX0-	B05A (2×)
DRX0+	B05A (2×)
DRX1-	B05A (2×)
DRX1+	B05A (2×)
DRX2-	B05A (2×)
DRX2+	B05A (2×)
DRX-5V	B05A (3×)
DRXC-	B05A (2×)
DRXC+	B05A (2×)
DRX-DDC-CLK	B05A (2×)
DRX-DDC-DAT	B05A (2×)
DRX-HPD	B05A (2×)
EA	B03H (1×)
EJTAG-DETECT	B03G (1×)
EJTAG-DETECT	B03H (2×)
EJTAG-TCK	B03G (3×)
EJTAG-TDI	B03G (3×)
EJTAG-TDO	B03G (3×)
EJTAG-TMS	B03G (3×)
EJTAG-TRSTN	B03G (3×)
ENABLE-3V3	B01A (1×)
ENABLE-3V3	B01B (1×)
ENABLE-3V3	B03H (2×)
FB	B09A (1×)
FBB	B09A (2×)
FBN	B09A (2×)
FE-CLK	B02A (1×)
FE-CLK	B03B (1×)
FE-DATA(0)	B02A (1×)
FE-DATA(0)	B03B (1×)
FE-DATA(1)	B02A (1×)
FE-DATA(1)	B03B (1×)
FE-DATA(2)	B02A (1×)
FE-DATA(2)	B03B (1×)
FE-DATA(3)	B02A (1×)
FE-DATA(3)	B03B (1×)
FE-DATA(4)	B02A (1×)
FE-DATA(4)	B03B (1×)
FE-DATA(5)	B02A (1×)
FE-DATA(5)	B03B (1×)
FE-DATA(6)	B02A (1×)
FE-DATA(6)	B03B (1×)
FE-DATA(7)	B02A (1×)
FE-DATA(7)	B03B (1×)
FE-ERR	B03B (2×)
FE-SOP	B02A (1×)
FE-SOP	B03B (1×)
FE-VALID	B02A (1×)
FE-VALID	B03B (1×)
FGD_EN	B09B (2×)
FLK	B09A (1×)
FLK	B09B (1×)
FRONT-C	B03E (1×)
FRONT-C	B04C (2×)
FRONT-Y_CVBS	B03E (1×)
FRONT-Y_CVBS	B04C (2×)
GMA1	B09A (1×)
GMA1	B09C (2×)
GMA10	B09A (1×)
GMA10	B09C (2×)
GMA12	B09A (1×)
GMA12	B09C (2×)
GMA13	B09A (1×)
GMA13	B09C (2×)
GMA14	B09A (1×)
GMA14	B09C (2×)
GMA15	B09A (1×)
GMA15	B09C (2×)
GMA16	B09A (1×)
GMA16	B09C (2×)
GMA17	B09A (1×)
GMA17	B09C (2×)
GMA18	B09A (1×)
GMA18	B09C (2×)
GMA2	B09A (1×)
GMA2	B09C (2×)
GMA3	B09A (1×)
GMA3	B09C (2×)
GMA4	B09A (1×)
GMA4	B09C (2×)
GMA5	B09A (1×)
GMA5	B09C (2×)
GMA6	B09A (1×)
GMA6	B09C (2×)
GMA7	B09A (1×)
GMA7	B09C (2×)
GMA9	B09A (1×)
GMA9	B09C (2×)
GND-SIG	B01A (12×)
GNDSND	B01B (2×)
GNDSND	B06A (20×)
GOE	B09B (1×)
GOE	B09C (2×)
GSC	B09B (1×)
GSC	B09C (2×)
GSP	B09B (1×)
GSP	B09C (2×)
GSP_R	B09B (1×)
GSP_R	B09C (2×)
G-VGA	B03E (1×)
G-VGA	B04C (1×)
H_CONV	B09B (1×)
H_CONV	B09C (2×)
HP_LOUT	B03C (1×)
HP_LOUT	B04C (1×)
HP_ROUT	B03C (1×)
HP_ROUT	B04C (1×)
H-SYNC-VGA	B03E (1×)
H-SYNC-VGA	B04C (1×)
I_GOE	B09B (2×)
I_GSC	B09B (2×)
I_GSP	B09B (2×)
I_GSP_R	B09B (2×)
I_POL	B09B (2×)
I_SOE	B09B (2×)
IF-AGC	B02A (2×)
IF-N	B02A (2×)
IF-P	B02A (2×)
IRQ-CA	B03B (1×)
IRQ-CA	B03G (2×)
IRQ-CA	B05C (2×)
IRQ-PCI	B03G (1×)
IRQ-PCI	B05B (1×)
KEYBOARD	B03G (1×)
KEYBOARD	B03H (2×)
LAMP-ON-OUT	B01B (1×)
LAMP-ON-OUT	B03H (2×)
LCD-SCL	B03H (2×)
LCD-SCL	B04A (1×)
LCD-SCL	B04C (1×)
LCLKN	B09B (1×)
LCLKN	B09C (1×)
LCLKP	B09B (1×)
LCLKP	B09C (1×)
LED1	B03G (2×)
LED1	B03H (1×)
LED2	B03G (2×)
LED2	B03H (1×)
LEFT-SPEAKER	B06A (4×)
LIGHT-SENSOR	B03G (2×)
LIGHT-SENSOR	B03H (1×)
LLV0N	B09B (1×)
LLV0N	B09C (1×)
LLV0P	B09B (1×)
LLV0P	B09C (1×)
LLV1N	B09B (1×)
LLV1N	B09C (1×)
LLV1P	B09B (1×)
LLV1P	B09C (1×)
LLV2N	B09B (1×)
LLV2N	B09C (1×)
LLV2P	B09B (1×)
LLV2P	B09C (1×)
LLV4N	B09B (1×)
LLV4N	B09C (1×)
LLV4P	B09B (1×)
LLV4P	B09C (1×)
LLV5N	B09B (1×)
LLV5N	B09C (1×)
LLV5P	B09B (1×)
LLV5P	B09C (1×)
LLV6N	B09B (1×)
LLV6N	B09C (1×)
LLV6P	B09B (1×)
LLV6P	B09C (1×)
LVCOM_FB	B09A (1×)
LVCOM_FB	B09C (1×)
MDO0	B05C (4×)
MDO1	B05C (4×)
MDO2	B05C (4×)
MDO3	B05C (4×)
MDO4	B05C (4×)
MDO5	B05C (4×)
MDO6	B05C (4×)
MDO7	B05C (4×)
MOCLKA	B05C (4×)
MOSTRTA	B05C (4×)
MOVALA	B05C (4×)
MUTE	B06A (2×)
NAND-AD(0)	B03G (2×)
NAND-AD(1)	B03G (2×)
NAND-AD(2)	B03G (2×)
NAND-AD(3)	B03G (2×)
NAND-AD(4)	B03G (2×)
NAND-AD(5)	B03G (2×)
NAND-AD(6)	B03G (2×)
NAND-AD(7)	B03G (2×)
NAND-ALE	B03G (2×)
NAND-CLE	B03G (2×)
NAND-REn	B03G (2×)
NAND-WEn	B03G (2×)
OPC_EN	B09B (2×)
OPT_N	B09B (1×)
OPT_N	B09C (2×)
OPT_P	B09B (1×)
OPT_P	B09C (1×)
P_VCOM	B09A (3×)
PBS_SPI_DI	B04A (2×)
PBS-I2C-SCL	B03G (2×)
PBS-I2C-SCL	B04A (2×)
PCI-AD0	B03G (2×)
PCI-AD0	B05B (1×)
PCI-AD0	B05C (1×)
PCI-AD1	B03G (2×)
PCI-AD1	B05B (1×)
PCI-AD1	B05C (1×)
PCI-AD10	B03G (1×)
PCI-AD10	B05B (1×)
PCI-AD10	B05C (1×)
PCI-AD11	B03G (1×)
PCI-AD11	B05B (1×)
PCI-AD11	B05C (1×)
PCI-AD12	B03G (1×)
PCI-AD12	B05B (1×)
PCI-AD12	B05C (1×)
PCI-AD13	B03G (1×)
PCI-AD13	B05B (1×)
PCI-AD13	B05C (1×)
PCI-AD14	B03G (1×)
PCI-AD14	B05B (1×)
PCI-AD14	B05C (1×)
PCI-AD15	B03G (1×)
PCI-AD15	B05B (1×)
PCI-AD16	B03G (1×)
PCI-AD16	B05B (1×)
PCI-AD16	B05C (1×)
PCI-AD17	B03G (1×)
PCI-AD17	B05B (1×)
PCI-AD17	B05C (1×)
PCI-AD18	B03G (1×)
PCI-AD18	B05B (1×)
PCI-AD18	B05C (1×)
PCI-AD19	B03G (1×)
PCI-AD19	B05B (1×)
PCI-AD19	B05C (1×)
PCI-AD2	B03G (1×)
PCI-AD2	B05B (1×)
PCI-AD2	B05C (1×)
PCI-AD20	B03G (1×)
PCI-AD20	B05B (1×)
PCI-AD21	B03G (1×)
PCI-AD21	B05B (1×)
PCI-AD22	B03G (1×)
PCI-AD22	B05B (1×)
PCI-AD22	B05C (1×)
PCI-AD23	B03G (1×)
PCI-AD23	B05B (2×)
PCI-AD23	B05C (1×)
PCI-AD24	B03G (3×)
PCI-AD24	B05B (1×)
PCI-AD24	B05C (1×)
PCI-AD25	B03G (2×)

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SSB: SRP List Part 2 (LGD panel)

Netname	Diagram
PCI-AD25	B05B (1×)
PCI-AD25	B05C (1×)
PCI-AD26	B03G (2×)
PCI-AD26	B05B (1×)
PCI-AD26	B05C (1×)
PCI-AD27	B03G (2×)
PCI-AD27	B05B (1×)
PCI-AD27	B05C (1×)
PCI-AD28	B03G (2×)
PCI-AD28	B05B (1×)
PCI-AD28	B05C (1×)
PCI-AD29	B03G (2×)
PCI-AD29	B05B (1×)
PCI-AD29	B05C (1×)
PCI-AD3	B03G (1×)
PCI-AD3	B05B (1×)
PCI-AD3	B05C (1×)
PCI-AD30	B03G (2×)
PCI-AD30	B05B (1×)
PCI-AD30	B05C (1×)
PCI-AD31	B03G (2×)
PCI-AD31	B05B (1×)
PCI-AD31	B05C (1×)
PCI-AD4	B03G (1×)
PCI-AD4	B05B (1×)
PCI-AD4	B05C (1×)
PCI-AD5	B03G (1×)
PCI-AD5	B05B (1×)
PCI-AD5	B05C (1×)
PCI-AD6	B03G (1×)
PCI-AD6	B05B (1×)
PCI-AD6	B05C (1×)
PCI-AD7	B03G (1×)
PCI-AD7	B05B (1×)
PCI-AD7	B05C (1×)
PCI-AD8	B03G (1×)
PCI-AD8	B05B (1×)
PCI-AD8	B05C (1×)
PCI-AD9	B03G (1×)
PCI-AD9	B05B (1×)
PCI-AD9	B05C (1×)
PCI-CBE0	B03G (1×)
PCI-CBE0	B05B (1×)
PCI-CBE1	B03G (2×)
PCI-CBE1	B05B (1×)
PCI-CBE1	B05C (1×)
PCI-CBE2	B03G (2×)
PCI-CBE2	B05B (1×)
PCI-CBE2	B05C (1×)
PCI-CBE3	B03G (1×)
PCI-CBE3	B05B (1×)
PCI-CLK-ETHERNET	B03G (1×)
PCI-CLK-ETHERNET	B05B (1×)
PCI-CLK-OUT	B03G (2×)
PCI-CLK-PNX5100	B03G (1×)
PCI-CLK-PNX8543	B03G (2×)
PCI-DEVSEL	B03G (2×)
PCI-DEVSEL	B05B (1×)
PCI-FRAME	B03G (2×)
PCI-FRAME	B05B (1×)
PCI-GNT	B03G (2×)
PCI-GNT	B05B (1×)
PCI-IRDY	B03G (2×)
PCI-IRDY	B05B (1×)
PCI-PAR	B03G (1×)
PCI-PAR	B05B (1×)
PCI-PERR	B03G (2×)
PCI-PERR	B05B (1×)
PCI-REQ	B03G (2×)
PCI-REQ	B05B (1×)
PCI-SERR	B03G (2×)
PCI-SERR	B05B (1×)
PCI-STOP	B03G (2×)
PCI-STOP	B05B (1×)
PCI-TRDY	B03G (2×)
PCI-TRDY	B05B (1×)
PCMCIA-A0	B05C (2×)
PCMCIA-A1	B05C (2×)
PCMCIA-A10	B05C (2×)
PCMCIA-A11	B05C (2×)
PCMCIA-A12	B05C (2×)
PCMCIA-A13	B05C (2×)
PCMCIA-A14	B05C (2×)
PCMCIA-A2	B05C (2×)
PCMCIA-A3	B05C (2×)
PCMCIA-A4	B05C (2×)
PCMCIA-A5	B05C (2×)
PCMCIA-A6	B05C (2×)
PCMCIA-A7	B05C (2×)
PCMCIA-A8	B05C (2×)
PCMCIA-A9	B05C (2×)
PCMCIA-D0	B05C (2×)
PCMCIA-D1	B05C (2×)
PCMCIA-D2	B05C (2×)
PCMCIA-D3	B05C (2×)
PCMCIA-D4	B05C (2×)
PCMCIA-D5	B05C (2×)
PCMCIA-D6	B05C (2×)
PCMCIA-D7	B05C (2×)
PCMCIA-VCC-VPP	B05C (5×)
PDN	B02A (2×)
PDP	B02A (2×)
PI_3	B03H (2×)
PI_3	B09B (1×)
PNX8543-BL-BOOST_SPI-CLK	B03G (2×)
PNX8543-BL-BOOST_SPI-CLK	B04A (1×)
PNX8543-BL-BOOST_SPI-CLK	B07B (1×)
PNX8543-LCD-PWR-ON_SPI-DI	B03G (2×)
PNX8543-LCD-PWR-ON_SPI-DI	B04A (1×)
PNX8543-LCD-PWR-ON_SPI-DI	B07B (1×)
POL	B09B (1×)
POL	B09C (2×)
POWER-OK	B01B (1×)
POWER-OK	B03H (2×)
PROT-DC	B01A (1×)
PROT-DC	B01B (1×)
PSEN	B03H (1×)
RBF	B09B (1×)
RC	B03G (1×)
RC	B03H (1×)
RC	B04A (1×)
RC_uP	B03H (2×)
RC1	B03H (1×)
RC1	B04A (1×)
RC1	B04C (1×)
RC2	B03H (1×)
RC2	B04A (1×)
RC2	B04C (1×)
RCLKN	B09B (1×)
RCLKN	B09C (1×)
RCLKP	B09B (1×)
RCLKP	B09C (1×)
REF	B09A (2×)
REGIMBEAU_CVBS-SWITCH	B03H (2×)
REGIMBEAU_CVBS-SWITCH	B04B (1×)
RESET	B09B (2×)
RESET-ETHERNET	B03H (2×)
RESET-ETHERNET	B05B (2×)
RESET-NVM	B03H (3×)
RESET-PNX5100	B03H (2×)
RESET-STBY	B03H (2×)
RESET-SYSTEM	B02A (1×)
RESET-SYSTEM	B03G (1×)
RESET-SYSTEM	B03H (3×)
REVERSE	B09B (2×)
RF-AGC	B02A (2×)
RIGHT-SPEAKER	B06A (4×)
RLV0N	B09B (1×)
RLV0N	B09C (1×)
RLV0P	B09B (1×)
RLV0P	B09C (1×)
RLV1N	B09B (1×)
RLV1N	B09C (1×)
RLV1P	B09B (1×)
RLV1P	B09C (1×)
RLV2N	B09B (1×)
RLV2N	B09C (1×)
RLV2P	B09B (1×)
RLV2P	B09C (1×)
RLV4N	B09B (1×)
RLV4N	B09C (1×)
RLV4P	B09B (1×)
RLV4P	B09C (1×)
RLV5N	B09B (1×)
RLV5N	B09C (1×)
RLV5P	B09B (1×)
RLV5P	B09C (1×)
RLV6N	B09B (1×)
RLV6N	B09C (1×)
RLV6P	B09B (1×)
RLV6P	B09C (1×)
RREF-PNX85XX	B03A (2×)
RREF-PNX85XX	B05A (1×)
R-VGA	B03E (1×)
R-VGA	B04C (1×)
RX0-	B05A (2×)
RX0+	B05A (2×)
RX1-	B05A (2×)
RX1+	B05A (2×)
RX2-	B05A (2×)
RX2+	B05A (2×)
RX51001A-	B03B (1×)
RX51001A-	B09B (1×)
RX51001A+	B03B (1×)
RX51001A+	B09B (1×)
RX51001B-	B03B (1×)
RX51001B-	B09B (1×)
RX51001B+	B03B (1×)
RX51001B+	B09B (1×)
RX51001C-	B03B (1×)
RX51001C-	B09B (1×)
RX51001C+	B03B (1×)
RX51001C+	B09B (1×)
RX51001CLK-	B03B (1×)
RX51001CLK-	B09B (1×)
RX51001CLK+	B03B (1×)
RX51001CLK+	B09B (1×)
RX51001D-	B03B (1×)
RX51001D-	B09B (1×)
RX51001D+	B03B (1×)
RX51001D+	B09B (1×)
RX51001E-	B03B (1×)
RX51001E-	B09B (1×)
RX51001E+	B03B (1×)
RX51001E+	B09B (1×)
RX51002A-	B03B (1×)
RX51002A-	B09B (1×)
RX51002A+	B03B (1×)
RX51002A+	B09B (1×)
RX51002B-	B03B (1×)
RX51002B-	B09B (1×)
RX51002B+	B03B (1×)
RX51002B+	B09B (1×)
RX51002C-	B03B (1×)
RX51002C-	B09B (1×)
RX51002C+	B03B (1×)
RX51002C+	B09B (1×)
RX51002CLK-	B03B (1×)
RX51002CLK-	B09B (1×)
RX51002CLK+	B03B (1×)
RX51002CLK+	B09B (1×)
RX51002D-	B03B (1×)
RX51002D-	B09B (1×)
RX51002D+	B03B (1×)
RX51002D+	B09B (1×)
RX51002E-	B03B (1×)
RX51002E-	B09B (1×)
RX51002E+	B03B (1×)
RX51002E+	B09B (1×)
RXC-	B05A (2×)
RXC+	B05A (2×)
RXD	B03G (1×)
RXD	B04A (1×)
RXD-BOLT-ON	B04A (3×)
RXD-MIPS	B03G (2×)
RXD-MIPS	B04A (2×)
RXD-MIPS2	B03G (2×)
RXD-UP	B03G (1×)
RXD-UP	B03H (2×)
RXD-UP	B04A (2×)
SC1-B	B03E (1×)
SC1-B	B04A (1×)
SC1-B	B04B (2×)
SC1-G	B03E (1×)
SC1-G	B04A (1×)
SC1-G	B04B (2×)
SC1-R	B03E (1×)
SC1-R	B04A (1×)
SC1-R	B04B (1×)
SCL	B09A (1×)
SCL	B09B (3×)
SCL1	B03G (2×)
SCL2	B03G (3×)
SCL3	B03G (2×)
SCL-DISP	B03G (1×)
SCL-DISP	B09B (1×)
SCL-SET	B01B (1×)
SCL-SET	B03G (3×)
SCL-SSB	B02A (1×)
SCL-SSB	B03G (2×)
SCL-SSB	B04A (1×)
SCL-SSB	B05A (1×)
SCL-TUNER	B02A (2×)
SCL-UP-MIPS	B03G (3×)
SCL-UP-MIPS	B03H (2×)
SDA	B09A (1×)
SDA	B09B (3×)
SDA1	B03G (2×)
SDA2	B03G (3×)
SDA3	B03G (2×)
SDA-DISP	B03G (1×)
SDA-DISP	B09B (1×)
SDA-SET	B01B (1×)
SDA-SET	B03G (3×)
SDA-SSB	B02A (1×)
SDA-SSB	B03G (2×)
SDA-SSB	B04A (1×)
SDA-SSB	B05A (1×)
SDA-TUNER	B02A (2×)
SDA-UP-MIPS	B03G (3×)
SDA-UP-MIPS	B03H (2×)
SDM	B03H (3×)
SENSE+1V2-PNX5100	B01B (2×)
SENSE+1V2-PNX85XX	B01A (1×)
SENSE+1V2-PNX85XX	B03A (1×)
SIF	B02A (1×)
SIF	B03E (1×)
SIF-GND	B02A (1×)
SIF-GND	B03E (2×)
SOE_L	B09B (1×)
SOE_L	B09C (1×)
SOE_R	B09B (1×)
SOE_R	B09C (1×)
SPDIF-IN	B03D (1×)
SPDIF-IN	B04A (1×)
SPDIF-OUT	B04B (1×)
SPDIF-OUT	B04C (1×)
SPDIF-OUT-1	B03D (1×)
SPDIF-OUT-1	B04C (1×)
SPI-CLK	B03H (2×)
SPI-CSB	B03H (2×)
SPI-DO_I2C-SDA	B03G (2×)
SPI-DO_I2C-SDA	B04A (1×)
SPI-PROG	B03H (3×)
SPI-SDI	B03H (2×)
SPI-SDO	B03H (2×)
SPI-WP	B03H (3×)
STANDBY	B01B (1×)
STANDBY	B03H (2×)
STANDBY	B04A (1×)
TXD	B03G (1×)
TXD	B04A (1×)
TXD-BOLT-ON	B04A (3×)
TXD-MIPS	B03G (2×)
TXD-MIPS	B04A (2×)
TXD-MIPS2	B03G (2×)
TXD-UP	B03G (1×)
TXD-UP	B03H (2×)
TXD-UP	B04A (2×)
UART-SWITCH	B03H (2×)
USB20-DM	B03G (2×)
USB20-DP	B03G (2×)
USB-OC	B03G (2×)
VCC	B09A (3×)
VCC	B09B (20×)
VCC	B09C (2×)
VCO	B09B (2×)
VCOM_SCL	B09A (2×)
VCOM_SCL	B09B (1×)
VCOM_SDA	B09A (2×)
VCOM_SDA	B09B (1×)
VCOML_OP	B09A (2×)
VCOMLOUT	B09A (1×)
VCOMLOUT	B09C (1×)
VCOMR_OP	B09A (2×)
VCOMROUT	B09A (1×)
VCOMROUT	B09C (1×)
VDD	B09A (4×)
VDD	B09C (2×)
VDD_1V8	B05A (2×)
VDD_D	B09A (4×)
VDDA-ADC	B03A (1×)
VDDA-AUDIO	B03A (2×)
VDDA-AUDIO	B03D (4×)
VDDA-DAC	B03A (1×)
VDDA-DAC	B03D (1×)
VDDA-LVDS	B03A (1×)
VDDA-LVDS	B03B (1×)
VDDH_3V3	B05A (3×)
VDDO_3V3	B05A (2×)
VDDS_3V3	B05A (2×)
VGH	B09A (3×)
VGH_M	B09A (1×)
VGH_M	B09C (2×)
VGHM	B09A (2×)
VGL	B09A (1×)
VGL	B09C (2×)
VON	B09A (1×)
VSW	B01A (1×)
V-SYNC-VGA	B03E (1×)
V-SYNC-VGA	B04C (1×)
WC-EEPROM-PNX5100_SPI-DI	B03G (1×)
WC-EEPROM-PNX5100_SPI-DI	B04A (1×)
WC-EEPROM-PNX5100_SPI-DI	B04C (1×)
WP1	B09B (2×)
WP2	B09B (2×)
WP-NANDFLASH	B03G (2×)
WP-NANDFLASH	B03H (2×)
XIO-ACK	B03G (3×)
XIO-SEL-NAND	B03G (3×)
Y_CVBS-MON-OUT	B03E (1×)
Y_CVBS-MON-OUT	B04B (1×)
Y_CVBS-MON-OUT-SC	B04B (2×)
Z_OUT	B09C (2×)

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18440_601_090225.eps
090225

SSB: SRP List Part 1 (Sharp panel)

Netname	Diagram
+12V	B01A (1×)
+12V	B01B (4×)
+12V	B02A (3×)
+12V	B04A (1×)
+12VD	B01B (1×)
+12VD	B07A (2×)
+12VF	B01A (2×)
+1V2	B02A (2×)
+1V2A	B02A (2×)
+1V2-PNX5100	B01B (1×)
+1V2-PNX5100	B03H (1×)
+1V2-PNX85XX	B01A (2×)
+1V2-PNX85XX	B02A (1×)
+1V2-PNX85XX	B03A (14×)
+1V2-PNX85XX	B03H (1×)
+1V2-STANDBY	B01B (2×)
+1V2-STANDBY	B03A (1×)
+1V8-PNX85XX	B03A (3×)
+1V8-PNX85XX	B03F (5×)
+1V8-PNX85XX	B05A (1×)
+3V3	B01A (1×)
+3V3	B01B (1×)
+3V3	B02A (2×)
+3V3	B03A (14×)
+3V3	B03C (1×)
+3V3	B03D (1×)
+3V3	B03G (11×)
+3V3	B03H (1×)
+3V3	B04A (1×)
+3V3	B04B (3×)
+3V3	B04C (2×)
+3V3	B05A (3×)
+3V3	B05B (2×)
+3V3	B05C (3×)
+3V3	B07A (2×)
+3V3	B07B (2×)
+3V3_BUF	B05C (5×)
+3V3_VCC	B09A (2×)
+3V3_VCC	B09B (8×)
+3V3_VCC	B09C (8×)
+3V3_VCC	B09D (5×)
+3V3A	B02A (3×)
+3V3B	B02A (6×)
+3V3D	B02A (2×)
+3V3E	B02A (2×)
+3V3-ET-ANA	B05B (4×)
+3V3-ET-DIG	B05B (3×)
+3V3F	B01A (2×)
+3V3F	B03A (1×)
+3V3-NAND	B03G (5×)
+3V3-PER	B03A (2×)
+3V3-PER	B03G (12×)
+3V3-PER	B03H (3×)
+3V3-STANDBY	B01B (2×)
+3V3-STANDBY	B03A (1×)
+3V3-STANDBY	B03G (3×)
+3V3-STANDBY	B03H (12×)
+3V3-STANDBY	B04A (3×)
+3V3-STANDBY	B05A (1×)
+5V	B01B (1×)
+5V	B02A (2×)
+5V	B03D (1×)
+5V	B03G (4×)
+5V	B03H (1×)
+5V	B04A (1×)
+5V	B04B (6×)
+5V	B04C (1×)
+5V	B05A (2×)
+5V	B05C (1×)
+5V	B07A (1×)
+5V5-TUN	B01B (1×)
+5V5-TUN	B02A (1×)
+5V-TUNER	B02A (10×)
+AUDIO-POWER	B01B (1×)
+AUDIO-POWER	B03C (2×)
+AUDIO-POWER	B06A (2×)
+VDISP-IN	B07A (1×)
+VDISP-IN	B07B (1×)
+VDISP-OUT	B07B (1×)
+VDISP-OUT	B09A (6×)
+VDISP-OUT	B09C (1×)
3V3-ST	B01A (1×)
3V3-ST	B01B (1×)
A(0)	B09B (2×)
A(1)	B09B (2×)
A(10)	B09B (2×)
A(2)	B09B (2×)
A(3)	B09B (2×)
A(4)	B09B (2×)
A(5)	B09B (2×)
A(6)	B09B (2×)
A(7)	B09B (2×)
A(8)	B09B (2×)
A(9)	B09B (2×)
ADAC(1)	B03D (2×)
ADAC(1)	B06A (1×)
ADAC(2)	B03D (2×)
ADAC(2)	B06A (1×)
ADAC(3)	B03C (2×)
ADAC(3)	B03D (2×)
ADAC(4)	B03C (2×)
ADAC(4)	B03D (2×)
ADAC(5)	B03C (1×)
ADAC(5)	B03D (1×)
ADAC(6)	B03C (1×)
ADAC(6)	B03D (1×)
ADAC(7)	B03C (1×)
ADAC(7)	B03D (3×)
ADAC(8)	B03C (1×)
ADAC(8)	B03D (3×)
ALE	B03H (1×)
ANTENNA-CTRL	B02A (2×)
ANTENNA-SUPPLY	B02A (2×)
A-PLOP	B03C (1×)
A-PLOP	B04B (1×)
A-PLOP	B04C (2×)
AP-SCART-OUT-L	B04B (5×)
AP-SCART-OUT-R	B04B (5×)
ARX0-	B05A (2×)
ARX0+	B05A (2×)
ARX1-	B05A (2×)
ARX1+	B05A (2×)
ARX2-	B05A (2×)
ARX2+	B05A (2×)
ARX-5V	B05A (3×)
ARXC-	B05A (2×)
ARXC+	B05A (2×)
ARX-DDC-CLK	B05A (2×)
ARX-DDC-DAT	B05A (2×)
ARX-HPD	B05A (2×)
ASIC_CS1	B09C (2×)
ASIC_CS2	B09C (2×)
ASIC_CS3	B09C (2×)
ASIC_CS4	B09C (2×)
ASIC_CS5	B09C (2×)
ASIC_CS6	B09C (2×)
A-STBY	B03C (1×)
A-STBY	B06A (2×)
AUD_GND	B03D (4×)
AUD_GND	B06A (2×)
AUDIO-CL-L	B03C (1×)
AUDIO-CL-L	B04B (1×)
AUDIO-CL-R	B03C (1×)
AUDIO-CL-R	B04B (1×)
AUDIO-IN1-L	B03D (1×)
AUDIO-IN1-L	B04A (1×)
AUDIO-IN1-L	B04B (2×)
AUDIO-IN1-R	B03D (1×)
AUDIO-IN1-R	B04A (1×)
AUDIO-IN1-R	B04B (2×)
AUDIO-IN2-L	B03D (1×)
AUDIO-IN2-L	B04B (2×)
AUDIO-IN2-R	B03D (1×)
AUDIO-IN2-R	B04B (2×)
AUDIO-IN3-L	B03D (1×)
AUDIO-IN3-L	B04C (1×)
AUDIO-IN3-R	B03D (1×)
AUDIO-IN3-R	B04C (1×)
AUDIO-IN4-L	B03D (1×)
AUDIO-IN4-L	B04C (1×)
AUDIO-IN4-R	B03D (1×)
AUDIO-IN4-R	B04C (1×)
AUDIO-IN5-L	B03D (1×)
AUDIO-IN5-L	B04C (2×)
AUDIO-IN5-R	B03D (1×)
AUDIO-IN5-R	B04C (2×)
AUDIO-MUTE	B03H (2×)
AUDIO-MUTE	B04C (1×)
AUDIO-MUTE	B06A (1×)
AUDIO-OUT-L	B03C (1×)
AUDIO-OUT-L	B04C (1×)
AUDIO-OUT-R	B03C (1×)
AUDIO-OUT-R	B04C (1×)
AUDIO-RESET	B03C (2×)
AUDIO-RESET	B03H (2×)
AUDIO-VDD	B03C (7×)
AV1-BLK	B03H (1×)
AV1-BLK	B04B (1×)
AV1-BLK-BO	B04A (1×)
AV1-BLK-BO	B04B (2×)
AV1-STATUS	B03H (1×)
AV1-STATUS	B04A (1×)
AV1-STATUS	B04B (2×)
AV2-BLK_LCD-SDA	B03H (1×)
AV2-BLK_LCD-SDA	B04A (1×)
AV2-BLK_LCD-SDA	B04B (2×)
AV2-PB_SC2-B	B03E (1×)
AV2-PB_SC2-B	B04B (2×)
AV2-PR_SC2-R	B03E (1×)
AV2-PR_SC2-R	B04B (2×)
AV2-STATUS	B03H (1×)
AV2-STATUS	B04B (2×)
AV2-Y_SC2-G	B03E (1×)
AV2-Y_SC2-G	B04B (2×)
AV3-PB	B03E (1×)
AV3-PB	B04C (1×)
AV3-PR	B03E (1×)
AV3-PR	B04C (1×)
AV3-Y	B03E (1×)
AV3-Y	B04C (1×)
BA0	B09B (2×)
BACKLIGHT-BOOST	B01B (1×)
BACKLIGHT-BOOST	B07A (1×)
BACKLIGHT-BOOST-IN	B07A (1×)
BACKLIGHT-BOOST-IN	B07B (1×)
BACKLIGHT-IN	B07A (1×)
BACKLIGHT-IN	B07B (1×)
BACKLIGHT-OUT	B01B (1×)
BACKLIGHT-OUT	B07A (1×)
BOLT-ON-IO	B03H (2×)
BOLT-ON-IO	B04A (1×)
BOLT-ON-TS-ENn	B03H (2×)
BOOTMODE_PNX8543-BL-CTRL	B03G (1×)
BOOTMODE_PNX8543-BL-CTRL	B07B (1×)
BRX0-	B05A (2×)
BRX0+	B05A (2×)
BRX1-	B05A (2×)
BRX1+	B05A (2×)
BRX2-	B05A (2×)
BRX2+	B05A (2×)
BRX-5V	B05A (3×)
BRXC-	B05A (2×)
BRXC+	B05A (2×)
BRX-DDC-CLK	B05A (2×)
BRX-DDC-DAT	B05A (2×)
BRX-HPD	B05A (2×)
B-VGA	B03E (1×)
B-VGA	B04C (1×)
CA-ADDEN	B03B (1×)
CA-ADDEN	B05C (3×)
CA-CD1	B03B (1×)
CA-CD1	B05C (2×)
CA-CD2	B03B (1×)
CA-CD2	B05C (2×)
CA-CE1	B05C (2×)
CA-CE2	B05C (2×)
CA-DATADIR	B03B (1×)
CA-DATADIR	B05C (1×)
CA-DATAEN	B03B (1×)
CA-DATAEN	B05C (1×)
CA-INPACK	B05C (2×)
CA-IORD	B05C (2×)
CA-IOWR	B05C (2×)
CA-MDI0	B03B (1×)
CA-MDI0	B05C (1×)
CA-MDI1	B03B (1×)
CA-MDI1	B05C (1×)
CA-MDI2	B03B (1×)
CA-MDI2	B05C (1×)
CA-MDI3	B03B (1×)
CA-MDI3	B05C (1×)
CA-MDI4	B03B (1×)
CA-MDI4	B05C (1×)
CA-MDI5	B03B (1×)
CA-MDI5	B05C (1×)
CA-MDI6	B03B (1×)
CA-MDI6	B05C (1×)
CA-MDI7	B03B (1×)
CA-MDI7	B05C (1×)
CA-MDO(0)	B03B (1×)
CA-MDO(0)	B05C (1×)
CA-MDO(1)	B03B (1×)
CA-MDO(1)	B05C (1×)
CA-MDO(2)	B03B (1×)
CA-MDO(2)	B05C (1×)
CA-MDO(3)	B03B (1×)
CA-MDO(3)	B05C (1×)
CA-MDO(4)	B03B (1×)
CA-MDO(4)	B05C (1×)
CA-MDO(5)	B03B (1×)
CA-MDO(5)	B05C (1×)
CA-MDO(6)	B03B (1×)
CA-MDO(6)	B05C (1×)
CA-MDO(7)	B03B (1×)
CA-MDO(7)	B05C (1×)
CA-MICLK	B03B (1×)
CA-MICLK	B05C (1×)
CA-MISTRT	B03B (1×)
CA-MISTRT	B05C (1×)
CA-MIVAL	B03B (1×)
CA-MIVAL	B05C (1×)
CA-MOCLK_VS2	B03B (2×)
CA-MOCLK_VS2	B05C (1×)
CA-MOSTRT	B03B (1×)
CA-MOSTRT	B05C (1×)
CA-MOVAL	B03B (1×)
CA-MOVAL	B05C (1×)
CA-OE	B05C (2×)
CA-REG	B05C (2×)
CA-RST	B03B (1×)
CA-RST	B05C (1×)
CAS	B09B (2×)
CA-VS1	B03B (1×)
CA-VS1	B05C (2×)
CA-WAIT	B05C (3×)
CA-WE	B05C (2×)
CEC	B05A (6×)
CEC-HDMI	B03H (2×)
CEC-HDMI	B05A (1×)
CLK-SCL	B04C (1×)
CLK-SCL	B09C (1×)
CPFB1	B09A (3×)
CRX0-	B05A (2×)
CRX0+	B05A (2×)
CRX1-	B05A (2×)
CRX1+	B05A (2×)
CRX2-	B05A (2×)
CRX2+	B05A (2×)
CRX-5V	B05A (3×)
CRXC-	B05A (2×)
CRXC+	B05A (2×)
CRX-DDC-CLK	B05A (2×)
CRX-DDC-DAT	B05A (2×)
CRX-HPD	B05A (2×)
CS1	B09C (2×)
CS1	B09D (2×)
CS10	B09C (2×)
CS10	B09D (2×)
CS11	B09C (2×)
CS11	B09D (2×)
CS12	B09C (2×)
CS12	B09D (2×)
CS2	B09C (2×)
CS2	B09D (2×)
CS3	B09C (2×)
CS3	B09D (2×)
CS4	B09C (2×)
CS4	B09D (2×)
CS5	B09C (2×)
CS5	B09D (2×)
CS6	B09C (2×)
CS6	B09D (2×)
CS7	B09C (2×)
CS7	B09D (2×)
CS8	B09C (2×)
CS8	B09D (2×)
CS9	B09C (2×)
CS9	B09D (2×)
CVBS	B02A (1×)
CVBS	B03E (1×)
CVBS1	B03E (1×)
CVBS1	B04A (1×)
CVBS1	B04B (2×)
CVBS2	B03E (1×)
CVBS2	B04B (2×)
CVBS-OUT-SC1	B04B (3×)
CVBS-OUT-SC1-PBS	B04A (1×)
CVBS-OUT-SC1-PBS	B04B (1×)
CVBS-OUT-SC2	B04B (2×)
CVBS-OUT-SC2	B04C (1×)
CVBS-TER-OUT	B02A (1×)
CVBS-TER-OUT	B04B (1×)
DATA-SDA	B04C (1×)
DATA-SDA	B09C (1×)
DDC-SCL	B05A (3×)
DDC-SDA	B05A (3×)
DDR2-A0	B03F (3×)
DDR2-A1	B03F (3×)
DDR2-A10	B03F (3×)
DDR2-A11	B03F (3×)
DDR2-A12	B03F (3×)
DDR2-A2	B03F (3×)
DDR2-A3	B03F (3×)
DDR2-A4	B03F (3×)
DDR2-A5	B03F (3×)
DDR2-A6	B03F (3×)
DDR2-A7	B03F (3×)
DDR2-A8	B03F (3×)
DDR2-A9	B03F (3×)
DDR2-BA0	B03F (3×)
DDR2-BA1	B03F (3×)
DDR2-BA2	B03F (3×)
DDR2-CAS	B03F (3×)
DDR2-CKE	B03F (3×)
DDR2-CLK_N	B03F (3×)
DDR2-CLK_P	B03F (3×)
DDR2-CS	B03F (3×)
DDR2-D0	B03F (2×)
DDR2-D1	B03F (2×)
DDR2-D10	B03F (2×)
DDR2-D11	B03F (2×)
DDR2-D12	B03F (2×)
DDR2-D13	B03F (2×)
DDR2-D14	B03F (2×)
DDR2-D15	B03F (2×)
DDR2-D16	B03F (2×)
DDR2-D17	B03F (2×)
DDR2-D18	B03F (2×)
DDR2-D19	B03F (2×)
DDR2-D2	B03F (2×)
DDR2-D20	B03F (2×)
DDR2-D21	B03F (2×)
DDR2-D22	B03F (2×)
DDR2-D23	B03F (2×)
DDR2-D24	B03F (2×)
DDR2-D25	B03F (2×)
DDR2-D26	B03F (2×)
DDR2-D27	B03F (2×)
DDR2-D28	B03F (2×)
DDR2-D29	B03F (2×)
DDR2-D3	B03F (2×)
DDR2-D30	B03F (2×)
DDR2-D31	B03F (2×)
DDR2-D4	B03F (2×)
DDR2-D5	B03F (2×)
DDR2-D6	B03F (2×)
DDR2-D7	B03F (2×)
DDR2-D8	B03F (2×)
DDR2-D9	B03F (2×)
DDR2-DQM0	B03F (2×)
DDR2-DQM1	B03F (2×)
DDR2-DQM2	B03F (2×)
DDR2-DQM3	B03F (2×)
DDR2-DQS0_N	B03F (2×)
DDR2-DQS0_P	B03F (2×)
DDR2-DQS1_N	B03F (2×)
DDR2-DQS1_P	B03F (2×)
DDR2-DQS2_N	B03F (2×)
DDR2-DQS2_P	B03F (2×)
DDR2-DQS3_N	B03F (2×)
DDR2-DQS3_P	B03F (2×)
DDR2-ODT	B03F (3×)
DDR2-RAS	B03F (3×)
DDR2-VREF-CTRL	B03F (2×)
DDR2-VREF-DDR	B03F (3×)
DDR2-WE	B03F (3×)
DETECT1	B01A (1×)
DETECT1	B03H (3×)
DETECT-12V	B01B (1×)
DETECT-12V	B03H (1×)
DETECT2	B03H (3×)
DQ(0)	B09B (2×)
DQ(1)	B09B (2×)
DQ(10)	B09B (2×)
DQ(11)	B09B (2×)
DQ(12)	B09B (2×)
DQ(13)	B09B (2×)
DQ(14)	B09B (2×)
DQ(15)	B09B (2×)
DQ(16)	B09B (2×)
DQ(17)	B09B (2×)
DQ(18)	B09B (2×)
DQ(19)	B09B (2×)
DQ(2)	B09B (2×)
DQ(20)	B09B (2×)
DQ(21)	B09B (2×)
DQ(22)	B09B (2×)
DQ(23)	B09B (2×)
DQ(24)	B09B (2×)
DQ(25)	B09B (2×)
DQ(26)	B09B (2×)
DQ(27)	B09B (2×)
DQ(28)	B09B (2×)
DQ(29)	B09B (2×)
DQ(3)	B09B (2×)
DQ(30)	B09B (2×)
DQ(31)	B09B (2×)
DQ(4)	B09B (2×)
DQ(5)	B09B (2×)
DQ(6)	B09B (2×)
DQ(7)	B09B (2×)
DQ(8)	B09B (2×)
DQ(9)	B09B (2×)
DQM	B09B (2×)
DRX0-	B05A (2×)
DRX0+	B05A (2×)
DRX1-	B05A (2×)
DRX1+	B05A (2×)
DRX2-	B05A (2×)
DRX2+	B05A (2×)
DRX-5V	B05A (3×)
DRXC-	B05A (2×)
DRXC+	B05A (2×)
DRX-DDC-CLK	B05A (2×)
DRX-DDC-DAT	B05A (2×)
DRX-HPD	B05A (2×)
DTC1	B09A (2×)
DTC2	B09A (2×)
DTC3	B09A (3×)
EA	B03H (1×)
EJTAG-DETECT	B03G (1×)
EJTAG-DETECT	B03H (2×)
EJTAG-TCK	B03G (3×)
EJTAG-TDI	B03G (3×)
EJTAG-TDO	B03G (3×)
EJTAG-TMS	B03G (3×)
EJTAG-TRSTN	B03G (3×)
ENABLE-3V3	B01A (1×)
ENABLE-3V3	B01B (1×)
ENABLE-3V3	B03H (2×)
EXCLK	B09B (2×)
FB3	B09A (2×)
FE-CLK	B02A (1×)
FE-CLK	B03B (1×)
FE-DATA(0)	B02A (1×)
FE-DATA(0)	B03B (1×)
FE-DATA(1)	B02A (1×)
FE-DATA(1)	B03B (1×)
FE-DATA(2)	B02A (1×)
FE-DATA(2)	B03B (1×)
FE-DATA(3)	B02A (1×)
FE-DATA(3)	B03B (1×)
FE-DATA(4)	B02A (1×)
FE-DATA(4)	B03B (1×)
FE-DATA(5)	B02A (1×)
FE-DATA(5)	B03B (1×)
FE-DATA(6)	B02A (1×)
FE-DATA(6)	B03B (1×)
FE-DATA(7)	B02A (1×)
FE-DATA(7)	B03B (1×)
FE-ERR	B03B (2×)
FE-SOP	B02A (1×)
FE-SOP	B03B (1×)
FE-VALID	B02A (1×)
FE-VALID	B03B (1×)
FRONT-C	B03E (1×)
FRONT-C	B04C (2×)
FRONT-Y_CVBS	B03E (1×)
FRONT-Y_CVBS	B04C (2×)
GCK	B09B (1×)
GCK	B09C (1×)
GCK	B09D (2×)
GCK_A	B09C (1×)
GCK_A	B09D (2×)
GND-SIG	B01A (12×)
GNDSND	B01B (2×)
GNDSND	B06A (20×)
GOE	B09B (1×)
GOE	B09D (2×)
GSLOP	B09A (1×)
GSLOP	B09B (1×)
GSP1	B09B (1×)
GSP1	B09C (1×)
GSP1	B09D (2×)
G-VGA	B03E (1×)
G-VGA	B04C (1×)
HP_LOUT	B03C (1×)
HP_LOUT	B04C (1×)
HP_ROUT	B03C (1×)
HP_ROUT	B04C (1×)
H-SYNC-VGA	B03E (1×)
H-SYNC-VGA	B04C (1×)
IF-AGC	B02A (2×)
IF-N	B02A (2×)
IF-P	B02A (2×)
IN-	B09A (2×)
IN+	B09A (2×)
IN1	B09A (1×)
IN1	B09C (1×)
IN2	B09A (1×)
IN2	B09C (1×)
IN3	B09A (1×)
IN3	B09C (1×)
IN4	B09A (1×)
IN4	B09C (1×)
IRQ-CA	B03B (1×)
IRQ-CA	B03G (2×)
IRQ-CA	B05C (2×)
IRQ-PCI	B03G (1×)
IRQ-PCI	B05B (1×)
KEYBOARD	B03G (1×)
KEYBOARD	B03H (2×)
LAMP-ON-OUT	B01B (1×)
LAMP-ON-OUT	B03H (2×)
LB0-	B09B (1×)
LB0-	B09D (1×)
LB0+	B09B (1×)
LB0+	B09D (1×)
LB1-	B09B (1×)
LB1-	B09D (1×)
LB1+	B09B (1×)
LB1+	B09D (1×)
LB2-	B09B (1×)
LB2-	B09D (1×)
LB2+	B09B (1×)
LB2+	B09D (1×)
LB3-	B09B (1×)
LB3-	B09D (1×)
LB3+	B09B (1×)

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SSB: SRP List Part 2 (Sharp panel)

Netname	Diagram
LB3+	B09D (1×)
LCD-SCL	B03H (2×)
LCD-SCL	B04A (1×)
LCD-SCL	B04C (1×)
LCDTL3	B09A (3×)
LCK-	B09B (1×)
LCK-	B09D (1×)
LCK+	B09B (1×)
LCK+	B09D (1×)
LED1	B03G (2×)
LED1	B03H (1×)
LED2	B03G (2×)
LED2	B03H (1×)
LEFT-SPEAKER	B06A (4×)
LG0-	B09B (1×)
LG0-	B09D (1×)
LG0+	B09B (1×)
LG0+	B09D (1×)
LG1-	B09B (1×)
LG1-	B09D (1×)
LG1+	B09B (1×)
LG1+	B09D (1×)
LG2-	B09B (1×)
LG2-	B09D (1×)
LG2+	B09B (1×)
LG2+	B09D (1×)
LG3-	B09B (1×)
LG3-	B09D (1×)
LG3+	B09B (1×)
LG3+	B09D (1×)
LIGHT-SENSOR	B03G (2×)
LIGHT-SENSOR	B03H (1×)
LR0-	B09B (1×)
LR0-	B09D (1×)
LR0+	B09B (1×)
LR0+	B09D (1×)
LR1-	B09B (1×)
LR1-	B09D (1×)
LR1+	B09B (1×)
LR1+	B09D (1×)
LR2-	B09B (1×)
LR2-	B09D (1×)
LR2+	B09B (1×)
LR2+	B09D (1×)
LR3-	B09B (1×)
LR3-	B09D (1×)
LR3+	B09B (1×)
LR3+	B09D (1×)
LS	B09B (1×)
LS	B09D (2×)
LVDSVDD3V3	B09B (2×)
MDO0	B05C (4×)
MDO1	B05C (4×)
MDO2	B05C (4×)
MDO3	B05C (4×)
MDO4	B05C (4×)
MDO5	B05C (4×)
MDO6	B05C (4×)
MDO7	B05C (4×)
MEMCLK	B09B (2×)
MOCLKA	B05C (4×)
MOSTRTA	B05C (4×)
MOVALA	B05C (4×)
MUTE	B06A (2×)
MVLS	B09A (1×)
MVLS	B09C (1×)
NAND-AD(0)	B03G (2×)
NAND-AD(1)	B03G (2×)
NAND-AD(2)	B03G (2×)
NAND-AD(3)	B03G (2×)
NAND-AD(4)	B03G (2×)
NAND-AD(5)	B03G (2×)
NAND-AD(6)	B03G (2×)
NAND-AD(7)	B03G (2×)
NAND-ALE	B03G (2×)
NAND-CLE	B03G (2×)
NAND-REn	B03G (2×)
NAND-WEn	B03G (2×)
OUT3	B09A (3×)
P_GND	B09A (17×)
PBS_SPI_DI	B04A (2×)
PBS-I2C-SCL	B03G (2×)
PBS-I2C-SCL	B04A (2×)
PCI-AD0	B03G (2×)
PCI-AD0	B05B (1×)
PCI-AD0	B05C (1×)
PCI-AD1	B03G (2×)
PCI-AD1	B05B (1×)
PCI-AD1	B05C (1×)
PCI-AD10	B03G (1×)
PCI-AD10	B05B (1×)
PCI-AD10	B05C (1×)
PCI-AD11	B03G (1×)
PCI-AD11	B05B (1×)
PCI-AD11	B05C (1×)
PCI-AD12	B03G (1×)
PCI-AD12	B05B (1×)
PCI-AD12	B05C (1×)
PCI-AD13	B03G (1×)
PCI-AD13	B05B (1×)
PCI-AD13	B05C (1×)
PCI-AD14	B03G (1×)
PCI-AD14	B05B (1×)
PCI-AD14	B05C (1×)
PCI-AD15	B03G (1×)
PCI-AD15	B05B (1×)
PCI-AD16	B03G (1×)
PCI-AD16	B05B (1×)
PCI-AD16	B05C (1×)
PCI-AD17	B03G (1×)
PCI-AD17	B05B (1×)
PCI-AD17	B05C (1×)
PCI-AD18	B03G (1×)
PCI-AD18	B05B (1×)
PCI-AD18	B05C (1×)
PCI-AD19	B03G (1×)
PCI-AD19	B05B (1×)
PCI-AD19	B05C (1×)
PCI-AD2	B03G (1×)
PCI-AD2	B05B (1×)
PCI-AD2	B05C (1×)
PCI-AD20	B03G (1×)
PCI-AD20	B05B (1×)
PCI-AD21	B03G (1×)
PCI-AD21	B05B (1×)
PCI-AD22	B03G (1×)
PCI-AD22	B05B (1×)
PCI-AD22	B05C (1×)
PCI-AD23	B03G (1×)
PCI-AD23	B05B (2×)
PCI-AD23	B05C (1×)
PCI-AD24	B03G (3×)
PCI-AD24	B05B (1×)
PCI-AD24	B05C (1×)
PCI-AD25	B03G (2×)
PCI-AD25	B05B (1×)
PCI-AD25	B05C (1×)
PCI-AD26	B03G (2×)
PCI-AD26	B05B (1×)
PCI-AD26	B05C (1×)
PCI-AD27	B03G (2×)
PCI-AD27	B05B (1×)
PCI-AD27	B05C (1×)
PCI-AD28	B03G (2×)
PCI-AD28	B05B (1×)
PCI-AD28	B05C (1×)
PCI-AD29	B03G (2×)
PCI-AD29	B05B (1×)
PCI-AD29	B05C (1×)
PCI-AD3	B03G (1×)
PCI-AD3	B05B (1×)
PCI-AD3	B05C (1×)
PCI-AD30	B03G (2×)
PCI-AD30	B05B (1×)
PCI-AD30	B05C (1×)
PCI-AD31	B03G (2×)
PCI-AD31	B05B (1×)
PCI-AD31	B05C (1×)
PCI-AD4	B03G (1×)
PCI-AD4	B05B (1×)
PCI-AD4	B05C (1×)
PCI-AD5	B03G (1×)
PCI-AD5	B05B (1×)
PCI-AD5	B05C (1×)
PCI-AD6	B03G (1×)
PCI-AD6	B05B (1×)
PCI-AD6	B05C (1×)
PCI-AD7	B03G (1×)
PCI-AD7	B05B (1×)
PCI-AD7	B05C (1×)
PCI-AD8	B03G (1×)
PCI-AD8	B05B (1×)
PCI-AD8	B05C (1×)
PCI-AD9	B03G (1×)
PCI-AD9	B05B (1×)
PCI-AD9	B05C (1×)
PCI-CBE0	B03G (1×)
PCI-CBE0	B05B (1×)
PCI-CBE1	B03G (2×)
PCI-CBE1	B05B (1×)
PCI-CBE1	B05C (1×)
PCI-CBE2	B03G (2×)
PCI-CBE2	B05B (1×)
PCI-CBE2	B05C (1×)
PCI-CBE3	B03G (1×)
PCI-CBE3	B05B (1×)
PCI-CLK-ETHERNET	B03G (1×)
PCI-CLK-ETHERNET	B05B (1×)
PCI-CLK-OUT	B03G (2×)
PCI-CLK-PNX5100	B03G (1×)
PCI-CLK-PNX8543	B03G (2×)
PCI-DEVSEL	B03G (2×)
PCI-DEVSEL	B05B (1×)
PCI-FRAME	B03G (2×)
PCI-FRAME	B05B (1×)
PCI-GNT	B03G (2×)
PCI-GNT	B05B (1×)
PCI-IRDY	B03G (2×)
PCI-IRDY	B05B (1×)
PCI-PAR	B03G (1×)
PCI-PAR	B05B (1×)
PCI-PERR	B03G (2×)
PCI-PERR	B05B (1×)
PCI-REQ	B03G (2×)
PCI-REQ	B05B (1×)
PCI-SERR	B03G (2×)
PCI-SERR	B05B (1×)
PCI-STOP	B03G (2×)
PCI-STOP	B05B (1×)
PCI-TRDY	B03G (2×)
PCI-TRDY	B05B (1×)
PCMCIA-A0	B05C (2×)
PCMCIA-A1	B05C (2×)
PCMCIA-A10	B05C (2×)
PCMCIA-A11	B05C (2×)
PCMCIA-A12	B05C (2×)
PCMCIA-A13	B05C (2×)
PCMCIA-A14	B05C (2×)
PCMCIA-A2	B05C (2×)
PCMCIA-A3	B05C (2×)
PCMCIA-A4	B05C (2×)
PCMCIA-A5	B05C (2×)
PCMCIA-A6	B05C (2×)
PCMCIA-A7	B05C (2×)
PCMCIA-A8	B05C (2×)
PCMCIA-A9	B05C (2×)
PCMCIA-D0	B05C (2×)
PCMCIA-D1	B05C (2×)
PCMCIA-D2	B05C (2×)
PCMCIA-D3	B05C (2×)
PCMCIA-D4	B05C (2×)
PCMCIA-D5	B05C (2×)
PCMCIA-D6	B05C (2×)
PCMCIA-D7	B05C (2×)
PCMCIA-VCC-VPP	B05C (5×)
PDN	B02A (2×)
PDP	B02A (2×)
PG2	B09A (3×)
PG3	B09A (1×)
PG3	B09B (1×)
PI_3	B03H (2×)
PI_3	B09D (1×)
PNX8543-BL-BOOST_SPI-CLK	B03G (2×)
PNX8543-BL-BOOST_SPI-CLK	B04A (1×)
PNX8543-BL-BOOST_SPI-CLK	B07B (1×)
PNX8543-LCD-PWR-ON_SPI-DI	B03G (2×)
PNX8543-LCD-PWR-ON_SPI-DI	B04A (1×)
PNX8543-LCD-PWR-ON_SPI-DI	B07B (1×)
POWER-OK	B01B (1×)
POWER-OK	B03H (2×)
PROT-DC	B01A (1×)
PROT-DC	B01B (1×)
PSEN	B03H (1×)
RAS	B09B (2×)
RB0-	B09B (1×)
RB0-	B09D (1×)
RB0+	B09B (1×)
RB0+	B09D (1×)
RB1-	B09B (1×)
RB1-	B09D (1×)
RB1+	B09B (1×)
RB1+	B09D (1×)
RB2-	B09B (1×)
RB2-	B09D (1×)
RB2+	B09B (1×)
RB2+	B09D (1×)
RB3-	B09B (1×)
RB3-	B09D (1×)
RB3+	B09B (1×)
RB3+	B09D (1×)
RC	B03G (1×)
RC	B03H (1×)
RC	B04A (1×)
RC_uP	B03H (2×)
RC1	B03H (1×)
RC1	B04A (1×)
RC1	B04C (1×)
RC2	B03H (1×)
RC2	B04A (1×)
RC2	B04C (1×)
RCK-	B09B (1×)
RCK-	B09D (1×)
RCK+	B09B (1×)
RCK+	B09D (1×)
REGIMBEAU_CVBS-SWITCH	B03H (2×)
REGIMBEAU_CVBS-SWITCH	B04B (1×)
RESET_A	B09B (2×)
RESET_A	B09C (1×)
RESET_A	B09D (1×)
RESET_B	B09B (1×)
RESET_B	B09C (1×)
RESET-ETHERNET	B03H (2×)
RESET-ETHERNET	B05B (2×)
RESET-NVM	B03H (3×)
RESET-PNX5100	B03H (2×)
RESET-STBY	B03H (2×)
RESET-SYSTEM	B02A (1×)
RESET-SYSTEM	B03G (1×)
RESET-SYSTEM	B03H (3×)
REV	B09B (1×)
REV	B09C (1×)
REV	B09D (2×)
RF-AGC	B02A (2×)
RG0-	B09B (1×)
RG0-	B09D (1×)
RG0+	B09B (1×)
RG0+	B09D (1×)
RG1-	B09B (1×)
RG1-	B09D (1×)
RG1+	B09B (1×)
RG1+	B09D (1×)
RG2-	B09B (1×)
RG2-	B09D (1×)
RG2+	B09B (1×)
RG2+	B09D (1×)
RG3-	B09B (1×)
RG3-	B09D (1×)
RG3+	B09B (1×)
RG3+	B09D (1×)
RIGHT-SPEAKER	B06A (4×)
ROM_VCC2	B09B (1×)
RR0-	B09D (1×)
RR0-	B09B (1×)
RR0+	B09D (1×)
RR0+	B09B (1×)
RR1-	B09D (1×)
RR1-	B09B (1×)
RR1+	B09D (1×)
RR1+	B09B (1×)
RR2-	B09D (1×)
RR2-	B09B (1×)
RR2+	B09D (1×)
RR2+	B09B (1×)
RR3-	B09D (1×)
RR3-	B09B (1×)
RR3+	B09D (1×)
RR3+	B09B (1×)
RREF-PNX85XX	B03A (2×)
RREF-PNX85XX	B05A (1×)
RSDSVDD3V3	B09B (1×)
R-VGA	B03E (1×)
R-VGA	B04C (1×)
RX0-	B05A (2×)
RX0+	B05A (2×)
RX1-	B05A (2×)
RX1+	B05A (2×)
RX2-	B05A (2×)
RX2+	B05A (2×)
RX51001A-	B03B (1×)
RX51001A-	B09B (2×)
RX51001A+	B03B (1×)
RX51001A+	B09B (2×)
RX51001B-	B03B (1×)
RX51001B-	B09B (2×)
RX51001B+	B03B (1×)
RX51001B+	B09B (2×)
RX51001C-	B03B (1×)
RX51001C-	B09B (2×)
RX51001C+	B03B (1×)
RX51001C+	B09B (2×)
RX51001CLK-	B03B (1×)
RX51001CLK-	B09B (2×)
RX51001CLK+	B03B (1×)
RX51001CLK+	B09B (2×)
RX51001D-	B03B (1×)
RX51001D-	B09B (2×)
RX51001D+	B03B (1×)
RX51001D+	B09B (2×)
RX51001E-	B03B (1×)
RX51001E-	B09B (2×)
RX51001E+	B03B (1×)
RX51001E+	B09B (2×)
RX51002A-	B03B (1×)
RX51002A-	B09B (2×)
RX51002A+	B03B (1×)
RX51002A+	B09B (2×)
RX51002B-	B03B (1×)
RX51002B-	B09B (2×)
RX51002B+	B03B (1×)
RX51002B+	B09B (2×)
RX51002C-	B03B (1×)
RX51002C-	B09B (2×)
RX51002C+	B03B (1×)
RX51002C+	B09B (2×)
RX51002CLK-	B03B (1×)
RX51002CLK-	B09B (2×)
RX51002CLK+	B03B (1×)
RX51002CLK+	B09B (2×)
RX51002D-	B03B (1×)
RX51002D-	B09B (2×)
RX51002D+	B03B (1×)
RX51002D+	B09B (2×)
RX51002E-	B03B (1×)
RX51002E-	B09B (2×)
RX51002E+	B03B (1×)
RX51002E+	B09B (2×)
RXC-	B05A (2×)
RXC+	B05A (2×)
RXD	B03G (1×)
RXD	B04A (1×)
RXD-BOLT-ON	B04A (3×)
RXD-MIPS	B03G (2×)
RXD-MIPS	B04A (2×)
RXD-MIPS2	B03G (2×)
RXD-UP	B03G (1×)
RXD-UP	B03H (2×)
RXD-UP	B04A (2×)
SC1-B	B03E (1×)
SC1-B	B04A (1×)
SC1-B	B04B (2×)
SC1-G	B03E (1×)
SC1-G	B04A (1×)
SC1-G	B04B (2×)
SC1-R	B03E (1×)
SC1-R	B04A (1×)
SC1-R	B04B (1×)
SCL	B09B (1×)
SCL	B09D (1×)
SCL1	B03G (2×)
SCL2	B03G (3×)
SCL3	B03G (2×)
SCL-DISP	B03G (1×)
SCL-DISP	B09D (1×)
SCL-SET	B01B (1×)
SCL-SET	B03G (3×)
SCL-SSB	B02A (1×)
SCL-SSB	B03G (2×)
SCL-SSB	B04A (1×)
SCL-SSB	B05A (1×)
SCL-TUNER	B02A (2×)
SCL-UP-MIPS	B03G (3×)
SCL-UP-MIPS	B03H (2×)
SDA	B09B (1×)
SDA	B09D (1×)
SDA1	B03G (2×)
SDA2	B03G (3×)
SDA3	B03G (2×)
SDA-DISP	B03G (1×)
SDA-DISP	B09D (1×)
SDA-SET	B01B (1×)
SDA-SET	B03G (3×)
SDA-SSB	B02A (1×)
SDA-SSB	B03G (2×)
SDA-SSB	B04A (1×)
SDA-SSB	B05A (1×)
SDA-TUNER	B02A (2×)
SDA-UP-MIPS	B03G (3×)
SDA-UP-MIPS	B03H (2×)
SDM	B03H (3×)
SDRAMVDD3V3	B09B (1×)
SELLVDS	B09B (2×)
SENSE+1V2-PNX5100	B01B (2×)
SENSE+1V2-PNX85XX	B01A (1×)
SENSE+1V2-PNX85XX	B03A (1×)
SIF	B02A (1×)
SIF	B03E (1×)
SIF-GND	B02A (1×)
SIF-GND	B03E (2×)
SPA1	B09B (1×)
SPA1	B09D (1×)
SPA2	B09B (1×)
SPA2	B09D (1×)
SPDIF-IN	B03D (1×)
SPDIF-IN	B04A (1×)
SPDIF-OUT	B04B (1×)
SPDIF-OUT	B04C (1×)
SPDIF-OUT-1	B03D (1×)
SPDIF-OUT-1	B04C (1×)
SPI-CLK	B03H (2×)
SPI-CSB	B03H (2×)
SPI-DO_I2C-SDA	B03G (2×)
SPI-DO_I2C-SDA	B04A (1×)
SPI-PROG	B03H (3×)
SPI-SDI	B03H (2×)
SPI-SDO	B03H (2×)
SPI-WP	B03H (3×)
STANDBY	B01B (1×)
STANDBY	B03H (2×)
STANDBY	B04A (1×)
TXD	B03G (1×)
TXD	B04A (1×)
TXD-BOLT-ON	B04A (3×)
TXD-MIPS	B03G (2×)
TXD-MIPS	B04A (2×)
TXD-MIPS2	B03G (2×)
TXD-UP	B03G (1×)
TXD-UP	B03H (2×)
TXD-UP	B04A (2×)
U_D_IN	B09D (2×)
U_D_INV	B09D (2×)
UART-SWITCH	B03H (2×)
USB20-DM	B03G (2×)
USB20-DP	B03G (2×)
USB-OC	B03G (2×)
VCC_1V5	B09A (2×)
VCC_1V5	B09B (1×)
VCC1V5	B09B (1×)
VCIN	B09C (2×)
VCOM	B09A (2×)
VCOM	B09C (1×)
VCOM	B09D (2×)
VCOM_SCL	B09C (2×)
VCOM_SCL	B09D (1×)
VCOM_SDA	B09C (2×)
VCOM_SDA	B09D (1×)
VCOM_WP	B09C (2×)
VCOM_WP	B09D (1×)
VDD_1V8	B05A (2×)
VDDA-ADC	B03A (1×)
VDDA-AUDIO	B03A (2×)
VDDA-AUDIO	B03D (4×)
VDDA-DAC	B03A (1×)
VDDA-DAC	B03D (1×)
VDDA-LVDS	B03A (1×)
VDDA-LVDS	B03B (1×)
VDDH_3V3	B05A (3×)
VDDIO3V3	B09B (3×)
VDDO_3V3	B05A (2×)
VDDS_3V3	B05A (2×)
VGH_35V	B09A (1×)
VGH_35V	B09D (2×)
VGL_-6V	B09A (1×)
VGL_-6V	B09D (2×)
VH0	B09C (1×)
VH0	B09D (2×)
VH127	B09C (1×)
VH127	B09D (2×)
VH159	B09D (2×)
VH191	B09C (1×)
VH191	B09D (2×)
VH247	B09C (1×)
VH247	B09D (2×)
VH255	B09A (1×)
VH255	B09C (7×)
VH255	B09D (2×)
VH31	B09C (1×)
VH31	B09D (2×)
VH31_247	B09A (1×)
VH31_247	B09C (1×)
VH63	B09A (1×)
VH63	B09C (1×)
VH63	B09D (2×)
VH95	B09D (2×)
VL0	B09C (1×)
VL0	B09D (2×)
VL127	B09C (2×)
VL127	B09D (2×)
VL159	B09D (2×)
VL191	B09C (2×)
VL191	B09D (2×)
VL247	B09C (1×)
VL247	B09D (2×)
VL31	B09C (1×)
VL31	B09D (2×)
VL31_247	B09A (1×)
VL31_247	B09C (1×)
VL63	B09A (1×)
VL63	B09C (1×)
VL63	B09D (2×)
VL95	B09D (2×)
VLS_15V6	B09A (3×)
VLS_15V6	B09C (1×)
VLS_15V6	B09D (2×)
VREF	B09A (4×)
VSW	B01A (1×)
V-SYNC-VGA	B03E (1×)
V-SYNC-VGA	B04C (1×)
WC-EEPROM-PNX5100_SPI-DI	B03G (1×)
WC-EEPROM-PNX5100_SPI-DI	B04A (1×)
WC-EEPROM-PNX5100_SPI-DI	B04C (1×)
WC-EEPROM-PNX5100_SPI-DI	B09C (1×)
WEX	B09B (2×)
WP-NANDFLASH	B03G (2×)
WP-NANDFLASH	B03H (2×)
XIO-ACK	B03G (3×)
XIO-SEL-NAND	B03G (3×)
Y_CVBS-MON-OUT	B03E (1×)
Y_CVBS-MON-OUT	B04B (1×)
Y_CVBS-MON-OUT-SC	B04B (2×)

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SSB: SRP List Part 1 (37" LGD panel)

Netname	Diagram
GND-SIG	B01A (12×)
+12V	B01A (1×)
+3V3	B01A (1×)
3V3-ST	B01A (1×)
DETECT1	B01A (1×)
ENABLE-3V3	B01A (1×)
PROT-DC	B01A (1×)
SENSE+1V2-PNX85XX	B01A (1×)
VSW	B01A (1×)
+12VF	B01A (2×)
+1V2-PNX85XX	B01A (2×)
+3V3F	B01A (2×)
+12VD	B01B (1×)
+1V2-PNX5100	B01B (1×)
+3V3	B01B (1×)
+5V	B01B (1×)
+5V5-TUN	B01B (1×)
+AUDIO-POWER	B01B (1×)
3V3-ST	B01B (1×)
BACKLIGHT-BOOST	B01B (1×)
BACKLIGHT-OUT	B01B (1×)
DETECT-12V	B01B (1×)
ENABLE-3V3	B01B (1×)
LAMP-ON-OUT	B01B (1×)
POWER-OK	B01B (1×)
PROT-DC	B01B (1×)
SCL-SET	B01B (1×)
SDA-SET	B01B (1×)
STANDBY	B01B (1×)
+1V2-STANDBY	B01B (2×)
+3V3-STANDBY	B01B (2×)
GNDSND	B01B (2×)
SENSE+1V2-PNX5100	B01B (2×)
+12V	B01B (4×)
+5V-TUNER	B02A (10×)
+1V2-PNX85XX	B02A (1×)
+5V5-TUN	B02A (1×)
CVBS	B02A (1×)
CVBS-TER-OUT	B02A (1×)
FE-CLK	B02A (1×)
FE-DATA(0)	B02A (1×)
FE-DATA(1)	B02A (1×)
FE-DATA(2)	B02A (1×)
FE-DATA(3)	B02A (1×)
FE-DATA(4)	B02A (1×)
FE-DATA(5)	B02A (1×)
FE-DATA(6)	B02A (1×)
FE-DATA(7)	B02A (1×)
FE-SOP	B02A (1×)
FE-VALID	B02A (1×)
RESET-SYSTEM	B02A (1×)
SCL-SSB	B02A (1×)
SDA-SSB	B02A (1×)
SIF	B02A (1×)
SIF-GND	B02A (1×)
+1V2	B02A (2×)
+1V2A	B02A (2×)
+3V3	B02A (2×)
+3V3D	B02A (2×)
+3V3E	B02A (2×)
+5V	B02A (2×)
ANTENNA-CTRL	B02A (2×)
ANTENNA-SUPPLY	B02A (2×)
IF-AGC	B02A (2×)
IF-N	B02A (2×)
IF-P	B02A (2×)
PDN	B02A (2×)
PDP	B02A (2×)
RF-AGC	B02A (2×)
SCL-TUNER	B02A (2×)
SDA-TUNER	B02A (2×)
+12V	B02A (3×)
+3V3A	B02A (3×)
+3V3B	B02A (6×)
+1V2-PNX85XX	B03A (14×)
+3V3	B03A (14×)
+1V2-STANDBY	B03A (1×)
+3V3F	B03A (1×)
+3V3-STANDBY	B03A (1×)
SENSE+1V2-PNX85XX	B03A (1×)
VDDA-ADC	B03A (1×)
VDDA-DAC	B03A (1×)
VDDA-LVDS	B03A (1×)
+3V3-PER	B03A (2×)
RREF-PNX85XX	B03A (2×)
VDDA-AUDIO	B03A (2×)
+1V8-PNX85XX	B03A (3×)
CA-ADDEN	B03B (1×)
CA-CD1	B03B (1×)
CA-CD2	B03B (1×)
CA-DATADIR	B03B (1×)
CA-DATAEN	B03B (1×)
CA-MDI0	B03B (1×)
CA-MDI1	B03B (1×)
CA-MDI2	B03B (1×)
CA-MDI3	B03B (1×)
CA-MDI4	B03B (1×)
CA-MDI5	B03B (1×)
CA-MDI6	B03B (1×)
CA-MDI7	B03B (1×)
CA-MDO(0)	B03B (1×)
CA-MDO(1)	B03B (1×)
CA-MDO(2)	B03B (1×)
CA-MDO(3)	B03B (1×)
CA-MDO(4)	B03B (1×)
CA-MDO(5)	B03B (1×)
CA-MDO(6)	B03B (1×)
CA-MDO(7)	B03B (1×)
CA-MICLK	B03B (1×)
CA-MISTRT	B03B (1×)
CA-MIVAL	B03B (1×)
CA-MOSTRT	B03B (1×)
CA-MOVAL	B03B (1×)
CA-RST	B03B (1×)
CA-VS1	B03B (1×)
FE-CLK	B03B (1×)
FE-DATA(0)	B03B (1×)
FE-DATA(1)	B03B (1×)
FE-DATA(2)	B03B (1×)
FE-DATA(3)	B03B (1×)
FE-DATA(4)	B03B (1×)
FE-DATA(5)	B03B (1×)
FE-DATA(6)	B03B (1×)
FE-DATA(7)	B03B (1×)
FE-SOP	B03B (1×)
FE-VALID	B03B (1×)
IRQ-CA	B03B (1×)
RX51001A-	B03B (1×)
RX51001A+	B03B (1×)
RX51001B-	B03B (1×)
RX51001B+	B03B (1×)
RX51001C-	B03B (1×)
RX51001C+	B03B (1×)
RX51001CLK-	B03B (1×)
RX51001CLK+	B03B (1×)
RX51001D-	B03B (1×)
RX51001D+	B03B (1×)
RX51001E-	B03B (1×)
RX51001E+	B03B (1×)
RX51002A-	B03B (1×)
RX51002A+	B03B (1×)
RX51002B-	B03B (1×)
RX51002B+	B03B (1×)
RX51002C-	B03B (1×)
RX51002C+	B03B (1×)
RX51002CLK-	B03B (1×)
RX51002CLK+	B03B (1×)
RX51002D-	B03B (1×)
RX51002D+	B03B (1×)
RX51002E-	B03B (1×)
RX51002E+	B03B (1×)
VDDA-LVDS	B03B (1×)
CA-MOCLK_VS2	B03B (2×)
FE-ERR	B03B (2×)
+3V3	B03C (1×)
ADAC(5)	B03C (1×)
ADAC(6)	B03C (1×)
ADAC(7)	B03C (1×)
ADAC(8)	B03C (1×)
A-PLOP	B03C (1×)
A-STBY	B03C (1×)
AUDIO-CL-L	B03C (1×)
AUDIO-CL-R	B03C (1×)
AUDIO-OUT-L	B03C (1×)
AUDIO-OUT-R	B03C (1×)
HP_LOUT	B03C (1×)
HP_ROUT	B03C (1×)
+AUDIO-POWER	B03C (2×)
ADAC(3)	B03C (2×)
ADAC(4)	B03C (2×)
AUDIO-RESET	B03C (2×)
AUDIO-VDD	B03C (7×)
+3V3	B03D (1×)
+5V	B03D (1×)
ADAC(5)	B03D (1×)
ADAC(6)	B03D (1×)
AUDIO-IN1-L	B03D (1×)
AUDIO-IN1-R	B03D (1×)
AUDIO-IN2-L	B03D (1×)
AUDIO-IN2-R	B03D (1×)
AUDIO-IN3-L	B03D (1×)
AUDIO-IN3-R	B03D (1×)
AUDIO-IN4-L	B03D (1×)
AUDIO-IN4-R	B03D (1×)
AUDIO-IN5-L	B03D (1×)
AUDIO-IN5-R	B03D (1×)
SPDIF-IN	B03D (1×)
SPDIF-OUT-1	B03D (1×)
VDDA-DAC	B03D (1×)
ADAC(1)	B03D (2×)
ADAC(2)	B03D (2×)
ADAC(3)	B03D (2×)
ADAC(4)	B03D (2×)
ADAC(7)	B03D (3×)
ADAC(8)	B03D (3×)
AUD_GND	B03D (4×)
VDDA-AUDIO	B03D (4×)
AV2-PB_SC2-B	B03E (1×)
AV2-PR_SC2-R	B03E (1×)
AV2-Y_SC2-G	B03E (1×)
AV3-PB	B03E (1×)
AV3-PR	B03E (1×)
AV3-Y	B03E (1×)
B-VGA	B03E (1×)
CVBS	B03E (1×)
CVBS1	B03E (1×)
CVBS2	B03E (1×)
FRONT-C	B03E (1×)
FRONT-Y_CVBS	B03E (1×)
G-VGA	B03E (1×)
H-SYNC-VGA	B03E (1×)
R-VGA	B03E (1×)
SC1-B	B03E (1×)
SC1-G	B03E (1×)
SC1-R	B03E (1×)
SIF	B03E (1×)
V-SYNC-VGA	B03E (1×)
Y_CVBS-MON-OUT	B03E (1×)
SIF-GND	B03E (2×)
DDR2-D0	B03F (2×)
DDR2-D1	B03F (2×)
DDR2-D10	B03F (2×)
DDR2-D11	B03F (2×)
DDR2-D12	B03F (2×)
DDR2-D13	B03F (2×)
DDR2-D14	B03F (2×)
DDR2-D15	B03F (2×)
DDR2-D16	B03F (2×)
DDR2-D17	B03F (2×)
DDR2-D18	B03F (2×)
DDR2-D19	B03F (2×)
DDR2-D2	B03F (2×)
DDR2-D20	B03F (2×)
DDR2-D21	B03F (2×)
DDR2-D22	B03F (2×)
DDR2-D23	B03F (2×)
DDR2-D24	B03F (2×)
DDR2-D25	B03F (2×)
DDR2-D26	B03F (2×)
DDR2-D27	B03F (2×)
DDR2-D28	B03F (2×)
DDR2-D29	B03F (2×)
DDR2-D3	B03F (2×)
DDR2-D30	B03F (2×)
DDR2-D31	B03F (2×)
DDR2-D4	B03F (2×)
DDR2-D5	B03F (2×)
DDR2-D6	B03F (2×)
DDR2-D7	B03F (2×)
DDR2-D8	B03F (2×)
DDR2-D9	B03F (2×)
DDR2-DQM0	B03F (2×)
DDR2-DQM1	B03F (2×)
DDR2-DQM2	B03F (2×)
DDR2-DQM3	B03F (2×)
DDR2-DQS0_N	B03F (2×)
DDR2-DQS0_P	B03F (2×)
DDR2-DQS1_N	B03F (2×)
DDR2-DQS1_P	B03F (2×)
DDR2-DQS2_N	B03F (2×)
DDR2-DQS2_P	B03F (2×)
DDR2-DQS3_N	B03F (2×)
DDR2-DQS3_P	B03F (2×)
DDR2-VREF-CTRL	B03F (2×)
DDR2-A0	B03F (3×)
DDR2-A1	B03F (3×)
DDR2-A10	B03F (3×)
DDR2-A11	B03F (3×)
DDR2-A12	B03F (3×)
DDR2-A2	B03F (3×)
DDR2-A3	B03F (3×)
DDR2-A4	B03F (3×)
DDR2-A5	B03F (3×)
DDR2-A6	B03F (3×)
DDR2-A7	B03F (3×)
DDR2-A8	B03F (3×)
DDR2-A9	B03F (3×)
DDR2-BA0	B03F (3×)
DDR2-BA1	B03F (3×)
DDR2-BA2	B03F (3×)
DDR2-CAS	B03F (3×)
DDR2-CKE	B03F (3×)
DDR2-CLK_N	B03F (3×)
DDR2-CLK_P	B03F (3×)
DDR2-CS	B03F (3×)
DDR2-ODT	B03F (3×)
DDR2-RAS	B03F (3×)
DDR2-VREF-DDR	B03F (3×)
DDR2-WE	B03F (3×)
+1V8-PNX85XX	B03F (5×)
+3V3	B03G (11×)
+3V3-PER	B03G (12×)
BOOTMODE_PNX8543-BL-CTRL	B03G (1×)
EJTAG-DETECT	B03G (1×)
IRQ-PCI	B03G (1×)
KEYBOARD	B03G (1×)
PCI-AD10	B03G (1×)
PCI-AD11	B03G (1×)
PCI-AD12	B03G (1×)
PCI-AD13	B03G (1×)
PCI-AD14	B03G (1×)
PCI-AD15	B03G (1×)
PCI-AD16	B03G (1×)
PCI-AD17	B03G (1×)
PCI-AD18	B03G (1×)
PCI-AD19	B03G (1×)
PCI-AD2	B03G (1×)
PCI-AD20	B03G (1×)
PCI-AD21	B03G (1×)
PCI-AD22	B03G (1×)
PCI-AD23	B03G (1×)
PCI-AD3	B03G (1×)
PCI-AD4	B03G (1×)
PCI-AD5	B03G (1×)
PCI-AD6	B03G (1×)
PCI-AD7	B03G (1×)
PCI-AD8	B03G (1×)
PCI-AD9	B03G (1×)
PCI-CBE0	B03G (1×)
PCI-CBE3	B03G (1×)
PCI-CLK-ETHERNET	B03G (1×)
PCI-CLK-PNX5100	B03G (1×)
PCI-PAR	B03G (1×)
RC	B03G (1×)
RESET-SYSTEM	B03G (1×)
RXD	B03G (1×)
RXD-UP	B03G (1×)
SCL-DISP	B03G (1×)
SDA-DISP	B03G (1×)
TXD	B03G (1×)
TXD-UP	B03G (1×)
WC-EEPROM-PNX5100_SPI-DI	B03G (1×)
IRQ-CA	B03G (2×)
LED1	B03G (2×)
LED2	B03G (2×)
LIGHT-SENSOR	B03G (2×)
NAND-AD(0)	B03G (2×)
NAND-AD(1)	B03G (2×)
NAND-AD(2)	B03G (2×)
NAND-AD(3)	B03G (2×)
NAND-AD(4)	B03G (2×)
NAND-AD(5)	B03G (2×)
NAND-AD(6)	B03G (2×)
NAND-AD(7)	B03G (2×)
NAND-ALE	B03G (2×)
NAND-CLE	B03G (2×)
NAND-REn	B03G (2×)
NAND-WEn	B03G (2×)
PBS-I2C-SCL	B03G (2×)
PCI-AD0	B03G (2×)
PCI-AD1	B03G (2×)
PCI-AD25	B03G (2×)
PCI-AD26	B03G (2×)
PCI-AD27	B03G (2×)
PCI-AD28	B03G (2×)
PCI-AD29	B03G (2×)
PCI-AD30	B03G (2×)
PCI-AD31	B03G (2×)
PCI-CBE1	B03G (2×)
PCI-CBE2	B03G (2×)
PCI-CLK-OUT	B03G (2×)
PCI-CLK-PNX8543	B03G (2×)
PCI-DEVSEL	B03G (2×)
PCI-FRAME	B03G (2×)
PCI-GNT	B03G (2×)
PCI-GNT-B	B03G (2×)
PCI-IRDY	B03G (2×)
PCI-PERR	B03G (2×)
PCI-REQ	B03G (2×)
PCI-REQ-B	B03G (2×)
PCI-SERR	B03G (2×)
PCI-STOP	B03G (2×)
PCI-TRDY	B03G (2×)
PNX8543-BL-BOOST_SPI-CLK	B03G (2×)
PNX8543-LCD-PWR-ON_SPI-DI	B03G (2×)
RXD-MIPS	B03G (2×)
RXD-MIPS2	B03G (2×)
SCL1	B03G (2×)
SCL3	B03G (2×)
SCL-SSB	B03G (2×)
SDA1	B03G (2×)
SDA3	B03G (2×)
SDA-SSB	B03G (2×)
SPI-DO_I2C-SDA	B03G (2×)
TXD-MIPS	B03G (2×)
TXD-MIPS2	B03G (2×)
USB20-DM	B03G (2×)
USB20-DP	B03G (2×)
USB-OC	B03G (2×)
WP-NANDFLASH	B03G (2×)
+3V3-STANDBY	B03G (3×)
EJTAG-TCK	B03G (3×)
EJTAG-TDI	B03G (3×)
EJTAG-TDO	B03G (3×)
EJTAG-TMS	B03G (3×)
EJTAG-TRSTN	B03G (3×)
PCI-AD24	B03G (3×)
SCL2	B03G (3×)
SCL-SET	B03G (3×)
SCL-UP-MIPS	B03G (3×)
SDA2	B03G (3×)
SDA-SET	B03G (3×)
SDA-UP-MIPS	B03G (3×)
XIO-ACK	B03G (3×)
XIO-SEL-NAND	B03G (3×)
+5V	B03G (4×)
+3V3-NAND	B03G (5×)
+3V3-STANDBY	B03H (12×)
+1V2-PNX5100	B03H (1×)
+1V2-PNX85XX	B03H (1×)
+5V	B03H (1×)
ALE	B03H (1×)
AV1-BLK	B03H (1×)
AV1-STATUS	B03H (1×)
AV2-BLK_LCD-SDA	B03H (1×)
AV2-STATUS	B03H (1×)
DETECT-12V	B03H (1×)
EA	B03H (1×)
LED1	B03H (1×)
LED2	B03H (1×)
LIGHT-SENSOR	B03H (1×)
PSEN	B03H (1×)
RC	B03H (1×)
RC1	B03H (1×)
RC2	B03H (1×)
+3V3	B03H (2×)
AUDIO-MUTE	B03H (2×)
AUDIO-RESET	B03H (2×)
BOLT-ON-IO	B03H (2×)
BOLT-ON-TS-ENn	B03H (2×)
CEC-HDMI	B03H (2×)
EJTAG-DETECT	B03H (2×)
ENABLE-3V3	B03H (2×)
KEYBOARD	B03H (2×)
LAMP-ON-OUT	B03H (2×)
LCD-SCL	B03H (2×)
PI_3	B03H (2×)
POWER-OK	B03H (2×)
RC_uP	B03H (2×)
REGIMBEAU_CVBS-SWITCH	B03H (2×)
RESET-ETHERNET	B03H (2×)
RESET-PNX5100	B03H (2×)
RESET-STBY	B03H (2×)
RXD-UP	B03H (2×)
SCL-UP-MIPS	B03H (2×)
SDA-UP-MIPS	B03H (2×)
SPI-CLK	B03H (2×)
SPI-CSB	B03H (2×)
SPI-SDI	B03H (2×)
SPI-SDO	B03H (2×)
STANDBY	B03H (2×)
TXD-UP	B03H (2×)
UART-SWITCH	B03H (2×)
WP-NANDFLASH	B03H (2×)
+3V3-PER	B03H (3×)
DETECT1	B03H (3×)
DETECT2	B03H (3×)
RESET-NVM	B03H (3×)
RESET-SYSTEM	B03H (3×)
SDM	B03H (3×)
SPI-PROG	B03H (3×)
SPI-WP	B03H (3×)
+12V	B04A (1×)
+3V3	B04A (1×)
+5V	B04A (1×)
AUDIO-IN1-L	B04A (1×)
AUDIO-IN1-R	B04A (1×)
AV1-BLK-BO	B04A (1×)
AV1-STATUS	B04A (1×)
AV2-BLK_LCD-SDA	B04A (1×)
BOLT-ON-IO	B04A (1×)
CVBS1	B04A (1×)
CVBS-OUT-SC1-PBS	B04A (1×)
LCD-SCL	B04A (1×)
PNX8543-BL-BOOST_SPI-CLK	B04A (1×)
PNX8543-LCD-PWR-ON_SPI-DI	B04A (1×)
RC	B04A (1×)
RC1	B04A (1×)
RC2	B04A (1×)
RXD	B04A (1×)
SC1-B	B04A (1×)
SC1-G	B04A (1×)
SC1-R	B04A (1×)
SCL-SSB	B04A (1×)
SDA-SSB	B04A (1×)
SPDIF-IN	B04A (1×)
SPI-DO_I2C-SDA	B04A (1×)
STANDBY	B04A (1×)
TXD	B04A (1×)
WC-EEPROM-PNX5100_SPI-DI	B04A (1×)
PBS_SPI_DI	B04A (2×)
PBS-I2C-SCL	B04A (2×)
RXD-MIPS	B04A (2×)
RXD-UP	B04A (2×)
TXD-MIPS	B04A (2×)
TXD-UP	B04A (2×)
+3V3-STANDBY	B04A (3×)
RXD-BOLT-ON	B04A (3×)
TXD-BOLT-ON	B04A (3×)
A-PLOP	B04B (1×)
AUDIO-CL-L	B04B (1×)
AUDIO-CL-R	B04B (1×)
AV1-BLK	B04B (1×)
AV2-BLK_LCD-SDA	B04B (1×)
CVBS-OUT-SC1-PBS	B04B (1×)
CVBS-TER-OUT	B04B (1×)
REGIMBEAU_CVBS-SWITCH	B04B (1×)
SC1-R	B04B (1×)
SPDIF-OUT	B04B (1×)
Y_CVBS-MON-OUT	B04B (1×)
AUDIO-IN1-L	B04B (2×)

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SSB: SRP List Part 2 (37" LGD panel)

Netname	Diagram
AUDIO-IN1-R	B04B (2×)
AUDIO-IN2-L	B04B (2×)
AUDIO-IN2-R	B04B (2×)
AV1-BLK-BO	B04B (2×)
AV1-STATUS	B04B (2×)
AV2-BLK-BO	B04B (2×)
AV2-PB_SC2-B	B04B (2×)
AV2-PR_SC2-R	B04B (2×)
AV2-STATUS	B04B (2×)
AV2-Y_SC2-G	B04B (2×)
CVBS1	B04B (2×)
CVBS2	B04B (2×)
CVBS-OUT-SC2	B04B (2×)
SC1-B	B04B (2×)
SC1-G	B04B (2×)
Y_CVBS-MON-OUT-SC	B04B (2×)
+3V3	B04B (3×)
CVBS-OUT-SC1	B04B (3×)
AP-SCART-OUT-L	B04B (5×)
AP-SCART-OUT-R	B04B (5×)
+5V	B04B (6×)
+5V	B04C (1×)
AUDIO-IN3-L	B04C (1×)
AUDIO-IN3-R	B04C (1×)
AUDIO-IN4-L	B04C (1×)
AUDIO-IN4-R	B04C (1×)
AUDIO-MUTE	B04C (1×)
AUDIO-OUT-L	B04C (1×)
AUDIO-OUT-R	B04C (1×)
AV3-PB	B04C (1×)
AV3-PR	B04C (1×)
AV3-Y	B04C (1×)
B-VGA	B04C (1×)
CLK-SCL	B04C (1×)
CVBS-OUT-SC2	B04C (1×)
DATA-SDA	B04C (1×)
G-VGA	B04C (1×)
HP_LOUT	B04C (1×)
HP_ROUT	B04C (1×)
H-SYNC-VGA	B04C (1×)
LCD-SCL	B04C (1×)
RC1	B04C (1×)
RC2	B04C (1×)
R-VGA	B04C (1×)
SPDIF-OUT	B04C (1×)
SPDIF-OUT-1	B04C (1×)
V-SYNC-VGA	B04C (1×)
WC-EEPROM-PNX5100_SPI-DI	B04C (1×)
+3V3	B04C (2×)
A-PLOP	B04C (2×)
AUDIO-IN5-L	B04C (2×)
AUDIO-IN5-R	B04C (2×)
FRONT-C	B04C (2×)
FRONT-Y_CVBS	B04C (2×)
+1V8-PNX85XX	B05A (1×)
+3V3-STANDBY	B05A (1×)
CEC-HDMI	B05A (1×)
RREF-PNX85XX	B05A (1×)
SCL-SSB	B05A (1×)
SDA-SSB	B05A (1×)
+5V	B05A (2×)
ARX0-	B05A (2×)
ARX0+	B05A (2×)
ARX1-	B05A (2×)
ARX1+	B05A (2×)
ARX2-	B05A (2×)
ARX2+	B05A (2×)
ARXC-	B05A (2×)
ARXC+	B05A (2×)
ARX-DDC-CLK	B05A (2×)
ARX-DDC-DAT	B05A (2×)
ARX-HPD	B05A (2×)
BRX0-	B05A (2×)
BRX0+	B05A (2×)
BRX1-	B05A (2×)
BRX1+	B05A (2×)
BRX2-	B05A (2×)
BRX2+	B05A (2×)
BRXC-	B05A (2×)
BRXC+	B05A (2×)
BRX-DDC-CLK	B05A (2×)
BRX-DDC-DAT	B05A (2×)
BRX-HPD	B05A (2×)
CRX0-	B05A (2×)
CRX0+	B05A (2×)
CRX1-	B05A (2×)
CRX1+	B05A (2×)
CRX2-	B05A (2×)
CRX2+	B05A (2×)
CRXC-	B05A (2×)
CRXC+	B05A (2×)
CRX-DDC-CLK	B05A (2×)
CRX-DDC-DAT	B05A (2×)
CRX-HPD	B05A (2×)
DRX0-	B05A (2×)
DRX0+	B05A (2×)
DRX1-	B05A (2×)
DRX1+	B05A (2×)
DRX2-	B05A (2×)
DRX2+	B05A (2×)
DRXC-	B05A (2×)
DRXC+	B05A (2×)
DRX-DDC-CLK	B05A (2×)
DRX-DDC-DAT	B05A (2×)
DRX-HPD	B05A (2×)
RX0-	B05A (2×)
RX0+	B05A (2×)
RX1-	B05A (2×)
RX1+	B05A (2×)
RX2-	B05A (2×)
RX2+	B05A (2×)
RXC-	B05A (2×)
RXC+	B05A (2×)
VDD_1V8	B05A (2×)
VDDO_3V3	B05A (2×)
VDDS_3V3	B05A (2×)
+3V3	B05A (3×)
ARX-5V	B05A (3×)
BRX-5V	B05A (3×)
CRX-5V	B05A (3×)
DDC-SCL	B05A (3×)
DDC-SDA	B05A (3×)
DRX-5V	B05A (3×)
VDDH_3V3	B05A (3×)
CEC	B05A (5×)
IRQ-PCI	B05B (1×)
PCI-AD0	B05B (1×)
PCI-AD1	B05B (1×)
PCI-AD10	B05B (1×)
PCI-AD11	B05B (1×)
PCI-AD12	B05B (1×)
PCI-AD13	B05B (1×)
PCI-AD14	B05B (1×)
PCI-AD15	B05B (1×)
PCI-AD16	B05B (1×)
PCI-AD17	B05B (1×)
PCI-AD18	B05B (1×)
PCI-AD19	B05B (1×)
PCI-AD2	B05B (1×)
PCI-AD20	B05B (1×)
PCI-AD21	B05B (1×)
PCI-AD22	B05B (1×)
PCI-AD24	B05B (1×)
PCI-AD25	B05B (1×)
PCI-AD26	B05B (1×)
PCI-AD27	B05B (1×)
PCI-AD28	B05B (1×)
PCI-AD29	B05B (1×)
PCI-AD3	B05B (1×)
PCI-AD30	B05B (1×)
PCI-AD31	B05B (1×)
PCI-AD4	B05B (1×)
PCI-AD5	B05B (1×)
PCI-AD6	B05B (1×)
PCI-AD7	B05B (1×)
PCI-AD8	B05B (1×)
PCI-AD9	B05B (1×)
PCI-CBE0	B05B (1×)
PCI-CBE1	B05B (1×)
PCI-CBE2	B05B (1×)
PCI-CBE3	B05B (1×)
PCI-CLK-ETHERNET	B05B (1×)
PCI-DEVSEL	B05B (1×)
PCI-FRAME	B05B (1×)
PCI-GNT	B05B (1×)
PCI-IRDY	B05B (1×)
PCI-PAR	B05B (1×)
PCI-PERR	B05B (1×)
PCI-REQ	B05B (1×)
PCI-SERR	B05B (1×)
PCI-STOP	B05B (1×)
PCI-TRDY	B05B (1×)
+3V3	B05B (2×)
PCI-AD23	B05B (2×)
RESET-ETHERNET	B05B (2×)
+3V3-ET-DIG	B05B (3×)
+3V3-ET-ANA	B05B (4×)
+5V	B05C (1×)
CA-DATADIR	B05C (1×)
CA-DATAEN	B05C (1×)
CA-MDI0	B05C (1×)
CA-MDI1	B05C (1×)
CA-MDI2	B05C (1×)
CA-MDI3	B05C (1×)
CA-MDI4	B05C (1×)
CA-MDI5	B05C (1×)
CA-MDI6	B05C (1×)
CA-MDI7	B05C (1×)
CA-MDO(0)	B05C (1×)
CA-MDO(1)	B05C (1×)
CA-MDO(2)	B05C (1×)
CA-MDO(3)	B05C (1×)
CA-MDO(4)	B05C (1×)
CA-MDO(5)	B05C (1×)
CA-MDO(6)	B05C (1×)
CA-MDO(7)	B05C (1×)
CA-MICLK	B05C (1×)
CA-MISTRT	B05C (1×)
CA-MIVAL	B05C (1×)
CA-MOCLK_VS2	B05C (1×)
CA-MOSTRT	B05C (1×)
CA-MOVAL	B05C (1×)
CA-RST	B05C (1×)
PCI-AD0	B05C (1×)
PCI-AD1	B05C (1×)
PCI-AD10	B05C (1×)
PCI-AD11	B05C (1×)
PCI-AD12	B05C (1×)
PCI-AD13	B05C (1×)
PCI-AD14	B05C (1×)
PCI-AD16	B05C (1×)
PCI-AD17	B05C (1×)
PCI-AD18	B05C (1×)
PCI-AD19	B05C (1×)
PCI-AD2	B05C (1×)
PCI-AD22	B05C (1×)
PCI-AD23	B05C (2×)
PCI-AD24	B05C (1×)
PCI-AD25	B05C (1×)
PCI-AD26	B05C (1×)
PCI-AD27	B05C (1×)
PCI-AD28	B05C (1×)
PCI-AD29	B05C (1×)
PCI-AD3	B05C (1×)
PCI-AD30	B05C (1×)
PCI-AD31	B05C (1×)
PCI-AD4	B05C (1×)
PCI-AD5	B05C (1×)
PCI-AD6	B05C (1×)
PCI-AD7	B05C (1×)
PCI-AD8	B05C (1×)
PCI-AD9	B05C (1×)
PCI-CBE1	B05C (1×)
PCI-CBE2	B05C (1×)
CA-CD1	B05C (2×)
CA-CD2	B05C (2×)
CA-CE1	B05C (2×)
CA-CE2	B05C (2×)
CA-INPACK	B05C (2×)
CA-IORD	B05C (2×)
CA-IOWR	B05C (2×)
CA-OE	B05C (2×)
CA-REG	B05C (2×)
CA-VS1	B05C (2×)
CA-WE	B05C (2×)
IRQ-CA	B05C (2×)
PCMCIA-A0	B05C (2×)
PCMCIA-A1	B05C (2×)
PCMCIA-A10	B05C (2×)
PCMCIA-A11	B05C (2×)
PCMCIA-A12	B05C (2×)
PCMCIA-A13	B05C (2×)
PCMCIA-A14	B05C (2×)
PCMCIA-A2	B05C (2×)
PCMCIA-A3	B05C (2×)
PCMCIA-A4	B05C (2×)
PCMCIA-A5	B05C (2×)
PCMCIA-A6	B05C (2×)
PCMCIA-A7	B05C (2×)
PCMCIA-A8	B05C (2×)
PCMCIA-A9	B05C (2×)
PCMCIA-D0	B05C (2×)
PCMCIA-D1	B05C (2×)
PCMCIA-D2	B05C (2×)
PCMCIA-D3	B05C (2×)
PCMCIA-D4	B05C (2×)
PCMCIA-D5	B05C (2×)
PCMCIA-D6	B05C (2×)
PCMCIA-D7	B05C (2×)
+3V3	B05C (3×)
CA-ADDEN	B05C (3×)
CA-WAIT	B05C (3×)
MDO0	B05C (4×)
MDO1	B05C (4×)
MDO2	B05C (4×)
MDO3	B05C (4×)
MDO4	B05C (4×)
MDO5	B05C (4×)
MDO6	B05C (4×)
MDO7	B05C (4×)
MOCLKA	B05C (4×)
MOSTRTA	B05C (4×)
MOVALA	B05C (4×)
+3V3_BUF	B05C (5×)
PCMCIA-VCC-VPP	B05C (5×)
ADAC(1)	B06A (1×)
ADAC(2)	B06A (1×)
AUDIO-MUTE	B06A (1×)
GNDSND	B06A (20×)
+AUDIO-POWER	B06A (2×)
A-STBY	B06A (2×)
AUD_GND	B06A (2×)
MUTE	B06A (2×)
LEFT-SPEAKER	B06A (4×)
RIGHT-SPEAKER	B06A (4×)
+5V	B07A (1×)
+VDISP-IN	B07A (1×)
BACKLIGHT-BOOST	B07A (1×)
BACKLIGHT-BOOST-IN	B07A (1×)
BACKLIGHT-IN	B07A (1×)
BACKLIGHT-OUT	B07A (1×)
+12VD	B07A (2×)
+3V3	B07A (2×)
+VDISP-IN	B07B (1×)
+VDISP-OUT	B07B (1×)
BACKLIGHT-BOOST-IN	B07B (1×)
BACKLIGHT-IN	B07B (1×)
BOOTMODE_PNX8543-BL-CTRL	B07B (1×)
PNX8543-BL-BOOST_SPI-CLK	B07B (1×)
PNX8543-LCD-PWR-ON_SPI-DI	B07B (1×)
+3V3	B07B (2×)
CLK1	B09A (1×)
CLK2	B09A (1×)
CLK3	B09A (1×)
CLK4	B09A (1×)
CLK5	B09A (1×)
CLK6	B09A (1×)
DPM	B09A (1×)
G_CLK1	B09A (1×)
G_CLK2	B09A (1×)
G_CLK3	B09A (1×)
G_CLK4	B09A (1×)
G_CLK5	B09A (1×)
G_CLK6	B09A (1×)
G_VST	B09A (1×)
LVCOM_FB	B09A (1×)
P_VCOM	B09A (1×)
VCC1V8	B09A (1×)
VCOM_L	B09A (1×)
VCOM_R	B09A (1×)
VDD_EVEN	B09A (1×)
VDD_ODD	B09A (1×)
VST	B09A (1×)
FB	B09A (2×)
FBN	B09A (2×)
FBP	B09A (2×)
FREQ	B09A (2×)
G_CLK1_I	B09A (2×)
G_CLK2_I	B09A (2×)
G_CLK3_I	B09A (2×)
G_CLK4_I	B09A (2×)
G_CLK5_I	B09A (2×)
G_CLK6_I	B09A (2×)
G_VDD_EVEN_I	B09A (2×)
G_VDD_ODD_I	B09A (2×)
G_VST_I	B09A (2×)
GD	B09A (2×)
REF	B09A (2×)
VCC	B09A (2×)
VCOM_COMPEN	B09A (2×)
VCOM_N	B09A (2×)
VDD_O	B09A (2×)
VGH	B09A (2×)
VGL	B09A (2×)
EN1	B09A (3×)
VDD	B09A (3×)
EN2	B09A (4×)
+VDISP-OUT	B09A (6×)
CLK-SCL	B09B (1×)
DATA-SDA	B09B (1×)
DPM	B09B (1×)
G_CLK1	B09B (1×)
G_CLK2	B09B (1×)
G_CLK3	B09B (1×)
G_CLK4	B09B (1×)
G_CLK5	B09B (1×)
G_CLK6	B09B (1×)
G_VDD_EVEN	B09B (1×)
G_VDD_ODD	B09B (1×)
G_VST	B09B (1×)
H_CONV_I	B09B (1×)
LCLKN	B09B (1×)
LCLKP	B09B (1×)
LLV0N	B09B (1×)
LLV0P	B09B (1×)
LLV1N	B09B (1×)
LLV1P	B09B (1×)
LLV2N	B09B (1×)
LLV2P	B09B (1×)
LLV3N	B09B (1×)
LLV3P	B09B (1×)
LLV4N	B09B (1×)
LLV4P	B09B (1×)
LLV5N	B09B (1×)
LLV5P	B09B (1×)
PI_3	B09B (1×)
POL	B09B (1×)
RCLKN	B09B (1×)
RCLKP	B09B (1×)
RLV0N	B09B (1×)
RLV0P	B09B (1×)
RLV1N	B09B (1×)
RLV1P	B09B (1×)
RLV2N	B09B (1×)
RLV2P	B09B (1×)
RLV3N	B09B (1×)
RLV3P	B09B (1×)
RLV4N	B09B (1×)
RLV4P	B09B (1×)
RLV5N	B09B (1×)
RLV5P	B09B (1×)
SCL-DISP	B09B (1×)
SDA-DISP	B09B (1×)
SOE	B09B (1×)
VCO	B09B (1×)
VCC	B09B (22×)
FGD_EN	B09B (2×)
GIP_EN	B09B (2×)
I2C-EN	B09B (2×)
POL_I	B09B (2×)
PWM_TIN	B09B (2×)
RBF	B09B (2×)
RESET	B09B (2×)
RX51001A-	B09B (2×)
RX51001A+	B09B (2×)
RX51001B-	B09B (2×)
RX51001B+	B09B (2×)
RX51001C-	B09B (2×)
RX51001C+	B09B (2×)
RX51001CLK-	B09B (2×)
RX51001CLK+	B09B (2×)
RX51001D-	B09B (2×)
RX51001D+	B09B (2×)
RX51001E-	B09B (2×)
RX51001E+	B09B (2×)
RX51002A-	B09B (2×)
RX51002A+	B09B (2×)
RX51002B-	B09B (2×)
RX51002B+	B09B (2×)
RX51002C-	B09B (2×)
RX51002C+	B09B (2×)
RX51002CLK-	B09B (2×)
RX51002CLK+	B09B (2×)
RX51002D-	B09B (2×)
RX51002D+	B09B (2×)
RX51002E-	B09B (2×)
RX51002E+	B09B (2×)
SOE_I	B09B (2×)
VCOM_SCL	B09B (2×)
VCOM_SDA	B09B (2×)
WP1	B09B (2×)
WP2	B09B (2×)
BIT	B09B (3×)
DISM	B09B (3×)
OPC_EN	B09B (3×)
SCL	B09B (4×)
SDA	B09B (4×)
VCC1V8	B09B (5×)
H_CONV_I	B09C (1×)
LCLKN	B09C (1×)
LCLKP	B09C (1×)
LLV0N	B09C (1×)
LLV0P	B09C (1×)
LLV1N	B09C (1×)
LLV1P	B09C (1×)
LLV2N	B09C (1×)
LLV2P	B09C (1×)
LLV3N	B09C (1×)
LLV3P	B09C (1×)
LLV4N	B09C (1×)
LLV4P	B09C (1×)
LLV5N	B09C (1×)
LLV5P	B09C (1×)
LVCOM_FB	B09C (1×)
P_VCOM	B09C (1×)
RCLKN	B09C (1×)
RCLKP	B09C (1×)
RLV0N	B09C (1×)
RLV0P	B09C (1×)
RLV1N	B09C (1×)
RLV1P	B09C (1×)
RLV2N	B09C (1×)
RLV2P	B09C (1×)
RLV3N	B09C (1×)
RLV3P	B09C (1×)
RLV4N	B09C (1×)
RLV4P	B09C (1×)
RLV5N	B09C (1×)
RLV5P	B09C (1×)
VCOM_L	B09C (1×)
VCOM_R	B09C (1×)
VCOM_SCL	B09C (1×)
VCOM_SDA	B09C (1×)
CLK1	B09C (2×)
CLK2	B09C (2×)
CLK3	B09C (2×)
CLK4	B09C (2×)
CLK5	B09C (2×)
CLK6	B09C (2×)
G_VST	B09C (2×)
GMA1	B09C (2×)
POL	B09C (2×)
SOE	B09C (2×)
VDD_EVEN	B09C (2×)
VDD_ODD	B09C (2×)
VST	B09C (2×)
Z_OUT	B09C (2×)
CHRSHR	B09C (3×)
GMA10	B09C (3×)
GMA12	B09C (3×)
GMA13	B09C (3×)
GMA15	B09C (3×)
GMA16	B09C (3×)
GMA18	B09C (3×)
GMA3	B09C (3×)
GMA4	B09C (3×)
GMA6	B09C (3×)
GMA7	B09C (3×)
GMA9	B09C (3×)
H_CONV	B09C (3×)
VDD	B09C (4×)
VCC	B09C (7×)

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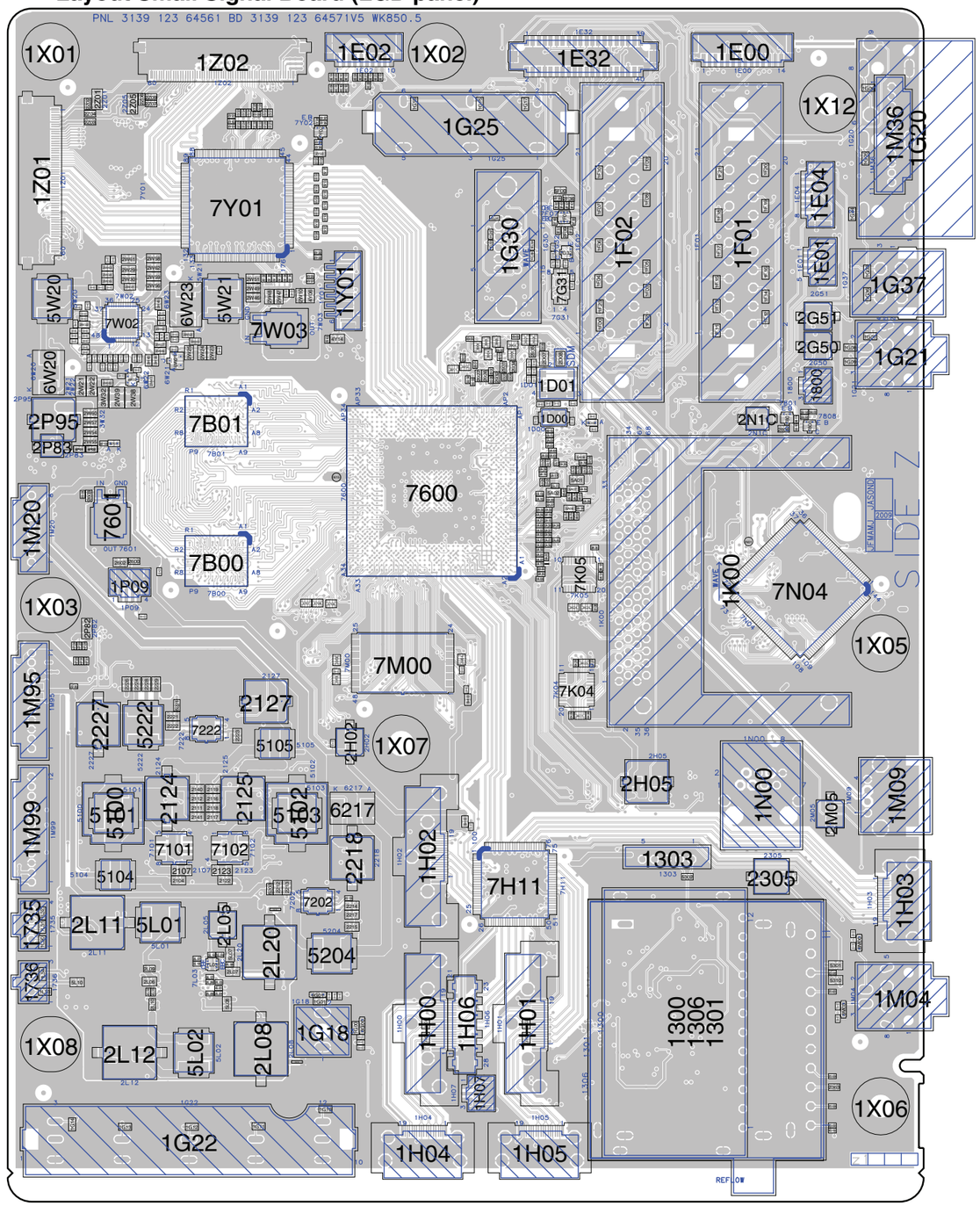
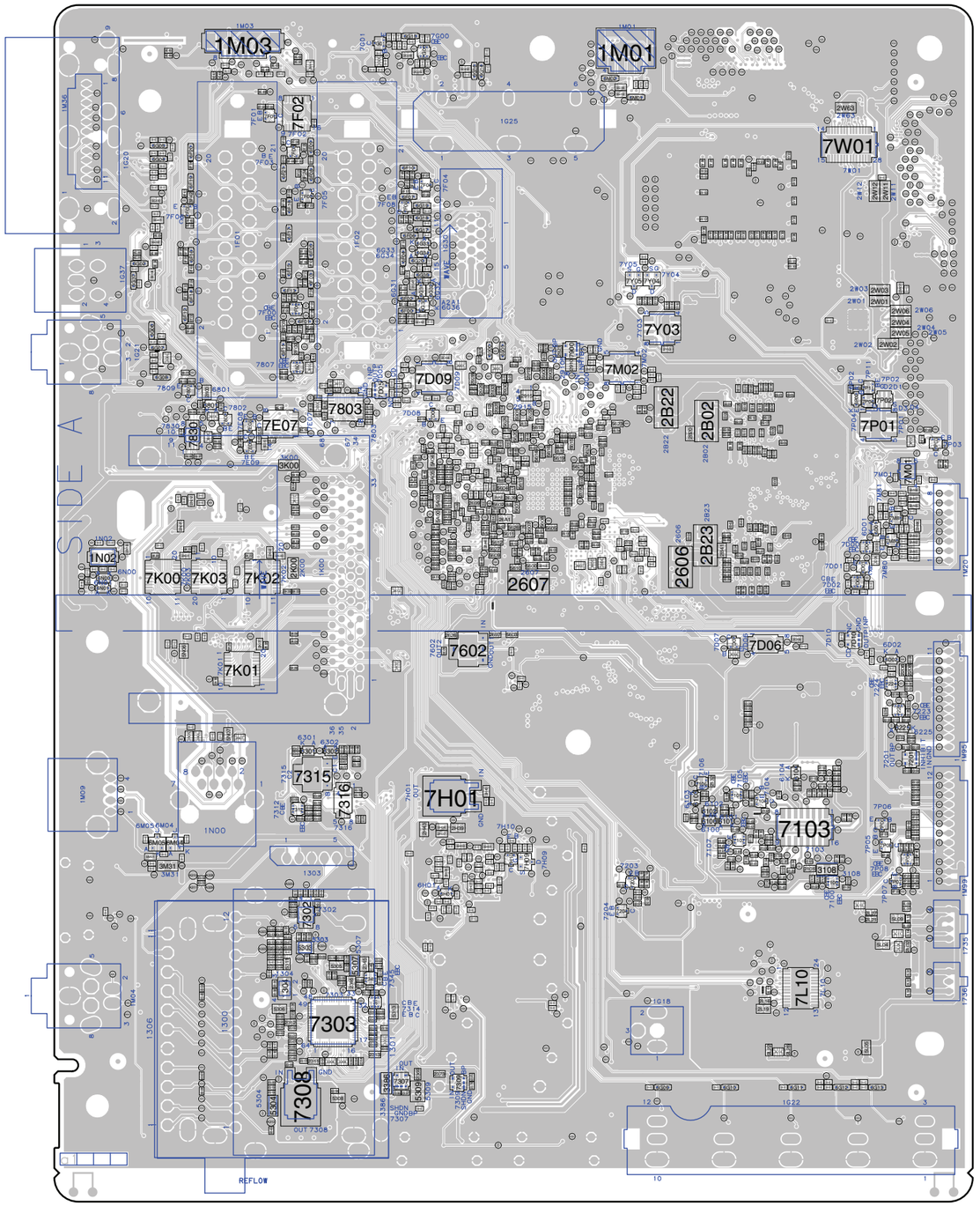
Layout Small Signal Board (LGD panel)



3104 113 6457.1



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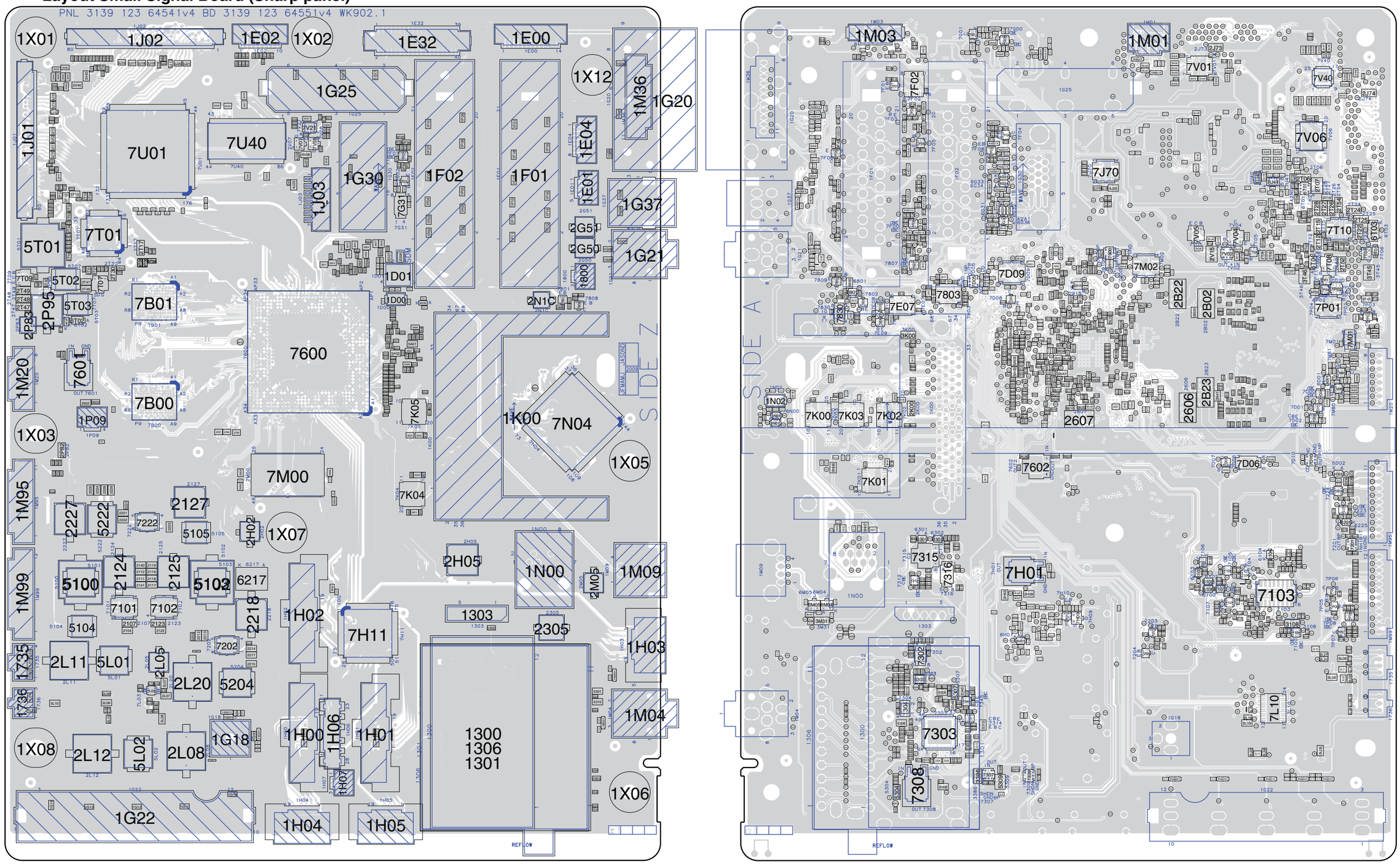
090427

Layout Small Signal Board (Sharp panel)



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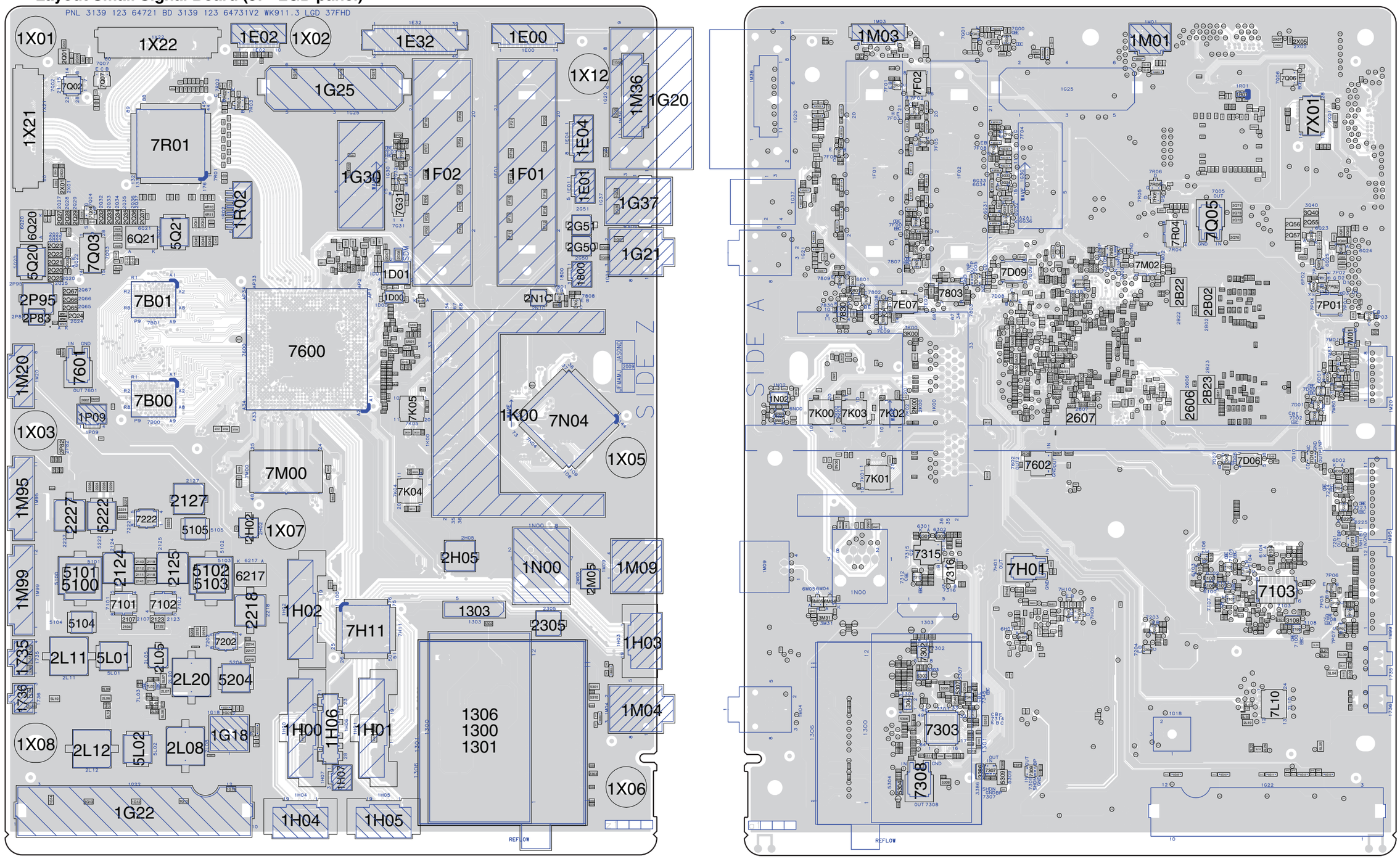
Layout Small Signal Board (37" LGD panel)



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