

Service
Service
Service

AZ1150
AZ1155
all versions



Service Manual

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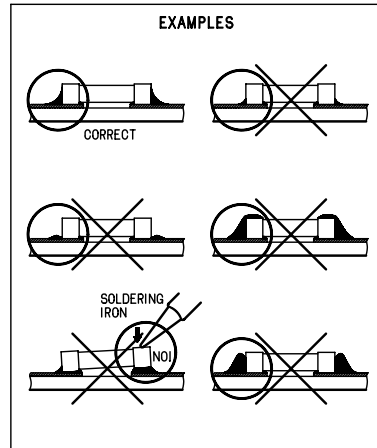
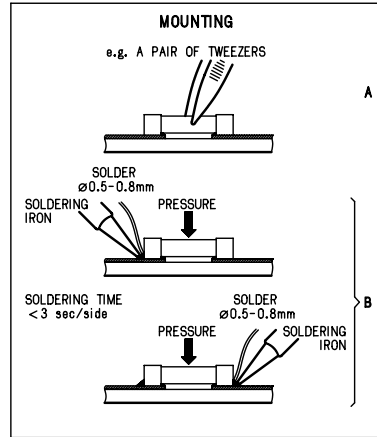
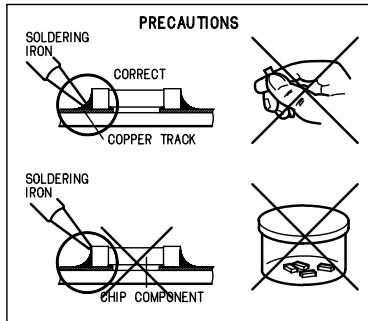
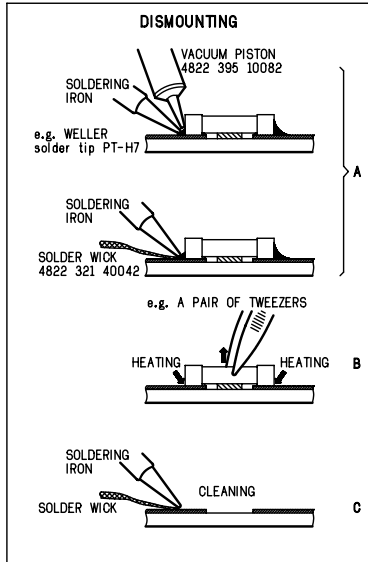
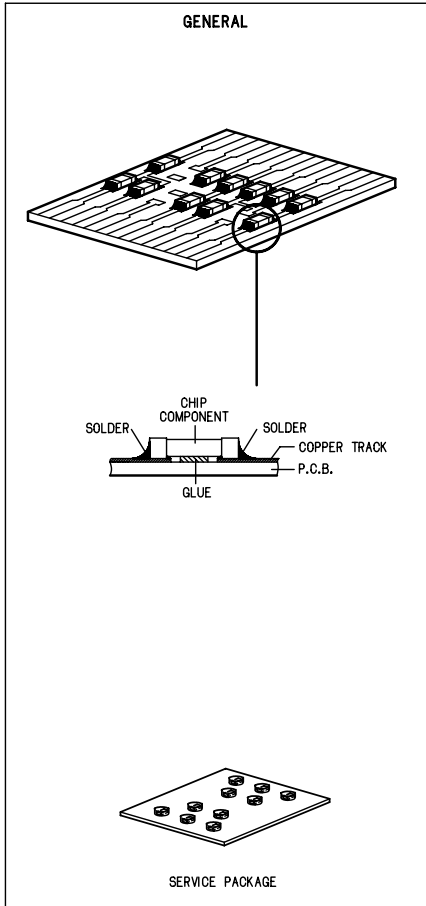
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HANDLING CHIP COMPONENTS



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.

ESD



NL WAARSCHUWING

Alle IC's en vele andere halfgeleiders zijn gevoelig voor electrostatische ontladingen (ESD). Onzorgvuldig behandelen tijdens reparatie kan de levensduur drastisch doen verminderen. 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.

F ATTENTION

Tous les IC et beaucoup d'autres semi-conducteurs sont sensibles aux décharges statiques (ESD). Leur longévité pourrait être considérablement écourtée par le fait qu'aucune précaution n'est prise à leur manipulation. Lors de réparations, s'assurer de bien être relié au même potentiel que la masse de l'appareil et enfilez le bracelet seré 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). Unvorsichtige Behandlung im Reparaturfall kann die Lebensdauer drastisch reduzieren. Sorgen Sie dafür, daß Sie im Reparaturfall über ein Puls- armband mit Widerstand mit dem Massepotential des Gerätes verbunden sind. Halten Sie Bauteile und Hilfsmittel ebenfalls auf diesem Potential.

I AVVERTIMENTO

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

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

SAFETY



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

NL

Veiligheidsbepalingen vereisen, dat het apparaat in zijn oorspronkelijke toestand wordt teruggebracht en dat onderdelen, identiek aan de gespecificeerde, worden toegepast. De Veiligheidsonderdelen zijn aangeduid met het symbol

I

Le norme di sicurezza estigono che l'apparecchio venga rimesso nelle condizioni originali e che siano utilizzati i pezzi di ricambio identici a quelli specificati. Componenti di sicurezza sono marcati con

GB

DANGER: Invisible laser radiation when open. AVOID DIRECT EXPOSURE TO BEAM.



S

Varning ! Osynlig laserstrålning när apparaten är öppnad och spårren är ukopplad. Betrakta ej strålen.

DK

Advarsel ! Usynlig laserstrålning ved åbning når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

FIN

Varoitus ! Avatussa laitteessa ja suojalukituksen ohitettaessa olet alltiina näkymättömälle laserisäteilylle. Älä katso säteeseen !

GB

After servicing and before returning the set to customer perform a leakage current measurement test from all exposed metal parts to earth ground, to assure no shock hazard exists. The leakage current must not exceed 0.5mA.

F

"Pour votre sécurité, ces documents doivent être utilisés par des spécialistes agréés, seuls habilités à réparer votre appareil en panne".

SPECIFICATIONS

GENERAL

Mains voltage	-/00 : 230 V
	-/01 : 120 / 230 V
	-/05 : 240 V
	-/17 : 120 V
Mains frequency	-/00/05 : 50 Hz
	-/01 : 50 / 60 Hz
	-/17 : 60 Hz
Battery	mains : 9 V (R14 x 6)
	remote : 3 V (R6 x 2)
Power consumption	: 35 W
Dimension (W x H x D)	: 404 x 194 x 314 mm
Weight	: 3.1 Kg

AMPLIFIER

Output power	mains : 2 x 1.6 W
	battery : 2 x 1.2 W
Speaker impedance	: 2 x 8 ohm, 8W
Frequency response	: 100 Hz - 10 kHz (± 3 dB)

COMPACT DISC

Frequency response	: 100 Hz - 10 kHz
S/N ratio	: 60 dB
Channel difference	1 kHz : 2 dB
Channel crosstalk	1 kHz : 40 dB
Laser wavelength	: 780 ± 20 nm
Laser light power	: < 0.3 mW

TUNER - FM SECTION

Tuning range	: 87.5 - 108 MHz
IF frequency	: 10.7 MHz \pm 0.03 MHz
Sensitivity	: 18 dB at 26dB S/N
Selectivity	: 24 dB at 300kHz
IF rejection	: 85 dB
Image rejection	: 24 dB

TUNER - AM SECTION

Tuning range	MW : 531 - 1602 kHz
	-/17 : 530 - 1700 kHz
Sensitivity	LW : 153 - 279 kHz
	MW : 3200 μ V/m at 26dB S/N
Selectivity	LW : 5500 μ V/m at 26dB S/N
	MW : 22 dB
IF rejection	LW : 29 dB
	MW : 60 dB
Image rejection	LW : 60 dB
	MW : 32 dB
	LW : 38 dB

SERVICE TOOLS

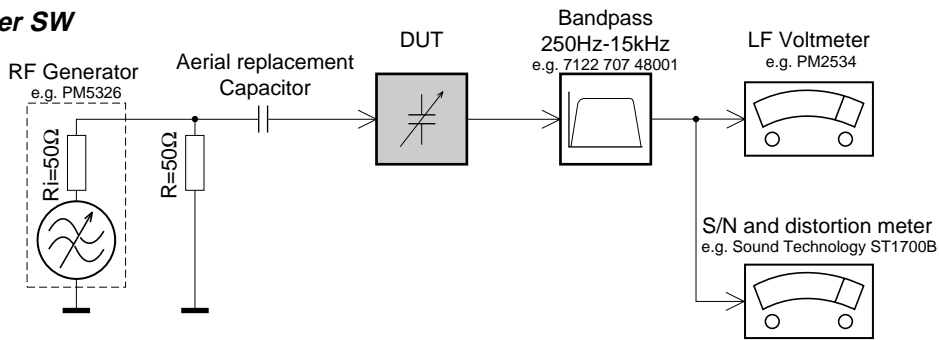
Audio signal disc SBC 429.....	4822 397 30184
Playability test disc SBC 444.....	4822 397 30245
Test disc 5 (disc without errors) +	
Test disc 5A (disc with dropout errors, black spots and fingerprints)	
SBC 426/426A.....	4822 397 30096
Burn in test disc (65 min. 1kHz signal at -30 dB level without "pause").....	4822 397 30155

AVAILABLE ESD PROTECTION EQUIPMENT

anti-static table mat	large 1200x650x1.25mm	4822 466 10953
	small 600x650x1.25m	4822 466 10958
anti-static wristband		4822 395 10223
connection box (3 press stud connections, 1M Ω)		4822 320 11307
extendible cable (2m, 2M Ω , to connect wristband to connection box)		4822 320 11305
connecting cable (3m, 2M Ω , to connect table mat to connection box)		4822 320 11306
earth cable (1M Ω , to connect any product to mat or to connection box)		4822 320 11308
KIT ESD3 (combining all 6 prior products - small table mat)		4822 310 10671
wristband tester		4822 344 13999

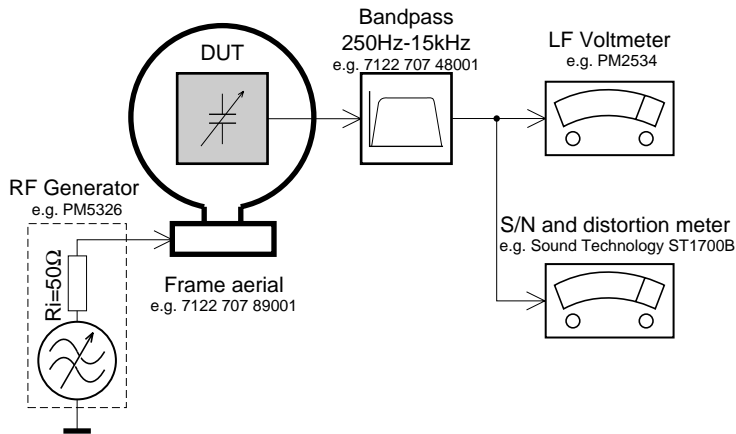
SERVICE MEASUREMENT

Tuner SW



To avoid atmospheric interference all AM-measurements have to be carried out in a Faraday's cage. Use a bandpass filter (or at least a high pass filter with 250Hz) to eliminate hum (50Hz, 100Hz).

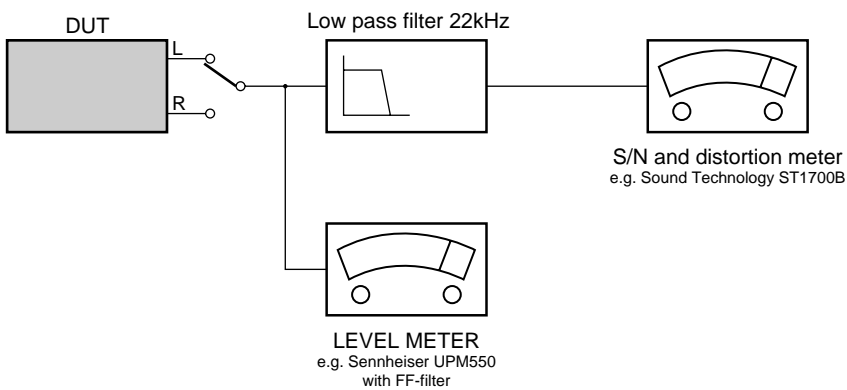
Tuner AM (MW,LW)



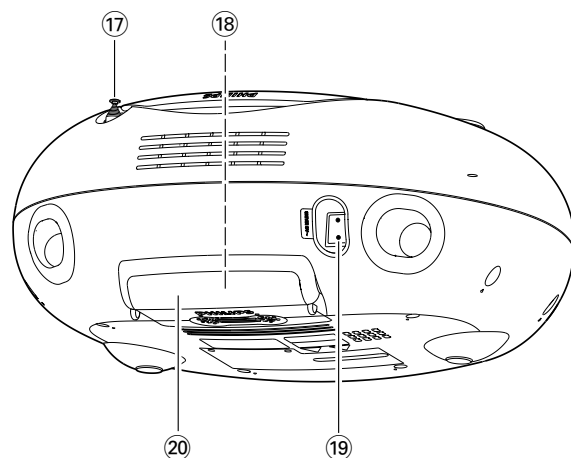
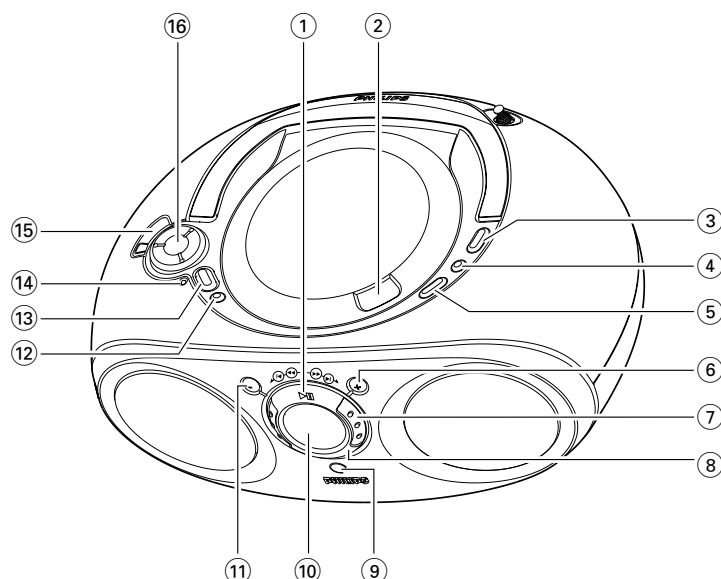
To avoid atmospheric interference all AM-measurements have to be carried out in a Faraday's cage.

CD

Use Audio Signal Disc SBC429 4822 397 30184 (replaces test disc 3)
L.P.F. = 13th order filter 4822 395 30204



CONTROLS



Top and front panels

- 1 ►||** – starts or pauses MP3-CD/CD playback
- 2 OPEN•CLOSE** – press to open/close CD door
- 3 BAND** – selects FM/MW (AM)
- 4 PROGRAM**
 – **MP3-CD/CD**: programs/ reviews programmed tracks;
 – **TUNER**: programs tuner stations
- 5 CD MODE**
 – plays MP3-CD tracks/CD/a program in random order
 – repeats a track/MP3-CD/CD/ program
- 6 + ALBUM, PRESET**
 – **MP3-CD** only: selects next album
 – **TUNER**: selects the next preset station
- 7 ROTARY NAVIGATION ◀◀, ▶▶**
 – **MP3-CD/CD**: fast searches backwards, forwards within a track
 – **TUNER**: tunes radio (manually: down, up)
- ◀, ▶
 – **MP3-CD/CD**: skips to previous, next title/track
 – **TUNER**: automatic search tuning
 (down, up)
- 8 STOP ■** – stops MP3-CD/CD playback; erases a MP3-CD/CD program
- 9 IR SENSOR (AZ1155 models only)**
 – infrared for remote control
- 10 Display** – backlit only when using AC mains supply
 – **MP3-CD**: orange backlight
 – **TUNER/CD**: green backlight

11 - ALBUM, PRESET

- **MP3-CD** only: selects previous album
- **TUNER**: selects previous preset station

12 SOURCE – selects sound source for MP3-CD/CD or TUNER

13 POWER – switches the set on/ off

14 LOW BATT – indicator lights up if battery power running low

15 ULTRABASS 2 – enhances bass response

16 VOLUME – adjusts volume level

Back Panel

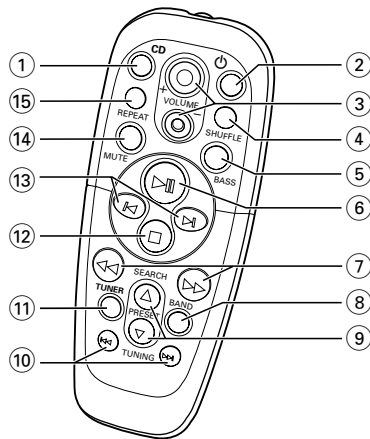
17 Telescopic aerial – to improve FM reception

18 Voltage selector – (inside the battery compartment, not all versions) adjust to match the local voltage 110/220V before plugging in the set

19 AC MAINS – inlet for mains lead

20 Battery door – open to insert 6 × **R-14, UM-2** or **C-cells**

REMOTE CONTROL



DIGITAL REMOTE CONTROL (for AZ1155 model only)

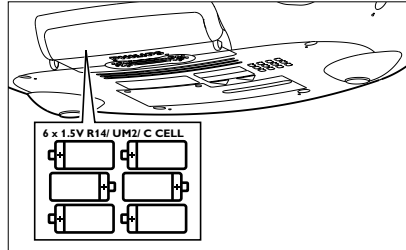
- 1 **CD** – selects **MP3-CD/CD** sound source
- 2 **⏻** – switches the set to standby
- 3 **+ VOLUME -** – adjusts volume level (up down)
- 4 **SHUFFLE** – plays all MP3-CD/CD tracks in random order
- 5 **BASS** – selects **ULTRABASS 2** on/off
- 6 **▶||** – starts MP3-CD/CD playback
– pauses MP3-CD/CD playback
- 7 **SEARCH ◀◀, ▶▶** – fast searches backwards, forwards within a track
- 8 **BAND** – selects FM/MW (AM) waveband
- 9 **PRESET ▲, ▼ (up, down)**
MP3-CD : selects an album
TUNER : selects a preset radio station
- 10 **TUNING ◀◀, ▶▶ (down, up)** – tunes to tuner stations
- 11 **TUNER** – selects tuner sound source
- 12 **■** – stops MP3-CD/CD playback;
– erases a MP3-CD/CD program
- 13 **◀, ▶** – skips to the beginning of a current track previous/
subsequent track
- 14 **MUTE** – interrupts/ resumes sound
- 15 **REPEAT** – repeats a track/ program/ entire MP3-CD/CD

Power Supply

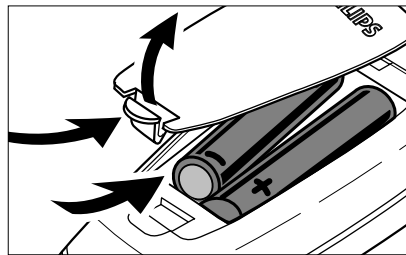
Whenever convenient, use the mains supply if you want to conserve battery life. Make sure you remove the plug from the set and wall socket before inserting batteries.

Batteries (not included)

- 1 Open the battery compartment and insert six batteries, type **R-14**, **UM-2** or **C-cells**, (preferably alkaline) with the correct polarity as indicated by the "+" and "-" symbols inside the compartment.



• Remote control (AZ1155 model only)



alkaline).

Open the battery compartment and insert 2 batteries, type **AAA, R03** or **UM4** (preferably

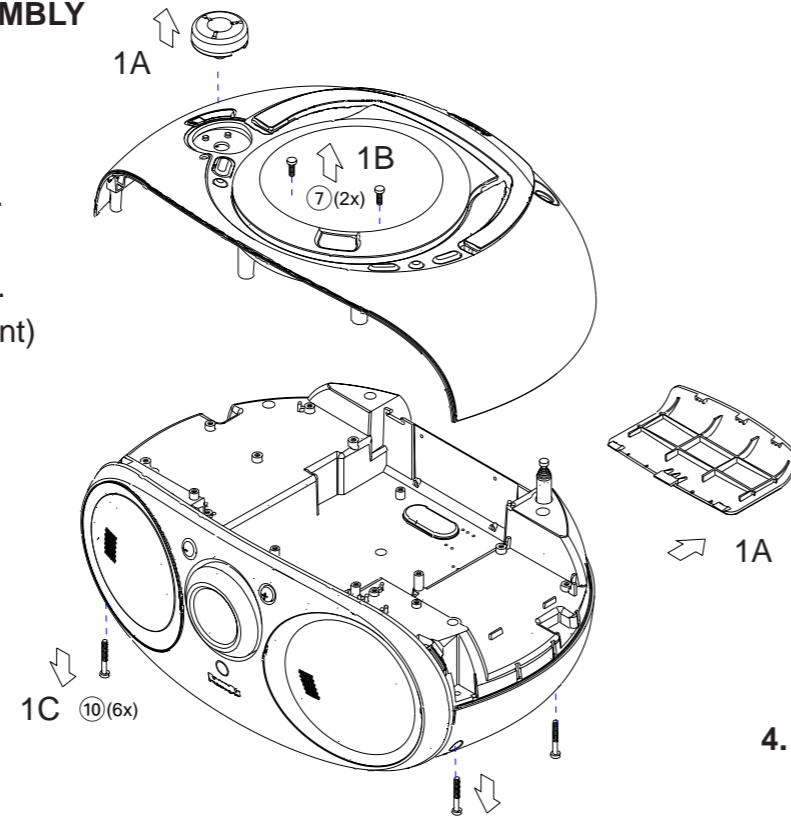
- 2 Replace the compartment door, making sure the batteries are firmly and correctly in place. The set is now ready to operate.
→ If **LOW BATT** lights up, battery power is running low. The **LOW BATT** indicator eventually goes out if the batteries are too weak.

Batteries contain chemical substances, so they should be disposed of properly.

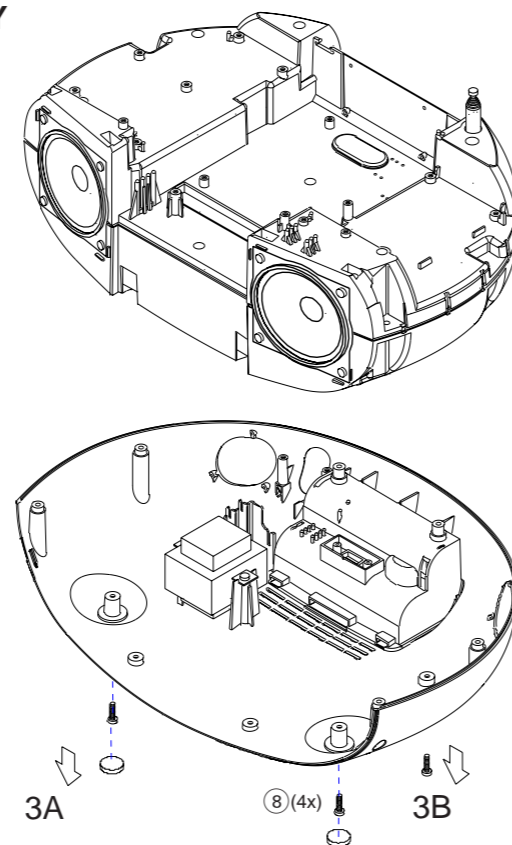
For more information on operation instruction please visit Philips Audio internet site :
<http://www.audio.philips.com>

DISASSEMBLY DIAGRAM**1. TO REMOVE TOP CABINET ASSEMBLY**

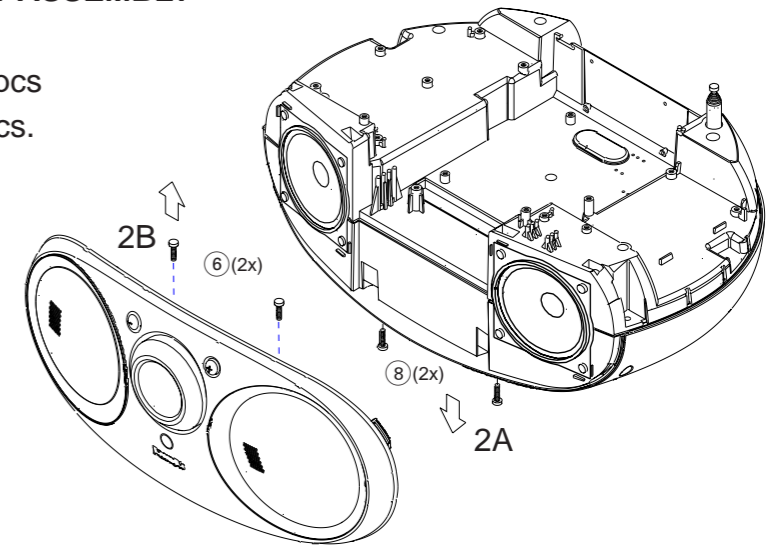
- A. Remove Volume Knob (423)
and battery Door (432)
- B. Remove screws ⑦ 3x10 - 2 pcs.
(inside CD comptrnt)
- C. Remove screws ⑩ 3x25 - 6 pcs.
(2 pcs. inside battery compartment)

**3. TO REMOVE MAIN CHASSIS ASSEMBLY FROM BOTTOM CABINET**

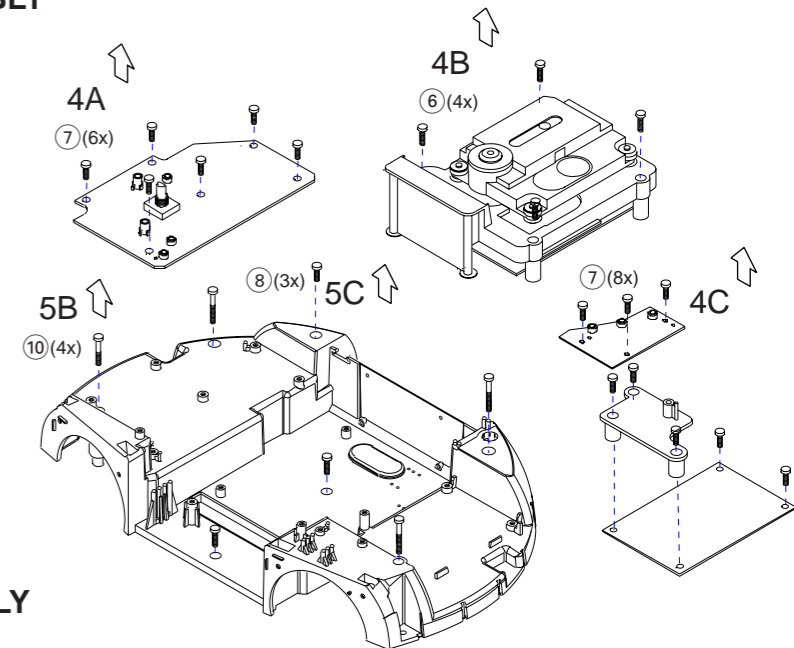
- A. Remove Rubber Foot (423) - 2 pcs.
- B. Remove screws ⑧ 3x12 - 4 pcs.
(2 pcs. under the rubber foot)

**2. TO REMOVE FRONT CABINET ASSEMBLY**

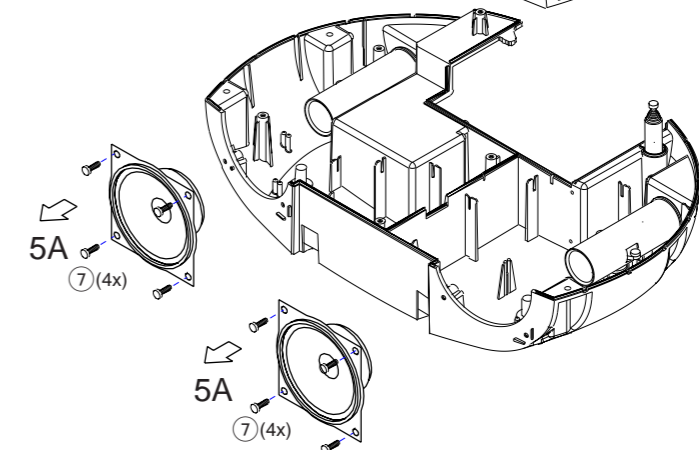
- A. Remove screws ⑧ 3x12 - 2 pcs
- B. Remove screws ⑥ 3x8 - 2 pcs.

**4. TO DISASSEMBLY MAIN CHASSIS ASSEMBLY**

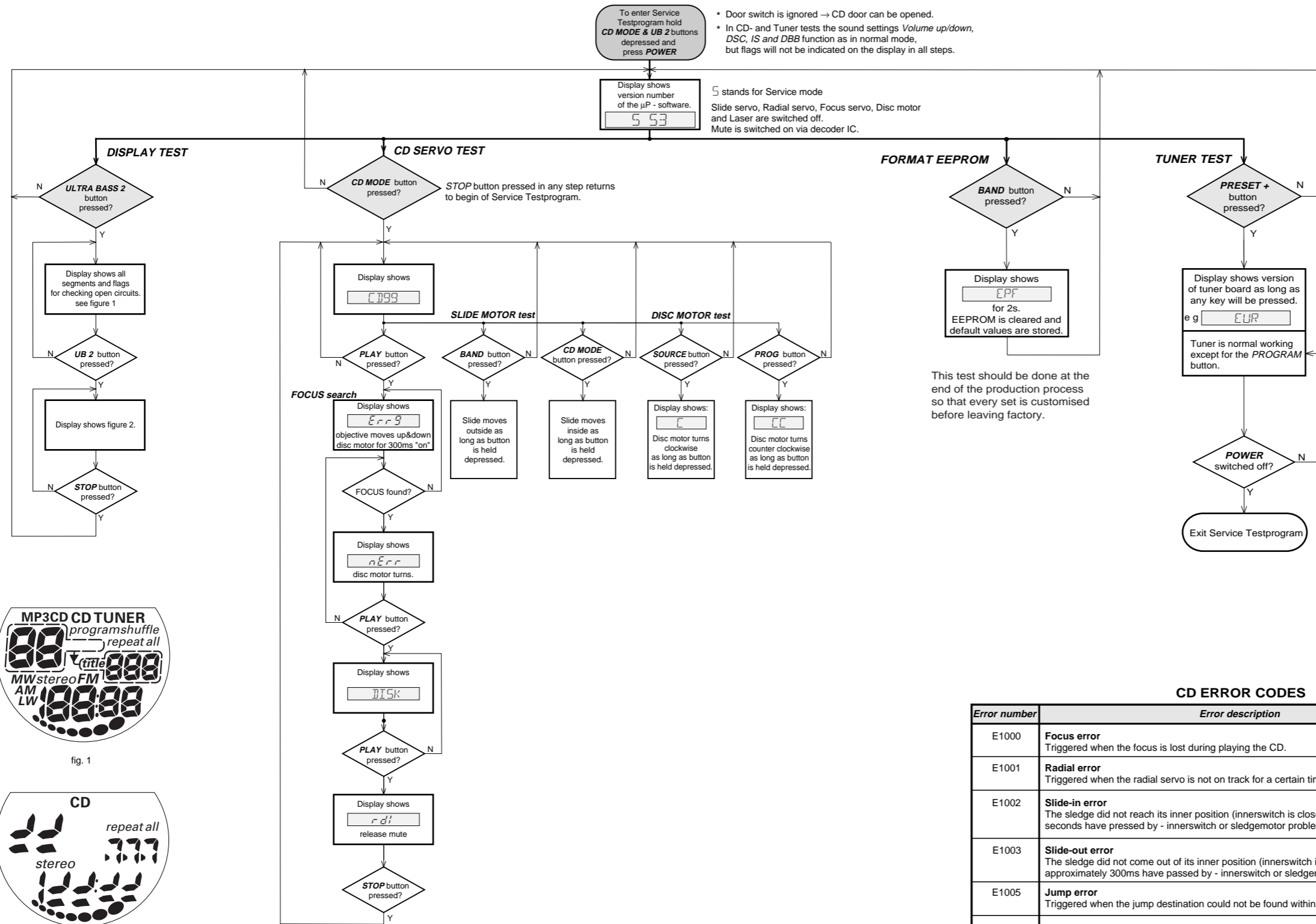
- A. Remove feature board
(screws ⑦ 3x10 - 6 pcs.)
- B. Remove CD module assembly
(screws ⑥ 3x8 - 4 pcs.)
- C. Remove Tuner and key board
(screws ⑦ 3x10 - 8 pcs.)

**5. TO DISASSEMBLY SOUND BOX ASSEMBLY**

- A. Remove Loudspeakers
(screws ⑥ 3x8 - 8 pcs.)
- B. Remove Soundbox top
(screws ⑩ 3x25- 4 pcs.)
- C. Remove Soundbox top
(screws ⑧ 3x12 - 3 pcs.)



SERVICE TEST PROGRAM



This test should be done at the end of the production process so that every set is customised before leaving factory.

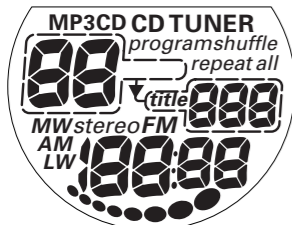


fig. 1

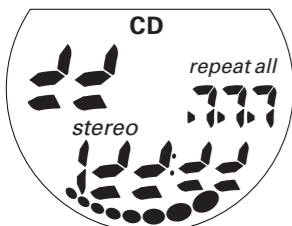


fig. 2

TUNER VERSIONS			
	EUR	USA	OSE
REGION & SET VERSIONS	EUROPE FM/MW /00 /05	USA FM/MW /17	OVERSEAS FM/MW 1)Grid switchable 100/10kHz - 50/9kHz /01 /11 /19

table 2

1) To toggle frequency grid press **CD MODE** button for more than 5s in normal tuner mode (not in service testmode).

Display will show either **09** or **10** for 2 s.

CD ERROR CODES		
Error number	Error description	Error type
E1000	Focus error Triggered when the focus is lost during playing the CD.	W
E1001	Radial error Triggered when the radial servo is not on track for a certain time during playing the CD.	W
E1002	Slide-in error The sledge did not reach its inner position (innerswitch is closed) before approximately 6 seconds have passed by - innerswitch or sledgemotor problem.	W
E1003	Slide-out error The sledge did not come out of its inner position (innerswitch is open) before approximately 300ms have passed by - innerswitch or sledgemotor problem.	W
E1005	Jump error Triggered when the jump destination could not be found within a certain time.	W
E1006	Subcode error No valid subcode for a certain time during play.	W
E1007	PLL error The Phase-Lock-Loop could not lock within a certain time.	W
E1008	Turntable motor error Generated when the CD could not reach 75% of speed during start-up within a certain time. Discmotor problem.	W
E1020	Focus search error The focus point has not been found within a certain time.	F

table 1

Error type W = Warning → set continues operation, message remains on the display until next error occurs or any key is pressed.

F = Fatal Error → set stops operation, message remains on the display.

Abbreviations and Pin-description of CD Ics**SERVO PROCESSOR SAA7325H**

SYMBOL	PIN	DESCRIPTION
HFREF	1	comparator common mode input
HFIN	2	comparator signal input
ISLICE	3	current feedback output from data slicer
V _{SSA1}	4 ⁽¹⁾	analog ground 1
V _{DDA1}	5 ⁽¹⁾	analog supply voltage 1
I _{ref}	6	reference current output pin
V _{RIN}	7	reference voltage for servo ADC's
D1	8	unipolar current input (central diode signal input)
D2	9	unipolar current input (central diode signal input)
D3	10	unipolar current input (central diode signal input)
D4	11	unipolar current input (central diode signal input)
R1	12	unipolar current input (satellite diode signal input)
R2	13	unipolar current input (satellite diode signal input)
V _{SSA2}	14 ⁽¹⁾	analog ground 2
CROUT	15	crystal/resonator output
CRIN	16	crystal/resonator input
V _{DDA2}	17 ⁽¹⁾	analog supply voltage 2
LN	18	DAC left channel differential output - negative
LP	19	DAC left channel differential output - positive
V _{neg}	20	DAC negative reference input
V _{pos}	21	DAC positive reference input
RN	22	DAC right channel differential output - negative
RP	23	DAC right channel differential output - positive
SELPLL	24	selects whether internal clock multiplier PLL is used
TEST1	25	test control input 1; this pin should be tied LOW
CL16	26	16.9344 MHz system clock output
DATA	27	serial d4(1)ata output (3-state)
WCLK	28	word clock output (3-state)
SCLK	29	serial bit clock output (3-state)
EF	30	C2 error flag output (3-state)
TEST2	31	test control input 2; this pin should be tied LOW
KILL	32	kill output (programmable; open-drain)
V _{SSD1}	33 ⁽¹⁾	digital ground 2
V2/V3	34	versatile I/O: input versatile pin 2 or output versatile pin 3 (open-drain)
WCLI	35	word clock iutput (for data loopback to DAC)
SDI	36	serial data input (for data loopback to DAC)
SCLI	37	serial bit clock input (for data loopback to DAC)
RESET	38	power-on reset input (active LOW)
SDA	39	microcontroller interface data I/O line (open-drain output)
SCL	40	microcontroller interface clock line input

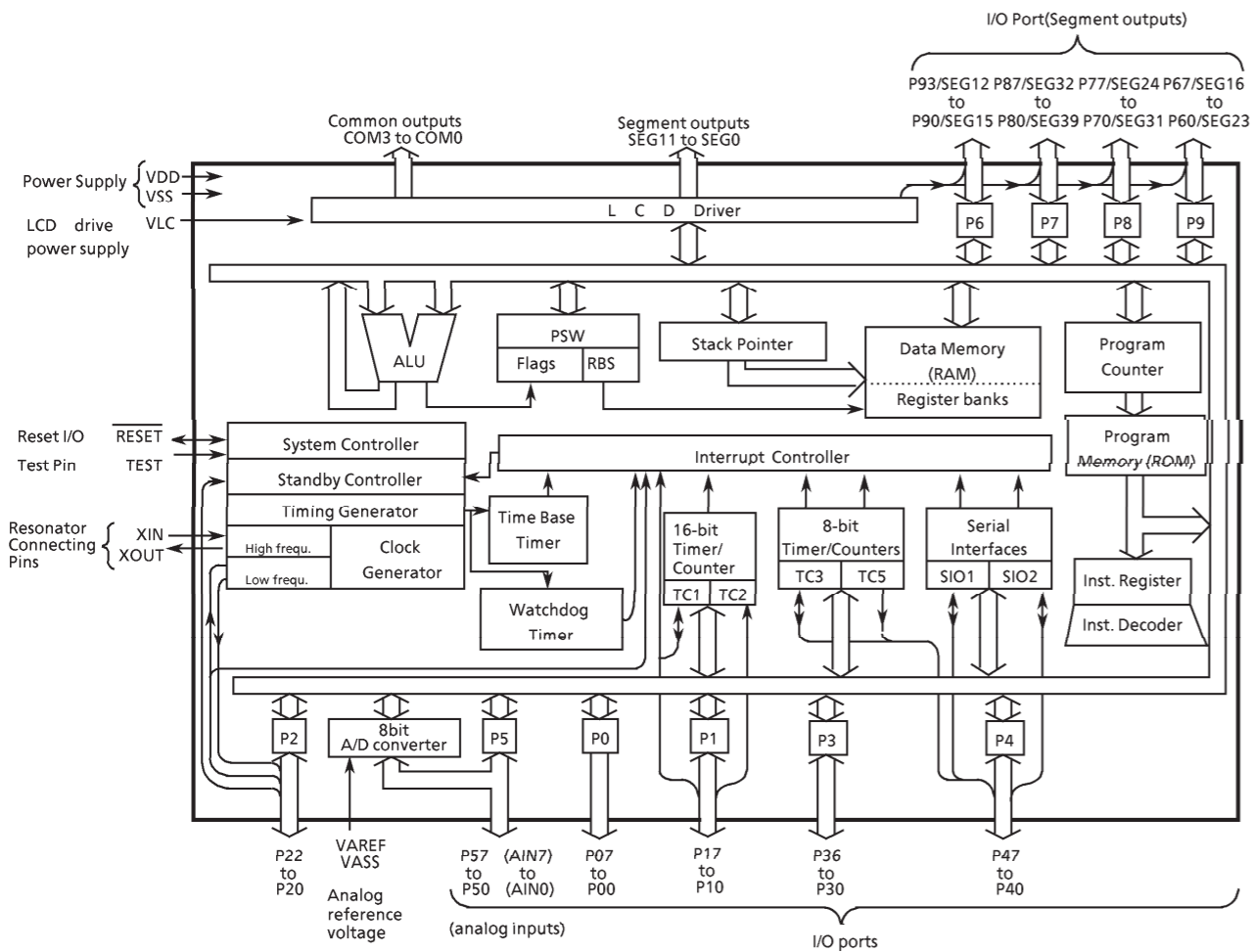
Abbreviations and Pin-description of CD Ics**SERVO PROCESSOR SAA7325H**

SYMBOL	PIN	DESCRIPTION
RAB	41	microcontroller interface R/W and load control line input (4-wire bus mode)
SILD	42	microcontroller interface R/W and load control line input (4-wire bus mode)
STATUS	43	servo interrupt request line/decoder status register output (open-drain)
TEST3	44	test control input 3; this pin should be tied LOW
RCK	45	subcode clock input
SUB	46	P-to-W subcode bits output (3-state)
SFSY	47	subcode frame sync output (3-state)
SBSY	48	subcode block sync output (3-state)
CL11/4	49	11.2896 MHz or 4.2336 MHz (for microcontroller) clock output
V _{SSD2}	50 ⁽¹⁾	digital ground 3
DOB M	51	bi-phase mark output (externally buffered; 3-state)
V _{DD1(P)}	52 ⁽¹⁾	digital supply voltage 2 for periphery
CFLG	53	correction flag output (open-drain)
RA	54	radial actuator output
FO	55	focus actuator output
SL	56	sledge control output
V _{DD2(C)}	57 ⁽¹⁾	digital supply voltage 3 for core
V _{SSD3}	58 ⁽¹⁾	digital ground 4
MOTO1	59	motor output 1; versatile (3-state)
MOTO2	60	motor output 2; versatile (3-state)
V4	61	versatile output pin 4
V5	62	versatile output pin 5
V1	63	versatile intput pin 1
LDON	64	laser drive on output (open-drain)

Note : All supply pins must be connected to the same external power supply voltage.

CK DIAGRAM OF INTEGRATED CIRCUIT

400 TMP87CM23F



PINS DESCRIPTION OF IC 7400 TMP87CM23F

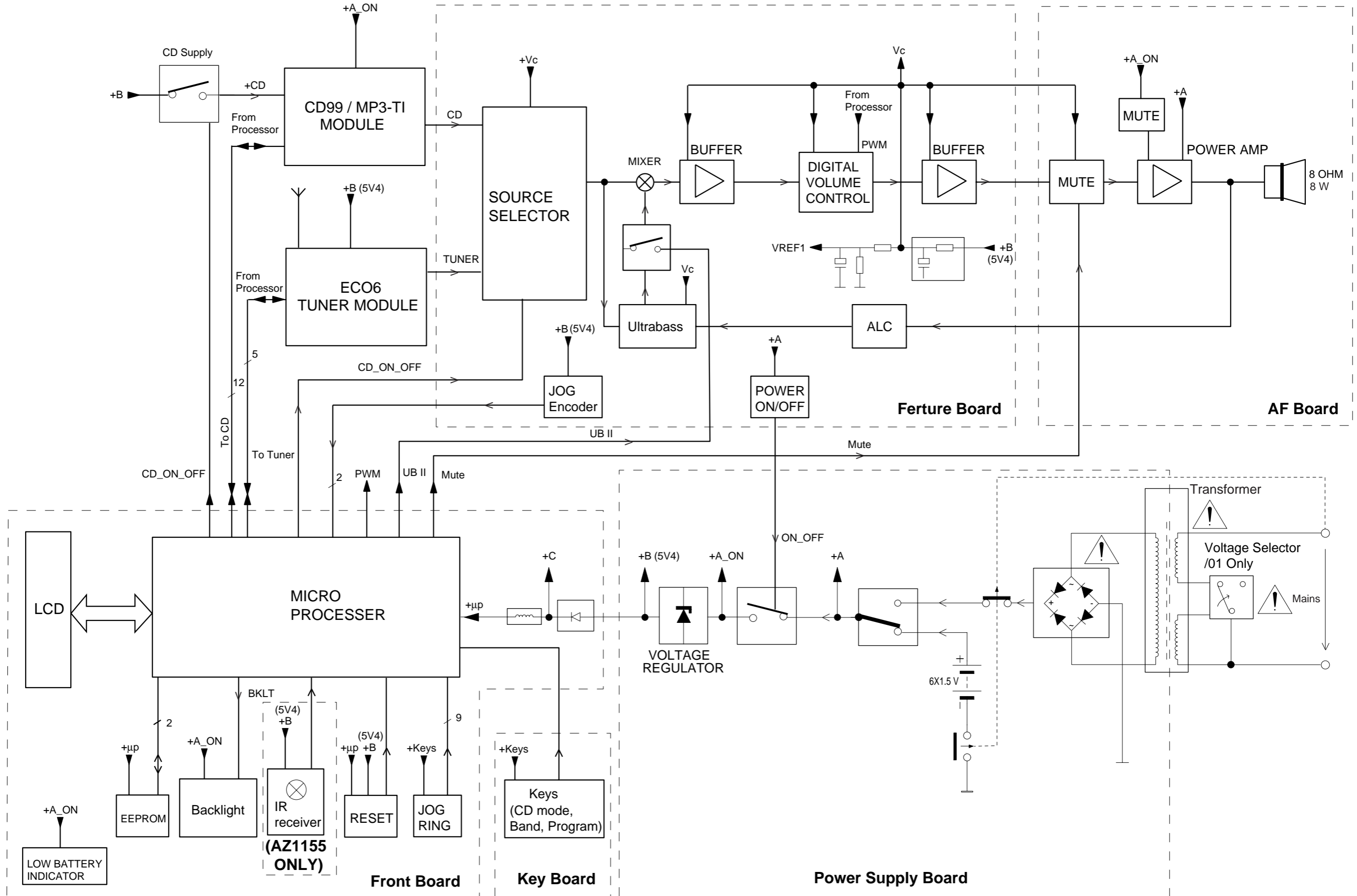
PIN FUNCTION

PIN NAME	Input / Output	FUNCTION
P07 to P00	I/O	8-bit programmable input/output ports (tri-state).
P17, P16	I/O (Input)	Timer/Counter 2 input
P15 (TC2)	I/O (Input)	Each bit of these ports can be individually configured as an input or an output under software control.
P14 (PPG)	I/O (Output)	Programmable pulse generator output
P13 (DVO)	I/O (Output)	Divider output
P12 (INT2 / TC1)	I/O (Input)	When used as timer/counter in or external interrupt input, the latch must be set to "0". When used as PPG output or divider output, the latch must be set to "1".
P11 (INT1)	I/O (Input)	External interrupt input 2 or Timer/Counter 1 input
P10 (INT0)	I/O (Input)	External interrupt input 1
P22 (XTOUT)	I/O (Output)	3-bit input/output port with latch. Resonator connecting pins (32.768kHz).
P21 (XTIN)	I/O (Input)	For inputting external clock, XTIN is used and XTOUT is opened.
P20 (INT5 / STOP)	I/O (Input)	External interrupt input 5 or STOP mode release signal input
P36 to P30	I/O	7-bit input/output port with latch. When used as input port, the latch must be set to "1".
P47 (SO2)	I/O (Output)	SIO2 serial data output
P46 (SI2)	I/O (Input)	SIO2 serial data input
P45 (SCK2)	I/O (I/O)	When used as input port or a SIO input/output port, the latch must be set to "1".
P44 (SO1)	I/O (Output)	SIO2 serial clock input/output
P43 (SI1)	I/O (Input)	SIO1 serial data output
P42 (SCK1)	I/O (I/O)	SIO1 serial data input
P41 (PWM/PDO)	I/O (Output)	SIO1 serial clock input/output
P40 (INT3/TC3)	I/O (Input)	8-bit PWM output, 8-bit programmable divider output
P57 (AIN07) to P50 (AIN00)	I/O (Input)	External interrupt input 3, Timer/Counter 3 input
SEG39 (P80) to SEG32 (P87)	Output (I/O)	8-bit programmable input/output port (tri-state). Each bit of the port can be individually configured as an input or an output under software control. When used as analog input, the latch must be set to "0".
SEG31 (P70) to SEG24 (P77)	Output (I/O)	8-bit input/output port with latch. When used as an input port, the latch must be set to "1".
SEG23 (P60) to SEG16 (P67)	Output (I/O)	8-bit input/output port with latch. When used as an input port, the latch must be set to "1".
SEG15 (P90) to SEG12 (P93)	Output (I/O)	4-bit input/output port with latch. When used as an input port, the latch must be set to "1".
SEG11 to SEG0	Output	LCD segment outputs
COM3 to COM0	Output	LCD common outputs
XIN, XOUT	Input, Output	Resonator connecting pins for high-frequency clock. For inputting external clock, XIN is used and XOUT is opened.
RESET	I/O	Reset signal input or watchdog timer output/address-trap-reset output
TEST	Input	Test pin for out-going test. Be fixed to low.
VDD, VSS	Power Supply	+ 5 V, 0 V (GND)
VAREF, VASS	Power Supply	Analog reference voltage inputs (High, Low)
VLC		LCD drive power supply.

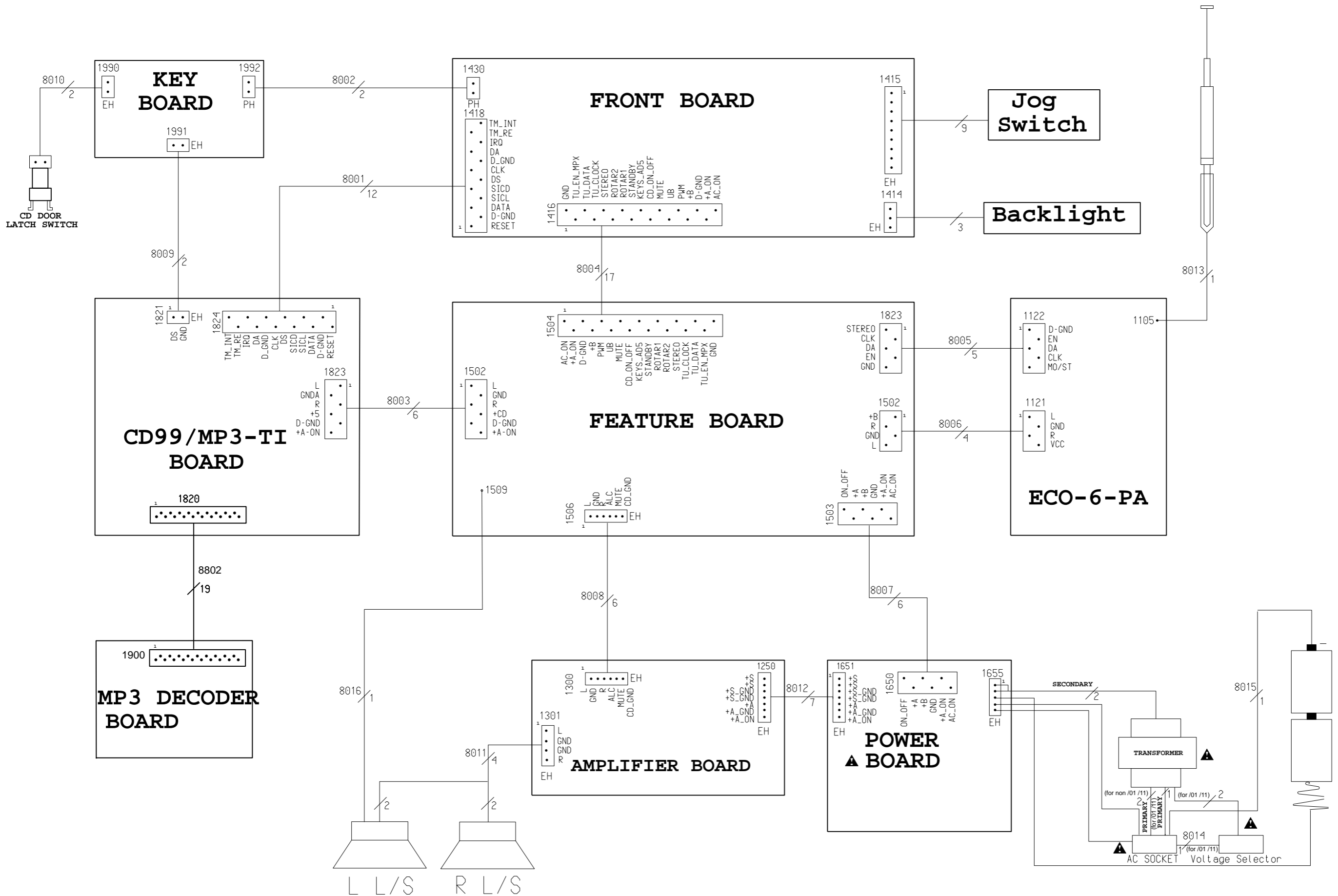
SET BLOCK DIAGRAM

5 - 1

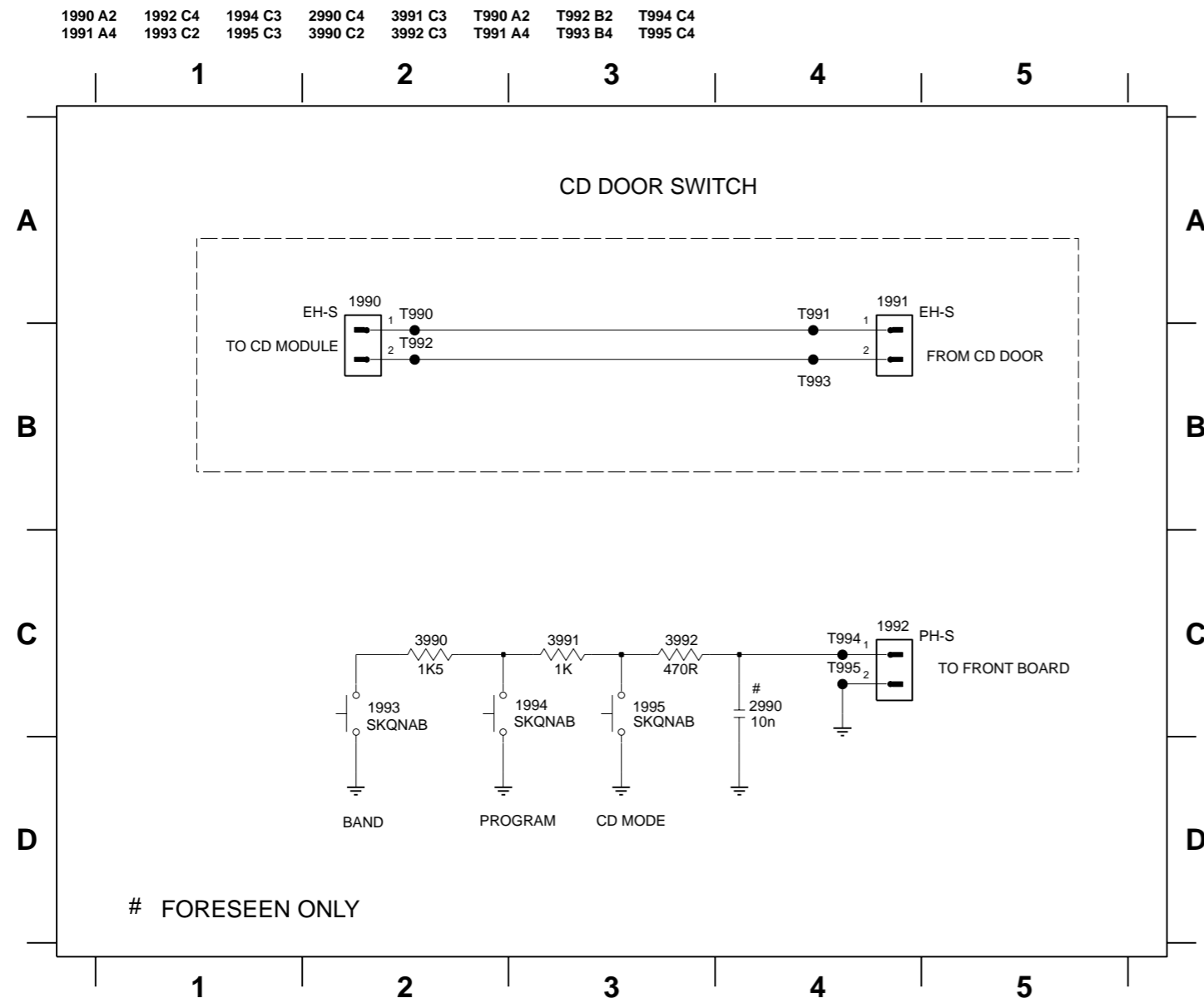
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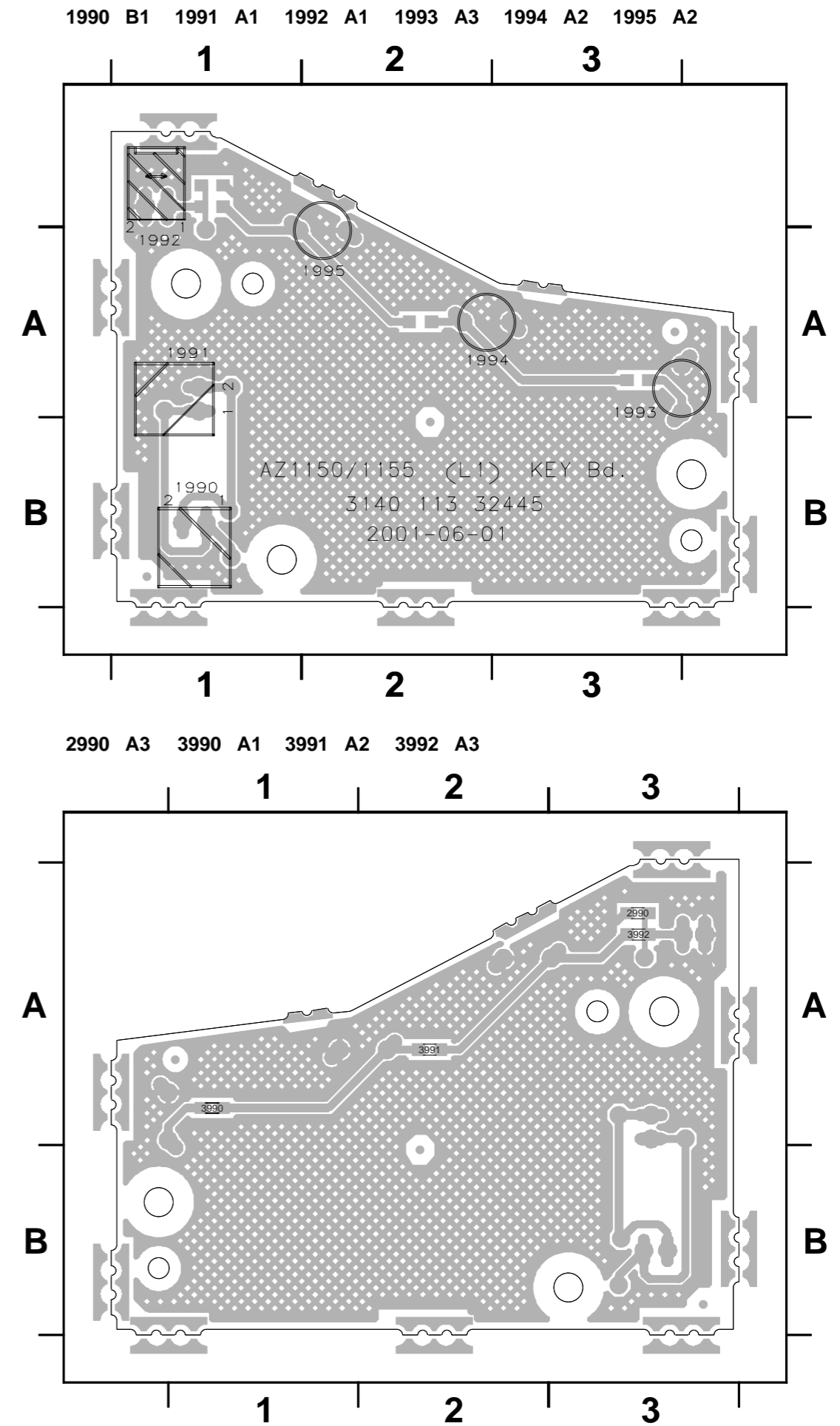
WIRING DIAGRAM



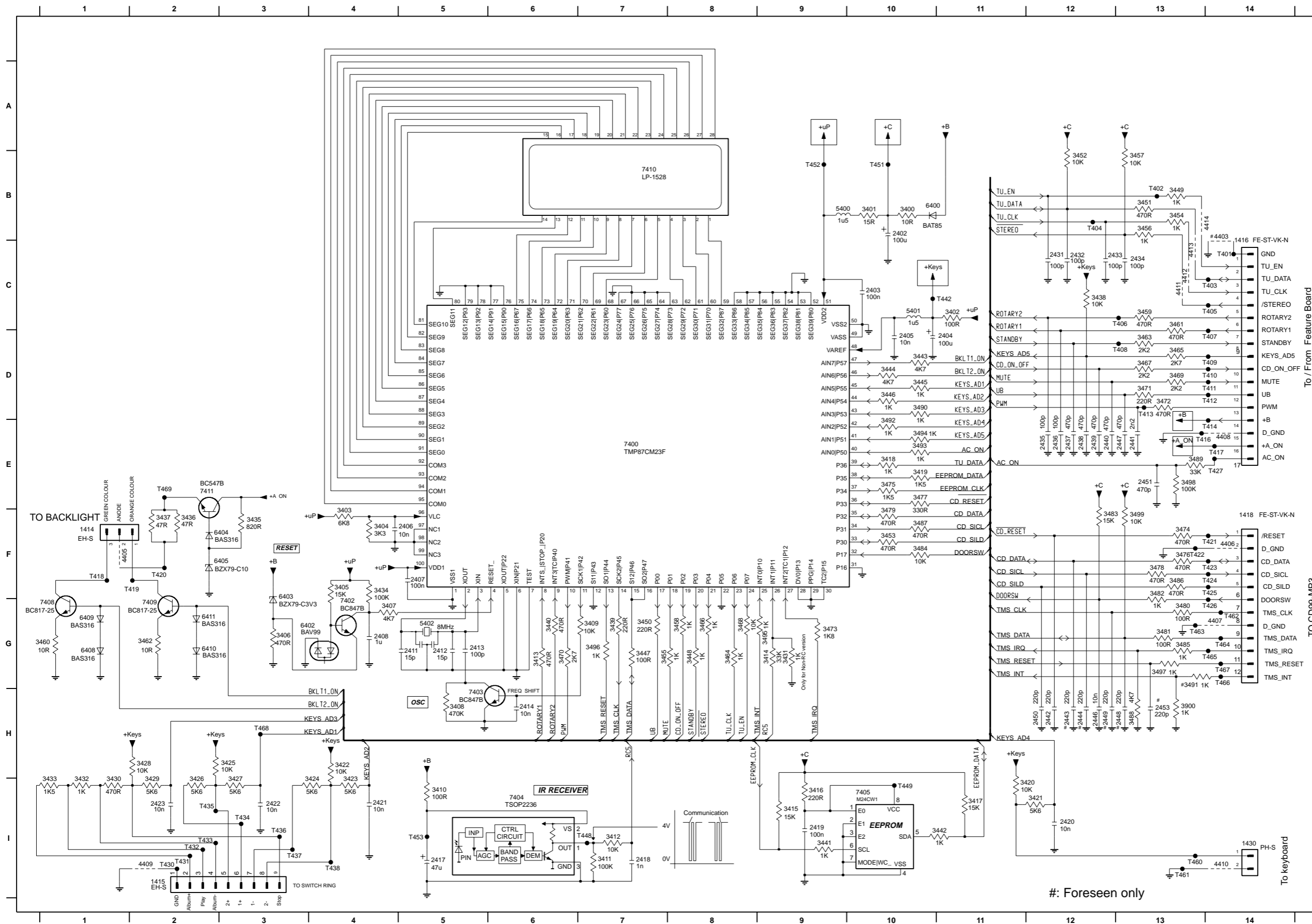
CIRCUIT DIAGRAM - KEY BOARD



KEY BOARD - LAYOUT DIAGRAM



CUIT DIAGRAM - FRONT BOARD



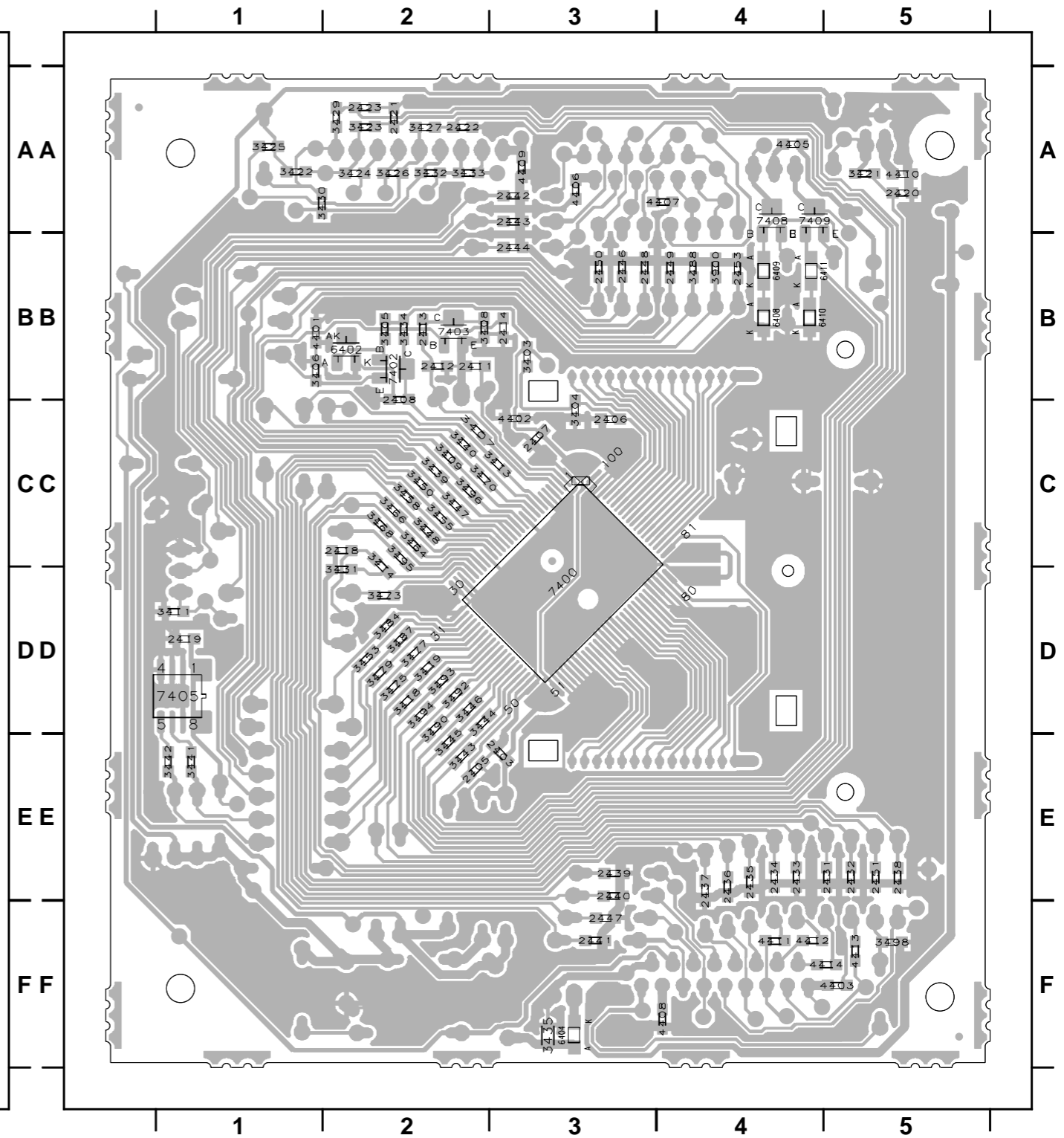
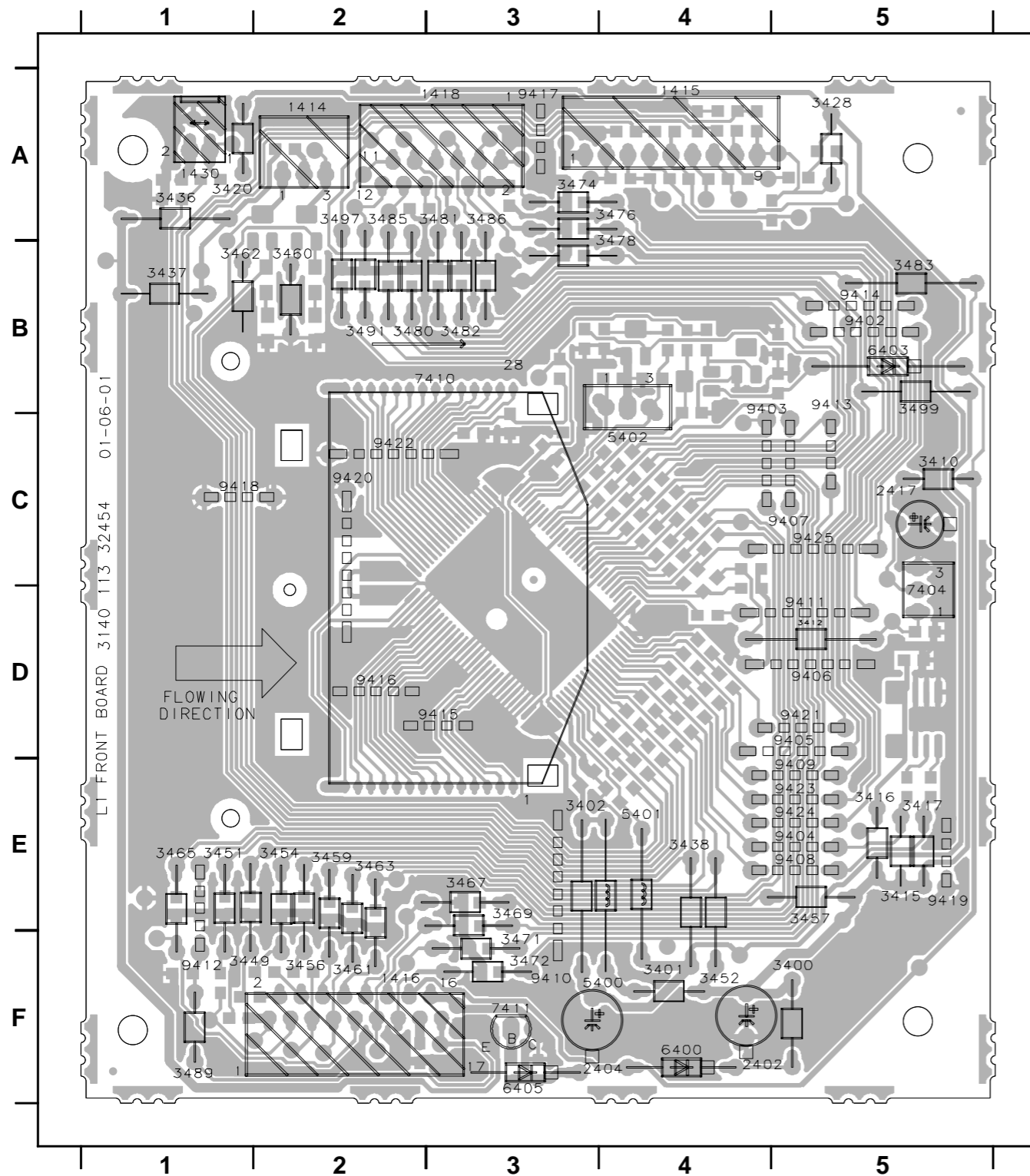
1414 F1	3479 F10
1415 I2	3480 G13
1416 C14	3481 G13
1418 F14	3482 F13
1430 H14	3483 F12
2402 B10	3484 F10
2403 C10	3485 G13
2404 D10	3486 F13
2405 D10	3487 F10
2406 F4	3488 H13
2407 F5	3489 E13
2408 G4	3490 D10
2411 G4	3491 G13
2412 G5	3492 E10
2413 G5	3493 E10
2414 H6	3494 E10
2417 I5	3495 G9
2418 I7	3496 G7
2419 I9	3497 G13
2420 I12	3498 E13
2421 I4	3499 F13
2422 I3	3900 H13
2423 I2	4403 B14
2431 C12	4405 F11
2432 C12	4406 F14
2433 C12	4407 G14
2434 C13	4408 E14
2435 E12	4409 I2
2436 E12	4410 H14
2437 E12	4411 C13
2438 E12	4412 C13
2439 E12	4413 C13
2440 E12	4414 B13
2441 E13	5400 B9
2442 H12	5401 C10
2443 H12	5402 G5
2444 H12	6400 B10
2446 H12	6402 G13
2447 E13	6403 G3
2448 H13	6404 F2
2449 H12	6405 F2
2450 H12	6406 G1
2451 E13	6409 G1
2453 H13	6410 G2
3400 B10	6411 G2
3401 B10	7400 E7
3402 C11	7402 G4
3403 F4	7403 H5
3404 F4	7404 I6
3405 F4	7405 I10
3406 G3	7408 G1
3407 G4	7409 G2
3408 H5	7410 B6
3409 G6	7411 E2
3410 I5	T401 C14
3411 I7	T402 B13
3412 I7	T403 C14
3413 G6	T404 B12
3414 G9	T405 C14
3415 I9	T406 C13
3416 I9	T407 D14
3417 I11	T408 D13
3418 E10	T409 D14
3419 E10	T410 D14
3420 H11	T411 D14
3421 I12	T412 D14
3422 H4	T413 D13
3423 I4	T414 E14
3424 I4	T416 E13
3425 H2	T417 E14
3426 I2	T418 F1
3427 I3	T419 F2
3428 H1	T420 F2
3429 I2	T421 F14
3430 I1	T422 F13
3431 G9	T423 F14
3432 F14	T424 F14
3433 I11	T425 F14
3434 F4	T426 G14
3435 F3	T427 E14
3436 F2	T430 I2
3437 F2	T431 I2
3438 C12	T432 I2
3439 G7	T433 I2
3440 G6	T434 I3
3441 I9	T435 I2
3442 I11	T436 I3
3443 D10	T437 I3
3444 D10	T438 I4
3445 D10	T442 C11
3446 D10	T448 I7
3447 G7	T449 I10
3448 G8	T451 B10
3449 B13	T452 B9
3450 G7	T453 I5
3451 B13	T460 H3
3452 B12	T461 H3
3453 F10	T462 G14
3454 B13	T463 G13
3455 G7	T464 G14
3456 B13	T465 G14
3457 B13	T466 G14
3458 G8	T467 G14
3459 C13	T468 G3
3460 G1	T469 E2
3461 C13	
3462 G2	
3463 D13	
3464 G8	
3465 D13	
3466 G8	
3467 D13	
3468 G8	
3469 D13	
3470 G6	
3471 D13	
3472 D13	
3473 G9	
3474 F13	
3475 E10	
3476 F13	
3477 E10	
3478 F13	

#: Foreseen only

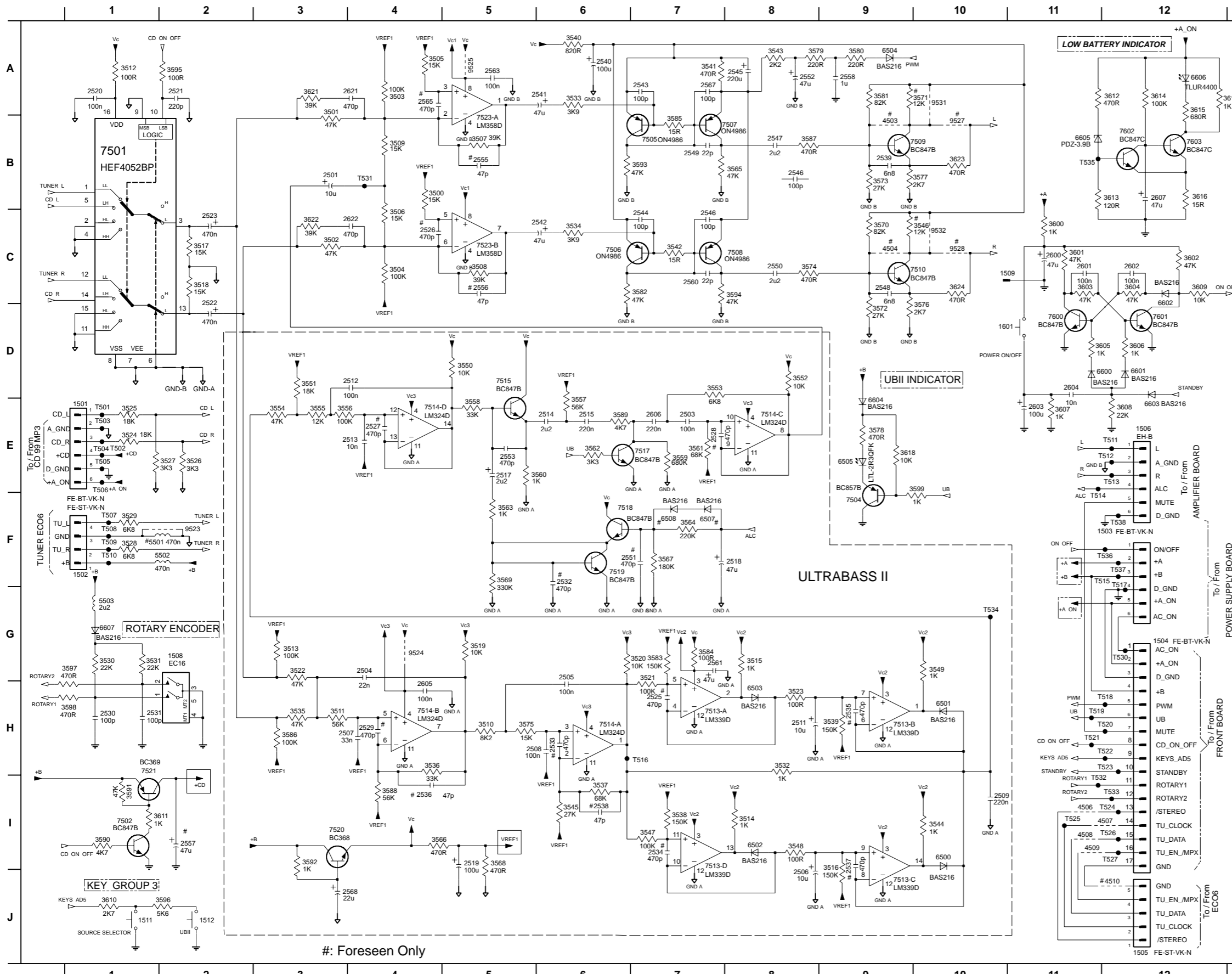
LAYOUT DIAGRAM - FRONT BOARD

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1415 A4	3410 C5	3449 F1	3463 E2	3481 A3	5401 E4	9404 E5	9414 B5	9424 E5
1416 F2	3412 D5	3451 E1	3465 E1	3482 B3	5402 C4	9405 D5	9415 D3	9425 C5
1418 A3	3415 E5	3452 F4	3467 E3	3483 B5	6400 F4	9406 D5	9416 D2	
1430 A1	3416 E5	3454 E2	3469 E3	3485 A2	6403 B5	9407 C5	9417 A3	
2402 F4	3417 E5	3456 F2	3471 F3	3486 A3	6405 F3	9408 E5	9418 C1	
2404 F4	3420 A1	3457 E5	3472 F3	3489 F1	7404 D5	9409 E5	9419 E5	
2417 C5	3428 A5	3459 E2	3474 A3	3491 B2	7410 B3	9410 F3	9420 C2	
3400 F5	3436 A1	3460 B2	3476 A4	3497 A2	7411 F3	9411 D5	9421 D5	
3401 F4	3437 B1	3461 F2	3478 A4	3499 B5	9402 B5	9412 F1	9422 C2	

2403 E3	2421 A2	2440 E3	3403 B3	3421 A5	3434 B2	3450 C2	3484 D2	4402 C3	6402 B2
2405 E2	2422 A2	2441 F3	3404 C3	3422 A1	3435 F3	3453 D2	3487 D2	4403 F5	6404 F3
2406 C3	2423 A2	2442 A3	3405 B2	3423 A2	3439 C2	3455 C2	3488 B4	4405 A4	6408 B4
2407 C3	2431 E5	2443 A3	3406 B1	3424 A2	3440 C2	3458 C2	3490 D2	4406 A3	6409 B4
2408 B2	2432 E5	2444 B3	3407 C2	3425 A1	3441 E1	3464 C2	3492 D2	4407 A4	6410 B4
2411 B2	2433 E4	2446 B3	3408 B2	3426 A2	3442 E1	3466 C2	3493 D2	4408 F4	6411 B5
2412 B2	2434 E4	2447 F3	3409 C2	3427 A2	3443 E2	3468 C2	3494 D2	4409 A3	7400 D3
2413 B2	2435 E4	2448 B3	3411 D1	3429 A2	3444 D2	3470 C2	3495 C2	4410 A5	7402 B2
2414 B3	2436 E4	2449 B4	3413 C3	3430 A1	3445 E2	3473 D2	3496 C2	4411 F4	7403 B2
2418 C2	2437 E4	2450 B3	3414 C2	3431 D2	3446 D2	3475 D2	3498 F5	4412 F4	7405 D1
2419 D1	2438 E5	2451 E5	3418 D2	3432 A2	3447 C2	3477 D2	3900 B4	4413 F5	7408 A4
2420 A5	2439 E3	2453 B4	3419 D2	3433 A2	3448 C2	3479 D2	4401 B1	4414 F5	7409 A4



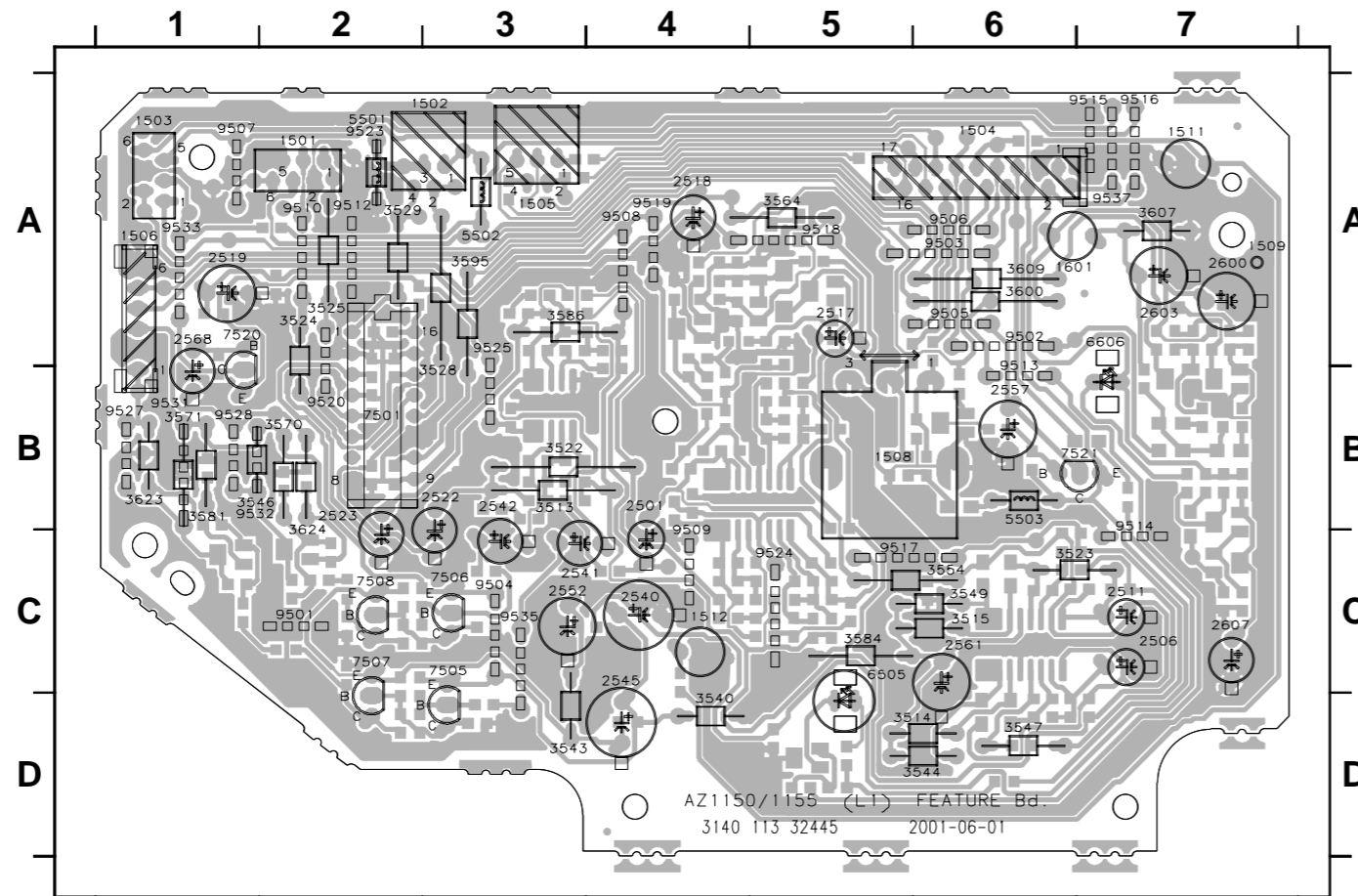
CUIT DIAGRAM - FEATURE BOARD



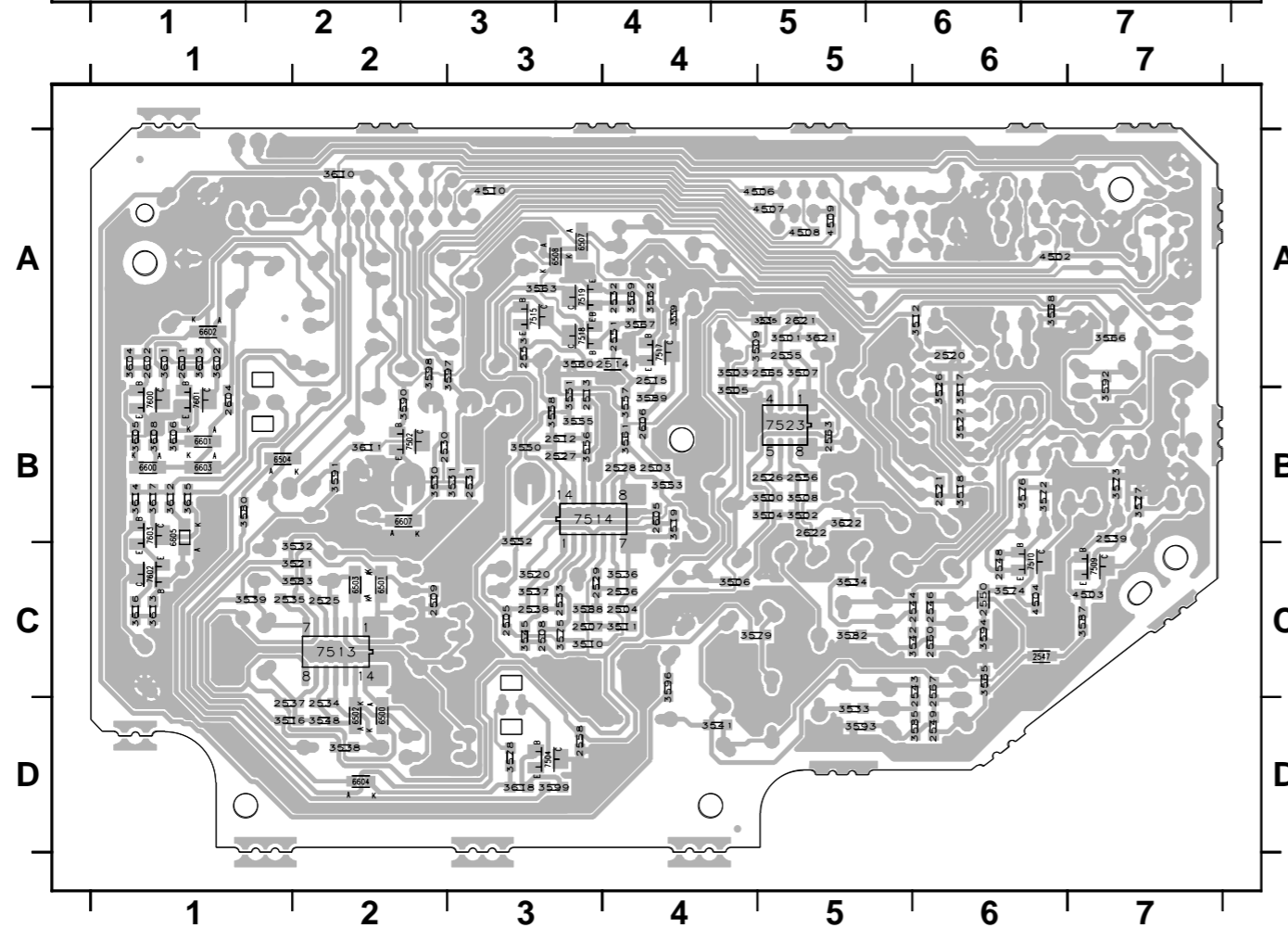
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1502 F1	3502 C3	3583 G7	7514-C E8
1503 F11	3503 A4	3584 G7	7514-D E4
1504 G12	3504 C4	3585 B7	7515 D5
1505 J12	3505 A4	3586 H3	7517 E7
A 1506 E12	3506 C4	3587 B8	7518 F7
1508 G2	3507 B5	3588 I4	7519 F6
1509 C10	3508 C5	3589 E6	7520 I3
1511 J1	3509 B4	3590 I1	7521 H1
1512 J2	3510 H5	3591 I1	7523-A B5
1601 D11	3511 H3	3592 I3	7523-B C5
2501 B3	3512 A1	3593 B6	7600 D11
2503 E7	3513 G3	3594 C7	7601 D12
B 2504 G4	3514 I8	3595 A1	7602 B12
2505 G6	3515 G8	3596 J2	7603 B12
2506 J8	3516 J9	3597 G1	9523 F2
2507 H3	3517 C2	3598 H1	9524 G4
2508 H5	3518 C2	3599 E10	9525 A5
2509 I10	3519 G5	3600 C11	9527 B10
2511 H8	3520 G6	3601 C11	9528 C10
2512 D4	3521 G7	3602 C12	9531 A10
C 2513 E4	3522 G3	3603 C11	9532 C10
2514 E6	3523 H8	3604 C12	T501 E1
2515 E6	3524 E1	3605 D11	T502 E1
2517 E5	3525 E1	3606 D12	T503 E1
2518 F7	3526 E2	3607 E11	T504 E1
2519 I5	3527 E1	3608 E12	T505 E1
2520 A1	3528 F1	3609 C12	T506 E1
2521 A2	3529 F1	3610 J1	T507 F1
D 2522 D2	3530 G1	3611 I1	T508 F1
2523 C2	3531 G1	3612 A11	T509 F1
2525 H7	3532 H8	3613 B11	T510 F1
2526 C4	3533 A6	3614 A12	T511 E12
2527 E4	3534 C6	3615 A12	T512 E12
2528 E7	3535 H3	3616 B12	T513 E12
2529 H4	3536 H4	3617 A12	T514 F11
E 2530 H1	3537 I6	3618 E9	T515 F12
2531 H1	3538 I7	3621 A3	T516 H7
2532 F6	3539 H9	3622 C3	T517 G12
2533 H6	3540 A6	3623 B10	T518 H12
2534 I7	3541 A7	3624 C10	T519 H11
2535 H9	3542 C7	4503 B9	T520 H12
2536 I4	3543 A8	4504 C9	T521 H11
2537 I9	3544 I10	4506 I11	T522 H12
2538 I6	3545 I6	4507 I12	T523 H12
F 2539 B9	3546 C9	4508 I11	T524 I12
2540 A6	3547 I7	4509 I11	T525 I11
2541 A6	3548 I8	4510 J12	T526 I12
2542 C6	3549 G10	5501 F1	T527 I12
2543 A7	3550 D5	5502 F2	T530 G12
2544 C7	3551 D3	5503 G1	T531 B4
2545 A8	3552 D8	6500 I10	T532 I11
2546 C7	3553 D7	6501 H10	T533 I12
G 2547 B8	3554 E3	6502 I8	T534 G10
2548 C9	3555 E3	6503 H8	T535 B11
2549 B7	3556 E3	6504 A9	T536 F12
2550 C8	3557 E6	6505 E9	T537 F12
2551 F7	3558 E5	6507 F7	T538 F12
2552 A8	3559 E7	6508 F7	
2553 E5	3560 E5	6600 D11	
2555 B5	3561 E7	6601 D12	
H 2556 C5	3562 E6	6602 D12	
2557 I2	3563 F5	6603 E12	
2558 A8	3564 F7	6604 E9	
2560 C7	3565 B7	6605 B12	
2561 G7	3566 I4	6606 A12	
2563 A5	3567 F7	6607 G1	
2565 A4	3568 I5	7501 B1	
2567 A7	3569 F5	7502 I1	
I 2568 J3	3570 C9	7504 F9	
2600 C11	3571 A9	7505 B7	
2601 C11	3572 D9	7506 C6	
2602 C12	3573 B9	7507 B7	
2603 E11	3574 C8	7508 C8	
2604 D11	3575 H5	7509 B9	
2605 H4	3576 D9	7510 C9	
2606 E7	3577 B9	7513-A H7	
J 2607 B12	3578 E9	7513-B H9	
2621 A4	3579 A8	7513-C J9	
2622 C4	3580 A9	7513-D I7	
3500 B4	3581 A9	7514-A H6	

LAYOUT DIAGRAM - FEATURE BOARD

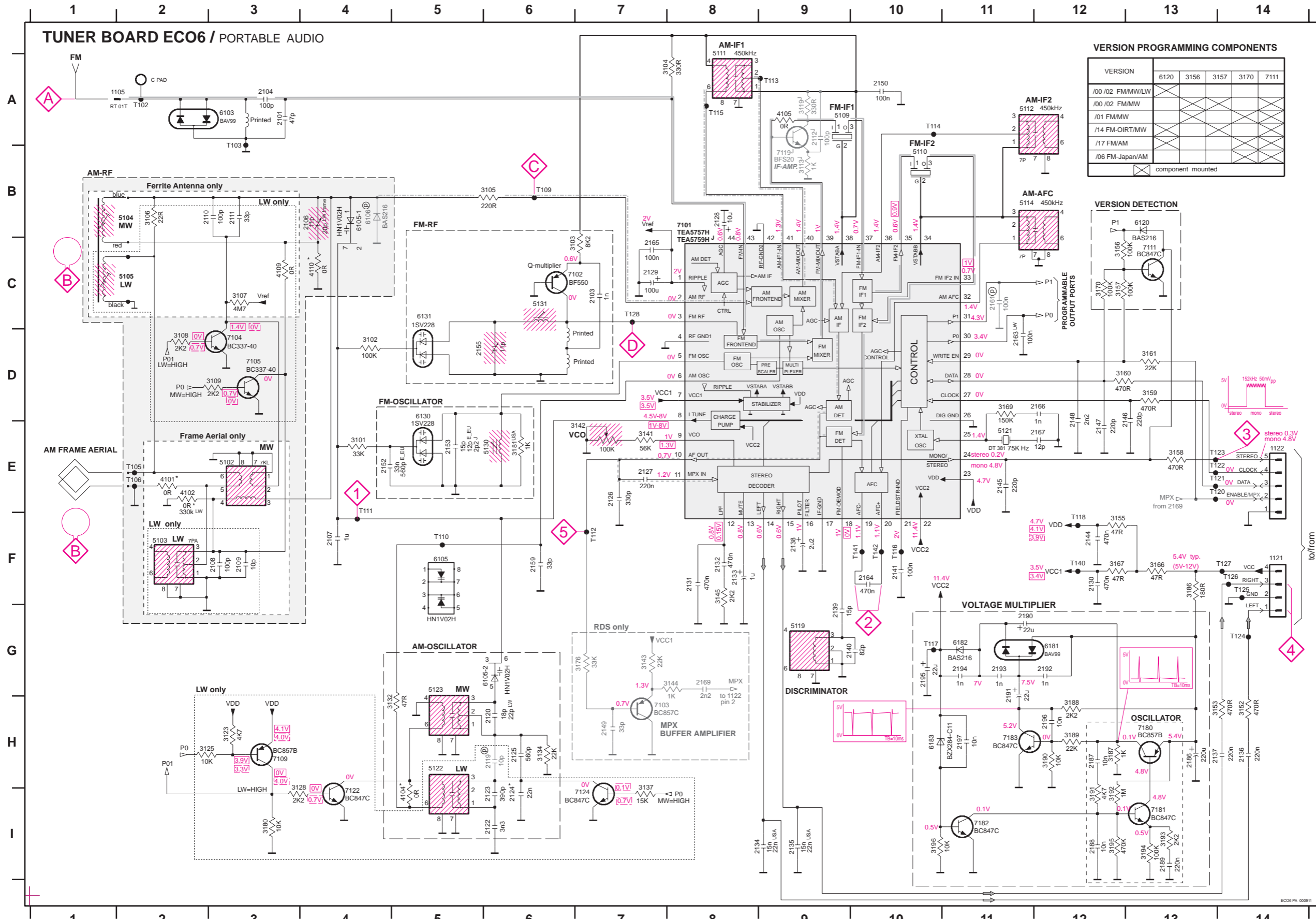


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1502 A3	2603 A7	3609 A6	9514 B7
1503 A1	2607 C7	3623 B1	9515 A7
1504 A6	3513 B3	3624 C2	9516 A7
1505 A3	3514 D5	5501 A2	9517 C5
1506 A1	3515 C6	5502 A3	9518 A5
1508 B5	3522 B3	5503 B6	9519 A4
1509 A7	3523 C6	6505 C5	9520 B2
1511 A7	3524 A2	6606 A7	9523 A2
1512 C4	3525 A2	7501 B2	9524 C5
1601 A6	3528 B3	7505 C3	9525 A3
2501 B4	3529 A2	7506 C3	9527 B1
2506 C7	3540 D4	7507 C2	9528 B1
2511 C7	3543 D3	7508 C2	9531 B1
2517 A5	3544 D6	7520 A1	9532 B1
2518 A4	3546 B1	7521 B7	9533 A1
2519 A1	3547 D6	9501 C2	9535 C3
2522 B3	3549 C6	9502 A6	9537 A7
2523 B2	3554 C6	9503 A6	
2540 C4	3564 A5	9504 C3	
2541 C3	3570 B2	9505 A6	
2542 B3	3571 B1	9506 A6	
2545 C4	3581 B1	9507 A1	
2552 C3	3584 C5	9508 A4	
2557 B6	3586 A3	9509 C4	
2561 C6	3595 A3	9510 A2	
2568 A1	3600 A6	9512 A2	



2503 B4	2550 C6	3519 B4	3566 A7	3606 B1	6605 B1
2504 C4	2551 A4	3520 C3	3567 A4	3608 B1	6607 B2
2505 C3	2553 A3	3521 C2	3568 A6	3610 A2	7502 B2
2507 C3	2555 A5	3526 B6	3569 A4	3611 B2	7504 D3
2508 C3	2556 B5	3527 B6	3572 B6	3612 B1	7509 C7
2509 C2	2558 D3	3530 B2	3573 B7	3613 C1	7510 C6
2512 B3	2560 C6	3531 B3	3574 C6	3614 B1	7513 C2
2513 B3	2563 B5	3532 C2	3575 C3	3615 B1	7514 B3
2514 A4	2565 A5	3533 D5	3576 B6	3616 C1	7515 A3
2515 A4	2567 C6	3534 C5	3577 B7	3617 B1	7517 A4
2520 A6	2601 A1	3535 A5	3578 D3	3618 D3	7518 A3
2521 B6	2602 A1	3536 C4	3579 C4	3621 A5	7519 A3
2525 C2	2604 B1	3537 C3	3580 B1	3622 B5	7523 B5
2526 B5	2605 B4	3538 D2	3582 C5	4502 A6	7600 B1
2527 B3	2606 B4	3539 C1	3583 C2	4503 C7	7601 B1
2528 B4	2621 A5	3541 D4	3585 D6	4504 C6	7602 C1
2529 C3	2622 B5	3542 C6	3587 C7	4506 A5	7603 B1
2530 B2	3500 B5	3545 C3	3588 C3	4507 A5	
2531 B3	3501 A5	3548 D2	3589 B4	4508 A5	
2532 A4	3502 B5	3550 B3	3590 B2	4509 A5	
2533 C3	3503 A4	3551 B3	3591 B2	4510 A3	
2534 D2	3504 B5	3552 B3	3592 A7	6500 D2	
2535 C1	3505 B4	3553 B4	3593 D5	6501 C2	
2536 C4	3506 C4	3555 B3	3594 C6	6502 D2	
2537 D1	3507 A5	3556 B3	3596 C4	6503 C2	
2538 C3	3508 B5	3557 B4	3597 A3	6504 B1	
2539 B7	3509 A4	3558 B3	3598 A2	6507 A3	
2543 C6	3510 C3	3559 A4	3599 D3	6508 A3	
2544 C6	3511 C4	3560 A3	3601 A1	6600 B1	
2546 C6	3512 A6	3561 B4	3602 A1	6601 B1	
2547 C6	3516 D1	3562 A4	3603 A1	6602 A1	
2548 C6	3517 B6	3563 A3	3604 A1	6603 B1	
2549 D6	3518 B6	3565 C6	3605 B1	6604 D2	

TUNER BOARD ECO6 / PORTABLE AUDIO

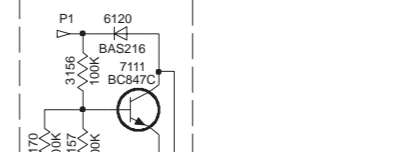


VERSION PROGRAMMING COMPONENTS

VERSION	6120	3156	3157	3170	7111
/00 /02 FM/MW/LW					
/00 /02 FM/MW					
/01 FM/MW					
/14 FM-OIRT/MW					
/17 FM/AM					
/06 FM-Japan/AM					

component mounted

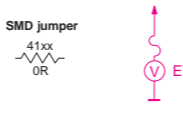
VERSION DETECTION



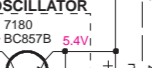
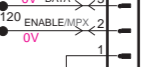
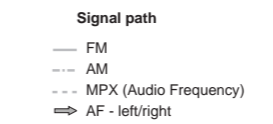
- 1105 A1
- 1121 F14
- 1122 E14
- 2101 A3
- 2103 C7
- 2104 A3
- 2106 B4
- 2107 F4
- 2108 F3
- 2109 F3
- 2110 B3
- 2111 B3
- 2112 A9
- 2119 H6
- 2120 H6
- 2122 H6
- 2123 I6
- 2124 I6
- 2125 H6
- 2126 E7
- 2127 E7
- 2128 B8
- 2129 C7
- 2130 F12
- 2131 F8
- 2132 F8
- 2133 F8
- 2134 I9
- 2135 I9
- 2136 H14
- 2137 H13
- 2138 F9
- 2139 G9
- 2140 G10
- 2141 F10
- 2144 F12
- 2145 E11
- 2146 D13
- 2147 E12
- 2148 D12
- 2149 H7
- 2150 A10
- 2152 E4
- 2153 E5
- 2155 D5
- 2159 F6
- 2161 C11
- 2163 D11
- 2164 F10
- 2165 C7
- 2166 D12
- 2167 E12
- 2169 G8
- 2188 I12
- 2189 I13
- 2190 G11
- 2191 G11
- 2192 G12
- 2193 G11
- 2194 G11
- 2195 G10
- 2196 H12
- 2197 H11
- 3101 E4
- 3102 D4
- 3103 C6
- 3104 A8
- 3105 B6
- 3106 B2
- 3107 C3
- 3108 D2
- 3109 D3
- 3113 B9
- 3119 A9
- 3123 H3
- 3125 H2
- 3128 H4
- 3134 H6
- 3137 I7
- 3141 E7
- 3142 E7
- 3143 G7
- 3144 G8
- 3145 F8
- 3152 H14
- 3153 H14
- 3155 F12
- 3156 C12
- 3157 C12
- 3158 E13
- 3159 D13
- 3161 D13
- 3166 F13
- 3167 F12
- 3169 D11
- 3170 C12
- 3176 G7
- 3180 I3
- 3181 E6
- 3186 F13
- 3187 H12
- 3188 H12
- 3189 H12
- 3190 H12
- 3191 I12
- 3192 I12
- 3193 I13
- 3194 I13
- 3195 I13
- 3196 I15
- 4101 E2
- 4102 E2
- 4104 I5
- 4105 A5
- 4109 C3
- 4110 C4
- 5102 E3
- 5103 F2
- 5109 A9
- 5110 B10
- 5111 A8
- 5112 A11
- 5114 B11
- 5119 G9

LEGEND

- * ... only assembled in FM/AM-version
- E_EU ... for East European version only
- USA ... for USA version only
- LW ... for LW version only
- LW frame ... for LW version with frame aerial only
- J ... for Japanese version only



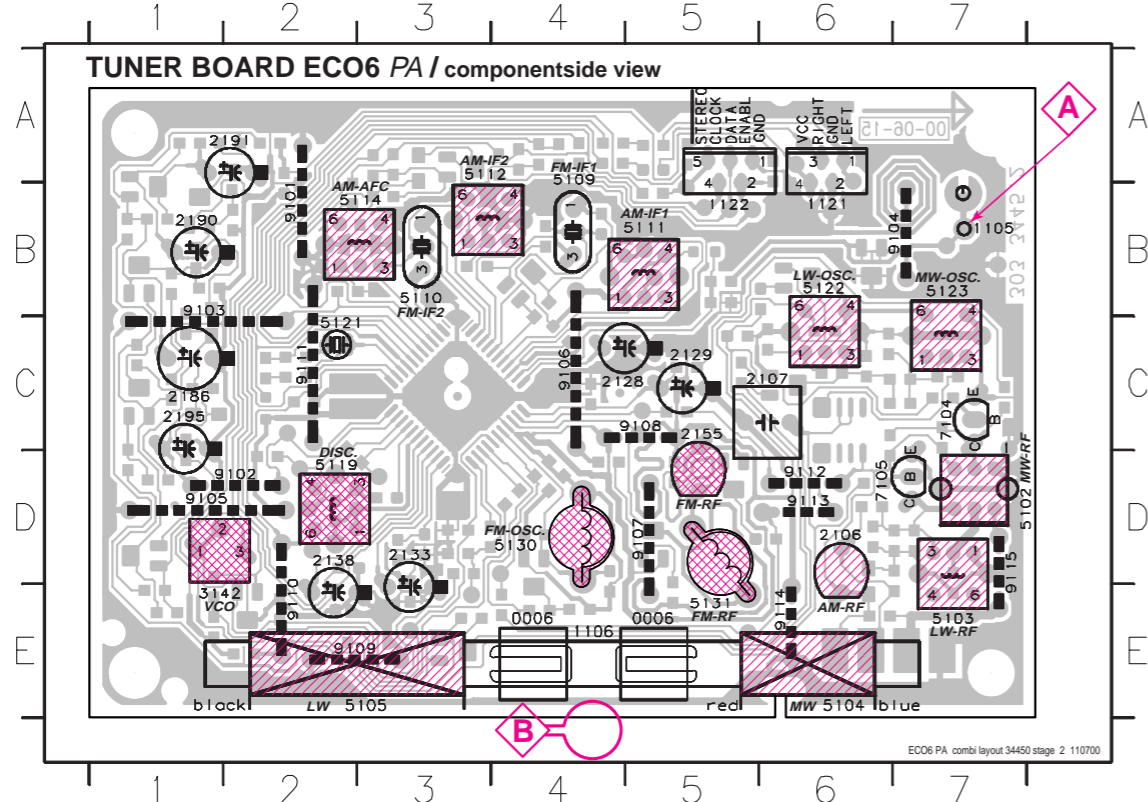
- ...V FM mode stereo
- ...V MW mode
- ...V LW mode
- voltages measured while set is tuned to a strong transmitter



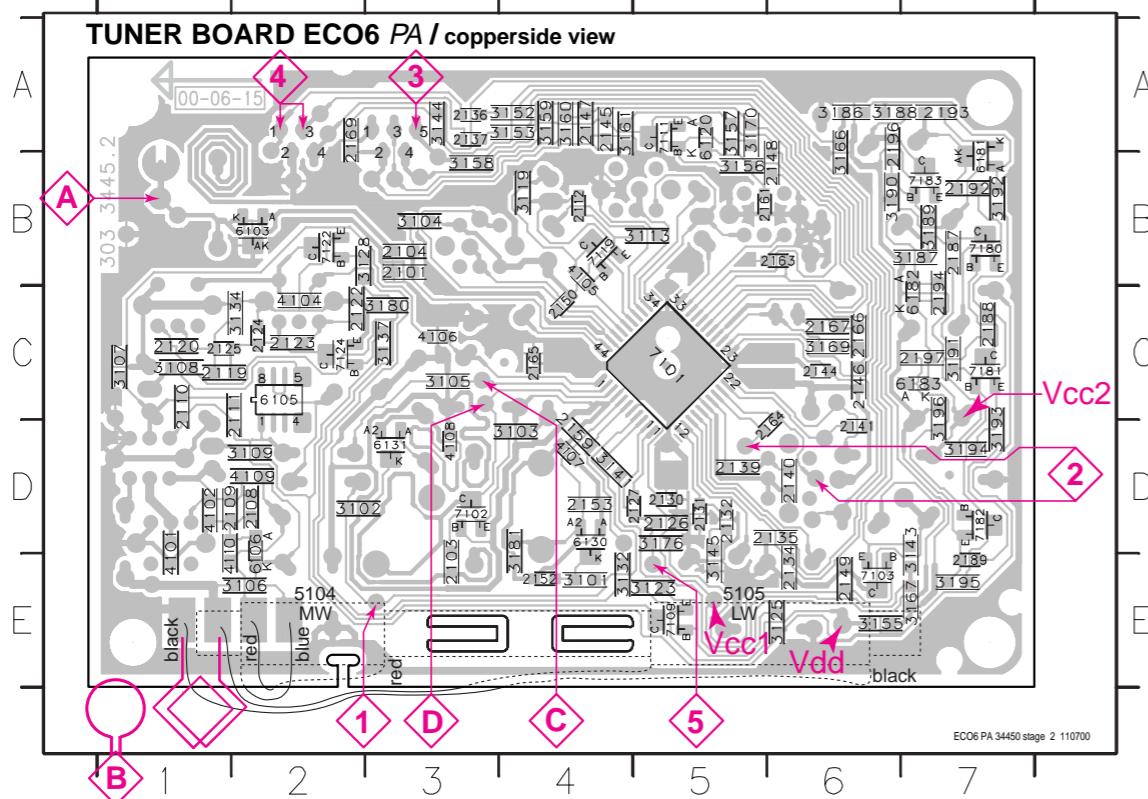
to/from

ECO6.PA 000911

1105 B7 2106 D6 2129 C5 2155 C5 2191 A2 5102 D7 5110 B3 5114 B3 5122 B6 5131 E5 9101 B2 9104 B7 9107 D5 9110 E2 9113 D6
 1121 B6 2107 C6 2133 D3 2186 C1 2195 C1 5103 E7 5111 B4 5119 D2 5123 B7 7104 C7 9102 D2 9105 D1 9108 C5 9111 C2 9114 E6
 1122 B5 2128 C4 2138 D2 2190 B1 3142 E1 5109 B4 5112 B3 5121 C2 5130 D4 7105 D6 9103 B1 9106 C4 9109 E2 9112 D6 9115 D7



2101 B3 2119 C1 2130 D5 2140 D6 2150 C4 2166 C6 2194 C7 3106 E2 3128 B2 3152 A4 3161 A4 3186 A6 3194 D7 4107 D4 6130 D4 7109 E5 7183 B7
 2103 E3 2120 C1 2131 D5 2141 D6 2152 E4 2167 C6 2196 A6 3107 C1 3132 E4 3153 A4 3166 B6 3187 B7 3195 E7 4108 D3 6131 D3 7111 A5
 2104 B3 2122 C2 2132 D5 2144 C6 2153 D4 2169 A2 2197 C7 3108 C1 3134 C2 3155 E6 3167 E7 3188 A6 3196 C7 4109 D2 6181 B7 7119 B5
 2108 D2 2123 C2 2134 E6 2145 A4 2159 D4 2187 B7 3101 E4 3109 D2 3137 C3 3156 B5 3169 C6 3189 B7 4101 D1 4110 D1 6182 C7 7122 B2
 2109 D1 2124 C2 2135 D6 2146 C6 2161 B5 2188 C7 3102 D2 3113 B5 3141 D4 3157 A5 3170 A5 3190 B6 4102 D1 6103 B2 6183 C7 7124 C2
 2110 C1 2125 C1 2136 A3 2147 A4 2163 B6 2189 E7 3103 D4 3119 B5 3143 D7 3158 B3 3176 D5 3191 C7 4104 C2 6105 C2 7101 C5 7180 B7
 2111 C2 2126 D5 2137 A3 2148 B6 2164 D6 2192 B7 3104 B3 3123 E5 3144 A3 3159 A4 3180 C3 3192 B7 4105 B4 6106 D2 7102 D3 7181 C7
 2112 B4 2127 D5 2139 D5 2149 E6 2165 C4 2193 A7 3105 C3 3125 E6 3145 E5 3160 A4 3181 D4 3193 D7 4106 C3 6120 A5 7103 E6 7182 D7



These assembly drawings show a summary of all possible versions.
 For components used in a specific version see schematic diagram respectively partslist.

TUNER ADJUSTMENT TABLE (ECO6 FM/MW- and FM/MW/LW - versions with ferrite antenna)

Waverange	Input frequency	Input	Tuned to	Adjust	Output	Scope/Voltmeter
VARICAP ALIGNMENT						
FM 87.5 - 108MHz (65.81 - 74, 87.5 - 108MHz)			108MHz	5130		8V -0.2V
			87.5MHz (65.81MHz)	check		4.3V -0.5V (1.2V -0.5V)
MW FM/AM-version, 10kHz grid 530 - 1700kHz			1700kHz	5123		8V -0.2V
			530kHz	check		1.1V -0.4V
FM/MW-version, 9kHz grid 531 - 1602kHz			1602kHz	5123	1	6.9V -0.2V
			531kHz	check		1.1V -0.4V
LW 153 - 279kHz			279kHz	5122		8V -0.2V
			153kHz	check		1.1V -0.4V
MW FM/MW/LW- version, 9kHz grid 531 - 1602kHz			1602kHz	5123		8V -0.2V
			531kHz	check		1.1V -0.4V
FM IF						
FM	10.7MHz, 45mV continuous wave	D		5119	2	0 - 3 mV DC
FM RF						
FM 87.5 - 108MHz (65.81 - 74, 87.5 - 108MHz)	108MHz	A mod=1kHz Δf=-22.5kHz	108MHz	2155	4	MAX
	87.5MHz (65.81MHz)		87.5MHz (65.81MHz)	5131		
VCO						
FM	98MHz, 1mV continuous wave	A	98MHz	3142	3	152kHz -1kHz ¹⁾
AM IF						
MW	450kHz connect pin 6 of IC 7101 (AM Osc.) with 2.2kΩ to Vcc	C Δf=-10kHz V _{RF} = 0.5mV (as low as possible) see remark 2)		5111	5	
				5112		
AM AFC		C		5114	2	0 - 2 mV DC
AM RF³⁾						
LW	198kHz	B 	198kHz	5105 LW ferrite coil	5	
MW FM/MW/LW- and FM/MW-version (9kHz grid) 531 - 1602kHz	1494kHz		2106			
	558kHz		5104 MW ferrite coil			
MW FM/AM-version, 10kHz grid 530 - 1700kHz	1500kHz		Δf = -30kHz V _{RF} as low as possible	1500kHz		
	560kHz	560kHz	5104 MW ferrite coil			

Use Service Testprogram. By selecting the TUNER TEST test frequencies will be stored as preset frequencies automatically.

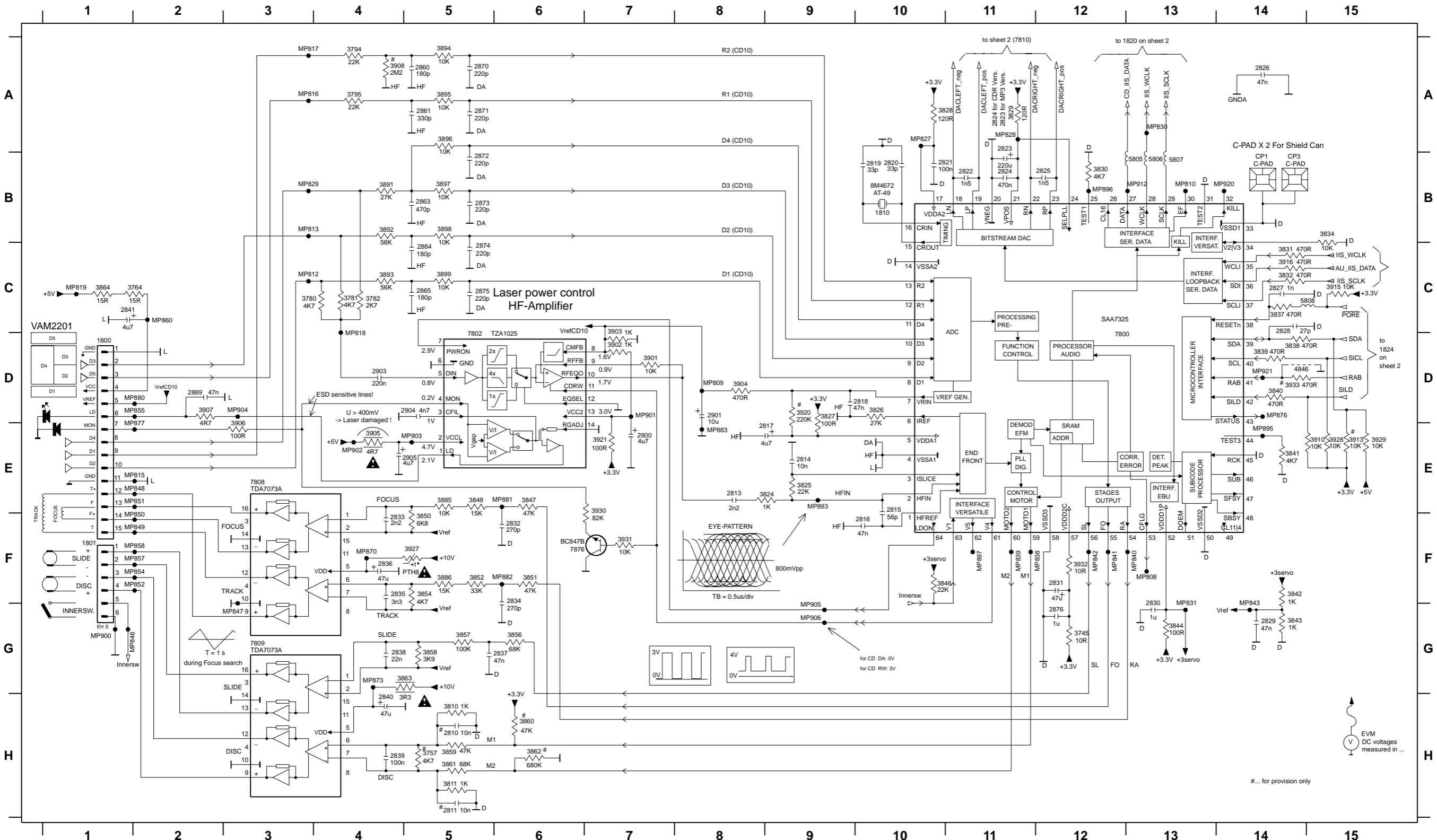
¹⁾ If sensitivity of frequency counter is too low adjust to max. channel separation (input signal: stereo left 90% + 9%, adjust output on right channel to minimum) ²⁾ RC network serves for damping the IF-filter while adjusting the other one.

³⁾ LW has to be aligned before MW.

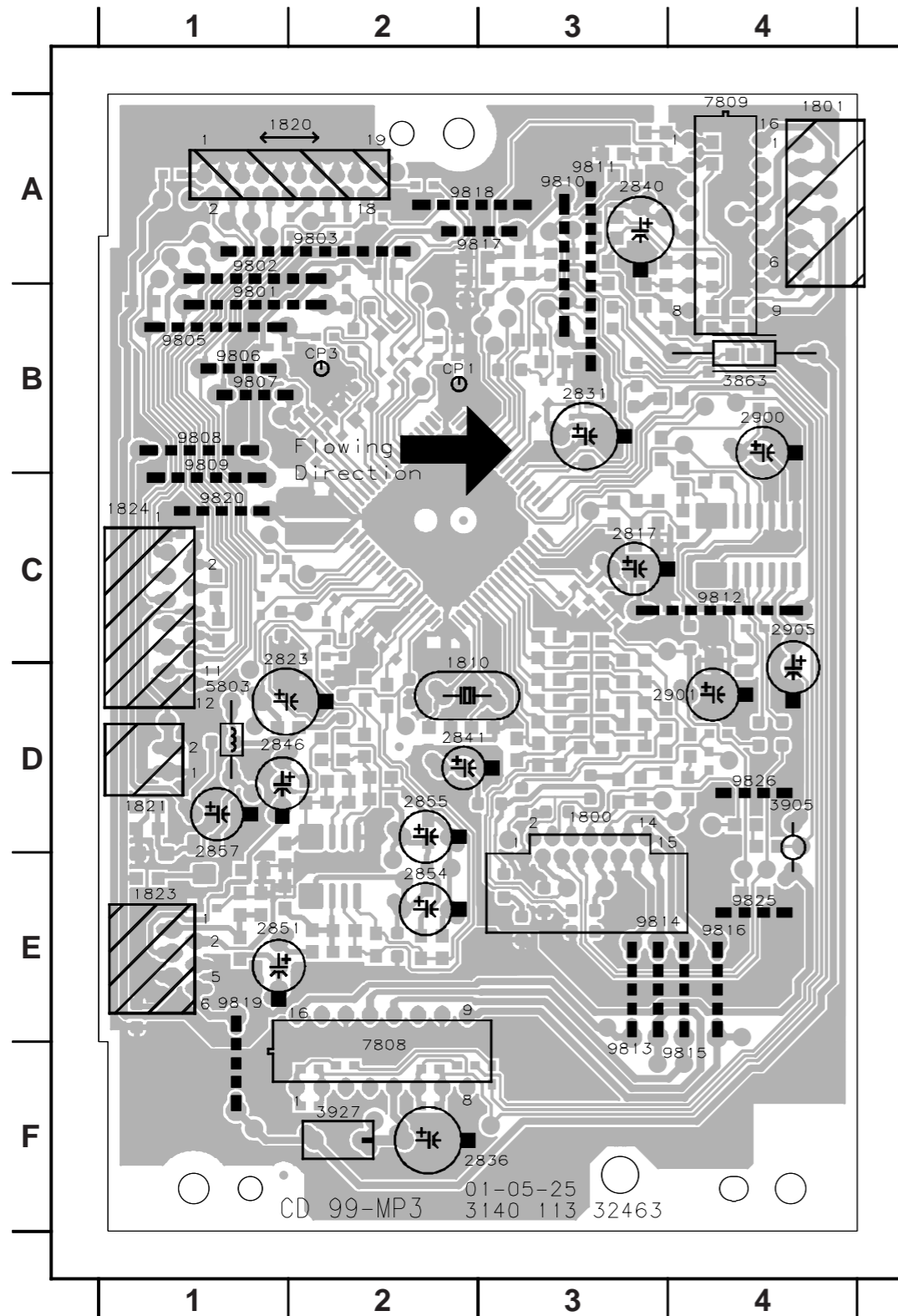
↑ Repeat

CUIT DIAGRAM - CD99 / MP3 PART 1

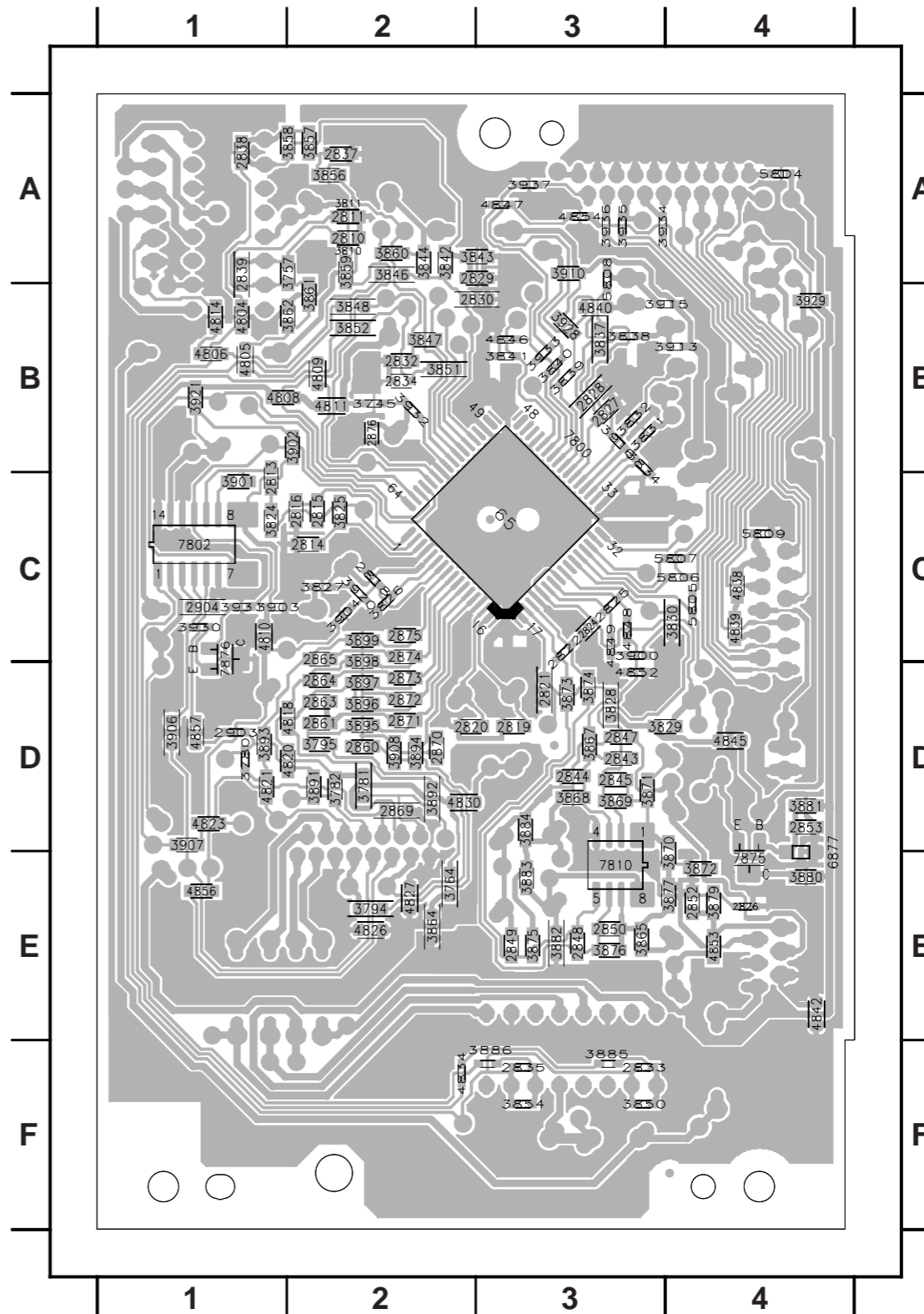
CP1 B14	2814 E9	2822 B11	2830 G13	2838 G4	2865 C5	2876 G12	3764 C2	3824 E9	3832 C14	3843 G14	3854 F4	3863 G5	3895 A5	3904 D8	3916 C14	3932 F12	7802 D5	MP813 B3	MP829 B3	MP843 G14	MP854 F2	MP877 E2	MP897 F11	MP912 B12
CP3 B14	2815 E10	2823 A11	2831 F12	2839 H4	2869 D2	2900 E7	3780 C4	3825 E9	3834 B15	3844 G13	3856 G6	3864 C1	3896 A5	3905 E4	3920 D9	3933 D14	7808 E3	MP815 E2	MP830 A13	MP846 G1	MP855 D2	MP880 D2	MP900 G1	MP920 B14
1800 D1	2816 F10	2824 B11	2832 F6	2840 H4	2870 A5	2901 D8	3781 C4	3826 D10	3837 C14	3846 F10	3857 G5	3885 E5	3897 B5	3906 E3	3921 E7	4846 D14	7809 G3	MP816 A3	MP831 G13	MP847 G3	MP857 F2	MP881 E6	MP901 D7	MP921 D14
1801 F1	2817 E9	2825 B12	2833 F4	2841 C1	2871 A5	2903 D4	3782 C4	3827 D9	3838 D14	3847 E6	3858 G5	3886 F5	3898 B5	3907 D2	3927 F5	5805 B12	7876 F7	MP817 A3	MP838 F12	MP848 E2	MP858 F2	MP882 F6	MP902 E4	
1810 B10	2818 D9	2826 A14	2834 G6	2860 A5	2872 B5	2904 D5	3794 A4	3828 A10	3839 D14	3848 E5	3859 H5	3891 B4	3899 C5	3908 A4	3928 E15	5806 B13	MP808 F13	MP818 D4	MP839 F11	MP849 F2	MP860 C2	MP883 D8	MP903 E5	
2810 H5	2819 B10	2827 C14	2835 F4	2861 A5	2873 B5	2905 E4	3795 A4	3829 A11	3840 D14	3850 F4	3860 H6	3892 B4	3901 D7	3910 E14	3929 E15	5807 B13	MP809 D8	MP819 C1	MP840 F13	MP850 F2	MP870 F4	MP883 E9	MP904 D3	
2811 H5	2820 B10	2828 C14	2836 F4	2863 B5	2874 C5	3745 G12	3810 H5	3830 B12	3841 E14	3851 F6	3861 H5	3893 C4	3902 D7	3913 E15	3930 E6	5808 C15	MP810 B13	MP827 A10	MP841 F12	MP851 E2	MP873 G4	MP895 E14	MP905 F9	
2813 E8	2821 B10	2829 G14	2837 G5	2864 C5	2875 C5	3757 H5	3811 H5	3831 C14	3842 F14	3852 F5	3862 H6	3894 A5	3903 D7	3915 C15	3931 F7	7800 C12	MP812 C3	MP828 A11	MP842 F12	MP852 F2	MP876 D14	MP896 B12	MP906 G9	



LAYOUT DIAGRAM - CD99 / MP3



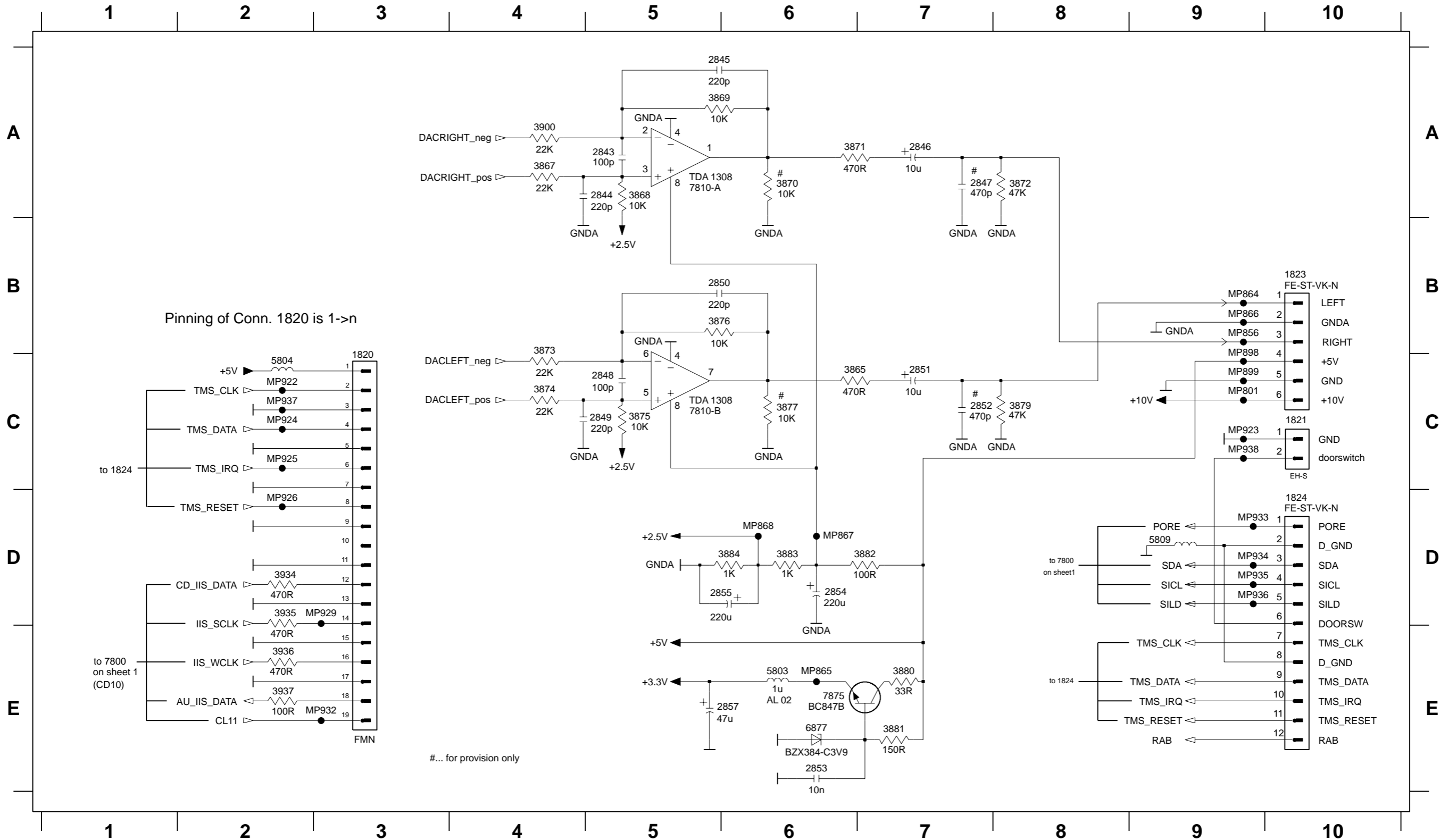
- CP1 B3
- CP3 B2
- 1800 E3
- 1801 A5
- 1810 D3
- 1820 A2
- 1821 E1
- 1824 C1
- 2817 C4
- 2823 D2
- 2831 C3
- 2836 G3
- 2840 A4
- 2841 D3
- 2846 D2
- 2851 E2
- 2854 E2
- 2855 E2
- 2857 E1
- 2900 C4
- 2901 D4
- 2905 D4
- 3863 C4
- 3905 E4
- 3927 F2
- 5803 D1
- 7808 F2
- 7809 A4
- 9801 B2
- 9802 B2
- 9803 B2
- 9805 B1
- 9806 B1
- 9807 C2
- 9808 C1
- 9809 C1
- 9810 A3
- 9811 A3
- 9812 D4
- 9813 F3
- 9814 E4
- 9815 F4
- 9816 E4
- 9817 B3
- 9818 B3
- 9819 F1
- 9820 C1
- 9825 E4
- 9826 E4



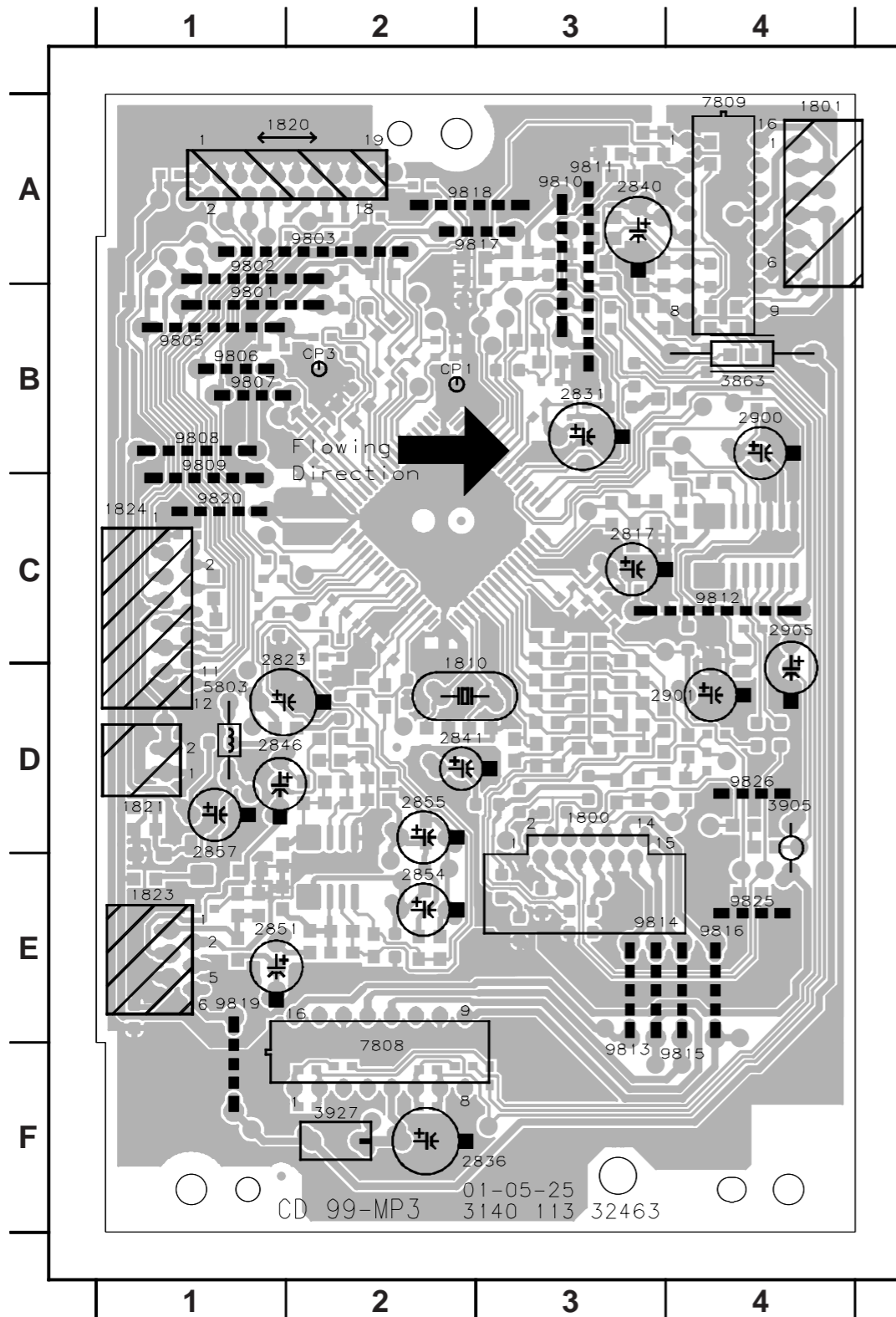
- 2810 B14
- 2811 B14
- 2813 C13
- 2814 C13
- 2815 C13
- 2816 C13
- 2818 D14
- 2819 D14
- 2820 D14
- 2821 D15
- 2822 D15
- 2824 D15
- 2825 D15
- 2826 E16
- 2827 C15
- 2828 C15
- 2829 B14
- 2830 B14
- 2832 B14
- 2833 F15
- 2834 C14
- 2835 F15
- 2837 A14
- 2838 A13
- 2839 B13
- 2843 E15
- 2844 E15
- 2845 E15
- 2847 D15
- 2848 E15
- 2849 E14
- 2850 E15
- 2852 E15
- 2853 D16
- 2860 D14
- 2861 D13
- 2863 D13
- 2864 D13
- 2865 D13
- 2869 E14
- 2870 D14
- 2871 D14
- 2872 D14
- 2873 D14
- 2874 D14
- 2875 D14
- 2876 C14
- 2903 D13
- 2904 D13
- 3745 C14
- 3757 B13
- 3764 E14
- 3780 E13
- 3781 E14
- 3782 E14
- 3794 E14
- 3795 D13
- 3810 B14
- 3811 B14
- 3824 C13
- 3825 C14
- 3826 D14
- 3827 D13
- 3828 D15
- 3829 D15
- 3830 D15
- 3831 C15
- 3832 C15
- 3834 C15
- 3837 B15
- 3838 B15
- 3839 B15
- 3840 B15
- 3841 B14
- 3842 B14
- 3843 B14
- 3844 B14
- 3846 B14
- 3847 B14
- 3848 B14
- 3850 F15
- 3851 B14
- 3852 B14
- 3854 F15
- 3856 A14
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- 3860 B14
- 3861 B13
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- 3864 E14
- 3865 E15
- 3867 D15
- 3868 E15
- 3869 E15
- 3870 E15
- 3871 E15
- 3872 E15
- 3873 D15
- 3874 D15
- 3875 E15
- 3876 F15
- 3877 E15
- 3879 E16
- 3880 E16
- 3881 E16
- 3882 E16
- 3883 E15
- 3884 E15
- 3885 F15
- 3886 F14
- 3891 E13
- 3892 E14
- 3893 D13
- 3894 D14
- 3895 D14
- 3899 D14
- 3900 D15
- 3901 C13
- 3902 C13
- 3903 D13
- 3904 D14
- 3906 D13
- 3907 E13
- 3908 D14
- 3910 B15
- 3913 B15
- 3915 B15
- 3916 C15
- 3920 D14
- 3921 C13
- 3928 B15
- 3929 B16
- 3930 D13
- 3931 D13
- 3933 B15
- 3934 B15
- 3935 B15
- 3936 B15
- 3937 A15
- 4804 B13
- 4805 B13
- 4806 B13
- 4808 C13
- 4809 B13
- 4810 D13
- 4811 C14
- 4814 B13
- 4818 D13
- 4820 E13
- 4821 E13
- 4823 E13
- 4826 E14
- 4827 E14
- 4830 E14
- 4834 F14
- 4838 D16
- 4839 D16
- 4840 B15
- 4842 F16
- 4845 D16
- 4846 B14
- 4847 B14
- 4848 D15
- 4849 D15
- 4852 D15
- 4853 F16
- 4854 B15
- 4856 E13
- 4857 D13
- 5804 A16
- 5805 D15
- 5806 D15
- 5807 C15
- 5808 B15
- 5809 C16
- 6877 E16
- 7800 C15
- 7802 C13
- 7810 E15
- 7875 E16
- 7876 D13

CUIT DIAGRAM - CD99 / MP3 PART 2

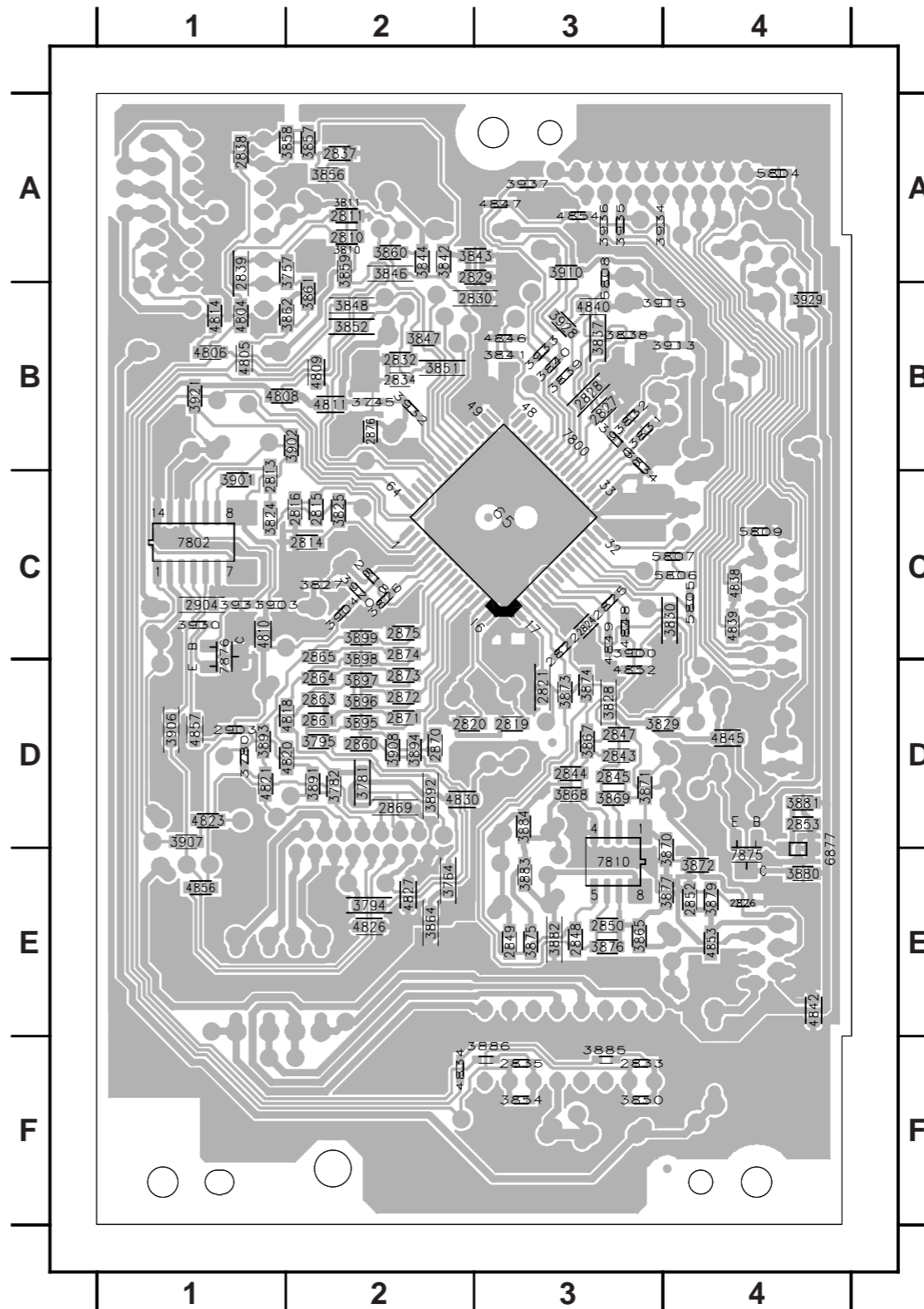
1820 C3	2844 A5	2849 C5	2854 D6	3868 A5	3873 B4	3879 C8	3884 D6	3937 E2	7810-A A5	MP864 B9	MP898 C9	MP925 C2	MP934 D9
1821 C10	2845 A5	2850 B5	2855 D5	3869 A5	3874 C4	3880 E7	3900 A4	5803 E6	7810-B C5	MP865 E6	MP899 C9	MP926 D2	MP935 D9
1823 B10	2846 A7	2851 C7	2857 E6	3870 A6	3875 C5	3881 E7	3934 D2	5804 C2	7875 E6	MP866 B9	MP922 C2	MP929 D3	MP936 D9
1824 D10	2847 A7	2852 C7	3865 C6	3871 A6	3876 B5	3882 D7	3935 D2	5809 D9	MP801 C9	MP867 D6	MP923 C9	MP932 E3	MP937 C2
2843 A5	2848 C5	2853 E6	3867 A4	3872 A8	3877 C6	3883 D6	3936 E2	6877 E6	MP856 B9	MP868 D6	MP924 C2	MP933 D9	MP938 C9



LAYOUT DIAGRAM - CD99 / MP3

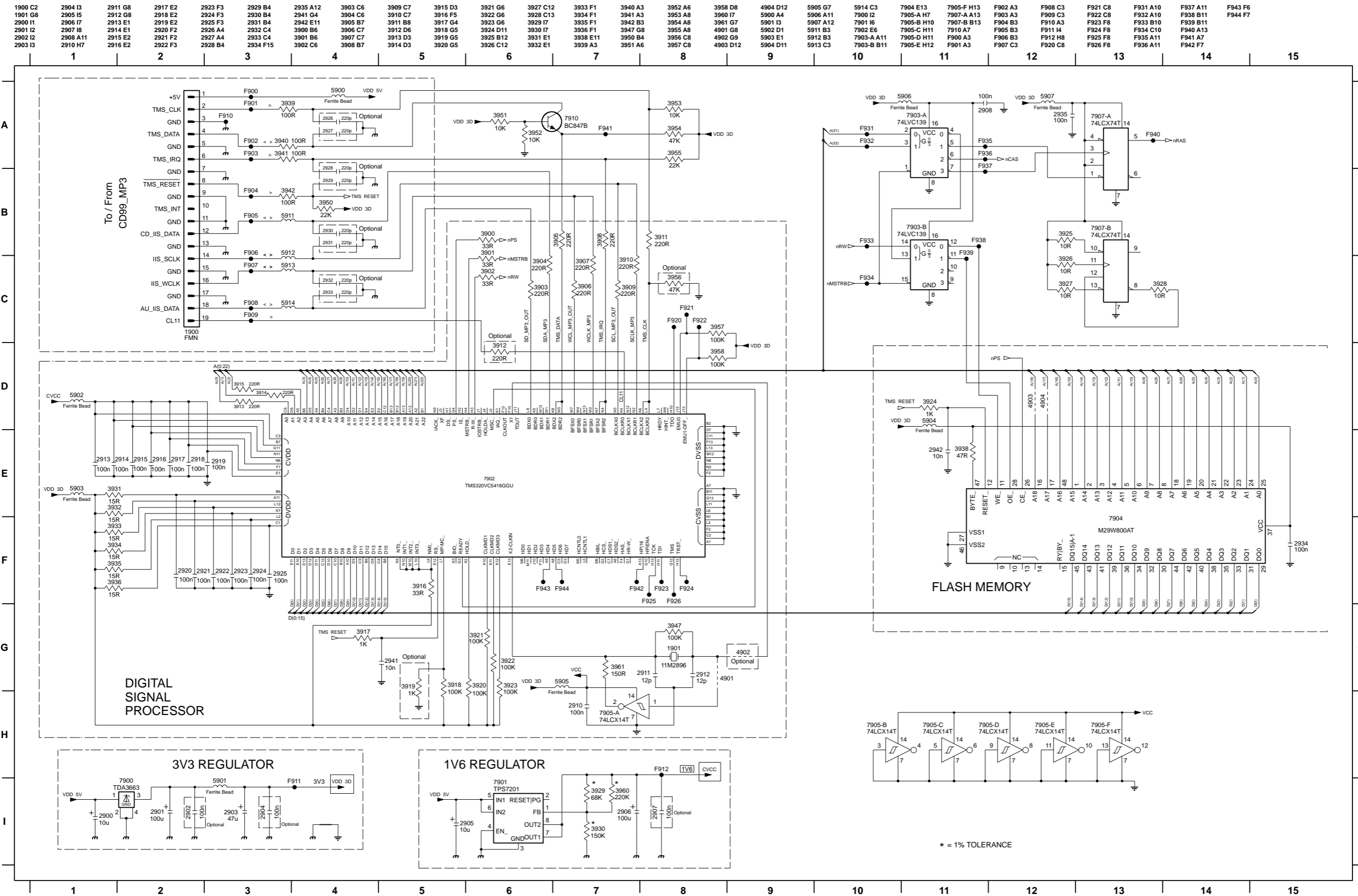


- CP1 B3
- CP3 B2
- 1800 E3
- 1801 A5
- 1810 D3
- 1820 A2
- 1821 E1
- 1823 E1
- 1824 C1
- 2817 C4
- 2823 D2
- 2831 C3
- 2836 G3
- 2840 A4
- 2841 D3
- 2846 D2
- 2851 E2
- 2854 E2
- 2855 E2
- 2857 E1
- 2900 C4
- 2901 D4
- 2905 D4
- 3863 C4
- 3905 E4
- 3927 F2
- 5803 D1
- 7808 F2
- 7809 A4
- 9801 B2
- 9802 B2
- 9803 B2
- 9805 B1
- 9806 B1
- 9807 C2
- 9808 C1
- 9809 C1
- 9810 A3
- 9811 A3
- 9812 D4
- 9813 F3
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- 9818 B3
- 9819 F1
- 9820 C1
- 9825 E4
- 9826 E4

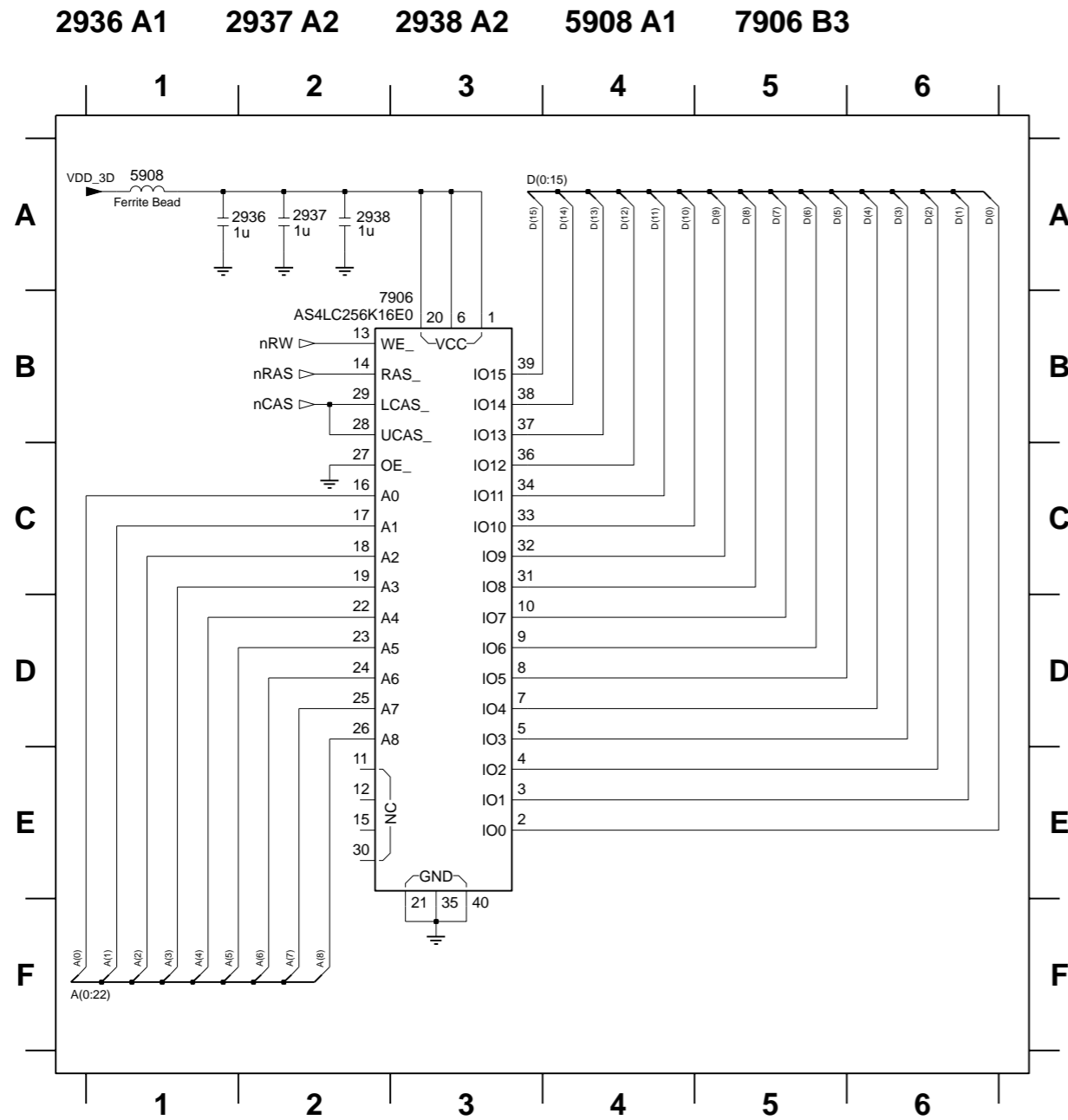


- 2810 B14
- 2811 B14
- 2813 C13
- 2814 C13
- 2815 C13
- 2816 C13
- 2818 D14
- 2819 D14
- 2820 D14
- 2821 D15
- 2822 D15
- 2824 D15
- 2825 D15
- 2826 E16
- 2827 C15
- 2828 C15
- 2829 B14
- 2830 B14
- 2832 B14
- 2833 F15
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- 2835 F15
- 2837 A14
- 2838 A13
- 2839 B13
- 2843 E15
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- 2849 E14
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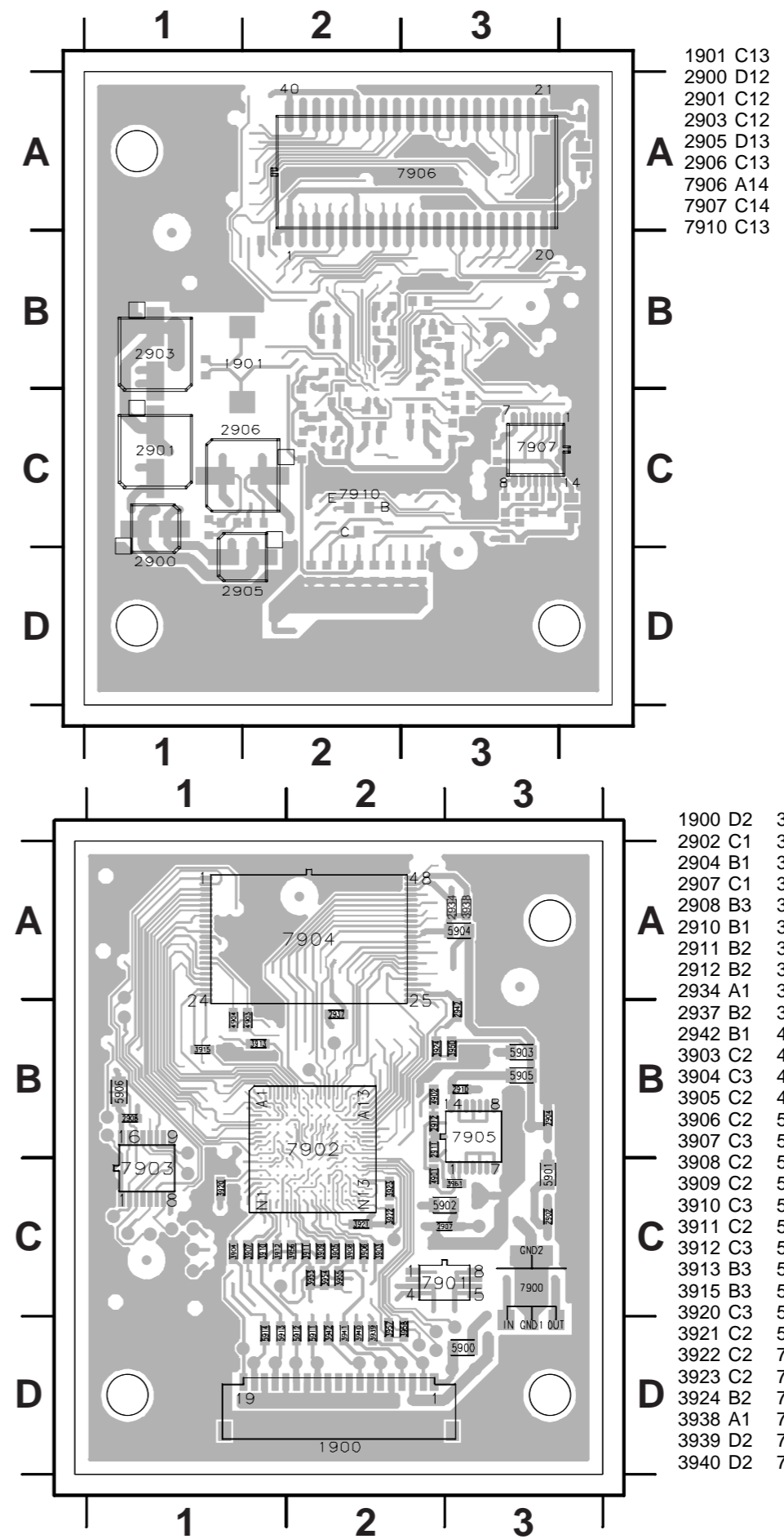
CUIT DIAGRAM - MP3 DECODER BOARD



LAYOUT DIAGRAM - MP3 DECODER BOARD

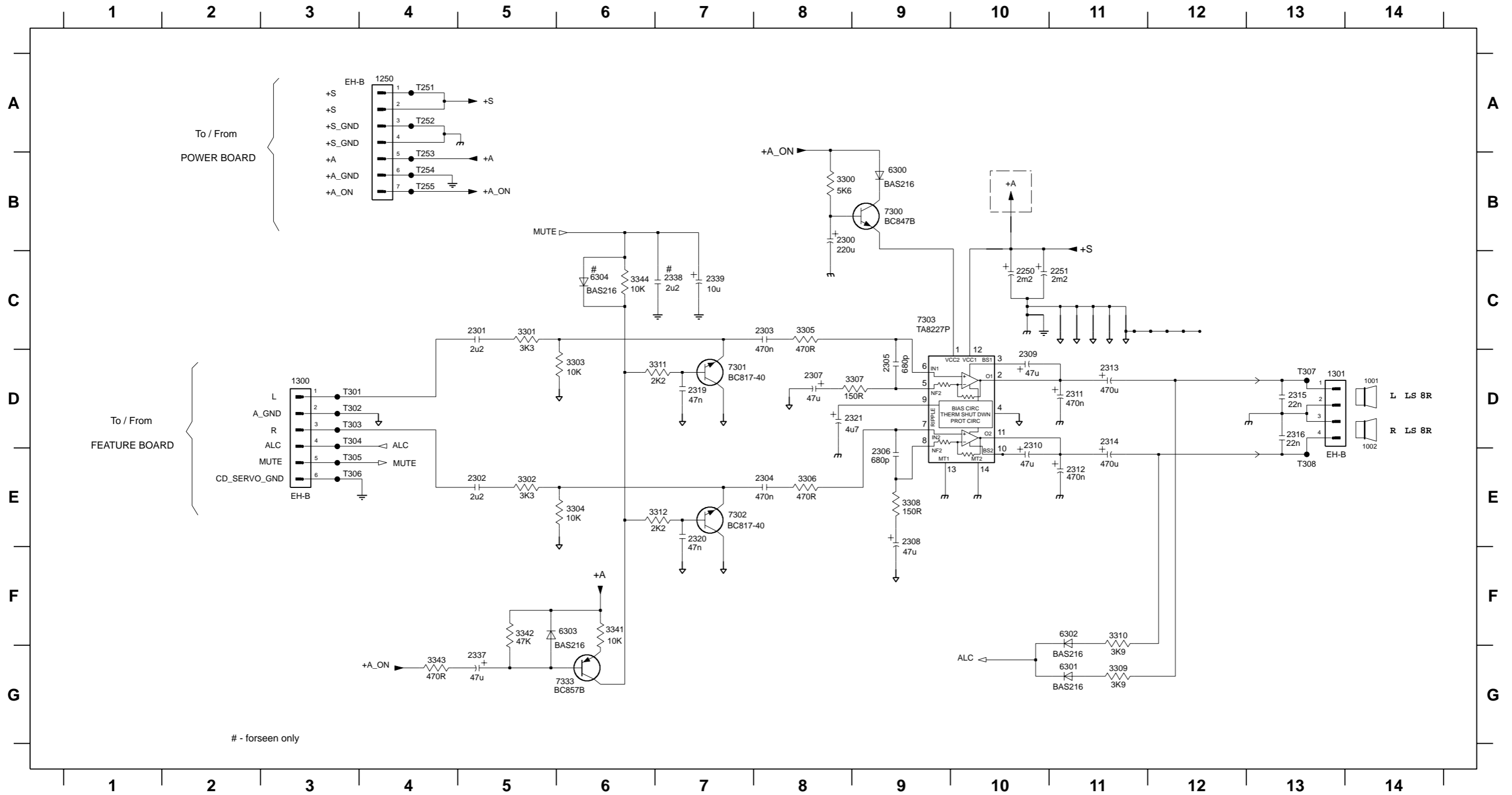


DECODER BOARD - LAYOUT DIAGRAM

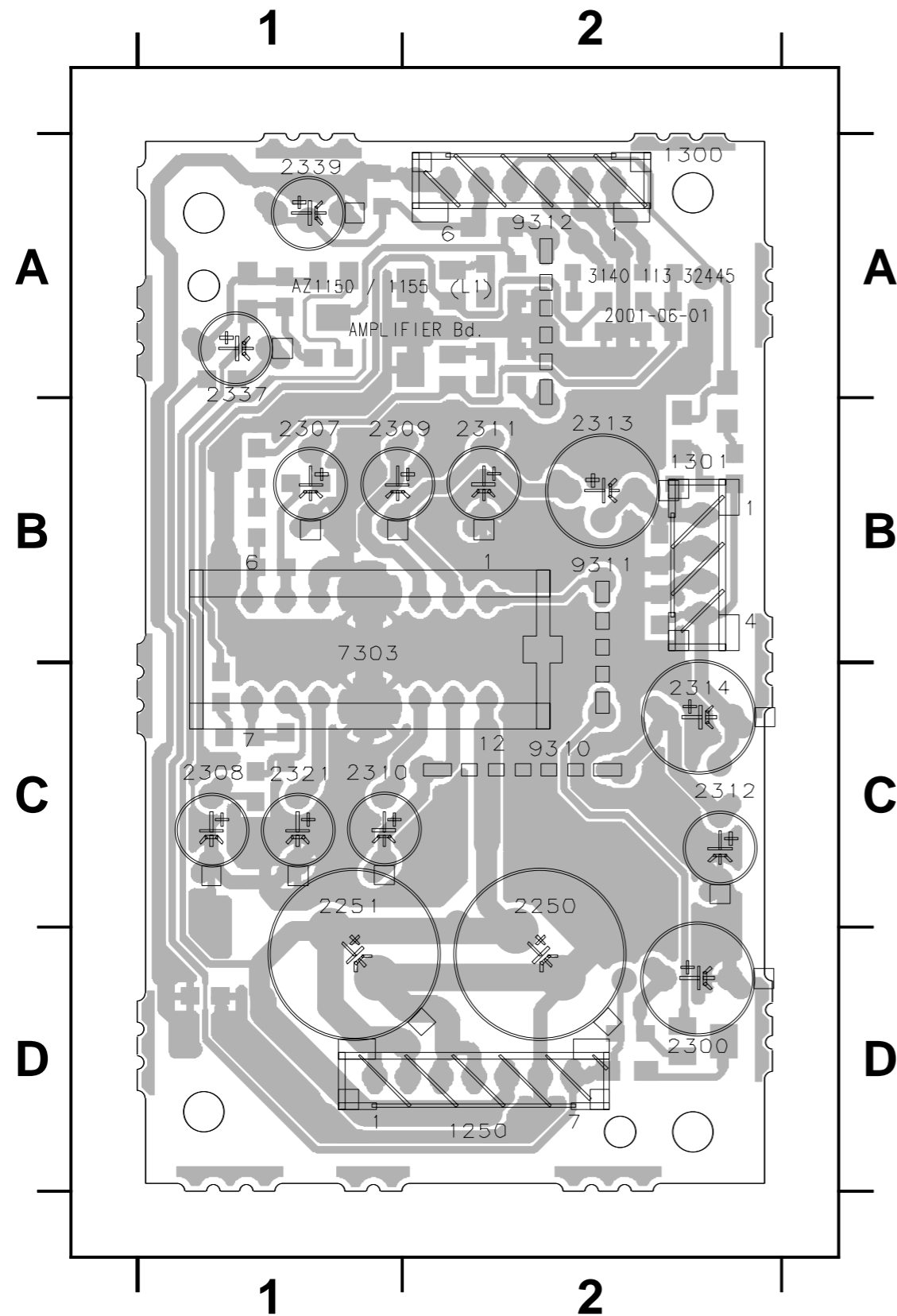


CUIT DIAGRAM - AMPLIFIER BOARD

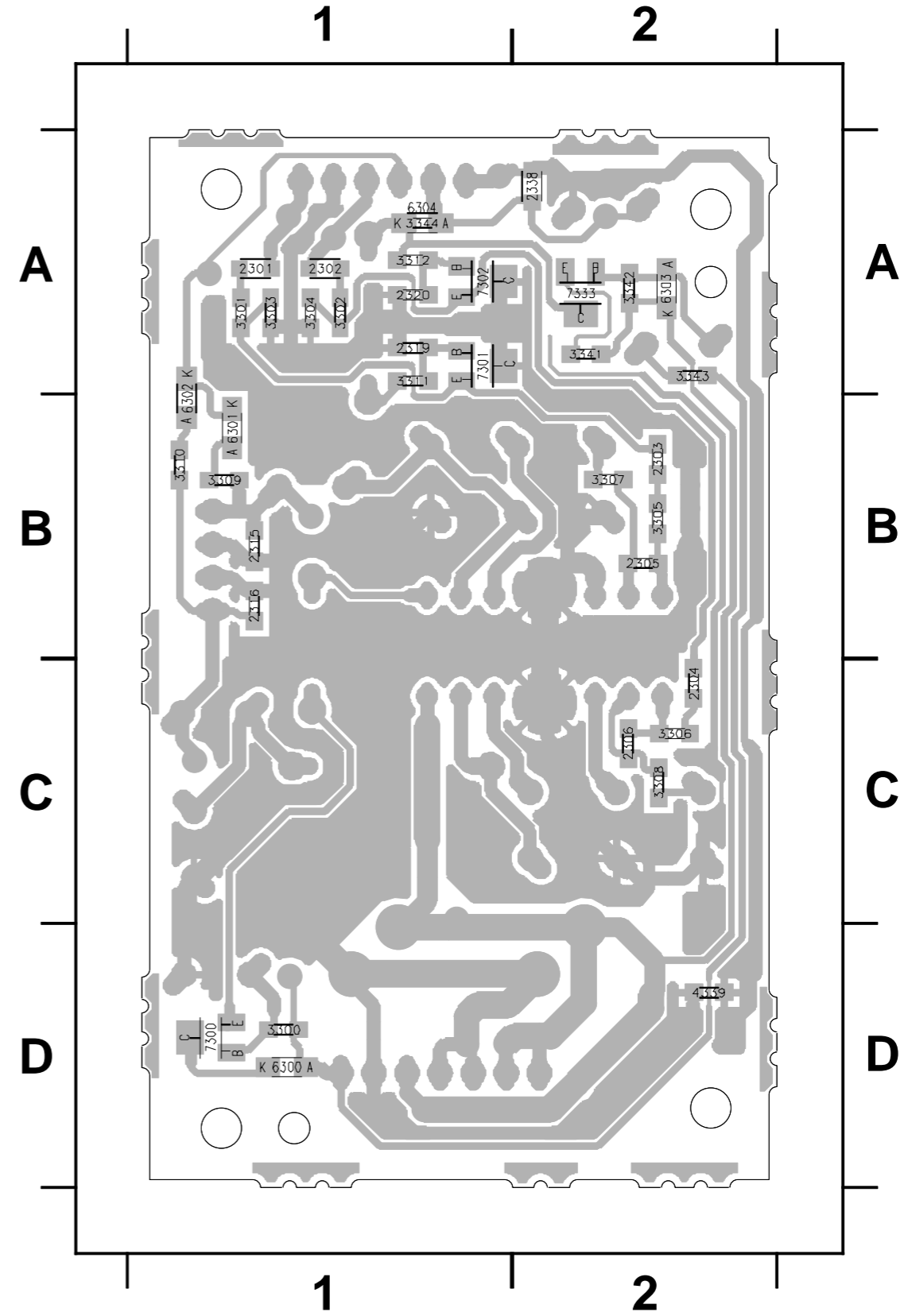
1001 D14	1301 D13	2301 C5	2305 D9	2309 D10	2313 D11	2319 D7	2338 C7	3302 E5	3306 E8	3310 F11	3342 F5	6301 G11	7300 B9	7333 G5	T254 B4	T303 D3	T307 D13
1002 E14	2250 C10	2302 E5	2306 E9	2310 D10	2314 D11	2320 E7	2339 C7	3303 D6	3307 D9	3311 D7	3343 G4	6302 F11	7301 D7	T251 A4	T255 B4	T304 D3	T308 E13
1250 A4	2251 C11	2303 C8	2307 D8	2311 D11	2315 D13	2321 D9	3300 B8	3304 E6	3308 E9	3312 E7	3344 C6	6303 F6	7302 E7	T252 A4	T301 D3	T305 E3	
1300 D3	2300 B8	2304 E8	2308 E9	2312 E11	2316 D13	2337 G5	3301 C5	3305 C8	3309 G11	3341 F6	6300 B9	6304 C6	7303 C9	T253 B4	T302 D3	T306 E3	



LAYOUT DIAGRAM - AMPLIFIER BOARD



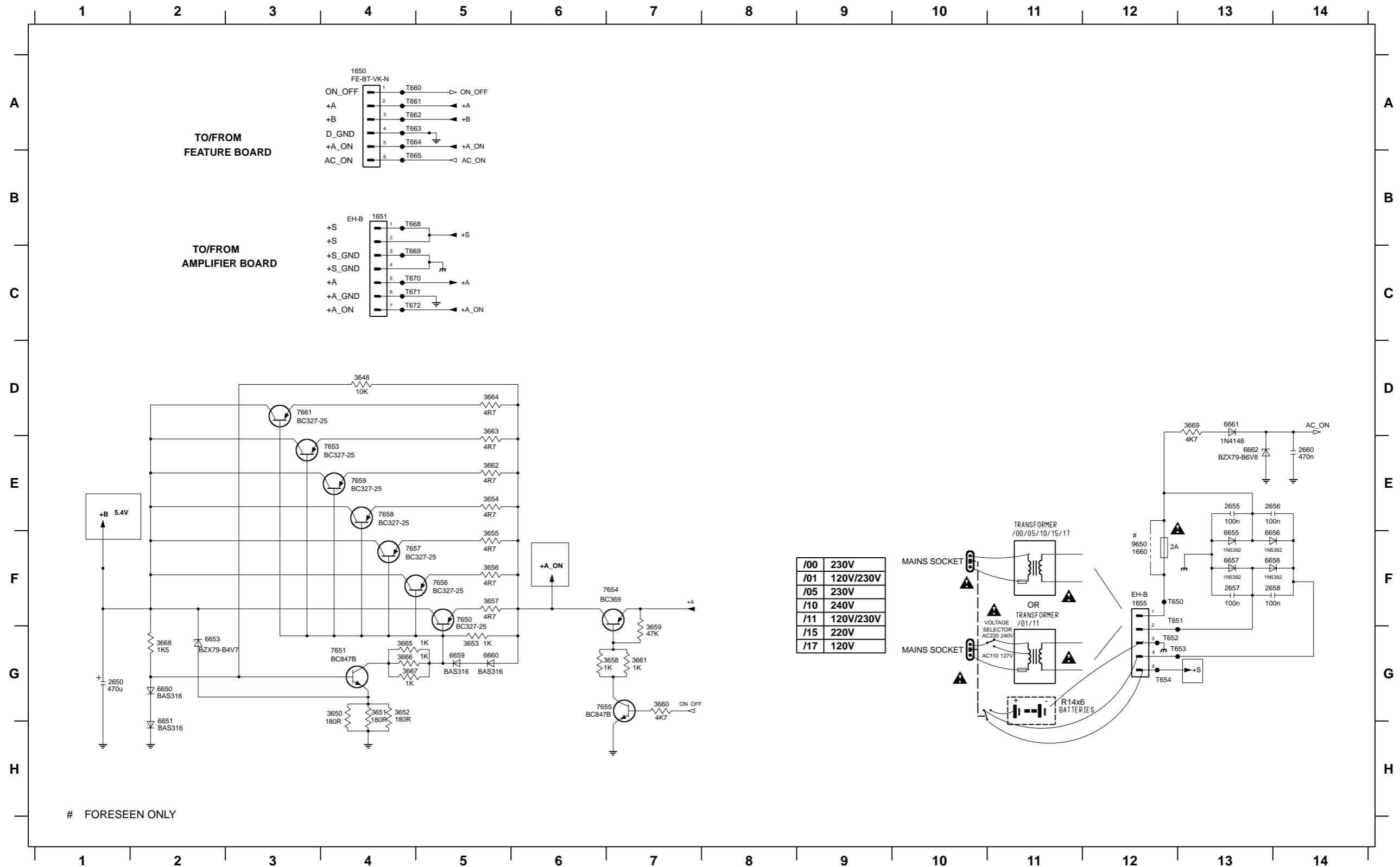
- 1250 D2
- 1300 A2
- 1301 B2
- 2250 C2
- 2251 C1
- 2300 D2
- 2307 B1
- 2308 C1
- 2309 B1
- 2310 C1
- 2311 B2
- 2300 C2
- 2313 B2
- 2314 C2
- 2321 C1
- 2337 A1
- 2339 A1
- 7303 B1
- 9310 C2
- 9311 B2
- 9312 A2



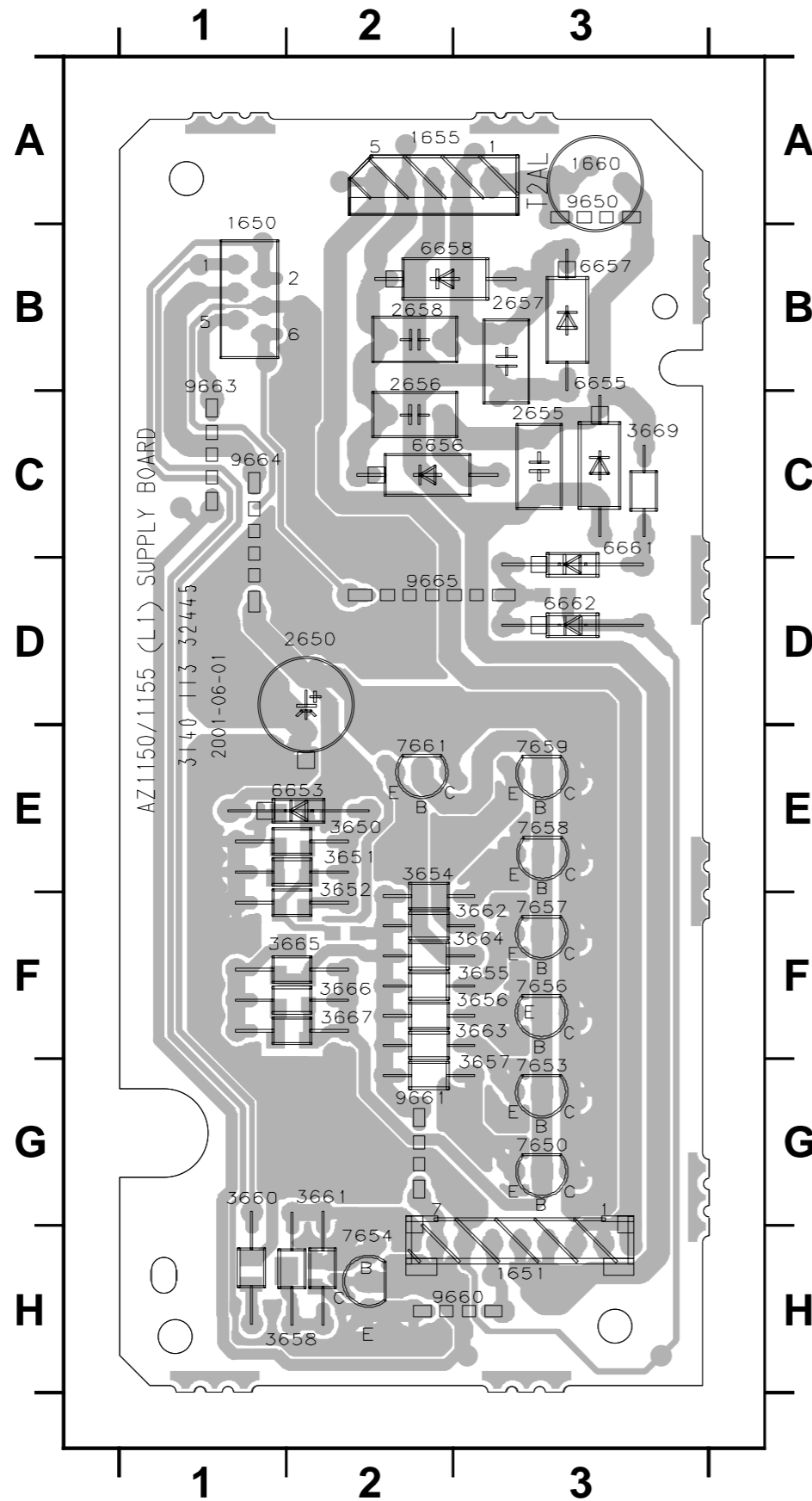
- 2301 A1
- 2302 A1
- 2303 B2
- 2304 C2
- 2305 B2
- 2306 C2
- 2315 B1
- 2316 B1
- 2319 A1
- 2320 A1
- 2338 A2
- 3300 D1
- 3301 A1
- 3302 A1
- 3303 A1
- 3304 A1
- 3305 B2
- 3306 C2
- 3307 B2
- 3308 C2
- 3309 B1
- 3310 B1
- 3311 A1
- 3312 A1
- 3341 A2
- 3342 A2
- 3343 A2
- 3344 A1
- 4339 D2
- 6300 D1
- 6301 B1
- 6302 B1
- 6303 A2
- 6304 A1
- 7300 D1
- 7301 A1
- 7302 A1
- 7333 A2

CUIT DIAGRAM - SUPPLY BOARD

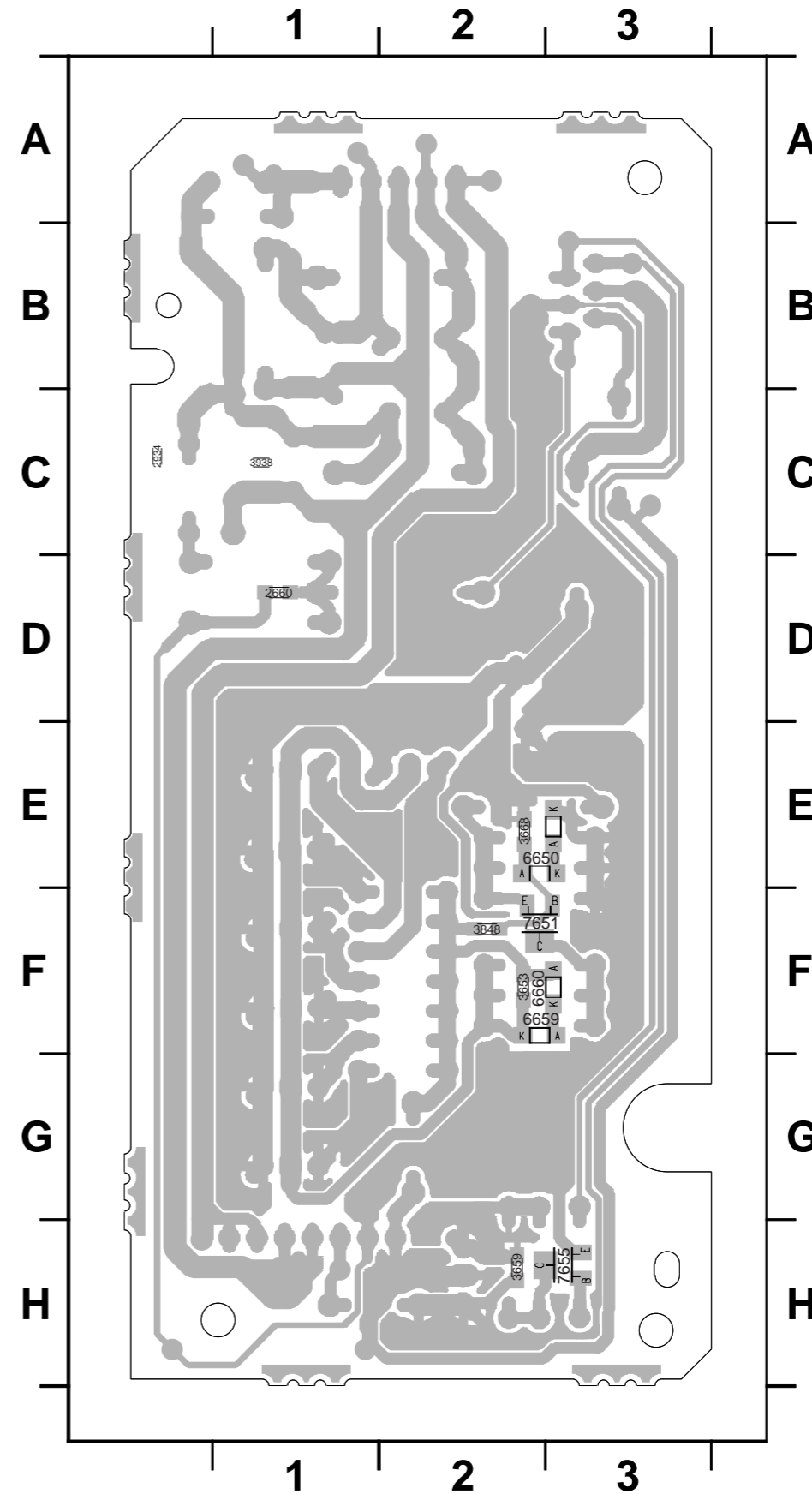
1650 A4	1660 F12	2656 E13	2660 E14	3651 G4	3654 E5	3657 F5	3660 G7	3663 D5	3666 G4	3669 D13	6653 G2	6657 F13	6660 G5	7650 F5	7654 F7	7657 F4	7661 D3	T651 F12	T654 G12	T662 A4	T665 B4	T670 C4
1651 B4	2650 G1	2657 F13	3648 D4	3652 G4	3655 F5	3658 G6	3661 G7	3664 D5	3667 G4	6650 G2	6655 F13	6661 D13	6662 E13	7651 G4	7655 G7	7658 E4	9650 F12	T652 G12	T660 A4	T663 A4	T668 B4	T671 C4
1655 F12	2655 E13	2658 F13	3650 G4	3653 G5	3656 F5	3659 G7	3662 E5	3665 G4	3668 G2	6651 H2	6656 F14	6659 G5	6662 E13	7653 E4	7656 F5	7659 E4	T650 F12	T653 G13	T661 A4	T664 A4	T669 C4	T672 C4



LAYOUT DIAGRAM - SUPPLY BOARD



- 1650 A1
- 1651 H3
- 1655 A2
- 1660 A3
- 2650 D2
- 2655 C3
- 2656 B2
- 2657 B3
- 2658 B2
- 3650 E2
- 3651 E2
- 3652 E2
- 3654 E2
- 3655 F3
- 3656 F3
- 3657 G3
- 3658 H2
- 3660 G1
- 3661 G2
- 3662 F3
- 3663 F3
- 3664 F3
- 3665 F2
- 3666 F2
- 3667 F2
- 3669 C3
- 6653 E2
- 6655 B3
- 6656 C2
- 6657 B3
- 6658 B2
- 6661 C3
- 6662 D3
- 7650 G3
- 7653 G3
- 7654 H2
- 7656 F3
- 7657 F3
- 7658 E3
- 7659 E3
- 7661 E2
- 9650 A3
- 9660 H3
- 9661 G2
- 9663 B1
- 9664 C1
- 9665 D2

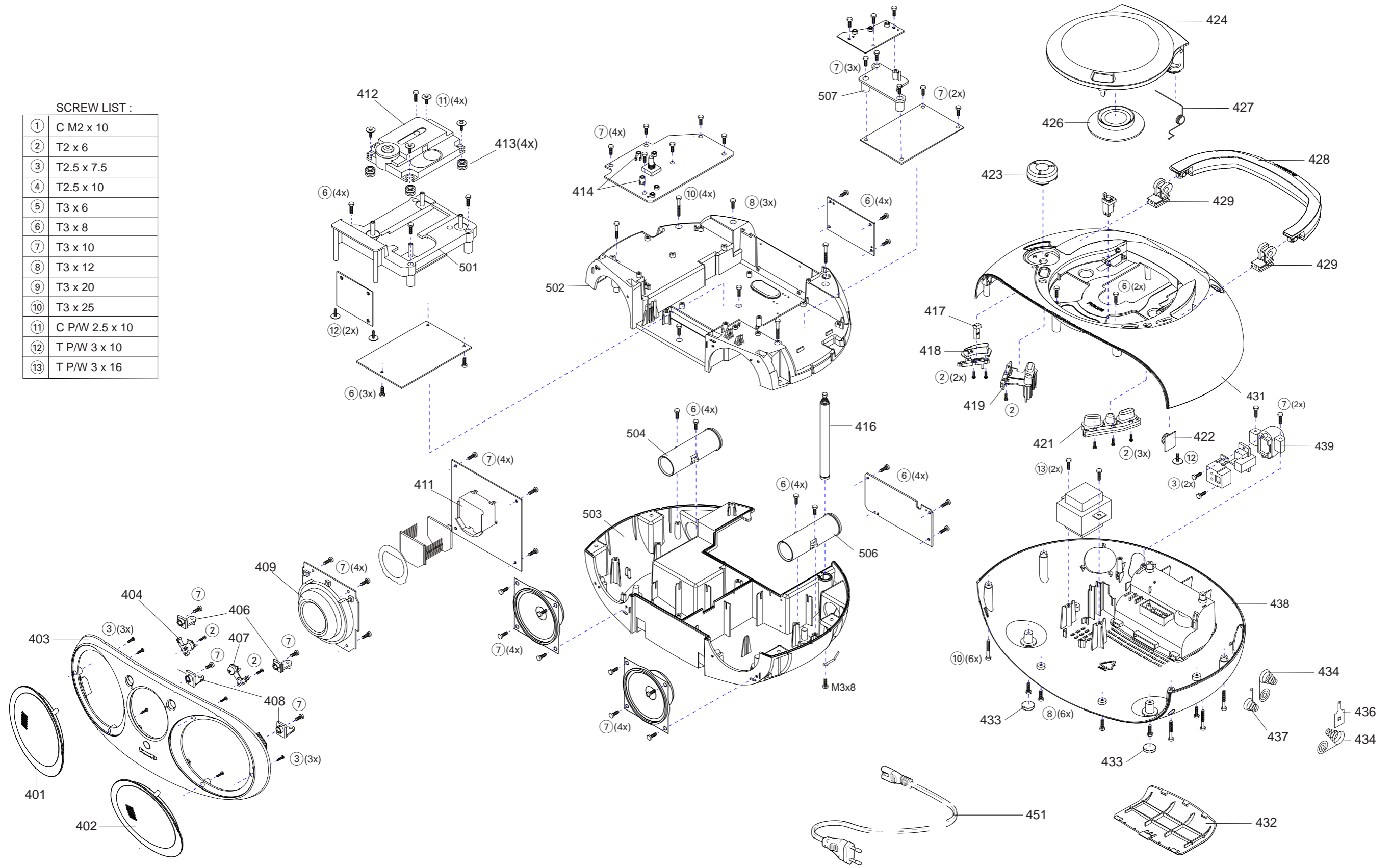


- 2660 D1
- 3648 F2
- 3653 F2
- 3659 H2
- 3668 E2
- 6650 E2
- 6651 E2
- 6659 F2
- 6660 F2
- 7651 F2
- 7655 H3

LODED VIEW DIAGRAM

SCREW LIST :

①	C M2 x 10
②	T2 x 6
③	T2.5 x 7.5
④	T2.5 x 10
⑤	T3 x 6
⑥	T3 x 8
⑦	T3 x 10
⑧	T3 x 12
⑨	T3 x 20
⑩	T3 x 25
⑪	C P/W 2.5 x 10
⑫	T P/W 3 x 10
⑬	T P/W 3 x 16



MECHANICAL PARTSLIST

401	3140 117 60840	LEFT GRILL ASSEMBLY	451	2422 070 98151	MAINS CORD SET (/00 /01)
402	3140 117 60850	RIGHT GRILL ASSEMBLY	451	2422 070 98152	MAINS CORD SET (/17)
403	3140 117 60520	FRONT CABINET ASSY (AZ1155)	451	9965 000 07586	MAINS CORD SET (/05)
403	3140 117 61620	FRONT CABINET ASSY (AZ1150)	451	2422 070 98148	MAINS CORD SET (/10)
404	3140 114 37350	MINUS KNOB			
406	3140 114 36360	TOP FIXING BRACKET			
407	3140 114 37340	PLUS KNOB	3140 115 28560	IFU (/00, /05)	
408	3140 114 36560	BOTTOM FIXING BRACKET	3140 115 28510	IFU (/01, /10, /11)	
409	3140 118 50970	RING SWITCH ASSY	3140 115 28430	IFU (/17)	
411	3140 114 36480	LCD BRACKET	3139 228 87200	REMOTE RC19420001/01 (AZ1155 ONLY)	
412	9305 022 30103	VAM2201/03			
413	4822 529 10431	DAMPER - RUBBER (25DEG)			
414	3140 114 38110	LED SOCKET			
416	3140 118 71780	AERIAL-TELESCOPIC			
417	3140 114 37360	UB2 LIGHTGUIDE			
418	3140 114 37390	UB2 KNOB			
419	3140 114 36410	BUTTON SET - LEFT			
421	3140 114 36400	BUTTON SET - RIGHT			
422	4822 529 10322	DAMPER ASSY			
423	3140 114 36600	VOLUME KNOB			
424	3140 117 60930	CD DOOR ASSEMBLY			
426	3140 117 59810	CLAMPER-VAM-RING-ASY			
427	3140 111 00860	CD DOOR SPRING			
428	3140 117 60500	HANDLE ASSY			
429	4822 402 10724	BRACKET-HANDLE			
431	3140 117 60510	TOP CABINET ASSY			
432	3140 114 36340	BATTERY DOOR			
433	3140 114 37490	RUBBER FOOT			
434	3140 111 00900	SPRING-COMP. PLUS-MINUS			
436	3140 111 21320	CONTACT PLATE			
437	3140 111 00890	SPRING COMPRESSION MINUS			
438	3140 117 60530	BOTTOM CABINET ASSY			
439	3140 114 37480	MAINS BRACKET			

Note : Only those parts mentioned in the list are normal service parts.

ELECTRICAL PARTSLIST - FRONT BOARD**- CAPACITORS -**

2402	4822 124 23432	100 µF 20% 10V
2403	4822 126 14305	100 nF 10% X7R 16V
2404	4822 124 23432	100 µF 20% 10V
2405	5322 126 11583	10 nF 10% X7R 50V
2406	5322 126 11583	10 nF 10% X7R 50V
2407	4822 126 14305	100 nF 10% X7R 16V
2408	3198 017 41050	1 µF Y5V 10V
2411	4822 122 33752	15 pF 5% NP0 50V
2412	4822 122 33752	15 pF 5% NP0 50V
2413	4822 122 31765	100 pF 2% NP0 63V
2414	5322 126 11583	10 nF 10% X7R 50V
2417	4822 124 40433	47 µF 20% 25V
2418	5322 126 11578	1 nF 10% X7R 50V
2419	4822 126 14305	100 nF 10% X7R 16V
2420	5322 126 11583	10 nF 10% X7R 50V
2421	5322 126 11583	10 nF 10% X7R 50V
2422	5322 126 11583	10 nF 10% X7R 50V
2423	5322 126 11583	10 nF 10% X7R 50V
2431	4822 122 31765	100 pF 2% NP0 63V
2432	4822 122 31765	100 pF 2% NP0 63V
2433	4822 122 31765	100 pF 2% NP0 63V
2434	4822 122 31765	100 pF 2% NP0 63V
2435	4822 122 31765	100 pF 2% NP0 63V
2436	4822 122 31765	100 pF 2% NP0 63V
2437	4822 126 13881	470 pF 5% 50V
2438	4822 126 13881	470 pF 5% 50V
2439	4822 126 13881	470 pF 5% 50V
2440	4822 126 13881	470 pF 5% 50V
2441	4822 126 14238	2,2 nF X7R 50V
2442	4822 126 13883	220 pF 5% 50V
2446	5322 126 11583	10 nF 10% X7R 50V
2447	4822 126 13881	470 pF 5% 50V
2450	4822 126 13883	220 pF 5% 50V
2451	4822 126 13881	470 pF 5% 50V

- RESISTORS -

3400	4822 116 52176	10 R 5% 0,5W
3401	4822 116 52182	15 R 5% 0,5W
3402	4822 116 52175	100 R 5% 0,5W
3403	4822 051 30682	6,8 K 5% 0,1W
3404	4822 051 30332	3,3 K 5% 0,1W
3405	4822 051 30153	15 K 5% 0,1W
3406	4822 051 30471	470 R 5% 0,1W
3407	4822 051 30472	4,7 K 5% 0,1W
3408	4822 051 30474	470 K 5% 0,1W
3409	4822 051 30103	10 K 5% 0,1W

- RESISTORS -

3410	4822 116 52175	100 R 5% 0,5W
3411	4822 117 13632	100 K 5% 0,16W
3412	4822 050 21003	10 K 5% 0,16W
3413	4822 051 30471	470 R 5% 0,1W
3414	4822 051 30333	33 K 5% 0,1W
3415	4822 116 52244	15 K 5% 0,5W
3416	4822 116 83872	220 R 5% 0,5W
3417	4822 116 52244	15 K 5% 0,5W
3418	4822 051 30102	1 K 5% 0,1W
3419	4822 051 30152	1,5 K 5% 0,1W
3420	4822 050 21003	10 K 5% 0,16W
3421	4822 051 30562	5,6 K 5% 0,1W
3422	4822 051 30103	10 K 5% 0,1W
3423	4822 051 30562	5,6 K 5% 0,1W
3424	4822 051 30562	5,6 K 5% 0,1W
3425	4822 051 30103	10 K 5% 0,1W
3426	4822 051 30562	5,6 K 5% 0,1W
3427	4822 051 30562	5,6 K 5% 0,1W
3428	4822 050 21003	10 K 5% 0,16W
3429	4822 051 30562	5,6 K 5% 0,1W
3430	4822 051 30471	470 R 5% 0,1W
3431	4822 051 30102	1 K 5% 0,1W
3432	4822 051 30102	1 K 5% 0,1W
3433	4822 051 30152	1,5 K 5% 0,1W
3434	4822 117 13632	100 K 1% 0,1W
3435	4822 117 11454	820 R 1% 0,1W
3436	4822 116 52195	47 R 5% 0,5W
3437	4822 116 52195	47 R 5% 0,5W
3438	4822 050 21003	10 K 5% 0,16W
3439	4822 051 30221	220 R 5% 0,1W
3440	4822 051 30471	470 R 5% 0,1W
3441	4822 051 30102	1 K 5% 0,1W
3442	4822 051 30102	1 K 5% 0,1W
3443	4822 051 30472	4,7 K 5% 0,1W
3444	4822 051 30472	4,7 K 5% 0,1W
3445	4822 051 30102	1 K 5% 0,1W
3446	4822 051 30102	1 K 5% 0,1W
3447	4822 051 30101	100 R 5% 0,1W
3448	4822 051 30102	1 K 5% 0,1W
3449	4822 050 11002	1 K 1% 0,4W
3450	4822 051 30221	220 R 5% 0,1W
3451	4822 116 83883	470 R 5% 0,5W
3452	4822 050 21003	10 K 5% 0,16W
3453	4822 051 30471	470 R 5% 0,1W
3454	4822 050 11002	1 K 1% 0,4W
3455	4822 051 30102	1 K 5% 0,1W
3456	4822 050 11002	1 K 1% 0,4W
3457	4822 050 21003	10 K 5% 0,16W
3458	4822 051 30102	1 K 5% 0,1W
3459	4822 116 83883	470 R 5% 0,5W

ELECTRICAL PARTSLIST - FRONT BOARD**- RESISTORS -**

3460	4822 116 52176	10 R 5% 0,5W
3461	4822 116 83883	470 R 5% 0,5W
3462	4822 116 52176	10 R 5% 0,5W
3463	4822 116 52256	2,2 K 5% 0,5W
3464	4822 051 30102	1 K 5% 0,1W
3465	4822 116 52263	2,7 K 5% 0,5W
3466	4822 051 30102	1 K 5% 0,1W
3467	4822 116 52256	2,2 K 5% 0,5W
3468	4822 051 30103	10 K 5% 0,1W
3469	4822 116 52256	2,2 K 5% 0,5W
3470	4822 051 30272	2,7 K 5% 0,1W
3471	4822 116 83872	220 R 5% 0,5W
3472	4822 116 83883	470 R 5% 0,5W
3473	4822 117 12903	1,8 K 1% 0,1W
3474	4822 116 83883	470 R 5% 0,5W
3475	4822 051 30152	1,5 K 5% 0,1W
3476	4822 116 83883	470 R 5% 0,5W
3477	4822 051 30331	330 R 5% 0,1W
3478	4822 116 83883	470 R 5% 0,5W
3479	4822 051 30471	470 R 5% 0,1W
3480	4822 116 52175	100 R 5% 0,5W
3481	4822 116 52175	100 R 5% 0,5W
3482	4822 050 11002	1 K 1% 0,4W
3483	4822 116 52244	15 K 5% 0,5W
3484	4822 051 30103	10 K 5% 0,1W
3485	4822 050 11002	1 K 1% 0,4W
3486	4822 116 83883	470 R 5% 0,5W
3487	4822 051 30471	470 R 5% 0,1W
3488	4822 051 30472	4,7 K 5% 0,1W
3489	4822 050 23303	33 K 5% 0,16W
3490	4822 051 30102	1 K 5% 0,1W
3492	4822 051 30102	1 K 5% 0,1W
3493	4822 051 30102	1 K 5% 0,1W
3494	4822 051 30102	1 K 5% 0,1W
3495	4822 051 30102	1 K 5% 0,1W
3496	4822 051 30102	1 K 5% 0,1W
3497	4822 050 11002	1 K 1% 0,4W
3498	4822 117 13632	100 K 5% 0,16W
3499	4822 050 21003	10 K 5% 0,16W
3900	4822 051 30102	1 K 5% 0,1W
4401	4822 051 30008	0 R JUMPER
4402	4822 051 30008	0 R JUMPER

- COILS & FILTERS -

4405	2422 549 44393	F.B. 100 MHz 2K7
4406	2422 549 44393	F.B. 100 MHz 2K7
4407	2422 549 44393	F.B. 100 MHz 2K7
4408	2422 549 44393	F.B. 100 MHz 2K7
4409	2422 549 44393	F.B. 100 MHz 2K7
4410	2422 549 44393	F.B. 100 MHz 2K7
4411	2422 549 44393	F.B. 100 MHz 2K7
4412	2422 549 44393	F.B. 100 MHz 2K7
4413	2422 549 44393	F.B. 100 MHz 2K7
4414	2422 549 44393	F.B. 100 MHz 2K7
5400	3198 018 11580	INDUCTOR 1,5 µH 5%
5401	3198 018 11580	INDUCTOR 1,5 µH 5%
5402	2422 540 98518	RESONATOR 8MHz

- DIODES -

6400	4822 130 31983	BAT85
6402	5322 130 34337	BAV99
6403	5322 130 31504	BZX79-B3V3
6404	4822 130 11397	BAS316
6405	4822 130 61219	BZX79-B10
6408	4822 130 11397	BAS316
6409	4822 130 11397	BAS316
6410	4822 130 11397	BAS316
6411	4822 130 11397	BAS316

- IC & TRANSISTORS -

7400	3140 110 50750	TMP87CP23F
7402	4822 130 60511	BC847B
7403	4822 130 60511	BC847B
7405	9965 000 04931	M24C01-WMN6
7408	4822 130 42804	BC817-25
7409	4822 130 42804	BC817-25
7411	4822 130 40959	BC547B

- MISCELLANEOUS -

1418	4822 267 51453	FFC Socket 12P
7404	9322 155 82667	IR RECEIVER TSOP2236
7410	3140 110 51130	LCD PANEL AZ1150
7411	3140 110 51110	BACKLIGHT ASSY

Note: Only these parts mentioned in the list are normal service parts.

ELECTRICAL PARTSLIST - TUNER**CAPACTORS**

2101	4822 126 13692	47pF 1% 63V
2103	5322 122 31647	1nF 10% 63V
2104	5322 122 32531	100pF 5% 50V
2106	2020 800 00191	3pF-11pF N450 100V
2107	4822 121 51319	1μF 10% 63V
2120	5322 122 32658	22pF 5% 50V
2124	5322 122 32654	22nF 10% 63V
2125	2238 861 18561	560pF 1% 50V
2126	5322 122 31863	330pF 5% 63V
2127	4822 126 14076	220nF 80/20% 25V
2128	4822 124 40248	10μF 20% 63V
2129	4822 124 41584	100μF 20% 10V
2130	4822 126 13482	470nF 80/20% 16V
2131	4822 126 13482	470nF 80/20% 16V
2132	4822 126 13482	470nF 80/20% 16V
2133	4822 124 21913	1μF 20% 63V
2134	5322 122 32654	22nF 10% 63V
2135	5322 122 32654	22nF 10% 63V
2136	4822 126 14076	220nF 80/20% 25V
2137	4822 126 14076	220nF 80/20% 25V
2138	4822 124 22652	2,2μF 20% 50V
2139	4822 126 14236	15pF 5% 50V
2140	4822 126 13695	82pF 1% 63V
2141	4822 126 13838	100nF 80/20% 50V
2144	4822 126 13482	470nF 80/20% 16V
2145	4822 122 33575	220pF 5% 63V
2146	4822 122 33575	220pF 5% 63V
2147	4822 122 33575	220pF 5% 63V
2148	4822 122 33127	2,2nF 10% 63V
2150	4822 126 13838	100nF 80/20% 50V
2152	4822 126 12105	33nF 5% 50V
2153	4822 126 13486	15pF 2% 63V
2155	2020 800 00191	3pF-11pF N450 100V
2159	5322 122 32659	33pF 5% 50V
2164	4822 126 13482	470nF 80/20% 16V
2165	4822 126 13838	100nF 80/20% 50V
2166	5322 122 31647	1nF 10% 63V
2167	4822 122 33926	12pF 5% 50V
2186	4822 124 40196	220μF 20% 16V
2187	4822 122 33177	10nF 20% 50V
2188	4822 122 33177	10nF 20% 50V
2189	4822 126 14076	220nF 80/20% 25V
2190	4822 124 81151	22μF 50V
2191	4822 124 81151	22μF 50V
2192	5322 122 31647	1nF 10% 63V
2193	5322 122 31647	1nF 10% 63V
2194	5322 122 31647	1nF 10% 63V
2195	4822 124 81151	22μF 20% 50V
2196	4822 122 33177	10nF 20% 50V
2197	4822 122 33177	10nF 20% 50V

RESISTORS

3187	4822 051 10102	1K 2% 0,25W
3181	4822 051 10182	1,8K 2% 0,25W
4104	4822 051 20008	0R Jumper 0805
3192	4822 051 20105	1M 5% 0,1W
3169	4822 051 20154	150K 5% 0,1W
3134	4822 051 20223	22K 5% 0,1W
3161	4822 051 20223	22K 5% 0,1W
3189	4822 051 20223	22K 5% 0,1W
3101	4822 051 20333	33K 5% 0,1W
3152	4822 051 20471	470R 5% 0,1W
3153	4822 051 20471	470R 5% 0,1W
3158	4822 051 20471	470R 5% 0,1W
3159	4822 051 20471	470R 5% 0,1W
3160	4822 051 20471	470R 5% 0,1W
3191	4822 051 20472	4,7K 5% 0,1W
3195	4822 051 20474	470K 5% 0,1W
3132	4822 051 20479	47R 5% 0,1W
3155	4822 051 20479	47R 5% 0,1W
3166	4822 051 20479	47R 5% 0,1W
3167	4822 051 20479	47R 5% 0,1W
3103	4822 051 20682	6,8K 5% 0,1W
3142	4822 100 12159	100K 30%
3190	4822 117 10833	10K 1% 0,1W
3196	4822 117 10833	10K 1% 0,1W
3102	4822 117 10837	100K 1% 0,1W
3156	4822 117 10837	100K 1% 0,1W
3157	4822 117 10837	100K 1% 0,1W
3194	4822 117 10837	100K 1% 0,1W
3141	4822 117 11148	56K 1% 0,1W
3186	4822 117 11448	180R 1% 0,1W
3145	4822 117 11449	2,2K 5% 0,1W
3188	4822 117 11449	2,2K 5% 0,1W
3193	4822 117 11449	2,2K 5% 0,1W
3105	4822 117 11503	220R 1% 0,1W
3104	4822 117 13577	330R 1% 1,25W
4105	4822 051 20008	0R Jumper 0805
4101	4822 051 20008	0R Jumper 0805
4107	4822 051 20008	0R Jumper 0805
4108	4822 051 20008	0R Jumper 0805
4110	4822 051 20008	0R Jumper 0805

ELECTRICAL PARTSLIST - TUNER

COILS AND FILTERS

5104	2422 535 91074	Coil MW ANT
5109	4822 242 70665	Filter SFE10,7MS3-A
5110	4822 242 70665	Filter SFE10,7MS3-A
5111	9965 000 10685	Ind Var 450kHz
5112	9965 000 10686	AM IFT yellow
5114	9965 000 10686	AM IFT yellow
5119	9965 000 10687	Coil 2,4 μ H
5121	4822 242 10261	Crystal 75kHz
5123	9965 000 10688	Ind Var 796kHz
5130	4822 157 11843	Coil MD7B-01F
5131	4822 157 11843	Coil MD7B-01F

DIODES

6103	5322 130 34337	BAV99
6105	4822 130 83075	HN1V02H-B
6130	4822 130 82833	1SV228
6131	4822 130 82833	1SV228
6181	5322 130 34337	BAV99
6182	4822 130 83757	BAS216
6183	9340 386 90115	BZX284-C11

TRANSISTORS AND IC

7101	9351 740 80557	TEA5757H/V1
7102	4822 130 42131	BF550
7111	5322 130 42755	BC847C
7180	4822 130 60373	BC856B
7181	5322 130 42755	BC847C
7182	5322 130 42755	BC847C
7183	5322 130 42755	BC847C

MISCELLANEOUS

1106	9965 000 10684	Ferrite Bar 5x13x55mm
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Note: Only these parts mentioned in the list are normal service parts.

ELECTRICAL PARTSLIST - CD99 / MP3 BOARD**- CAPACITORS -**

2813	2238 786 11554	2,2 nF 5% NP0 16V
2814	5322 126 11583	10 nF 10% X7R 50V
2815	4822 126 14225	56 pF 5% NP0 50V
2816	3198 024 44730	47 nF Y5V 50V
2817	4822 124 40769	4,7 µF 20% 100V
2818	3198 024 44730	47 nF Y5V 50V
2819	2222 867 15339	33 pF 5% NP0 50V
2820	2222 867 15339	33 pF 5% NP0 50V
2821	4822 126 14585	100 nF 10% X7R 50V
2822	4822 126 14247	1,5 nF X7R 50V
2823	4822 124 42383	220 µF 20% 4V
2824	3198 017 44740	470 nF Y5V 10V
2825	4822 126 13344	1,5 nF 5% 63V
2826	3198 024 44730	47 nF Y5V 50V
2827	5322 126 11578	1 nF 10% X7R 50V
2828	4822 126 13691	27 pF 1% NP0 63V
2829	3198 024 44730	47 nF Y5V 50V
2830	4822 126 14043	1 µF +80-20% Y5V 16V
2831	4822 124 81286	47 µF 20% 16V
2832	4822 126 14506	270 pF 5% NP0 50V
2833	4822 126 14238	2,2 nF X7R 50V
2834	4822 126 14506	270 pF 5% NP0 50V
2835	4822 126 14247	1,5 nF X7R 50V
2836	4822 124 41751	47 µF 20% 50V
2837	3198 024 44730	47 nF Y5V 50V
2838	4822 126 14494	22 nF 10% X7R 25V
2839	4822 126 14585	100 nF 10% X7R 50V
2840	4822 124 81286	47 µF 20% 16V
2841	4822 124 40769	4,7 µF 20% 100V
2843	4822 122 31765	100 pF 2% NP0 63V
2844	4822 126 13883	220 pF 5% 50V
2845	4822 126 13883	220 pF 5% 50V
2846	4822 124 22833	10 µF 20% 50V
2848	4822 122 31765	100 pF 2% NP0 63V
2849	4822 126 13883	220 pF 5% 50V
2850	4822 126 13883	220 pF 5% 50V
2851	4822 124 22833	10 µF 20% 50V
2853	5322 126 11583	10 nF 10% X7R 50V
2854	4822 124 11912	220 µF 20% 6,3V
2855	4822 124 11912	220 µF 20% 6,3V
2857	4822 124 41751	47 µF 20% 50V
2860	4822 126 14508	180 pF 5% NP0 50V
2861	4822 126 14241	330 pF 5% NP0 50V
2863	4822 126 13881	470pF 5% 50V
2864	4822 126 14508	180 pF 5% NP0 50V
2865	4822 126 14508	180 pF 5% NP0 50V
2869	4822 126 13751	47 nF 10% X7R 63V
2870	4822 126 13883	220 pF 5% 50V
2871	4822 126 13883	220 pF 5% 50V
2872	4822 126 13883	220 pF 5% 50V

- CAPACITORS -

2873	4822 126 13883	220 pF 5% 50V
2874	4822 126 13883	220 pF 5% 50V
2875	4822 126 13883	220 pF 5% 50V
2876	3198 017 41050	1 µF Y5V 10V
2900	4822 124 40769	4,7 µF 20% 100V
2901	4822 124 40248	10 µF 20% 63V
2903	4822 126 13879	220 nF +80-20% 16V
2904	5322 126 10223	4,7 nF 10% X7R 63V
2905	4822 124 40769	4,7 µF 20% 100V

- RESISTORS -

3745	4822 051 30109	10 R 5% 0,1W
3764	4822 051 20159	15 R 5% 0,1W
3780	4822 051 30472	4,7 K 5% 0,1W
3781	4822 051 20472	4,7 K 5% 0,1W
3782	4822 051 30272	2,7 K 5% 0,1W
3794	4822 051 20223	22 K 5% 0,1W
3795	4822 051 30223	22 K 5% 0,1W
3810	4822 051 30102	1 K 5% 0,1W
3811	4822 051 30102	1 K 5% 0,1W
3824	4822 051 30102	1 K 5% 0,1W
3825	4822 051 30223	22 K 5% 0,1W
3826	4822 051 30273	27 K 5% 0,1W
3827	4822 051 30101	100 R 5% 0,1W
3828	4822 051 20121	120 R 5% 0,1W
3829	4822 051 30121	120 R 5% 0,1W
3830	4822 051 20472	4,7 K 5% 0,1W
3831	4822 051 30471	470 R 5% 0,1W
3832	4822 051 30471	470 R 5% 0,1W
3834	4822 051 30103	10 K 5% 0,1W
3837	4822 051 20471	470 R 5% 0,1W
3838	4822 051 30471	470 R 5% 0,1W
3839	4822 051 30471	470 R 5% 0,1W
3840	4822 051 30471	470 R 5% 0,1W
3841	4822 051 30472	4,7 K 5% 0,1W
3842	4822 051 30102	1 K 5% 0,1W
3843	4822 051 30102	1 K 5% 0,1W
3844	4822 051 30101	100 R 5% 0,1W
3846	4822 051 20223	22 K 5% 0,1W
3847	4822 117 12925	47 K 1% 0,1W
3848	4822 116 83933	15 K 1% 0,1W
3850	4822 051 30682	6,8 K 5% 0,1W
3851	4822 117 10834	47 K 1% 0,1W
3852	4822 051 20333	33 K 5% 0,1W
3854	4822 051 30472	4,7 K 5% 0,1W
3856	4822 051 30683	68 K 5% 0,1W

ELECTRICAL PARTSLIST - CD99 / MP3 BOARD**- RESISTORS -**

3857	4822 117 13632	100K 1% 0.62W
3858	4822 051 30392	3,9 K 5% 0.1W
3859	4822 117 12925	47 K 1% 0,1W
3861	4822 051 30683	68 K 5% 0,1W
3863	4822 052 10338	3,3 R 5% 0,33W
3864	4822 051 20159	15 R 5% 0,1W
3865	4822 051 30471	470 R 5% 0,1W
3867	4822 051 30223	22 K 5% 0,1W
3868	4822 051 30103	10 K 5% 0,1W
3869	4822 051 30103	10 K 5% 0,1W
3871	4822 051 30471	470 R 5% 0,1W
3872	4822 117 12925	47 K 1% 0,1W
3873	4822 051 30223	22 K 5% 0,1W
3874	4822 051 30223	22 K 5% 0,1W
3875	4822 051 30103	10 K 5% 0,1W
3876	4822 051 30103	10 K 5% 0,1W
3879	4822 117 12925	47 K 1% 0,1W
3880	4822 051 30339	33 R 5% 0,1W
3881	4822 051 30151	150 R 5% 0,1W
3882	4822 117 11373	100R 1%
3883	4822 051 30102	1 K 5% 0,1W
3884	4822 051 30102	1 K 5% 0,1W
3885	4822 051 30103	10 K 5% 0,1W
3886	4822 051 30153	15 K 5% 0,1W
3891	4822 051 30273	27 K 5% 0,1W
3892	4822 117 11148	56 K 1% 0,1W
3893	4822 051 30563	56 K 5% 0,1W
3894	4822 051 30103	10 K 5% 0,1W
3895	4822 051 30103	10 K 5% 0,1W
3896	4822 051 30103	10 K 5% 0,1W
3897	4822 051 30103	10 K 5% 0,1W
3898	4822 051 30103	10 K 5% 0,1W
3899	4822 051 30103	10 K 5% 0,1W
3900	4822 051 30223	22 K 5% 0,1W
3901	4822 051 30103	10 K 5% 0,1W
3902	4822 051 30102	1 K 5% 0,1W
3903	4822 051 30102	1 K 5% 0,1W
3904	4822 051 30471	470 R 5% 0,1W
3905	4822 052 10478	4,7 R 5% 0,33W
3906	4822 117 11373	100R 1%
3907	4822 117 13608	4,7 R 5% 0,1W
3910	4822 051 30103	10 K 5% 0,1W
3915	4822 051 30103	10 K 5% 0,1W
3916	4822 051 30471	470 R 5% 0,1W
3921	4822 051 30101	100 R 5% 0,1W
3927	4822 116 40227	PTC 4,6 R 25% 30V
3928	4822 051 30103	10 K 5% 0,1W
3929	4822 051 30103	10 K 5% 0,1W
3930	4822 117 12864	82 K 5% 0,16W
3931	4822 051 30103	10 K 5% 0,1W

- RESISTORS -

3932	4822 051 30109	10 R 5% 0,1W
3933	4822 051 30471	470 R 5% 0,1W
3934	4822 051 30471	470 R 5% 0,1W
3935	4822 051 30471	470 R 5% 0,1W
3936	4822 051 30471	470 R 5% 0,1W
3937	4822 051 30101	100 R 5% 0,1W
4804	4822 051 30008	0 R JUMPER
4805	4822 051 20008	0 R JUMPER (0805)
4806	4822 051 30008	0 R JUMPER
4808	4822 051 30008	0 R JUMPER
4809	4822 051 20008	0 R JUMPER (0805)
4810	4822 051 20008	0 R JUMPER (0805)
4811	4822 051 20008	0 R JUMPER (0805)
4814	4822 051 30008	0 R JUMPER
4818	4822 051 30008	0 R JUMPER
4820	4822 051 30008	0 R JUMPER
4821	4822 051 30008	0 R JUMPER
4823	4822 051 30008	0 R JUMPER
4826	4822 051 20008	0 R JUMPER (0805)
4827	4822 051 20008	0 R JUMPER (0805)
4830	4822 051 20008	0 R JUMPER (0805)
4834	4822 051 30008	0 R JUMPER
4838	4822 051 30008	0 R JUMPER
4839	4822 051 30008	0 R JUMPER
4840	4822 051 20008	0 R JUMPER (0805)
4842	4822 051 20008	0 R JUMPER (0805)
4845	4822 051 20008	0 R JUMPER (0805)
4846	4822 051 30008	0 R JUMPER
4847	4822 051 30008	0 R JUMPER
4848	4822 051 20008	0 R JUMPER (0805)
4849	4822 051 30008	0 R JUMPER
4852	4822 051 30008	0 R JUMPER
4853	4822 051 30008	0 R JUMPER
4854	4822 051 30008	0 R JUMPER
4856	4822 051 30008	0 R JUMPER
4857	4822 051 20008	0 R JUMPER (0805)

- COIL & FILTERS -

1810	2422 543 01068	RES XTL 8,4672 MHz
5803	4822 157 11231	LAN02TB1R0J
5804	4822 157 11074	100 µH
5805	4822 157 11074	100 µH
5806	4822 157 11074	100 µH
5807	4822 157 11074	100 µH
5808	4822 157 11074	100 µH
5809	4822 157 11074	100 µH

ELECTRICAL PARTSLIST - CD99 / MP3 BOARD

- DIODES -

6877	4822 130 11564	UDZ3.9B
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- IC & TRANSISTORS -

7800	9352 684 20557	SAA7325H/T/M2B
7802	9352 622 36118	TZA1025T/V2
7808	4822 209 32852	TDA7073A/N2
7809	4822 209 32852	TDA7073A/N2
7810	4822 209 33165	TDA1308T/N1

7875	4822 130 60511	BC847B
7876	4822 130 60511	BC847B

- MISCELLANEOUS -

1011	3140 118 82770	PBAS MP3 DECODER
1800	4822 265 10925	15P FFC CONNECTOR
1823	4822 265 11207	6P FFC CONNECTOR
1824	4822 267 51453	12P FFC CONNECTOR
8800	4822 320 12178	FFC FOIL 15P 65MM BD
8802	8240 005 53670	FFC FOIL 19P 80MM BD

Note: Only these parts mentioned in the list are normal service parts.

ELECTRICAL PARTSLIST - COMBI BOARD**- CAPACITORS -**

2250	4822 123 14025	2200 µF 20% 16V
2251	4822 123 14025	2200 µF 20% 16V
2300	4822 124 80144	220 µF 20% 25V
2301	4822 126 14491	2.2 µF 10V 0805
2302	4822 126 14491	2.2 µF 10V 0805
2303	3198 017 44740	470 nF Y5V 10V
2304	3198 017 44740	470 nF Y5V 10V
2305	4822 126 13909	680 pF 10% X7R 50V
2306	4822 126 13909	680 pF 10% X7R 50V
2307	4822 124 23052	100 µF 20% 16V
2308	4822 124 23052	100 µF 20% 16V
2309	4822 124 40433	47 µF 20% 25V
2310	4822 124 40433	47 µF 20% 25V
2311	4822 124 41407	0,47 µF 20% 63V
2312	4822 124 41407	0,47 µF 20% 63V
2313	4822 124 81144	1000 µF 20% 16V
2314	4822 124 81144	1000 µF 20% 16V
2315	4822 126 14494	22 nF 10% X7R 25V
2316	4822 126 14494	22 nF 10% X7R 25V
2319	3198 024 44730	47 nF Y5V 50V
2320	3198 024 44730	47 nF Y5V 50V
2321	4822 124 40769	4,7 µF 20% 100V
2337	4822 124 40433	47 µF 20% 25V
2339	4822 124 40248	100 µF 20% 16V
2501	4822 124 11947	10 µF 20% 16V
2503	4822 126 14305	100 nF 10% X7R 16V
2504	4822 126 14494	22 nF 10% X7R 25V
2505	4822 126 14305	100 nF 10% X7R 16V
2506	4822 124 21732	10 µF 20% 25V
2507	4822 126 14549	33 nF X7R 16V
2508	4822 126 14305	100 nF 10% X7R 16V
2509	4822 126 13879	220 nF +80-20% 16V
2511	4822 124 21732	10 µF 20% 25V
2512	4822 126 14305	100 nF 10% X7R 16V
2513	5322 126 11583	10 nF 10% X7R 50V
2514	4822 126 14491	2.2 µF 10V 0805
2515	4822 126 13879	220 nF +80-20% 16V
2517	4822 124 41407	0,47 µF 20% 63V
2518	4822 124 21732	10 µF 20% 25V
2519	4822 124 23052	100 µF 20% 16V
2520	4822 126 14305	100 nF 10% X7R 16V
2521	4822 126 13883	220 pF 5% 50V
2522	4822 124 41407	0,47 µF 20% 63V
2523	4822 124 40768	0,47 µF 20% 100V
2530	4822 122 31765	100 pF 2% NP0 63V
2531	4822 122 31765	100 pF 2% NP0 63V
2539	5322 126 11582	6,8 nF 10% X7R 63V
2540	4822 124 41643	100 µF 20% 16V
2541	4822 124 40433	47 µF 20% 25V
2542	4822 124 40433	47 µF 20% 25V

- CAPACITORS -

2543	4822 122 31765	100 pF 2% NP0 63V
2544	4822 122 31765	100 pF 2% NP0 63V
2545	4822 124 12245	220 µF 20% 10V
2546	4822 122 31765	100 pF 2% NP0 63V
2547	4822 126 14491	2.2 µF 10V 0805
2548	5322 126 11582	6,8 nF 10% X7R 63V
2549	4822 122 33761	22 pF 5% NP0 50V
2550	4822 126 14491	2.2 µF 10V 0805
2552	4822 124 81286	47 µF 20% 16V
2555	4822 126 13883	220 pF 5% 50V
2556	4822 126 13883	220 pF 5% 50V
2558	3198 017 41050	1 µF Y5V 10V
2560	4822 122 33761	22 pF 5% NP0 50V
2561	4822 124 81286	47 µF 20% 16V

- RESISTORS -

3300	4822 051 30562	5,6 K 5% 0,1W
3301	4822 051 30332	3,3 K 5% 0,1W
3302	4822 051 30332	3,3 K 5% 0,1W
3303	4822 051 30103	10 K 5% 0,1W
3304	4822 051 30103	10 K 5% 0,1W
3305	4822 051 30471	470 R 5% 0,1W
3306	4822 051 30471	470 R 5% 0,1W
3307	4822 051 30151	150 R 5% 0,1W
3308	4822 051 30151	150 R 5% 0,1W
3309	4822 051 30472	4,7 K 5% 0,1W
3310	4822 051 30472	4,7 K 5% 0,1W
3311	4822 051 30222	2,2 K 5% 0,1W
3312	4822 051 30222	2,2 K 5% 0,1W
3341	4822 051 30103	10 K 5% 0,1W
3342	4822 117 12925	47 K 1% 0,1W
3343	4822 051 30471	470 R 5% 0,1W
3344	4822 051 30103	10 K 5% 0,1W
3500	4822 051 30153	15 K 5% 0,1W
3501	4822 117 12925	47 K 1% 0,1W
3502	4822 117 12925	47 K 1% 0,1W
3503	4822 117 13632	100 K 1% 0,1W
3504	4822 117 13632	100 K 1% 0,1W
3505	4822 051 30153	15 K 5% 0,1W
3506	4822 051 30153	15 K 5% 0,1W
3507	4822 051 30393	39 K 5% 0,1W
3508	4822 051 30393	39 K 5% 0,1W
3509	4822 051 30153	15 K 5% 0,1W
3510	4822 117 12902	8,2 K 1% 0,1W
3511	4822 051 30563	56 K 5% 0,1W
3512	4822 051 30101	100 R 5% 0,1W

ELECTRICAL PARTSLIST - COMBI BOARD**- RESISTORS -**

3513	4822 116 52234	100 K 5% 0,5W
3514	4822 050 11002	1 K 1% 0,4W
3515	4822 050 11002	1 K 1% 0,4W
3516	4822 051 30154	150 K 5% 0,1W
3517	4822 051 30153	15 K 5% 0,1W
3518	4822 051 30153	15 K 5% 0,1W
3519	4822 051 30103	10 K 5% 0,1W
3520	4822 051 30103	10 K 5% 0,1W
3521	4822 117 13632	100 K 1% 0,1W
3522	4822 116 83884	47 K 5% 0,5W
3523	4822 116 52175	100 R 5% 0,5W
3524	4822 116 52251	18 K 5% 0,5W
3525	4822 116 52251	18 K 5% 0,5W
3526	4822 051 30332	3,3 K 5% 0,1W
3527	4822 051 30332	3,3 K 5% 0,1W
3528	4822 116 83961	6.8 K 5% 0,5W
3529	4822 116 83961	6.8 K 5% 0,5W
3530	4822 051 30223	22 K 5% 0,1W
3531	4822 051 30223	22 K 5% 0,1W
3532	4822 051 30102	1 K 5% 0,1W
3533	4822 051 30392	3,9 K 5% 0,1W
3534	4822 051 30392	3,9 K 5% 0,1W
3535	4822 117 12925	47 K 1% 0,1W
3536	4822 051 30333	33 K 5% 0,1W
3537	4822 051 30683	68 K 5% 0,1W
3538	4822 051 30154	150 K 5% 0,1W
3539	4822 051 30154	150 K 5% 0,1W
3540	4822 116 52231	820 R 5% 0,5W
3541	4822 051 30471	470 R 5% 0,1W
3542	4822 117 12971	15 R 5% 0,62W
3543	4822 116 52256	2,2 K 5% 0,5W
3544	4822 050 11002	1 K 1% 0,4W
3545	4822 051 30273	27 K 5% 0,1W
3547	4822 116 52234	100 K 5% 0,5W
3548	4822 051 30101	100 R 5% 0,1W
3549	4822 050 11002	1 K 1% 0,4W
3550	4822 051 30103	10 K 5% 0,1W
3551	4822 051 30123	12 K 5% 0,1W
3552	4822 051 30103	10 K 5% 0,1W
3553	4822 051 30682	6,8 K 5% 0,1W
3554	4822 116 83884	47 K 5% 0,5W
3555	4822 051 30123	12 K 5% 0,1W
3556	4822 117 13632	100 K 1% 0,1W
3557	4822 051 30563	56 K 5% 0,1W
3558	4822 051 30333	33 K 5% 0,1W
3559	4822 051 30684	680 K 5% 0,1W
3560	4822 051 30102	1 K 5% 0,1W
3561	4822 051 30683	68 K 5% 0,1W
3562	4822 051 30332	3,3 K 5% 0,1W
3563	4822 051 30102	1 K 5% 0,1W

- RESISTORS -

3564	4822 116 52272	330 K 5% 0,5W
3565	4822 117 12925	47 K 1% 0,1W
3566	4822 051 30471	470 R 5% 0,1W
3567	4822 051 20154	150 K 5% 0,1W
3568	4822 051 30471	470 R 5% 0,1W
3569	4822 051 30334	330 K 5% 0,1W
3570	4822 116 52304	82 K 5% 0,5W
3572	4822 051 30273	27 K 5% 0,1W
3573	4822 051 30273	27 K 5% 0,1W
3574	4822 051 30471	470 R 5% 0,1W
3575	4822 051 30153	15 K 5% 0,1W
3576	4822 051 30272	2,7 K 5% 0,1W
3577	4822 051 30272	2,7 K 5% 0,1W
3578	4822 051 30471	470 R 5% 0,1W
3579	4822 051 30221	220 R 5% 0,1W
3580	4822 051 30221	220 R 5% 0,1W
3581	4822 116 52304	82 K 5% 0,5W
3582	4822 117 12925	47 K 1% 0,1W
3583	4822 051 30154	150 K 5% 0,1W
3584	4822 116 52175	100 R 5% 0,5W
3585	4822 117 12971	15 R 5% 0,62W
3586	4822 116 52234	100 K 5% 0,5W
3587	4822 051 30471	470 R 5% 0,1W
3588	4822 051 30563	56 K 5% 0,1W
3589	4822 051 30472	4,7 K 5% 0,1W
3590	4822 051 30472	4,7 K 5% 0,1W
3591	4822 117 12925	47 K 1% 0,1W
3592	4822 051 30102	1 K 5% 0,1W
3593	4822 117 12925	47 K 1% 0,1W
3594	4822 117 12925	47 K 1% 0,1W
3595	4822 116 52175	100 R 5% 0,5W
3596	4822 051 30562	5,6 K 5% 0,1W
3597	4822 051 30471	470 R 5% 0,1W
3598	4822 051 30471	470 R 5% 0,1W
3599	4822 051 30102	1 K 5% 0,1W
3600	4822 050 11002	1 K 1% 0,4W
3601	4822 117 12925	47 K 1% 0,1W
3602	4822 117 12925	47 K 1% 0,1W
3603	4822 117 12925	47 K 1% 0,1W
3604	4822 117 12925	47 K 1% 0,1W
3605	4822 051 30102	1 K 5% 0,1W
3606	4822 051 30102	1 K 5% 0,1W
3607	4822 050 11002	1 K 1% 0,4W
3608	4822 051 30223	22 K 5% 0,1W
3609	4822 050 21003	10 K 5% 0,16W
3610	4822 051 30272	2,7 K 5% 0,1W
3611	4822 051 30102	1 K 5% 0,1W
3612	4822 051 30471	470 R 5% 0,1W
3613	4822 051 30121	120 R 5% 0,1W
3614	4822 117 13632	100 K 1% 0,1W

ELECTRICAL PARTSLIST - COMBI BOARD**- RESISTORS -**

3615	4822 051 30681	680 R 5% 0,1W
3616	4822 117 12971	15 R 5% 0,62W
3617	4822 051 30102	1 K 5% 0,1W
3618	4822 051 30103	10 K 5% 0,1W
3621	4822 051 30393	39 K 5% 0,1W
3622	4822 051 30393	39 K 5% 0,1W
3623	4822 116 83883	470 R 5% 0,5W
3624	4822 116 83883	470 R 5% 0,5W
3648	4822 051 30103	10 K 5% 0,1W
3650	4822 116 52213	180 R 5% 0,5W
3651	4822 116 52213	180 R 5% 0,5W
3652	4822 116 52213	180 R 5% 0,5W
3653	4822 051 30102	1 K 5% 0,1W
3654	4822 117 12798	8,2 R 5% 0,25W
3655	4822 117 12798	8,2 R 5% 0,25W
3656	4822 117 12798	8,2 R 5% 0,25W
3657	4822 117 12798	8,2 R 5% 0,25W
3658	4822 050 11002	1 K 1% 0,4W
3659	4822 117 12925	47 K 1% 0,1W
3660	4822 116 52283	4,7 K 5% 0,5W
3661	4822 050 11002	1 K 1% 0,4W
3662	4822 117 12798	8,2 R 5% 0,25W
3663	4822 117 12798	8,2 R 5% 0,25W
3664	4822 117 12798	8,2 R 5% 0,25W
3665	4822 050 11002	1 K 1% 0,4W
3666	4822 050 11002	1 K 1% 0,4W
3667	4822 050 11002	1 K 1% 0,4W
3668	4822 051 30152	1,5 K 5% 0,1W
3669	4822 116 52283	4,7 K 5% 0,5W
3990	4822 051 30152	1,5 K 5% 0,1W
3991	4822 051 30102	1 K 5% 0,1W
3992	4822 051 30471	470 R 5% 0,1W
4339	4822 051 30008	0 R JUMPER
4502	4822 051 30008	0 R JUMPER

- COILS & FILTERS -

4506	2422 549 44393	F.B. 100 MHz 2K7
4507	2422 549 44393	F.B. 100 MHz 2K7
4508	2422 549 44393	F.B. 100 MHz 2K7
4509	2422 549 44393	F.B. 100 MHz 2K7
5502	4822 157 10686	0,47 µH
5503	4822 157 62552	2,2 µH

- DIODES -

6300	4822 130 83757	BAS216
6301	4822 130 83757	BAS216
6302	4822 130 83757	BAS216
6303	4822 130 83757	BAS216
6500	4822 130 83757	BAS216
6501	4822 130 83757	BAS216
6502	4822 130 83757	BAS216
6503	4822 130 83757	BAS216
6504	4822 130 83757	BAS216
6505	8240 005 52890	LED LTL2R3QFK
6600	4822 130 83757	BAS216
6601	4822 130 83757	BAS216
6602	4822 130 83757	BAS216
6603	4822 130 83757	BAS216
6604	4822 130 83757	BAS216
6605	9322 129 34685	BZM55-C3V9
6606	4822 130 83059	TLUR4400
6607	4822 130 83757	BAS216
6650	4822 130 11397	BAS316
6651	4822 130 11397	BAS316
6653	4822 130 34174	BZX79-B4V7
6655	4822 130 31878	1N4003G
6656	4822 130 31878	1N4003G
6657	4822 130 31878	1N4003G
6658	4822 130 31878	1N4003G
6659	4822 130 11397	BAS316
6660	4822 130 11397	BAS316
6661	4822 130 30621	1N4148
6662	4822 130 34278	BZX79-B6V8

- IC & TRANSISTORS -

7300	4822 130 60511	BC847B
7301	4822 130 42615	BC817-40
7302	4822 130 42615	BC817-40
7303	4822 209 31544	TA8227P
7333	4822 130 60373	BC856B
7501	4822 209 10263	HEF4052BP
7502	4822 130 60511	BC847B
7504	4822 130 60373	BC856B
7505	4822 130 44568	BC557B
7506	4822 130 44568	BC557B
7507	4822 130 44568	BC557B
7508	4822 130 44568	BC557B
7509	4822 130 60511	BC847B
7510	4822 130 60511	BC847B
7513	4822 209 60177	LM339D

ELECTRICAL PARTSLIST - COMBI BOARD**- IC & TRANSISTORS -**

7514	4822 209 63709	LM324D
7515	4822 130 60511	BC847B
7517	4822 130 60511	BC847B
7518	4822 130 60511	BC847B
7519	4822 130 60511	BC847B
7520	5322 130 44647	BC368
7521	5322 130 44593	BC369
7523	5322 209 82941	LM358D
7600	4822 130 60511	BC847B
7601	4822 130 60511	BC847B
7602	5322 130 42755	BC847C
7603	5322 130 42755	BC847C
7650	4822 130 41246	BC327-25
7651	4822 130 60511	BC847B
7653	4822 130 41246	BC327-25
7654	5322 130 44593	BC369
7655	4822 130 60511	BC847B
7656	4822 130 41246	BC327-25
7657	4822 130 41246	BC327-25
7658	4822 130 41246	BC327-25
7659	4822 130 41246	BC327-25
7661	4822 130 41246	BC327-25

- MISCELLANEOUS -

1501	4822 267 10731	6P FFC CONNECTOR
1502	4822 265 11183	4P FFC CONNECTOR (H)
1503	4822 267 10731	6P FFC CONNECTOR
1504	4822 267 10871	17P FFC CONNECTOR
1505	4822 267 10958	5P FFC CONNECTOR (H)
1508	2422 129 16349	ROT ENCODER 24P
1511	2422 128 02917	SWITCH TACT
1512	2422 128 02917	SWITCH TACT
1601	2422 128 02917	SWITCH TACT
1650	4822 267 10731	6P FFC CONNECTOR
1660	⚠ 2422 086 10783	FUSE 2A 250V IEC
1993	2422 128 02917	SWITCH TACT
1994	2422 128 02917	SWITCH TACT
1995	2422 128 02917	SWITCH TACT

Note: Only these parts mentioned in the list are normal service parts.

ELECTRICAL PARTSLIST - MISCELLANEOUS

1007	2422 264 00438	LOUDSPEAKER 8R 2W R77
1008	2422 264 00438	LOUDSPEAKER 8R 2W R77
1009	3140 118 50970	SWITCH-RING
1010	⚠ 4822 277 21794	VOLTAGE SELECTOR
1011	4822 276 13963	CD DOOR SWITCH
1012	⚠ 2422 030 00333	AC SOCKET (NON /17)
1012	⚠ 4822 265 20706	MAINS SOCKET (/17)
5001	⚠ 3140 118 33070	TFM POW EI48 230V
5001	⚠ 3140 118 33080	TFM POW EI48 120/230V
5001	⚠ 3140 118 33090	TFM POW EI48 120V
8001	3139 110 34730	FFC FOIL 12P 180MM AD
8003	3139 110 34360	FFC FOIL 6P 280MM AD
8004	3139 110 34550	FFC FOIL 17P 140MM BD
8005	3139 110 35870	FFC FOIL 5P 340MM BD
8006	3139 110 34780	FFC FOIL 4P 280MM BD
8007	3139 110 35130	FFC FOIL 6P 180MM AD
	⚠ 2422 070 98151	MAINS CORD SET (/00 /01)
	⚠ 9965 000 07586	MAINS CORD SET (/05)
	⚠ 2422 070 98152	POWER CORD SET (/17)

Note: Only these parts mentioned in the list are normal service parts.