Wireless Multimedia Link SL300i

all versions

Service
Service
Service

streamium

Service Manual

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Version 1.0

PHILIPS

TECHNICAL SPECIFICATION

General

Dimensions (incl. sockets & feet)	: 184 x 196 x 65mm
Net weight	: 0.8kg

Power supply (via external AC/DC-Adaptor)

Mains voltage (AC)	: 98-264V, 50-60Hz
Power consumption	: 17W max., <1W standby

Video playback performance

S/N Luminance	: >60dB
S/N Chrominance AM	: >60dB
S/N Chrominance PM	: >60dB
Bandwidth Luminance	: 4.8MHz ±2dB

Y/Pr/Pb / Progressive Scan

S/N (all channels)	: >60dB
Bandwidth Y	: >12MHz ±3dB
Bandwidth PrPb	: >6MHz ±3dB
YPrPb crosstalk (bw < 10MHz)	: < -50dB

Audio playback performance – Line out

Output voltage	: 1.6Vrms ±2dB
Channel unbalance (1kHz)	: <1dB
Frequency response	: 20Hz-20kHz ±0.5dB
Crosstalk (1kHz)	: >80dB
S/N unweighted	: >90dB
Dynamic range (1kHz)	: >85dB
Distortion and noise (1kHz)	: >82dB

Audio playback performance – SCART out

Output voltage	: 1.6Vrms ±2dB
Channel unbalance (1kHz)	: <1dB
Frequency response	: 20Hz-20kHz ±0.5dB
Crosstalk (1kHz)	: >75dB
S/N unweighted	: >85dB
Dynamic range (1kHz)	: >80dB
Distortion and noise (1kHz)	: >75dB

Network

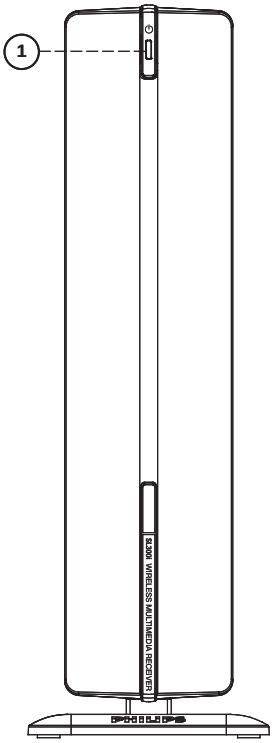
Interoperability	: Universal Plug&Play (UPnP)
Protocol	: TCP/IP
Wired Ethernet	: RJ45 jack, IEEE802.3
Wireless LAN	: WiFi IEEE802.11g

Supported multimedia formats

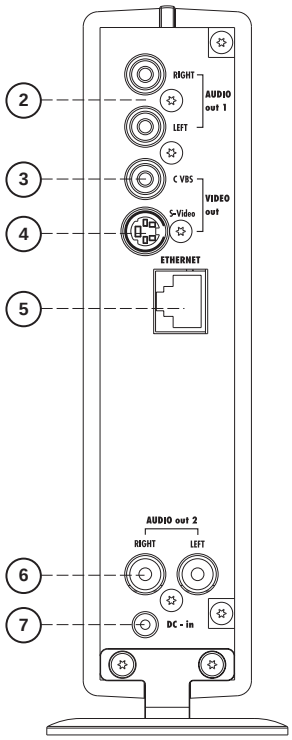
Audio playback	: MP3, MP3pro, Real Audio, PCM
Video playback	: MPEG1, MPEG2, MPEG4, DivX4.0/5.03
Picture	: JPEG, BMP, GIF
Playlist	: M3U, ID3

CONNECTIONS & CONTROLS

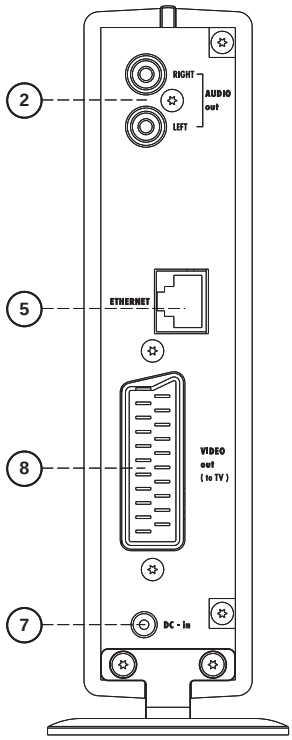
Front View *(all versions)*



Rear View *(version /37)*



Rear View *(versions /00/05/19)*



Pos	Function	Remarks
1	On/Off	Power on/Standby button with integrated red standby indicator
2	Audio L/R output	To connect the SL300i to the left and right audio inputs of an Audio system
3	Video out / CVBS	To connect the SL300i to the Composite video input of a TV set
4	Video out / S-Video	To connect the SL300i to the S-Video input of a TV set
5	Ethernet connector	Optional RJ-45 Ethernet connection for a wired home network
6	Audio L/R output	To connect the SL300i to the left and right audio inputs of an Audio system
7	DC-in	For connecting the SL300i's power adaptor
8	SCART A/V output	Connects the SL300i to a TV set

ACCESSORIES

Article	Codenumber	SL300i/00	SL300i/05	SL300i/19	SL300i/37
Mains cord /00 (EUR)	2422 070 98151	X		X	
Mains cord /05 (UK)	2422 070 98147		X		
Mains cord /37 (USA)	2422 070 98134				X
AC/DC Adaptor AD2835-010/SBC CS1225/00	3103 308 31021	X	X	X	X
Remote control RC1453601/01	3139 228 63221	X	X	X	X
Cinch cable Audio L+R	3103 308 92611	X	X	X	X
SCART cable	2422 076 00549	X	X	X	
CVBS & Audio L+R cable	2422 076 00304				X

x...supplied with the set

SAFETY & WARNINGS

SAFETY

(GB)
Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified be used.
Safety components are marked by the symbol ⚠

(F)
Les normes de sécurité exigent que l`appareil soit remis à l`état d`origine et que soient utilisées les pièces de rechange identiques à celles spécifiées.
Les composants de sécurité sont marqués ⚠

(D)
Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Originalzustand des Gerätes darf nicht verändert werden. Für Reparaturen sind Originalersatzteile zu verwenden.
Sicherheitsbauteile sind durch das Symbol ⚠ markiert.

(NL)
Veiligheidsbepalingen vereisen, dat het apparaat in zijn oorspronkeliijke toestand wordt teruggebracht en dat onderdelen, identiek aan de gespecificeerde, worden toegepast.
De Veiligheidsonderdelen zijn aangeduid met het symbool ⚠

(I)
Le norme di sicurezza estigono che l´apparecchio venga rimesso nelle condizioni originali e che siano utilizzati i pezzi di ricambiago identici a quelli specificati.
Componenty di sicurezza sono marcati con ⚠

ESD

(GB) WARNING
All ICs and many other semiconductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically.
When repairing, make sure that you are connected with the same potential as the mass of the set via a wristband with resistance. Keep components and tools at this potential.

(F) ATTENTION
Tous les IC et beaucoup d´autres semi-conducteurs sont sensibles aux décharges statiques (ESD). Leur longévite pourrait être considérablement écourtée par le fait qu´aucune précaution nést prise à leur manipulation.
Lors de réparations, s´assurer de bien être relié au même potentiel que la masse de l´appareil et enfileer le bracelet serti d´une résistance de sécurité.
Veiller à ce que les composants ainsi que les outils que l´on utilise soient également à ce potentiel.

(D) WARNUNG
Alle ICs und viele andere Halbleiter sind empfindlich gegenüber elektrostatischen Entladungen (ESD).
Unsorgfältige Behandlung im Reparaturfall kann die Lebensdauer drastisch reduzieren.
Sorgen Sie dafür, daß Sie im Reparaturfall über ein Pulsarmband mit Widerstand mit dem Massepotential des Gerätes verbunden sind.
Halten Sie Bauteile und Hilfsmittel ebenfalls auf diesem Potential.

(NL) WAARSCHUWING
Alle IC´s en vele andere halfgeleiders zijn gevoelig voor electrostatische ontladingen (ESD).
Onzorgvuldig behandelen tijdens reparatie kan de levensduur drastisch doen vermindern. Zorg ervoor dat u tijdens reparatie via een polsband met weerstand verbonden bent met hetzelfde potentiaal als de massa van het apparaat.
Houd componenten en hulpmiddelen ook op ditzelfde potentiaal.

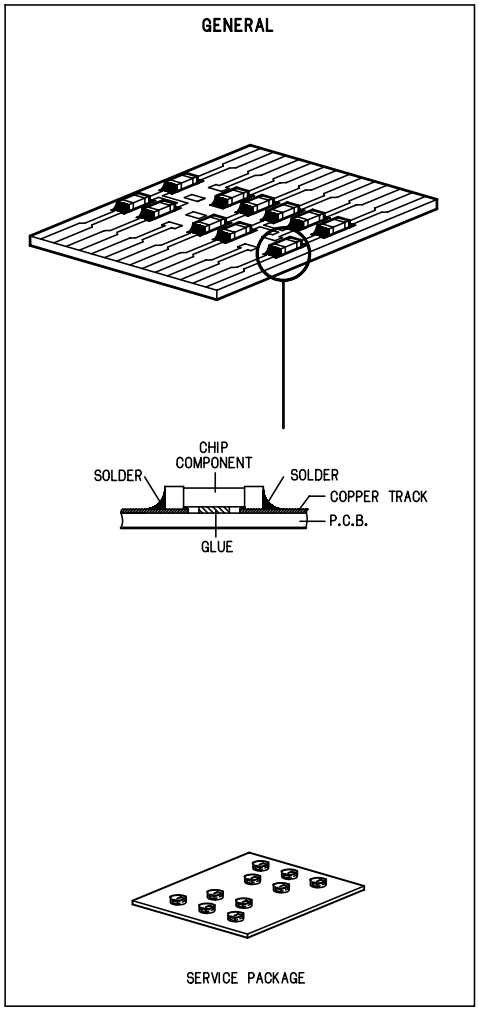
(I) AVVERTIMENTO
Tutti IC e parecchi semi-conduttori sono sensibili alle scariche statiche (ESD).
La loro longevità potrebbe essere fortemente ridatta in caso di non osservazione della più grande cauzione alla loro manipolazione. Durante le riparationi occorre quindi essere collegato allo stesso potenziale che quello della massa delápparecchio tramite un braccialetto a resistenza.
Assicurarsi che i componenti e anche gli utensili con quali si lavora siano anche a questo potenziale.

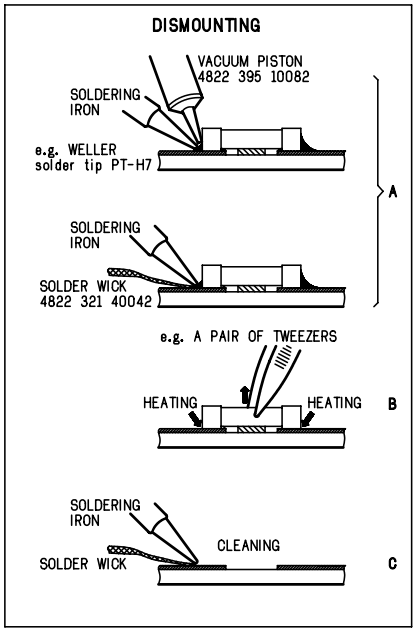
ESD PROTECTION EQUIPMENT

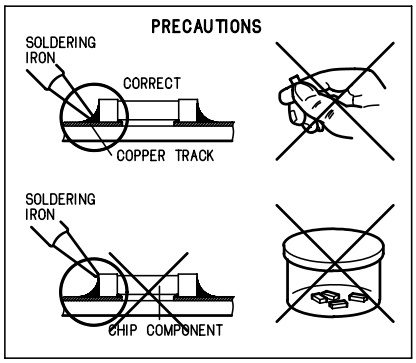
ESD3 KIT – 4822 310 10671
- Anti-static table mat (600x650x1.25mm)
- Anti-static wristband
- Connection box (3 press stud connections, 1MΩ)
- Extendible cable (2m, 2MΩ, to connect wristband to connection box)
- Connecting cable (3m, 2MΩ, to connect table mat to connection box)
- Earch cable (1MΩ, to connect any product to table mat or to connection box)

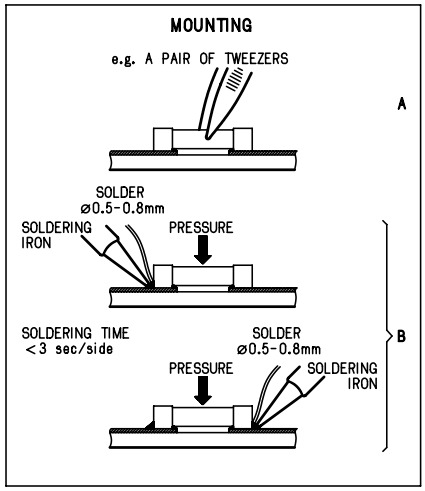
SERVICE HINTS

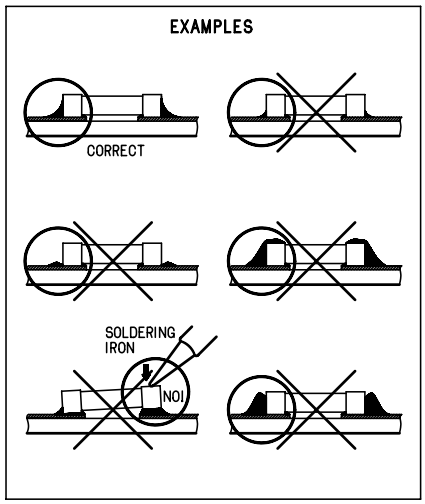
HANDLING CHIP COMPONENTS











TIPS FOR TROUBLESHOOTING

1. General information

The Wireless Multimedia Receiver SL300i contains the following printed boards and modules:
• External AC/DC-Adaptor
• Main Board
• Internet A/V-Module “StreamIOm G1.0/LinX”
• WiFi-Antenna (2x)
• Stand Illumination Board

The external AC/DC-Adaptor, the Main Board and the Internet A/V module are not intended to be repaired on component level. When shallow faultfinding fails and diagnostics threaten to escalate, the board/module in question should be replaced entirely.

2. Operational tests

The following checks will help to delimit hardware problems down to board/module level:

Check	Repair action on failure
Connect external AC/C-Adaptor and check if stand-by LED is on.	Measure if output voltage of AC/DC-Adaptor is 12V. If voltage is not ok replace AC/DC-Adaptor.
Press the stand-by button. Check if colour of standby-LED changes from red to blue.	Check FFC cables. If connections are ok replace entire Main Board.
If unit wakes up check if OSD works and if there is any response on the MENU key.	Hold RED key (=subtitle key) on the RC depressed while plugging in mains. This will enter the “system recovery mode”. TV-screen will show an emergency OSD for downloading the module firmware via internet. Follow the instructions on screen (press RED key on the RC when prompted to continue). DO NOT DISCONNECT WHILE DOWNLOAD IS IN PROGRESS!
If unit fails to wake up or OSD does not work at all	Replace entire StreamIOm module. Caution: When replacing StreamIOm module, the set 12NC must be programmed into the module (see factory test server, chapter 4-3). After setting the set 12NC, upgrade firmware via system recovery mode (see above).
If wired streaming works but wireless streaming fails	Check wiring of WiFi-Antennas. If wiring is ok replace WiFi-Card. If problem remains replace entire StreamIOm module.
If no fault found	Upgrade firmware via system recovery mode (see above).

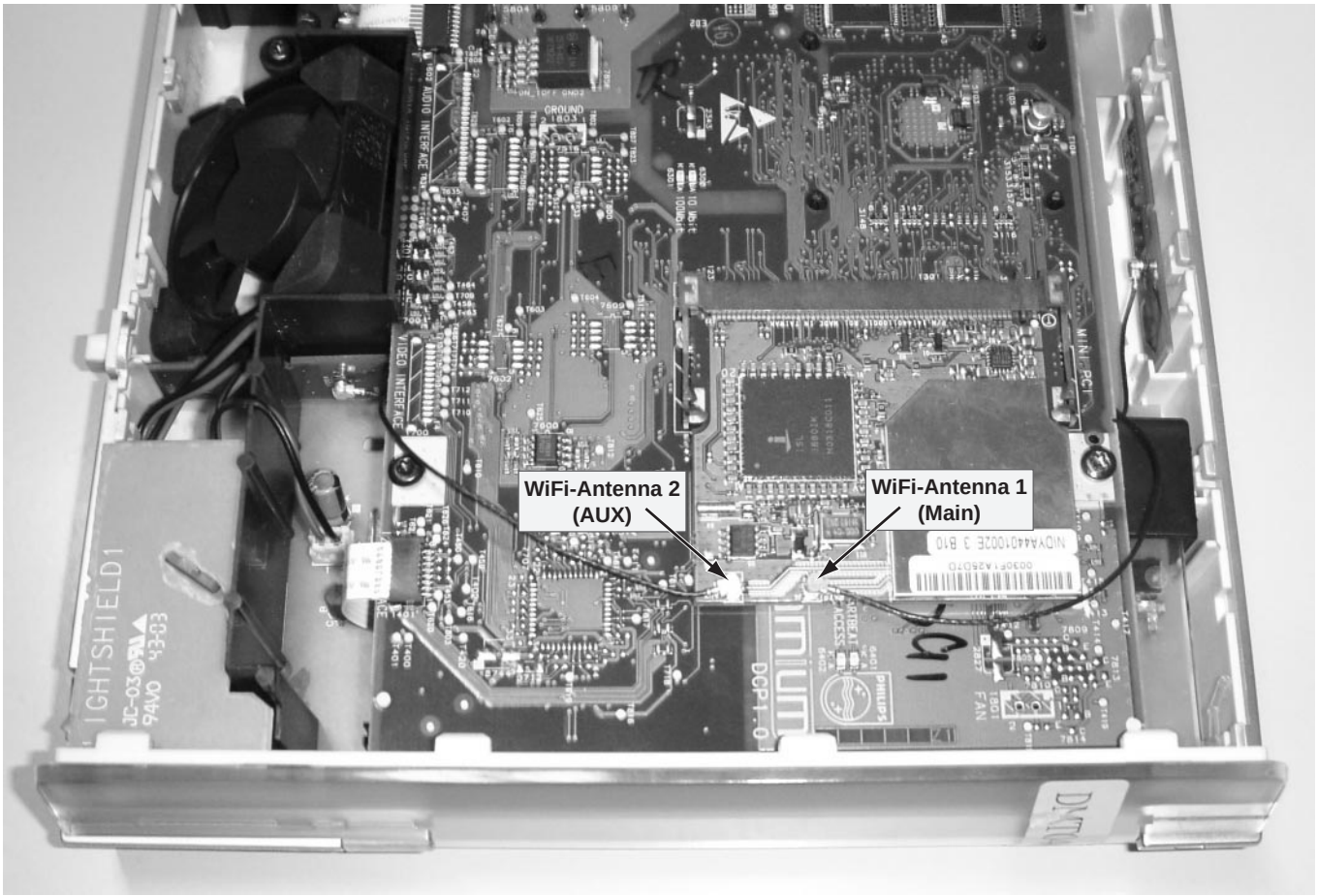
3. Functional tests

The following tests should be carried out before returning the set to the customer:

Functional test	Test sequence
Factory server mode (after replacement of StreamIOm module only)	• Start factory test server on PC → select correct set type • Start set with STANDBY+STANDBY(RC)+plug in mains (press keys until set powers on automatically) • Set will boot as in normal operation • Check/modify set 12NC on the OSD when factory test server is active
Wired streaming test	• Navigate through filestructure • Stream high bitrate Video content and testpicture, check line out, screen appearance and line outputs
Video output test (for EUR version only)	• Press “Menu” on RC → PICTURE → TV settings → VIDEO OUTPUT → select “RGB” • Check if OSD is still visible (assure that the TV is capable of using RGB) • RESET SETTINGS by pressing “Menu” → “Reset settings” → YES → unplug mains
Video output test (for NAFTA version only)	• Check if OSD is visible on TV connected via CVBS and S-Video • RESET SETTINGS by pressing “Menu” → “Reset settings” → YES → unplug mains
Wireless test	• Remove Ethernet cable • Plug in mains • Wake up the unit by pressing PC-LINK button on the RC • Wireless networks will be shown → select your network and hit OK • Stream high bitrate video content • Press the RED key on the RC repeatedly and check if color key bar and more OSD details are shown • Press until Colour key bar disappears • Press the PAUSE key on the RC repeatedly and check if the set pauses and resumes play • Press “Menu” on RC → Network → wireless settings → SSID and try to modify the SSID by entering about 10 characters in SMS style. If problems are observed, routing of wireless cables may be wrong.
Reset settings	As last step of the functional test, all settings MUST be reset to the factory defaults as described above! Else, the connection wizard will not work and the customer will face problems connecting the set to the home network. The reset will also restore the default video output mode.

4. Wiring instructions for WiFi-Antennas

Caution: The terminals for the WiFi-Antennas must not be interchanged!
The cable connected to the “Main” terminal on the WiFi-Card MUST be connected to the antenna on the right side of the set (seen from front panel). Wrong wiring will disturb the functionality of the IR-Receiver and cause serious problems with the Remote Control in WiFi mode.



3-1

SERVICE TEST PROGRAM

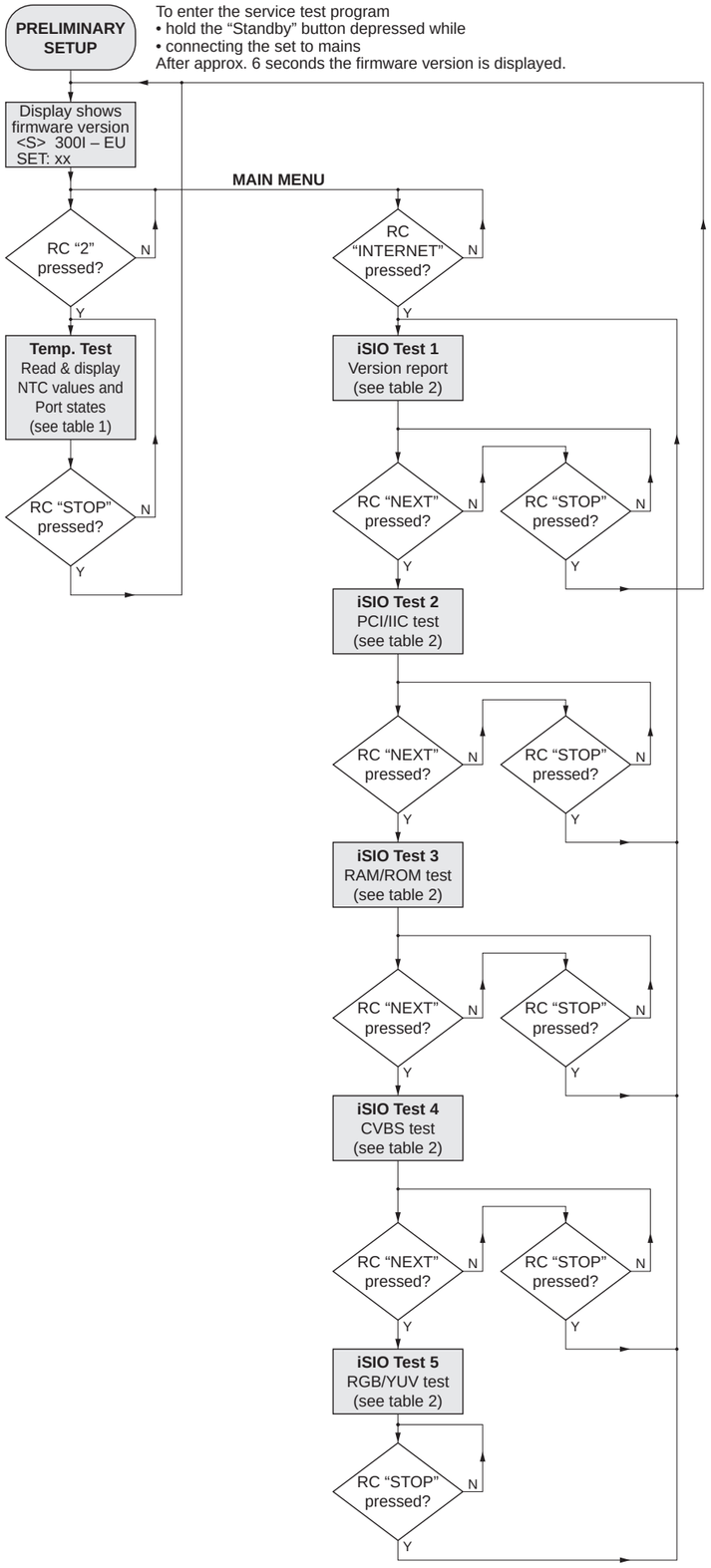


Table 1 – Temp. test

Input line	Test point	Value	Display
TEMP_SEN	pin 18	Temp. in °C	Line1: STR:xxx V:---
VER_OPT	pin 22	decimal	
300N400	pin 23	0=SL400i NAFTA	Line2: T:x FB:x
		1=SL400i EU	
		2=SL300i NAFTA	
		3=SL300i EU	
FBIN	pin 17	0 or 1	
SVID	pin 8	0 or 1	Line3: SV:x PRO:x
nPROSCAN	pin 16	0 or 1	

Table 2 – iSIO test

Test step	Display	Remarks
Version report	Line1: StreamIOm Line2: xx.xx.xxxx Line3: VMC x-x-x-xxx-xx	Reads and shows the iSIO firmware version (line 2) and the Version Matrix Code (line 3). The meaning of the 8 VMC digits is described in table 3.
PCI/IIC test	Line1: PCI/IIC COMM Line2: PASS or FAIL + Error code (see table 4)	Checks communication to PCI/IIC devices • WiFi card • Ethernet controller • Video switch • SPDIF receiver • Audio DAC
RAM/ROM test	Line1: RAM/ROM TEST Line2: PASS or FAIL + Error code (see table 4)	Verifies checksums of iSIO's • EEPROM • FLASH • SDRAM • PLD
CVBS test	Line1: CVBS TEST PIC	Output of a test picture (Video DAC) Format CVBS and S-Video
RGB/YUV test	Line1: RGB/YUV TEST PIC	Output of a test picture (Video DAC) Format RGB or YUV (dep. on set version)

Table 3 – Version Matrix Code (VMC)

Digit	Description		
1	Region Code	1 2 3 4 5 6 7	USA EU AP Australia, NZ, Latam Russia, India China Baltic (plays region 2 and 5)
2	TV System	1 2 3 4	NTSC/PAL PAL/NTSC NTSC/PALn PALm/PAL
3	Menu/AS Language	1 2 3 4	USA EU AP Others
4..6	Architecture Feature Set	001, 002, 003, etc.	Refer Version Matrix
7..8	OEM Derivative	00 01 02 03 04 05 06 07 08 09 10 99	Philips Grundig Marantz B&O Magnavox Loewe Yamaha Hitachi Audio TV etc. Test purpose

Table 4 – Error codes

Error code	Description
0x01	FSM_PCI_INIT_ERROR
0x02	FSM_PCI_MINIPCI_MISSING
0x04	FSM_PCI_TRIMEDIA_MISSING
0x08	FSM_PCI_PCILAN_MISSING
0x10	FSM_PCI_UNKNOWN_DEVICE
0x20	FSM_IIC_SA7104_ERROR
0x40	FSM_IIC_STV6618_ERROR
0x80	FSM_IIC_CS4362_ERROR
0x00000001	FLASH_ERROR_OPEN_FOR_WRITE
0x00000002	FLASH_ERROR_WRITING
0x00000003	FLASH_ERROR_CLOSE_AFTER_WRITE
0x00000004	FLASH_ERROR_OPEN_FOR_READ
0x00000005	FLASH_ERROR_FILE_LENGTH
0x00000006	FLASH_ERROR_WRONG_DATA
0x00000007	FLASH_ERROR_CLOSE_AFTER_READ
0x00000008	FLASH_ERROR_REMOVE_FILE

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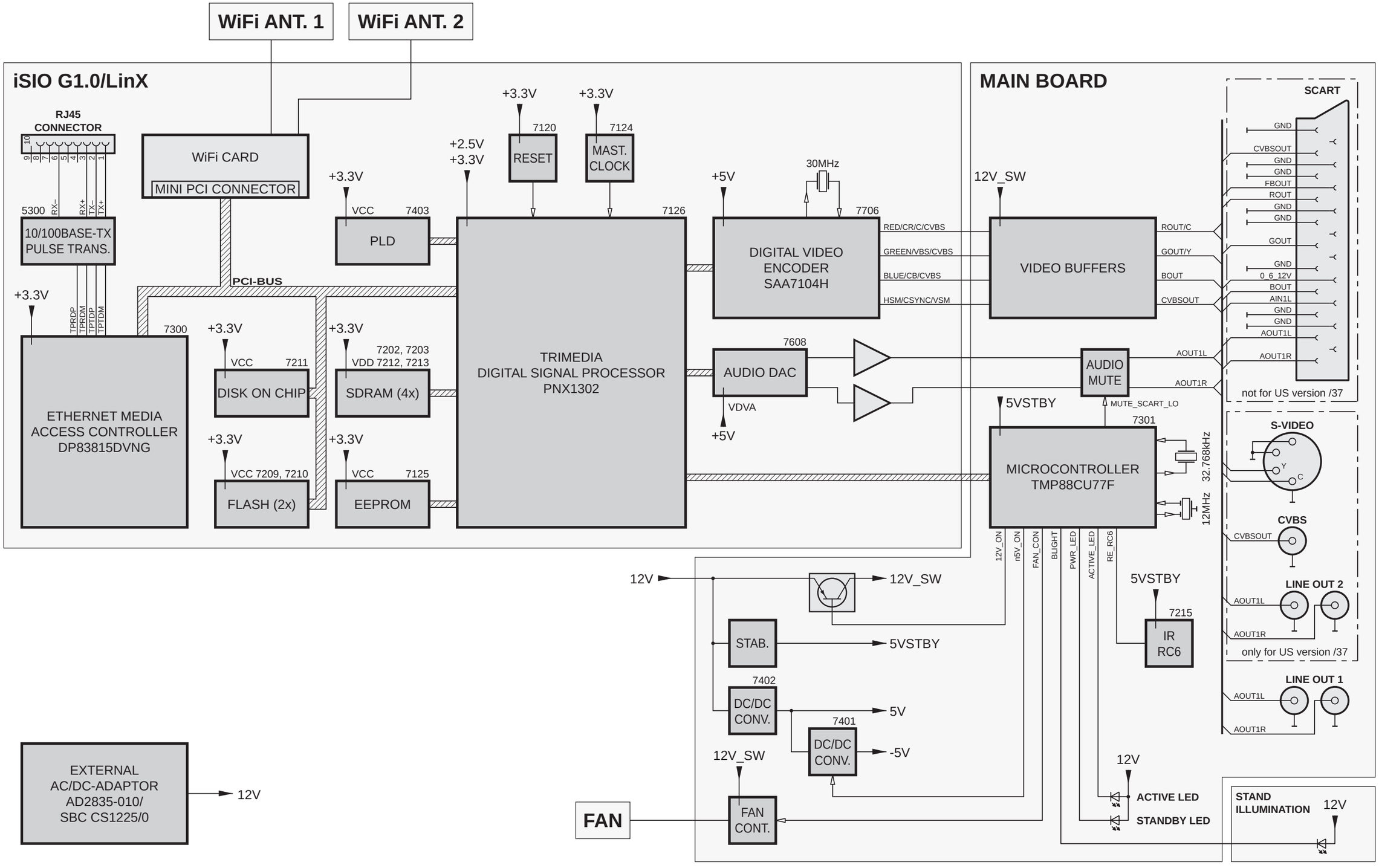
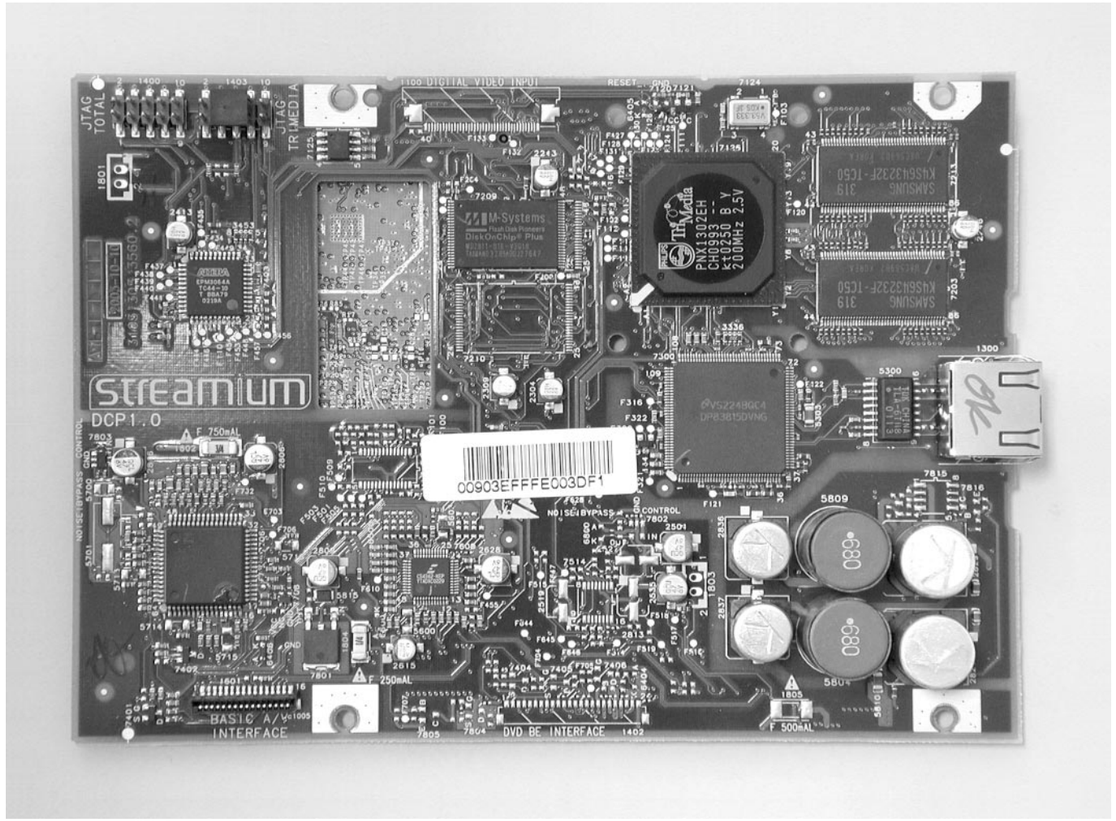
BLOCK DIAGRAM





StreamIOm G1.0/LinX Internet A/V Module

This module is not intended to be repaired on component level.
Circuit Diagrams and Printed Circuit Board drawings
are published for orientation only.

In case of defects please replace the entire module.

Modules can be ordered with codenumber “3103 308 67790”.

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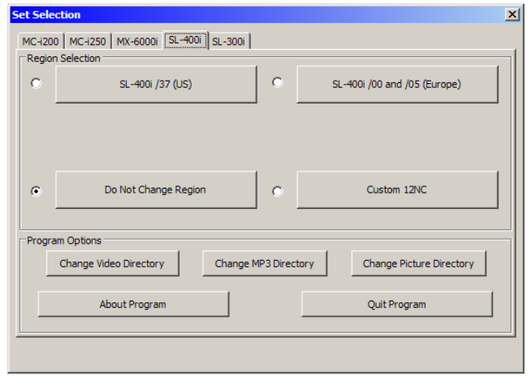
Internet A/V Module – Service Hints

The Internet A/V Module **StreamIOm G1.0/LinX** is not intended to be repaired on component level. Only the complete Printed Board Assembly and the Wireless LAN Card are available as service spare part. These articles can be ordered with the following codenumbers:

StreamIOm G1.0/LinX PBAS 3103 308 67790
Wireless LAN Card.....9307 008 01371

Important note: When replacing the Internet A/V Module the set 12NC must be programmed into the module before returning the set to the customer !!
The 12NC depends on the stroke version of the set and can only be programmed with the help of an external application – the so-called **Factory Test Server**.

Factory Test Server Application



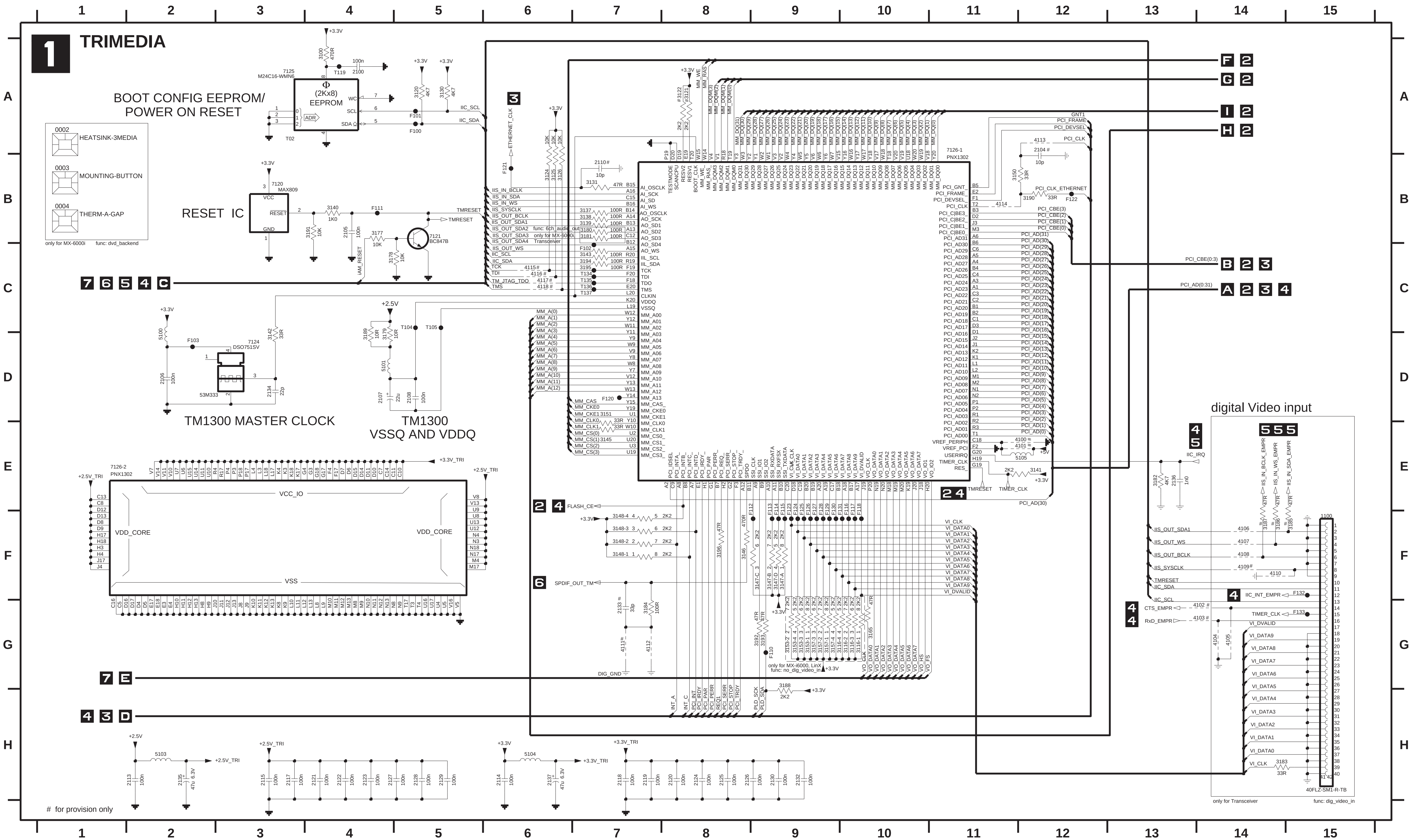
The Factory Test Server serves two purposes:
1. To test the Internet streaming of the module, without having a broadband Internet connection present.
2. To program the SET 12NC into the module after replacement.

The Factory Test Server Application is available at dedicated workshops, only.

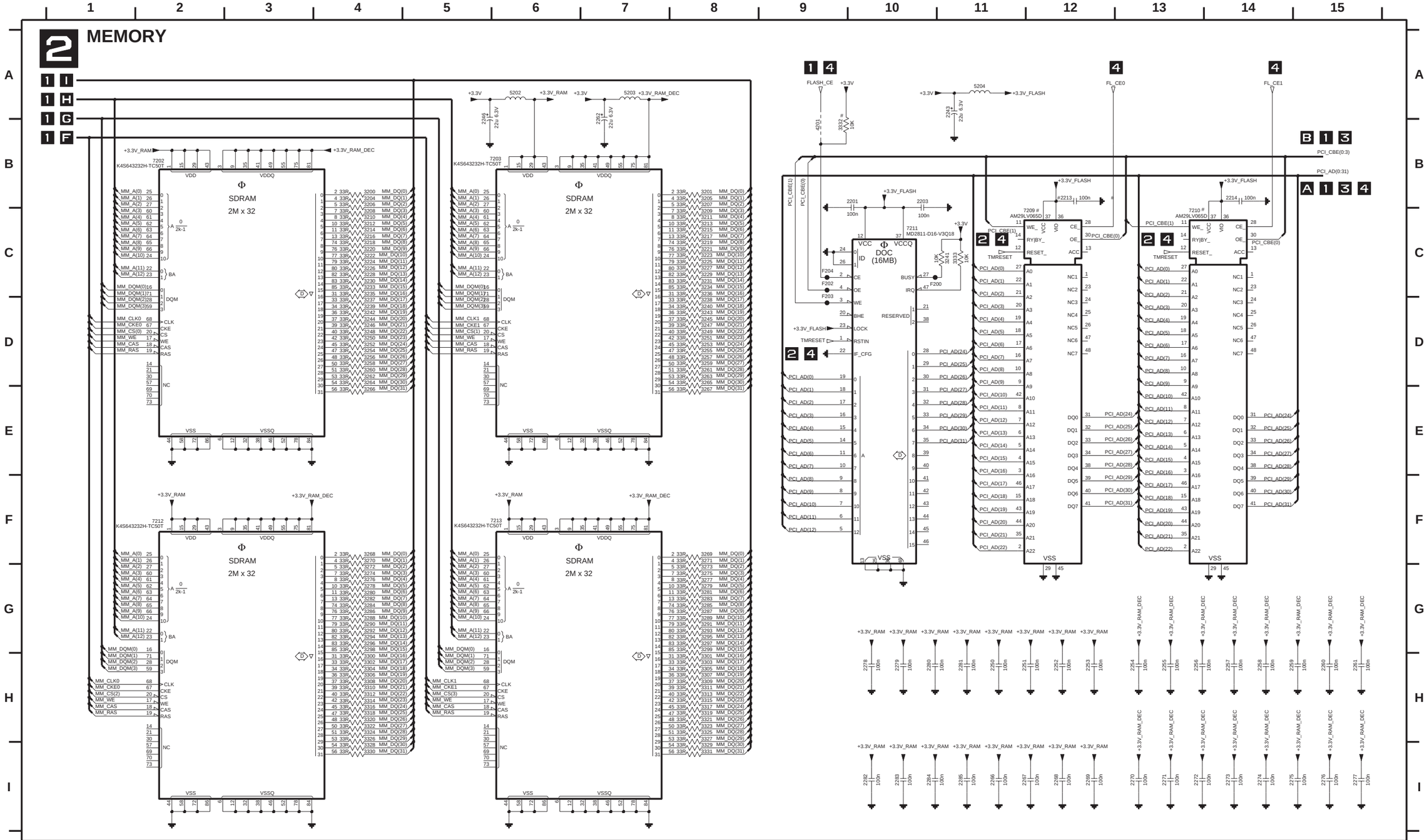
Basic requirements:
- PC running Windows NT4 Service Pack 6 or higher, Windows 2000, or Windows XP Pro
- 400MB hard disk space
- Ethernet network card
- Ethernet crossover cable or Ethernet hub with standard patch cable
- Wireless Access Point
- Mouse
- Monitor
- CD-ROM drive (for installation)

For detailed instructions on how to install, setup and use this application please refer to the “Factory Test Server Application Manual”, included on the CD-ROM.

0002 A1	2105 B4	2114 H6	2121 H4	2127 H4	2134 D3	3116-2 G10	3124 B6	3138 B7	3145 E7	3148-1 F7	3153-1 G9	3157-3 G9	3180 B7	3186 F14	3192 G9	4101 E12	4107 F14	4113 A12	5100 D2	7121 B5	F101 A5	F113 E9	F120 D7	F126 E9	F132 F15	T135 C7
0003 B1	2106 D2	2115 H3	2122 H4	2128 H5	2135 H2	3116-3 G10	3125 B6	3139 B7	3146 F8	3148-2 F7	3153-2 G9	3157-4 G9	3181 B7	3187 F14	3193 G9	4102 G14	4108 F14	4114 B11	5101 D4	7124 D3	F102 C7	F114 E9	F121 B6	F127 E9	F133 G15	T136 C7
0004 B1	2107 D4	2117 H3	2123 H4	2129 H5	2136 E13	3116-4 G10	3126 B6	3140 B4	3147-A F9	3148-3 F7	3153-3 G9	3165 G10	3182 E13	3188 G9	3194 C7	4103 G14	4109 F14	4115 C6	5103 H2	7125 A3	F103 D2	F115 E9	F122 B12	F128 E9	T104 C5	T137 C7
1100 F15	2108 D5	2118 H7	2124 H8	2130 H9	2137 H6	3120 A5	3130 A5	3141 E12	3147-B F9	3148-4 F7	3153-4 G9	3177 B4	3183 H14	3189 D4	3195 C7	4104 G14	4110 F14	4116 C6	5104 H6	7126-1 A11	F110 G9	F116 E10	F123 E9	F129 E9	T105 C5	
2100 A4	2110 B7	2119 H7	2125 H8	2132 H9	3100 A4	3121 A8	3131 B7	3142 D3	3147-C F9	3150 B11	3157-1 G9	3178 C4	3184 G7	3190 B12	3196 F8	4105 G14	4111 G7	4117 C6	5105 E12	7126-2 E1	F111 B4	F117 E10	F124 E9	F130 E9	T119 A4	
2104 A12	2113 H2	2120 H8	2126 H8	2133 G7	3116-1 G10	3122 A8	3137 B7	3143 C7	3147-D F9	3151 D7	3157-2 G9	3179 D4	3185 F15	3191 B4	4100 E12	4106 F14	4112 G7	4118 C6	7120 B3	F100 A5	F112 E9	F118 E10	F125 E9	F131 E10	T134 C7	



4-3



4-4

3 ETHERNET

RJ45 CONNECTOR

TERM_PLANE

MINI PCI CONNECTOR

10 Mbit

100Mbit

option for DP83816

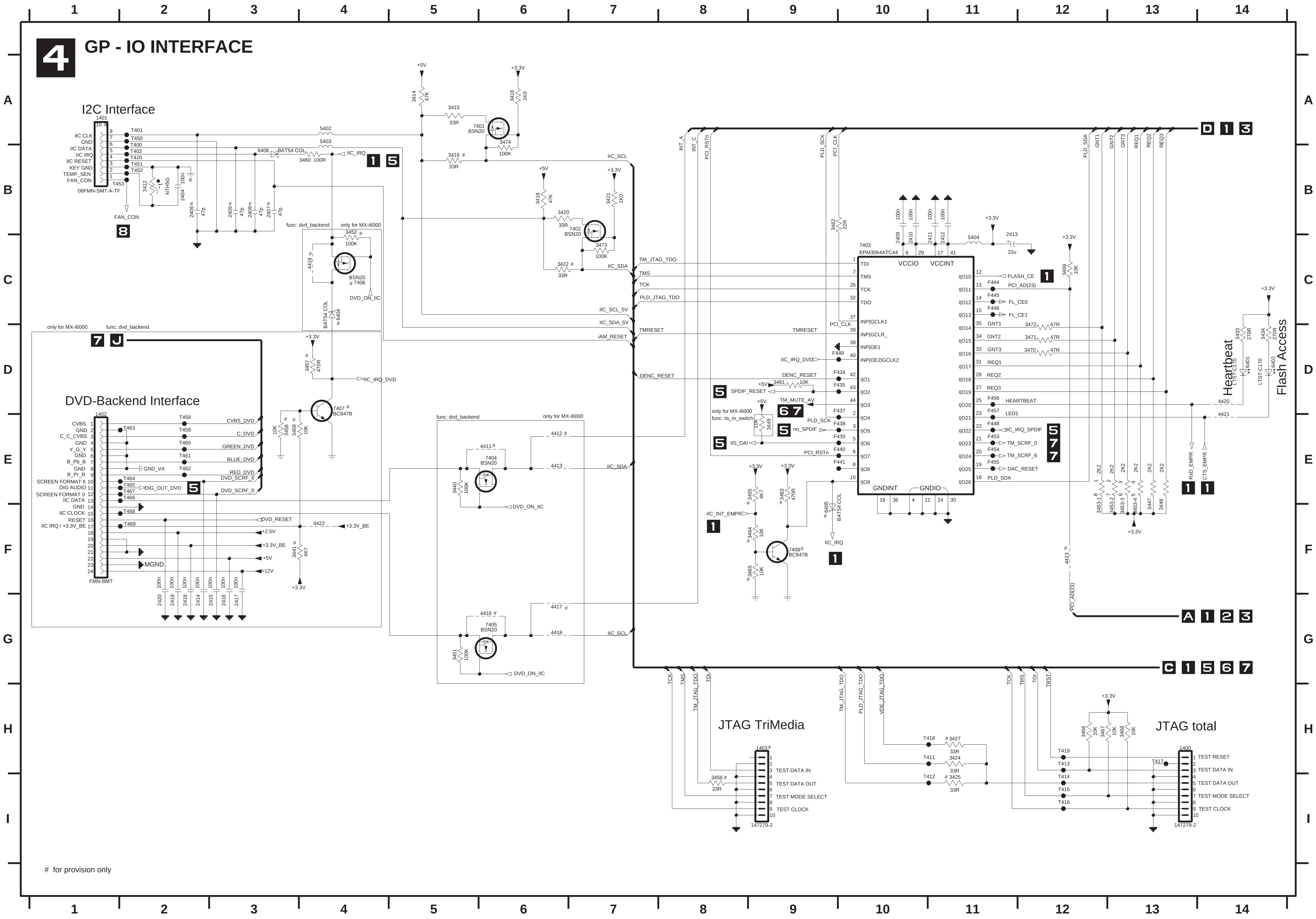
only for LinX func: no_dvd_backend

DP83815DVNG

for provision only

4-5

4 GP - IO INTERFACE



for provision only

1400 H13
1401 A1
1402 E1
1403 H9
2404 B2
2405 B3
2406 B2
2407 B3
2408 B3
2409 C10
2410 C10
2411 C11
2412 C11
2413 C11
2414 G2
2415 G3
2416 G3
2417 G3
2418 G2
2419 G2
2420 G2
3412 B2
3414 A5
3415 A5
3416 B5
3418 A6
3419 B6
3420 B6
3421 B7
3422 C6
3424 H11
3425 I11
3427 H11
3433 D14
3434 D14
3440 E5
3441 F3
3447 E13
3448 F13
3449 E9
3451 G5
3452 B4
3453-1 F12
3453-2 F13
3453-3 F13
3453-4 F13
3455 E9
3456 I8
3457 D4
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3459 E3
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3466 H12
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4411 E6
4412 E6
4413 E6
4416 G6
4417 G6
4418 G6
4419 C4
4420 D14
4421 E14
4422 F4
4423 F12
5402 A4
5403 A4
5404 C11
6401 D14
6402 D14
6404 C4
6405 F9
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7404 E6
7405 G6
7406 C4
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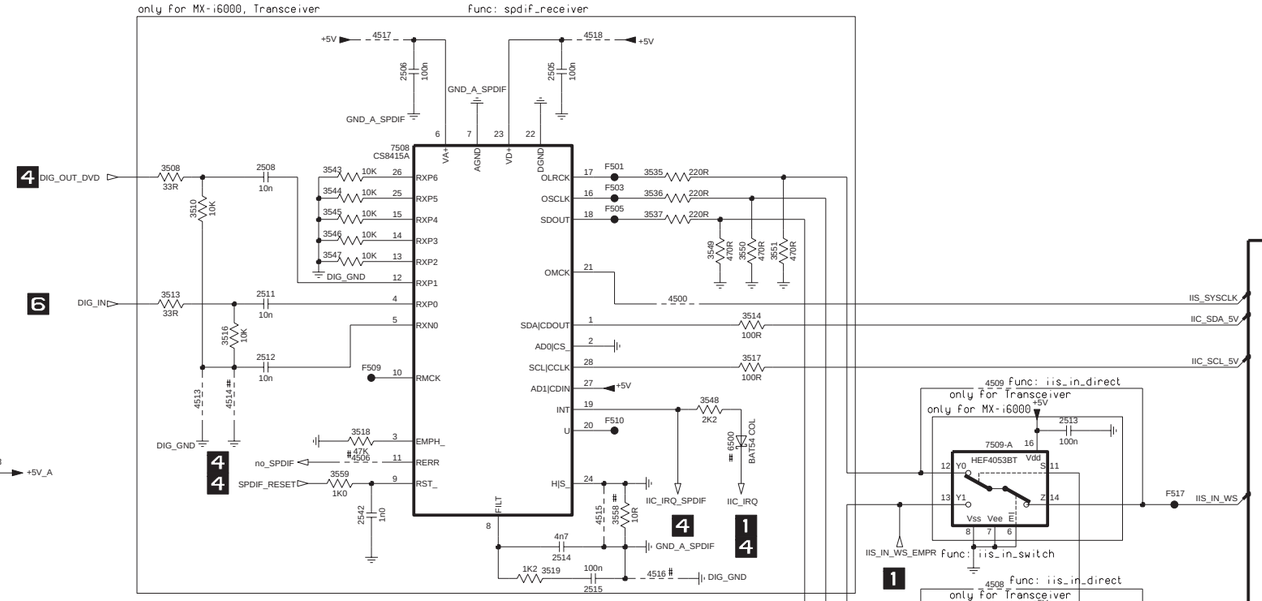
7408 F9
F434 D10
F435 D10
F437 D10
F438 E10
F439 E10
F440 E10
F441 E10
F444 C11
F445 C11
F446 C11
F448 E11
F449 D10
F453 E11
F454 E11
F455 E11
F456 D11
F457 D11
T400 B2
T401 A2
T402 B2
T411 H11
T412 I11
T413 H12
T414 I12
T415 I12
T416 I12
T417 H13
T418 H11
T419 H12
T420 B2
T450 A2
T451 B2
T452 B2
T453 B1
T458 E2
T459 E2
T460 E2
T461 E2
T462 E2
T463 E2
T464 E2
T465 E2
T466 E2
T467 E2
T468 F2
T469 F2

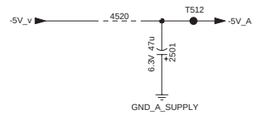
4-6

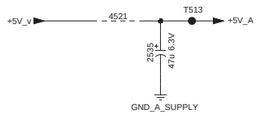
1 2 3 4 5 6 7 8 9 10 11 12 13 14

5 ANALOG / DIGITAL AUDIO IN

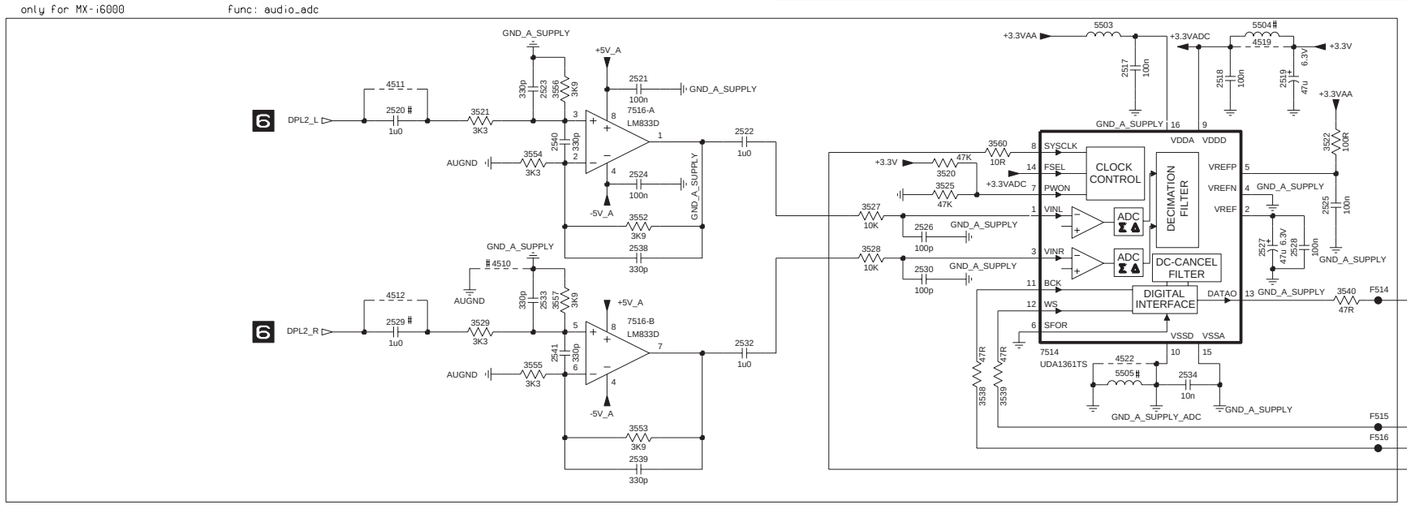
only for MX-i6000, Transceiver — func: spdif_receiver







only for MX-i6000 — func: audio_adc



for provision only

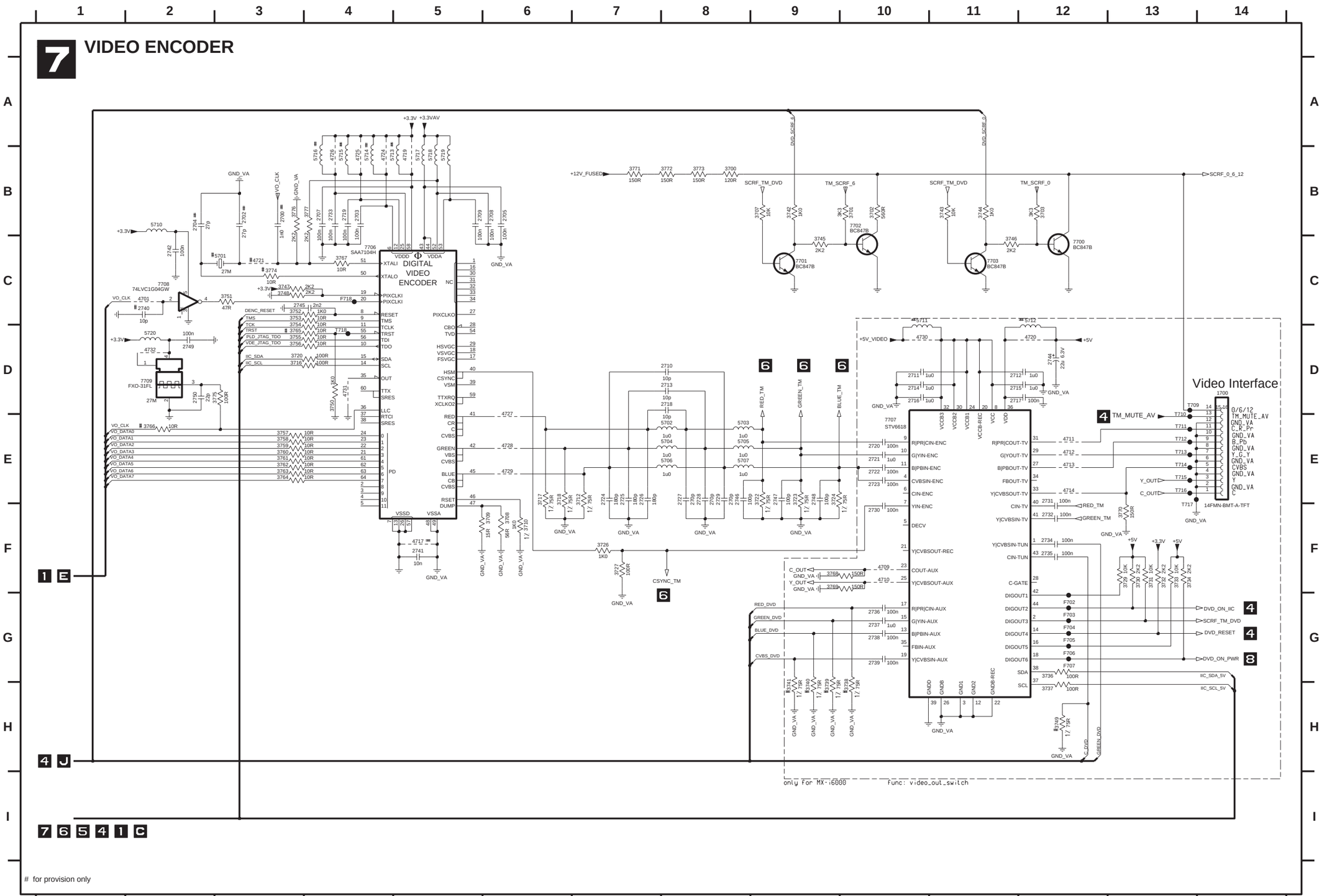
1601 A14
1602 C14
2600 A10
2601 A11
2602 A10
2603 A12
2605 B10
2606 B11
2608 C10
2609 C12
2610 D10
2611 D11
2612 D10
2613 D12
2614 D6
2615 D5
2617 D6
2620 E10
2621 E11
2622 F10
2623 E12
2624 F10
2625 F11
2626 G10
2627 G12
2628 G8
2629 G8
2630 G8
2633 H6
2634 H10
2635 H11
2636 H10
2637 H12
2638 D4
2639 H6
2641 H7
3600 A10
3601 A11
3602 A10
3603 A11
3604 B10
3605 B11
3606 B10
3607 B11
3608 B10
3609 C11
3610 C10
3611 C11
3612 C10
3613 C11
3614 D10
3615 D11
3616 D10
3617 D11
3619 E10
3620 E11
3621 E10
3622 E4
3623 E3
3624 E4
3625 E11
3626 F4
3627 F3
3628 F4
3629 F10
3630 F11
3631 F4
3632 F4
3633 F4
3634 F10
3635 F11
3636 F3
3637 F3
3638 F10
3640 G11
3641 G4
3642 G4
3643 G10
3644 G11
3645 G4
3646 G4
3647 H4
3648 H4
3649 H10
3650 H11
3651 H10
3652 H11
3653 H10
3654 H11
3655 D4
4602 H6
4609 H7
4610 D14
4611 E14
4612 A13
4613 A13
4614 D6
4617 H7
4618 G6
5600 D6
5601 D7
5603 H6
5604 D7
6600 D6
7600-A A11
7600-B B11
7602-A C11
7602-B E11
7608 E5
7609-A F11
7609-B H11
F610 F8
F628 F3
F644 E3
F645 E3
F646 F3
F647 F3
F648 F3
T602 D13
T603 D13
T604 D13
T605 D13
T616 A14
T617 A14
T618 A14
T619 A14
T620 A14
T621 A14
T622 A14
T623 A14
T624 A14
T625 A14
T626 A14
T627 B14
T629 D14
T632 E14
T633 E14
T634 E14
T635 E14

6 ANALOG AUDIO OUT

for provision only

4-8

7 VIDEO ENCODER

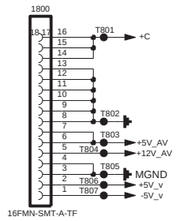


1700 D14	4709 F10
2700 B3	4710 F10
2702 B3	4711 E12
2703 B4	4712 E12
2704 B2	4713 E12
2705 B6	4714 E12
2707 B4	4717 F5
2708 B6	4719 B5
2709 B5	4720 D12
2710 D8	4721 C3
2711 D10	4724 B4
2712 D11	4725 B4
2713 D8	4726 B4
2714 D10	4727 E6
2715 D11	4728 E6
2716 D10	4729 E6
2717 D11	4730 D10
2718 D8	4731 D4
2719 B4	4732 D2
2720 E10	5701 C3
2721 E10	5702 E8
2722 E10	5703 E8
2723 E10	5704 E8
2724 E7	5705 E8
2725 E7	5706 E8
2726 E7	5707 E8
2727 E8	5710 B2
2728 E8	5711 C10
2729 E8	5712 C12
2730 F10	5713 B5
2731 E12	5714 B4
2732 F12	5715 B4
2733 B4	5716 B4
2734 F12	5717 B5
2735 F12	5718 B5
2736 G10	5719 B5
2737 G10	5720 D2
2738 G10	7700 C12
2739 G10	7701 C9
2740 C2	7702 B10
2741 F5	7703 C11
2742 C2	7706 C4
2744 D12	7707 E10
2745 C3	7708 C2
2746 E8	7709 D2
2747 E9	7702 G12
2748 E9	7703 G12
2749 D2	7704 G12
2750 D2	7705 G12
3700 B8	7706 G12
3701 B10	7707 G12
3702 B10	7718 C4
3703 B12	7709 D13
3707 B9	7710 E13
3708 F6	7711 E13
3709 F6	7712 E13
3710 F6	7713 E13
3712 E7	7714 E13
3716 D3	7715 E13
3717 E6	7716 E13
3718 E6	7717 F13
3720 D3	7718 D4
3722 E9	
3723 E9	
3724 E9	
3726 F7	
3727 F7	
3729 F13	
3730 F13	
3731 F13	
3732 F13	
3733 F13	
3734 F13	
3736 G12	
3737 H12	
3738 H10	
3739 H9	
3740 H9	
3741 H9	
3742 B9	
3743 B11	
3744 B11	
3745 C9	
3746 C11	
3747 C3	
3748 C3	
3749 H12	
3750 D4	
3751 C3	
3752 C3	
3753 C3	
3754 D3	
3755 D3	
3756 D3	
3757 E3	
3758 E3	
3759 E3	
3760 E3	
3761 E3	
3762 E3	
3763 E3	
3764 E3	
3765 D3	
3766 E2	
3767 C4	
3768 F9	
3769 F9	
3770 F13	
3771 B7	
3772 B8	
3773 B8	
3774 C3	
3775 D3	
3776 B3	
3777 B4	
4701 C2	

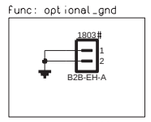
4-9

8 POWER SUPPLY

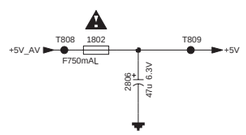
Supply Interface



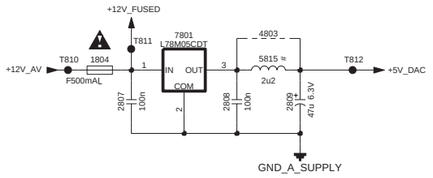
Ground Connection



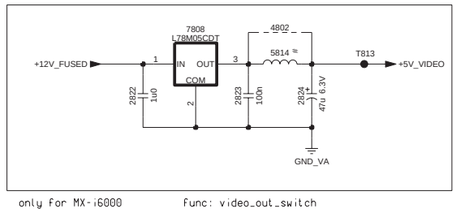
+5V Digital Supply



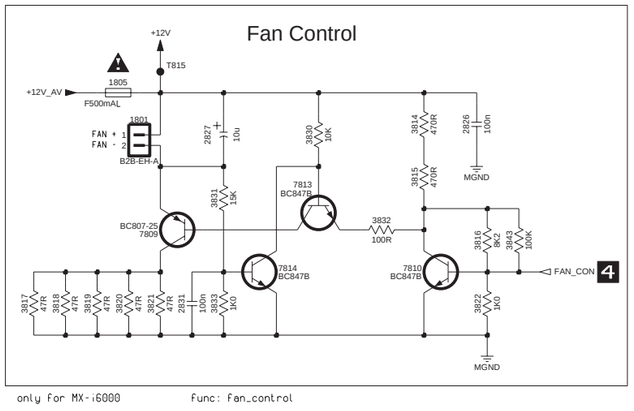
+5V Audio Analog Supply



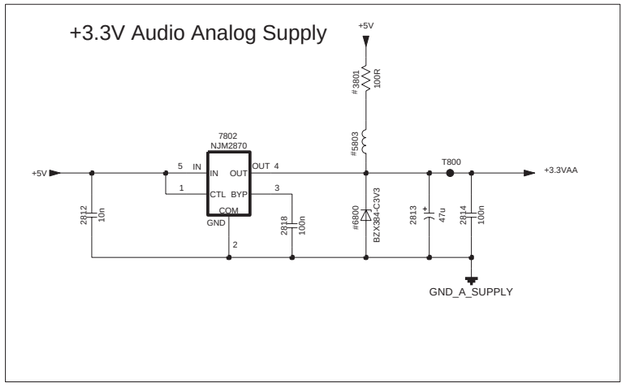
+5V Video Analog Supply



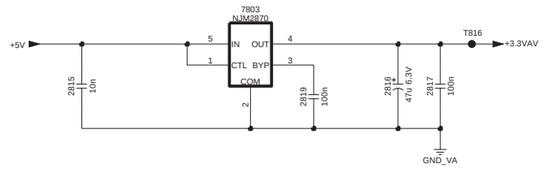
Fan Control



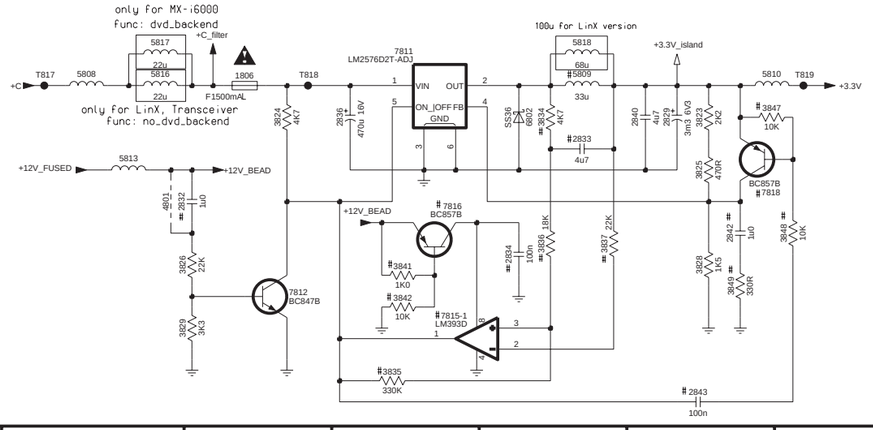
+3.3V Audio Analog Supply



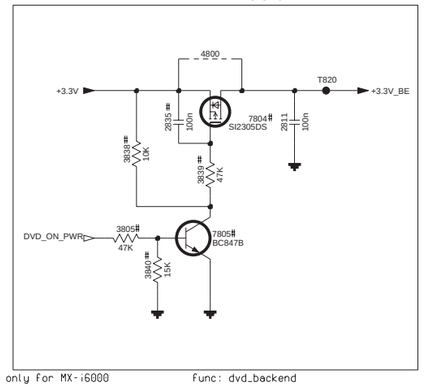
+3.3V Video Analog Supply



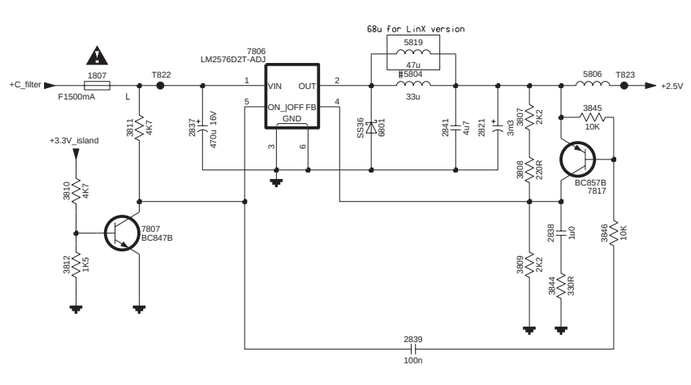
+3.3V Digital Supply



+3.3V Backend Supply Switch



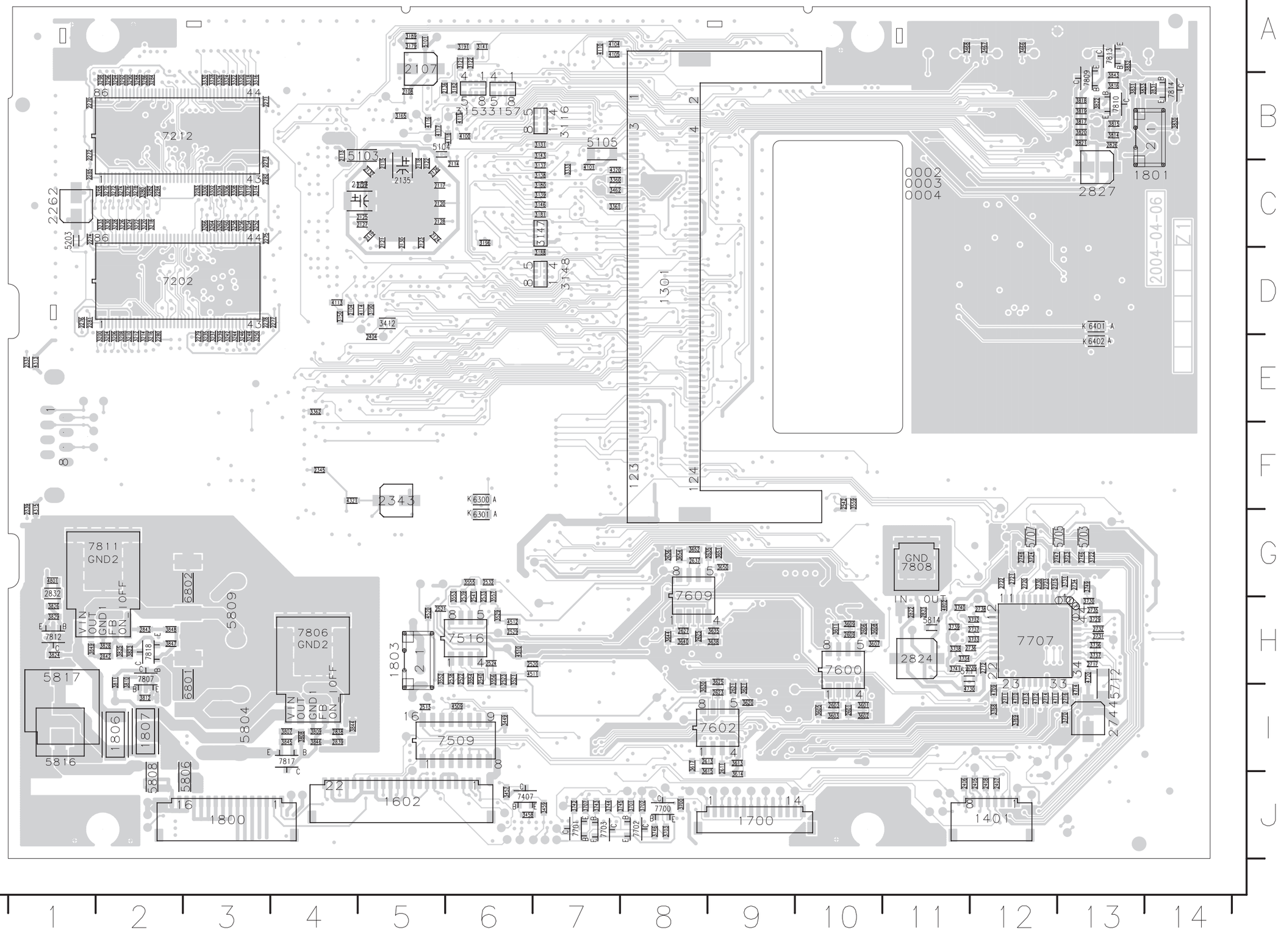
+2.5V TriMedia Core Supply



A												A
B												B
C												C
D												D
E												E
F												F
G												G
H												H
I												I
	1	2	3	4	5	6	7	8	9	10	11	12	13

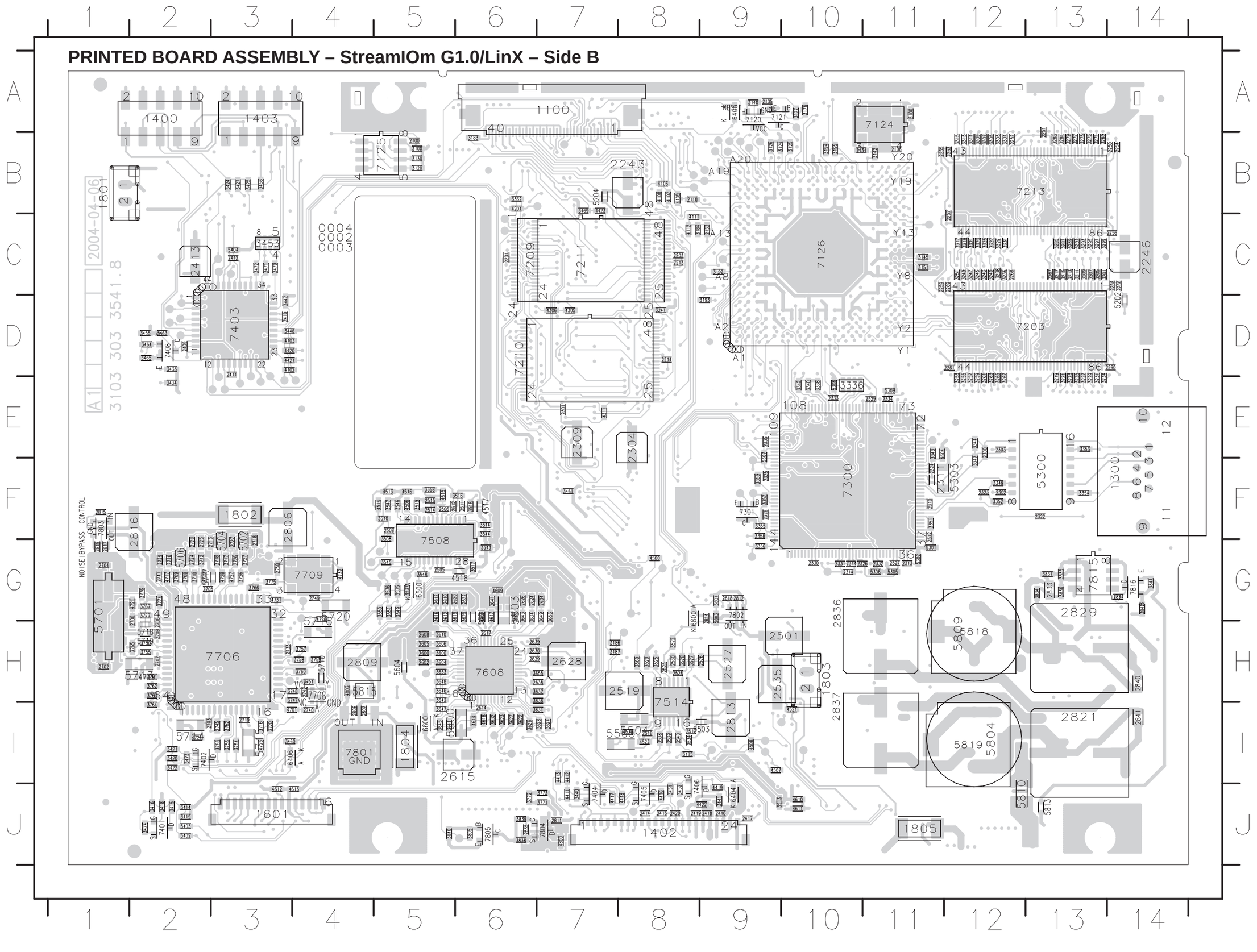
4-10

PRINTED BOARD ASSEMBLY – StreamIOm G1.0/LinX – Side A

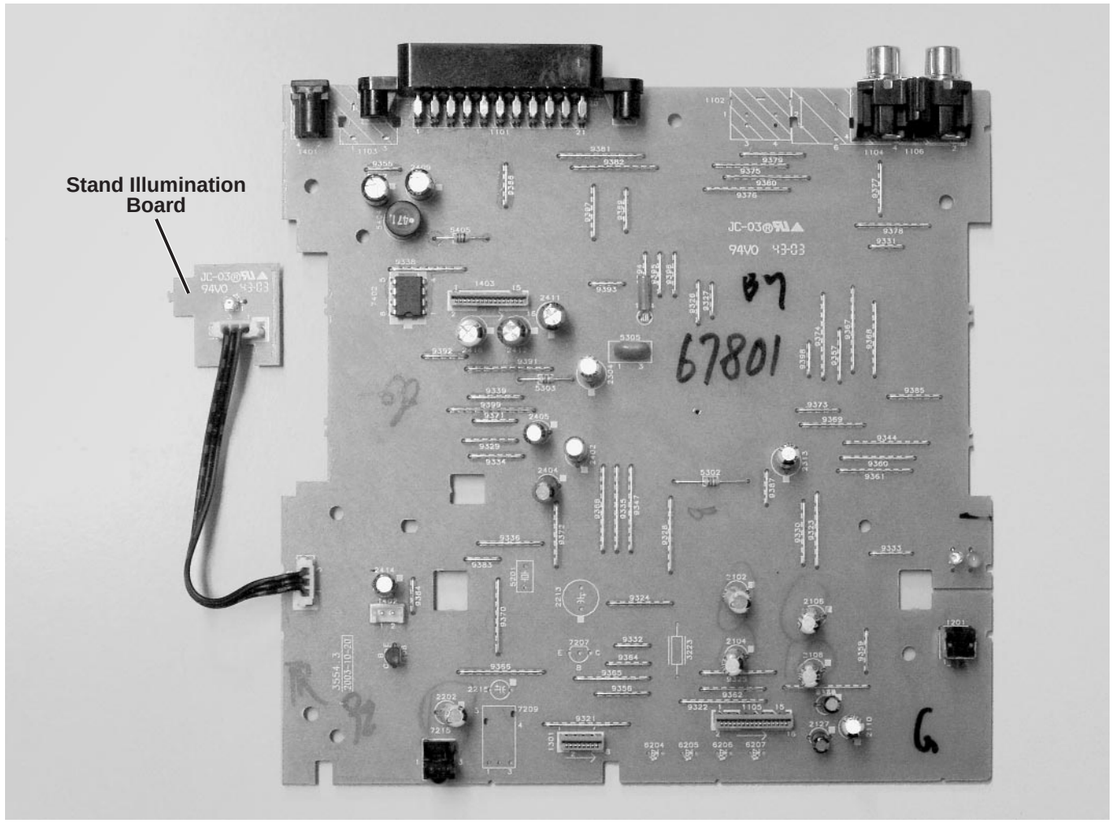


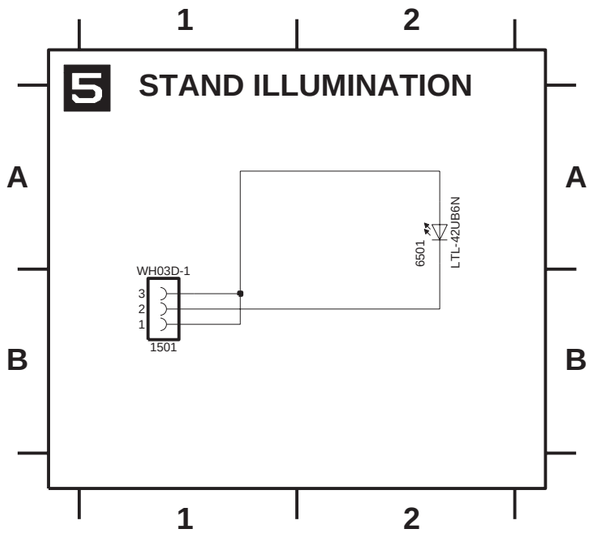
4-13

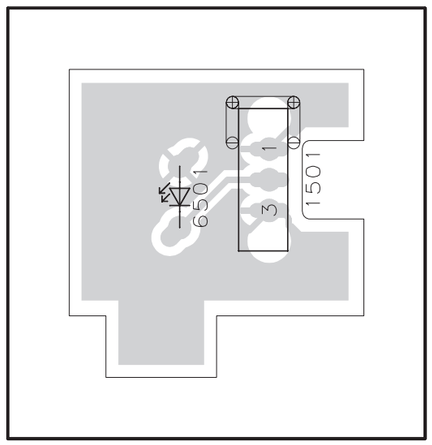
PRINTED BOARD ASSEMBLY – StreamIOm G1.0/LinX – Side B



4-14







Main Board

This board is not intended to be repaired on component level.
Circuit Diagrams and Printed Circuit Board drawings
are published for orientation only.

In case of defects please replace the entire board.

Boards can be ordered with the following codenumbers:

Main Board EUR Version /00/05/19..... 3103 308 67800
Main Board NAFTA Version /37..... 3103 308 67810

4-15

1 VIDEO OUT

EUR version only

NAFTA version only

EUR version only

from StreamIOM

CVBS/LINE OUT 1

LINE OUT 2

#... for provision only

1101 A9
1102 D13
1103 G13
1104 F13
1105 I1
1106 G13
2101 A2
2102 C4
2103 C4
2104 E4
2105 D4
2106 F4
2107 F4
2108 G4
2109 G4
2110 I10
2113 H8
2114 I8
2115 H12
2116 H12
2117 G13
2118 F13
2119 F12
2120 E11
2121 E12
2122 E11
2123 D12
2124 G6
2127 H8
2128 I8
2130 A3
2131 A3
3101 A2
3102 B4
3103 B5
3104 B5
3105 B3
3106 B3
3107 C3
3108 D3
3109 B9
3110 B9
3111 C5
3112 D5
3113 C5
3114 D5
3115 C5
3116 C6
3117 C4
3118 D3
3119 E3
3120 D4
3121 D5
3122 E5
3123 D5
3124 E5
3125 E5
3126 E6
3127 F4
3128 F5
3129 F5
3130 F5
3131 F5
3132 F5
3133 F6
3134 G4
3135 G5
3136 H5
3137 G5
3138 H5
3139 G5
3140 G6
3141 I11
3142 H11
3143 H10
3144 I10
3145 I9
3146 H9
3147 H7
3148 H8
3149 I7
3150 I8
3151 C11
3152 D10
3153 D10
3154 D11
3155 C11
3156 D12
3157 E5
3158 E4
3159 D4
3160 C5
3161 F5
3162 G5
3163 G6
3164 H4
3165 F4
3166 E3
3167 C2
3168 C2
3169 C8
3170 C9
3171 C3
3172 H10
4116 D3
4117 G6
4333 I4

6101 B6
6102 B6
6103 B7
6104 B7
6105 B8
6106 B8
6107 F11
6108 E12
6109 E11
7101 B5
7102 B3
7103 D3
7104 C5
7105 C6
7106 E3
7107 E5
7108 E6
7109 F5
7110 F6
7111 G5
7112 G6
7113 I10
7114 H10
7115 I9
7116 H9
7117 C11
7118 D12
7119 C2
F101 B6
F102 A7
F103 B8
F105 B8
F107 B6
F108 B9
F110 H1
F111 H1
F112 H2
F113 A3
F114 A3
F115 B7
F116 B7
F117 B8
F118 B3
F119 C4
F120 D12
F121 E12
F122 E4
F123 H1
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F125 H2
F126 H2
F127 H1
F128 H2

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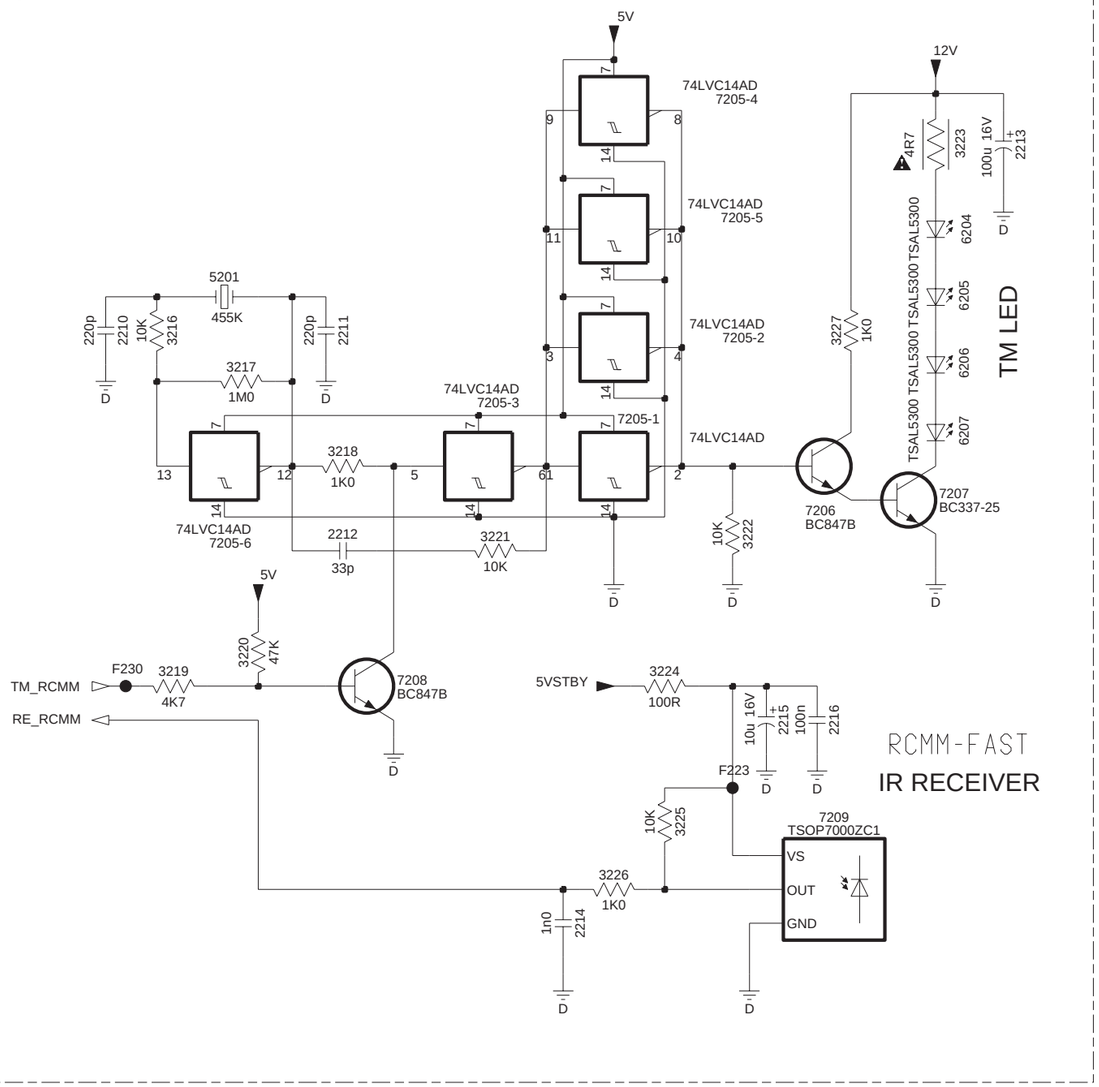
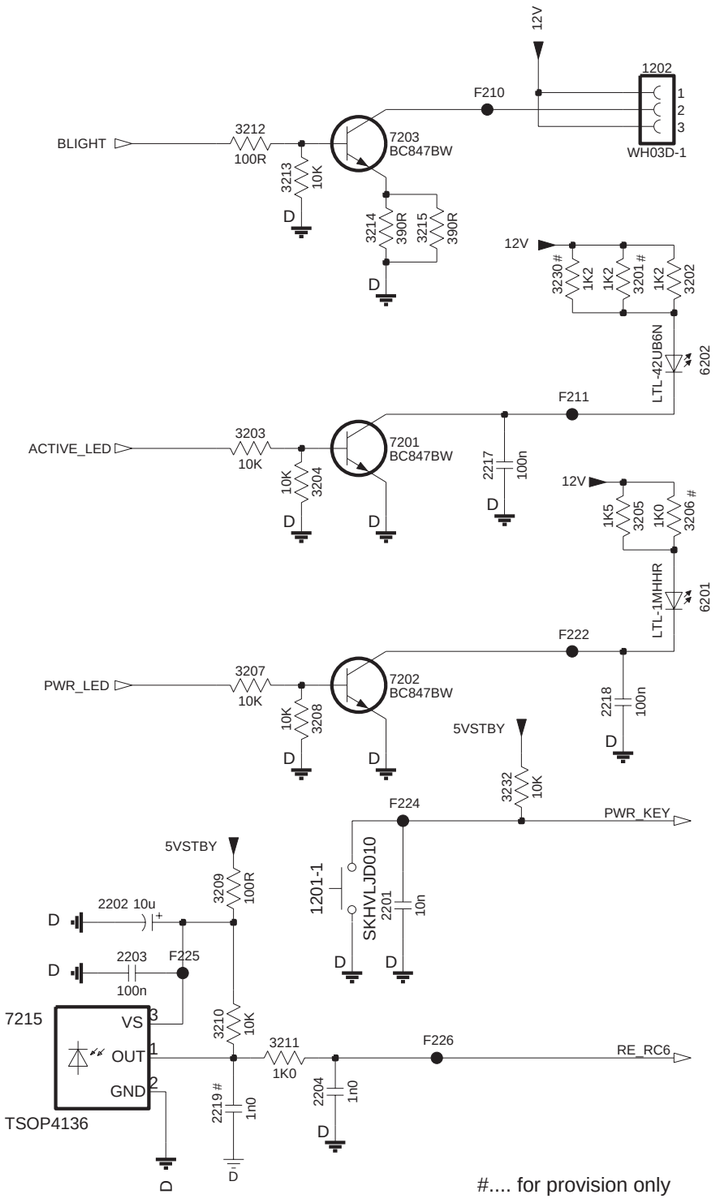
2 SL-300i FRONT AREA

provisional





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2201 E7
2202 E6
2203 E6
2204 F7
2210 C1
2211 C2
2212 D2
2213 B5
2214 E3
2215 D4
2216 D4
2217 C8
2218 D8
2219 F7
3201 C8
3202 C8
3203 C7
3204 C7
3205 D8
3206 D8
3207 D7
3208 D7
3209 E7
3210 F7
3211 F7
3212 B7
3213 B7
3214 B7
3215 B8
3216 C1
3217 C1
3218 C2
3219 D1
3220 D1
3221 D3
3222 D4
3223 B4
3224 D3
3225 E3
3226 E3
3227 C4
3230 C8
3232 E8
5201 C1
6201 D8
6202 C8
6204 B4
6205 C4
6206 C4
6207 C4
7201 C7
7202 D7
7203 B7
7205-1 C3
7205-2 C4
7205-3 C3
7205-4 B4
7205-5 B4
7205-6 D1
7206 D4
7207 D4
7208 D2
7209 E4
7215 F6
F210 B8
F211 C8
F222 D8
F223 E4
F224 E8
F225 E7
F226 F8
F230 D1

4-17

3 CONTROL

To iAM Module

1301 FMN

F320 F321 F301 F302 F303 F304 F305

IM_IIC_CLK IM_IIC_DATA IM_IIC_IRQ IM_RESET TEMP_SEN

+5V0_K 5V +5V0_D

6K8 3301 10K 3302 2K2 3303 4K7 3304 4K7 3305

10p 2301 10p 2302

4399 10K 3306 10K 3307

provisional

EEPROM

2u2 5301

2303 100n

7302 M24C08

VCC E0 E1 E2 SDA SCL WC_ VSS

3308 470R F308

3309 470R F307

IIC_DATA IIC_CLK1

5VSTBY 5302 2u2

F324 2317 100n

1K0 3310

TMP88CU77F 7301

PWR_KEY FAN_CON PWR_LED

3311 10K F325 3312 1K0 3313 18K

5VSTBY 5303 2u2 F322

2304 47u 25V 2305 100n

CSALA 5305

2306 22p # 2307 22p

1304 32K768 2308 10p 2309 # 22p 2310 22p

F309 3314 10R

F323 2311 10n

RESET

100R 3315 100R 3316 100R 3317 100R 3318

IM_IIC_DATA IM_IIC_CLK IIC_DATA IIC_CLK1

1K0 #3319 1K0 3320 470R 3321 10K 3339

RE_RCMM RE_RC6 IM_IIC_IRQ

+5V0_K

4311 NFATA (S-Video output)

1K0 # 3322 1K0 3323

TM_RCMM IM_RESET

5K6 3348 470R 3349 47R 3326 10K 3327

F315 RGB_ON

1K0 3328 10K 3329 4K7 3330 10K 3347 1K0 3331 10K 3332

TEMP_SEN VER_OPT

EUR only 3350 10K 12V_FAIL

3336 33K 3337 10K 3338 1K0 BLIGHT ACTIVE_LED

3352 4K7 3340 1K0 MUTE_SCART_LO

3341 1K0 3342 1K0 12V_ON n5V_ON

F313 +5V0_D

5307 2u2 5306 2u2 5VSTBY

3333 68R F312 +5V0_K

2312 100n 2313 47u 16V 2314 100n

F314 3334 10K # 3335 10K

VER_OPT

RESET

100K 3344 680K 3343 220K 3351 10K 3345 470n 2316 10n 2315

BC847BW 7120

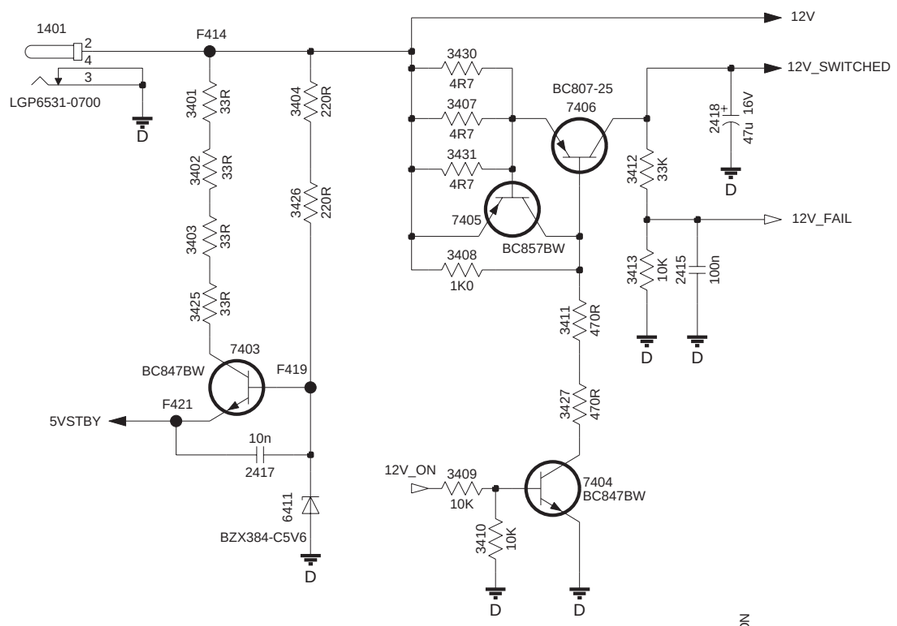
1K0 3346 RESET

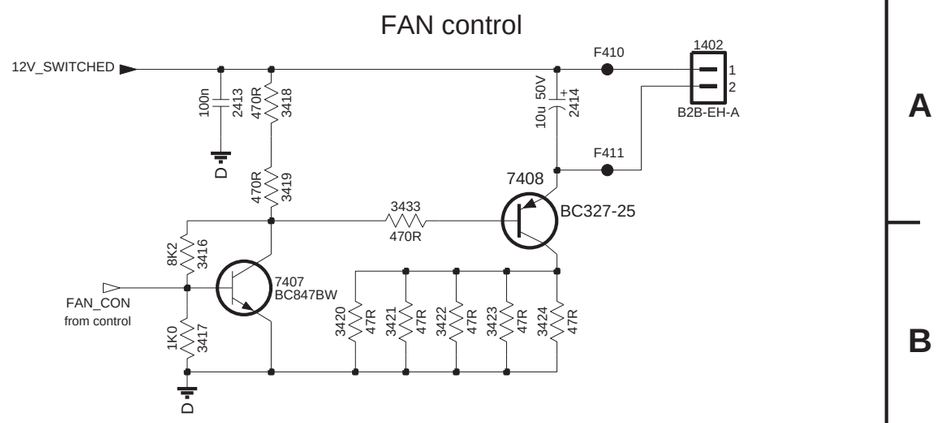
{IIC_CLK1,IIC_DATA,RESET,PWR_LED,RE_RCMM,RE_RC6,IM_IIC_IRQ,IM_IIC_DATA,IM_IIC_CLK,IM_RESET,PWR_KEY,VER_OPT,TEMP_SEN,FAN_CON,TM_RCMM,MUTE_SCART_LO,RGB_ON,12V_ON,n5V_ON}

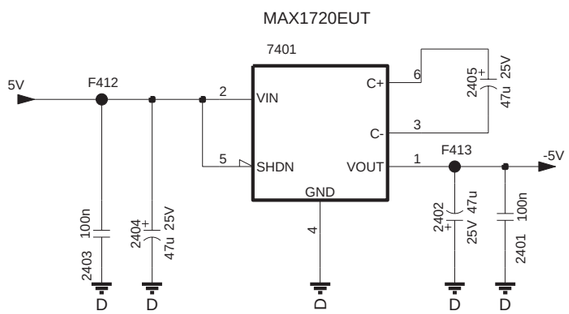
to sheets 1,2,4

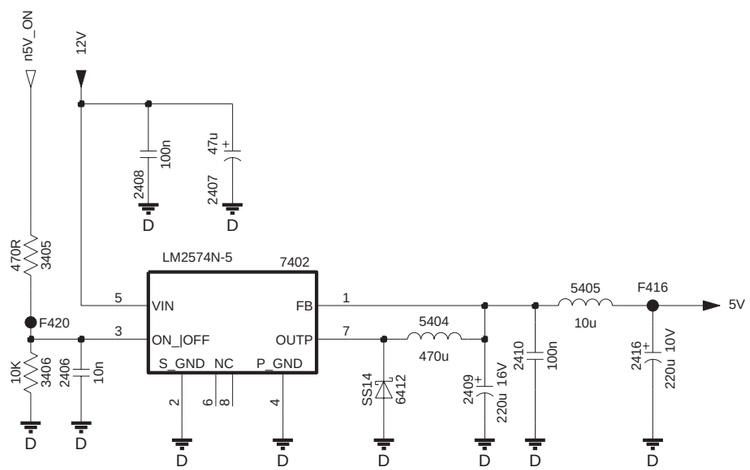
4-18

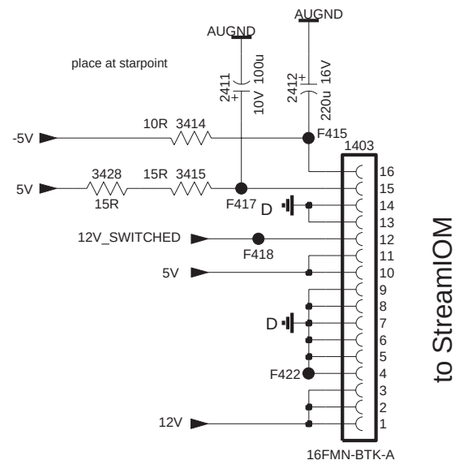
4 SUPPLY











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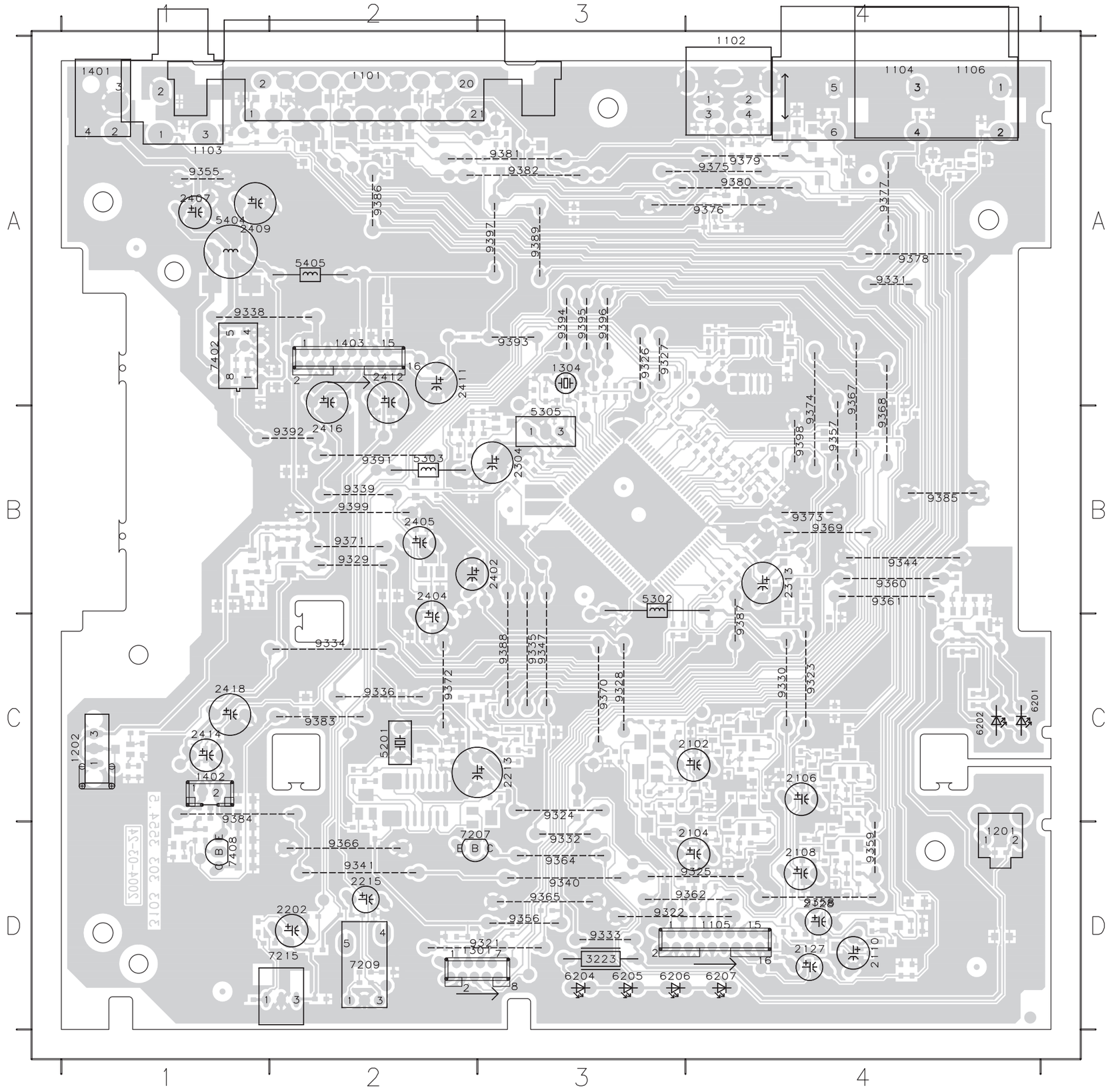

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1106	A4	9386	A2
1201	D4	9387	C4
1202	C1	9388	C3
1301	D2	9389	A3
1304	A3	9391	B2
1401	A1	9392	B2
1402	C1	9393	A3
1403	A2	9394	A3
2102	C4	9395	A3
2104	D4	9396	A3
2106	C4	9397	A3
2108	D4	9398	B4
2110	D4	9399	B2
2127	D4		
2128	D4		
2202	D2		
2213	C3		
2215	D2		
2304	B3		
2313	B4		
2402	B3		
2404	B2		
2405	B2		
2407	A1		
2409	A1		
2411	A2		
2412	A2		
2414	C1		
2416	B2		
2418	C1		
3223	D3		
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5302	B3		
5303	B2		
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5405	A2		
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6207	D4		
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7209	D2		
7215	D2		
7402	A1		
7408	D1		
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9322	D3		
9323	C4		
9324	C3		
9325	D4		
9326	A3		
9327	A3		
9328	C3		
9329	B2		
9330	C4		
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9334	C2		
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9367	A4		
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9372	C2		
9373	B4		
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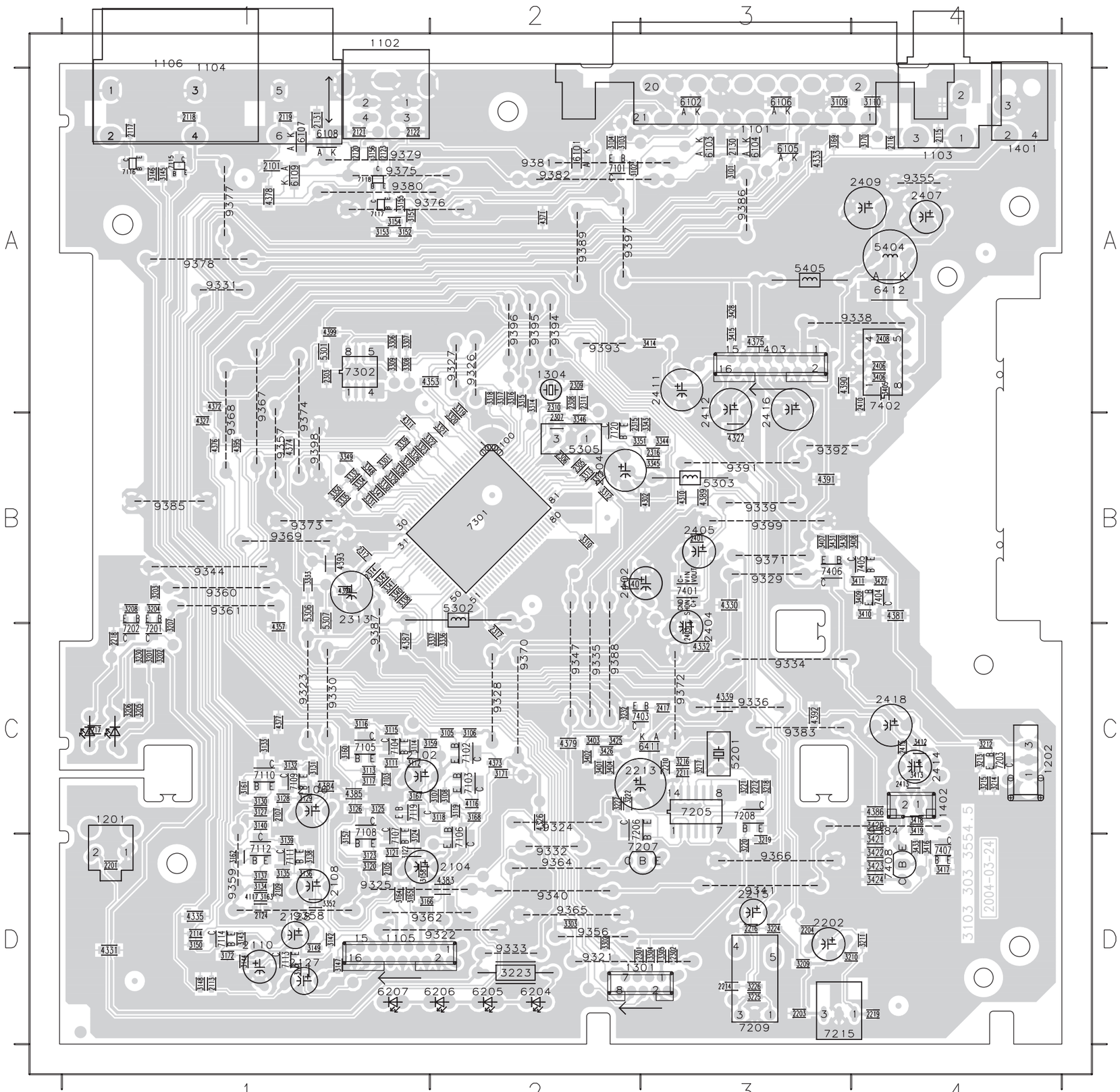

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2107	C1	3149	D1	3349	B1	7110	C1
2109	D1	3150	D1	3350	B1	7111	D1
2113	D1	3151	A1	3351	B2	7112	D1
2114	D1	3152	A1	3352	D1	7113	D1
2115	A4	3153	A1	3401	C2	7114	D1
2116	A4	3154	A1	3402	C2	7115	A1
2117	A1	3155	A1	3403	C2	7116	A1
2118	A1	3156	A1	3404	C2	7117	A1
2119	A1	3157	D1	3405	A4	7118	A1
2120	A1	3158	D1	3406	A4	7119	C1
2121	A1	3159	C2	3407	B3	7120	B2
2122	A1	3160	C1	3408	B4	7201	C1
2123	A1	3161	C1	3409	B4	7202	C1
2124	D1	3162	D1	3410	B4	7203	C4
2130	A3	3163	D1	3411	B4	7205	C3
2131	A1	3164	D1	3412	C4	7206	C2
2201	D1	3165	D1	3413	C4	7208	C3
2203	D3	3166	D1	3414	A3	7301	B2
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2210	C3	3168	C2	3416	D4	7401	B3
2211	C3	3169	A3	3417	D4	7403	C2
2212	C3	3170	A4	3418	C4	7404	B4
2214	D3	3171	C2	3419	C4	7405	B4
2216	D3	3172	D1	3420	C4	7406	B3
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2219	D4	3203	B1	3423	D4		
2301	D2	3204	B1	3424	D4		
2302	D3	3205	C1	3425	C2		
2303	A1	3206	C1	3426	C2		
2305	B2	3207	C1	3427	B4		
2306	B2	3208	B1	3428	A3		
2307	B2	3209	D3	3430	B3		
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2310	A2	3212	C4	4116	C2		
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3104	A2	3302	D2	4372	A1		
3105	C2	3303	D2	4373	C2		
3106	C2	3304	D3	4374	B1		
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3122	D1	3320	B2	4393	B1		
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3128	C1	3328	B1	5307	B1		
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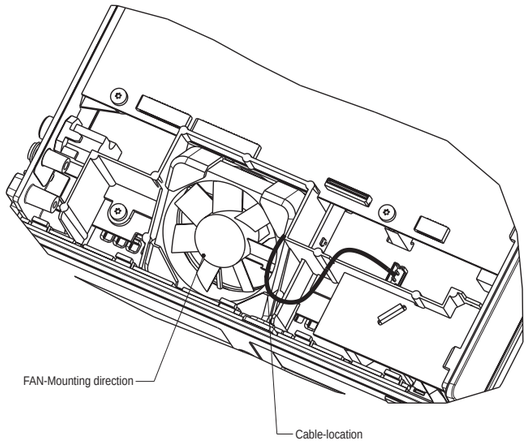
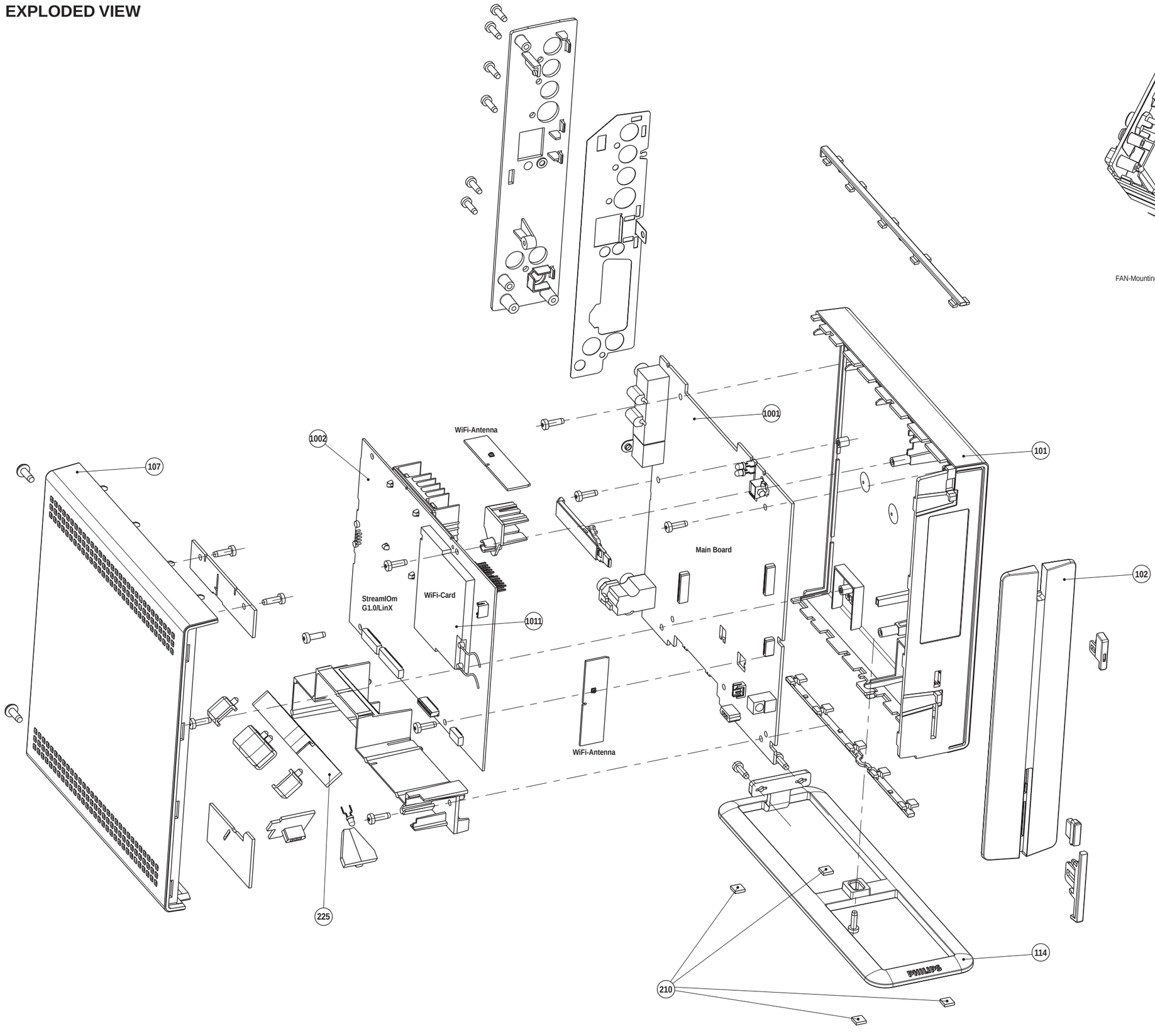
EXPLODED VIEW





PARTSLIST

101	3103 607 50801	Cabinet Right
102	3103 607 50831	Window Front
107	3103 607 50822	Cabinet Left
114	3103 607 50901	Stand
210	3103 301 72061	Rubber
225	3139 118 79761	Fan KD1245PFS3
1001	3103 308 67800	PBAS Main Board SL300i EUR (not for /37)
1001	3103 308 67810	PBAS Main Board SL300i NAFTA (only for /37)
1002	3103 308 67790	PBAS StreamIOm G1.0/LinX
1011	3103 308 55421	WiFi-Card WMOD WiFi-G MPCI WN4401A EU
8002	3103 308 94031	Cable CRC 1P/140/1P CRC F-MF BK
8003	3103 308 94031	Cable CRC 1P/140/1P CRC F-MF BK
8010	3103 308 93983	FFC Foil 16P/120/16P BD 1.0MMP
8020	3103 308 93962	FFC Foil 16P/140/16P BD 1.0MMP
8030	3103 308 93972	FFC Foil 8P/80/8P BD 1.0MMP

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REVISION LIST

Service Manual 3103 785 25250 – Version 1.0
• Initial release