Service Manual

Speaker Line Checker

SC-6224

interM

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SPECIFICATIONS

	SC-6224
Check Range	20Ω~3kΩ
Check Time	Less than 100msec / Channel
Auto Check Time Range	5min ~ 200min
Check Channel	24CH Power
Consumption	DC 24V, 750mA
Operating temperature	–10° C ~ 40° C
Weight (SET)	4.4kg/9.7lb
Dimensions (SET)	482(W)×88(H)×280(D)mm/18.9(W)×3.46(H)×3.14(D)in
Accessory	
LINK IN/OUT Cable	UTP Cable (500mm)

* Design and specification are subject to be changed for the improvement of product quality without pre notice.

ELECTRICAL PARTS LIST

Ref.	Part No.	Description	Value
BGM B'D			
AN101-108	107248	06P/ASSY/3.96/107248,ASS'Y-06P	ASS'Y-06P
AN485	107164	06P/ASSY/2.5/107164,ASS'Y-06P	ASS'Y-06P
BD3-4	119251	120OHM/HB-1M2012-121JT/2012,120ohm	120ohm
BK1-3	113528	BK/113528,Bracket	Bracket
BUZZER	112730	BUZZER/CAP-1205SL,CAP-1205SL	CAP-1205SL
C1 C11 C31-32 C45-47 C49-50 C58-60 C67	120246	CE0.1U50Z/1608,0.1U	0.1U
C10	105378	EC470U16M/SG,470/16	470/16
C12 C17-18 C21-24	120234	CE0.001U50J/1608,0.001U	0.001U
C13-14 C25	120355	CE15P50J/1608,15P	15P
C15 C20 C27 C36-44 C51-52	120415	CE0.01U50K/1608,0.01U	0.01U
C16 C19 C69	120390	CE470P50J/1608,470P	470P
C2 C4	120404	CE68P50J/1608,68P	68P
C26	120427	CE0.015U50K/1608,0.015U	0.015U
C3 C6 C68	128384	CE750P50J/2012,750P	750P
C30	120406	CE680P50J/2012,680P	680P
C33-34	120267	CE20P50J/1608,20P	20P
C35	120353	CE120P50J/1608,120P	120P
C48 C55	120250	CE1U50K/1608,1U	1U
C5 C7	128382	MA0.47U50J/DEM/T,0.47/50(M)	0.47/50(M)
C53 C71-72	120123	EC100U25M/RC,100/25	100/25
C57	120235	CE0.001U50J/2012,0.001U	0.001U
C62-63	120145	EC4.7U16M/RC,4.7/16	4.7/16
C64-66	120127	EC1U50M/RC,1/50	1/50
C73-74 C79	120103	EC47U25M/SC,47/25	47/25
C75-76	120212	TT4.7U35M/B,4.7/35	4.7/35
C77	105384	EC470U50M/SG,470/50	470/50
C78	105511	EC47U50M/SG/T,47/50	47/50
C8 C54 C56 C99	105864	MA0.047U100J/T,0.047/100(M)	0.047/100(M)
C81	120142	EC3.3U50M/RC,3.3/50	3.3/50
C9	105351	EC220U50M/RD,220/50	220/50
CN101	120524	14P/FFCFPC553-1/1,FFCFPC553-14P	FFCFPC553-14P
CN103	111357	02P/LW-5267/2.5,LW5267-02P	LW5267-02P
CN16	111251	06P/PHWS-2/12.2,PHWS-06P	PHWS-06P
CN201-208	110496	06P/B6P-VH/3.96,B6PVH-06P	B6PVH-06P
D1-24 D27-28 D101-107 D109-117 D201-224	119171	D/1N4148/SOT23,1N4148	1N4148
D32	125880	SD/SS16/SMA,SS16	SS16
DD1 DD3-4	126873	D/SS36A/SMB,SS36A	SS36A
DEBUG	111361	06P/LW-5267/2.5,LW5267-6P	LW5267-6P
HS1	114268	HS/114268/21,Heat sink	Heat sink
I1/2 I10/11 I11/12 I13/14 I14/15 I16/17 I17/18 I19/20 I2/3 I20/21 I22/23 I23/24 I4/5 I5/6 I7/8 I8/9	110793	TER/BL/5045GL/03V/110793,TERMINAL03P	TERMINAL03P
IC9	103146	MC34063A/2,MC34063A	MC34063A
L2	129415	12MH/LINE/129415,12mH	12mH
L3	126871	330UH/12/DSC-1070R,330uH	330uH
L4	119304	68UH/SHP1055P/119304,68uH	68uH
O1/1-2 O10/11 O11/12 O13/14 O14/15 O16/17 O17/18 O19/20 O2/3 O20/21 O22/23 O23/24 O4/5 O5/6 O7/8 O8/9	110793	TER/BL/5045GL/03V/110793,TERMINAL03P	TERMINAL03P
PEN	111956	SL/JSS-1218,JSS-1218	JSS-1218
PTC1	112403	PSW/30R110,30R110	30R110
Q1-24 Q98 Q101-124	118640	NPN/KRC107S/SOT23,KRC107S	KRC107S
Q91 Q94	118670	NPN/KTD1304/SOT23,KTD1304	KTD1304

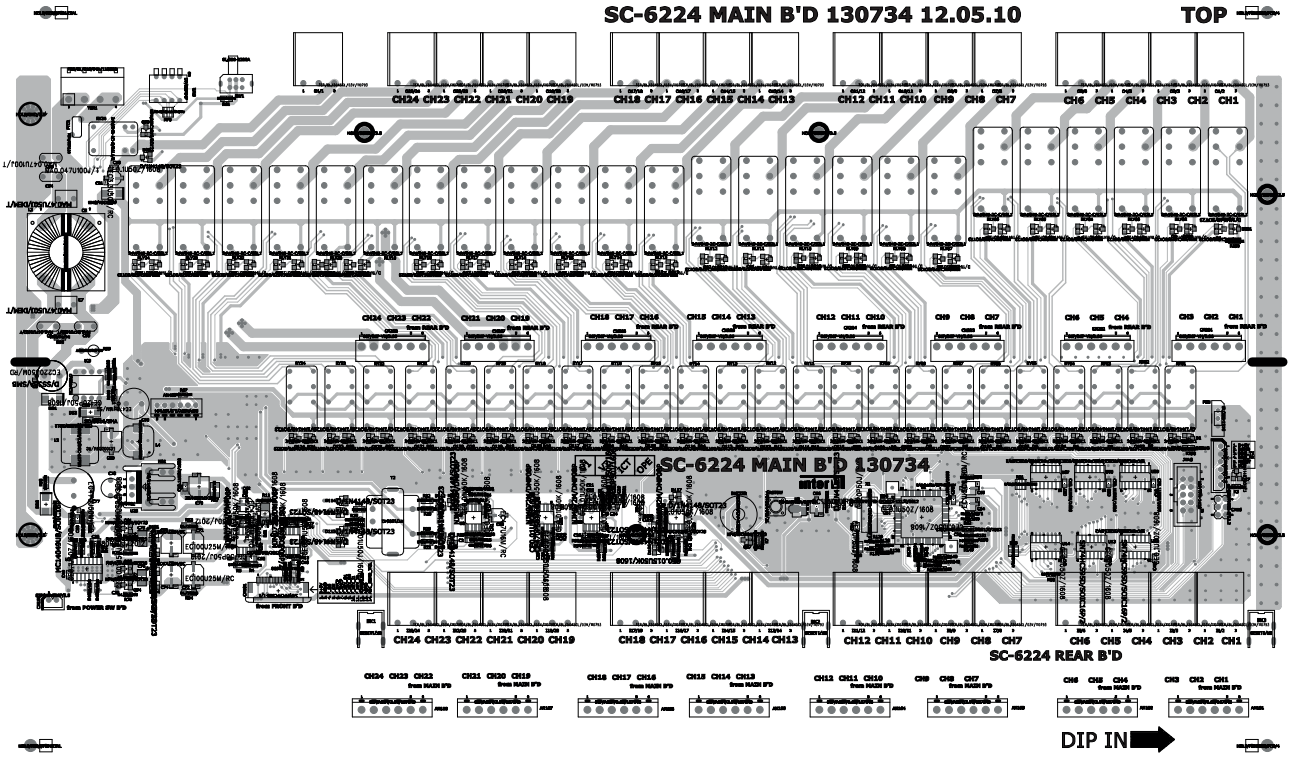
ELECTRICAL PARTS LIST

Ref.	Part No.	Description	Value
Q92-93	118660	PNP/KTA1298/SOT23,KTA1298	KTA1298
Q96	118642	NPN/KTC3875S-Y/SOT23,KTC3875S-Y	KTC3875S-Y
Q97	118672	NPN/2N3904/SOT23,2N3904	2N3904
R10 R58 R999	119334	R0J/2012,0	0
R1-3 R7 R11-12 R38 R52 R65-66	119366	R10KJ/1608,10K	10K
R13-14 R16 R34	119653	R5.1KJ/1608,5.1K	5.1K
R15 R18-19	119498	R22KJ/1608,22K	22K
R17	119333	R0J/1608,0	0
R20-23 R43	119497	R2.2KJ/2012,2.2K	2.2K
R24-27	119516	R24KJ/1608,24K	24K
R28	119422	R1.5KJ/1608,1.5K	1.5K
R29	119731	R7.5KJ/1608,7.5K	7.5K
R298-299	119499	R22KJ/2012,22K	22K
R30	119553	R30KJ/1608,30K	30K
R31	119700	R680J/1608,680	680
R32	119706	R6.8KJ/1608,6.8K	6.8K
R33 R74-77	119624	R4.7KJ/1608,4.7K	4.7K
R35	119433	R150KJ/1608,150K	150K
R36	119475	R20KJ/1608,20K	20K
R37 R50 R80 R129-134 R138-140 R143 R148-151	119352	R100J/1608,100	100
R4 R6 R81	119781	R10KF/2012,10K 1%	10K 1%
R40	119616	R47J/1608,47	47
R41	119505	R2.2MJ/1608,2.2M	2.2M
R48 R51 R68 R70	120089	R10KJ/ARY8Y/SMD/2,10K	10K
R5	119884	R9.53KF/2012,9.53K 1%	9.53K 1%
R53-54	119644	R4.7J/3216,4.7	4.7
R55	119652	R5.1KF/2012,5.1K 1%	5.1K 1%
R56	119817	R47KF/2012,47K 1%	47K 1%
R57	119511	R2.2J/3225,2.2	2.2
R59	104666	R0.47J/2W/MO/T,0.47 2W	0.47 2W
R60	119851	R3.01KF/2012,3.01K 1%	3.01K 1%
R61	119630	R47KJ/2012,47K	47K
R63	119526	R2.7KJ/1608,2.7K	2.7K
R64	119797	R18KF/2012,18K 1%	18K 1%
R67	119629	R47KJ/1608,47K	47K
R69	119882	R9.09KF/1/8W/2012,9.09K 1/8W 1%	9.09K 1/8W 1%
R72	119840	R2KF/2012,2K 1%	2K 1%
R8 R42 R44-47	119361	R1KJ/1608,1K	1K
R9 R39	119369	R100KJ/1608,100K	100K
R99	119639	R4.7MJ/2012,4.7M	4.7M
RLY01-24	112713	24V/845-2C-C/S2L1,24V	24V
RY01-24	126997	24V/HR-90/S2L1,24V	24V
RY26	112635	24V/842-1C-S/S1L1/2,24V	24V
SW1	112022	SL/JSS-2208A,JSS-2208A	JSS-2208A
SW2	112242	DP/KSP04P,KSP04P	KSP04P
T2	103642	MT/103642,103642	103642
TER1	110852	TER/BL/010/04H/110852,TERMINAL04P	TERMINAL04P
U1	118763	ATMEGA128/TQFP64P/2,ATmega128	ATmega128
U12-14 U59-60 U67	119127	SN74HC595D/SOIC16P/2,SN74HC595D	SN74HC595D
U2	119046	7042AF/KIA/SOT89,KIA7042AF	KIA7042AF
U23	103064	7818/KA,7818	7818
U3	118783	MC14049UB/SOIC16P,MC14049UB	MC14049UB
U4	119081	DS1804/SOP08P/2,DS1804	DS1804
U6-7 U9-11	118730	NJM072M/DMP08P,NJM072M	NJM072M
U8	118712	NJM5532M/DMP08P,NJM5532M	NJM5532M
X1	120478	11.0592MHZ/HC-49S/SMD,11.0592MHz	11.0592MHz

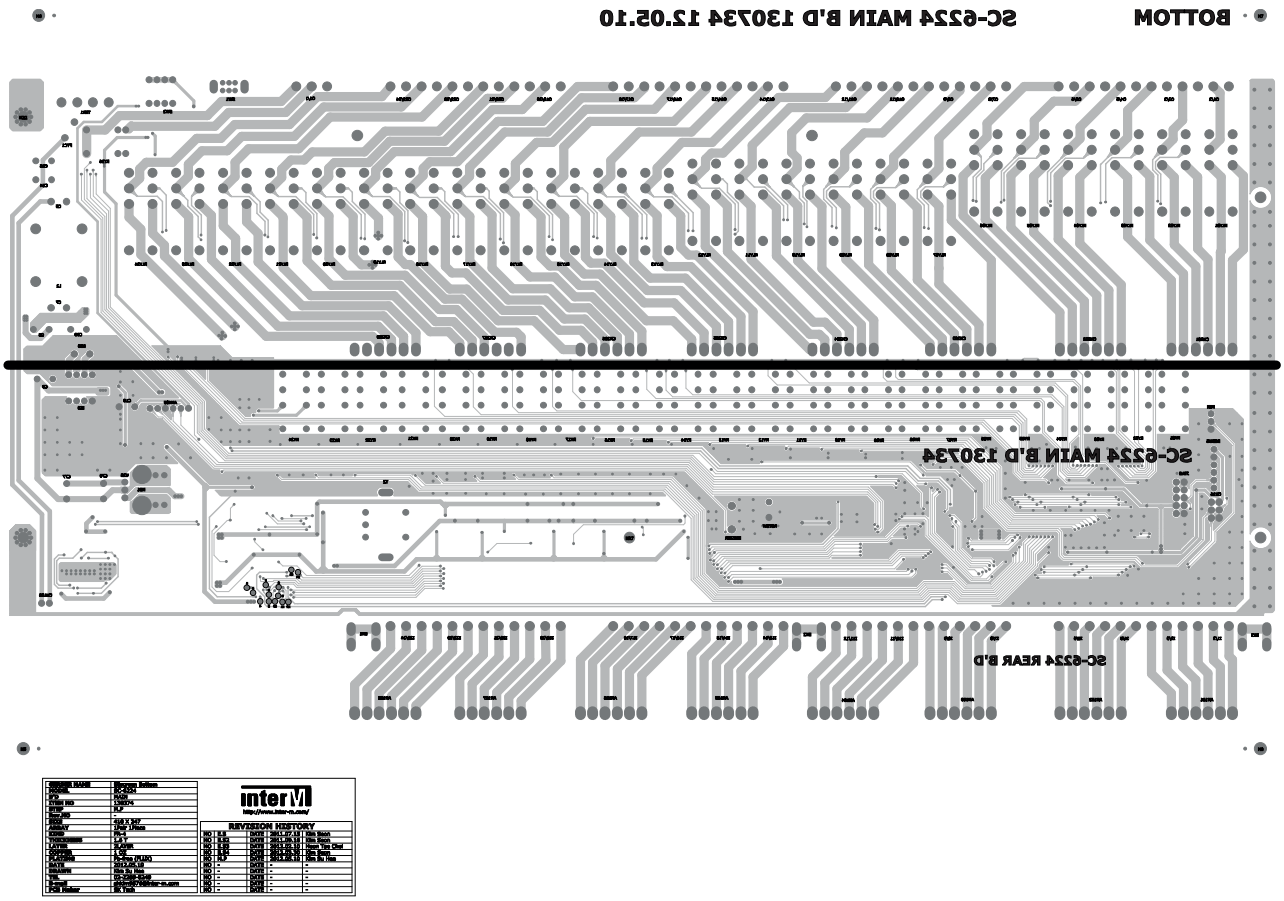
ELECTRICAL PARTS LIST

Ref.	Part No.	Description	Value
BGM B'D			
ZD2-3	118618	ZD/UZ3.3V/0.2W/USC,3.3V 0.2W	3.3V 0.2W
ZD4-5	122227	ZD/UZ5.1V/0.2W/USC,5.1V 0.2W	5.1V 0.2W

TOP & BOTTOM VIEW OF P.C BOARD



TOP & BOTTOM VIEW OF P.C BOARD



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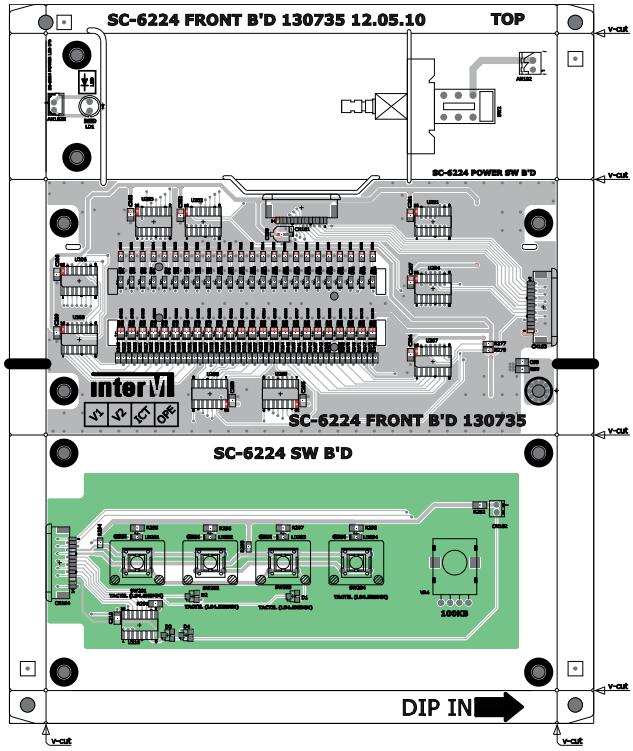

SOURCE NAME	Silkscreen Top
MODEL	SC-6224
P/N	P6287
ITEM NO	130735
STEP	N.P
Item_NO	-
SIZE	140 X 187
ARRAY	1 Pcs 1Place
KIND	PC-4
THICKNESS	1.6 t
LAYER	2LAYER
COPPER	1 OZ
PLATING	Sn-Pbe (PLUG)
DATE	2012.05.10
DRAWN	Kim Su Hee
TEL	02-2289-8249
E-mail	shkim0574@inter-m.com
PCB Maker	SK Tech

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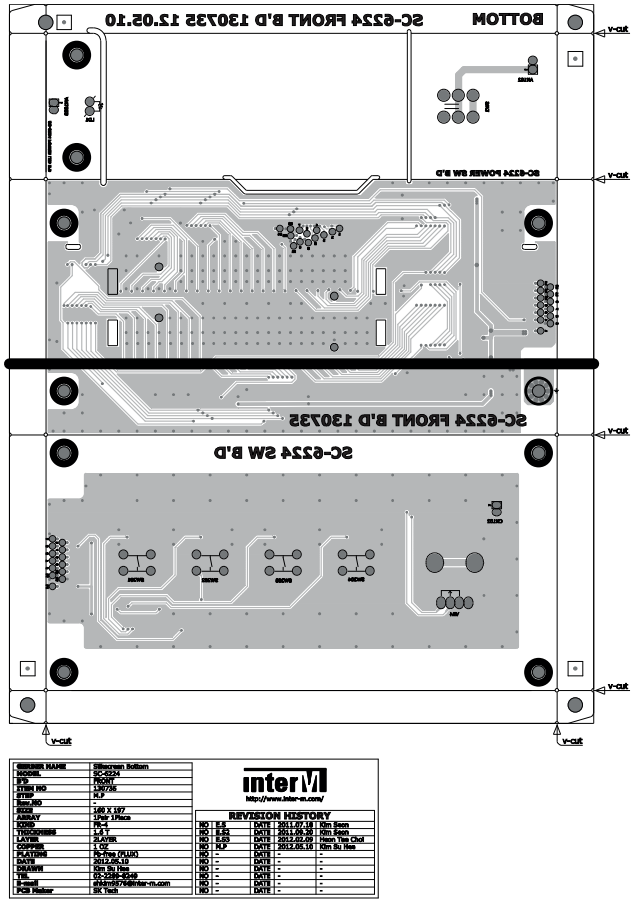
REVISION HISTORY

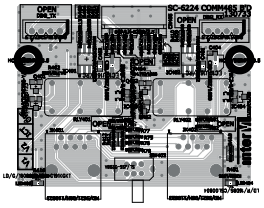
NO	E-0	DATE	2011.07.18	Kim Seon
NO	E-01	DATE	2011.08.02	Kim Seon
NO	E-03	DATE	2012.02.09	Heon Tae Chol
NO	N.P	DATE	2012.05.10	Kim Su Hee
NO	-	DATE	-	-
NO	-	DATE	-	-
NO	-	DATE	-	-
NO	-	DATE	-	-
NO	-	DATE	-	-
NO	-	DATE	-	-

TOP & BOTTOM VIEW OF P.C BOARD



TOP & BOTTOM VIEW OF P.C BOARD

SC-6224 COMM485 B'D 130733 12.04.19 DIP IN ➡ TOP



GERBER NAME	Silkscreen Top
MODEL	SC-6224
BD	COMM485
ITEM NO	130733
STIF	KLF
Serial NO	-
SIZE	210 X 187
ASSEY	Shar 1Piece
SIDE	TOP
THICKNESS	1.6
LAYER	2LAYER
COPPER	1 OZ
PLATING	Pb-free (RoHS)
DATE	2012.04.19
DRAWR	Seok Jung Sick
TEL	02-2289-5271
E-mail	seok1303@inter-m.com
PCB Maker	SK TECH

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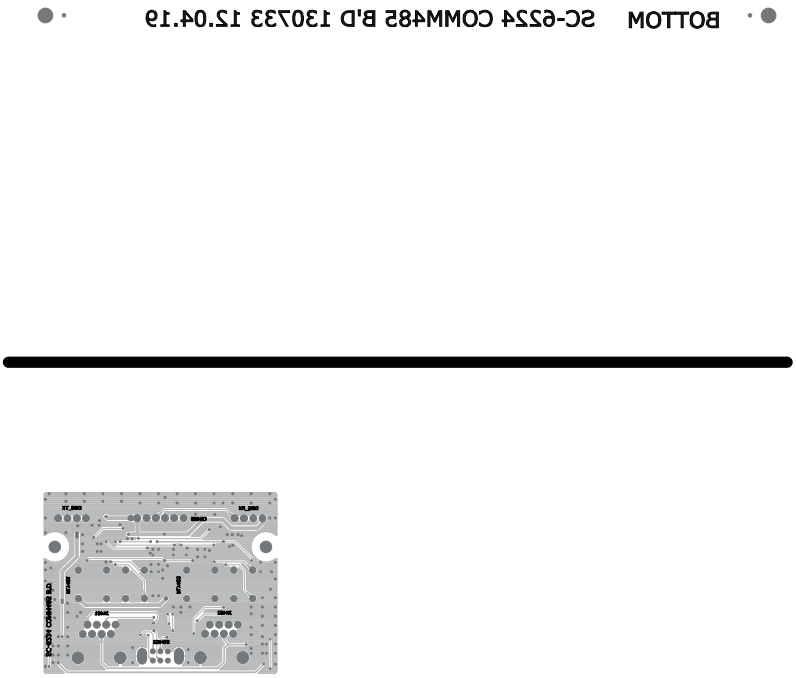
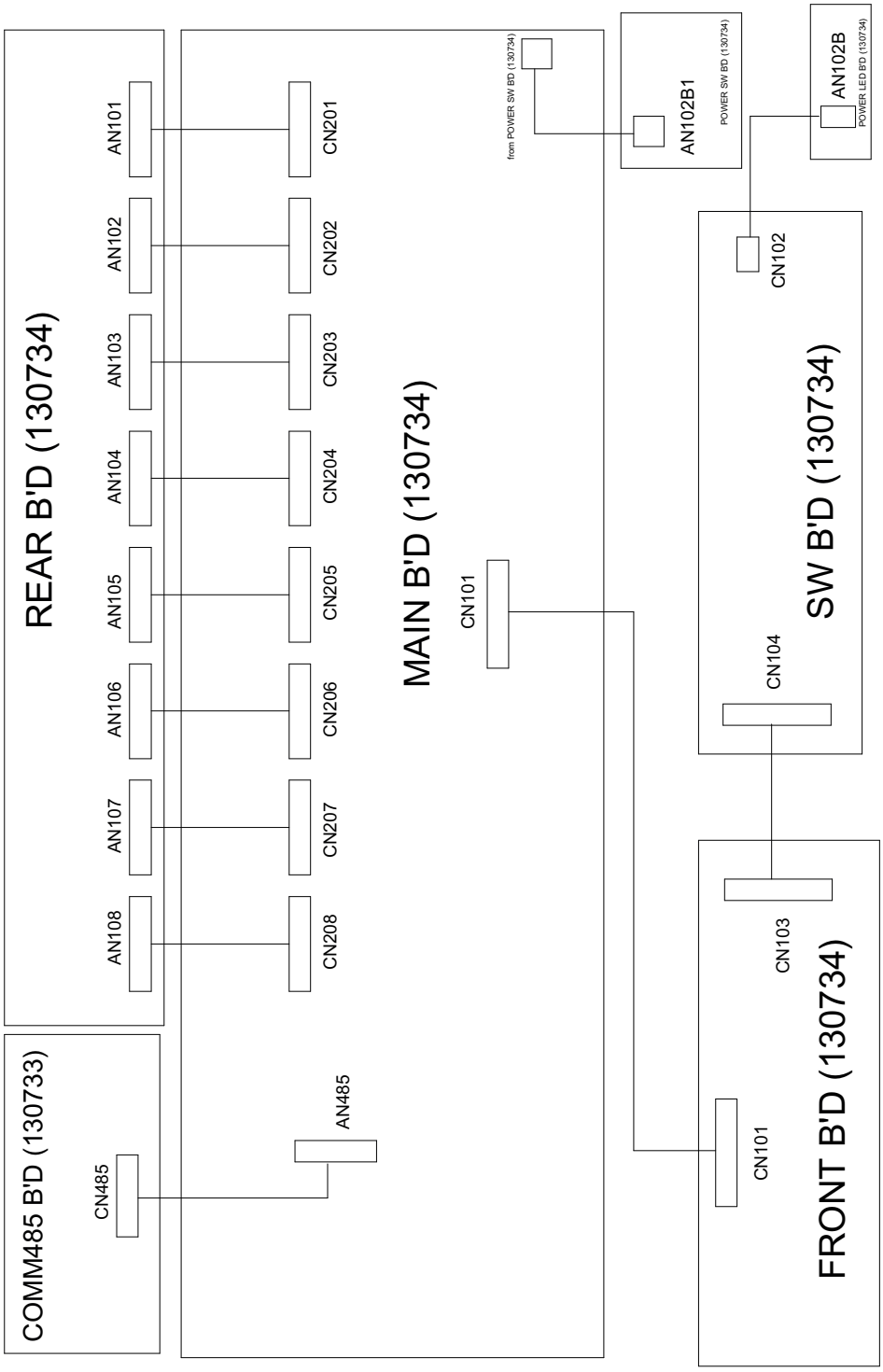
REVISION HISTORY

NO	E.S	DATE	2011.07.12	Kim Su Hee
NO	E.Sr	DATE	2012.02.23	Seok Jung Sick
NO	K.F	DATE	2012.04.19	Seok Jung Sick
NO	-	DATE	-	-
NO	-	DATE	-	-
NO	-	DATE	-	-
NO	-	DATE	-	-
NO	-	DATE	-	-
NO	-	DATE	-	-
NO	-	DATE	-	-
NO	-	DATE	-	-

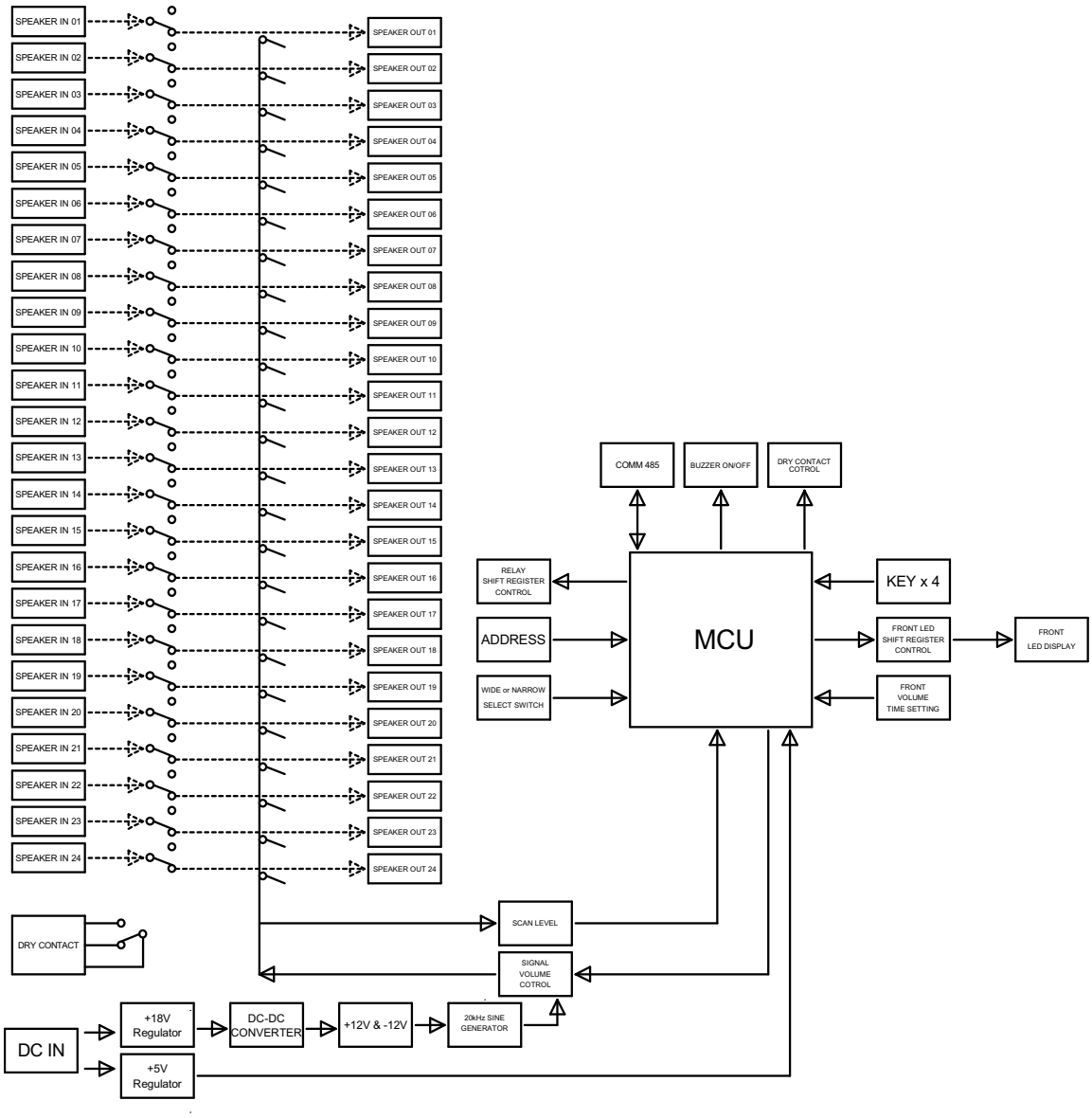
TOP & BOTTOM VIEW OF P.C BOARD



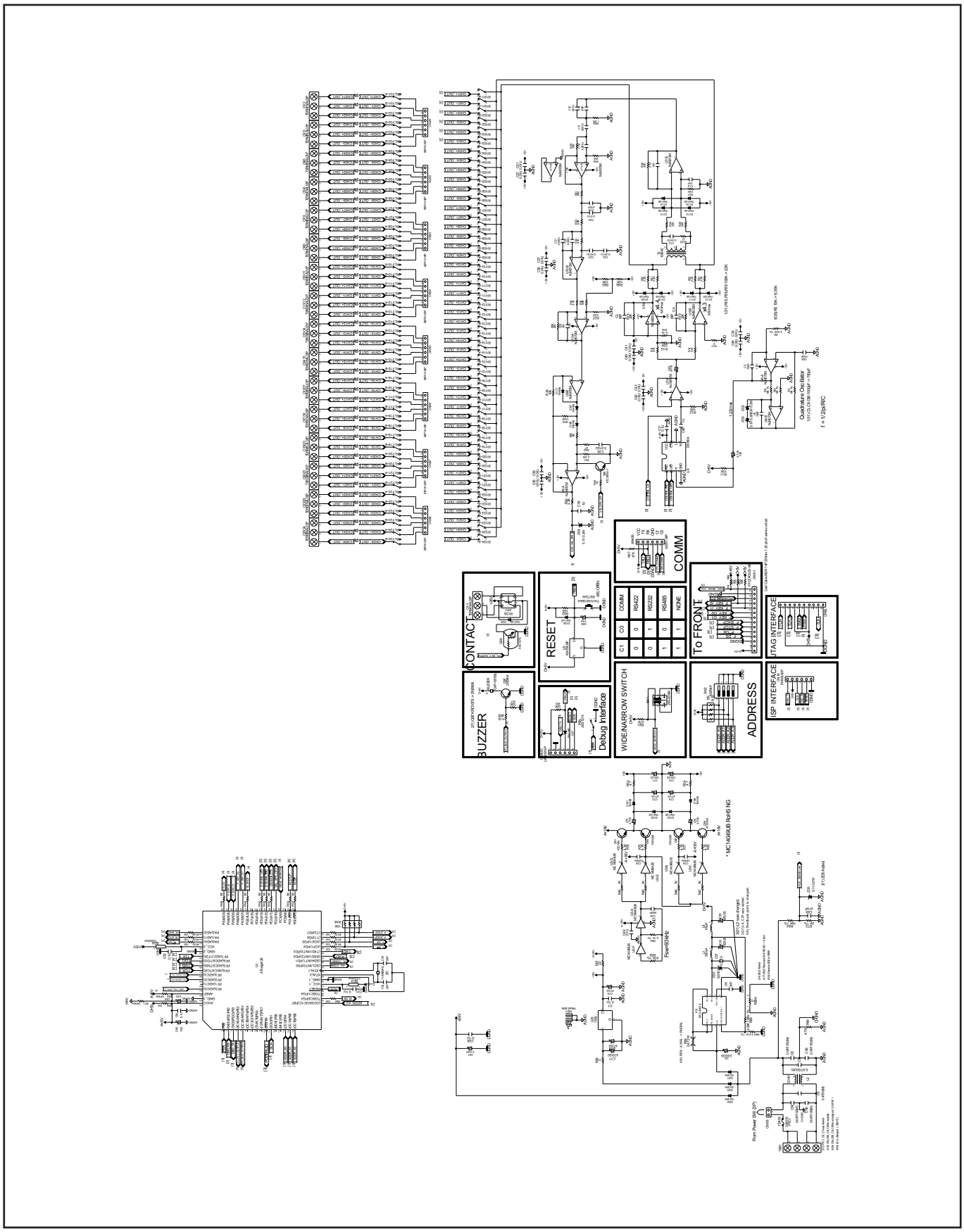

REAR B'D (130734)
AN101
AN102
AN103
AN104
AN105
AN106
AN107
AN108
COMM485 B'D (130733)
CN485
AN485
CN201
CN202
CN203
CN204
CN205
CN206
CN207
CN208
MAIN B'D (130734)
CN101
from POWER SW B'D (130734)
AN102B1
POWER SW B'D (130734)
AN102B
POWER LED B'D (130734)
CN102
SW B'D (130734)
CN104
CN103
CN101
FRONT B'D (130734)

BLOCK DIAGRAM

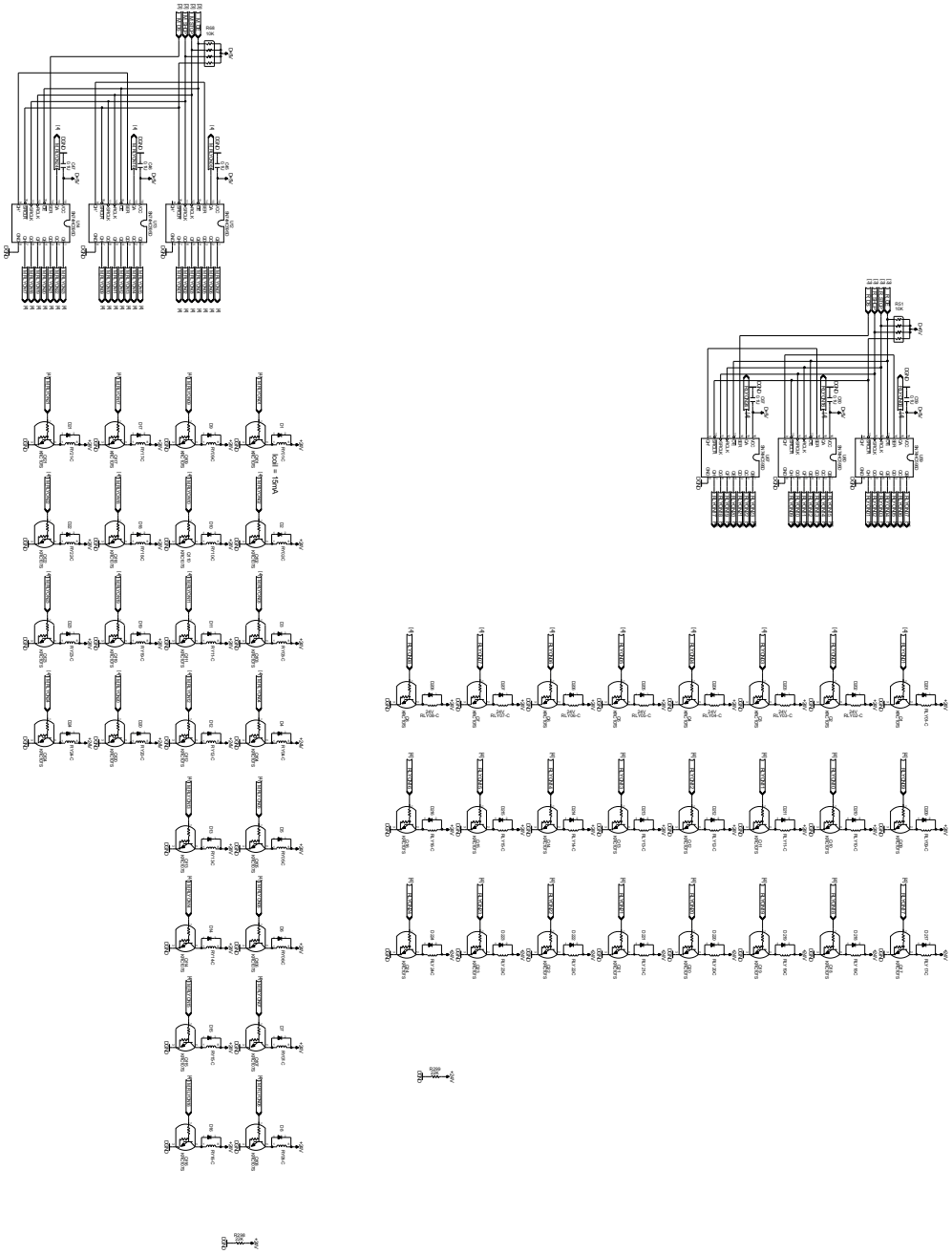
SC-6224 BLOCK DIAGRAM

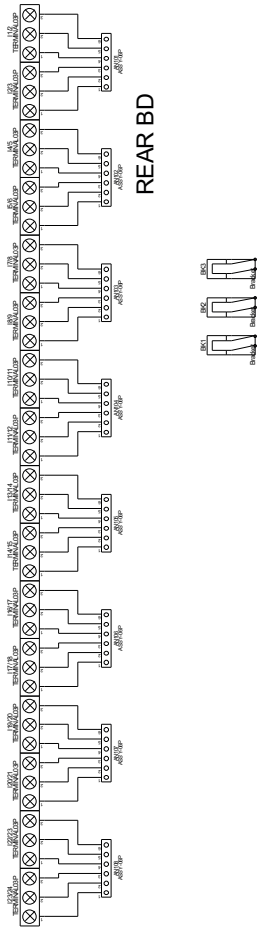


SCHEMATIC DIAGRAM

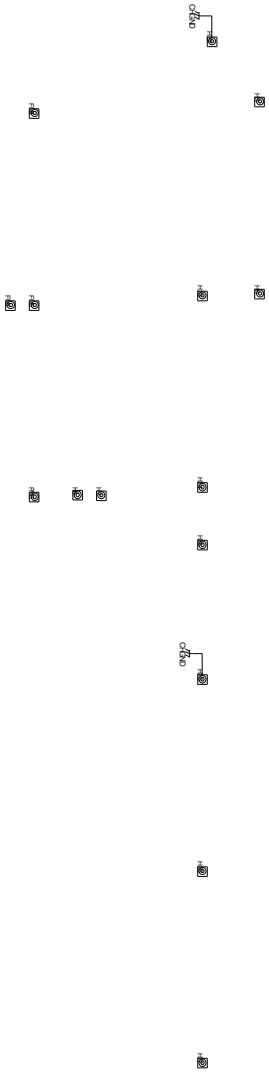


SCHEMATIC DIAGRAM

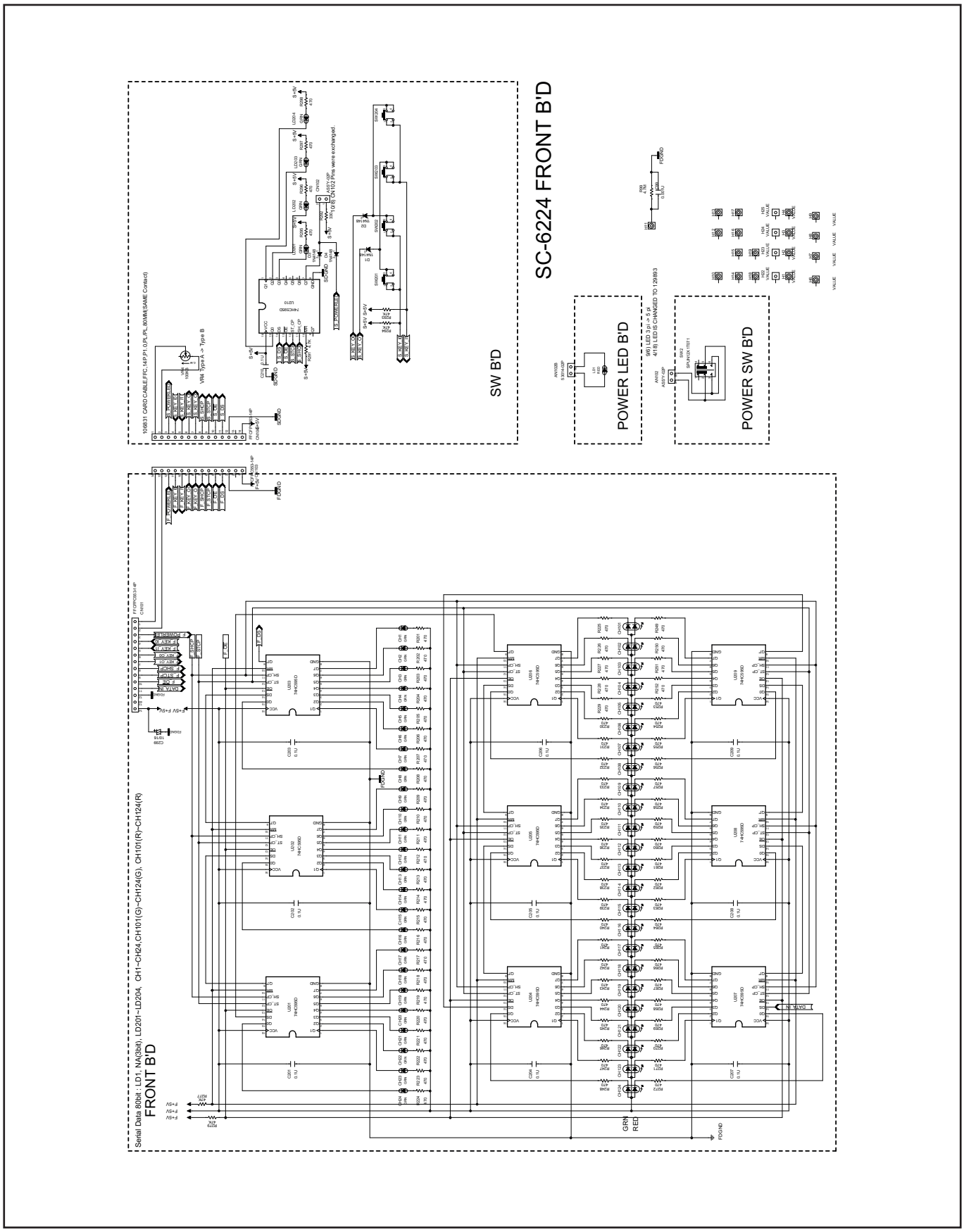



REAR BD

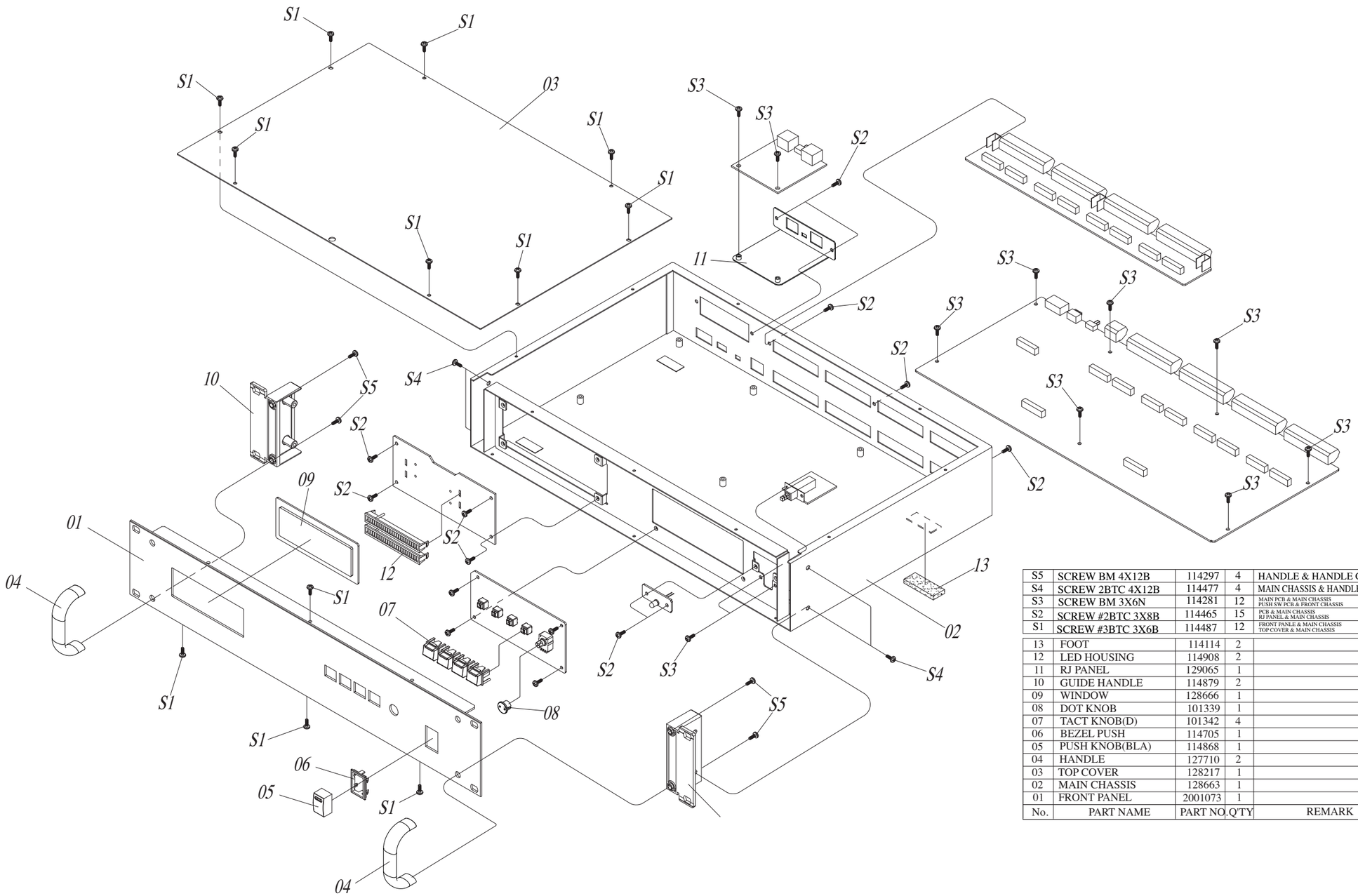
SCHEMATIC DIAGRAM



SCHEMATIC DIAGRAM



EXPLODED VIEW OF CABINET & CHASSIS/
MECHANICAL PARTS LIST



S5	SCREW BM 4X12B	114297	4	HANDLE & HANDLE GUIDE
S4	SCREW 2BTC 4X12B	114477	4	MAIN CHASSIS & HANDLE GUIDE
S3	SCREW BM 3X6N	114281	12	MAIN PCB & MAIN CHASSIS PUSH SW PCB & FRONT CHASSIS
S2	SCREW #2BTC 3X8B	114465	15	PCB & MAIN CHASSIS RJ PANEL & MAIN CHASSIS
S1	SCREW #3BTC 3X6B	114487	12	FRONT PANLE & MAIN CHASSIS TOP COVER & MAIN CHASSIS

No.	PART NAME	PART NO.	Q'TY	REMARK
13	FOOT	114114	2	
12	LED HOUSING	114908	2	
11	RJ PANEL	129065	1	
10	GUIDE HANDLE	114879	2	
09	WINDOW	128666	1	
08	DOT KNOB	101339	1	
07	TACT KNOB(D)	101342	4	
06	BEZEL PUSH	114705	1	
05	PUSH KNOB(BLA)	114868	1	
04	HANDLE	127710	2	
03	TOP COVER	128217	1	
02	MAIN CHASSIS	128663	1	
01	FRONT PANEL	2001073	1	

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