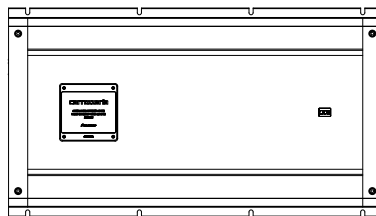


Pioneer *sound.vision.soul*

Service Manual



RS-A9/EW

ORDER NO.
CRT3232

OPTICAL DIGITAL REFERENCE SYSTEM DIGITAL INTEGRATED AMPLIFIER

RS-A9_{/EW}



For details, refer to "Important symbols for good services".

PIONEER CORPORATION 4-1, Meguro 1-chome, Meguro-ku, Tokyo 153-8654, Japan
PIONEER ELECTRONICS (USA) INC. P.O. Box 1760, Long Beach, CA 90801-1760, U.S.A.
PIONEER EUROPE NV Haven 1087, Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE. LTD. 253 Alexandra Road, #04-01, Singapore 159936
©**PIONEER CORPORATION 2004**

K-ZZU.APR. 2004 printed in Japan

SAFETY INFORMATION

● Service Precaution

1. You should conform to the regulations governing the product (safety, radio and noise, and other regulations), and should keep the safety during servicing by following the safety instructions described in this manual.
2. Do not keep connecting IP BUS-IN connector under the condition of H/U's power line on and RS-A9's power line off , otherwise data in memory may be erased.

[Important symbols for good services]

In this manual, the symbols shown-below indicate that adjustments, settings or cleaning should be made securely. When you find the procedures bearing any of the symbols, be sure to fulfill them:

1. Product safety



You should conform to the regulations governing the product (safety, radio and noise, and other regulations), and should keep the safety during servicing by following the safety instructions described in this manual.

2. Adjustments



To keep the original performances of the product, optimum adjustments or specification confirmation is indispensable. In accordance with the procedures or instructions described in this manual, adjustments should be performed.

3. Cleaning



For optical pickups, tape-deck heads, lenses and mirrors used in projection monitors, and other parts requiring cleaning, proper cleaning should be performed to restore their performances.

4. Shipping mode and shipping screws



To protect the product from damages or failures that may be caused during transit, the shipping mode should be set or the shipping screws should be installed before shipping out in accordance with this manual, if necessary.

5. Lubricants, glues, and replacement parts



Appropriately applying grease or glue can maintain the product performances. But improper lubrication or applying glue may lead to failures or troubles in the product. By following the instructions in this manual, be sure to apply the prescribed grease or glue to proper portions by the appropriate amount. For replacement parts or tools, the prescribed ones should be used.

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- 8. OPERATIONS125

A
B
C
D
E
F

1. SPECIFICATIONS

GENERAL

Power Source	DC14.4V (10.8 — 15.1V allowable)
Grounding system	Negative type
Max. Current consumption	
(Rated Power)	31A
(No signal)	5A
Average Current consumption	
(4ch 4Ω)	12A
(2ch 4Ω)	16.5A
Backup current	3mA or less
Fuse	25Ax2
Dimensions	330(W)x71(H)x585(D)mm
Weight	13kg

DSP/PREAMP

Tone controls (parametric)	
Bass frequency	63Hz, 100Hz, 160Hz, 250Hz
Treble frequency	4kHz, 6.3kHz, 10kHz, 16kHz
Gain	±12dB
31-band graphic equalizer (L/R independent)	
Frequency	20Hz—20 kHz, 1/3oct.
Gain	±12dB (0.5dB)
3-band parametric equalizer (L/R independent)	
Frequency	20Hz—20kHz, 1/3oct.
Gain	±12dB (0.5dB)
Crossover network (L/R independent)	

SUBWOOFER

HPF frequency	20Hz—100Hz, 1/3oct.
LPF frequency	40Hz—250Hz, 1/3oct.
Gain	+10dB—24dB (0.5dB)
LOW	HPF frequency : 25Hz—250Hz, 1/3oct.
LPF frequency	250Hz—10kHz, 1/3oct.
Gain	0dB—24dB (0.5dB)
MID	HPF frequency : 160Hz—10kHz, 1/3oct.
LPF frequency	2kHz—20kHz, 1/3oct.
Gain	0dB—24dB (0.5dB)
HIGH	HPF frequency : 1.6kHz—20kHz, 1/3oct.
LPF frequency	8kHz—20kHz, 1/3oct.
Gain	0dB—24dB (0.5dB)

Slope

PASS, -6, -12, -18, -24, -36, -48, -72dB/oct.
(PASS: no pass HPF-High channel)

Phase.....NORMAL/REVERSE

Time alignment

(H/M/L ch)	0—192.5cm (0.77cm)
(SW ch)	0—385cm (1.54cm)

Position adjustment

DISTANCE	0—192.5cm (0.77 cm)
Level	0—30dB (0.5dB)

Sampling frequency.....44.1kHz

Digital input.....Optical input

Analog Output.....Optical output (3line)

POWER AMP

Max. power (14.4V)	100Wx4/300Wx2 (4Ω)
Continuous power (14.4V)	
50Wx4/150Wx2	
(20—20kHz, 0.02/0.02% (4Ω))	
75Wx4	
(20—20kHz, 0.02% (2Ω))	
Frequency response	10—100kHz, (-1,+0dB)
Distortion	0.002% (1kHz, 20k LPF)
S/N ratio	105dB (IHF-A)
Separation	80dB (100Hz—10kHz, 20k LPF)
Slew rate	100V/μsec
Dumping factor	150
Impedance	4Ω (2—8Ω)

Note:

- Specifications and the design are subject to possible modification without notice due to improvements.



5



6



7



8



A



B



C



D



E



F



5



6

RS-A9/EW



7



8

5



2. EXPLODED VIEWS AND PARTS LIST

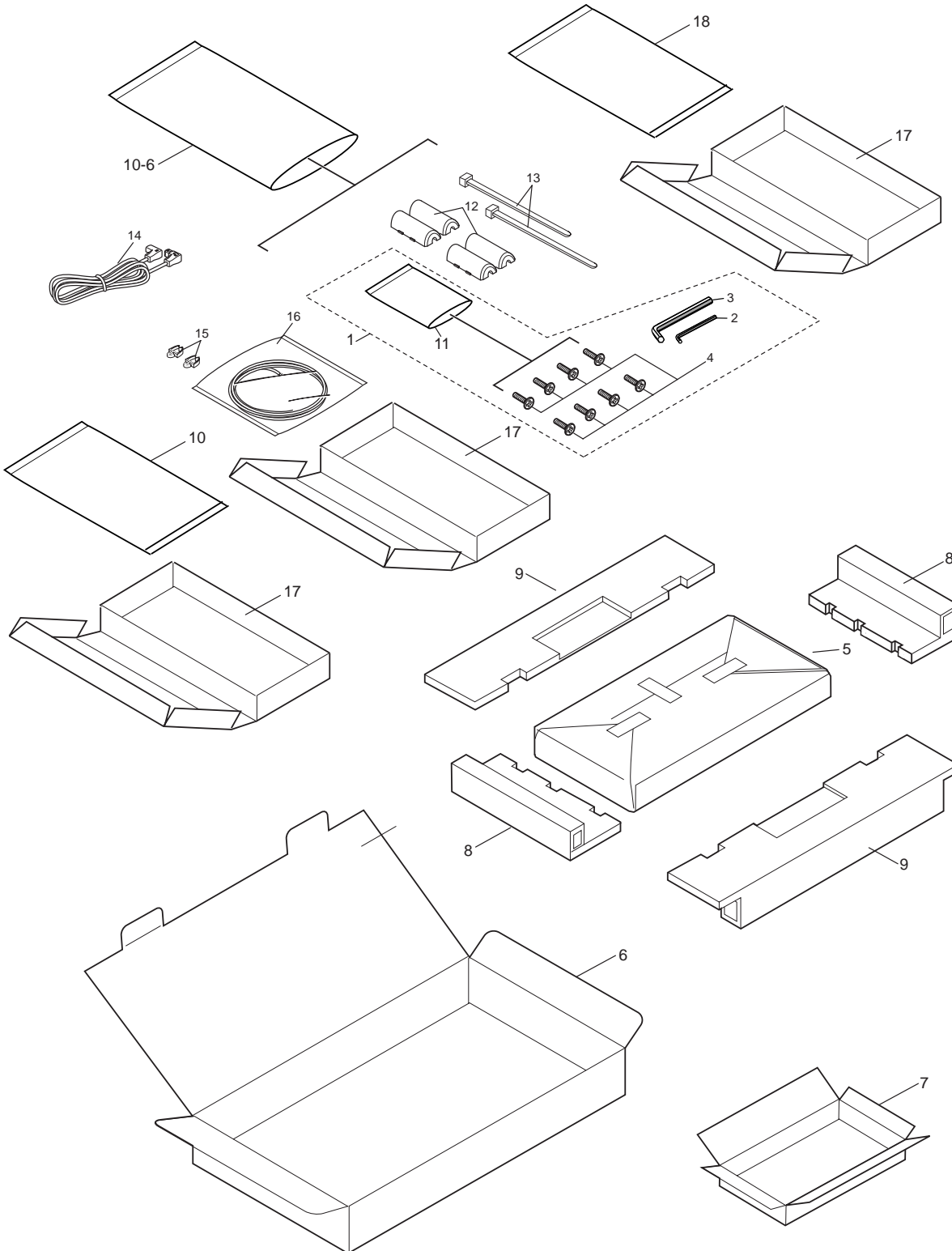
NOTES : • Parts marked by "*" are generally unavailable because they are not in our Master Spare Parts List.

• Screw adjacent to ▽ mark on the product are used for disassembly.

• For the applying amount of lubricants or glue, follow the instructions in this manual.

(In the case of no amount instructions, apply as you think it appropriate.)

2.1 PACKING



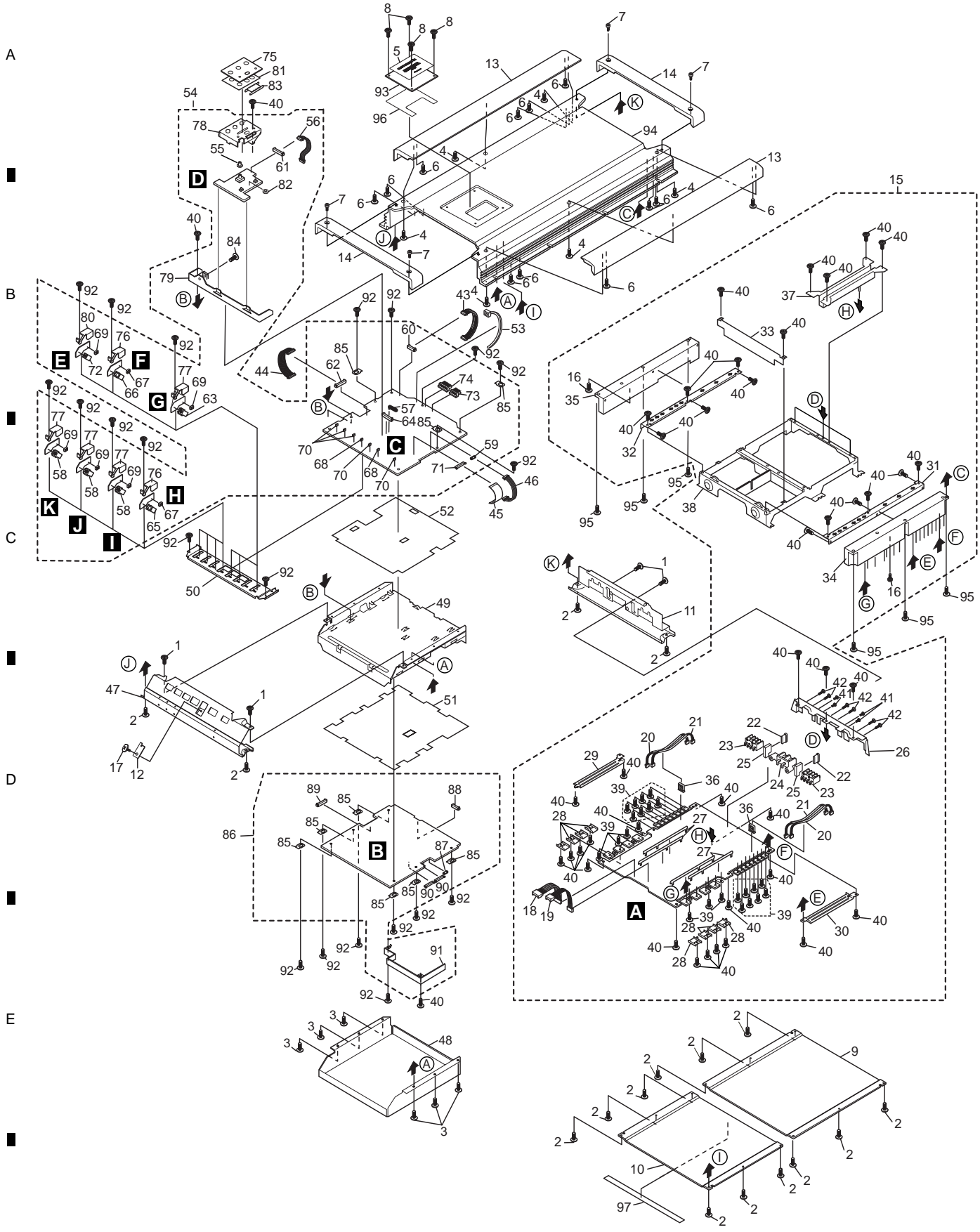
PACKING SECTION PARTS LIST

<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>
1	Screw Assy	CEA4028	* 11	Polyethylene Bag	E36-613
* 2	Shaft	CLP1100			
* 3	Shaft	CLP1224	12	Filter	CTX1060
4	Screw	HNC50P200FZK	* 13	Lock Tie	CNV-754
5	Cover	CEG1342	14	Cord Assy	CDE4167
			15	Clamper	CNV1443
			16	Cable	CDE6690
6	Carton	CHA5237	17	Sub Carton	CHG5236
7	Contain Box	CHD5237	18-1	Owner's Manual	CRB1955
8	Protector	CHP2758	18-2	Owner's Manual	CRB1956
9	Protector	CHP2759	18-3	Owner's Manual	CRB1958
10-1	Owner's Manual	CRB1953	18-4	Owner's Manual	CRB1959
10-2	Owner's Manual	CRB1954			
10-3	Owner's Manual	CRB1957			
* 10-5	Warranty Card	CRY1157	* 18-5	Polyethylene Bag	E36-634
* 10-6	Polyethylene Bag	E36-634			

Owner's Manual

Part No.	Language
CRB1953	English
CRB1954	Spanish
CRB1955	German
CRB1956	French
CRB1957	Italian
CRB1958	Dutch
CRB1959	Russian

2.2 EXTERIOR



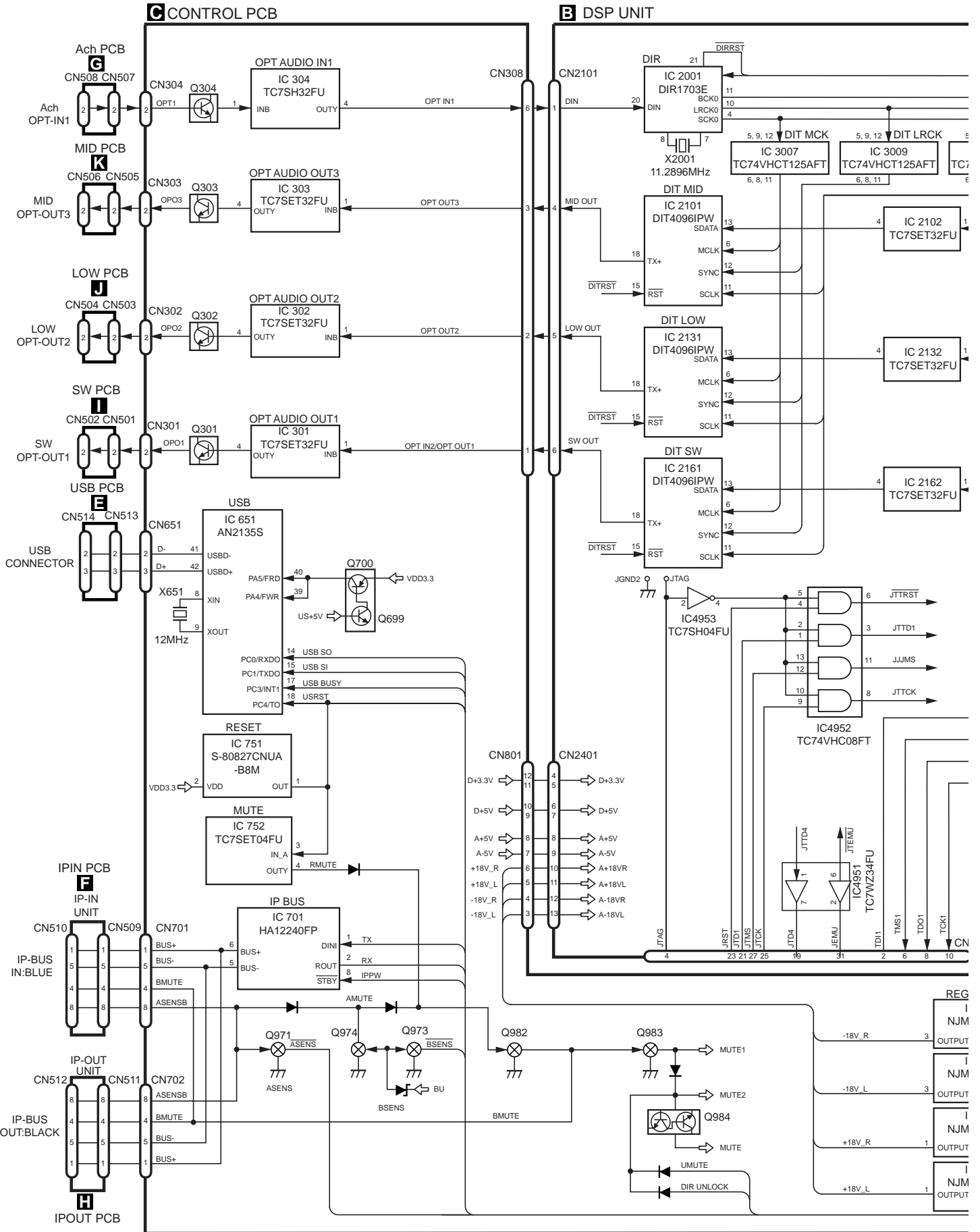
EXTERIOR SECTION PARTS LIST

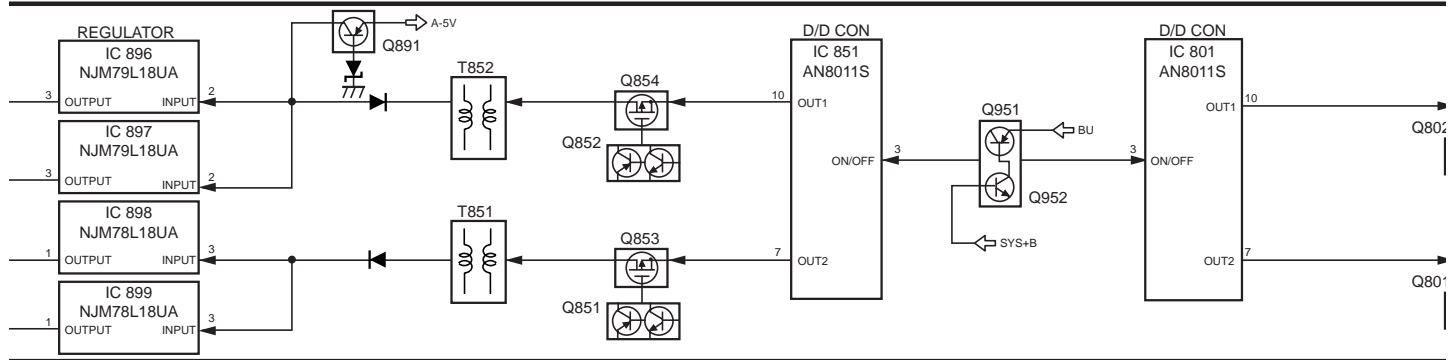
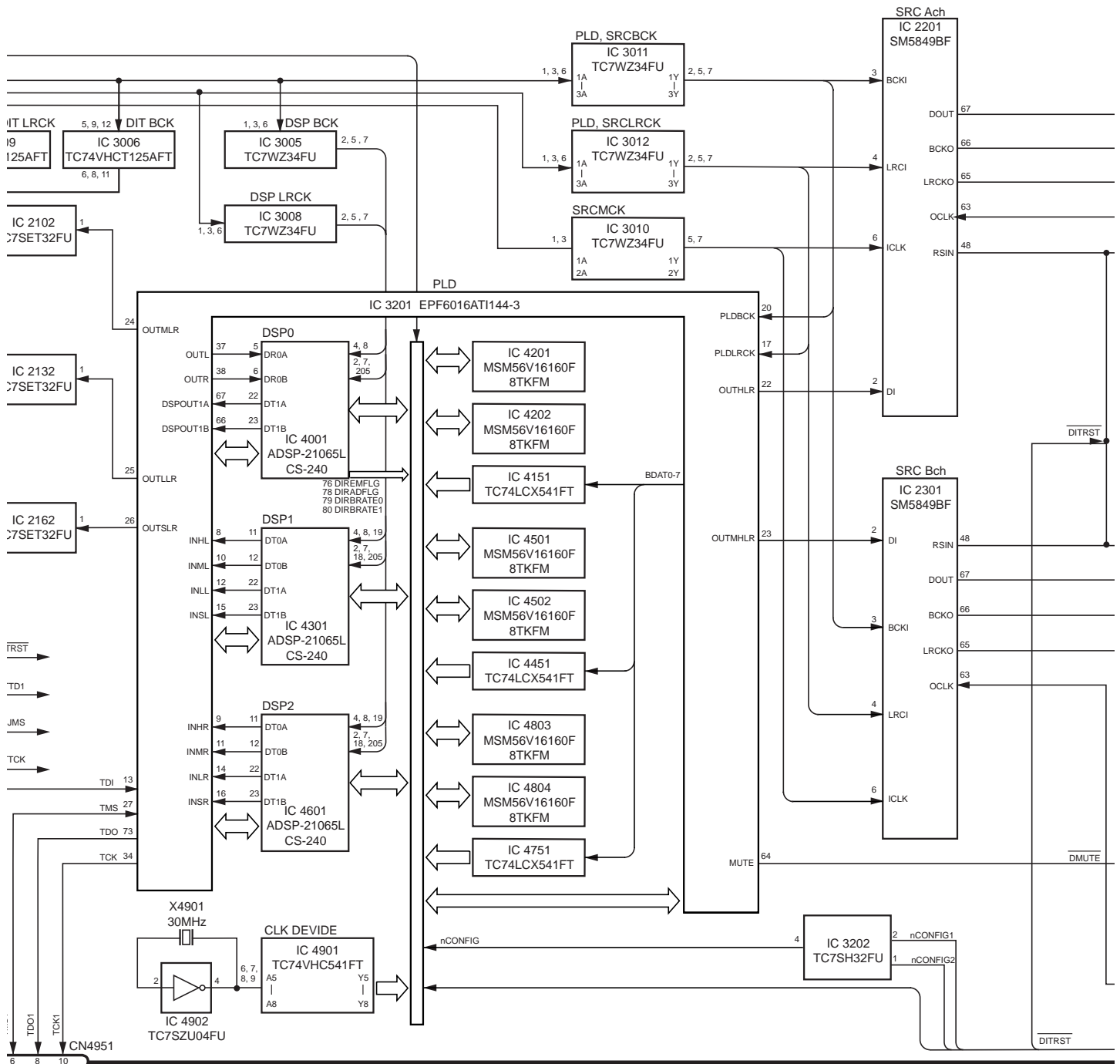
Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Screw	BMZ30P050FZK	50	Holder	CND1945
2	Screw	AMZ30P080FZK			
3	Screw	BMZ40P060FTC	51	Insulator	CNM8710
4	Screw	BMZ40P100FTC	52	Insulator	CNM8711
5	Badge	CAH1895	*	53 Lock Tie	CNV-754
				54 Control Unit	CWM9586
				55 Knob	CAA2762
6	Screw(M2.6 x 4)	CBA1784			
7	Screw(M5 x 10)	CBA1775			
8	Screw(M2 x 6)	CBA1776	56	Cord	CDE7137
9	Cover	CNB3023	57	Clamper(CN111)	CEF1033
10	Cover	CNB3024	58	Connector(CN502,504,506)	CKS2104
			59	Connector(CN308)	CKS2195
			60	Connector(CN101)	CKS2197
11	Panel	CNB3016			
12	Cover	CNB2892			
13	Heat Sink	CNR1670	61	Connector(CN401)	CKS2200
14	Cover	CNR1671	62	Connector(CN801)	CKS2204
15	Amp Unit	CWH1264	63	Connector(CN508)	CKS2601
			64	Connector(CN602)	CKS3133
			65	Connector(CN512)	CKS3409
16	Screw(M2.6 x 4)	CBA1784			
17	Screw(M3 x 4.5)	CBA1807			
18	Cord(CN1102)	CDE7130	66	Connector(CN510)	CKS3410
19	Cord(CN1904)	CDE7131	67	Connector(CN509,511)	CKS4485
20	Cord(CN1103,203)	CDE7710	68	Connector(CN701,702)	CKS4487
			69	Connector(CN501,503,505,507,513)	CKS4518
			70	Connector(CN301,302,303,304,651)	CKS4519
21	Cord(CN1104,204)	CDE7711			
22	Fuse(25A)	CEK1139			
23	Terminal(CN1101,1201)	CKE1053	71	Connector(CN601)	CKS4522
24	Terminal(CN1901)	CKE1052	72	Connector(CN514)	CKS4686
25	Fuse Holder(CN1902,1903)	CKR1011	73	Connector(CN901)	CKS4783
			74	Connector(CN201)	CKS4784
			75	Panel	CNB2886
26	Holder	CND1369			
27	Holder	CND1375			
28	Holder	CND1752	76	Holder	CND2256
29	Holder	CND1884	77	Holder	CND1360
30	Holder	CND1885	78	Holder	CND1361
			79	Holder	CND1362
			80	Holder	CND1883
31	Holder	CND1886			
32	Holder	CND1887			
33	Holder	CND2018	81	Tape	CNM8390
34	Heat Sink	CNR1704	82	Spacer	CNM8687
35	Heat Sink	CNR1705	83	Plate	CNS7957
			84	Screw	ASZ26P080FTC
			85	Pin	
36	Clamper	CNV3751		(CN902,903,3202,3203,3204,3205,3206,3207)	VNF1084
37	Holder Assy	CXB9937			
38	Chassis Assy	CXC3185			
39	Screw	AMZ26P080FCC	86	DSP Unit	CWX3066
40	Screw	IMS30P080FCC	87	Connector(CN2101)	CKS2195
			88	Connector(CN2281)	CKS2197
			89	Connector(CN2401)	CKS2204
			90	Connector(CN3201,4951)	CKS4522
41	Screw	PPZ20P060FZK			
42	Screw	PPZ30P080FZK			
43	Cord	CDE7133			
44	Cord	CDE7134	91	Holder	CND2417
45	Cord	CDE7135	92	Screw	ISS26P055FUC
			93	Badge Base Assy	CXC1915
			94	Heat Sink Assy	CXC3168
46	Cord	CDE7136	95	Screw	PMB40P120FTC
47	Panel	CNB3017			
48	Case	CND1384			
49	Holder	CND2258	96	Panel	CNB3027
			97	Shield	CNM9333

3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

3.1 BLOCK DIAGRAM

A
B
C
D
E
F





A

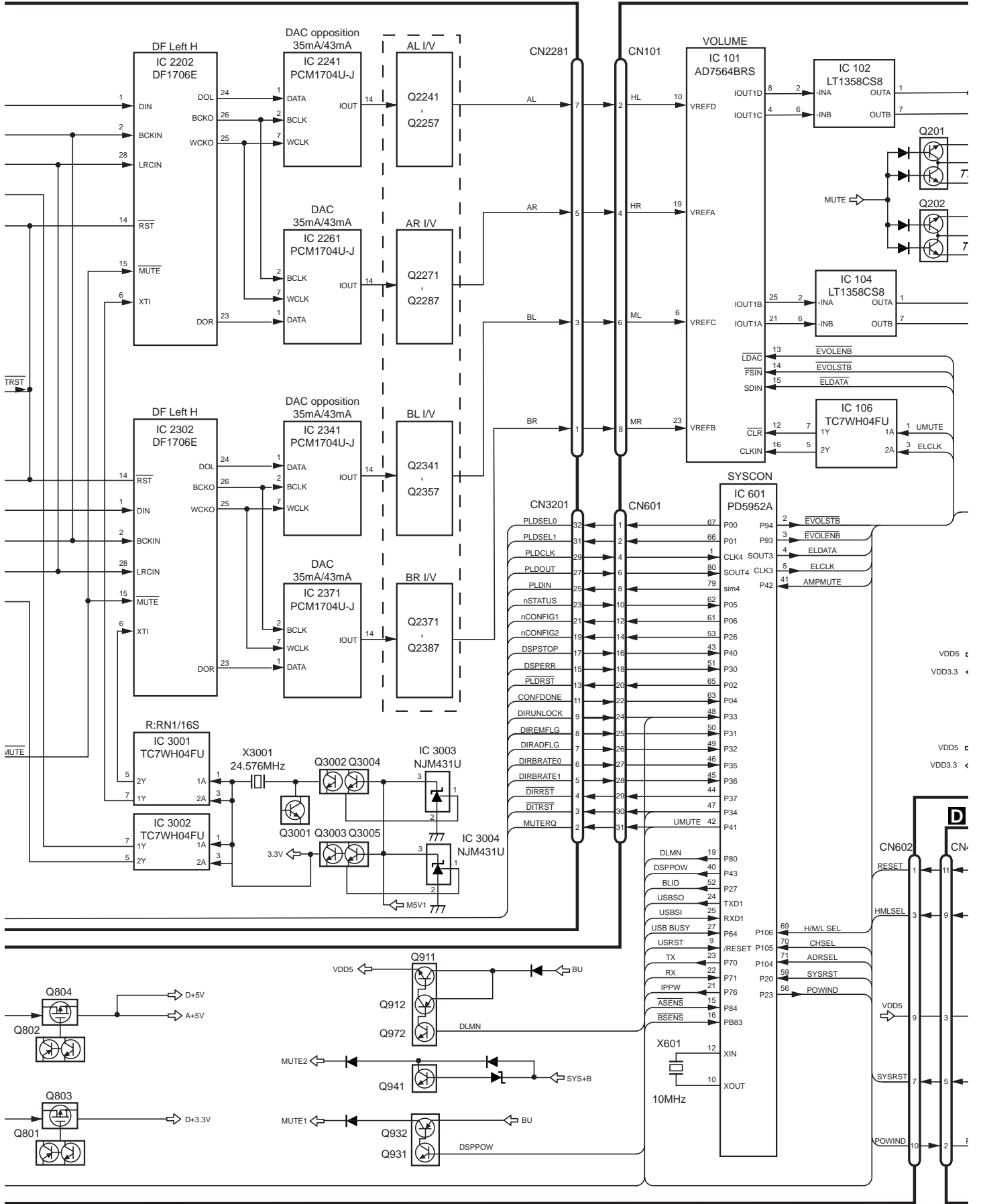
B

C

D

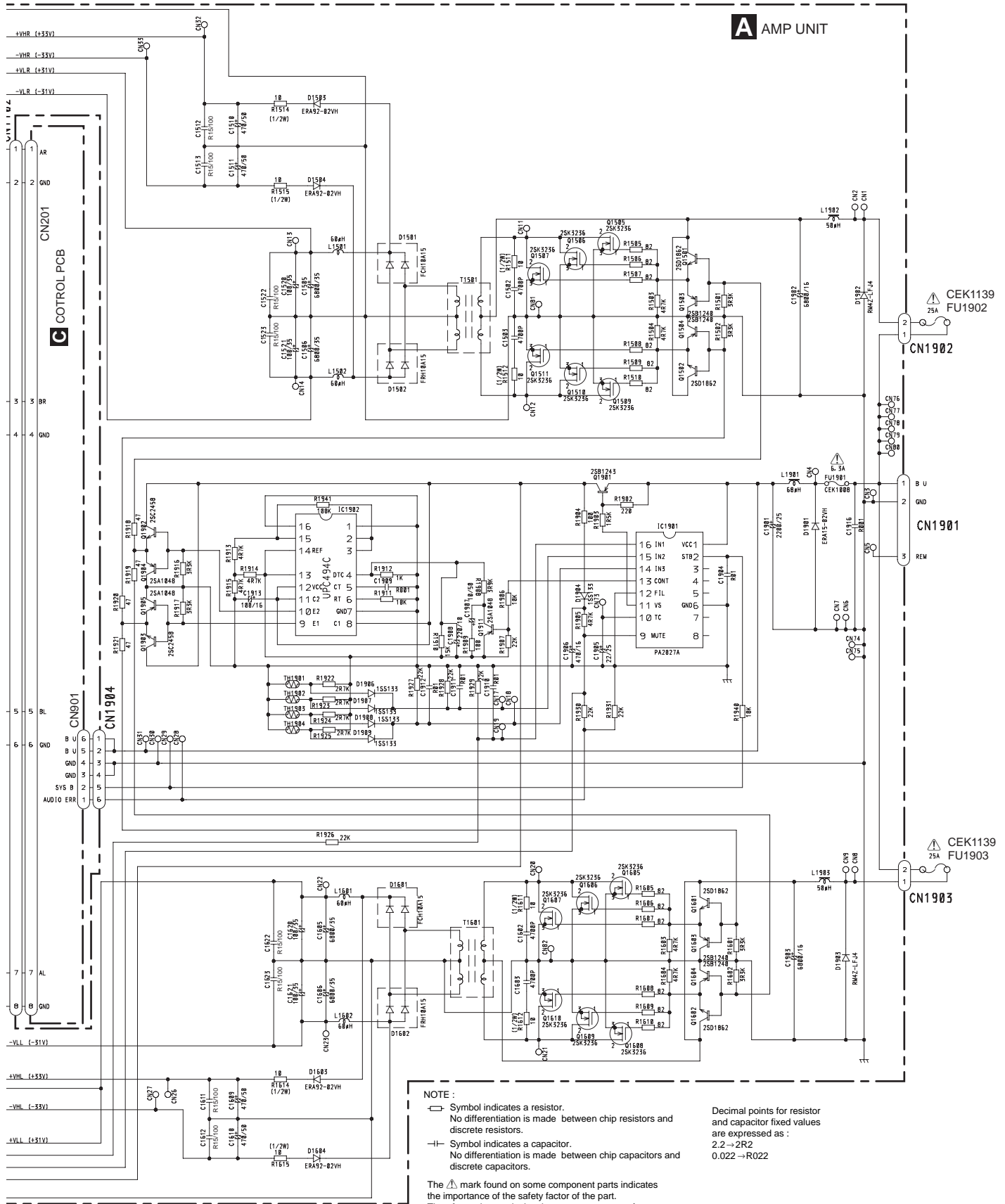
E

F



A-b

A AMP UNIT



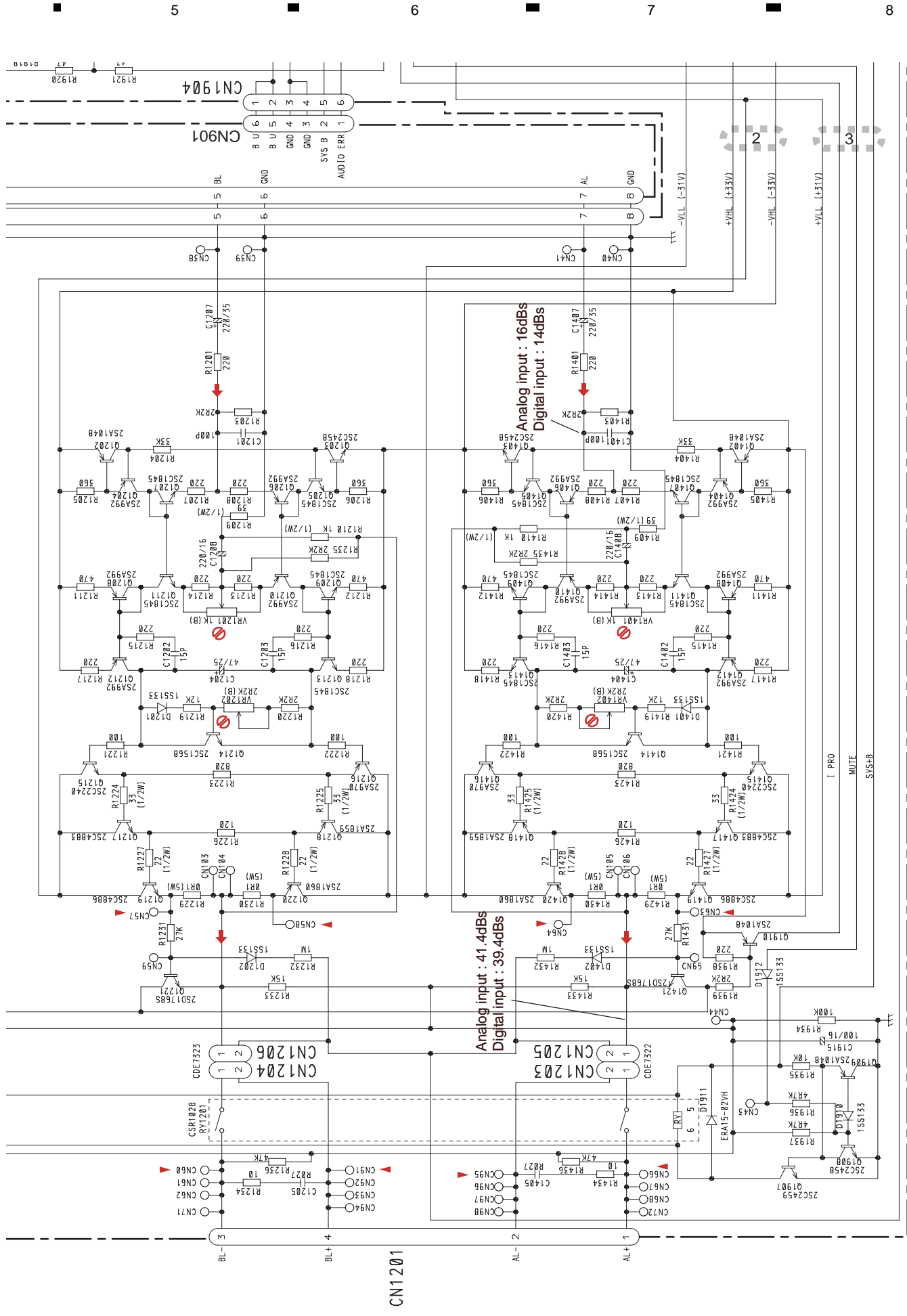
NOTE :

- Symbol indicates a resistor. No differentiation is made between chip resistors and discrete resistors.
- ⊖ Symbol indicates a capacitor. No differentiation is made between chip capacitors and discrete capacitors.

The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

Decimal points for resistor and capacitor fixed values are expressed as :
 2.2 → 2R2
 0.022 → R022





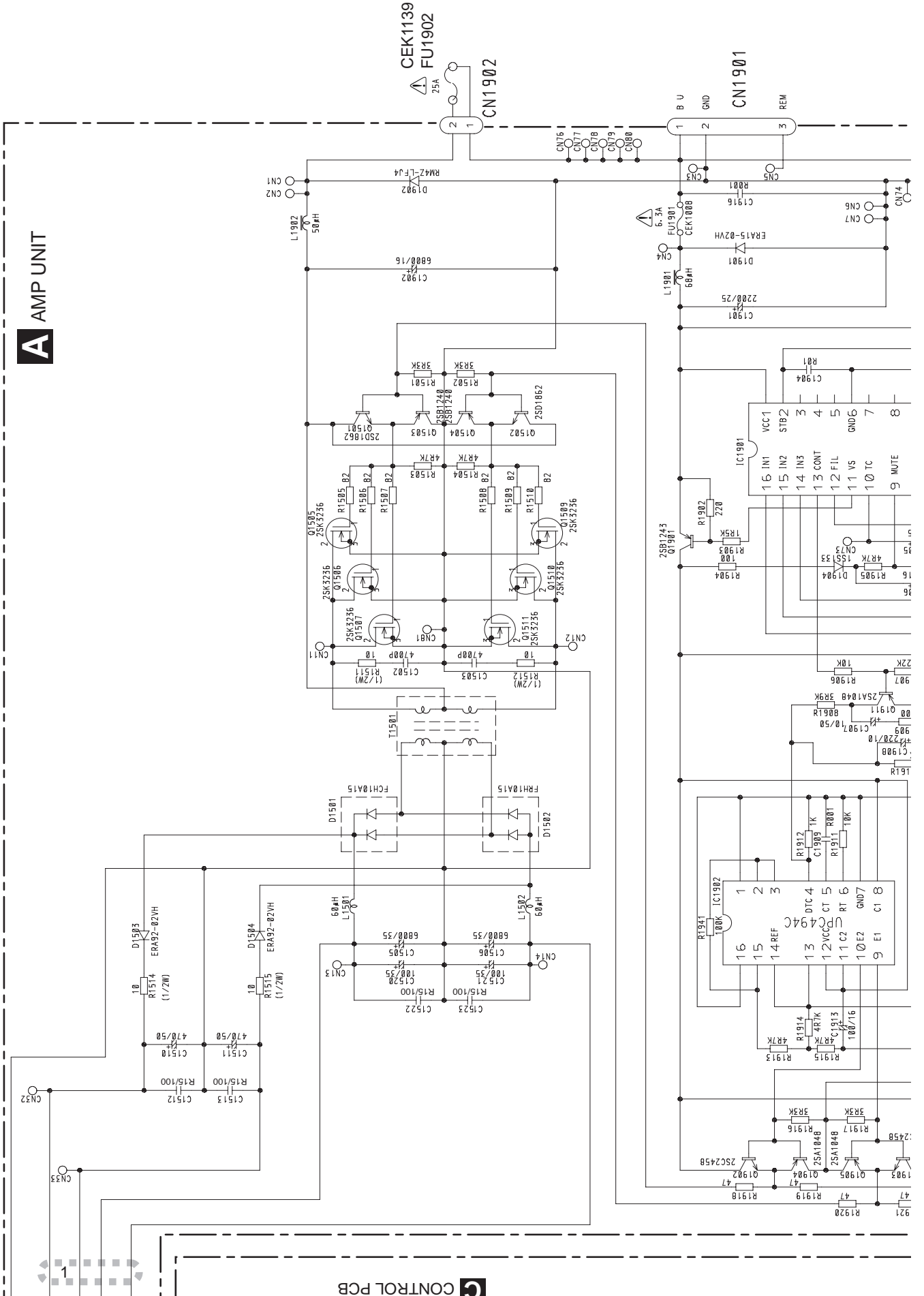
A-b

A-a A-b

A-a

A
B
C
D
E
F

A AMP UNIT

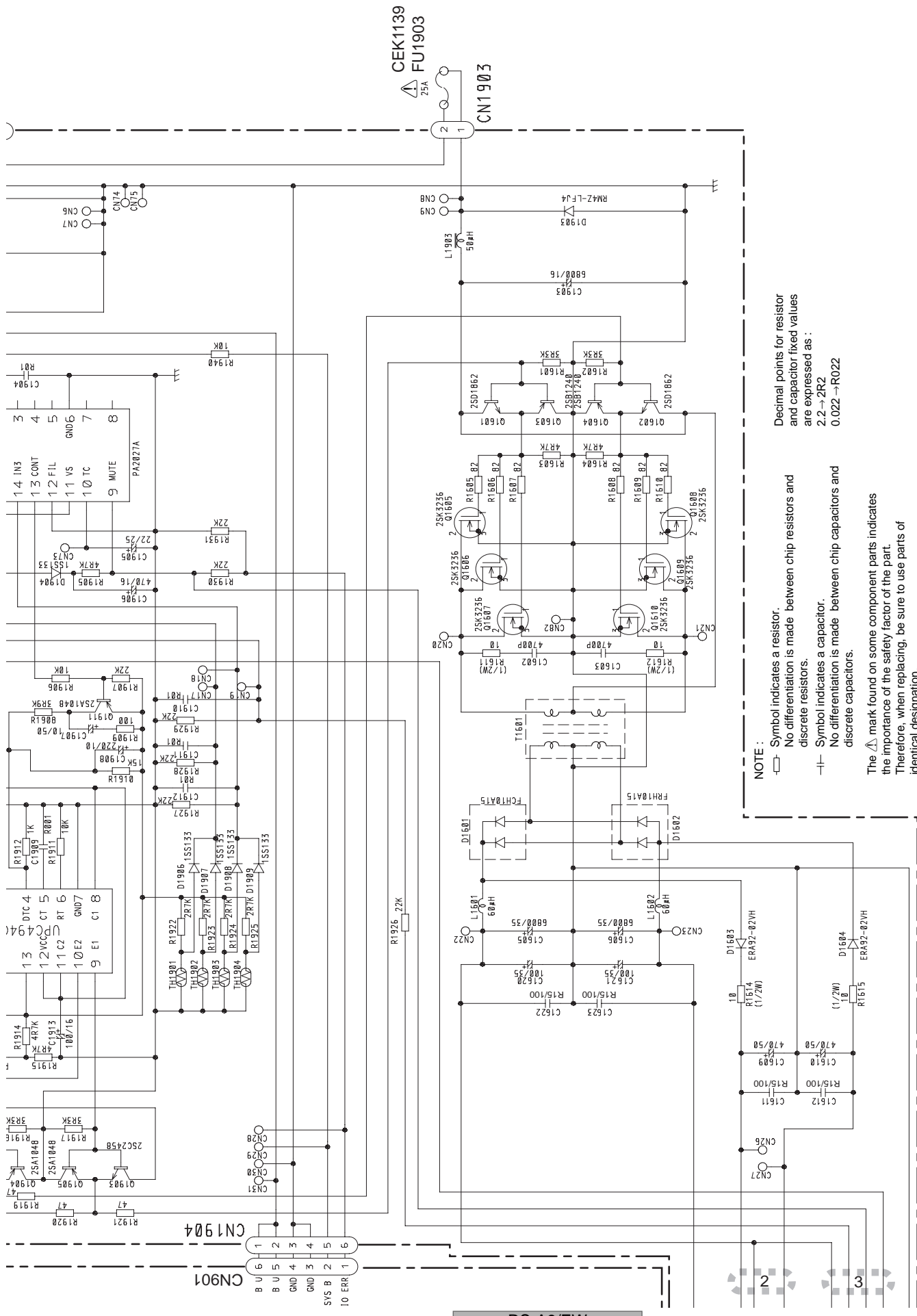


A B C D E F

A-a A-b

A-b

CONTROL PCB RS-A9/EW



CEK1139
FU1903

CN1903

CN1904

RS-A9/EW

NOTE :
 Symbol indicates a resistor.
 No differentiation is made between chip resistors and discrete resistors.
 Symbol indicates a capacitor.
 No differentiation is made between chip capacitors and discrete capacitors.

Decimal points for resistor and capacitor fixed values are expressed as :
 2.2 → 2R2
 0.022 → R022

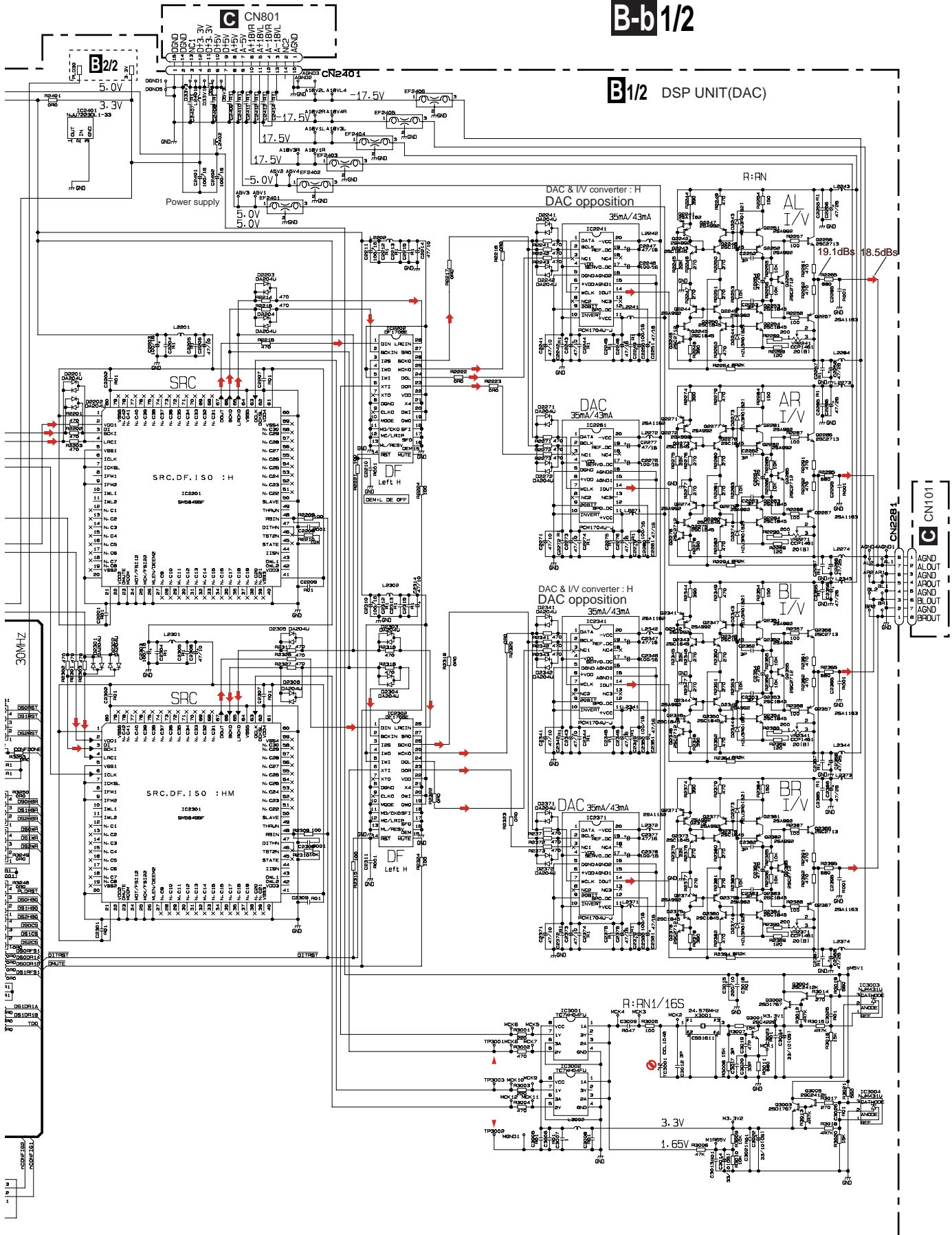
The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

A-a A-b

A-b

B-b 1/2

B 1/2 DSP UNIT(DAC)



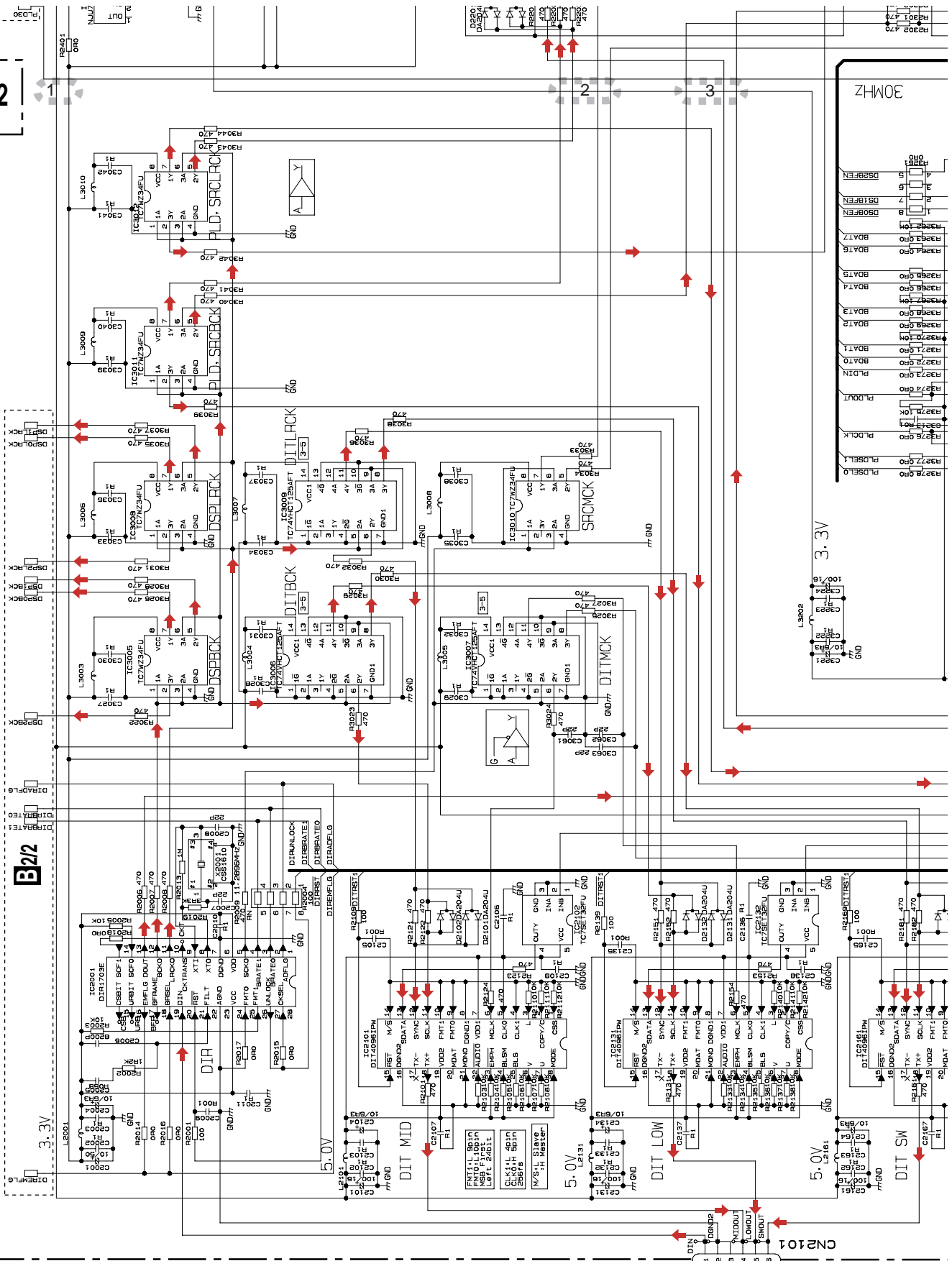
A
B
C
D
E
F

B 1/2

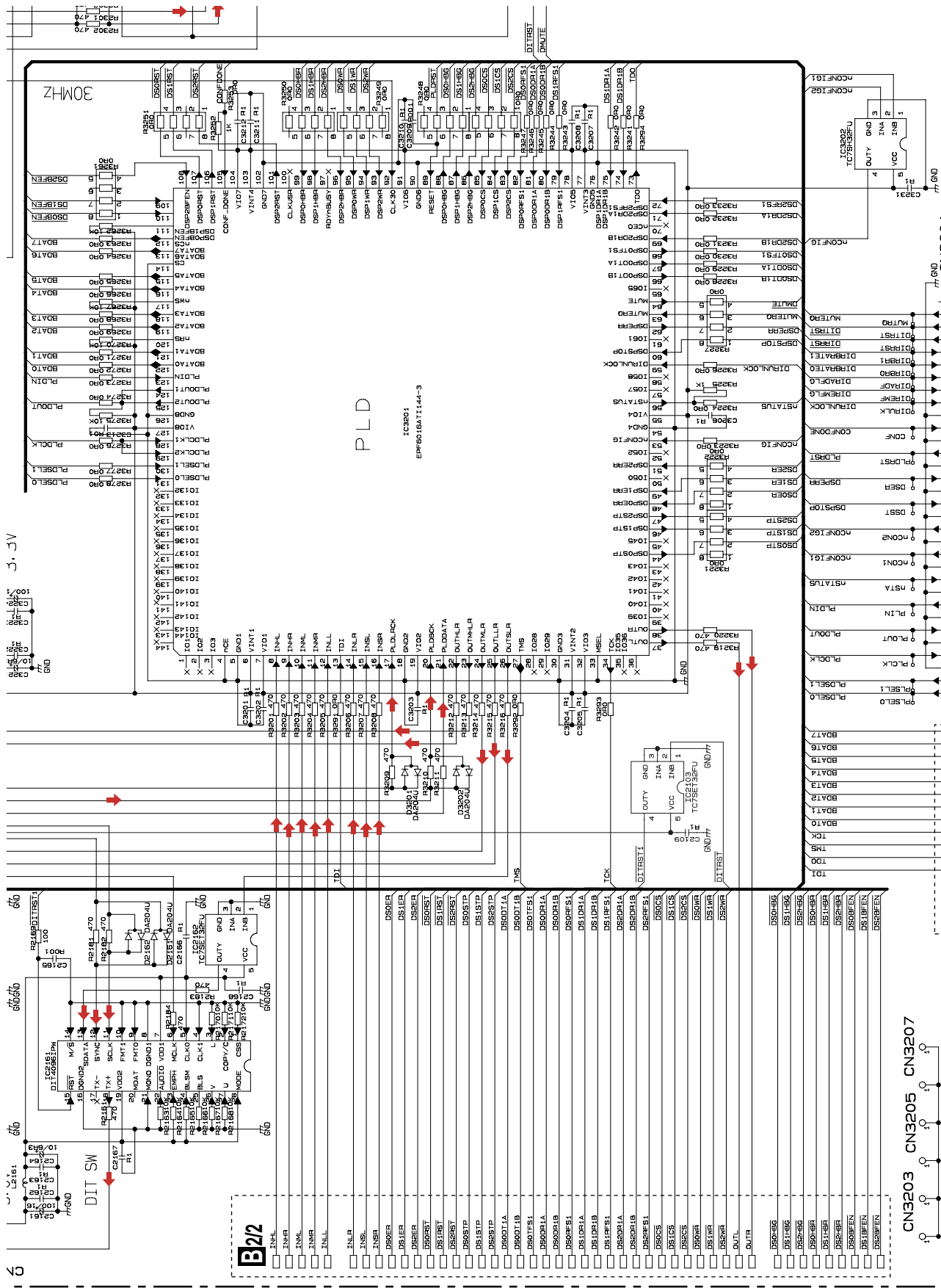
B-b 1/2

B-a B-b

B-a 1/2



RS-A9/EW



B-b 1/2

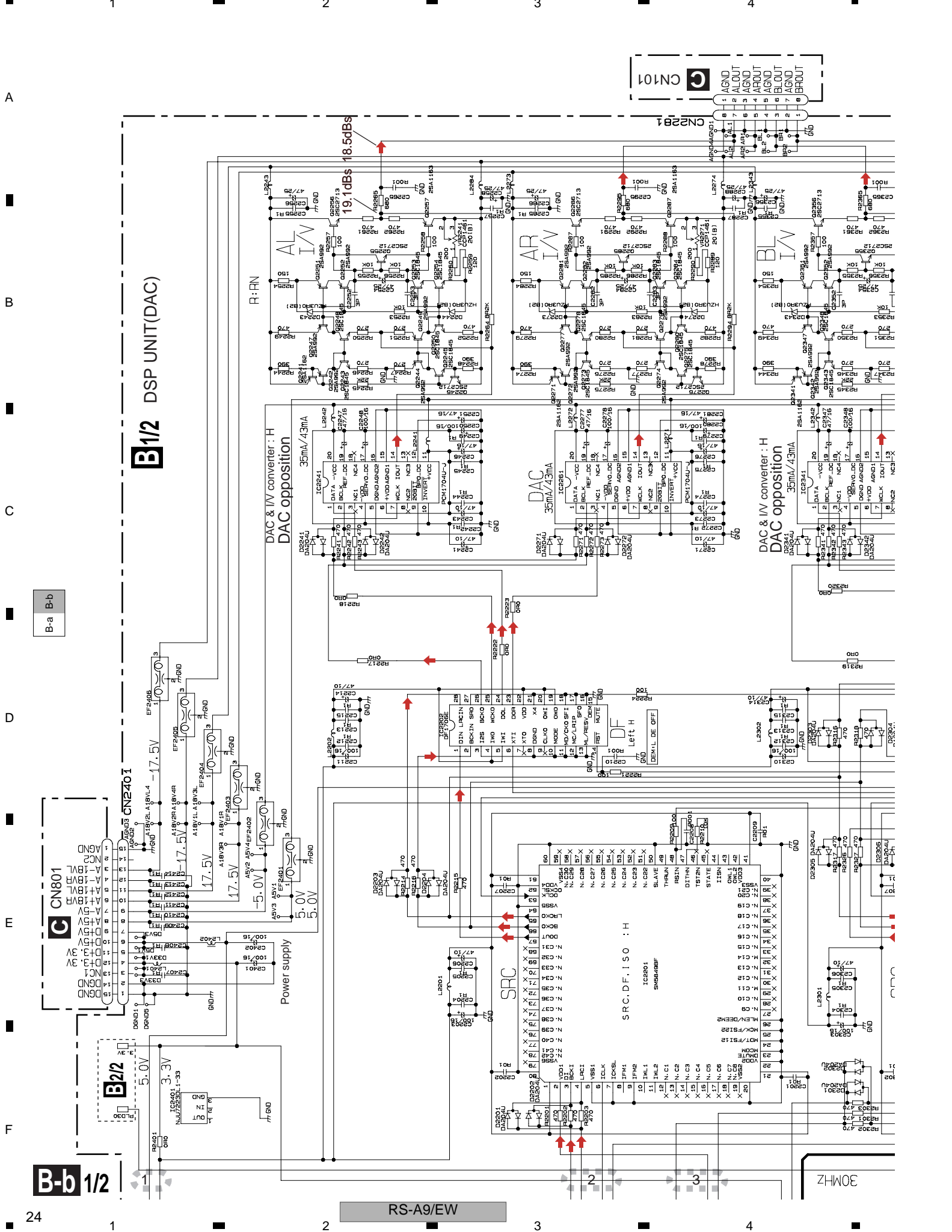
C CN601

Ba B-b

B2/2

CN3203 CN3205 CN3207
CN3202 CN3204 CN3206

B-a 1/2



A
B
C
D
E
F

1 2 3 4

1 2 3 4

B-b 1/2

B1/2 DSP UNIT(DAC)

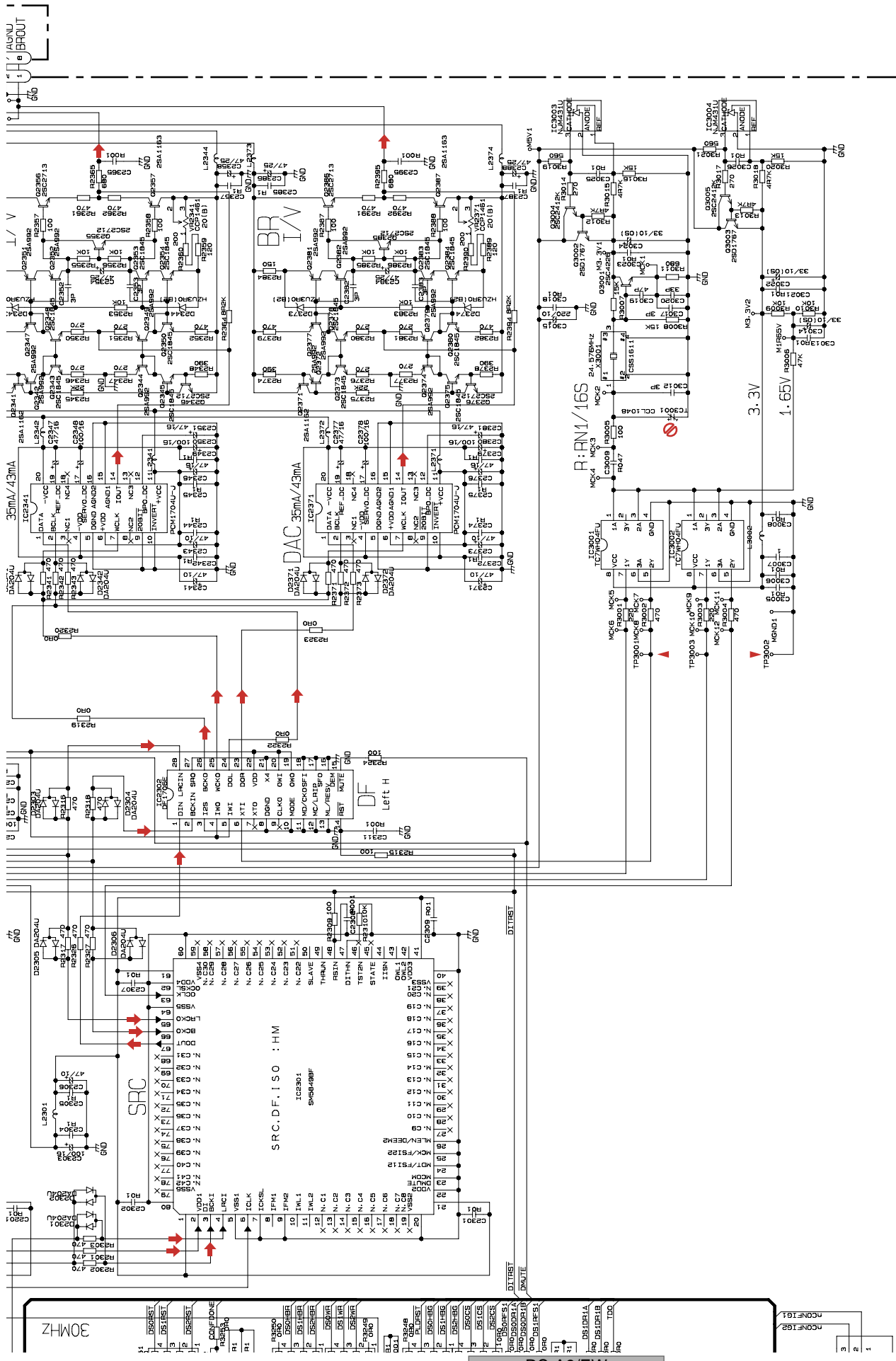
B-a B-b

RS-A9/EW

CN101

CN2281

30MHz



B-a B-b

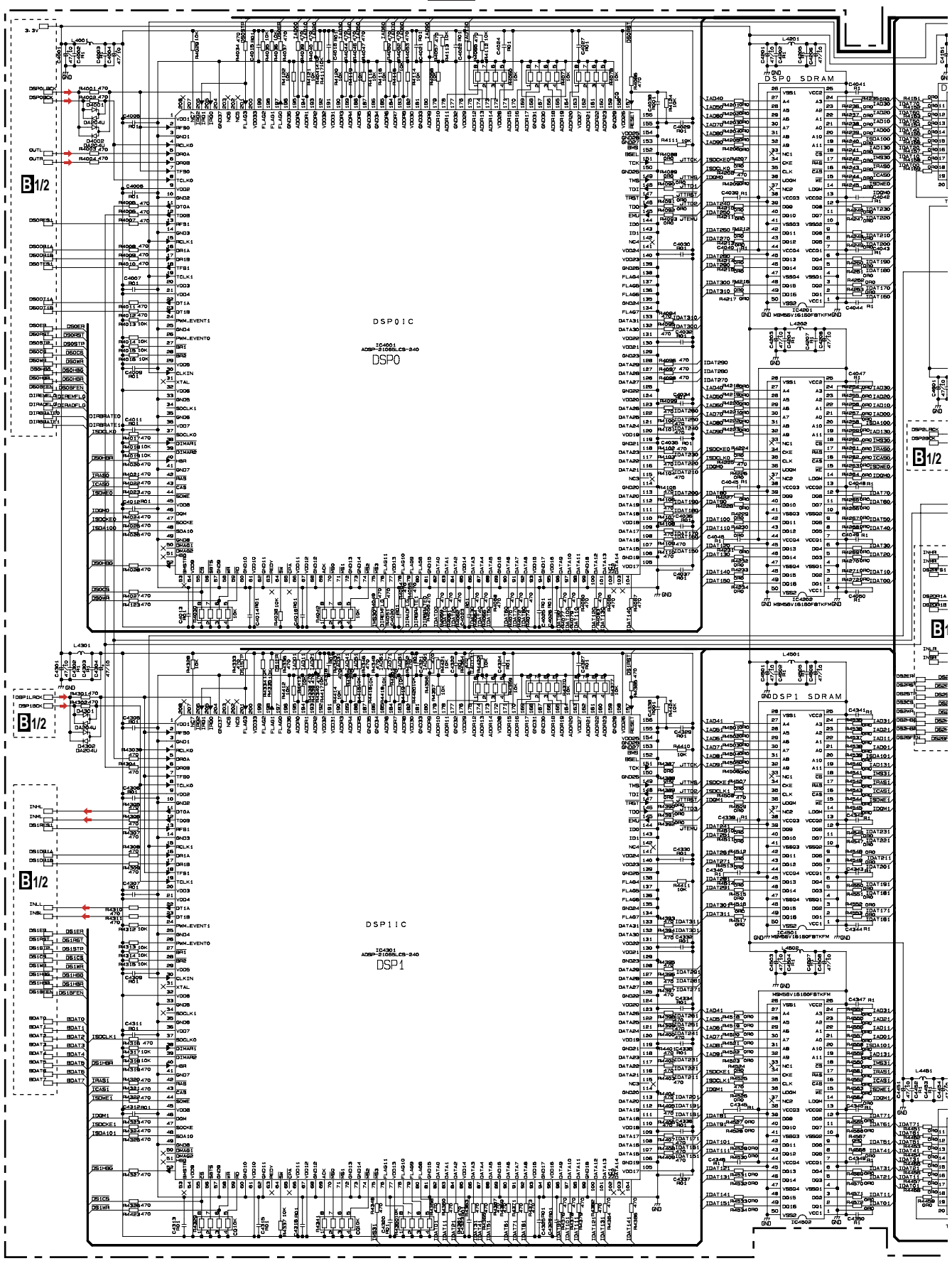
B-b 1/2

RS-A9/EW

3.4 DSP UNIT(DSP)(GUIDE PAGE)

B-a 2/2

A
B
C
D
E
F



B 2/2

B-b 2/2

A

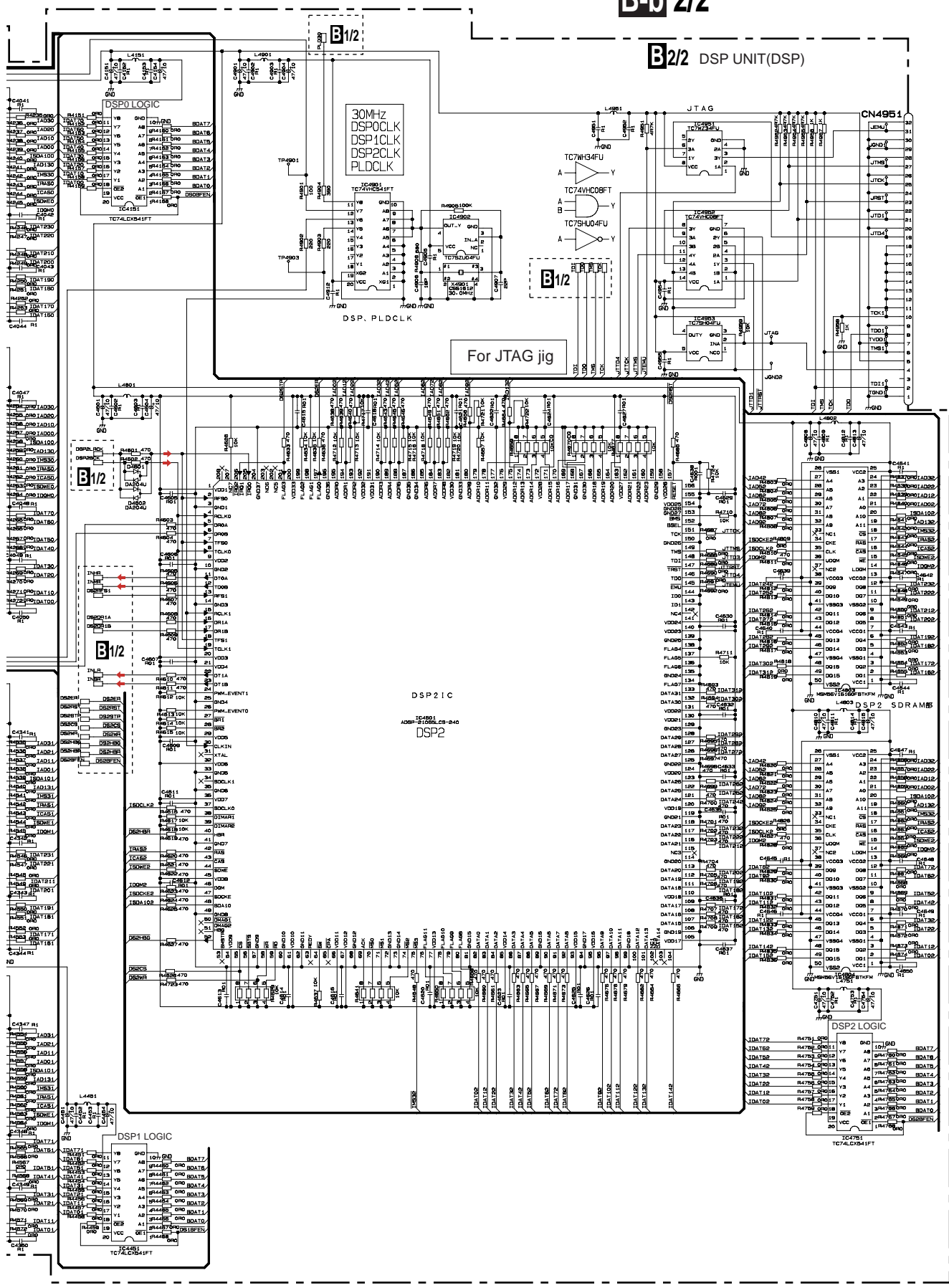
B

C

D

E

F



For JTAG jig

B2/2 DSP UNIT(DSP)

DSP2 IC
ADM-TC4901
DSP2

DSP2 SDRAMs

DSP2 LOGIC

B 2/2

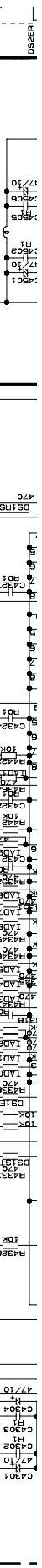
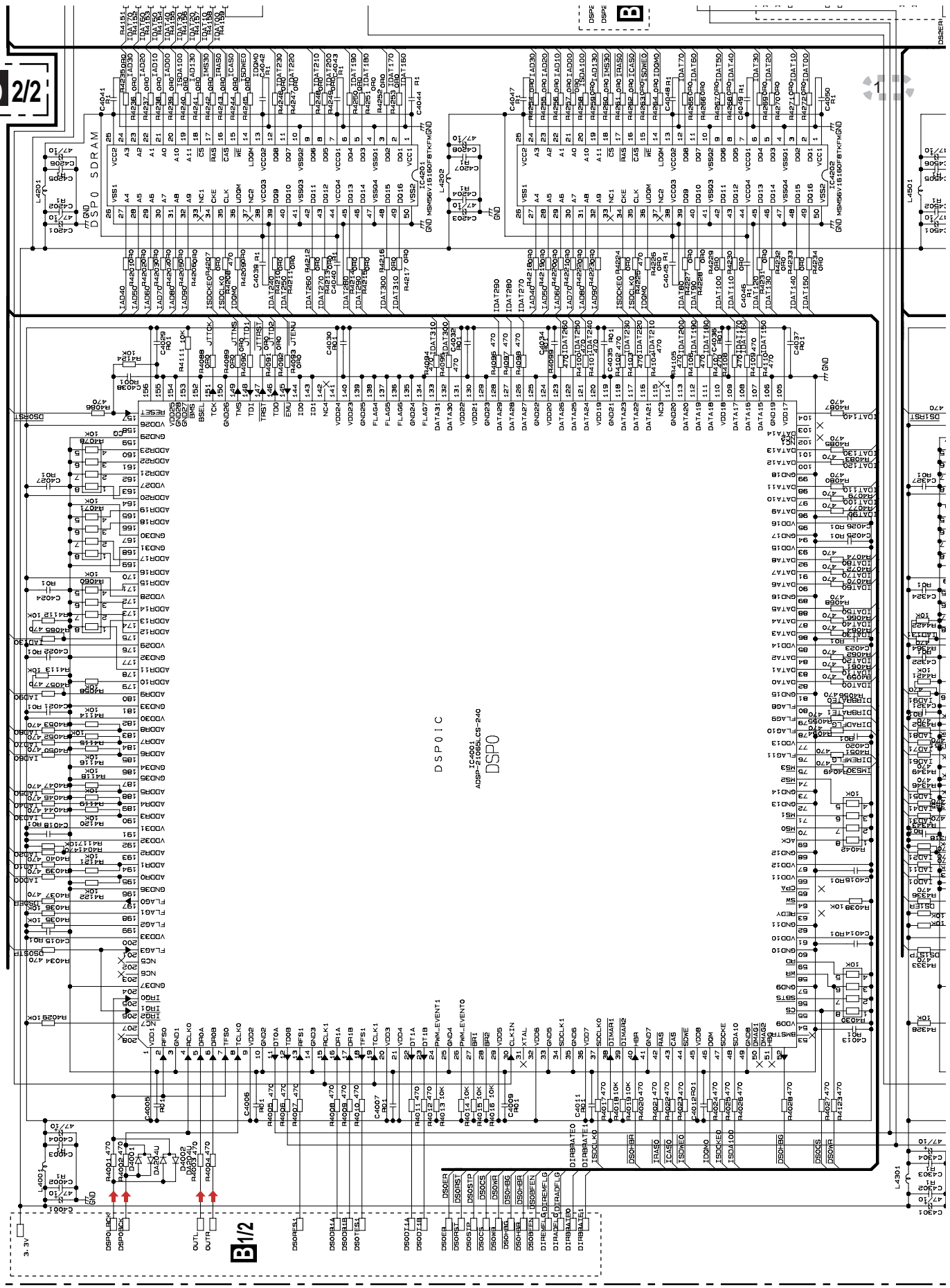
A B C D E F

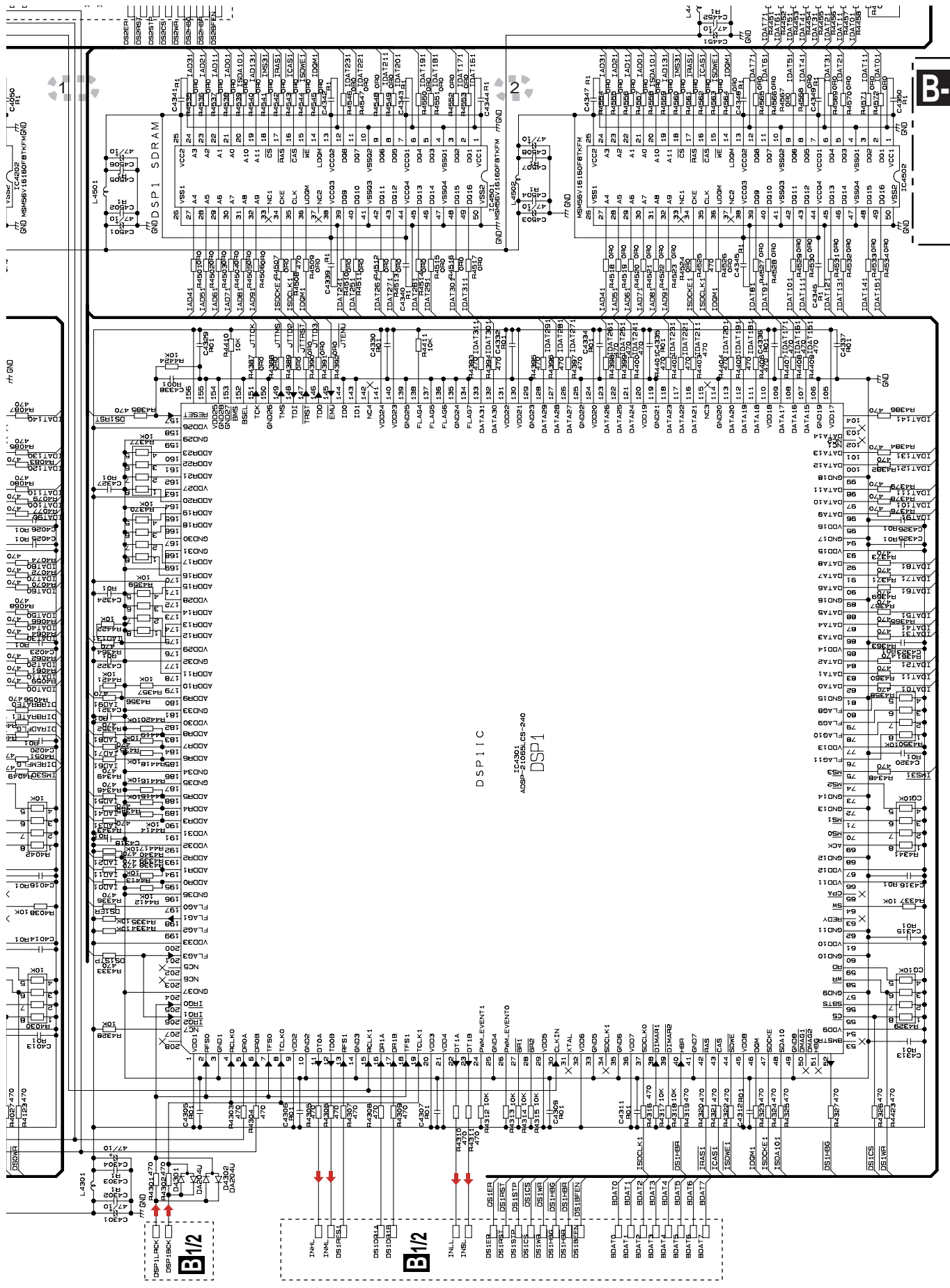
B-b 2/2

B-a B-b

B-a 2/2

RS-A9/EW

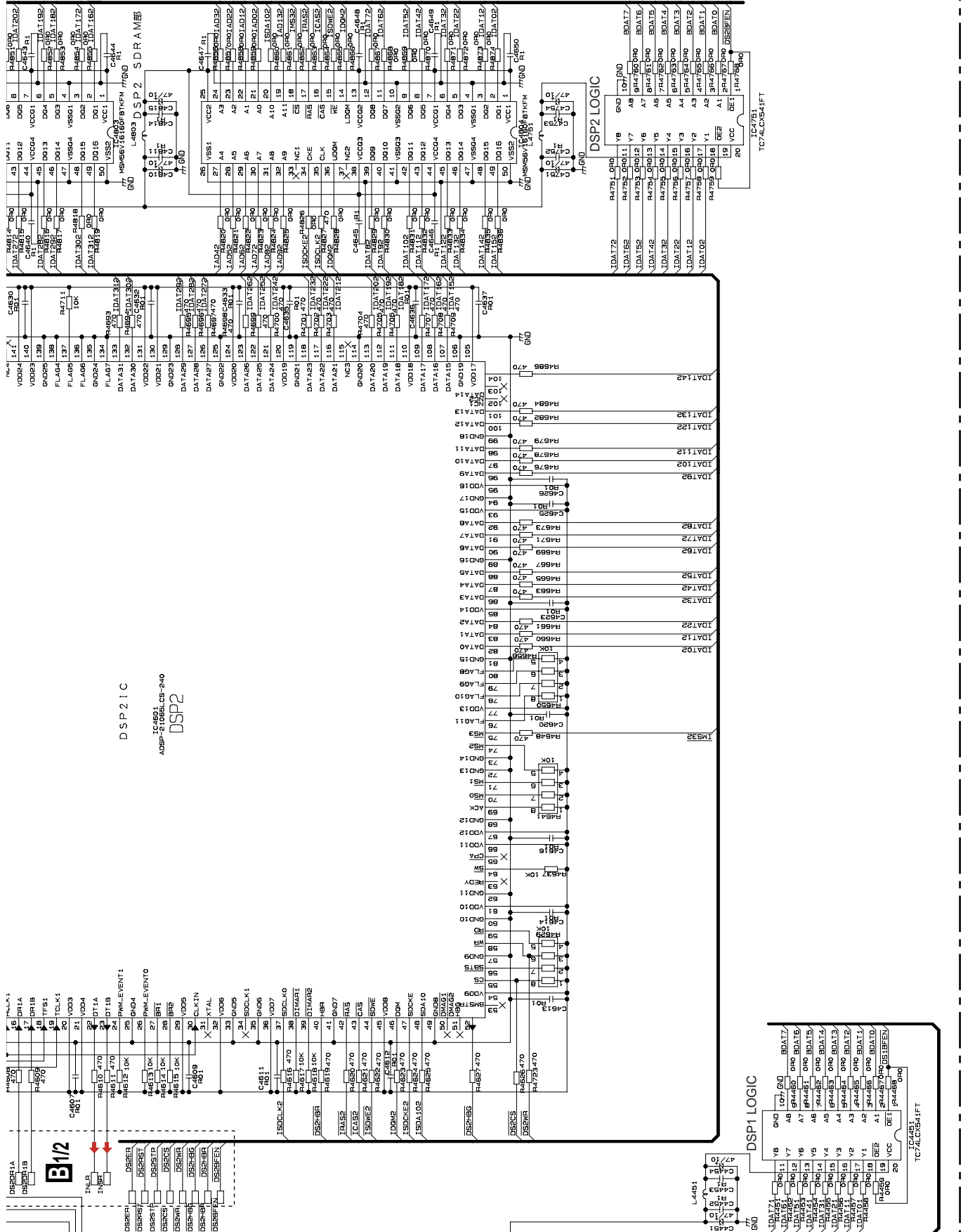




B-b 2/2

Ba Bb

B-a 2/2



DSP2 IC4601 CS-240
 DSP2

B112

B-a B-b

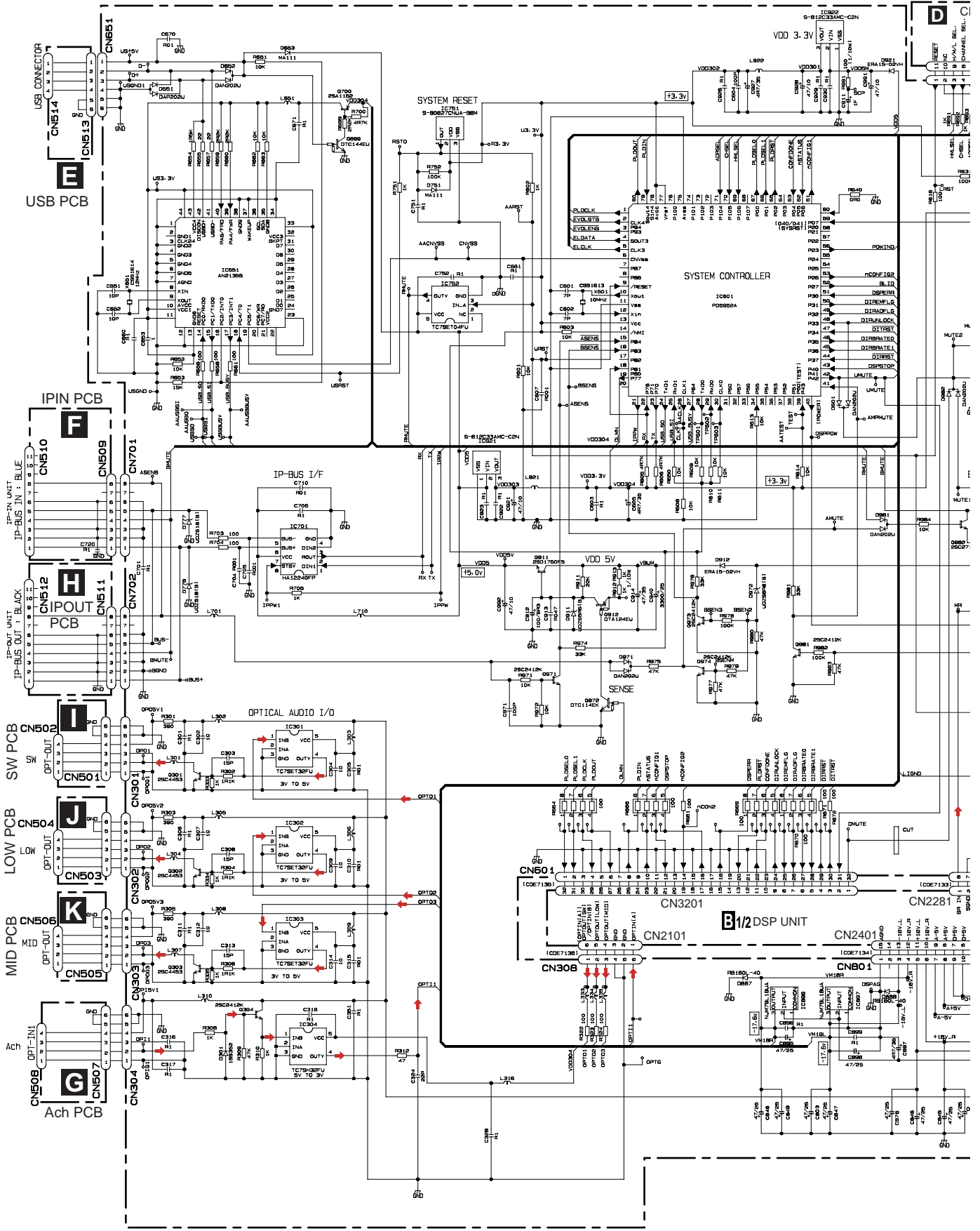
B-b 2/2

RS-A9/EW

3.5 CONTROL UNIT(GUIDE PAGE)

C-a

A
B
C
D
E
F



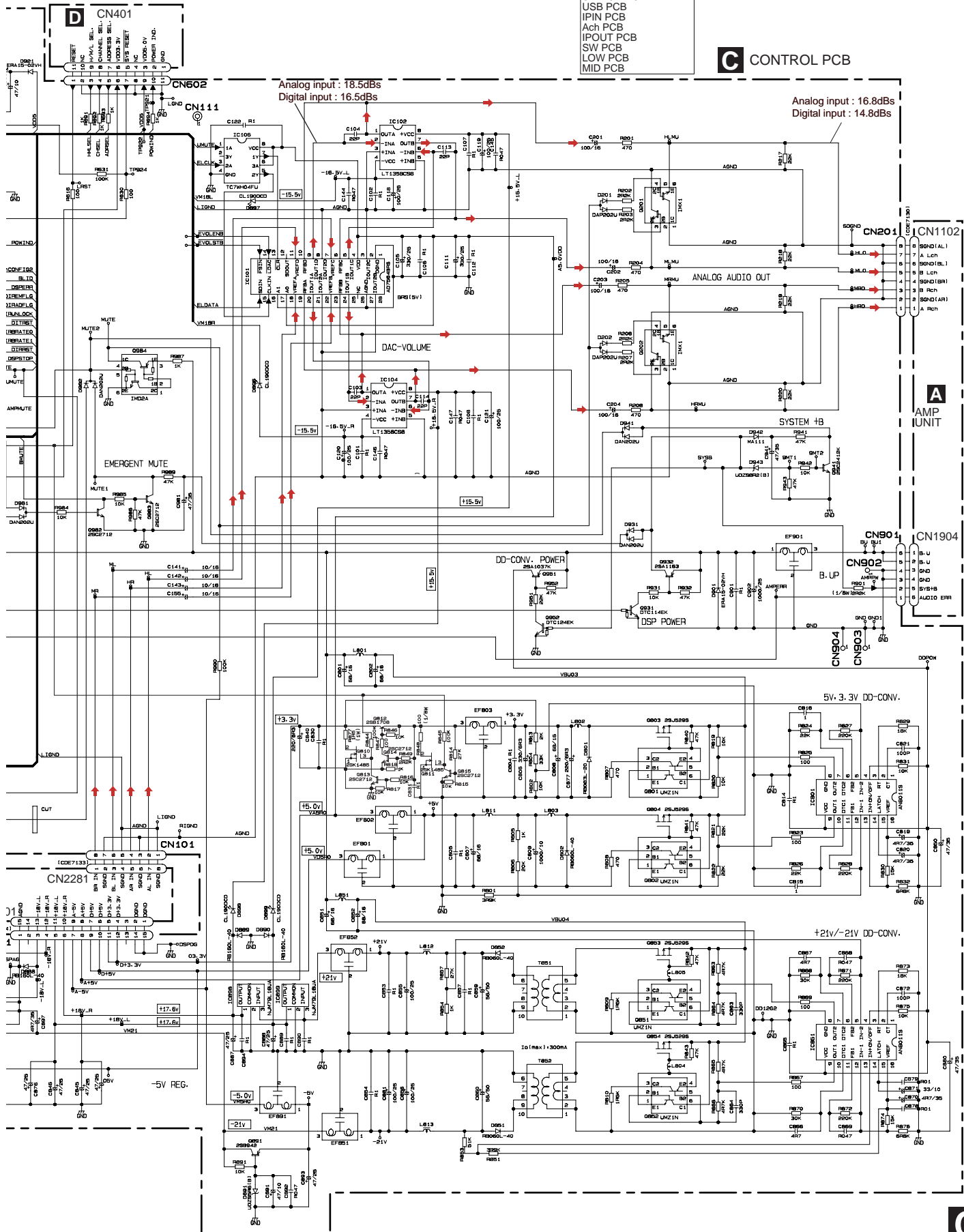
C E F G H I J K

RS-A9/EW

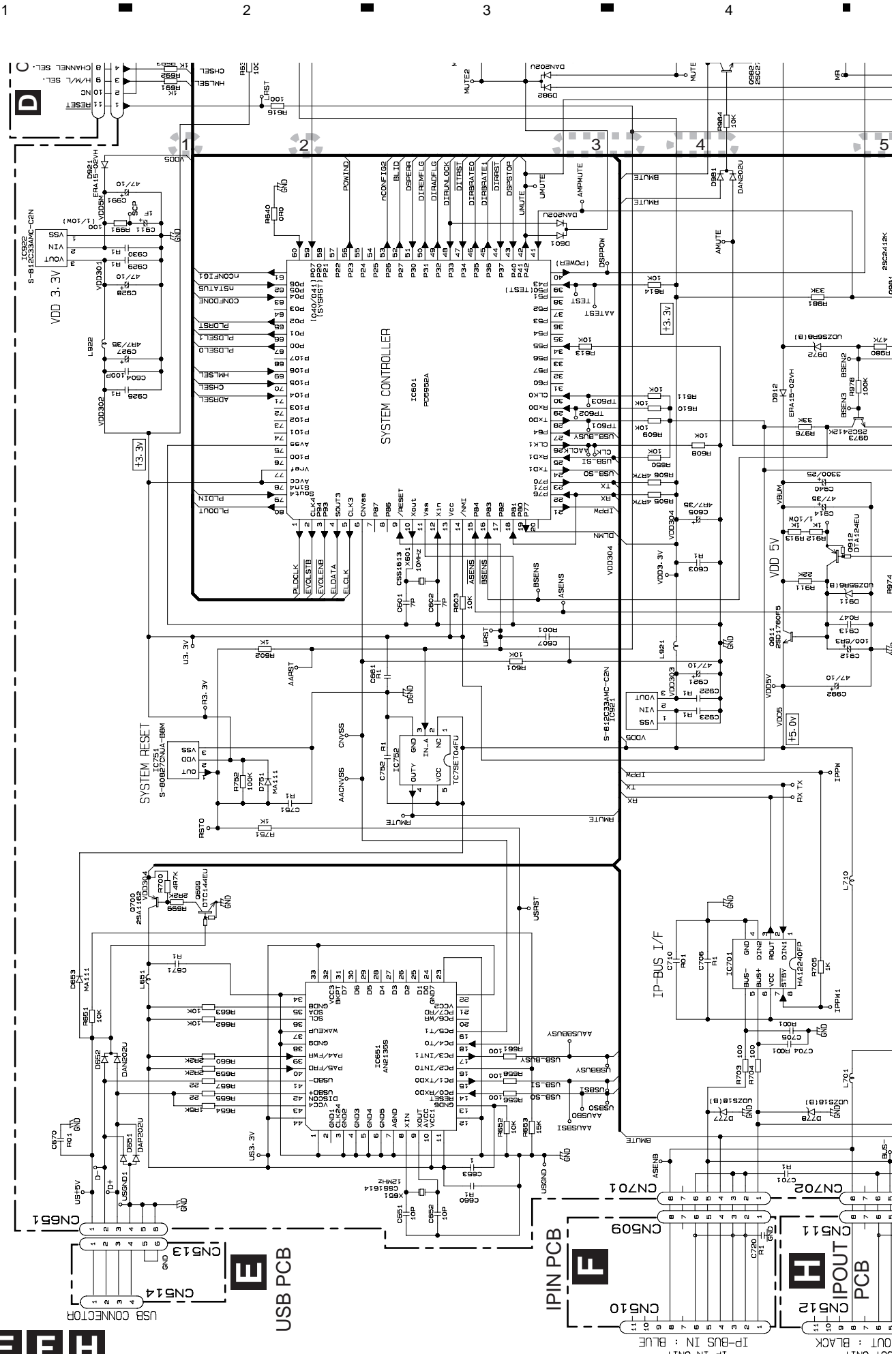
C-b

CONTROL UNIT
 Consists of
 CONTROL PCB
 SWITCH PCB
 USB PCB
 IPIN PCB
 Ach PCB
 IPOUT PCB
 SW PCB
 LOW PCB
 MID PCB

C CONTROL PCB

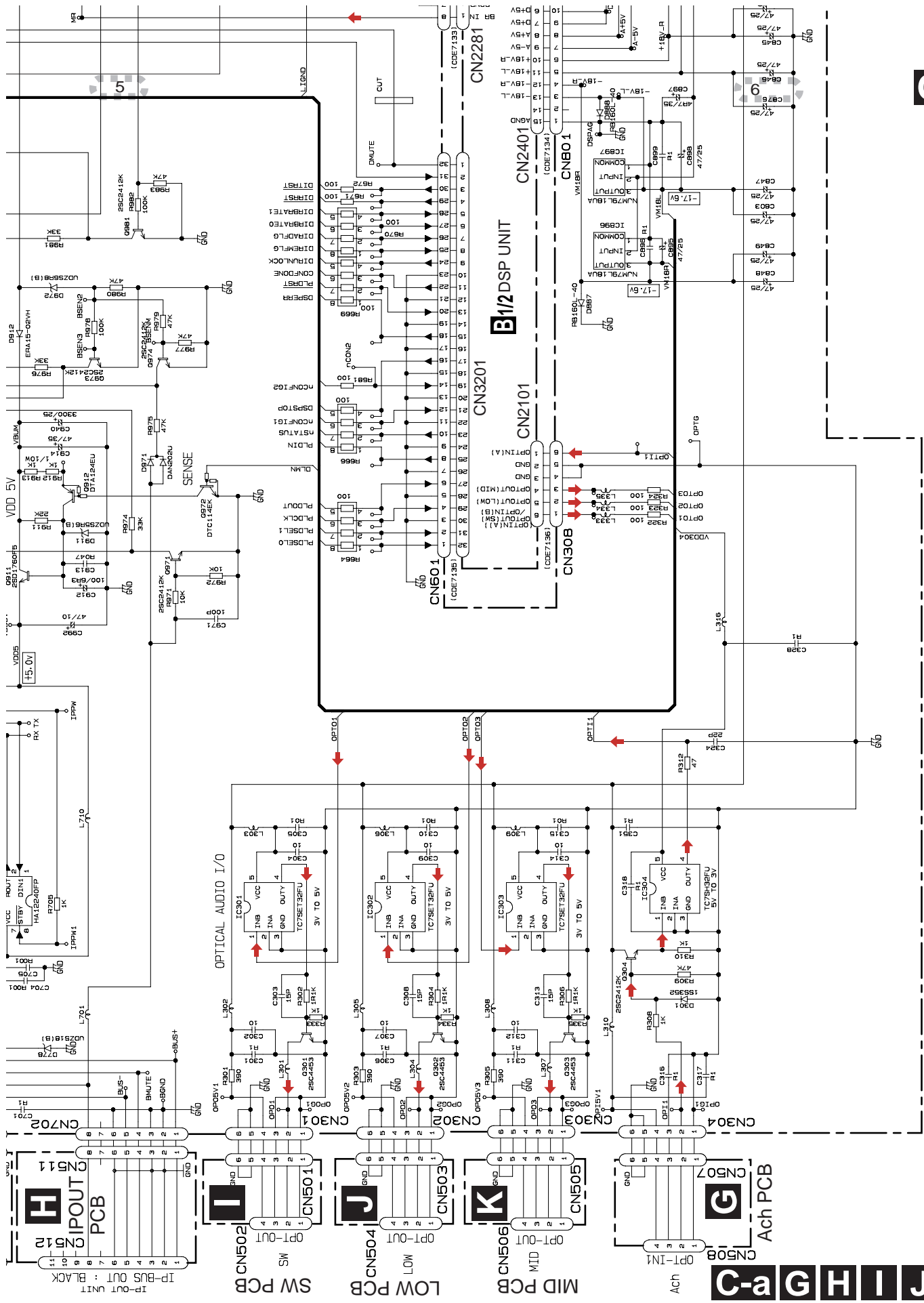


A
B
C
D
E
F



C-b
B
C
D
E
F
C-a **E** **F** **H**
34

IP-BUS IN : BLUE
 OUT : BLACK

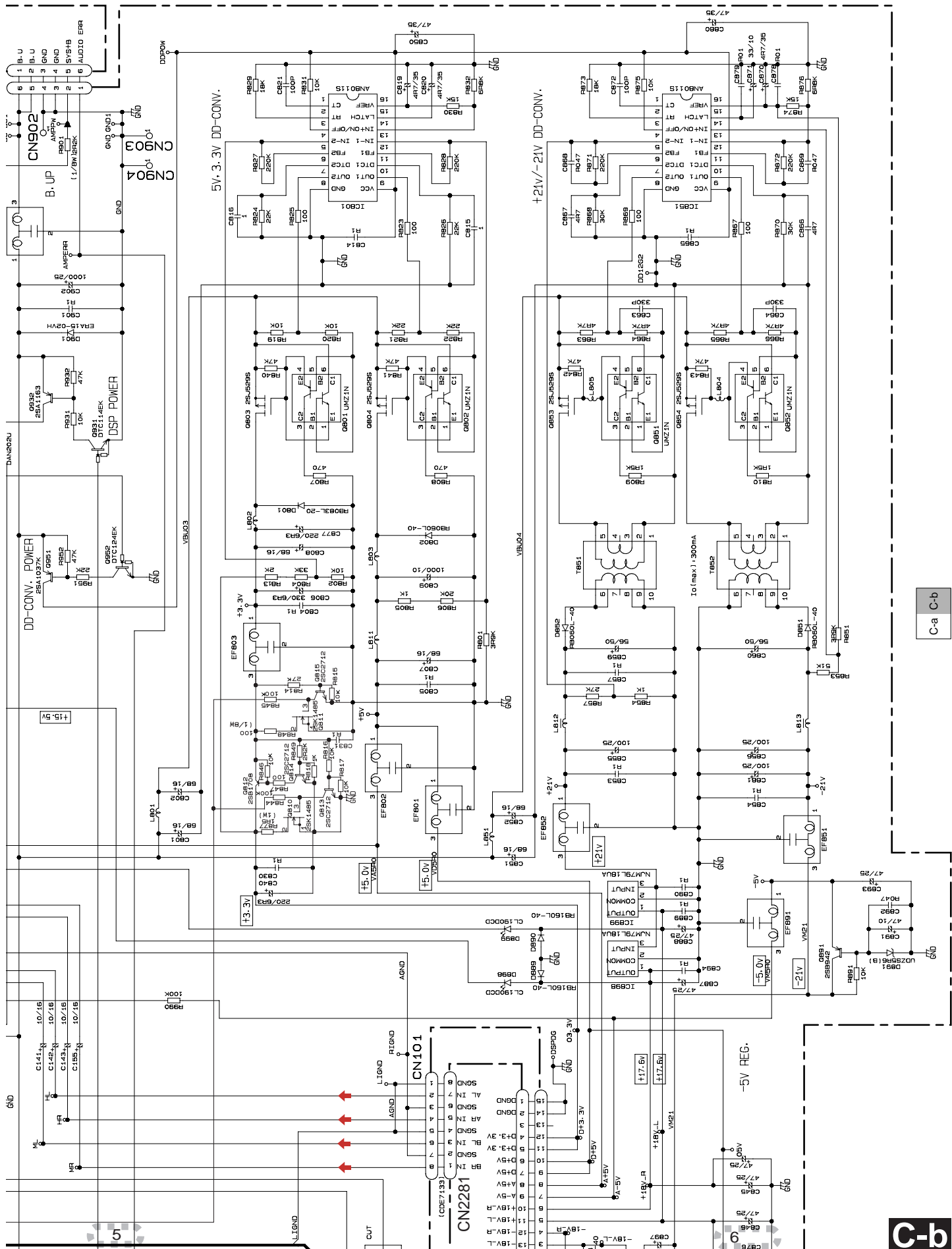


C-b

C-a C-b

C-a G H I J K

RS-A9/EW



C-a C-b

C-b

RS-A9/EW

5 6 7 8 A B C D E F

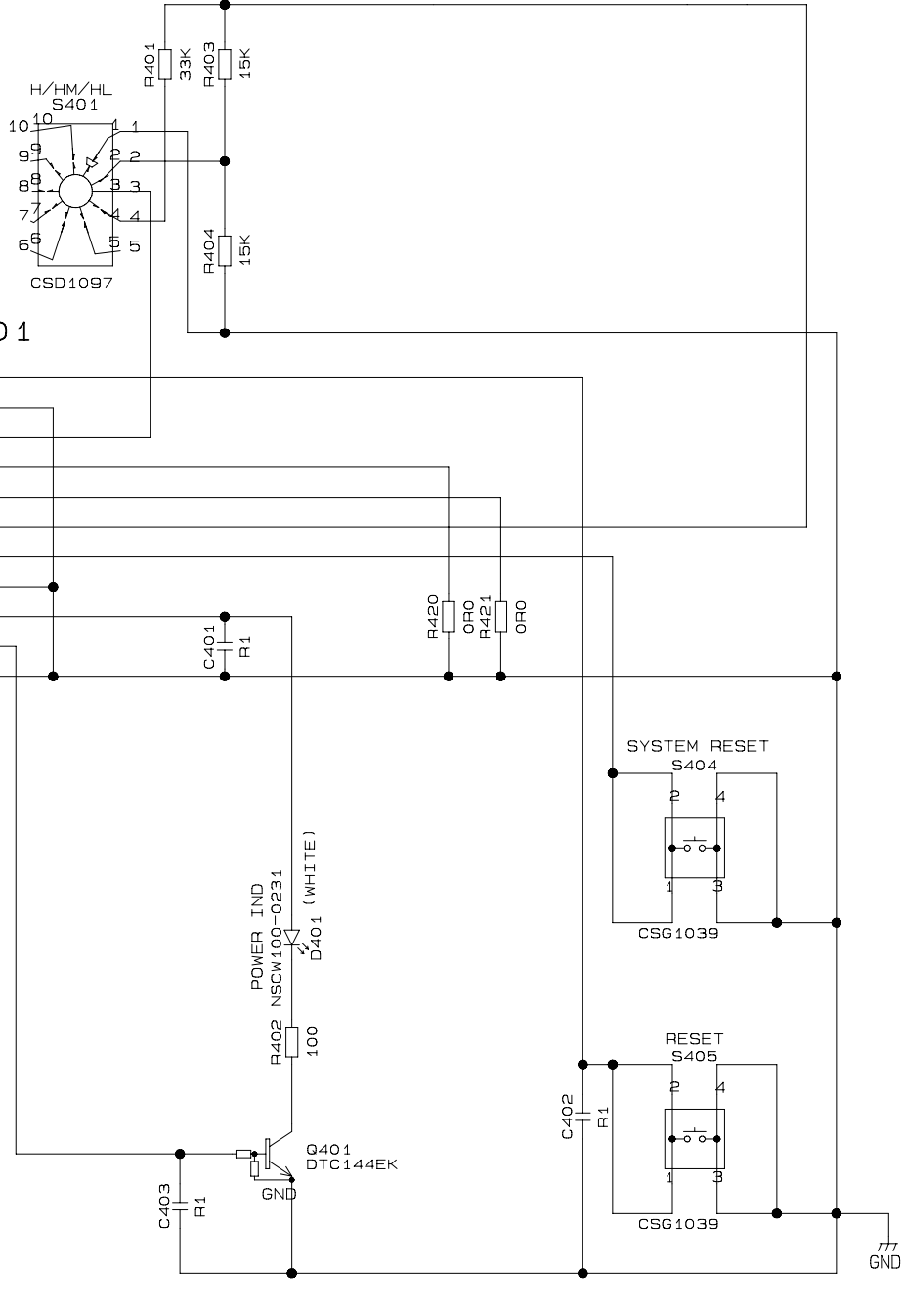
5 6 7 8 37

3.6 SWITCH PCB

D SWITCH PCB

CONTROL UNIT
 Consists of
 CONTROL PCB
 SWITCH PCB
 USB PCB
 IPIN PCB
 Ach PCB
 IPOUT PCB
 SW PCB
 LOW PCB
 MID PCB

S401	1	H	0V	0°
	2	HM	1.65V	
	3	HL	3.3V	Right 40° rotation
	4	HL	3.3V	Right 80° rotation



D

■

5

■

6

■

7

■

8

■

A

■

B

■

C

■

D

■

E

■

F

■

5

■

6

RS-A9/EW

■

7

■

8

■

4. PCB CONNECTION DIAGRAM

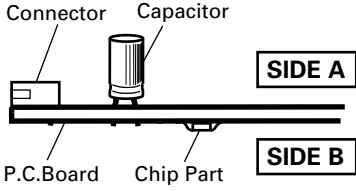
4.1 AMP UNIT(GUIDE PAGE)

A AMP UNIT

NOTE FOR PCB DIAGRAMS

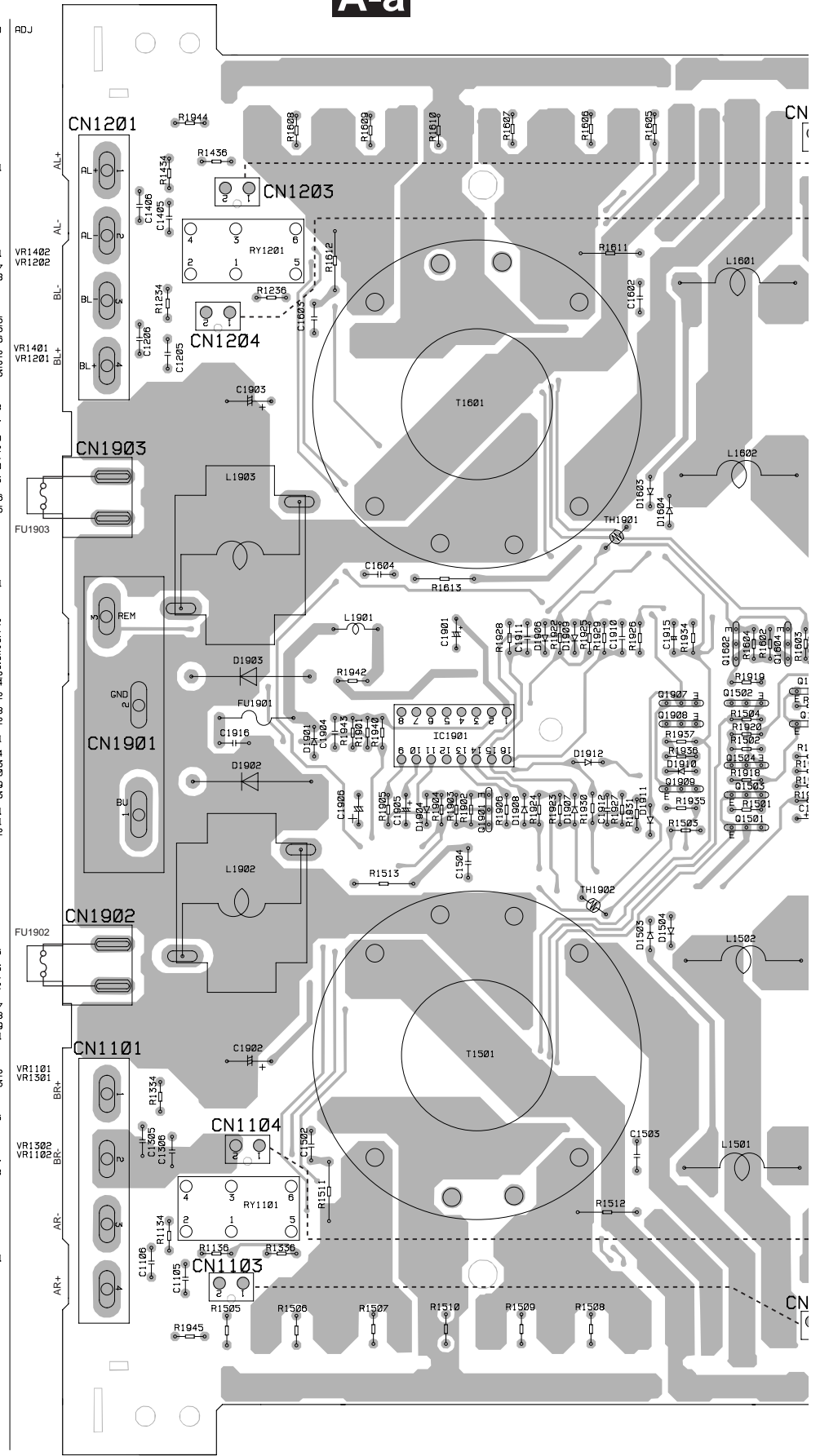
1. The parts mounted on this PCB include all necessary parts for several destination.
For further information for respective destinations, be sure to check with the schematic diagram.

2. Viewpoint of PCB diagrams



A-a

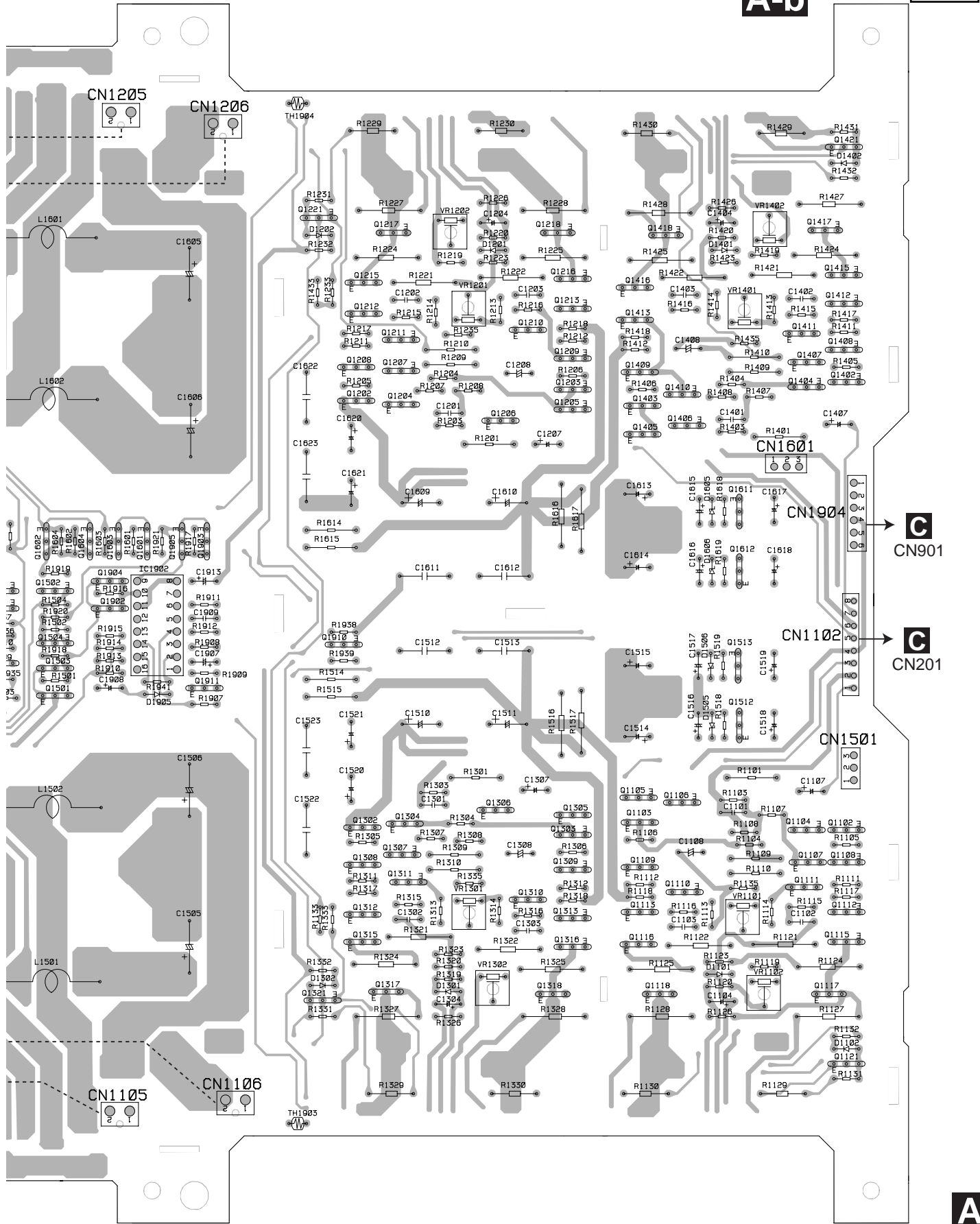
A
B
C
D
E
F



A

A-b

SIDE A



A
B
C
D
E
F

C
CN901

C
CN201

A

1 2 3 4

A B C D E F

A-b

A-a

A AMP UNIT

The diagram shows a detailed PCB layout for an AMP UNIT. Key components include:

- IC1900: A large integrated circuit at the bottom center.
- Resistors: Numerous resistors labeled R1200 through R1900, distributed across the board.
- Capacitors: Various capacitors labeled C1200 through C1900.
- Connectors: Multiple connectors labeled CN1200 through CN1900, including a 6-pin connector (CN1201) and a 16-pin connector (CN1901).
- Other components: Inductors (L1600, L1900), diodes (D1900), and a transformer (T1600).

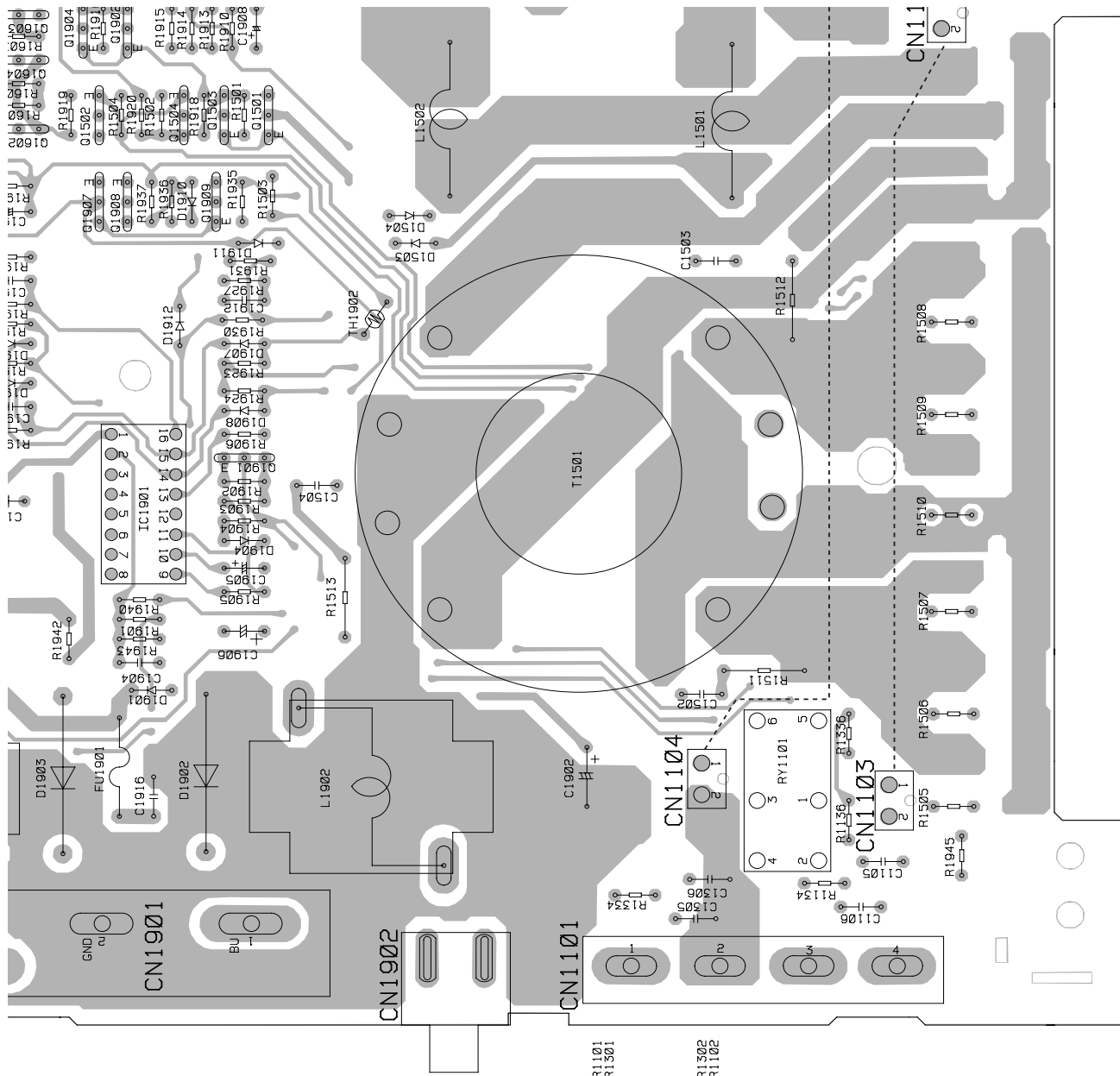
IC, Q	ADJ
Q1421	
Q1221	VR1402
Q1418	VR1202
Q1217	Q1218
Q1415	
Q1215	
Q1416	
Q1213	VR1401
Q1212	VR1201
Q1413	
Q1210	Q1411
Q1211	Q1408
Q1209	Q1407
Q1208	Q1409
Q1207	Q1409
Q1203	Q1402
Q1202	Q1410
Q1204	Q1403
Q1205	Q1403
Q1206	Q1406
Q1405	Q1405
Q1611	
Q1602	
Q1604	
Q1603	
Q1612	
Q1601	
Q1905	
Q1907	
Q1902	
Q1908	
Q1901	

A-a

RS-A9/EW

1 2 3 4

42



- 01605
- 01601
- 01612
- 01605
- 01605
- 01604
- 01502
- 01907
- 01908
- 01902
- IC1901
- 01504
- 01515
- 01910
- 01909
- 01505
- 01911
- 01501
- 01901
- 01512

- 01105
- 01506
- 01505
- 01502
- 01505
- 01505
- 01507
- 01508
- 01509
- 01511
- 01110
- 01510
- 01512
- 01513
- 01515
- 01516
- 01516
- 01517
- 01516
- 01521

- 01121

A-b

A-a

A-a

A

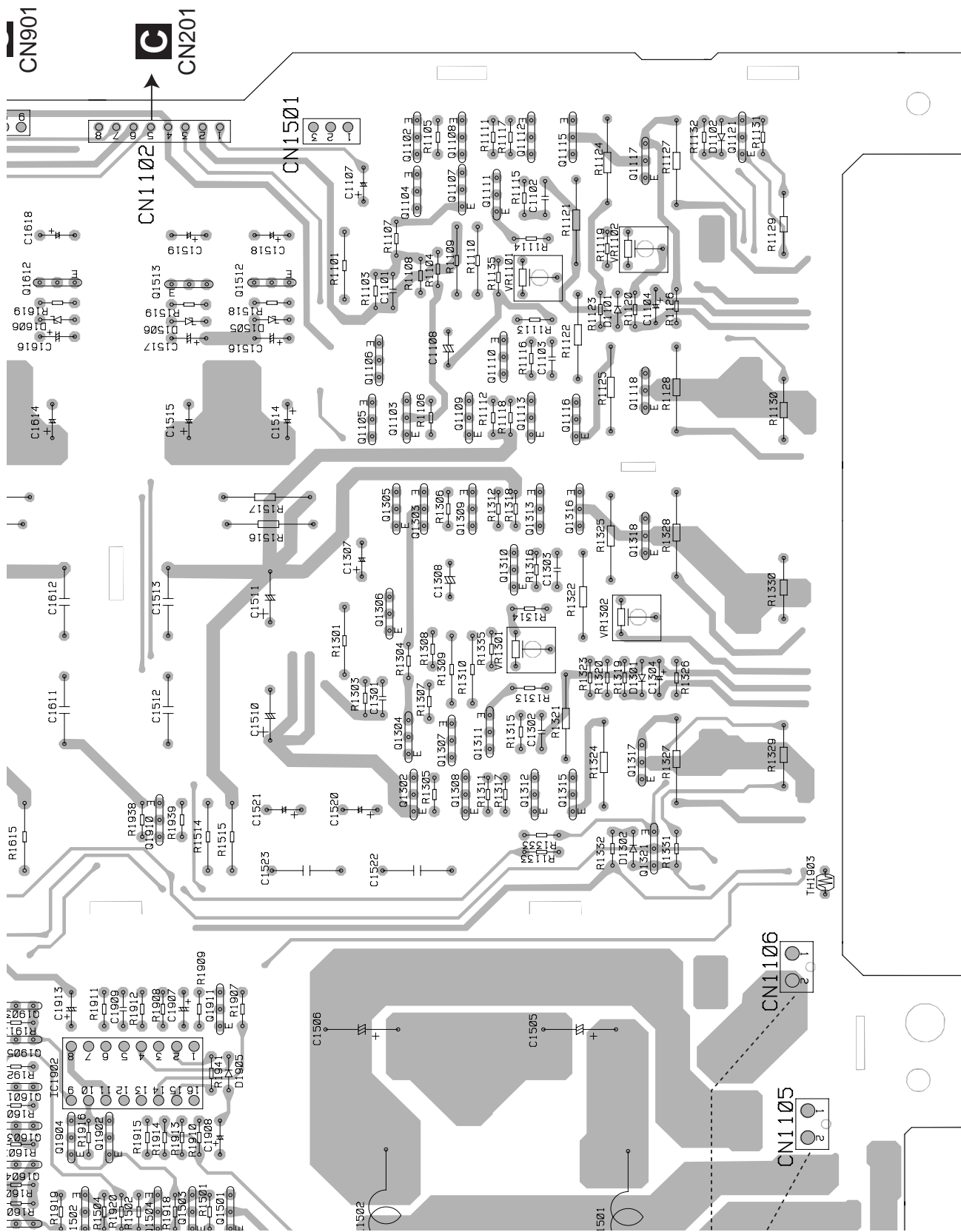
B

C

D

E

F

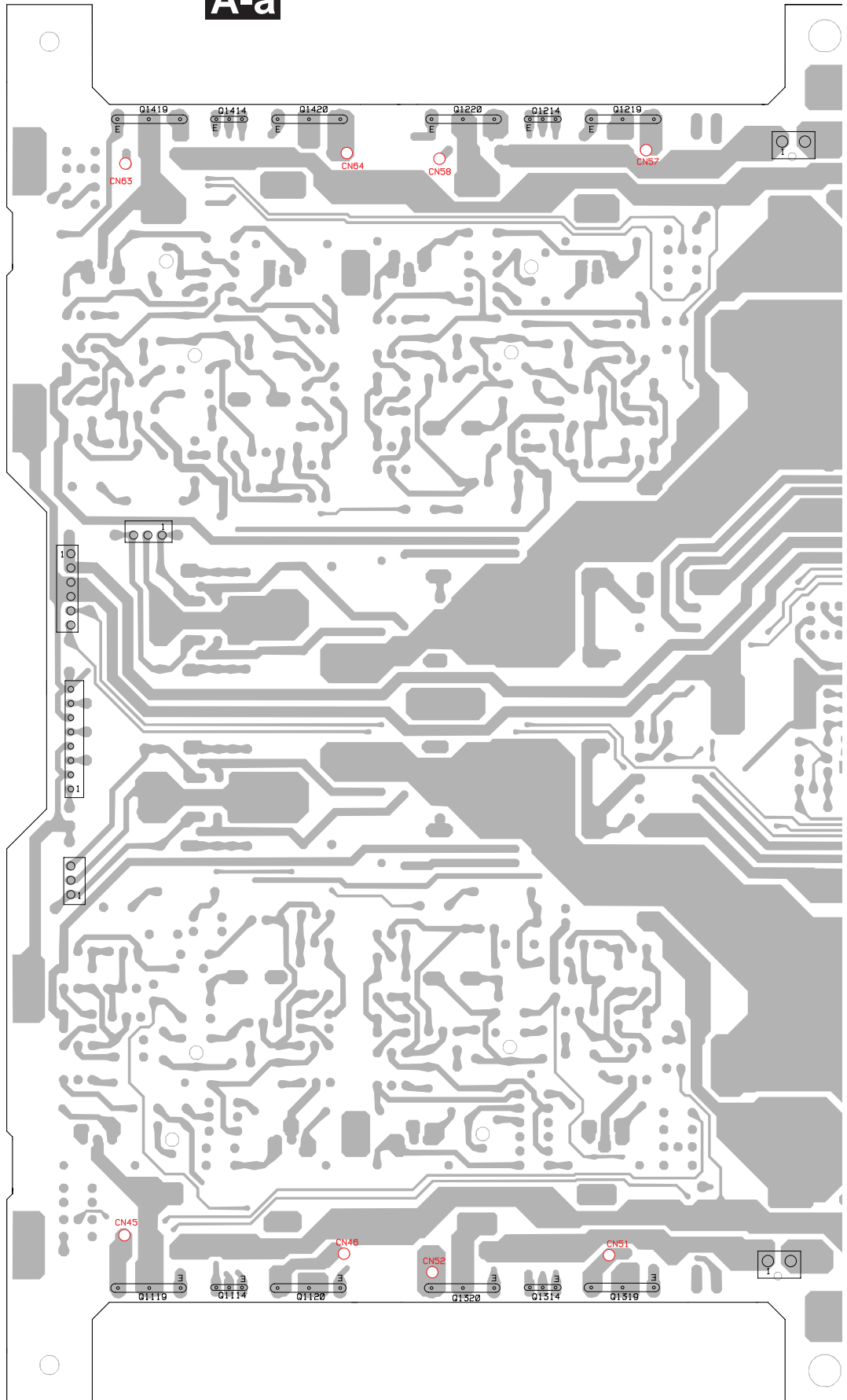


A-a A-b

A-b

A AMP UNIT

A-a



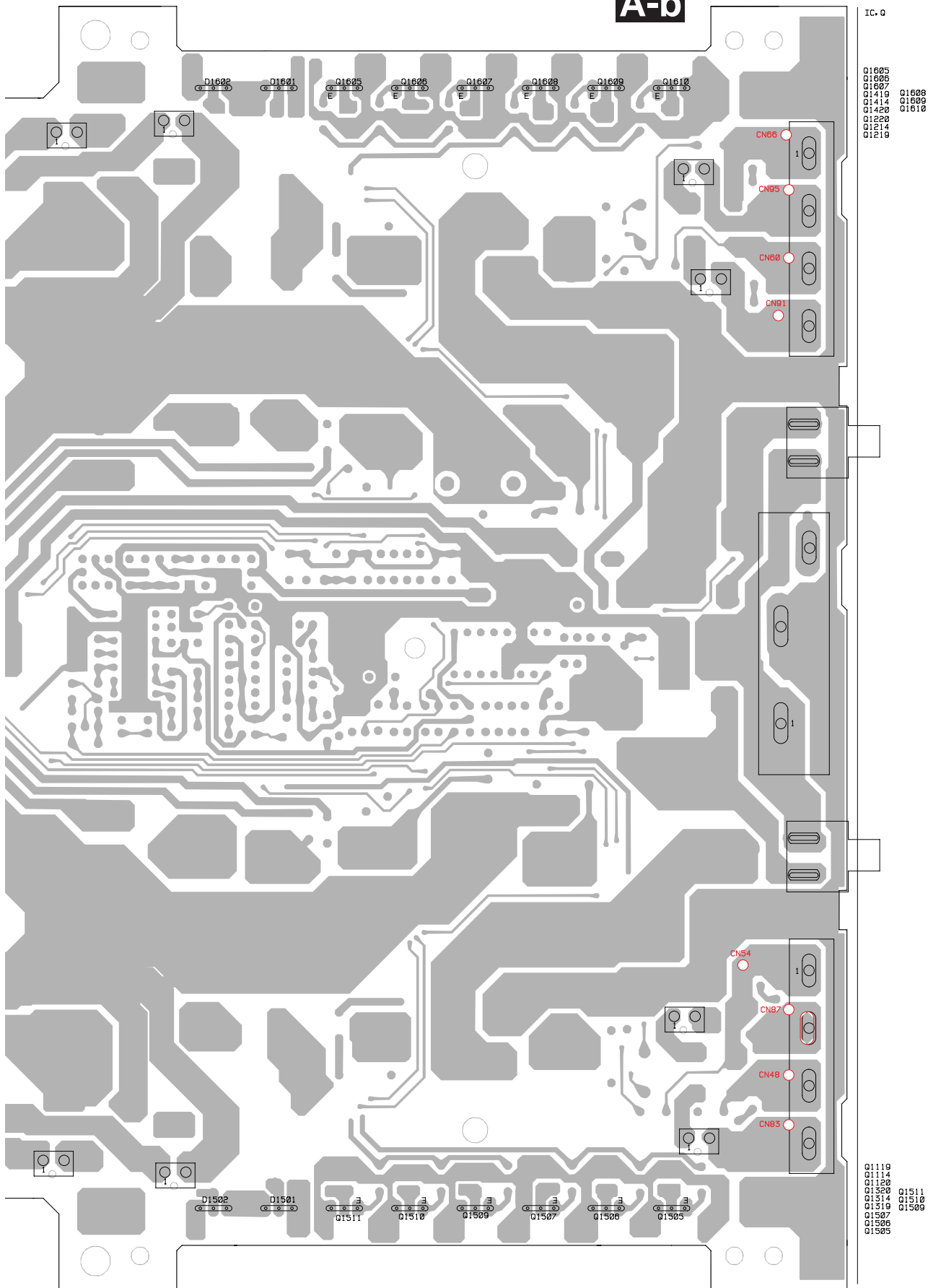
A
B
C
D
E
F

RS-A9/EW

A

A-b

SIDE B



IC-Q

Q1605
Q1606
Q1607
Q1419
Q1414
Q1420
Q1220
Q1214
Q1219

Q1119
Q1114
Q1120
Q1320
Q1314
Q1319
Q1507
Q1506
Q1505

A

B

C

D

E

F

A

RS-A9/EW

A

A-b

B

C

D

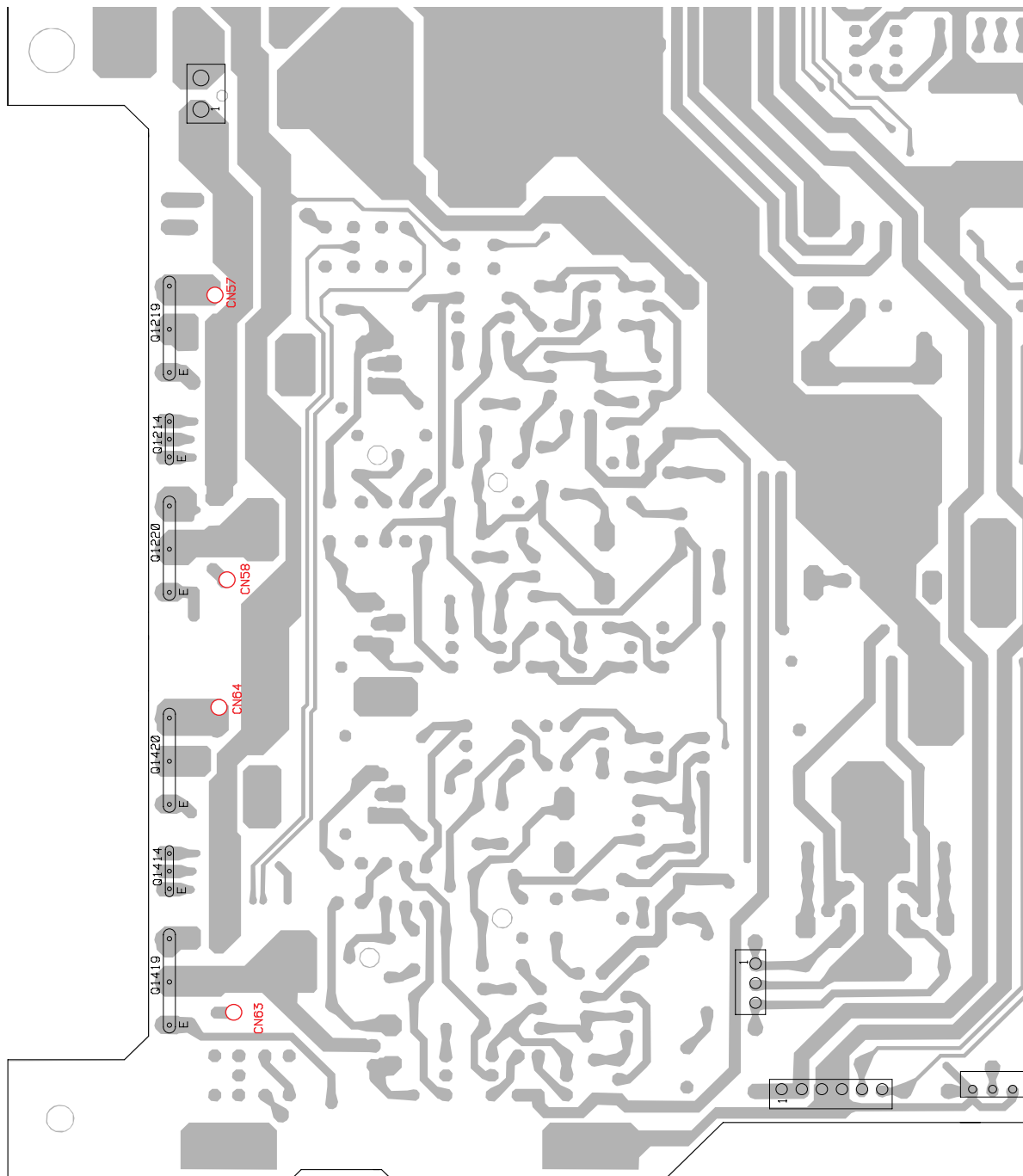
E

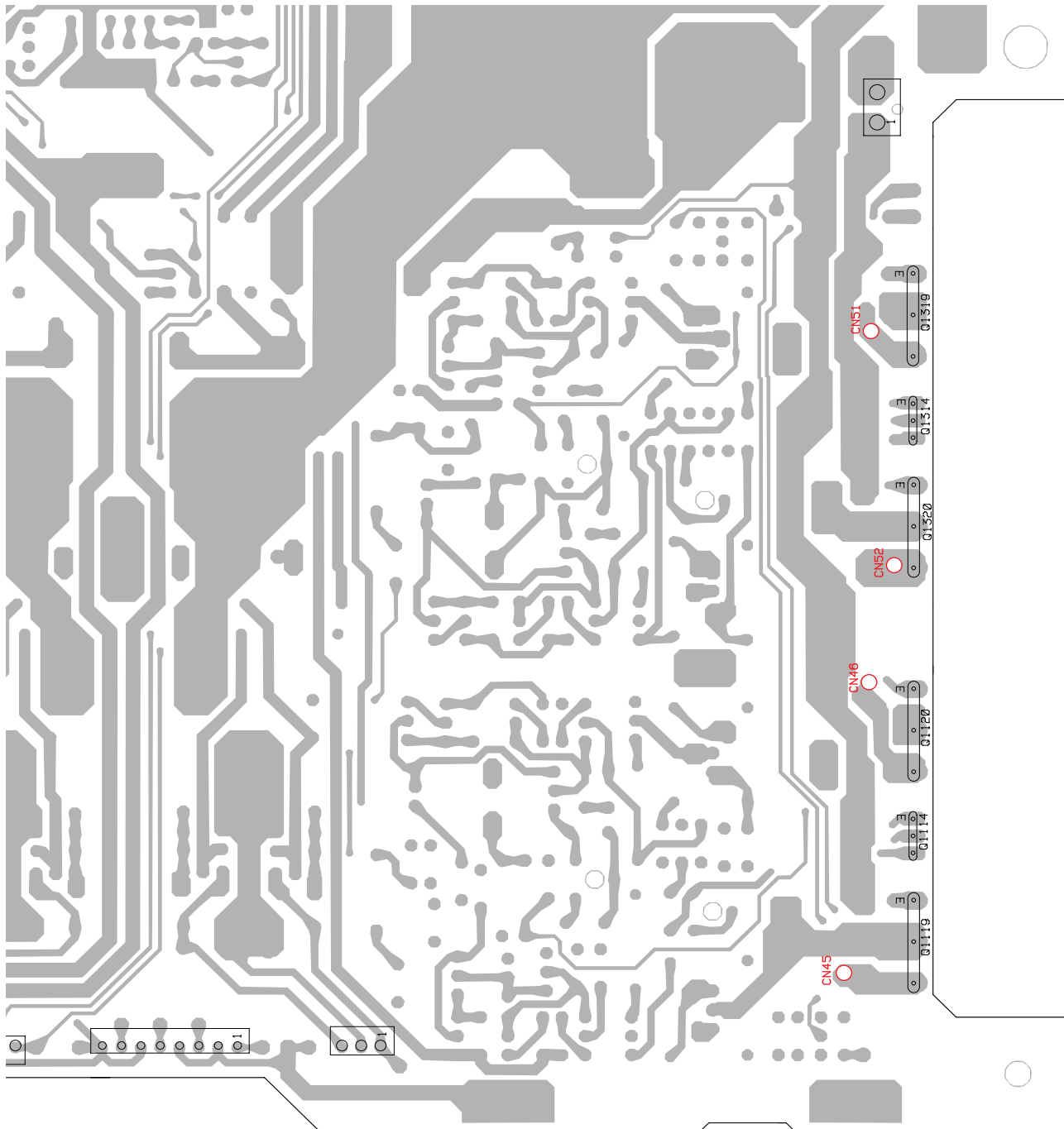
F

A-a A-b

A AMP UNIT

A-a





A-b

A

B

C

A-a A-b

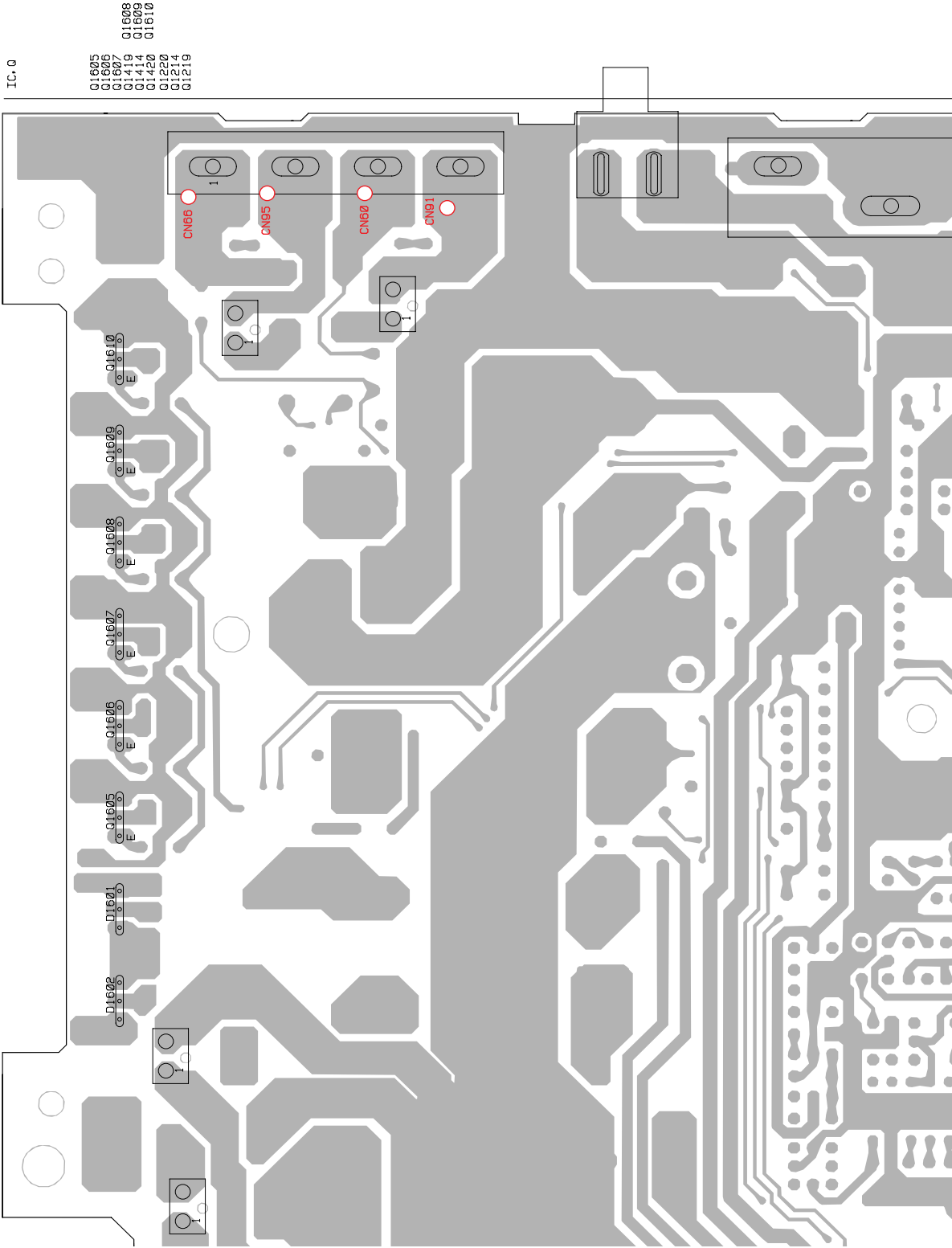
D

E

F

A-a

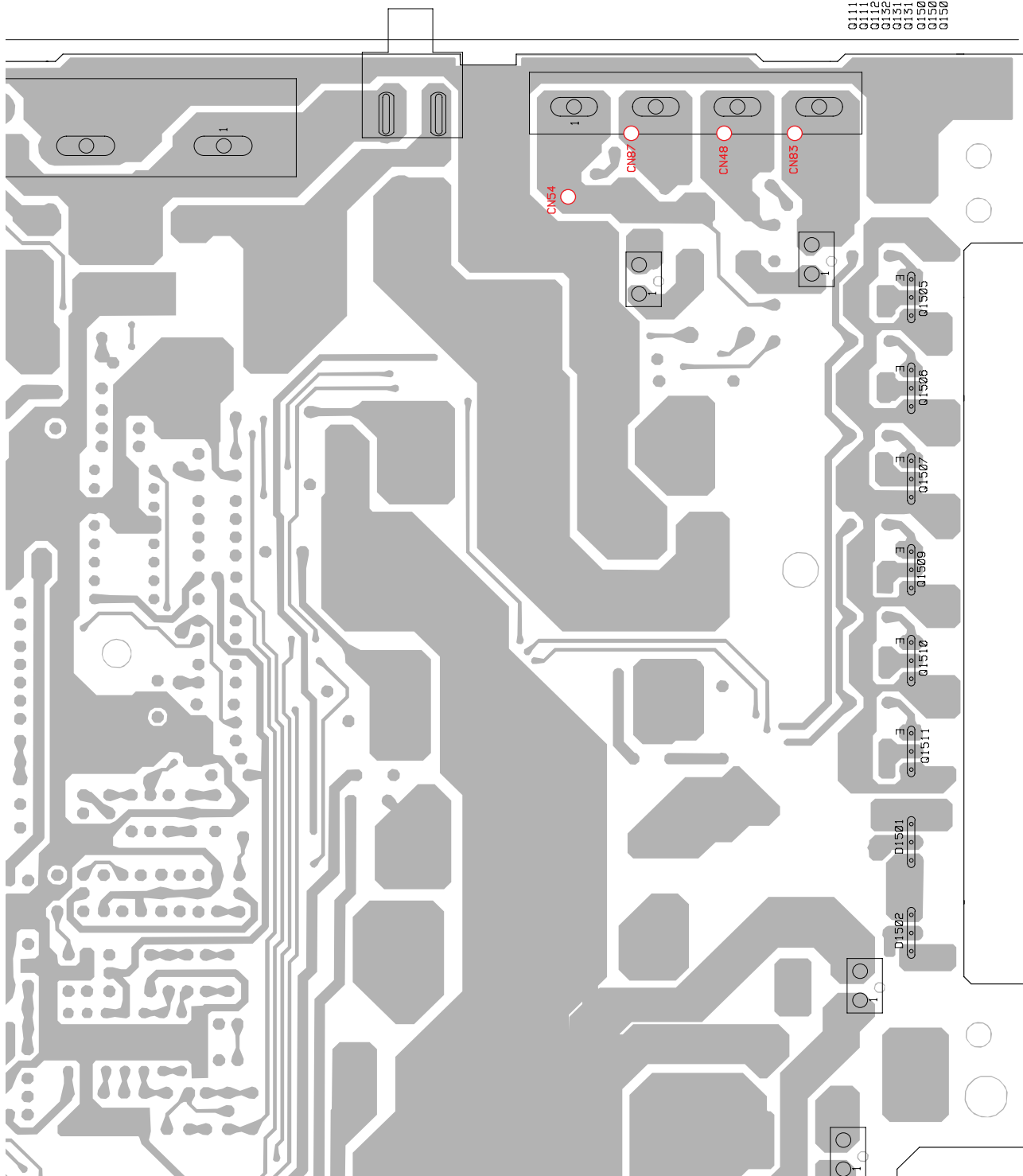
SIDE B



A-b

RS-A9/EW

01119
 01114
 01120
 01320
 01314
 01319
 01306
 01305
 01511
 01510
 01509



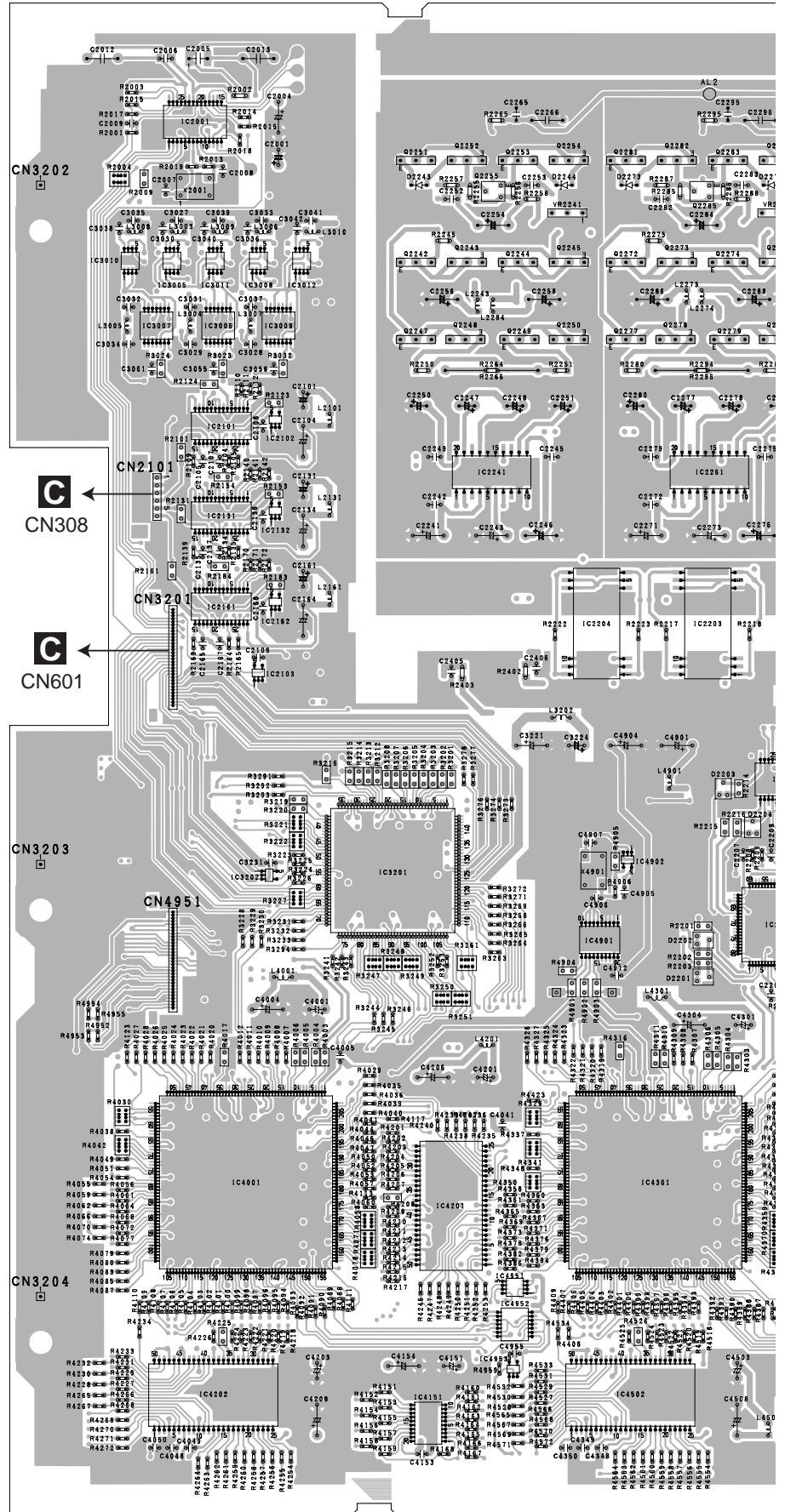
A-a A-b

A-b

4.2 DSP UNIT(GUIDE PAGE)

B DSP UNIT

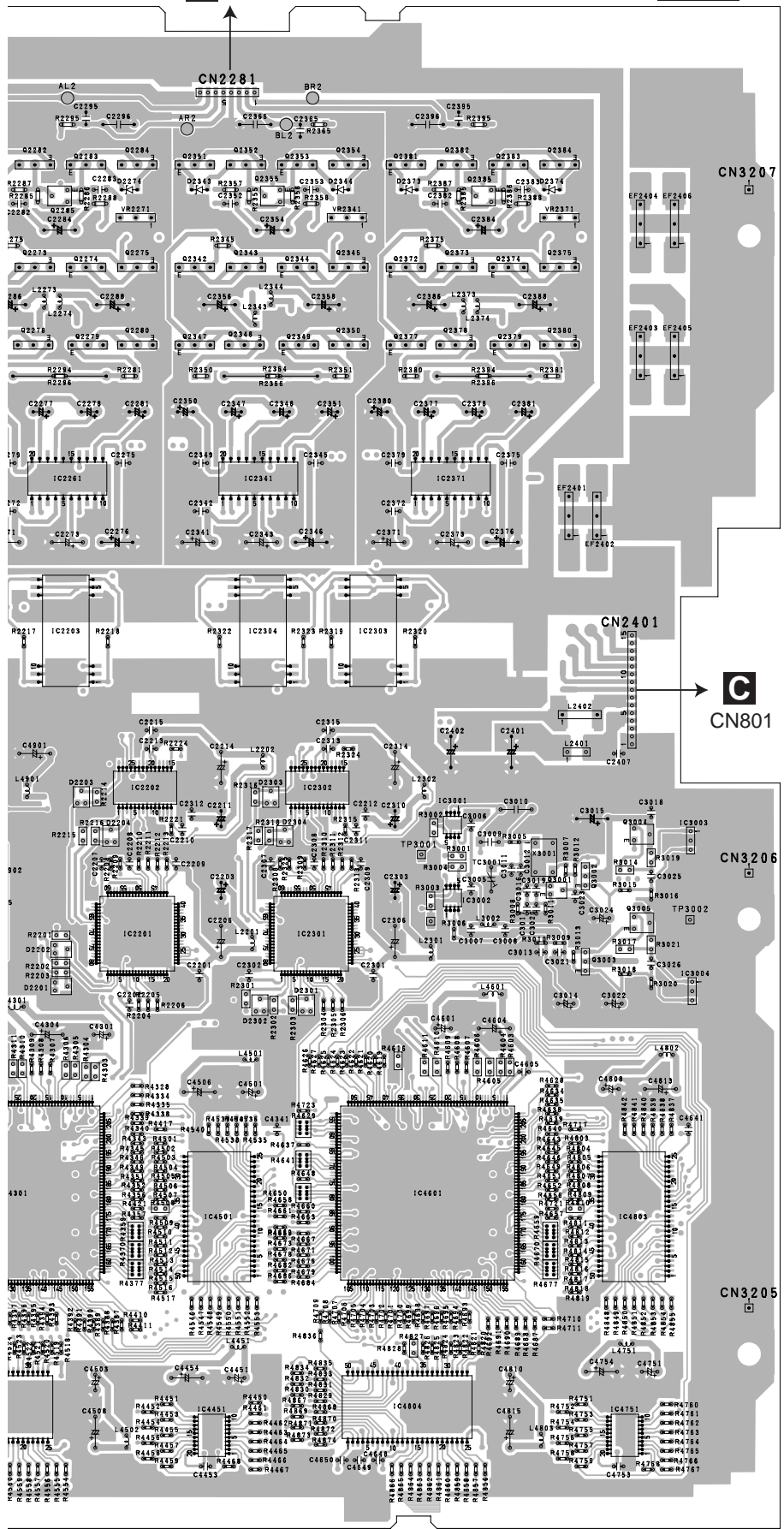
B-a



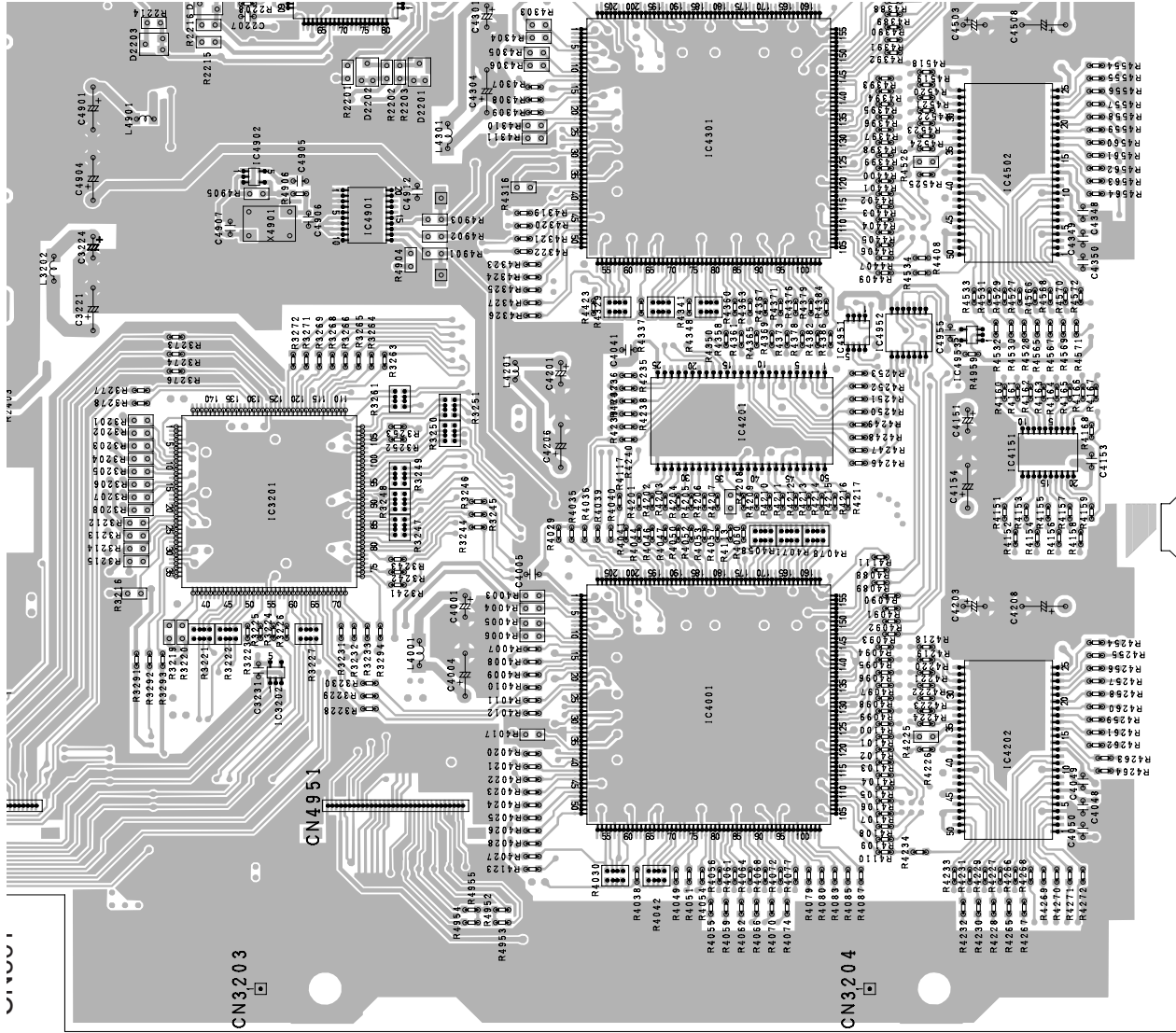
C CN101

B-b

SIDE A



- IC2001
- Q2252 Q2254 Q2282 Q2284 Q2352
- Q2354 Q2382 Q2384 Q2251 Q2253
- Q2281 Q2283 Q2351 Q2353 Q2381
- Q2383 Q2255 Q2355 Q2385
- VR2241 VR2271 VR2341 VR2371 Q2285
- Q2243
- Q2245 Q2273 Q2275 Q2343 Q2345
- Q2373 Q2375 Q2242 Q2244 Q2272
- Q2274 Q2342 Q2344 Q2372 Q2374
- IC3010 IC3085 IC3011 IC3008 IC3012
- Q2248
- Q2250 Q2278 Q2280 Q2348 Q2350
- Q2378 Q2380 IC3007 IC3006 IC3009
- Q2247 Q2249 Q2277 Q2279 Q2347
- Q2349 Q2377 Q2379
- IC2101
- IC2102
- IC2241 IC2261 IC2341 IC2371
- IC2131
- IC2132
- IC2161
- IC2162 IC2204 IC2205 IC2304 IC2305
- IC2103
- IC2202 IC2302
- IC3001
- IC3003
- Q3004
- IC4902
- Q3002 IC3002 IC3001
- Q3001 IC3201 IC3202
- Q3005
- IC2201 IC2301
- Q3003 IC4901
- IC3004
- IC4001 IC4301 IC4601
- IC4201 IC4501 IC4803
- IC4951
- IC4952
- IC4953
- IC4202 IC4502 IC4804 IC4131 IC4451
- IC4751



B-b

A

B

C

D

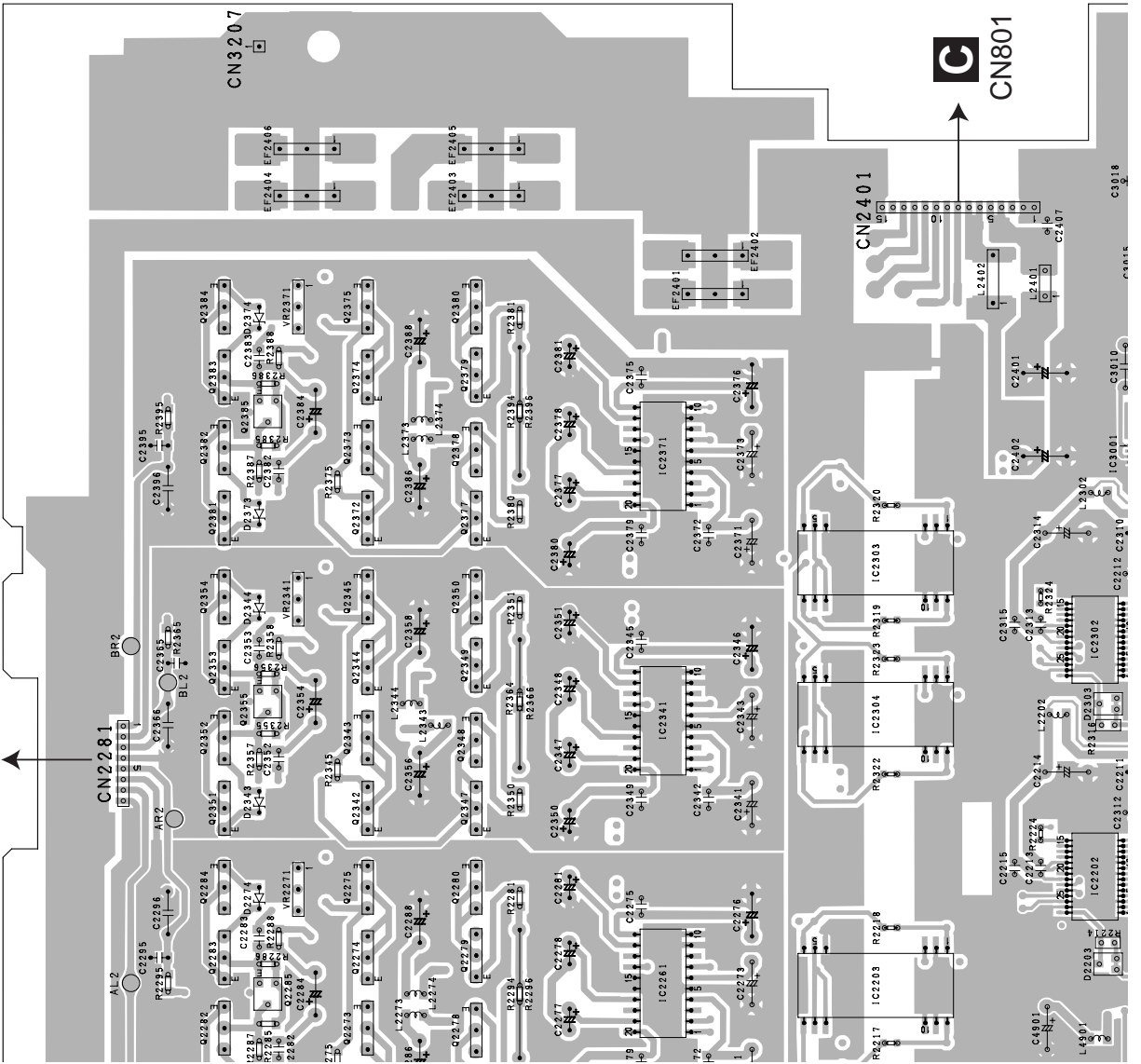
E

F

B-a B-b

B-a

SIDE A



IC,Q

IC2001

Q2252 Q2254 Q2282 Q2284 Q2352
 Q2354 Q2382 Q2384 Q2351 Q2253
 Q2281 Q2283 Q2351 Q2353 Q2381
 Q2383 Q2255 Q2355 Q2385
 VR2241 VR2271 VR2341 VR2371 Q2285
 Q2243

Q2245 Q2273 Q2275 Q2343 Q2345
 Q2373 Q2375 Q2242 Q2244 Q2272
 Q2274 Q2342 Q2344 Q2372 Q2374
 IC3010 IC3005 IC3011 IC3008 IC3012
 Q2248

Q2250 Q2278 Q2280 Q2348 Q2350
 Q2378 Q2380 IC3007 IC3006 IC3009
 Q2247 Q2249 Q2277 Q2279 Q2347
 Q2349 Q2377 Q2379

IC2101

IC2102

IC2241 IC2261 IC2341 IC2371

IC2131

IC2132

IC2151

IC2152 IC2204 IC2203 IC2304 IC2303
 IC2103

IC2202 IC2302

IC3001

A

B

C

D

E

F

1

2

3

4

B-a B-b

B-b

RS-A9/EW

1

2

3

4

B DSP UNIT

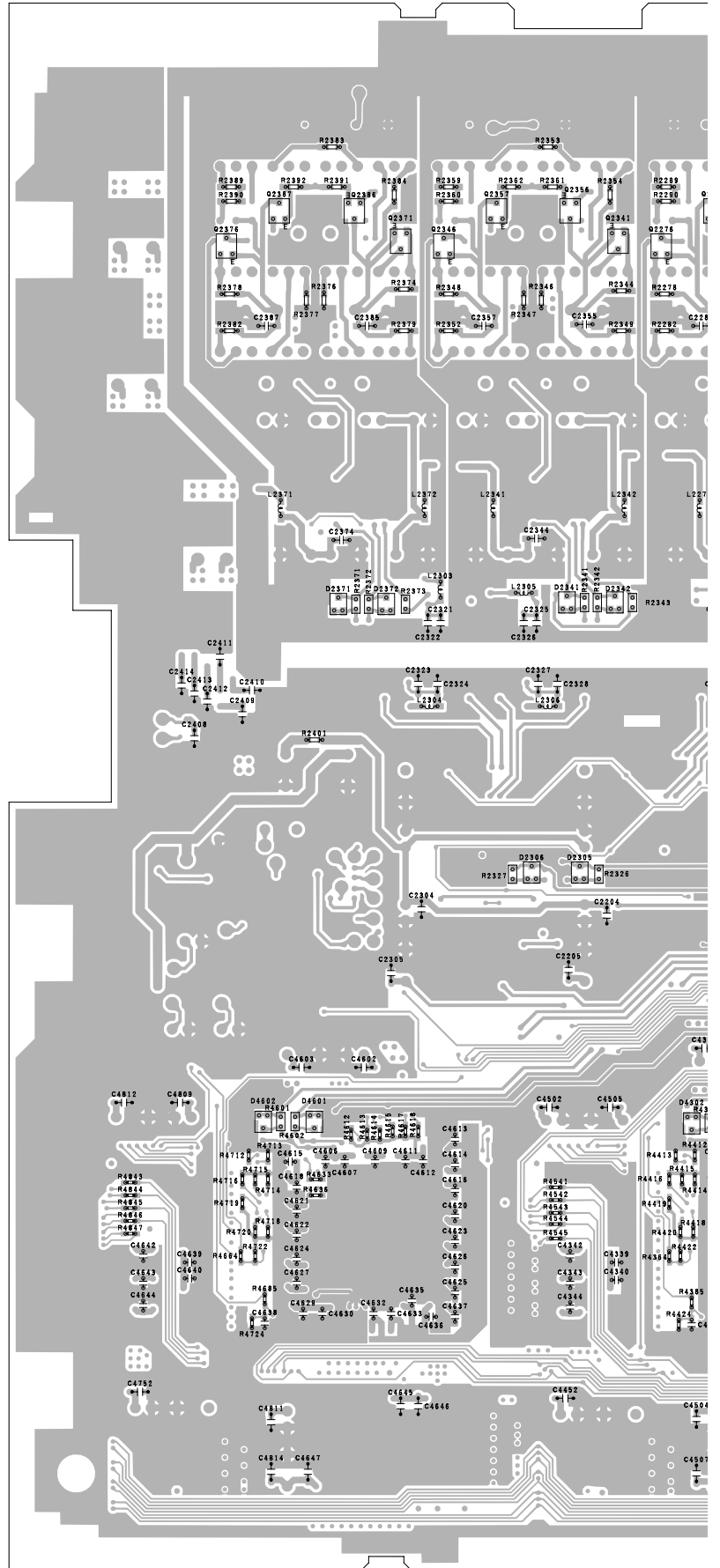
B-a

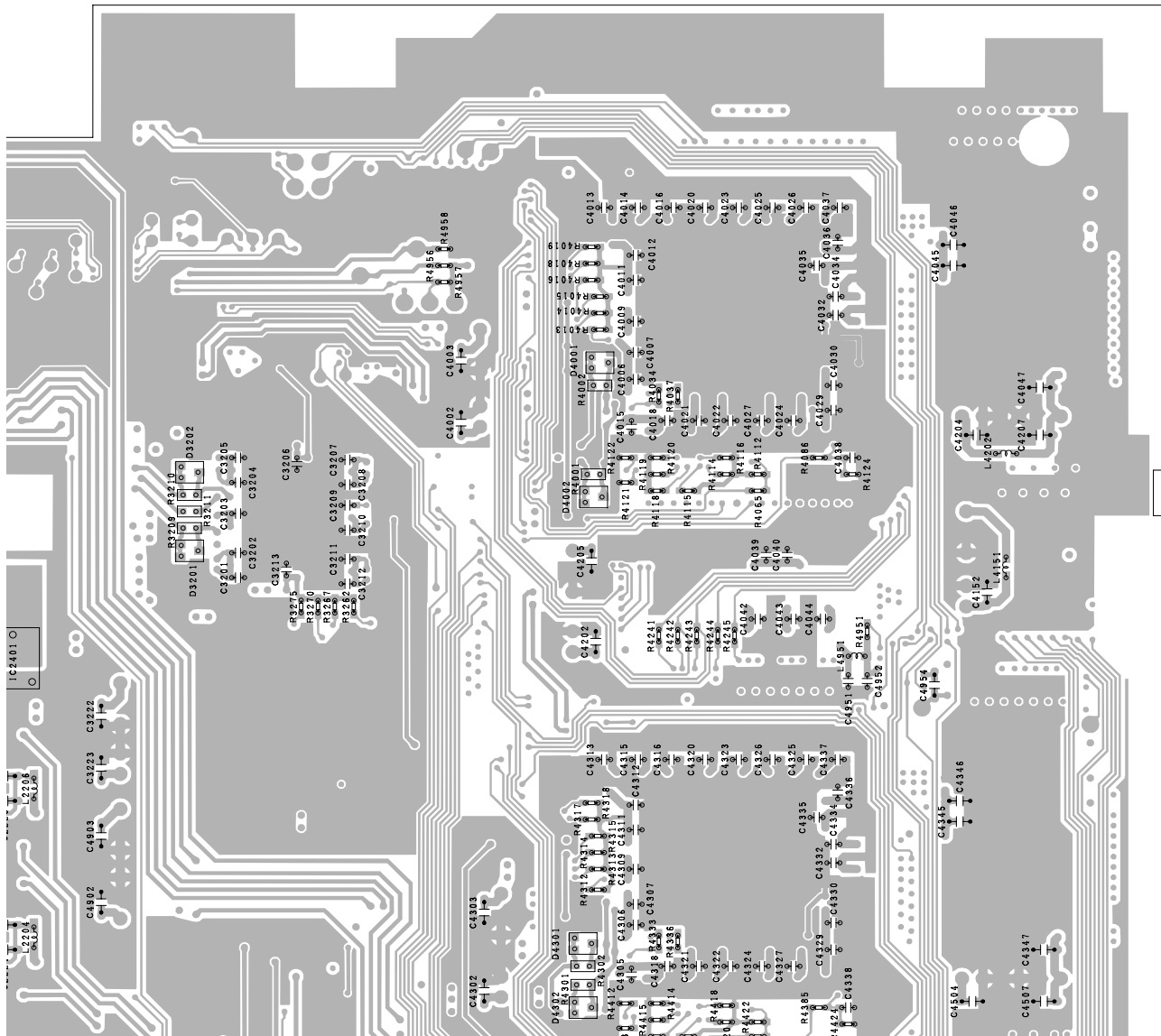
A
B
C
D
E
F

Q2387 Q2357 Q2287 Q2257
 Q2386 Q2356 Q2286 Q2256
 Q2248 Q2371 Q2341 Q2271 Q2241
 Q2376 Q2346 Q2276

IC20

IC2401





B-a B-b

B-b

4.3 CONTROL PCB(GUIDE PAGE)

C CONTROL PCB

C-a

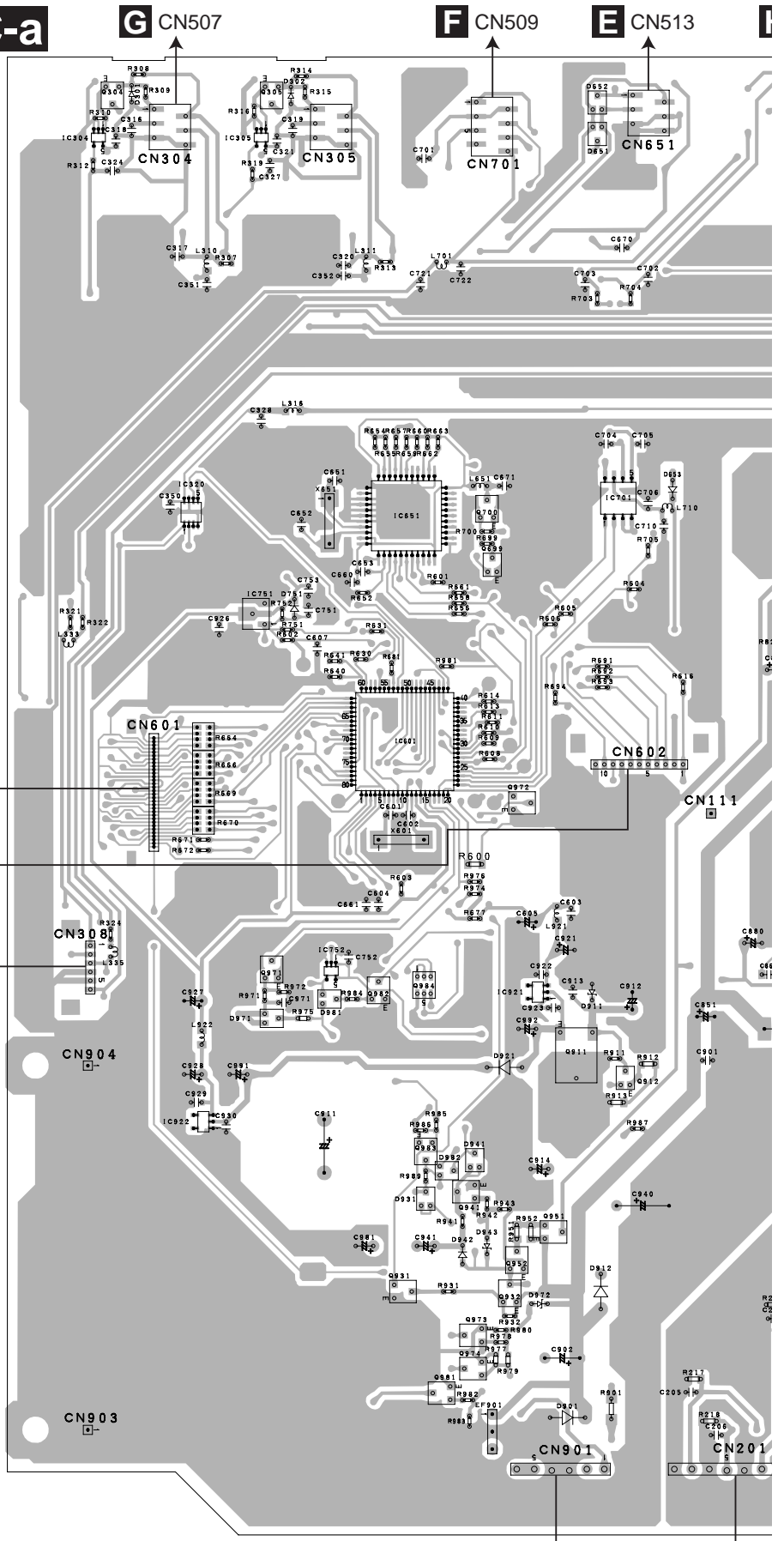
G CN507

F CN509

E CN513

H

A
B
C
D
E
F



B CN3201

D CN401

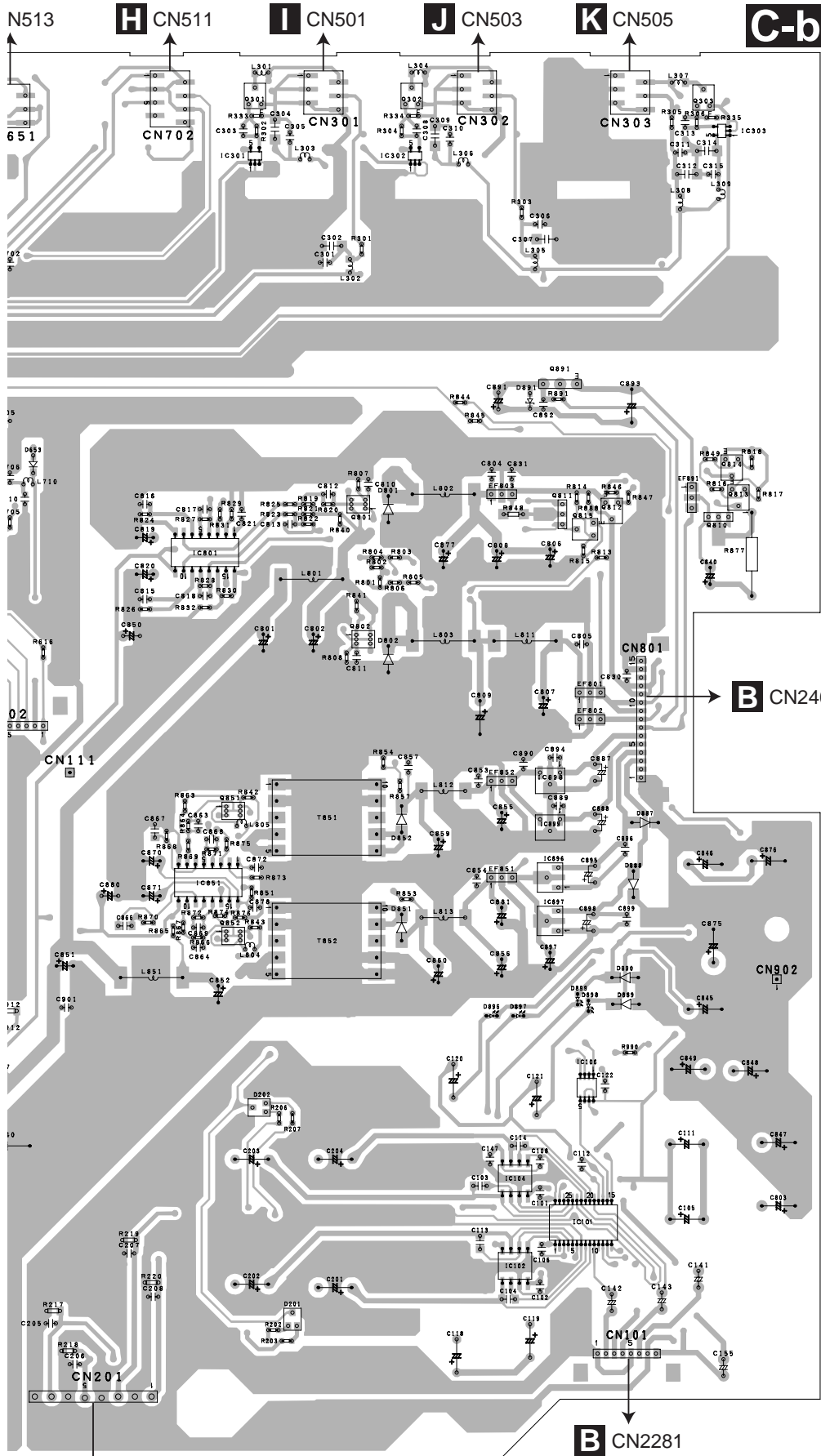
B CN2101

A CN1904

A CN110

C

RS-A9/EW



SIDE A

- IC30
- Q304 Q305
- Q301 Q302 Q303
- IC304 IC305 IC303
- IC301 IC302
- Q891
- IC320
- Q814 IC701
- Q700 IC851
- Q813 Q811 Q812
- Q815 Q810 Q801 Q899
- IC801
- IC751
- Q802
- IC601
- Q972
- IC898
- Q851
- IC899
- IC896
- IC851
- IC897 IC792
- Q852 Q871
- Q884
- IC921 Q882
- Q811
- Q812
- IC106
- IC922
- Q883
- Q841
- Q851
- IC104
- Q852
- Q891
- IC101 Q882
- Q873
- IC102
- Q874
- Q881

A

B

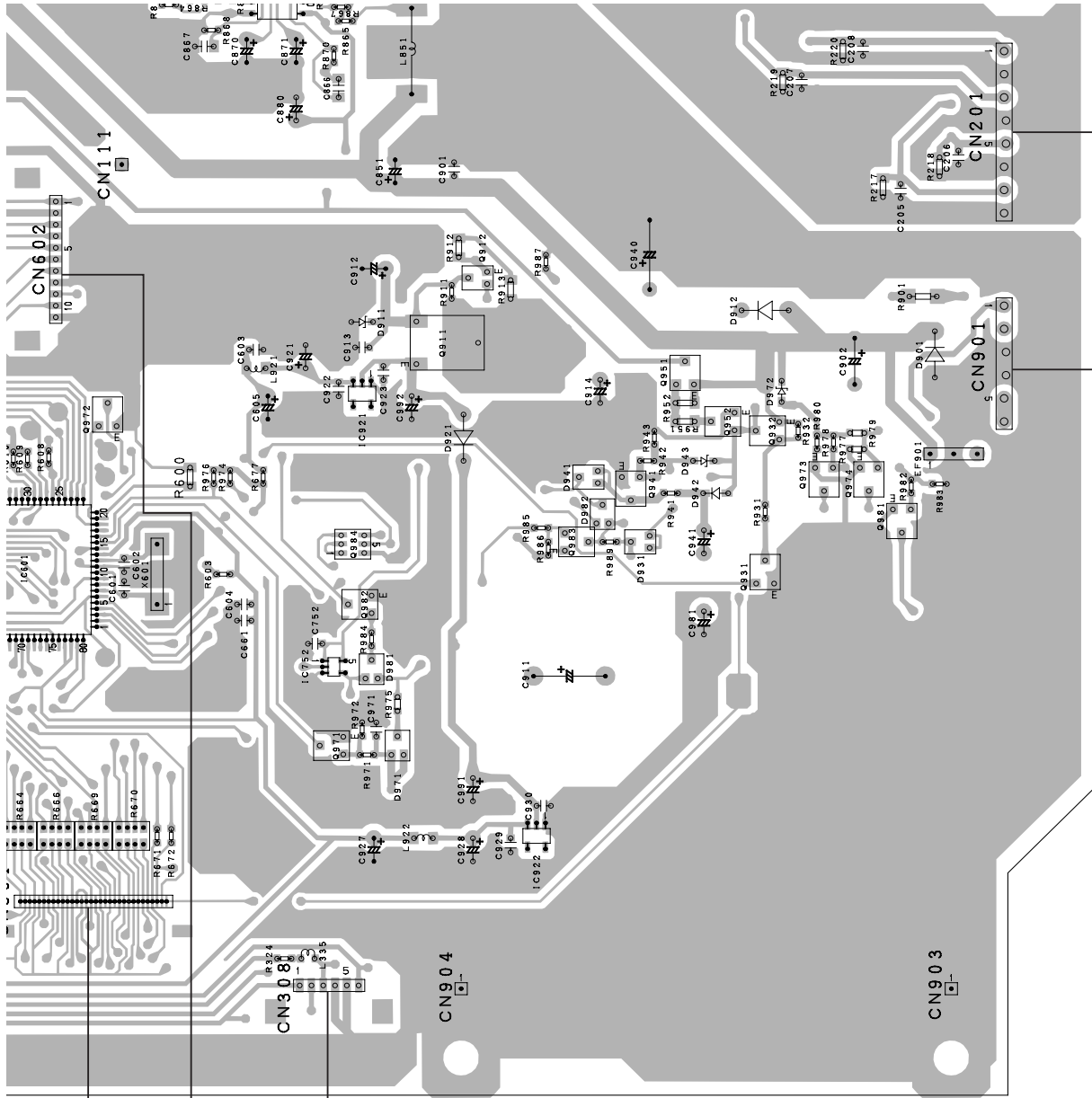
C

D

E

F

C



B CN3201

D CN401

B CN2101

A CN1904

A CN1102

C-a C-b

C-a

C-b

A

B

C

E

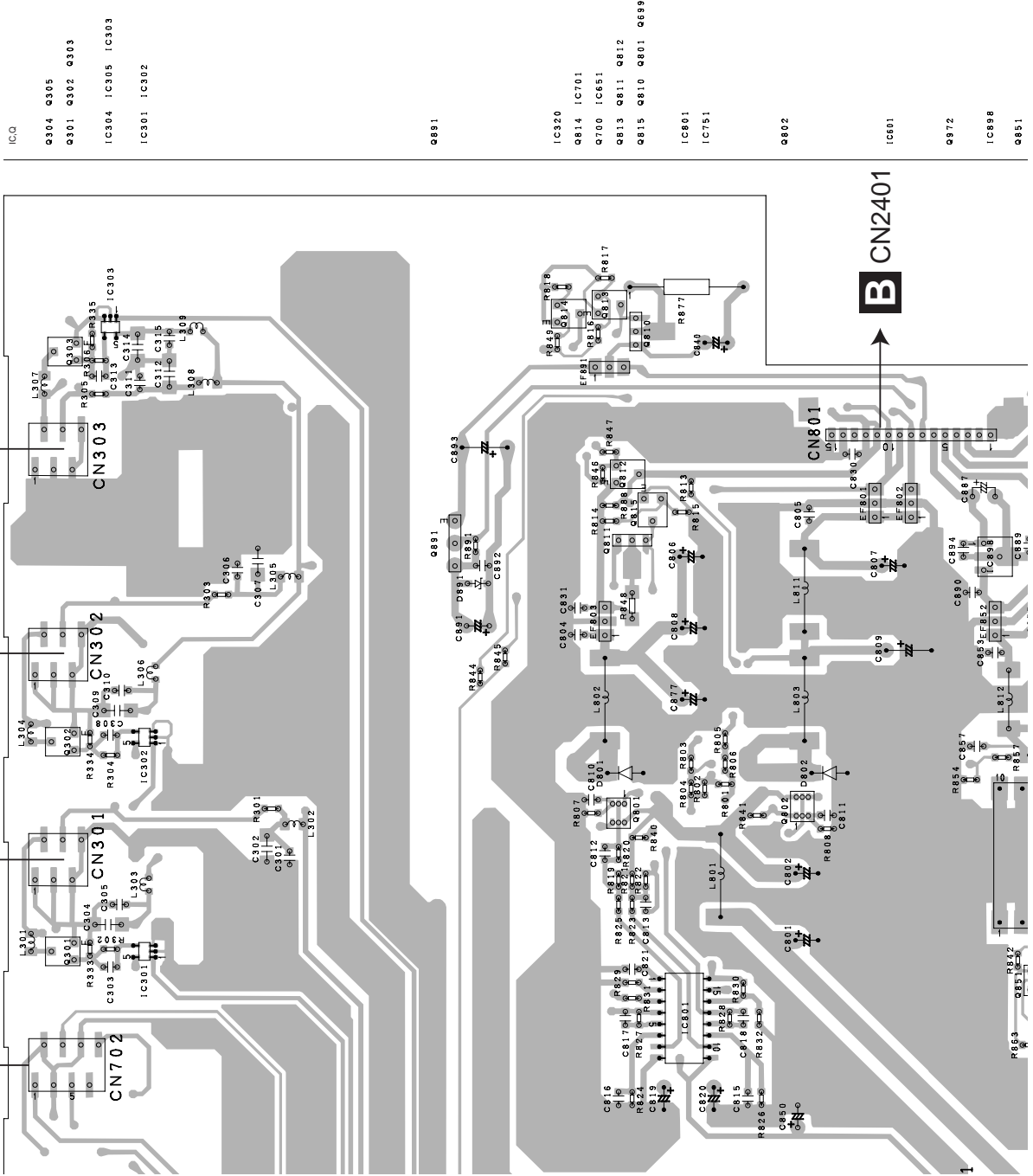
F

C-a C-b

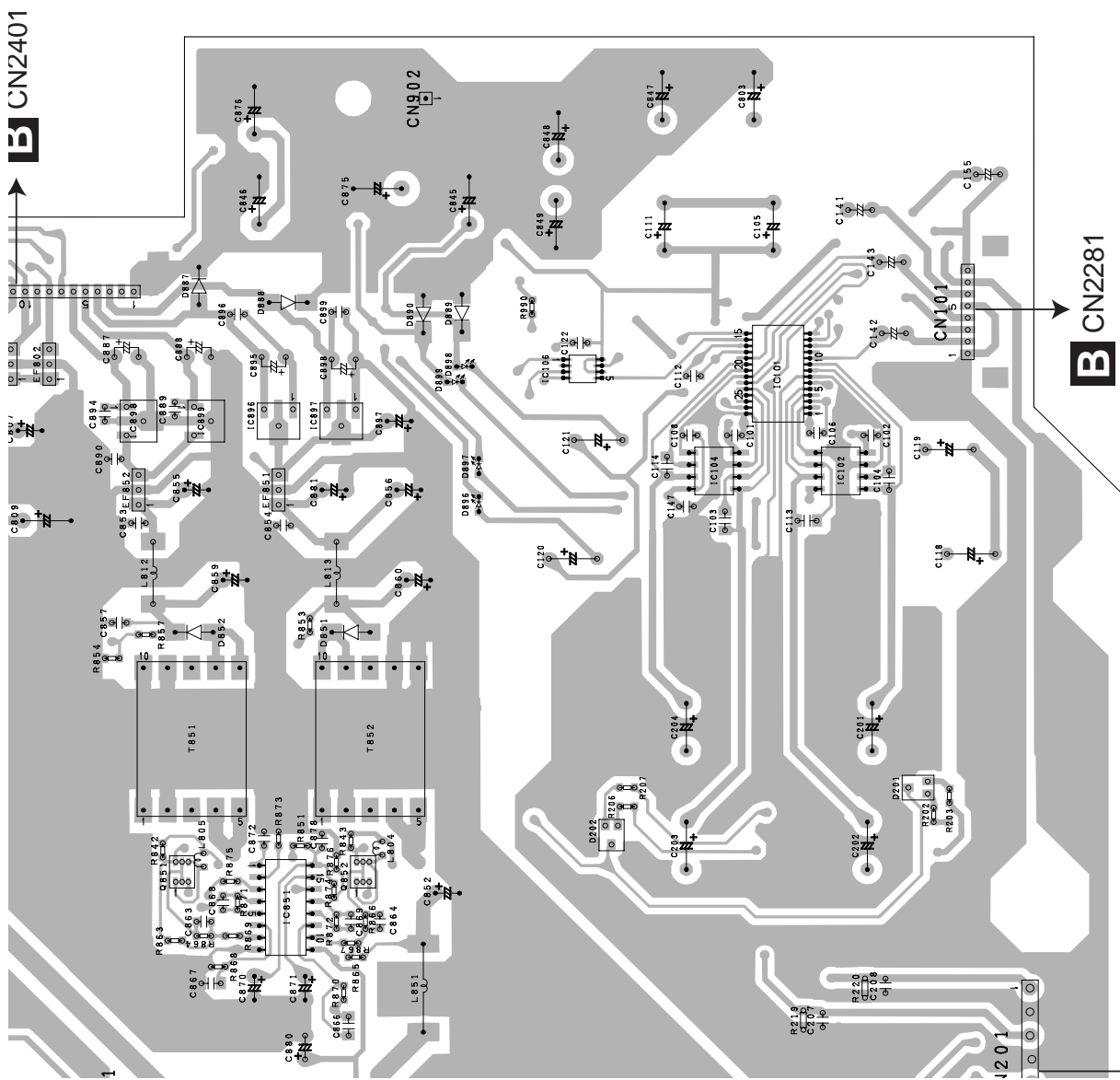
C-b

SIDE A

H CN511 I CN501 J CN503 K CN505



RS-A9/EW



- IC601
- Q972
- IC898
- Q851
- IC899
- IC896
- IC851
- IC887 IC752
- Q852 Q971
- Q984
- IC921 Q982
- Q911
- Q912
- IC106
- IC922
- Q983
- Q941
- Q951
- IC104
- Q952
- Q931
- IC101 Q932
- Q973
- IC102
- Q974
- Q981

B CN2401

B CN2281

N1102

J201

RS-A9/EW

C-a C-b

C-b

5 6 7 8

A B C D E F

5

6

7

8

C CONTROL PCB

C-a

A

B

C

D

E

F

ICQ

Q803

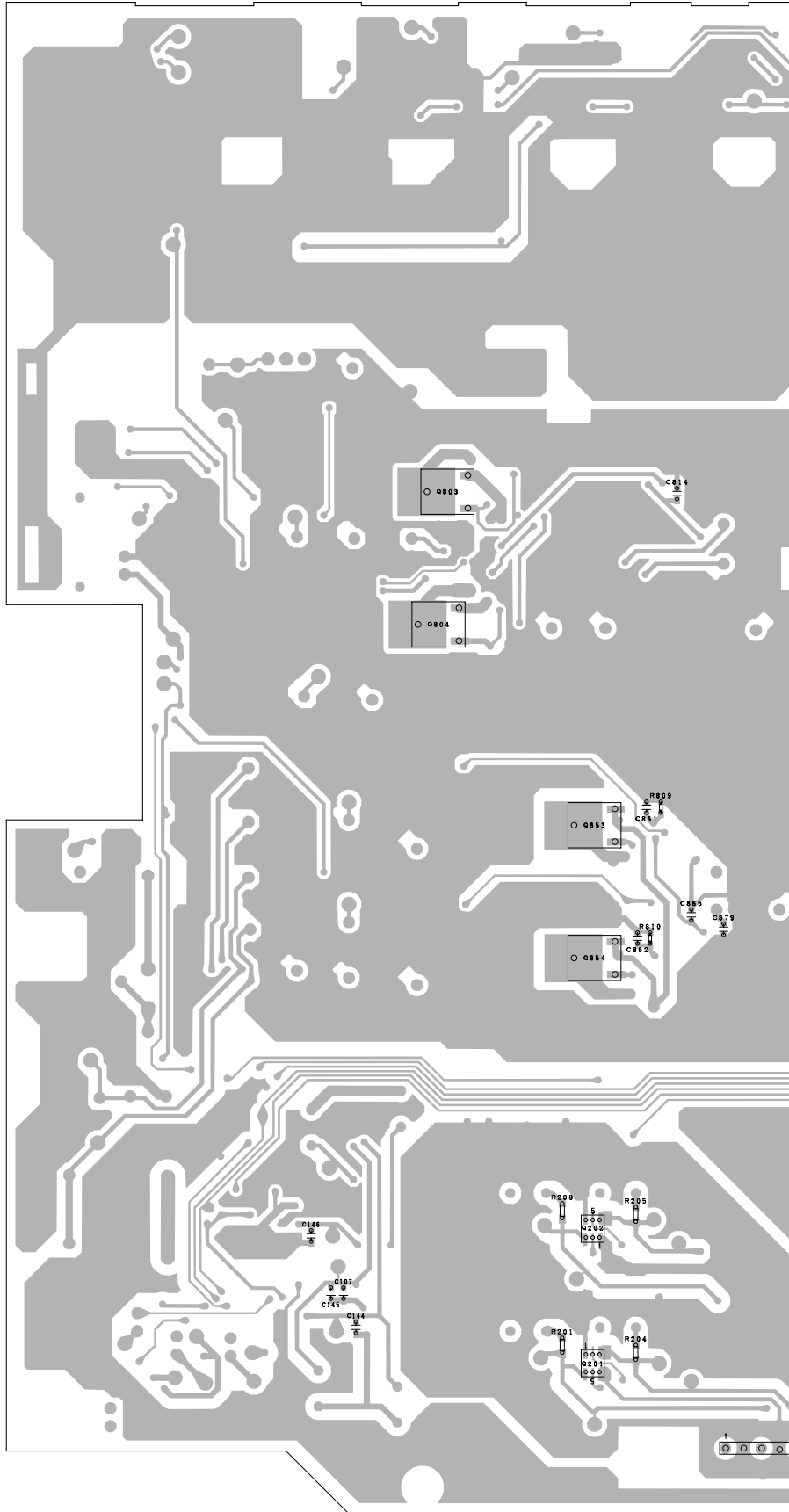
Q804

Q853

Q854

Q202

Q201



C

C-b

SIDE B

A

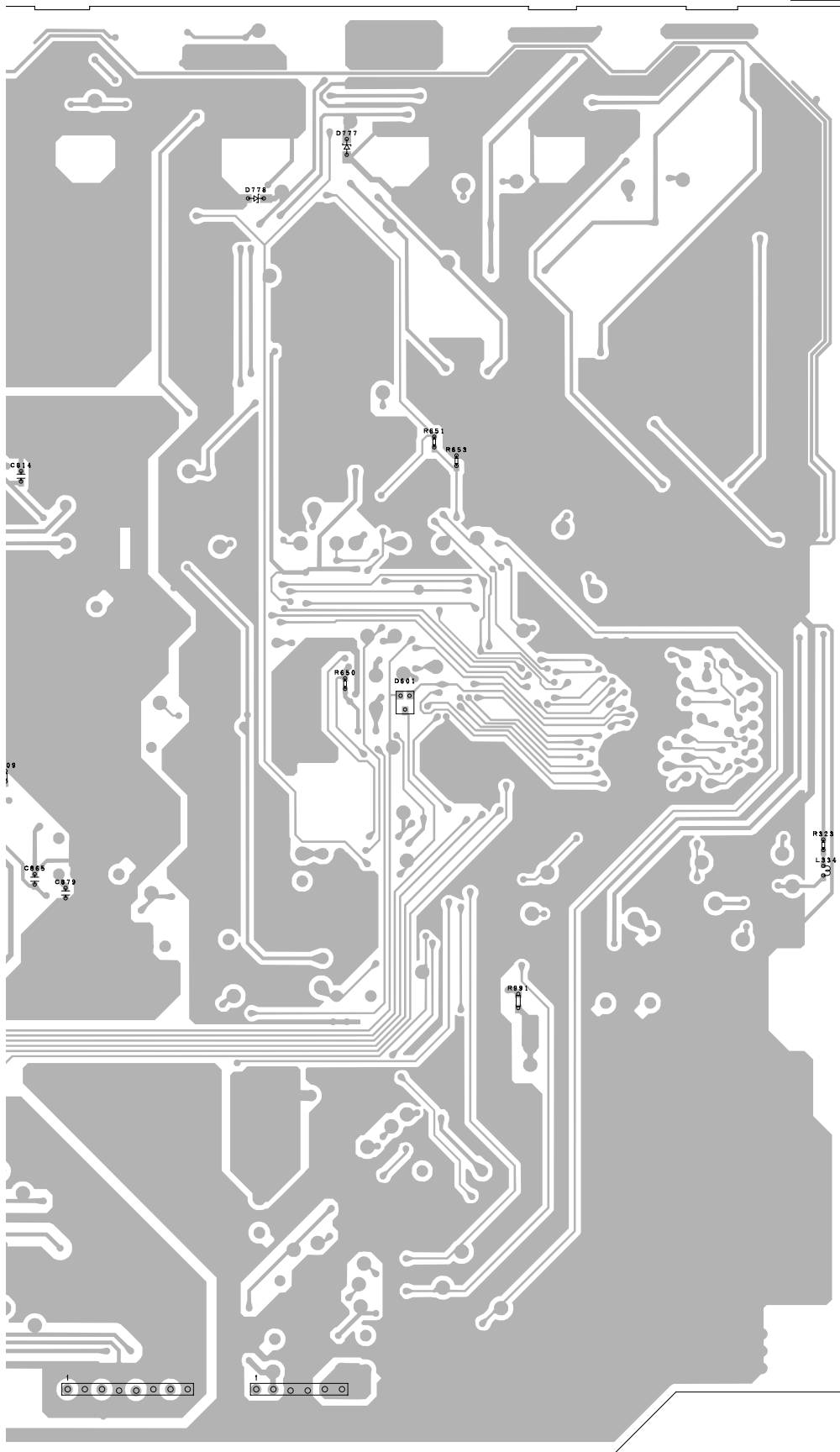
B

C

D

E

F



C

A

C-b

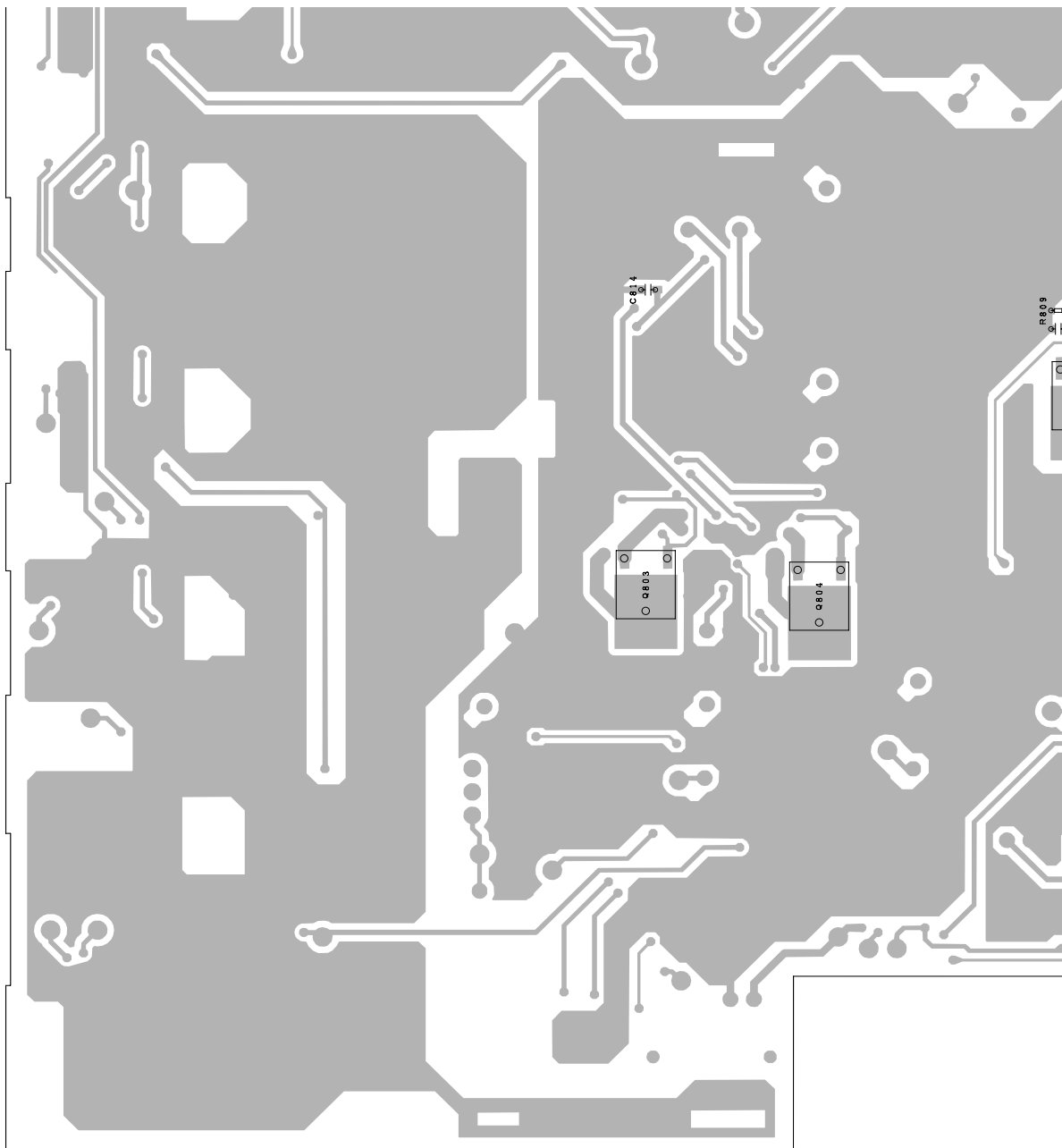
B

C

D

E

F



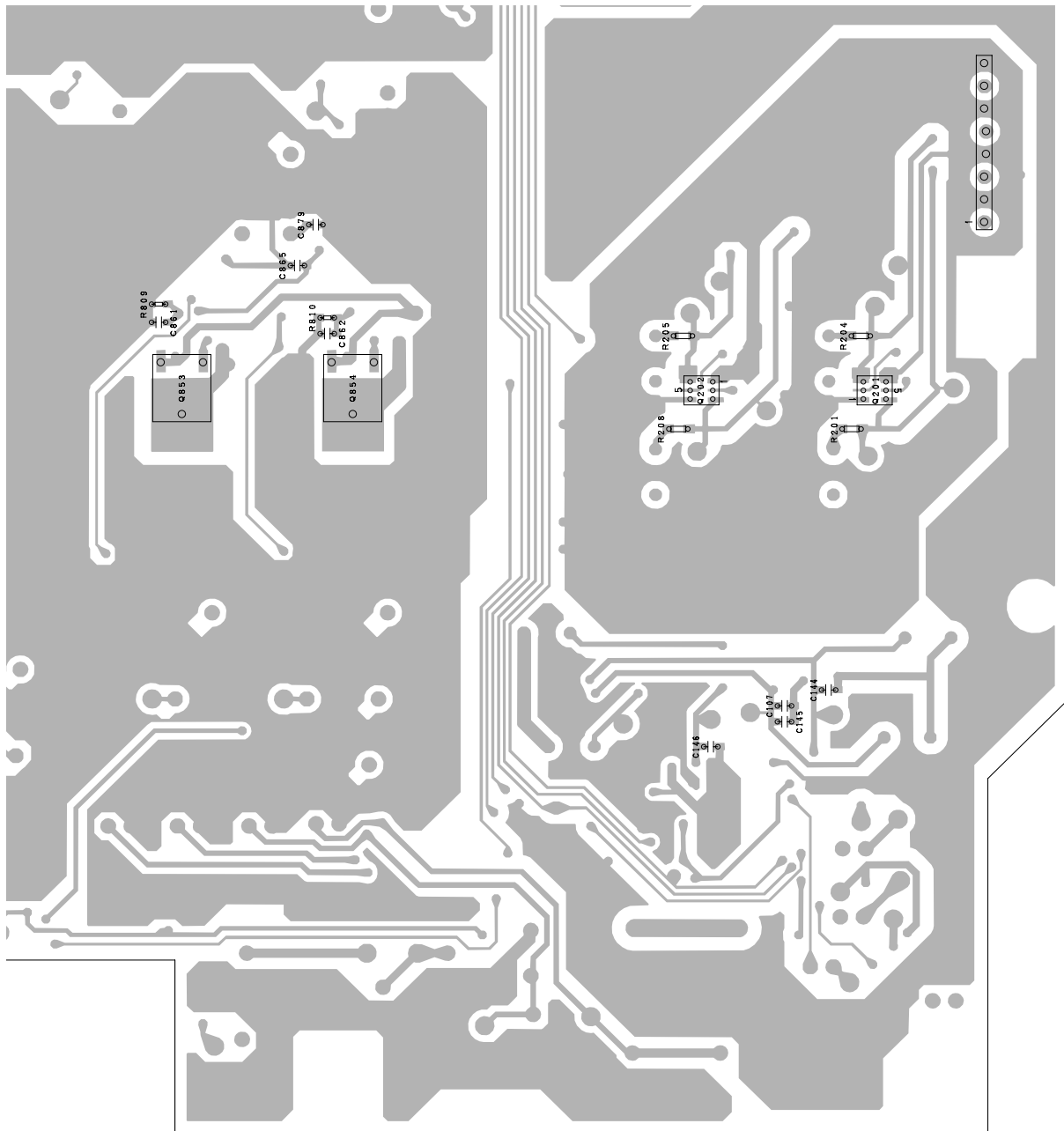
IC2

Q803

Q804

C CONTROL PCB

C-a



Q853

Q854

Q202

Q201

C-b

A

B

C

D

E

F

C-a C-b

C-a

A

B

C

D

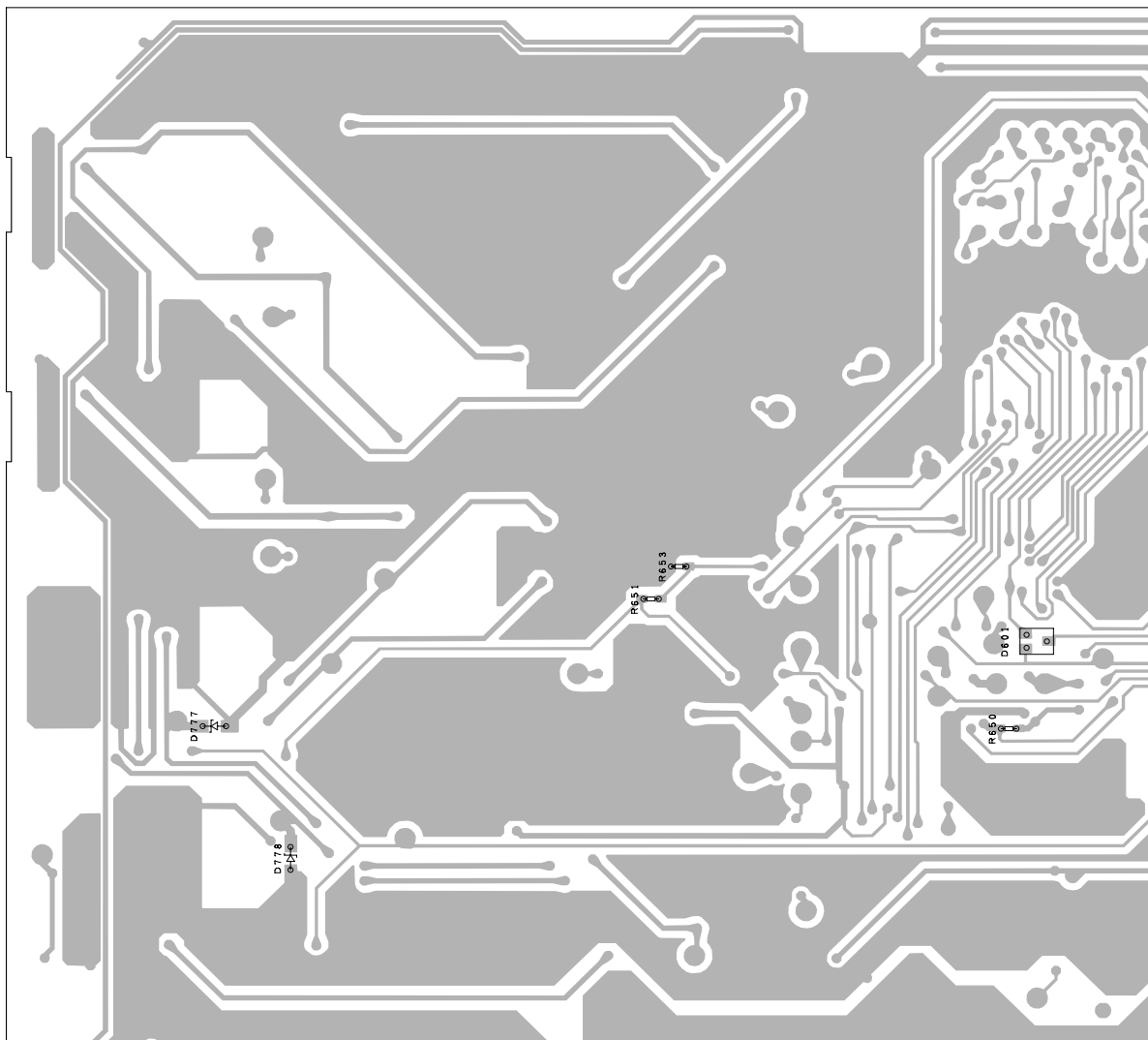
E

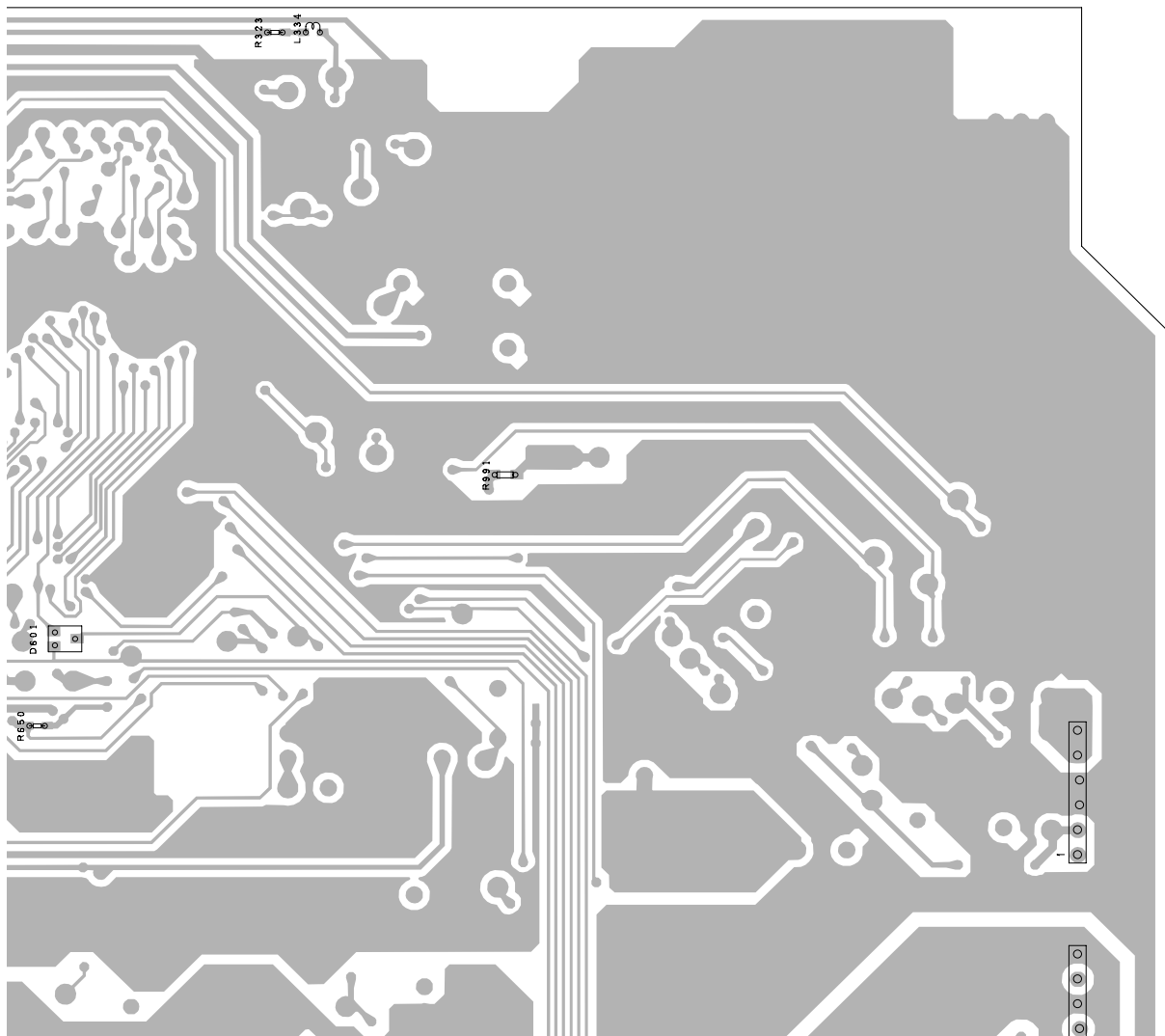
F

SIDE B

C-a C-b

C-b





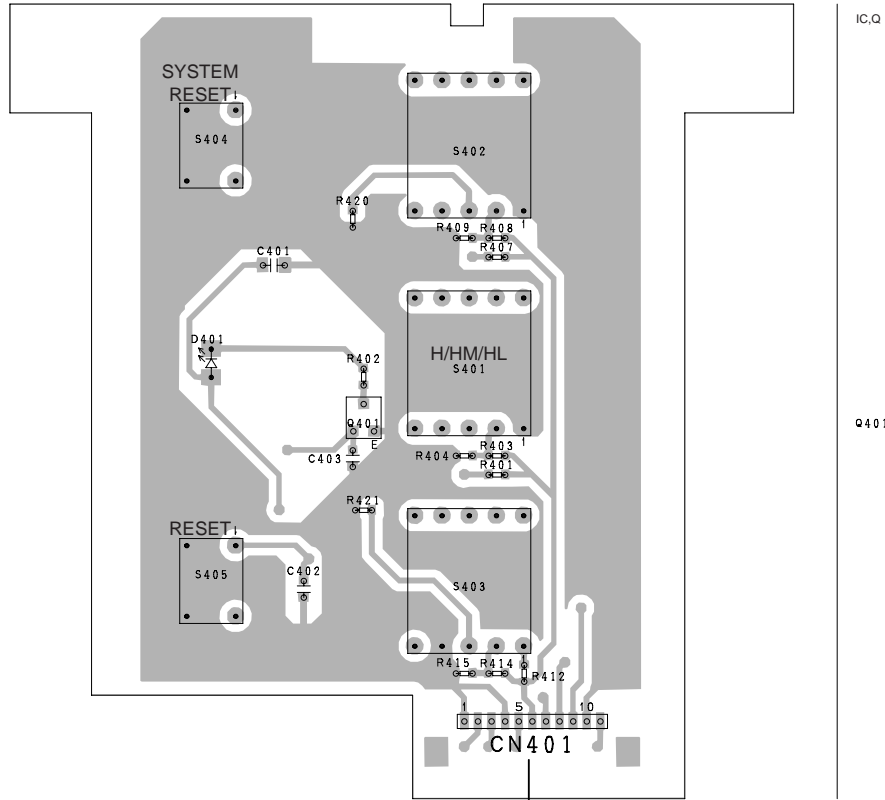
C-a
C-b

C-b

4.4 SWITCH PCB

D SWITCH PCB

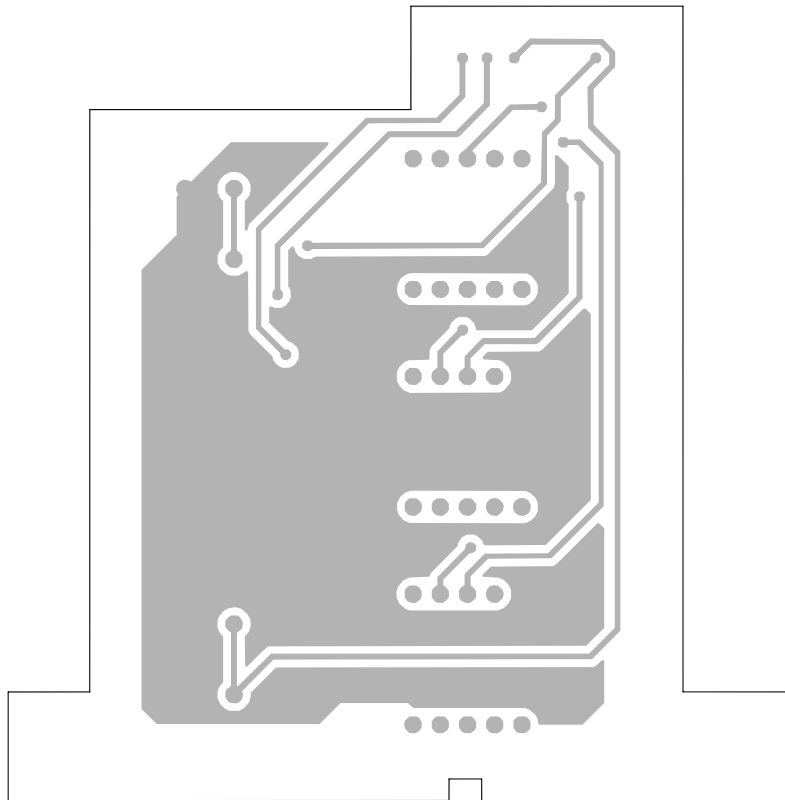
SIDE A



C CN602

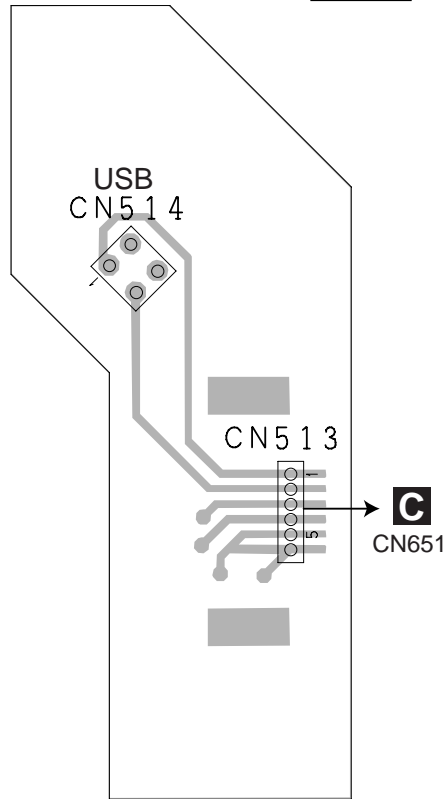
D SWITCH PCB

SIDE B

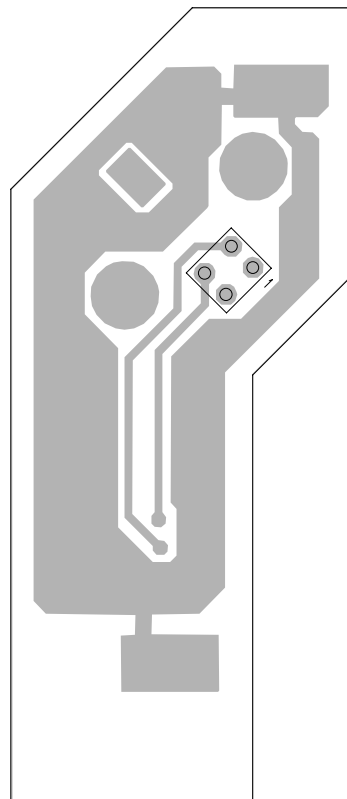


4.5 USB PCB AND IPIN PCB

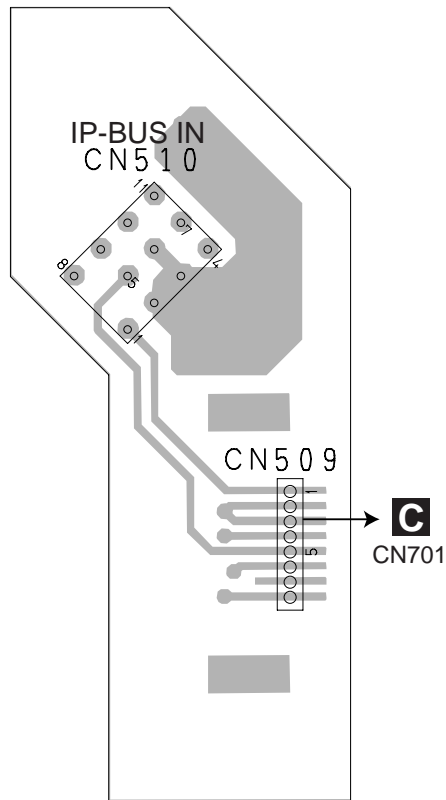
E USB PCB **SIDE A**



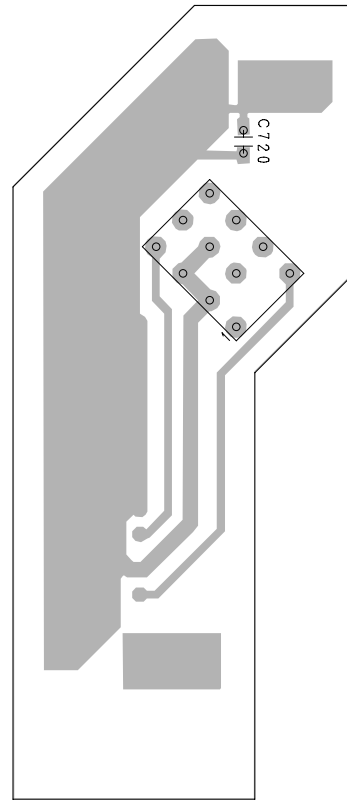
E USB PCB **SIDE B**



F IPIN PCB **SIDE A**



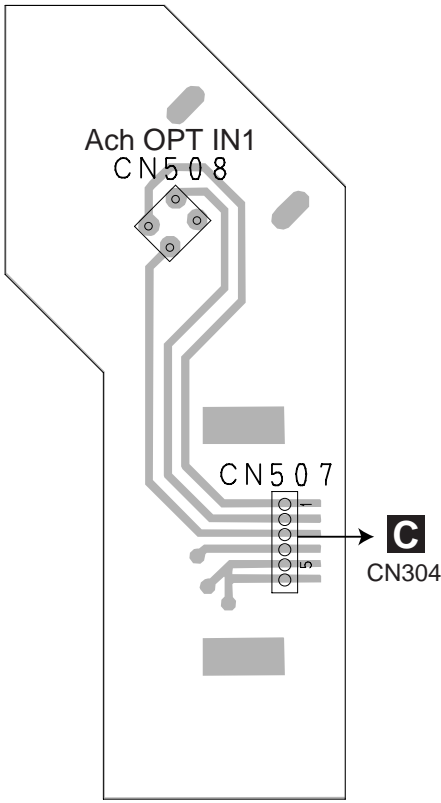
F IPIN PCB **SIDE B**



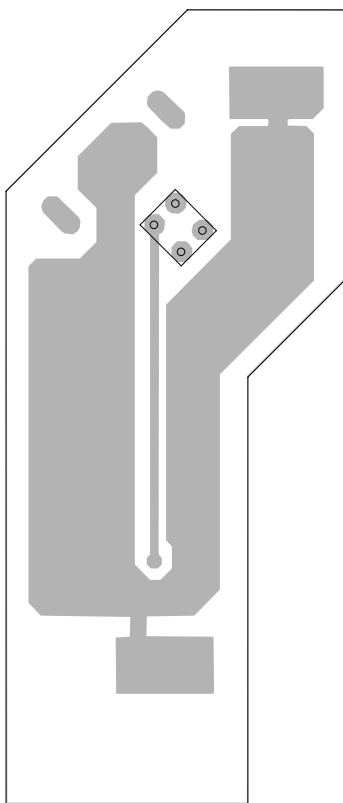
E F

4.6 Ach PCB AND IPOUT PCB

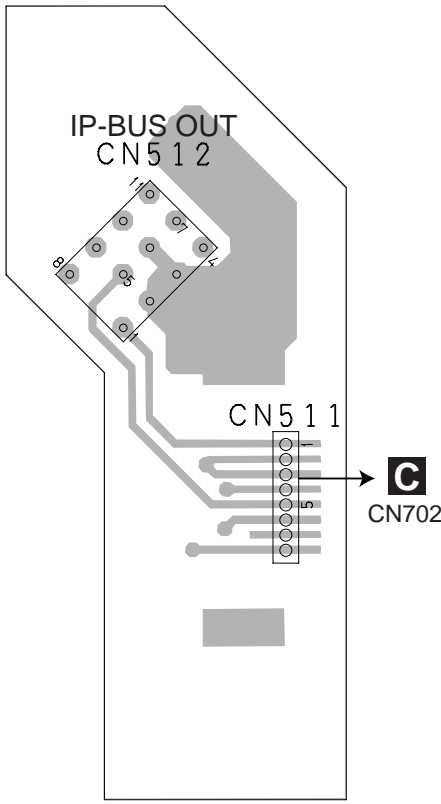
G Ach PCB **SIDE A**



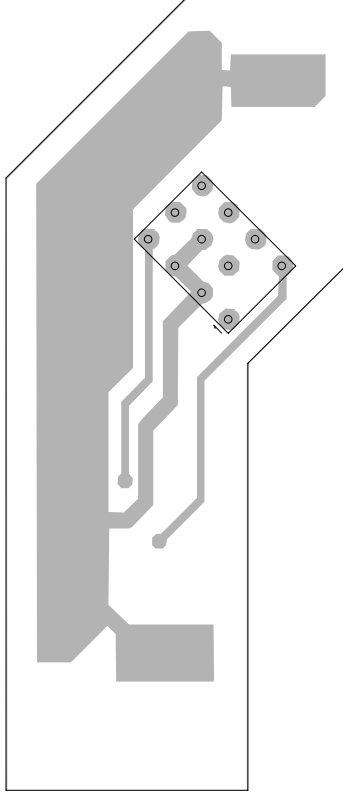
G Ach PCB **SIDE B**



H IPOUT PCB **SIDE A**

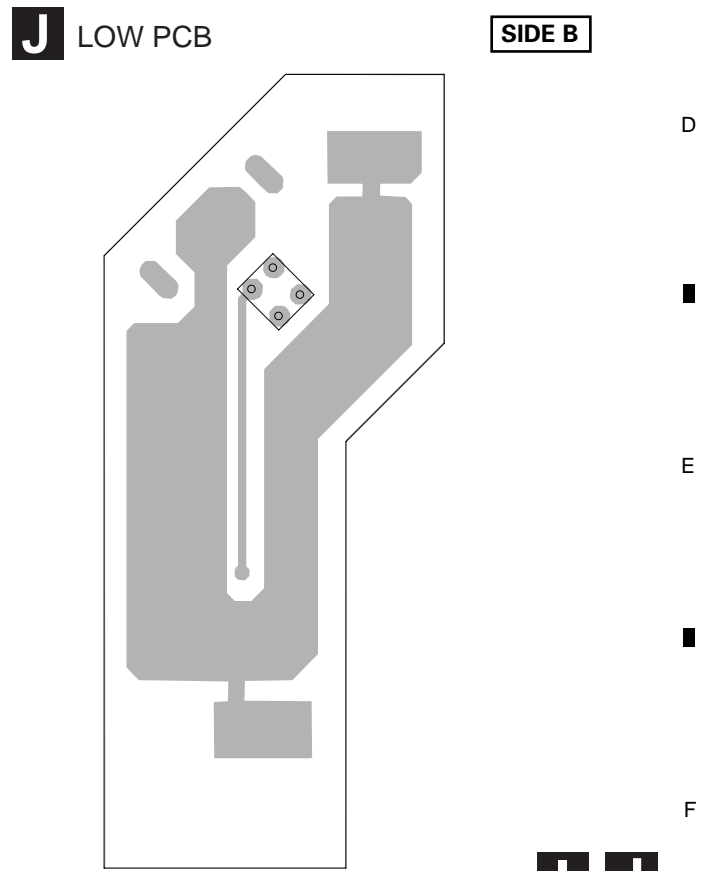
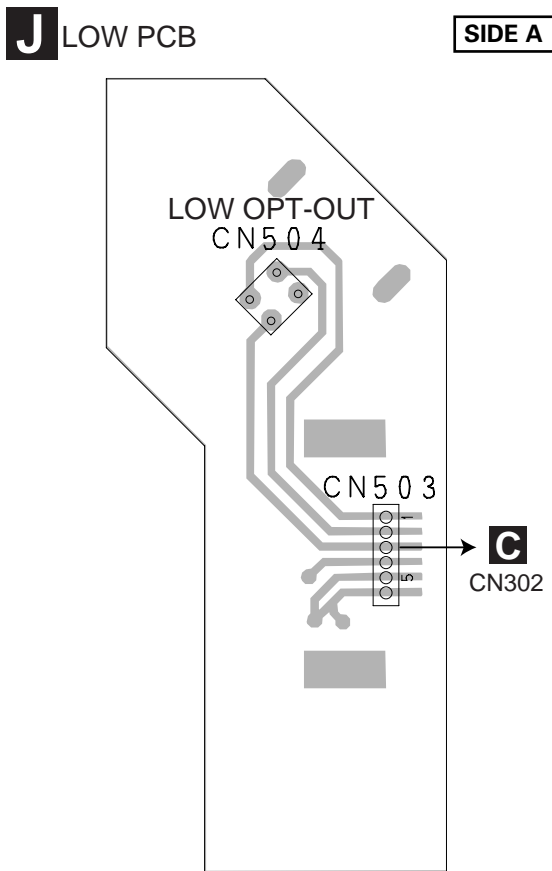
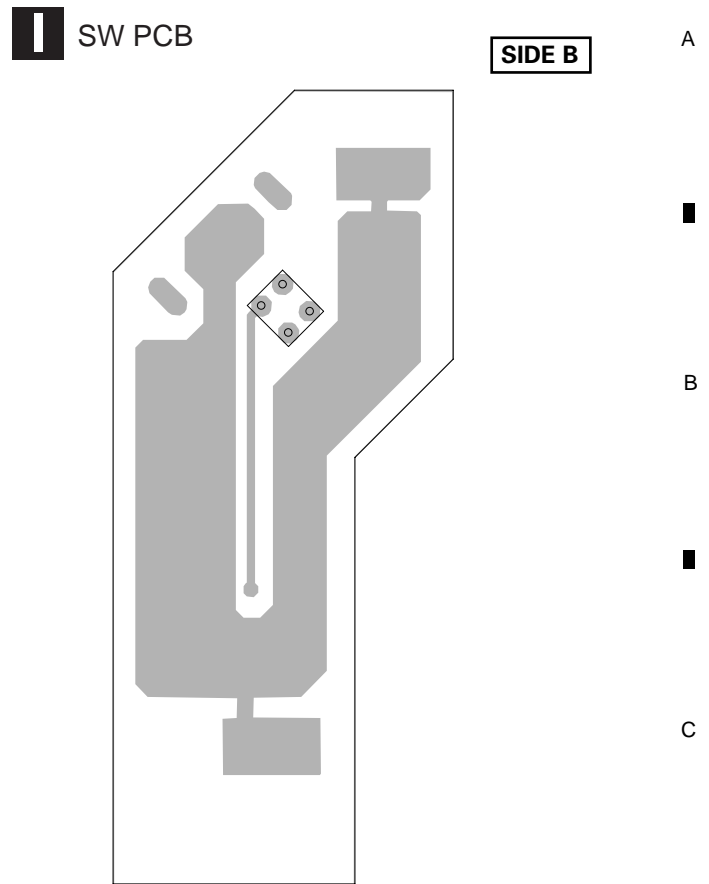
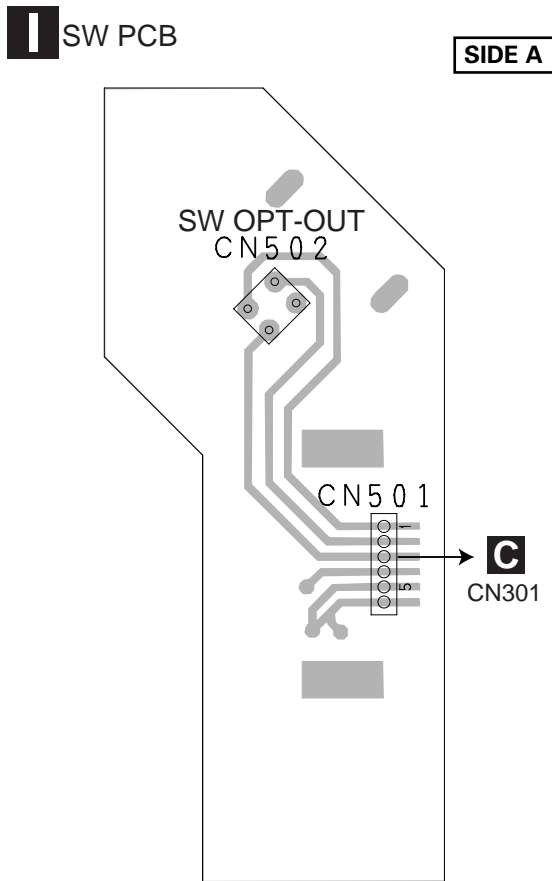


H IPOUT PCB **SIDE B**



G H

4.7 SW PCB AND LOW PCB



I J

1 2 3 4

4.8 MID PCB

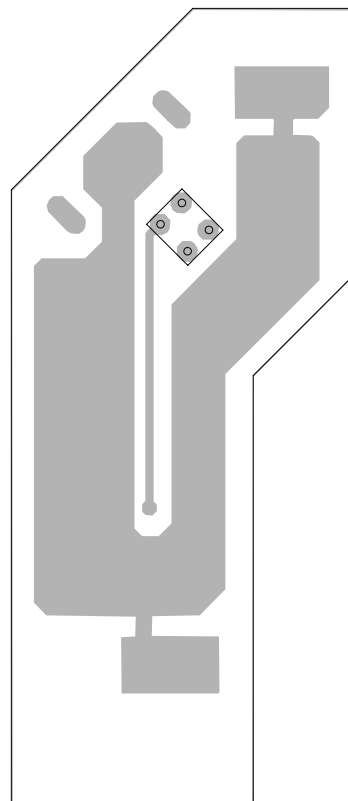
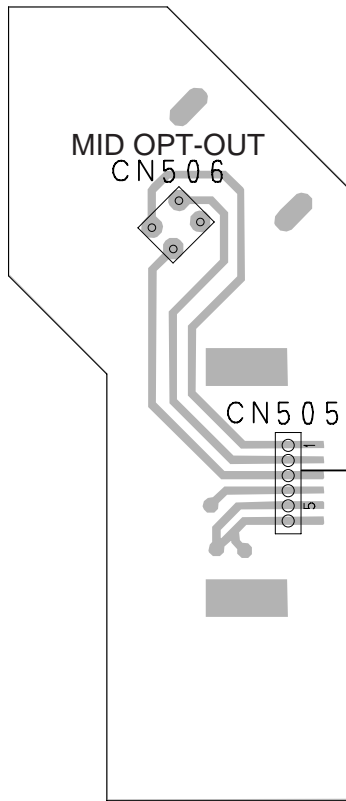
A
B
C
D
E
F

K MID PCB

SIDE A

K MID PCB

SIDE B



K

5. ELECTRICAL PARTS LIST

NOTE:

- Parts whose parts numbers are omitted are subject to being not supplied.
- The part numbers shown below indicate chip components.

Chip Resistor

RS1/○S○○○○J,RS1/○○S○○○○J

Chip Capacitor (except for CQS.....)

CKS....., CCS....., CSZS.....

A

Unit Number:CWH1264

Unit Name:Amp Unit

MISCELLANEOUS

IC 1901	IC	PA2027A
IC 1902	IC	UPC494C
Q 1102	Transistor	2SA1048
Q 1103	Transistor	2SC2458
Q 1104	Transistor	2SA992
Q 1105	Transistor	2SC1845
Q 1106	Transistor	2SA992
Q 1107	Transistor	2SC1845
Q 1108	Transistor	2SA992
Q 1109	Transistor	2SC1845
Q 1110	Transistor	2SA992
Q 1111	Transistor	2SC1845
Q 1112	Transistor	2SA992
Q 1113	Transistor	2SC1845
Q 1114	Transistor	2SC1568
Q 1115	Transistor	2SC2240
Q 1116	Transistor	2SA970
Q 1117	Transistor	2SC4883
Q 1118	Transistor	2SA1859
Q 1119	Transistor	2SC4886
Q 1120	Transistor	2SA1860
Q 1121	Transistor	2SD1768S
Q 1202	Transistor	2SA1048
Q 1203	Transistor	2SC2458
Q 1204	Transistor	2SA992
Q 1205	Transistor	2SC1845
Q 1206	Transistor	2SA992
Q 1207	Transistor	2SC1845
Q 1208	Transistor	2SA992
Q 1209	Transistor	2SC1845
Q 1210	Transistor	2SA992
Q 1211	Transistor	2SC1845
Q 1212	Transistor	2SA992
Q 1213	Transistor	2SC1845
Q 1214	Transistor	2SC1568
Q 1215	Transistor	2SC2240
Q 1216	Transistor	2SA970
Q 1217	Transistor	2SC4883
Q 1218	Transistor	2SA1859
Q 1219	Transistor	2SC4886

Circuit Symbol and No.	Part No.	Circuit Symbol and No.	Part No.
Q 1220	Transistor	2SA1860	
Q 1221	Transistor	2SD1768S	
Q 1302	Transistor	2SA1048	
Q 1303	Transistor	2SC2458	
Q 1304	Transistor	2SA992	
Q 1305	Transistor	2SC1845	
Q 1306	Transistor	2SA992	
Q 1307	Transistor	2SC1845	
Q 1308	Transistor	2SA992	
Q 1309	Transistor	2SC1845	
Q 1310	Transistor	2SA992	
Q 1311	Transistor	2SC1845	
Q 1312	Transistor	2SA992	
Q 1313	Transistor	2SC1845	
Q 1314	Transistor	2SC1568	
Q 1315	Transistor	2SC2240	
Q 1316	Transistor	2SA970	
Q 1317	Transistor	2SC4883	
Q 1318	Transistor	2SA1859	
Q 1319	Transistor	2SC4886	
Q 1320	Transistor	2SA1860	
Q 1321	Transistor	2SD1768S	
Q 1402	Transistor	2SA1048	
Q 1403	Transistor	2SC2458	
Q 1404	Transistor	2SA992	
Q 1405	Transistor	2SC1845	
Q 1406	Transistor	2SA992	
Q 1407	Transistor	2SC1845	
Q 1408	Transistor	2SA992	
Q 1409	Transistor	2SC1845	
Q 1410	Transistor	2SA992	
Q 1411	Transistor	2SC1845	
Q 1412	Transistor	2SA992	
Q 1413	Transistor	2SC1845	
Q 1414	Transistor	2SC1568	
Q 1415	Transistor	2SC2240	
Q 1416	Transistor	2SA970	
Q 1417	Transistor	2SC4883	
Q 1418	Transistor	2SA1859	
Q 1419	Transistor	2SC4886	
Q 1420	Transistor	2SA1860	
Q 1421	Transistor	2SD1768S	
Q 1501	Transistor	2SD1862	
Q 1502	Transistor	2SD1862	
Q 1503	Transistor	2SB1240	
Q 1504	Transistor	2SB1240	
Q 1505	FET	2SK3236	
Q 1506	FET	2SK3236	
Q 1507	FET	2SK3236	

Circuit Symbol and No.**Part No.****Circuit Symbol and No.****Part No.**

Q 1509	FET	2SK3236	RY1201	Relay	CSR1028
Q 1510	FET	2SK3236	TH1901	Thermistor	CCX1035
Q 1511	FET	2SK3236	TH1902	Thermistor	CCX1035
Q 1601	Transistor	2SD1862	TH1903	Thermistor	CCX1013
Q 1602	Transistor	2SD1862	TH1904	Thermistor	CCX1013
Q 1603	Transistor	2SB1240	VR1101	Semi-fixed 1kΩ(B)	VRTB6VS102
Q 1604	Transistor	2SB1240	VR1102	Semi-fixed 2.2kΩ(B)	VRTB6VS222
Q 1605	FET	2SK3236	VR1201	Semi-fixed 1kΩ(B)	VRTB6VS102
Q 1606	FET	2SK3236	VR1202	Semi-fixed 2.2kΩ(B)	VRTB6VS222
Q 1607	FET	2SK3236	VR1301	Semi-fixed 1kΩ(B)	VRTB6VS102
Q 1608	FET	2SK3236	VR1302	Semi-fixed 2.2kΩ(B)	VRTB6VS222
Q 1609	FET	2SK3236	VR1401	Semi-fixed 1kΩ(B)	VRTB6VS102
Q 1610	FET	2SK3236	VR1402	Semi-fixed 2.2kΩ(B)	VRTB6VS222
Q 1901	Transistor	2SB1243	FU1901	Fuse 6.3A	CEK1008
Q 1902	Transistor	2SC2458	FU1902	Fuse 25A	CEK1139
Q 1903	Transistor	2SC2458	FU1903	Fuse 25A	CEK1139
Q 1904	Transistor	2SA1048			
Q 1905	Transistor	2SA1048			
Q 1907	Transistor	2SC2459	R 1101		RD1/2PM221J
Q 1908	Transistor	2SC2458	R 1103		RD1/4PU222J
Q 1909	Transistor	2SA1048	R 1104		RD1/4PU333J
			R 1105		RD1/4PU361J
			R 1106		RD1/4PU361J
Q 1910	Transistor	2SA1048			
Q 1911	Transistor	2SA1048			
D 1101	Diode	1SS133	R 1107		RD1/4PU221J
D 1102	Diode	1SS133	R 1108		RD1/4PU221J
D 1201	Diode	1SS133	R 1109		RD1/2PM390J
			R 1110		RD1/2PM102J
D 1202	Diode	1SS133	R 1111		RD1/4PU471J
D 1301	Diode	1SS133			
D 1302	Diode	1SS133	R 1112		RD1/4PU471J
D 1401	Diode	1SS133	R 1113		RD1/4PU221J
D 1402	Diode	1SS133	R 1114		RD1/4PU221J
			R 1115		RD1/4PU221J
			R 1116		RD1/4PU221J
D 1501	Diode	FCH10A15			
D 1502	Diode	FRH10A15			
D 1503	Diode	ERA92-02VH	R 1117		RD1/4PU221J
D 1504	Diode	ERA92-02VH	R 1118		RD1/4PU221J
D 1601	Diode	FCH10A15	R 1119		RD1/4PU123J
			R 1120		RD1/4PU222J
D 1602	Diode	FRH10A15	R 1121	100Ω	CCN1096
D 1603	Diode	ERA92-02VH			
D 1604	Diode	ERA92-02VH	R 1122	100Ω	CCN1096
D 1901	Diode	ERA15-02VH	R 1123		RD1/4PU821J
D 1902	Diode	RM4Z-LFJ4	R 1124	33Ω	CCN1087
			R 1125	33Ω	CCN1087
			R 1126		RD1/4PU121J
D 1903	Diode	RM4Z-LFJ4			
D 1904	Diode	1SS133			
D 1906	Diode	1SS133	R 1127	22Ω	CCN1149
D 1907	Diode	1SS133	R 1128	22Ω	CCN1149
D 1908	Diode	1SS133	R 1129	0.1Ω	CCN1090
			R 1130	0.1Ω	CCN1090
			R 1131		RD1/4PU273J
D 1909	Diode	1SS133			
D 1910	Diode	1SS133			
D 1911	Diode	ERA15-02VH	R 1132		RD1/4PU105J
D 1912	Diode	1SS133	R 1133		RD1/4PU153J
L 1501	Choke Coil 60μH	CTH1316	R 1134		RD1/4PU100J
			R 1135		RD1/4PU222J
			R 1136		RD1/4PU473J
L 1502	Choke Coil 60μH	CTH1316			
L 1601	Choke Coil 60μH	CTH1316			
L 1602	Choke Coil 60μH	CTH1316	R 1201		RD1/2PM221J
L 1901	Choke Coil 68μH	CTH1283	R 1203		RD1/4PU222J
L 1902	Choke Coil 50μH	CTH1144	R 1204		RD1/4PU333J
			R 1205		RD1/4PU361J
			R 1206		RD1/4PU361J
L 1903	Choke Coil 50μH	CTH1144			
T 1501	Transformer	CTT1121			
T 1601	Transformer	CTT1121	R 1207		RD1/4PU221J
RY1101	Relay	CSR1028			

RESISTORS

5		6		7		8	
<u>Circuit Symbol and No.</u>		<u>Part No.</u>		<u>Circuit Symbol and No.</u>		<u>Part No.</u>	
R 1208		RD1/4PU221J		R 1333		RD1/4PU153J	
R 1209		RD1/2PM390J		R 1334		RD1/4PU100J	
R 1210		RD1/2PM102J		R 1335		RD1/4PU222J	
R 1211		RD1/4PU471J		R 1336		RD1/4PU473J	A
R 1212		RD1/4PU471J		R 1401		RD1/2PM221J	
R 1213		RD1/4PU221J		R 1403		RD1/4PU222J	
R 1214		RD1/4PU221J		R 1404		RD1/4PU333J	
R 1215		RD1/4PU221J		R 1405		RD1/4PU361J	
R 1216		RD1/4PU221J		R 1406		RD1/4PU361J	
R 1217		RD1/4PU221J		R 1407		RD1/4PU221J	
R 1218		RD1/4PU221J		R 1408		RD1/4PU221J	
R 1219		RD1/4PU123J		R 1409		RD1/2PM390J	
R 1220		RD1/4PU222J		R 1410		RD1/2PM102J	
R 1221	100Ω	CCN1096		R 1411		RD1/4PU471J	
R 1222	100Ω	CCN1096		R 1412		RD1/4PU471J	
R 1223		RD1/4PU821J		R 1413		RD1/4PU221J	
R 1224	33Ω	CCN1087		R 1414		RD1/4PU221J	
R 1225	33Ω	CCN1087		R 1415		RD1/4PU221J	
R 1226		RD1/4PU121J		R 1416		RD1/4PU221J	
R 1227	22Ω	CCN1149		R 1417		RD1/4PU221J	
R 1228	22Ω	CCN1149		R 1418		RD1/4PU221J	
R 1229	0.1Ω	CCN1090		R 1419		RD1/4PU123J	
R 1230	0.1Ω	CCN1090		R 1420		RD1/4PU222J	
R 1231		RD1/4PU273J		R 1421	100Ω	CCN1096	
R 1232		RD1/4PU105J		R 1422	100Ω	CCN1096	C
R 1233		RD1/4PU153J		R 1423		RD1/4PU821J	
R 1234		RD1/4PU100J		R 1424	33Ω	CCN1087	
R 1235		RD1/4PU222J		R 1425	33Ω	CCN1087	
R 1236		RD1/4PU473J		R 1426		RD1/4PU121J	
R 1301		RD1/2PM221J		R 1427	22Ω	CCN1149	
R 1303		RD1/4PU222J		R 1428	22Ω	CCN1149	
R 1304		RD1/4PU333J		R 1429	0.1Ω	CCN1090	
R 1305		RD1/4PU361J		R 1430	0.1Ω	CCN1090	
R 1306		RD1/4PU361J		R 1431		RD1/4PU273J	
R 1307		RD1/4PU221J		R 1432		RD1/4PU105J	
R 1308		RD1/4PU221J		R 1433		RD1/4PU153J	D
R 1309		RD1/2PM390J		R 1434		RD1/4PU100J	
R 1310		RD1/2PM102J		R 1435		RD1/4PU222J	
R 1311		RD1/4PU471J		R 1436		RD1/4PU473J	
R 1312		RD1/4PU471J		R 1501		RD1/4PU332J	
R 1313		RD1/4PU221J		R 1502		RD1/4PU332J	
R 1314		RD1/4PU221J		R 1503		RD1/4PU472J	
R 1315		RD1/4PU221J		R 1504		RD1/4PU472J	
R 1316		RD1/4PU221J		R 1505		RD1/4PU820J	
R 1317		RD1/4PU221J		R 1506		RD1/4PU820J	
R 1318		RD1/4PU221J		R 1507		RD1/4PU820J	
R 1319		RD1/4PU123J		R 1508		RD1/4PU820J	E
R 1320		RD1/4PU222J		R 1509		RD1/4PU820J	
R 1321	100Ω	CCN1096		R 1510		RD1/4PU820J	
R 1322	100Ω	CCN1096		R 1511		RD1/2PM100J	
R 1323		RD1/4PU821J		R 1512		RD1/2PM100J	
R 1324	33Ω	CCN1087		R 1514		RD1/2PM100J	
R 1325	33Ω	CCN1087		R 1515		RD1/2PM100J	
R 1326		RD1/4PU121J		R 1601		RD1/4PU332J	
R 1327	22Ω	CCN1149		R 1602		RD1/4PU332J	
R 1328	22Ω	CCN1149		R 1603		RD1/4PU472J	
R 1329	0.1Ω	CCN1090		R 1604		RD1/4PU472J	
R 1330	0.1Ω	CCN1090		R 1605		RD1/4PU820J	F
R 1331		RD1/4PU273J		R 1606		RD1/4PU820J	
R 1332		RD1/4PU105J		R 1607		RD1/4PU820J	

Circuit Symbol and No.**Part No.****Circuit Symbol and No.****Part No.**

R 1608	RD1/4PU820J	C 1207	220µF/35V	CCH1634(P35)
R 1609	RD1/4PU820J	C 1208		CEANP221M16
R 1610	RD1/4PU820J	C 1301		CQPA101G2A
A R 1611	RD1/2PM100J			
		C 1302	15pF	CCF1003
R 1612	RD1/2PM100J	C 1303	15pF	CCF1003
R 1614	RD1/2PM100J	C 1304	47µF/25V	CCH1544
R 1615	RD1/2PM100J	C 1305		CFTNA273J50
R 1902	RD1/4PU221J	C 1307	220µF/35V	CCH1634(P35)
R 1903	RD1/4PU152J			
		C 1308		CEANP221M16
R 1904	RD1/4PU101J	C 1401		CQPA101G2A
R 1905	RD1/4PU472J	C 1402	15pF	CCF1003
R 1906	RD1/4PU103J	C 1403	15pF	CCF1003
R 1907	RD1/4PU223J	C 1404	47µF/25V	CCH1544
R 1908	RD1/4PU392J			
B R 1909	RD1/4PU101J	C 1405		CFTNA273J50
R 1910	RD1/4PU153J	C 1407	220µF/35V	CCH1634(P35)
R 1911	RD1/4PU103J	C 1408		CEANP221M16
R 1912	RD1/4PU102J	C 1502		CQPA472G2A
R 1913	RD1/4PU472J	C 1503		CQPA472G2A
		C 1505	6800µF/35V	CCH1473
R 1914	RD1/4PU472J	C 1506	6800µF/35V	CCH1473
R 1915	RD1/4PU472J	C 1510	470µF/50V	CCH1602
R 1916	RD1/4PU332J	C 1511	470µF/50V	CCH1602
R 1917	RD1/4PU332J	C 1512	Film capacitor 0.15µF/100V	CCE1033
R 1918	RD1/4PU470J			
C R 1919	RD1/4PU470J	C 1513	Film capacitor 0.15µF/100V	CCE1033
R 1920	RD1/4PU470J	C 1520	100µF/35V	CCH1633(P45)
R 1921	RD1/4PU470J	C 1521	100µF/35V	CCH1633(P45)
R 1922	RD1/4PU272J	C 1522	Film capacitor 0.15µF/100V	CCE1033
R 1923	RD1/4PU272J	C 1523	Film capacitor 0.15µF/100V	CCE1033
		C 1602		CQPA472G2A
R 1924	RD1/4PU272J	C 1603		CQPA472G2A
R 1925	RD1/4PU272J	C 1605	6800µF/35V	CCH1473
R 1926	RD1/4PU223J	C 1606	6800µF/35V	CCH1473
R 1927	RD1/4PU223J	C 1609	470µF/50V	CCH1602
R 1928	RD1/4PU223J			
D R 1929	RD1/4PU223J	C 1610	470µF/50V	CCH1602
R 1930	RD1/4PU223J	C 1611	Film capacitor 0.15µF/100V	CCE1033
R 1931	RD1/4PU223J	C 1612	Film capacitor 0.15µF/100V	CCE1033
R 1934	RD1/4PU104J	C 1620	100µF/35V	CCH1633(P45)
R 1935	RD1/4PU103J	C 1621	100µF/35V	CCH1633(P45)
		C 1622	Film capacitor 0.15µF/100V	CCE1033
R 1936	RD1/4PU472J	C 1623	Film capacitor 0.15µF/100V	CCE1033
R 1937	RD1/4PU472J	C 1901		CEAT222M25
R 1938	RD1/4PU221J	C 1902	6800µF/16V	CCH1474
R 1939	RD1/4PU222J	C 1903	6800µF/16V	CCH1474
R 1940	RD1/4PU103J			
E R 1941	RD1/4PU104J	C 1904		CFTNA103J50
		C 1905		CEAT220M25
		C 1906		CEAT471M16
		C 1907		CEAT100M50
		C 1908		CEAT221M10
		C 1909		CQPA102G2A
C 1101	CQPA101G2A	C 1910		CFTNA103J50
C 1102	CCF1003	C 1911		CFTNA103J50
C 1103	CCF1003	C 1912		CFTNA103J50
C 1104	CCH1544	C 1913		CEAT101M16
C 1105	CFTNA273J50			
		C 1915		CEANP101M16
C 1107	CCH1634(P35)	C 1916		CQPA102G2A
C 1108	CEANP221M16			
C 1201	CQPA101G2A			
C 1202	CCF1003			
C 1203	CCF1003			
F C 1204	CCH1544			
C 1205	CFTNA273J50			

B**Unit Number: CWX3066****Unit Name: DSP Unit**

Circuit Symbol and No.Part No.Circuit Symbol and No.Part No.**MISCELLANEOUS**

IC 2001	IC	DIR1703E	Q 2250	Transistor	2SC1845	
IC 2101	IC	DIT4096IPW	Q 2251	Transistor	2SA992	
IC 2102	IC	TC7SET32FU	Q 2252	Transistor	2SA992	A
IC 2103	IC	TC7SET32FU	Q 2253	Transistor	2SC1845	
IC 2131	IC	DIT4096IPW	Q 2254	Transistor	2SC1845	
			Q 2255	Transistor	2SC2712	
			Q 2256	Transistor	2SC2713	
			Q 2257	Transistor	2SA1163	
IC 2132	IC	TC7SET32FU				
IC 2161	IC	DIT4096IPW	Q 2271	Transistor	2SA1162	
IC 2162	IC	TC7SET32FU	Q 2272	Transistor	2SA992	
IC 2201	IC	SM5849BF	Q 2273	Transistor	2SC1845	
IC 2202	IC	DF1706E	Q 2274	Transistor	2SA992	
			Q 2275	Transistor	2SC1845	
IC 2241	IC	PCM1704U-J				
IC 2261	IC	PCM1704U-J	Q 2276	Transistor	2SC2712	B
IC 2301	IC	SM5849BF	Q 2277	Transistor	2SA992	
IC 2302	IC	DF1706E	Q 2278	Transistor	2SC1845	
IC 2341	IC	PCM1704U-J	Q 2279	Transistor	2SA992	
			Q 2280	Transistor	2SC1845	
IC 2371	IC	PCM1704U-J				
IC 2401	IC	NJU7223DL1-33	Q 2281	Transistor	2SA992	
IC 3001	IC	TC7WH04FU	Q 2282	Transistor	2SA992	
IC 3002	IC	TC7WH04FU	Q 2283	Transistor	2SC1845	
IC 3003	IC	NJM431U	Q 2284	Transistor	2SC1845	
			Q 2285	Transistor	2SC2712	
IC 3004	IC	NJM431U				
IC 3005	IC	TC7WZ34FU	Q 2286	Transistor	2SC2713	
IC 3006	IC	TC74VHCT125AFT	Q 2287	Transistor	2SA1163	C
IC 3007	IC	TC74VHCT125AFT	Q 2341	Transistor	2SA1162	
IC 3008	IC	TC7WZ34FU	Q 2342	Transistor	2SA992	
			Q 2343	Transistor	2SC1845	
IC 3009	IC	TC74VHCT125AFT				
IC 3010	IC	TC7WZ34FU	Q 2344	Transistor	2SA992	
IC 3011	IC	TC7WZ34FU	Q 2345	Transistor	2SC1845	
IC 3012	IC	TC7WZ34FU	Q 2346	Transistor	2SC2712	
IC 3201	IC	EPF6016ATI144-3	Q 2347	Transistor	2SA992	
			Q 2348	Transistor	2SC1845	
IC 3202	IC	TC7SH32FU				
IC 4001	IC	ADSP-21065LCS-240	Q 2349	Transistor	2SA992	
IC 4151	IC	TC74LCX541FT	Q 2350	Transistor	2SC1845	
IC 4201	IC	MSM56V16160F8TKFM	Q 2351	Transistor	2SA992	D
IC 4202	IC	MSM56V16160F8TKFM	Q 2352	Transistor	2SA992	
			Q 2353	Transistor	2SC1845	
IC 4301	IC	ADSP-21065LCS-240				
IC 4451	IC	TC74LCX541FT	Q 2354	Transistor	2SC1845	
IC 4501	IC	MSM56V16160F8TKFM	Q 2355	Transistor	2SC2712	
IC 4502	IC	MSM56V16160F8TKFM	Q 2356	Transistor	2SC2713	
IC 4601	IC	ADSP-21065LCS-240	Q 2357	Transistor	2SA1163	
			Q 2371	Transistor	2SA1162	
IC 4751	IC	TC74LCX541FT				
IC 4803	IC	MSM56V16160F8TKFM	Q 2372	Transistor	2SA992	
IC 4804	IC	MSM56V16160F8TKFM	Q 2373	Transistor	2SC1845	
IC 4901	IC	TC74VHC541FT	Q 2374	Transistor	2SA992	E
IC 4902	IC	TC7SZU04FU	Q 2375	Transistor	2SC1845	
			Q 2376	Transistor	2SC2712	
IC 4951	IC	TC7WZ34FU				
IC 4952	IC	TC74VHC08FT	Q 2377	Transistor	2SA992	
IC 4953	IC	TC7SH04FU	Q 2378	Transistor	2SC1845	
Q 2241	Transistor	2SA1162	Q 2379	Transistor	2SA992	
Q 2242	Transistor	2SA992	Q 2380	Transistor	2SC1845	
			Q 2381	Transistor	2SA992	
Q 2243	Transistor	2SC1845				
Q 2244	Transistor	2SA992	Q 2382	Transistor	2SA992	
Q 2245	Transistor	2SC1845	Q 2383	Transistor	2SC1845	
Q 2246	Transistor	2SC2712	Q 2384	Transistor	2SC1845	
Q 2247	Transistor	2SA992	Q 2385	Transistor	2SC2712	
			Q 2386	Transistor	2SC2713	F
Q 2248	Transistor	2SC1845				
Q 2249	Transistor	2SA992	Q 2387	Transistor	2SA1163	
			Q 3001	Transistor	2SC4226	

Circuit Symbol and No.**Part No.****Circuit Symbol and No.****Part No.**

Q 3002	Transistor	2SD1767	L 2341	Chip Ferrite Bead	CTF1399
Q 3003	Transistor	2SD1767	L 2342	Chip Ferrite Bead	CTF1399
Q 3004	Transistor	2SC2412K	L 2343	Chip Ferrite Bead	CTF1399

A

Q 3005	Transistor	2SC2412K	L 2344	Chip Ferrite Bead	CTF1399
D 2101	Diode Network	DA204U	L 2371	Chip Ferrite Bead	CTF1399
D 2102	Diode Network	DA204U	L 2372	Chip Ferrite Bead	CTF1399
D 2131	Diode Network	DA204U	L 2373	Chip Ferrite Bead	CTF1399
D 2132	Diode Network	DA204U	L 2374	Chip Ferrite Bead	CTF1399

D 2161	Diode Network	DA204U	L 2401	Inductor	CTF1453
D 2162	Diode Network	DA204U	L 2402	Inductor	CTF1250
D 2201	Diode Network	DA204U	L 3002	Chip Ferrite Bead	CTF1399
D 2202	Diode Network	DA204U	L 3003	Chip Ferrite Bead	CTF1399
D 2203	Diode Network	DA204U	L 3004	Chip Ferrite Bead	CTF1399

B

D 2204	Diode Network	DA204U	L 3005	Chip Ferrite Bead	CTF1399
D 2241	Diode Network	DA204U	L 3006	Chip Ferrite Bead	CTF1399
D 2242	Diode Network	DA204U	L 3007	Chip Ferrite Bead	CTF1399
D 2243	Diode	HZU3R0(B2)	L 3008	Chip Ferrite Bead	CTF1399
D 2244	Diode	HZU3R0(B2)	L 3009	Chip Ferrite Bead	CTF1399

D 2271	Diode Network	DA204U	L 3010	Chip Ferrite Bead	CTF1399
D 2272	Diode Network	DA204U	L 3202	Inductor	CTF1488
D 2273	Diode	HZU3R0(B2)	L 4001	Inductor	CTF1488
D 2274	Diode	HZU3R0(B2)	L 4151	Chip Ferrite Bead	CTF1399
D 2301	Diode Network	DA204U	L 4201	Chip Ferrite Bead	CTF1399

C

D 2302	Diode Network	DA204U	L 4202	Chip Ferrite Bead	CTF1399
D 2303	Diode Network	DA204U	L 4301	Inductor	CTF1488
D 2304	Diode Network	DA204U	L 4451	Chip Ferrite Bead	CTF1399
D 2305	Diode Network	DA204U	L 4501	Chip Ferrite Bead	CTF1399
D 2306	Diode Network	DA204U	L 4502	Chip Ferrite Bead	CTF1399

D 2341	Diode Network	DA204U	L 4601	Inductor	CTF1488
D 2342	Diode Network	DA204U	L 4751	Chip Ferrite Bead	CTF1399
D 2343	Diode	HZU3R0(B2)	L 4802	Chip Ferrite Bead	CTF1399
D 2344	Diode	HZU3R0(B2)	L 4803	Chip Ferrite Bead	CTF1399
D 2371	Diode Network	DA204U	L 4901	Chip Ferrite Bead	CTF1399

D

D 2372	Diode Network	DA204U	L 4951	Chip Ferrite Bead	CTF1399
D 2373	Diode	HZU3R0(B2)	TC3001	Trimmer	CCL1048
D 2374	Diode	HZU3R0(B2)	X 2001	Crystal Resonator 11.2896MHz	CSS1610
D 3201	Diode Network	DA204U	X 3001	Crystal Resonator 24.576MHz	CSS1611
D 3202	Diode Network	DA204U	X 4901	Crystal Resonator 30.0MHz	CSS1612

D 4001	Diode Network	DA204U	VR2241	Semi-fixed 20Ω(B)	CCP1461
D 4002	Diode Network	DA204U	VR2271	Semi-fixed 20Ω(B)	CCP1461
D 4301	Diode Network	DA204U	VR2341	Semi-fixed 20Ω(B)	CCP1461
D 4302	Diode Network	DA204U	VR2371	Semi-fixed 20Ω(B)	CCP1461
D 4601	Diode Network	DA204U	EF2401	EMI Filter	CCG1030

E

D 4602	Diode Network	DA204U	EF2402	EMI Filter	CCG1030
L 2001	Chip Ferrite Bead	CTF1399	EF2403	EMI Filter	CCG1030
L 2101	Chip Ferrite Bead	CTF1399	EF2404	EMI Filter	CCG1030
L 2131	Chip Ferrite Bead	CTF1399	EF2405	EMI Filter	CCG1030
L 2161	Chip Ferrite Bead	CTF1399	EF2406	EMI Filter	CCG1030

L 2201	Chip Ferrite Bead	CTF1399	TP3001	Checker Chip	CKF1031
L 2202	Chip Ferrite Bead	CTF1399	TP3002	Checker Chip	CKF1031
L 2241	Chip Ferrite Bead	CTF1399	TP3003	Checker Chip	CKF1031
L 2242	Chip Ferrite Bead	CTF1399	TP4901	Checker Chip	CKF1031
L 2243	Chip Ferrite Bead	CTF1399	TP4903	Checker Chip	CKF1031

F

L 2271	Chip Ferrite Bead	CTF1399	RESISTORS				
L 2272	Chip Ferrite Bead	CTF1399					
L 2273	Chip Ferrite Bead	CTF1399				R 2001	RS1/16S101J
L 2274	Chip Ferrite Bead	CTF1399				R 2002	RN1/10SE1201D
L 2284	Chip Ferrite Bead	CTF1399				R 2003	RS1/16S103J
L 2301	Chip Ferrite Bead	CTF1399	R 2004	RAB4CQ101J			
L 2302	Chip Ferrite Bead	CTF1399	R 2005	RS1/16S103J			

5		6		7		8	
<u>Circuit Symbol and No.</u>		<u>Part No.</u>		<u>Circuit Symbol and No.</u>		<u>Part No.</u>	
R 2006		RN1/16SC47R0D		R 2210		RS1/16S103J	
R 2007		RN1/16SC47R0D		R 2214		RN1/16SC47R0D	A
R 2008		RN1/16SC47R0D		R 2215		RN1/16SC47R0D	
R 2009		RN1/16SC47R0D		R 2216		RN1/16SC47R0D	
R 2013		RS1/16S105J		R 2217		RS1/16S0R0J	
R 2014		RS1/16S0R0J		R 2218		RS1/16S0R0J	
R 2015		RS1/16S0R0J		R 2221		RS1/16S101J	
R 2016		RS1/16S0R0J		R 2222		RS1/16S0R0J	
R 2017		RS1/16S0R0J		R 2223		RS1/16S0R0J	
R 2018		RS1/16S0R0J		R 2224		RS1/16S101J	
R 2019		RN1/16SE3301D		R 2241		RN1/16SC47R0D	
R 2101		RN1/16SC47R0D		R 2242		RN1/16SC47R0D	
R 2103		RS1/16S103J		R 2243		RN1/16SC47R0D	
R 2104		RS1/16S103J		R 2244		RN1/10SE3900D	B
R 2105		RS1/16S103J		R 2245		RN1/10SE2202D	
R 2106		RS1/16S103J		R 2246		RN1/10SC27R0D	
R 2107		RS1/16S103J		R 2247		RN1/10SC27R0D	
R 2108		RS1/16S103J		R 2248		RN1/10SE3900D	
R 2109		RS1/16S101J		R 2249		RN1/10SE4700D	
R 2110		RS1/16S103J		R 2250		RN1/10SC27R0D	
R 2111		RS1/16S103J		R 2251		RN1/10SC27R0D	
R 2112		RS1/16S103J		R 2252		RN1/10SE4700D	
R 2121		RN1/16SC47R0D		R 2253		RN1/10SE1002D	
R 2122		RN1/16SC47R0D		R 2254		RN1/10SE1500D	
R 2123		RN1/16SC47R0D		R 2255		RN1/10SE1002D	C
R 2124		RN1/16SC47R0D		R 2256		RN1/10SE1002D	
R 2131		RN1/16SC47R0D		R 2257		RN1/10SE1000D	
R 2133		RS1/16S103J		R 2258		RN1/10SE1000D	
R 2134		RS1/16S103J		R 2259		RN1/10SE1200D	
R 2135		RS1/16S103J		R 2260		RN1/10SC20R0D	
R 2136		RS1/16S103J		R 2261		RN1/10SC47R0D	
R 2137		RS1/16S103J		R 2262		RN1/10SC47R0D	
R 2138		RS1/16S103J		R 2264		RN1/10SE8201D	
R 2139		RS1/16S101J		R 2265		RN1/10SE6800D	
R 2140		RS1/16S103J		R 2271		RN1/16SC47R0D	D
R 2141		RS1/16S103J		R 2272		RN1/16SC47R0D	
R 2142		RS1/16S103J		R 2273		RN1/16SC47R0D	
R 2151		RN1/16SC47R0D		R 2274		RN1/10SE3900D	
R 2152		RN1/16SC47R0D		R 2275		RN1/10SE2202D	
R 2153		RN1/16SC47R0D		R 2276		RN1/10SC27R0D	
R 2154		RN1/16SC47R0D		R 2277		RN1/10SC27R0D	
R 2161		RN1/16SC47R0D		R 2278		RN1/10SE3900D	
R 2163		RS1/16S103J		R 2279		RN1/10SE4700D	
R 2164		RS1/16S103J		R 2280		RN1/10SC27R0D	
R 2165		RS1/16S103J		R 2281		RN1/10SC27R0D	
R 2166		RS1/16S103J		R 2282		RN1/10SE4700D	E
R 2167		RS1/16S103J		R 2283		RN1/10SE1002D	
R 2168		RS1/16S103J		R 2284		RN1/10SE1500D	
R 2169		RS1/16S101J		R 2285		RN1/10SE1002D	
R 2170		RS1/16S103J		R 2286		RN1/10SE1002D	
R 2171		RS1/16S103J		R 2287		RN1/10SE1000D	
R 2172		RS1/16S103J		R 2288		RN1/10SE1000D	
R 2181		RN1/16SC47R0D		R 2289		RN1/10SE1200D	
R 2182		RN1/16SC47R0D		R 2290		RN1/10SC20R0D	
R 2183		RN1/16SC47R0D		R 2291		RN1/10SC47R0D	
R 2184		RN1/16SC47R0D		R 2292		RN1/10SC47R0D	
R 2201		RN1/16SC47R0D		R 2294		RN1/10SE8201D	F
R 2202		RN1/16SC47R0D		R 2295		RN1/10SE6800D	
R 2203		RN1/16SC47R0D		R 2301		RN1/16SC47R0D	
R 2209		RS1/16S101J		R 2302		RN1/16SC47R0D	

Circuit Symbol and No.Part No.Circuit Symbol and No.Part No.

A	R 2303	RN1/16SC47R0D	R 2394	RN1/10SE8201D
	R 2309	RS1/16S101J	R 2395	RN1/10SE6800D
	R 2310	RS1/16S103J	R 2401	RS1/10S0R0J
	R 2315	RS1/16S101J	R 3001	RN1/16SC22R0D
	R 2316	RN1/16SC47R0D	R 3002	RN1/16SC47R0D
■	R 2317	RN1/16SC47R0D	R 3003	RN1/16SC22R0D
	R 2318	RN1/16SC47R0D	R 3004	RN1/16SC47R0D
	R 2319	RS1/16S0R0J	R 3005	RN1/16SE1000D
	R 2320	RS1/16S0R0J	R 3006	RN1/16SE4702D
	R 2322	RS1/16S0R0J	R 3007	RN1/16SE1502D
B	R 2323	RS1/16S0R0J	R 3008	RN1/16SE1502D
	R 2324	RS1/16S101J	R 3009	RN1/16SE1002D
	R 2326	RN1/16SC47R0D	R 3010	RN1/16SE1002D
	R 2327	RN1/16SC47R0D	R 3011	RN1/16SE6800D
	R 2341	RN1/16SC47R0D	R 3012	RN1/16SE4701D
■	R 2342	RN1/16SC47R0D	R 3013	RN1/16SE4701D
	R 2343	RN1/16SC47R0D	R 3014	RN1/16SC27R0D
	R 2344	RN1/10SE3900D	R 3015	RN1/16SE4701D
	R 2345	RN1/10SE2202D	R 3016	RN1/16SE1502D
	R 2346	RN1/10SC27R0D	R 3017	RN1/16SC27R0D
C	R 2347	RN1/10SC27R0D	R 3018	RN1/16SE4701D
	R 2348	RN1/10SE3900D	R 3019	RN1/16SC56R0D
	R 2349	RN1/10SE4700D	R 3020	RN1/16SE1502D
	R 2350	RN1/10SC27R0D	R 3021	RN1/16SC56R0D
	R 2351	RN1/10SC27R0D	R 3022	RN1/16SC47R0D
■	R 2352	RN1/10SE4700D	R 3023	RN1/16SC47R0D
	R 2353	RN1/10SE1002D	R 3024	RN1/16SC47R0D
	R 2354	RN1/10SE1500D	R 3025	RN1/16SC47R0D
	R 2355	RN1/10SE1002D	R 3026	RN1/16SC47R0D
	R 2356	RN1/10SE1002D	R 3027	RN1/16SC47R0D
D	R 2357	RN1/10SE1000D	R 3028	RN1/16SC47R0D
	R 2358	RN1/10SE1000D	R 3029	RN1/16SC47R0D
	R 2359	RN1/10SE1200D	R 3030	RN1/16SC47R0D
	R 2360	RN1/10SC20R0D	R 3031	RN1/16SC47R0D
	R 2361	RN1/10SC47R0D	R 3032	RN1/16SC47R0D
■	R 2362	RN1/10SC47R0D	R 3033	RN1/16SC47R0D
	R 2364	RN1/10SE8201D	R 3034	RN1/16SC47R0D
	R 2365	RN1/10SE6800D	R 3035	RN1/16SC47R0D
	R 2371	RN1/16SC47R0D	R 3036	RN1/16SC47R0D
	R 2372	RN1/16SC47R0D	R 3037	RN1/16SC47R0D
E	R 2373	RN1/16SC47R0D	R 3038	RN1/16SC47R0D
	R 2374	RN1/10SE3900D	R 3039	RN1/16SC47R0D
	R 2375	RN1/10SE2202D	R 3040	RN1/16SC47R0D
	R 2376	RN1/10SC27R0D	R 3041	RN1/16SC47R0D
	R 2377	RN1/10SC27R0D	R 3042	RN1/16SC47R0D
■	R 2378	RN1/10SE3900D	R 3043	RN1/16SC47R0D
	R 2379	RN1/10SE4700D	R 3044	RN1/16SC47R0D
	R 2380	RN1/10SC27R0D	R 3201	RN1/16SC47R0D
	R 2381	RN1/10SC27R0D	R 3202	RN1/16SC47R0D
	R 2382	RN1/10SE4700D	R 3203	RN1/16SC47R0D
F	R 2383	RN1/10SE1002D	R 3204	RN1/16SC47R0D
	R 2384	RN1/10SE1500D	R 3205	RN1/16SC47R0D
	R 2385	RN1/10SE1002D	R 3206	RN1/16SC47R0D
	R 2386	RN1/10SE1002D	R 3207	RN1/16SC47R0D
	R 2387	RN1/10SE1000D	R 3208	RN1/16SC47R0D
■	R 2388	RN1/10SE1000D	R 3209	RN1/16SC47R0D
	R 2389	RN1/10SE1200D	R 3210	RN1/16SC47R0D
	R 2390	RN1/10SC20R0D	R 3211	RN1/16SC47R0D
	R 2391	RN1/10SC47R0D	R 3212	RN1/16SC47R0D
	R 2392	RN1/10SC47R0D	R 3213	RN1/16SC47R0D

5		6		7		8	
<u>Circuit Symbol and No.</u>		<u>Part No.</u>		<u>Circuit Symbol and No.</u>		<u>Part No.</u>	
R 3214		RN1/16SC47R0D		R 4008		RS1/16S47R0D	
R 3215		RN1/16SC47R0D		R 4009		RS1/16S47R0D	
R 3216		RN1/16SC47R0D		R 4010		RS1/16S47R0D	A
R 3219		RN1/16SC47R0D		R 4011		RS1/16S47R0D	
R 3220		RN1/16SC47R0D		R 4012		RS1/16S47R0D	
R 3221		RAB4CQ0R0J		R 4013		RS1/16S103J	
R 3222		RAB4CQ0R0J		R 4014		RS1/16S103J	
R 3223		RS1/16S0R0J		R 4015		RS1/16S103J	
R 3224		RS1/16S0R0J		R 4016		RS1/16S103J	
R 3225		RS1/16S102J		R 4017		RN1/16SC47R0D	
R 3226		RS1/16S0R0J		R 4018		RS1/16S103J	
R 3227		RAB4CQ0R0J		R 4019		RS1/16S103J	
R 3228		RS1/16S0R0J		R 4020		RS1/16S47R0D	
R 3229		RS1/16S0R0J		R 4021		RS1/16S47R0D	B
R 3230		RS1/16S0R0J		R 4022		RS1/16S47R0D	
R 3231		RS1/16S0R0J		R 4023		RS1/16S47R0D	
R 3232		RS1/16S0R0J		R 4024		RS1/16S47R0D	
R 3233		RS1/16S0R0J		R 4025		RS1/16S47R0D	
R 3241		RS1/16S0R0J		R 4026		RS1/16S47R0D	
R 3242		RS1/16S0R0J		R 4027		RS1/16S47R0D	
R 3243		RS1/16S0R0J		R 4028		RS1/16S47R0D	
R 3244		RS1/16S0R0J		R 4029		RS1/16S103J	
R 3245		RS1/16S0R0J		R 4030		RAB4CQ103J	
R 3246		RS1/16S0R0J		R 4034		RS1/16S47R0D	
R 3247		RAB4CQ0R0J		R 4035		RS1/16S103J	C
R 3248		RAB4CQ0R0J		R 4036		RS1/16S103J	
R 3249		RAB4CQ0R0J		R 4037		RS1/16S47R0D	
R 3250		RAB4CQ0R0J		R 4038		RS1/16S103J	
R 3251		RAB4CQ0R0J		R 4039		RS1/16S47R0D	
R 3252		RS1/16S102J		R 4040		RS1/16S47R0D	
R 3253		RS1/16S0R0J		R 4041		RS1/16S47R0D	
R 3261		RAB4CQ0R0J		R 4042		RAB4CQ103J	
R 3262		RS1/16S103J		R 4044		RS1/16S47R0D	
R 3263		RS1/16S0R0J		R 4046		RS1/16S47R0D	
R 3264		RS1/16S0R0J		R 4047		RS1/16S47R0D	
R 3265		RS1/16S0R0J		R 4049		RS1/16S47R0D	
R 3266		RS1/16S0R0J		R 4050		RS1/16S47R0D	
R 3267		RS1/16S103J		R 4051		RS1/16S47R0D	
R 3268		RS1/16S0R0J		R 4052		RS1/16S47R0D	
R 3269		RS1/16S0R0J		R 4053		RS1/16S47R0D	
R 3270		RS1/16S103J		R 4054		RS1/16S47R0D	
R 3271		RS1/16S0R0J		R 4055		RS1/16S47R0D	
R 3272		RS1/16S0R0J		R 4056		RS1/16S47R0D	
R 3273		RS1/16S0R0J		R 4057		RS1/16S47R0D	
R 3274		RS1/16S0R0J		R 4058		RS1/16S103J	
R 3275		RS1/16S103J		R 4059		RS1/16S47R0D	E
R 3276		RS1/16S0R0J		R 4060		RAB4CQ103J	
R 3277		RS1/16S0R0J		R 4061		RS1/16S47R0D	
R 3278		RS1/16S0R0J		R 4062		RS1/16S47R0D	
R 3291		RS1/16S0R0J		R 4064		RS1/16S47R0D	
R 3292		RS1/16S0R0J		R 4065		RS1/16S47R0D	
R 3293		RS1/16S0R0J		R 4066		RS1/16S47R0D	
R 3294		RS1/16S0R0J		R 4068		RS1/16S47R0D	
R 4001		RN1/16SC47R0D		R 4070		RS1/16S47R0D	
R 4002		RN1/16SC47R0D		R 4071		RAB4CQ103J	
R 4003		RN1/16SC47R0D		R 4072		RS1/16S47R0D	
R 4004		RN1/16SC47R0D		R 4074		RS1/16S47R0D	F
R 4005		RN1/16SC47R0D		R 4077		RS1/16S47R0D	
R 4006		RN1/16SC47R0D		R 4078		RAB4CQ103J	
R 4007		RS1/16S47R0D		R 4079		RS1/16S47R0D	

6.2 AUDIO UNIT ADJUSTMENT



The items for adjusting audio unit are:

- ① Offset voltage
- ② Master clock

The adjustment for service should be served in the product condition, instead of in the unit condition.
(Otherwise, it would require jigs.)

Both adjustments are capable by removing the bottom plate of product, the sealed case of Control Assy and black panel (IN/OUT-signal printed side) to expose the face A of audio unit.

Adjustment is done by using the following half-fixed resistance and the trimmer capacitor:

For adjusting offset voltage --- VR2241, VR2271, VR2341, VR2371

For adjusting master clock --- TC3001

(Measuring instruments to be used)

For adjusting offset voltage: Voltage measuring device such as a multi-meter

For adjusting master clock: Frequency counter or high-frequency probe

* For adjusting each of RS-A7, use RS-A9.

(Adjustment Requirements)

Operate the product in the following requirements and make adjustment within 2 or 3 minutes from the start of such operation.

No.	Item	Rated Value	Requirements
1	Offset Voltage	0 Below $\pm 10\text{mV}$	Set volume value of Main Unit to -72dB and reproduce CD without recording. *1
2	Master clock	$24.576\text{MHz} \pm 20\text{Hz}$	Set volume value of Main Unit to -72dB and reproduce CD without recording. *1

*1 : 23 tracks of test disc(YEDS-7)

Sensing pin land of AL2 : its equivalent land and GND

Sensing pin land of AR2 : its equivalent land and GND

Sensing pin land of BL2 : its equivalent land and GND

Sensing pin land of BR2 : its equivalent land and GND

(The measuring points for adjusting master clock)

TP3001 or its equivalent land and TP3002 or its equivalent GND

(Waveform Confirmation for Adjustment)

Waveform confirmation is required since the waveform may be deformed according to the type of probe to be used when adjusting master clock.

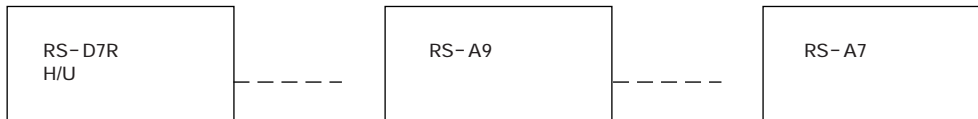
The waveform is basically a rectangular wave of 0 --- 3.3V (24.576MHz).



5	6	7	8	
<u>Circuit Symbol and No.</u>	<u>Part No.</u>	<u>Circuit Symbol and No.</u>	<u>Part No.</u>	
R 4261	RS1/16S0R0J	R 4358	RS1/16S47R0D	
R 4262	RS1/16S0R0J	R 4359	RAB4CQ103J	A
R 4263	RS1/16S0R0J	R 4360	RS1/16S47R0D	
R 4264	RS1/16S0R0J	R 4361	RS1/16S47R0D	
R 4265	RS1/16S0R0J	R 4363	RS1/16S47R0D	
R 4266	RS1/16S0R0J	R 4364	RS1/16S47R0D	
R 4267	RS1/16S0R0J	R 4365	RS1/16S47R0D	
R 4268	RS1/16S0R0J	R 4367	RS1/16S47R0D	
R 4269	RS1/16S0R0J	R 4369	RS1/16S47R0D	
R 4270	RS1/16S0R0J	R 4370	RAB4CQ103J	
R 4271	RS1/16S0R0J	R 4371	RS1/16S47R0D	
R 4272	RS1/16S0R0J	R 4373	RS1/16S47R0D	
R 4301	RN1/16SC47R0D	R 4376	RS1/16S47R0D	
R 4302	RN1/16SC47R0D	R 4377	RAB4CQ103J	B
R 4303	RN1/16SC47R0D	R 4378	RS1/16S47R0D	
R 4304	RN1/16SC47R0D	R 4379	RS1/16S47R0D	
R 4305	RN1/16SC47R0D	R 4382	RS1/16S47R0D	
R 4306	RN1/16SC47R0D	R 4384	RS1/16S47R0D	
R 4307	RS1/16S47R0D	R 4385	RS1/16S47R0D	
R 4308	RS1/16S47R0D	R 4386	RS1/16S47R0D	
R 4309	RS1/16S47R0D	R 4387	RS1/16S0R0J	
R 4310	RN1/16SC47R0D	R 4388	RS1/16S0R0J	
R 4311	RN1/16SC47R0D	R 4389	RS1/16S0R0J	
R 4312	RS1/16S103J	R 4390	RS1/16S0R0J	
R 4313	RS1/16S103J	R 4391	RS1/16S0R0J	C
R 4314	RS1/16S103J	R 4392	RS1/16S0R0J	
R 4315	RS1/16S103J	R 4393	RS1/16S47R0D	
R 4316	RN1/16SC47R0D	R 4394	RS1/16S47R0D	
R 4317	RS1/16S103J	R 4395	RS1/16S47R0D	
R 4318	RS1/16S103J	R 4396	RS1/16S47R0D	
R 4319	RS1/16S47R0D	R 4397	RS1/16S47R0D	
R 4320	RS1/16S47R0D	R 4398	RS1/16S47R0D	
R 4321	RS1/16S47R0D	R 4399	RS1/16S47R0D	
R 4322	RS1/16S47R0D	R 4400	RS1/16S47R0D	
R 4323	RS1/16S47R0D	R 4401	RS1/16S47R0D	
R 4324	RS1/16S47R0D	R 4402	RS1/16S47R0D	D
R 4325	RS1/16S47R0D	R 4403	RS1/16S47R0D	
R 4326	RS1/16S47R0D	R 4404	RS1/16S47R0D	
R 4327	RS1/16S47R0D	R 4405	RS1/16S47R0D	
R 4328	RS1/16S103J	R 4406	RS1/16S47R0D	
R 4329	RAB4CQ103J	R 4407	RS1/16S47R0D	
R 4333	RS1/16S47R0D	R 4408	RS1/16S47R0D	
R 4334	RS1/16S103J	R 4409	RS1/16S47R0D	
R 4335	RS1/16S103J	R 4410	RS1/16S103J	
R 4336	RS1/16S47R0D	R 4411	RS1/16S103J	
R 4337	RS1/16S103J	R 4412	RS1/16S103J	E
R 4338	RS1/16S47R0D	R 4413	RS1/16S103J	
R 4339	RS1/16S47R0D	R 4414	RS1/16S103J	
R 4340	RS1/16S47R0D	R 4415	RS1/16S103J	
R 4341	RAB4CQ103J	R 4416	RS1/16S103J	
R 4343	RS1/16S47R0D	R 4417	RS1/16S103J	
R 4345	RS1/16S47R0D	R 4418	RS1/16S103J	
R 4346	RS1/16S47R0D	R 4419	RS1/16S103J	
R 4348	RS1/16S47R0D	R 4420	RS1/16S103J	
R 4349	RS1/16S47R0D	R 4421	RS1/16S103J	
R 4350	RAB4CQ103J	R 4422	RS1/16S103J	
R 4351	RS1/16S47R0D	R 4423	RS1/16S47R0D	F
R 4352	RS1/16S47R0D	R 4424	RS1/16S103J	
R 4356	RS1/16S47R0D	R 4451	RS1/16S0R0J	
R 4357	RS1/16S103J	R 4452	RS1/16S0R0J	

Remarks

- 1 Offset voltage/Master clock must be adjusted in the product condition.
- 2 Input signal must be CD—∞signal. 23 tracks of test disc(YEDS-7)
- 3 The adjustment for offset voltage/master clock must be done within 2 or 3 minutes from the start of product operation.
- 4 Master clock must be adjusted using high-frequency probe.
- 5 The measuring points for adjusting offset voltage must be as follows:
 - Sensing pin land : AL2 or its equivalent land and GND
 - Sensing pin land : AR2 or its equivalent land and GND
 - Sensing pin land : BL2 or its equivalent land and GND
 - Sensing pin land : BR2 or its equivalent land and GND
- 6 The measuring points for adjusting master clock must be as follows:
 - TP3001 or its equivalent land and TP3002 or its equivalent GND
- 7 Adjusting Point Offset voltage/master clock for the audio unit must be adjusted by the following connection:



5		6		7		8	
<u>Circuit Symbol and No.</u>	<u>Part No.</u>	<u>Circuit Symbol and No.</u>	<u>Part No.</u>	<u>Circuit Symbol and No.</u>	<u>Part No.</u>		
R 4636	RS1/16S47R0D	R 4711	RS1/16S103J	R 4711	RS1/16S103J		
R 4637	RS1/16S103J	R 4712	RS1/16S103J	R 4712	RS1/16S103J		
R 4638	RS1/16S47R0D	R 4713	RS1/16S103J	R 4713	RS1/16S103J		A
R 4639	RS1/16S47R0D	R 4714	RS1/16S103J	R 4714	RS1/16S103J		
R 4640	RS1/16S47R0D	R 4715	RS1/16S103J	R 4715	RS1/16S103J		
R 4641	RAB4CQ103J	R 4716	RS1/16S103J	R 4716	RS1/16S103J		
R 4643	RS1/16S47R0D	R 4717	RS1/16S103J	R 4717	RS1/16S103J		
R 4645	RS1/16S47R0D	R 4718	RS1/16S103J	R 4718	RS1/16S103J		
R 4646	RS1/16S47R0D	R 4719	RS1/16S103J	R 4719	RS1/16S103J		
R 4648	RS1/16S47R0D	R 4720	RS1/16S103J	R 4720	RS1/16S103J		
R 4649	RS1/16S47R0D	R 4721	RS1/16S103J	R 4721	RS1/16S103J		
R 4650	RAB4CQ103J	R 4722	RS1/16S103J	R 4722	RS1/16S103J		
R 4651	RS1/16S47R0D	R 4723	RS1/16S47R0D	R 4723	RS1/16S47R0D		
R 4652	RS1/16S47R0D	R 4724	RS1/16S103J	R 4724	RS1/16S103J		B
R 4656	RS1/16S47R0D	R 4751	RS1/16S0R0J	R 4751	RS1/16S0R0J		
R 4657	RS1/16S103J	R 4752	RS1/16S0R0J	R 4752	RS1/16S0R0J		
R 4658	RS1/16S47R0D	R 4753	RS1/16S0R0J	R 4753	RS1/16S0R0J		
R 4659	RAB4CQ103J	R 4754	RS1/16S0R0J	R 4754	RS1/16S0R0J		
R 4660	RS1/16S47R0D	R 4755	RS1/16S0R0J	R 4755	RS1/16S0R0J		
R 4661	RS1/16S47R0D	R 4756	RS1/16S0R0J	R 4756	RS1/16S0R0J		
R 4663	RS1/16S47R0D	R 4757	RS1/16S0R0J	R 4757	RS1/16S0R0J		
R 4664	RS1/16S47R0D	R 4758	RS1/16S0R0J	R 4758	RS1/16S0R0J		
R 4665	RS1/16S47R0D	R 4759	RS1/16S0R0J	R 4759	RS1/16S0R0J		
R 4667	RS1/16S47R0D	R 4760	RS1/16S0R0J	R 4760	RS1/16S0R0J		
R 4669	RS1/16S47R0D	R 4761	RS1/16S0R0J	R 4761	RS1/16S0R0J		C
R 4670	RAB4CQ103J	R 4762	RS1/16S0R0J	R 4762	RS1/16S0R0J		
R 4671	RS1/16S47R0D	R 4763	RS1/16S0R0J	R 4763	RS1/16S0R0J		
R 4673	RS1/16S47R0D	R 4764	RS1/16S0R0J	R 4764	RS1/16S0R0J		
R 4676	RS1/16S47R0D	R 4765	RS1/16S0R0J	R 4765	RS1/16S0R0J		
R 4677	RAB4CQ103J	R 4766	RS1/16S0R0J	R 4766	RS1/16S0R0J		
R 4678	RS1/16S47R0D	R 4767	RS1/16S0R0J	R 4767	RS1/16S0R0J		
R 4679	RS1/16S47R0D	R 4768	RS1/16S0R0J	R 4768	RS1/16S0R0J		
R 4682	RS1/16S47R0D	R 4803	RS1/16S0R0J	R 4803	RS1/16S0R0J		
R 4684	RS1/16S47R0D	R 4804	RS1/16S0R0J	R 4804	RS1/16S0R0J		
R 4685	RS1/16S47R0D	R 4805	RS1/16S0R0J	R 4805	RS1/16S0R0J		D
R 4686	RS1/16S47R0D	R 4806	RS1/16S0R0J	R 4806	RS1/16S0R0J		
R 4687	RS1/16S0R0J	R 4807	RS1/16S0R0J	R 4807	RS1/16S0R0J		
R 4688	RS1/16S0R0J	R 4808	RS1/16S0R0J	R 4808	RS1/16S0R0J		
R 4689	RS1/16S0R0J	R 4809	RS1/16S0R0J	R 4809	RS1/16S0R0J		
R 4690	RS1/16S0R0J	R 4810	RN1/16SC47R0D	R 4810	RN1/16SC47R0D		
R 4691	RS1/16S0R0J	R 4811	RS1/16S0R0J	R 4811	RS1/16S0R0J		
R 4692	RS1/16S0R0J	R 4812	RS1/16S0R0J	R 4812	RS1/16S0R0J		
R 4693	RS1/16S47R0D	R 4813	RS1/16S0R0J	R 4813	RS1/16S0R0J		
R 4694	RS1/16S47R0D	R 4814	RS1/16S0R0J	R 4814	RS1/16S0R0J		
R 4695	RS1/16S47R0D	R 4815	RS1/16S0R0J	R 4815	RS1/16S0R0J		
R 4696	RS1/16S47R0D	R 4816	RS1/16S0R0J	R 4816	RS1/16S0R0J		E
R 4697	RS1/16S47R0D	R 4817	RS1/16S0R0J	R 4817	RS1/16S0R0J		
R 4698	RS1/16S47R0D	R 4818	RS1/16S0R0J	R 4818	RS1/16S0R0J		
R 4699	RS1/16S47R0D	R 4819	RS1/16S0R0J	R 4819	RS1/16S0R0J		
R 4700	RS1/16S47R0D	R 4820	RS1/16S0R0J	R 4820	RS1/16S0R0J		
R 4701	RS1/16S47R0D	R 4821	RS1/16S0R0J	R 4821	RS1/16S0R0J		
R 4702	RS1/16S47R0D	R 4822	RS1/16S0R0J	R 4822	RS1/16S0R0J		
R 4703	RS1/16S47R0D	R 4823	RS1/16S0R0J	R 4823	RS1/16S0R0J		
R 4704	RS1/16S47R0D	R 4824	RS1/16S0R0J	R 4824	RS1/16S0R0J		
R 4705	RS1/16S47R0D	R 4825	RS1/16S0R0J	R 4825	RS1/16S0R0J		
R 4706	RS1/16S47R0D	R 4826	RS1/16S0R0J	R 4826	RS1/16S0R0J		
R 4707	RS1/16S47R0D	R 4827	RN1/16SC47R0D	R 4827	RN1/16SC47R0D		F
R 4708	RS1/16S47R0D	R 4828	RS1/16S0R0J	R 4828	RS1/16S0R0J		
R 4709	RS1/16S47R0D	R 4829	RS1/16S0R0J	R 4829	RS1/16S0R0J		
R 4710	RS1/16S103J	R 4830	RS1/16S0R0J	R 4830	RS1/16S0R0J		

Circuit Symbol and No.Part No.Circuit Symbol and No.Part No.CAPACITORS

	R 4831	RS1/16S0R0J		
	R 4832	RS1/16S0R0J	C 2001	CEAT100M50
A	R 4833	RS1/16S0R0J	C 2002	CKSRYB104K16
	R 4834	RS1/16S0R0J	C 2003	CKSRYB104K16
	R 4835	RS1/16S0R0J	C 2004	CASA100M6R3
			C 2005	CFHXSP683J16
	R 4836	RS1/16S0R0J		
	R 4837	RS1/16S0R0J	C 2006	CFHXSQ822G16
	R 4838	RS1/16S0R0J	C 2007	CCSRCH220D50
	R 4839	RS1/16S0R0J	C 2008	CCSRCH220D50
	R 4840	RS1/16S0R0J	C 2009	CKSRYB102K50
			C 2010	CKSRYB104K16
	R 4841	RS1/16S0R0J		
	R 4842	RS1/16S0R0J	C 2011	CKSRYB104K16
	R 4843	RS1/16S0R0J	C 2101	CEAT101M16
B	R 4844	RS1/16S0R0J	C 2102	CKSRYB104K16
	R 4845	RS1/16S0R0J	C 2103	CKSRYB104K16
			C 2104	CASA100M6R3
	R 4846	RS1/16S0R0J		
	R 4847	RS1/16S0R0J	C 2105	CKSRYB102K50
	R 4848	RS1/16S0R0J	C 2106	CKSRYB104K16
	R 4849	RS1/16S0R0J	C 2107	CKSRYB104K16
	R 4850	RS1/16S0R0J	C 2108	CKSRYB104K16
			C 2109	CKSRYB104K16
	R 4851	RS1/16S0R0J		
	R 4852	RS1/16S0R0J	C 2131	CEAT101M16
	R 4853	RS1/16S0R0J	C 2132	CKSRYB104K16
	R 4854	RS1/16S0R0J	C 2133	CKSRYB104K16
C	R 4855	RS1/16S0R0J	C 2134	CASA100M6R3
			C 2135	CKSRYB102K50
	R 4856	RS1/16S0R0J		
	R 4857	RS1/16S0R0J	C 2136	CKSRYB104K16
	R 4858	RS1/16S0R0J	C 2137	CKSRYB104K16
	R 4859	RS1/16S0R0J	C 2138	CKSRYB104K16
	R 4860	RS1/16S0R0J	C 2161	CEAT101M16
			C 2162	CKSRYB104K16
	R 4861	RS1/16S0R0J		
	R 4862	RS1/16S0R0J	C 2163	CKSRYB104K16
	R 4863	RS1/16S0R0J	C 2164	CASA100M6R3
	R 4864	RS1/16S0R0J	C 2165	CKSRYB102K50
D	R 4865	RS1/16S0R0J	C 2166	CKSRYB104K16
			C 2167	CKSRYB104K16
	R 4866	RS1/16S0R0J		
	R 4867	RS1/16S0R0J	C 2168	CKSRYB104K16
	R 4868	RS1/16S0R0J	C 2201	CKSRYB103K50
	R 4869	RS1/16S0R0J	C 2202	CKSRYB103K50
	R 4870	RS1/16S0R0J	C 2203	CEAT101M16
			C 2204	CKSRYB104K16
	R 4871	RS1/16S0R0J		
	R 4872	RS1/16S0R0J	C 2205	CKSRYB104K16
	R 4873	RS1/16S0R0J	C 2206	CASA470M10
	R 4874	RS1/16S0R0J	C 2207	CKSRYB103K50
	R 4901	RN1/16SC10R0D	C 2208	CKSRYB102K50
			C 2209	CKSRYB103K50
E	R 4902	RN1/16SC22R0D		
	R 4903	RN1/16SC22R0D	C 2210	CKSRYB102K50
	R 4904	RN1/16SC39R0D	C 2211	CEAT101M16
	R 4905	RN1/16SK1003D	C 2212	CKSRYB104K16
	R 4906	RN1/16SE6800D	C 2213	CKSRYB104K16
			C 2214	CASA470M10
	R 4951	RS1/16S472J		
	R 4952	RS1/16S472J	C 2215	CKSRYB104K16
	R 4953	RS1/16S472J	C 2241	CASA470M10
	R 4954	RS1/16S472J	C 2242	CKSQYB104K50
	R 4955	RS1/16S472J	C 2243	CASA470M10
			C 2244	CKSQYB104K50
F	R 4956	RS1/16S102J		
	R 4957	RS1/16S102J	C 2245	CKSQYB104K50
	R 4958	RS1/16S102J	C 2246	CEAT101M16
	R 4959	RS1/16S103J	C 2247	CEAT101M16

5		6		7		8	
<u>Circuit Symbol and No.</u>		<u>Part No.</u>		<u>Circuit Symbol and No.</u>		<u>Part No.</u>	
C 2248		CEAT101M16		C 2355		CKSQYB104K50	
C 2249		CKSQYB104K50		C 2356	47μF/25V	CCH1544	
C 2250		CEAT101M16		C 2357		CKSQYB104K50	A
C 2251		CEAT101M16		C 2358	47μF/25V	CCH1544	
C 2252		CCSQCJ3R0C50		C 2365		CFHXSQ102J50	
C 2253		CCSQCJ3R0C50		C 2371		CASA470M10	
C 2254	47μF/25V	CCH1544		C 2372		CKSQYB104K50	
C 2255		CKSQYB104K50		C 2373		CASA470M10	
C 2256	47μF/25V	CCH1544		C 2374		CKSQYB104K50	
C 2257		CKSQYB104K50		C 2375		CKSQYB104K50	
C 2258	47μF/25V	CCH1544		C 2376		CEAT101M16	
C 2265		CFHXSQ102J50		C 2377		CEAT101M16	
C 2271		CASA470M10		C 2378		CEAT101M16	
C 2272		CKSQYB104K50		C 2379		CKSQYB104K50	B
C 2273		CASA470M10		C 2380		CEAT101M16	
C 2274		CKSQYB104K50		C 2381		CEAT101M16	
C 2275		CKSQYB104K50		C 2382		CCSQCJ3R0C50	
C 2276		CEAT101M16		C 2383		CCSQCJ3R0C50	
C 2277		CEAT101M16		C 2384	47μF/25V	CCH1544	
C 2278		CEAT101M16		C 2385		CKSQYB104K50	
C 2279		CKSQYB104K50		C 2386	47μF/25V	CCH1544	
C 2280		CEAT101M16		C 2387		CKSQYB104K50	
C 2281		CEAT101M16		C 2388	47μF/25V	CCH1544	
C 2282		CCSQCJ3R0C50		C 2395		CFHXSQ102J50	
C 2283		CCSQCJ3R0C50		C 2401		CEAT101M16	C
C 2284	47μF/25V	CCH1544		C 2402		CEAT101M16	
C 2285		CKSQYB104K50		C 2407		CKSRYB104K16	
C 2286	47μF/25V	CCH1544		C 2408		CKSRYB104K16	
C 2287		CKSQYB104K50		C 2409		CKSRYB104K16	
C 2288	47μF/25V	CCH1544		C 2410		CKSRYB104K16	
C 2295		CFHXSQ102J50		C 2411		CKSRYB104K16	
C 2301		CKSRYB103K50		C 2412		CKSRYB104K16	
C 2302		CKSRYB103K50		C 2413		CKSRYB104K16	
C 2303		CEAT101M16		C 2414		CKSRYB104K16	
C 2304		CKSRYB104K16		C 3005		CKSRYB103K50	
C 2305		CKSRYB104K16		C 3006		CKSRYB103K50	D
C 2306		CASA470M10		C 3007		CKSRYB105K10	
C 2307		CKSRYB103K50		C 3008		CKSRYB103K50	
C 2308		CKSRYB102K50		C 3009		CFHXS473J16	
C 2309		CKSRYB103K50		C 3012		CCSRCJ3R0C50	
C 2310		CEAT101M16		C 3013		CKSRYB103K50	
C 2311		CKSRYB102K50		C 3014		CASA330M10	
C 2312		CKSRYB104K16		C 3015	220μF/10V	CCH1429	
C 2313		CKSRYB104K16		C 3017		CCSRCJ3R0C50	
C 2314		CASA470M10		C 3018		CKSRYB103K50	
C 2315		CKSRYB104K16		C 3019		CCSRCH470J50	E
C 2341		CASA470M10		C 3020		CCSRCH330J50	
C 2342		CKSQYB104K50		C 3021		CKSRYB103K50	
C 2343		CASA470M10		C 3022		CASA330M10	
C 2344		CKSQYB104K50		C 3023		CKSRYB103K50	
C 2345		CKSQYB104K50		C 3024		CASA330M10	
C 2346		CEAT101M16		C 3025		CKSRYB103K50	
C 2347		CEAT101M16		C 3026		CKSRYB103K50	
C 2348		CEAT101M16		C 3027		CKSRYB104K16	
C 2349		CKSQYB104K50		C 3028		CKSRYB104K16	
C 2350		CEAT101M16		C 3029		CKSRYB104K16	
C 2351		CEAT101M16		C 3030		CKSRYB104K16	F
C 2352		CCSQCJ3R0C50		C 3031		CKSRYB104K16	
C 2353		CCSQCJ3R0C50		C 3032		CKSRYB104K16	
C 2354	47μF/25V	CCH1544		C 3033		CKSRYB104K16	

Circuit Symbol and No.Part No.Circuit Symbol and No.Part No.

	C 3034	CKSRYB104K16	C 4038	CKSRYB102K50
	C 3035	CKSRYB104K16	C 4039	CKSRYB104K16
A	C 3036	CKSRYB104K16	C 4040	CKSRYB104K16
	C 3037	CKSRYB104K16	C 4041	CKSRYB104K16
	C 3038	CKSRYB104K16	C 4042	CKSRYB104K16
	C 3039	CKSRYB104K16	C 4043	CKSRYB104K16
	C 3040	CKSRYB104K16	C 4044	CKSRYB104K16
	C 3041	CKSRYB104K16	C 4045	CKSRYB104K16
	C 3042	CKSRYB104K16	C 4046	CKSRYB104K16
	C 3061	CCSRCH220D50	C 4047	CKSRYB104K16
	C 3062	CCSRCH220D50	C 4048	CKSRYB104K16
	C 3063	CCSRCH220D50	C 4049	CKSRYB104K16
	C 3201	CKSRYB104K16	C 4050	CKSRYB104K16
B	C 3202	CKSRYB104K16	C 4151	CEJQ470M10
	C 3203	CKSRYB104K16	C 4152	CKSRYB104K16
	C 3204	CKSRYB104K16	C 4153	CKSRYB104K16
	C 3205	CKSRYB104K16	C 4154	CASA470M10
	C 3206	CKSRYB104K16	C 4201	CEJQ470M10
	C 3207	CKSRYB104K16	C 4202	CKSRYB104K16
	C 3208	CKSRYB104K16	C 4203	CEJQ470M10
	C 3209	CKSRYB102K50	C 4204	CKSRYB104K16
	C 3210	CKSRYB104K16	C 4205	CKSRYB104K16
	C 3211	CKSRYB104K16	C 4206	CASA470M10
	C 3212	CKSRYB104K16	C 4207	CKSRYB104K16
C	C 3213	CKSRYB103K50	C 4208	CASA470M10
	C 3221	CASA100M6R3	C 4301	CEJQ470M10
	C 3222	CKSRYB104K16	C 4302	CKSRYB104K16
	C 3223	CKSRYB104K16	C 4303	CKSRYB104K16
	C 3224	CEAT101M16	C 4304	CASA470M10
	C 3231	CKSRYB104K16	C 4305	CKSRYB103K50
	C 4001	CEJQ470M10	C 4306	CKSRYB103K50
	C 4002	CKSRYB104K16	C 4307	CKSRYB103K50
	C 4003	CKSRYB104K16	C 4309	CKSRYB103K50
	C 4004	CASA470M10	C 4311	CKSRYB103K50
	C 4005	CKSRYB103K50	C 4312	CKSRYB103K50
D	C 4006	CKSRYB103K50	C 4313	CKSRYB103K50
	C 4007	CKSRYB103K50	C 4315	CKSRYB103K50
	C 4009	CKSRYB103K50	C 4316	CKSRYB103K50
	C 4011	CKSRYB103K50	C 4318	CKSRYB103K50
	C 4012	CKSRYB103K50	C 4320	CKSRYB103K50
	C 4013	CKSRYB103K50	C 4321	CKSRYB103K50
	C 4014	CKSRYB103K50	C 4322	CKSRYB103K50
	C 4015	CKSRYB103K50	C 4323	CKSRYB103K50
	C 4016	CKSRYB103K50	C 4324	CKSRYB103K50
	C 4018	CKSRYB103K50	C 4325	CKSRYB103K50
E	C 4020	CKSRYB103K50	C 4326	CKSRYB103K50
	C 4021	CKSRYB103K50	C 4327	CKSRYB103K50
	C 4022	CKSRYB103K50	C 4329	CKSRYB103K50
	C 4023	CKSRYB103K50	C 4330	CKSRYB103K50
	C 4024	CKSRYB103K50	C 4332	CKSRYB103K50
	C 4025	CKSRYB103K50	C 4334	CKSRYB103K50
	C 4026	CKSRYB103K50	C 4335	CKSRYB103K50
	C 4027	CKSRYB103K50	C 4336	CKSRYB103K50
	C 4029	CKSRYB103K50	C 4337	CKSRYB103K50
	C 4030	CKSRYB103K50	C 4338	CKSRYB102K50
	C 4032	CKSRYB103K50	C 4339	CKSRYB104K16
F	C 4034	CKSRYB103K50	C 4340	CKSRYB104K16
	C 4035	CKSRYB103K50	C 4341	CKSRYB104K16
	C 4036	CKSRYB103K50	C 4342	CKSRYB104K16
	C 4037	CKSRYB103K50	C 4343	CKSRYB104K16

<u>Circuit Symbol and No.</u>	<u>Part No.</u>	<u>Circuit Symbol and No.</u>	<u>Part No.</u>
C 4344	CKSRYB104K16	C 4649	CKSRYB104K16
C 4345	CKSRYB104K16	C 4650	CKSRYB104K16
C 4346	CKSRYB104K16	C 4751	CEJQ470M10
C 4347	CKSRYB104K16	C 4752	CKSRYB104K16
C 4348	CKSRYB104K16	C 4753	CKSRYB104K16
C 4349	CKSRYB104K16	C 4754	CASA470M10
C 4350	CKSRYB104K16	C 4808	CEJQ470M10
C 4451	CEJQ470M10	C 4809	CKSRYB104K16
C 4452	CKSRYB104K16	C 4810	CEJQ470M10
C 4453	CKSRYB104K16	C 4811	CKSRYB104K16
C 4454	CASA470M10	C 4812	CKSRYB104K16
C 4501	CEJQ470M10	C 4813	CASA470M10
C 4502	CKSRYB104K16	C 4814	CKSRYB104K16
C 4503	CEJQ470M10	C 4815	CASA470M10
C 4504	CKSRYB104K16	C 4901	CASA470M10
C 4505	CKSRYB104K16	C 4902	CKSRYB104K16
C 4506	CASA470M10	C 4903	CKSRYB104K16
C 4507	CKSRYB104K16	C 4904	CASA470M10
C 4508	CASA470M10	C 4905	CKSRYB104K16
C 4601	CEJQ470M10	C 4906	CCSRCH180D50
C 4602	CKSRYB104K16	C 4907	CCSRCH220D50
C 4603	CKSRYB104K16	C 4912	CKSRYB104K16
C 4604	CASA470M10	C 4951	CKSRYB104K16
C 4605	CKSRYB103K50	C 4952	CKSRYB104K16
C 4606	CKSRYB103K50	C 4954	CKSRYB104K16
C 4607	CKSRYB103K50	C 4955	CKSRYB104K16
C 4609	CKSRYB103K50		
C 4611	CKSRYB103K50		
C 4612	CKSRYB103K50		
C 4613	CKSRYB103K50		
C 4614	CKSRYB103K50		
C 4615	CKSRYB103K50		
C 4616	CKSRYB103K50		
C 4618	CKSRYB103K50		
C 4620	CKSRYB103K50		
C 4621	CKSRYB103K50		
C 4622	CKSRYB103K50		
C 4623	CKSRYB103K50		
C 4624	CKSRYB103K50		
C 4625	CKSRYB103K50		
C 4626	CKSRYB103K50		
C 4627	CKSRYB103K50		
C 4629	CKSRYB103K50		
C 4630	CKSRYB103K50		
C 4632	CKSRYB103K50		
C 4633	CKSRYB103K50		
C 4635	CKSRYB103K50		
C 4636	CKSRYB103K50		
C 4637	CKSRYB103K50		
C 4638	CKSRYB102K50		
C 4639	CKSRYB104K16		
C 4640	CKSRYB104K16		
C 4641	CKSRYB104K16		
C 4642	CKSRYB104K16		
C 4643	CKSRYB104K16		
C 4644	CKSRYB104K16		
C 4645	CKSRYB104K16		
C 4646	CKSRYB104K16		
C 4647	CKSRYB104K16		
C 4648	CKSRYB104K16		

**Control Unit
Consists of
Control PCB
Switch PCB
USB PCB
IPIN PCB
Ach PCB
IPOUT PCB
SW PCB
LOW PCB
MID PCB**

CDEFGHIJK

Unit Number:CWM9586

Unit Name:Control Unit

MISCELLANEOUS

IC 101	IC	AD7564BRS
IC 102	IC	LT1358CS8
IC 104	IC	LT1358CS8
IC 106	IC	TC7WH04FU
IC 301	IC	TC7SET32FU
IC 302	IC	TC7SET32FU
IC 303	IC	TC7SET32FU
IC 304	IC	TC7SH32FU
IC 601	IC	PD5952A
IC 651	IC	AN2135S
IC 701	IC	HA12240FP
IC 751	IC	S-80827CNUA-B8M
IC 752	IC	TC7SET04FU
IC 801	IC	AN8011S

Circuit Symbol and No.**Part No.****Circuit Symbol and No.****Part No.**

	IC 851	IC	AN8011S	D 852	Diode	RB060L-40
A	IC 896	IC	NJM79L18UA	D 887	Diode	RB160L-40
	IC 897	IC	NJM79L18UA	D 888	Diode	RB160L-40
	IC 898	IC	NJM78L18UA	D 889	Diode	RB160L-40
	IC 899	IC	NJM78L18UA	D 890	Diode	RB160L-40
	IC 921	IC	S-812C33AMC-C2N	D 891	Diode	UDZS5R6(B)
	IC 922	IC	S-812C33AMC-C2N	D 896	LED	CL190DCD
	Q 201	Transistor	IMX1	D 897	LED	CL190DCD
	Q 202	Transistor	IMX1	D 898	LED	CL190DCD
	Q 301	Transistor	2SC4453	D 899	LED	CL190DCD
	Q 302	Transistor	2SC4453	D 901	Diode	ERA15-02VH
	Q 303	Transistor	2SC4453	D 911	Diode	UDZS5R6(B)
B	Q 304	Transistor	2SC2412K	D 912	Diode	ERA15-02VH
	Q 401	Transistor	DTC144EK	D 921	Diode	ERA15-02VH
	Q 699	Transistor	DTC144EU	D 931	Diode	DAN202U
	Q 700	Transistor	2SA1162	D 941	Diode	DAN202U
		Q 801	Transistor	UMZ1N	D 942	Diode
	Q 802	Transistor	UMZ1N	D 943	Diode	UDZS8R2(B)
	Q 803	Transistor	2SJ529S	D 971	Diode	DAN202U
	Q 804	Transistor	2SJ529S	D 972	Diode	UDZS6R8(B)
	Q 810	Transistor	2SK1485	D 981	Diode	DAN202U
	Q 811	Transistor	2SK1485	D 982	Diode	DAN202U
C	Q 812	Transistor	2SB1708	L 301	Inductor	CTF1407
	Q 813	Transistor	2SC2712	L 302	Inductor	LCTC4R7K2125
	Q 814	Transistor	2SC2712	L 303	Inductor	LCTC4R7K1608
	Q 815	Transistor	2SC2712	L 304	Inductor	CTF1407
		Q 851	Transistor	UMZ1N	L 305	Inductor
	Q 852	Transistor	UMZ1N	L 306	Inductor	LCTC4R7K1608
	Q 853	Transistor	2SJ529S	L 307	Inductor	CTF1407
	Q 854	Transistor	2SJ529S	L 308	Inductor	LCTC4R7K2125
	Q 891	Transistor	2SB942	L 309	Inductor	LCTC4R7K1608
	Q 911	Transistor	2SD1760F5	L 310	Inductor	LCTC1R8K2125
D	Q 912	Transistor	DTA124EU	L 316	Inductor	LCTC120K2125
	Q 931	Transistor	DTC114EK	L 333	Inductor	CTF1334
	Q 932	Transistor	2SA1163	L 334	Inductor	CTF1334
	Q 941	Transistor	2SC2412K	L 335	Inductor	CTF1334
		Q 951	Transistor	2SA1037K	L 651	Inductor
	Q 952	Transistor	DTC124EK	L 701	Inductor	CTF1410
	Q 971	Transistor	2SC2412K	L 710	Inductor	LCTC4R7K1608
	Q 972	Transistor	DTC114EK	L 801	Inductor	CTH1285
	Q 973	Transistor	2SC2412K	L 802	Inductor	CTH1285
	Q 974	Transistor	2SC2412K	L 803	Inductor	CTH1255
E	Q 981	Transistor	2SC2412K	L 804	Inductor	CTF1379
	Q 982	Chip Transistor	2SC2712	L 805	Inductor	CTF1379
	Q 983	Chip Transistor	2SC2712	L 811	Inductor	CTH1255
	Q 984	Transistor	IMD2A	L 812	Coil	CTH1110
		D 201	Diode	DAP202U	L 813	Coil
	D 202	Diode	DAP202U	L 851	Inductor	CTH1255
	D 301	Diode	1SS352	L 921	Inductor	LCTC4R7K2125
	D 401	LED	NSCW100-0231	L 922	Inductor	LCTC4R7K2125
	D 601	Diode	DAN202U	T 851	Transformer	CTT1111
	D 651	Diode	DAP202U	T 852	Transformer	CTT1111
	D 652	Diode	DAN202U	X 601	Crystal Resonator 10MHz	CSS1613
	D 653	Diode	MA111	X 651	Crystal Resonator 12MHz	CSS1614
	D 751	Diode	MA111	S 401	Rotary Switch(H/HM/HL)	CSD1097
	D 777	Diode	UDZS18(B)	S 404	Switch(SYSTEM RESET)	CSG1039
F	D 778	Diode	UDZS18(B)	S 405	Switch(RESET)	CSG1039
	D 801	Diode	RB083L-20	EF801	EMI Filter	CCG1083
	D 802	Diode	RB060L-40	EF802	EMI Filter	CCG1083
	D 851	Diode	RB060L-40	EF803	EMI Filter	CCG1083

<u>Circuit Symbol and No.</u>		<u>Part No.</u>	<u>Circuit Symbol and No.</u>		<u>Part No.</u>
EF851	EMI Filter	CCG1083	R 654		RS1/16S152J
			R 655		RS1/16S220J
EF852	EMI Filter	CCG1083			
EF891	EMI Filter	CCG1083	R 656		RS1/16S101J
EF901	EMI Filter	CCG1109	R 657		RS1/16S220J
			R 658		RS1/16S101J
			R 659		RS1/16S222J
			R 660		RS1/16S222J
R 201		RN1/10SE4700D			
R 202		RS1/16S222J	R 661		RS1/16S101J
R 203		RS1/16S222J	R 662		RS1/16S103J
R 204		RN1/10SE4700D	R 663		RS1/16S103J
R 205		RN1/10SE4700D	R 664		RAB4C101J
			R 666		RAB4C101J
R 206		RS1/16S222J			
R 207		RS1/16S222J	R 669		RAB4C101J
R 208		RN1/10SE4700D	R 670		RAB4C101J
R 217		RN1/10SE2202D	R 671		RS1/16S101J
R 218		RN1/10SE2202D	R 672		RS1/16S101J
			R 681		RS1/16S101J
R 219		RN1/10SE2202D			
R 220		RN1/10SE2202D	R 691		RS1/16S102J
R 301		RN1/16SE3900D	R 692		RS1/16S102J
R 302		RN1/16SE1101D	R 693		RS1/16S102J
R 303		RN1/16SE3900D	R 694		RS1/16S102J
			R 699		RS1/16S222J
R 304		RN1/16SE1101D			
R 305		RN1/16SE3900D	R 700		RS1/16S472J
R 306		RN1/16SE1101D	R 703		RS1/16S101J
R 308		RS1/16S102J	R 704		RS1/16S101J
R 309		RS1/16S473J	R 705		RS1/16S102J
			R 751		RS1/16S102J
R 310		RS1/16S102J			
R 312		RS1/16S470J	R 752		RS1/16S104J
R 322		RS1/16S101J	R 801		RS1/16S3901D
R 323		RS1/16S101J	R 802		RS1/16S1002D
R 324		RS1/16S101J	R 804		RS1/16S3302D
			R 805		RS1/16S1001D
R 333		RN1/16SE1001D			
R 334		RN1/16SE1001D	R 806		RS1/16S2002D
R 335		RN1/16SE1001D	R 807		RS1/16S471J
R 401		RS1/16S333J	R 808		RS1/16S471J
R 402		RS1/16S101J	R 809		RS1/16S152J
			R 810		RS1/16S152J
R 403		RS1/16S153J			
R 404		RS1/16S153J	R 813		RS1/16S2001D
R 420		RS1/16S0R0J	R 814		RN1/16SE2702D
R 421		RS1/16S0R0J	R 815		RN1/16SE1002D
R 601		RS1/16S103J	R 816		RN1/16SE1002D
			R 817		RN1/16SE1002D
R 602		RS1/16S102J			
R 603		RS1/16S103J	R 818		RN1/16SE1001D
R 605		RS1/16S472J	R 819		RS1/16S103J
R 606		RS1/16S472J	R 820		RS1/16S103J
R 608		RS1/16S103J	R 821		RS1/16S223J
			R 822		RS1/16S223J
R 609		RS1/16S103J			
R 610		RS1/16S103J	R 823		RS1/16S101J
R 611		RS1/16S103J	R 824		RS1/16S2202D
R 613		RS1/16S103J	R 825		RS1/16S101J
R 614		RS1/16S103J	R 826		RS1/16S2202D
			R 827		RS1/16S224J
R 616		RS1/16S101J			
R 630		RS1/16S101J	R 828		RS1/16S224J
R 631		RS1/16S104J	R 829		RS1/16S1802D
R 640		RS1/16S0R0J	R 830		RS1/16S1502D
R 650		RS1/16S103J	R 831		RS1/16S103J
			R 832		RS1/16S6801D
R 651		RS1/16S103J			
R 652		RS1/16S103J	R 840		RS1/16S473J
R 653		RS1/16S153J	R 841		RS1/16S473J
			R 842		RS1/16S473J

Circuit Symbol and No.Part No.Circuit Symbol and No.Part No.

	R 843	RS1/16S473J	C 101		CKSRYB104K25
	R 844	RS1/16S104J	C 102		CKSRYB104K25
			C 103		CCSQCH220J50
A	R 845	RS1/16S104J	C 104		CCSQCH220J50
	R 846	RS1/16S103J	C 105		CEAT331M25
	R 847	RS1/16S101J			
	R 848	RS1/8S101J	C 106		CKSRYB104K25
	R 849	RN1/16SE2201D	C 107		CKSRYB104K25
			C 108		CKSRYB104K25
	R 851	RS1/16S3901D	C 111		CEAT331M25
	R 853	RS1/16S5102D	C 112		CKSRYB104K25
	R 854	RS1/16S1001D			
	R 857	RS1/16S2702D	C 113		CCSQCH220J50
	R 863	RS1/16S472J	C 114		CCSQCH220J50
			C 118	100µF/25V	CCH1632
	R 864	RS1/16S472J	C 119	100µF/25V	CCH1632
B	R 865	RS1/16S472J	C 120	100µF/25V	CCH1632
	R 866	RS1/16S472J			
	R 867	RS1/16S101J	C 121	100µF/25V	CCH1632
	R 868	RS1/16S3002D	C 122		CKSRYB104K25
			C 141		CEANP100M16
	R 869	RS1/16S101J	C 142		CEANP100M16
	R 870	RS1/16S3002D	C 143		CEANP100M16
	R 871	RS1/16S224J			
	R 872	RS1/16S224J	C 144		CKSRYB473K16
	R 873	RS1/16S1802D	C 145		CKSRYB473K16
			C 146		CKSRYB473K16
	R 874	RS1/16S1502D	C 147		CKSRYB473K16
	R 875	RS1/16S103J	C 155		CEANP100M16
C	R 876	RS1/16S6801D			
	R 877	CCH1150	C 201	100µF/16V	CCH1631
	R 891	RS1/16S103J	C 202	100µF/16V	CCH1631
			C 203	100µF/16V	CCH1631
	R 901	RS1/8S222J	C 204	100µF/16V	CCH1631
	R 911	RS1/16S223J	C 301		CKSRYB104K25
	R 912	RS1/10S102J			
	R 913	RS1/10S102J	C 302		CKSYB106K6R3
	R 931	RS1/16S103J	C 303		CCSRCH150J50
			C 304		CKSYB106K6R3
	R 932	RS1/16S473J	C 305		CKSRYB103K50
	R 941	RS1/16S473J	C 306		CKSRYB104K25
D	R 942	RS1/16S103J			
	R 943	RS1/16S473J	C 307		CKSYB106K6R3
	R 951	RS1/10S223J	C 308		CCSRCH150J50
			C 309		CKSYB106K6R3
	R 952	RS1/10S473J	C 310		CKSRYB103K50
	R 971	RS1/16S103J	C 311		CKSRYB104K25
	R 972	RS1/16S103J			
	R 974	RS1/16S333J	C 312		CKSYB106K6R3
	R 975	RS1/16S473J	C 313		CCSRCH150J50
			C 314		CKSYB106K6R3
	R 976	RS1/16S333J	C 315		CKSRYB103K50
	R 977	RS1/16S473J	C 316		CKSRYB104K25
	R 978	RS1/16S104J			
E	R 979	RS1/16S473J	C 317		CKSRYB104K25
	R 980	RS1/16S473J	C 318		CKSRYB104K25
			C 324		CCSRCH220J50
	R 981	RS1/16S333J	C 328		CKSRYB104K25
	R 982	RS1/16S104J	C 351		CKSRYB104K25
	R 983	RS1/16S473J			
	R 984	RS1/16S103J	C 401		CKSQYB104K16
	R 985	RS1/16S103J	C 402		CKSRYB103K50
			C 403		CKSRYB103K50
	R 986	RS1/16S473J	C 601		CCSRCH7R0D50
	R 987	RS1/16S102J	C 602		CCSRCH7R0D50
	R 989	RS1/16S473J			
	R 990	RS1/16S104J	C 603		CKSRYB104K25
F	R 991	RS1/10S101J	C 604		CCSRCH101J50
			C 605		CEJQ4R7M35
			C 607		CCSRCH102J50
			C 651		CCSRCH100D50

CAPACITORS

5		6		7		8	
<u>Circuit Symbol and No.</u>		<u>Part No.</u>		<u>Circuit Symbol and No.</u>		<u>Part No.</u>	
C 652		CCSRCH100D50		C 878		CKSRYB103K50	
C 653		CKSRYB105K10		C 879		CKSRYB103K50	
C 660		CKSRYB104K25		C 880		CEAT470M35	
C 661		CKSRYB104K25		C 881		CEHAZL101M25	A
C 670		CKSRYB103K50		C 887	47µF/25V	CCH1544	
C 671		CKSRYB104K25		C 888	47µF/25V	CCH1544	
C 701		CKSRYB104K25		C 889		CKSRYB104K25	
C 704		CCSRCH102J50		C 890		CKSRYB104K25	
C 705		CCSRCH102J50		C 891		CEAT470M10	
C 706		CKSRYB104K25		C 892		CKSRYB473K16	
C 710		CKSRYB103K50		C 893	47µF/25V	CCH1394	
C 720		CKSRYB104K50		C 894		CKSRYB104K25	
C 751		CKSRYB104K25		C 895	47µF/25V	CCH1544	
C 752		CKSRYB104K25		C 896		CKSRYB104K25	
C 801		CEHAZL680M16		C 897		CEAL4R7M35	B
C 802		CEHAZL680M16		C 898	47µF/25V	CCH1544	
C 803	47µF/25V	CCH1643		C 899		CKSRYB104K25	
C 804		CKSRYB104K25		C 901		CKSRYB104K25	
C 805		CKSRYB104K25		C 902	1000µF/25V	CCH1381	
C 806		CEHAZL331M6R3		C 911	1.0F	CCL1060	
C 807		CEHAZL680M16		C 912		CEJQ101M6R3	
C 808		CEHAZL680M16		C 913		CKSRYB473K16	
C 809	1000µF/10V	CCH1184		C 914		CEAT470M35	
C 814		CKSRYB104K25		C 921		CEAT470M10	
C 815		CKSRYB105K10		C 922		CKSRYB104K25	C
C 816		CKSRYB105K10		C 923		CKSRYB104K25	
C 819		CEAL4R7M35		C 926		CKSRYB104K25	
C 820		CEAL4R7M35		C 927		CEJQ4R7M35	
C 821		CCSRCH101J50		C 928		CEAT470M10	
C 830		CKSRYB104K25		C 929		CKSRYB104K25	
C 831		CKSRYB104K50		C 930		CKSRYB104K25	
C 840		CEHAZA221M6R3		C 940	3300µF/25V	CCH1131	
C 845	47µF/25V	CCH1632		C 941		CEAT470M35	
C 846	47µF/25V	CCH1632		C 971		CCSRCH101J50	
C 847	47µF/25V	CCH1632		C 981		CEAT470M35	
C 848	47µF/25V	CCH1632		C 991		CEAT470M10	D
C 849	47µF/25V	CCH1643		C 992		CEAT470M10	
C 850		CEAT470M35					
C 851		CEHAZL680M16					
C 852		CEHAZL680M16					
C 853		CKSRYB104K25					
C 854		CKSRYB104K25					
C 855		CEHAZL101M25					
C 856		CEHAZL101M25					
C 857		CKSRYB104K25					
C 859		CEHAZL560M50					E
C 860		CEHAZL560M50					
C 863		CCSRCH331J50					
C 864		CCSRCH331J50					
C 865		CKSRYB104K25					
C 866		CKSQYB475K6R3					
C 867		CKSQYB475K6R3					
C 868		CKSRYB473K16					
C 869		CKSRYB473K16					
C 870		CEAL4R7M35					
C 871		CEJQ330M10					
C 872		CCSRCH101J50					F
C 875	47µF/25V	CCH1643					
C 876	47µF/25V	CCH1643					
C 877		CEHAZA221M6R3					

6. ADJUSTMENT

6.1 AMP UNIT ADJUSTMENT



The items for adjusting AMP unit are:

- ① Offset Voltage
- ② Idling Voltage

Refer to the 126 pages for connection of the system at the time of adjustment and repair.

Both items are adjustable if the bottom plate of the product is removed to expose the unit.

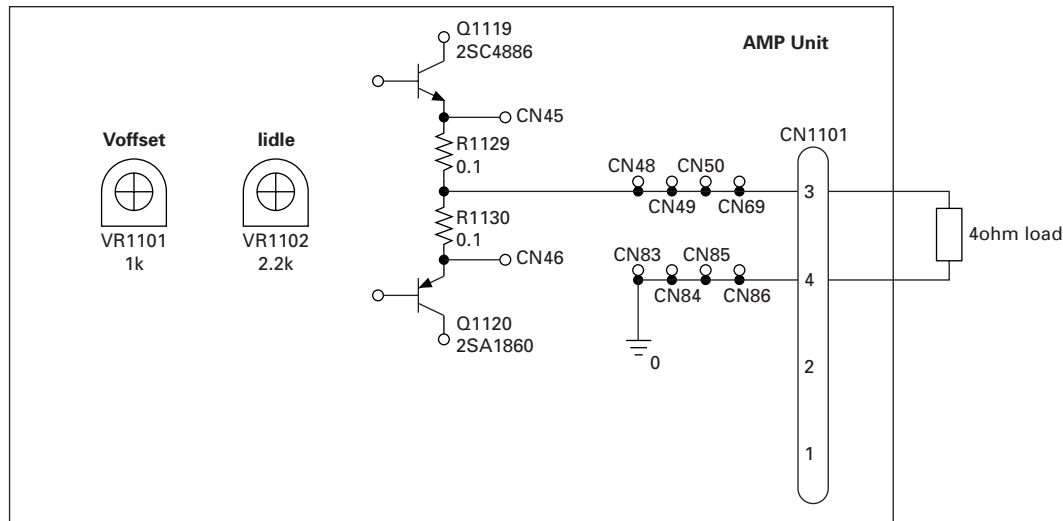
Adjustment is capable using half-fixed resistance, by inserting the precise driver into a hole on the base plate from its surface B.

When adjusting offset voltage--- VR1101, VR1201, VR1301, VR1401

When adjusting idling current--- VR1102, VR1202, VR1302, VR1402

B Connecting Diagram for AMP Unit

[Offset Voltage/Idling Current Adjustment and Confirmation]



Remarks

- 1 When adjusting and confirming the offset voltage/idling current, connect 4Ω load to the speaker output terminal.
- 2 Input must be non-signal.
- 3 For adjusting offset voltage, coarsely control with VR1101, VR1201, VR1301, VR1401 immediately after powering ON, within 3 or 4 minutes.
Idling current must also be coarsely adjusted at the same time.
- 4 Idling current must be adjusted with VR1102, VR1202, VR1302, VR1402 immediately after the completion of offset voltage adjustment (within 4 or 5 minutes after powering ON).
- 5 Both adjustments must be completed within 3 to 5 minutes after powering ON.
- 6 For confirming, measure "within 3 to 5 minutes" after powering ON.
- 7 Measuring points for Rated Value No.13 (offset voltage)
 - AL (CN66-CN95) or its equivalent land
 - AR (CN48-CN83) or its equivalent land
 - BL (CN60-CN91) or its equivalent land
 - BR (CN54-CN87) or its equivalent land
- 8 Measuring points for Rated Value No.14 (idling current)
 - AL (CN63-CN64)
 - AR (CN45-CN46)
 - BL (CN57-CN58)
 - BR (CN51-CN52)

Postscript) The voltage between R1129 and R1130 as shown in the above diagram is to be measured so as to adjust the idling current in:
*When mounted on main Main Heat Sink --- 30mV (150mA × 0.2 Ω)
*When not mounted on main Main Heat Sink --- 20mV (100mA × 0.2 Ω)

Item	Rated Value	Item
Intermediate Voltage (Offset Voltage)	0 Below $\pm 30\text{mV}$	Set volume value of Main Unit to -72dB and \pm both ends voltage of output when CD is reproduced without recording. *1
Idling Current	150 $\pm 50\text{mA}$	Set volume value of Main Unit to -72dB and reproduce CD without recording. *1

*1 : 23 tracks of test disc(YEDS-7)

Note)

When adjusting by AMP unit alone (in the state removed from the main heat sink), set the idling current to: $100 \pm 50\text{mA}$.

Reason: Since the temperatures for Power TR vary according to their radiator capacity, the adjustment values must be different with or without the main heat sink.

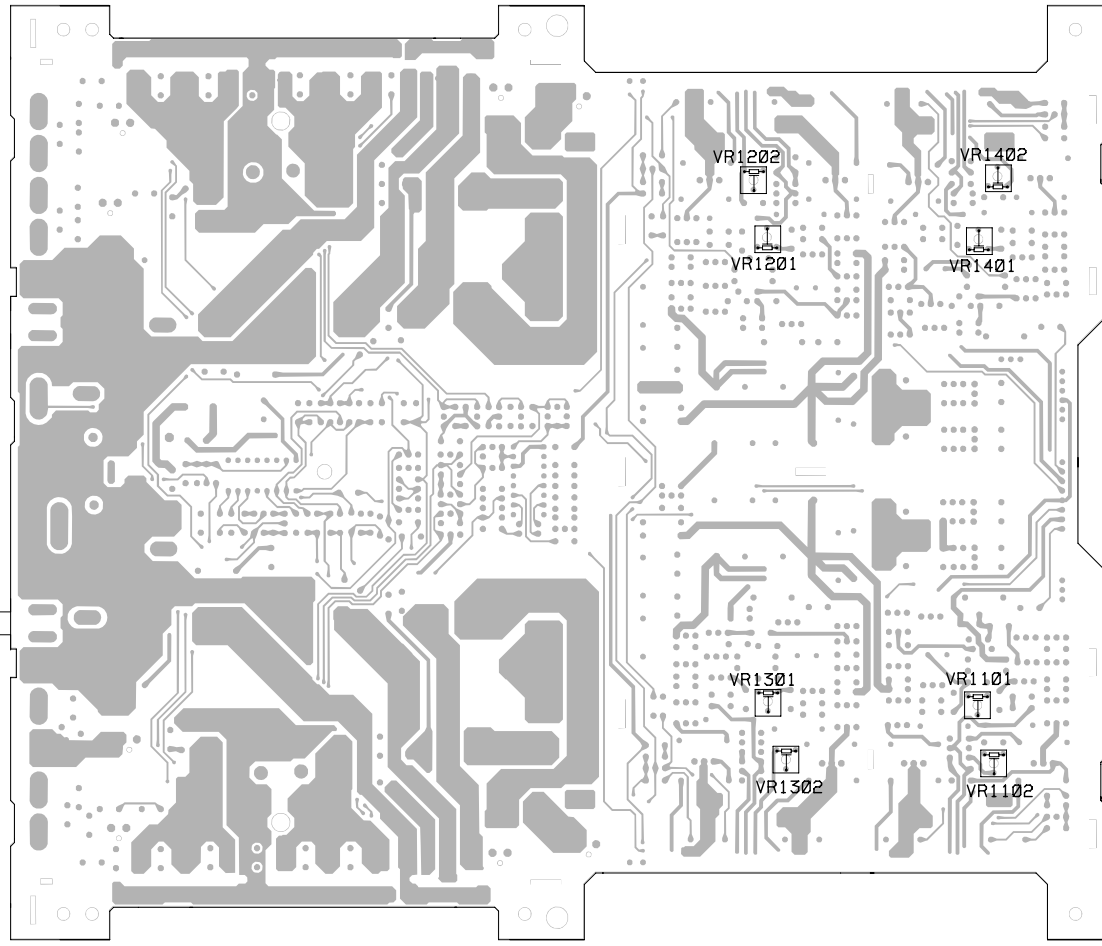
● TEST POINT

SIDE A

A

B

C

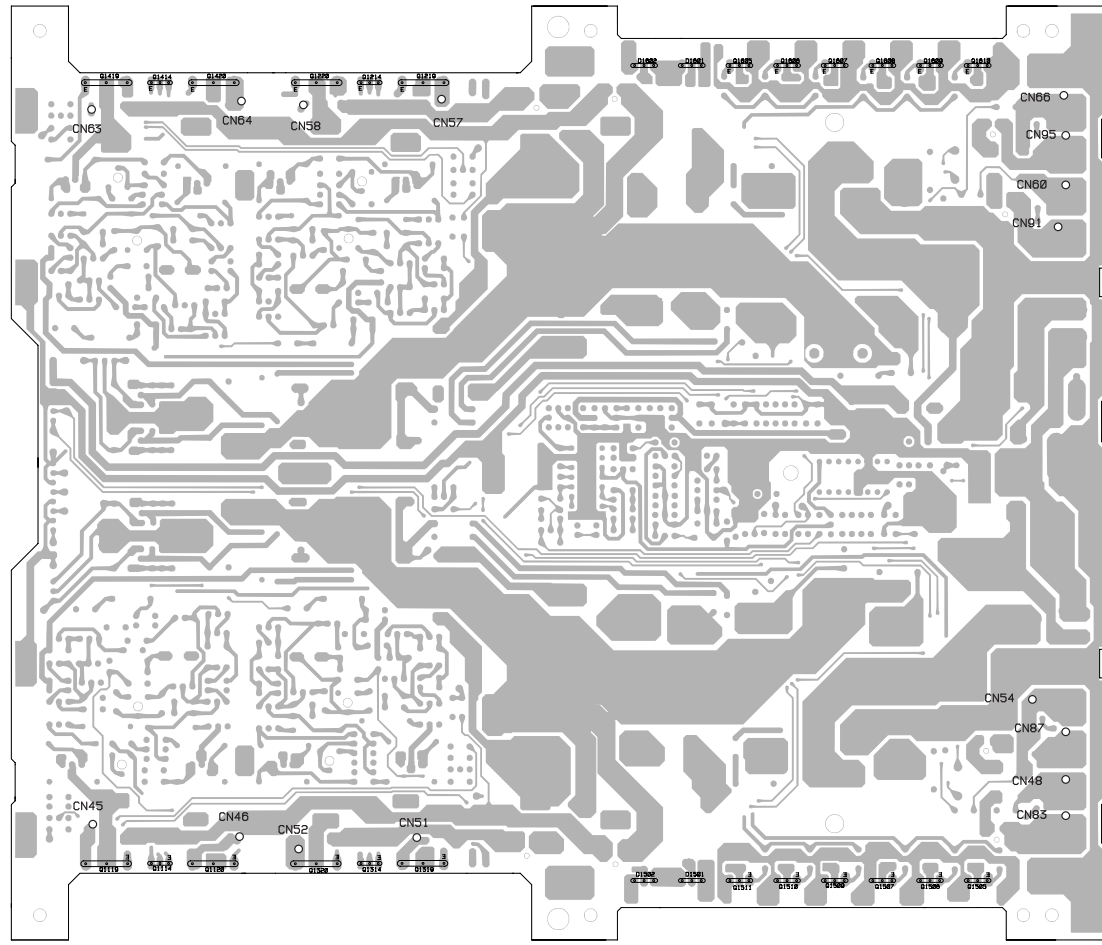


SIDE B

D

E

F



6.2 DSP UNIT ADJUSTMENT



The items for adjusting DSP unit are:

- ① Offset voltage
- ② Master clock

The adjustment for service should be served in the product condition, instead of in the unit condition. (Otherwise, it would require jigs.)

Both adjustments are capable by removing the bottom plate of product, the sealed case of Control Assy and black panel (IN/OUT-signal printed side) to expose the face A of DSP unit.

Adjustment is done by using the following half-fixed resistance and the trimmer capacitor:

For adjusting offset voltage --- VR2241, VR2271, VR2341, VR2371

For adjusting master clock --- TC3001

(Measuring instruments to be used)

For adjusting offset voltage: Voltage measuring device such as a multi-meter

For adjusting master clock: Frequency counter or high-frequency probe

(Adjustment Requirements)

Operate the product in the following requirements and make adjustment within 2 or 3 minutes from the start of such operation.

No.	Item	Rated Value	Requirements
1	Offset Voltage	0 Below $\pm 10\text{mV}$	Set volume value of Main Unit to -72dB and reproduce CD without recording. *1
2	Master clock	$24.576\text{MHz} \pm 20\text{Hz}$	Set volume value of Main Unit to -72dB and reproduce CD without recording. *1

*1 : 23 tracks of test disc(YEDS-7)

Sensing pin land of AL2 : its equivalent land and GND

Sensing pin land of AR2 : its equivalent land and GND

Sensing pin land of BL2 : its equivalent land and GND

Sensing pin land of BR2 : its equivalent land and GND

(The measuring points for adjusting master clock)

TP3001 or its equivalent land and TP3002 or its equivalent GND

(Waveform Confirmation for Adjustment)

Waveform confirmation is required since the waveform may be deformed according to the type of probe to be used when adjusting master clock.

The waveform is basically a rectangular wave of 0 --- 3.3V (24.576MHz).

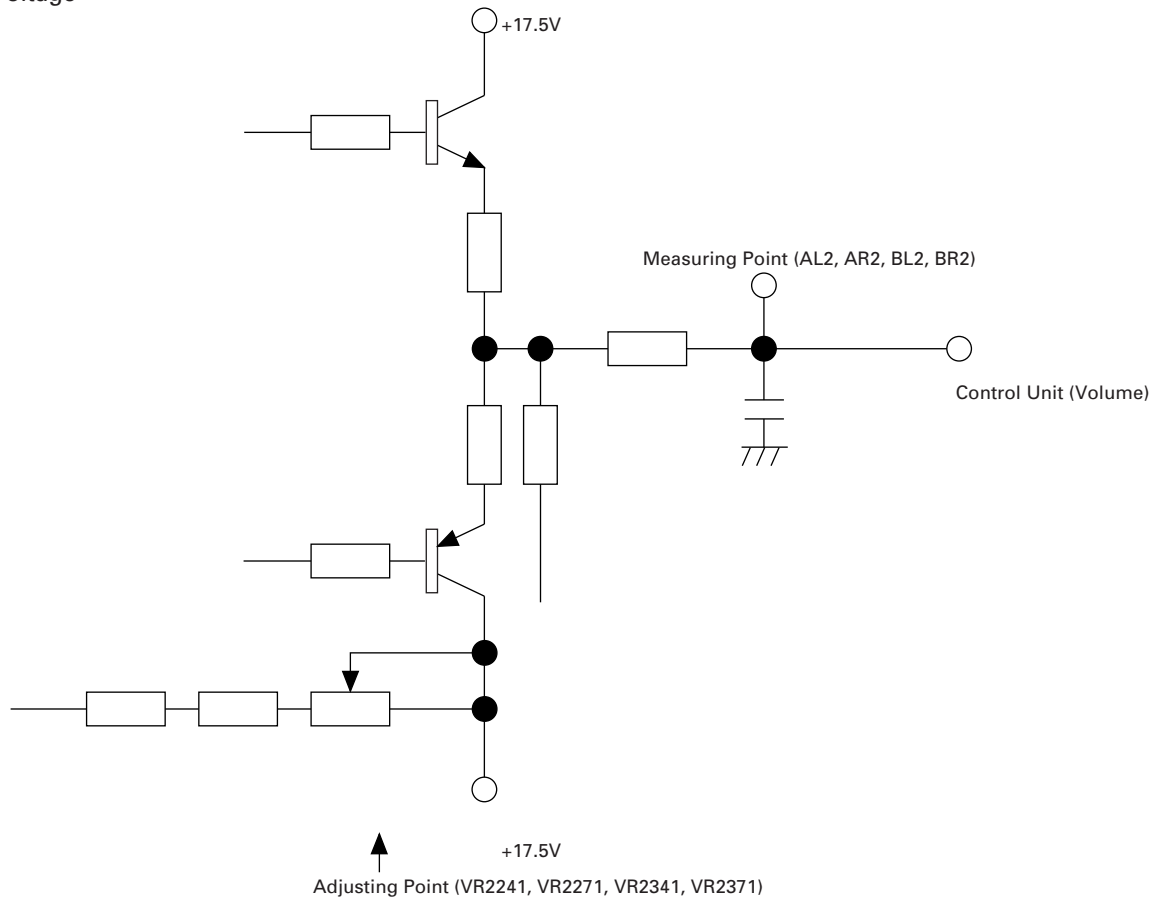


(Connecting Diagram for DSP Unit)
Offset Voltage

A

B

C

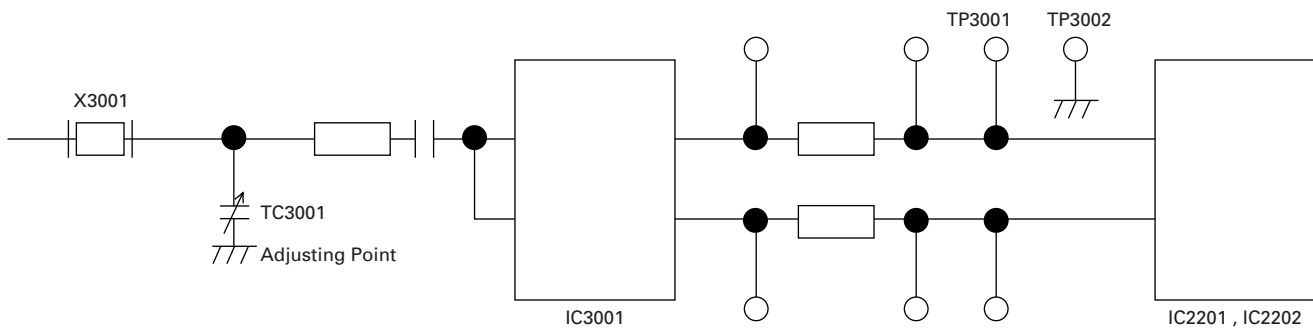


Master Clock

D

E

F



Remarks

- 1 Offset voltage/Master clock must be adjusted in the product condition.
- 2 Input signal must be CD—∞signal. 23 tracks of test disc(YEDS-7)
- 3 The adjustment for offset voltage/master clock must be done within 2 or 3 minutes from the start of product operation. A
- 4 Master clock must be adjusted using high-frequency probe.
- 5 The measuring points for adjusting offset voltage must be as follows:
 - Sensing pin land : AL2 or its equivalent land and GND
 - Sensing pin land : AR2 or its equivalent land and GND
 - Sensing pin land : BL2 or its equivalent land and GND
 - Sensing pin land : BR2 or its equivalent land and GND
- 6 The measuring points for adjusting master clock must be as follows:
 - TP3001 or its equivalent land and TP3002 or its equivalent GND B

A

B

C

D

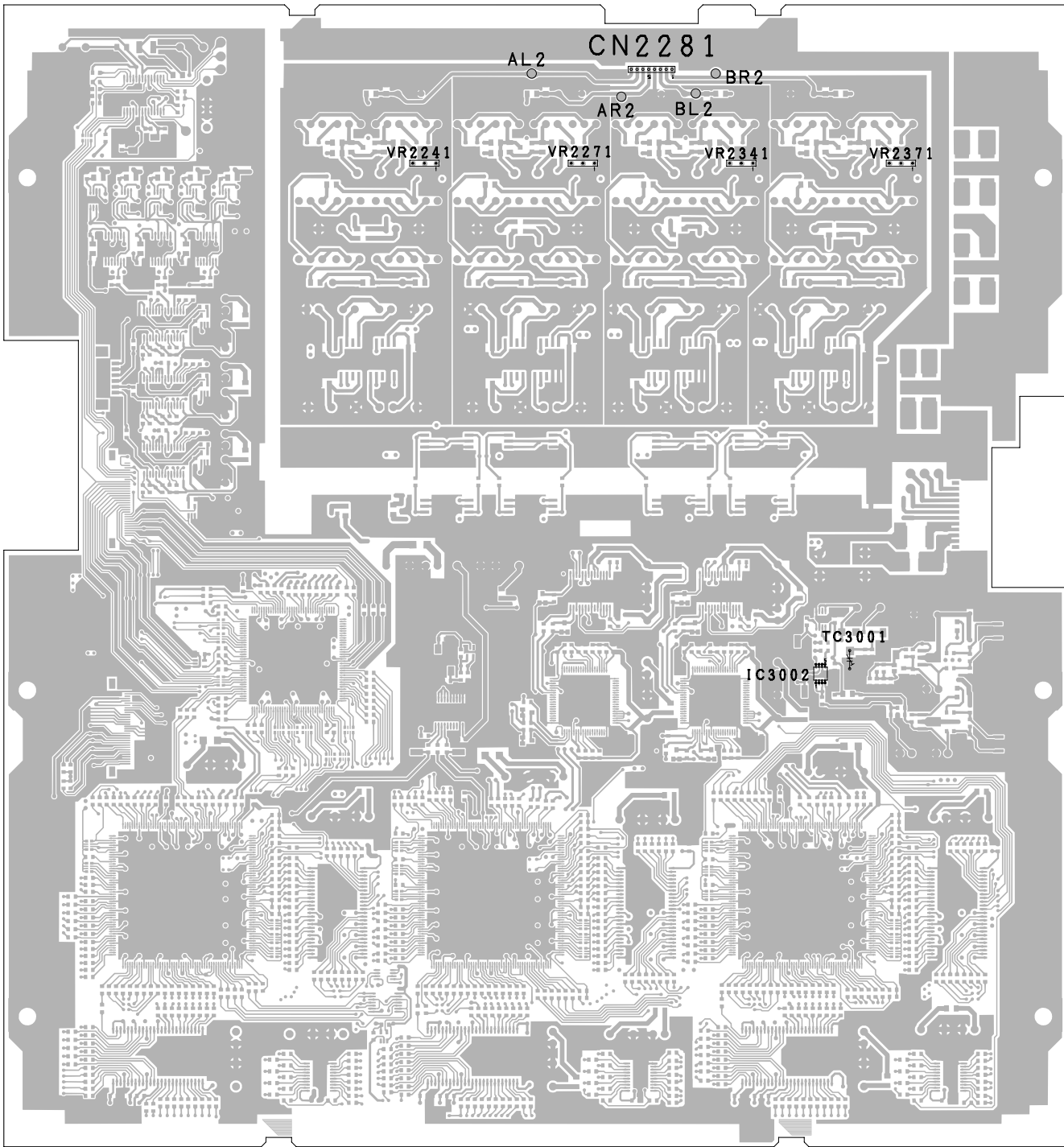
E

F

● TEST POINT

SIDE A

A
B
C
D
E
F



7. GENERAL INFORMATION

7.1 DIAGNOSIS

7.1.1 DISASSEMBLY

●Removing the Cover1,2(Fig.1)

- ➔ **1** Remove the twelve screws and then remove the Cover1,2.

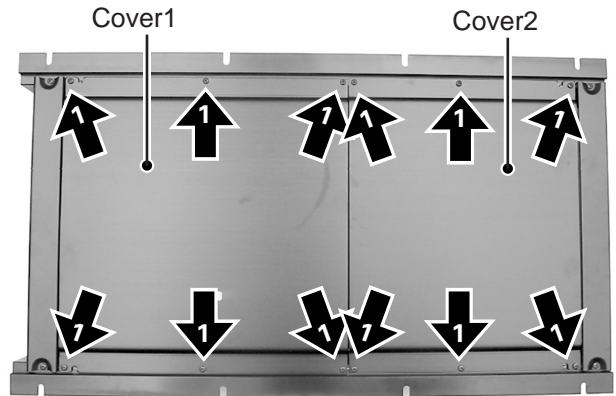


Fig.1

●Removing the Amp Unit(Fig.2)

- ➔ **1** Remove the eight screws.
- ➔ **2** Disconnect the two connectors and then remove the Amp Unit.

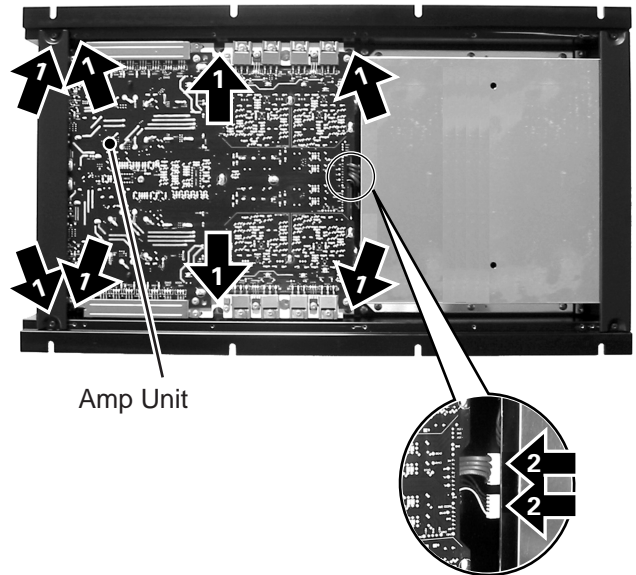


Fig.2

●Removing the Case(Fig.3)

- ➔ **1** Remove the eight screws and then remove the Case.

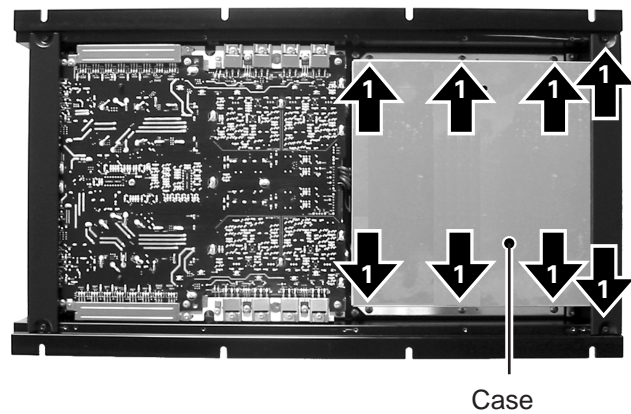


Fig.3

● Removing the Case (Fig.4)

A

1 Remove the two screws and then remove the case.

B

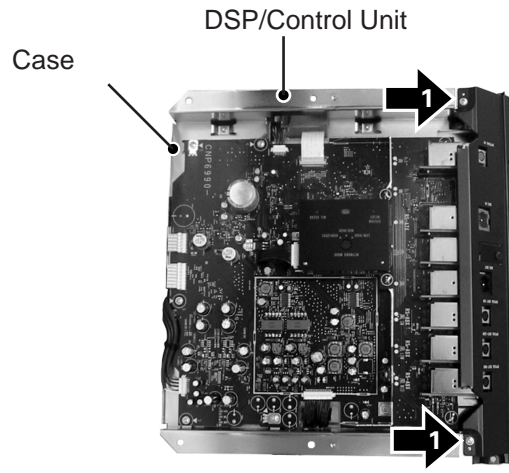


Fig.4

C

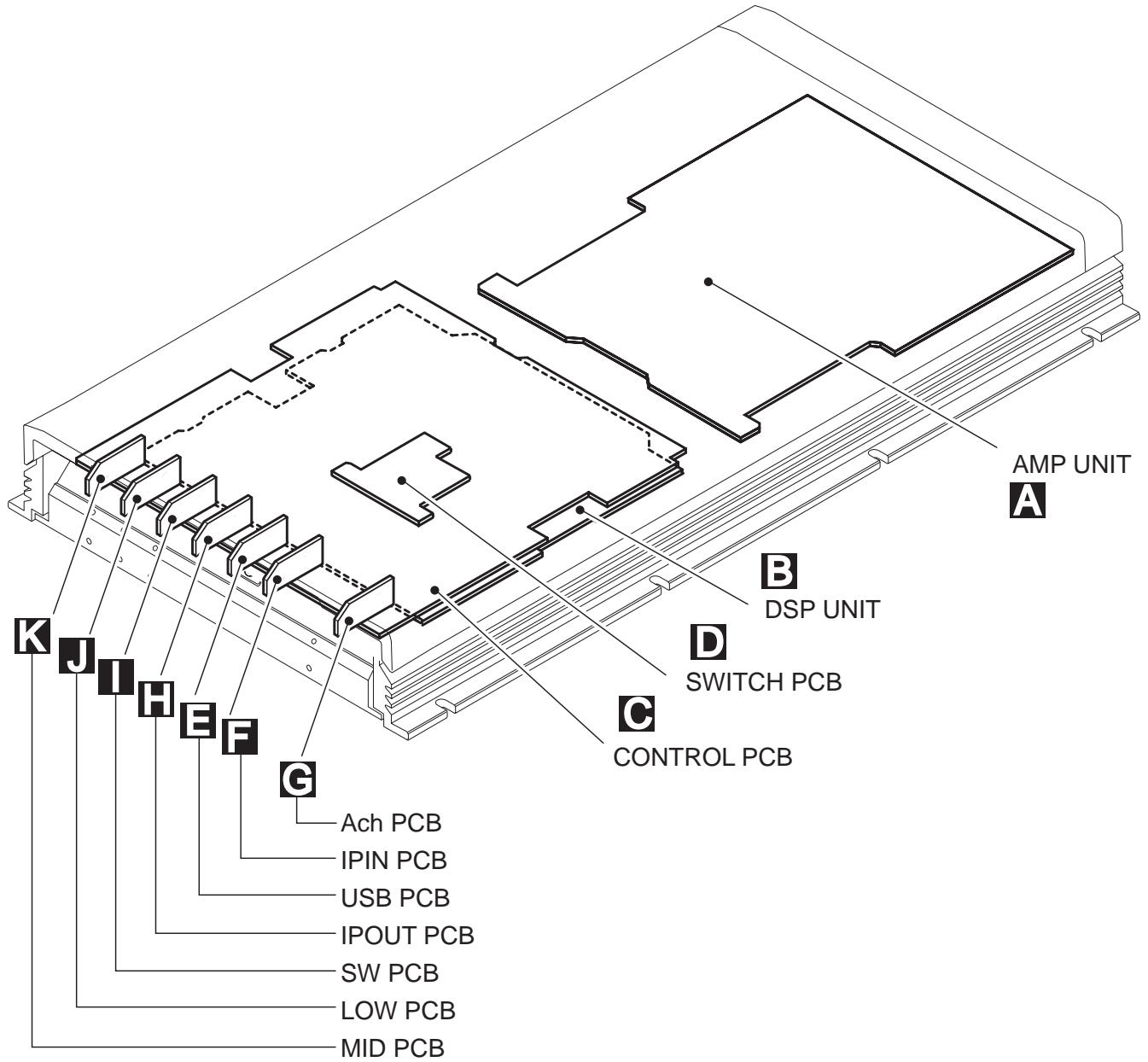
D

E

F

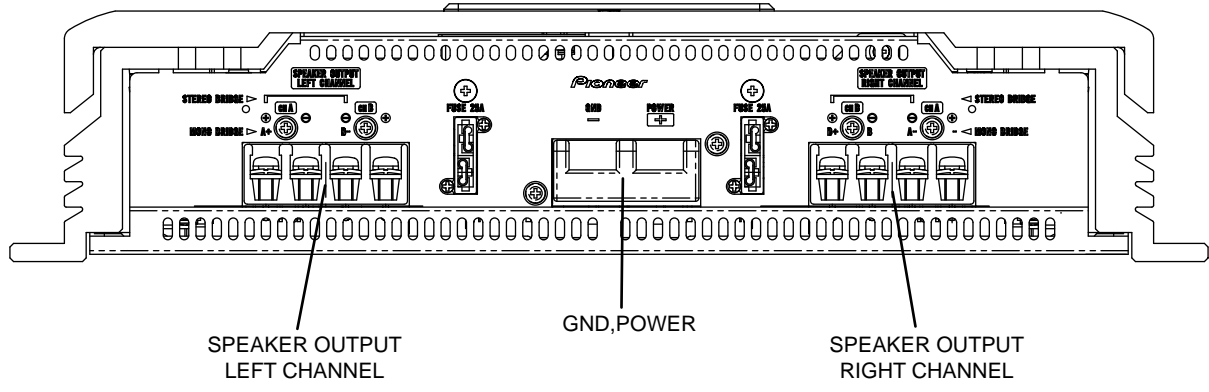
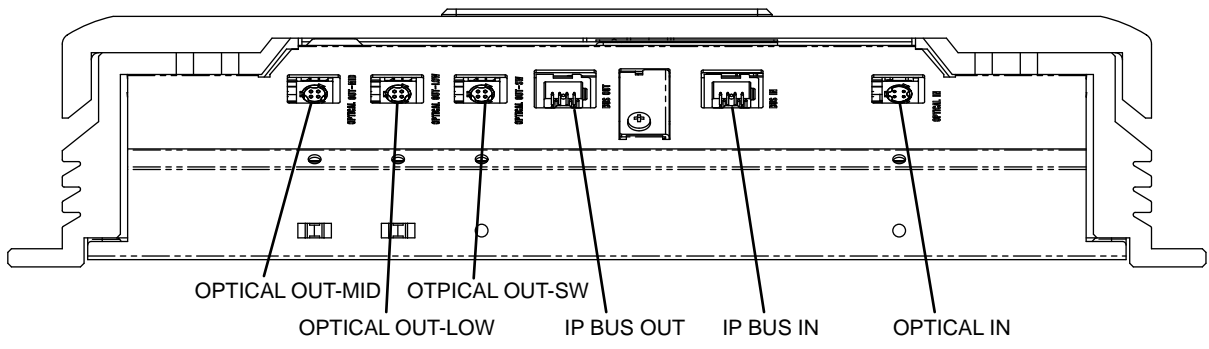
5 6 7 8

7.1.2 PCB LOCATIONS



7.1.3 CONNECTOR FUNCTION DESCRIPTION

A
B
C
D
E
F



7.2 IC

TC7WZ34FU
 NJM431U
 DF1706E
 DIT4096IPW
 DIR1703E

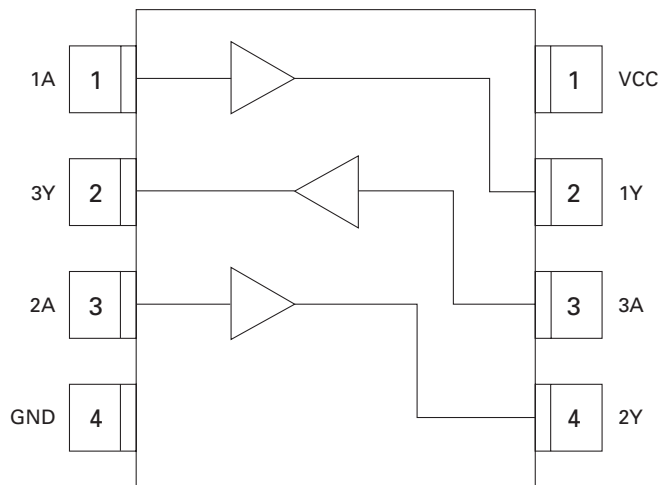
TC7SZU04FU
 SM5849BF
 ADSP-21065LCS-240
 EPF6016ATI144-3
 NJM78L18UA

S-80827CNUA-B8M
 NJM79L18UA
 S-812C33AMC-C2N
 LT1358CS8
 AN2135S

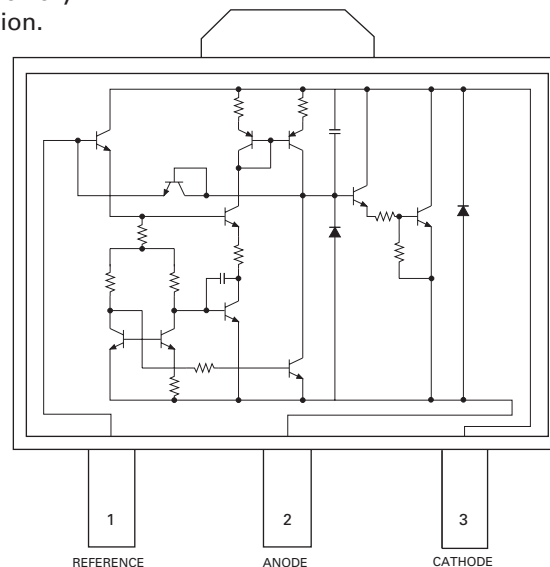
HA12240FP
 AN8011S
 AD7564BRS
 PD5952A

*TC7WZ34FU

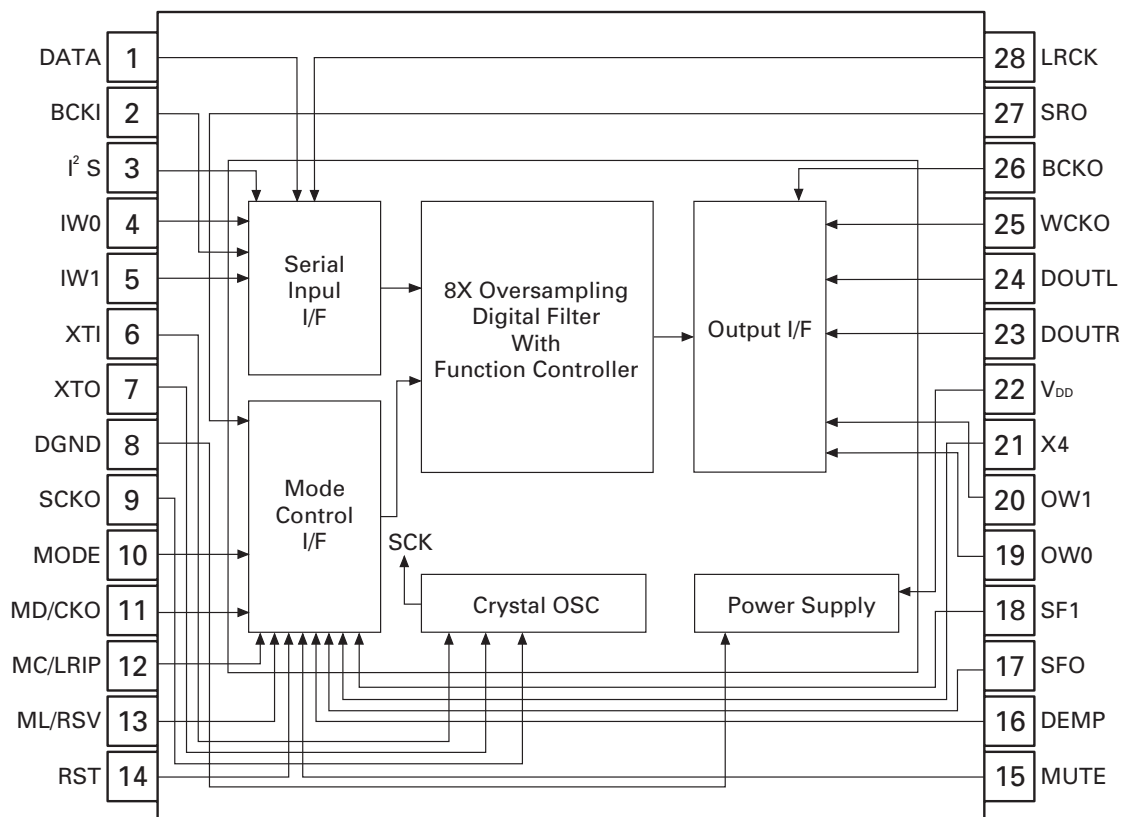
IC's marked by * are MOS type.
 Be careful in handling them because they are very
 liable to be damaged by electrostatic induction.



NJM431U

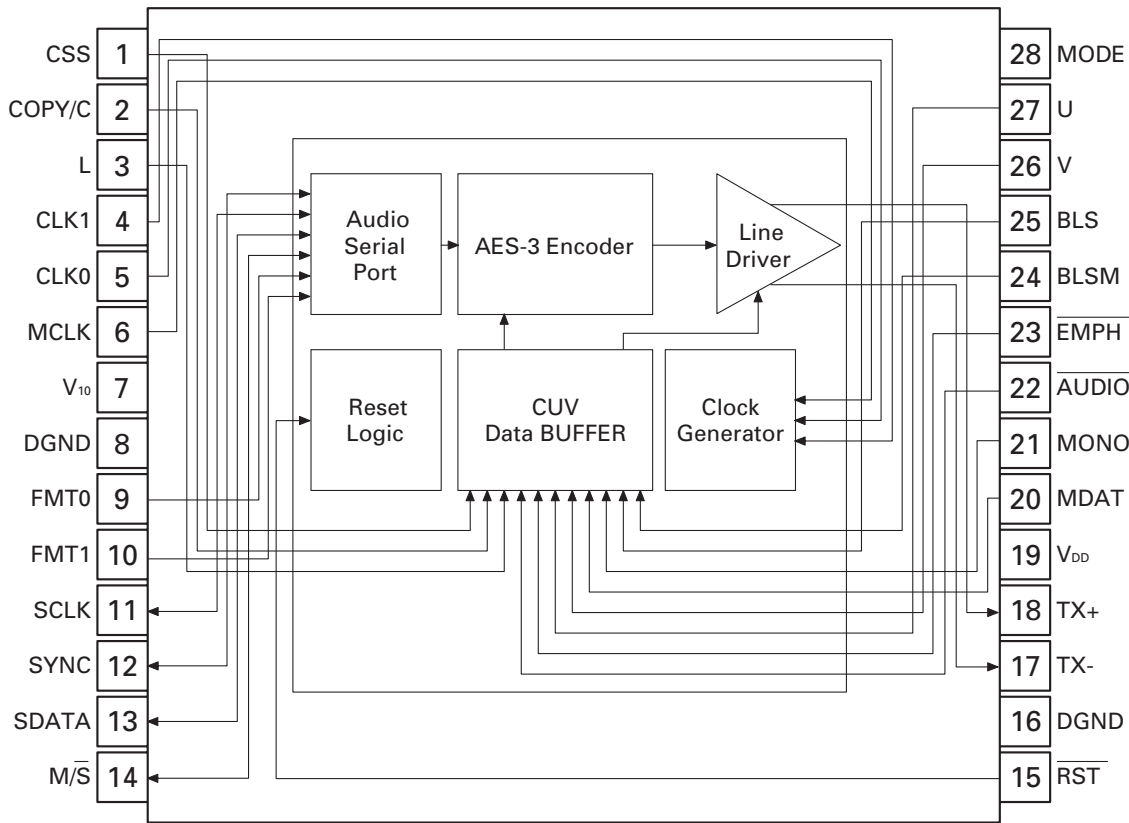


*DF1706E



*DIT4096IPW

A



B

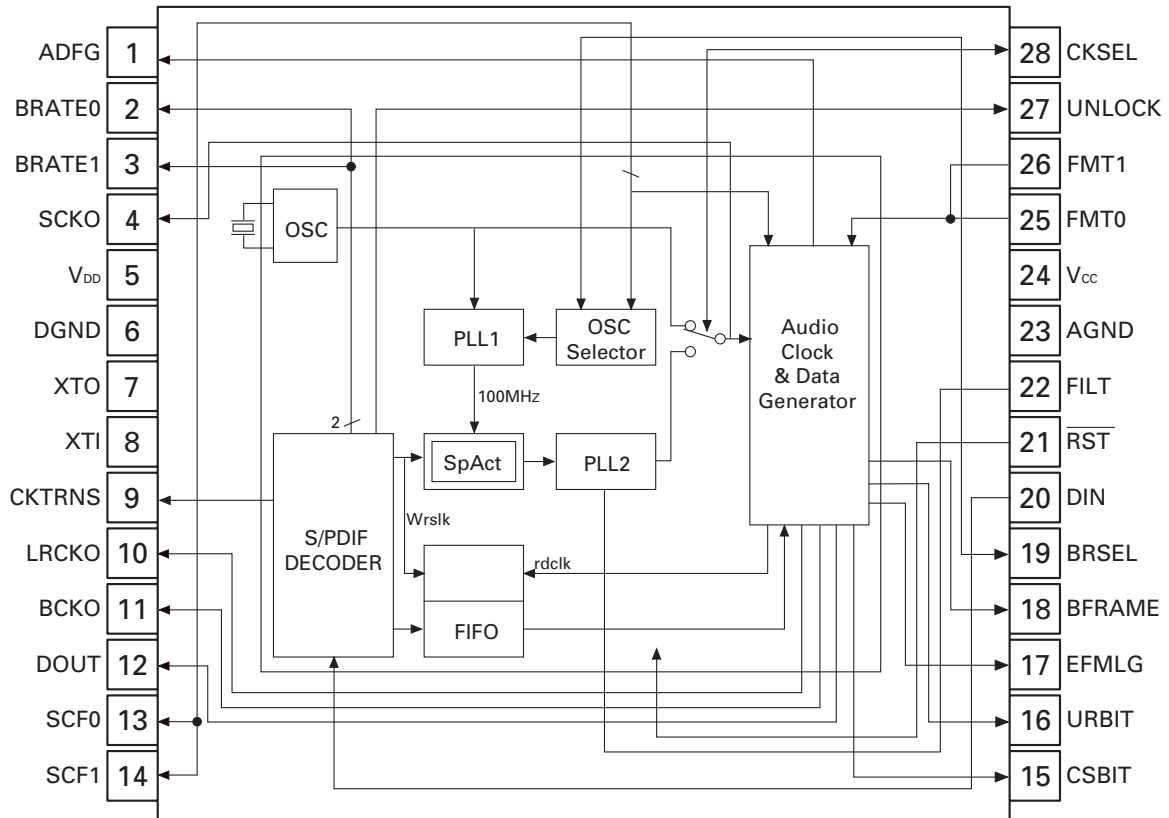
C

*DIR1703E

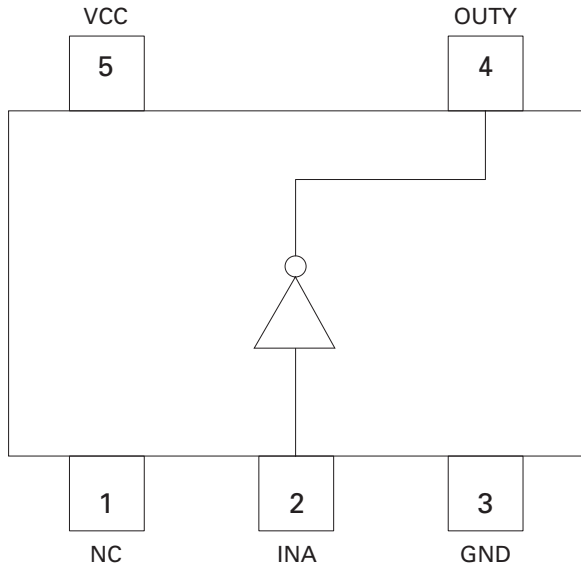
D

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F

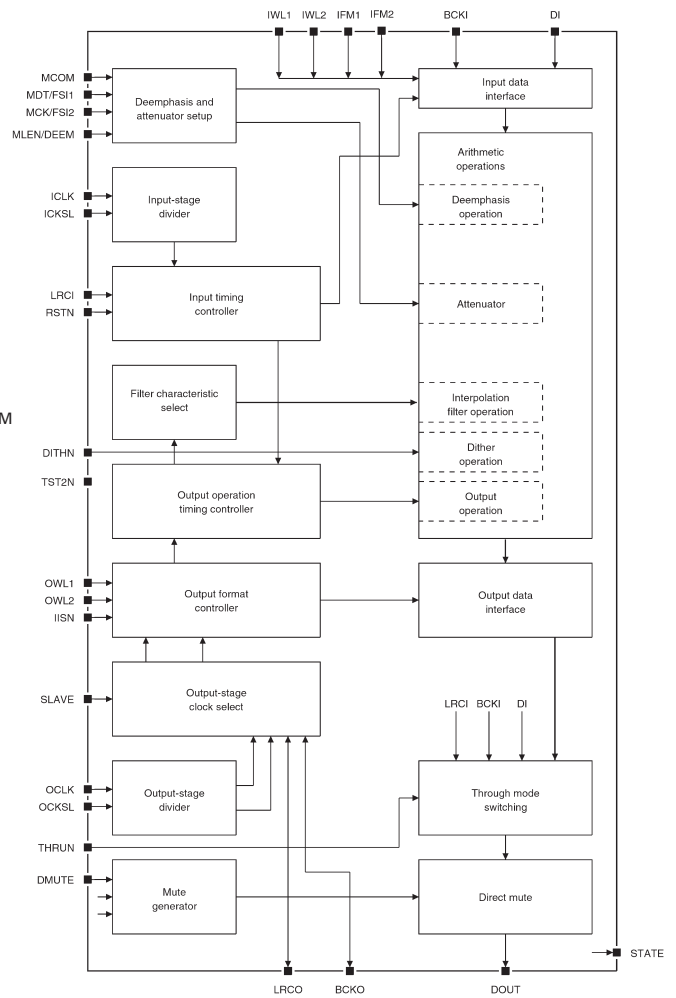
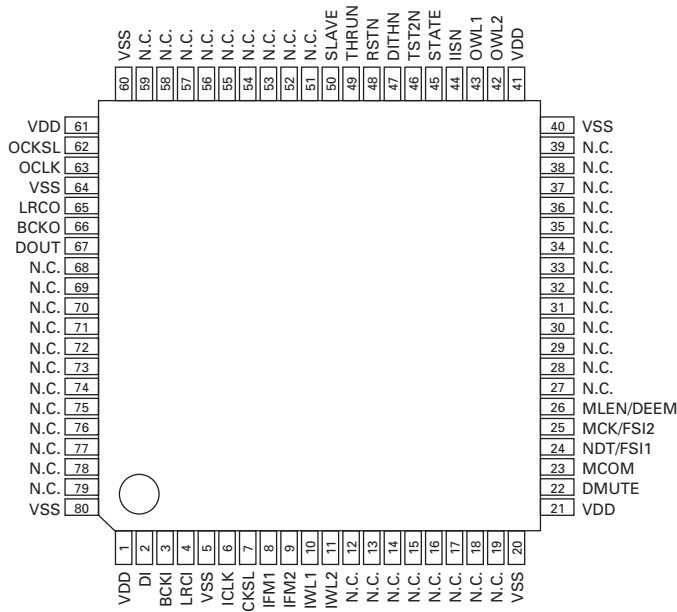


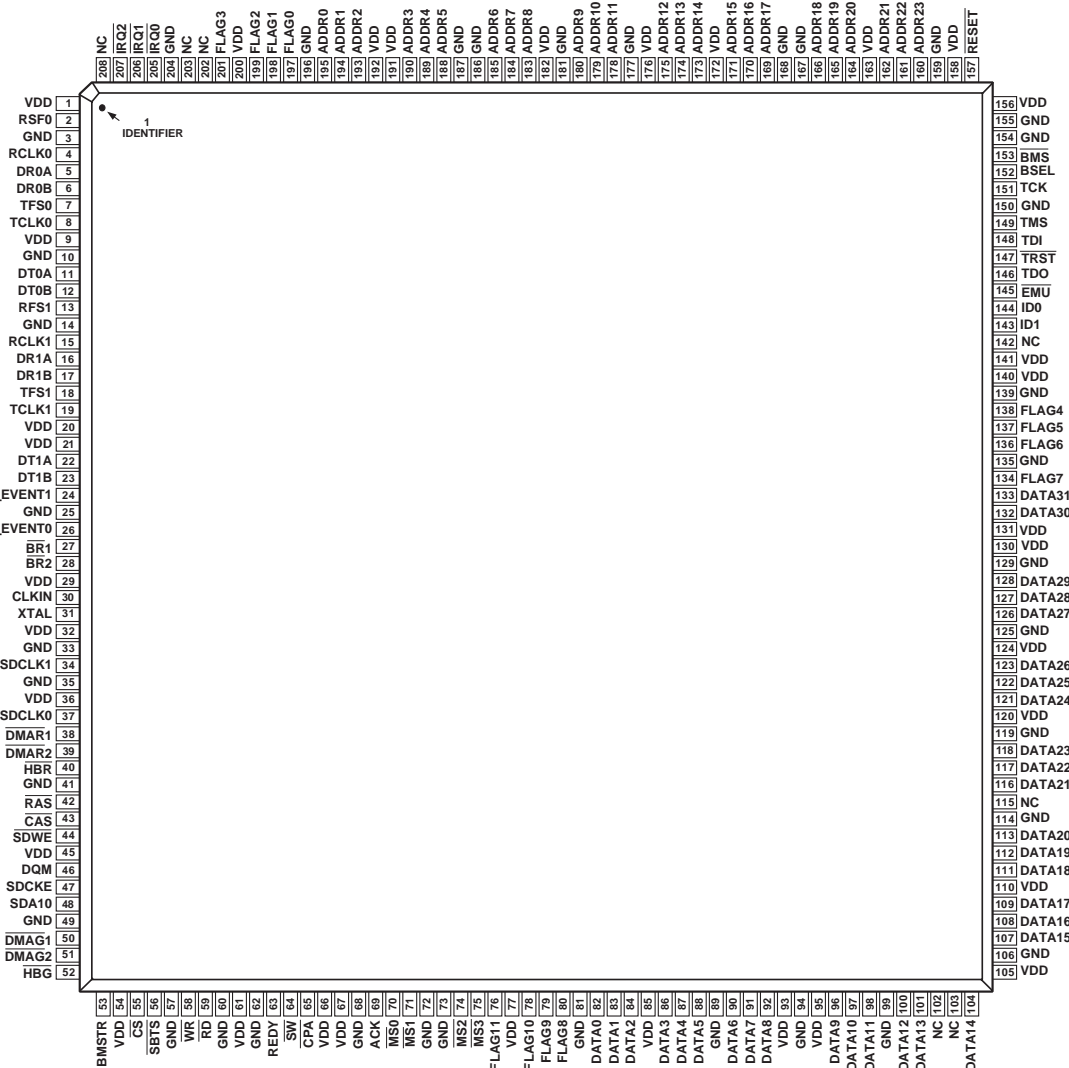
*TC7SZU04FU



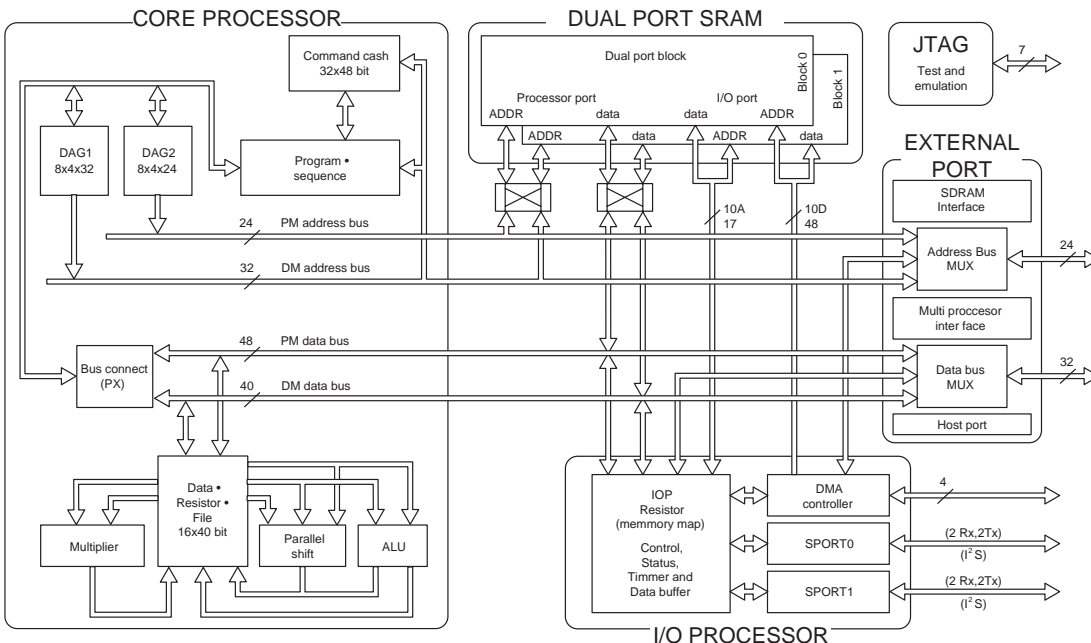
*SM5849BF

● Block diagram



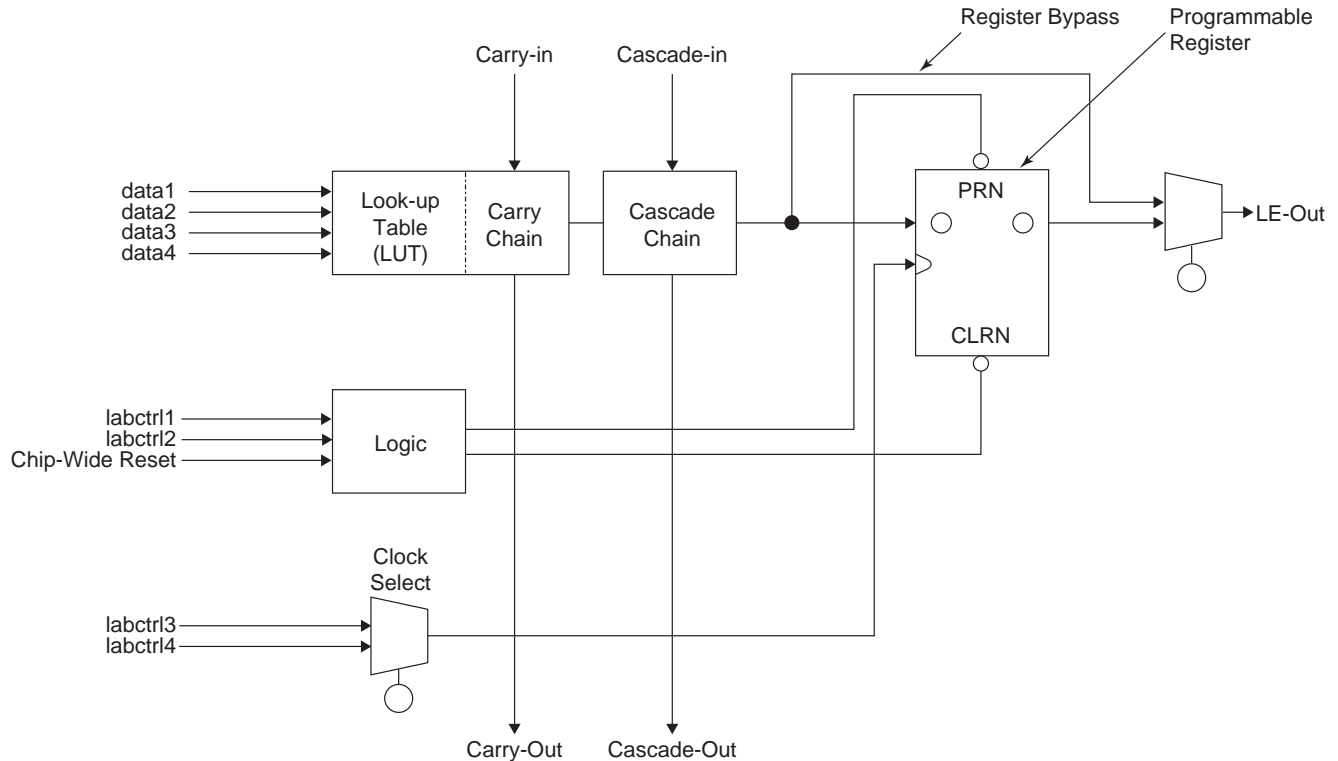


● Block diagram



144	IO144	108
143	IO143	107
142	IO142	106
141	IO141	105
140	IO140	104
139	IO139	103
138	IO138	102
137	IO137	101
136	IO136	DSP2RST
135	IO135	CLKUSR
134	IO134	DSP0HBR
133	IO133	DSP1HBR
132	IO132	RDYnBUSY
131	PLDSELO	DSP2HBR
130	PLDSEL1	DSP0WR
129	PLDSEL2	DSP1WR
128	PLDCLK1	DSP2WR
127	VI08	CLK30
126	GND8	VI06
125	GND8	GND6
124	PLDOUT2	RESET
123	PLDOUT1	DSP0HBG
122	PLDIN	DSP1HBG
121	BDATA0	DSP2HBG
120	BDATA1	DSP0CS
119	BDATA2	DSP1CS
118	BDATA3	DSP2CS
117	BDATA4	DSP0RFS1
116	BDATA5	DSP0DR1A
115	BDATA6	DSP0DR1B
114	BDATA7	DSP1RFS1
113	BDATA8	VI05
112	DSP0BFEN	VINT3
111	DSP1BFEN	GND5
110	DSP2BFEN	DSP1DR1A
109	DSP3BFEN	DSP1DR1B
		TD0
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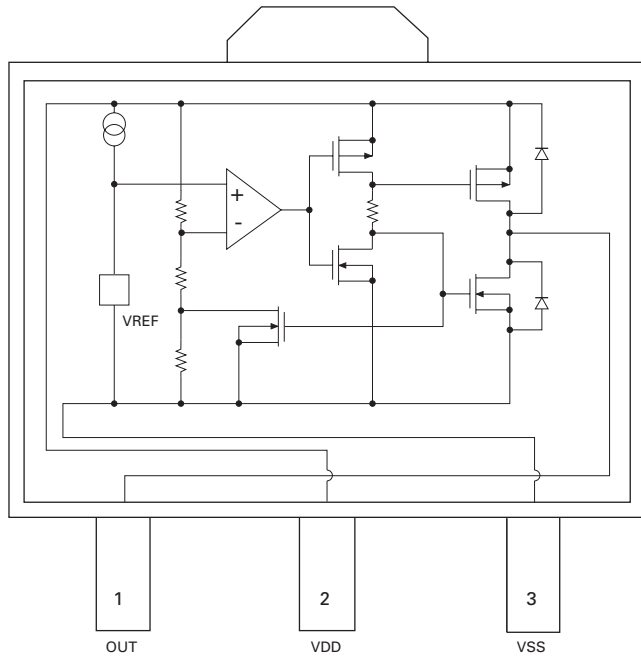
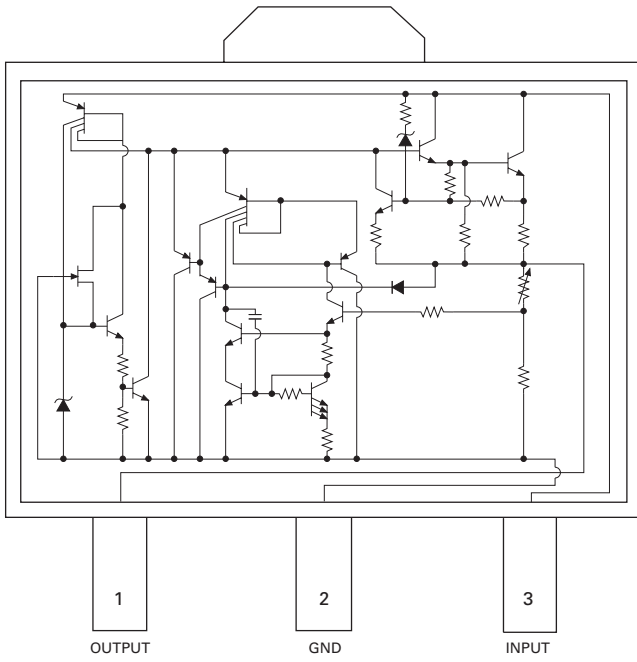
● Block diagram



NJM78L18UA

*S-80827CNUA-B8M

A



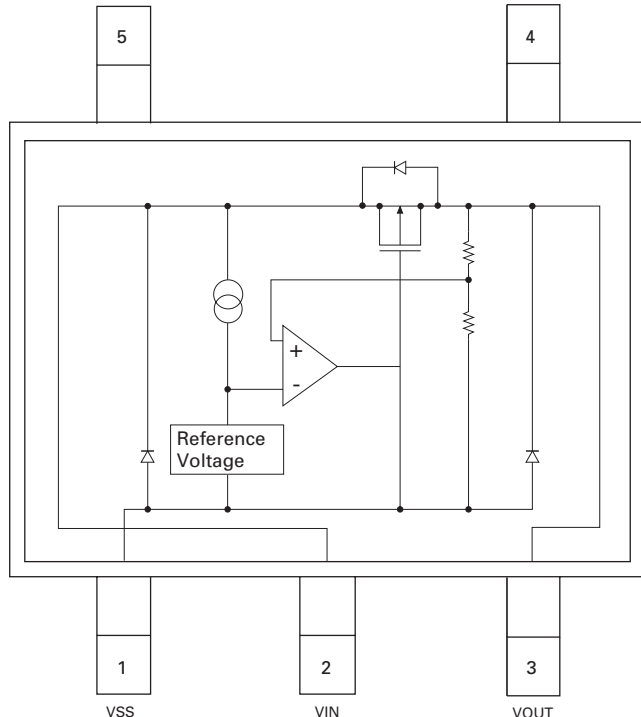
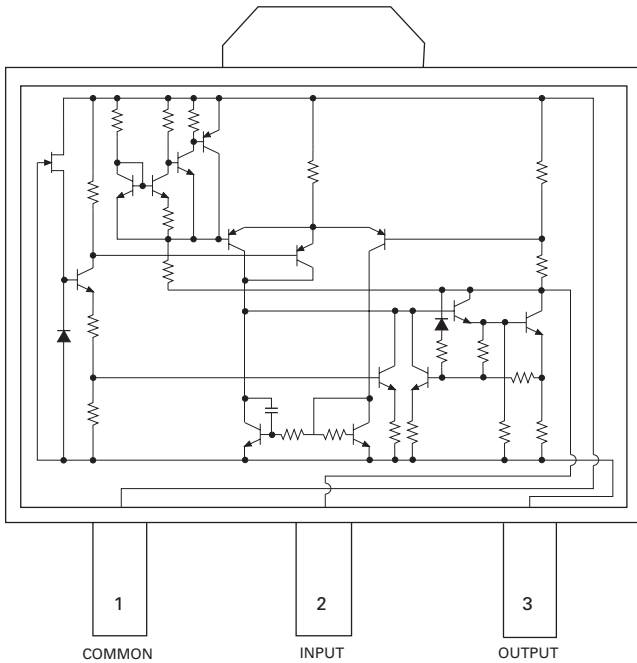
B

C

NJM79L18UA

*S-812C33AMC-C2N

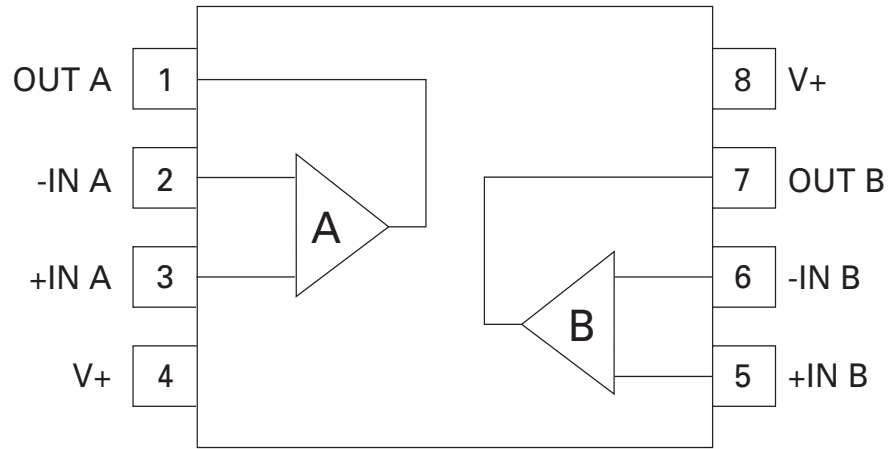
D



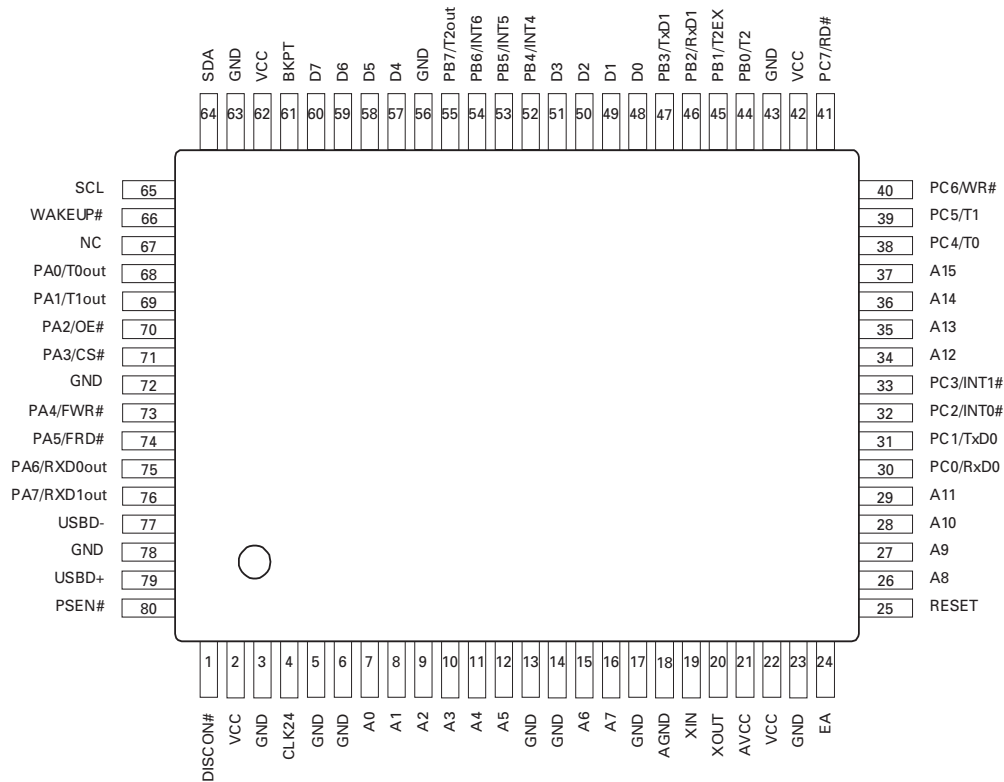
E

F

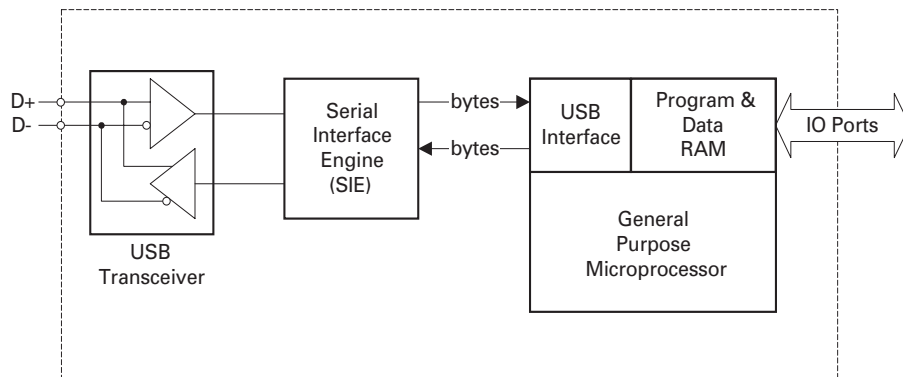
*LT1358CS8

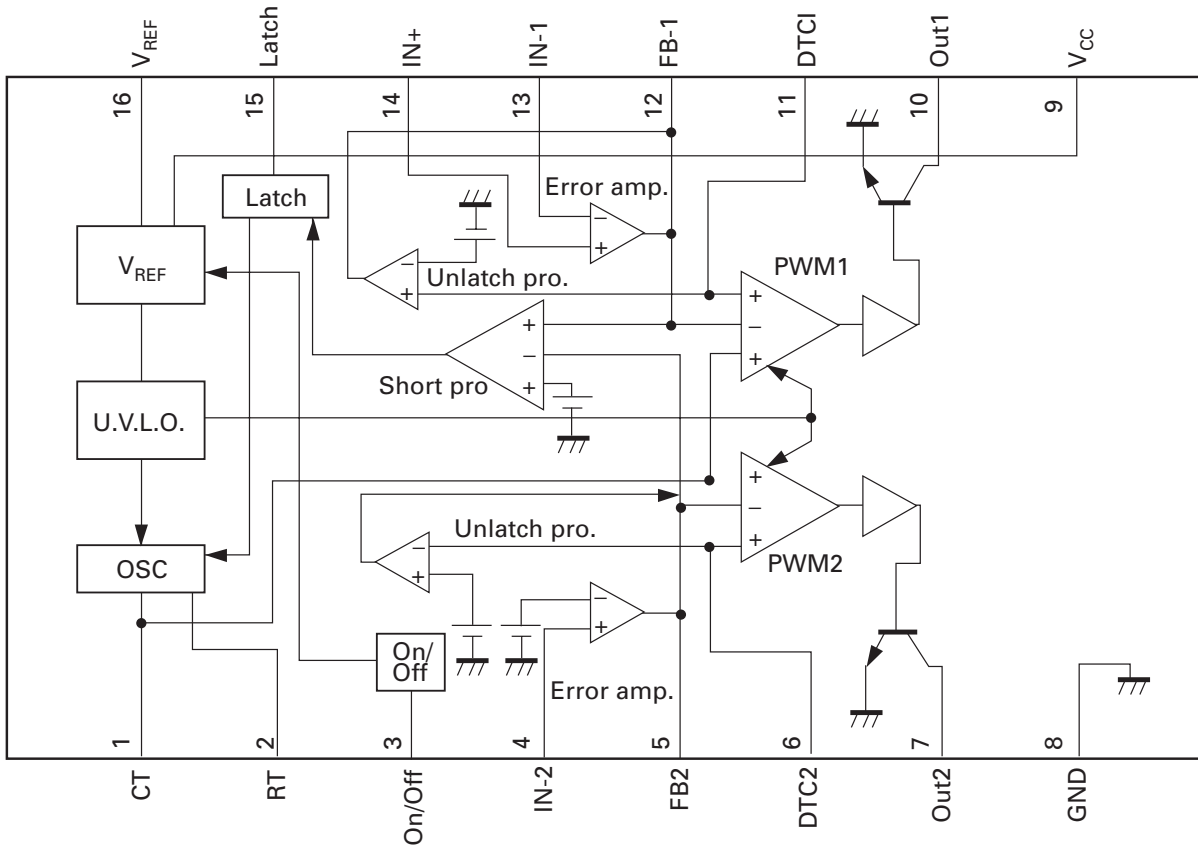
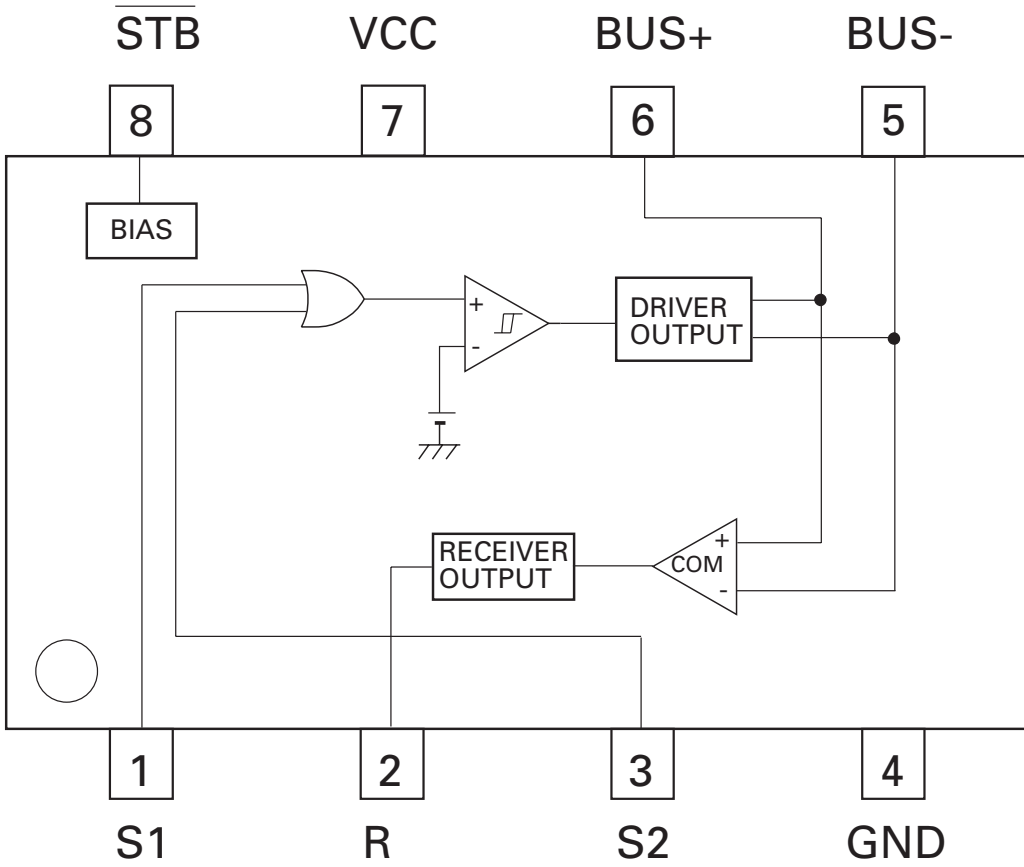


*AN2135S

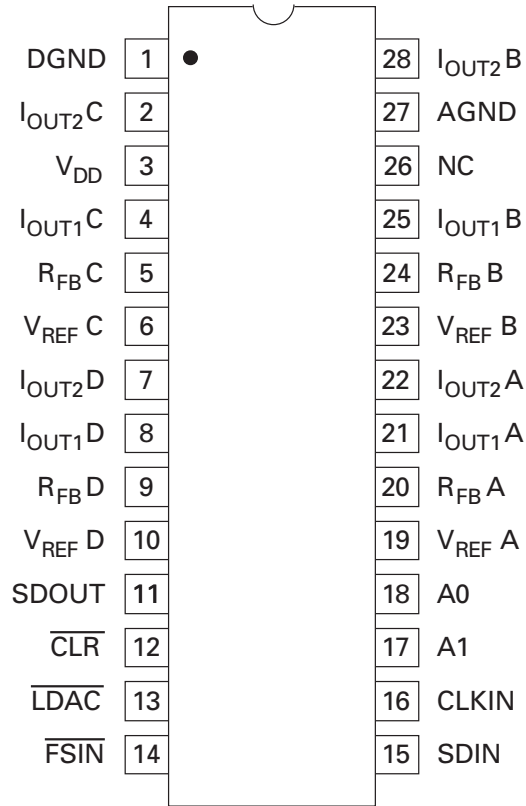


● Block diagram

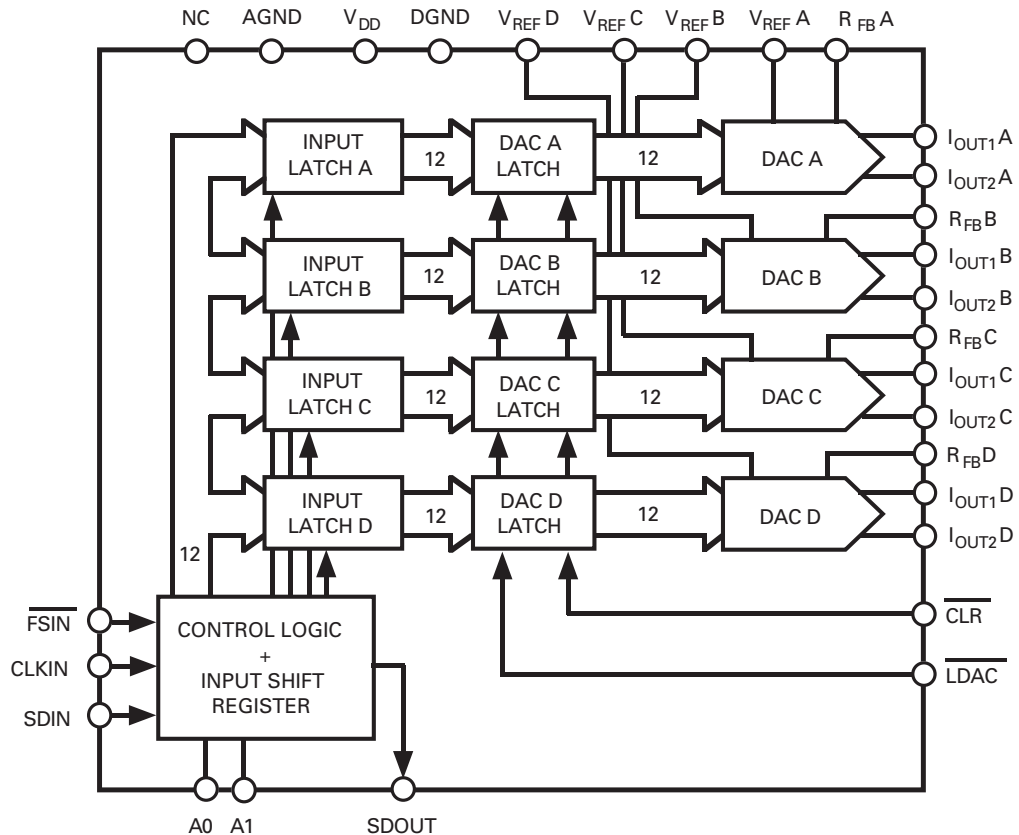




*AD7564BRS



● Block diagram

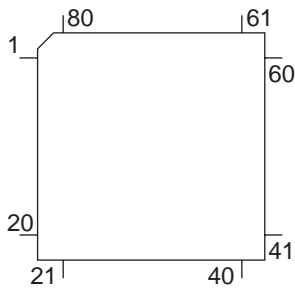


● Pin Functions (PD5952A)

Pin No.	Pin Name	I/O	Format	Function and Operation
1	CLK4	O	C	PLD serial clock output
2	$\overline{P94}$	O	C	EVOL strobe output
3	$\overline{P93}$	O	C	EVOL chip enable output
4	SOUT3	O	C	EVOL serial data output
5	CLK3	O	C	EVOL serial clock output
6	CNVss			Vss
7,8	NC			Not used
9	\overline{RESET}	I		Reset input
10	XOUT	O	C	System clock output
11	Vss			GND
12	XIN	I		System clock input
13	Vcc			5V
14	\overline{NMI}			Vcc
15	$\overline{P84}$	I		Back up sense input
16	$\overline{P83}$	I		Acc sense input
17	NC			Not used
18	$\overline{P81}$	I		IP-BUS request input
19	$\overline{P80}$	O	C	DALMON control output
20	$\overline{P77}$	O	C	NW through mode output
21	$\overline{P76}$	O	C	IP-BUS driver control output
22	$\overline{P71}$	I		IP-BUS data input
23	$\overline{P70}$	O	N	IP-BUS data output
24	TxD1	O	C	USB controller serial data output
25	RxD1	I		USB controller serial data input
26	$\overline{CLK1}$	I		Flash write mode enable input
27	$\overline{P64}$	I		Flash write busy information input
28	TXD0	O	C	Test program serial data output
29	RxD0	I		Test program serial data input
30	CLK0	I		Test program serial clock input
31-33	NC			Not used
34	$\overline{P55}$	I	C	Flash write mode enable input
35-38	NC			Not used
39	$\overline{P50}$	I		Test program enable input
40	$\overline{P43}$	O	C	DSP IC power control output
41	$\overline{P42}$	I		Power amp error input
42	$\overline{P41}$	O	C	Hardware mute request output
43	$\overline{P40}$	I		DSP stop request input
44	$\overline{P37}$	I		DIR reset input
45	$\overline{P36}$	O	C	DIR sampling frequency output
46	$\overline{P35}$	O	C	DIR sampling frequency output
47	$\overline{P34}$	I		DIT reset input
48	$\overline{P33}$	I		DIR unlock information input
49	$\overline{P32}$	O	C	DIR audio/data select output
50	$\overline{P31}$	O	C	DIR emphasis information output
51	$\overline{P30}$	I		DSP error information input
52	$\overline{P27}$	O	C	Bridge connect enable output
53	$\overline{P26}$	O	C	PLD config strobe output
54,55	NC			Not used
56	$\overline{P23}$	O	C	Power indicator LED control output
57,58	NC			Not used
59	$\overline{P20}$	I		System reset input
60	$\overline{P07}$	I		Model select input
61	$\overline{P06}$	O	C	PLD config strobe output

Pin No.	Pin Name	I/O	Format	Function and Operation
62	P05	I		PLD config status input
63	P04	I		PLD config end information input
64	NC			Not used
65	P02	O	C	PLD reset data output
66	P01	O	C	PLD chip enable output
67	P00	O	C	PLD chip enable output
68	NC			Not used
69	P106	I		Band select input
70	P105	I		Ach band select input
71	P104	I		Address select input
72-74	NC			Not used
75	AVSS			Vss
76	NC			Not used
77	VREF			AD translation reference voltage
78	AVCC			Vcc
79	SIN4	I		PLD serial data input
80	SOUT4	O	C	PLD serial data output

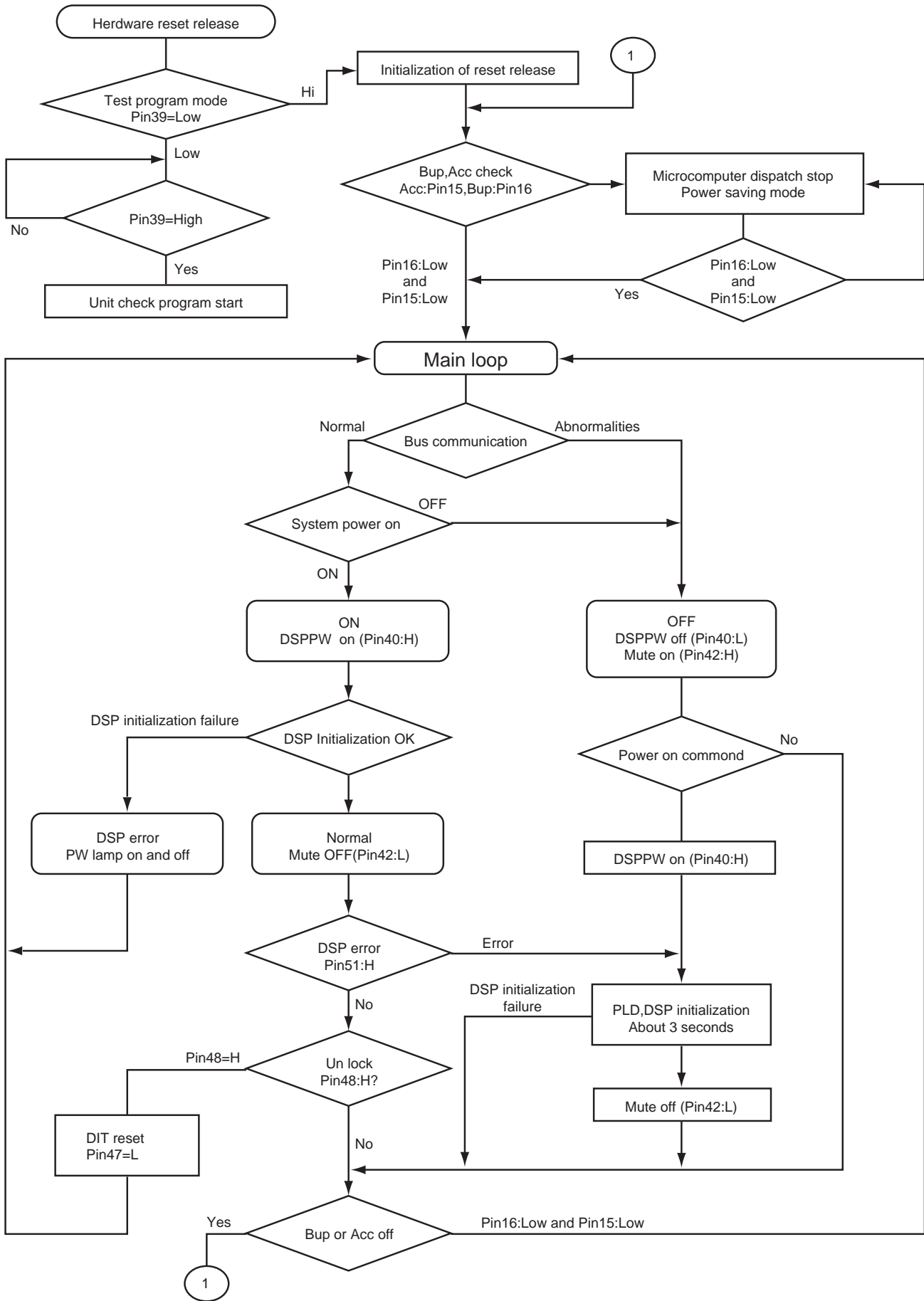
*PD5952A



Format	Meaning
C	CMOS
N	N ch open drain

7.3 OPERATIONAL FLOW CHART

● SYSTEM RESET

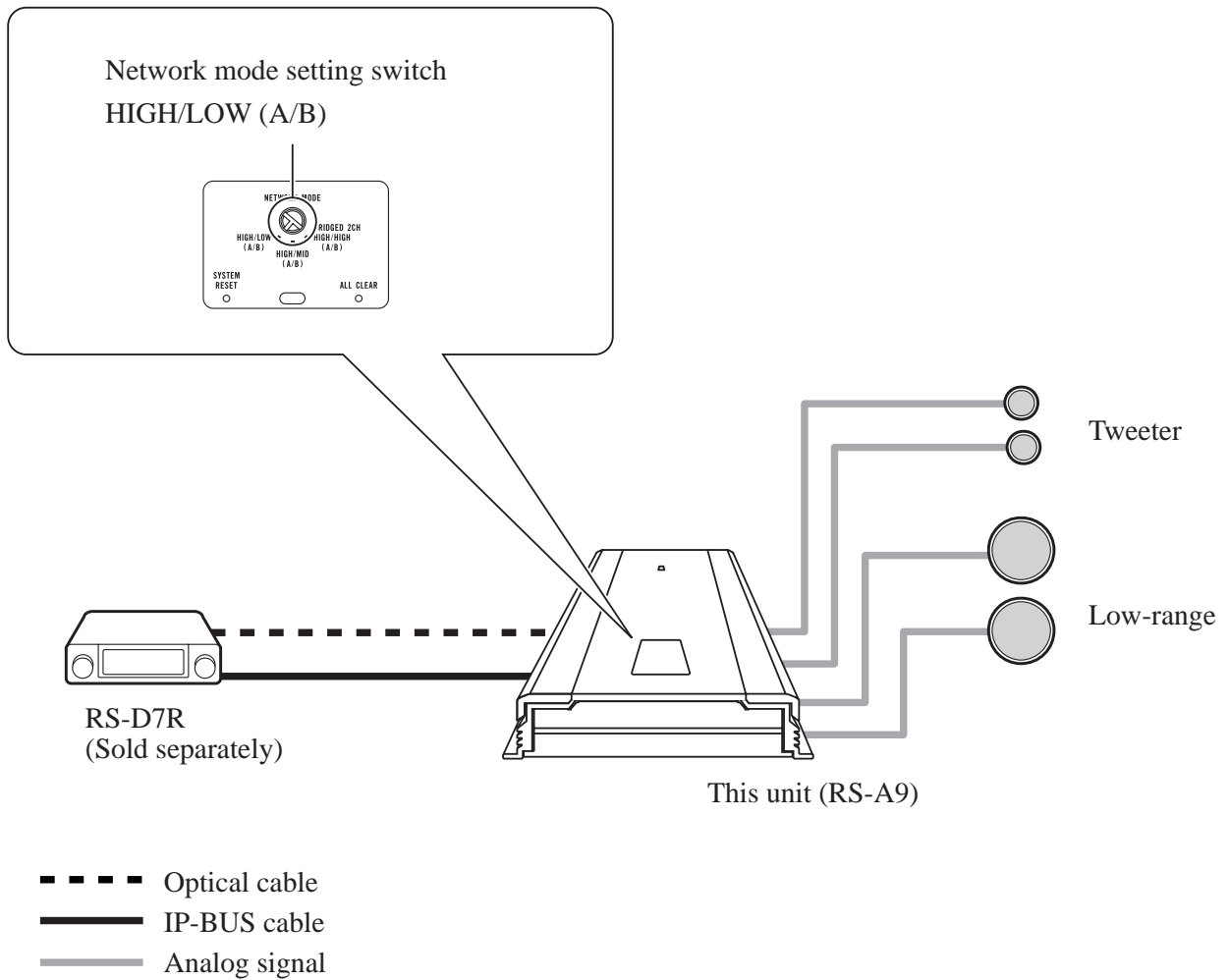


8. OPERATIONS

Setting Example

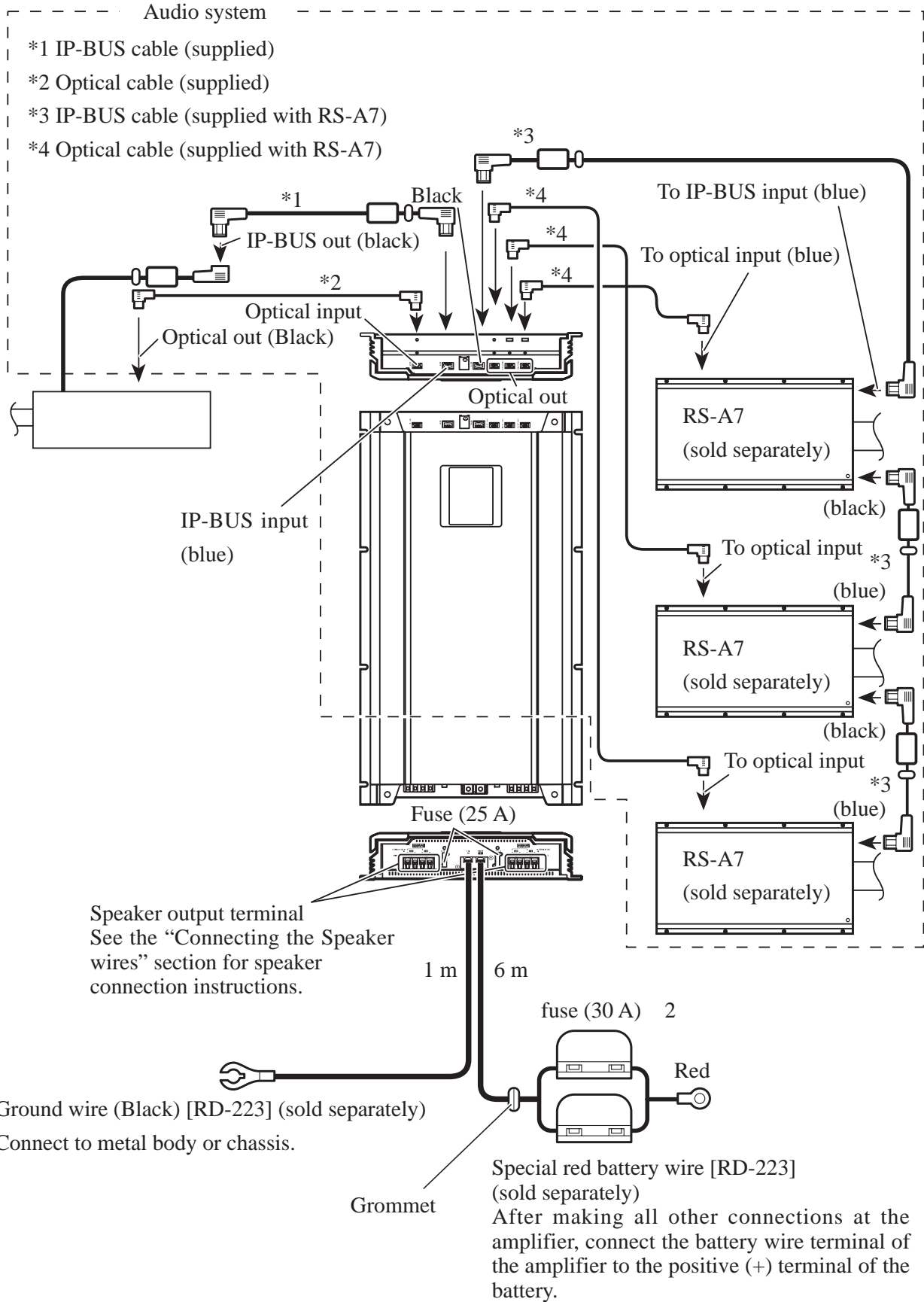
To provide better sound quality, it is recommended you connect digital amps in the order high, mid, low, subwoofer mode.

Example of 2-way system connection with 1 RS-A9



Connection Diagram

A
B
C
D
E
F



■

5

■

6

■

7

■

8

■

A

■

B

■

C

■

D

■

E

■

F

■

5

■

6

RS-A9/EW

■

7

■

8

■

● Jigs list

Test Disc : YEDS-7

A

B

C

D

E

F