

Service Document **Exchange Set**

Sono Clock 690

Service Manual
Sicherheit Safety
Materialnr./Part No.
72010 800 0000



Es gelten die Vorschriften und Sicherheitshinweise gemäß dem Service Manual "Sicherheit", Materialnummer 72010 800 0000, sowie zusätzlich die eventuell abweichenden, landesspezifischen Vorschriften!



The regulations and safety instructions shall be valid as provided by the "Safety" Service Manual, part number 72010 800 0000, as well as the respective national deviations.

Dieses Service Dokument ist nur in Datenform verfügbar
This Service Document is only available as data
Änderungen vorbehalten/Subject to alteration
Made by GRUNDIG in Germany • E-BS31 0800
<http://www.grundig.com>

Alignment Information

Model : GRUNDIG SC690

Ref. No. : SC690

Date : 16 FEB 2000

A) FM Radio section

1) FM IF

INPUT	SIGNAL	OUTPUT	SET RADIO	ADJUST	ADJUST FOR	REMARK
TP8	10.7MHz	TP3,4	Quiet Point	T101,102	Max. o/p symmetrical	Vol. at min. position

2) RF VOLTAGE

BAND	SIGNAL	OUTPUT	SET RADIO	ADJUST	ADJUST FOR	REMARK
FM	--	TP2,5	108MHz	L102	1.7V~ 2.3V	high end 7.3V ~7.7V

3) FM RF

INPUT	SIGNAL	OUTPUT	SET RADIO	ADJUST	ADJUST FOR	REMARK
TP1,2	90MHz	Speaker	90MHz	L101	Max. o/p	Vol. at max. position
TP1,2	106MHz	„ „	106MHz	TC102	„ „	„ „

4) 75KHZ CRYSTAL

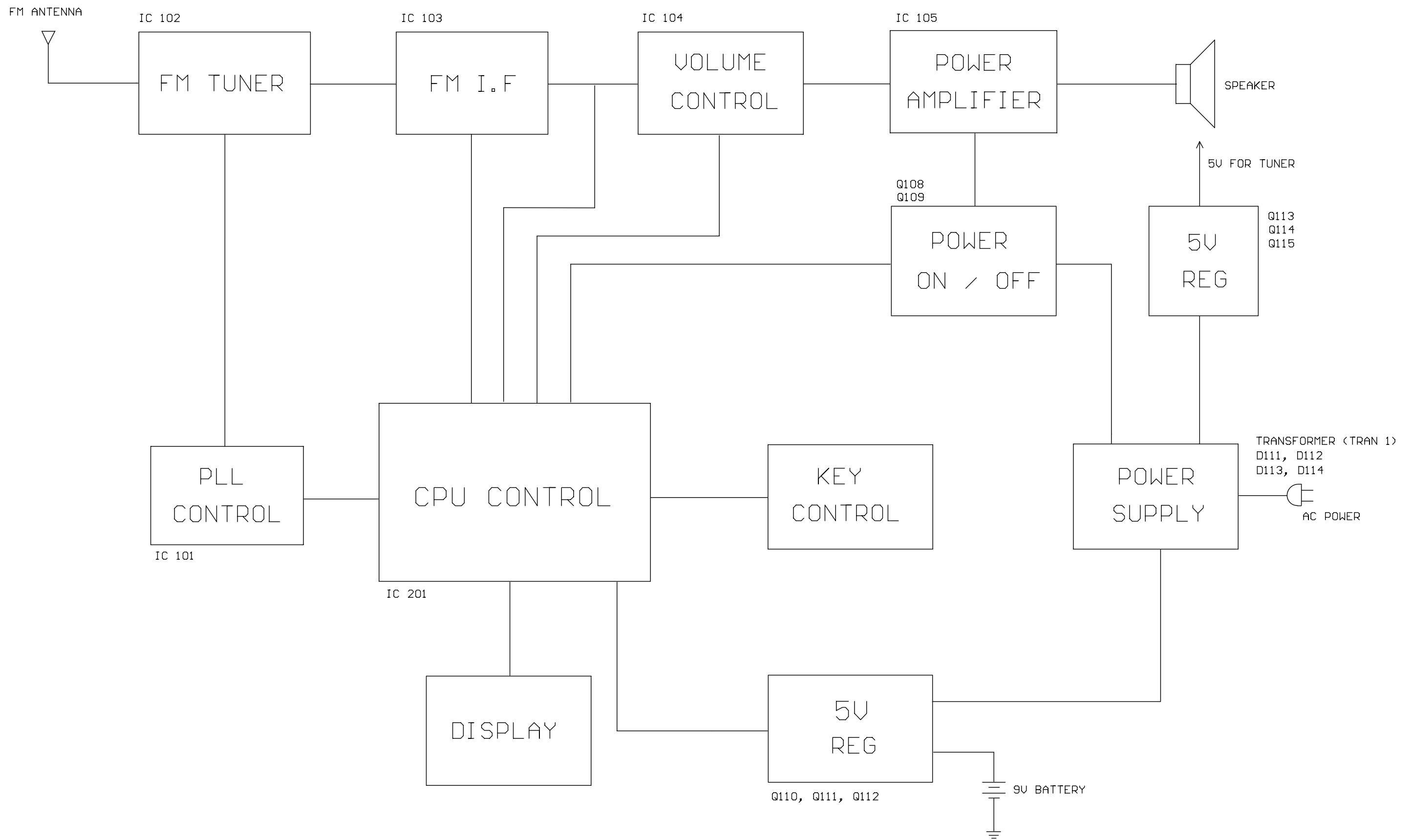
OUTPUT	ADJUST	ADJUST FOR	REMARK
TP6,7	CHECK ONLY	75KHz± 10HZ	

5) 1.8432MHZ CRYSTAL

OUTPUT	ADJUST	ADJUST FOR	REMARK
TC201	TC201	1.8432MHz± 10HZ	

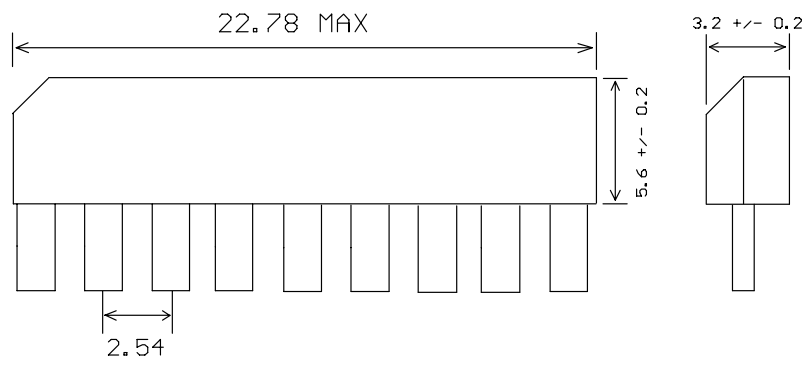
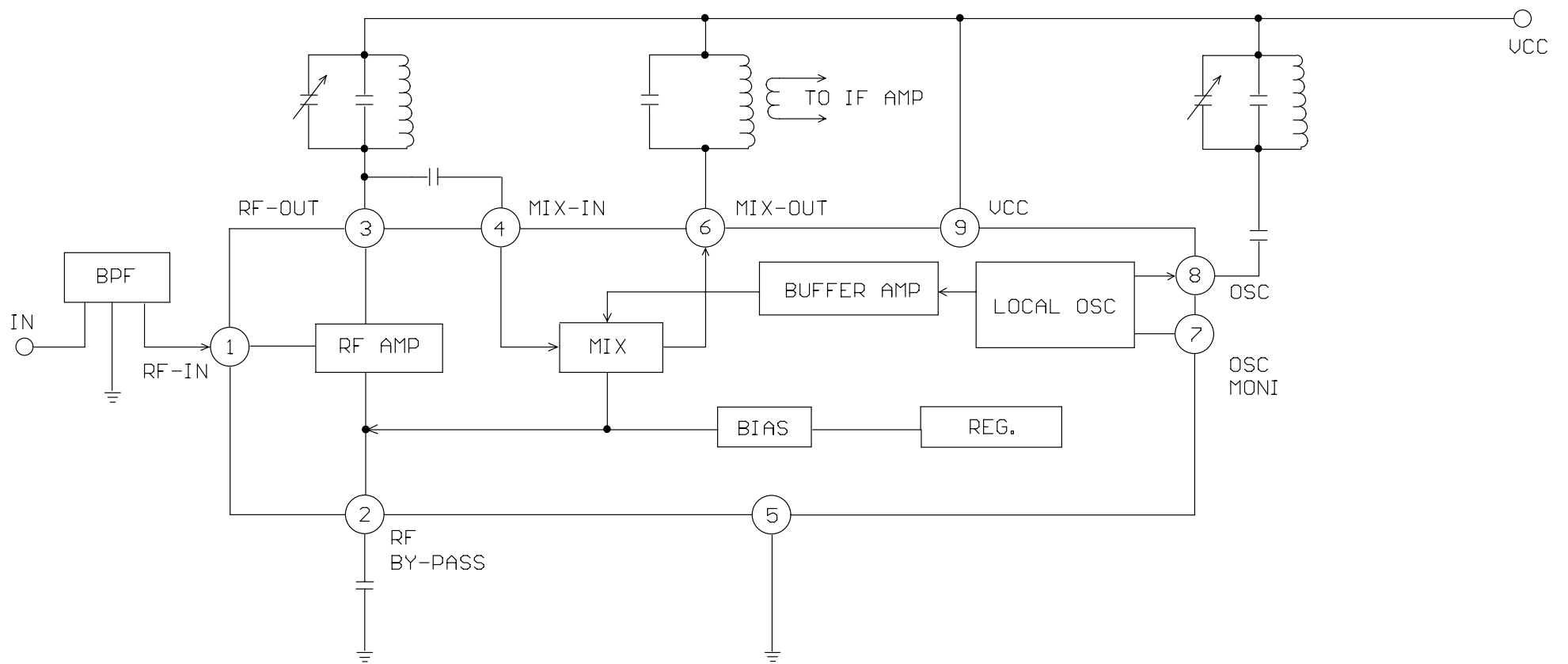
Note :

1. Use the digital meter to measure each required voltage on the above items
2. Use weak signal in RF alignment
3. Radio & LCD board must be connected before alignment
4. Use the frequency counter to measure each required frequency on the about items.

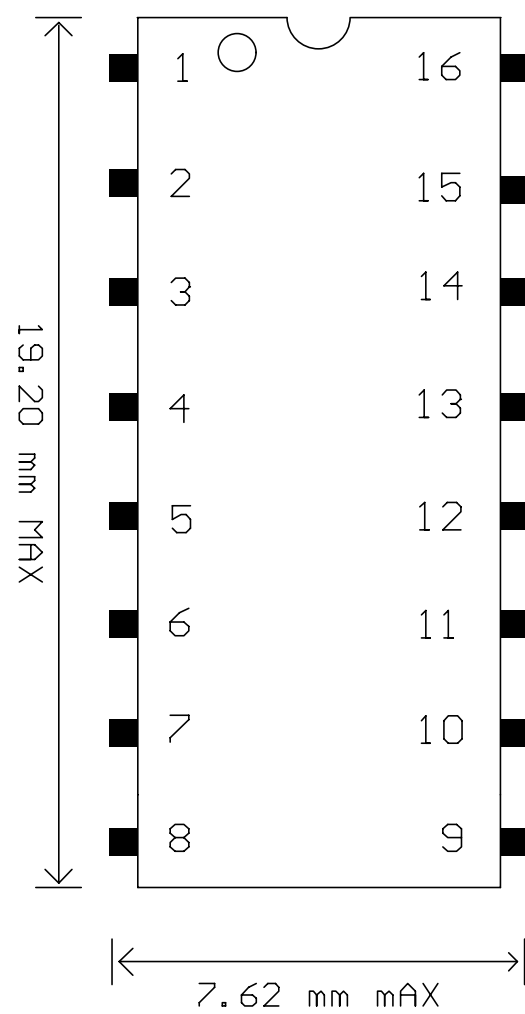
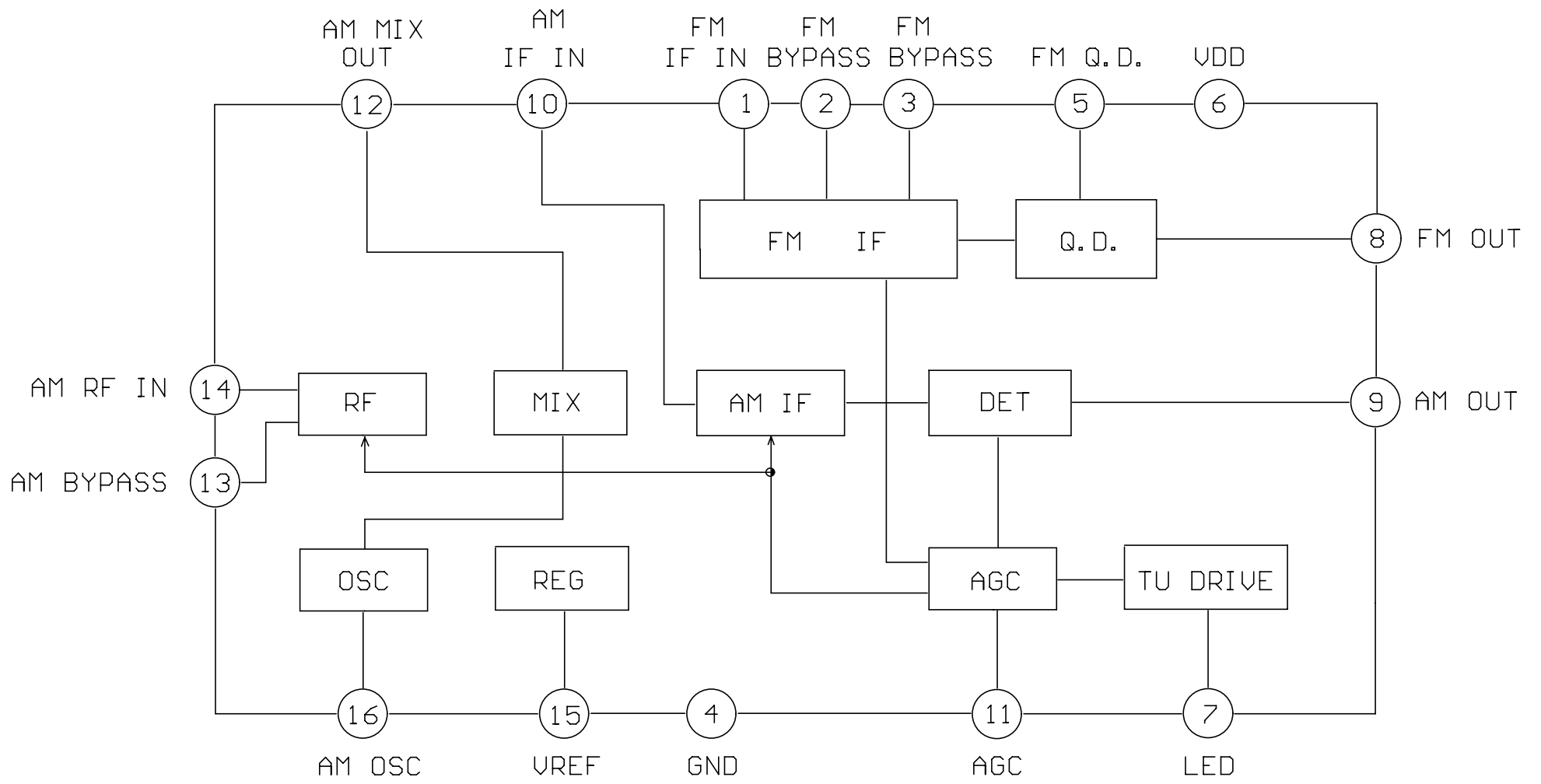


MODEL: SC690 BLOCK DIAGRAM

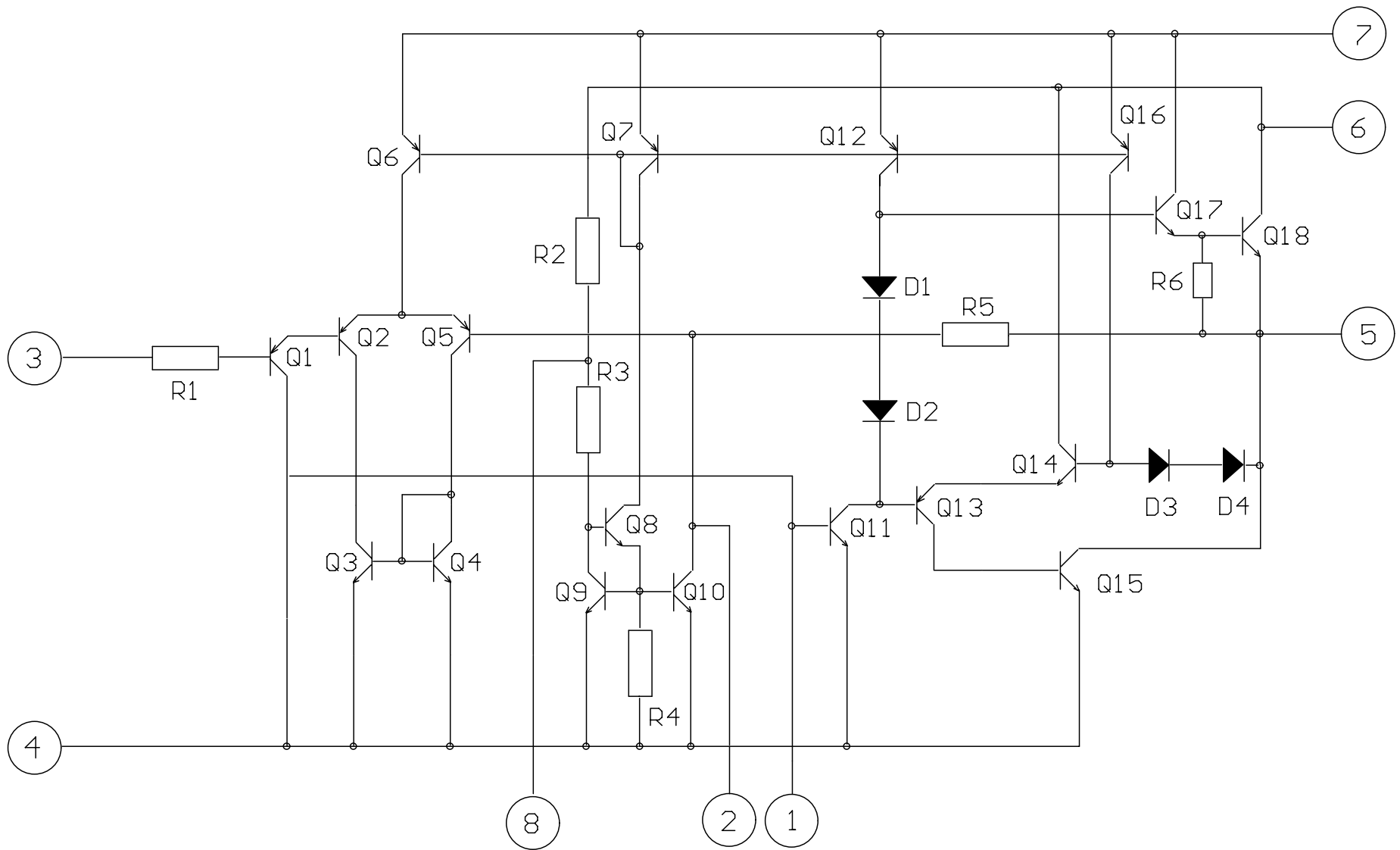
BLOCK DIAGRAM OF IC102, TA7358



BLOCK DIAGRAM OF IC103, LA1260

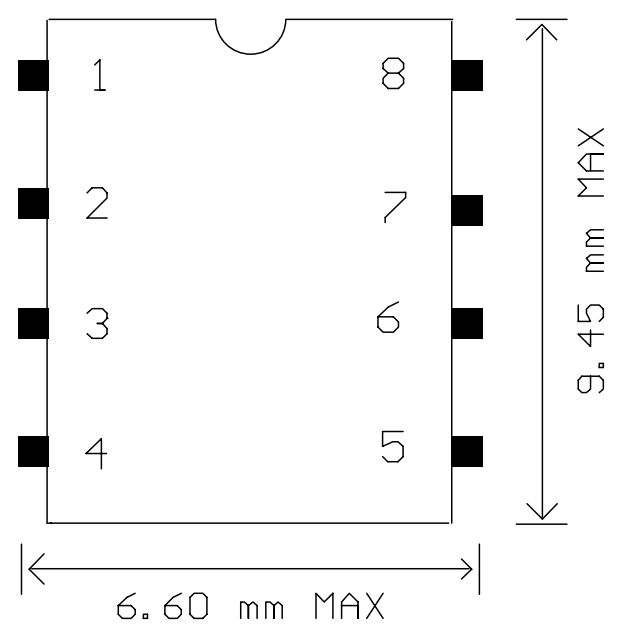


BLOCK DIAGRAM OF IC105, KA2201

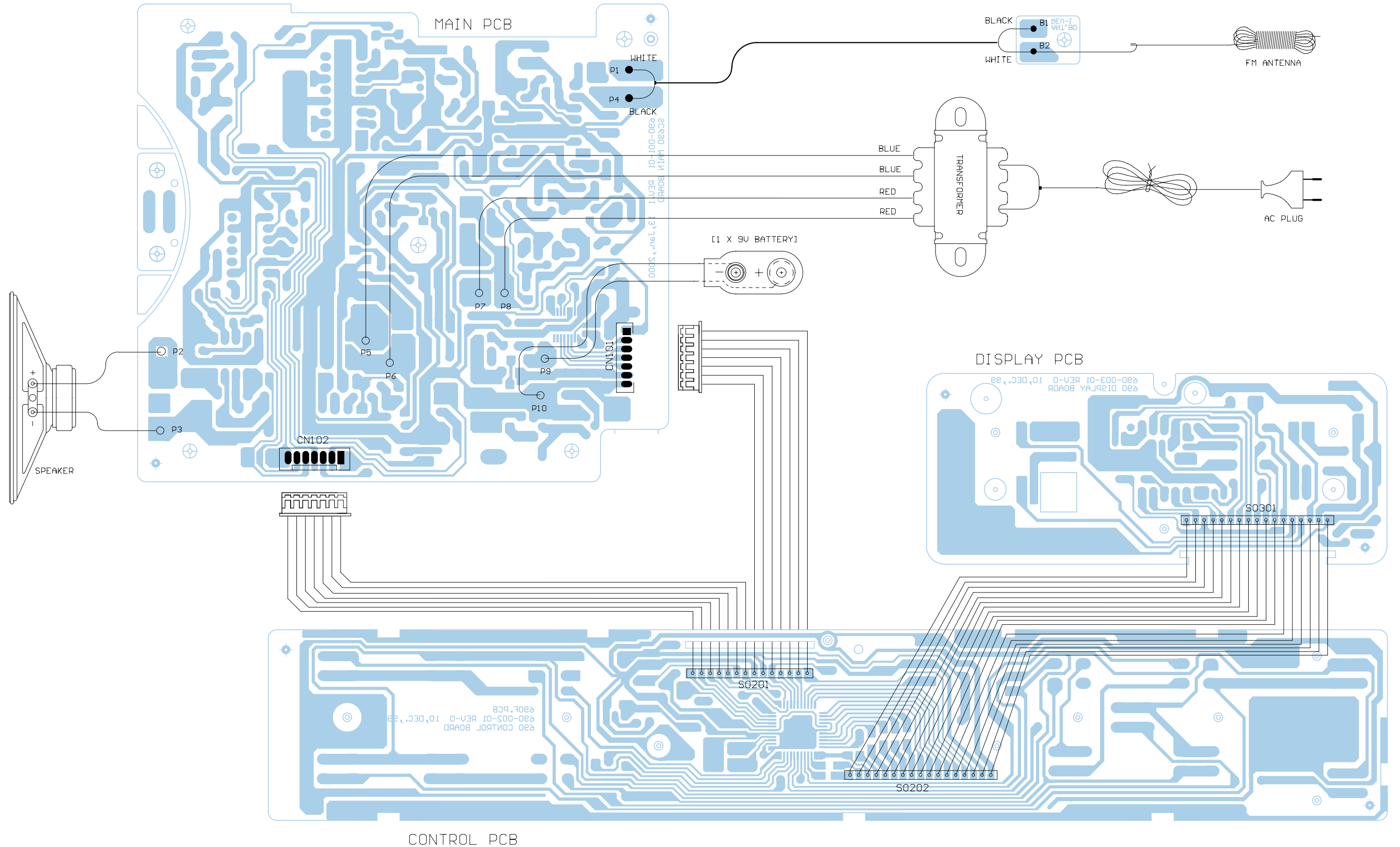


CONNECTION DIAGRAM

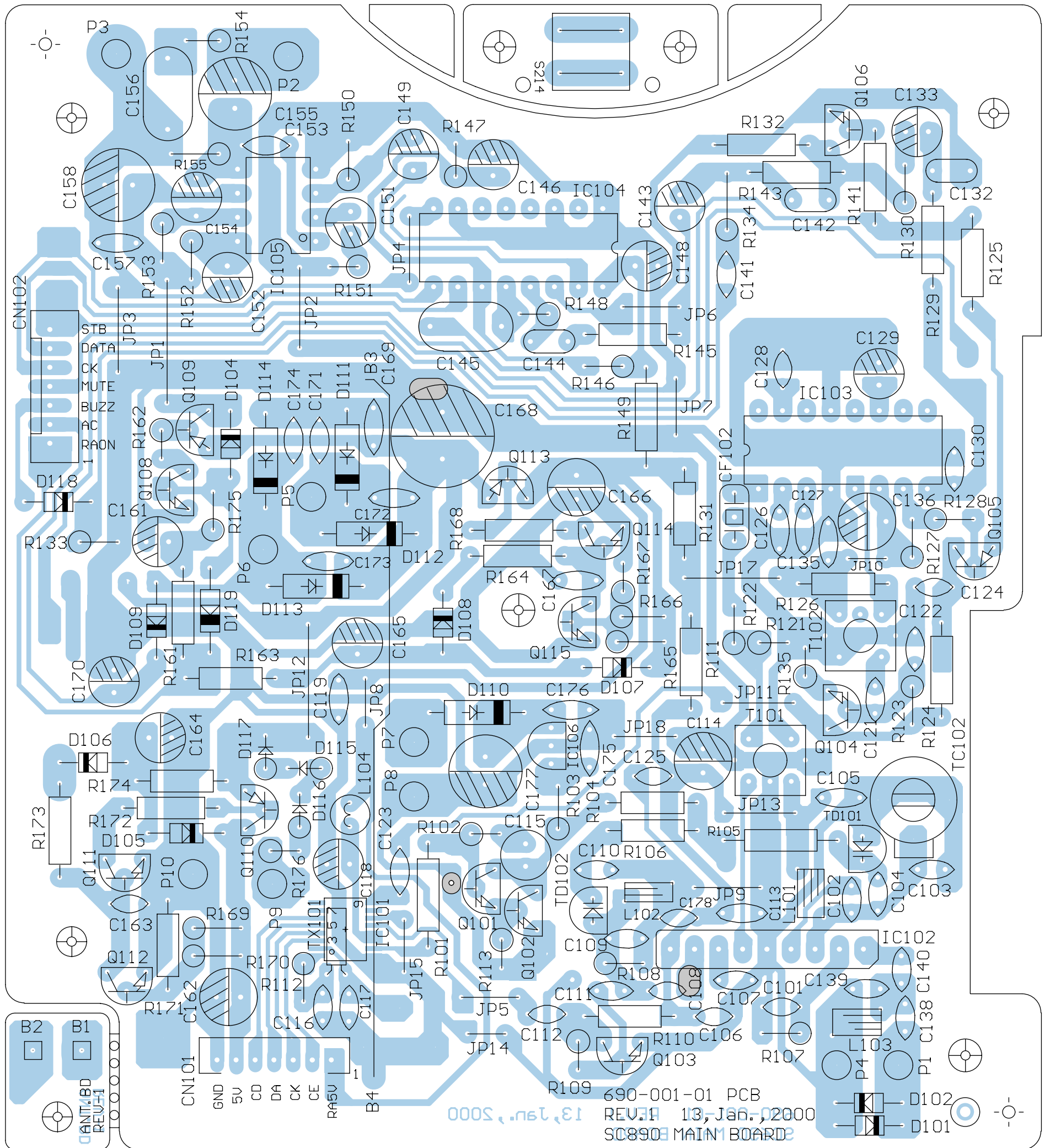
PIN NO.	CONNECTION
1	-----
2	-----
3	INPUT
4	GND
5	OUTPUT
6	VCC
7	-----
8	-----



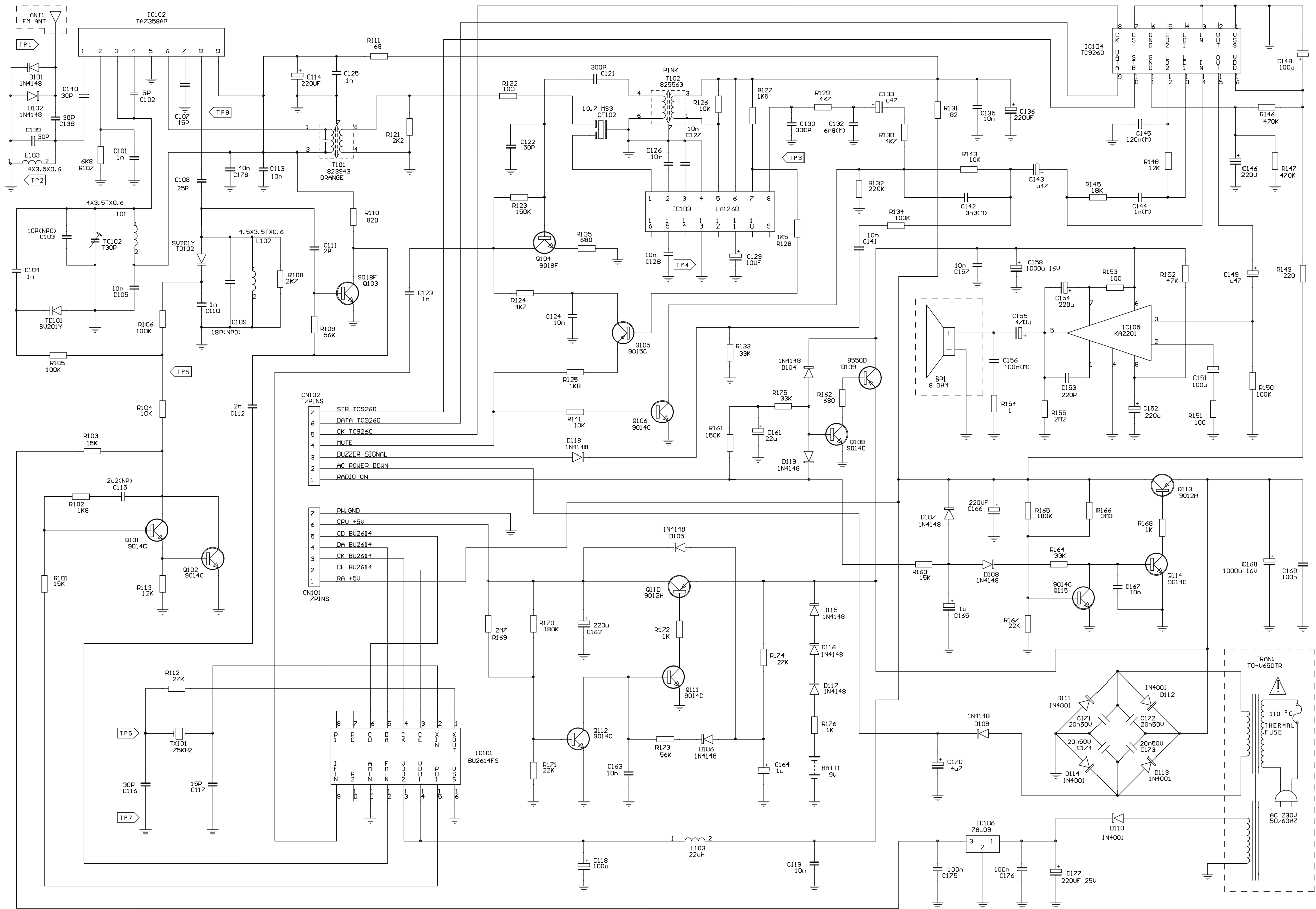
GRUNDIG SC690 WIRING DIAGRAM



GRUNDIG SC690 PCB LAYOUT

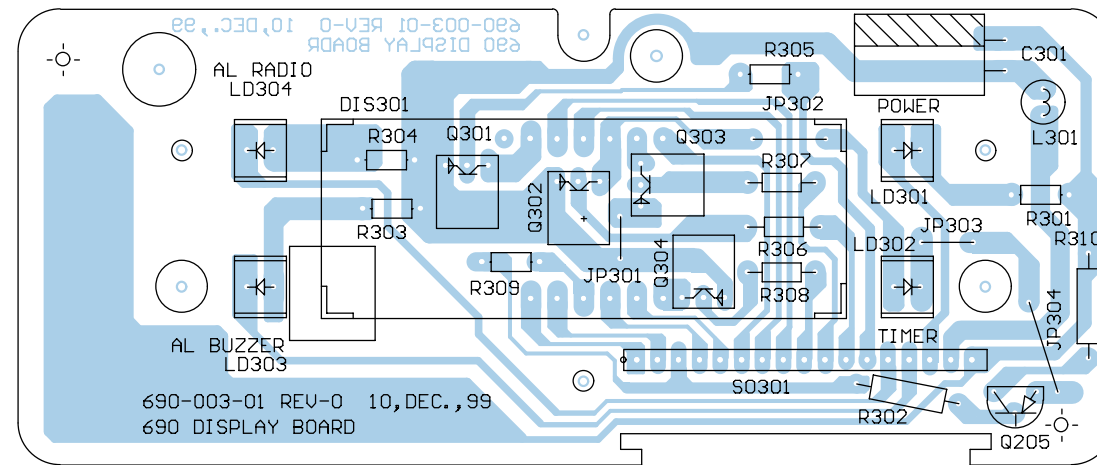


MAIN PCB

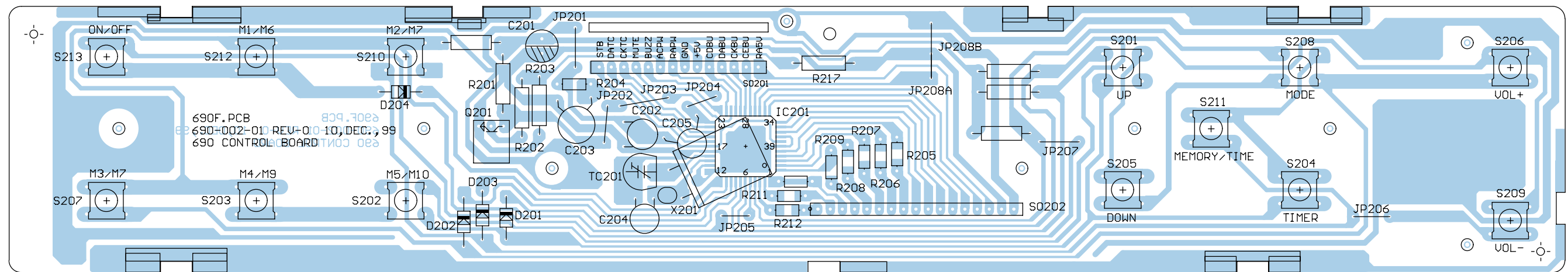


SC690 RADIO & POWER SECTION
690M.SCH
Date: February 3, 2000

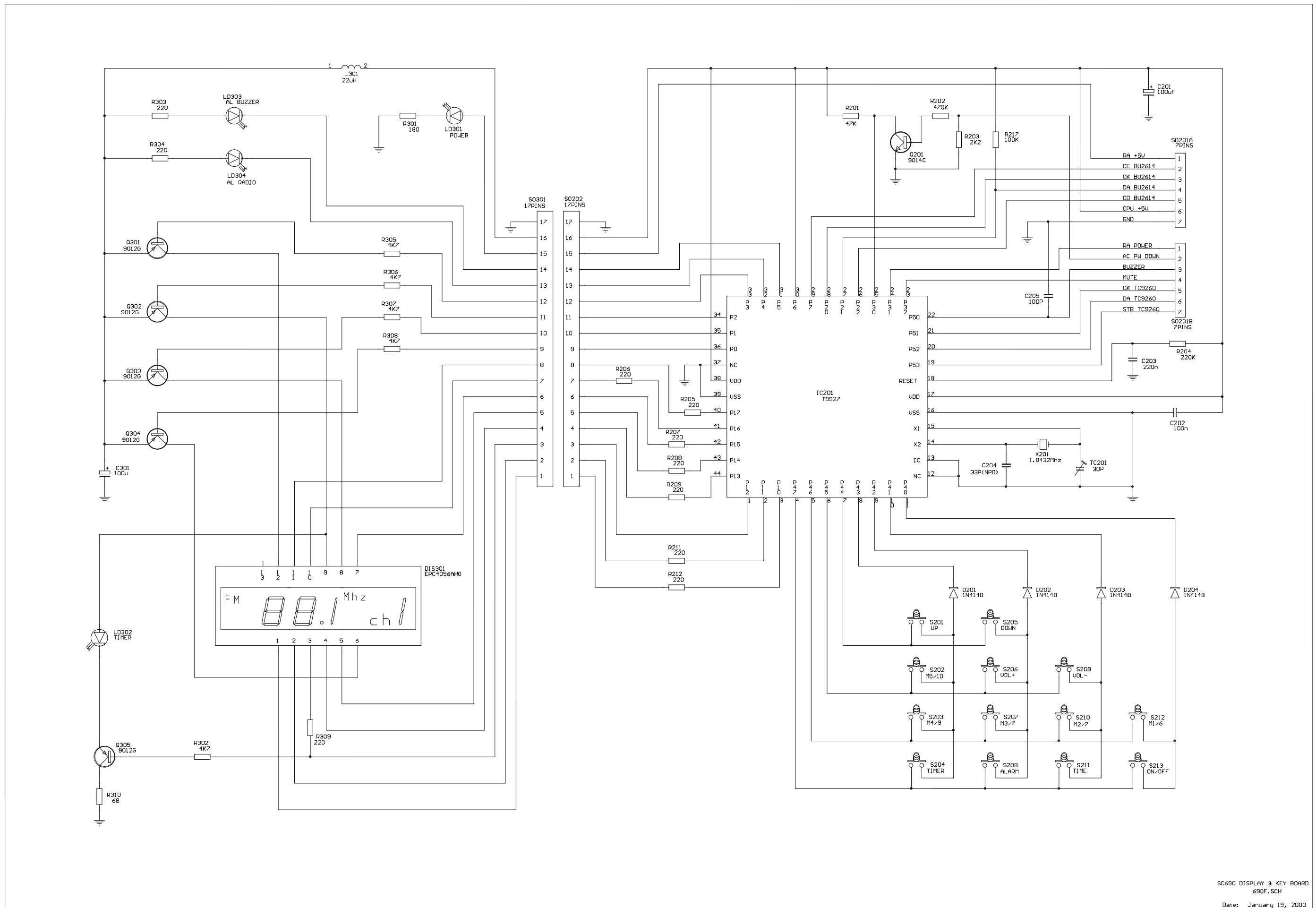
GRUNDIG SC690 PCB LAYOUT



DISPLAY PCB



CONTROL PCB



SC690 DISPLAY & KEY BOARD
690F.SCH
Date: January 19, 2000

VOLTAGE TABLE OF MODEL : GRUNDIG SC690 (UNITS = VOLTS)

DATE : 25 APR 00

COMPONENTS : IC'S

IC 102, TA7358AP	
AT POWER ON CONDITION	
PIN NO.	V-OUT (Volts)
1	0,47
2	1,17
3	2,92
4	1,16
5	0
6	3,34
7	2,22
8	2,96
9	2,92

IC 105, KA2201	
AT POWER ON CONDITION	
PIN NO.	V-OUT (Volts)
1	0,6
2	0,5
3	0
4	0
5	6,5
6	12,2
7	12,1
8	7,2

IC 103, LA1260	
AT POWER ON CONDITION	
PIN NO.	V-OUT (Volts)
1	0
2	2,5
3	1,5
4	0
5	3,7
6	3,3
7	0,68
8	1,53
9	1,45
10	1,46
11	1,38
12	2
13	0
14	0
15	2,3
16	1,76

IC 101, BU2614	
AT POWER ON CONDITION	
PIN NO.	V-OUT (Volts)
1	2,3
2	1,7
3	0
4	4,85
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	4,85
14	4,85
15	1,14
16	0

COMPONENTS : IC'S

IC 104, TC9260	
AT POWER ON CONDITION	
PIN NO.	V-OUT (Volts)
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	2,4
12	2,4
13	2,4
14	2,4
15	2,4
16	4,8

IC 106, 78L09	
AT POWER ON CONDITION	
PIN NO.	V-OUT (Volts)
1	16,7
2	0
3	9

VOLTAGE TABLE OF MODEL : GRUNDIG SC690 (UNITS = VOLTS)

DATE : 25 APR 00

COMPONENTS : TRANSISTORS
MEASURED CONDITION : AT POWER ON

Q101	9014C
C	5,25
B	1,11
E	0,58

Q109	85500
C	12,2
B	11,4
E	12,2

Q201	9014C
C	0,37
B	0,59
E	0

Q102	9014C
C	5,25
B	0,58
E	0

Q110	9012H
C	4,91
B	11,6
E	12,2

Q301	9012G
C	1,3
B	4,74
E	4,88

Q103	9018F
C	1,8
B	0,75
E	0

Q111	9014C
C	11,4
B	0,56
E	0

Q302	9012G
C	1,4
B	4,72
E	4,88

Q104	9018F
C	0,07
B	0
E	0

Q112	9014C
C	0,56
B	0,55
E	0

Q303	9012G
C	1,4
B	4,73
E	4,88

Q105	9015C
C	0
B	0,7
E	0,036

Q113	9012H
C	0
B	11,4
E	12,1

Q304	9012G
C	1,3
B	4,73
E	4,88

Q106	9014C
C	0
B	0,036
E	0

Q114	9014C
C	11,27
B	0,57
E	0

Q305	9012G
C	0
B	1,3
E	0

Q108	9014C
C	6,1
B	0,67
E	0

Q115	9014C
C	0,57
B	0,55
E	0

VOLTAGE TABLE OF MODEL : GRUNDIG SC690 (UNITS = VOLTS)

DATE : 25 APR 00

COMPONENTS : TRANSISTORS
MEASURED CONDITION : AT POWER OFF

Q108	9014C
C	12,54
B	0,038
E	0

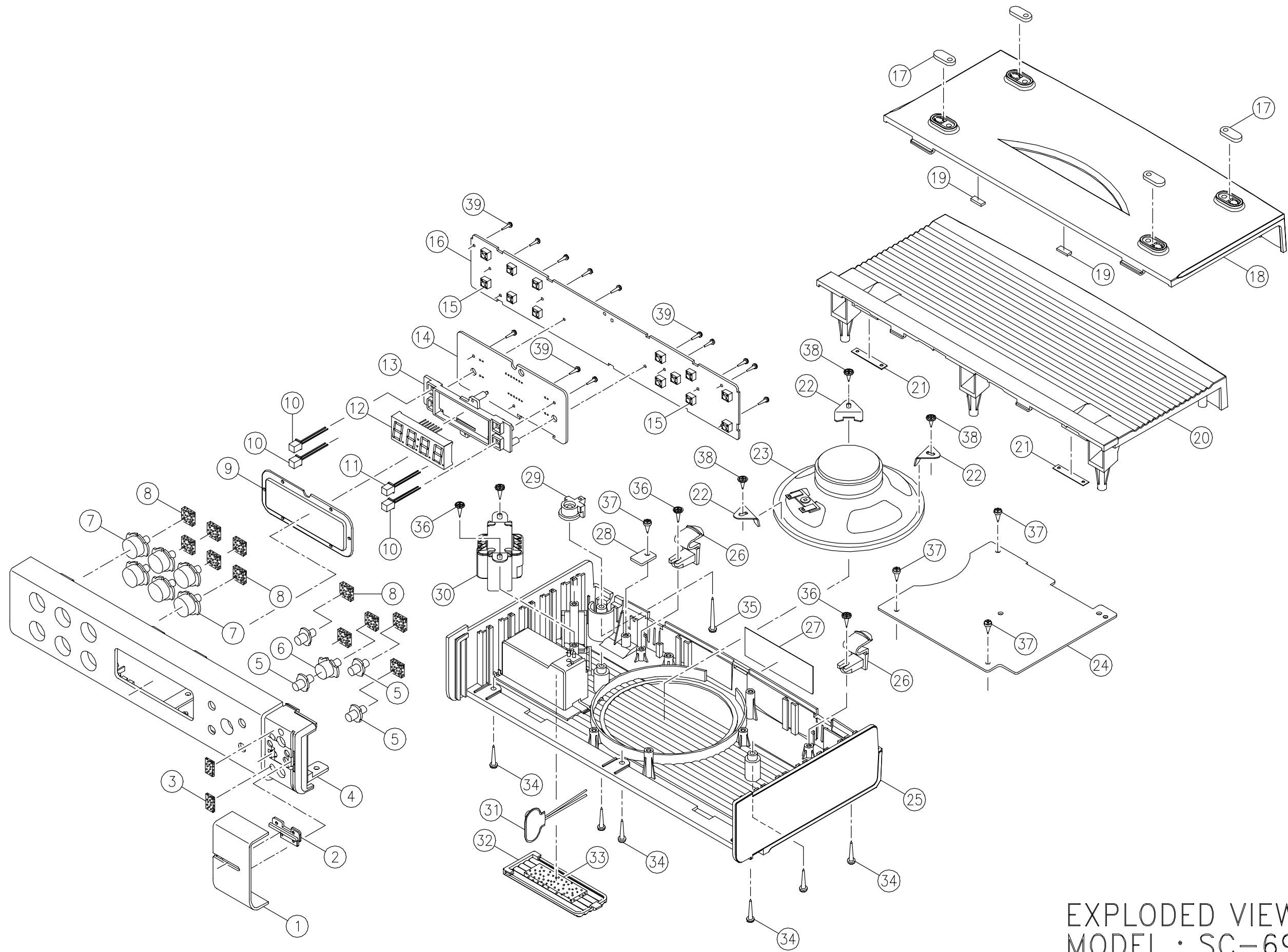
Q109	85500
C	0,63
B	12,5
E	13,12

Q110	9012H
C	4,91
B	12,56
E	13,1

Q111	9014C
C	12,3
B	0,57
E	0

Q112	9014C
C	0,57
B	0,55
E	0

Q201	9014C
C	0,34
B	0
E	0



EXPLODED VIEW
MODEL : SC-690