

ONKYO® SERVICE MANUAL

Digital Theater Station

GXW-5.1



UD	120V AC, 50Hz
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SAFETY-RELATED COMPONENT WARNING!!


COMPONENTS IDENTIFIED BY MARK \triangle ON THE SCHEMATIC DIAGRAM AND IN THE PARTS LIST ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE THESE COMPONENTS WITH ONKYO PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL.

MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

SERVICE SAFETY PRECAUTIONS

1. Replacing the fuse

 This symbol located near the fuse indicates that the fuse used is fast operating type. For continued protection against fire hazard, replace with same type fuse. For fuse rating refer to the marking adjacent to the symbol.

 Ce symbol indique le fusible utilise est a rapide. Pour une protection permanente, n'utiliser que fusibles de meme type. Ce dernier est la qu le present symbol est appe.

Circuit No.	Part No.	Description
F901	252159	2A-UL/T-237 <D>

NOTE: <D>: 120 V model only

3. To initialize the unit

1. Press the standby button.
2. Press and hold down the STANDBY/ON, then press the LATE NIGHT button at remote controller.
3. After "CLEAR" is displayed, and initialized the unit.

4. Test mode

1. Press the standby button.
2. Press and hold down the STANDBY/ON, then press the CHANNEL button.
3. Press the LEVEL/DISTANCE button and get the test mode displayed "TEST-1-00".

EX) "TEST-1-00~01" is used the fan control operation.

2. Safety check out

(Only U. S. A. model)

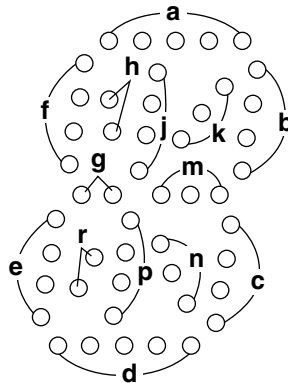
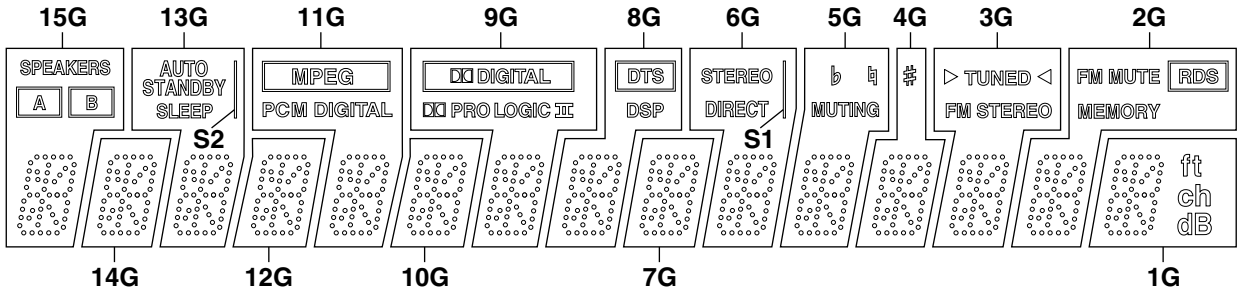
After correcting the original service problem, perform the following safety check before releasing the set to the customer.

Connect the insulating-resistance tester between the plug of power supply cord and screw on the back panel.

Specifications: 3.3M ohm +/- 10% at 500 V.

FL TUBE VIEW

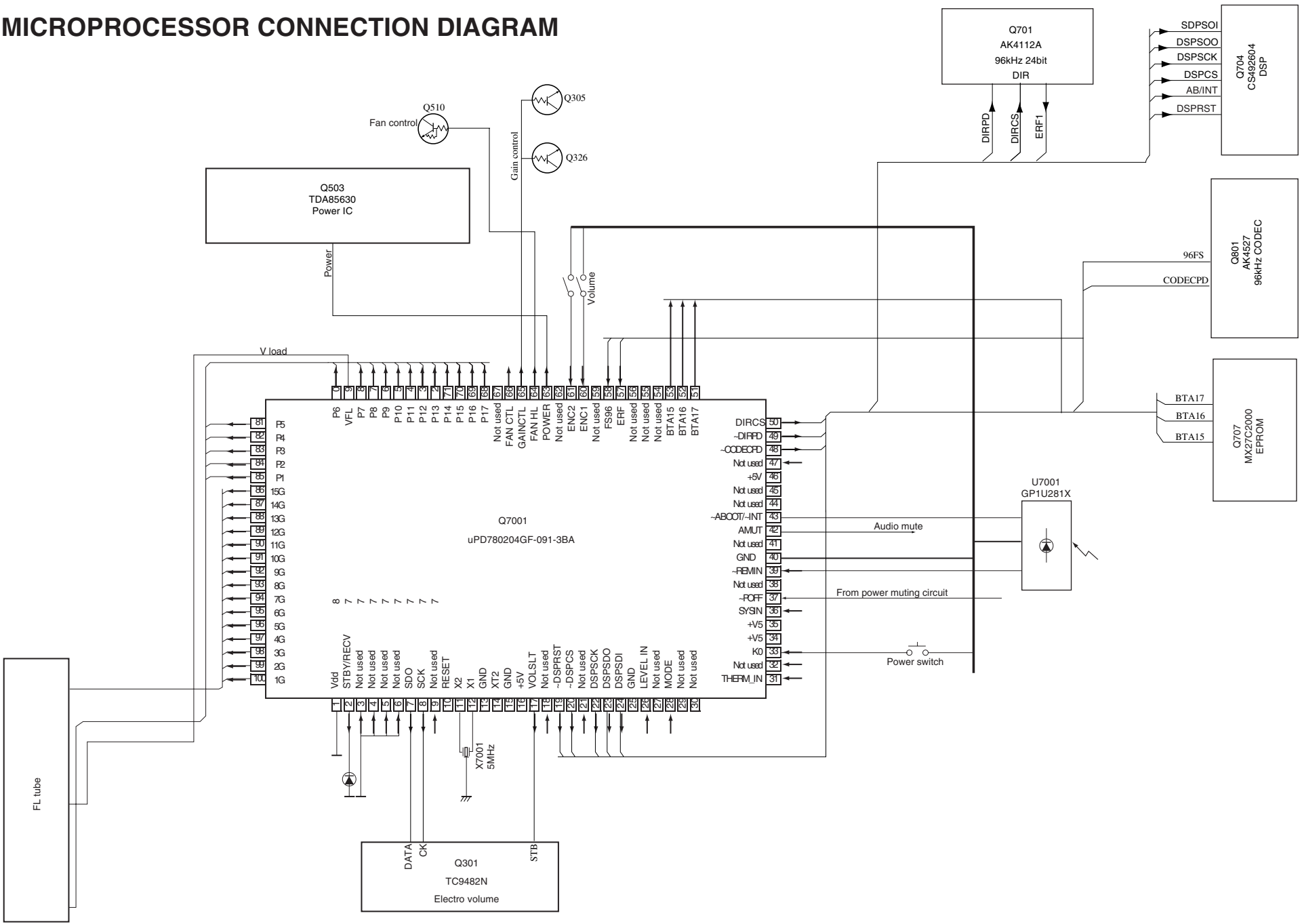
(15-BT-80GNK)



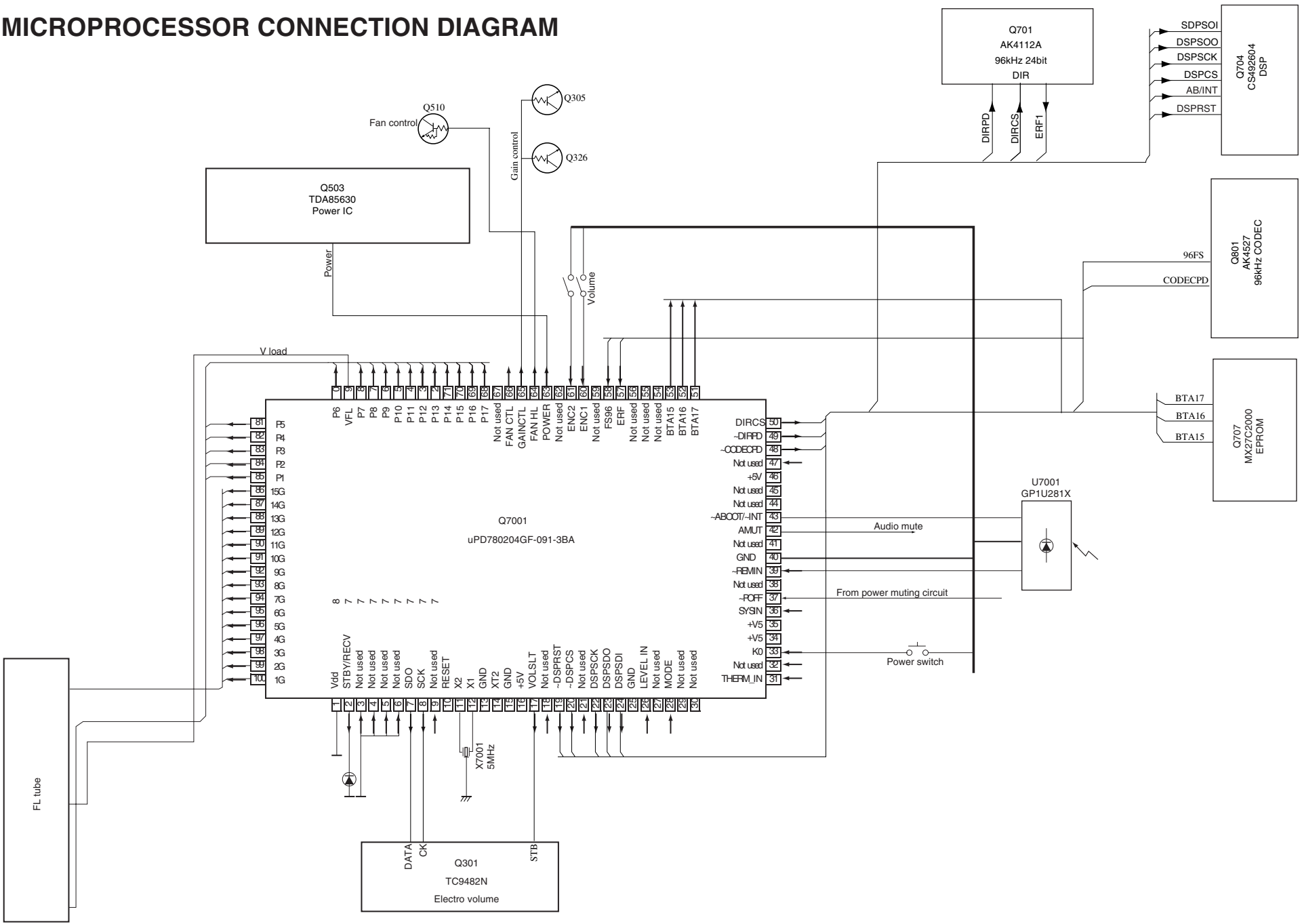
(15G - 1G)

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17
15G	SPEAKERS	A	B	a	h	j	k	b	f	m	g	c	e	r	p	n	d
14G	—	—	—	a	h	j	k	b	f	m	g	c	e	r	p	n	d
13G	AUTO STANDBY	SLEEP	S2	a	h	j	k	b	f	m	g	c	e	r	p	n	d
12G	—	—	—	a	h	j	k	b	f	m	g	c	e	r	p	n	d
11G	MPEG	MPEG	PCM DIGITAL	a	h	j	k	b	f	m	g	c	e	r	p	n	d
10G	—	—	—	a	h	j	k	b	f	m	g	c	e	r	p	n	d
9G	DIGITAL	DIGITAL	PRO LOGIC II	a	h	j	k	b	f	m	g	c	e	r	p	n	d
8G	DTS	DTS	DSP	a	h	j	k	b	f	m	g	c	e	r	p	n	d
7G	—	—	—	a	h	j	k	b	f	m	g	c	e	r	p	n	d
6G	STEREO	DIRECT	S1	a	h	j	k	b	f	m	g	c	e	r	p	n	d
5G	q	b	MUTING	a	h	j	k	b	f	m	g	c	e	r	p	n	d
4G	#	—	—	a	h	j	k	b	f	m	g	c	e	r	p	n	d
3G	TUNED	> <	FM STEREO	a	h	j	k	b	f	m	g	c	e	r	p	n	d
2G	RDS	FM MUTE G	MEMORY	a	h	j	k	b	f	m	g	c	e	r	p	n	d
1G	dB	h	ft	a	h	j	k	b	f	m	g	c	e	r	p	n	d

MICROPROCESSOR CONNECTION DIAGRAM



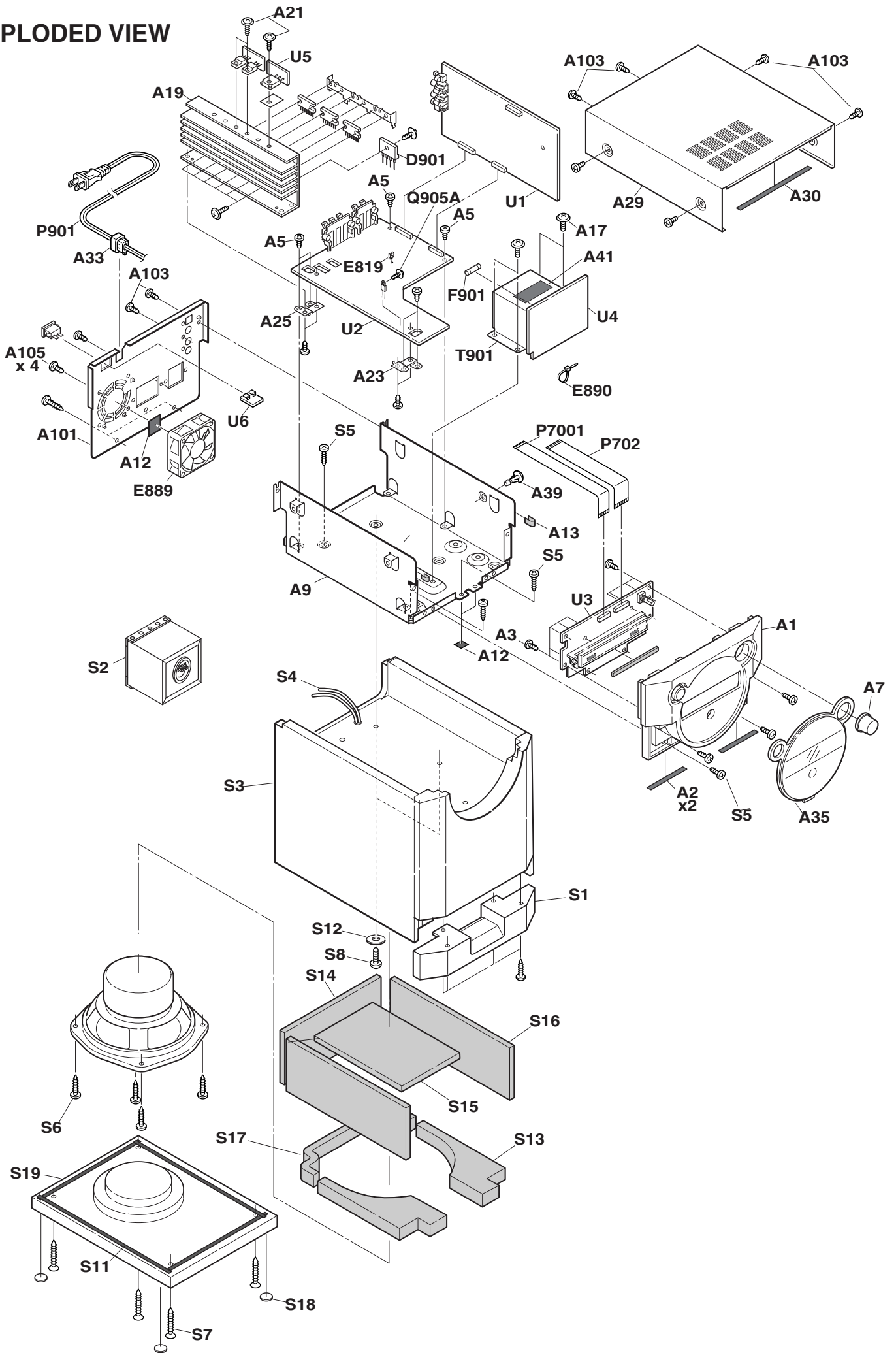
MICROPROCESSOR CONNECTION DIAGRAM



MICROPROCESSOR TERMINAL DESCRIPTION

No.	Function	I/O	Act	Description	No.	Function	I/O	Act	Description
1	Vdd			Power supply +5V	51	BTA17	O	H	Set up output terminal for BOOT ROM address.
2	STBY/RECV	O	L	Standby / received indicator output terminal. "L" : Light on	52	BTA16	O	H	Set up output terminal for BOOT ROM address.
3	Not used	I	L	Not used	53	BTA15	O	H	Set up output terminal for BOOT ROM address.
4	Not used	I	L	Not used	54	Not used	I	L	Not used
5	Not used	I	L	Not used	55	Not used	I	L	Not used
6	Not used	I	L	Not used	56	Not used	I	L	Not used
7	SDO	O	H	Serial data output terminal for volume mode.	57	ERF	I	H	DIR ERF signal input terminal.
8	SCK	O	CLK	Serial clock output terminal for volume mode.	58	Not used	I	L	Not used
9	Not used	I	L	Not used	59	Not used	I	L	Not used
10	RESET			Reset terminal.	60	ENC1	I	H	Volume control input terminal.
11	X2			Main clock input terminal. 5MHz	61	ENC2	I	H	Volume control input terminal.
12	X1			Main clock input terminal. 5MHz	62	Not used	I	L	Not used
13	GND			Connect to the ground terminal.	63	POWER	O	H	Power supply control output terminal.
14	XT2			Open terminal. Sub-clock input terminal.	64	FAN_HL	O	L	FAN control terminal.
15	GND			To connect to the ground. Sub-clock input terminal.	65	GAINCTL	O	H	Gain control output terminal.
16	+5V			Power supply. +5V	66	FAN_CNT	O	L	Select terminal of FAN.
17	VOLSLT	O	H	Strobe output terminal for electrical volume.	67	Not used	I	L	Not used
18	Not used	I	L	Not used	68	P17	O	H	Segment signal output terminal of fluorescence tube.
19	~DSPRST	O	L	Reset output terminal of DSP	69	P16	O	H	Segment signal output terminal of fluorescence tube.
20	~DSPCS	O	L	Chip select output terminal for DSP.	70	P15	O	H	Segment signal output terminal of fluorescence tube.
21	Not used	I	L	Not used	71	P14	O	H	Segment signal output terminal of fluorescence tube.
22	DSPSCK	O	CLK	Serial clock output terminal for DIR and DSP.	72	P13	O	H	Segment signal output terminal of fluorescence tube.
23	DSPSDO	O	H	Serial data output terminal for DIR and DSP.	73	P12	O	H	Segment signal output terminal of fluorescence tube.
24	DSPSDI	I	H	Serial data input terminal for DSP.	74	P11	O	H	Segment signal output terminal of fluorescence tube.
25	GND			Ground terminal of A/D converter.	75	P10	O	H	Segment signal output terminal of fluorescence tube.
26	LEVEL_IN	I	A	Detection input terminal for input signal.	76	P9	O	H	Segment signal output terminal of fluorescence tube.
27	Not used	I	A	Not used	77	P8	O	H	Segment signal output terminal of fluorescence tube.
28	MODE	I	A	Initializing input terminal for mode select.	78	P7	O	H	Segment signal output terminal of fluorescence tube.
29	Not used	I	A	Not used	79	VFL			Power supply terminal of fluorescence tube.
30	Not used	I	A	Not used	80	P6	O	H	Segment signal output terminal of fluorescence tube.
31	THERM_IN	I	A	Detection terminal of temperature.	81	P5	O	H	Segment signal output terminal of fluorescence tube.
32	Not used	I	A	Not used	82	P4	O	H	Segment signal output terminal of fluorescence tube.
33	K0	I	A	Input key terminal.	83	P3	O	H	Segment signal output terminal of fluorescence tube.
34	+5V			Power supply terminal of A/D converter. +5V	84	P2	O	H	Segment signal output terminal of fluorescence tube.
35	+5V			Compare input voltage terminal for A/D converter.	85	P1	O	H	Segment signal output terminal of fluorescence tube.
36	SYSIN	I	L	RI input terminal.	86	15G	O	H	Grid signal output terminal of fluorescence tube.
37	~POFF	I	L	Detection power failure input terminal.	87	14G	O	H	Grid signal output terminal of fluorescence tube.
38	Not used	I	L	Not used	88	13G	O	H	Grid signal output terminal of fluorescence tube.
39	~REMIN	I	L	Input terminal of remote controller.	89	12G	O	H	Grid signal output terminal of fluorescence tube.
40	GND			To connect to the ground terminal	90	11G	O	H	Grid signal output terminal of fluorescence tube.
41	Not used	I	L	Not used	91	10G	O	H	Grid signal output terminal of fluorescence tube.
42	AMUT	O	H	Muting output terminal for power amplifier.	92	9G	O	H	Grid signal output terminal of fluorescence tube.
43	~ABOOT/~INT	I/O	H	AUTOBOOT/INTREQ mode input terminal of DSP.	93	8G	O	H	Grid signal output terminal of fluorescence tube.
44	Not used	I	L	Not used	94	7G	O	H	Grid signal output terminal of fluorescence tube.
45	Not used	I	L	Not used	95	6G	O	H	Grid signal output terminal of fluorescence tube.
46	+5V			+5V	96	5G	O	H	Grid signal output terminal of fluorescence tube.
47	Not used	I	L	Not used	97	4G	O	H	Grid signal output terminal of fluorescence tube.
48	~CODECPD	O	L	CODEC POWER DOWN signal output terminal.	98	3G	O	H	Grid signal output terminal of fluorescence tube.
49	~DIRPD	O	L	DIR POWER DOWN signal output terminal.	99	2G	O	H	Grid signal output terminal of fluorescence tube.
50	~DIRCS	O	L	DIR chip select output terminal.	100	1G	O	H	Grid signal output terminal of fluorescence tube.

EXPLODED VIEW



EXPLODED PARTS LIST

REF. NO.	PART NO.	DESCRIPTION
(AMPLIFIER SECTION)		
U1	1A903558-1B	NADG-7058-1B, DSP circuit PC board ass'y
U2	1A903559-1B	NAAF-7059-1B, Power amplifier circuit PC board ass'y
U3	1A903560-1B	NADIS-7060-1B, Display circuit PC board ass'y
U4	1A903561-1B	NAAF-7061-1B, Power supply circuit PC board ass'y
U5	1A903562-1B	NAETC-7062-1B, Second regulator PC board ass'y
U6	1A903521-1B	NASW-7121-1B, Power switch PC board
A1	27111262	Front bracket ass'y (Clear plate + Front bracket)
A2	28141463	Cushion 45 x 5 t=2
A3	838426088	2.6TTB+8B(BC), Self-tapping screw
A4	838130088	3TTB+8B, Self-tapping screw
A7	28325683	Knob (SS)
A9	27100397	Chassis
A12	28141464	Cushion, 10 x 10 t=0.5
A13	28141465	Cushion, 20 x 20 t=0.5
A17	830440089	4TTC+8C(BC), Self-tapping screw
A19	27160485	Heat sink
A21	801433	3SMS8W.SW+14B(BC), Special screw
A23	27141788	Retainer, front
A25	27141789	Retainer, back
A29	28184805	Top cover
A30	28141462	Cushion, 180 x 5 t=1
A31	838430088	3TTB+8B(BC), Self-tapping screw
A33	△ 27300750	S-RELIEF #2271, Cord bushing
A39	27190693	KGLS-6R, Holder
A41	29362900	Label RISK
A101	27122823	Rear panel
A105	838450108	5TTB+10B(BC), Self-tapping screw
D901	△ 22380308	RS1505M or
	△ 22380044	RBV-1506, Diode
E819	27190541	WS-1NS, Holder
E889	24502314A	D06T-12TM, Fan
E890	260208	Wire tie
E900	28141464	Cushion, 10 x 10 t=0.5
F901	△ 252159	2A-UL/T-237, Fuse
P7001	2045182512	NCFC5-182512, Flexible flat cable
P702	2045222012	NCFC5-222012, Flexible flat cable
P901	△ 253279HIT	AS-UC-2#18, Power cord
Q905A	801433	3SMS8W.SW+14B(BC), Special screw
R519A	801433	3SMS8W.SW+14B(BC), Special screw
T901	△ 2301513	NPT-1412D, Power transformer
(CABINET SECTION)		
S1	401-GXW5SR-RL Panel, L/R 1set	
S2	903-1GGXW5-SR Net ass'y, with grille cloth	
S3	505GXW51	Cabinet ass'y
S4	196-GXW5-SW	Cord ass'y, 205/110 VH type L=280
S5	838435204	Self tapping screw, Bind head 3.5x16(BC) Tapping(A)
S6	838440204	Self tapping screw, Bind head 4x20 Tapping(A)
S7	300-F8405000	Self tapping screw, Flat head 4x50(BC) Tapping(A)
S8	305-C8402000	Self tapping screw, Cuo head 4x20(BC) S-Tite
S11	429-GXW5-SW	Cushion, L=870 W=4 t=1
S12	430-NS-290	Washer, 9-φ 5 t=1
S13	431-BGXW5-SW	Absorbent sponge
S14	436-ANS-290	Absorbent sponge, HB-08 150x100x10t
S15	436-BNS-290	Absorbent sponge, HB-08 150x80x10t
S16	436-CNS-290	Absorbent sponge, HB-08 210x80x10t
S17	436-DNS-290	Absorbent sponge, HB-08 300x20x10t
S18	437-GXW5-SW	Bottom leg ass'y 15
S19	516-GXW5-SW	Bottom plate ass'y

NOTE: THE COMPONENTS IDENTIFIED BY MARK △ ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

PRINTED CIRCUIT BOARD PARTS LIST

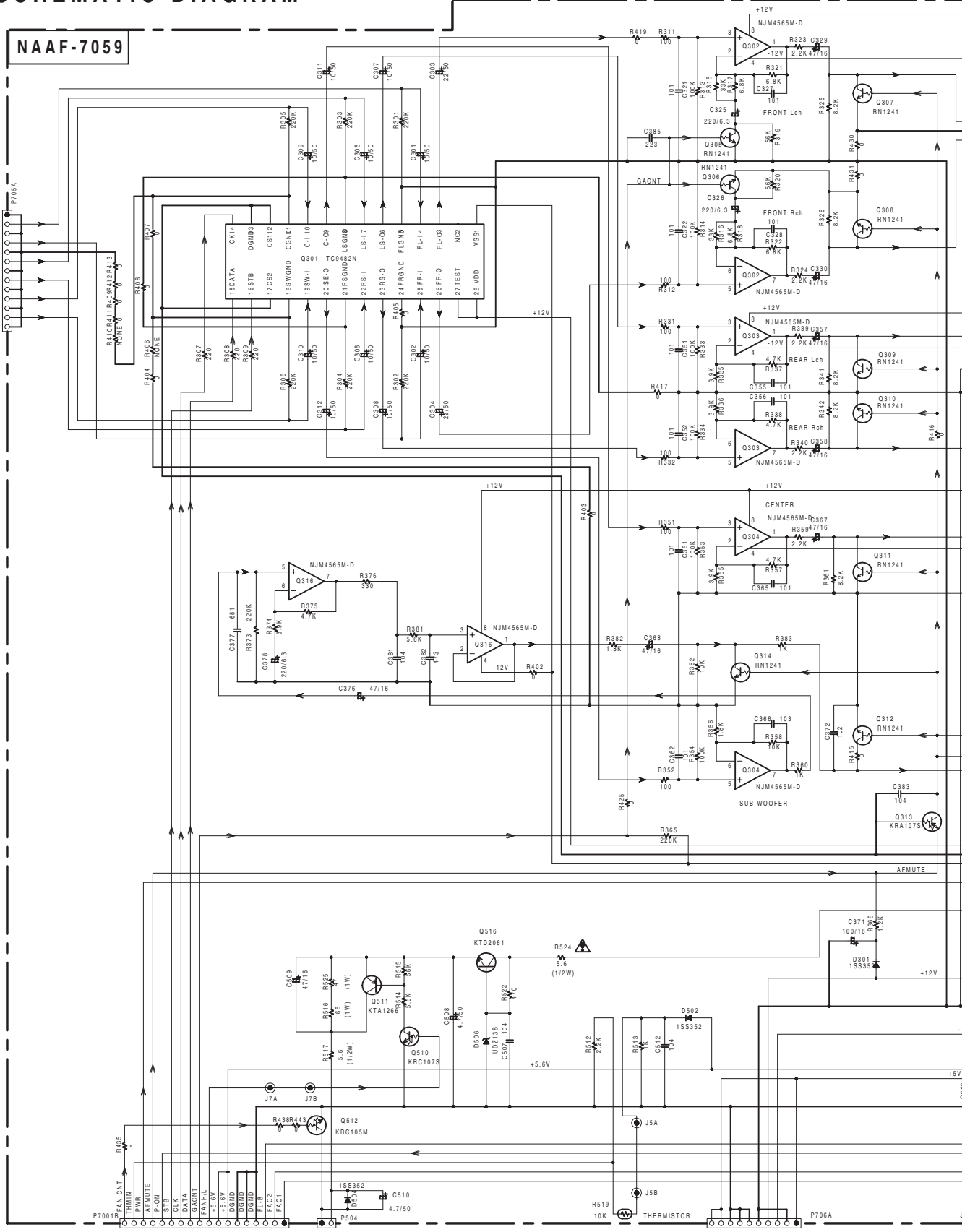
GXW-5.1

DSP CIRCUIT PC BOARD (NADG-7058-1B)

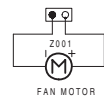
CIRCUIT NO.	PART NO.	DESCRIPTION	CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs			Sockets	
Q701	22241520R2	AK4112AVF	P702B	25052322 or	NSCT-22P2219 or
Q703	22241399R2	TC7WU04F		25052516	NSCT-22P2413
Q704	22241340R9	CS492604-CL	P705	25051238	NSCT-13P1028
Q705,Q706	22274574ER2O	TC74VHC574FT	P706	25051235	NSCT-10P1025
Q707	22241596R3 or	MBM29F002TC-90PFTN or		Jacks	
	22241591R3	MX27C2000	P7201	25045641	NPJ-2PDR446, Line input
Q708	222740077R2O	TC74HCT7007AF	P7202	25045473	NPJ-1PDBL291, Coaxial input
Q709	22278033DR2NE	MPC2933T		Photo coupler	
Q710	22274000GR2O	TC74VHCT00AFT	U7201	24120037	TORX178B, Digital input
Q7201	222740046R2O	TC74HCU04F		Resonators	
Q801	22241529R3	AK4527VQ	X701	3010327 or	AT-4912.288MHz
Q803-Q808	22241383R2	NJM4565M-D		3010320 or	
	Diodes			3010335	
D801-D811	223234R2 or	1SS352 or		Oscillator	
	223269R2	1SS355, Chip	X702	3010324R2	CSTCV12.2MTJ0C4
	Coils			POWER AMPLIFIER CIRCUIT PC BOARD (NAAF-7059-1B)	
L701-L703, L720,L7201, L7202,L721-L724, L802,L803 L704,L705	231237M022R2	NCH-1471		CIRCUIT NO. PART NO. DESCRIPTION	
				ICs	
	230921R2		Q301	22241371	TC9482N
	Capacitors		Q302-C304,Q316	22241383R2	NJM4565M-D
C701,C708, C7203,C740-C741, C767,C768,C770	354721019	100uF,6.3V,Elect.	Q501-Q503	△ 22241679	TDA8563AQ
C788,C791	354724719	470uF,6.3V,Elect.	Q901,Q902	222780125JRC or	NJM78M12FA or
C807,C810	354722219	220uF,6.3V,Elect.		222780125MAT or	AN78M12F or
C811,C840,C842	354742219	220uF,16V,Elect.		222780125NEC	MPC78M12HF
C812,C813,C830, C831,C844,C845, C858,C859	354784709	47uF,50V,Elect.		Transistors	
C816,C817,C833, C846,C847, C860,C861	374721524	0.015uF+/-5%,50V, Plastic	Q305-Q312, Q314	2213631 or	RN1241-A or
C825	355741009	10uF,16V,Elect.	Q313,Q514	2213632	RN1241-B
C827,C829	354744709	47uF,16V,Elect.		2216350R2 or	KRA107S or
C832	374721544	0.1uF+/-5%,50V, Plastic		2216360R2	RN2407
C834,C836	374726834	0.068uF+/-5%,50V, Plastic	Q507,Q513, Q510	2216340R2 or	KRC107S or
C835,C837,C848, C849,C850,C851	374726814	680pF+/-5%,50V, Plastic	Q508	2216260R2	RN1407
C862-C865			Q509	2216230R2 or	KRA103S or
C868,C869	354742209	22uF,16V,Elect.		2214540R2	RN2403
			Q511	2216175R2 or	KTC3875-GR or
			Q512	2213145R2	2SC2712-GR
				2215975 or	KTA1266-GR or
			Q516	2211455	2SA1015-GR
				2213640 or	DTC123JS or
				2215830	KRC105M
				2203434	KTD2061-Y
				Diodes	
			D301,D502, D504	223234R2 or	1SS352 or
			D506	223269R2	1SS355, Chip
			D905-D908	224491300R2	UDZ13B or
				22380260 or	RL1N4003 or
				22380035	GP104003E, Zener

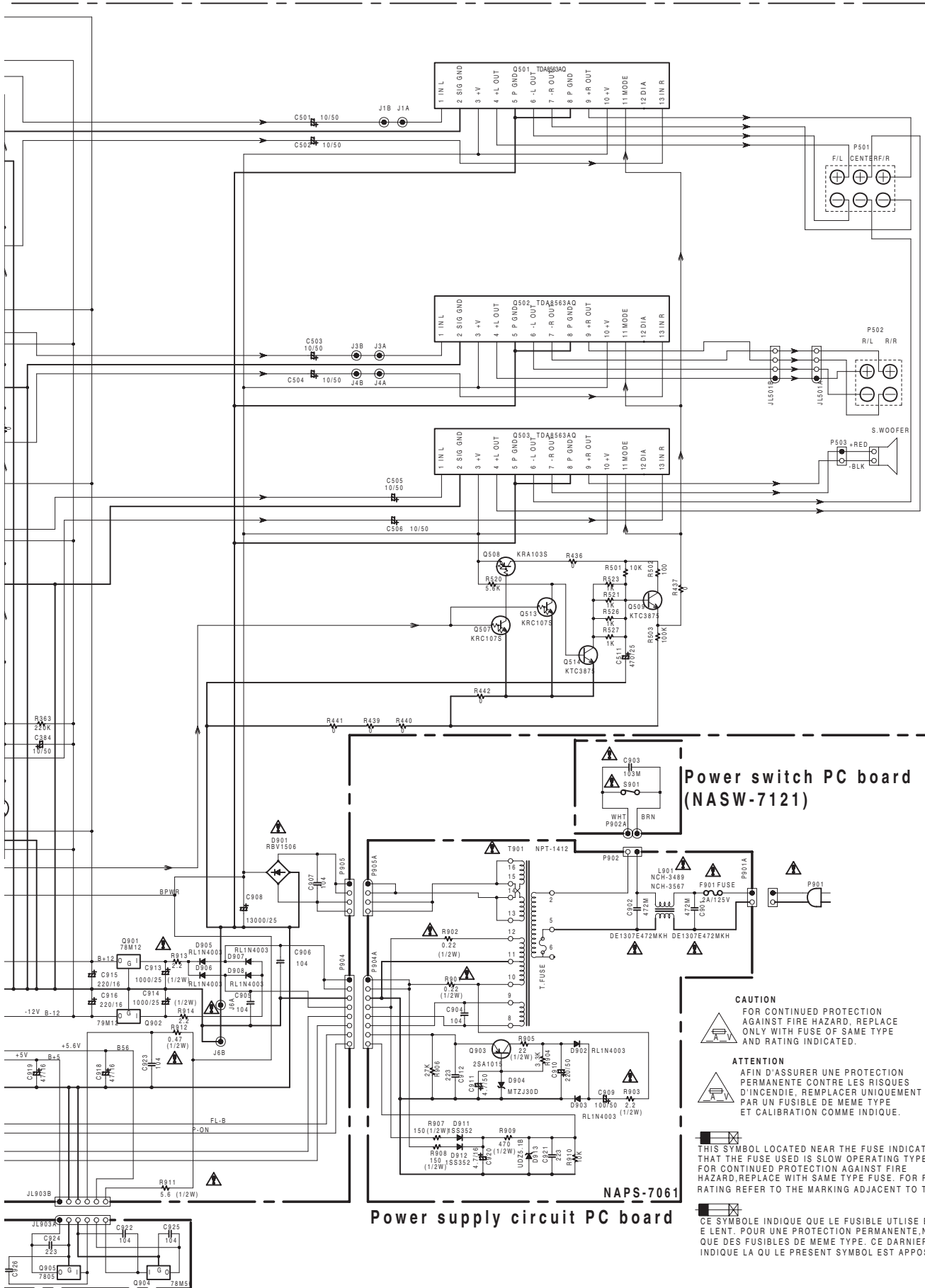
SCHEMATIC DIAGRAM

Power amplifier circuit PC board



Second regulator PC board
(NAETC-7062)





Power switch PC board (NASW-7121)

NAPS-7061

Power supply circuit PC board

CAUTION
 FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH FUSE OF SAME TYPE AND RATING INDICATED.

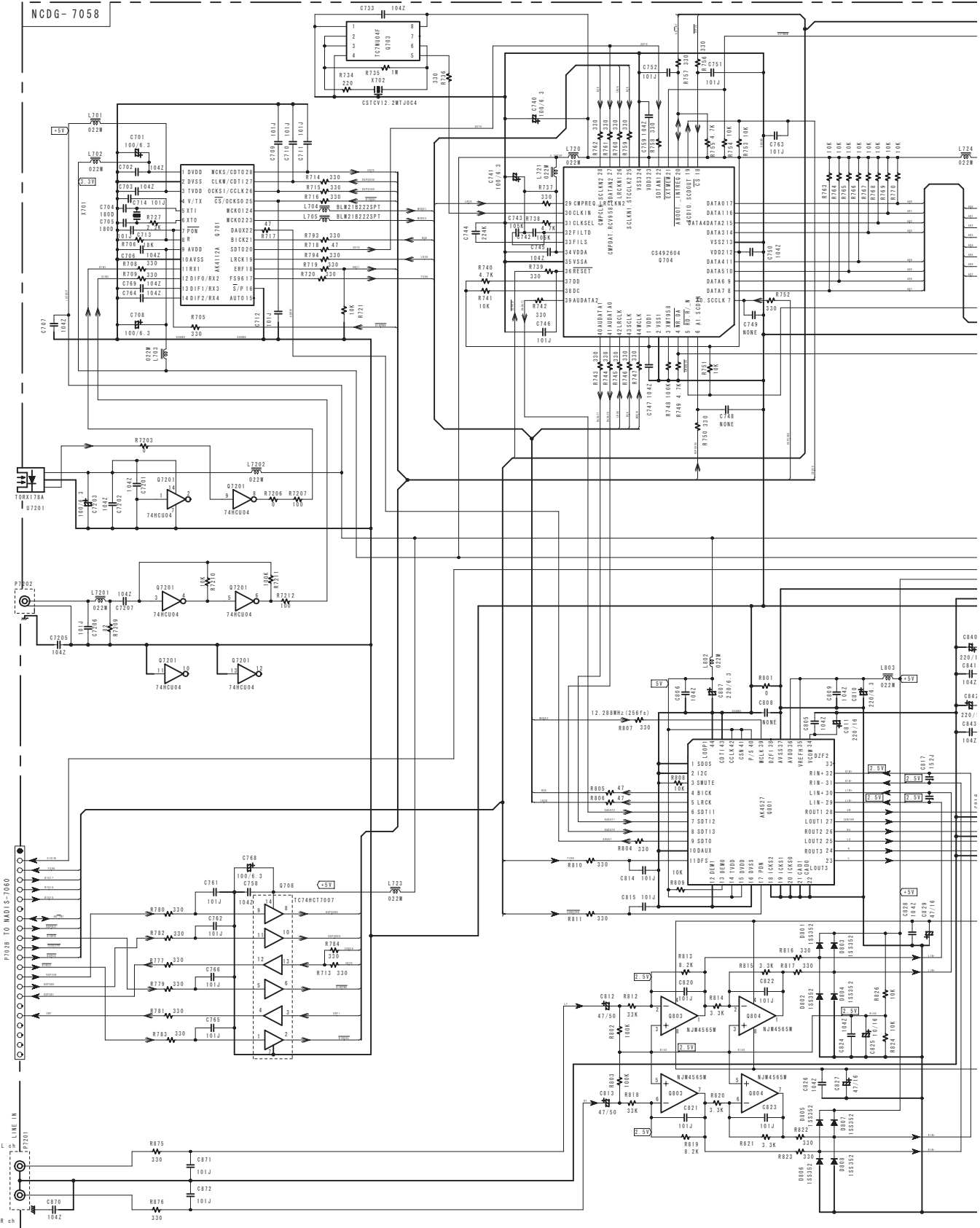
ATTENTION
 AFIN D'ASSURER UNE PROTECTION PERMANENTE CONTRE LES RISQUES D'INCENDIE, REMPLACER UNIQUEMENT PAR UN FUSIBLE DE MEME TYPE ET CALIBRATION COMME INDIQUE.

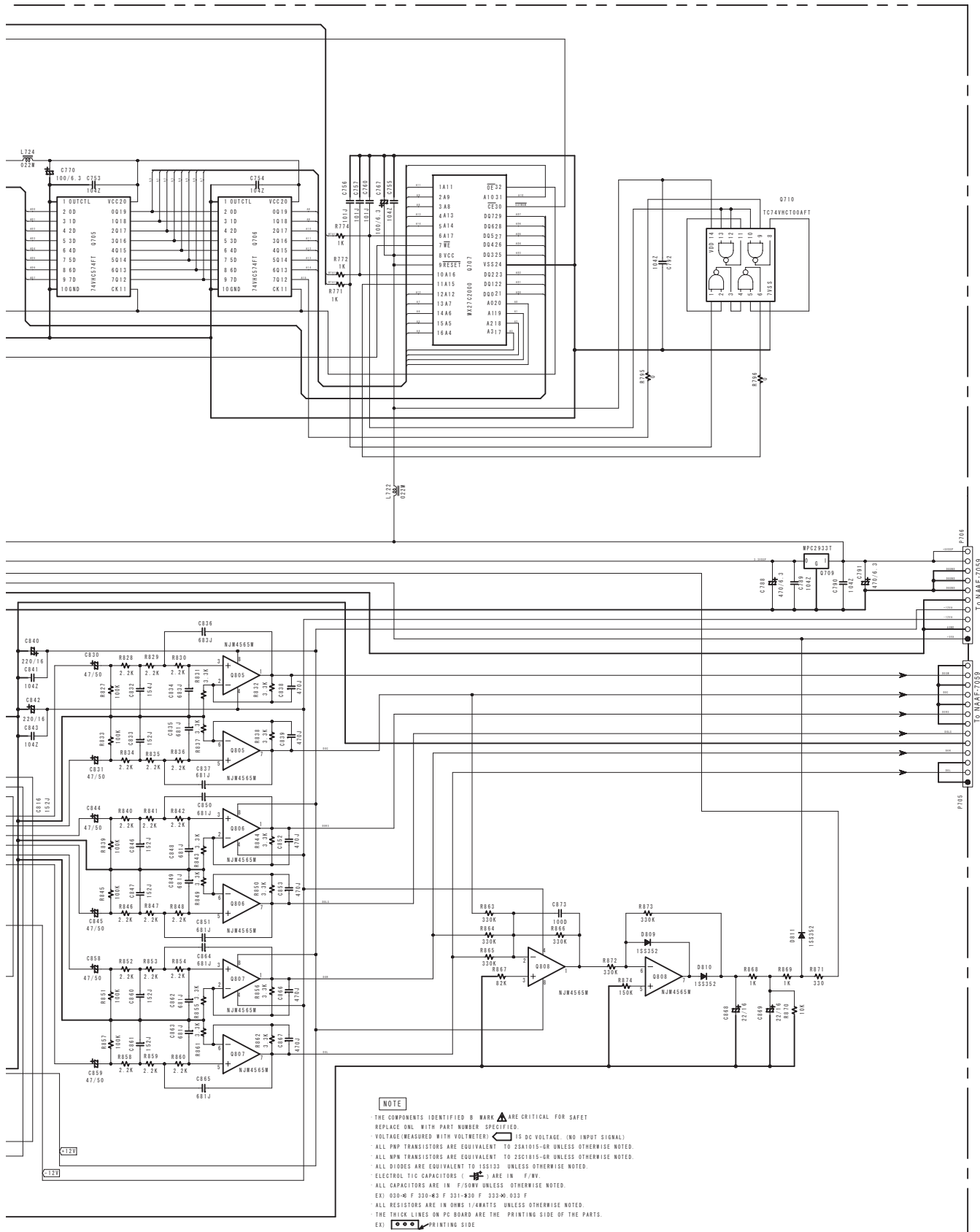
THIS SYMBOL LOCATED NEAR THE FUSE INDICATES THAT THE FUSE USED IS SLOW OPERATING TYPE FOR CONTINUED PROTECTION AGAINST FIRE HAZARD. REPLACE WITH SAME TYPE FUSE. FOR FUSE RATING REFER TO THE MARKING ADJACENT TO THE SYMBOL.

CE SYMBOLE INDIQUE QUE LE FUSIBLE UTILISE EST LENT. POUR UNE PROTECTION PERMANENTE, N'UTILISER QUE DES FUSIBLES DE MEME TYPE. CE DERNIER EST INDIQUE LA OU LE PRESENT SYMBOLE EST APPOSE.

SCHEMATIC DIAGRAM

DSP Section





A

B

C

D

SCHEMATIC DIAGRAM

Display circuit PC board

1

2

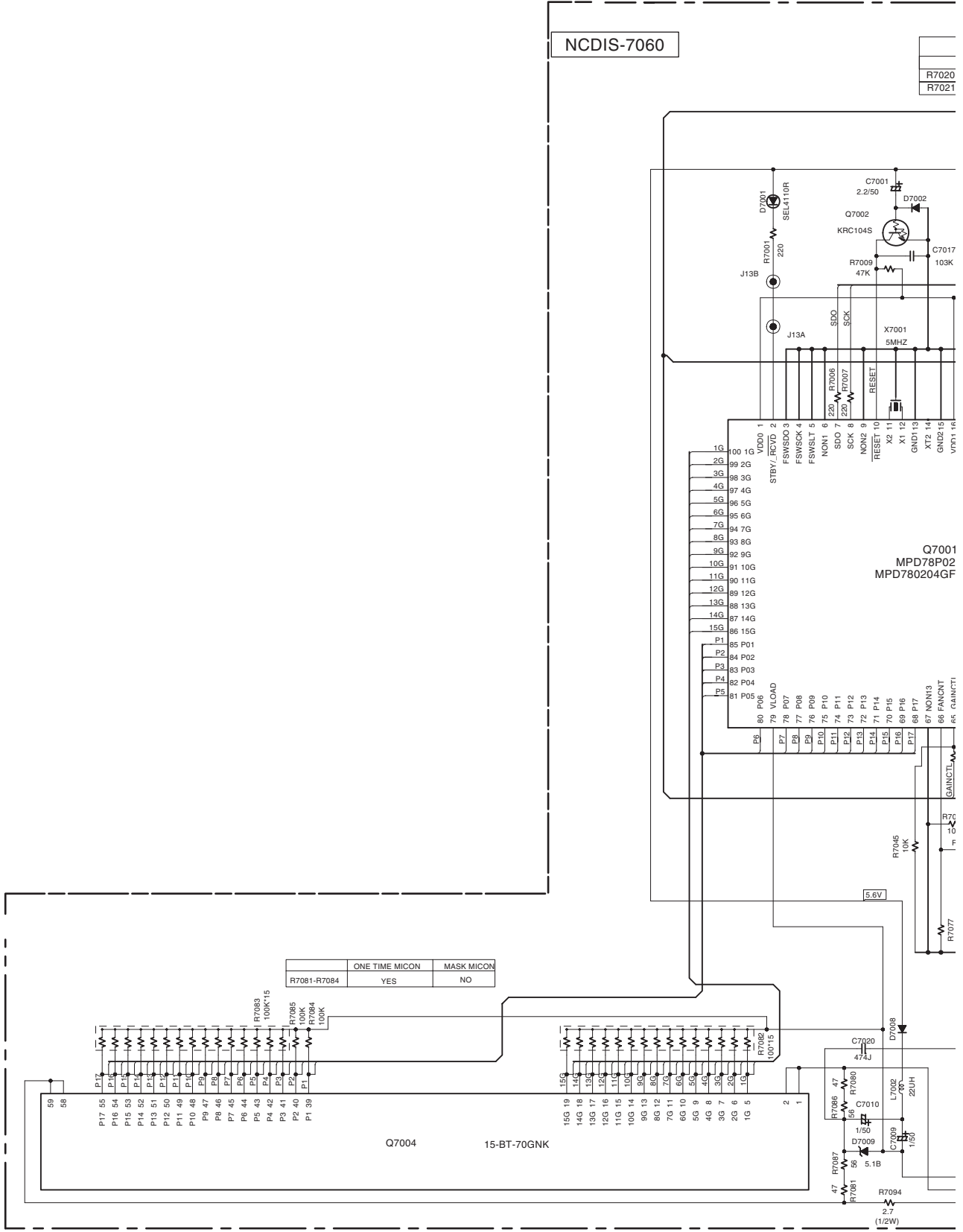
3

4

5

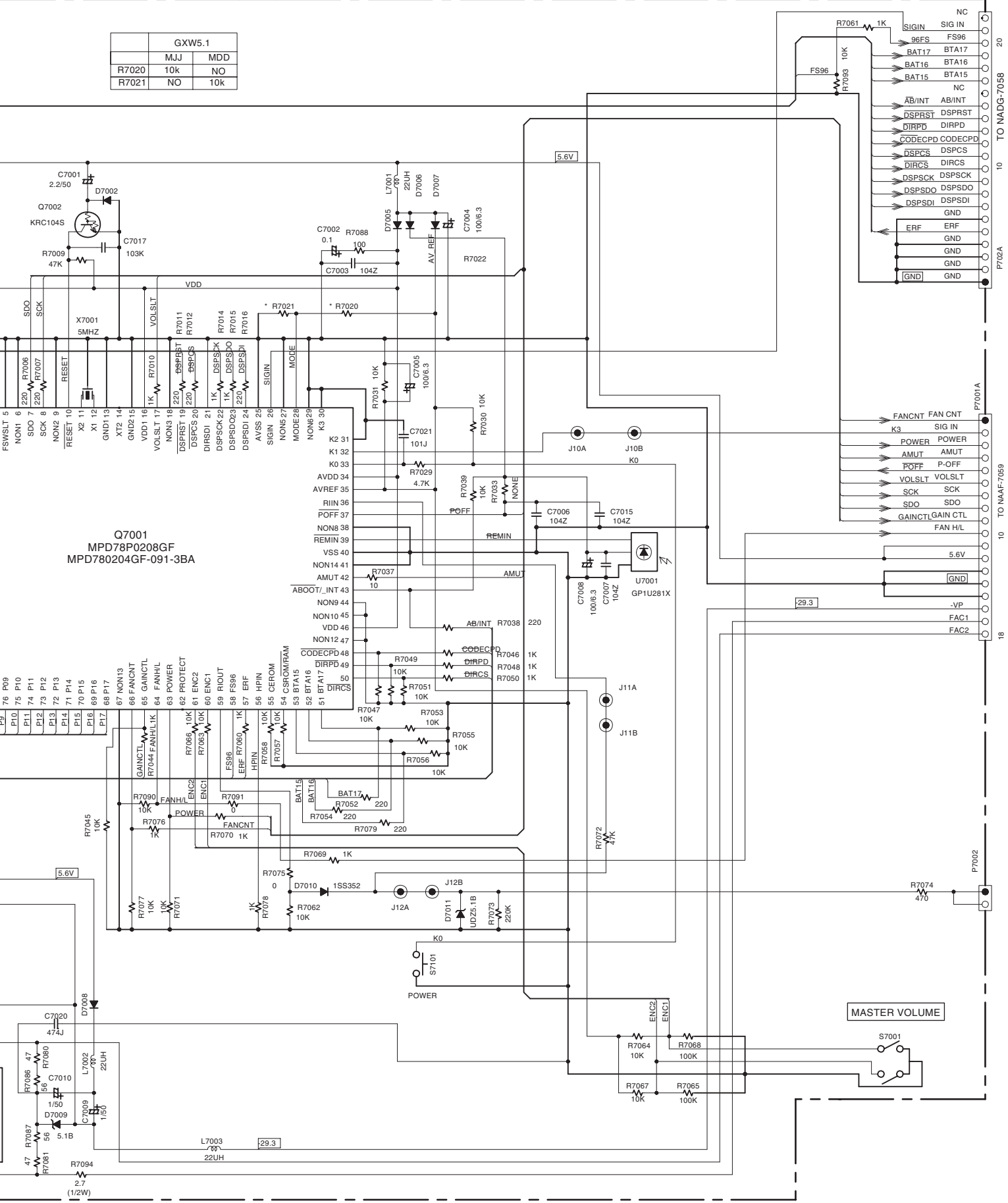
NCDIS-7060

R7020
R7021



SCHEMATIC DIAGRAM

	GXW5.1	
	MJJ	MDD
R7020	10k	NO
R7021	NO	10k



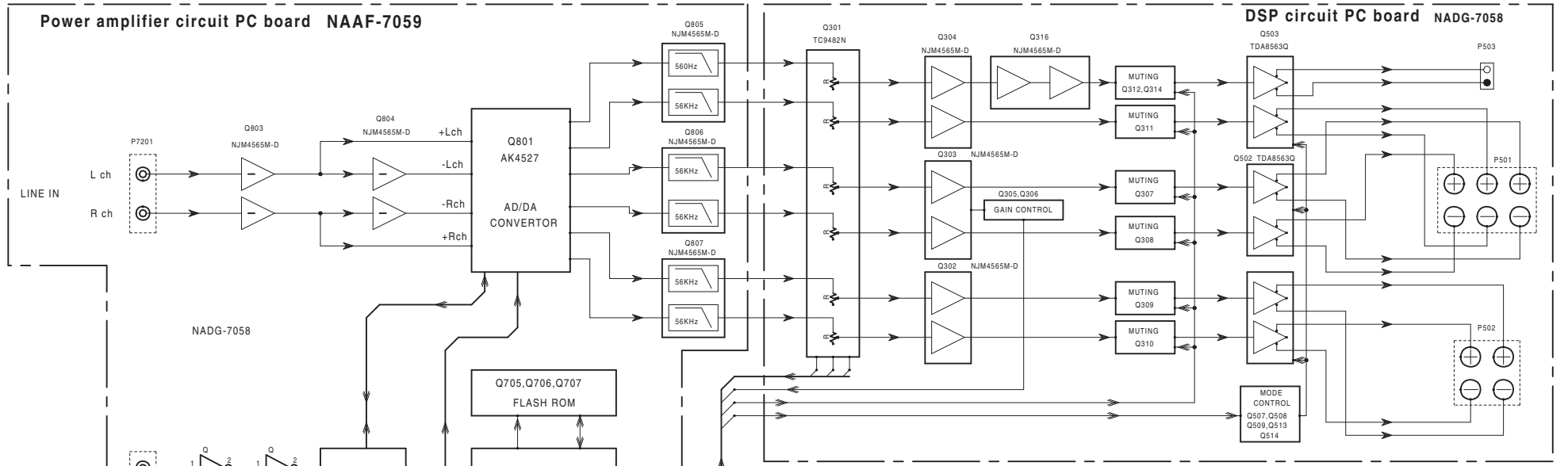
Q7001
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MASTER VOLUME

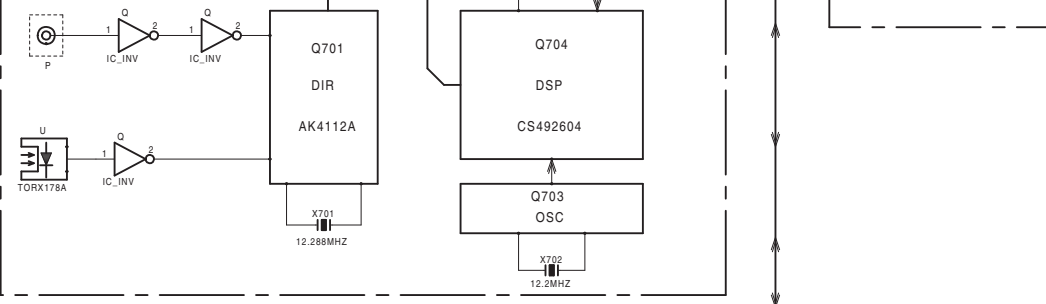
A B C D E

BLOCK DIAGRAM

1



2

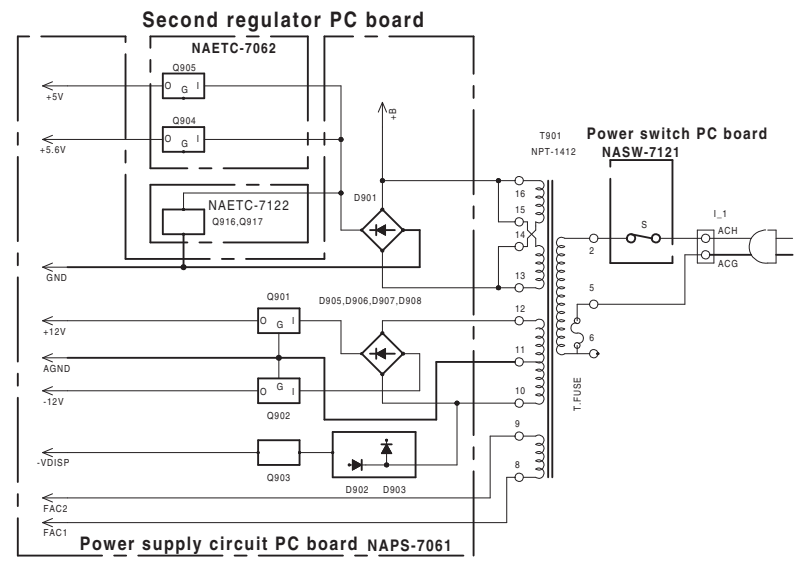
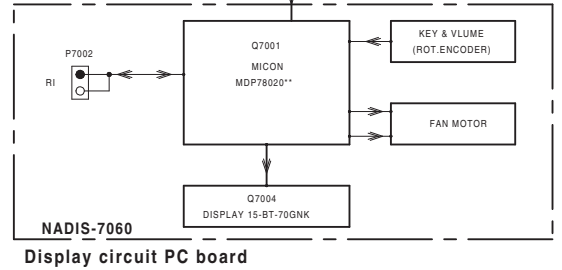


3

➤ SIGNAL FLOW

➤ DIGITAL & CONTROL FLOW

4



PACKING PARTS LIST

GXW-5.1

REF. NO.	PART NO.	DESCRIPTION
P1	29343033	Instruction manual
P2	2050070	NOP-1P150, Fiber cable ass'y
P3	24140442	RC-442S, Remote controller
P4	3010054	UM-3, Battery
P5	29362893	Label, serial number
P6	180-000044	Speaker cord ass'y, L=2.5m
P7	180-000229	Speaker cord ass'y,L=8m
P8	404-NS-290	Pad, 3peace/1set
P9	437-GXW5-SR	Leg, 7 x 20 Cork
P10	600-GXW51D	Master carton
P11	601-GXW51D	Gift box
P12	610-PGXW51D	UPC Label
P13	GX-5.1S(B)	Satellite speaker
P15	402-GXW5-SW	Poly bag,HD 530x495
P16	29365090	Warranty card
P18	29100097-1A	Polybag, 350*250

ONKYO CORPORATION

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ONKYO U.S.A. CORPORATION

18 Park Way, Upper Saddle River, N.J. 07458, U.S.A.
Tel: 201-785-2600 Fax: 201-785-2650 E-mail: onkyo@onkyousa.com



PRINTED CIRCUIT BOARD PARTS LIST

CIRCUIT NO.	PART NO.	DESCRIPTION	CIRCUIT NO.	PART NO.	DESCRIPTION
L7001-L7003	231237K220R2	NCH-1477, Chokey	F901A,F901B	△ 25052133	NSCT-1P2031
	Coils			Fuse holders	
C301,C302-C307, C305-C312	354781009	10uF,50V, Elect.	P501	25060305	NTM-6PDML236
C303,C304	354782209	22uF,50V, Elect.	P502	25060306	NTM-4PDML237
C325,C326,C378	354722219	220uF,6.3V, Elect.	E817	27190540-1	
C329,C330,C357, C358,C367,C368, C376,C918,C919	354744709	47uF,16V, Elect.	F901B	29362525	2A/125V, Fuse label
C366	374721034	0.01uF+/-5%,50V, Plastic	Q501A	27130865	Bracket
C371	354741019	100uF,16V, Elect.	Q901A,Q902A	27160484	RAD-153, Heat sink
C372	371121024	1000pF+/-5%,50V, Plastic	Q901B,Q902B	838430107	3TTB+10S(BC), Self-tapping screw
C377	374726814	680pF+/-5%,50V, Plastic	A202	28141460	20 x 5 x t=1, Cushion
C381,C905-C907	374721044	0.1uF+/-5%,50V, Plastic	A203	28141461	125 x 5 x t=1, Cushion
C382	374724734	0.047uF+/-5%,50V, Plastic	DISPLAY CIRCUIT PC BOARD (NADIS-7060-1B)		
C384,C501-C506	354781009	10uF,50V, Elect.	CIRCUIT NO.	PART NO.	DESCRIPTION
C508,C510	354780479	4.7uF,50V, Elect.		ICs	
C509	354744709	47uF,16V, Elect.	Q7001	22241628	MPD780204GF-091-3BA
C511	354754719S	470uF,25V, Elect.		Transistors	
C908	3504168	13000uF,25V, Elect.	Q7002	2214490R2 or	RN1404 or
C913,C914	354751029S	1000uF,25V, Elect.		2216210R2	KRC104S
C915,C916	354742219	220uF,16V, Elect.		Diodes	
	Sockets		D7002,	223234R2 or	1SS352
JL501A,JL501B	25051108	NSCT-4P895	D7005-D7008	223269R2	1SS355
JL903B	25051110	NSCT-6P897	D7009	224490510R2 or	UDZ5.1B or
P7001B	25052318	NSCT-18P2215	D7010	224550510R2	UDZS5.1B, Zener
P7001Bor	25052512	NSCT-18P2409		223234R2 or	1SS352
	Socket AS			223269R2	1SS355
P904B	2009990664UL	NSAS-8P0927	D7011	224490510R2 or	UDZ5.1B or
P905B	2009990665UL	NSAS-4P0928		224550510R2	UDZS5.1B, Zener
	Plugs			LED	
P503	25055165	NPLG-2P149	D7001	225381	SEL2210R-TP1
P504	25055099	NPLG-2P83		Capacitors	
P705A	25055709	NPLG-13P665	C7001	354780229	2.2uF,50V,Elect.
P706A	25055706	NPLG-10P662	C7002	3000120	FMC0H104Z, Super capacitor
P904	25055138	NPLG-8P122	C7004,C7005,	354721019	100uF,6.3V,Elect.
P905	25055134	NPLG-4P118	C7008		
	Resistors		C7009,C7010	354780109	1uF,50V,Elect.
R516	443626804	68 ohm+/-5%,1W,Metal oxide	C7020	375524744S	0.47uF+/-5%,50V, Plastic
R517,R524	△ 453530564	5.6 ohm+/-5%,1W,Metal		Sockets	
△ 19	4000203	NTH4G1S33B103F01, Thermis	P7001A	25052355	NSCT-18P2252
R525	443624704	47 ohm+/-5%,1W,Metal oxide	P7001Aor	25052539	NSCT-18P2436
R901,R902	453532294	0.22 ohm+/-5%,1/2W,Metal	P702A	25052359	NSCT-22P2256
R903	△ 453530224	2.2 ohm+/-5%,1/2W,Metal	P702Aor	25052543	NSCT-22P2440
R905	443522204	22 ohm+/-5%,1/2W,Metal oxide		Plug	
R907-R909	443521514	150 ohm+/-5%,1/2W,Metal ox	P7002	25055691	NPLG-2P647
R911	△ 453530564	5.6 ohm+/-5%,1/2W,Metal		Switches	
R912	△ 453534794	0.47 ohm+/-5%,1/2W,Metal	S7101	25035652	NPS-111-S604, Power
R913,R914	△ 453530224	0.22 ohm+/-5%,1/2W,Metal	S7001	25065616A	EC11B1517, Volume

PRINTED CIRCUIT BOARD PARTS LIST

GXW-5.1

CIRCUIT NO.	PART NO.	DESCRIPTION
U7001	241305 or	GP1U281X or
	241332	PIC-28143TE5
Q7004	FL tube	
	212218	15-BT-80GNK
X7001	Oscillator	
	3010343	CSTS0500MG06
Q7004A	Holder	
	27190989A	FL

POWER SUPPLY CIRCUIT PC BOARD (NAAF-7061-1B)

CIRCUIT NO.	PART NO.	DESCRIPTION
Q903	Transistors	
	2215975 or 2211455	KTA1266-GR or 2SA1015-GR
D902,D903	Diodes	
	22380260 or 22380035	RL1N4003 or GP104003E
D904	224473004	MTZJ30D, Zener
D911,D912	223234R2 or	
	223269R2	1SS352 or 1SS355, Chip
D913	224490510R2 or	
	224550510R2	UDZ5.1B or UDZS5.1B, Zener
L901	Coils	
	△ 231287 △ 231252	NCH-3567 or NCH-3489, Choke
C901,C902 C904 C909 C910 C911,C920	Capacitors	
	△ 3300030	DE1307E472M-KH, IS
	374721044	
	354781019	100uF,50V,Elect.
	354782219S	220uF,50V,Elect.
354780479	4.7uF,50V,Elect.	
P901A,P902	Plugs	
	25055675	NPLG-2P631
P904A P905A	Sockets	
	25051112 25051108	NSCT-8P899 NSCT-4P895

POWER SWITCH PC BOARD (NASW-7121-1B)

CIRCUIT NO.	PART NO.	DESCRIPTION
S901	Switch	
	△ 25065620	NRC-11007P, Power
C903	Capacitor	
	△ 3300031	DE1607F103M-KH, IS
P902A	Socket AS	
	2009990654UL	NSAS-4P0911

SECOND REGULATOR PC BOARD (NAETC-7062-1B)

CIRCUIT NO.	PART NO.	DESCRIPTION
Q904 Q905	ICs	
	222780565JRC 222780054JRC or 222780054MAT or 222780054NEC	NJM78M56FA NJM7805FA or 7805F or MPC7805HF
JL903A	Socket	
	25051110	NSCT-6P897

NOTE: THE COMPONENTS IDENTIFIED BY MARK △ ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.