TOYOTA
AUDIO COMPONENT SERVICE MANUAL

AVX.

COMPACT disc DIGITAL AUDIO

VEHICLE	DESTINATION	PRODUCED AFTER	TOYOTA PART No.	ID CODE	FUJITSU TEN MODEL No.
4RUNNER	NORTH AMERICA	October 2002	86120-35240	17006	135000-2400B101

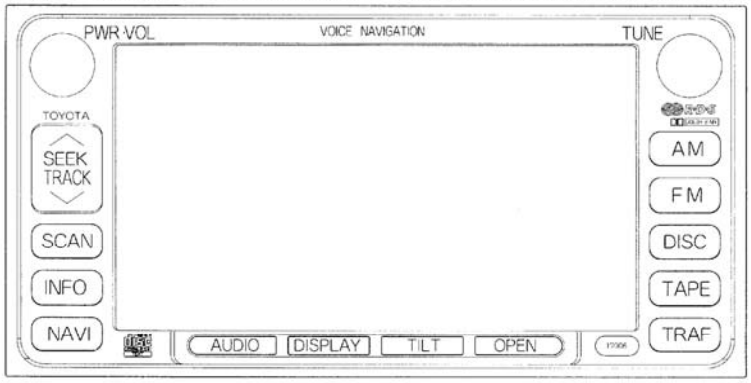


TABLE OF CONTENTS

※CS-DECK:311000-36600700/S (DK-93-02) cannot be supplied with individual parts, so please exchange the whole deck.
※CD-DECK:321000-41800700/S (DA-35-165) : Refer to SM-1379C

Manufactured for TOYOTA

by FUJITSU TEN LIMITED

PUB. NO. SM-1408

SPECIFICATIONS

(DISPLAY SECTION)

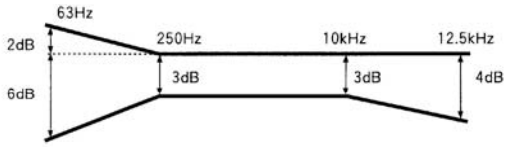
LIQUID CRYSTAL PANEL	6.5" (WIDE) TFT TFT Active Matrix Drive
TOTAL NUMBER OF DOTS	93,600dots

(RADIO SECTION)	AM	FM
TUNING RANGE	530 to 1710 kHz	87.75 to 107.9 MHz
SENSITIVITY	34 dB μ or less	14 dB μ or less
A G C	58 $\pm$ 6 dB μ	
LIMITING SENSITIVITY		7 $\pm$ 6 dB μ (54 dB μ input)
SEPARATION		25 dB or better (74 dB μ input)
ELECTRONIC TUNING SENSITIVITY	Distant : 40 $\pm$ 8 dB μ	Distant : 24 $\pm$ 6 dB μ
SIGNAL TO NOISE RATIO	21 dB or better (35dB μ input)	46dB or better (20 kHz LPF) (54 dB μ input) Stereo : 40 dB or better (74 dB μ input)

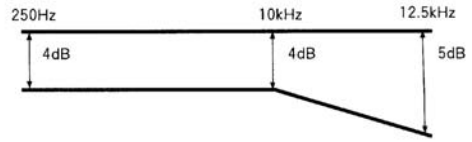
(CASSETTE DECK SECTION)

NUMBER OF TRACKS	4 — track 2 — channel
TAPE SPEED	4.76 cm / sec.
WOW & FLUTTER	0.2 % or better (W.R.M.S.)
CROSSTALK	40 dB or better (1kHz, B.P.F.)
SEPARATION	30 dB or better (1kHz, B.P.F.)

FREQUENCY RESPONSE



DOLBY PROCESSOR FREQUENCY RESPONSE



SIGNAL TO NOISE RATIO	40 dB or better (JIS-A filter is used for)

(CD SECTION)

SYSTEM	Compact Disc Digital Audio
APPLICABLE DISC	Compact Disc (8/12cm)
LASER WAVELENGTH	795nm
FOCUS ERROR DETECTION SYSTEM	Astigmatic method system
FREQUENCY RESPONSE	997Hz : REFER 21Hz ~19997Hz : 0 $\pm$ 2 dB
SIGNAL TO NOISE RATIO	80 dB or better

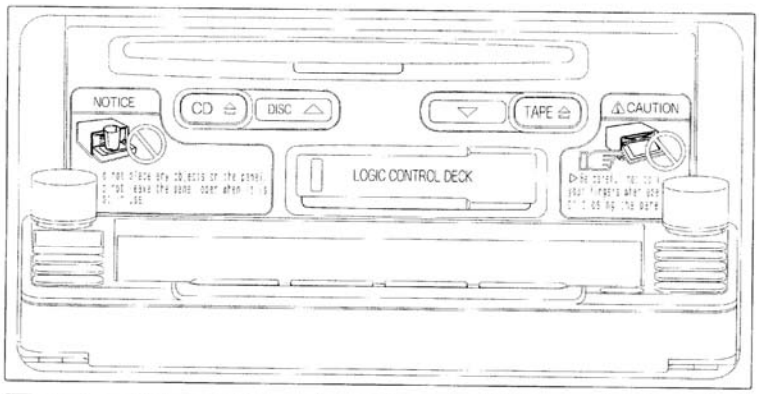
(COMMON SECTION)

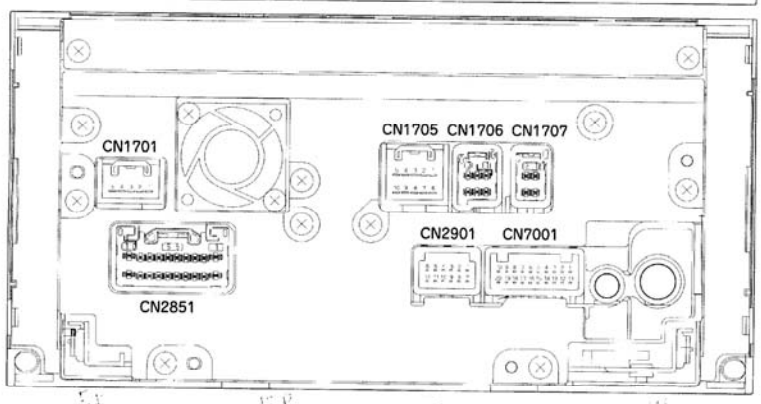
LOAD IMPEDANCE	10 kΩ
POWER INPUT	12V car battery, negative terminal to ground
Voltage	13.2VDC
Current	Approx. 1.4A (MAX.)
Back up current	3 mA or less
DIMENSIONS	201 (W) × 100 (H) × 161 (D) mm
WEIGHT	Unit — Approx. 2.8 kg

NOTES : Measuring the specifications, balance and fader control must be at center.

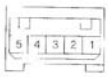
CONNECTIONS

SM-1408
86120-35240
〔135000-2400B101〕



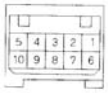


CN1701 (PIN VIEW)



1	PKB	IN
2	—	—
3	SPD	IN
4	TST	IN
5	REV	IN

CN1705 (PIN VIEW)



1	VR	—
2	R	IN
3	B	IN
4	—	—
5	TX+	IN/OUT
6	VG	—
7	G	IN
8	SYNC	IN
9	—	—
10	TX−	IN/OUT

CN1706 (PIN VIEW)

1	TX+	IN/OUT
2	—	—
3	NTSC	IN
4	TX−	IN/OUT
5	SLD	—
6	SGND	—

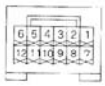
CN1707 (PIN VIEW)

1	V+	IN
2	CA+	OUT
3	V−	IN
4	GND	—

CN2851 (PIN VIEW)

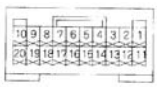
1	BU+B	IN	11	ACC+B	IN
2	ILL+B	IN	12	ILL−	OUT
3	AMP+B	OUT	13	ANT+B	OUT
4	—	—	14	—	—
5	TX+	IN/OUT	15	TX−	IN/OUT
6	—	—	16	—	—
7	MUTE	OUT	17	—	—
8	R+	OUT	18	R−	OUT
9	L+	OUT	19	L−	OUT
10	SLD	—	20	GND	—

CN2901 (PIN VIEW)



1	SLD	—
2	R+	IN
3	R-	IN
4	L+	IN
5	L-	IN
6	MUTE	IN
7	GND	—
8	—	—
9	TX +	IN/OUT
10	TX -	IN/OUT
11	ACC+B	OUT
12	BU+B	OUT

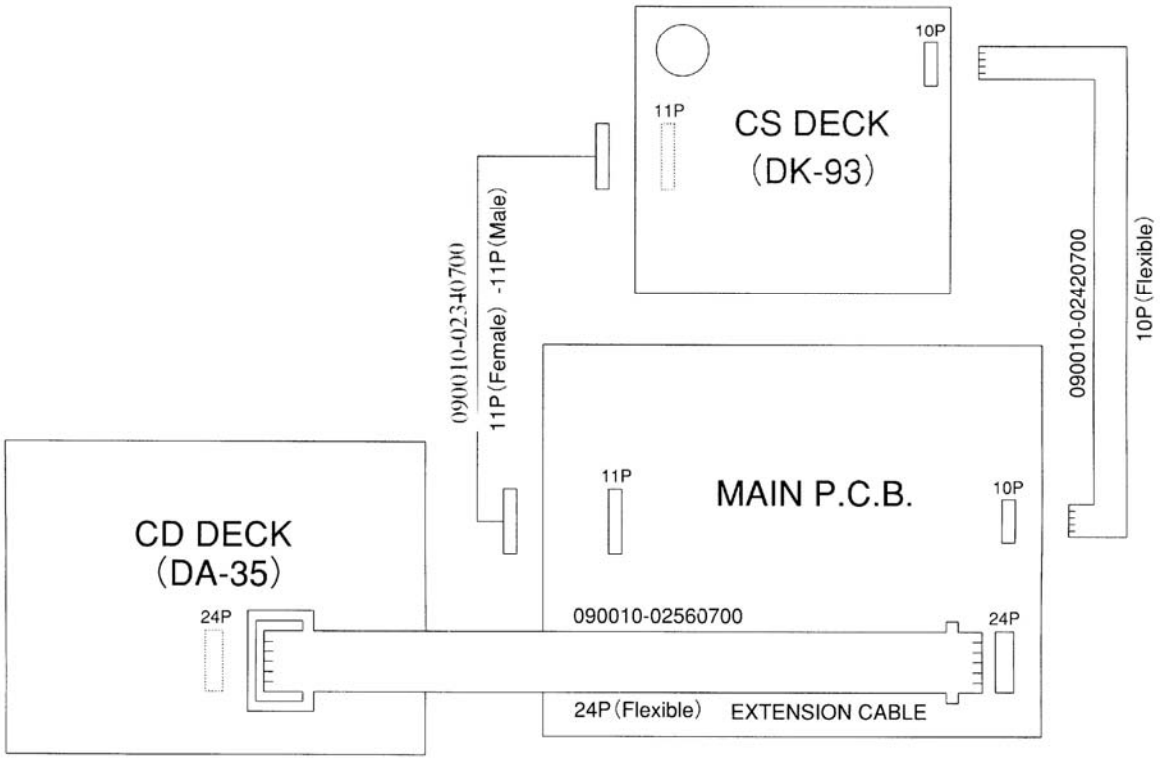
CN7001 (PIN VIEW)



1	—	—
2	—	—
3	—	—
4	CMP+	OUT
5	CMP-	OUT
6	GND	—
7	SW1	IN
8	SW2	IN
9	TX1+	IN/OUT
10	TX1-	IN/OUT
11	—	—
12	—	—
13	—	—
14	SLD1	—
15	RSR+	OUT
16	RSR-	OUT
17	RSL+	OUT
18	RSL-	OUT
19	RMU	OUT
20	—	—

(CM40801D)

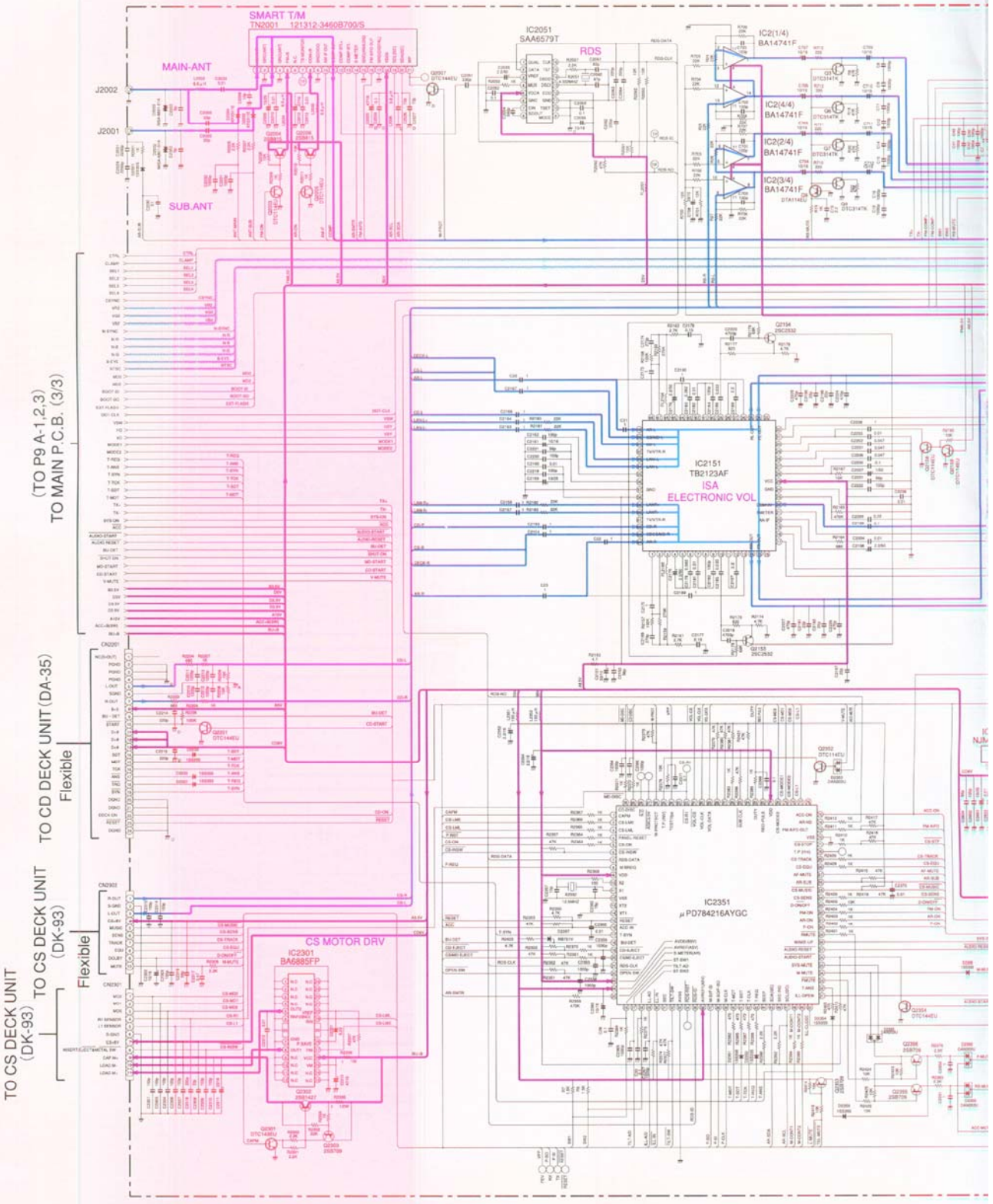
SERVICE EXTENSION CABLES



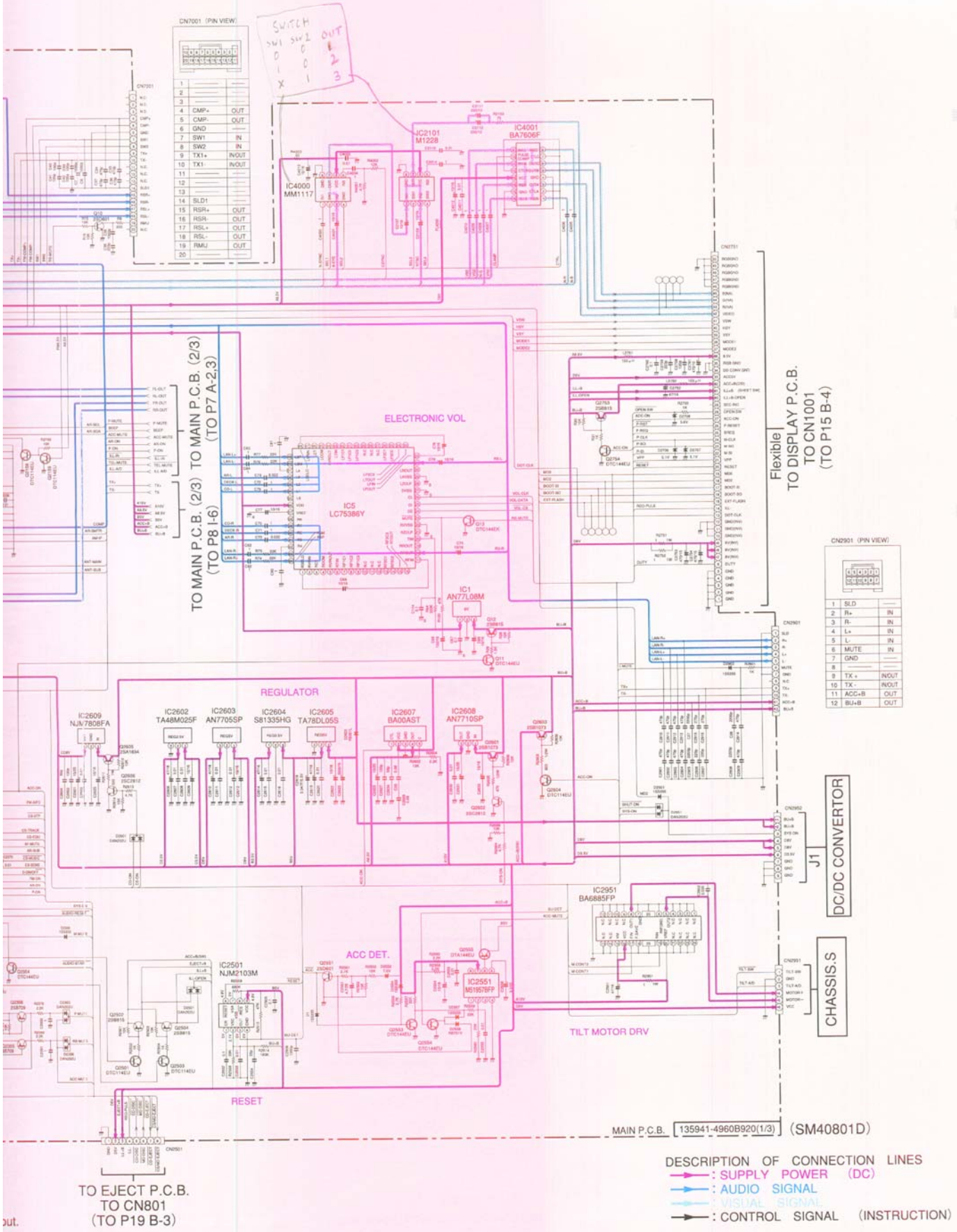
(EM40801F)

SCHEMATIC (MAIN 1/3)

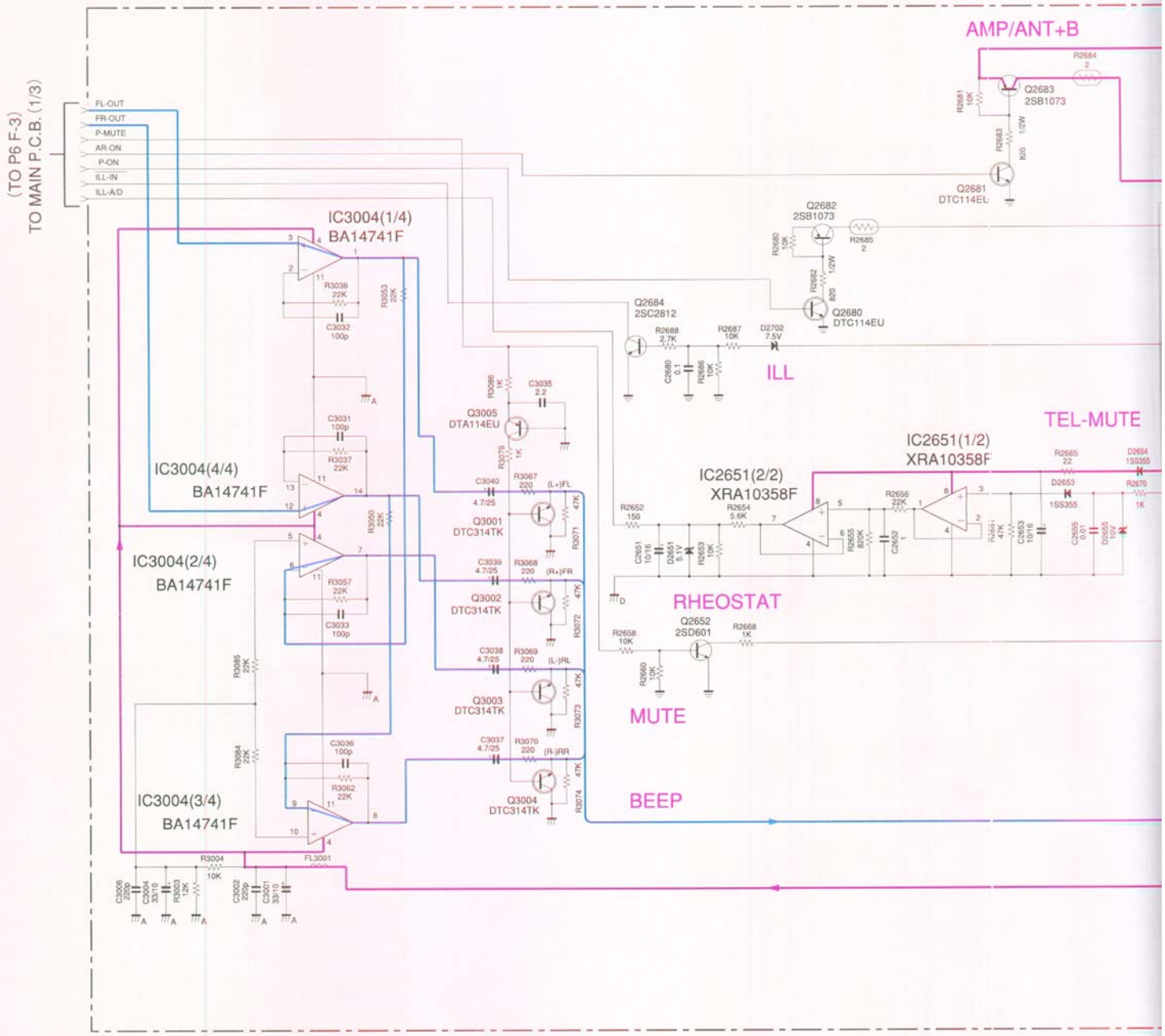
SM-1408
86120-35240
〔135000-2400B101〕



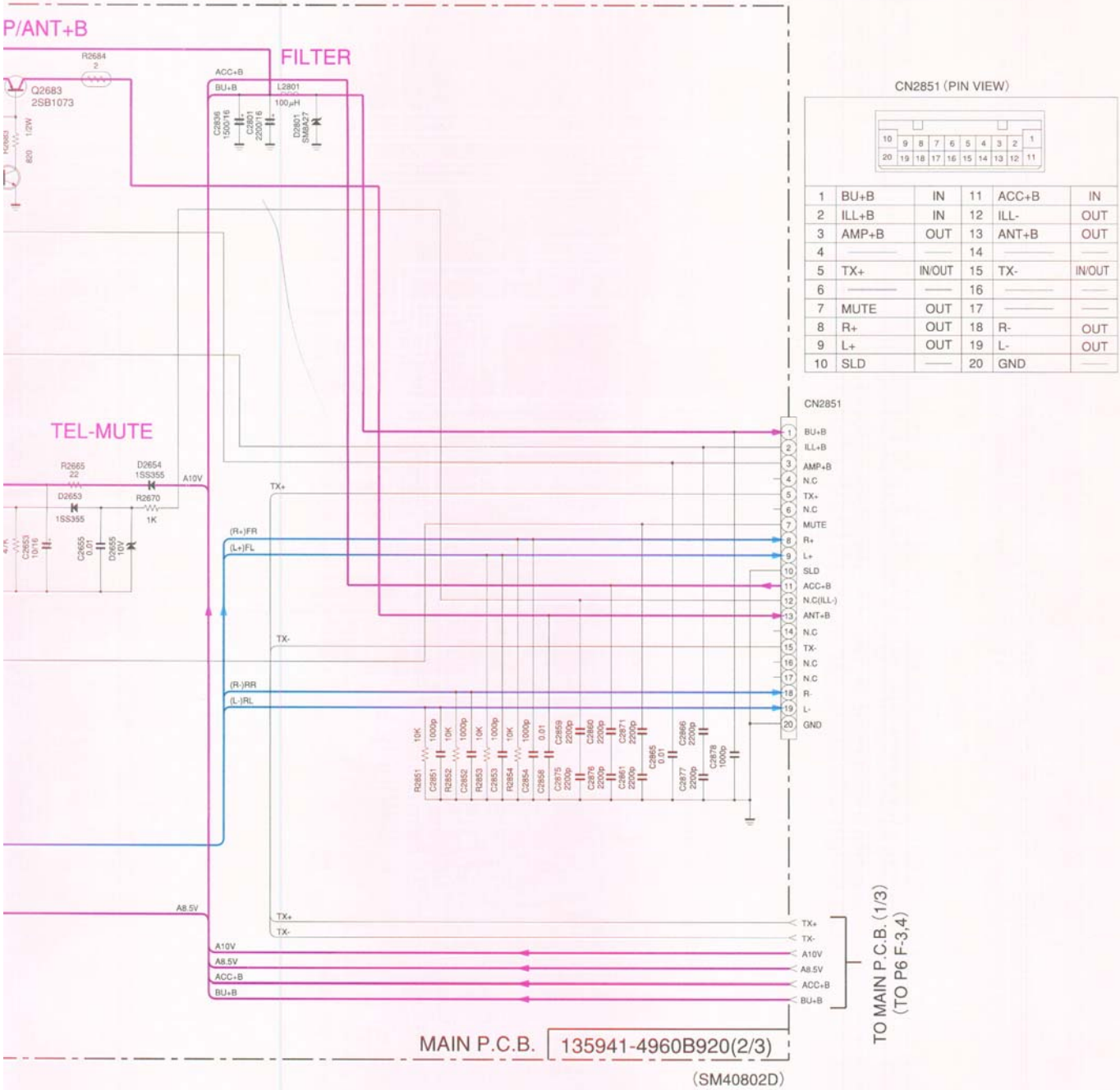
NOTES : 1. All capacitance in Micro or Pico farad, $\mu=10^{-6}$ $P=10^{-12}$.
2. All resistance in ohm $K=10^{3}$.
3. DC voltages in refernce to the chassis ground, measured with 10M-ohm digital voltmeter, power supply set at + 13.2 VDC, and under no signal input.


CN7001 (PIN VIEW)
SWITCH
SW1 SW2 OUT
0 0 1
1 0 2
X 1 3
1 —
2 —
3 —
4 CMP+ OUT
5 CMP- OUT
6 GND —
7 SW1 IN
8 SW2 IN
9 TX1+ IN/OUT
10 TX1- IN/OUT
11 —
12 —
13 —
14 SLD1 —
15 RSR+ OUT
16 RSR- OUT
17 RSL+ OUT
18 RSL- OUT
19 RMU OUT
20 —
IC2101
M1228
IC4001
BA7606F
IC4000
MM1117
CN2751
Flexible
TO DISPLAY P.C.B.
TO CN1001
(TO P15 B-4)
TO MAIN P.C.B. (2/3)
(TO P8 I-6)
TO MAIN P.C.B. (2/3)
(TO P7 A-2,3)
ELECTRONIC VOL
IC5
LC75386Y
IC1
AN77L08M
REGULATOR
IC2609
NJV7808FA
IC2602
TA48M025F
IC2603
AN7705SP
IC2604
S81335HG
IC2605
TA78DL05S
IC2607
BA00AST
IC2608
AN7710SP
CN2901 (PIN VIEW)
1 SLD —
2 R+ IN
3 R- IN
4 L+ IN
5 L- IN
6 MUTE IN
7 GND —
8 —
9 TX + IN/OUT
10 TX - IN/OUT
11 ACC+B OUT
12 BU+B OUT
CN2901
CN2952
J1
DC/DC CONVERTOR
IC2951
BA6885FP
CN2991
CHASSIS.S
ACC DET.
IC2501
NJM2103M
IC2551
M51957BFP
TILT MOTOR DRV
RESET
CN2501
TO EJECT P.C.B.
TO CN801
(TO P19 B-3)
MAIN P.C.B. 135941-4960B920(1/3) (SM40801D)
DESCRIPTION OF CONNECTION LINES
: SUPPLY POWER (DC)
: AUDIO SIGNAL
: VISUAL SIGNAL
: CONTROL SIGNAL (INSTRUCTION)

SCHEMATIC (MAIN 2/3)



NOTES : 1. All capacitance in Micro or Pico farad, $\mu=10^{-6}$ $P=10^{-12}$.
2. All resistance in ohm $K=10^{3}$.
3. DC voltages in refernce to the chassis ground, measured with 10M-ohm digital voltmeter, power supply set at + 13.2 VDC, and under no signal input.

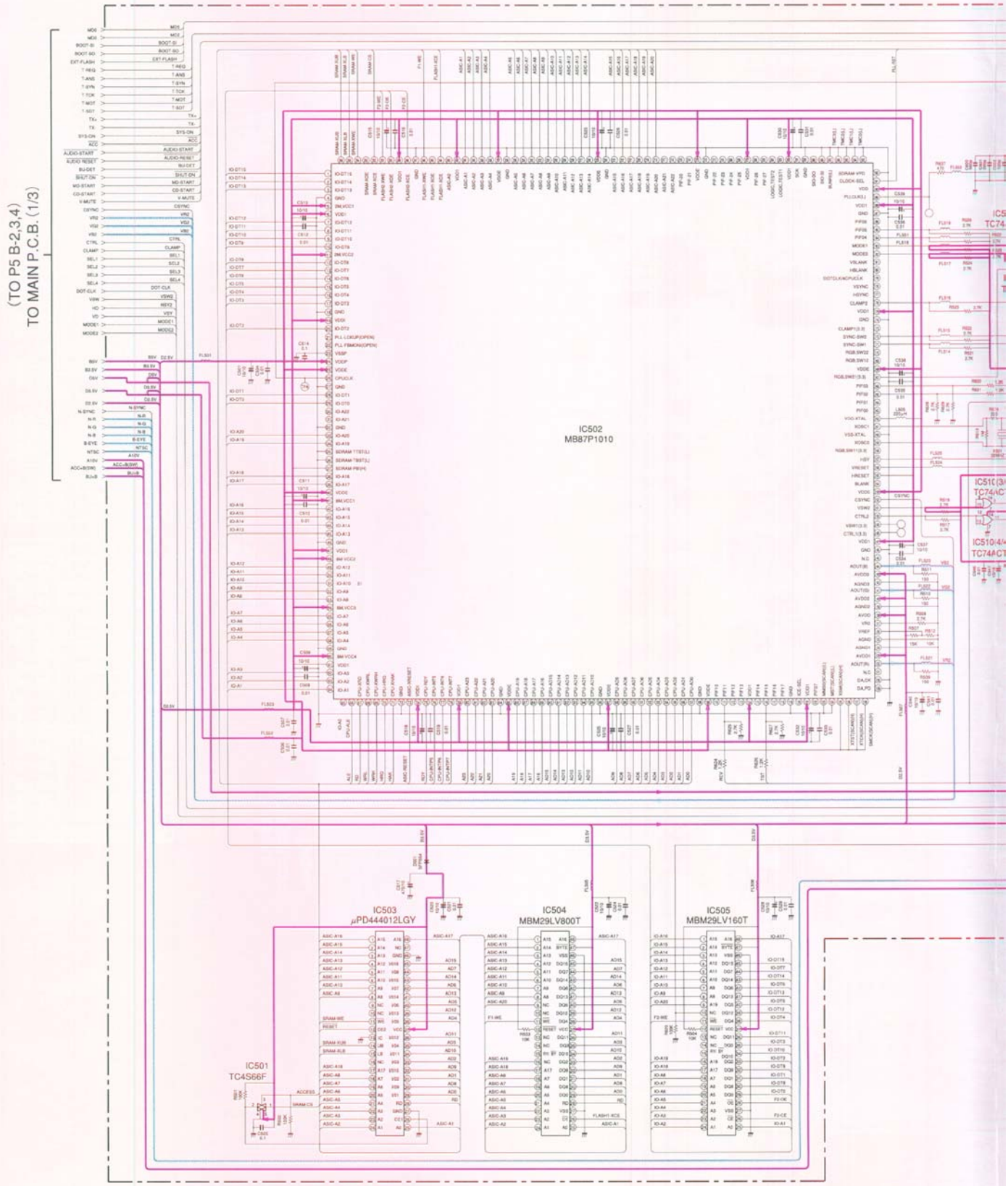


CN2851 (PIN VIEW)

1	BU+B	IN	11	ACC+B	IN
2	ILL+B	IN	12	ILL-	OUT
3	AMP+B	OUT	13	ANT+B	OUT
4	——	——	14	——	——
5	TX+	IN/OUT	15	TX-	IN/OUT
6	——	——	16	——	——
7	MUTE	OUT	17	——	——
8	R+	OUT	18	R-	OUT
9	L+	OUT	19	L-	OUT
10	SLD	——	20	GND	——

DESCRIPTION OF CONNECTION LINES
——→ : SUPPLY POWER (DC)
——→ : AUDIO SIGNAL

SCHEMATIC (MAIN 3/3)



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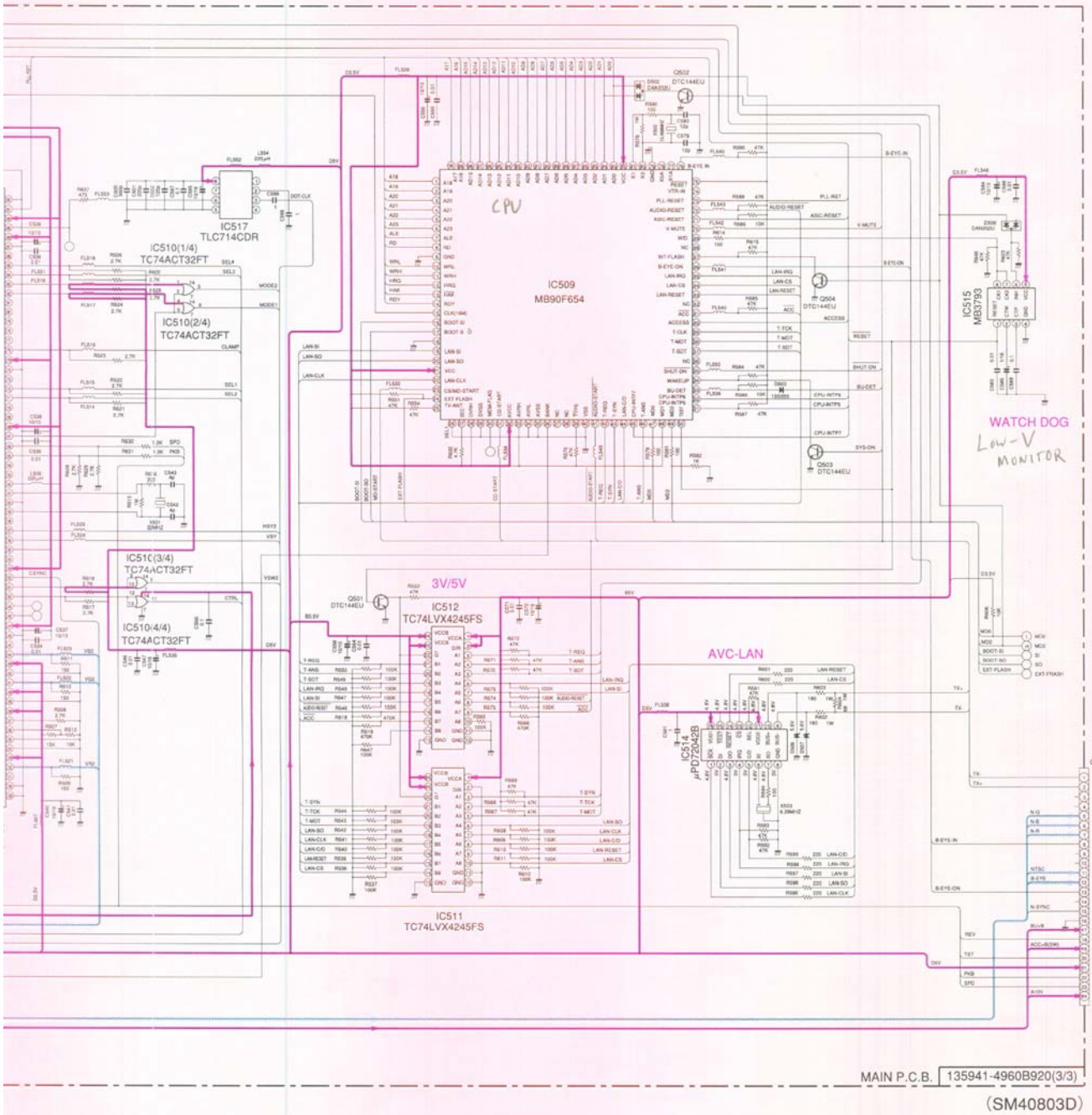


DESCRIPTION OF CONNECTION LINES
→ : SUPPLY POWER (DC)
→ : VISUAL SIGNAL

nal input.

WIRING ON PC BOARD (MAIN)

SM-1408
86120-35240
〔135000-2400B101〕

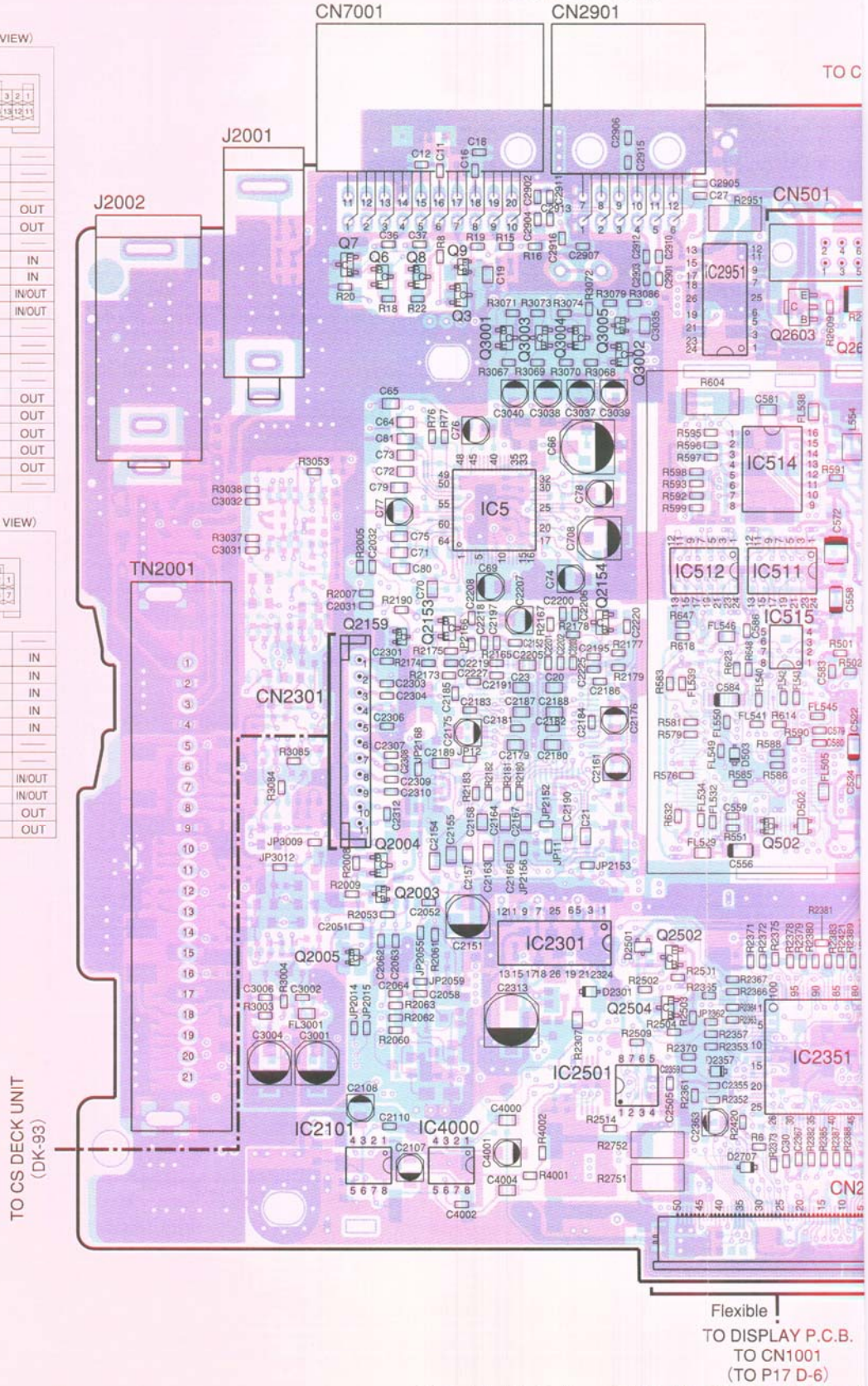
1SS355
A
2SA1834RS
A1834
2SB1073-QR
IQ IR
2SB709-QRS
AQ AR AS
2SB815-67
B6 B7
2SC2532
AN
2SC2812-567
L5 L6 L7
2SD601-RS
YR YS
AN7705SP
7705
DAN202U
N
DTA114EU
14
DTA144EU
16
DTC114EU
24
DTC144EU
26
DTC314TK
H04
DTZ8R2B
J2
RB051L-40
31
RB751V-40
5
S81335HG
KI
SFPB54
B4 ロット No.
UDZS5.1B
A2

CN7001 (PIN VIEW)

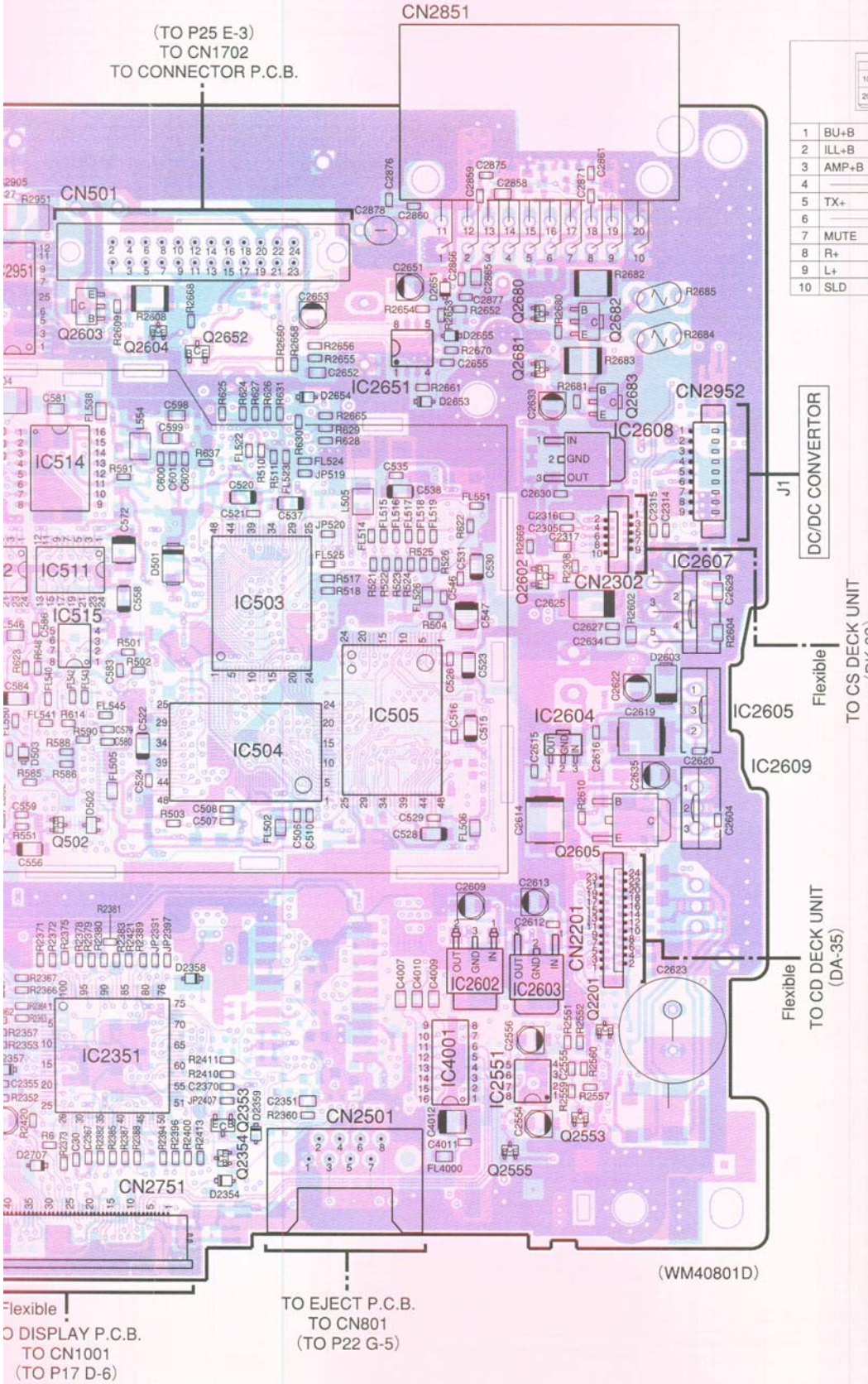
1		
2		
3		
4	CMP+	OUT
5	CMP-	OUT
6	GND	
7	SW1	IN
8	SW2	IN
9	TX1+	IN/OUT
10	TX1-	IN/OUT
11		
12		
13		
14	SLD1	
15	RSR+	OUT
16	RSR-	OUT
17	RSL+	OUT
18	RSL-	OUT
19	RMU	OUT
20		

CN2901 (PIN VIEW)

1	SLD	
2	R+	IN
3	R-	IN
4	L+	IN
5	L-	IN
6	MUTE	IN
7	GND	
8		
9	TX +	IN/OUT
10	TX -	IN/OUT
11	ACC+B	OUT
12	BU+B	OUT



MAIN P.C.B. 135941-4960B920



CN2851 (PIN VIEW)

1	BU+B	IN	11	ACC+B	IN
2	ILL+B	IN	12	ILL—	OUT
3	AMP+B	OUT	13	ANT+B	OUT
4	——	——	14	——	——
5	TX+	IN/OUT	15	TX—	IN/OUT
6	——	——	16	——	——
7	MUTE	OUT	17	——	——
8	R+	OUT	18	R—	OUT
9	L+	OUT	19	L—	OUT
10	SLD	——	20	GND	——

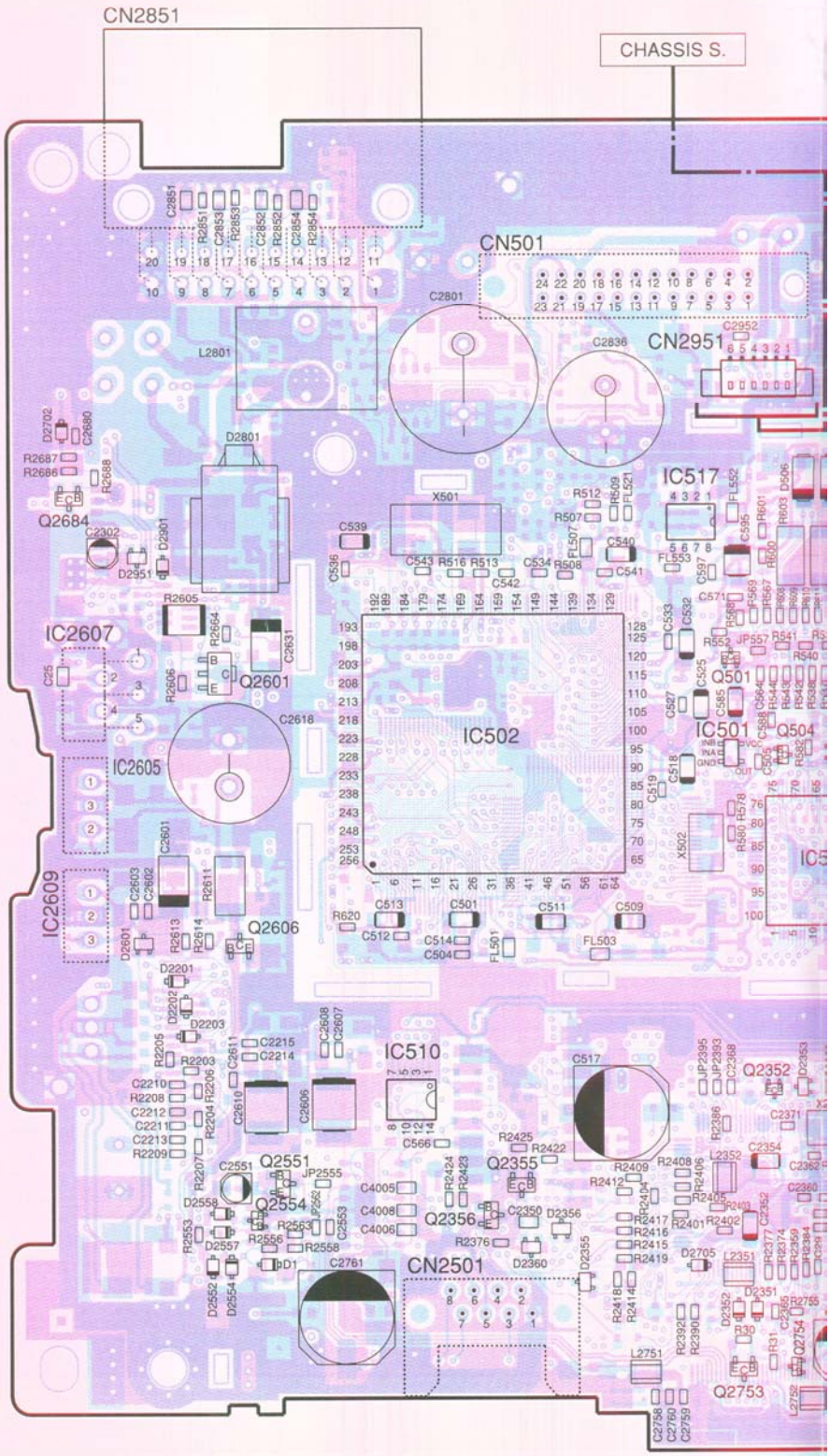
I C No.	Coordinates
I C 5	D−3
I C 503,504,515	F−4
I C 505	G−4
I C 511,512,514	E−3
I C 2101,4000	D−6
I C 2301	D−5
I C 2351	F−6
I C 2501	E−6
I C 2551,4001	G−6
I C 2602,2603	G−5
I C 2604,2605,2609	H−4
I C 2607,2608	H−3
I C 2651	G−3
I C 2951	E−2

Q No.	Coordinates
Q 3,6,7,8,9	D−2
Q 502,2502,2504	E−5
Q 2003,2004,2005	D−5
Q 2153,2159	D−4
Q 2154	E−4
Q 2201,2605	H−5
Q 2353,2354	F−6
Q 2553	H−6
Q 2555	G−6
Q 2602	G−4
Q 2603,2604,2652	F−3
Q 2680	G−2
Q 2682	H−2
Q 2681	G−3
Q 2683	H−3
Q 3001,3003	D−3
Q 3002,3004,3005	E−3

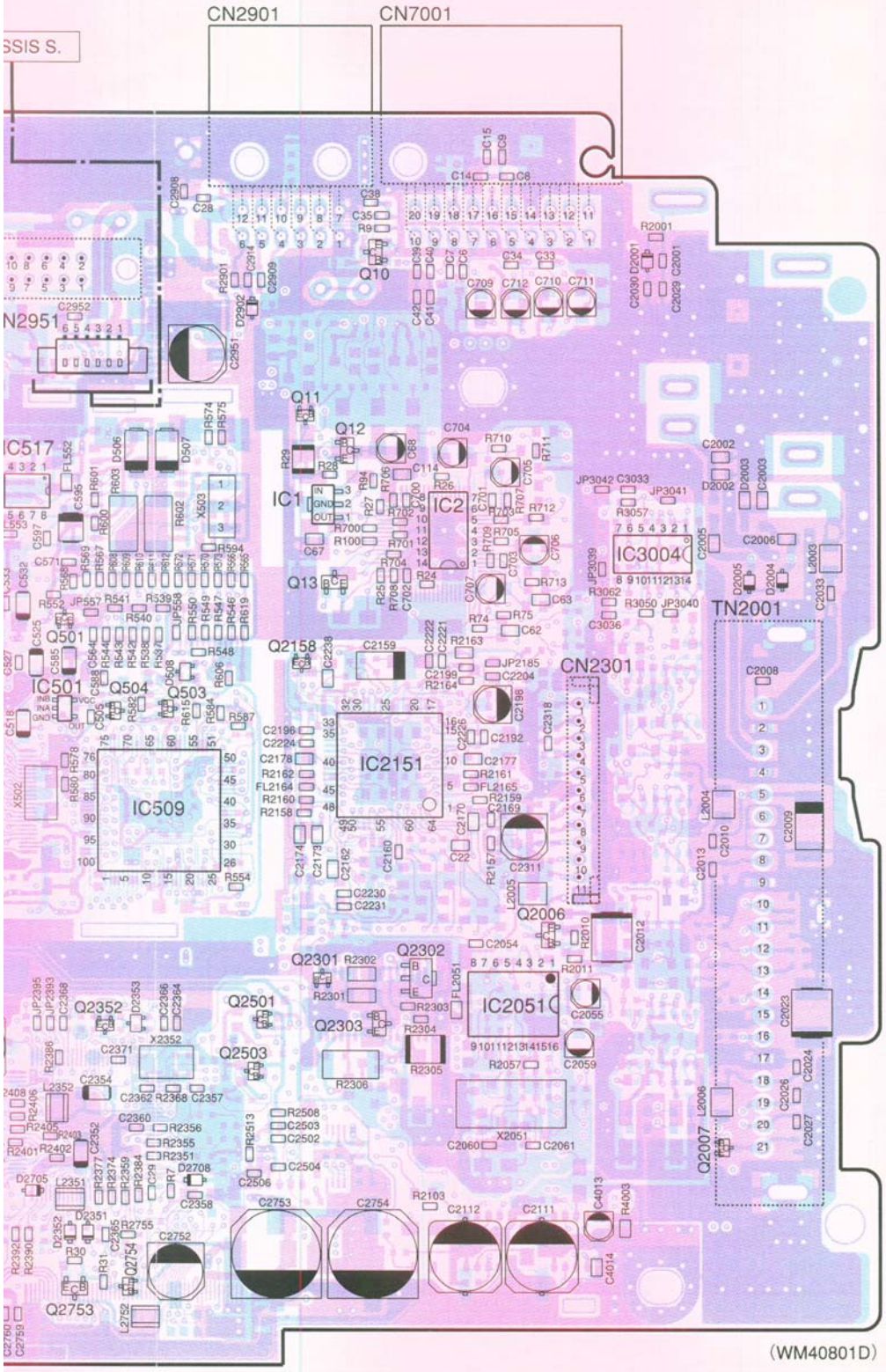
960B920 (TOP SIDE VIEW)

: TOP SIDE
: BOTTOM SIDE

KP2311E	1SS355
31	A
PTZ5R6A	2.2/50-5936
5.6,A	2.2H ZR
RB751V-40	22/16-5934
5	22C ZR
TC4S66F	2SB1073-QR
C9	IQ IR
UDZS5.1B	2SB1427-EU
A2	B,J Lot No. C or U
	2SB709-QRS
	AQ AR AS
	2SB815-67
	B6 B7
	2SC2812-567
	L5 L6 L7
	2SD601-RS
	YR YS
	AN77L08M
	E8 3D
	DAN202U
	N
	DTC114EU
	24
	DTC143EU
	23
	DTC144EK
	26
	DTC144EU
	26
	DTZ5R6C
	C3
	DTZ7R5B
	H2



MAIN P.C.B. 135941-4960B92



41-4960B920（BOTTOM SIDE VIEW）

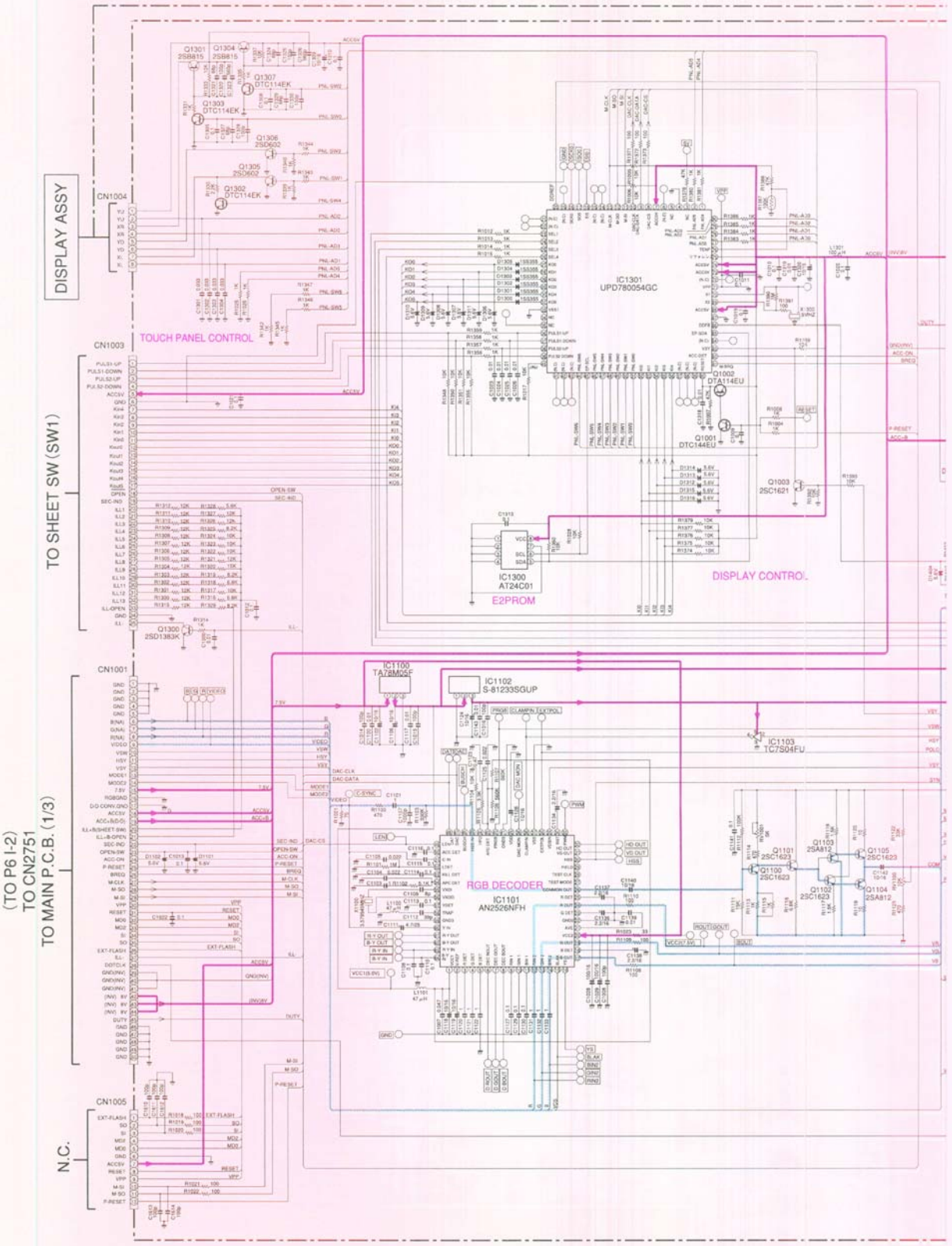
I C No.	Coordinates
I C 1	F－3
I C 2	G－3
I C 501	E－4
I C 502	D－4
I C 509	F－4
I C 510	D－5
I C 517	E－3
I C 2051	G－5
I C 2151	G－4
I C 3004	H－3

Q No.	Coordinates
Q 10	G－2
Q 11	F－3
Q 12	G－3
Q 13,503,504 2158	F－4
Q 501	E－4
Q 2006,2302	G－5
Q 2007	H－6
Q 2301,2303,2501 2503	F－5
Q 2352	E－5
Q 2355,2753	E－6
Q 2356,2551,2554	D－6
Q 2601	D－4
Q 2606	D－5
Q 2684	C－3
Q 2754	F－6

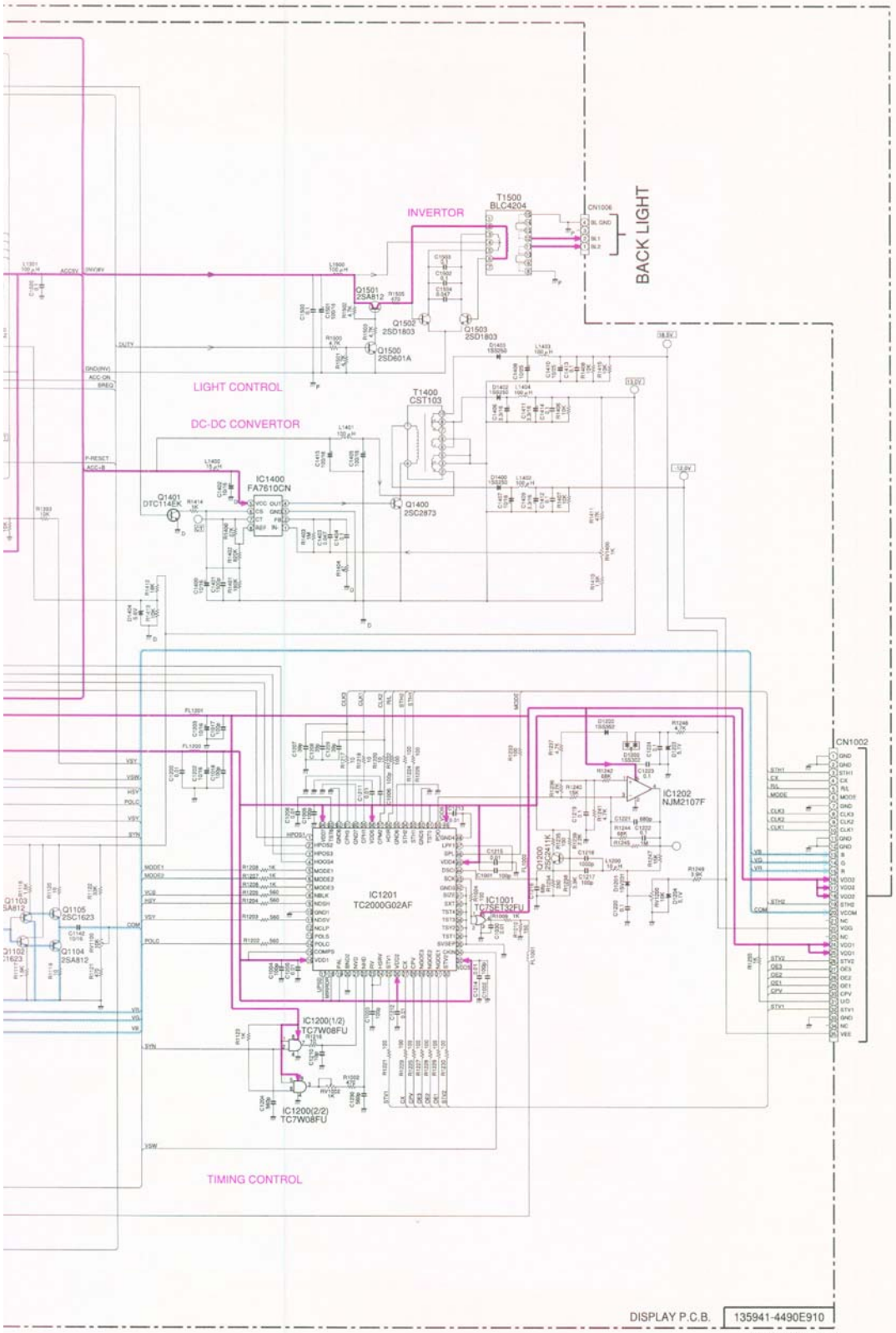
: TOP SIDE
: BOTTOM SIDE

SCHEMATIC (DISPLAY)

SM-1408
86120-35240
〔135000-2400B101〕



NOTES : 1. All capacitance in Micro or Pico farad, $\mu=10^{-6}$ $P=10^{-12}$.
2. All resistance in ohm $K=10^{3}$.
3. DC voltages in refernce to the chassis ground, measured with 10M-ohm digital voltmeter, power supply set at + 13.2 VDC, and under no signal input.



(SM40806D)

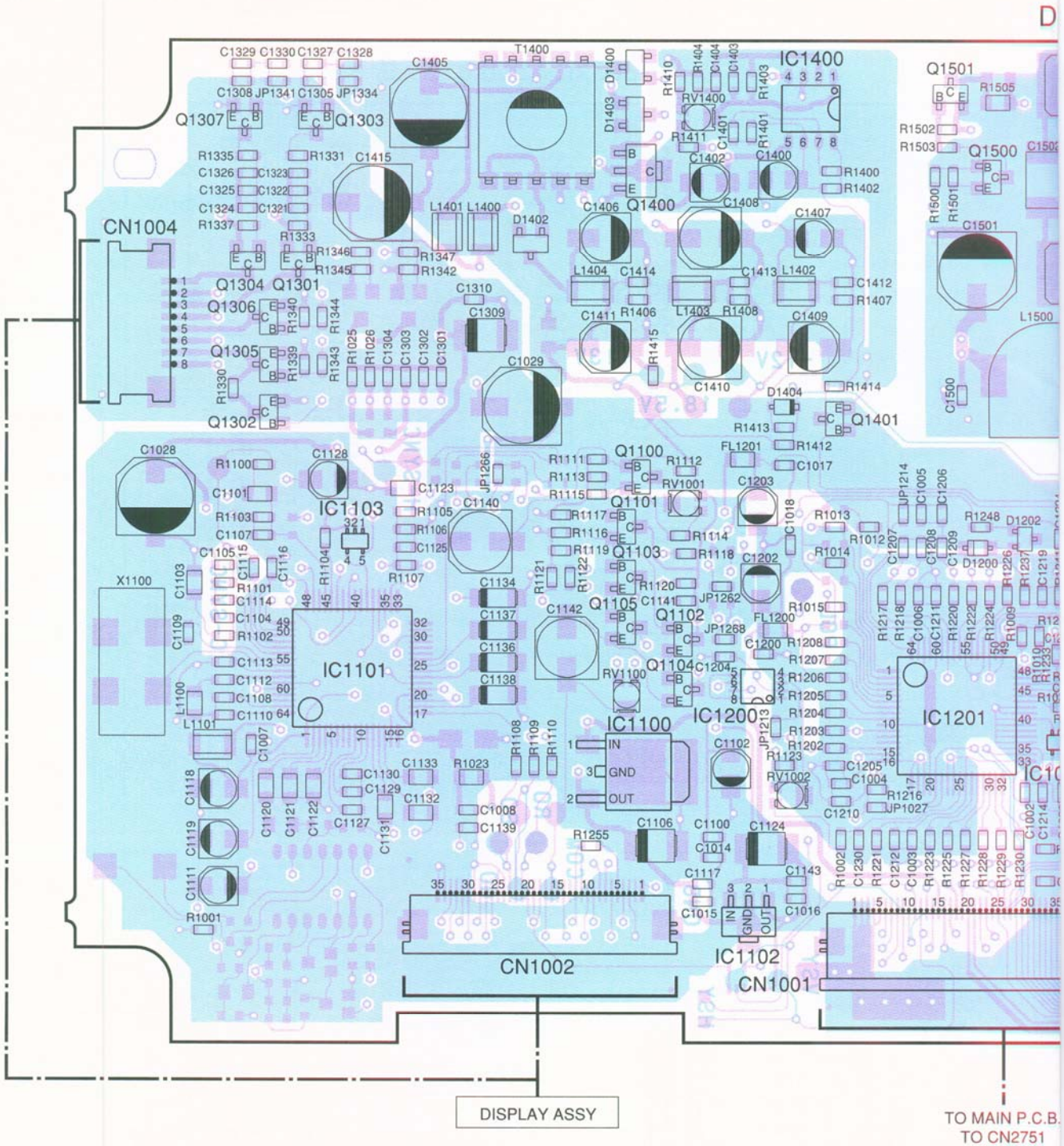
DESCRIPTION OF CONNECTION LINES

→ : SUPPLY POWER (DC)

→ : VISUAL SIGNAL

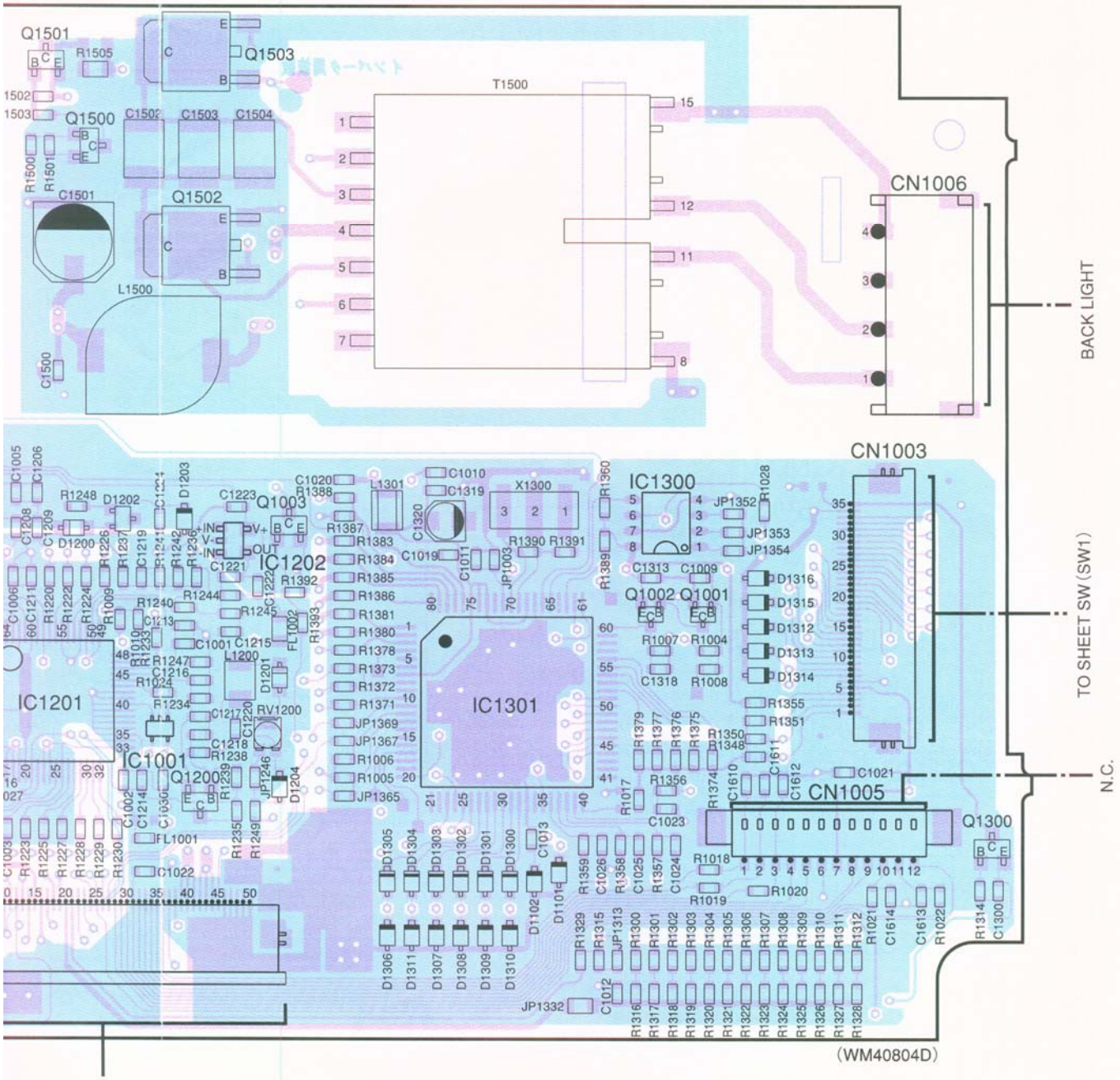
→ : CONTROL SIGNAL (INSTRUCTION)

WIRING ON PC BOARD (DISPLAY)



1SS250	1SS302	1SS352	1SS355	1SV231	2SA812-567	2SB815-67	2SC1621-234	2SC1623-67	2SC2411K-PQR	2SC2873-Y	2SD1383K	2SD18(
F5	C3	C1	A	TA	M5 M6 M7	B6 B7	B2 B3 B4	L6 L7	CP CQ CR	MY	WA WB	D
2SD601A	2SD602-RS	DTA114EU	DTC114EK	DTC144EU	NJM2107F	S-81233SGUP	TA78M05F	TC7S04FU	TC7SET32FU	UDZS5.1B	UDZS5.6B	
Z	WR WS	14	24	26	2D	DQF	TA78 M05F	E5	G4	A2	C2	

DISPLAY P.C.B. 135941-4490E910 (FRONT SIDE VIEW)



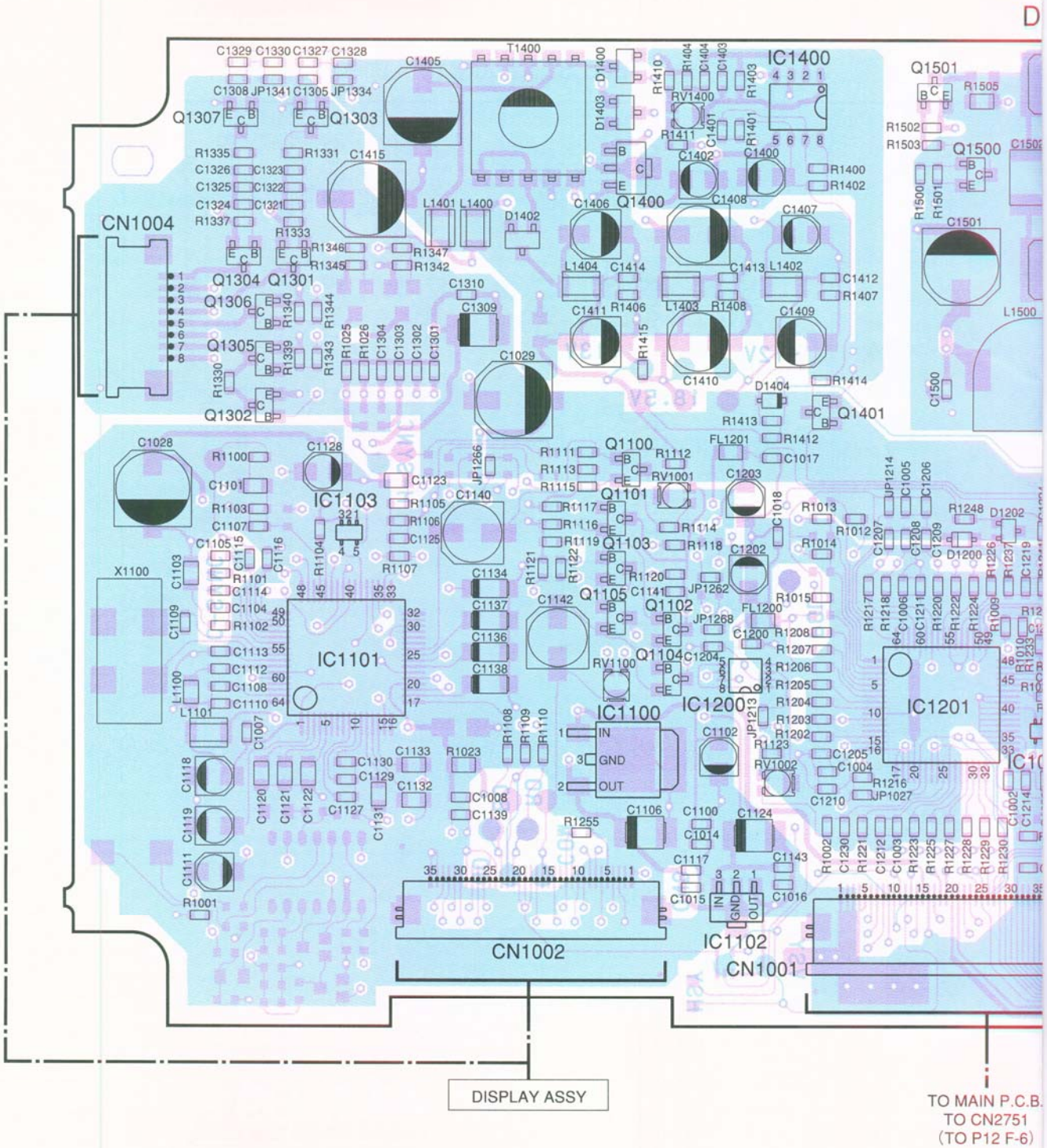
I C No.	Coordinates
I C 1001	F−5
I C 1100,1200	D−4
I C 1101,1103	C−4
I C 1102	D−5
I C 1201	E−4
I C 1202	F−4
I C 1300	H−3
I C 1301	G−4
I C 1400	E−2

Q No.	Coordinates	Q No.	Coordinates
Q 1001,1002	H−4	Q 1307	B−2
Q 1003	F−4	Q 1400	D−2
Q 1100,1101	D−3	Q 1401	E−3
Q 1102,1103,1104 1105	D−4	Q 1500,1501	E−2
		Q 1502,1503	F−2
Q 1200	F−5		
Q 1300	I−5		
Q 1301,1302,1304 1305,1306	B−3		
Q 1303	C−2		

Y	2SD1383K	2SD1803-ST
	WA WB	D1803
B	UDZS5.6B	
2	C2	

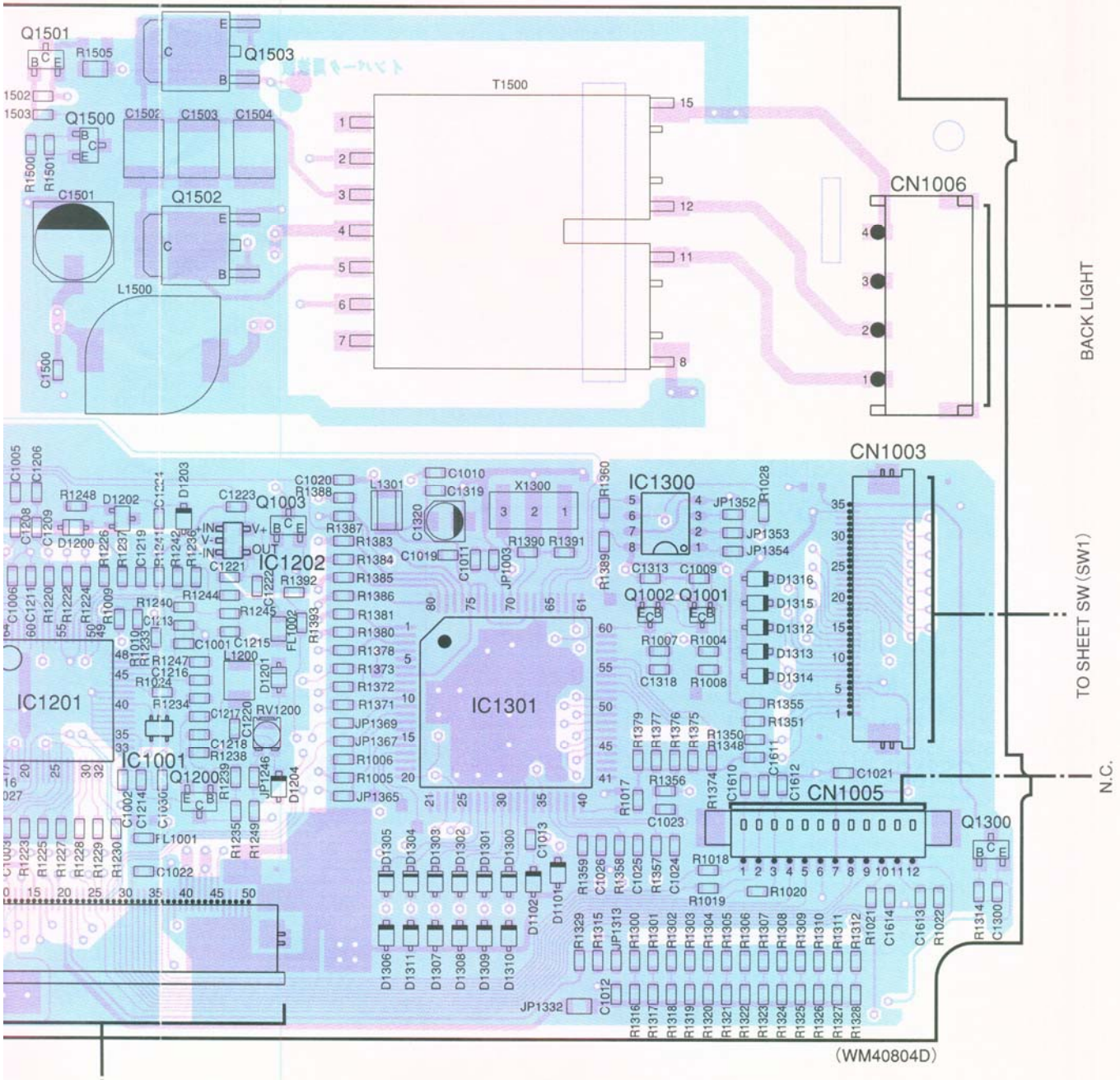
: FRONT SIDE
: BACK SIDE

WIRING ON PC BOARD (DISPLAY)



1SS250	1SS302	1SS352	1SS355	1SV231	2SA812-567	2SB815-67	2SC1621-234	2SC1623-67	2SC2411K-PQR	2SC2873-Y	2SD1383K	2SD18(
F5	C3	C1	A	TA	M5 M6 M7	B6 B7	B2 B3 B4	L6 L7	CP CQ CR	MY	WA WB	D
2SD601A	**2SD602-RS**	**DTA114EU**	**DTC114EK**	**DTC144EU**	**NJM2107F**	**S-81233SGUP**	**TA78M05F**	**TC7S04FU**	**TC7SET32FU**	**UDZS5.1B**	**UDZS5.6B**	
Z	WR WS	14	24	26	2D	DQF	TA78 M05F	E5	G4	A2	C2	

DISPLAY P.C.B. 135941-4490E910 (FRONT SIDE VIEW)



TO MAIN P.C.B.
TO CN2751
(TO P12 F-6)

Y	2SD1383K	2SD1803-ST
	WA WB	D1803
B	UDZS5.6B	
2	C2	

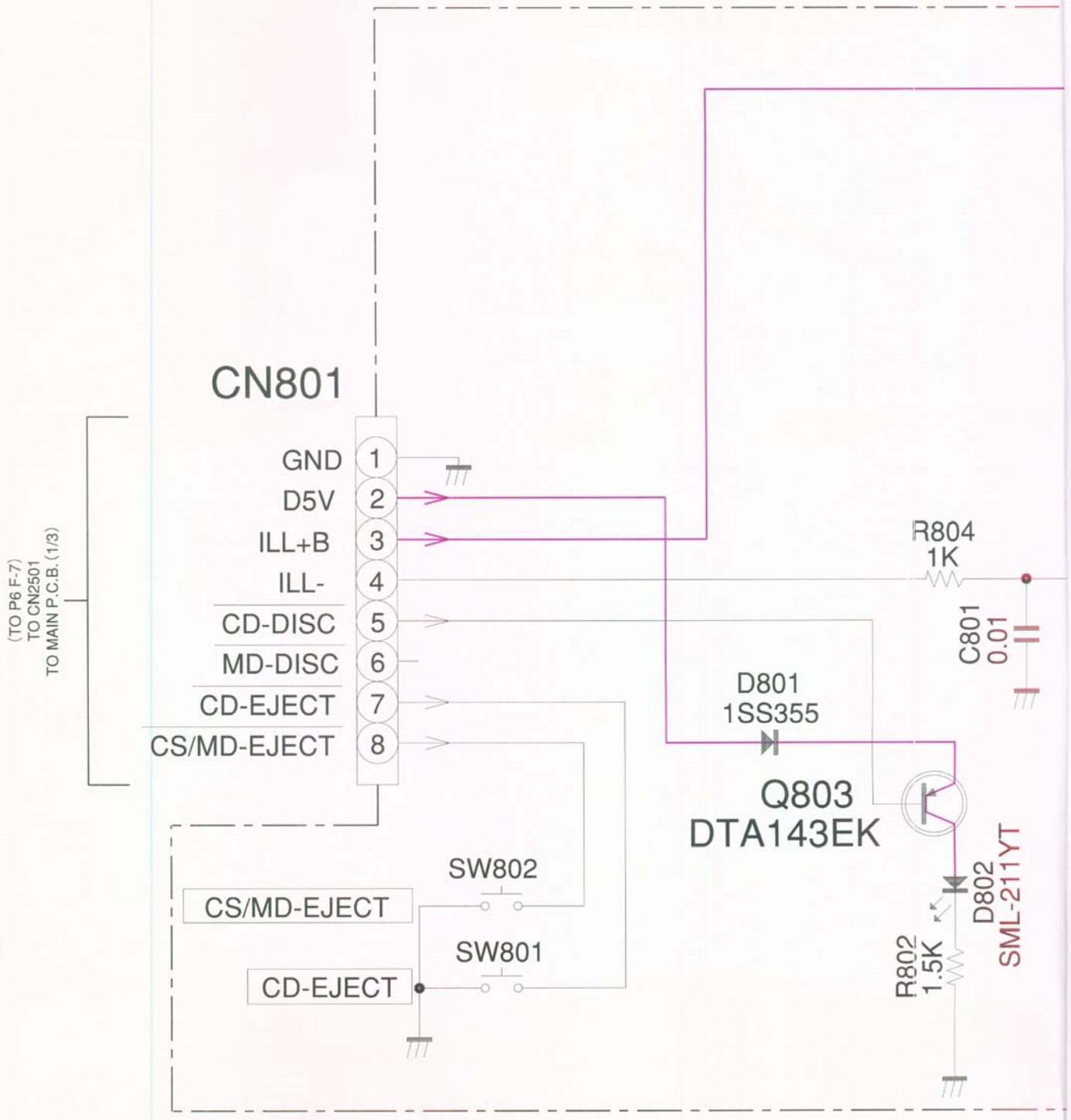
I C No.	Coordinates
I C 1001	F−5
I C 1100,1200	D−4
I C 1101,1103	C−4
I C 1102	D−5
I C 1201	E−4
I C 1202	F−4
I C 1300	H−3
I C 1301	G−4
I C 1400	E−2

Q No.	Coordinates	Q No.	Coordinates
Q 1001,1002	H−4	Q 1307	B−2
Q 1003	F−4	Q 1400	D−2
Q 1100,1101	D−3	Q 1401	E−3
Q 1102,1103,1104 1105	D−4	Q 1500,1501	E−2
		Q 1502,1503	F−2
Q 1200	F−5		
Q 1300	I−5		
Q 1301,1302,1304 1305,1306	B−3		
Q 1303	C−2		

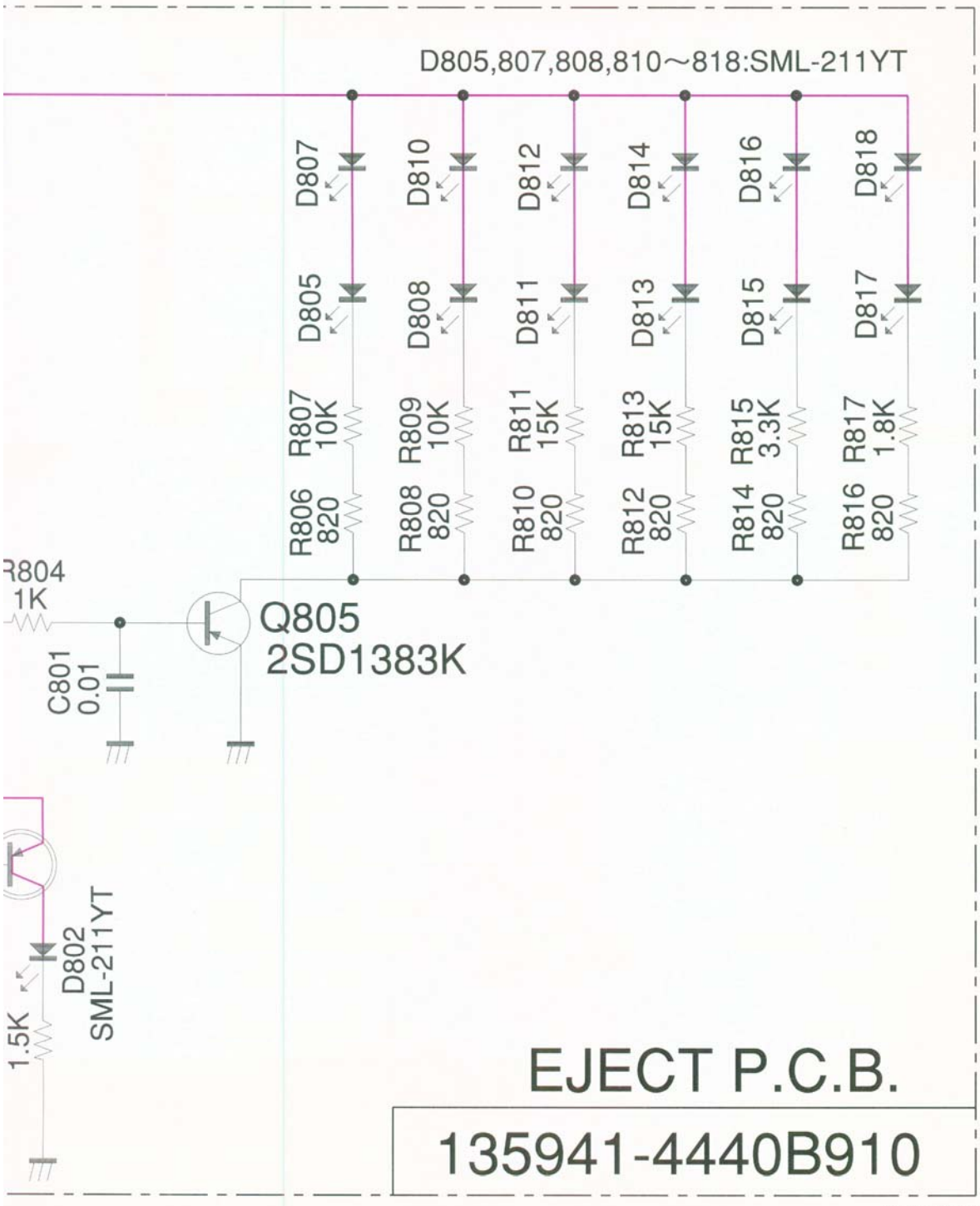
: FRONT SIDE
: BACK SIDE

SCHEMATIC (EJECT)

SM-1408
86120-35240
〔135000-2400B101〕



NOTES : 1. All capacitance in Micro or Pico farad, $\mu=10^{-6}$ $P=10^{-12}$.
2. All resistance in ohm $K=10^{3}$.
3. DC voltages in refernce to the chassis ground, measured with 10M-ohm digital voltmeter, power supply set at + 13.2 VDC, and under no signal input.

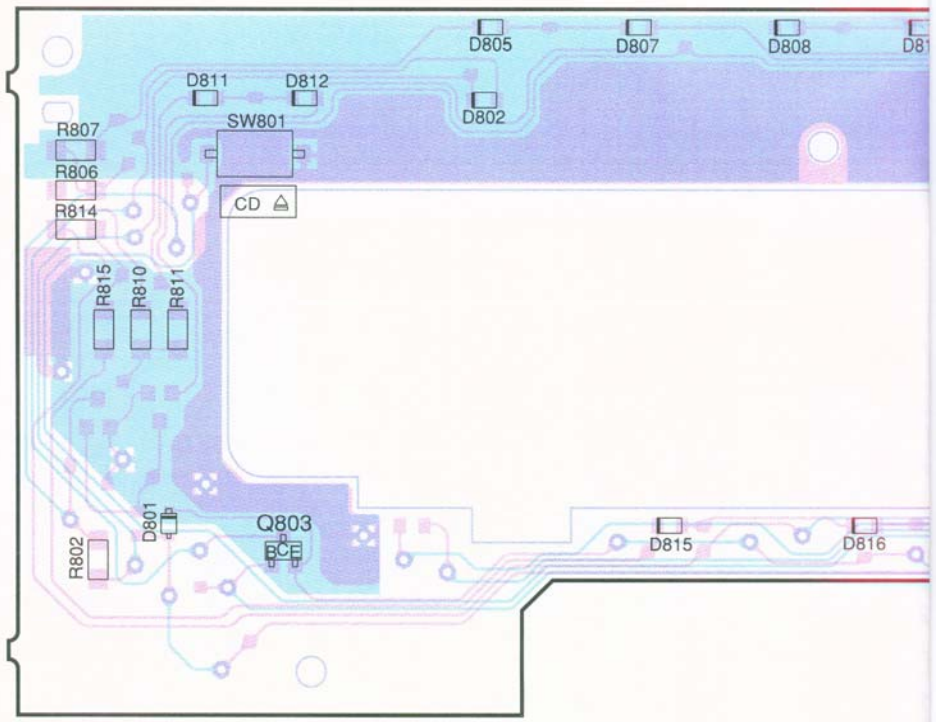


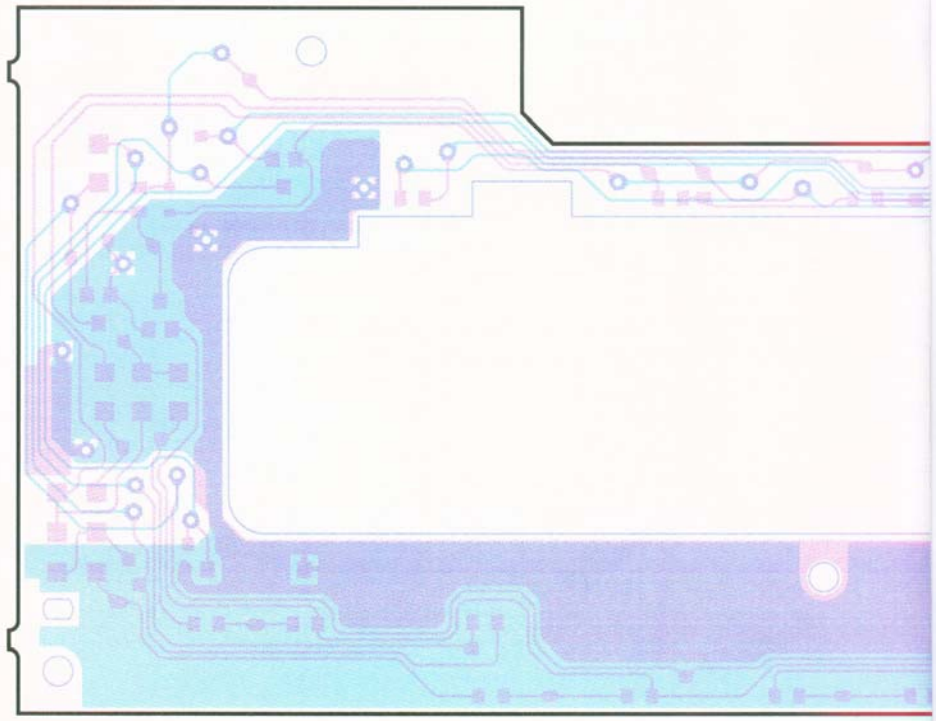
DESCRIPTION OF CONNECTION LINES
→: SUPPLY POWER (DC)
→: CONTROL SIGNAL (INSTRUCTION)

WIRING ON PC BOARD (EJECT)

EJECT P.C

1SS355
A
2SD1383K
WA WB
DTA143EK
13

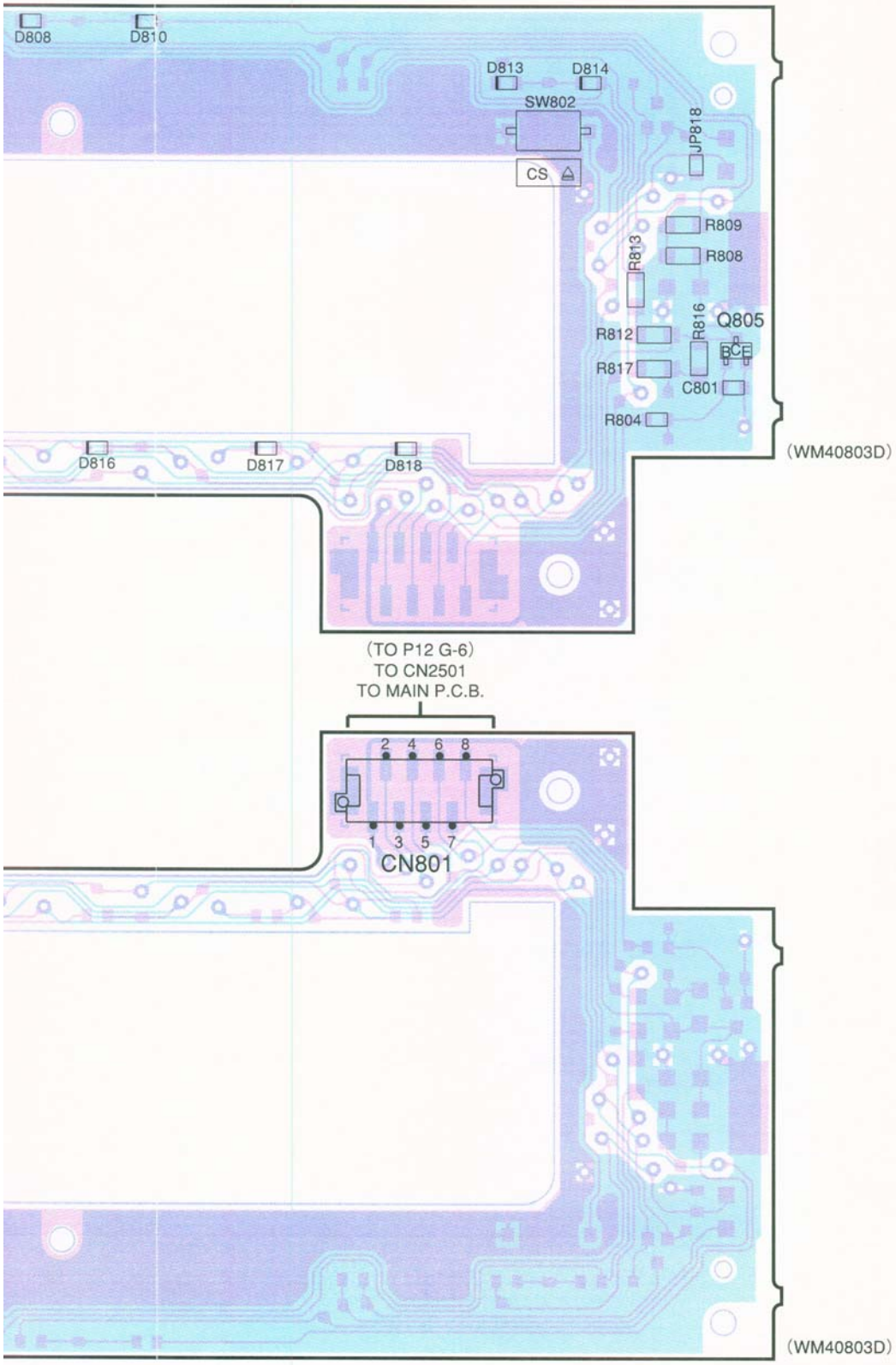




EJECT P

Q No.	Coordinates
Q 803	C−3
Q 805	H−3

EJECT P.C.B. 135941-4440B910 (FRONT SIDE VIEW)

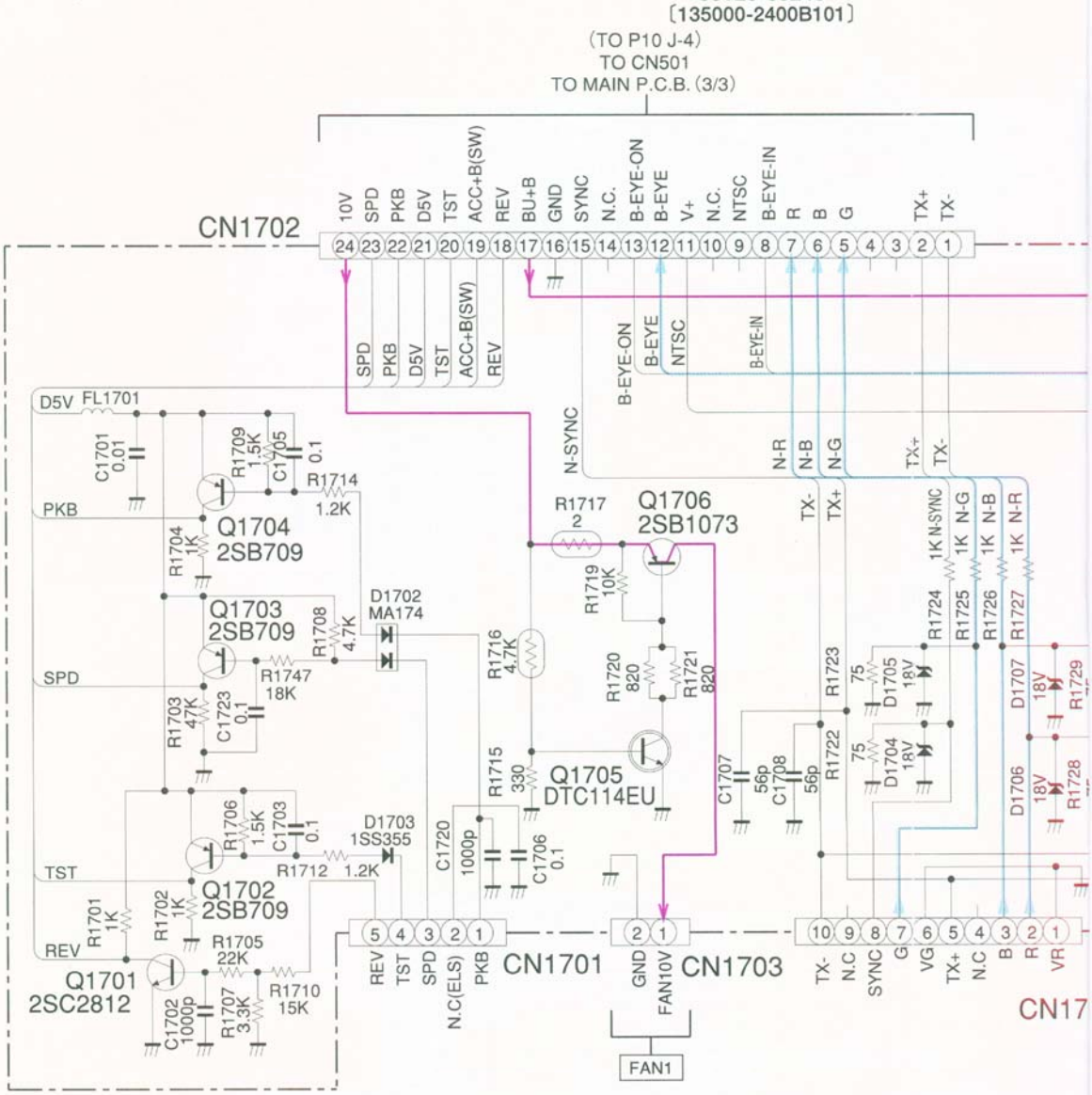


EJECT P.C.B. 135941-4440B910 (BACK SIDE VIEW)

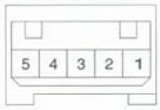
: FRONT SIDE
: BACK SIDE

SCHEMATIC (CONNECTOR)

SM-1408
86120-35240
〔135000-2400B101〕

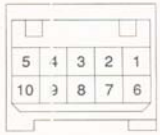


CN1701 (PIN VIEW)



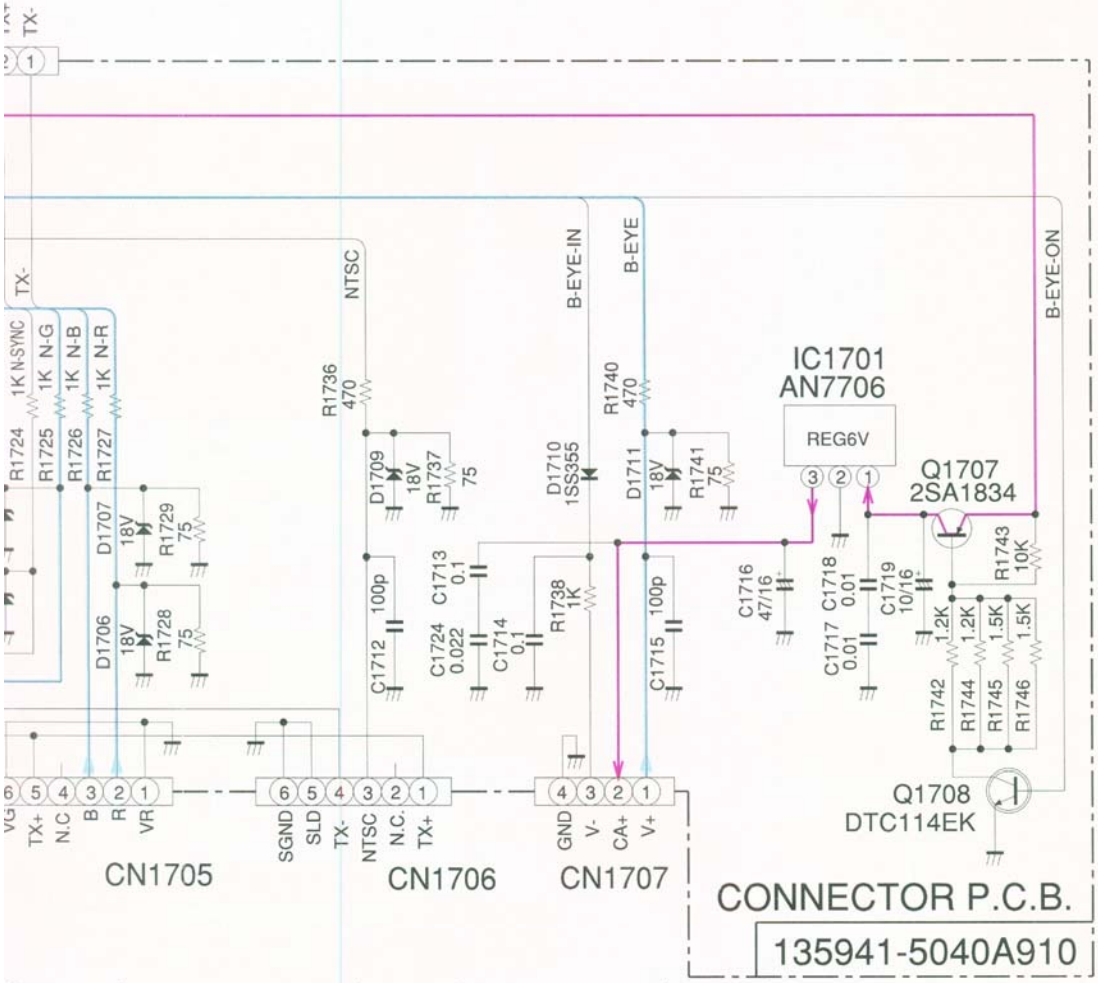
1	PKB	IN
2	———	———
3	SPD	IN
4	TST	IN
5	REV	IN

CN1705 (PIN VIEW)



1	VR	———
2	R	IN
3	B	IN
4	———	———
5	TX+	IN/OUT
6	VG	———
7	G	IN
8	SYNC	IN
9	———	———
10	TX−	IN/OUT

NOTES : 1. All capacitance in Micro or Pico farad, $\mu=10^{-6}$ $P=10^{-12}$.
2. All resistance in ohm $K=10^{3}$.
3. DC voltages in refernce to the chassis ground, measured with 10M-ohm digital voltmeter, power supply set at + 13.2 VDC, and under no signal input.



(PIN VIEW)

	———
	IN
	IN
———	———
	IN/OUT
	———
	IN
	IN
———	———
	IN/OUT

CN1706 (PIN VIEW)

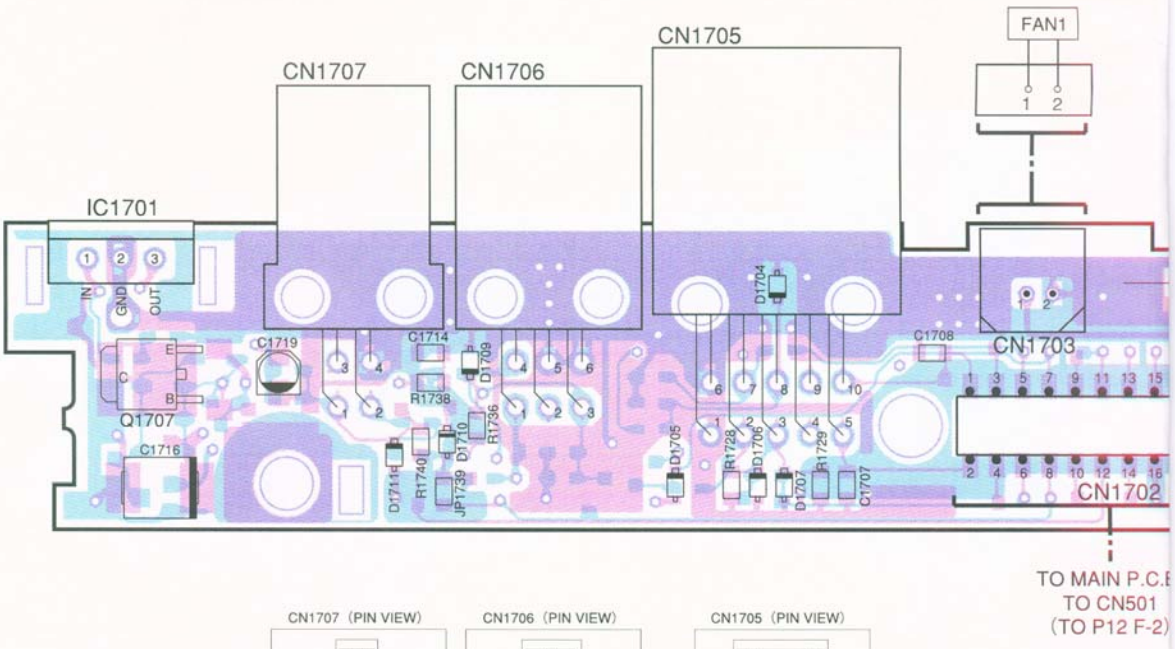
1	TX+	IN/OUT
2	———	———
3	NTSC	IN
4	TX−	IN/OUT
5	SLD	———
6	SGND	———

CN1707 (PIN VIEW)

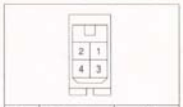
1	V+	IN
2	CA+	OUT
3	V−	IN
4	GND	———

DESCRIPTION OF CONNECTION LINES
——→ : SUPPLY POWER (DC)
——→ : VISUAL SIGNAL

WIRING ON PC BOARD (CONNECTOR)

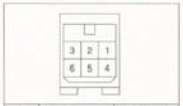


CN1707 (PIN VIEW)



1	V+	IN
2	CA+	OUT
3	V−	IN
4	GND	———

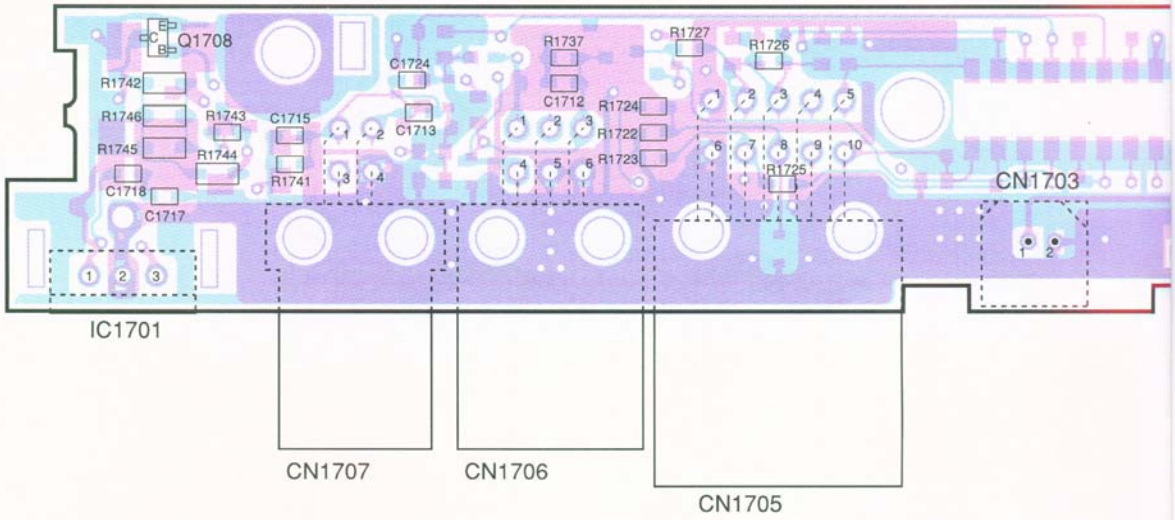
CN1706 (PIN VIEW)



1	TX+	IN/OUT
2	———	———
3	NTSC	IN
4	TX−	IN/OUT
5	SLD	———
6	SGND	———

CN1705 (PIN VIEW)

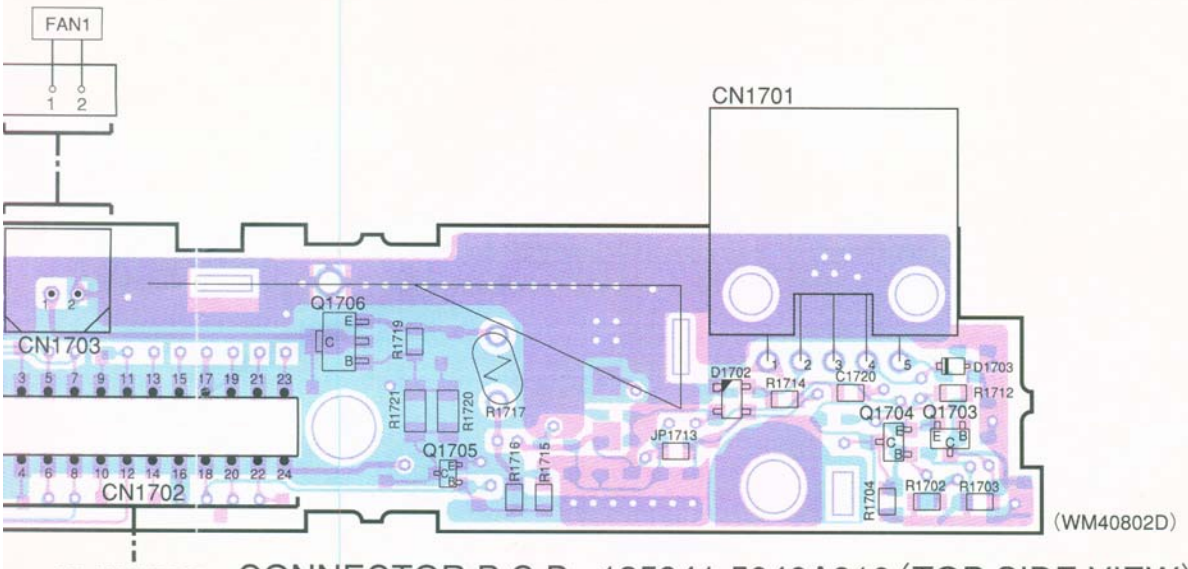
1	VR	———
2	R	IN
3	B	IN
4	———	———
5	TX+	IN/OUT
6	VG	———
7	G	IN
8	SYNC	IN
9	———	———
10	TX−	IN/OUT



1SS355	2SB1073-QR	2SB709-QRS	DTC114EU	DTZ180B	MA174	2SC2812-567	DTC114EK
A	IQ IR	AQ AR AS	24	65	M20	L5 L6 L7	24

I C No.	Coordinates
I C 1701	B−2

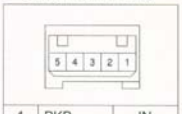
Q No.	Coordinates
Q 1701,1702	H−5
Q 1703,1704	H−3
Q 1705	G−3
Q 1706	F−2
Q 1707	B−3
Q 1708	B−5



TO MAIN P.C.B.
TO CN501
(TO P12 F-2)

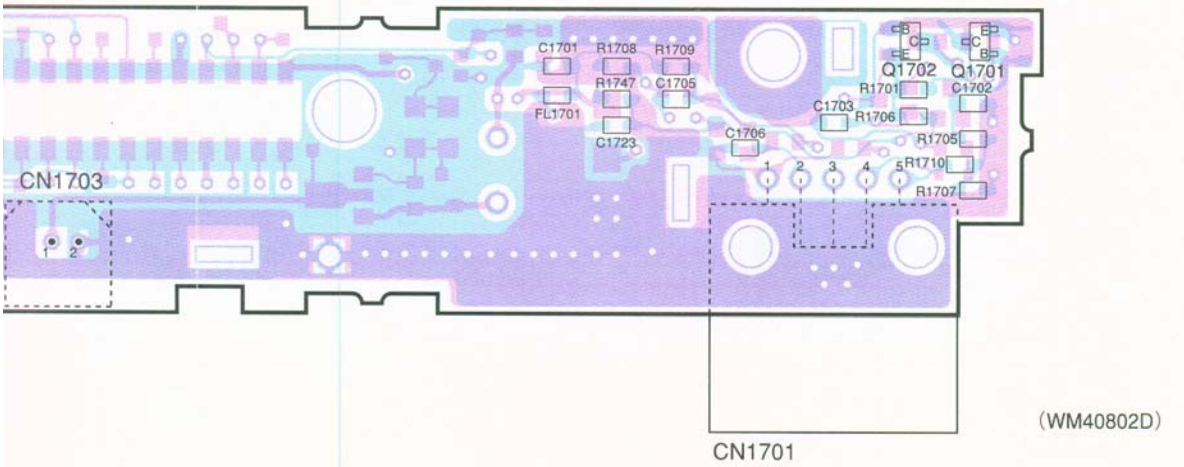
CONNECTOR P.C.B. 135941-5040A910 (TOP SIDE VIEW)

CN1701 (PIN VIEW)



1	PKB	IN
2		
3	SPD	IN
4	TST	IN
5	REV	IN

CONNECTOR P.C.B. 135941-5040A910 (BOTTOM SIDE VIEW)



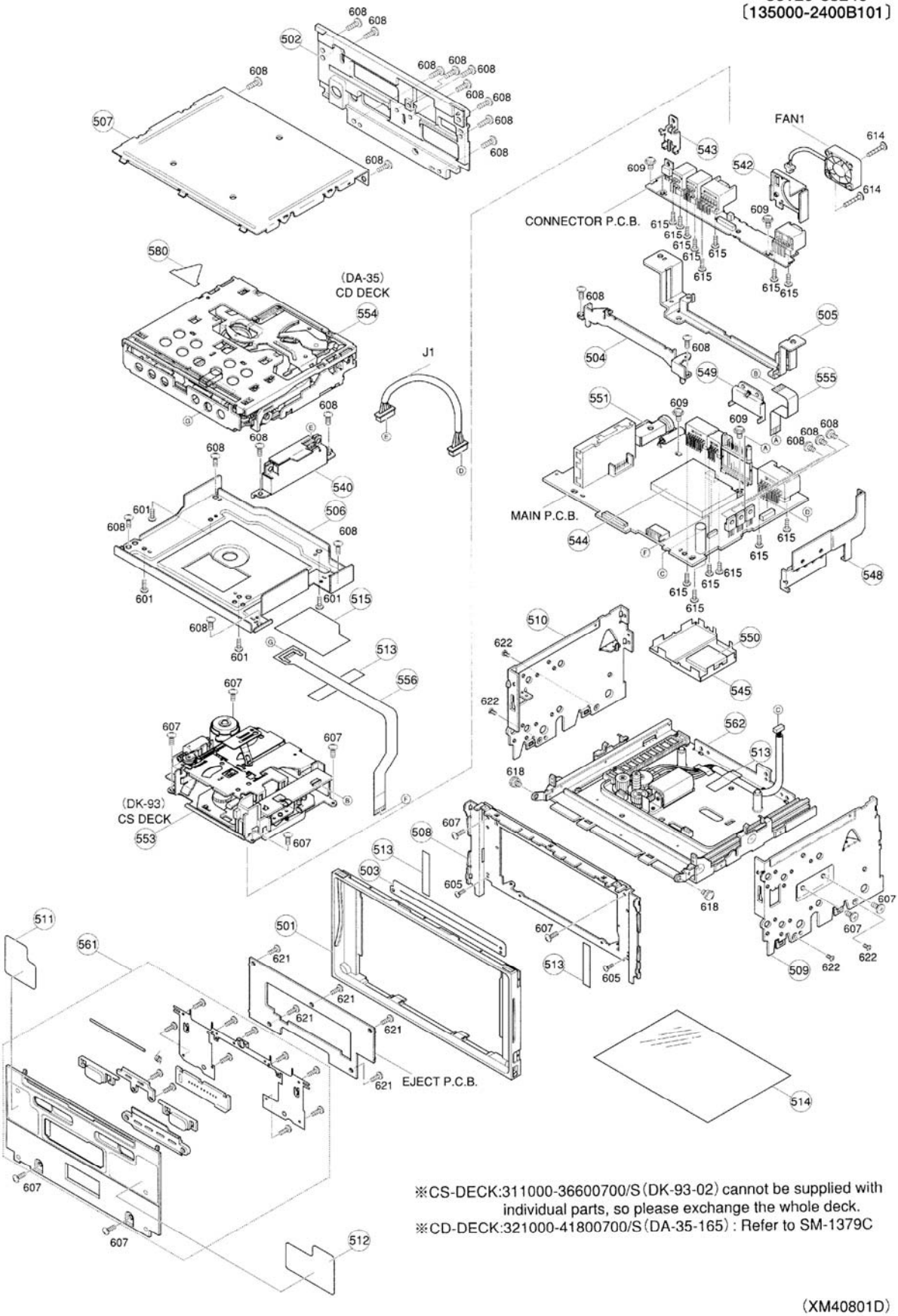
14EK

24

: TOP SIDE
: BOTTOM SIDE

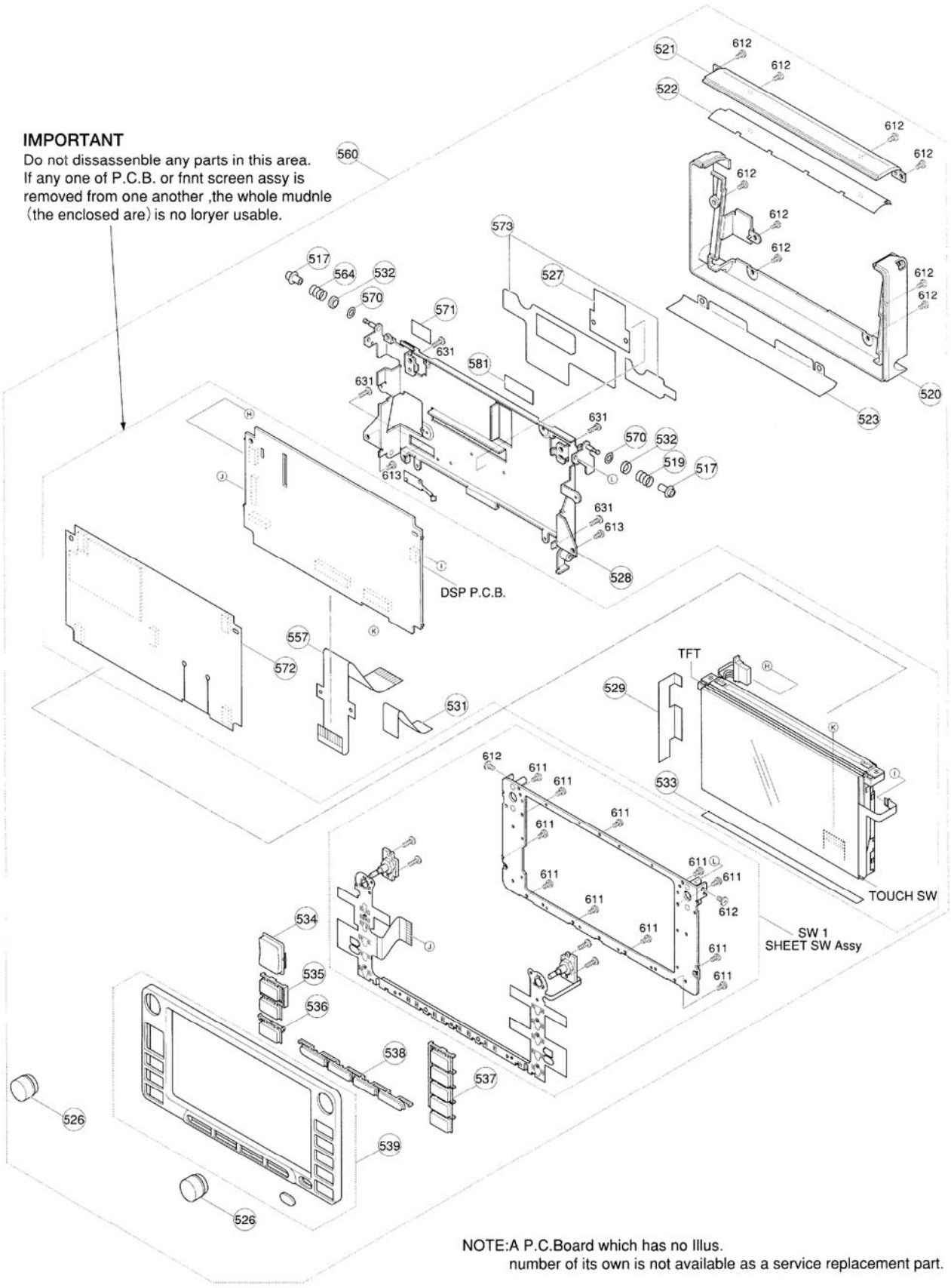
EXPLODED VIEW

SM-1408
86120-35240
〔135000-2400B101〕



※CS-DECK:311000-36600700/S(DK-93-02) cannot be supplied with individual parts, so please exchange the whole deck.
※CD-DECK:321000-41800700/S(DA-35-165) : Refer to SM-1379C

(XM40801D)



NOTE:A P.C.Board which has no Illus.
number of its own is not available as a service replacement part.

(XM40802D)