

Service
Service
Service



Service Manual



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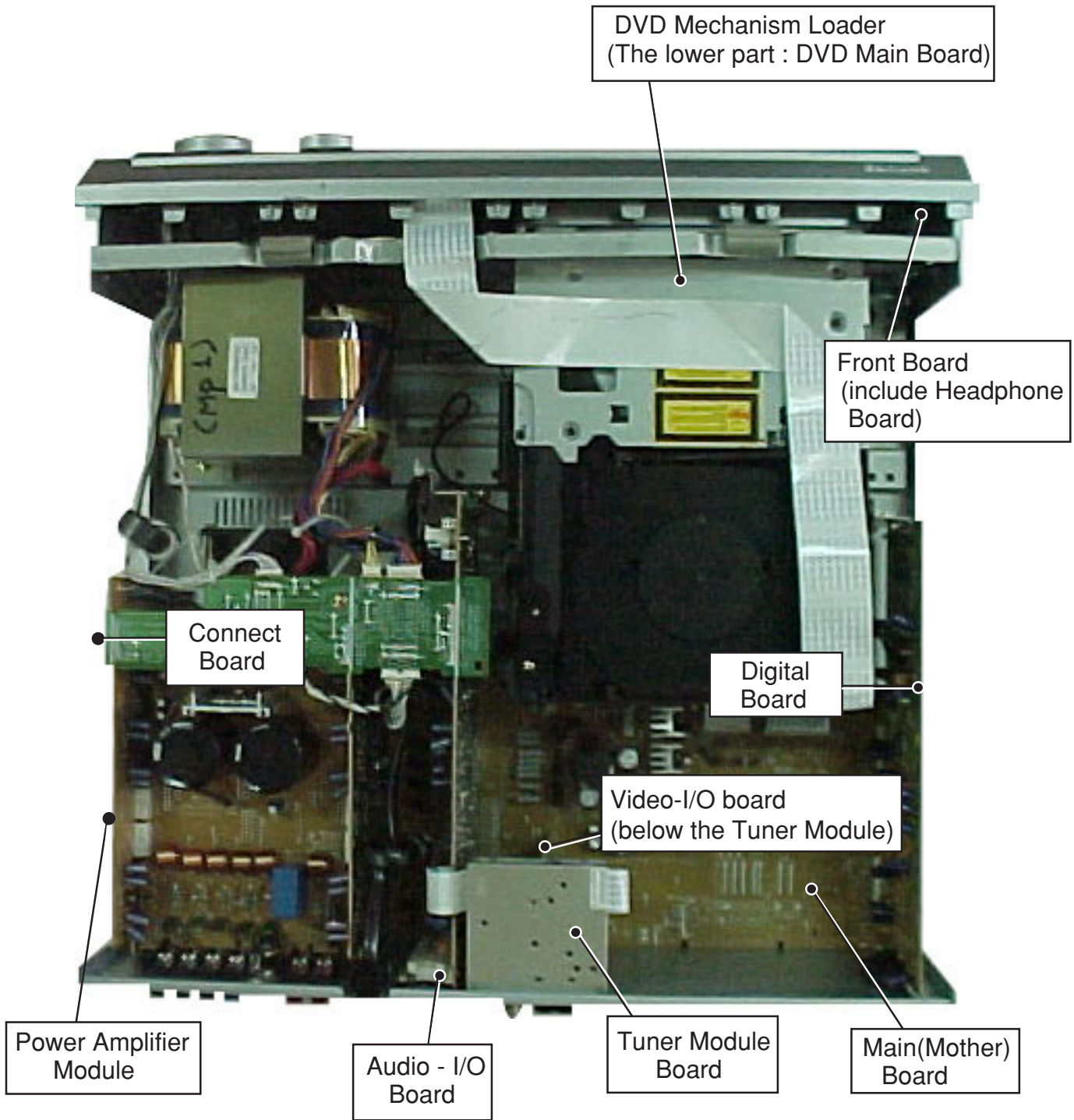
3139 785 30252

Version 1.2



PHILIPS

LOCATION OF PC BOARDS



SPECIFICATIONS

AMPLIFIER SECTION

Output power (6Ω, 1kHz, 10%THD, 100W)	
Stereo (Front left/right)	: 2 x 100W/2 x 90W FTC
Output power (6Ω, 1kHz, 10%THD, 100W)	
Front left/right	: 2 x 100W
Center	: 100W
Surround left/right	: 2 x 100W
Subwoofer	: 100W
Total Harmonic Distortion: 10% at rated power 100W(1kHz)	
Signal to Noise Ratio	
Stereo TV	> 67 dB (IHF-A)
Surround front/center/rear	> 65 dB (IHF-A, -20 dB FS)
Frequency Response	10Hz-20kHz, -3dB/+1dB
Tone Control	±10 dB
Input Sensitivity	450 mV/ 47 Kohm
Output level	420 mV/ 1 Kohm
Cross-talk (separation)	
Stereo TV(line)	> 55 dB
Dolby Digital	> 45 dB

TUNER SECTION

Tuning Range	
- 37 version : FM 87.5-108MHz(100kHz steps)	
AM 530-1700kHz (10kHz steps)	
- 22 version : FM 87.5-108MHz (50kHz steps)	
AM 531-1602kHz (9kHz steps)	
26dB Quieting Sensitivity	FM < 22 dBf
	AM < 3250 μV/m
Harmonic Distortion (15kHz LPF on)	FM Mono < 3%
	FM Stereo < 2%
Signal to Noise Ratio	FM Mono > 60 dB
	FM Stereo > 60 dB
	AM > 40 dB
Frequency Response	FM 20 Hz-15 kHz, -3 dB
Selectivity	AM > 25 dB

DVD SECTION

Laser Type	Semiconductor
Disc Diameter	12cm / 8cm
Video Decoding	MPEG-2
Video DAC	10 Bits
Video Format	4:3/ 16:9
Video S/N	> 45 dB (minimum)
Input sensitivity	1.0Vpp / 75Ω
Out put level	1.0Vpp / 75Ω
S-Video Output	Y - 1.0V(p-p), 75Ω
	C - 286 mVp-p, 75Ω
SCART Output	R- 700mVp-p, 75Ω
(-22 Version only)	G- 700mVp-p, 75Ω
	B- 700mVp-p, 75Ω
Frequency Response	20 Hz - 20 kHz (44.1 kHz)
	20 Hz - 22 kHz (48 kHz)
	20 Hz - 44 kHz (96 kHz)

MP3-CD FORMAT

- Suported Bit-rates : 32, 48, 64, 128, 160, 192, 256, 320 (kbps)
(Can not Scan between 32 to 64Kbps.)
- Suported VBR(variable bitrate) Bit-rate
- Sampling frequece : 44.1kHz
- Suported File name : *.mp3 (Max. 10 charaters)
- Recording Format
- File Type : ISO9660
- Write Format : MODE 1 (CD-ROM)
- Max Multisession : 5 (recommend only session 1)
- NOTE: set can read other type format, but we can't guarantee.

MISCELLANEOUS

Power Supply Rating	230V / 50 Hz(-22 Version)
	120V / 60 Hz(-37 Version)
Power Consumption	3.4A(1/8W), 690W max(Before clip)
Dimensions (w x h x d)	430mm x 140mm x 400mm
Weight	16.7 kg

IR REMOTE CONTROL

Effective Range	> 8 Meter
Number of Keys	51
Battery (1.5V)	AA x 2

SPEAKERS (front/ center/ surround)

Front Speakers	
System	3-way shielded
Impedance	6Ω
Speaker drivers	3" woofer, 1.75" tweeter
Dimensions (w x h x d)	94mm x 155mm x 88mm
Weight	0.45 kg

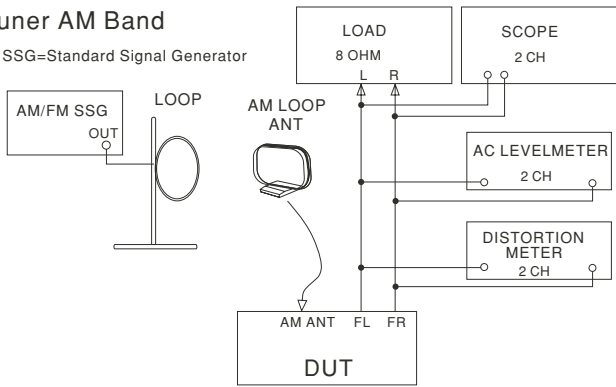
SUBWOOFER

Subwoofer (not magnetically shielded design)	6.5"
Output power	100W(6Ω, DIN)
THD	10% at 55 Hz
Reproduction frequency response	35 Hz - 150 Hz
Dimensions (w x h x d)	200mm x 310mm x 370mm
Weight	7 kg

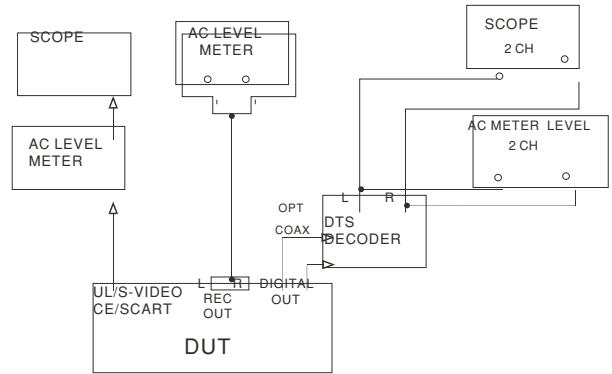
Specifications subject to change without prior notice

Tuner AM Band

SSG=Standard Signal Generator

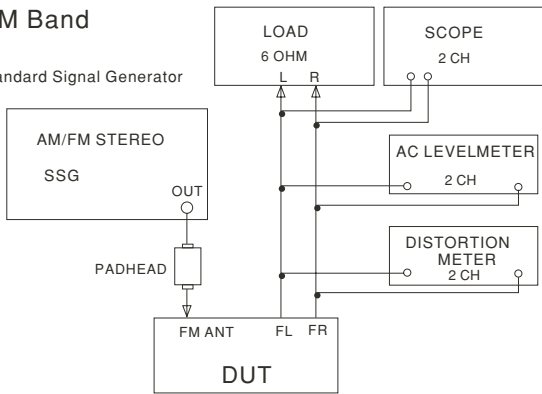


S-Video/Scart/Digital Output

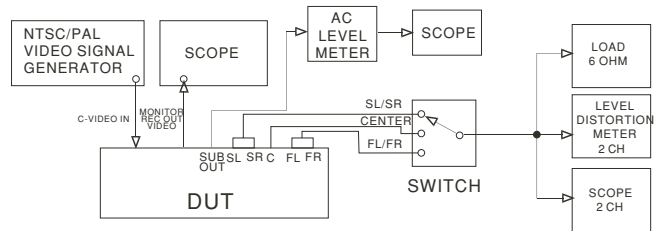


Tuner FM Band

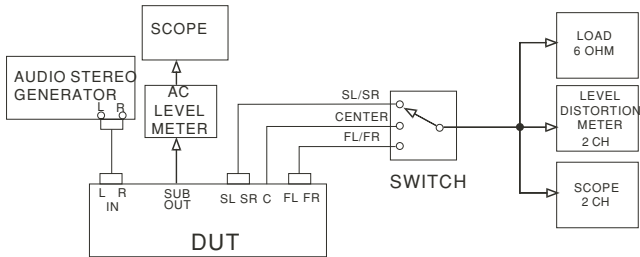
SSG=Standard Signal Generator



CD/DVD/C-VIDEO OUTPUT



Balance EQ Power



SERVICE AIDS

Service Tools:

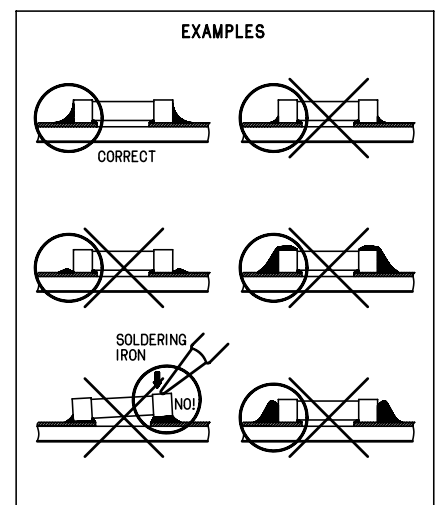
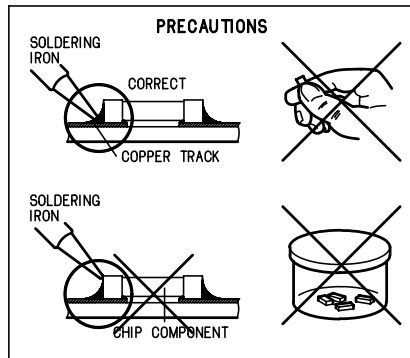
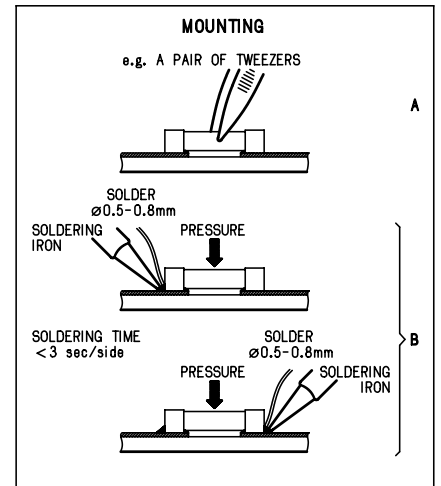
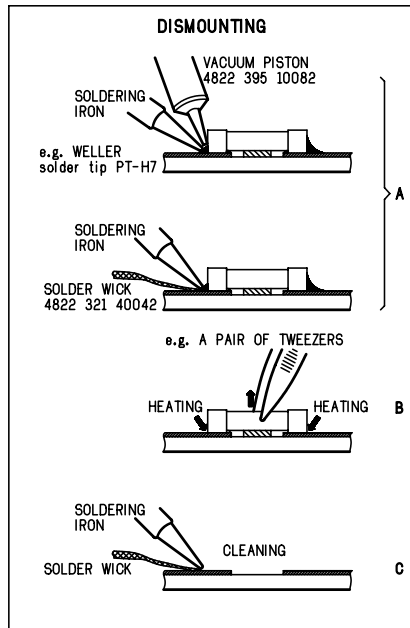
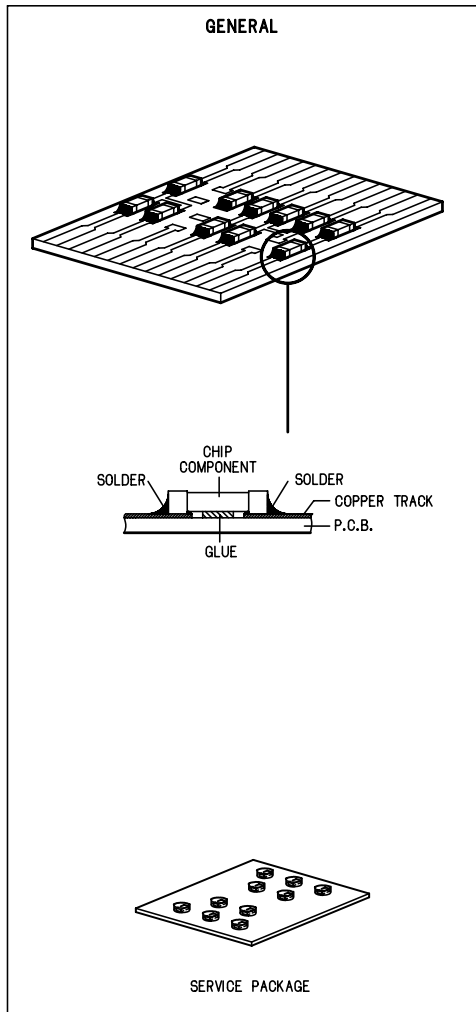
Universal Torx driver holder	4822 395 91019
Torx bit T10 150mm	4822 395 50456
Torx driver set T6 - T20	4822 395 50145
Torx driver T10 extended	4822 395 50423

Complete kit ESD3 (combining all above products)	4822 320 10671
Wristband tester	4822 344 13999

ESD Equipment:

Anti-static table mat - large 1200x650x1.25mm ...	4822 466 10953
Anti-static table mat - small 600x650x1.25mm	4822 466 10958
Anti-static wristband	4822 395 10223
Connector box (1MΩ)	4822 320 11307
Extension cable (to connect wristband to conn. box)	4822 320 11305
Connecting cable (to connect table mat to conn. box)	4822 320 11306
Earth cable (to connect product to mat or box)	4822 320 11308

HANDLING CHIP COMPONENTS



(GB) WARNING

All ICs and many other semi-conductors 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 wrist wrap with resistance. Keep components and tools also 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 charges statiques (ESD).

Leur long vit pourrait être considérablement court et par le fait qu'aucune précaution n'est prise leur manipulation.

Lors de réparations, s'assurer de bien être relié au même potentiel que la masse de l'appareil et enfilez le braceleterti d'une résistance de sécurité.

Veillez 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 gegenber elektrostatischen Entladungen (ESD).

Unvorsorgliche Behandlung im Reparaturfall kann die Lebensdauer drastisch reduzieren.

Veranlassen Sie, dass Sie im Reparaturfall über ein Pulsarmband mit Widerstand verbunden sind mit dem gleichen Potential wie die Masse des Gerätes.

Bauteile und Hilfsmittel auch auf dieses gleiche Potential halten.

(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 cautela 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.

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

(NL)

Veiligheidsbepalingen vereisen, dat het apparaat bij reparatie in zijn oorspronkelijke toestand wordt teruggebracht en dat onderdelen, identiek aan de gespecificeerde, worden toegepast.

**(F)**

Les normes de sécurité exigent que l'appareil soit remis à l'état d'origine et que soient utilisés les pièces de rechange identiques celles spécifiées.

(GB) Warning !

Invisible laser radiation when open. Avoid direct exposure to beam.

(D)

Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Originalzustand des Geräts darf nicht verändert werden; für Reparaturen sind Original-Ersatzteile zu verwenden.

(S) Varning !

Osynlig laserstrålning när apparaten öppnas och spröcket är anslutet. Beträkta ej strålen.

(I)

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

(SF) Varoitus !

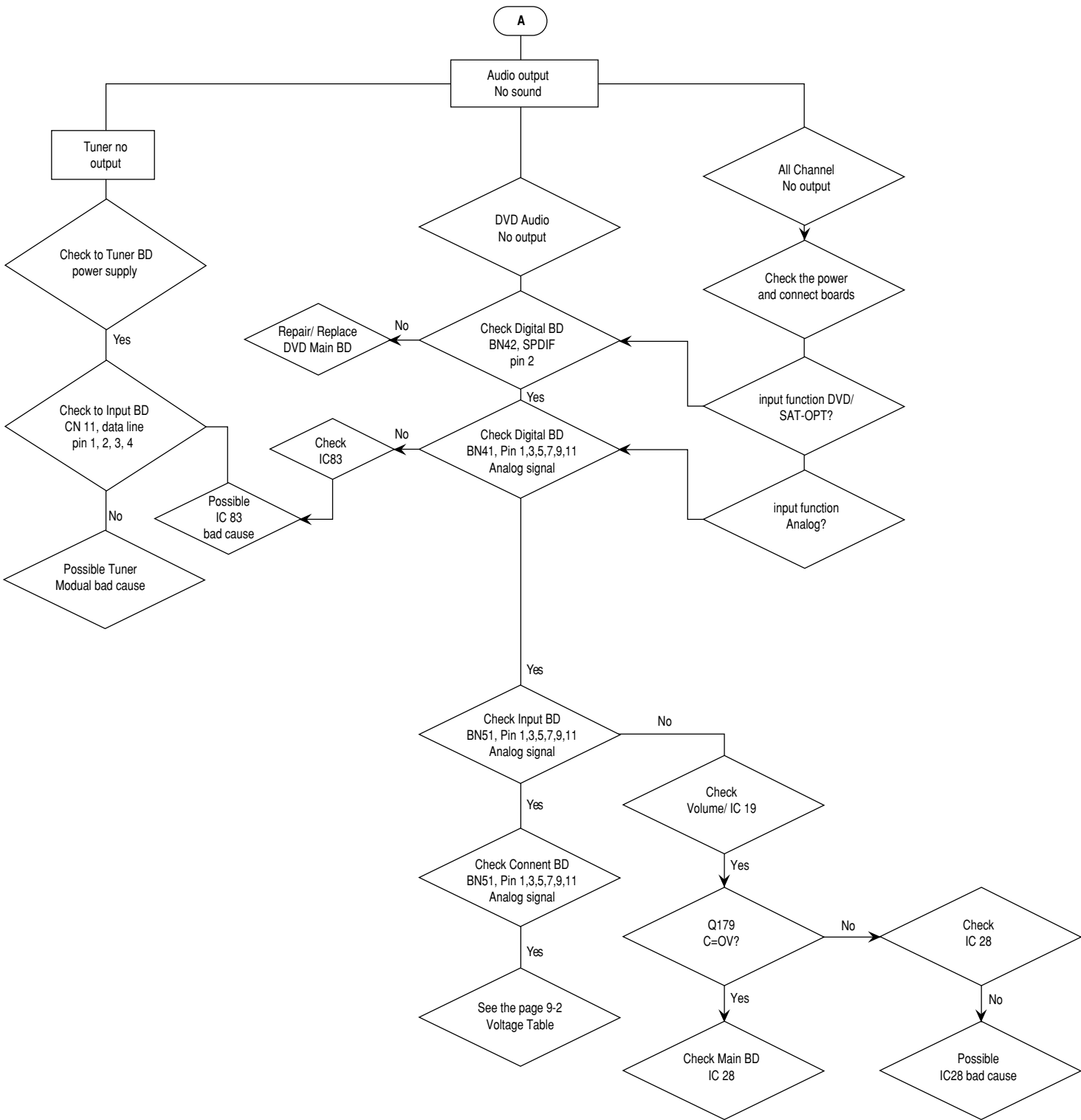
Avatussa laitteessa ja suojalukituksen ohitettaessa olet alttiina näkymättömälle laserisäteilylle. Katso säteeseen!

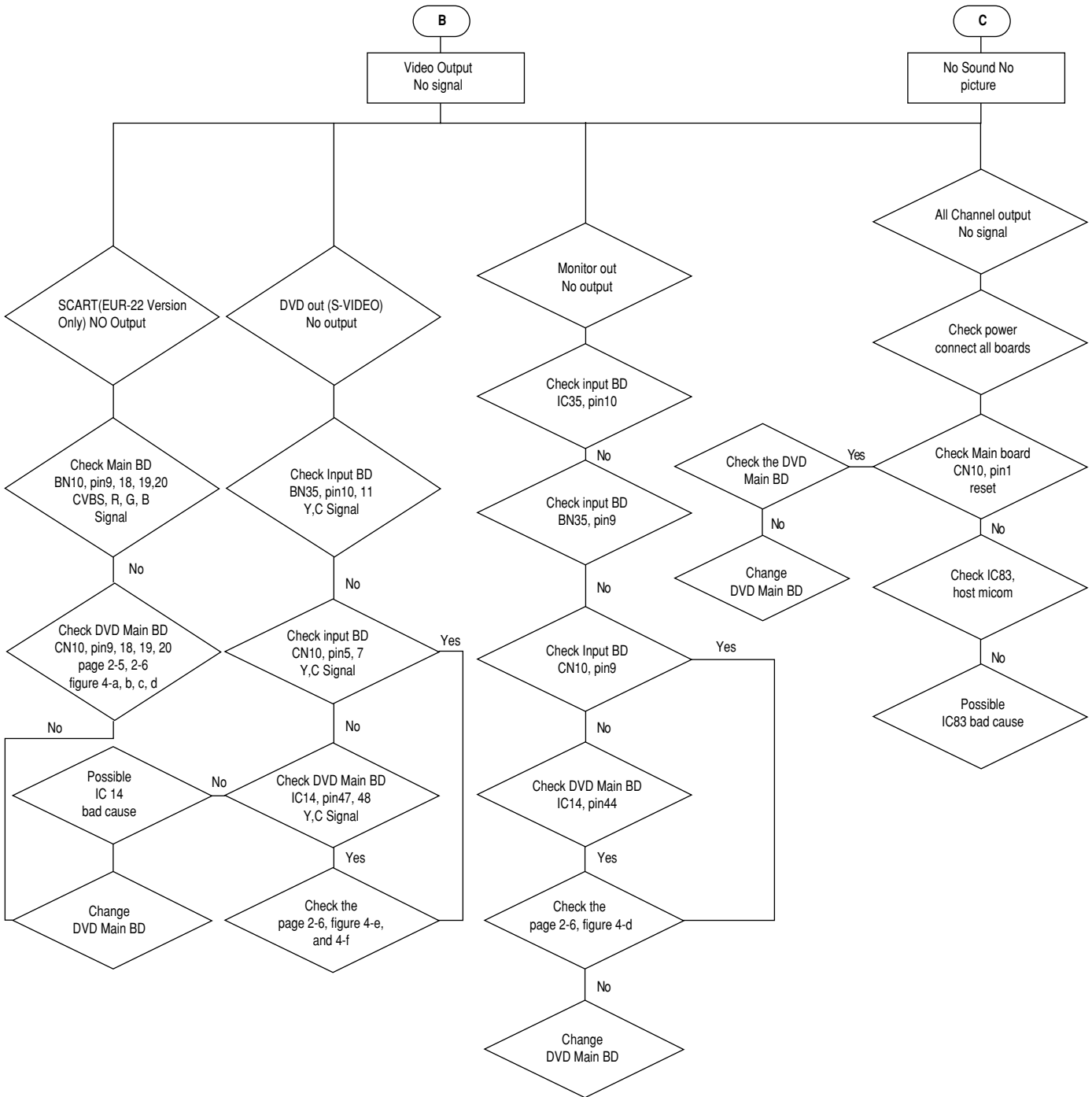
(DK) Advarsel !

Usynlig laserstrålning ved åbning af apparatets sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for strålning.

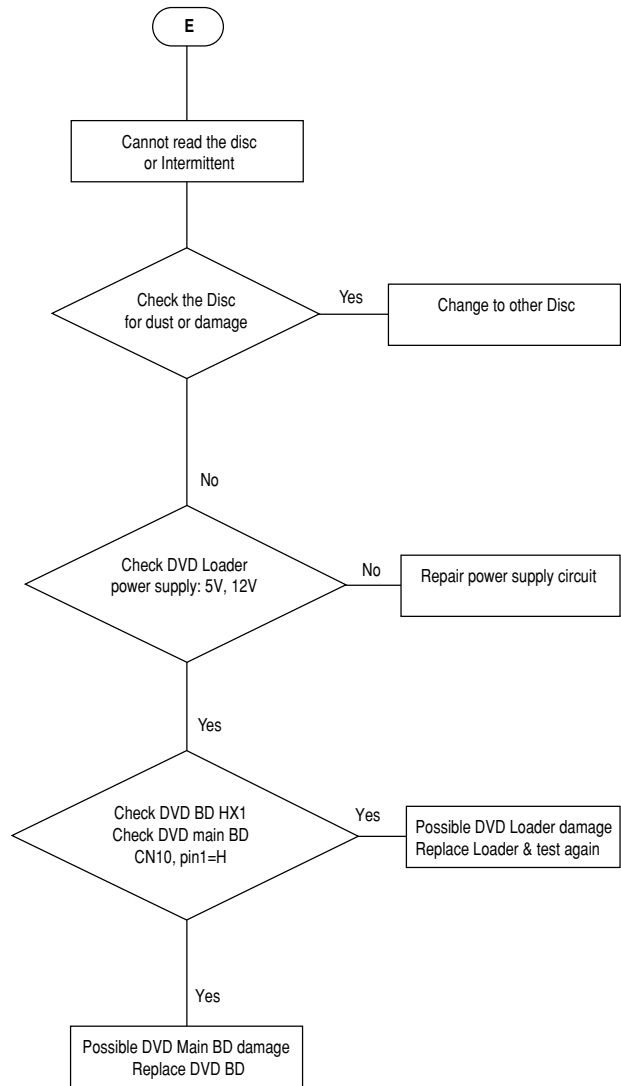
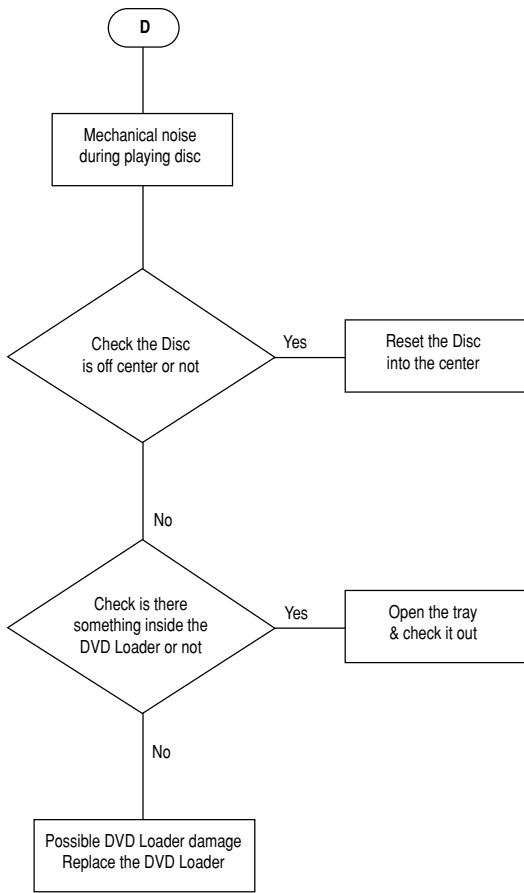
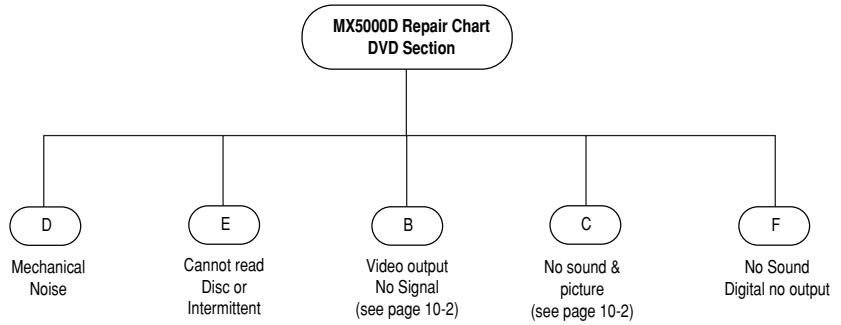
"After servicing and before returning set to customer perform a leakage current measurement test from all exposed metal parts to earth ground to assure no shock hazard exist. The leakage current must not exceed 0.5mA."

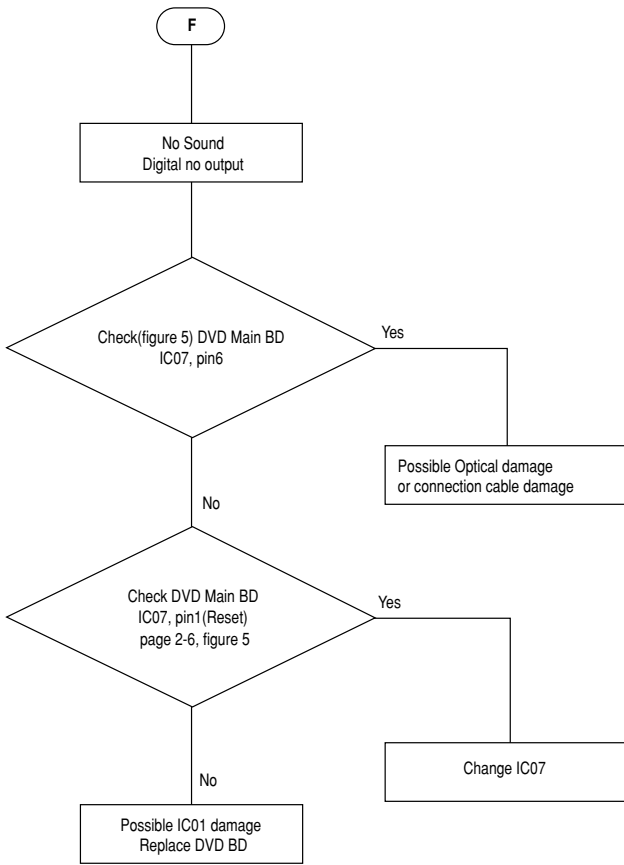
MX5000D REPAIR CHART





MX5000D REPAIR CHART - DVD SECTION





ADDITIONAL INFORMATION FOR DVD SECTION

1. Clock Check

Clock name	Test point	Frequency	Figure	Remarks
27MHz	IC07 (Pin10)	27MHz	1	

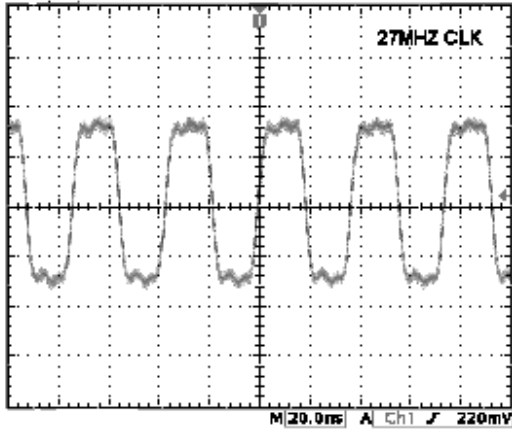


Figure 1

2. DVD Audio Clock Audio Test Signal

Test name	IC01	Test point	Condition	Figure
SPDIF	41	after R261	PLAY	2

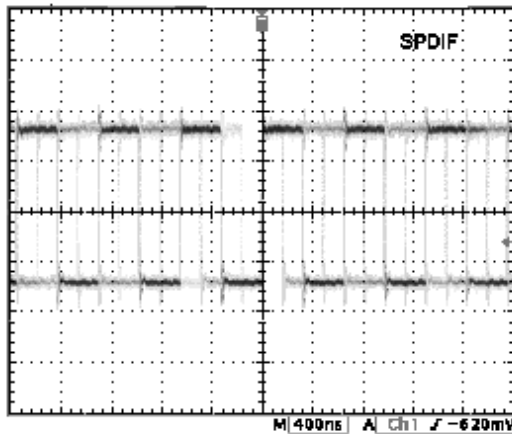


Figure 2

3. Control In / Out

Test name	Test point	Condition	Figure
RXD	CN10 (Pin7)	FUNCTION PRESS	3-a
TXD	CN10 (Pin16)	FUNCTION PRESS	3-b

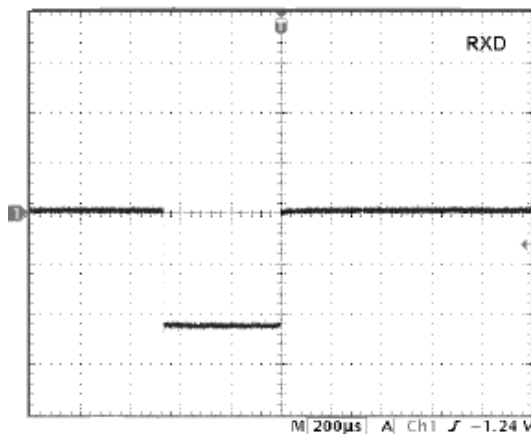


Figure 3-a

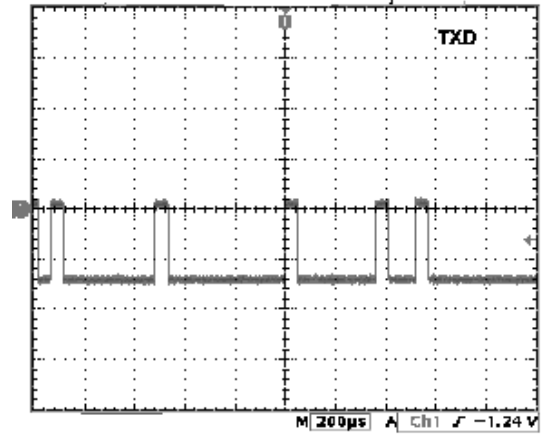


Figure 3-b

4. Video Output Check Playback TDV540 Color Bar

Test name	Test point	Condition	Figure
RED OUT	CN10 (Pin20)	PLAY	4-a
GREEN OUT	CN10 (Pin19)	PLAY	4-b
BLUE OUT	CN10 (Pin18)	PLAY	4-c
CVBS OUT	CN10 (Pin9)	PLAY	4-d
C OUT	CN10 (Pin7)	PLAY	4-e
Y OUT	CN10 (Pin5)	PLAY	4-f

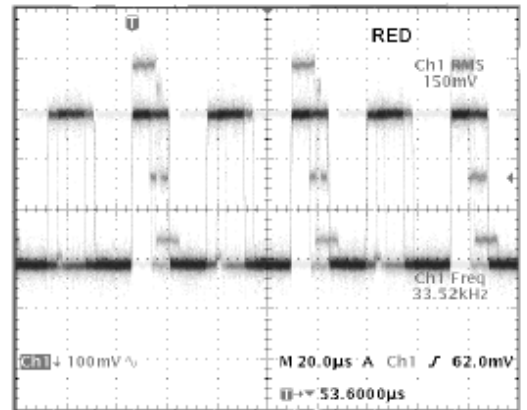


Figure 4-a (EUR only)

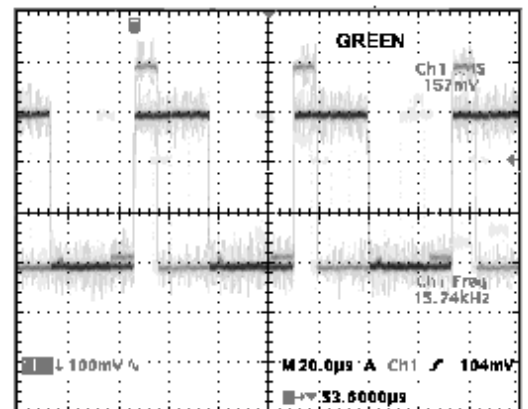


Figure 4-b EUR only

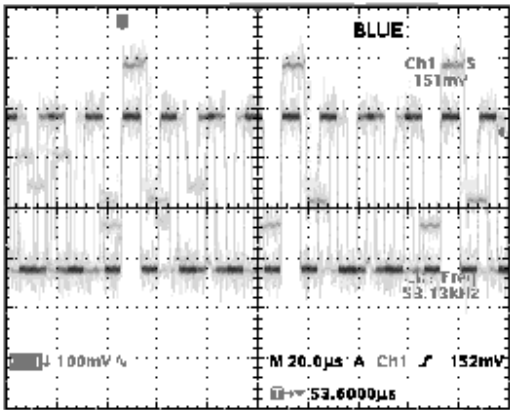


Figure 4-c (EUR only)

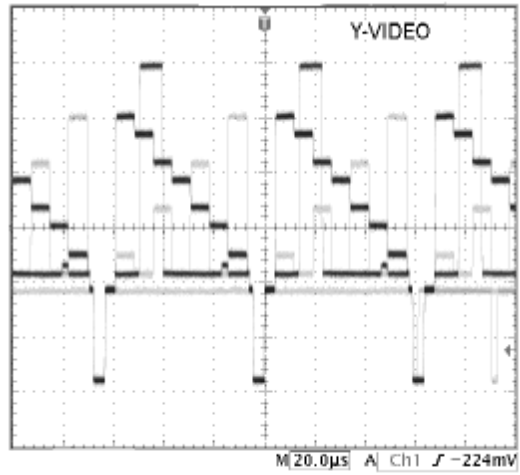


Figure 4-f

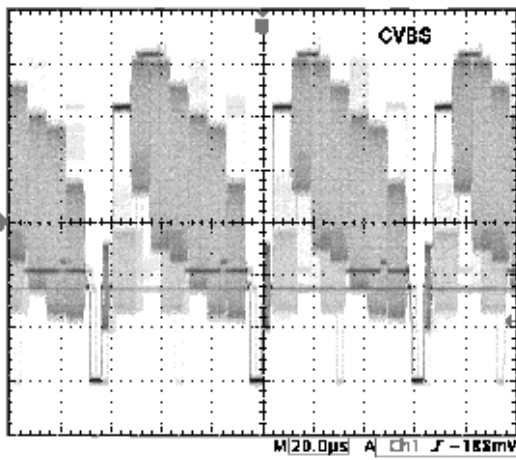


Figure 4-d (EUR only)

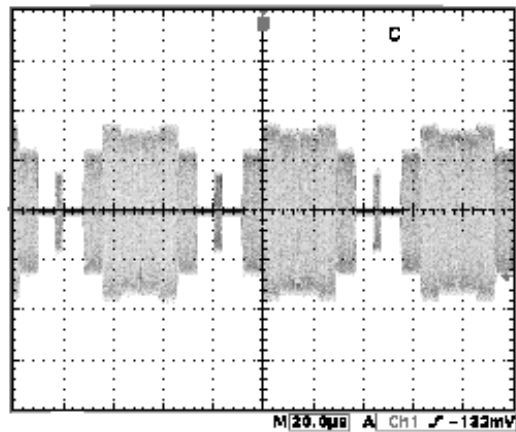


Figure 4-e

5. DVD Reset (fig. 5)

CN10 : Pin1 (reset pont)

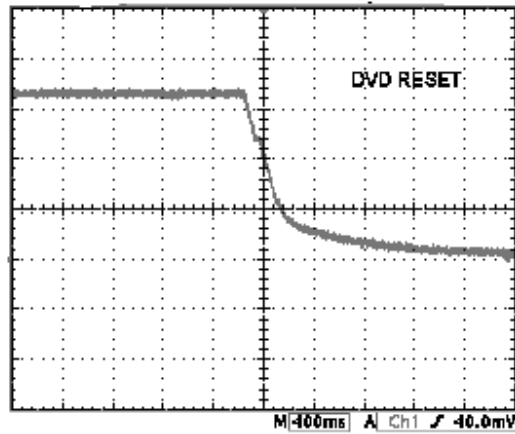


Figure 5

DISMANTLING INSTRUCTIONS

Dismantling of the Front Panel Assembly

- 1) Loosen 13 screws and remove the Top Cover by lifting the rear portion upwards before sliding it out towards the rear
 - 7 screws on the rear
 - 6 screws each on the left & right side
- 2) Loosen 1 screws C1 Pull out holder C2. (see figure1)

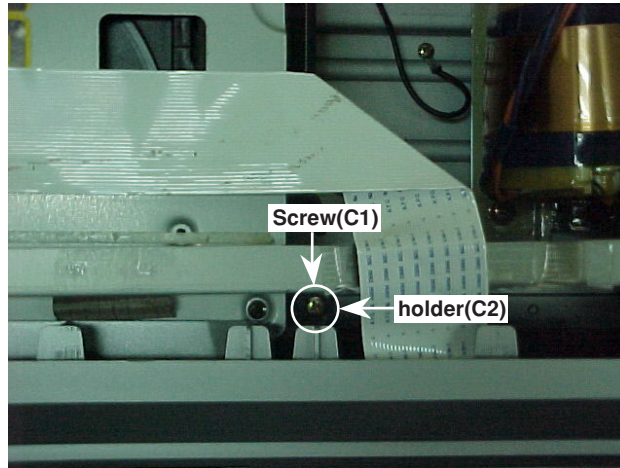


Figure 1

- 3) Loosen 5 screws A and each side 2 screws A-1 for wire tags & cut 2 wire ties, then remove the front pannel. (see figure2)

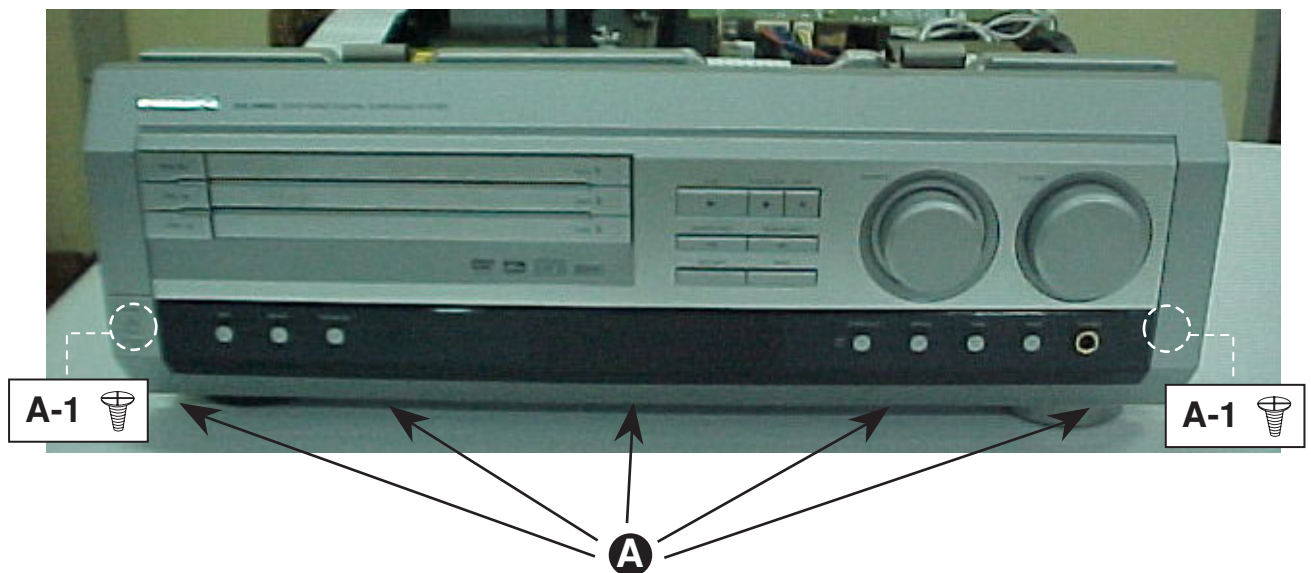


Figure 2

Dismantling of the DVD Module / shield bracket B1

1) Loosen screws D3 of bottom chassis figure3.

2) Loosen 5 screws B and remove the B1. (figure 4)

3) Loosen 4 screws D (see figure 5) and 2 screws D1, then all connectors to remove the DVD module.

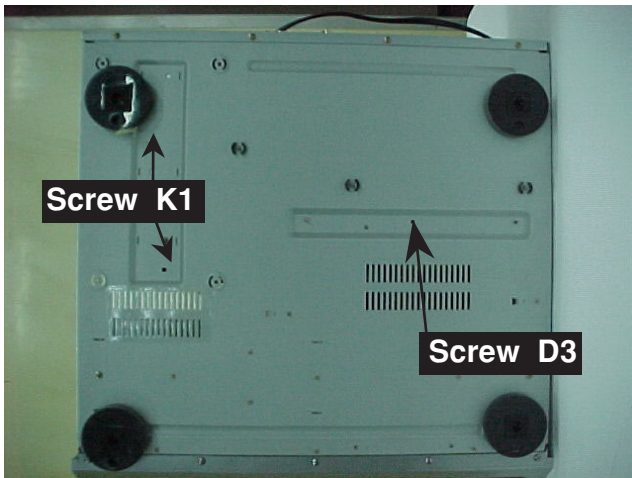


Figure 3

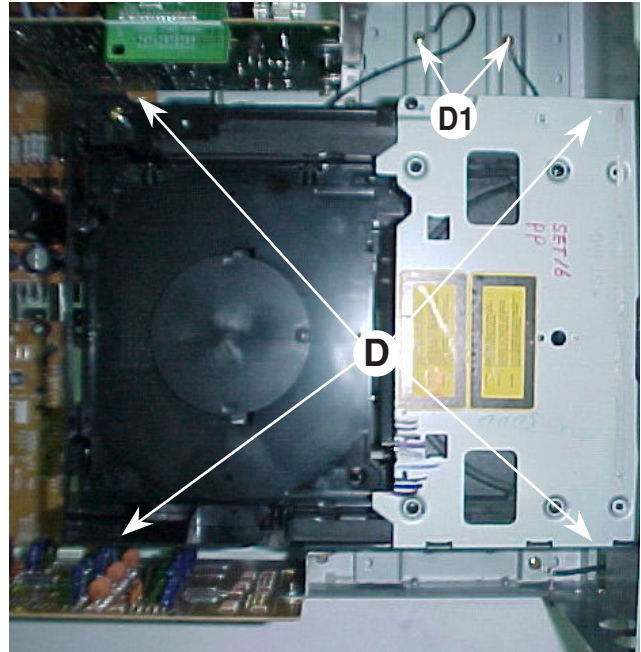


Figure 5

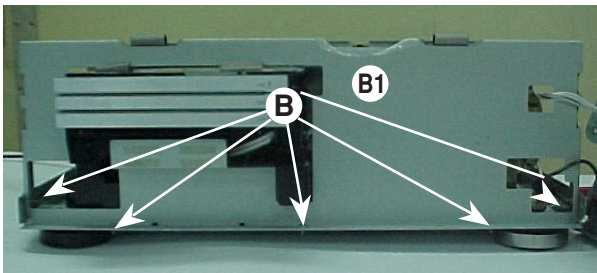


Figure 4

Dismantling the Power Amplifier Module

1) Pull out connected wires and Loosen 1 screws (see figure 6).

2) Loosen 10 screws on the Rear Panel

- 4 screws K for the Speaker sockets (see figure7)
- 4 screws K for the heat sink.
- 2 screws K1 for the bottom chassis.(see figure 3)

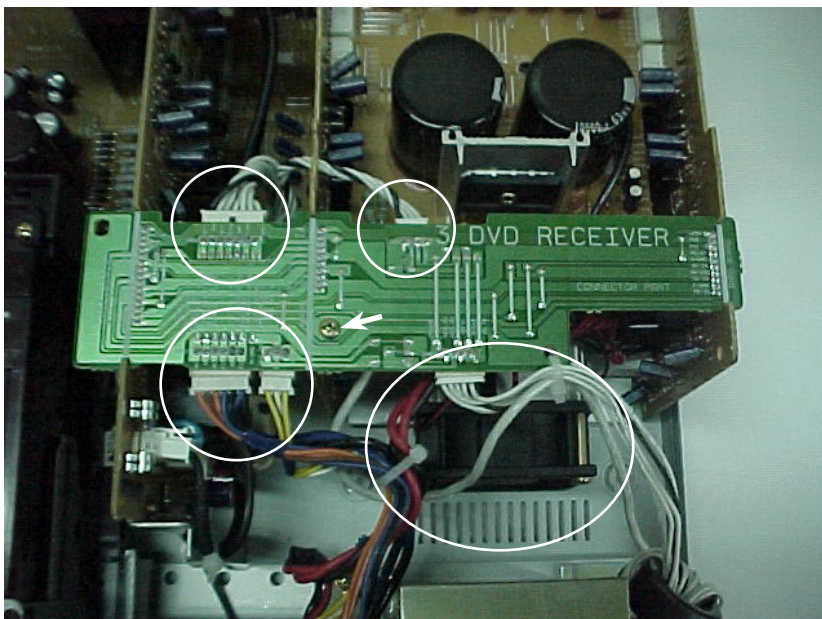


Figure 6

Dismantling the Tuner, Audio - I/O Video - I/O and Digital Boards. (Refer figure 7)

- 1) Loosen 2 screws E on the Rear panel to remove the Tuner Module.
- 2) Loosen 2 screws F on the Rear panel and Loosen 3 screws F1 (figure8) to remove the Digital Board.
- 3) Loosen 8 screws G on the Rear panel and Loosen 3 screws G1 (figure9) to remove the Audio-I/O, Video-I/O Board.

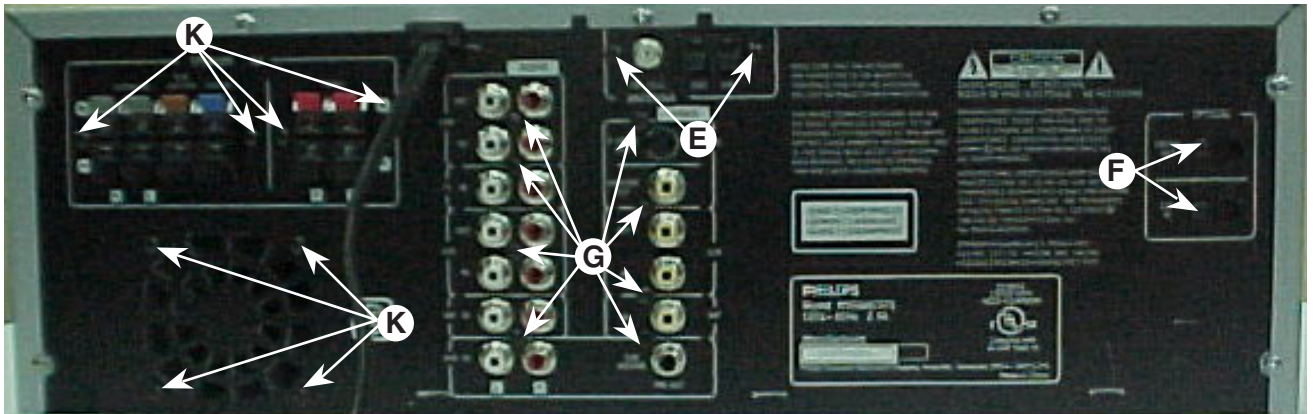


Figure 7

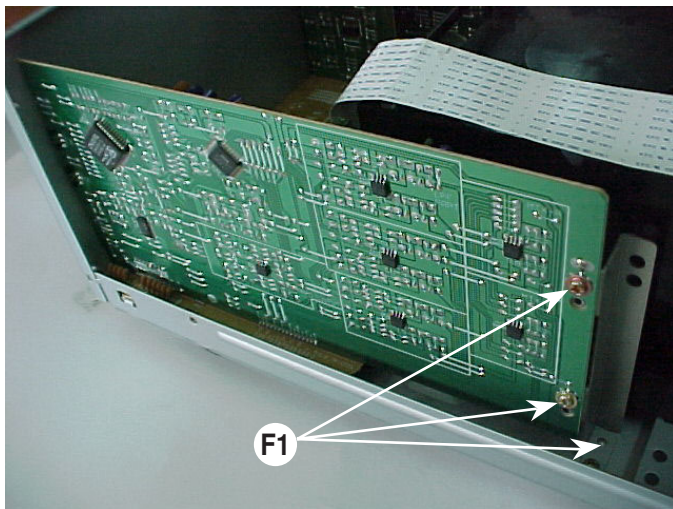


Figure 8

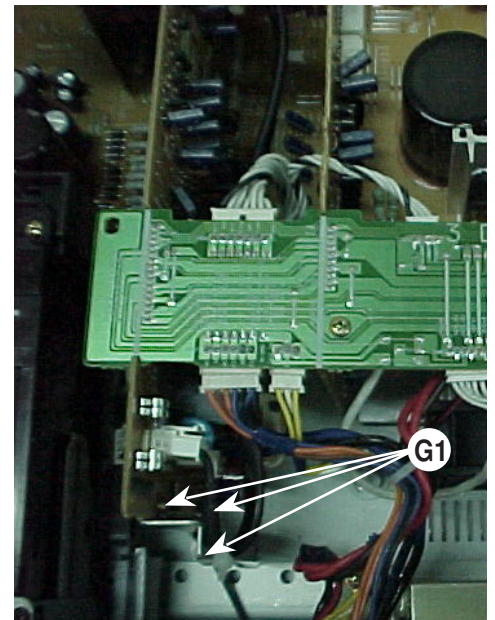


Figure 9

Dismantling the Main(Mother) Boards. (Refer figure 10)

Loosen 3 screws H on the bottom chassis then remove the board.

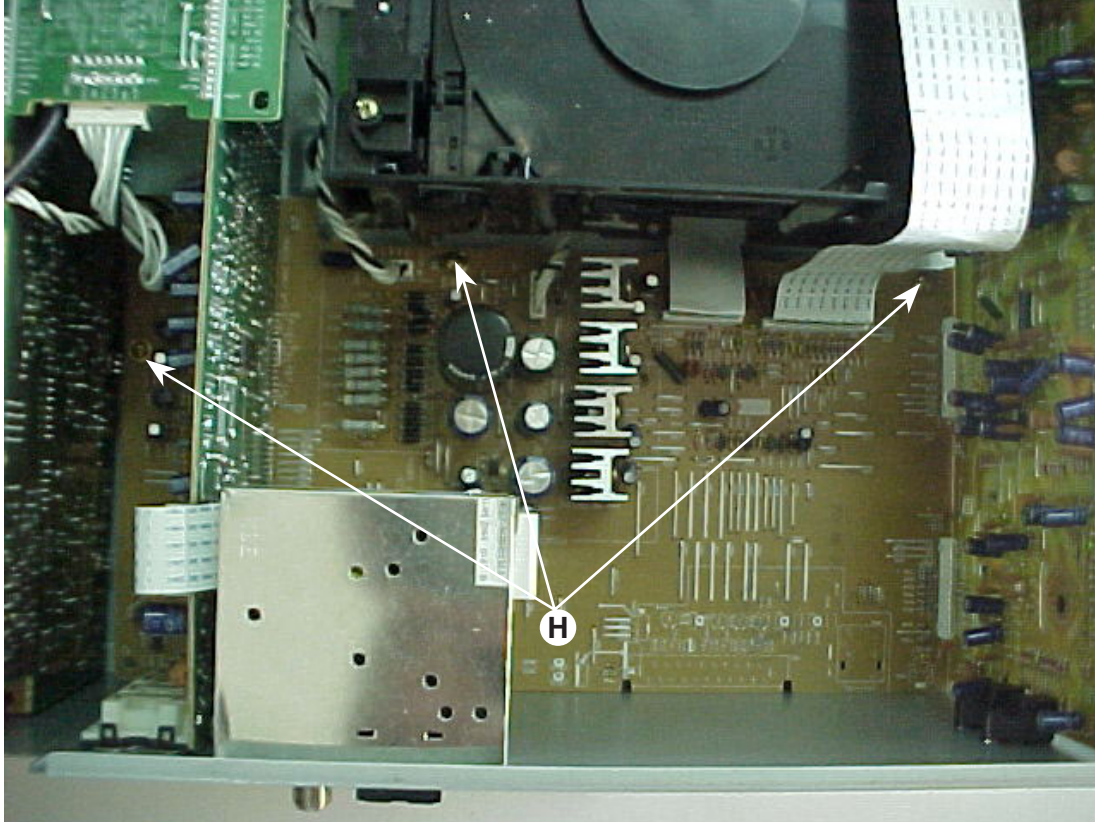
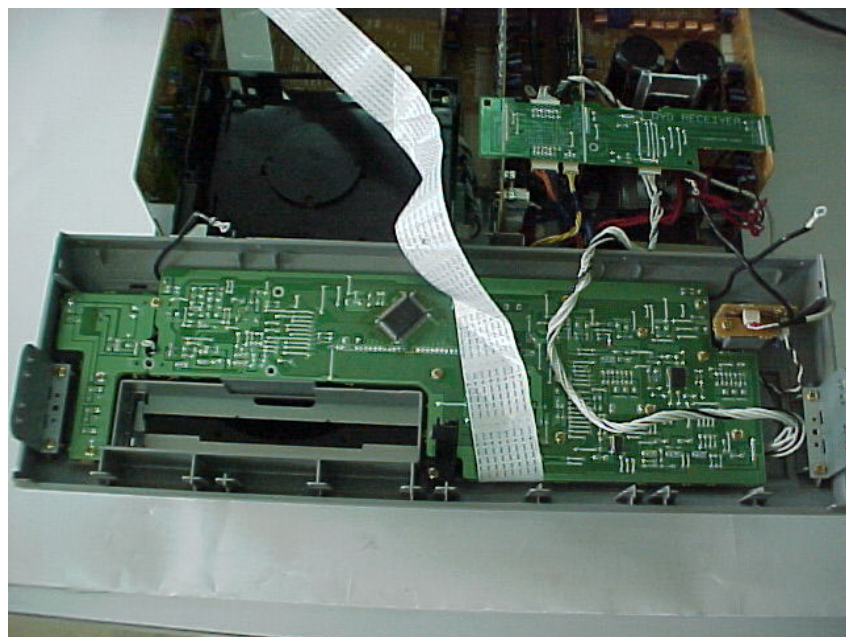


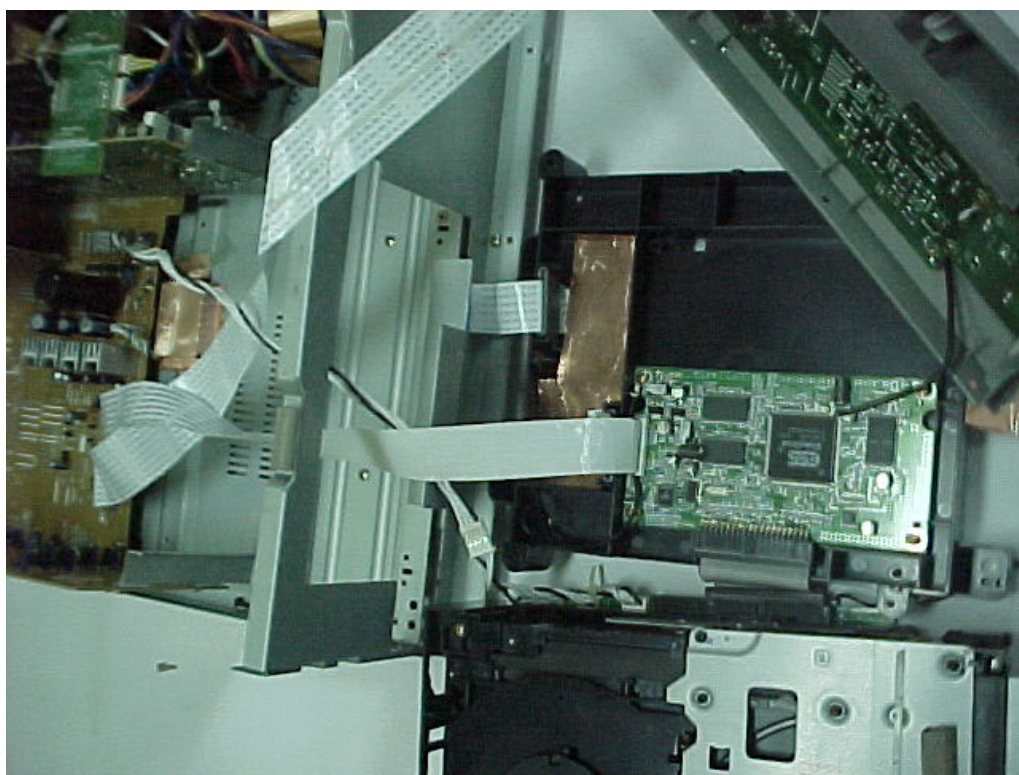
Figure 10

Service pos A

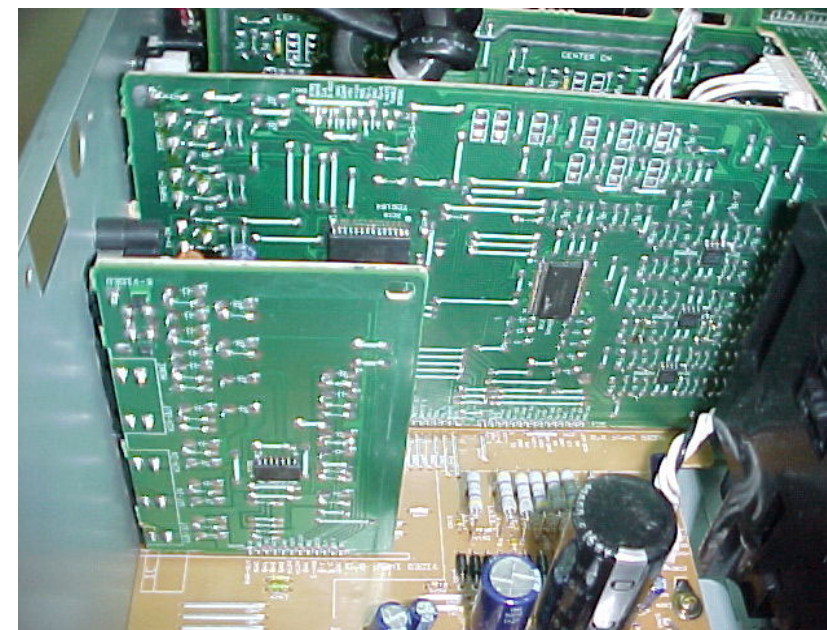


Note: In some service positions the components or copper patterns of one board may risk touching its neighbouring pc boards or metallic parts. To prevent such short-circuit use a piece of hard paper or other insulating material between them.

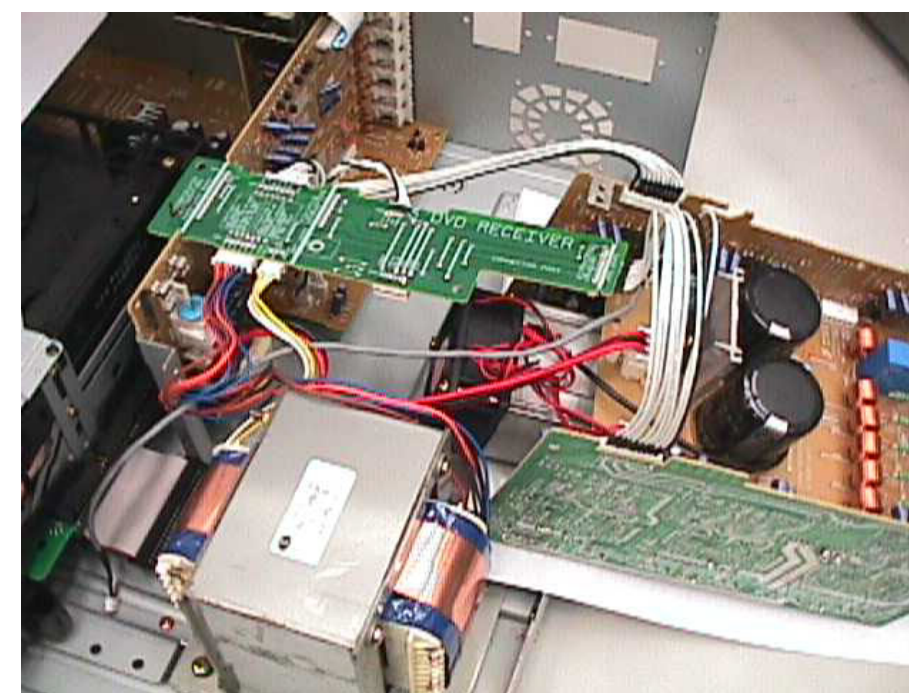
Service pos B



Service pos C

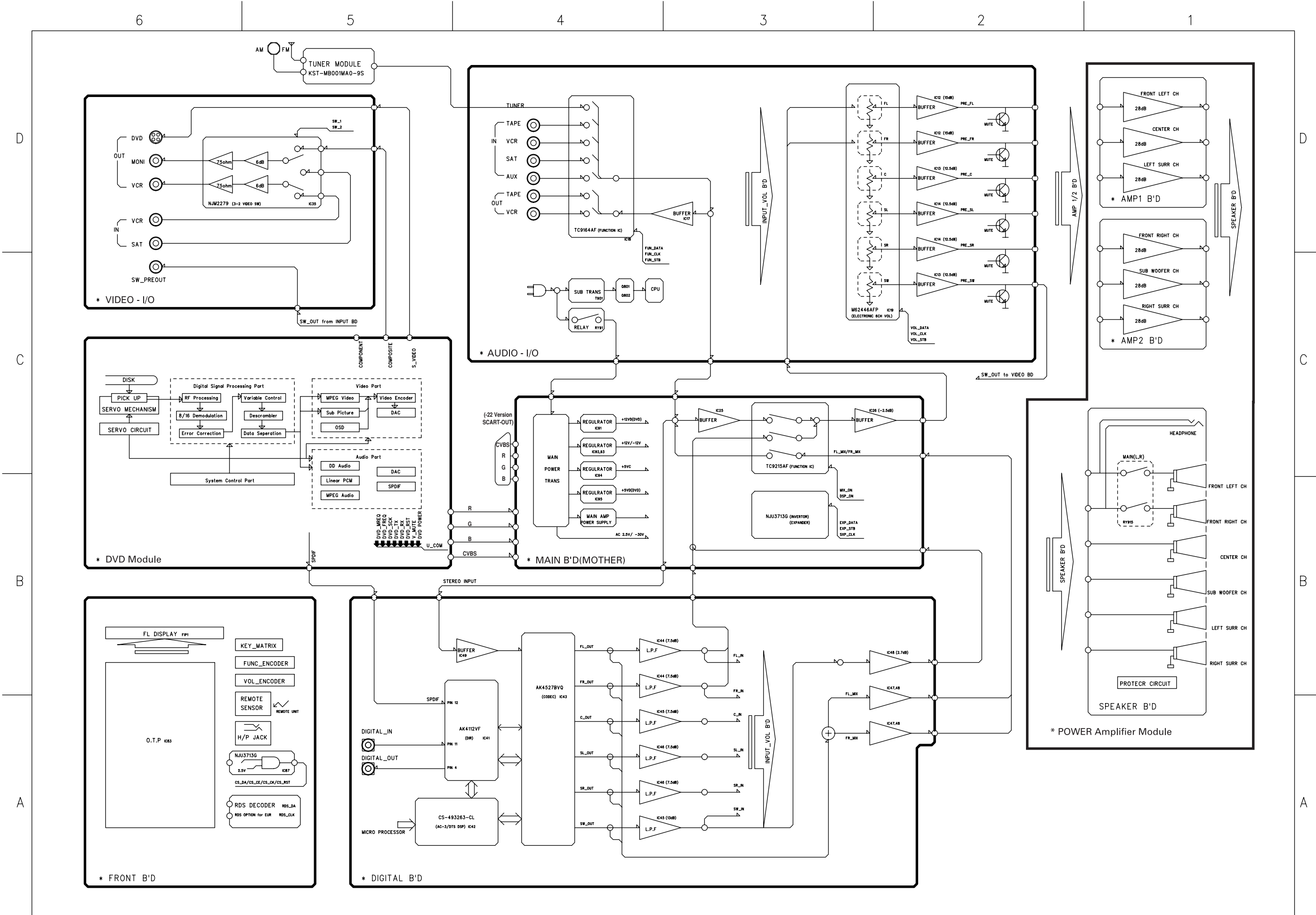


Service pos D

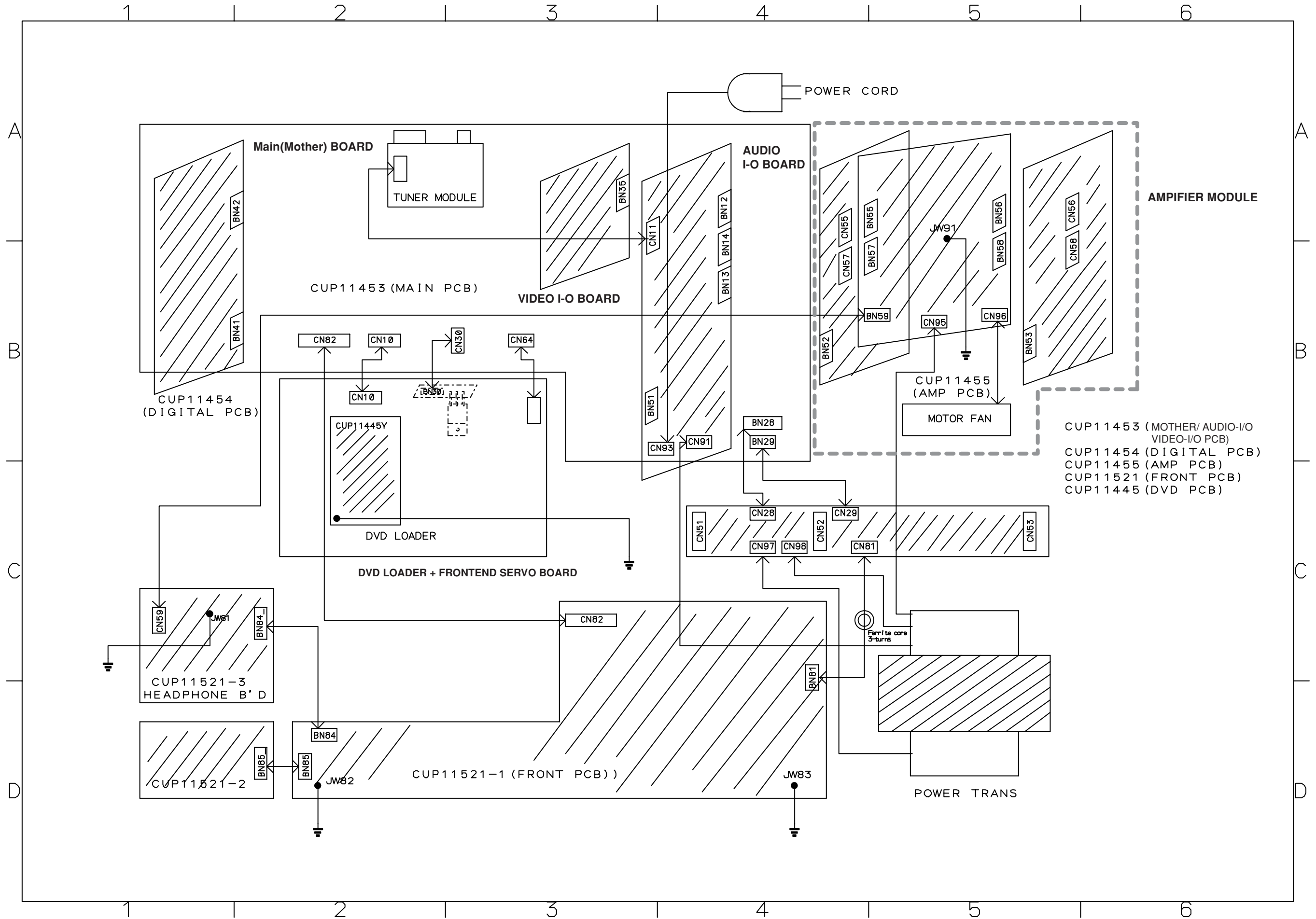


Note: Use service cable "9965 000 15831" to connect the Power Amplifier Module

SET BLOCK DIAGRAM



SET WIRING DIAGRAM

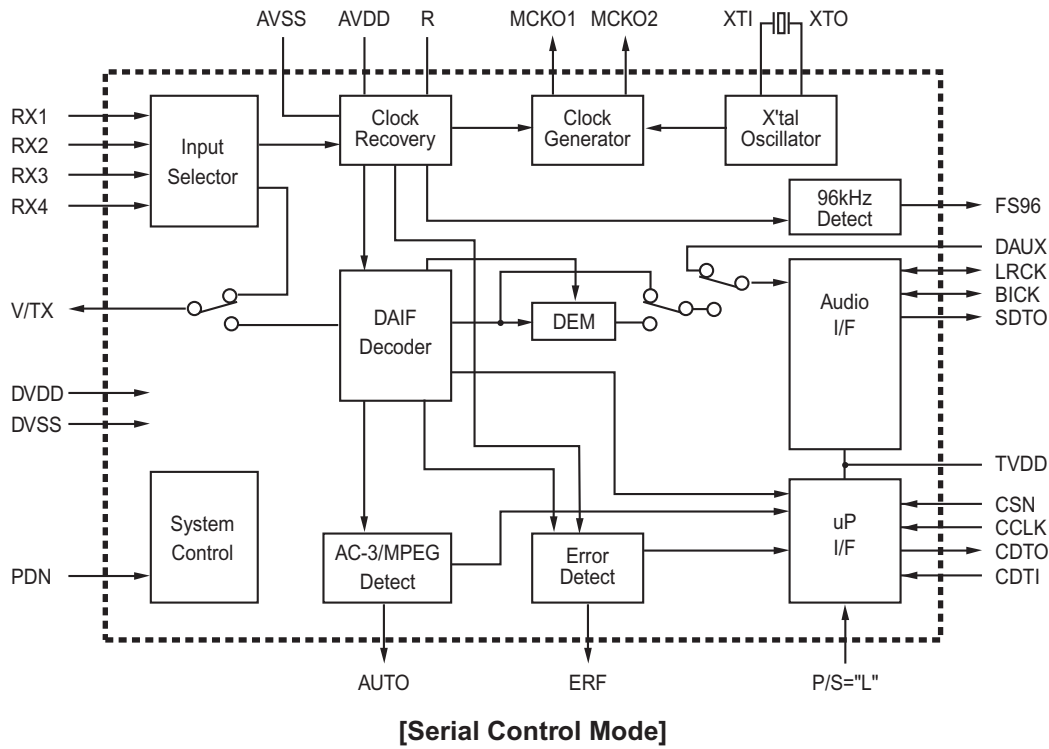


DIGITAL BOARD

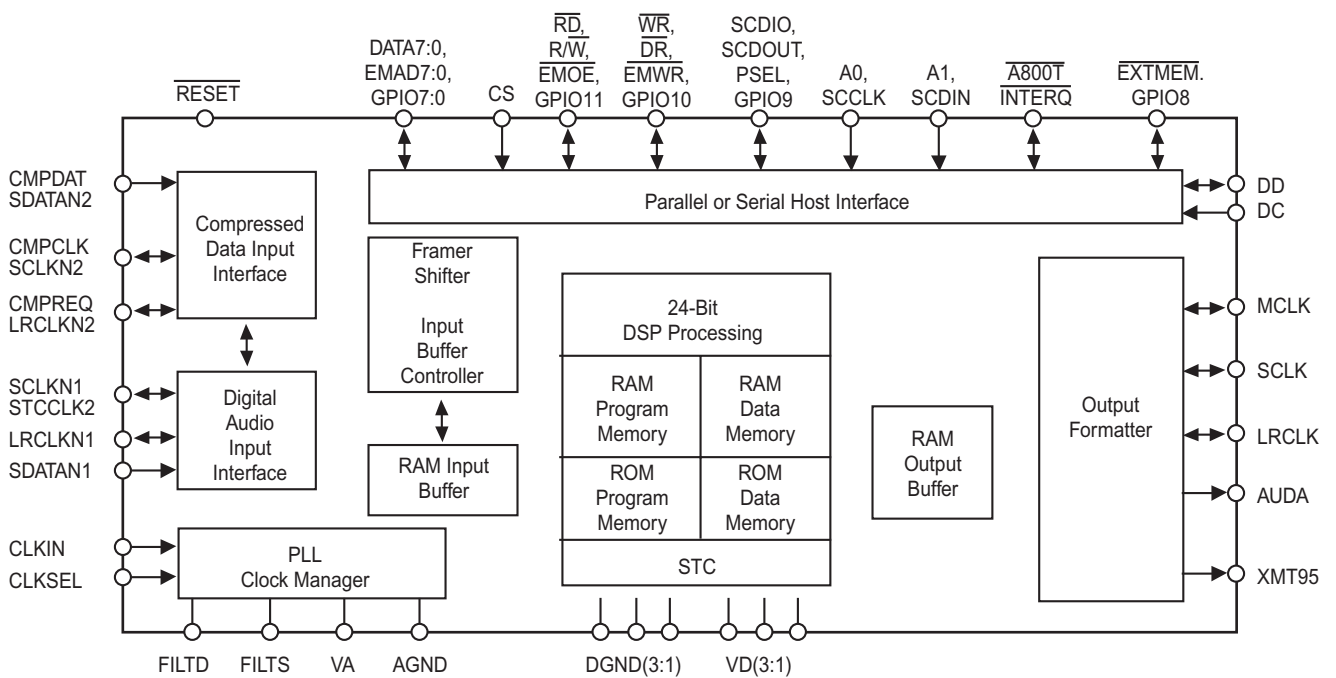
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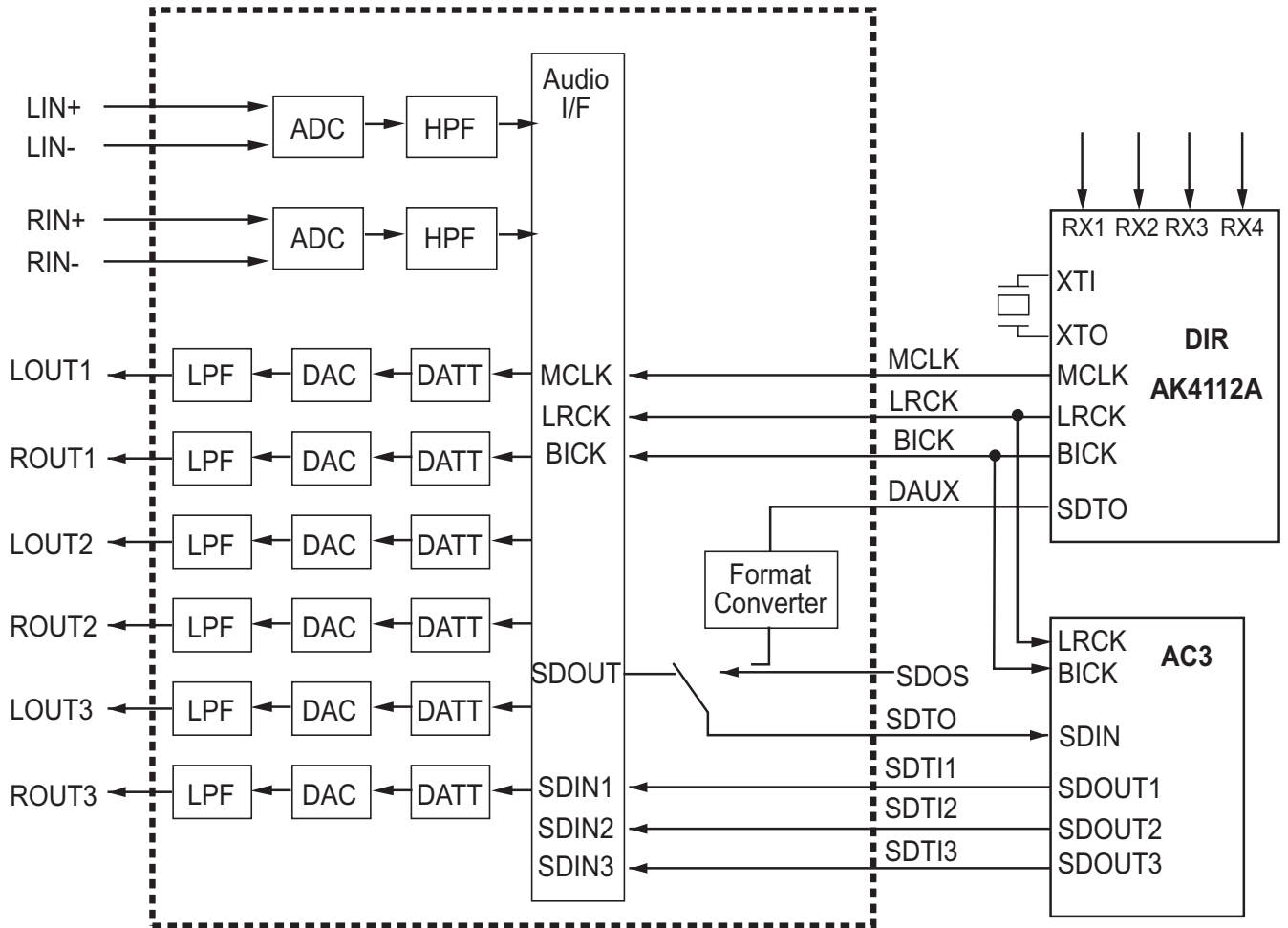
BLOCK DIAGRAM (AK4112AVF)



BLOCK DIAGRAM (CS493263)



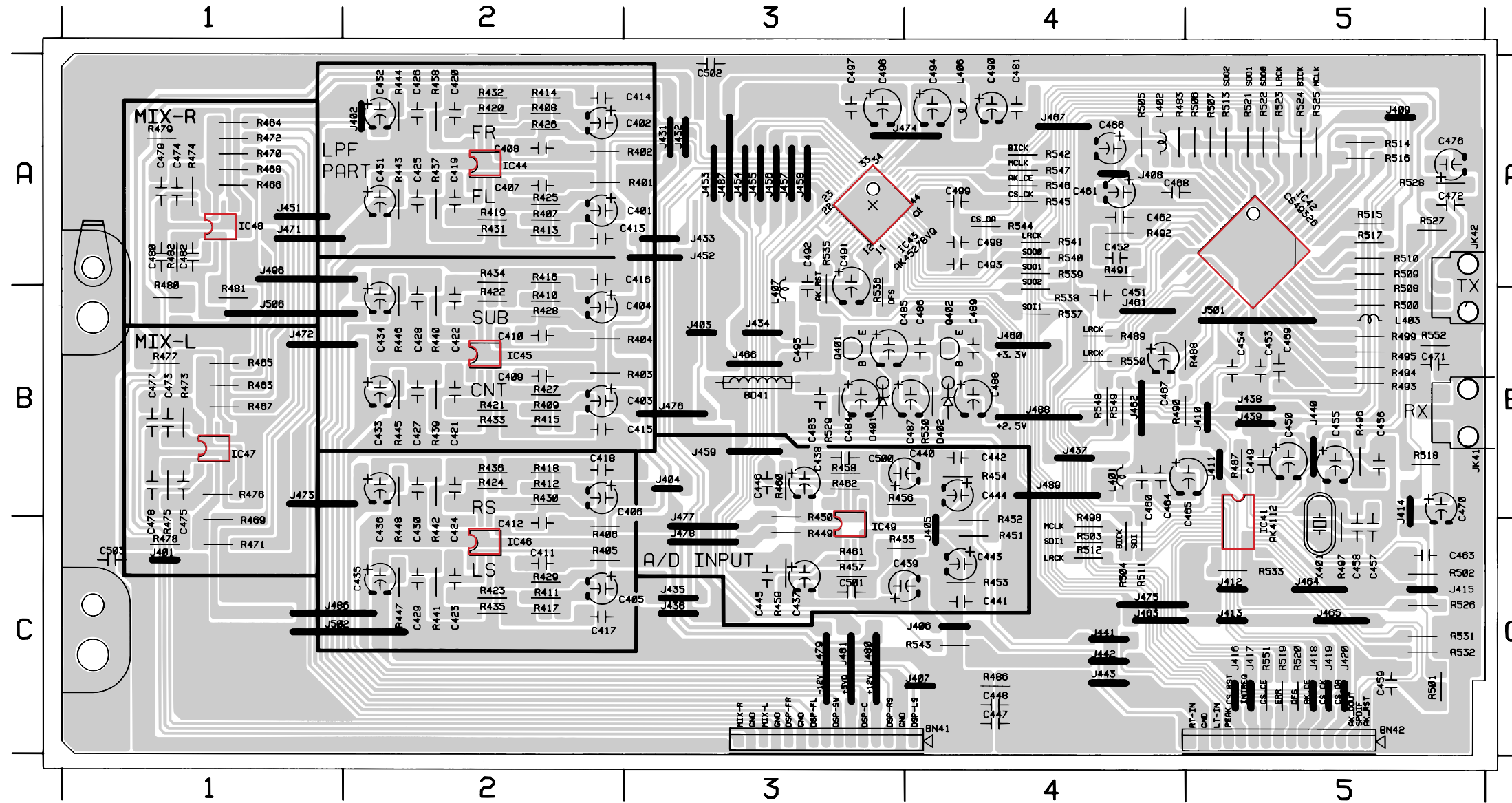
BLOCK DIAGRAM (AK4527BVQ)



[Serial Control Mode]

COMPONENTS VIEW

BD41 B3	C412 C2	C426 A2	C440 B3	C456 B5	C470 B5	C485 B3	C499 A4	IC48 A1	J413 C5	J437 B4	J458 A3	J475 C4	JK41 B5	R407 A2	R421 B2	R435 C2	R448 B2	R462 B3	R475 B1	R490 B4	R504 C4	R518 B5	R532 C5	R548 B4
BN41 C3	C413 A2	C427 B2	C441 C4	C457 C5	C471 B5	C486 B4	C500 B3	IC49 C3	J414 B5	J438 B5	J459 B3	J476 B3	JK42 A5	R408 A2	R422 B2	R436 B2	R449 C3	R463 B1	R476 B1	R491 A4	R505 A4	R519 C5	R533 C5	R549 B4
BN42 C5	C414 A2	C428 B2	C442 B4	C458 C5	C472 A5	C487 B4	C501 C3	J401 C1	J415 C5	J439 B5	J460 B4	J477 C3	L401 B4	R409 B2	R423 C2	R436 B3	R450 B3	R464 A1	R477 B1	R492 A4	R506 A5	R520 C5	R535 A3	R550 B4
C102 A2	C415 B2	C429 C2	C443 C4	C459 C5	C473 B1	C488 B4	C502 A3	J402 A2	J416 C5	J440 B5	J461 B4	J478 C3	L403 B5	R410 B2	R424 B2	R437 A2	R451 C4	R465 B1	R478 C1	R493 B5	R507 A5	R521 A5	R537 B4	R551 C5
C401 A2	C416 A2	C430 B2	C444 B4	C460 B4	C474 A1	C489 B4	C503 C1	J403 B3	J417 C5	J441 C4	J462 B4	J479 C3	L406 A4	R411 C2	R425 A2	R438 A2	R452 C4	R466 A1	R479 A1	R494 B5	R508 B5	R522 A5	R538 B4	R552 B5
C403 B2	C417 C2	C431 A2	C445 C3	C461 A4	C475 B1	C490 A4	D401 B3	J404 B3	J418 C5	J442 C4	J463 C4	J480 C3	L407 B3	R412 B2	R426 A2	R439 B2	R453 C4	R466 B2	R480 B1	R495 B5	R509 A5	R523 A5	R539 A4	X401 C5
C404 B2	C418 B2	C432 A2	C448 C4	C462 A4	C476 A5	C491 A3	D402 B4	J405 C4	J419 C5	J443 C4	J464 C5	J481 C3	Q401 B3	R413 A2	R427 B2	R440 B2	R454 B4	R467 B1	R481 B1	R496 B5	R510 A5	R524 A5	R540 A4	
C405 C2	C419 A2	C433 B2	C449 B5	C463 C5	C477 B1	C492 A3	IC41 C5	J406 C4	J420 C5	J451 A1	J465 C5	J486 C1	Q402 B4	R414 A2	R428 B2	R441 C2	R455 C3	R468 A1	R482 A1	R497 C5	R511 C4	R525 A5	R541 A4	
C406 B2	C420 A2	C434 B2	C450 B5	C464 B4	C478 B1	C493 A4	IC42 A5	J407 C4	J431 A3	J452 A3	J466 B3	J487 A3	R401 A2	R415 B2	R429 C2	R442 B2	R456 B3	R469 C1	R483 A4	R498 C4	R512 C4	R526 C5	R542 A4	
C407 A2	C421 B2	C435 C2	C451 B4	C465 B4	C479 A1	C494 A4	IC43 A3	J408 A4	J432 A3	J453 A3	J467 A4	J488 B4	R402 A2	R416 A2	R430 B2	R443 A2	R457 C3	R470 A1	R483 B3	R499 B5	R513 A5	R527 A5	R543 C4	
C408 A2	C422 B2	C436 B2	C452 A4	C466 A4	C480 A1	C495 B3	IC44 A2	J409 A5	J433 A3	J454 A3	J471 A1	J489 B4	R403 B2	R417 C2	R431 A2	R444 A2	R458 B3	R471 C1	R486 C4	R500 B5	R514 A5	R528 A5	R544 A4	
C409 B2	C423 C2	C437 C3	C453 B5	C467 B4	C481 A4	C496 A3	IC45 B2	J410 B5	J434 B3	J455 A3	J472 B1	J496 A1	R404 B2	R418 B2	R432 A2	R445 B2	R459 C3	R472 A1	R487 B5	R501 C5	R515 A5	R529 B3	R545 A4	
C410 B2	C424 B2	C438 B3	C454 B5	C468 A4	C482 A1	C497 A3	IC46 C2	J411 B5	J435 C3	J456 A3	J473 B1	J501 B5	R405 C2	R419 A2	R433 B2	R446 B3	R460 B3	R473 B1	R488 B4	R502 C5	R516 A5	R530 B4	R546 A4	
C411 C2	C425 A2	C439 C3	C455 B5	C469 B5	C484 B3	C498 A4	IC47 B1	J412 C5	J436 C3	J457 A3	J474 A3	J502 C2	R406 C2	R420 A2	R434 A2	R447 C2	R461 C3	R474 A1	R489 B4	R503 C4	R517 A5	R531 C5	R547 A4	



(IC44,45,46,47,48,49 M2068MD)

Pin NO.	Voltage
1	0
2	0
3	0
4	-11.64
5	0
6	0
7	0
8	11.65

REF. NO.	E	C	B
Q401	3.4	4.9	4
Q402	2.5	4.9	3.2

DIGITAL BOARD

(IC42 CS493263-CL)

Pin NO.	Voltage	Pin NO.	Voltage	Pin NO.	Voltage	Pin NO.	Voltage	Pin NO.	Voltage
1	2.49	11	2.57	21	2.49	31	0	41	2.65
2	0	12	2.49	22	1.27	32	2	42	1.69
3	0.94	13	0	23	2.5	33	1.3	43	1.66
4	0	14	2.57	24	0	34	2.66	44	1.76
5	2.49	15	2.57	25	1.65	35	0		
6	2.53	16	2.57	26	1.69	36	2.57		
7	2.53	17	2.57	27	1.28	37	2.66		
8	2.57	18	2.53	28	1.65	38	2.66		
9	2.57	19	2.24	29	1.69	39	2.73		
10	2.57	20	0.07	30	1.8	40	2		

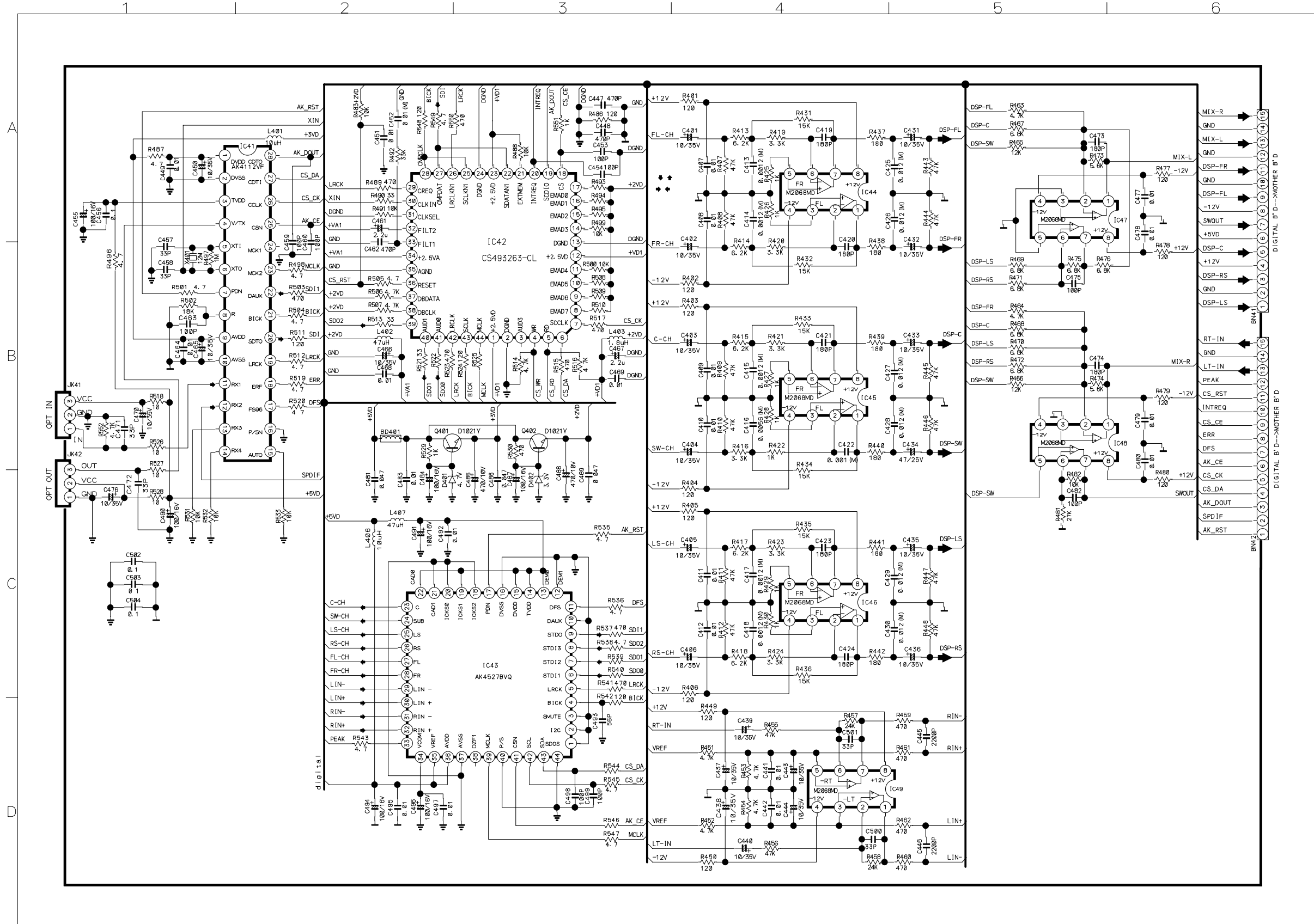
(IC43 AK4527 BVQ)

Pin NO.	Voltage	Pin NO.	Voltage	Pin NO.	Voltage	Pin NO.	Voltage	Pin NO.	Voltage
1	0	11	0.65	21	0	31	2.44	41	4.7
2	0	12	0	22	4.84	32	2.45	42	2.53
3	0	13	4.86	23	3.2	33	0.01	43	2.53
4	1.65	14	4.86	24	2.42	34	2.42	44	0
5	1.69	15	4.84	25	2.42	35	4.87		
6	0.94	16	0	26	2.42	36	4.87		
7	0	17	4.5	27	3.15	37	0		
8	0.47	18	0	28	3.15	38	0		
9	1.82	19	4.84	29	2.42	39	1.76		
10	0	20	0	30	2.43	40	0		

(IC 41 AK4112VF)

Pin NO.	Voltage	Pin NO.	Voltage	Pin NO.	Voltage
1	3.37	11	0	21	1.83
2	0.06	12	0	22	1.65
3	4.92	13	0	23	1.28
4	1.71	14	0.8	24	1.69
5	1.5	15	0	25	0.06
6	0	16	0	26	0.06
7	4.51	17	0.06	27	0
8	0	18	1.79	28	0
9	0	19	1.75		
10	0	20	1.75		

CIRCUIT DIAGRAM



BD40	B2	C503	C1	R486	A3
BN41	A6	C504	C1	R487	A1
BN42	B6	D401	C2	R488	A3
C401	A4	D402	C3	R489	A2
C402	B4	IC41	B2	R490	A2
C403	B4	IC42	A3	R491	A2
C404	B4	IC43	C3	R493	A3
C405	C4	IC44	A4	R494	A3
C406	C4	IC45	B4	R495	A3
C407	A4	IC46	C4	R496	B1
C408	A4	IC47	A5	R497	B1
C409	B4	IC48	B5	R498	B2
C410	B4	IC49	D4	R499	A3
C411	C4	JK42	B1	R500	B3
C412	C4	JK42	C1	R501	B1
C413	A4	K406	C2	R502	B1
C414	A4	L401	A2	R503	B2
C415	B4	L402	B2	R504	B2
C416	B4	L403	B3	R505	B2
C417	C4	L407	C2	R506	B2
C418	C4	Q401	B2	R507	B2
C419	A4	Q402	B3	R508	B3
C420	B4	R401	A4	R509	B3
C421	B4	R402	B4	R510	B3
C422	B4	R403	B4	R511	B2
C423	C4	R404	C4	R512	B2
C424	C4	R405	C4	R513	B2
C425	A5	R406	C4	R514	B3
C426	A5	R407	A4	R515	B3
C427	B5	R408	A4	R516	B3
C428	B5	R409	B4	R517	B3
C429	C5	R410	B4	R518	B1
C430	C5	R411	C4	R519	B2
C431	A5	R412	C4	R520	B2
C432	B5	R413	A4	R521	B2
C433	B5	R414	B4	R522	B2
C434	B5	R415	B4	R523	B2
C436	C5	R416	B4	R524	B3
C437	D4	R417	C4	R525	B3
C438	D4	R418	C4	R526	B1
C439	D4	R419	A4	R527	B1
C440	D4	R420	B4	R528	C1
C441	D4	R421	B4	R529	B2
C442	D4	R422	B4	R530	B3
C443	D4	R423	C4	R531	C1
C444	D4	R424	C4	R532	C1
C445	D5	R425	A4	R533	C2
C446	D5	R426	A4	R535	C3
C447	A3	R427	B4	R536	C3
C448	A3	R428	B4	R537	C3
C449	A1	R429	C4	R538	C3
C450	A1	R430	C4	R539	C3
C451	A2	R431	A4	R540	C3
C452	A2	R432	B4	R541	C3
C453	C5	R433	B4	R542	C3
C454	A3	R434	B4	R543	D2
C455	A1	R435	C4	R544	D3
C456	A1	R436	C4	R545	D3
C457	B1	R437	A4	R546	D3
C458	B1	R438	B4	R547	D3
C459	B2	R439	B4	R548	A2
C461	A2	R440	B4	R549	A2
C462	B2	R441	C4	R550	A3
C463	B1	R442	C4	R551	A3
C464	B1	R443	A5	R552	B1
C465	B1	R444	A5	X401	B1
C466	B2	R445	B5		
C467	B3	R446	B5		
C468	B2	R447	C5		
C469	B3	R448	C5		
C470	B1	R449	D4		
C471	B1	R451	D4		
C472	C1	R452	D4		
C473	A5	R453	D4		
C474	B5	R454	D4		
C475	B5	R455	D4		
C476	C1	R456	D4		
C477	A6	R457	D4		
C478	A6	R458	D4		
C479	B6	R459	D5		
C480	B6	R460	D5		
C481	C2	R461	D5		
C482	C5	R462	D5		
C483	C2	R463	A5		
C484	C2	R464	B5		
C485	C3	R465	A5		
C486	C3	R466	B5		
C487	C3	R467	A5		
C488	C3	R468	B5		
C489	C3	R469	B5		
C490	C1	R470	B5		
C491	C2	R471	B5		
C492	C2	R472	B5		
C493	D3	R473	A5		
C494	D2	R474	B5		
C495	D2	R475	B5		
C496	D2	R476	B5		
C497	D2	R477	A6		
C498	D3	R478	B6		
C499	D3	R479	B6		
C500	D4	R481	C5		
C501	D4	R482	C5		
C502	C1	R483	A2		

ELECTRICAL PARTS LIST - DIGITAL BOARD

MISCELLANEOUS

BD41	9965 000 13226	BEAD, CORE
BN41	9965 000 13227	WAFER 15PIN
BN42	9965 000 13227	WAFER 15PIN
JK41	9965 000 13229	JACK, OPTICAL SAT-IN
JK42	9965 000 13230	JACK, OPTICAL DIG-OUT
X401	9965 000 13342	CRYSTAL 12,288MHZ

CAPACITORS

C401	9965 000 13231	CAP, ELECT 10UF 35V
C402	9965 000 13231	CAP, ELECT 10UF 35V
C403	9965 000 13231	CAP, ELECT 10UF 35V
C404	9965 000 13231	CAP, ELECT 10UF 35V
C405	9965 000 13231	CAP, ELECT 10UF 35V
C406	9965 000 13231	CAP, ELECT 10UF 35V
C407	9965 000 13232	CAP, CERAMIC 0,01UF 50V ZF
C408	9965 000 13232	CAP, CERAMIC 0,01UF 50V ZF
C409	9965 000 13232	CAP, CERAMIC 0,01UF 50V ZF
C410	9965 000 13232	CAP, CERAMIC 0,01UF 50V ZF
C411	9965 000 13232	CAP, CERAMIC 0,01UF 50V ZF
C412	9965 000 13232	CAP, CERAMIC 0,01UF 50V ZF
C413	9965 000 13239	CAP, MYLAR 1200PF 50V J
C414	9965 000 13239	CAP, MYLAR 1200PF 50V J
C415	9965 000 13239	CAP, MYLAR 1200PF 50V J
C416	9965 000 13239	CAP, MYLAR 1200PF 50V J
C417	9965 000 13239	CAP, MYLAR 1200PF 50V J
C418	9965 000 13239	CAP, MYLAR 1200PF 50V J
C419	9965 000 13240	CAP, CERAMIC 180PF 50V KB
C420	9965 000 13240	CAP, CERAMIC 180PF 50V KB
C421	9965 000 13240	CAP, CERAMIC 180PF 50V KB
C422	9965 000 13241	CAP, MYLAR 1000PF 50V J
C423	9965 000 13240	CAP, CERAMIC 180PF 50V KB
C424	9965 000 13240	CAP, CERAMIC 180PF 50V KB
C425	9965 000 13242	CAP, MYLAR 0,012UF 50V J
C426	9965 000 13242	CAP, MYLAR 0,012UF 50V J
C427	9965 000 13242	CAP, MYLAR 0,012UF 50V J
C428	9965 000 13242	CAP, MYLAR 0,012UF 50V J
C429	9965 000 13242	CAP, MYLAR 0,012UF 50V J
C430	9965 000 13242	CAP, MYLAR 0,012UF 50V J
C431	9965 000 13231	CAP, ELECT 10UF 35V
C432	9965 000 13231	CAP, ELECT 10UF 35V
C433	9965 000 13231	CAP, ELECT 10UF 35V
C434	9965 000 13243	CAP, ELECT 47UF 25V
C435	9965 000 13231	CAP, ELECT 10UF 35V
C436	9965 000 13231	CAP, ELECT 10UF 35V
C437	9965 000 13231	CAP, ELECT 10UF 35V
C438	9965 000 13231	CAP, ELECT 10UF 35V
C439	9965 000 13231	CAP, ELECT 10UF 35V
C440	9965 000 13231	CAP, ELECT 10UF 35V
C441	9965 000 13232	CAP, CERAMIC 0,01UF 50V ZF
C442	9965 000 13232	CAP, CERAMIC 0,01UF 50V ZF
C443	9965 000 13231	CAP, ELECT 10UF 35V
C444	9965 000 13231	CAP, ELECT 10UF 35V

C445	9965 000 13244	CAP, MYLAR 2200PF 50V J
C446	9965 000 13244	CAP, MYLAR 2200PF 50V J
C447	9965 000 13260	CAP, CERAMIC 470PF 50V KB
C448	9965 000 13260	CAP, CERAMIC 470PF 50V KB
C449	9965 000 13232	CAP, CERAMIC 0,01UF 50V ZF
C450	9965 000 13231	CAP, ELECT 10UF 35V
C451	9965 000 13232	CAP, CERAMIC 0,01UF 50V ZF
C452	9965 000 13261	CAP, MYLAR 0,01UF 50V J
C453	9965 000 13262	CAP, CERAMIC 100PF 50V KB
C454	9965 000 13262	CAP, CERAMIC 100PF 50V KB
C455	9965 000 13263	CAP, ELECT 100UF 16V
C456	9965 000 13232	CAP, CERAMIC 0,01UF 50V ZF
C457	9965 000 13264	CAP, CERAMIC 33PF 50V J
C458	9965 000 13264	CAP, CERAMIC 33PF 50V J
C459	9965 000 13262	CAP, CERAMIC 100PF 50V KB
C460	9965 000 13262	CAP, CERAMIC 100PF 50V KB
C461	9965 000 13265	CAP, ELECT 2,2UF 50V
C462	9965 000 13260	CAP, CERAMIC 470PF 50V KB
C463	9965 000 13262	CAP, CERAMIC 100PF 50V KB
C464	9965 000 13232	CAP, CERAMIC 0,01UF 50V ZF
C465	9965 000 13231	CAP, ELECT 10UF 35V
C466	9965 000 13231	CAP, ELECT 10UF 35V
C467	9965 000 13265	CAP, ELECT 2,2UF 50V
C468	9965 000 13266	CAP, CERAMIC 0,01UF 50V Z
C469	9965 000 13266	CAP, CERAMIC 0,01UF 50V Z
C470	9965 000 13231	CAP, ELECT 10UF 35V
C471	9965 000 13264	CAP, CERAMIC 33PF 50V J
C472	9965 000 13264	CAP, CERAMIC 33PF 50V J
C473	9965 000 13267	CAP, CERAMIC 180PF 50V K
C474	9965 000 13267	CAP, CERAMIC 180PF 50V K
C475	9965 000 13268	CAP, CERAMIC 100PF 50V K
C476	9965 000 13231	CAP, ELECT 10UF 35V
C477	9965 000 13266	CAP, CERAMIC 0,01UF 50V Z
C478	9965 000 13266	CAP, CERAMIC 0,01UF 50V Z
C479	9965 000 13266	CAP, CERAMIC 0,01UF 50V Z
C480	9965 000 13266	CAP, CERAMIC 0,01UF 50V Z
C481	9965 000 13269	CAP, CERAMIC 0,047UF 50V ZF
C482	9965 000 13270	CAP, CERAMIC 82P 50V K
C483	9965 000 13232	CAP, CERAMIC 0,01UF 50V ZF
C484	9965 000 13263	CAP, ELECT 100UF 16V
C485	9965 000 13271	CAP, ELECT 470UF 10V
C486	9965 000 13269	CAP, CERAMIC 0,047UF 50V ZF
C487	9965 000 13263	CAP, ELECT 100UF 16V
C488	9965 000 13271	CAP, ELECT 470UF 10V
C489	9965 000 13269	CAP, CERAMIC 0,047UF 50V ZF
C490	9965 000 13263	CAP, ELECT 100UF 16V
C491	9965 000 13263	CAP, ELECT 100UF 16V
C492	9965 000 13232	CAP, CERAMIC 0,01UF 50V ZF
C493	9965 000 13275	CAP, CERAMIC 56PF 50V J
C494	9965 000 13263	CAP, ELECT 100UF 16V
C495	9965 000 13232	CAP, CERAMIC 0,01UF 50V ZF
C496	9965 000 13263	CAP, ELECT 100UF 16V

ELECTRICAL PARTS LIST - DIGITAL BOARD

C497	9965 000 13232	CAP, CERAMIC 0,01UF 50V ZF
C498	9965 000 13262	CAP, CERAMIC 100PF 50V KB
C499	9965 000 13262	CAP, CERAMIC 100PF 50V KB
C500	9965 000 13264	CAP, CERAMIC 33PF 50V J
C501	9965 000 13264	CAP, CERAMIC 33PF 50V J
C502	9965 000 13276	CAP, CERAMIC 0,1UF 50V Z
C503	9965 000 13276	CAP, CERAMIC 0,1UF 50V Z

RESISTORS

R401	9965 000 13283	RES, CARBON 120R 1/5W J
R402	9965 000 13283	RES, CARBON 120R 1/5W J
R403	9965 000 13283	RES, CARBON 120R 1/5W J
R404	9965 000 13283	RES, CARBON 120R 1/5W J
R405	9965 000 13283	RES, CARBON 120R 1/5W J
R406	9965 000 13283	RES, CARBON 120R 1/5W J
R407	9965 000 13284	RES, CARBON 47K 1/5W J
R408	9965 000 13284	RES, CARBON 47K 1/5W J
R409	9965 000 13284	RES, CARBON 47K 1/5W J
R410	9965 000 13284	RES, CARBON 47K 1/5W J
R411	9965 000 13284	RES, CARBON 47K 1/5W J
R412	9965 000 13284	RES, CARBON 47K 1/5W J
R413	9965 000 13285	RES, CARBON 6,2K 1/5W J
R414	9965 000 13285	RES, CARBON 6,2K 1/5W J
R415	9965 000 13285	RES, CARBON 6,2K 1/5W J
R416	9965 000 13286	RES, CARBON 3,3K 1/5W J
R417	9965 000 13285	RES, CARBON 6,2K 1/5W J
R418	9965 000 13285	RES, CARBON 6,2K 1/5W J
R419	9965 000 13286	RES, CARBON 3,3K 1/5W J
R420	9965 000 13286	RES, CARBON 3,3K 1/5W J
R421	9965 000 13286	RES, CARBON 3,3K 1/5W J
R422	9965 000 13290	RES, CARBON 1K 1/5W J
R423	9965 000 13286	RES, CARBON 3,3K 1/5W J
R424	9965 000 13286	RES, CARBON 3,3K 1/5W J
R425	9965 000 13290	RES, CARBON 1K 1/5W J
R426	9965 000 13290	RES, CARBON 1K 1/5W J
R427	9965 000 13290	RES, CARBON 1K 1/5W J
R428	9965 000 13290	RES, CARBON 1K 1/5W J
R429	9965 000 13290	RES, CARBON 1K 1/5W J
R430	9965 000 13290	RES, CARBON 1K 1/5W J
R431	9965 000 13291	RES, CARBON 15K 1/5W J
R432	9965 000 13291	RES, CARBON 15K 1/5W J
R433	9965 000 13291	RES, CARBON 15K 1/5W J
R434	9965 000 13291	RES, CARBON 15K 1/5W J
R435	9965 000 13291	RES, CARBON 15K 1/5W J
R436	9965 000 13291	RES, CARBON 15K 1/5W J
R437	9965 000 13292	RES, CARBON 180R 1/5W J
R438	9965 000 13292	RES, CARBON 180R 1/5W J
R439	9965 000 13292	RES, CARBON 180R 1/5W J
R440	9965 000 13292	RES, CARBON 180R 1/5W J
R441	9965 000 13292	RES, CARBON 180R 1/5W J
R442	9965 000 13292	RES, CARBON 180R 1/5W J
R443	9965 000 13284	RES, CARBON 47K 1/5W J

R444	9965 000 13284	RES, CARBON 47K 1/5W J
R445	9965 000 13284	RES, CARBON 47K 1/5W J
R446	9965 000 13284	RES, CARBON 47K 1/5W J
R447	9965 000 13284	RES, CARBON 47K 1/5W J
R448	9965 000 13284	RES, CARBON 47K 1/5W J
R449	9965 000 13283	RES, CARBON 120R 1/5W J
R450	9965 000 13283	RES, CARBON 120R 1/5W J
R451	9965 000 13296	RES, CARBON 4,7K 1/5W J
R452	9965 000 13296	RES, CARBON 4,7K 1/5W J
R453	9965 000 13296	RES, CARBON 4,7K 1/5W J
R454	9965 000 13296	RES, CARBON 4,7K 1/5W J
R455	9965 000 13284	RES, CARBON 47K 1/5W J
R456	9965 000 13284	RES, CARBON 47K 1/5W J
R457	9965 000 13297	RES, CARBON 24K 1/5W J
R458	9965 000 13297	RES, CARBON 24K 1/5W J
R459	9965 000 13298	RES, CARBON 470R 1/5W J
R460	9965 000 13298	RES, CARBON 470R 1/5W J
R461	9965 000 13298	RES, CARBON 470R 1/5W J
R462	9965 000 13298	RES, CARBON 470R 1/5W J
R463	9965 000 13296	RES, CARBON 4,7K 1/5W J
R464	9965 000 13296	RES, CARBON 4,7K 1/5W J
R465	9965 000 13302	RES, CARBON 12K 1/5W J
R466	9965 000 13302	RES, CARBON 12K 1/5W J
R467	9965 000 13303	RES, CARBON 6,8K 1/5W J
R468	9965 000 13303	RES, CARBON 6,8K 1/5W J
R469	9965 000 13303	RES, CARBON 6,8K 1/5W J
R470	9965 000 13303	RES, CARBON 6,8K 1/5W J
R471	9965 000 13303	RES, CARBON 6,8K 1/5W J
R472	9965 000 13303	RES, CARBON 6,8K 1/5W J
R473	9965 000 13380	RES, CARBON 5,6K 1/5W J
R474	9965 000 13380	RES, CARBON 5,6K 1/5W J
R475	9965 000 13303	RES, CARBON 6,8K 1/5W J
R476	9965 000 13303	RES, CARBON 6,8K 1/5W J
R477	9965 000 13283	RES, CARBON 120R 1/5W J
R478	9965 000 13283	RES, CARBON 120R 1/5W J
R479	9965 000 13283	RES, CARBON 120R 1/5W J
R480	9965 000 13283	RES, CARBON 120R 1/5W J
R481	9965 000 13304	RES, CARBON 27K 1/5W J
R482	9965 000 13335	RES, CARBON 10K 1/5W J
R483	9965 000 13335	RES, CARBON 10K 1/5W J
R486	9965 000 13283	RES, CARBON 120R 1/5W J
R487	9965 000 13336	RES, CARBON 4,7R 1/5W J
R488	9965 000 13335	RES, CARBON 10K 1/5W J
R489	9965 000 13336	RES, CARBON 4,7R 1/5W J
R490	9965 000 13337	RES, CARBON 33R 1/5W J
R491	9965 000 13335	RES, CARBON 10K 1/5W J
R492	9965 000 13338	RES, CARBON 33K 1/5W J
R493	9965 000 13335	RES, CARBON 10K 1/5W J
R494	9965 000 13335	RES, CARBON 10K 1/5W J
R495	9965 000 13335	RES, CARBON 10K 1/5W J
R496	9965 000 13336	RES, CARBON 4,7R 1/5W J
R497	9965 000 13339	RES, CARBON 1M 1/5W J

ELECTRICAL PARTS LIST - DIGITAL BOARD**RESISTORS**

R498	9965 000 13341	RES, CARBON 10R 1/5W J
R499	9965 000 13335	RES, CARBON 10K 1/5W J
R500	9965 000 13335	RES, CARBON 10K 1/5W J
R501	9965 000 13336	RES, CARBON 4,7R 1/5W J
R502	9965 000 13340	RES, CARBON 18K 1/5W J
R503	9965 000 13298	RES, CARBON 470R 1/5W J
R504	9965 000 13336	RES, CARBON 4,7R 1/5W J
R505	9965 000 13336	RES, CARBON 4,7R 1/5W J
R506	9965 000 13296	RES, CARBON 4,7K 1/5W J
R507	9965 000 13296	RES, CARBON 4,7K 1/5W J
R508	9965 000 13335	RES, CARBON 10K 1/5W J
R509	9965 000 13335	RES, CARBON 10K 1/5W J
R510	9965 000 13335	RES, CARBON 10K 1/5W J
R511	9965 000 13283	RES, CARBON 120R 1/5W J
R512	9965 000 13336	RES, CARBON 4,7R 1/5W J
R513	9965 000 13337	RES, CARBON 33R 1/5W J
R514	9965 000 13296	RES, CARBON 4,7K 1/5W J
R515	9965 000 13298	RES, CARBON 470R 1/5W J
R516	9965 000 13296	RES, CARBON 4,7K 1/5W J
R517	9965 000 13298	RES, CARBON 470R 1/5W J
R518	9965 000 13341	RES, CARBON 10R 1/5W J
R519	9965 000 13336	RES, CARBON 4,7R 1/5W J
R520	9965 000 13336	RES, CARBON 4,7R 1/5W J
R521	9965 000 13337	RES, CARBON 33R 1/5W J
R522	9965 000 13337	RES, CARBON 33R 1/5W J
R523	9965 000 13298	RES, CARBON 470R 1/5W J
R524	9965 000 13283	RES, CARBON 120R 1/5W J
R525	9965 000 13337	RES, CARBON 33R 1/5W J
R526	9965 000 13341	RES, CARBON 10R 1/5W J
R527	9965 000 13341	RES, CARBON 10R 1/5W J
R528	9965 000 13341	RES, CARBON 10R 1/5W J
R529	9965 000 13290	RES, CARBON 1K 1/5W J
R530	9965 000 13298	RES, CARBON 470R 1/5W J
R531	9965 000 13335	RES, CARBON 10K 1/5W J
R532	9965 000 13335	RES, CARBON 10K 1/5W J
R533	9965 000 13335	RES, CARBON 10K 1/5W J
R535	9965 000 13336	RES, CARBON 4,7R 1/5W J
R536	9965 000 13336	RES, CARBON 4,7R 1/5W J
R537	9965 000 13298	RES, CARBON 470R 1/5W J
R538	9965 000 13336	RES, CARBON 4,7R 1/5W J
R539	9965 000 13336	RES, CARBON 4,7R 1/5W J
R540	9965 000 13336	RES, CARBON 4,7R 1/5W J
R541	9965 000 13298	RES, CARBON 470R 1/5W J
R542	9965 000 13283	RES, CARBON 120R 1/5W J
R543	9965 000 13336	RES, CARBON 4,7R 1/5W J
R544	9965 000 13336	RES, CARBON 4,7R 1/5W J
R545	9965 000 13336	RES, CARBON 4,7R 1/5W J
R546	9965 000 13336	RES, CARBON 4,7R 1/5W J
R547	9965 000 13336	RES, CARBON 4,7R 1/5W J
R548	9965 000 13283	RES, CARBON 120R 1/5W J
R549	9965 000 13336	RES, CARBON 4,7R 1/5W J
R550	9965 000 13298	RES, CARBON 470R 1/5W J

R551	9965 000 13290	RES, CARBON 1K 1/5W J
R552	9965 000 13296	RES, CARBON 4,7K 1/5W J

COILS & FILTERS

L401	9965 000 13277	COIL, AXAIL 10UH K
L402	9965 000 13281	COIL, AXAIL 47UH K
L403	9965 000 13282	COIL, AXAIL 1,8UH,K
L406	9965 000 13277	COIL, AXAIL 10UH K
L407	9965 000 13281	COIL, AXAIL 47UH K

DIODES

D401	4822 130 10667	MTZJ4,7B
D402	9965 000 10585	ZENER 3,3V 1/2W

TRANSISTORS & INTEGRATED CIRCUITS

IC41	9965 000 10587	DIR I,C AK4112A-VF-E2
IC42	9965 000 10589	DSP I,C CS493263-CL
IC43	9965 000 10588	I,C AK4527B-VQ
IC44	9965 000 13228	NJM2068MD-TE1
IC45	9965 000 13228	NJM2068MD-TE1
IC46	9965 000 13228	NJM2068MD-TE1
IC47	9965 000 13228	NJM2068MD-TE1
IC48	9965 000 13228	NJM2068MD-TE1
IC49	9965 000 13228	NJM2068MD-TE1
Q401	4822 130 11612	KSD1021Y
Q402	4822 130 11612	KSD1021Y

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

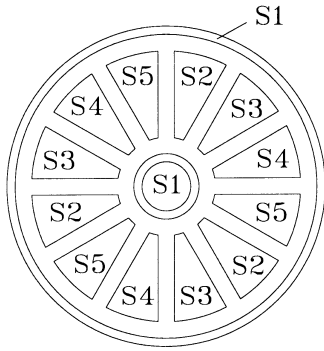
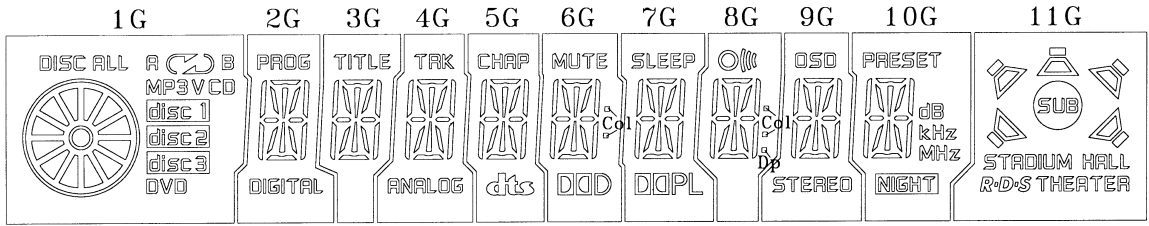
FRONT BOARD

(Includes Headphone Board)

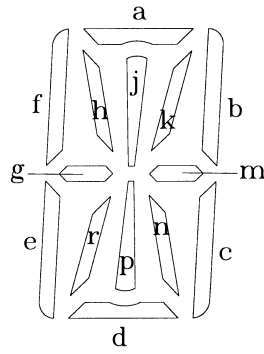
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FTD DISPLAY PIN ASSIGNMENT & CONNECTION



(1G)



(2G-10G)

	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G	11G
P1	DISC	PROG	TITLE	TRK	CHAP	MUTE	SLEEP	Col	OSD	PRESET	STADIUM
P2	ALL	a	a	a	a	a	a	a	a	a	HALL
P3	A	f	f	f	f	f	f	f	f	f	R-D-S
P4	MP3	h	h	h	h	h	h	h	h	h	THEATER
P5	VCD	j	j	j	j	j	j	j	j	j	
P6	B	k	k	k	k	k	k	k	k	k	
P7	S1	b	b	b	b	b	b	b	b	b	
P8	S2	g	g	g	g	g	g	g	g	g	
P9	S3	m	m	m	m	m	m	m	m	m	
P10	S4	-	-	-	-	Col	-	Col	-	-	
P11	S5	e	e	e	e	e	e	e	e	e	
P12	-	r	r	r	r	r	r	r	r	r	
P13	-	p	p	p	p	p	p	p	p	p	
P14	-	n	n	n	n	n	n	n	n	n	
P15	MP3	c	c	c	c	c	c	c	c	c	
P16	V	d	d	d	d	d	d	d	d	d	
P17	CD	DIGITAL	-	ANALOG	dts	DOD	DIOPL	Dp	STEREO	dB	
P18	disc 1	-	-	-	-	-	-	-	-	kHz	
P19	disc 2	-	-	-	-	-	-	-	-	MHz	
P20	disc 3	-	-	-	-	-	-	-	-	NIGHT	
P21	DVD	-	-	-	-	-	-	-	-	-	

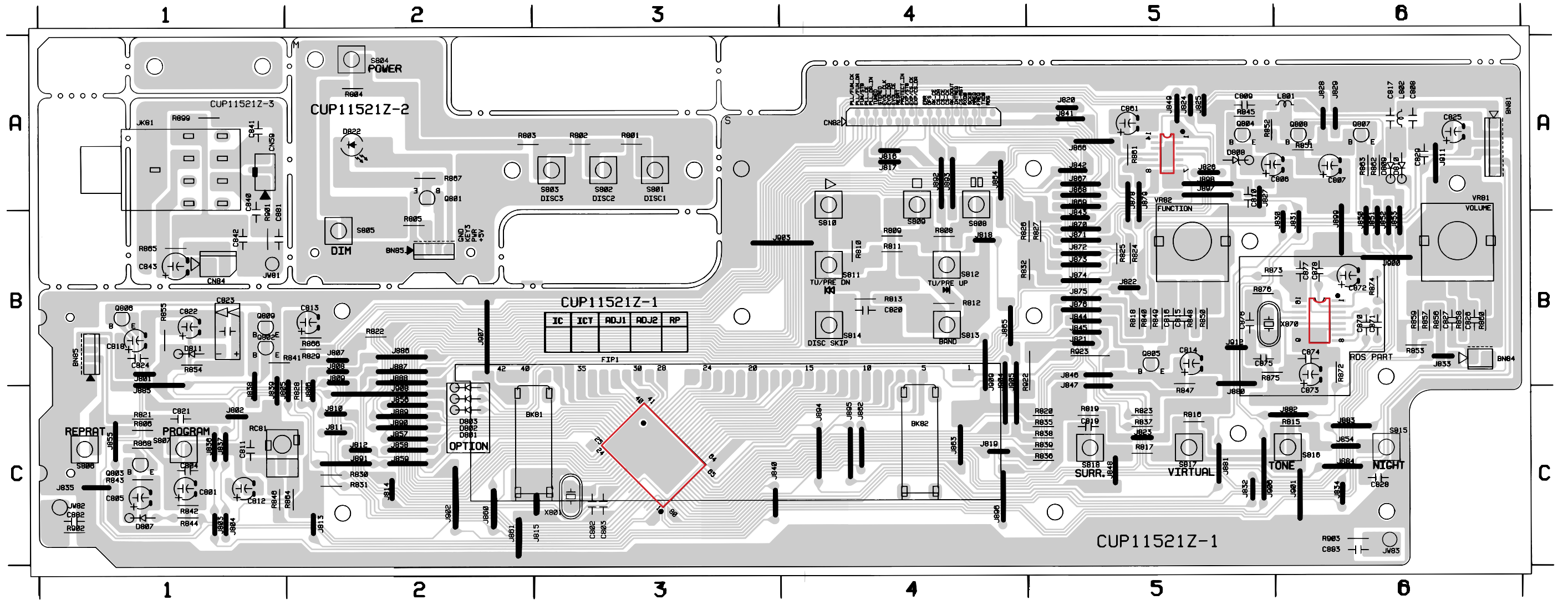
PIN NO.	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
CONNECTION	F2	F2	NP	NP	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G	11G	NX	P21	P20	P19	P18	P17	P16	P15	P14	P13	P12	P11	P10	P9	P8	P7	P6	P5	P4	P3	P2	P1	NP	NP	F1	F1	

● Notes ●

- 1) Fn : Filament pin
- 2) nG : Grid pin
- 3) Pn : Anode pin
- 4) NX : No Extended pin
- 5) NP : No pin

COMPONENT VIEW

BK81 C2	C809 A5	C822 B1	C872 B6	D802 C2	J804 C1	J819 C4	J833 B6	J847 B5	J861 C2	J875 B5	J890 C2	J904 B4	Q802 B1	R808 B4	R823 C5	R839 C5	R853 B6	R868 C1	S803 A3	S816 C6
BK82 C4	C810 A5	C823 B1	C873 B6	D803 C2	J805 B1	J820 A5	J834 C6	J848 C5	J862 C4	J876 B5	J891 C2	J905 B4	Q803 C1	R809 B4	R824 B5	R840 B5	R854 B1	R872 B6	S804 A2	S817 C5
BN81 A6	C811 C1	C824 B1	C874 B6	D807 C1	J806 B2	J821 B5	J835 C1	J849 A5	J863 C4	J878 A5	J892 A4	J906 C5	Q804 A5	R810 B4	R825 B5	R841 B1	R855 B1	R873 B5	S805 B2	S818 C5
BN84 B6	C812 C1	C825 A6	C875 B5	D808 A5	J807 B2	J822 B5	J836 C1	J850 B6	J864 A4	J879 A5	J893 A4	J907 B2	Q805 B5	R811 B4	R826 B4	R842 C1	R856 B6	R874 B6	S806 C1	VR81 B6
BN85 B1	C813 B2	C828 C6	C876 B5	D809 A6	J808 B2	J823 C5	J837 C1	J851 B6	J865 B4	J880 B5	J894 C4	J908 C2	Q806 B1	R813 B4	R828 B6	R843 C1	R857 B6	R875 B5	S807 C1	VR82 B5
BN85 B2	C814 B5	C829 A6	C877 B6	D810 A6	J809 B2	J824 A5	J838 B1	J852 B6	J866 A5	J881 C5	J895 C4	J909 B4	Q807 A6	R815 C6	R828 B2	R844 C1	R858 B6	R876 B5	S808 A4	X801 C3
C801 C1	C815 B5	C840 A1	C878 B6	D811 B1	J810 C2	J825 A5	J839 B1	J853 B6	J867 A5	J882 C6	J896 C4	J911 A6	Q808 A6	R816 C5	R829 B2	R845 A5	R859 B6	R899 A1	S809 A4	X870 B5
C802 C3	C816 B5	C841 A1	C882 C1	D822 A2	J811 C2	J826 A5	J840 C3	J854 C6	J868 A5	J883 C6	J897 A5	J912 B5	Q809 B1	R817 C5	R830 C2	R846 C1	R860 B6	R902 C1	S810 A4	
C803 C3	C817 A6	C842 B1	C883 C6	IC81 A5	J812 C2	J827 A5	J841 A5	J855 C1	J869 A5	J884 C6	J898 A5	JK81 A1	Q808 A6	R818 B4	R831 C2	R847 B5	R861 A5	R903 C6	S811 B4	
C804 C1	C818 B1	C842 B1	CN59 A1	IC83 C3	J813 C2	J828 A6	J842 A5	J856 C2	J870 B5	J885 B1	J899 B6	JW82 C1	Q802 A3	R818 B5	R832 B4	R848 B5	R862 A6	R922 B4	S812 B4	
C805 C1	C819 C5	C843 B1	CN82 A4	IC87 B6	J814 C2	J829 A6	J843 B5	J857 C2	J871 B5	J886 B2	J900 B6	JW83 C6	Q803 A2	R819 C5	R835 C5	R849 B5	R863 A6	R923 B5	S813 B4	
C806 A5	C820 B4	C861 A5	CN84 B1	J801 B1	J815 C2	J830 B6	J844 B5	J858 C2	J872 B5	J887 B2	J901 C6	L801 A6	R804 A2	R820 C5	R836 C5	R850 B5	R865 B1	RC81 C1	S814 B4	
C807 A6	C821 C1	C870 B6	CW81 B1	J802 C1	J816 A4	J831 B6	J845 B5	J859 C2	J873 B5	J888 B2	J902 C2	L802 A6	R805 B2	R821 C1	R837 C5	R851 A6	R866 B2	S801 A3	S814 B4	
C808 A6	C821 B6	C871 B6	D801 C2	J803 C1	J817 A4	J832 C5	J846 B5	J860 C2	J874 B5	J889 C2	J903 B3	Q801 A2	R806 C1	R822 B2	R838 C5	R852 A5	R867 A2	S802 A3	S815 C6	



IC81 74LCX08MX

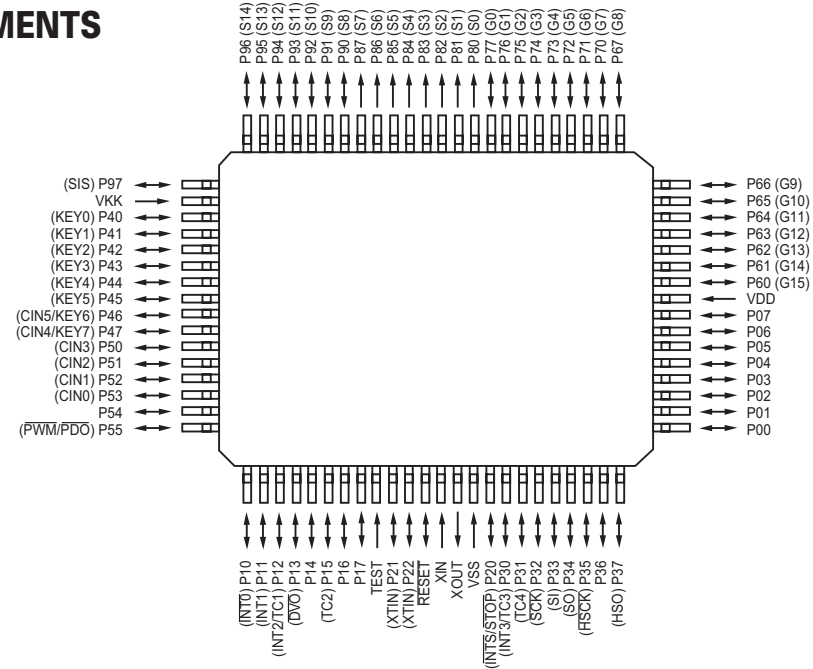
Pin NO.	Voltage	Pin NO.	Voltage
1	4.84	9	2.57
2	2.57	10	4.84
3	2.57	11	2.57
4	4.84	12	2.57
5	2.57	13	4.84
6	2.57	14	2.57
7	0		
8	2.57		

IC83 TMP87PS71F

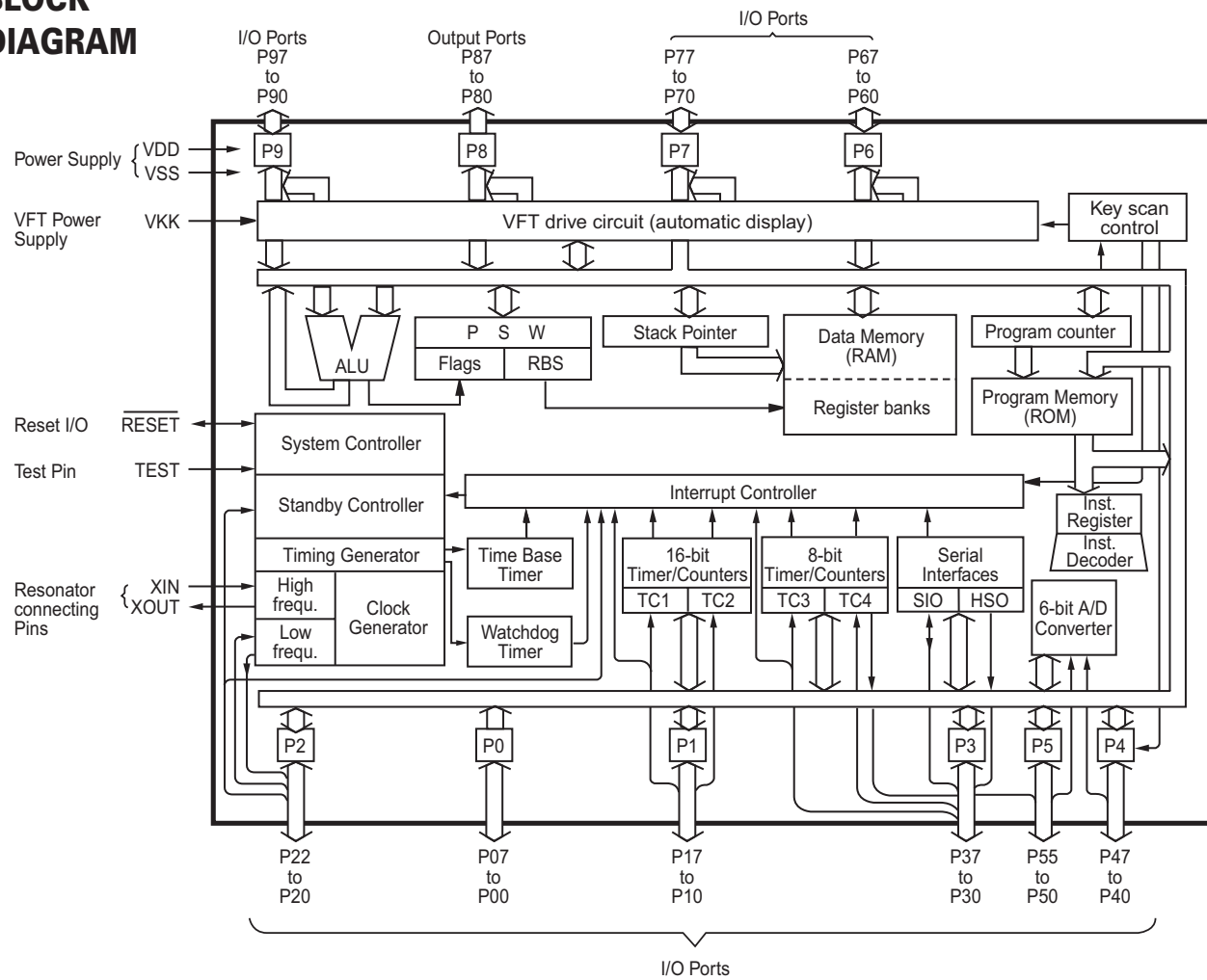
Pin NO.	Voltage	Pin NO.	Voltage	Pin NO.	Voltage	Pin NO.	Voltage	Pin NO.	Voltage	Pin NO.	Voltage	Pin NO.	Voltage	Pin NO.	Voltage
1	1.06	10	0.71	19	0.85	28	5.01	37	-24.5	46	-27.3	55	-16.2	64	-11
2	4.71	11	0.72	20	0	29	0	38	-24.5	47	-24.6	56	-27.4	65	-24.6
3	1.58	12	4.77	21	0.04	30	0	39	-24.5	48	-27.3	57	-18.9	66	-27.6
4	1.7	13	2.32	22	4.84	31	0	40	-24.5	49	-21.8	58	-19	67	0
5	3.38	14	2.43	23	4.84	32	0	41	-24.6	50	-19.1	59	-13.6	68	0
6	0.04	15	0	24	4.84	33	4.77	42	-24.6	51	-10.8	60	-24.6	69	0
7	0.04	16	4.72	25	4.71	34	-24.6	43	-24.6	52	-27.4	61	-27.4	70	4.84
8	0.04	17	4.7	26	4.83	35	-24.5	44	-24.6	53	-27.4	62	-21.9	71	4.85
9	0	18	4.82	27	4.69	36	-24.5	45	-27.3	54	-27.4	63	-1.09	72	4.85

μ-COM IC PIN ASSIGNMENT & BLOCK DIAGRAM.

**PIN ASSIGNMENTS
(TOP VIEW)**

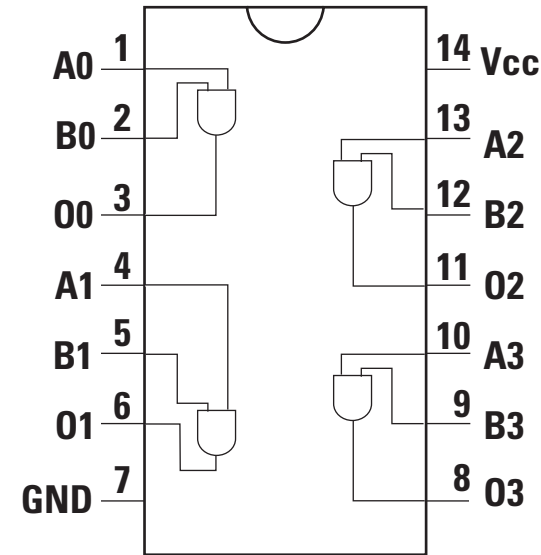


**BLOCK
DIAGRAM**

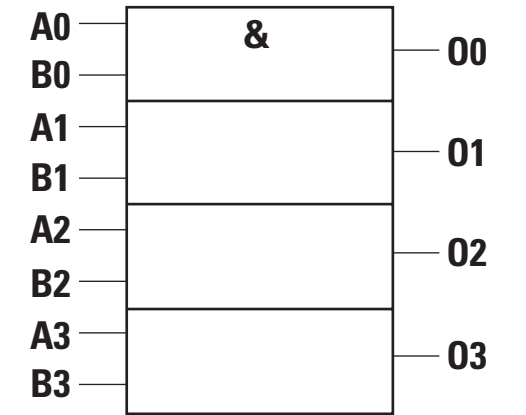


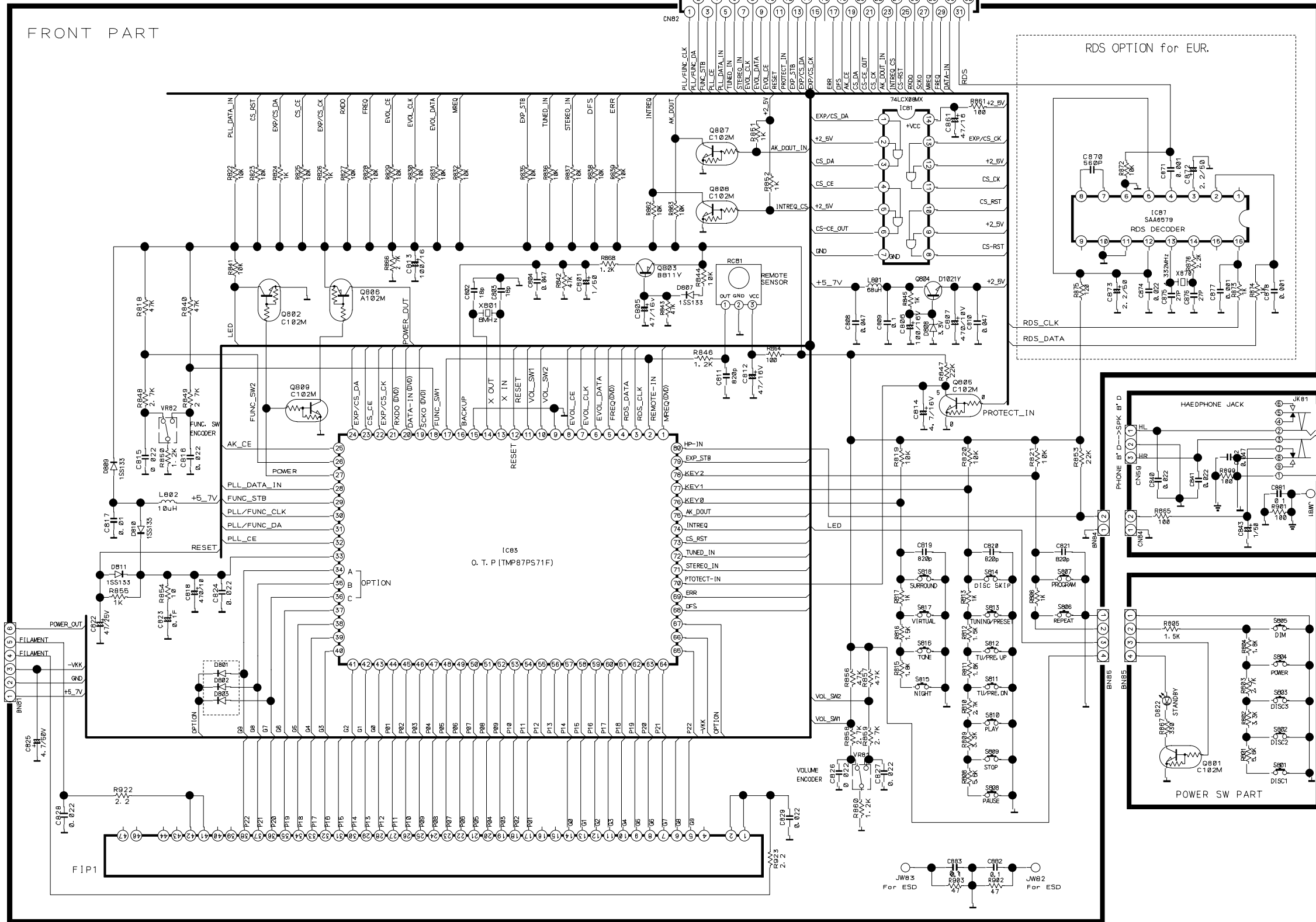
74CX08 (AND GATE)

■ Connection Diagram



■ Logic Symbol





- BN81 C1
- BN84 C5
- BN85 C5
- BN85 C5
- BN85 C5
- C801 B3
- C802 B3
- C803 B3
- C804 B3
- C805 B3
- C806 B4
- C807 B4
- C808 B4
- C809 B4
- C810 B4
- C811 B4
- C812 B4
- C814 B4
- C815 B2
- C816 B2
- C818 C2
- C819 C4
- C820 C4
- C821 C5
- C822 C2
- C823 C2
- C824 C2
- C825 C1
- C826 C4
- C827 C4
- C828 D1
- C829 D4
- C840 C5
- C841 C5
- C842 B5
- C843 B3
- C843 C5
- C861 A4
- C870 B5
- C871 B5
- C872 B5
- C873 B5
- C874 B5
- C875 B5
- C876 B5
- C877 B5
- C878 B5
- C881 C5
- C882 D4
- CN59 B5
- CN84 C5
- D801 C2
- D802 C2
- D803 C2
- D807 B3
- D808 B4
- D809 B2
- D810 C2
- D811 C2
- D822 C5
- IC81 A4
- IC83 C3
- IC87 B5
- JW81 C5
- JW82 D5
- JW83 D4
- L801 B4
- L802 C2
- Q801 C5
- Q802 B2
- Q803 B3
- Q804 B4
- Q805 B4
- Q806 B2
- Q807 A4
- Q808 B4
- Q809 B2
- R801 C5
- R802 C5
- R803 C5
- R804 C5
- R805 C5
- R806 C5
- R808 C4
- R809 C4
- R810 C4
- R811 C4
- R812 C4
- R813 C4
- R818 B2
- R819 B4
- R820 B4
- R821 B5
- R822 B2
- R823 B2
- R824 B2
- R825 B2
- R826 B2
- R827 B2
- R828 B2
- R829 B2
- R830 B3
- R831 B3
- R832 B3
- R833 B3
- R836 B3
- R837 B3
- R838 B3
- R839 B3
- R840 B2
- R841 B2
- R842 B3
- R844 B4
- R846 B4
- R847 B4
- R848 B2
- R849 B2
- R850 B2
- R852 B4
- R853 B5
- R854 C2
- R855 C2
- R856 C4
- R857 C4
- R858 C4
- R859 C4
- R860 D4
- R861 A4
- R862 B3
- R863 B3
- R864 B4
- R865 C5
- R866 B2
- R867 C5
- R868 B3
- R872 B5
- R873 B5
- R874 B5
- R875 B5
- R899 C5
- R901 C5
- R902 D4
- R903 D4
- R922 D2
- R923 D4
- RC81 B4
- S801 C5
- S802 C5
- S803 C5
- S804 C5
- S805 C5
- S806 C5
- S807 C5
- S808 C4
- S809 C4
- S810 C4
- S811 C4
- S812 C4
- S813 C4
- S814 C4
- S815 C4
- S816 C4
- S817 C4
- S818 C4
- VR82 B2
- X801 B3

ELECTRICAL PARTS LIST - FRONT BOARD (including HEADPHONE BOARD)

MISCELLANEOUS

CN82	9965 000 13353	WAFER, CARD CABLE 32PIN
FIP1	9965 000 13539	FTD DISPLAY HNA-11SM29
JK81	9965 000 13541	JACK, HEADPHONE HTJ-064-05NG
RC81	9965 000 13546	REM CONTROL SENSER KSM-603TH2
S801	9965 000 13548	TACT SWITCH SKHV10910G
S802	9965 000 13548	TACT SWITCH SKHV10910G
S803	9965 000 13548	TACT SWITCH SKHV10910G
S804	9965 000 13548	TACT SWITCH SKHV10910G
S805	9965 000 13548	TACT SWITCH SKHV10910G
S806	9965 000 13548	TACT SWITCH SKHV10910G
S807	9965 000 13548	TACT SWITCH SKHV10910G
S808	9965 000 13548	TACT SWITCH SKHV10910G
S809	9965 000 13548	TACT SWITCH SKHV10910G
S810	9965 000 13548	TACT SWITCH SKHV10910G
S811	9965 000 13548	TACT SWITCH SKHV10910G
S812	9965 000 13548	TACT SWITCH SKHV10910G
S813	9965 000 13548	TACT SWITCH SKHV10910G
S814	9965 000 13548	TACT SWITCH SKHV10910G
S815	9965 000 13548	TACT SWITCH SKHV10910G
S816	9965 000 13548	TACT SWITCH SKHV10910G
S817	9965 000 13548	TACT SWITCH SKHV10910G
S818	9965 000 13548	TACT SWITCH SKHV10910G
VR81	9965 000 13549	ROTARY ENCODER, VOLUME
VR82	9965 000 13550	ROTARY ENCODER, SOURCE
X801	9965 000 13551	CRYSTAL 8MHZ
X870	9965 000 16116	CRYSTAL 4,332MHZ /22S

CAPACITORS

C801	9965 000 13530	CAP, ELECT 1UF 50V
C802	9965 000 13531	CAP, CERAMIC 18PF 50V
C803	9965 000 13531	CAP, CERAMIC 18PF 50V
C804	9965 000 13508	CAP, CERAMIC 0,047UF 50V Z
C805	9965 000 13532	CAP, ELECT 47UF 16V
C806	9965 000 13533	CAP, ELECT 100UF 16V
C807	9965 000 13271	CAP, ELECT 470UF 10V
C808	9965 000 13508	CAP, CERAMIC 0,047UF 50V Z
C809	9965 000 13276	CAP, CERAMIC 0,1UF 50V Z
C810	9965 000 13508	CAP, CERAMIC 0,047UF 50V Z
C811	9965 000 13470	CAP, CERAMIC 820PF 50V K
C812	9965 000 13532	CAP, ELECT 47UF 16V
C813	9965 000 13263	CAP, ELECT 100UF 16V
C814	9965 000 13536	CAP, ELECT 4,7UF 50V
C815	9965 000 13378	CAP, CERAMIC 0,022UF 50V Z
C816	9965 000 13378	CAP, CERAMIC 0,022UF 50V Z
C817	9965 000 13378	CAP, CERAMIC 0,022UF 50V Z
C818	9965 000 13271	CAP, ELECT 470UF 10V
C819	9965 000 13470	CAP, CERAMIC 820PF 50V K
C820	9965 000 13470	CAP, CERAMIC 820PF 50V K
C821	9965 000 13470	CAP, CERAMIC 820PF 50V K
C822	9965 000 13243	CAP, ELECT 47UF 25V
C823	9965 000 13537	CAP, GOLD 0,1F
C824	9965 000 13266	CAP, CERAMIC 0,01UF 50V Z

C825	9965 000 13536	CAP, ELECT 4,7UF 50V
C826	9965 000 13378	CAP, CERAMIC 0,022UF 50V Z
C827	9965 000 13378	CAP, CERAMIC 0,022UF 50V Z
C828	9965 000 13378	CAP, CERAMIC 0,022UF 50V Z
C829	9965 000 13378	CAP, CERAMIC 0,022UF 50V Z
C840	9965 000 13378	CAP, CERAMIC 0,022UF 50V Z
C841	9965 000 13378	CAP, CERAMIC 0,022UF 50V Z
C842	9965 000 13508	CAP, CERAMIC 0,047UF 50V Z
C843	9965 000 13506	CAP, ELECT 1UF 50V
C861	9965 000 13532	CAP, ELECT 47UF 16V
C870	9965 000 16112	CAP, CERAMIC 560PF 50V 10% /22S
C871	9965 000 16113	CAP, CERAMIC 1NF 50V +80/-20% /22S
C872	9965 000 16114	CAP, CERAMIC 2,2UF 50V /22S
C873	9965 000 16114	CAP, CERAMIC 2,2UF 50V /22S
C874	9965 000 13378	CAP, CERAMIC 0,022UF 50V Z /22S
C875	9965 000 16115	CAP, CERAMIC 39PF 50V 5% /22S
C876	9965 000 16115	CAP, CERAMIC 39PF 50V 5% /22S
C877	9965 000 16113	CAP, CERAMIC 1NF 50V +80/-20% /22S
C878	9965 000 16113	CAP, CERAMIC 1NF 50V +80/-20% /22S
C881	9965 000 13276	CAP, CERAMIC 0,1UF 50V Z
C882	9965 000 13276	CAP, CERAMIC 0,1UF 50V Z
C883	9965 000 13276	CAP, CERAMIC 0,1UF 50V Z

RESISTORS

R801	9965 000 13380	RES, CARBON 5,6K 1/5W J
R802	9965 000 13286	RES, CARBON 3,3K 1/5W J
R803	9965 000 13543	RES, CARBON 2,7K 1/5W J
R804	9965 000 13522	RES, CARBON 1,8K 1/5W J
R805	9965 000 13487	RES, CARBON 1,5K 1/5W J
R806	9965 000 13290	RES, CARBON 1K 1/5W J
R808	9965 000 13380	RES, CARBON 5,6K 1/5W J
R809	9965 000 13286	RES, CARBON 3,3K 1/5W J
R810	9965 000 13543	RES, CARBON 2,7K 1/5W J
R811	9965 000 13522	RES, CARBON 1,8K 1/5W J
R812	9965 000 13487	RES, CARBON 1,5K 1/5W J
R813	9965 000 13290	RES, CARBON 1K 1/5W J
R815	9965 000 13522	RES, CARBON 1,8K 1/5W J
R816	9965 000 13487	RES, CARBON 1,5K 1/5W J
R817	9965 000 13290	RES, CARBON 1K 1/5W J
R818	9965 000 13284	RES, CARBON 47K 1/5W J
R819	9965 000 13335	RES, CARBON 10K 1/5W J
R820	9965 000 13335	RES, CARBON 10K 1/5W J
R821	9965 000 13335	RES, CARBON 10K 1/5W J
R822	9965 000 13335	RES, CARBON 10K 1/5W J
R823	9965 000 13335	RES, CARBON 10K 1/5W J
R824	9965 000 13290	RES, CARBON 1K 1/5W J
R825	9965 000 13335	RES, CARBON 10K 1/5W J
R826	9965 000 13290	RES, CARBON 1K 1/5W J
R827	9965 000 13335	RES, CARBON 10K 1/5W J
R828	9965 000 13335	RES, CARBON 10K 1/5W J
R829	9965 000 13335	RES, CARBON 10K 1/5W J
R830	9965 000 13335	RES, CARBON 10K 1/5W J

ELECTRICAL PARTS LIST - FRONT BOARD (including HEADPHONE BOARD)

R831	9965 000 13335	RES, CARBON 10K 1/5W J
R832	9965 000 13335	RES, CARBON 10K 1/5W J
R835	9965 000 13335	RES, CARBON 10K 1/5W J
R836	9965 000 13335	RES, CARBON 10K 1/5W J
R837	9965 000 13335	RES, CARBON 10K 1/5W J
R838	9965 000 13335	RES, CARBON 10K 1/5W J
R839	9965 000 13335	RES, CARBON 10K 1/5W J
R840	9965 000 13284	RES, CARBON 47K 1/5W J
R841	9965 000 13335	RES, CARBON 10K 1/5W J
R842	9965 000 13284	RES, CARBON 47K 1/5W J
R843	9965 000 13284	RES, CARBON 47K 1/5W J
R844	9965 000 13335	RES, CARBON 10K 1/5W J
R845	9965 000 13290	RES, CARBON 1K 1/5W J
R846	9965 000 13544	RES, CARBON 1,2K 1/5W J
R847	9965 000 13485	RES, CARBON 22K 1/5W J
R848	9965 000 13543	RES, CARBON 2,7K 1/5W J
R849	9965 000 13543	RES, CARBON 2,7K 1/5W J
R850	9965 000 13544	RES, CARBON 1,2K 1/5W J
R851	9965 000 13522	RES, CARBON 1,8K 1/5W J
R852	9965 000 13522	RES, CARBON 1,8K 1/5W J
R853	9965 000 13485	RES, CARBON 22K 1/5W J
R854	9965 000 13341	RES, CARBON 10R 1/5W J
R855	9965 000 13290	RES, CARBON 1K 1/5W J
R856	9965 000 13284	RES, CARBON 47K 1/5W J
R857	9965 000 13284	RES, CARBON 47K 1/5W J
R858	9965 000 13543	RES, CARBON 2,7K 1/5W J
R859	9965 000 13543	RES, CARBON 2,7K 1/5W J
R860	9965 000 13543	RES, CARBON 2,7K 1/5W J
R861	9965 000 13545	RES, CARBON 100R 1/5W J
R862	9965 000 13335	RES, CARBON 10K 1/5W J
R863	9965 000 13335	RES, CARBON 10K 1/5W J
R864	9965 000 13545	RES, CARBON 100R 1/5W J
R865	9965 000 13545	RES, CARBON 100R 1/5W J
R866	9965 000 13543	RES, CARBON 2,7K 1/5W J
R867	9965 000 13547	RES, CARBON 330R 1/5W J
R868	9965 000 13544	RES, CARBON 1,2K 1/5W J
R872	9965 000 13335	RES, CARBON 10K 1/5W J /22S
R873	9965 000 13290	RES, CARBON 1K 1/5W J /22S
R874	9965 000 13290	RES, CARBON 1K 1/5W J /22S
R875	9965 000 13283	RES, CARBON 120R 1/5W J /22S
R876	9965 000 13545	RES, CARBON 100R 1/5W J /22S
R899	9965 000 13545	RES, CARBON 100R 1/5W J
R901	9965 000 13545	RES, CARBON 100R 1/5W J
R902	9965 000 13489	RES, CARBON 47R 1/5W J
R903	9965 000 13489	RES, CARBON 47R 1/5W J
R922	9965 000 13496	RES, CARBON 2,2R 1/4W J
R923	9965 000 13496	RES, CARBON 2,2R 1/4W J

COILS & FILTERS

L801	9965 000 13542	COIL, AXIAL 68UH K
L802	9965 000 13277	COIL, AXIAL 10UH K

DIODES

D801	9965 000 04668	1SS133T-77 T26
D802	9965 000 04668	1SS133T-77 T26
D803	9965 000 04668	1SS133T-77 T26
D807	9965 000 04668	1SS133T-77 T26
D808	9965 000 10585	3,3V 1/2W
D809	9965 000 04668	1SS133T-77 T26
D810	9965 000 04668	1SS133T-77 T26
D811	9965 000 04668	1SS133T-77 T26
D822	9965 000 13538	LED, RED SLR342VCTB7T089

TRANSISTORS & INTEGRATED CIRCUITS

Q801	4822 130 60588	DTC114ES
Q802	4822 130 60588	DTC114ES
Q803	4822 130 11613	KSB811Y
Q804	4822 130 11612	KSD1021Y
Q805	4822 130 60588	DTC114ES
Q806	4822 130 61227	DTA114ES
Q807	4822 130 60588	DTC114ES
Q808	4822 130 60588	DTC114ES
Q809	4822 130 60588	DTC114ES
IC81	9965 000 10595	74LCX08MX
IC83	9965 000 13540	UPROCESSOR TMP87PS71F
IC87	4822 209 31981	SAA6579T

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

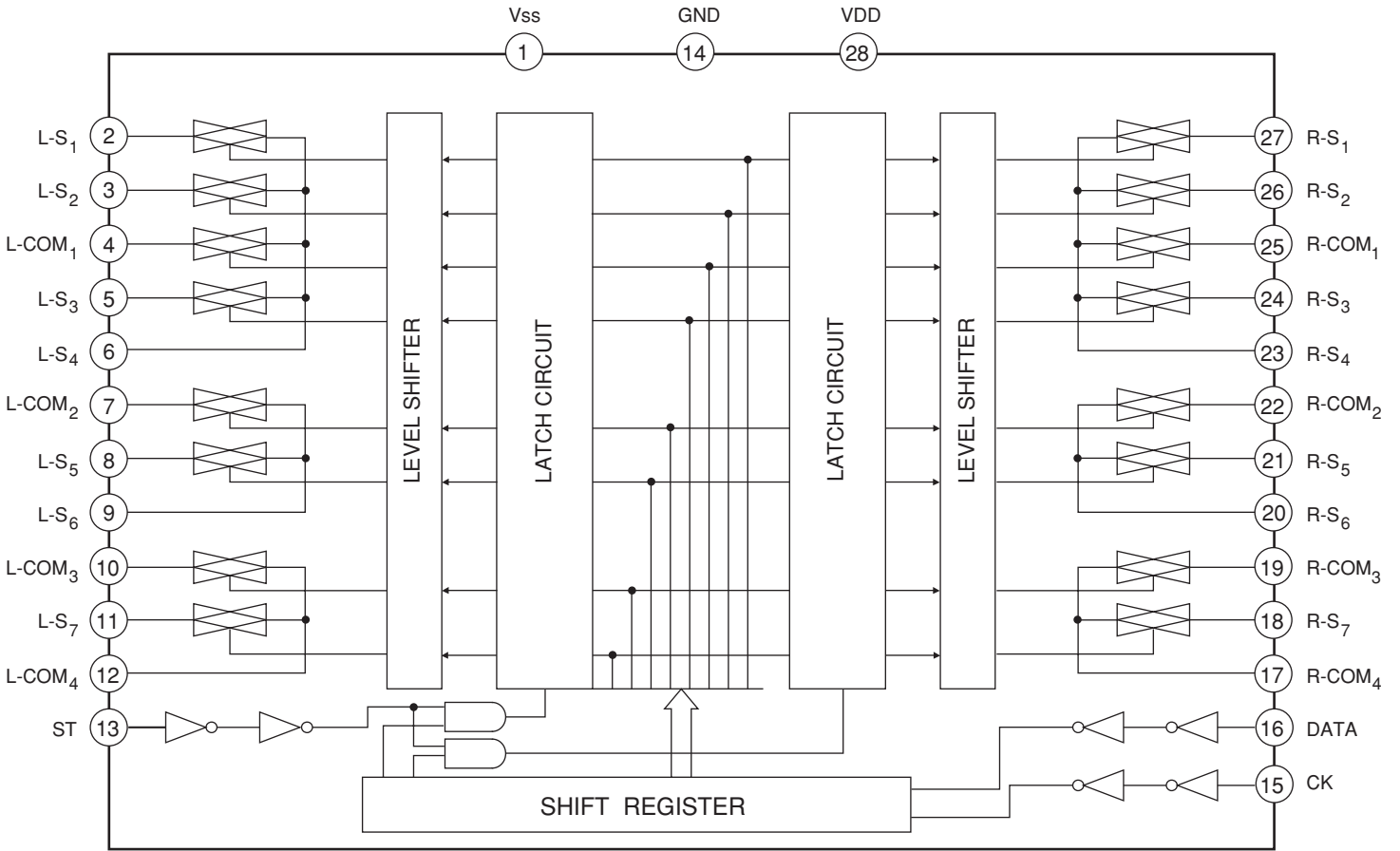
MAIN BOARD

Includes Audio-I/O, Video-I/O & Connect Boards)

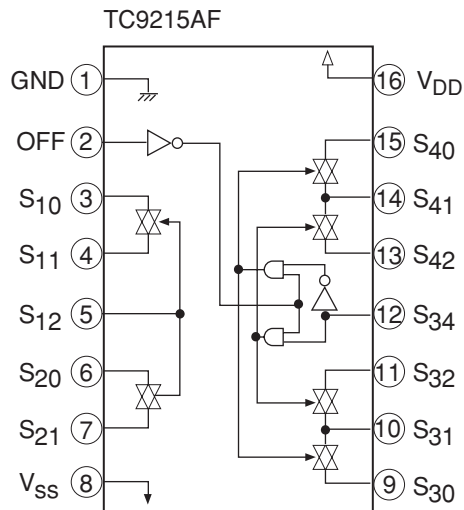
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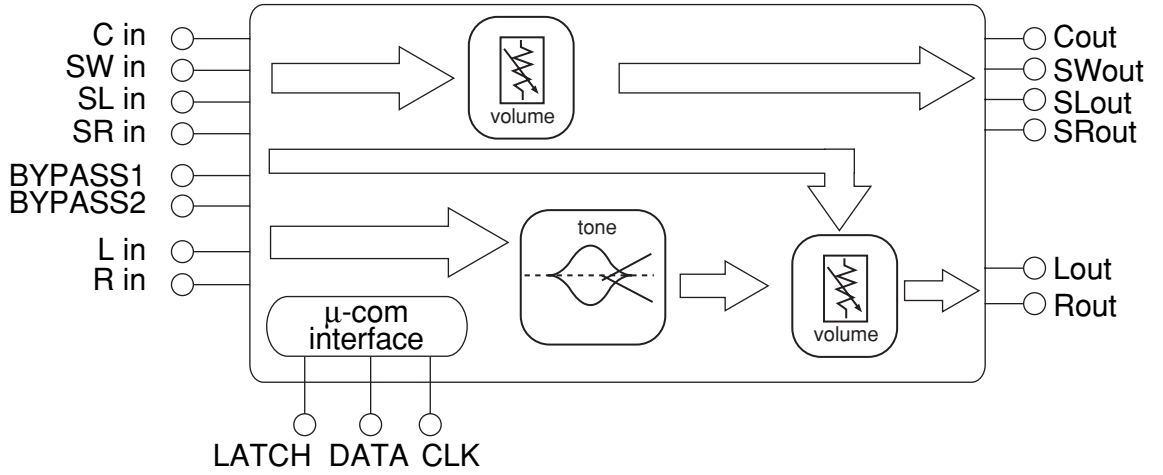
TC9164AF (FUNCTION/INPUT : IC18)



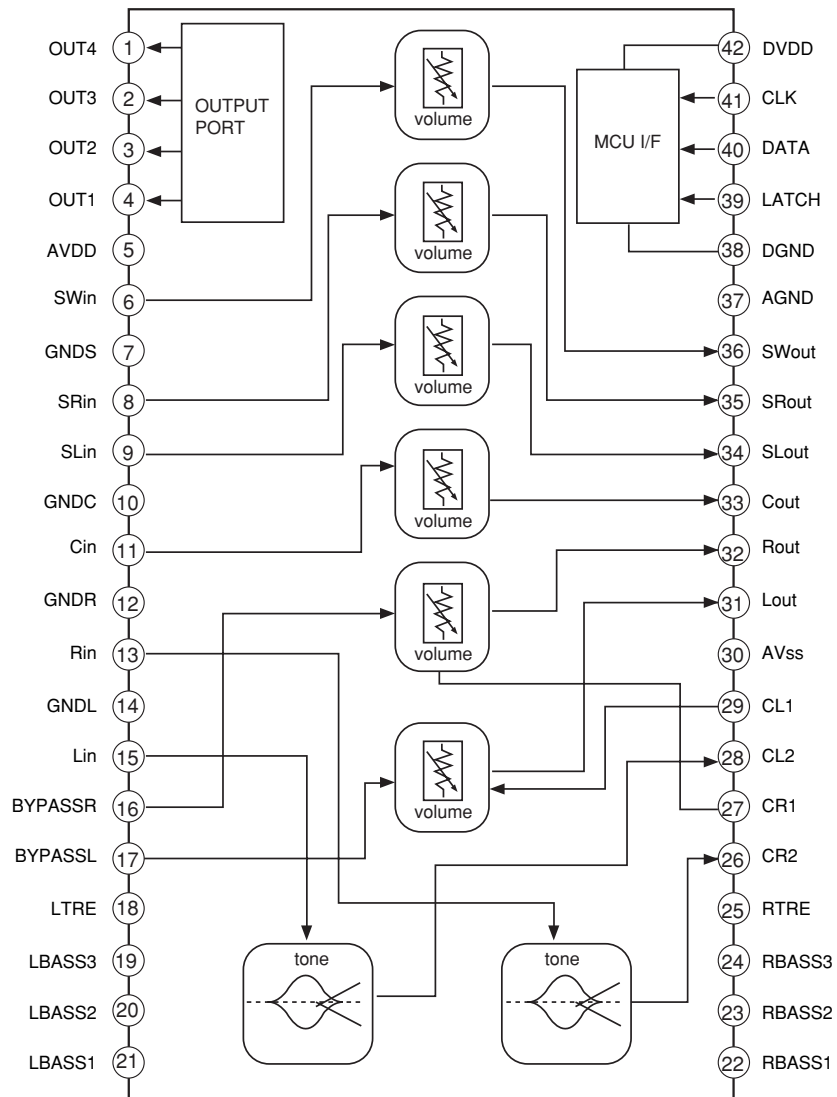
TC9215AF (FUNCTION/MAIN : IC27)



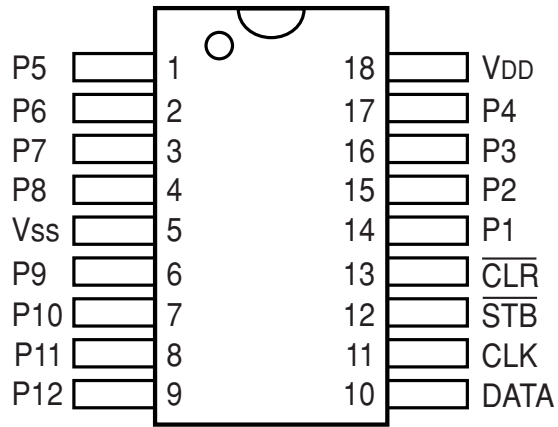
**M62446FP (ELECTRONIC VOLUME/INPUT : IC19)
SYSTEM BLOCK DIAGRAM**



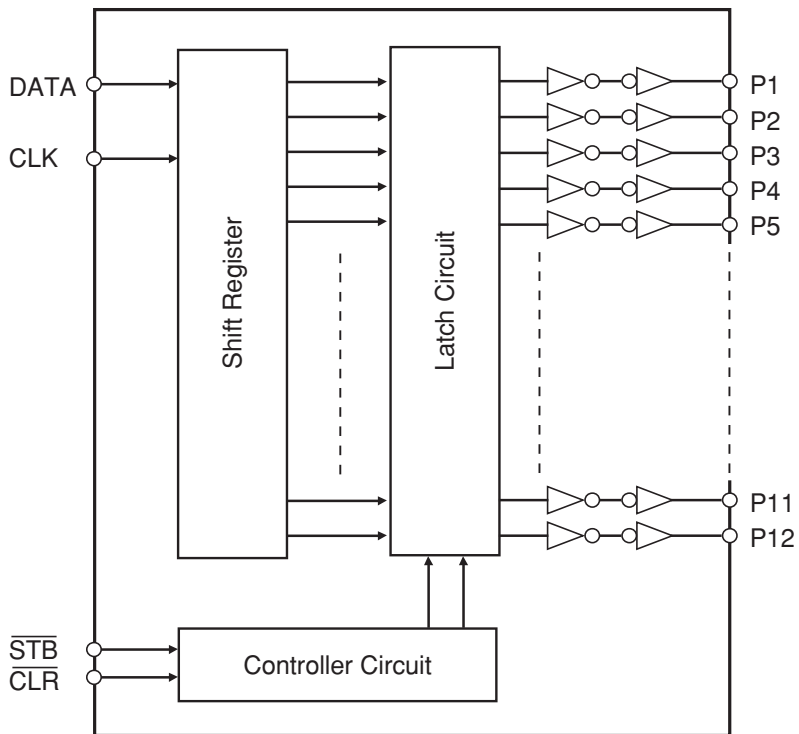
PIN CONFIGURATION AND IC INTERNAL BLOCK DIAGRAM



NJU3713
(IC28 : EXPANDER / MAIN)



BLOCK DIAGRAM



IC 27(TC9215AF)		
PIN NO.	DESCRIPTION	VOLTAGE
1	GND	0
2	GND	0
3	MIX-L	0
4	L-CH	0
5	MIX-ON	0
6	R-CH	0
7	MIX-R	0
8	VSS	-12
9	RT-OUT	0
10	FR-CH	0
11	DSP-FR	0
12	DSP-ON	12
13	DSP-FL	0
14	FL-CH	0
15	LT-OUT	0
16	VCC	12

OP-AMP		
PIN NO.	DESCRIPTION	VOLTAGE
1	A OUTPUT	0
2	A - INPUT	0
3	A + INPUT	0
4	V -	-12
5	B + INPUT	0
6	B - INPUT	0
7	B OUTPUT	0
8	V +	12

IC 91(12V REGULATOR)		
PIN NO.	DESCRIPTION	VOLTAGE
1	IN	17.8
2	OUT	12
3	GND	0
4	ENABLE	4.9

IC 28(NJU3713G)		
PIN NO.	DESCRIPTION	VOLTAGE
1	F_MUTE	0
2	RELAY_ON	0
3	PM	0
4	V_SW1	0
5	GND	0
6	V_SW2	0
7	AK_RST	2.5
8	DVD_RST	5
9	SUB_ON	5
10	EXP/CS_DA	5
11	EXP/CS_CK	5
12	EXP_STB	5
13	CLR	5
14	NIGHT_LED	0
15	DVD	0
16	MIX	5
17	DSP	0
18	VDD	5

IC 95(5V REGULATOR)		
PIN NO.	DESCRIPTION	VOLTAGE
1	IN	7.6
2	OUT	4.9
3	GND	0
4	ENABLE	4.9

REF. NO.	E	C	B
Q575~Q580	42.7	40.6	42.2
Q581~Q586	42.2	0.8	40.6
Q587~Q598	0.6	-40.6	0
Q641~Q646	-40.8	39.3	-40.6
Q647~Q652	40.9	7.9	41.1
Q665~Q670	-41.1	-7.9	39.3
Q683~Q688	-1	1	0.4
Q701~Q706	41.6	1	40.9
Q707~Q712	-41.8	-1	-41.1
Q725~Q730	0.5	43	1
Q731~Q736	-0.5	-43	-1
Q743~Q748	0	43.4	0.5
Q749~Q754	0	-43.4	-0.5
Q791~Q796	0	12	0
Q971	12	0	12
Q974	12	0.7	11.5
Q977	0	11.4	0.4
Q979	0	12	0
Q981,Q982	0	12	0

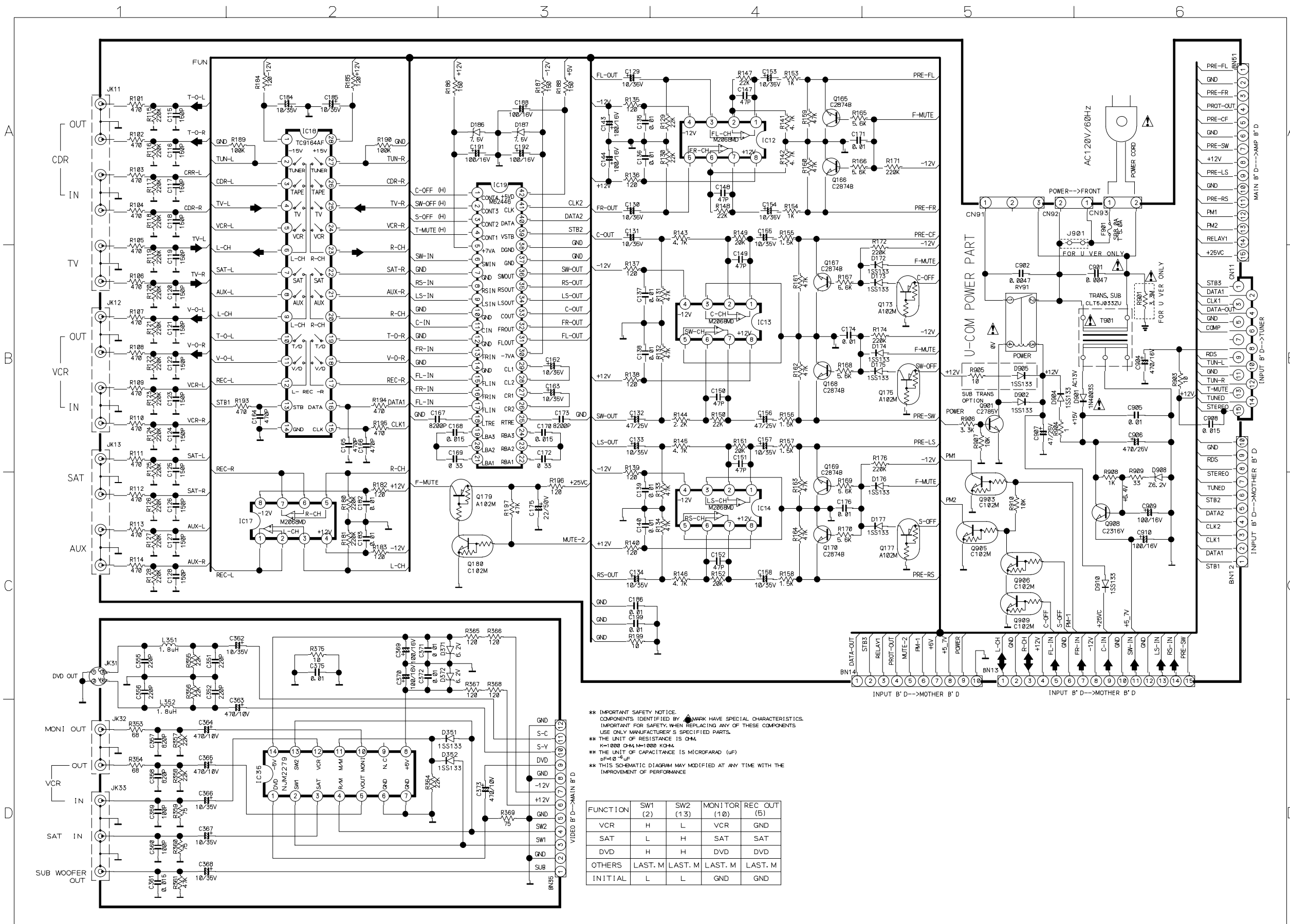
MAIN BOARD

IC 92(12V REGULATOR)		
PIN NO.	DESCRIPTION	VOLTAGE
1	IN	17.3
2	GND	0
3	OUT	12

REF. NO.	E	C	B
Q165~Q170	0	0	-11.7
Q173,Q175,Q177	0	-12.2	0
Q179	20.2	11.8	20
Q180	0	20	0
Q284	0	0	5.7
Q285	0	5.7	0
Q286	4.8	4.8	0
Q287,Q288	0	0	0.7
Q291	4.4	4.4	0
Q292	-12	-12	4.4
Q293	0	0	5
Q294	0	12	0
Q901	0	0	0.7
Q903	0	0	4.9
Q905	0	0	2.8
Q906	0	2.8	0
Q909	0	0	0
Q908	5.8	15.2	6.4
Q940	-28.6	-32.4	-29.2

MAIN BOARD

MAIN CIRCUIT DIAGRAM (Audio-I/O and Video-I/O Boards)

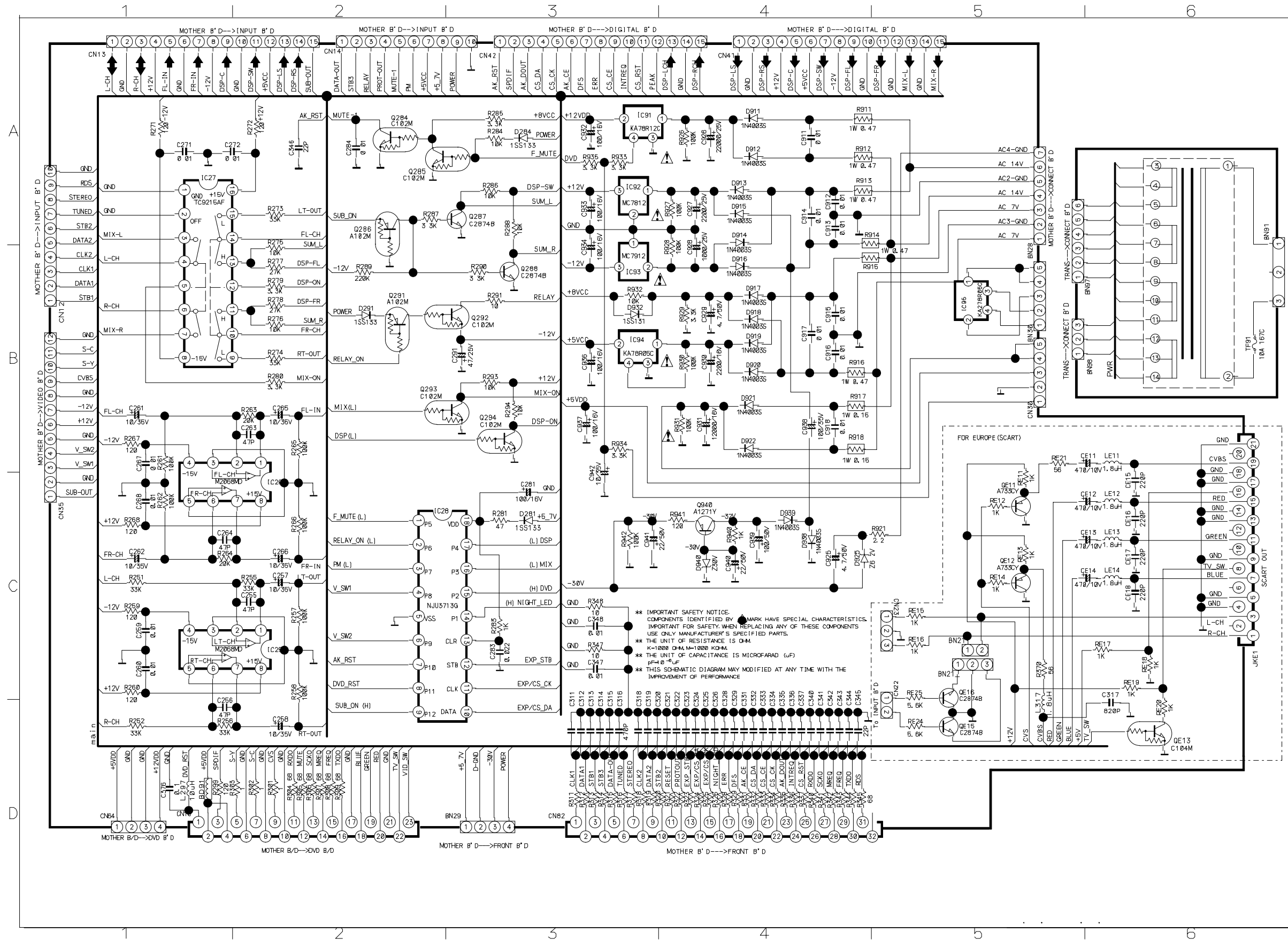


**** IMPORTANT SAFETY NOTICE.**
 COMPONENTS IDENTIFIED BY MARK HAVE SPECIAL CHARACTERISTICS.
 IMPORTANT FOR SAFETY, WHEN REPLACING ANY OF THESE COMPONENTS
 USE ONLY MANUFACTURER'S SPECIFIED PARTS.
 ** THE UNIT OF RESISTANCE IS OHM.
 K=1000 OHM, M=1000 KOHM.
 ** THE UNIT OF CAPACITANCE IS MICROFARAD (UF)
 UF=10⁻⁶ FARAD
 ** THIS SCHEMATIC DIAGRAM MAY BE MODIFIED AT ANY TIME WITH THE
 IMPROVEMENT OF PERFORMANCE

FUNCTION	SW1 (2)	SW2 (13)	MONITOR (10)	REC OUT (5)
VCR	H	L	VCR	GND
SAT	L	H	SAT	SAT
DVD	H	H	DVD	DVD
OTHERS	LAST. M	LAST. M	LAST. M	LAST. M
INITIAL	L	L	GND	GND

- BN12 C6
- BN13 C5
- BN14 C5
- BN35 D3
- BN51 A6
- C115 A1
- C116 A1
- C117 A1
- C118 A1
- C119 B1
- C120 B1
- C121 B1
- C122 B1
- C123 B1
- C124 B1
- C125 B1
- C126 C1
- C127 C1
- C128 C1
- C129 A3
- C130 A3
- C131 A3
- C132 B3
- C133 B3
- C134 C3
- C135 A3
- C136 A3
- C137 B3
- C138 B3
- C139 C3
- C140 C3
- C143 A3
- C144 A3
- C147 A4
- C148 A4
- C149 B4
- C150 B4
- C151 B4
- C152 C4
- C153 A4
- C154 A4
- C155 A4
- C156 B4
- C157 B4
- C158 C4
- C162 B3
- C163 B3
- C164 B2
- C165 B2
- C166 B2
- C167 B3
- C168 B3
- C169 B3
- C170 B3
- C171 A4
- C172 B3
- C173 B3
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- C175 C3
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- C182 C2
- C183 C2
- C184 A2
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- C186 C3
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- C191 A3
- C192 A3
- C199 C3
- C351 C1
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- CN11 B6
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- CN92 A5
- CN93 A6
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- D176 C5
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- D187 A3
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- D371 C3
- D372 C3
- D901 B6
- D902 B5
- D904 B5
- D905 B5
- D906 C6
- D910 C6
- F901 A6
- IC13 B4
- IC14 C4
- IC17 C2
- IC18 A2
- IC35 D2
- J901 C1
- JK11 A1
- JK12 B1
- JK13 B1
- JK31 C1
- JK32 D1
- JK33 D1
- L351 H
- L352 H
- L353 H
- L354 H
- L355 H
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- N177 C5
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- N287 B1
- N288 B1
- N289 B1
- N290 B1
- N291 B5
- T901 B6

MAIN CIRCUIT DIAGRAM (Mother Board)



BD91	D1	D915	A4	R335	D4
BN97	A5	D916	B4	R336	D4
BN28	A5	D917	B4	R337	D4
BN29	D3	D918	B4	R340	D4
BN30	B5	D919	B4	R341	D4
BN91	B6	D920	B4	R342	D4
BN98	B5	D921	B4	R343	D4
C255	C2	D922	B4	R344	D4
C256	D1	D925	C4	R345	D4
C257	C2	D932	B3	R347	C3
C258	D2	D938	C4	R348	C3
C259	C1	D939	C4	R911	A4
C260	C1	D940	C4	R912	A4
C261	B1	IC25	C1	R913	A4
C262	C1	IC26	C1	R914	A4
C263	B2	IC27	A1	R916	B4
C264	C1	IC28	C2	R917	B4
C265	B2	IC91	A3	R918	B4
C266	C2	IC92	A3	R921	C4
C267	B1	IC93	B3	R926	A4
C268	C1	IC94	B3	R927	A4
C271	A1	IC95	B5	R928	A4
C272	A1	L297	C2	R929	B4
C281	C3	L317	C5	R930	B4
C283	C3	Q284	A2	R931	B4
C284	A2	Q285	A2	R932	B3
C291	B3	Q286	A2	R933	A3
C311	D3	Q287	A3	R934	B3
C312	D3	Q288	B3	R935	A3
C313	D3	Q291	B2	R940	C4
C314	D3	Q292	B3	R941	C4
C315	D3	Q293	B2	R942	C3
C316	D3	Q294	B3	TF91	B6
C317	D5	Q940	C1	CN23	C5
C318	D3	R251	C1	CN22	C5
C319	D3	R252	D1	RE11	B5
C320	D4	R255	C2	RE12	C5
C321	D4	R256	D1	RE13	C5
C322	D4	R257	C2	RE14	C5
C323	D4	R258	C2	RE15	C5
C324	D4	R259	C1	RE16	C5
C325	D4	R260	C1	RE17	C5
C326	D4	R261	B1	RE18	C6
C328	D4	R262	B1	RE19	C6
C329	D4	R263	B2	RE20	C6
C331	D4	R264	C1	RE21	B5
C332	D4	R265	B2	RE24	C5
C333	D4	R266	C2	RE25	D5
C334	D4	R267	B1	R370	C5
C335	D4	R268	C1	LE11	B6
C336	D4	R271	A1	LE12	C6
C337	D4	R272	A2	LE13	C6
C340	D4	R273	A2	LE14	C6
C341	D4	R274	B2	L317	D5
C342	D4	R275	B2	CE15	C6
C343	D4	R276	B2	CE16	C6
C344	D4	R277	B2	CE17	C6
C345	D4	R278	B2	CE18	C6
C346	A2	R279	B2	C317	D6
C347	C3	R280	C2	CE11	C6
C348	C3	R281	B3	CE12	C6
C376	C2	R283	C3	CE13	C6
C911	A4	R284	A3	CE14	C6
C912	A4	R285	A3	QE11	C5
C913	A4	R286	A3	QE12	C5
C914	A4	R287	A2	QE13	D6
C915	B4	R288	A3	QE15	D6
C916	B4	R289	B2	QE16	D6
C917	B4	R290	B3	BN21	C6
C918	B4	R291	B3	JKE1	C6
C925	C4	R293	B3		
C926	A4	R294	B3		
C927	A4	R299	D1		
C928	A4	R301	D2		
C929	B4	R302	D2		
C930	B4	R303	D2		
C931	B4	R304	D2		
C932	A3	R305	D2		
C933	A3	R306	D2		
C934	A3	R307	D2		
C936	B3	R308	D2		
C937	B3	R309	D2		
C938	B4	R311	D3		
C939	C4	R312	D3		
C940	C4	R313	D3		
C941	C3	R314	D3		
C942	B3	R315	D3		
CN10	D2	R316	D3		
CN12	A1	R317	D3		
CN13	A1	R318	D3		
CN14	A2	R319	D3		
CN30	B5	R320	D4		
CN35	B1	R321	D4		
CN41	A4	R322	D4		
CN42	A3	R323	D4		
CN64	D1	R324	D4		
CN82	D4	R325	D4		
D281	C3	R326	D4		
D284	A3	R328	D4		
D291	B2	R329	D4		
D911	A4	R331	D4		
D912	A4	R332	D4		
D913	A4	R333	D4		
D914	A4	R334	D4		

ELECTRICAL PARTS LIST - MAIN BOARD (INCLUDES AUDIO-I/O, VIDEO-I/O AND CONNECT BOARDS)**MISCELLANEOUS**

BD91	9965 000 13226	BEAD, CORE	C144	9965 000 13263	CAP, ELECT 100UF 16V	
BN12	9965 000 13343	WAFER 10PIN	C147	9965 000 13373	CAP, CERAMIC 47PF 50V J	
BN13	9965 000 13227	WAFER 15PIN	C148	9965 000 13373	CAP, CERAMIC 47PF 50V J	
BN14	9965 000 13343	WAFER 10PIN	C149	9965 000 13373	CAP, CERAMIC 47PF 50V J	
BN35	9965 000 13344	WAFER 12PIN	C150	9965 000 13373	CAP, CERAMIC 47PF 50V J	
BN51	9965 000 13227	WAFER 15PIN	C151	9965 000 13373	CAP, CERAMIC 47PF 50V J	
CN10	9965 000 13345	WAFER, CARD CABLE 23PIN	C152	9965 000 13373	CAP, CERAMIC 47PF 50V J	
CN11	9965 000 13346	WAFER, CARD CABLE 15PIN	C153	9965 000 13231	CAP, ELECT 10UF 35V	
CN82	9965 000 13353	WAFER, CARD CABLE 32PIN	C154	9965 000 13231	CAP, ELECT 10UF 35V	
CN91	9965 000 13354	△ WAFER 3PIN TRANSFO	C155	9965 000 13231	CAP, ELECT 10UF 35V	
CN93	9965 000 13355	△ WAFER 2PIN TRANSFO	C156	9965 000 13243	CAP, ELECT 47UF 25V	
F901	9965 000 13483	△ FUSE 8A / 250V	/37S	C157	9965 000 13231	CAP, ELECT 10UF 35V
F901	9965 000 16117	△ FUSE 5A / 250V	/22S	C158	9965 000 13231	CAP, ELECT 10UF 35V
JK11	9965 000 13367	JACK, TAPE/TV IN/OUT	C162	9965 000 13231	CAP, ELECT 10UF 35V	
JK12	9965 000 13368	JACK, VCR IN/OUT	C163	9965 000 13231	CAP, ELECT 10UF 35V	
JK13	9965 000 13368	JACK, VCR IN/OUT	C164	9965 000 13260	CAP, CERAMIC 470PF 50V KB	
JK31	9965 000 13369	JACK, S-VIDEO(1P/H)	C165	9965 000 13260	CAP, CERAMIC 470PF 50V KB	
JK32	9965 000 13370	JACK, VIDEO MONITOR/VCR-OUT	C166	9965 000 13260	CAP, CERAMIC 470PF 50V KB	
JK33	9965 000 13371	JACK, V-IN VCR/SAT, SUBWOOFER	C167	9965 000 13374	CAP, MYLAR 8200PF 50V J	
JKE1	9965 000 16119	JACK, SCART	/22S	C168	9965 000 13375	CAP, MYLAR 0,015UF 50V J
RY91	9965 000 02031	△ RELAY SDT-S-112DMR	C169	9965 000 13376	CAP, FILM 0,33UF 63V J	
T901	9965 000 13498	△ STANDBY TRANSFORMER T901	/37S	C170	9965 000 13375	CAP, MYLAR 0,015UF 50V J
T901	9965 000 16118	△ STANDBY TRANSFORMER T901	/22S	C171	9965 000 13266	CAP, CERAMIC 0,01UF 50V Z

CAPACITORS

C115	9965 000 13372	CAP, CERAMIC 150PF 50V KB	C172	9965 000 13376	CAP, FILM 0,33UF 63V J
C116	9965 000 13372	CAP, CERAMIC 150PF 50V KB	C173	9965 000 13374	CAP, MYLAR 8200PF 50V J
C117	9965 000 13372	CAP, CERAMIC 150PF 50V KB	C174	9965 000 13266	CAP, CERAMIC 0,01UF 50V Z
C118	9965 000 13372	CAP, CERAMIC 150PF 50V KB	C175	9965 000 13377	CAP, ELECT 22UF 50V
C119	9965 000 13372	CAP, CERAMIC 150PF 50V KB	C176	9965 000 13266	CAP, CERAMIC 0,01UF 50V Z
C120	9965 000 13372	CAP, CERAMIC 150PF 50V KB	C182	9965 000 13232	CAP, CERAMIC 0,01UF 50V ZF
C121	9965 000 13372	CAP, CERAMIC 150PF 50V KB	C183	9965 000 13232	CAP, CERAMIC 0,01UF 50V ZF
C122	9965 000 13372	CAP, CERAMIC 150PF 50V KB	C184	9965 000 13231	CAP, ELECT 10UF 35V
C123	9965 000 13372	CAP, CERAMIC 150PF 50V KB	C185	9965 000 13231	CAP, ELECT 10UF 35V
C124	9965 000 13372	CAP, CERAMIC 150PF 50V KB	C186	9965 000 13266	CAP, CERAMIC 0,01UF 50V Z
C125	9965 000 13372	CAP, CERAMIC 150PF 50V KB	C188	9965 000 13263	CAP, ELECT 100UF 16V
C126	9965 000 13372	CAP, CERAMIC 150PF 50V KB	C191	9965 000 13263	CAP, ELECT 100UF 16V
C127	9965 000 13372	CAP, CERAMIC 150PF 50V KB	C192	9965 000 13263	CAP, ELECT 100UF 16V
C128	9965 000 13372	CAP, CERAMIC 150PF 50V KB	C199	9965 000 13266	CAP, CERAMIC 0,01UF 50V Z
C129	9965 000 13231	CAP, ELECT 10UF 35V	C255	9965 000 13373	CAP, CERAMIC 47PF 50V J
C130	9965 000 13231	CAP, ELECT 10UF 35V	C256	9965 000 13373	CAP, CERAMIC 47PF 50V J
C131	9965 000 13231	CAP, ELECT 10UF 35V	C257	9965 000 13231	CAP, ELECT 10UF 35V
C132	9965 000 13243	CAP, ELECT 47UF 25V	C258	9965 000 13231	CAP, ELECT 10UF 35V
C133	9965 000 13231	CAP, ELECT 10UF 35V	C259	9965 000 13266	CAP, CERAMIC 0,01UF 50V Z
C134	9965 000 13231	CAP, ELECT 10UF 35V	C260	9965 000 13266	CAP, CERAMIC 0,01UF 50V Z
C135	9965 000 13232	CAP, CERAMIC 0,01UF 50V ZF	C261	9965 000 13231	CAP, ELECT 10UF 35V
C136	9965 000 13232	CAP, CERAMIC 0,01UF 50V ZF	C262	9965 000 13231	CAP, ELECT 10UF 35V
C137	9965 000 13232	CAP, CERAMIC 0,01UF 50V ZF	C263	9965 000 13373	CAP, CERAMIC 47PF 50V J
C138	9965 000 13232	CAP, CERAMIC 0,01UF 50V ZF	C264	9965 000 13373	CAP, CERAMIC 47PF 50V J
C139	9965 000 13232	CAP, CERAMIC 0,01UF 50V ZF	C265	9965 000 13231	CAP, ELECT 10UF 35V
C140	9965 000 13232	CAP, CERAMIC 0,01UF 50V ZF	C266	9965 000 13231	CAP, ELECT 10UF 35V
C143	9965 000 13263	CAP, ELECT 100UF 16V	C267	9965 000 13266	CAP, CERAMIC 0,01UF 50V Z
			C268	9965 000 13266	CAP, CERAMIC 0,01UF 50V Z
			C271	9965 000 13266	CAP, CERAMIC 0,01UF 50V Z

ELECTRICAL PARTS LIST - MAIN BOARD (INCLUDES AUDIO-I/O, VIDEO-I/O AND CONNECT BOARDS)**CAPACITORS**

C272	9965 000 13266	CAP, CERAMIC 0,01UF 50V Z	C366	9965 000 13231	CAP, ELECT 10UF 35V	
C281	9965 000 13263	CAP, ELECT 100UF 16V	C367	9965 000 13263	CAP, ELECT 100UF 16V	
C283	9965 000 13276	CAP, CERAMIC 0,1UF 50V Z	C368	9965 000 13263	CAP, ELECT 100UF 16V	
C284	9965 000 13266	CAP, CERAMIC 0,01UF 50V Z	C369	9965 000 13231	CAP, ELECT 10UF 35V	
C291	9965 000 13243	CAP, ELECT 47UF 25V	C370	9965 000 13231	CAP, ELECT 10UF 35V	
C311	9965 000 13373	CAP, CERAMIC 47PF 50V J	C371	9965 000 13232	CAP, CERAMIC 0,01UF 50V ZF	
C312	9965 000 13373	CAP, CERAMIC 47PF 50V J	C372	9965 000 13232	CAP, CERAMIC 0,01UF 50V ZF	
C313	9965 000 13373	CAP, CERAMIC 47PF 50V J	C373	9965 000 13271	CAP, ELECT 470UF 10V	
C314	9965 000 13373	CAP, CERAMIC 47PF 50V J	C375	9965 000 13266	CAP, CERAMIC 0,01UF 50V Z	
C315	9965 000 13373	CAP, CERAMIC 47PF 50V J	C376	9965 000 13276	CAP, CERAMIC 0,1UF 50V Z	
C316	9965 000 13373	CAP, CERAMIC 47PF 50V J	C901	9965 000 13356	△ CAP, CERAMIC 0,0047UF/2,5KV	
C317	9965 000 13470	CAP, CERAMIC 820PF 50V K	C904	9965 000 13476	CAP, ELECT 470UF 16V	
C318	9965 000 13373	CAP, CERAMIC 47PF 50V J	C905	9965 000 13232	CAP, CERAMIC 0,01UF 50V ZF	
C319	9965 000 13373	CAP, CERAMIC 47PF 50V J	C906	9965 000 13357	CAP, ELECT 470UF 25V	
C320	9965 000 13373	CAP, CERAMIC 47PF 50V J	C907	9965 000 13243	CAP, ELECT 47UF 25V	
C321	9965 000 13373	CAP, CERAMIC 47PF 50V J	C908	9965 000 13477	CAP, CERAMIC 1500PF 16V M	
C322	9965 000 13373	CAP, CERAMIC 47PF 50V J	C909	9965 000 13263	CAP, ELECT 100UF 16V	
C323	9965 000 13470	CAP, CERAMIC 820PF 50V K	C910	9965 000 13263	CAP, ELECT 100UF 16V	
C324	9965 000 13373	CAP, CERAMIC 47PF 50V J	C911	9965 000 13266	CAP, CERAMIC 0,01UF 50V Z	
C325	9965 000 13373	CAP, CERAMIC 47PF 50V J	C912	9965 000 13266	CAP, CERAMIC 0,01UF 50V Z	
C326	9965 000 13471	CAP, CERAMIC 22PF 50V J	C913	9965 000 13266	CAP, CERAMIC 0,01UF 50V Z	
C328	9965 000 13472	CAP, CERAMIC 22PF 50V JC	C914	9965 000 13266	CAP, CERAMIC 0,01UF 50V Z	
C329	9965 000 13472	CAP, CERAMIC 22PF 50V JC	C915	9965 000 13266	CAP, CERAMIC 0,01UF 50V Z	
C331	9965 000 13472	CAP, CERAMIC 22PF 50V JC	C916	9965 000 13266	CAP, CERAMIC 0,01UF 50V Z	
C332	9965 000 13472	CAP, CERAMIC 22PF 50V JC	C917	9965 000 13266	CAP, CERAMIC 0,01UF 50V Z	
C333	9965 000 13472	CAP, CERAMIC 22PF 50V JC	C918	9965 000 13266	CAP, CERAMIC 0,01UF 50V Z	
C334	9965 000 13472	CAP, CERAMIC 22PF 50V JC	C919	9965 000 13266	CAP, CERAMIC 0,01UF 50V Z	
C335	9965 000 13472	CAP, CERAMIC 22PF 50V JC	C920	9965 000 13276	CAP, CERAMIC 0,1UF 50V Z	
C336	9965 000 13472	CAP, CERAMIC 22PF 50V JC	C921	9965 000 13276	CAP, CERAMIC 0,1UF 50V Z	
C337	9965 000 13472	CAP, CERAMIC 22PF 50V JC	C925	9965 000 13478	CAP, ELECT 4,7UF 50V	
C340	9965 000 13472	CAP, CERAMIC 22PF 50V JC	C926	9965 000 13358	CAP, ELECT 2200UF 25V	
C341	9965 000 13472	CAP, CERAMIC 22PF 50V JC	C927	9965 000 13358	CAP, ELECT 2200UF 25V	
C342	9965 000 13472	CAP, CERAMIC 22PF 50V JC	C928	9965 000 13359	CAP, ELECT 1000UF 25V	
C343	9965 000 13472	CAP, CERAMIC 22PF 50V JC	C929	9965 000 13478	CAP, ELECT 4,7UF 50V	
C344	9965 000 13472	CAP, CERAMIC 22PF 50V JC	C930	9965 000 13360	CAP, ELECT 2200UF 16V	
C345	9965 000 13471	CAP, CERAMIC 22PF 50V J	C931	9965 000 13361	E-CAP FHS 22000UF 16V	
C346	9965 000 13472	CAP, CERAMIC 22PF 50V JC	C932	9965 000 13263	CAP, ELECT 100UF 16V	
C347	9965 000 13266	CAP, CERAMIC 0,01UF 50V Z	C933	9965 000 13263	CAP, ELECT 100UF 16V	
C348	9965 000 13266	CAP, CERAMIC 0,01UF 50V Z	C934	9965 000 13263	CAP, ELECT 100UF 16V	
C351	9965 000 13473	CAP, CERAMIC 220PF 50V KB	C936	9965 000 13263	CAP, ELECT 100UF 16V	
C352	9965 000 13473	CAP, CERAMIC 220PF 50V KB	C937	9965 000 13263	CAP, ELECT 100UF 16V	
C355	9965 000 13473	CAP, CERAMIC 220PF 50V KB	C938	9965 000 13479	CAP, ELECT 100UF 35V	
C356	9965 000 13473	CAP, CERAMIC 220PF 50V KB	C939	9965 000 13480	CAP, ELECT 100UF 50V	
C357	9965 000 13474	CAP, CERAMIC 820PF 50V KB	C940	9965 000 13481	CAP, ELECT 47UF 50V	
C358	9965 000 13474	CAP, CERAMIC 820PF 50V KB	C941	9965 000 13377	CAP, ELECT 22UF 50V	
C359	9965 000 13262	CAP, CERAMIC 100PF 50V KB	C942	9965 000 13231	CAP, ELECT 10UF 35V	
C360	9965 000 13262	CAP, CERAMIC 100PF 50V KB	CE11	9965 000 13271	CAP, ELECT 470UF 10V	/22S
C361	9965 000 13475	CAP, MYLAR 1500PF 50V J	CE12	9965 000 13271	CAP, ELECT 470UF 10V	/22S
C362	9965 000 13271	CAP, ELECT 470UF 10V	CE13	9965 000 13271	CAP, ELECT 470UF 10V	/22S
C363	9965 000 13271	CAP, ELECT 470UF 10V	CE14	9965 000 13271	CAP, ELECT 470UF 10V	/22S
C364	9965 000 13271	CAP, ELECT 470UF 10V	CE15	9965 000 16120	CAP, CERAMIC 220PF 50V 10%	/22S
C365	9965 000 13271	CAP, ELECT 470UF 10V	CE16	9965 000 16120	CAP, CERAMIC 220PF 50V 10%	/22S

ELECTRICAL PARTS LIST - MAIN BOARD (INCLUDES AUDIO-I/O, VIDEO-I/O AND CONNECT BOARDS)**CAPACITORS**

CE17	9965 000 16120	CAP, CERAMIC 220PF 50V 10%	/22S
CE18	9965 000 16120	CAP, CERAMIC 220PF 50V 10%	/22S

RESISTORS

R101	9965 000 13298	RES, CARBON 470R 1/5W J	R149	9965 000 13486	RES, CARBON 20K 1/5W J
R102	9965 000 13298	RES, CARBON 470R 1/5W J	R150	9965 000 13485	RES, CARBON 22K 1/5W J
R103	9965 000 13298	RES, CARBON 470R 1/5W J	R151	9965 000 13486	RES, CARBON 20K 1/5W J
R104	9965 000 13298	RES, CARBON 470R 1/5W J	R152	9965 000 13486	RES, CARBON 20K 1/5W J
R105	9965 000 13298	RES, CARBON 470R 1/5W J	R153	9965 000 13290	RES, CARBON 1K 1/5W J
R106	9965 000 13298	RES, CARBON 470R 1/5W J	R154	9965 000 13290	RES, CARBON 1K 1/5W J
R107	9965 000 13298	RES, CARBON 470R 1/5W J	R155	9965 000 13487	RES, CARBON 1,5K 1/5W J
R108	9965 000 13298	RES, CARBON 470R 1/5W J	R156	9965 000 13487	RES, CARBON 1,5K 1/5W J
R109	9965 000 13298	RES, CARBON 470R 1/5W J	R157	9965 000 13487	RES, CARBON 1,5K 1/5W J
R110	9965 000 13298	RES, CARBON 470R 1/5W J	R158	9965 000 13487	RES, CARBON 1,5K 1/5W J
R111	9965 000 13298	RES, CARBON 470R 1/5W J	R159	9965 000 13284	RES, CARBON 47K 1/5W J
R112	9965 000 13298	RES, CARBON 470R 1/5W J	R160	9965 000 13284	RES, CARBON 47K 1/5W J
R113	9965 000 13298	RES, CARBON 470R 1/5W J	R161	9965 000 13284	RES, CARBON 47K 1/5W J
R114	9965 000 13298	RES, CARBON 470R 1/5W J	R162	9965 000 13284	RES, CARBON 47K 1/5W J
R115	9965 000 13484	RES, CARBON 220K 1/5W J	R163	9965 000 13284	RES, CARBON 47K 1/5W J
R116	9965 000 13484	RES, CARBON 220K 1/5W J	R164	9965 000 13284	RES, CARBON 47K 1/5W J
R117	9965 000 13484	RES, CARBON 220K 1/5W J	R165	9965 000 13380	RES, CARBON 5,6K 1/5W J
R118	9965 000 13484	RES, CARBON 220K 1/5W J	R166	9965 000 13380	RES, CARBON 5,6K 1/5W J
R119	9965 000 13484	RES, CARBON 220K 1/5W J	R167	9965 000 13380	RES, CARBON 5,6K 1/5W J
R120	9965 000 13484	RES, CARBON 220K 1/5W J	R168	9965 000 13380	RES, CARBON 5,6K 1/5W J
R121	9965 000 13484	RES, CARBON 220K 1/5W J	R169	9965 000 13380	RES, CARBON 5,6K 1/5W J
R122	9965 000 13484	RES, CARBON 220K 1/5W J	R170	9965 000 13380	RES, CARBON 5,6K 1/5W J
R123	9965 000 13484	RES, CARBON 220K 1/5W J	R171	9965 000 13484	RES, CARBON 220K 1/5W J
R124	9965 000 13484	RES, CARBON 220K 1/5W J	R172	9965 000 13484	RES, CARBON 220K 1/5W J
R125	9965 000 13484	RES, CARBON 220K 1/5W J	R174	9965 000 13484	RES, CARBON 220K 1/5W J
R126	9965 000 13484	RES, CARBON 220K 1/5W J	R176	9965 000 13484	RES, CARBON 220K 1/5W J
R127	9965 000 13484	RES, CARBON 220K 1/5W J	R180	9965 000 13484	RES, CARBON 220K 1/5W J
R128	9965 000 13484	RES, CARBON 220K 1/5W J	R181	9965 000 13484	RES, CARBON 220K 1/5W J
R129	9965 000 13485	RES, CARBON 22K 1/5W J	R182	9965 000 13283	RES, CARBON 120R 1/5W J
R130	9965 000 13485	RES, CARBON 22K 1/5W J	R183	9965 000 13283	RES, CARBON 120R 1/5W J
R131	9965 000 13284	RES, CARBON 47K 1/5W J	R184	9965 000 13283	RES, CARBON 120R 1/5W J
R132	9965 000 13284	RES, CARBON 47K 1/5W J	R185	9965 000 13283	RES, CARBON 120R 1/5W J
R133	9965 000 13284	RES, CARBON 47K 1/5W J	R186	9965 000 13292	RES, CARBON 180R 1/5W J
R134	9965 000 13284	RES, CARBON 47K 1/5W J	R187	9965 000 13292	RES, CARBON 180R 1/5W J
R135	9965 000 13283	RES, CARBON 120R 1/5W J	R188	9965 000 13283	RES, CARBON 120R 1/5W J
R136	9965 000 13283	RES, CARBON 120R 1/5W J	R189	9965 000 13488	RES, CARBON 100K 1/5W J
R137	9965 000 13283	RES, CARBON 120R 1/5W J	R190	9965 000 13488	RES, CARBON 100K 1/5W J
R138	9965 000 13283	RES, CARBON 120R 1/5W J	R193	9965 000 13298	RES, CARBON 470R 1/5W J
R139	9965 000 13283	RES, CARBON 120R 1/5W J	R194	9965 000 13298	RES, CARBON 470R 1/5W J
R140	9965 000 13283	RES, CARBON 120R 1/5W J	R195	9965 000 13298	RES, CARBON 470R 1/5W J
R141	9965 000 13296	RES, CARBON 4,7K 1/5W J	R196	9965 000 13283	RES, CARBON 120R 1/5W J
R142	9965 000 13296	RES, CARBON 4,7K 1/5W J	R197	9965 000 13284	RES, CARBON 47K 1/5W J
R143	9965 000 13296	RES, CARBON 4,7K 1/5W J	R199	9965 000 13341	RES, CARBON 10R 1/5W J
R144	9965 000 13286	RES, CARBON 3,3K 1/5W J	R251	9965 000 13338	RES, CARBON 33K 1/5W J
R145	9965 000 13296	RES, CARBON 4,7K 1/5W J	R252	9965 000 13338	RES, CARBON 33K 1/5W J
R146	9965 000 13296	RES, CARBON 4,7K 1/5W J	R255	9965 000 13338	RES, CARBON 33K 1/5W J
R147	9965 000 13485	RES, CARBON 22K 1/5W J	R256	9965 000 13338	RES, CARBON 33K 1/5W J
R148	9965 000 13485	RES, CARBON 22K 1/5W J	R257	9965 000 13488	RES, CARBON 100K 1/5W J
			R258	9965 000 13488	RES, CARBON 100K 1/5W J
			R259	9965 000 13283	RES, CARBON 120R 1/5W J
			R260	9965 000 13283	RES, CARBON 120R 1/5W J
			R261	9965 000 13488	RES, CARBON 100K 1/5W J

ELECTRICAL PARTS LIST - MAIN BOARD (INCLUDES AUDIO-I/O, VIDEO-I/O AND CONNECT BOARDS)

RESISTORS

R262	9965 000 13488	RES, CARBON 100K 1/5W J		R324	9965 000 13491	RES, CARBON 68R 1/5W J	
R263	9965 000 13486	RES, CARBON 20K 1/5W J		R325	9965 000 13491	RES, CARBON 68R 1/5W J	
R264	9965 000 13486	RES, CARBON 20K 1/5W J		R326	9965 000 13491	RES, CARBON 68R 1/5W J	
R265	9965 000 13488	RES, CARBON 100K 1/5W J		R328	9965 000 13491	RES, CARBON 68R 1/5W J	
R266	9965 000 13488	RES, CARBON 100K 1/5W J		R329	9965 000 13491	RES, CARBON 68R 1/5W J	
R267	9965 000 13283	RES, CARBON 120R 1/5W J		R331	9965 000 13491	RES, CARBON 68R 1/5W J	
R268	9965 000 13283	RES, CARBON 120R 1/5W J		R332	9965 000 13491	RES, CARBON 68R 1/5W J	
R271	9965 000 13283	RES, CARBON 120R 1/5W J		R333	9965 000 13491	RES, CARBON 68R 1/5W J	
R272	9965 000 13283	RES, CARBON 120R 1/5W J		R334	9965 000 13491	RES, CARBON 68R 1/5W J	
R273	9965 000 13338	RES, CARBON 33K 1/5W J		R335	9965 000 13491	RES, CARBON 68R 1/5W J	
R274	9965 000 13338	RES, CARBON 33K 1/5W J		R336	9965 000 13491	RES, CARBON 68R 1/5W J	
R275	9965 000 13335	RES, CARBON 10K 1/5W J		R337	9965 000 13491	RES, CARBON 68R 1/5W J	
R276	9965 000 13335	RES, CARBON 10K 1/5W J		R340	9965 000 13491	RES, CARBON 68R 1/5W J	
R277	9965 000 13304	RES, CARBON 27K 1/5W J		R341	9965 000 13491	RES, CARBON 68R 1/5W J	
R278	9965 000 13304	RES, CARBON 27K 1/5W J		R342	9965 000 13491	RES, CARBON 68R 1/5W J	
R279	9965 000 13286	RES, CARBON 3,3K 1/5W J		R343	9965 000 13491	RES, CARBON 68R 1/5W J	
R280	9965 000 13286	RES, CARBON 3,3K 1/5W J		R344	9965 000 13491	RES, CARBON 68R 1/5W J	
R281	9965 000 13489	RES, CARBON 47R 1/5W J		R345	9965 000 13491	RES, CARBON 68R 1/5W J	
R283	9965 000 13290	RES, CARBON 1K 1/5W J		R347	9965 000 13341	RES, CARBON 10R 1/5W J	
R284	9965 000 13335	RES, CARBON 10K 1/5W J		R348	9965 000 13341	RES, CARBON 10R 1/5W J	
R285	9965 000 13286	RES, CARBON 3,3K 1/5W J		R353	9965 000 13491	RES, CARBON 68R 1/5W J	
R286	9965 000 13335	RES, CARBON 10K 1/5W J		R354	9965 000 13491	RES, CARBON 68R 1/5W J	
R287	9965 000 13286	RES, CARBON 3,3K 1/5W J		R355	9965 000 13485	RES, CARBON 22K 1/5W J	
R288	9965 000 13335	RES, CARBON 10K 1/5W J		R356	9965 000 13485	RES, CARBON 22K 1/5W J	
R289	9965 000 13484	RES, CARBON 220K 1/5W J		R357	9965 000 13485	RES, CARBON 22K 1/5W J	
R290	9965 000 13286	RES, CARBON 3,3K 1/5W J		R358	9965 000 13485	RES, CARBON 22K 1/5W J	
R291	9965 000 13341	RES, CARBON 10R 1/5W J		R359	9965 000 13492	RES, CARBON 75R 1/5W J	
R293	9965 000 13335	RES, CARBON 10K 1/5W J		R360	9965 000 13492	RES, CARBON 75R 1/5W J	
R294	9965 000 13335	RES, CARBON 10K 1/5W J		R361	9965 000 13284	RES, CARBON 47K 1/5W J	
R299	9965 000 13283	RES, CARBON 120R 1/5W J		R364	9965 000 13485	RES, CARBON 22K 1/5W J	
R301	9965 000 13490	RES, CARBON 1R 1/5W J	/22S	R365	9965 000 13283	RES, CARBON 120R 1/5W J	
R302	9965 000 13490	RES, CARBON 1R 1/5W J		R366	9965 000 13283	RES, CARBON 120R 1/5W J	
R303	9965 000 13490	RES, CARBON 1R 1/5W J		R367	9965 000 13283	RES, CARBON 120R 1/5W J	
R304	9965 000 13491	RES, CARBON 68R 1/5W J		R368	9965 000 13283	RES, CARBON 120R 1/5W J	
R305	9965 000 13491	RES, CARBON 68R 1/5W J		R369	9965 000 13492	RES, CARBON 75R 1/5W J	
R306	9965 000 13491	RES, CARBON 68R 1/5W J		R375	9965 000 13341	RES, CARBON 10R 1/5W J	
R307	9965 000 13491	RES, CARBON 68R 1/5W J		R901	9965 000 13493	△ RES, CARBON 3,3M 1/2W	/37S
R308	9965 000 13491	RES, CARBON 68R 1/5W J		R903	9965 000 13341	RES, CARBON 10R 1/5W J	
R309	9965 000 13491	RES, CARBON 68R 1/5W J		R904	9965 000 13490	RES, CARBON 1R 1/5W J	
R311	9965 000 13283	RES, CARBON 120R 1/5W J		R906	9965 000 13286	RES, CARBON 3,3K 1/5W J	
R312	9965 000 13283	RES, CARBON 120R 1/5W J		R907	9965 000 13335	RES, CARBON 10K 1/5W J	
R313	9965 000 13283	RES, CARBON 120R 1/5W J		R908	9965 000 13290	RES, CARBON 1K 1/5W J	
R314	9965 000 13283	RES, CARBON 120R 1/5W J		R909	9965 000 13337	RES, CARBON 33R 1/5W J	
R315	9965 000 13283	RES, CARBON 120R 1/5W J		R910	9965 000 13335	RES, CARBON 10K 1/5W J	
R316	9965 000 13283	RES, CARBON 120R 1/5W J		R911	9965 000 13494	△ RES, FUSE 0,47R 1W J	
R317	9965 000 13283	RES, CARBON 120R 1/5W J		R912	9965 000 13494	△ RES, FUSE 0,47R 1W J	
R318	9965 000 13283	RES, CARBON 120R 1/5W J		R913	9965 000 13494	△ RES, FUSE 0,47R 1W J	
R319	9965 000 13283	RES, CARBON 120R 1/5W J		R914	9965 000 13494	△ RES, FUSE 0,47R 1W J	
R320	9965 000 13283	RES, CARBON 120R 1/5W J		R915	9965 000 13494	△ RES, FUSE 0,47R 1W J	
R321	9965 000 13283	RES, CARBON 120R 1/5W J		R916	9965 000 13494	△ RES, FUSE 0,47R 1W J	
R322	9965 000 13283	RES, CARBON 120R 1/5W J		R917	9965 000 13495	△ RES, FUSE 0,15R 1W J	
R323	9965 000 13283	RES, CARBON 120R 1/5W J		R918	9965 000 13495	△ RES, FUSE 0,15R 1W J	

ELECTRICAL PARTS LIST - MAIN BOARD (INCLUDES AUDIO-I/O, VIDEO-I/O AND CONNECT BOARDS)**RESISTORS**

R919	9965 000 13496	RES, CARBON 2,2R 1/4W J	
R920	9965 000 13496	RES, CARBON 2,2R 1/4W J	
R921	9965 000 13496	RES, CARBON 2,2R 1/4W J	
R922	9965 000 13484	RES, CARBON 220K 1/5W J	
R923	9965 000 13484	RES, CARBON 220K 1/5W J	
R926	9965 000 13488	RES, CARBON 100K 1/5W J	
R927	9965 000 13488	RES, CARBON 100K 1/5W J	
R928	9965 000 13488	RES, CARBON 100K 1/5W J	
R929	9965 000 13286	RES, CARBON 3,3K 1/5W J	
R930	9965 000 13488	RES, CARBON 100K 1/5W J	
R931	9965 000 13488	RES, CARBON 100K 1/5W J	
R932	9965 000 13290	RES, CARBON 1K 1/5W J	
R933	9965 000 13286	RES, CARBON 3,3K 1/5W J	
R934	9965 000 13286	RES, CARBON 3,3K 1/5W J	
R935	9965 000 13286	RES, CARBON 3,3K 1/5W J	
R940	9965 000 13497	RES, CARBON 680R 1/5W J	
R941	9965 000 13283	RES, CARBON 120R 1/5W J	
R942	9965 000 13488	RES, CARBON 100K 1/5W J	
RE11	9965 000 13290	RES, CARBON 1K 1/5W J	/22S
RE12	9965 000 13290	RES, CARBON 1K 1/5W J	/22S
RE13	9965 000 13290	RES, CARBON 1K 1/5W J	/22S
RE14	9965 000 13290	RES, CARBON 1K 1/5W J	/22S
RE15	9965 000 13290	RES, CARBON 1K 1/5W J	/22S
RE16	9965 000 13290	RES, CARBON 1K 1/5W J	/22S
RE17	9965 000 13545	RES, CARBON 100R 1/5W J	/22S
RE18	9965 000 13519	RES, CARBON 270R 1/5W J	/22S
RE19	9965 000 13290	RES, CARBON 1K 1/5W J	/22S
RE20	9965 000 13290	RES, CARBON 1K 1/5W J	/22S
RE21	9965 000 16122	RES, CARBON 56R 1/5W 5%	/22S
RE24	9965 000 13380	RES, CARBON 5,6K 1/5W J	/22S
RE25	9965 000 13380	RES, CARBON 5,6K 1/5W J	/22S

COILS & FILTERS

L297	9965 000 13277	COIL, AXAIL 10UH K	
L317	9965 000 13282	COIL, AXAIL 1,8UH,K	
L351	9965 000 13282	COIL, AXAIL 1,8UH,K	
L352	9965 000 13282	COIL, AXAIL 1,8UH,K	
LE11	9965 000 13282	COIL, AXAIL 1,8UH,K	/22S
LE12	9965 000 13282	COIL, AXAIL 1,8UH,K	/22S
LE13	9965 000 13282	COIL, AXAIL 1,8UH,K	/22S
LE14	9965 000 13282	COIL, AXAIL 1,8UH,K	/22S

DIODES

D172	9965 000 04668	1SS133T-77 T26	
D173	9965 000 04668	1SS133T-77 T26	
D174	9965 000 04668	1SS133T-77 T26	
D175	9965 000 04668	1SS133T-77 T26	
D176	9965 000 04668	1SS133T-77 T26	
D177	9965 000 04668	1SS133T-77 T26	
D186	4822 130 11003	MTZJ7,5A	
D187	4822 130 11003	MTZJ7,5A	
D281	9965 000 04668	1SS133T-77 T26	

D284	9965 000 04668	1SS133T-77 T26	
D291	9965 000 04668	1SS133T-77 T26	
D351	9965 000 04668	1SS133T-77 T26	
D352	9965 000 04668	1SS133T-77 T26	
D371	4822 130 83166	MTZJ6,2B	
D372	4822 130 83166	MTZJ6,2B	
D901	4822 130 31878	1N4003G	
D902	9965 000 04668	1SS133T-77 T26	
D904	9965 000 04668	1SS133T-77 T26	
D908	4822 130 83166	MTZJ6,2B	
D910	9965 000 04668	1SS133T-77 T26	
D911	4822 130 31878	1N4003G	
D912	4822 130 31878	1N4003G	
D913	4822 130 31878	1N4003G	
D914	4822 130 31878	1N4003G	
D915	4822 130 31878	1N4003G	
D916	4822 130 31878	1N4003G	
D917	4822 130 31878	1N4003G	
D918	4822 130 31878	1N4003G	
D919	4822 130 31878	1N4003G	
D920	4822 130 31878	1N4003G	
D921	9965 000 13362	RECT., DIODE 2A04H (2A)	
D922	9965 000 13362	RECT., DIODE 2A04H (2A)	
D923	9965 000 13362	RECT., DIODE 2A04H (2A)	
D925	4822 130 83166	MTZJ6,2B	
D932	9965 000 04668	1SS133T-77 T26	
D938	4822 130 31878	1N4003G	
D939	4822 130 31878	1N4003G	
D940	9965 000 13482	DIODE, ZENER 30V	

INTEGRATED CIRCUITS

IC12	9965 000 13228	NJM2068MD-TE1	
IC13	9965 000 13228	NJM2068MD-TE1	
IC14	9965 000 13228	NJM2068MD-TE1	
IC17	9965 000 13228	NJM2068MD-TE1	
IC18	9965 000 10590	FUNCTION I,C TC9164AF	
IC19	9965 000 09272	M62446FP	
IC25	9965 000 13228	NJM2068MD-TE1	
IC26	9965 000 13228	NJM2068MD-TE1	
IC27	9965 000 13363	TC9215AF	
IC28	9965 000 10594	EXPANDER I,C NJU3713G	
IC35	9965 000 13364	NJM2279M-TE1	
IC91	4822 209 16953	KA78R12	
IC92	4822 209 90087	KA7812	
IC93	9965 000 10576	I,C REGULATOR KA7912	
IC94	9965 000 13365	REGULATOR KA78R05TU (5V)	
IC95	9965 000 13366	REGULATOR KA278R05TU (5V)	

TRANSISTORS

Q165	9965 000 10445	KTC2874B TO92	
Q166	9965 000 10445	KTC2874B TO92	
Q167	9965 000 10445	KTC2874B TO92	

ELECTRICAL PARTS LIST - MAIN BOARD (INCLUDES AUDIO-I/O, VIDEO-I/O AND CONNECT BOARDS)

TRANSISTORS

Q168	9965 000 10445	KTC2874B TO92	
Q169	9965 000 10445	KTC2874B TO92	
Q170	9965 000 10445	KTC2874B TO92	
Q173	4822 130 61227	DTA114ES	
Q175	4822 130 61227	DTA114ES	
Q177	4822 130 61227	DTA114ES	
Q179	4822 130 61227	DTA114ES	
Q180	4822 130 60588	DTC114ES	
Q284	4822 130 60588	DTC114ES	
Q285	4822 130 60588	DTC114ES	
Q286	4822 130 61227	DTA114ES	
Q287	9965 000 10445	KTC2874B TO92	
Q288	9965 000 10445	KTC2874B TO92	
Q291	4822 130 61227	DTA114ES	
Q292	4822 130 60588	DTC114ES	
Q293	4822 130 60588	DTC114ES	
Q294	4822 130 60588	DTC114ES	
Q901	4822 130 11609	KSC2785Y	
Q903	4822 130 60588	DTC114ES	
Q905	4822 130 60588	DTC114ES	
Q906	4822 130 60588	DTC114ES	
Q908	4822 130 11617	KSC2316Y	
Q909	4822 130 60588	DTC114ES	
Q940	4822 130 11621	KTA1271Y	
QE11	9965 000 16121	KSA733C	/22S
QE12	9965 000 16121	KSA733C	/22S
QE13	4822 130 42594	DTC144ES	/22S
QE14	9965 000 10445	KTC2874B TO92	/22S
QE15	9965 000 10445	KTC2874B TO92	/22S

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

DVD MODULE

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Procedure to enter Service Mode: (After B/E firmware upgrade)

- **Step 1.** Press OPEN button to open Tray DISC1
- **Step 2.** With the Remote Control press [CLEAR] [2] [5] [8] [0] [CLEAR] buttons in sequence
 - where CLEAR = Press & hold STOP button down till the INVALID Logo disappears on the TV screen
 - TVscreen shows:

-/37 version				-/22 version			
BE VER	MXKI0005	- B/E version		BE VER	MXKI0005	- B/E version	
FE VER /	33-680111	- F/E version		FE VER /	33-680111	- F/E version	
BUILD TIME	020814	- B/E bulid time		BUILD TIME	020913	- B/E bulid time	
	1	- Region Number			2	- Region Number	

EEPROM DATA

00 - 4D 58 4B 49 30 30 30 35
08 - FF FF FF FF 22 21 01

EEPROM DATA

00 - 4D 58 4B 49 30 30 30 35
08 - FF FF FF FF 35 33 02

Note:

- **B/E version** = Back End (Buyer model version) version
- **F/E version** = Front end (Mechanism Firmware) version

- **Step 3.** Press STOP button to clear the EEPROM
- **Step 4.** Change address 13, 14, 15.
 - 37 Version : 22 21 01
 - 37 Version : 35 33 02
- **Step 5.** Press two times RETURN button to exit Service mode
 - The Set display will shows: END and the Versions information on the TV screen disappears.

Procedure to upgrade Firmware (Software):

■ Upgrading of B/E Firmware

- **Step 1.** With the Remote Control enter the Service Mode
- **Step 2.** Place CD-R disc with new firmware onto Tray
- **Step 3.** Press PROGRAM button
TV screen will shows:
 - ERASE >>>>>>>>>>>>>>
 - WIRTE >>>>>>>>>>>>>>
 - DONE
- **Step 4.** Switch the Mains supply off and on again.
- **Step 5.** Press OPEN button to remove CD-R disc from Tray DISC1
- **Step 6.** Enter the Service Mode and clear the EEPROM.

The set firmware is now fully upgraded.

■ Upgrading of F/E Firmware

- **Step 1.** Press Open button to open Tray DISC1
- **Step 2.** Place CD-R disc with new software onto Tray
- **Step 3.** With the Remote Control press PLAY button
 - The set will start loading the new firmware
 - NO DISC will be display on the Set display after about 30 seconds

The set will start loading the new firmware

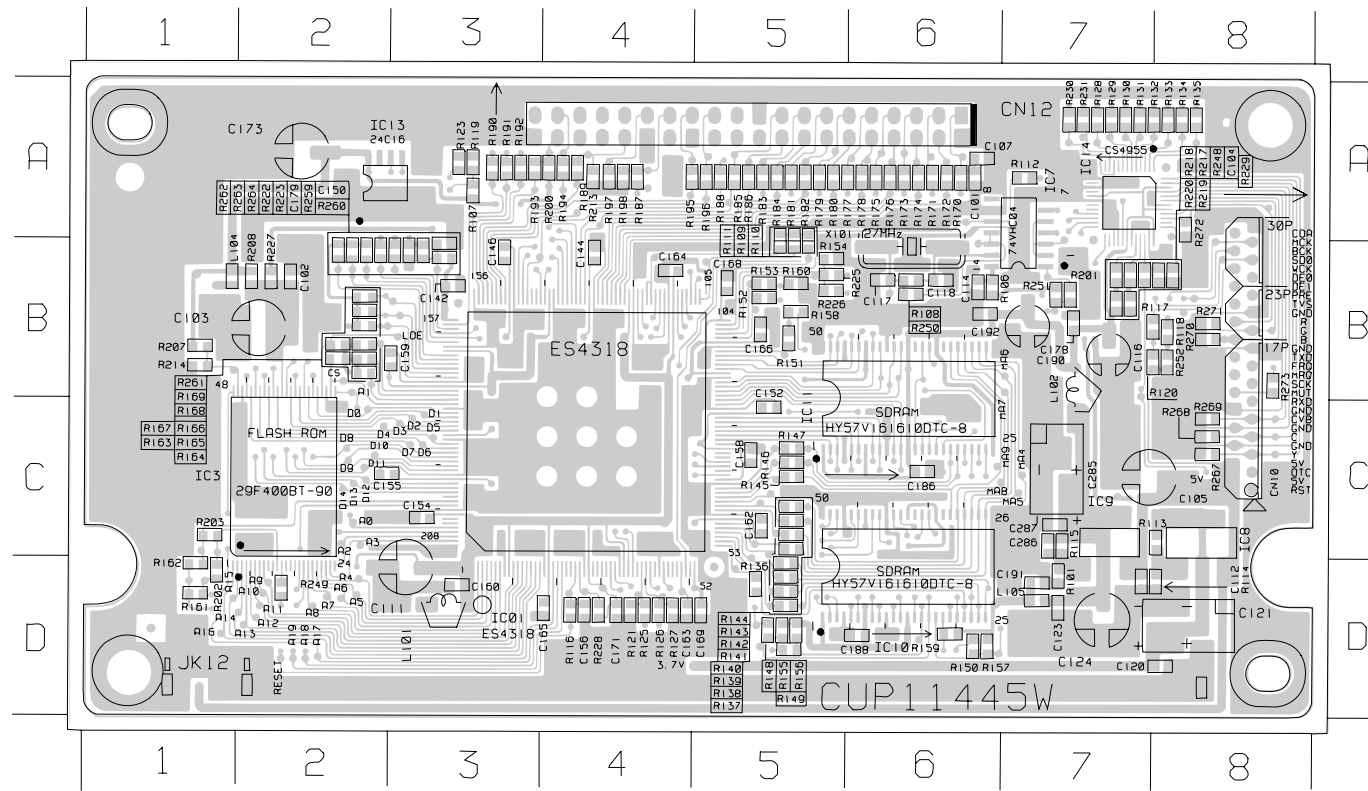
■ NO DISC will be display on the Set display after about 30 seconds

- **Step 4.** Switch the Mains supply off and on again.
- **Step 5.** Press OPEN button to remove CD-R disc from Tray DISC1

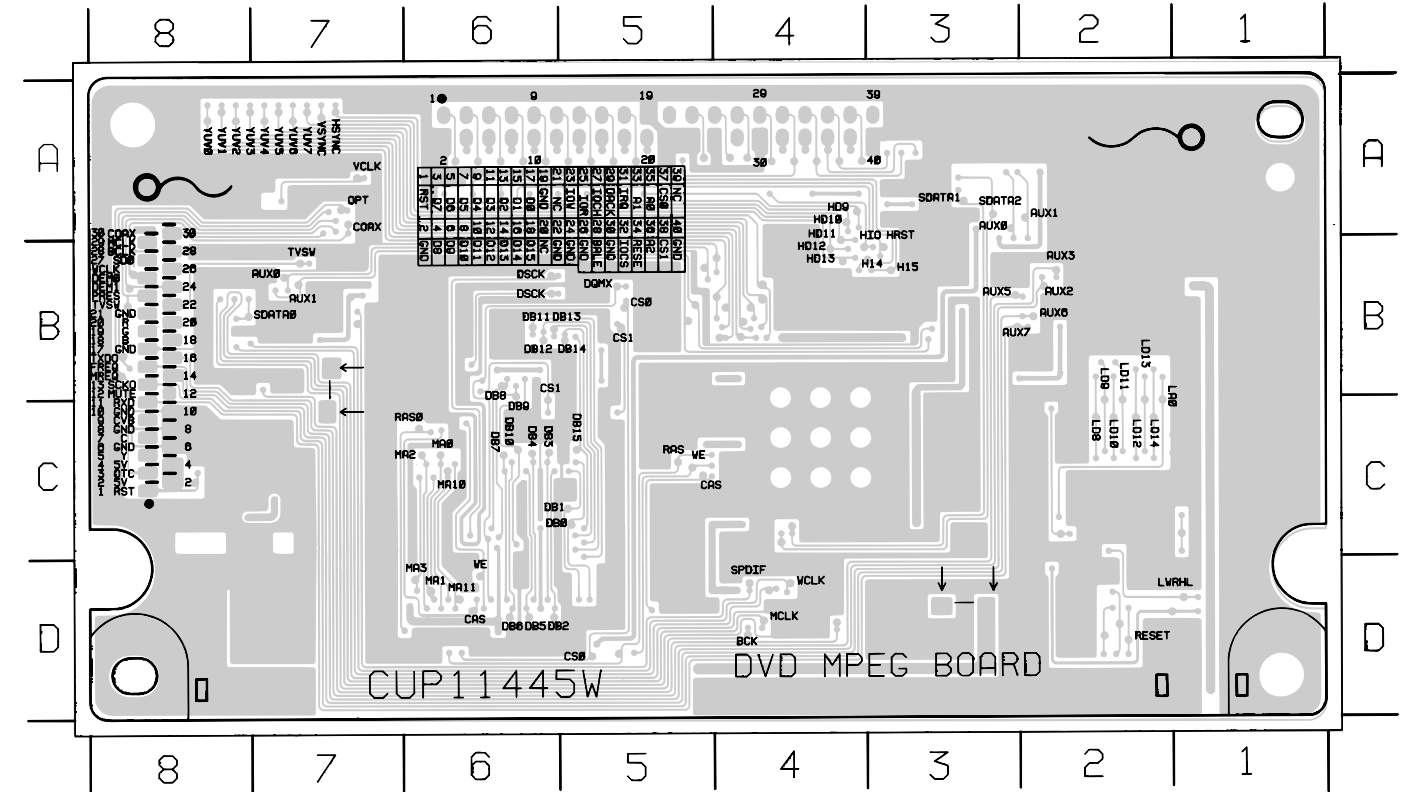
Warning: Do not switch the Mains supply off during the Firmware Upgrading.

DVD MAIN BOARD - TOP VIEW

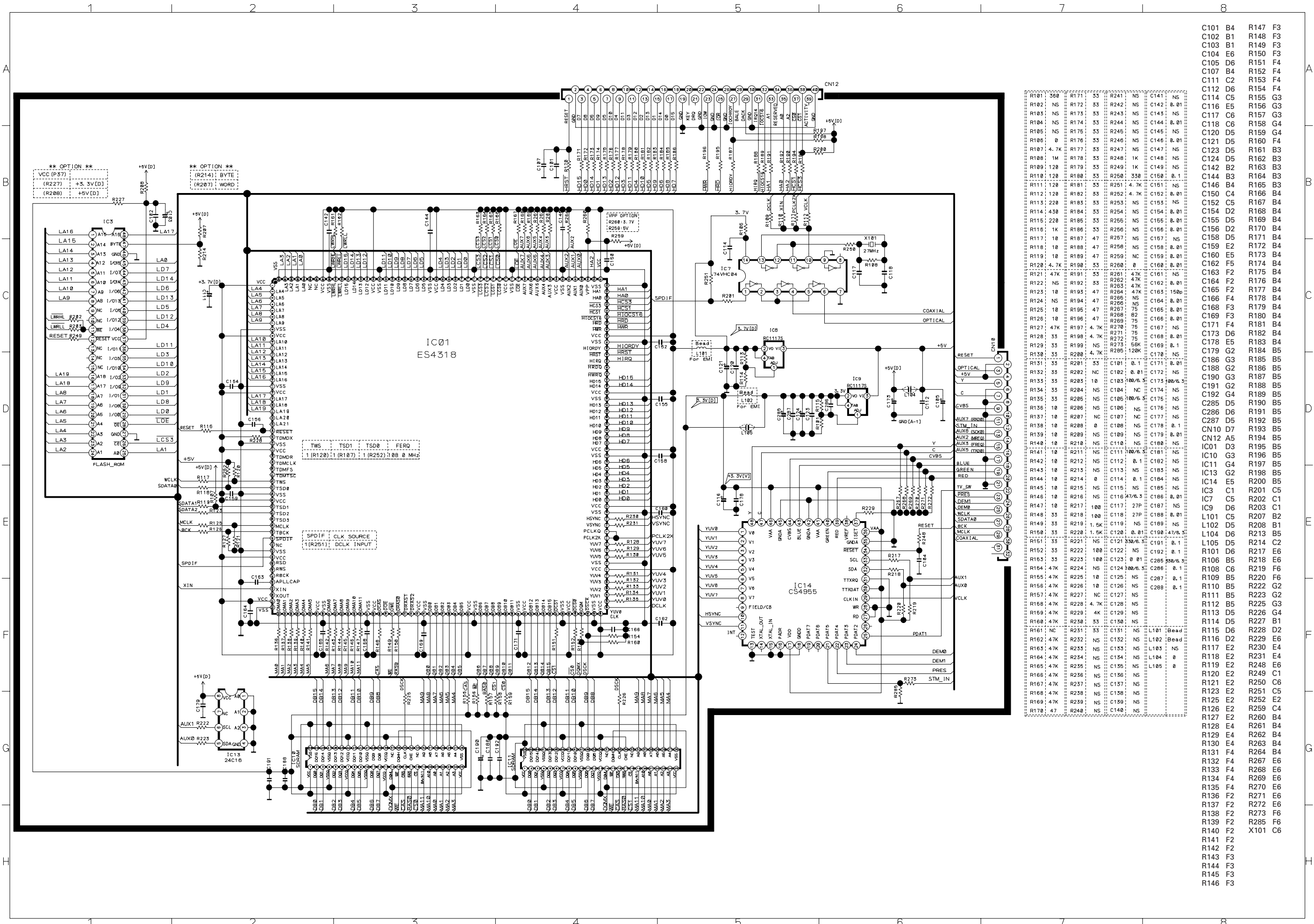
C101 A6	C124 D7	C164 B4	C285 C7	JK12 D1	R114 D7	R130 A7	R144 C5	R158 B5	R172 A6	R186 A5	R201 B7	R226 B5	R262 B2
C102 B2	C142 B3	C165 D3	C286 C7	L101 D3	R115 C7	R131 A7	R145 C5	R159 D6	R173 A6	R187 A4	R202 D1	R227 B2	R263 B2
C103 B2	C144 B4	C166 B5	C287 C7	L102 B7	R116 D4	R132 A7	R147 C5	R160 B5	R174 A6	R188 A4	R203 C1	R228 D4	R264 B2
C104 B7	C146 B3	C168 B5	CN10 B8	L104 B1	R117 B7	R133 A8	R148 C5	R161 D1	R175 A6	R188 A5	R207 B1	R229 B8	R267 C8
C107 A6	C150 B3	C169 D5	CN12 A5	L105 D7	R118 B8	R134 A8	R148 D5	R162 D1	R176 A6	R190 A3	R208 B2	R230 A7	R268 C8
C111 D3	C152 C5	C171 D4	IC01 C4	R106 B6	R119 A3	R135 A8	R149 D5	R163 B2	R177 A5	R191 A3	R213 A4	R231 A7	R269 C8
C112 D7	C153 C3	C173 A2	IC10 D6	R107 A3	R120 B7	R136 D5	R150 D6	R164 B2	R178 A6	R192 A3	R214 B1	R248 B7	R270 B8
C114 B6	C155 C2	C178 B7	IC11 C6	R108 B6	R121 D4	R137 D5	R151 B5	R165 B2	R179 A5	R193 A3	R217 B7	R249 D2	R271 B8
C116 B7	C156 D4	C179 B3	IC13 A2	R109 B5	R123 A3	R138 D5	R152 B5	R166 B2	R180 A5	R194 A4	R218 B7	R250 B6	R272 A8
C117 B6	C158 C5	C186 C6	IC14 A7	R110 B5	R125 D4	R139 D5	R153 B5	R167 B2	R181 A5	R195 A4	R219 B7	R251 B7	R273 B8
C118 B6	C159 B2	C188 D6	IC3 C2	R111 B5	R126 D4	R140 D5	R154 B5	R168 B2	R182 A5	R196 A5	R220 B7	R252 B8	X101 B6
C120 D7	C160 D3	C190 B7	IC7 A7	R112 A7	R127 D4	R141 C5	R155 D5	R169 B2	R183 A5	R197 A4	R222 B2	R259 B3	
C121 D8	C162 C5	C191 D7	IC8 C8	R113 C7	R128 A7	R142 C5	R156 D5	R170 A6	R184 A5	R198 A4	R223 B3	R260 B3	
C123 D7	C163 D4	C192 B6	IC9 C7	R113 C7	R129 A7	R143 C5	R157 D6	R171 A6	R185 A5	R200 A3	R225 B5	R261 B2	



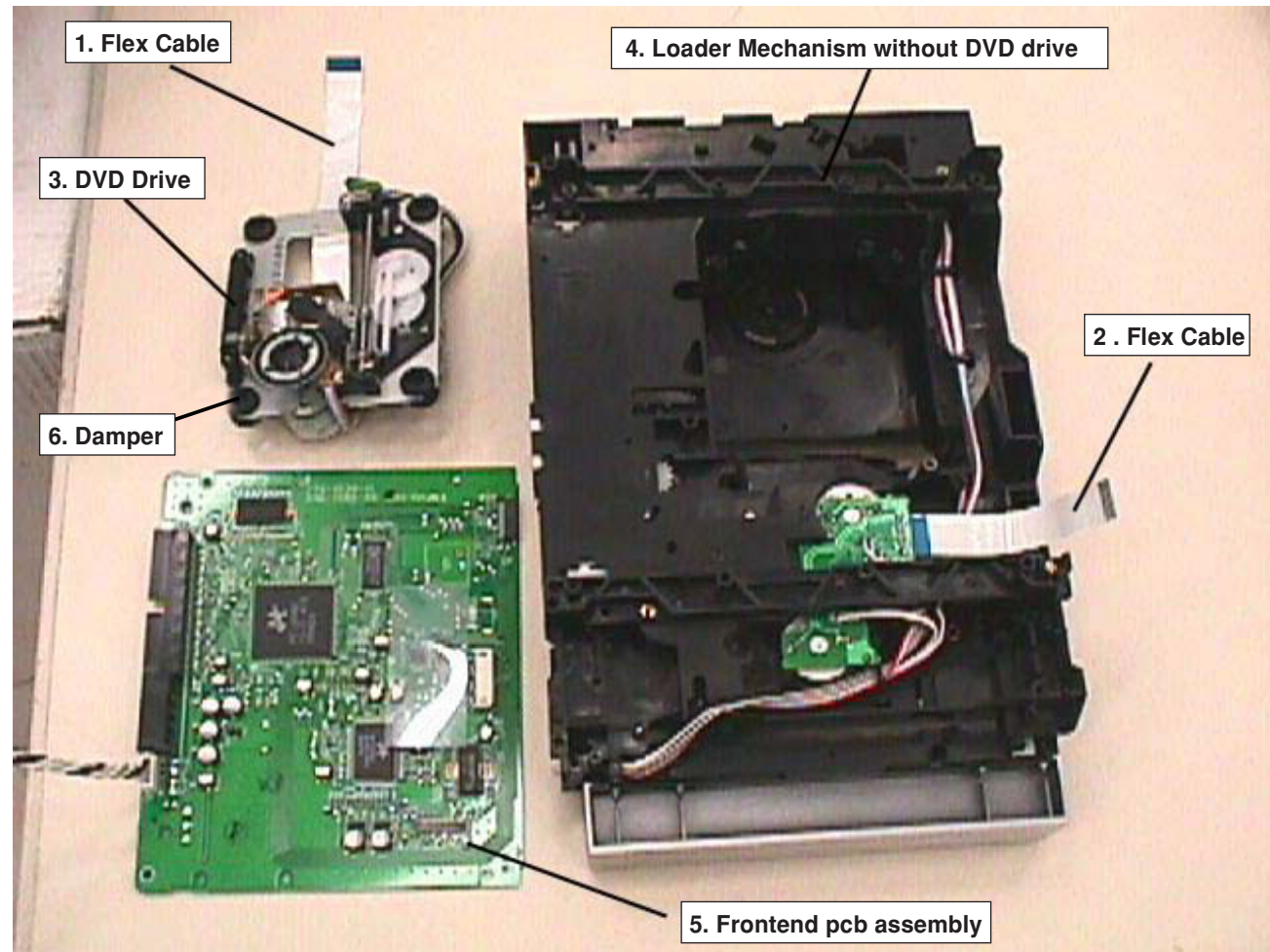
DVD MAIN BOARD - BOTTOM VIEW



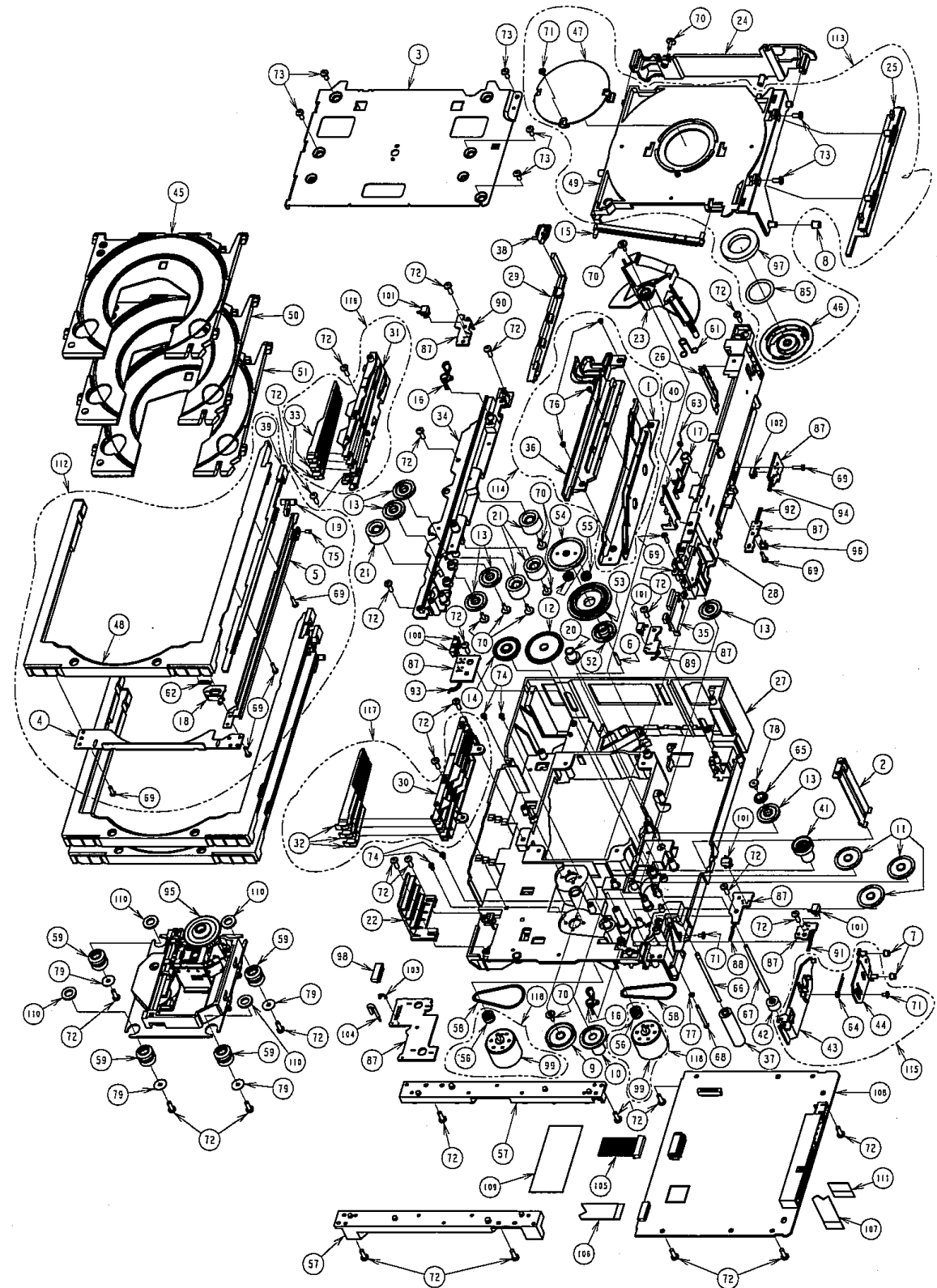
DVD MAIN SCHEATIC DIAGRAM



C101	B4	R147	F3
C102	B1	R148	F3
C103	B1	R149	F3
C104	E6	R150	F3
C105	D6	R151	F4
C107	B4	R152	F4
C111	C2	R153	F4
C112	D6	R154	F4
C114	C5	R155	G3
C116	E5	R156	G3
C117	C6	R157	G3
C118	C6	R158	G4
C120	D5	R159	G4
C121	D5	R160	F4
C123	D5	R161	B3
C124	D5	R162	B3
C142	B2	R163	B3
C144	B3	R164	B3
C146	B4	R165	B3
C150	C4	R166	B4
C152	C5	R167	B4
C154	D2	R168	B4
C155	D5	R169	B4
C156	D2	R170	B4
C158	D5	R171	B4
C159	E2	R172	B4
C160	E5	R173	B4
C162	F5	R174	B4
C163	F2	R175	B4
C164	F2	R176	B4
C165	F2	R177	B4
C166	F4	R178	B4
C168	F3	R179	B4
C169	F3	R180	B4
C171	F4	R181	B4
C173	D6	R182	B4
C178	E5	R183	B4
C179	G2	R184	B5
C186	G3	R185	B5
C188	G2	R186	B5
C190	G3	R187	B5
C191	G2	R188	B5
C192	G4	R189	B5
C285	D5	R190	B5
C286	D6	R191	B5
C287	D5	R192	B5
CN10	D7	R193	B5
CN12	A5	R194	B5
IC01	D3	R195	B5
IC10	G3	R196	B5
IC11	G4	R197	B5
IC13	G2	R198	B5
IC14	E5	R200	B5
IC3	C1	R201	C5
IC7	C5	R202	C1
IC9	D6	R203	C1
L101	C5	R207	B2
L102	D5	R208	B1
L104	D6	R213	B5
L105	D5	R214	C2
R101	D6	R217	E6
R106	B5	R218	E6
R108	C6	R219	F6
R109	B5	R220	F6
R110	B5	R222	G2
R111	B5	R223	G2
R112	B5	R225	G3
R113	D5	R226	G4
R114	D5	R227	B1
R115	D6	R228	D2
R116	D2	R229	E6
R117	E2	R230	E4
R118	E2	R231	E4
R119	E2	R248	E6
R120	E2	R249	C1
R121	E2	R250	C6
R123	E2	R251	C5
R125	E2	R252	E2
R126	E2	R259	C4
R127	E2	R260	B4
R128	E4	R261	B4
R129	E4	R262	B4
R130	E4	R263	B4
R131	F4	R264	B4
R132	F4	R265	E6
R133	F4	R266	E6
R134	F4	R269	E6
R135	F4	R270	E6
R136	F2	R271	E6
R137	F2	R272	E6
R138	F2	R273	F6
R139	F2	R275	F6
R140	F2	R285	F6
R141	F2	X101	C6
R142	F2		
R143	F3		
R144	F3		
R145	F3		
R146	F3		



EXPLODED VIEW (For information only)



ELECTRICAL PARTS LIST - DVD MODULE

LOADER MECHANISM + FRONT END PARTS (See Page 8-7)

1	9965 000 13582	FLEX CABLE PICKUP
2	9965 000 13581	FLEX CABLE MECHANISM
3	9965 000 13580	DVD DRIVE, TRAVERSE UNIT
4	9965 000 13658	LOADER MECH W/O PCB & DVD DRIVE
5	9965 000 13583	FRONT END PCB ASSEMBLY
6	9965 000 13579	DAMPER, INSULATOR 50

DVD MAIN BOARD PARTS

MISCELLANEOUS

CN10	9965 000 13345	WAFER, CARD CABLE 23PIN
CN12	9965 000 13558	40P HEADER (ANGLE TYPE)
X101	9965 000 13570	CRYSTAL, CHIP HC-49/US 27MHZ

CAPACITORS

C101	9965 000 13552	CAP CHIP 1608 0,1UF ZF
C102	9965 000 13552	CAP CHIP 1608 0,1UF ZF
C103	9965 000 13553	CAP CHIP ELECT 100UF/6,3V
C104	9965 000 13552	CAP CHIP 1608 0,1UF ZF
C105	9965 000 13553	CAP CHIP ELECT 100UF/6,3V
C111	9965 000 13553	CAP CHIP ELECT 100UF/6,3V
C112	9965 000 13552	CAP CHIP 1608 0,1UF ZF
C114	9965 000 13552	CAP CHIP 1608 0,1UF ZF
C116	9965 000 13554	CAP CHIP ELECT 47UF/6,3V
C117	9965 000 13555	CAP CHIP 1608 27PF JA
C118	9965 000 13555	CAP CHIP 1608 27PF JA
C120	9965 000 13552	CAP CHIP 1608 0,1UF ZF
C121	9965 000 13556	CAP CHIP ELECT 330UF/6,3
C123	9965 000 13552	CAP CHIP 1608 0,1UF ZF
C124	9965 000 13553	CAP CHIP ELECT 100UF/6,3V
C142	9965 000 13552	CAP CHIP 1608 0,1UF ZF
C144	9965 000 13552	CAP CHIP 1608 0,1UF ZF
C146	9965 000 13552	CAP CHIP 1608 0,1UF ZF
C150	9965 000 13552	CAP CHIP 1608 0,1UF ZF
C152	9965 000 13552	CAP CHIP 1608 0,1UF ZF
C154	9965 000 13552	CAP CHIP 1608 0,1UF ZF
C155	9965 000 13552	CAP CHIP 1608 0,1UF ZF
C156	9965 000 13552	CAP CHIP 1608 0,1UF ZF
C158	9965 000 13552	CAP CHIP 1608 0,1UF ZF
C159	9965 000 13552	CAP CHIP 1608 0,1UF ZF
C160	9965 000 13552	CAP CHIP 1608 0,1UF ZF
C162	9965 000 13552	CAP CHIP 1608 0,1UF ZF
C163	9965 000 13557	CAP CHIP 1608 150PF JA
C164	9965 000 13552	CAP CHIP 1608 0,1UF ZF
C165	9965 000 13552	CAP CHIP 1608 0,1UF ZF
C166	9965 000 13552	CAP CHIP 1608 0,1UF ZF
C168	9965 000 13552	CAP CHIP 1608 0,1UF ZF
C169	9965 000 13552	CAP CHIP 1608 0,1UF ZF
C171	9965 000 13552	CAP CHIP 1608 0,1UF ZF
C173	9965 000 13553	CAP CHIP ELECT 100UF/6,3V
C178	9965 000 13552	CAP CHIP 1608 0,1UF ZF
C179	9965 000 13552	CAP CHIP 1608 0,1UF ZF

C186	9965 000 13552	CAP CHIP 1608 0,1UF ZF
C188	9965 000 13552	CAP CHIP 1608 0,1UF ZF
C190	9965 000 13554	CAP CHIP ELECT 47UF/6,3V
C191	9965 000 13552	CAP CHIP 1608 0,1UF ZF
C192	9965 000 13552	CAP CHIP 1608 0,1UF ZF
C285	9965 000 13556	CAP CHIP ELECT 330UF/6,3
C286	9965 000 13552	CAP CHIP 1608 0,1UF ZF
C287	9965 000 13552	CAP CHIP 1608 0,1UF ZF

RESISTORS

R101	9965 000 13566	RES CHIP 1608 1/10W 360R J
R106	4822 051 30008	OR JUMPER
R107	4822 051 30472	4K7 5% 0,062W
R108	4822 051 30105	1M 5% 0,062W
R109	4822 051 30121	120R 5% 0,062W
R110	4822 051 30121	120R 5% 0,062W
R111	4822 051 30121	120R 5% 0,062W
R112	4822 051 30121	120R 5% 0,062W
R113	4822 051 30221	220R 5% 0,062W
R114	9965 000 13567	RES CHIP 1608 1/10W 430R J
R115	4822 051 30221	220R 5% 0,062W
R116	4822 051 30102	1K 5% 0,062W
R117	4822 051 30109	10R 5% 0,062W
R118	4822 051 30109	10R 5% 0,062W
R119	4822 051 30109	10R 5% 0,062W
R120	4822 051 30472	4K7 5% 0,062W
R121	4822 051 30473	47K 5% 0,062W
R123	4822 051 30109	10R 5% 0,062W
R125	4822 051 30109	10R 5% 0,062W
R126	4822 051 30109	10R 5% 0,062W
R127	4822 051 30473	47K 5% 0,062W
R128	4822 051 30339	33R 5% 0,062W
R129	4822 051 30339	33R 5% 0,062W
R130	4822 051 30339	33R 5% 0,062W
R131	4822 051 30339	33R 5% 0,062W
R132	4822 051 30339	33R 5% 0,062W
R133	4822 051 30339	33R 5% 0,062W
R134	4822 051 30339	33R 5% 0,062W
R135	4822 051 30339	33R 5% 0,062W
R136	4822 051 30109	10R 5% 0,062W
R137	4822 051 30109	10R 5% 0,062W
R138	4822 051 30109	10R 5% 0,062W
R139	4822 051 30109	10R 5% 0,062W
R140	4822 051 30109	10R 5% 0,062W
R141	4822 051 30109	10R 5% 0,062W
R142	4822 051 30109	10R 5% 0,062W
R143	4822 051 30109	10R 5% 0,062W
R144	4822 051 30109	10R 5% 0,062W
R145	4822 051 30109	10R 5% 0,062W
R146	4822 051 30109	10R 5% 0,062W
R147	4822 051 30109	10R 5% 0,062W
R148	4822 051 30339	33R 5% 0,062W

ELECTRICAL PARTS LIST - DVD MODULE

R149	4822 051 30339	33R 5% 0,062W
R150	4822 051 30339	33R 5% 0,062W
R151	4822 051 30339	33R 5% 0,062W
R152	4822 051 30339	33R 5% 0,062W
R153	4822 051 30339	33R 5% 0,062W
R154	4822 051 30473	47K 5% 0,062W
R155	4822 051 30473	47K 5% 0,062W
R156	4822 051 30473	47K 5% 0,062W
R157	4822 051 30473	47K 5% 0,062W
R158	4822 051 30473	47K 5% 0,062W
R159	4822 051 30473	47K 5% 0,062W
R160	4822 051 30473	47K 5% 0,062W
R162	4822 051 30473	47K 5% 0,062W
R163	4822 051 30473	47K 5% 0,062W
R164	4822 051 30473	47K 5% 0,062W
R165	4822 051 30473	47K 5% 0,062W
R166	4822 051 30473	47K 5% 0,062W
R167	4822 051 30473	47K 5% 0,062W
R168	4822 051 30473	47K 5% 0,062W
R169	4822 051 30473	47K 5% 0,062W
R170	4822 051 30479	47R 5% 0,062W
R171	4822 051 30339	33R 5% 0,062W
R172	4822 051 30339	33R 5% 0,062W
R173	4822 051 30339	33R 5% 0,062W
R174	4822 051 30339	33R 5% 0,062W
R175	4822 051 30339	33R 5% 0,062W
R176	4822 051 30339	33R 5% 0,062W
R177	4822 051 30339	33R 5% 0,062W
R178	4822 051 30339	33R 5% 0,062W
R179	4822 051 30339	33R 5% 0,062W
R180	4822 051 30339	33R 5% 0,062W
R181	4822 051 30339	33R 5% 0,062W
R182	4822 051 30339	33R 5% 0,062W
R183	4822 051 30339	33R 5% 0,062W
R184	4822 051 30339	33R 5% 0,062W
R185	4822 051 30339	33R 5% 0,062W
R186	4822 051 30339	33R 5% 0,062W
R187	4822 051 30479	47R 5% 0,062W
R188	4822 051 30479	47R 5% 0,062W
R189	4822 051 30479	47R 5% 0,062W
R190	4822 051 30339	33R 5% 0,062W
R191	4822 051 30339	33R 5% 0,062W
R192	4822 051 30339	33R 5% 0,062W
R193	4822 051 30479	47R 5% 0,062W
R194	4822 051 30479	47R 5% 0,062W
R195	4822 051 30479	47R 5% 0,062W
R196	4822 051 30479	47R 5% 0,062W
R197	4822 051 30472	4K7 5% 0,062W
R198	4822 051 30472	4K7 5% 0,062W
R200	4822 051 30472	4K7 5% 0,062W
R201	4822 051 30339	33R 5% 0,062W
R203	4822 051 30109	10R 5% 0,062W

R208	4822 051 30008	OR JUMPER
R213	4822 051 30472	4K7 5% 0,062W
R214	4822 051 30008	OR JUMPER
R217	4822 051 30101	100R 5% 0,062W
R218	4822 051 30101	100R 5% 0,062W
R219	4822 051 30152	1K5 5% 0,062W
R220	4822 051 30152	1K5 5% 0,062W
R222	4822 051 30101	100R 5% 0,062W
R223	4822 051 30101	100R 5% 0,062W
R225	4822 051 30101	100R 5% 0,062W
R226	4822 051 30101	100R 5% 0,062W
R228	4822 051 30472	4K7 5% 0,062W
R229	9965 000 13568	RES CHIP 1608 1/10W 4K J
R230	4822 051 30339	33R 5% 0,062W
R231	4822 051 30339	33R 5% 0,062W
R248	4822 051 30102	1K 5% 0,062W
R249	4822 051 30102	1K 5% 0,062W
R250	4822 051 30331	330R 5% 0,062W
R251	4822 051 30472	4K7 5% 0,062W
R252	4822 051 30472	4K7 5% 0,062W
R260	4822 051 30008	OR JUMPER
R261	4822 051 30473	47K 5% 0,062W
R262	4822 051 30473	47K 5% 0,062W
R263	4822 051 30473	47K 5% 0,062W
R264	4822 051 30473	47K 5% 0,062W
R267	4822 051 30759	75R 5% 0,062W
R268	9965 000 13569	RES CHIP 1608 1/10W 82R J
R269	4822 051 30759	75R 5% 0,062W
R270	4822 051 30759	75R 5% 0,062W
R271	4822 051 30759	75R 5% 0,062W
R272	4822 051 30759	75R 5% 0,062W
R273	4822 051 30102	1K 5% 0,062W

COILS & FILTERS

L101	9965 000 13565	FERRITE CORE
L102	9965 000 13565	FERRITE CORE
L104	4822 051 30008	OR JUMPER
L105	4822 051 30008	OR JUMPER

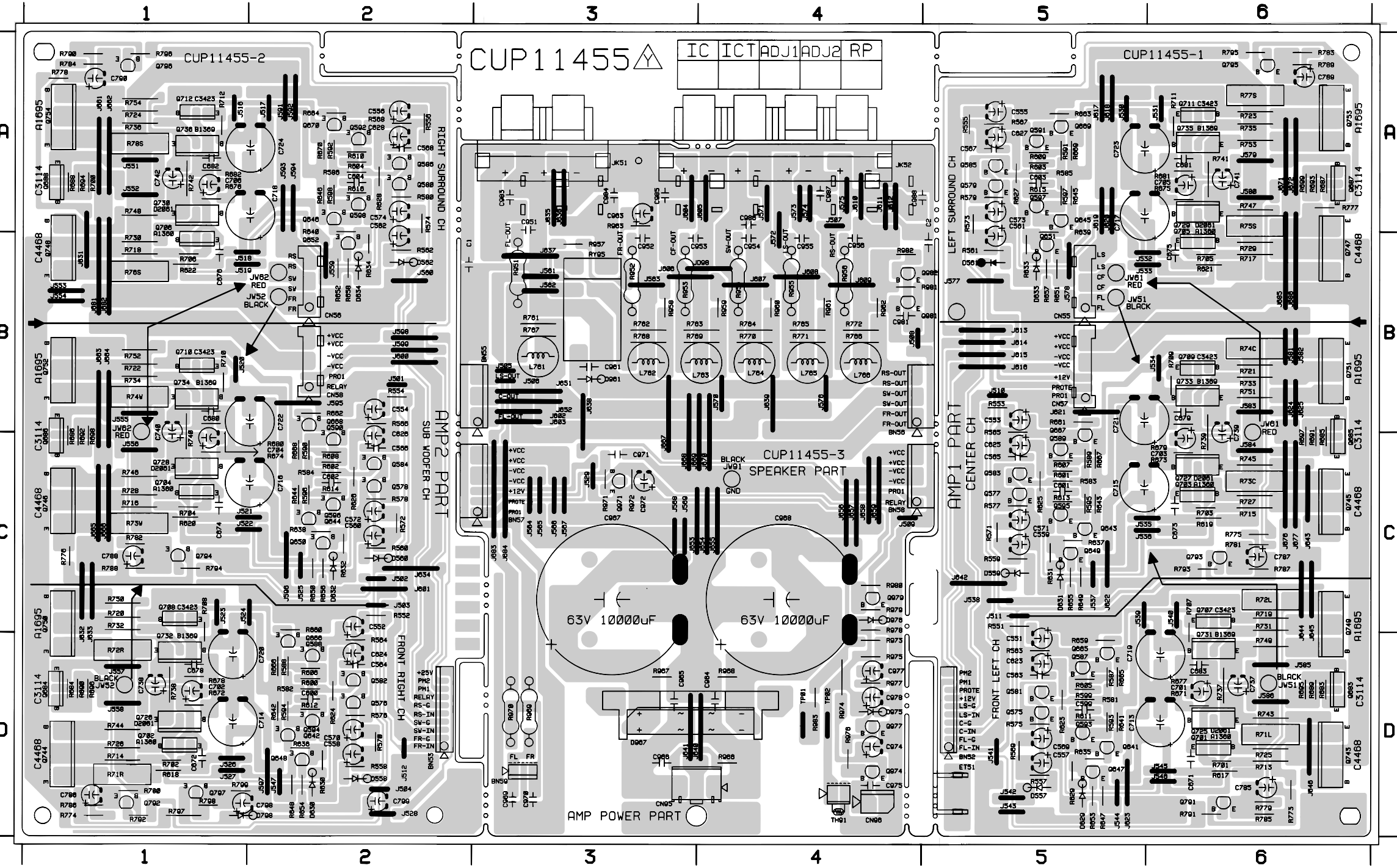
INTEGRATED CIRCUITS

IC01	9965 000 13559	ES4318F DVD MPEG DECODER
IC03	9965 000 13560	HY29F400BT90 FLASH MEMORY(4M)
IC07	9965 000 13561	74VHC04M INVERTER
IC08	9965 000 13562	RC1117ST ADJ REGULATOR
IC09	9965 000 13562	RC1117ST ADJ REGULATOR
IC10	9965 000 13563	HY57V161610D TC-8 SDRAM(16M)
IC11	9965 000 13563	HY57V161610D TC-8 SDRAM(16M)
IC13	9965 000 13564	BR24C16F EEPROM(16K)
IC14	3141 018 51100	IC SM CS4955

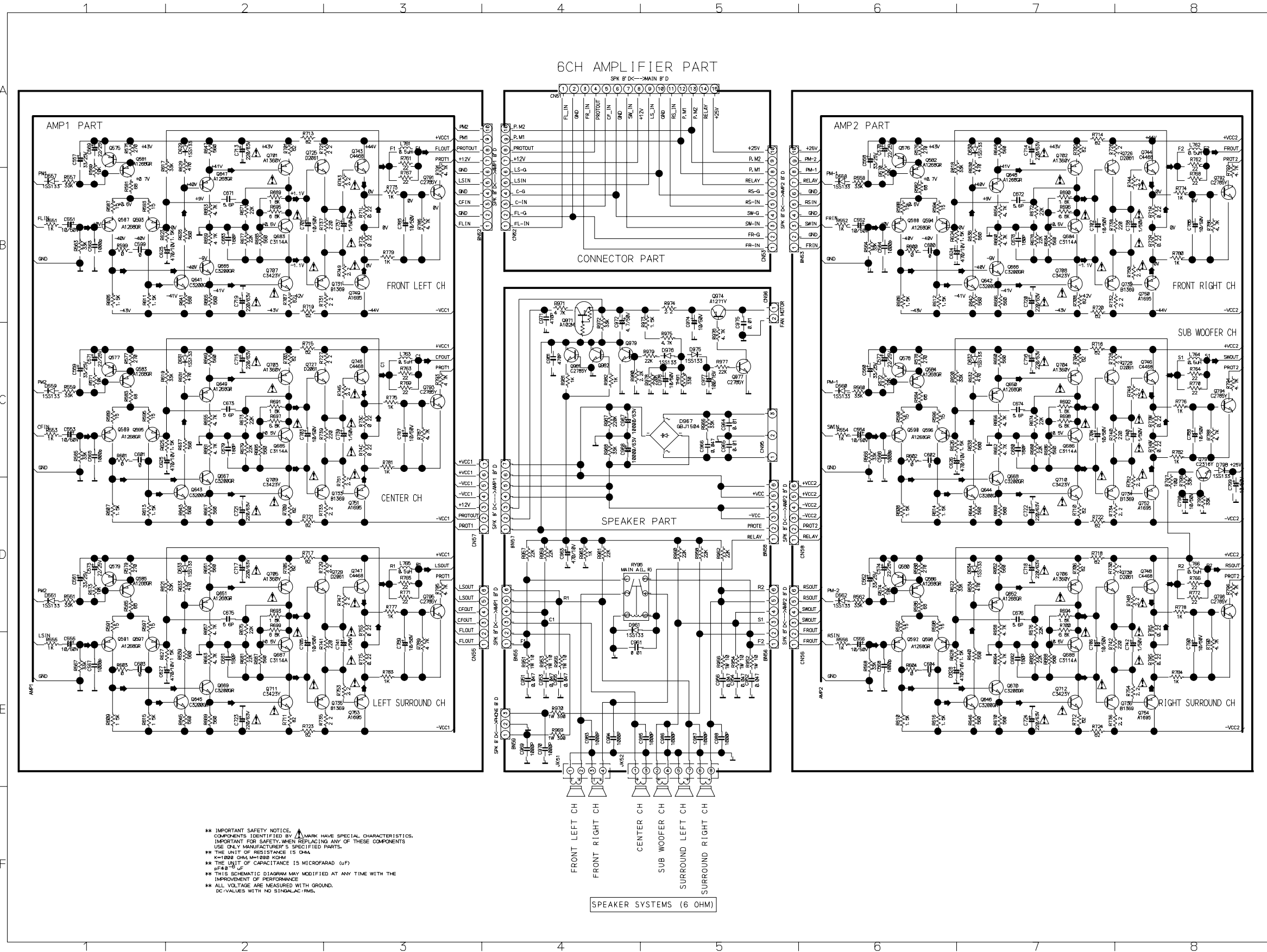
Note: Only the parts mentioned in this list are normal service spare parts.

COMPONENT VIEW

BN52	D5	C977	D4	J578	B5	Q576	D2	R561	B5	R665	D5	R766	B4
BN53	D2	C978	D4	J579	A6	Q577	C5	R562	B2	R666	D2	R767	B3
BN55	B3	C981	B4	J580	A6	Q578	C2	R563	D5	R667	C5	R768	B3
BN56	B4	C983	A3	J581	B6	Q579	A5	R564	D2	R668	C2	R769	B3
BN59	D3	C984	A3	J582	B6	Q580	A2	R565	C5	R669	A5	R770	B4
C551	D5	C985	A3	J583	B6	Q581	D5	R566	B2	R670	A2	R771	B4
C552	C2	C986	A4	J584	C6	Q582	D2	R567	A5	R671	D6	R772	B4
C553	B5	C987	A4	J585	D6	Q583	C5	R568	D5	R672	D6	R773	D6
C554	B2	C988	A4	J586	D6	Q584	C2	R570	D2	R672	D1	R774	D1
C555	A5	CN55	B5	J591	A2	Q585	A5	R571	C5	R673	C6	R775	C6
C556	A2	CN56	B2	J592	A2	Q586	A2	R572	C2	R674	C2	R776	C1
C557	D5	CN57	B5	J593	A2	Q587	D5	R573	A5	R675	A6	R777	A6
C558	D2	CN58	B2	J594	A2	Q588	D2	R574	A2	R676	A1	R778	A1
C559	C5	CN59	D3	J595	B2	Q589	C5	R575	D5	R677	D6	R779	D6
C560	C2	CN60	D4	J596	C2	Q591	A5	R576	D2	R678	D1	R775	A6
C561	B5	D557	D5	J597	D2	Q592	A2	R577	C5	R679	C6	R780	D1
C563	D5	D558	D2	J598	D2	Q593	D5	R578	C2	R680	C2	R781	C6
C564	D2	D559	C5	J599	B2	Q594	D2	R579	A5	R681	A6	R782	C1
C565	C5	D560	C2	J600	B2	Q595	C5	R580	A2	R682	A1	R783	A6
C566	C2	D561	B5	J601	C2	Q596	C2	R581	D5	R683	D6	R784	A1
C567	A5	D562	B2	J602	B3	Q597	A5	R582	D2	R684	D1	R785	A1
C568	A2	D563	D5	J603	B3	Q598	A2	R583	D5	R685	C6	R785	D6
C568	A2	D563	D2	J604	A3	Q641	D5	R584	C2	R686	C1	R786	D1
C569	D5	D631	C5	J605	A4	Q642	D2	R585	A5	R687	A6	R787	C6
C570	D2	D632	C2	J606	B3	Q643	C5	R587	D5	R688	A1	R788	C1
C571	C5	D633	B5	J607	B4	Q644	C2	R588	D2	R689	D6	R789	A6
C572	C2	D634	B2	J608	B4	Q645	A5	R589	C5	R690	D1	R790	A1
C573	A5	D798	D1	J609	B4	Q646	A2	R590	C2	R691	C6	R791	D6
C574	A2	D961	B3	J610	A4	Q647	D5	R591	A5	R692	C1	R792	D1
C593	B3	D967	D3	J611	A4	Q648	D2	R591	B3	R693	A6	R793	C6
C599	D5	D975	D4	J612	A4	Q649	C5	R592	A2	R694	A1	R794	C1
C600	D2	D976	D4	J613	B5	Q650	C2	R593	D5	R696	D1	R795	A6
C601	C5	E751	C5	J614	B5	Q651	B5	R594	D2	R697	C6	R796	A1
C602	C2	J501	B2	J615	B5	Q652	D2	R595	C5	R698	C1	R797	D1
C603	A5	J502	C2	J616	B5	Q665	D5	R595	D6	R699	A6	R798	D1
C604	A2	J503	C2	J617	A5	Q666	D2	R596	C2	R700	A1	R799	D1
C623	D5	J504	D2	J618	A5	Q667	C5	R597	A5	R701	D6	R952	B3
C624	D2	J505	B3	J619	A5	Q668	B2	R598	A2	R702	D1	R953	B3
C625	C5	J506	B3	J620	A5	Q669	A5	R599	D5	R703	C6	R954	B4
C626	C2	J507	A4	J621	B5	Q670	A2	R600	D2	R704	C1	R955	B4
C627	A5	J508	B4	J622	C5	Q683	D6	R601	C5	R705	B6	R956	B4
C628	A2	J509	C4	J623	D5	Q684	D1	R602	C2	R706	B1	R957	B3
C671	D6	J510	B5	J624	B6	Q685	C6	R603	A5	R707	C6	R958	B3
C672	D1	J511	C5	J625	B6	Q686	C1	R604	A2	R708	C1	R959	B4
C673	C6	J512	D2	J631	B1	Q687	A6	R605	D5	R709	B6	R960	B4
C674	C1	J516	A1	J632	C1	Q688	A1	R606	D2	R710	B1	R961	B4
C675	B6	J517	A2	J633	C1	Q701	D6	R607	C5	R711	A6	R963	A3
C676	B1	J518	B1	J634	C2	Q702	D1	R608	C2	R712	A1	R966	D4
C678	D1	J519	B1	J635	A3	Q703	C6	R609	A5	R713	D6	R967	D3
C679	B6	J520	B1	J636	A3	Q704	C1	R610	A2	R714	D1	R968	D4
C680	B1	J521	C1	J637	B3	Q705	B6	R611	D5	R715	C6	R969	D3
C681	A6	J522	C1	J638	B3	Q706	A1	R612	D2	R716	C1	R970	D3
C682	A1	J523	C1	J639	B4	Q707	C6	R613	C5	R717	B6	R971	C3
C683	D6	J524	C1	J641	D3	Q708	C1	R614	C2	R718	B1	R972	C3
C701	D6	J525	C2	J642	C5	Q709	B6	R615	A5	R719	C6	R973	D4
C702	D1	J526	D1	J643	C6	Q710	B1	R616	A2	R711	D6	R974	D4
C703	C6	J527	D1	J644	C6	Q711	A6	R618	D1	R711	D1	R975	D4
C704	C2	J528	D2	J645	C6	Q712	A1	R619	C6	R720	C1	R976	D4
C705	A6	J529	C3	J646	D6	Q725	D6	R620	C1	R721	B6	R977	D4
C706	A1	J530	A5	J651	B3	Q726	D1	R621	B6	R722	B1	R978	C4
C713	D5	J531	A6	J652	B3	Q727	C6	R622	B1	R723	A6	R979	D4
C714	D1	J532	B6	J653	C4	Q728	C1	R623	D5	R724	A1	R980	C4
C715	C5	J533	B6	J654	C4	Q729	A6	R624	D2	R725	D6	R981	B4
C716	C2	J534	B6	J655	C4	Q730	A1	R625	C5	R726	D1	R982	B4
C717	A5	J535	C6	J656	C4	Q731	D6	R626	C2	R727	C6	R983	D4
C718	A2	J536	C6	J657	C4	Q732	D1	R627	A5	R728	C1	R985	D3
C719	D5	J537	C5	J658	C4	Q733	B6	R628	A2	R729	B6	TH91	D4
C720	D1	J538	C5	J663	B1	Q734	B1	R629	D5	R721	C6	TP01	D4
C721	B5	J539	C5	J664	B1	Q735	A6	R630	D2	R722	D1	TP02	D4
C722	B2	J540	C6	J665	C1	Q736	A1	R631	C5	R730	B1	V999	D2
C723	A5	J541	D5	J666	C1	Q743	D6	R632	C2	R731	C6	V968	C4
C724	A2	J542	D5	J667	B3	Q745	C6	R633	B5	R732	C1		
C737	D6	J543	D5	J668	C3	Q746	C1	R634	B2	R733	B6		
C738	D1	J544	D5	J669	C4	Q747	B6	R635	D5	R734	B1		
C739	C6	J545	D6	J670	C4	Q748	B1	R636	D2	R735	A6		
C740	C1	J546	D6	J671	A6	Q749	C6	R637	C5	R736	A1		
C741	A6	J547	D2	J672	A6	Q751	B6	R638	C2	R737	D6		
C742	A1	J551	A1	J676	C6	Q752	B1	R639	B5	R738	D1		
C785	D6	J552	A1	J677	C6	Q753	A6	R640	B2	R739	C6		
C786	D1	J553	B1	J681	B1	Q754	A1	R641	D5	R733	C6		
C787	C6	J554	B1	J682	B1	Q791	D6	R642	D2	R737W	C1		
C788	C1	J555	B1	J683	C3	Q792	D1	R643	C5	R740	C1		
C789	A6	J556	C1	J684	C3	Q793	C6	R644	C2	R741	A6		
C790	A1	J557	D1	J685	B6	Q794	C1	R645	A5	R742	A1		
C798	D1	J558	D1	J686	B6	Q795	A6	R646	A2	R743	D6		
C825	B5	J559	B2	JD98	B4	Q796	A1	R647	D5	R744	D1		
C951	A3	J560	B2	JK51	A3	Q797	D1	R648	D2	R745	C6		
C952	B3	J561	B3	JK52	A4	Q971	C3	R649	C5	R746	C1		
C954	B4	J562	B3	JK52	A4	Q974	D4	R650	C2	R747	A6		
C955	B4	J563	B3	JW51	B5	Q977	D4	R651	B5	R748	A1		
C956	B4	J564	C3	JW51	D6	Q979	C4	R652	B2	R749	D6		
C961	B3	J565	C3	JW52	D1	Q981	B4	R653	D5	R74C	B6		
C963	A3	J566	C3	JW61	B5	Q981	B4	R654	D2	R74W	B1		
C964	D4	J567	C3	JW61	C6	Q982	B4	R655	C5	R750	C1		
C965	D3	J568	C3	JW62	B1	R551	C5	R656	C2	R751	B6		
C966	D3	J569	C3	JW62	B2	R552	C2	R657	B5	R752	B1		
C967	C3	J570	B4	KW52	B2	R553	B5	R658	B2	R754	A1		
C969	D3	J571	A4	L761	B3	R554	B2	R659	C4	R755	A6		
C970	D3	J572	B4	L762	B3	R555	A5	R659	D5	R761	B3		
C971	C3	J573	A4	L763	B4	R556	A2	R660	C2	R762	B3		
C972	C3	J574	A4	L764	B4	R557	D5	R661	B5	R763	B3		
C974	D4	J575	A4	L765	B4	R558	D2	R662	B2	R764	B4		
C975	D4	J576	B4	L766	B4	R559	C5	R663	A5	R765	B1		
C975	D4	J577	B5	Q575	D5	R560	C2	R664	A2	R765	B4		



CIRCUIT DIAGRAM



*** IMPORTANT SAFETY NOTICE. Components identified by mark have special characteristics. IMPORTANT FOR SAFETY, WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY MANUFACTURER'S SPECIFIED PARTS. ***
 * THE UNIT OF RESISTANCE IS OHM.
 K=1000 OHM, M=1000 K OHM.
 * THE UNIT OF CAPACITANCE IS MICROFARAD (UF).
 P.F.# = 0 UF.
 * THIS SCHEMATIC DIAGRAM MAY BE MODIFIED AT ANY TIME WITH THE IMPROVEMENT OF PERFORMANCE.
 ** ALL VOLTAGE ARE MEASURED WITH GROUND.
 DC VALUES WITH NO SIGNAL AC RMS.

BN52	A2	C978	B3	Q728	B5	R621	B1	R724	C5	R977	B3
BN53	A4	C981	B3	Q729	B2	R622	B4	R725	A2	R978	B3
BN55	B2	C983	C3	Q730	B5	R623	A1	R726	A5	R979	B3
BN56	B4	C984	C3	Q731	A2	R624	A4	R727	B2	R980	B3
BN57	B2	C985	C3	Q732	A5	R625	B1	R728	B5	R981	B3
BN58	B4	C986	C3	Q733	B2	R626	B4	R729	B2	R982	B3
BN59	C3	C987	C3	Q734	B5	R627	C1	R72L	A2	RY95	B3
C551	A1	C988	C3	Q735	C2	R628	C4	R72R	A5	TH91	B3
C552	A4	CN51	A3	Q736	C5	R629	A1	R730	B5		
C553	B1	CN52	A2	Q743	A2	R630	A4	R731	A2		
C554	B4	CN53	A4	Q744	A5	R631	B1	R732	A5		
C555	C1	CN55	B2	Q745	B2	R632	B4	R733	B2		
C556	C4	CN56	B4	Q746	B5	R633	B1	R734	B5		
C557	A1	CN57	B2	Q747	B2	R634	B4	R735	C2		
C558	A4	CN58	B4	Q748	B5	R635	A1	R736	C5		
C559	B1	CN96	A4	Q749	A2	R636	A4	R737	A2		
C560	B4	D557	A1	Q750	A5	R637	B1	R738	A5		
C561	B1	D558	A4	Q751	B2	R638	B4	R739	B2		
C562	B4	D559	B1	Q752	B5	R640	C4	R73C	B2		
C564	A4	D560	B4	Q753	C2	R641	A1	R73W	B5		
C565	B1	D561	B1	Q754	C5	R642	A4	R740	B5		
C566	B4	D562	B4	Q791	A2	R643	B1	R741	C2		
C567	C1	D629	A1	Q792	A5	R644	B4	R742	C5		
C568	C4	D630	A4	Q793	B2	R645	C1	R743	A2		
C570	A4	D631	B1	Q794	B5	R646	C4	R744	A5		
C571	B1	D632	B4	Q795	B2	R647	A1	R745	B2		
C572	B4	D633	B1	Q796	B5	R648	A4	R746	B5		
C574	B4	D634	B4	Q797	B5	R649	B1	R747	B2		
C599	A1	D798	B5	Q971	A3	R650	B4	R748	B5		
C600	A4	D961	C3	Q974	A3	R651	B1	R749	A2		
C601	B1	D967	B3	Q977	B3	R652	B4	R74C	B2		
C602	B4	D975	B3	Q979	B3	R654	A4	R74W	B5		
C603	C1	D976	B3	Q981	B3	R655	B1	R750	A5		
C604	C4	JK51	C3	Q982	B3	R656	B4	R751	B2		
C623	A1	JK52	C3	R551	A1	R657	B1	R752	B5		
C624	A4	L761	A2	R552	A4	R658	B4	R754	C5		
C625	B1	L762	A5	R553	B1	R659	A1	R759	C2		
C626	B4	L763	B2	R554	B4	R659	A1	R75S	C2		
C627	C1	L764	B5	R555	C1	R660	A4	R761	A2		
C628	C4	L765	B2	R556	C4	R661	B1	R762	A5		
C671	A1	L766	B5	R557	A1	R662	B4	R763	B2		
C672	A4	U575	A1	R558	A4	R663	C1	R764	B5		
C673	B1	U576	A4	R559	B1	R664	C4	R765	B2		
C673	B1	U577	B1	R560	B4	R665	A1	R766	B5		
C674	B5	U578	B4	R561	B1	R666	A4	R767	A2		
C675	B1	U579	B1	R562	B4	R667	B1	R768	A5		
C676	B4	U580	B4	R563	A1	R668	B4	R769	B2		
C678	A4	U581	A1	R564	A4	R669	C1	R76S	C5		
C679	B1	U582	A4	R565	B1	R670	C4	R770	B5		
C680	B4	U583	B1	R566	B4	R672	A5	R771	B2		
C681	C1	U584	B4	R567	C1	R673	B1	R772	B5		
C682	C4	U585	B1	R568	C4	R674	B5	R773	A2		
C683	A1	U586	B4	R569	A1	R675	B1	R774	A5		
C702	A5	U587	A1	R570	A4	R676	B5	R775	B2		
C703	B2	U588	A4	R571	B1	R677	A1	R776	B5		
C704	B5	U589	B1	R572	B4	R678	A5	R777	B2		
C705	C2	U590	B4	R573	B1	R679	B1	R778	B5		
C706	C5	U591	C1	R574	B4	R680	B5	R779	A2		
C713	A1	U592	C4	R575	A1	R681	C1	R780	A5		
C714	A5	U593	A1	R576	A4	R682	C5	R781	B2		
C715	B1	U594	A4	R577	B1	R683	A2	R782	B5		
C716	B5	U595	B1	R578	B4	R684	A5	R783	C2		
C717	B1	U596	B4	R579	B1	R685	B1	R783	C2		
C718	B5	U597	C1	R580	B4	R686	B5	R784	C5		
C719	A1	U598	C4	R581	A1	R687	C1	R785	A2		
C720	A5	U641	A1	R582	A4	R688	C5	R786	A5		
C721	B1	U642	A4	R583	B1	R689	A2	R787	B2		
C722	B5	U643	B1	R584	B4	R690	A5	R788	B5		
C723	C1	U644	B4	R585	B1	R691	B1	R789	C2		
C724	C5	U645	C1	R586	B4	R691	B2	R78S	C5		
C737	A2	U646	C4	R587	A1	R692	B5	R790	C5		
C738	A5	U647	A1	R588	A4	R693	B2	R791	A2		
C739	B2	U648	A4	R589	B1	R694	B5	R792	A5		
C740	B5	U649	B1	R590	B4	R695	A2	R793	B2		
C741	C2	U650	B4	R591	B1	R696	A5	R794	B5		
C742	C5	U651	B1	R592	B4	R697	B2	R795	B2		
C785	A2	U652	B4	R593	A1	R698	B5	R796	B5		
C786	A5	U655	A1	R594	A4	R699	B2	R797	B5		
C787	B2	U666	A4	R595	B1	R700	B5	R798	B5		
C788	B5	U667	B1	R596	B4	R701	A2	R799	B5		
C789	C2	U668	B4	R597	B1	R702	A5	R951	C3		
C790	C5	U669	C1	R598	B4	R703	B2	R952	C3		
C798	B5	U670	C4	R599	A1	R704	B5	R953	C3		
C799	B5	U683	A2	R600	A4	R705	B2	R954	C3		
C951	C3	U684	A5	R600	B4	R706	B5	R955	C3		
C952	C3	U685	B2	R601	B1	R707	A2	R956	C3		
C953	C3	U686	B5	R602	B4	R708	A5	R957	B3		
C954	C3	U687	C2	R603	C1	R709	B2	R958	B3		
C955	C3	U688	C5	R604	C4	R710	B5	R959	B3		
C956	C3	U701	A2	R605	A1	R711	C2	R960	B3		
C961	C3	U702	A5	R606	A4	R712	C5	R961	B3		
C963	B3	U703	B2	R607	B1	R713	A2	R962	B3		
C964	B3	U704	B5	R609	C1	R714	A5	R963	B3		
C965	B3	U705	B2	R610	C4	R715	B2	R966	B3		
C966	B3	U706	B5	R611	A1	R716	B5	R967	B3		
C967	B3	U707	A2	R612	A4	R717	B2	R968	B3		
C968	B3	U708	A5	R613	B1	R718	B5	R969	C3		
C969	C3	U709	B2	R614	B4	R719	A2	R970	C3		
C970	C3	U710	B5	R615	C1	R71L	A2	R971	A3		
C971	A3	U711	C2	R616	C4	R71R	A5	R972	A3		
C972	A3	U712	C5	R617	A1	R720	A5	R973	A3		
C974	A3	U725	A2	R618	A4	R721	B2	R974	A3		
C975	A3	U726	A5	R619	B1	R722	B5	R975	B3		
C977	B3	U727	B2	R620	B4	R723	C2	R976	B3		

SPEAKER SYSTEMS (6 OHM)

ELECTRICAL PARTS LIST - POWER AMPLIFIER MODULE

DIODES

D632	9965 000 04668	1SS133T-77 T26
D633	9965 000 04668	1SS133T-77 T26
D634	9965 000 04668	1SS133T-77 T26
D798	9965 000 04668	1SS133T-77 T26
D961	9965 000 04668	1SS133T-77 T26
D967	9965 000 02034	DIODE BRIDGE GBJ1504
D975	9965 000 04668	1SS133T-77 T26
D976	9965 000 04668	1SS133T-77 T26

TRANSISTORS

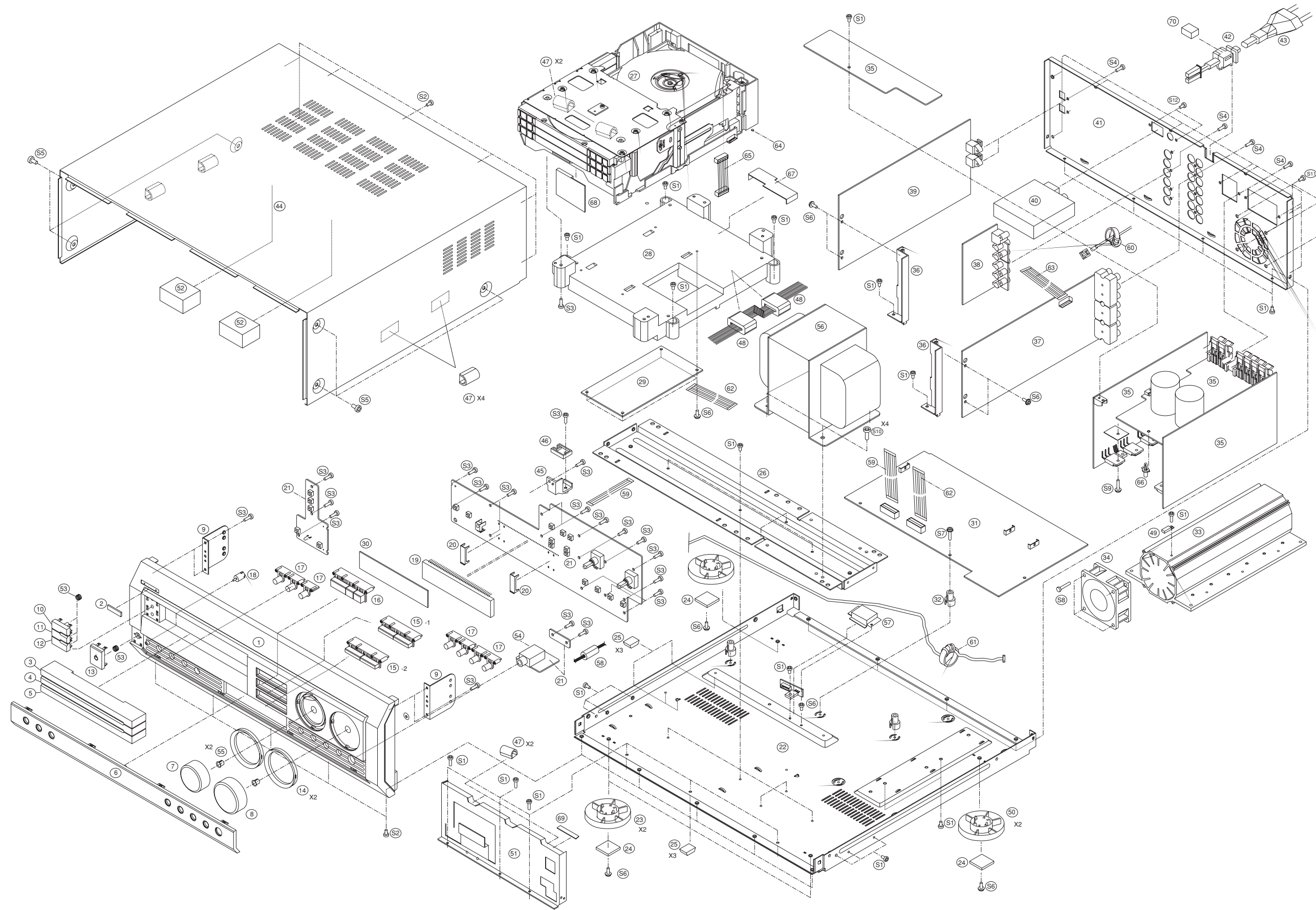
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Q670	4822 130 11616	KTC3200GR

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Q684	9965 000 13514	KTC3114A
Q685	9965 000 13514	KTC3114A
Q686	9965 000 13514	KTC3114A
Q687	9965 000 13514	KTC3114A
Q688	9965 000 13514	KTC3114A
Q701	9965 000 13515	KTA1360Y
Q702	9965 000 13515	KTA1360Y
Q703	9965 000 13515	KTA1360Y
Q704	9965 000 13515	KTA1360Y
Q705	9965 000 13515	KTA1360Y
Q706	9965 000 13515	KTA1360Y
Q707	9965 000 13516	KTC3423Y
Q708	9965 000 13516	KTC3423Y
Q709	9965 000 13516	KTC3423Y
Q710	9965 000 13516	KTC3423Y
Q711	9965 000 13516	KTC3423Y
Q712	9965 000 13516	KTC3423Y
Q725	9965 000 10601	KTD2061Y
Q726	9965 000 10601	KTD2061Y
Q727	9965 000 10601	KTD2061Y
Q728	9965 000 10601	KTD2061Y
Q729	9965 000 10601	KTD2061Y
Q730	9965 000 10601	KTD2061Y
Q731	9965 000 10602	KTB1369Y
Q732	9965 000 10602	KTB1369Y
Q733	9965 000 10602	KTB1369Y
Q734	9965 000 10602	KTB1369Y
Q735	9965 000 10602	KTB1369Y
Q736	9965 000 10602	KTB1369Y
Q743	9965 000 13517	2SC4466
Q744	9965 000 13517	2SC4466
Q745	9965 000 13517	2SC4466
Q746	9965 000 13517	2SC4466
Q747	9965 000 13517	2SC4466
Q748	9965 000 13517	2SC4466
Q749	9965 000 13518	2SA1695
Q750	9965 000 13518	2SA1695
Q751	9965 000 13518	2SA1695
Q752	9965 000 13518	2SA1695
Q753	9965 000 13518	2SA1695
Q754	9965 000 13518	2SA1695
Q791	4822 130 11609	KSC2785Y
Q792	4822 130 11609	KSC2785Y
Q793	4822 130 11609	KSC2785Y
Q794	4822 130 11609	KSC2785Y
Q795	4822 130 11609	KSC2785Y
Q796	4822 130 11609	KSC2785Y
Q797	4822 130 11617	KSC2316Y
Q971	4822 130 61227	DTA114ES
Q974	4822 130 11621	KTA1271Y
Q977	4822 130 11609	KSC2785Y

ELECTRICAL PARTS LIST - POWER AMPLIFIER MODULE

Q979	4822 130 11609	KSC2785Y
Q981	4822 130 11609	KSC2785Y
Q982	4822 130 11609	KSC2785Y

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



MECHANICAL & ACCESSORIES PARTS LIST - MAIN UNIT

1	9965 000 16080	PANEL, FRONT	/22S	42	9965 000 16099	BUSHING, AC CORD	/22S
1	9965 000 13201	PANEL, FRONT	/37S	42	9965 000 13221	BUSHING, AC CORD	/37S
2	9965 000 13603	BADGE, PHILIPS		43	9965 000 16100	△ CORD, POWER	/22S
3	9965 000 16081	ORNAMENT, DISC(1)	/22S	43	9965 000 13210	△ CORD, POWER	/37S
3	9965 000 13188	ORNAMENT, DISC(1)	/37S	45	9965 000 13203	SUPPORT, MECHA(A)	
4	9965 000 16082	ORNAMENT, DISC(2)	/22S	46	9965 000 13209	SUPPORT, MECHA(B)	
4	9965 000 13189	ORNAMENT, DISC(2)	/37S	47	9965 000 13604	SHIELD CUSHION	
5	9965 000 16083	ORNAMENT, DISC(3)	/22S	48	9965 000 13469	FERRITE CORE 5 X 12 X 34MM	
5	9965 000 13190	ORNAMENT, DISC(3)	/37S	49	9965 000 02037	△ THERMAL SENSOR P42T7D330B	
6	9965 000 16084	WINDOW, FIP	/22S	50	9965 000 16101	FOOT	/22S
6	9965 000 13191	WINDOW, FIP	/37S	50	9965 000 13211	FOOT	/37S
7	9965 000 16085	KNOB, FUNCTION	/22S	52	9965 000 13208	CUSHION, MECHA	
7	9965 000 13186	KNOB, FUNCTION	/37S	53	9965 000 13205	SPRING, OPEN	
8	9965 000 16086	KNOB, VOLUME	/22S	55	9965 000 13606	RING, SHAFT	
8	9965 000 13187	KNOB, VOLUME	/37S	56	9965 000 16102	△ POWER TRANSFORMER	/22S
10	9965 000 16087	KNOB, DISC(1)	/22S	56	9965 000 13222	△ POWER TRANSFORMER	/37S
10	9965 000 13193	KNOB, DISC(1)	/37S	58	9965 000 13608	FERRITE CORE	
11	9965 000 16088	KNOB, DISC(2)	/22S	59	9965 000 13204	CABLE, CARD 32PIN 60CM	
11	9965 000 13194	KNOB, DISC(2)	/37S	60	9965 000 13213	FERRITE, RING	
12	9965 000 16089	KNOB, DISC(3)	/22S	61	9965 000 13207	CORE, RING 28X15.4X13	
12	9965 000 13195	KNOB, DISC(3)	/37S	62	9965 000 13218	CABLE, CARD 23PIN 23CM	
13	9965 000 16090	KNOB, POWER	/22S	63	9965 000 13219	CABLE, CARD 15PIN 15CM	
13	9965 000 13192	KNOB, POWER	/37S	65	9965 000 13468	CABLE,ATAPI 40PIN	
14	9965 000 16091	ORNAMENT, RING	/22S	66	9965 000 13217	SUPPORT, PCB	
14	9965 000 13202	ORNAMENT, RING	/37S		9965 000 13183	AM LOOP ANTENNA	
15-1	9965 000 16103	KNOB, NEXT	/22S		9965 000 16106	FM ANTENNA WIRE	/22S
15-1	9965 000 13199	KNOB, NEXT	/37S		9965 000 13182	FM ANTENNA WIRE	/37S
15-2	9965 000 16104	KNOB, RDS	/22S		3140 118 51160	REMOTE CONTROL	
15-2	9965 000 13198	KNOB, RDS	/37S		9965 000 16107	INSTRUCTION FOR USE	/22S
16	9965 000 16092	KNOB, PLAY	/22S		9965 000 13178	INSTRUCTION FOR USE	/37S
16	9965 000 13197	KNOB, PLAY	/37S		9965 000 16105	SCART CABLE	/22S
17	9965 000 16093	KNOB, DTS	/22S		9965 000 13177	CINCH CABLE 3P RED/YEL/WHITE	/37S
17	9965 000 13196	KNOB, DTS	/37S		3139 118 79980	PASSIVE SUB-WOOFER BOX	
18	9965 000 13200	INDICATOR, STAND BY			3139 118 79990	SATELLITE LOUDSPEAKER PACKAGE	
23	9965 000 16096	FOOT, FRONT	/22S		9965 000 13574	LEFT MAIN SPEAKER BOX	
23	9965 000 13212	FOOT, FRONT	/37S		9965 000 13575	RIGHT MAIN SPEAKER BOX	
24	9965 000 13224	CUSHION, FOOT			9965 000 13576	CENTER SPEAKER BOX	
25	9965 000 13206	RUBBER			9965 000 13577	LEFT SURROUND BOX	
27	9965 000 13467	3DVD MECHANISM (KPJ P/U)			9965 000 13578	RIGHT SURROUND BOX	
29	9965 000 13466	DVD MPEG BOARD			9965 000 13573	DETACHABLE METAL GRILLE ASSY	
32	9965 000 16097	HOLDER, PCB	/22S		9965 000 11844	KEYHOLE BRACKET, MOUNTING	
32	9965 000 13220	HOLDER, PCB	/37S				
34	9965 000 13216	MOTOR, FAN KD1206PTS3					
40	9965 000 16098	TUNER MODULE	/22S				
40	9965 000 13223	TUNER MODULE	/37S				

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

SCREW LIST - MAIN UNIT

S1	D3 x 6
S2	D3 x 8
S3	D3 x 10
S4	D3 x 10
S5	M4 x 6
S6	D3 x 8
S7	D3 x 20
S8	D3 x 36
S9	D3 x 12
S10	M3.8 x 10
S11	D3 x 8
S12	M3 x 6

DOCUMENT HISTORY**Version 1.1**

- * Initial release under 12NC: 3139 785 30051

Version 1.2

- * Application of new 12NC: 3139 785 30252 to allow future point no. change
- * The following pages are adapted to include new type/version MX5000D/22S:
Front page, page 1-3, 2-2, 4-1/4-2, 6-9/6-10, 7-11/7-12, 7-13 to 7-18, 8-2, 10-1/10-2 and 10-3/10-4.
- * The following pages have their layout drawings improved for printing & readability:
Page 5-4/5-5, 6-3/6-4, 7-5/7-6, 8-3/8-4 and 9-3/9-4.
- * Correction of Service Manual pages
Page 3-5 & 3-6 : change on service position D
Page 7-17: correction of error on item nos. IC27, IC28, IC35 and missing IC91 to IC94
Page 10-3 : Correction of part code for pos 48 and 61