

CDX-C4840R/C4850R

SERVICE MANUAL

AEP Model
UK Model



Photo: CDX-C4850R

Model Name Using Similar Mechanism	CDX-C570R/C580R
CD Drive Mechanism Type	MG-363T-121
Optical Pick-up Name	KSS-521A

SPECIFICATIONS

CD player section

System	Compact disc digital audio system
Signal-to-noise ratio	90 dB
Frequency response	10 – 20,000 Hz
Wow and flutter	Below measurable limit

Tuner section

FM

Tuning range	87.5 – 108.0 MHz
Aerial terminal	External aerial connector
Intermediate frequency	10.7 MHz
Usable sensitivity	12 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	65 dB (stereo), 68 dB (mono)
Harmonic distortion at 1 kHz	0.8% (stereo), 0.6% (mono)
Separation	35 dB at 1 kHz
Frequency response	30 – 15,000 Hz

MW/LW

Tuning range	MW: 531 – 1,602 kHz LW: 153 – 281 kHz
Aerial terminal	External aerial connector
Intermediate frequency	10.7 MHz / 450 kHz
Sensitivity	MW: 30 μ V LW: 50 μ V

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	40 W \times 4 (at 4 ohms)

General

Outputs	Line outputs (2) (CDX-C4850R) Line output (1) (CDX-C4840R) Power aerial relay control lead Power amplifier control lead Telephone ATT control lead (CDX-C4850R)
Tone controls	Bass \pm 8 dB at 100 Hz Treble \pm 8 dB at 10 kHz
Power requirements	12 V DC car battery (negative ground)
Dimensions	Approx. 178 \times 50 \times 185 mm (w/h/d)
Mounting dimension	Approx. 182 \times 53 \times 162 mm (w/h/d)
Mass	Approx. 1.2 kg
Supplied accessories	Parts for installation and connections (1 set) Front panel case (1)

Design and specifications are subject to change without notice.

FM/MW/LW COMPACT DISC PLAYER



SONY®

SECTION 4 DIAGRAMS

4-1. IC PIN DESCRIPTION

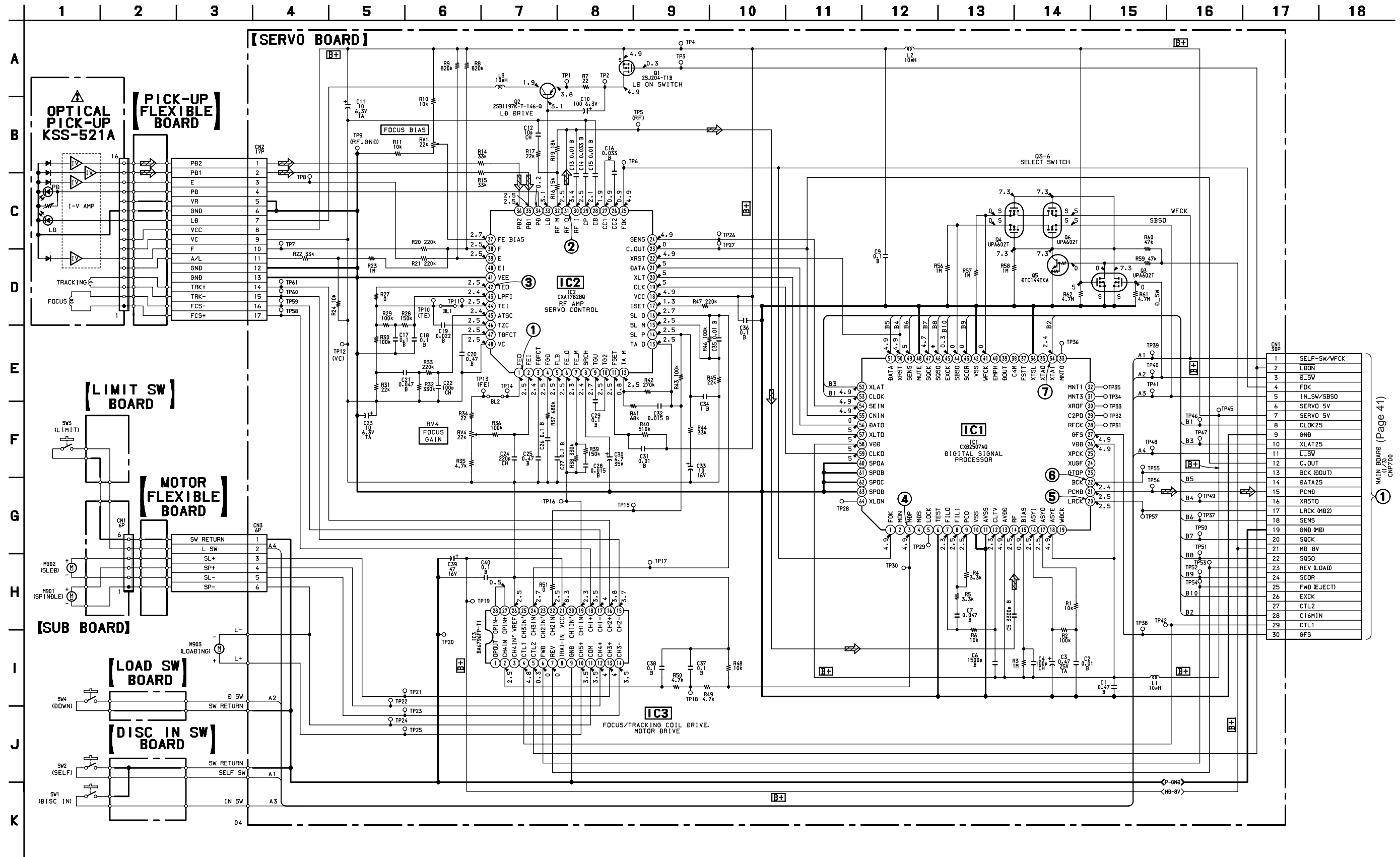
• IC801 MB90574APMT-G-199-BND (SYSTEM CONTROL)

Pin No.	Pin Name	I/O	Pin Description
1	$\overline{\text{LD ON}}$	O	Laser ON/OFF control output
2	FOK	I	Focus OK signal detection input
3	XLAT25	O	CD signal processing latch output
4	DATA25	O	CD signal serial data output
5	$\overline{\text{XRST}}$	O	Reset output to CD signal processor IC.
6	GFS	I	GFS signal detection input
7	NIL	—	Not used. (Connect to ground in this set.)
8	VCC	—	Power supply pin (+5 V)
9 – 11	NIL	—	Not used. (Open)
12	$\overline{\text{FLS SI/NOSEI}}$	I	Front panel attachment detection input
13	LCD SO/FLS SO	O	LCD serial data output
14	LCD CKO	O	LCD serial clock output
15	BEEP	O	BEEP output
16	NIL	—	Not used. (Open)
17	SQ SI	I	Sub Q data input
18	NIL	—	Not used. (Connect to ground in this set.)
19	SQ CKO	O	Sub Q read clock output
20	UNI SI	I	BUS system serial interface input
21	UNI SO	O	BUS system serial interface output
22	UNI CK	I/O	BUS system serial clock input/output
23	C IN	I	Track jump No. count input
24	SIRCS	I	Remote commander input
25	TXT SI	I	CD-TEXT data input
26	NIL	—	Not used. (Connect to ground in this set.)
27	TXT CKO	O	CD-TEXT data read clock output
28	CLOK25	O	CD signal processing serial clock output
29	$\overline{\text{SYSRST}}$	O	System reset output
30	DEEMPH	O	De-emphasis output
31	$\overline{\text{AMP ATT}}$	O	Power amplifier attenuator control output
32	MD ON	O	CD mechanism power control output
33	VSS	—	Ground
34	C	—	Power stabilization capacitor pin
35	CD ON	O	CD power control output
36	$\overline{\text{BUS ON}}$	O	BUS ON control output
37	NIL	O	Power control output of A/D conversion.
38	DVCC	—	VREF input of D/A converter.
39	DVSS	—	Ground of D/A converter.
40	NIL	—	Not used. (Open)
41	ANGLE	O	LCD view angle alignment output (Not used in this set.)
42	AVCC	—	Analog power supply pin (+5 V)
43	AVRH	—	VREF + input of A/D converter.
44	AVRL	—	VREF – input of A/D converter.
45	AVSS	—	Analog ground
46 – 48	KEY IN0 – 2	I	Key input 0 – 2
49	RC IN0	I	Rotary commander input 0
50	QUALITY	I	Noise detection input
51	NIL	—	Not used. (Connect to ground in this set.)
52	MPDH	I	Tuner multi path input
53	S-METER	I	S-meter voltage detection input
54	VCC	—	Power supply pin (+5 V)
55	NS MASK	O	Noise detection output

Pin No.	Pin Name	I/O	Pin Description
56	AMP ON	O	Power amplifier power control output
57	TXT ON	O	Reset output to CD-TEXT decoder IC.
58	VOL ATT	O	Electric volume mute control output
59	NIL	—	Not used. (Open)
60	ATT	O	System attenuate control output
61	RC IN $\bar{1}$	I	Rotary commander shift key input 1
62	TU ATT	O	Tuner attenuate output
63	VSS	—	Ground
64	NIL	—	Not used. (Open)
65	SSTOP	I	IF counter result signal detection input of PLL.
66	TEST	I	Test mode initial setting detection input
67	DAVN	I	RDS IC data acquisition detection input
68	FM ON/AM ON	O	FM ON output
69	TU ON	O	Tuner power control output
70	SDA	I/O	I ² C BUS serial data input/output
71	SCL	O	I ² C BUS serial clock output
72	NOSE2	I	Front panel OPEN detection input
73	X1A	O	Sub ceramic oscillator output (32 kHz)
74	X0A	I	Sub ceramic oscillator input (32 kHz)
75	SCOR	I	SCOR signal detection input
76	BU IN	I	Backup power detection input
77	DQSY	I	CD-TEXT data setting completion signal detection input
78	CD SENS	I	CD SENS signal detection input
79	NIL	I	Key input acknowledge
80	TEL ATT	I	Telephone attenuate detection input
81	ST/MONO	I/O	Tuner stereo signal detection input/forced monaural output
82	SEEKOUT	O	SEEK output
83	SD IN	I	Signal detector input
84	WIDE	O	WIDE select output (Not used in this set.)
85	NARROW	O	NARROW select output (Not used in this set.)
86	HSTX	—	Hardware standby input (Connect to pin 6 (RESET).)
87	MD2	—	Operation mode input (Connect to ground in this set.)
88, 89	MD1, 0	—	Operation mode input (Connect to VCC in this set.)
90	RESET	I	Reset input
91	VSS	—	Ground
92	X0	I	Main ceramic oscillator input (4.19 MHz)
93	X1	O	Main ceramic oscillator output (4.19 MHz)
94	VCC	—	Power supply pin (+5 V)
95	COM8V ON	O	COM 8V control output
96	NIL	—	Not used. (Open)
97	AREA1	I	Destination select input 1 (Fixed at "L" in this set.)
98	AREA2	I	Destination select input 2 (Fixed at "L" (AEP, UK model) or "H" (German model) in this set.)
99	LOUD	I	Fixed at "L" in this set.
100	BAND	I	Fixed at "H" in this set.
101	ACC IN	I	Accessory power detection input
102, 103	PH3, 2	I	Disc insertion detection photo sensor input (Fixed at "H" in this set.)
104	LCD CE	O	LCD chip enable output
105	FLS W	I	Flash write input (Fixed at "H" in this set.)
106, 107	RE IN0, 1	I	Rotary encoder input
108	ILL ON	O	Illumination power control output
109	PW ON	O	System power control output
110	NIL	—	Not used. (Open)

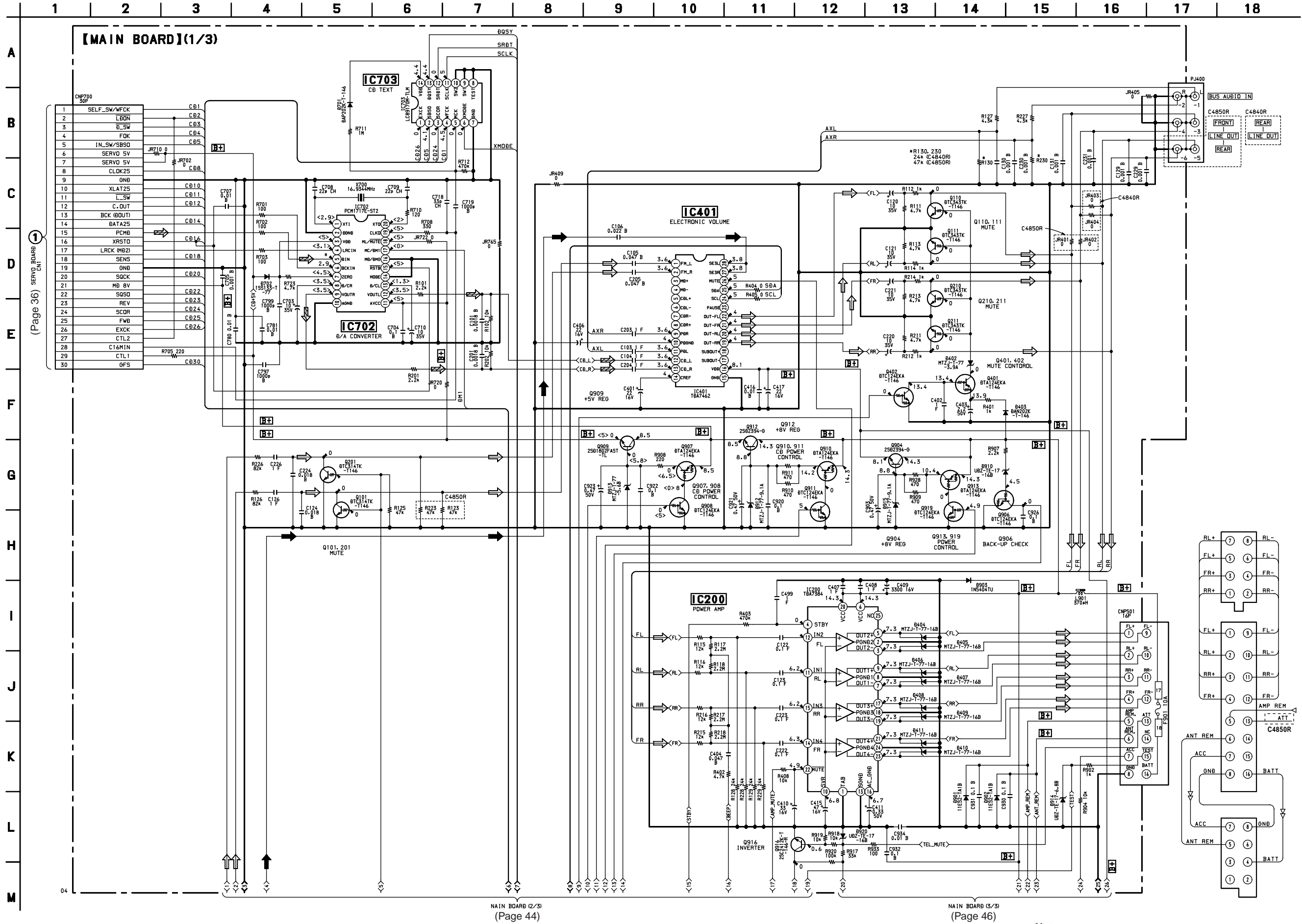
Pin No.	Pin Name	I/O	Pin Description
111	ANT REM	O	ANT REMOTE power control output
112	NIL	—	Not used. (Open)
113	CTL2	—	Not used in this set.
114	CD LD	O	Loading motor control output (Loading direction)
115	CDEJ	O	Loading motor control output (Eject direction)
116	L SW	I	Sled limit switch detection input
117	IN SW/(PH1)	I	Disc insertion detection input
118	D SW	I	DOWN switch detection input
119	VSS	—	Ground
120	SELF SW/(IN SW)	I	Disc self store detection input

4-7. SCHEMATIC DIAGRAM — CD MECHANISM SECTION — • Refer to page 32 for Waveforms.
• Refer to page 51 for IC Block Diagrams.



Note:
• Voltage and waveforms are dc with respect to ground under no-signal conditions.
no mark : CD PLAY
* : Impossible to measure

4-9. SCHEMATIC DIAGRAM — MAIN SECTION (1/3) — • Refer to page 53 for IC Block Diagrams.



SERVO BOARD (Page 36) CN1

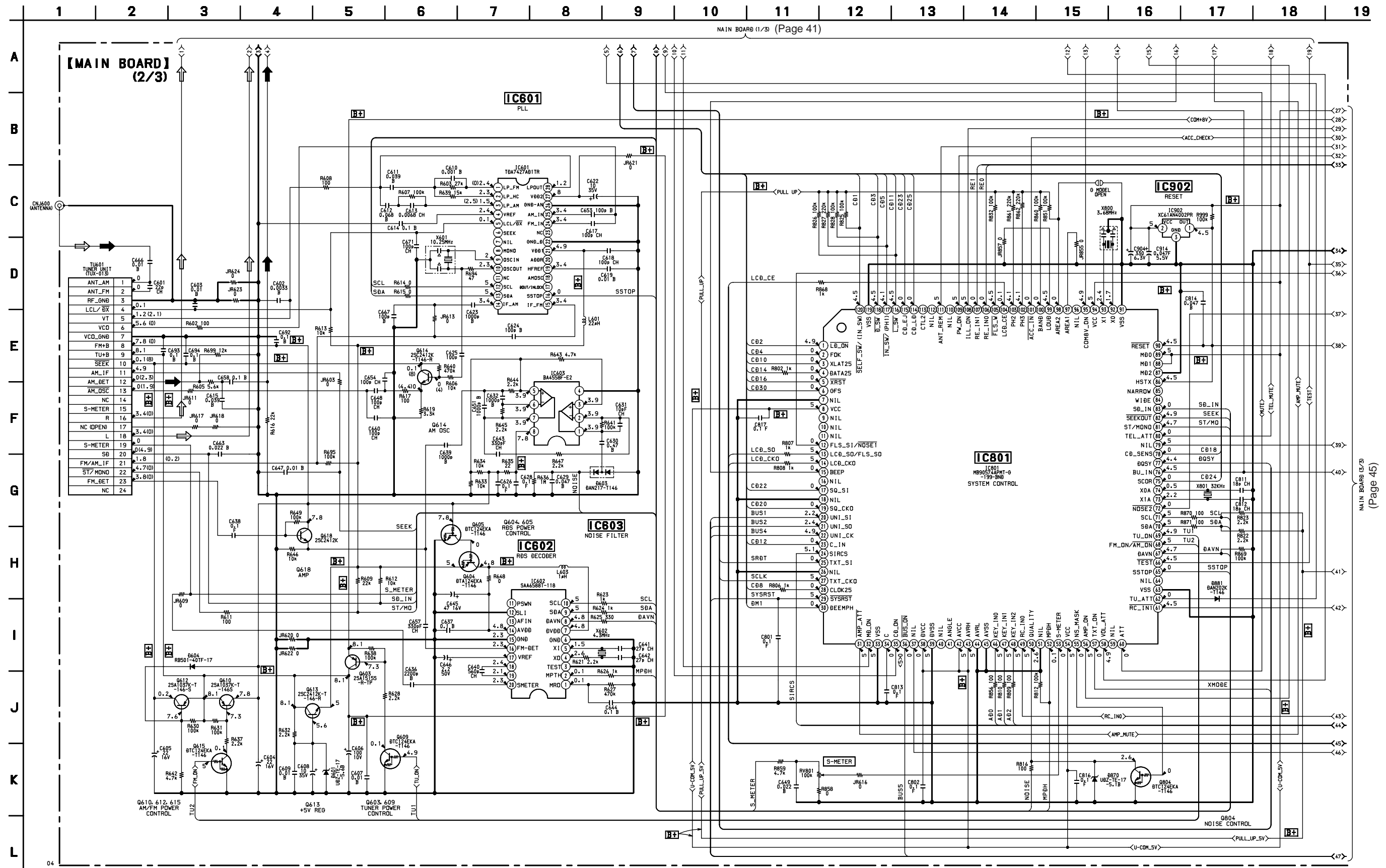
1	SELF_SW/FCK	CB1
2	LBDN	CB2
3	B_SW	CB3
4	FDK	CB4
5	IN_SW/SBSO	CB5
6	SERVO 5V	
7	SERVO 5V	
8	CLOCK25	CB8
9	GNB	
10	XLAT25	CB10
11	L_SW	CB11
12	C_OUT	CB12
13	BCK (BOUT)	CB14
14	DATA25	
15	PCMB	CB16
16	XRSTO	
17	LRCK (MB2)	CB18
18	SENS	
19	GNB	CB20
20	SOCK	
21	MD 8V	
22	SOSO	CB22
23	REV	CB23
24	SCDR	CB24
25	FWB	CB25
26	EXCK	CB26
27	CTL2	
28	CL16MIN	
29	CTL1	
30	GFS	CB30

MAIN BOARD (2/3)
(Page 44)

MAIN BOARD (3/3)
(Page 46)

Note:
 • Voltage is dc with respect to ground under no-signal (detuned) condition.
 no mark : FM
 () : MW
 < > : CD PLAY

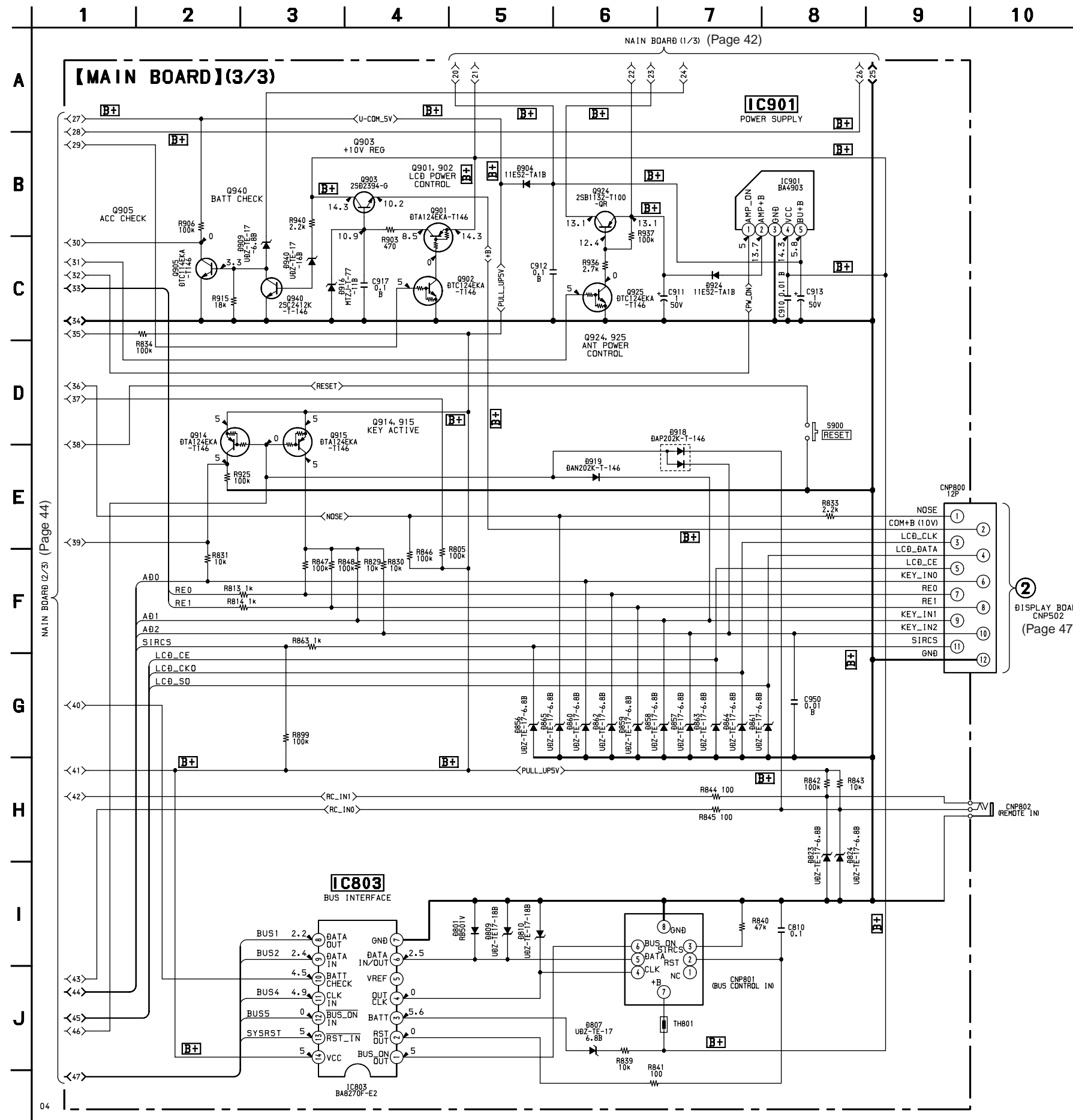
4-10. SCHEMATIC DIAGRAM — MAIN SECTION (2/3) — • Refer to page 51 for IC Block Diagrams.



Note:

- Voltage is dc with respect to ground under no-signal (detuned) condition.
- no mark : FM
- () : MW
- < > : CD PLAY

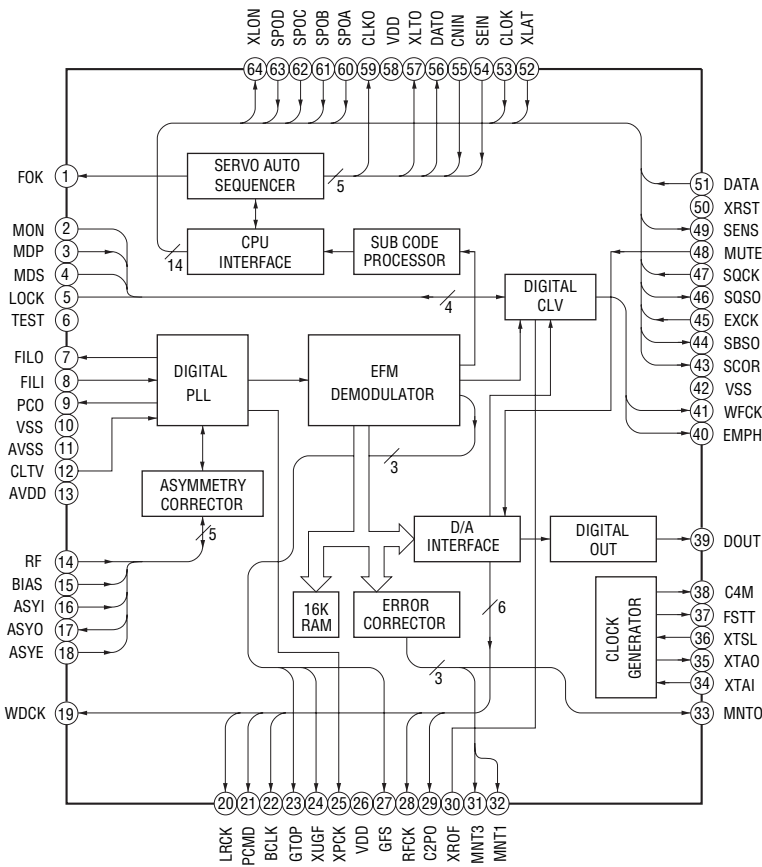
4-11. SCHEMATIC DIAGRAM — MAIN SECTION (3/3) — • Refer to page 53 for IC Block Diagrams.



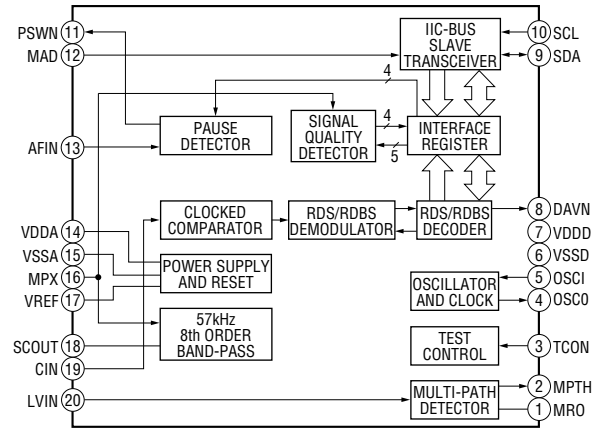
Note:
 • Voltage is dc with respect to ground under no-signal (detuned) condition.
 no mark : FM
 () : MW
 < > : CD PLAY

• IC Block Diagrams

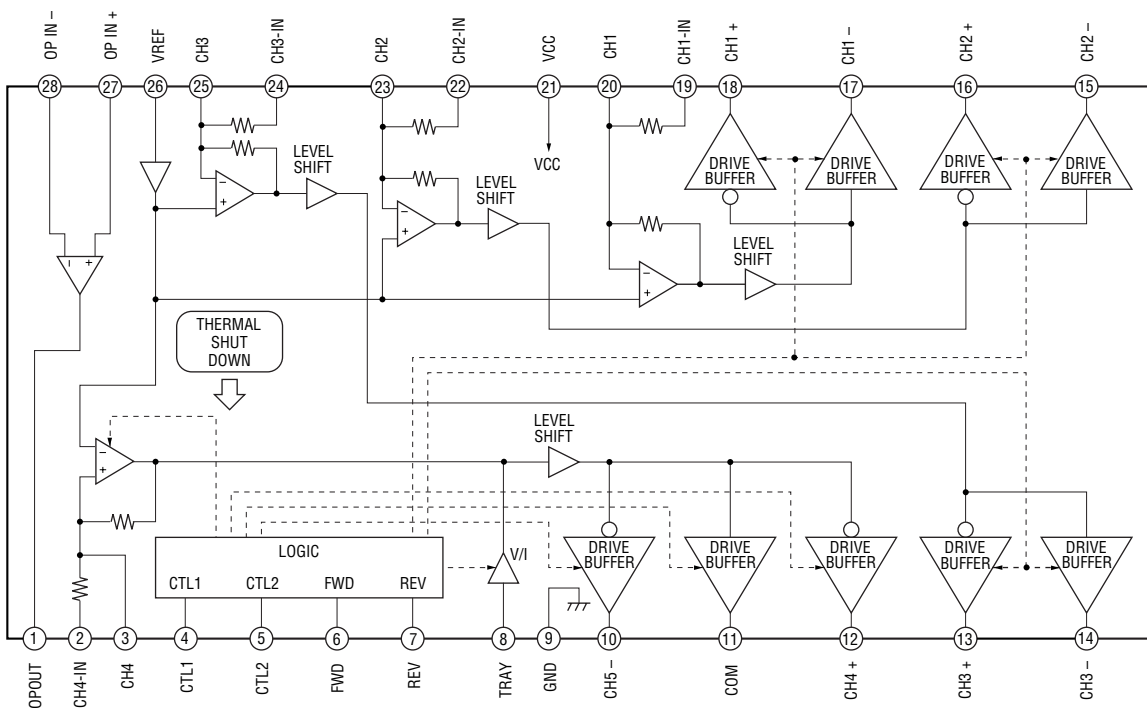
IC1 CXD2507AQ



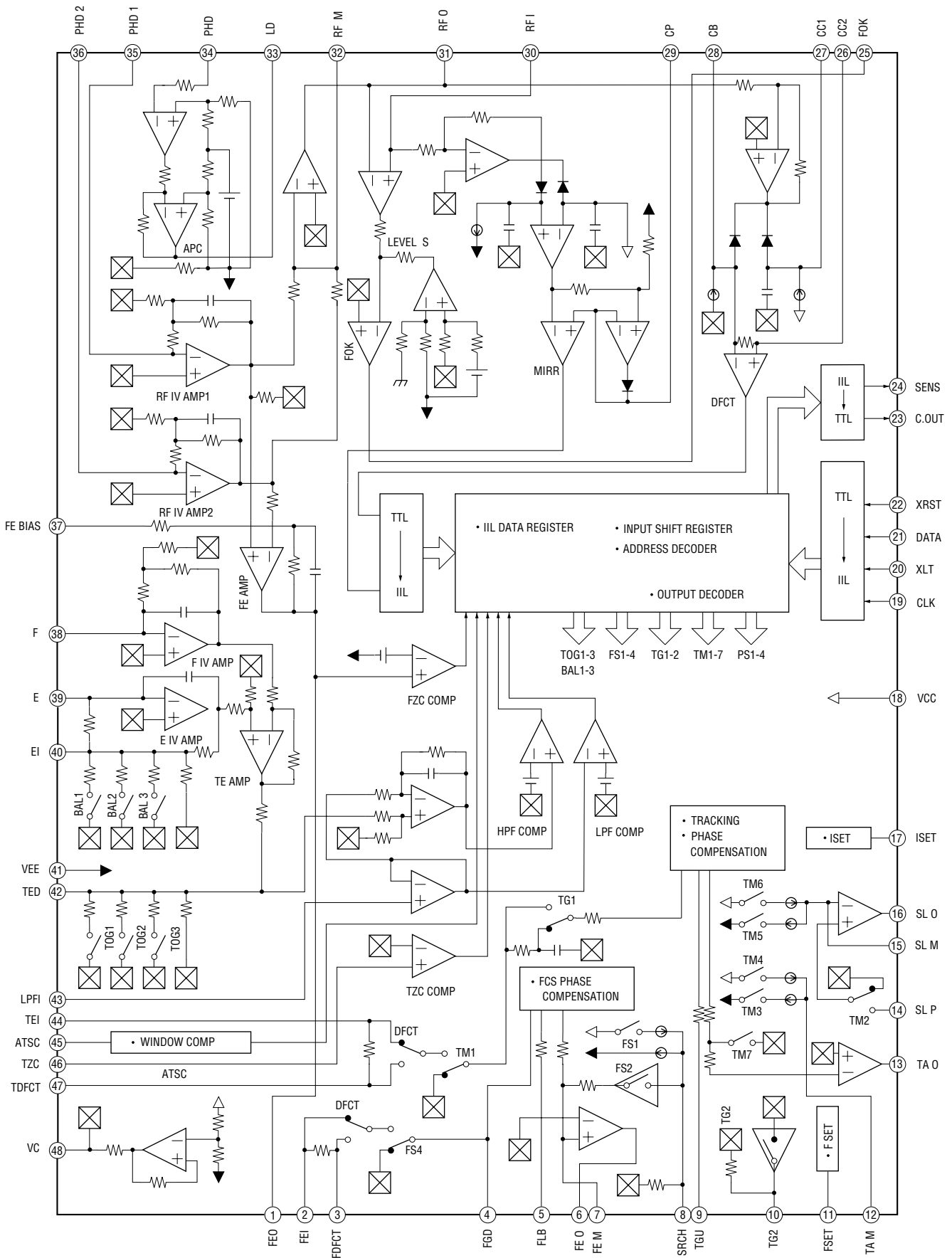
IC602 SAA6588T-118



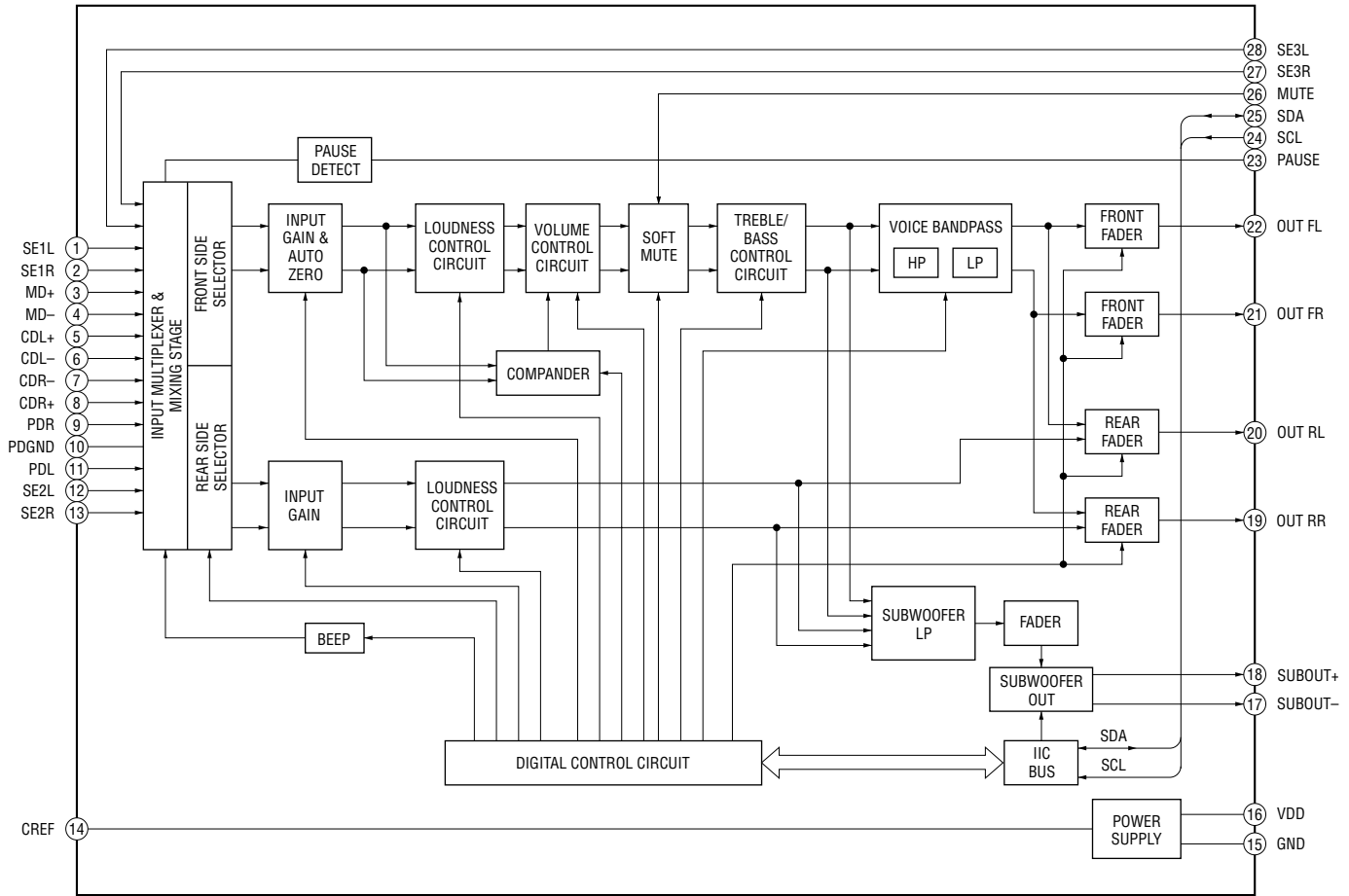
IC3 BA6796FP-T1



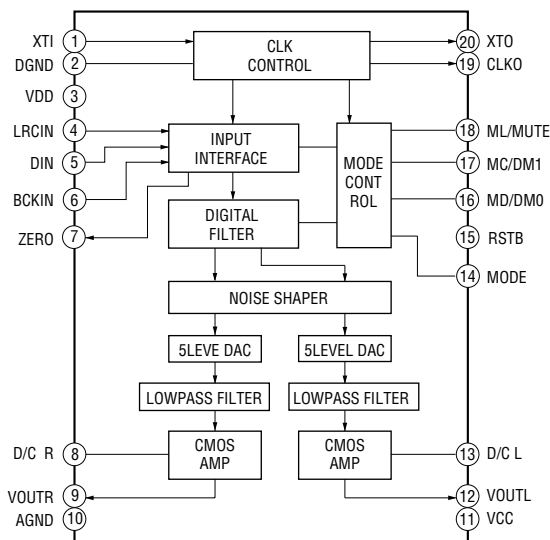
IC2 CXA1782BQ



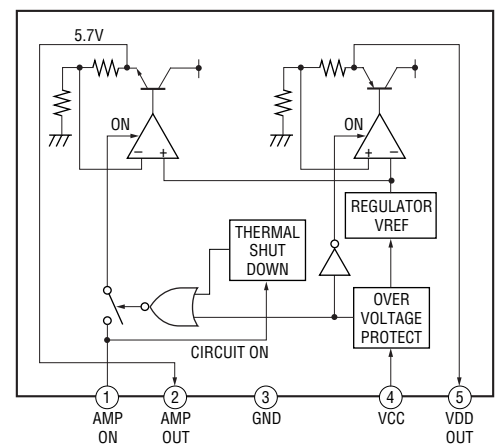
IC401 TDA7462



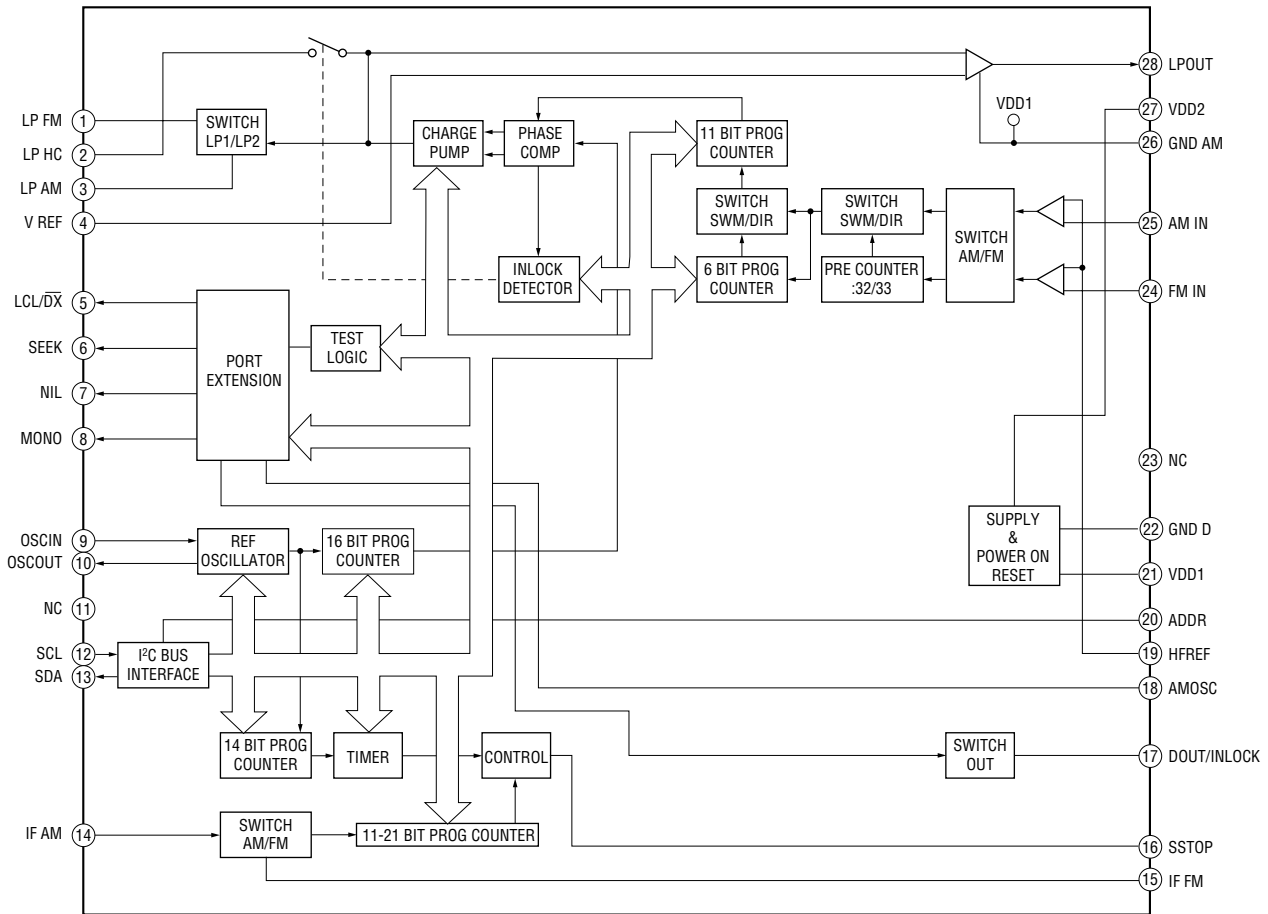
IC702 PCM1717E-ST2



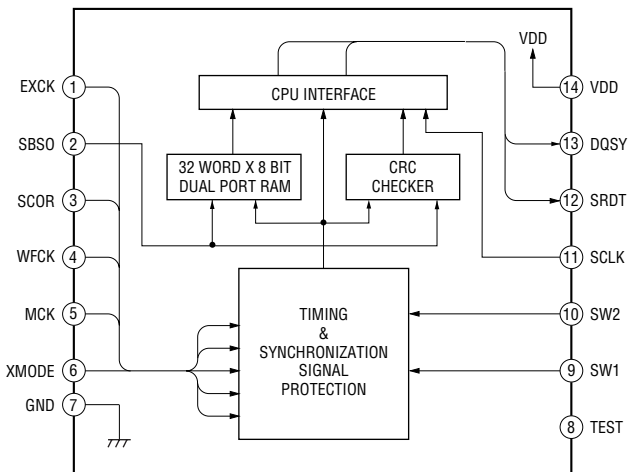
IC901 BA4903



IC601 TDA7427AD1TR



IC703 LC89170M-T



IC803 BA8270F-E2

