

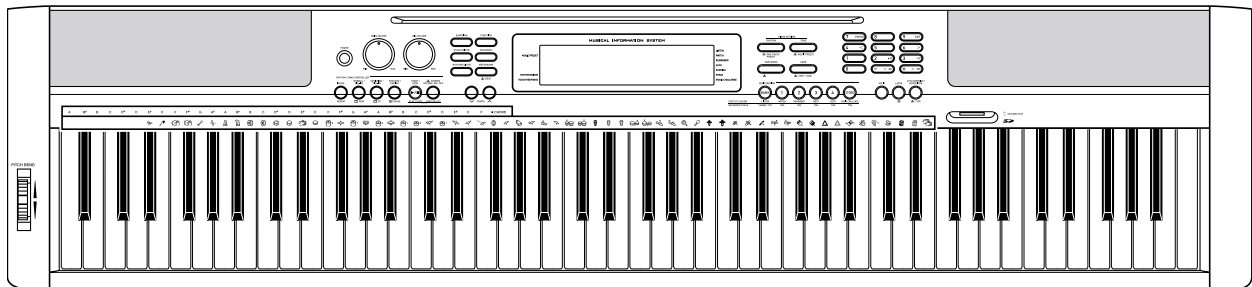
# CASIO®

# SERVICE MANUAL

# & PARTS LIST (without price)

## CDP-200R

JUL. 2008



CDP-200R

**ELECTRONIC KEYBOARD**

# CONTENTS

<b>SPECIFICATIONS</b>	<b>1</b>
<b>BLOCK AND WIRING DIAGRAM</b>	<b>2</b>
<b>PCB LAYOUT</b>	<b>3</b>
<b>PRINTED CIRCUIT BOARDS</b>	<b>5</b>
<b>EXPLODED VIEW</b>	<b>10</b>
<b>PARTS LIST</b>	<b>11</b>
<b>SCHEMATIC DIAGRAMS</b>	<b>15</b>

## SPECIFICATIONS

<b>Keyboard</b>	88-key piano keyboard
Touch Response	3 types, Off
<b>Maximum Polyphony</b>	48 notes (24 for certain tones)
<b>Tones</b>	
Built-in Tones	670
Sampling Tones	Up to 8 (Melody Sampling: 5, Drum Sampling: 3)* Up to 10 seconds
Functions	Layer, Split
<b>Reverb</b>	1 to 10, Off
<b>Chorus</b>	1 to 5, Off
<b>Metronome</b>	
Beats per Measure	0, 2 to 6
Tempo Range	30 to 255
<b>Song Bank</b>	
Built-in Songs	152
User Songs	Up to 10*
<b>Step Up Lesson</b>	
Lessons	4 (Listen, Watch, Remember, Auto)
Lesson Part	L, R, LR
Functions	Repeat, Voice Fingering Guide, Note Guide, Performance Evaluation
<b>Music Challenge</b>	20 notes
<b>Auto Accompaniment</b>	
Built-in Rhythms	200
User Rhythms	Up to 10 (Accompaniment Edit)*
<b>Registration</b>	32 (4 setups × 8 banks)
<b>Recorder</b>	Real-time recording, playback
Keyboard Play	5 songs, 6 tracks
Playing Along with a Built-in Songs	1 song (L, R, LR)
Memory Capacity	Approximately 12,000 notes (total for 6 songs)
<b>Other Functions</b>	
Transpose	±1 octaves (12 semitones)
Octave Shift	Upper/Lower ±2 octaves
Tuning	A4 = approx. 440 Hz ±100 cents
Scale Tuning	Scale Fine Tune, Quarter Tone, Preset Scales
Music Preset	305
One Touch Preset	200
Auto Harmonize	12 types
Arpeggiator	90 types
<b>MIDI</b>	16 multi-timbre received, GM Level 1 standard
<b>Musical Information Function</b>	Tone, Rhythm, Song Bank, numbers and names; staff notation, fingering, pedal operation, tempo, measure and beat number, chord name, etc.
<b>Pitch Bend Wheel</b>	
Pitch Bend Range	0 to 12 semitones

**SD Memory Cards**

Supported SD Memory Cards 2GB or less

Functions SMF playback, file storage, file recall, file delete, card format

**Inputs/Outputs**

USB port TYPE B

Sustain/Assignable jack Standard jack (sustain, sostenuto, soft, rhythm start/stop)

Phones/Output jack Stereo standard jack

Output Impedance: 20 $\Omega$ , Output Voltage: 1.5V (RMS) MAX

Audio In jack Stereo mini jack

Input Impedance: 40k $\Omega$ , Input Sensitivity: 200mV

Mic In jack Standard jack

Input Impedance: 3k $\Omega$ , Input Sensitivity: 10mV

**Power Jack**

12V DC

Power Supply

AC Adaptor AD-12

**Speakers**

(12cm  $\times$  6cm oval)  $\times$  2

Output 8W + 8W

**Power Consumption**

12V  $\approx$  18W

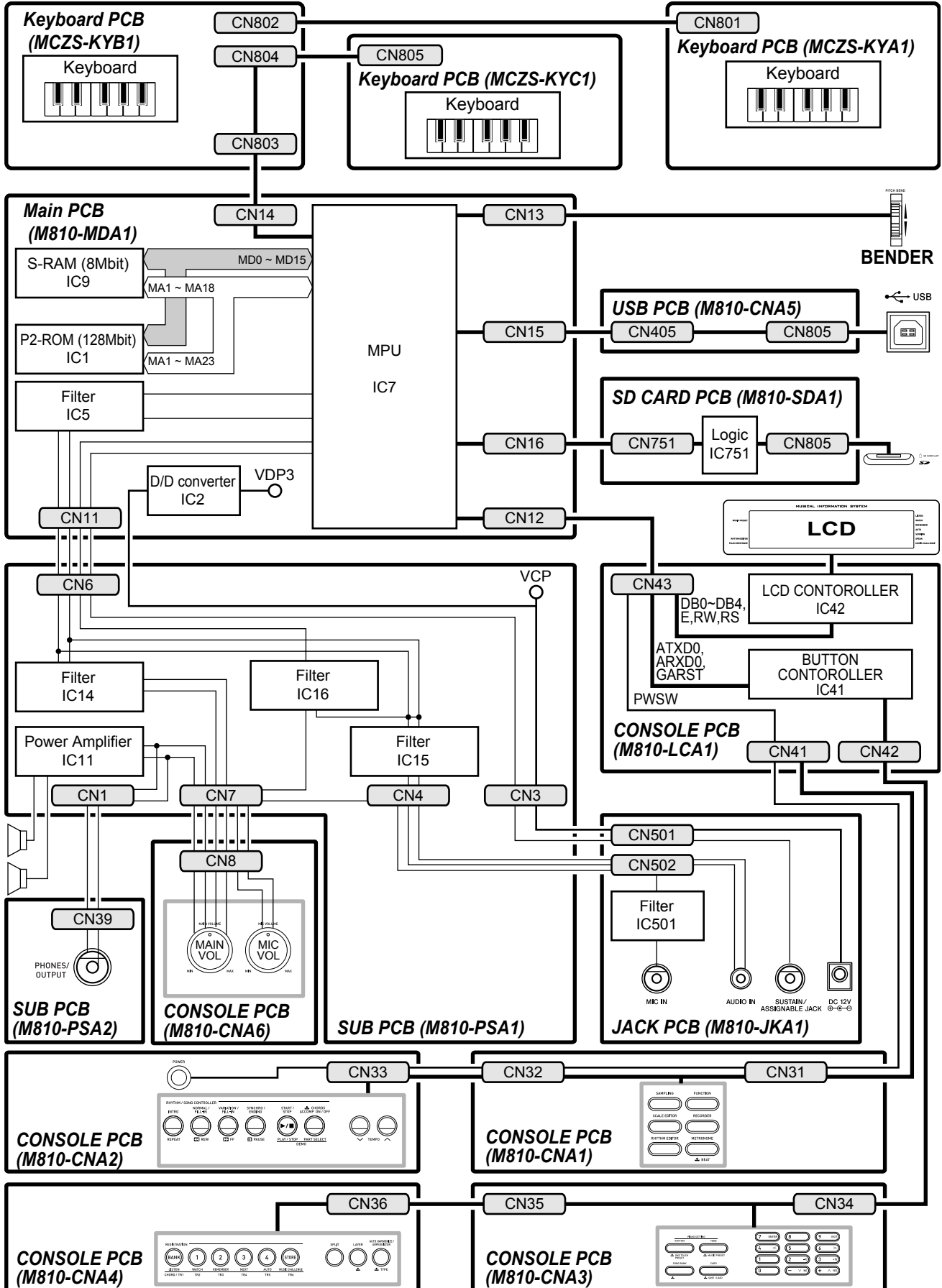
**Dimensions**

133.3  $\times$  27.8  $\times$  13.3cm (52  $\frac{1}{2}$   $\times$  10  $\frac{15}{16}$   $\times$  5  $\frac{1}{4}$  inch)

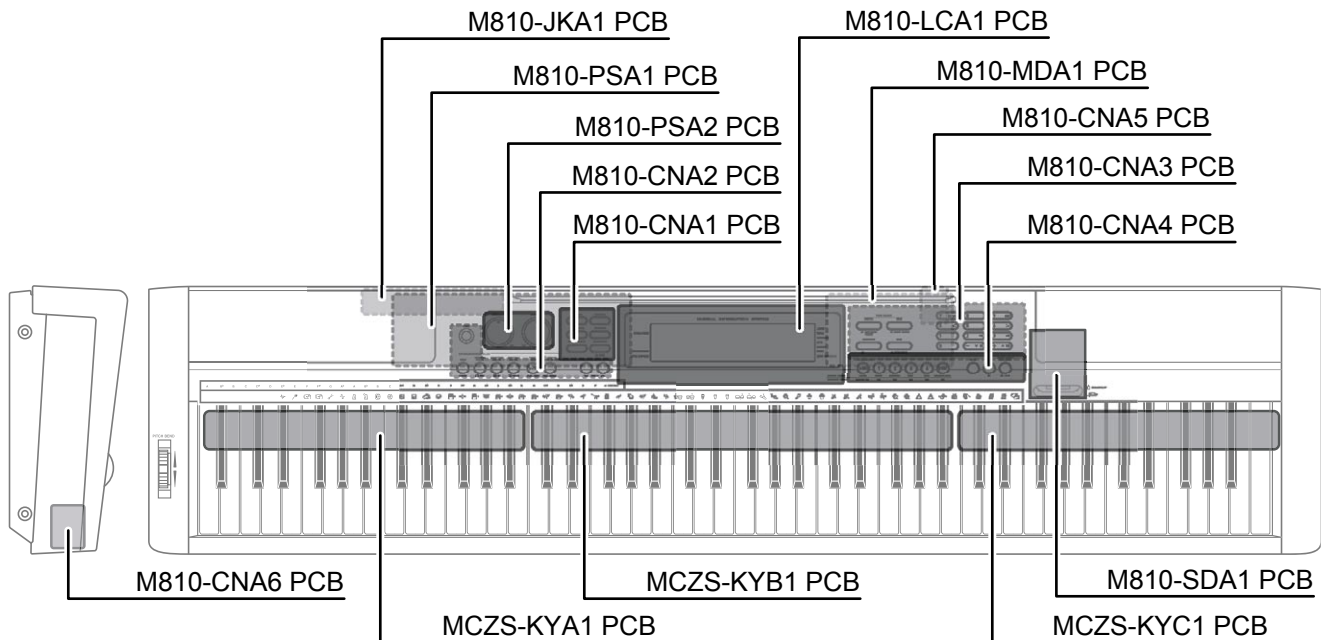
**Weight**

Approximately 12.0kg (26.4 lbs)

# BLOCK AND WIRING DIAGRAM



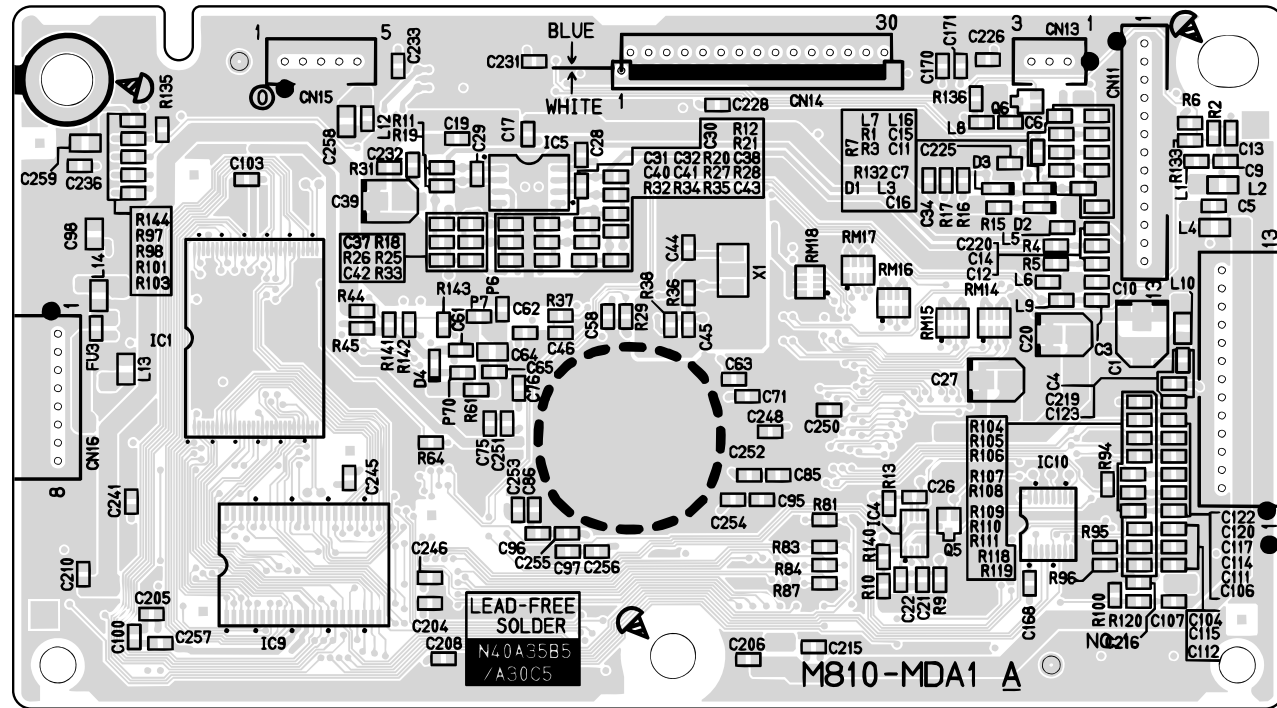
## PCB LAYOUT



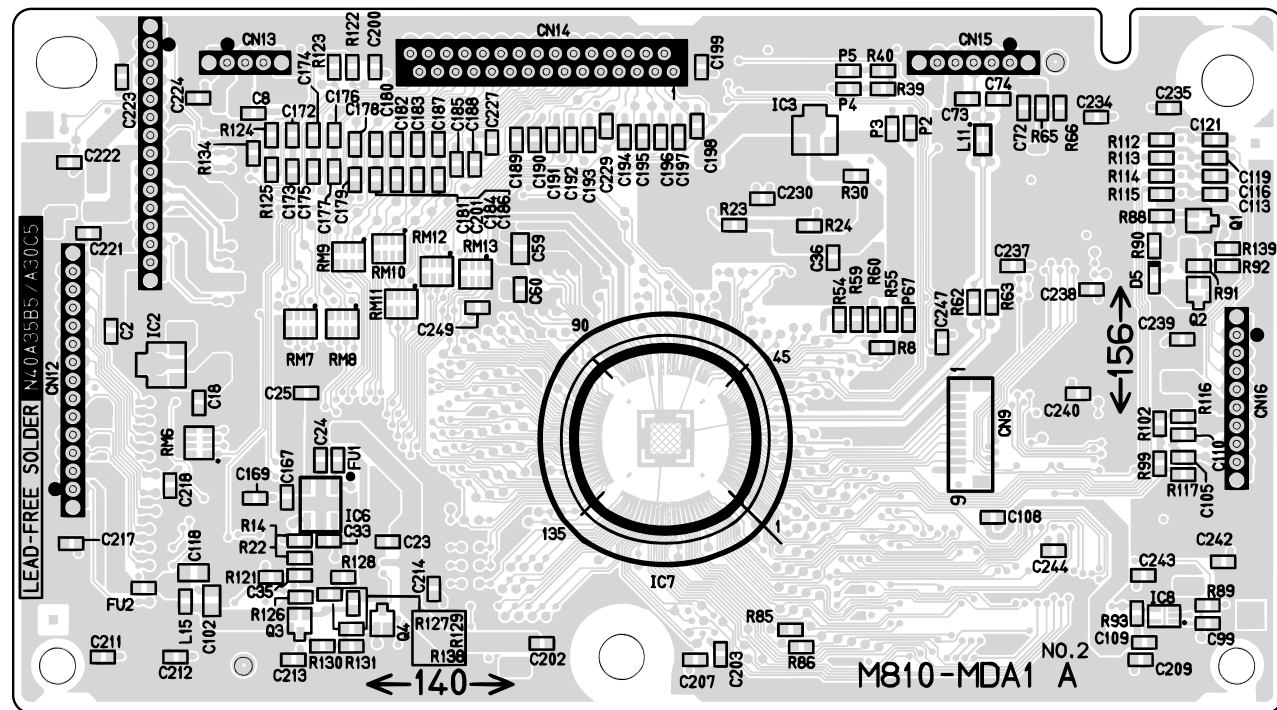
PCB		Components
MAIN PCB	M810-MDA1	MPU, Reset IC, RAM(8Mbit), ROM(128Mbit), Key controller, Power supply circuit
SUB PCB	M810-PSA1	Power supply circuit, Power amplifier
SUB PCB	M810-PSA2	Phones jack
CONSOLE PCBs	M810-CNA1	Button
	M810-CNA2	Button
	M810-CNA3	Button
	M810-CNA4	Button
	M810-CNA6	Main volume , Mic volume
	M810-LCA1	LCD controller, Button controller
USB PCB	M810-CNA5	USB
JACK PCB	M810-JKA1	Mic, Audio IN, Pedal, DC 12V terminal
SD CARD PCB	M810-SDA1	SD CARD
KEYBOARD PCBs	MCZS-KYA1	KEYBOARD
	MCZS-KYB1	
	MCZS-KYC1	

# PRINTED CIRCUIT BOARDS

## Main PCB M810-MDA1



Top View



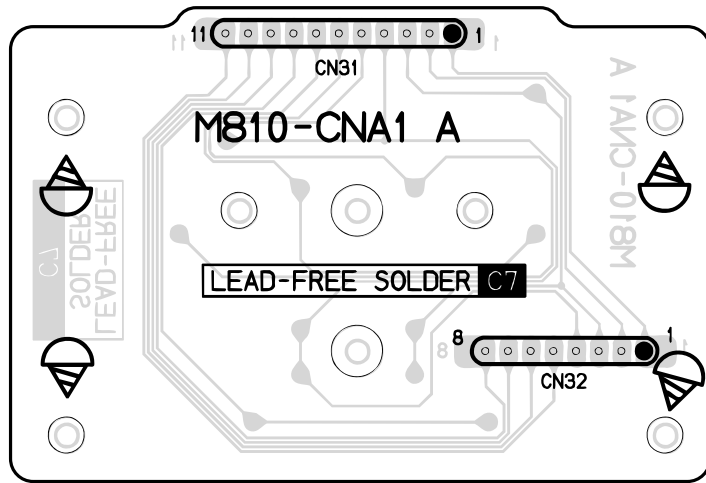
Bottom View



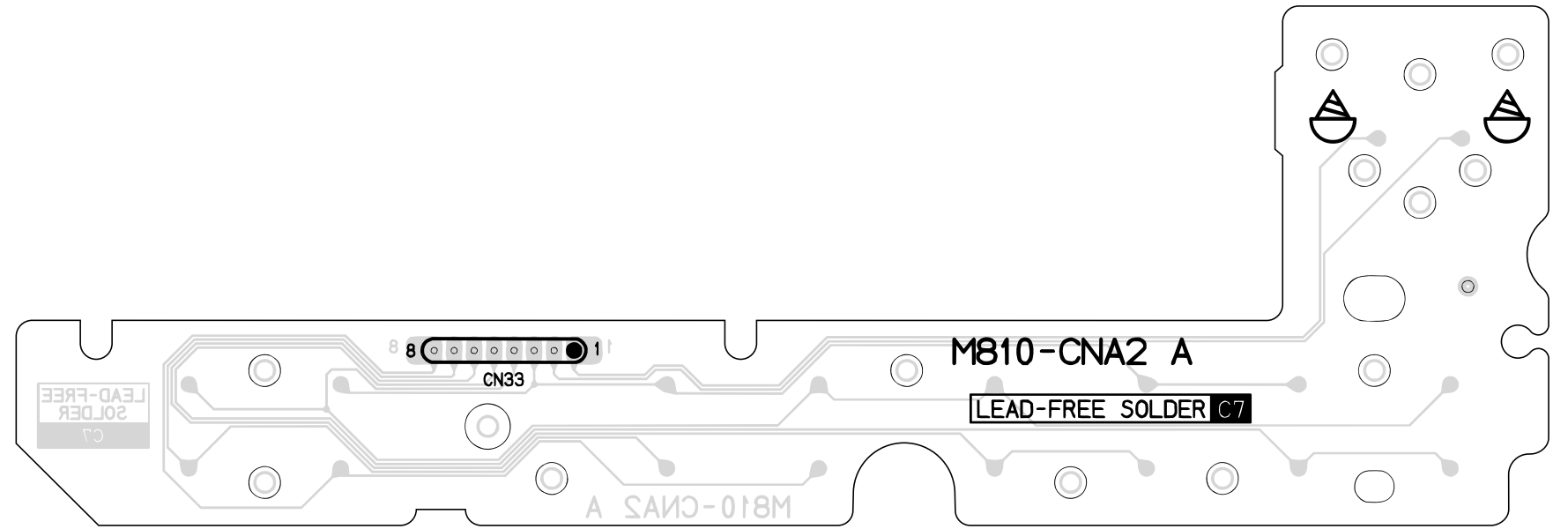




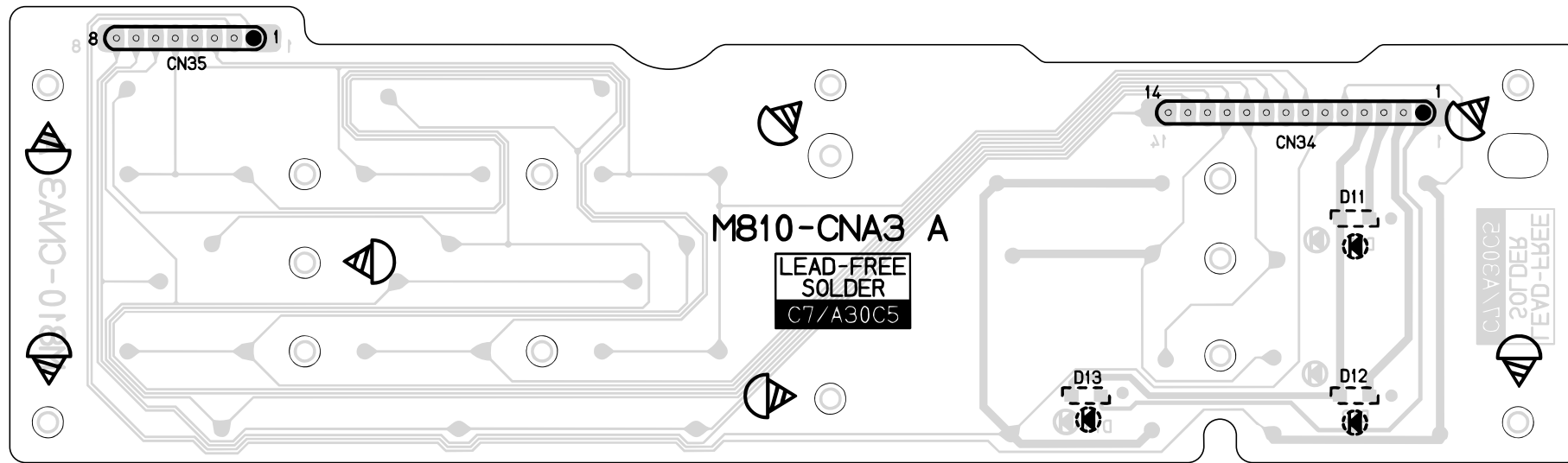
Console PCB M810-CNA1



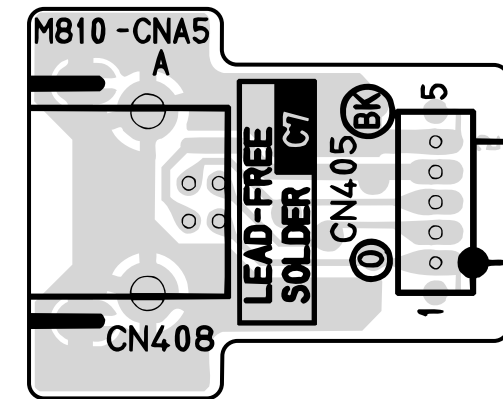
Console PCB M810-CNA2



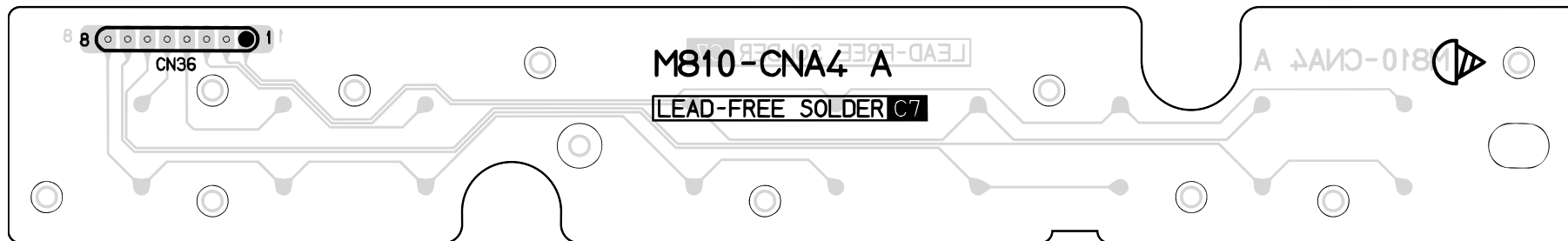
Console PCB M810-CNA3



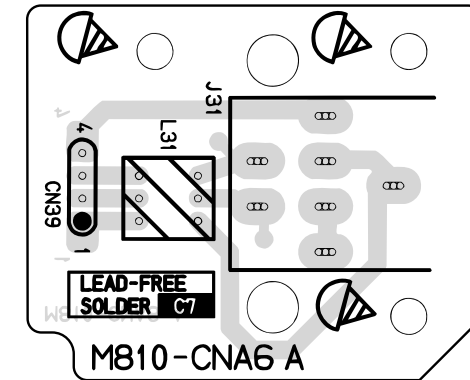
Console PCB M810-CNA5



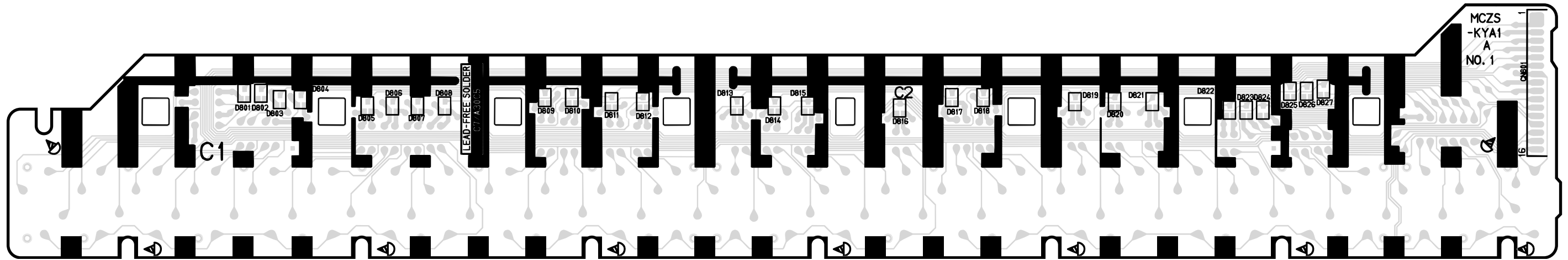
Console PCB M810-CNA4



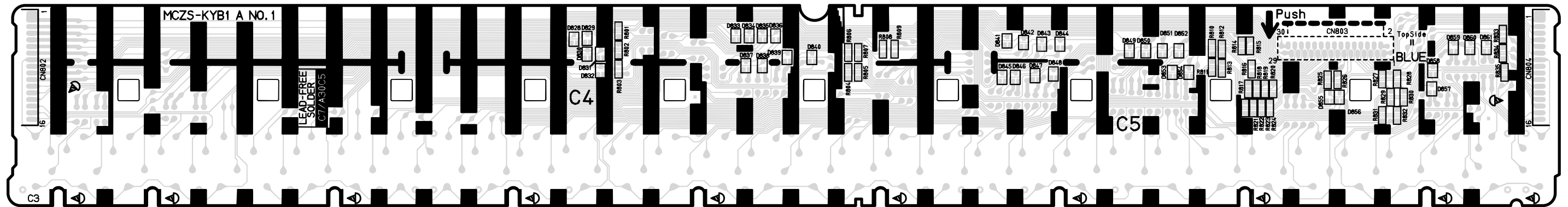
Console PCB M810-CNA6



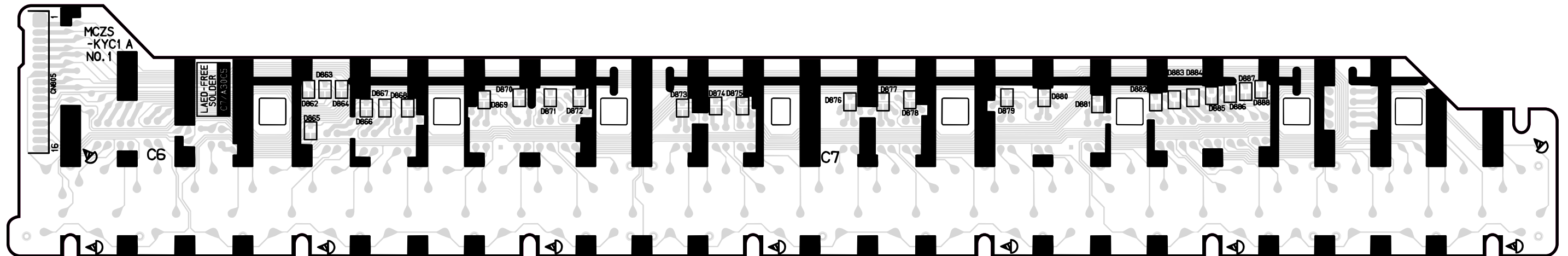
Keyboard PCB MCZS-KYA1



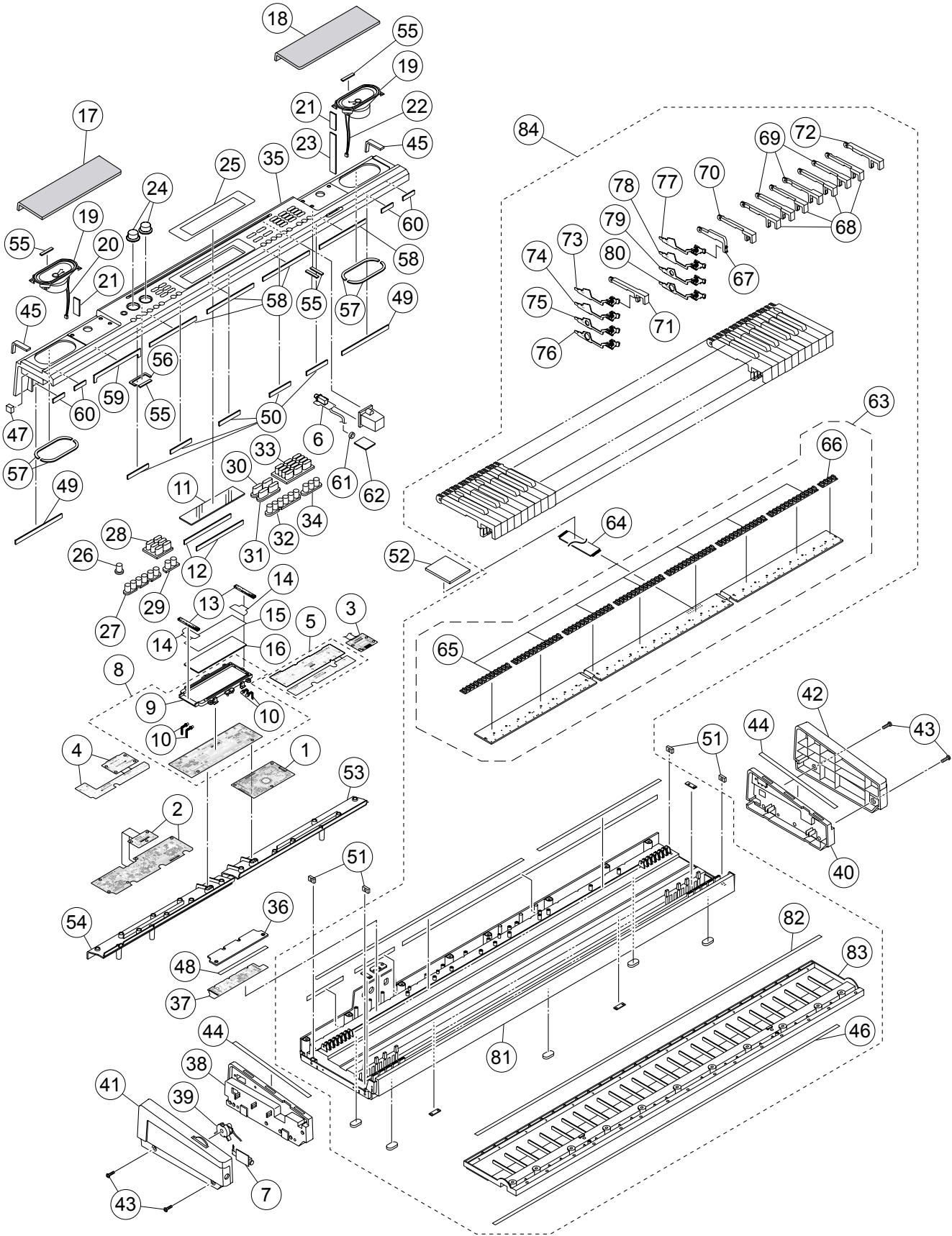
Keyboard PCB MCZS-KYB1



Keyboard PCB MCZS-KYC1



# EXPLODED VIEW



# PARTS LIST

## CDP-200R

Notes: This parts list does not include the cosmetic parts, which parts are marked with item No. "R-X" in the exploded view.

Contact our spare parts department if you need these parts for refurbish.

1. Prices and specifications are subject to change without prior notice.
2. As for spare parts order and supply, refer to the "GUIDEBOOK for Spare parts Supply", published seperately.
3. The numbers in item column correspond to the same numbers in drawing.

- 1 CDP-200R\_DI\_120V
- 2 CDP-200R\_DI\_230V
- 3 CDP-200R\_EU
- 4 CDP-200R\_UI\_UK
- 5 CDP-200R\_US

N	Item	Parts NO.	Parts Name	Specification	Q'TY					Price Code	R	Remarks
					1	2	3	4	5			
<b>Main PCB MDA1</b>												
N	1	10310729	PCB ASSY/MDA1	TK-RJM508883*001	1	1	1	1	1		A	
	D1,2,3,5	10276977	DIODE	L1SS400T1G	4	4	4	4	4	AA	X	
	IC5	10211950	IC	NJM2068M-D(TE1)	1	1	1	1	1	AC	X	
	IC10	10123002	IC	TC74VHC174FT(EL)	1	1	1	1	1	AD	X	
	IC8	10197554	IC	TC7SZ126FU(TE85L.F	1	1	1	1	1	AE	X	
	IC4	10197809	IC	TC7WH123FU(TE12L.F	1	1	1	1	1	AE	X	
	IC2	10098821	IC	XC6202P332PR	1	1	1	1	1	AD	X	
	IC6	10269340	IC	XC6403FY51PR	1	1	1	1	1	AE	X	
N	IC9	10299049	LSI	LP62S16256GV55LLIF	1	1	1	1	1		X	
N	IC1	10306295	MEMORY	MR27T12802L11GTA3A	1	1	1	1	1	BN	X	
	L11	10193074	COIL	DLW21HN181SQ2L	1	1	1	1	1	AC	X	
	L13,14	10122963	FERRITE BEAD	BLM21AG102SN1D	2	2	2	2	2	AC	X	
	L2,4,10	10089941	FERRITE BEAD	BLM21PG221SN1D	3	3	3	3	3	AA	X	
	L1,3,5,6,7,9,16	10238668	FERRITE BEAD	EBMS160808A102	7	7	7	7	7	AA	X	
	Q2,6	10202670	TRANSISTOR	KTA2014-GR-RTK/P	2	2	2	2	2	AA	X	
	Q1,5	10207675	TRANSISTOR	KTC4075-GR-RTK/P	2	2	2	2	2	AA	X	
N	X1	10302397	RESONATOR	7A48000118	1	1	1	1	1		C	
<b>Sub PCB PS1</b>												
N	2	10310730	PCB ASSY/PSA	TK-RJM508885*001	1	1	1	1	1		B	
	IC13	10201503	IC	PQ1CG21H2FZH	1	1	1	1	1	AO	X	
N	IC11	10306512	IC	TDA7297	1	1	1	1	1		X	
	L11	10231919	COIL	RB53-856396NP	1	1	1	1	1	AA	X	
	L12,13	10231920	COIL	RB53-856397NP	2	2	2	2	2	AA	X	
N	L14	10232457	COIL	R117-860400NP	1	1	1	1	1		X	
	D12,14,15	10276977	DIODE	L1SS400T1G	3	3	3	3	3	AA	X	
	D13	10210387	DIODE	RSX101VA-30TR	1	1	1	1	1	AA	X	
	D11	10294394	DIODE	SK34A	1	1	1	1	1	AD	X	
N	IC12	10306415	IC	BH3547F-E2	1	1	1	1	1		X	
	IC14,15,16	10211950	IC	NJM2068M-D(TE1)	3	3	3	3	3	AC	X	
N	IC17	10265568	IC	TC7SB66FU(TE85L.F)	1	1	1	1	1	AA	X	
	Q14	10216428	TRANSISTOR	KTA1666-Y-RTF/P	1	1	1	1	1	AB	X	
	Q16,18	10202670	TRANSISTOR	KTA2014-GR-RTK/P	2	2	2	2	2	AA	X	
	Q11,12,13,15,17,19	10207675	TRANSISTOR	KTC4075-GR-RTK/P	6	6	6	6	6	AA	X	
N	VR1	10273794	VARIABLE R	F-09KGH1-CASIO-2	1	1	1	1	1		X	
N	VR2	10304718	VARIABLE R	F-09KH1-CASIO-1	1	1	1	1	1		X	
<b>SDA PCB</b>												
N	3	10310734	PCB ASSY/SDA1	TK-RJM508899*001	1	1	1	1	1		C	
<b>Console PCB</b>												
N	4	10310732	PCB ASSY/CNA1	TK-RJM508890*001	1	1	1	1	1		C	
N	5	10310733	PCB ASSY/CNA3	TK-RJM508891*001	1	1	1	1	1		C	
	D1-D3	10209564	LED	KPTD-3216SURCK	3	3	3	3	3	AA	X	
N	6	10310731	PCB ASSY/CNA5	TK-RJM508893*001	1	1	1	1	1		C	
	CN408	10236622	CONNECTOR	USB-4FBRS30NB2	1	1	1	1	1	AC	X	
N	7	10310727	PCB ASSY/CNA6	TK-RJM508895*001	1	1	1	1	1		C	
	L31	10231919	COIL	RB53-856396NP	1	1	1	1	1	AA	X	

- 1 CDP-200R\_DI\_120V
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N	Item	Parts NO.	Parts Name	Specification	Q'TY					Price Code	R	Remarks
					1	2	3	4	5			
<b>Case unit</b>												
N	8	10310728	BL ASSY	TK-RJM508735*001	1	1	1	1	1		C	
	9	10247802	REFRECTOR	RJM506719-001V01	1	1	1	1	1	AG	X	
	10	10255738	LED	UY4067S-9B1	4	4	4	4	4		X	
N	11	10308372	LCD	TY11276N-A0158/08	1	1	1	1	1		C	
	12	10248658	CONNECTOR	RJM506848-001V01	2	2	2	2	2	AJ	X	
	13	10037738	SPONGE	M441167-1	2	2	2	2	2	AA	X	
	14	10244704	TOP PIECE	RJM506943-001V01	2	2	2	2	2	AA	X	
	15	10244703	FILM	RJM506942-001V01	1	1	1	1	1	AA	X	
	16	10244501	PLATE/BL	RJM506777-001V01	1	1	1	1	1	AO	X	
N	17	10310735	COVER ASSY/SP/LEFT	TK-RJM508736*001	1	1	1	1	1		X	
N	18	10310736	COVER ASSY/SP/RIGHT	TK-RJM508737*001	1	1	1	1	1		X	
	19	10284878	SPEAKER	C0612J01	2	2	2	2	2	BO	B	
N	20	10308815	HARNESS	EH-2P-15-M810	1	1	1	1	1		X	L
N	21	69264590	SPONGE	M440564-1	2	2	2	2	2	AA	X	L,R
N	22	10308814	HARNESS	EH-2P-85-M810	1	1	1	1	1		X	R
	23	10216001	SPONGE	RJM506430-001V01	1	1	1	1	1	AE	X	R
	24	10269765	KNOB/RTR	M341109-008V01	2	2	2	2	2	AD	C	
N	25	10306474	PLATE/DISPLAY	RJM508552-001V01	1	1	1	1	1		C	
N	26	10306479	RUBBER KEY/A	RJM508560-001V01	1	1	1	1	1	AA	C	
N	27	10306480	RUBBER KEY/B	RJM508561-001V01	1	1	1	1	1	AD	C	
N	28	10306481	RUBBER KEY/C	RJM508562-001V01	1	1	1	1	1	AC	C	
N	29	10306482	RUBBER KEY/D	RJM508563-001V01	1	1	1	1	1	AA	C	
N	30	10306483	RUBBER KEY/E	RJM508564-001V01	1	1	1	1	1	AB	C	
N	31	10306484	RUBBER KEY/F	RJM508565-001V01	1	1	1	1	1	AB	C	
N	32	10306485	RUBBER KEY/G	RJM508566-001V01	1	1	1	1	1	AC	C	
N	33	10306486	RUBBER KEY/H	RJM508567-001V01	1	1	1	1	1	AF	C	
N	34	10306487	RUBBER KEY/J	RJM508568-001V01	1	1	1	1	1	AA	C	
N	35	10314505	PANEL ASSY	TK-RJM505332*010	1	1	1	1	1		C	
N	36	10306459	HOLDER/JACK	RJM505667-002V01	1	1	1	1	1		X	
N	37	10310738	PCB ASSY/JKA1	TK-RJM508897*001	1	1	1	1	1		C	
	J504	10210582	DC JACK	HEC2305-016920	1	1	1	1	1	AC	C	
	J501	10206815	CONNECTOR	JY-6314*01-030	1	1	1	1	1	AA	C	
	J502	10206816	CONNECTOR	JY-6314*01-130	1	1	1	1	1	AA	C	
N	J503	10305131	CONNECTOR	ST-3529B	1	1	1	1	1		X	
	L502	10231919	COIL	RB53-856396NP	1	1	1	1	1	AA	X	
	L501,503	10231920	COIL	RB53-856397NP	2	2	2	2	2	AA	X	
	IC501	10211950	I.C	NJM2068M-D(TE1)	1	1	1	1	1	AC	X	
N	38	10306472	SIDE CASE/IL	RJM508550-001V01	1	1	1	1	1		C	
N	39	10310726	BENDER ASSY	TK-RJM504468*005	1	1	1	1	1		C	
N	40	10306473	SIDE CASE/IR	RJM508551-001V01	1	1	1	1	1		C	
N	41	10306467	SIDE CASE/L	RJM508548-001V01	1	1	1	1	1		C	
N	42	10306470	SIDE CASE/R	RJM508549-001V01	1	1	1	1	1		C	
	43	10203785	SCREW	S-TRMA-6X30B3	4	4	4	4	4	AA	C	
N	44	10179177	HIMELON	RJM505229-001V01	2	2	2	2	2		X	
N	45	10209201	PACKING	RJM506148-001V01	2	2	2	2	2		X	
N	46	10214405	PACKING	RJM506367-001V01	1	1	1	1	1		X	
N	47	10305236	HIMELON	M411136-003V03	1	1	1	1	1		X	
N	48	10214401	PACKING	RJM506159-001V01	1	1	1	1	1		X	
	49	69255770	HIMELON	M440339-1	2	2	2	2	2		X	
N	50	10219387	HIMELON	RJM506468-001V01	5	5	5	5	5		X	
N	51	10306463	SIDE BRACKET	RJM508544-001V01	4	4	4	4	4		X	
	52	69265870	SPONGE	M440591-1	1	1	1	1	1	AB	X	For FFC
N	53	10306477	HOLDER/SP/A	RJM508556-001V01	1	1	1	1	1		X	
N	54	10306478	HOLDER/SP/B	RJM508557-001V01	1	1	1	1	1		X	

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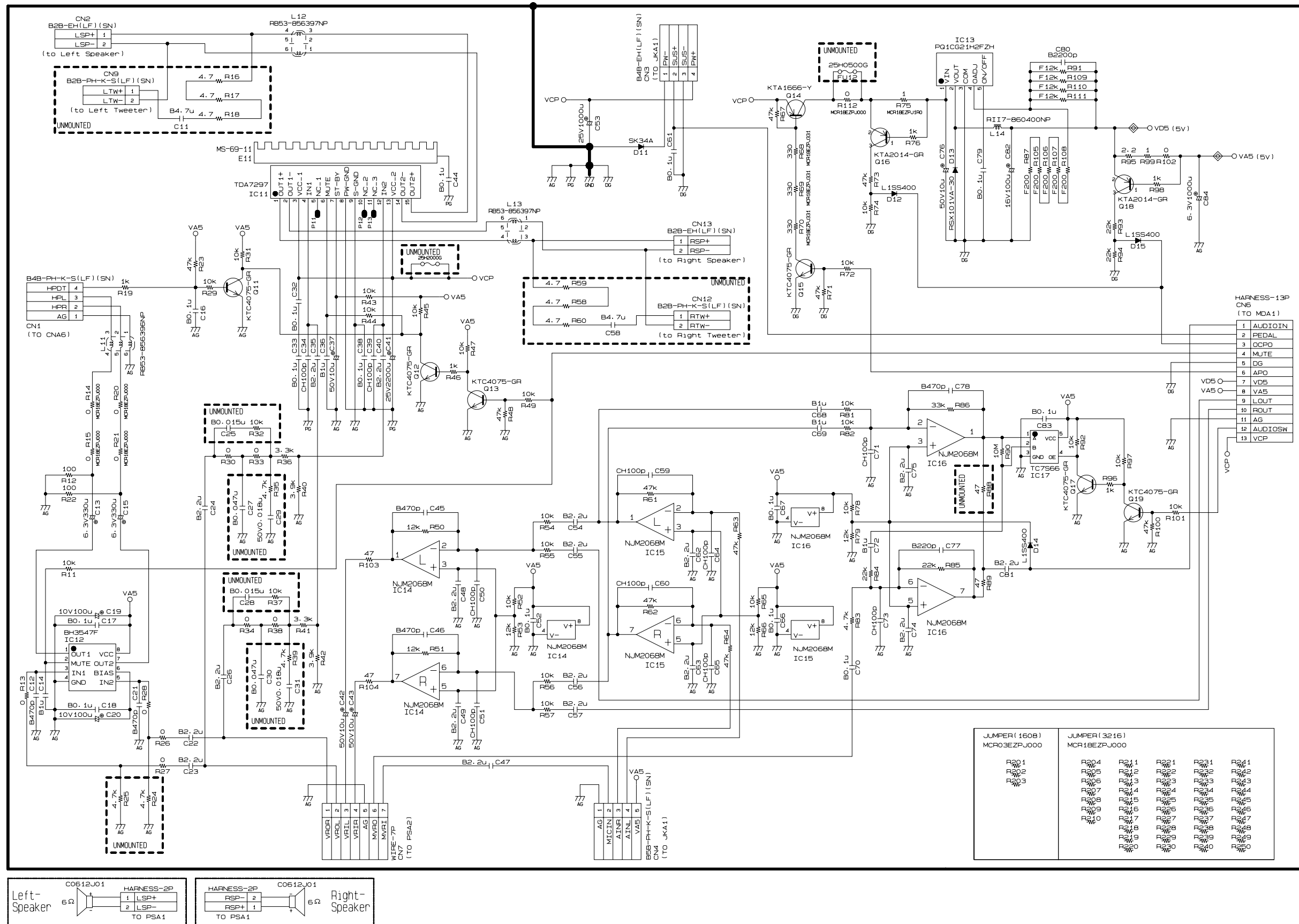
N	Item	Parts NO.	Parts Name	Specification	Q'TY					Price Code	R	Remarks	
					1	2	3	4	5				
N	55	10175759	PACKING	RJM504745-001V01	5	5	5	5	5	AA	X		
	56	10175758	PACKING	RJM504744-001V01	1	1	1	1	1		X		
N	57	10209204	PACKING	RJM506160-001V01	4	4	4	4	4	AA	X		
	58	10216009	PACKING	RJM506422-001V01	4	4	4	4	4	AA	X		
	59	10209203	PACKING	RJM506157-001V01	1	1	1	1	1		X		
	60	69321322	PACKING	M441333-1	4	4	4	4	4	AA	X		
N	61	10268012	FERRITE CORE	K5ARH16X9X17	1	1	1	1	1	AX	C		
	62	69264590	SPONGE	M440564-1	1	1	1	1	1	AA	X		
<b>Key board assy</b>													
N	63	10294094	PCB ASSY/KEY/RUBBER	TK-RJM506061*003	1	1	1	1	1	CU	C		
	D801-D888	10294400	DIODE	LM1MA142WKT1G	88	88	88	88	88		X		
N	64	37195442	CABLE	N30315B1B05-UL2896	1	1	1	1	1	AO	C		
	65	10133656	RUBBER/CONATCT/AG	RJM502920-001V01	7	7	7	7	7	AK	B		
	66	10133635	RUBBER/CONATCT/GC	RJM502921-001V01	1	1	1	1	1	AG	B		
	67	10135317	BLACK KEY	RJM502797-001V01	36	36	36	36	36	AC	C		
	68	10135426	WHITE KEY/CEGB	RJM502862-001V01	7	7	7	7	7	AT	C		
	69	10135427	WHITE KEY/DFA	RJM502863-001V01	7	7	7	7	7	AQ	C		
	70	10135428	WHITE KEY/B	RJM502794-001V01	1	1	1	1	1	AG	C		
	71	10135429	WHITE KEY/SA	RJM502795-001V01	1	1	1	1	1	AJ	C		
	72	10135430	WHITE KEY/SC	RJM502796-001V01	1	1	1	1	1	AJ	C		
	73	10208265	HAMMER ASSY/W1	TK-RJM506035*001	13	13	13	13	13	AF	C		
	74	10208266	HAMMER ASSY/W2	TK-RJM506036*001	13	13	13	13	13	AF	C		
	75	10208267	HAMMER ASSY/W3	TK-RJM506037*001	13	13	13	13	13	AF	C		
	76	10208269	HAMMER ASSY/W4	TK-RJM506038*001	13	13	13	13	13	AF	C		
	77	10208275	HAMMER ASSY/B1	TK-RJM506039*001	9	9	9	9	9	AE	C		
	78	10208281	HAMMER ASSY/B2	TK-RJM506040*001	9	9	9	9	9	AE	C		
	79	10208286	HAMMER ASSY/B3	TK-RJM506041*001	9	9	9	9	9	BJ	C		
	80	10208290	HAMMER ASSY/B4	TK-RJM506042*001	9	9	9	9	9	AE	C		
	N	81	10310740	CHASSIS ASSY	TK-RJM506053*007	1	1	1	1	1		C	
	N	82	10311215	CUSHION/HAMMER	RJM509043-001V01	1	1	1	1	1	BI	C	
	N	83	10310741	CASE ASSY/LOWER	TK-RJM505967*005	1	1	1	1	1		C	
N	84	10314506	KEY ASSY	TK-RJM506464*007	1	1	1	1	1		A		
<b>ACCESSORY</b>													
N	-	10133504	PEDAL ASSY	TK-RJM503195*001	1	1	1	1	1	BN	C		
	-	10303050	AC ADAPTOR	AD-12ML(E)-FC1(D)				1		DE	C	For UK	
	-	10303048	AC ADAPTOR	AD-12ML(U)-FC1(D)	1				1	CW	C	For US	
	-	10303049	AC ADAPTOR	AD-12MLGKA-FC1(D)		1	1			DE	C	*1	
	-	10306488	STAND/MUSIC	RJM508666-001V01	1	1	1	1	1		C		

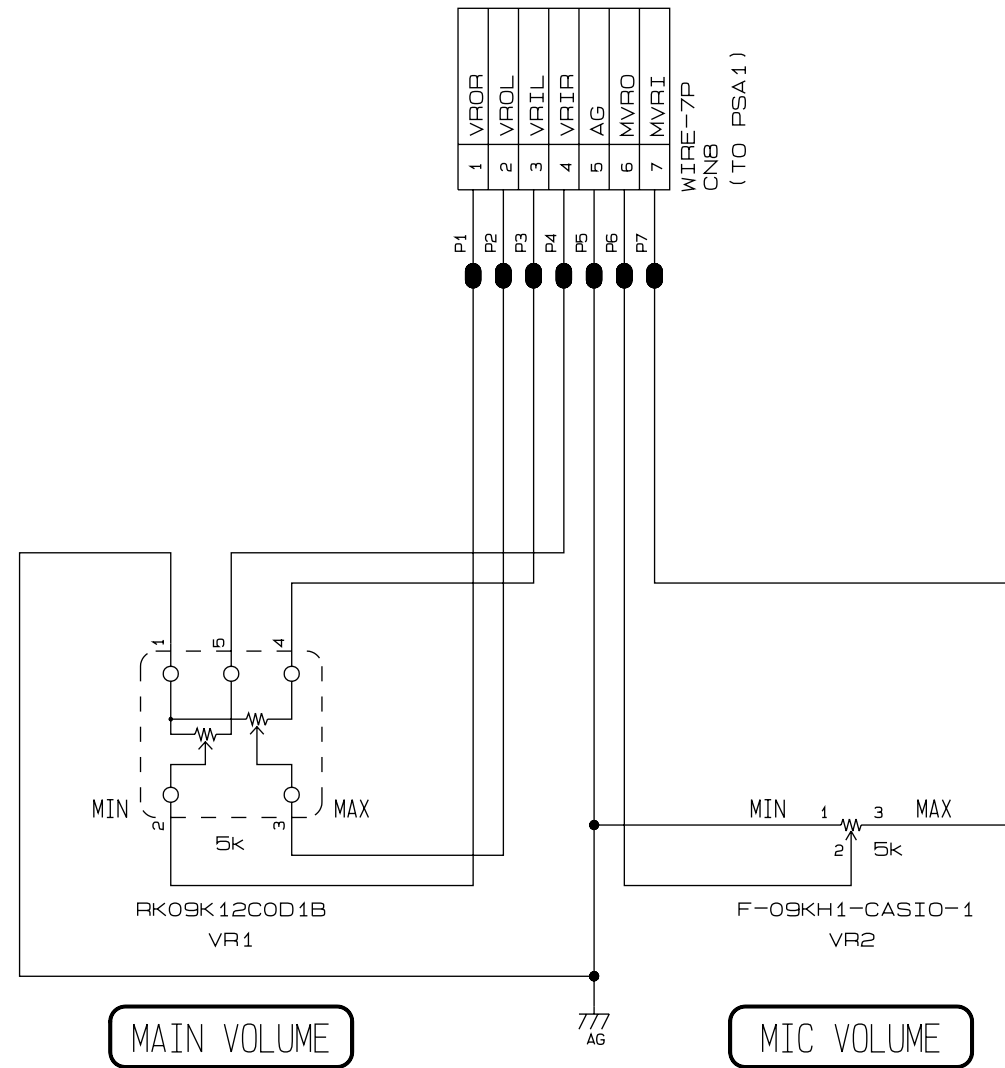
\*1 : Three kinds of plugs(Euro, Australia, Korea) are bundled.



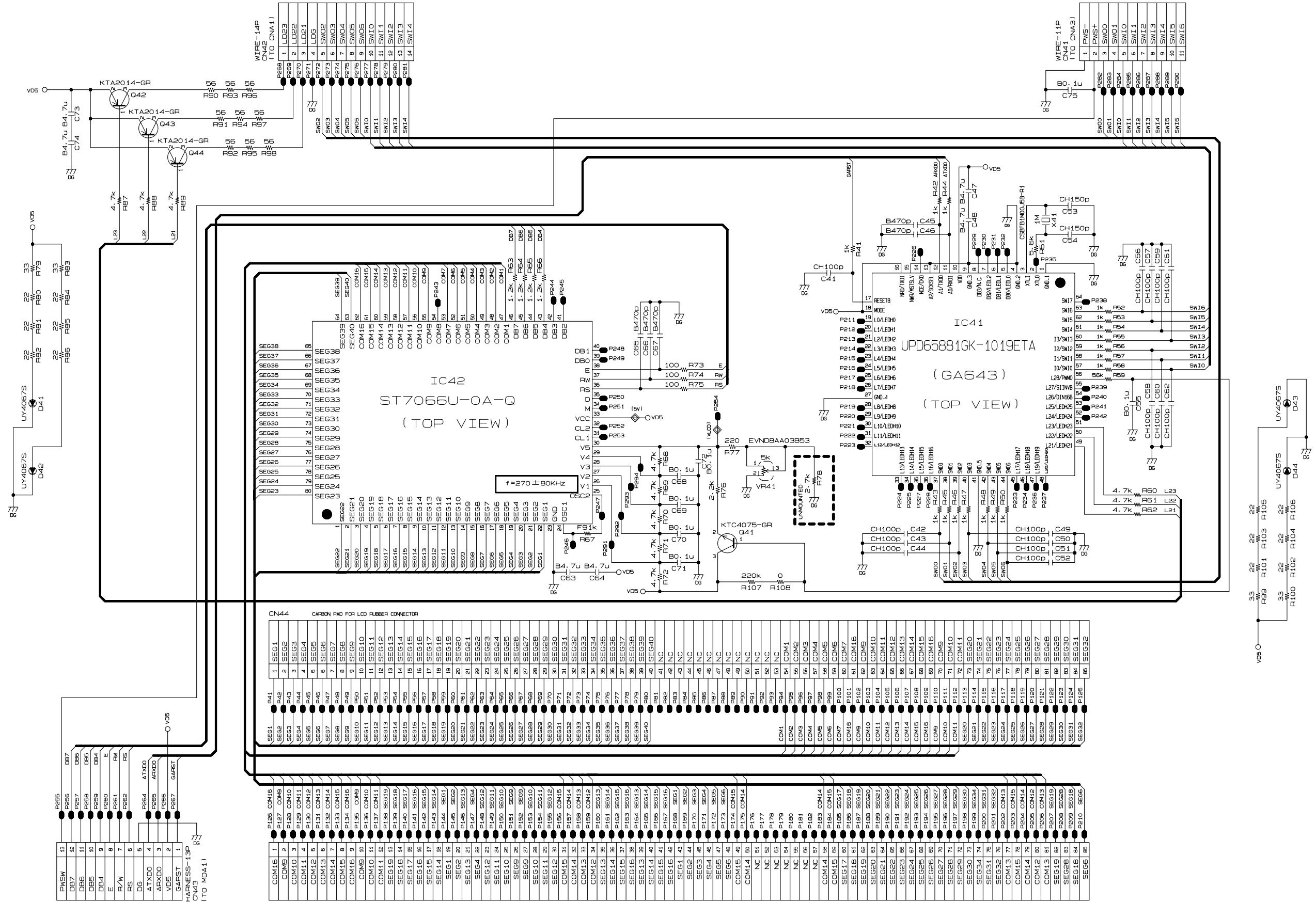


Sub PCB M810-PSA1

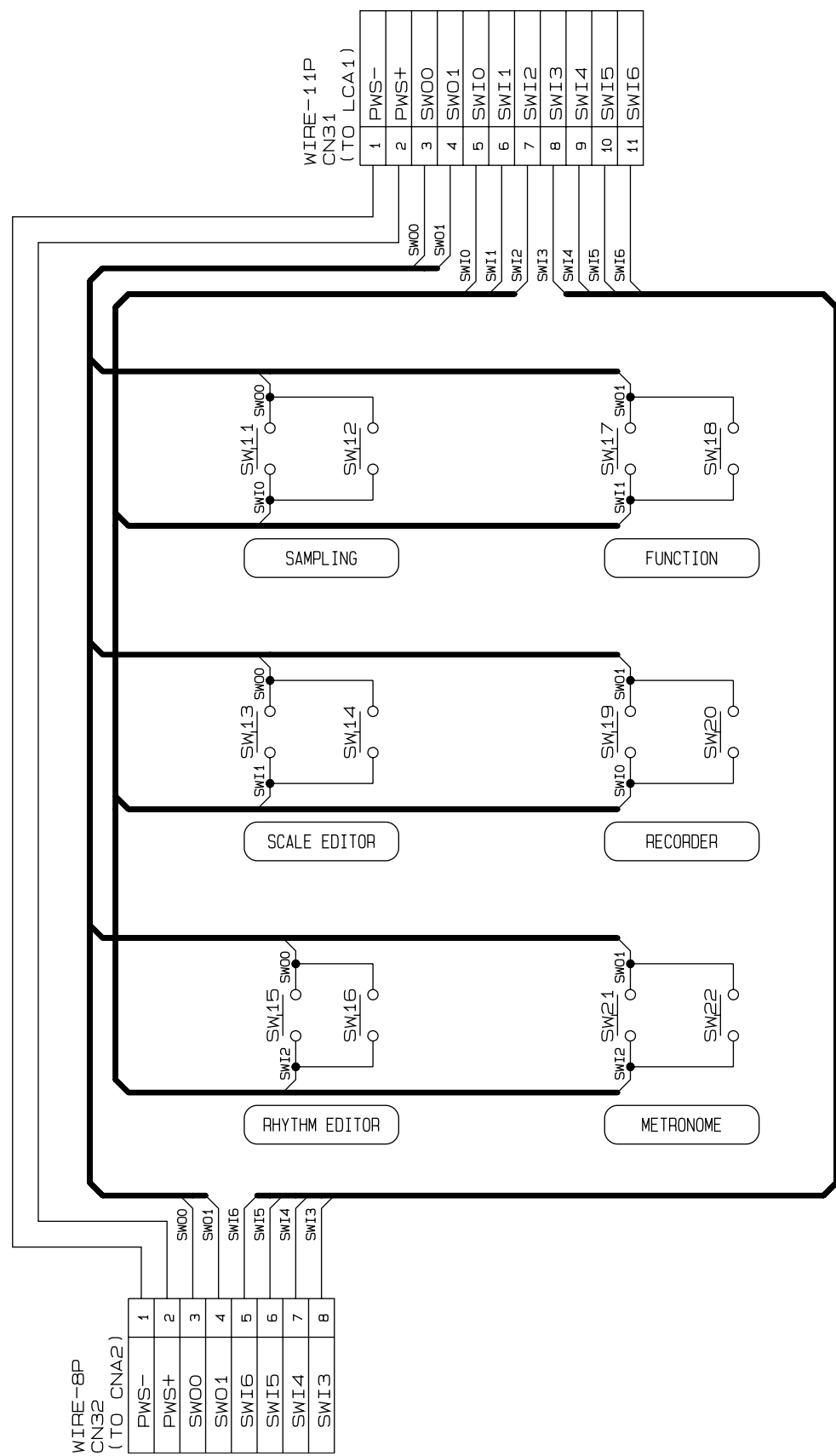




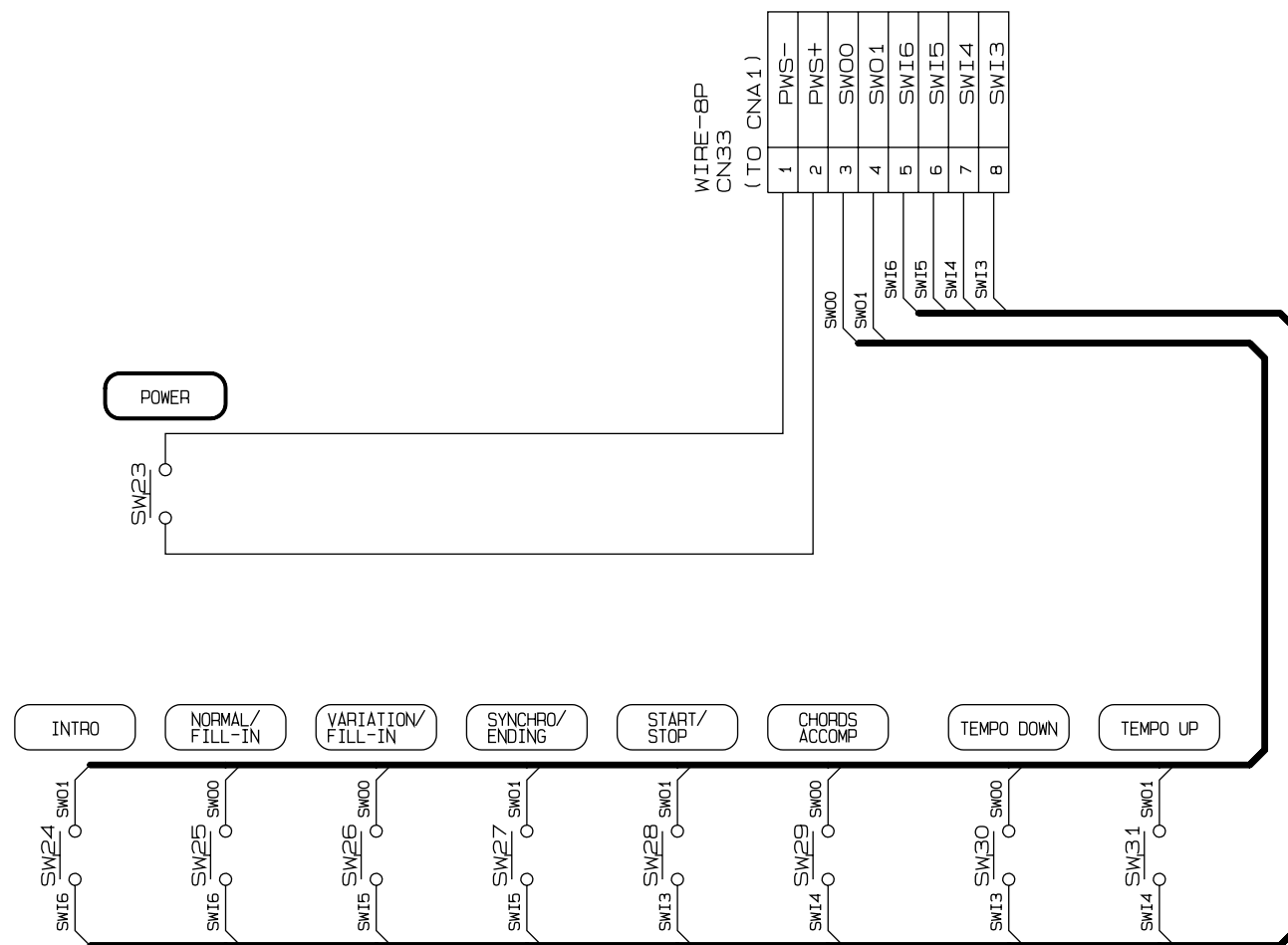
Console PCB M810-LCA1



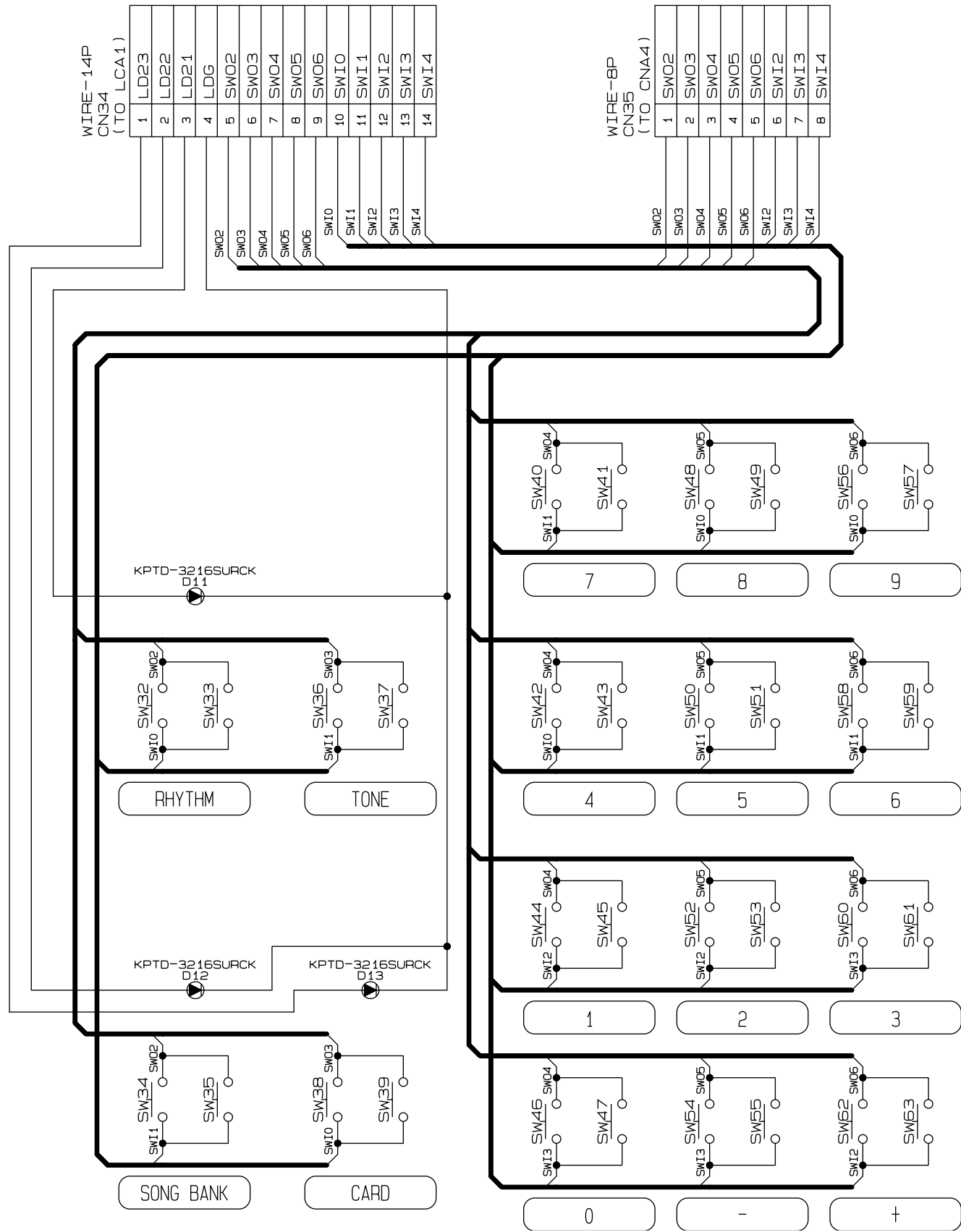
Console PCB M810-CNA1



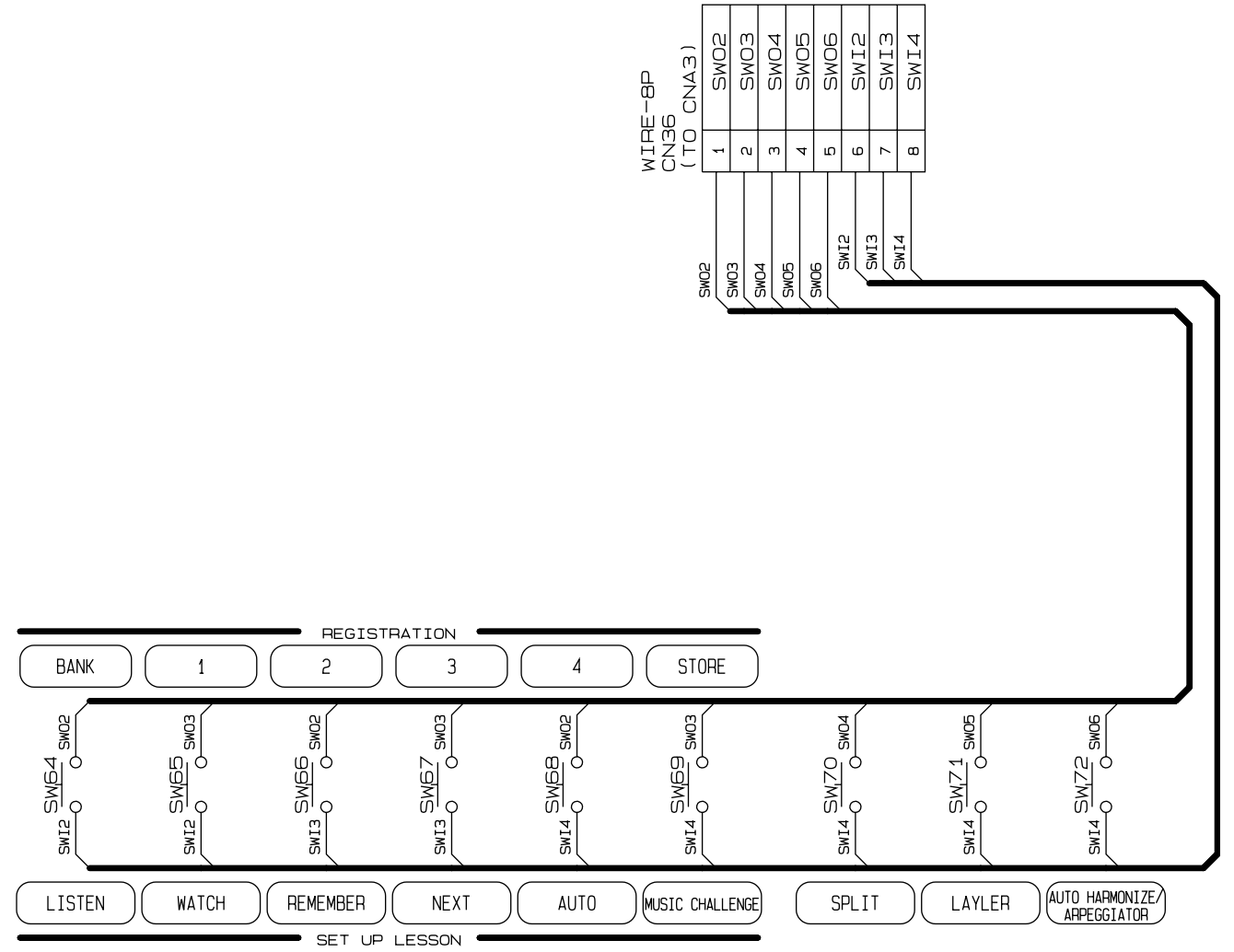
Console PCB M810-CNA2



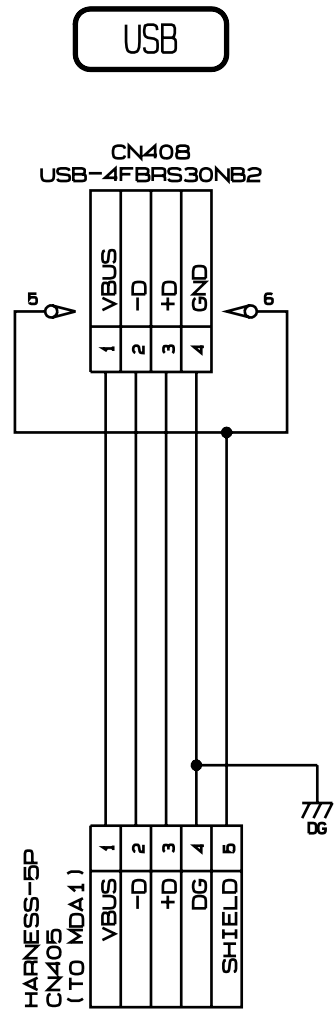
Console PCB M810-CNA3



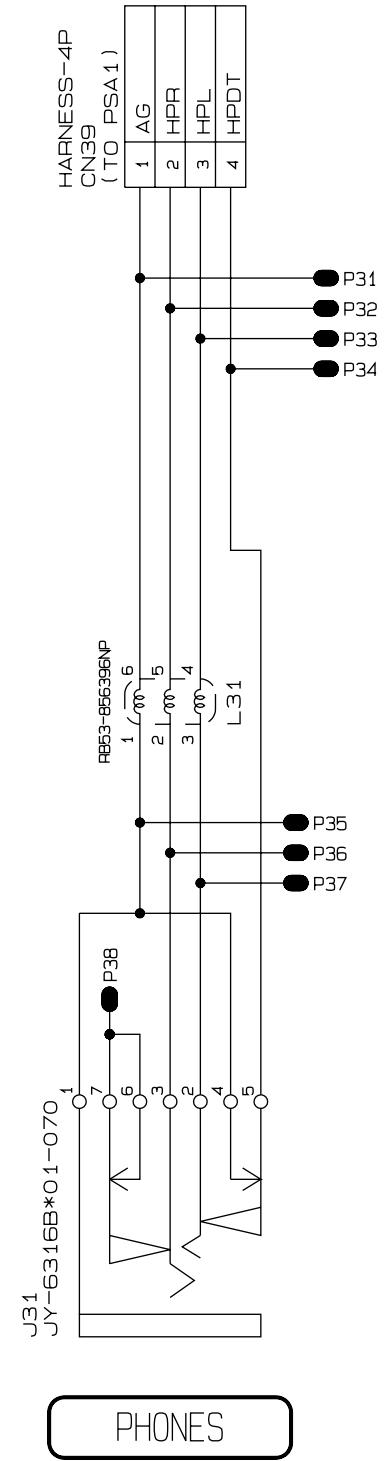
Console PCB M810-CNA4



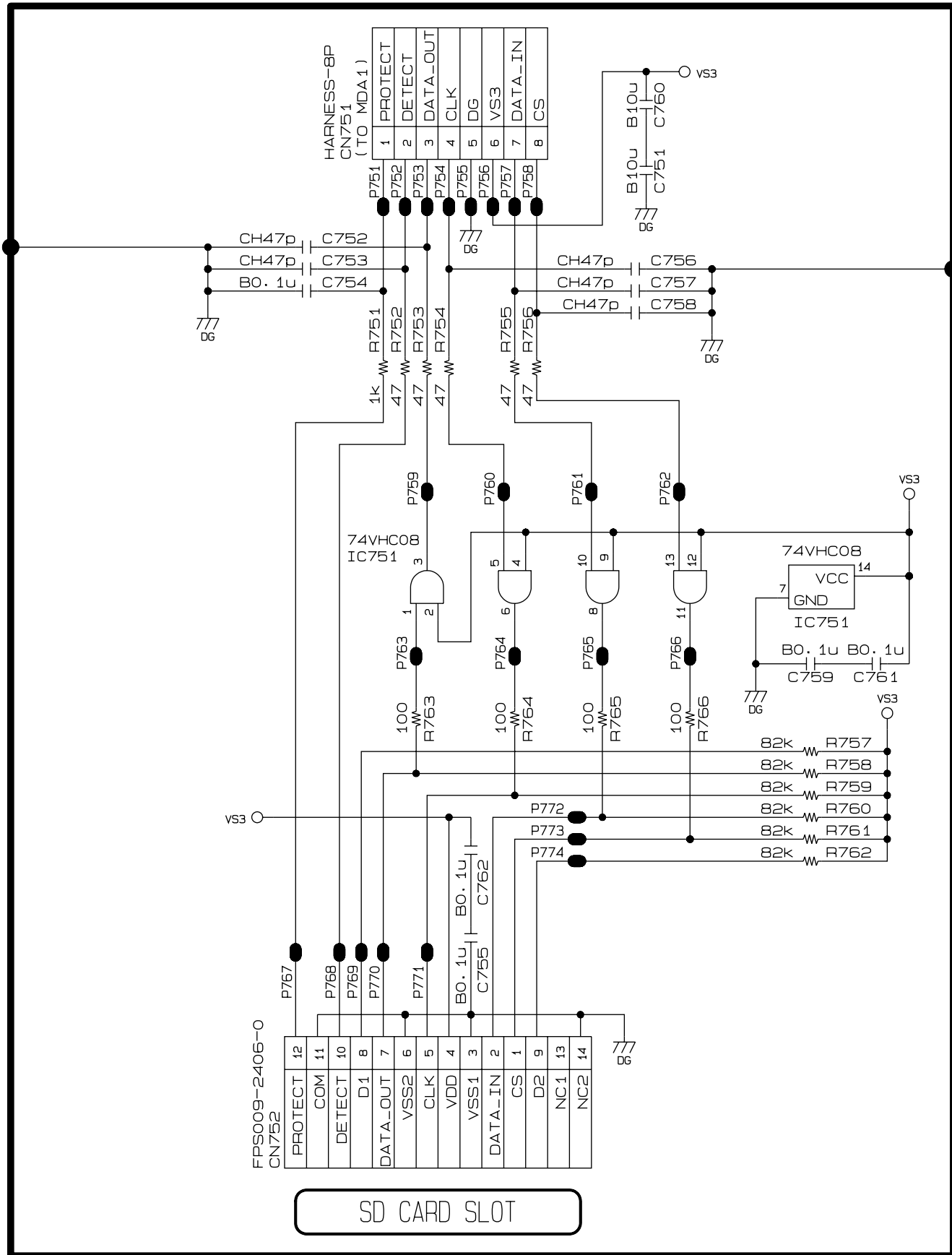
Console PCB M810-CNA5



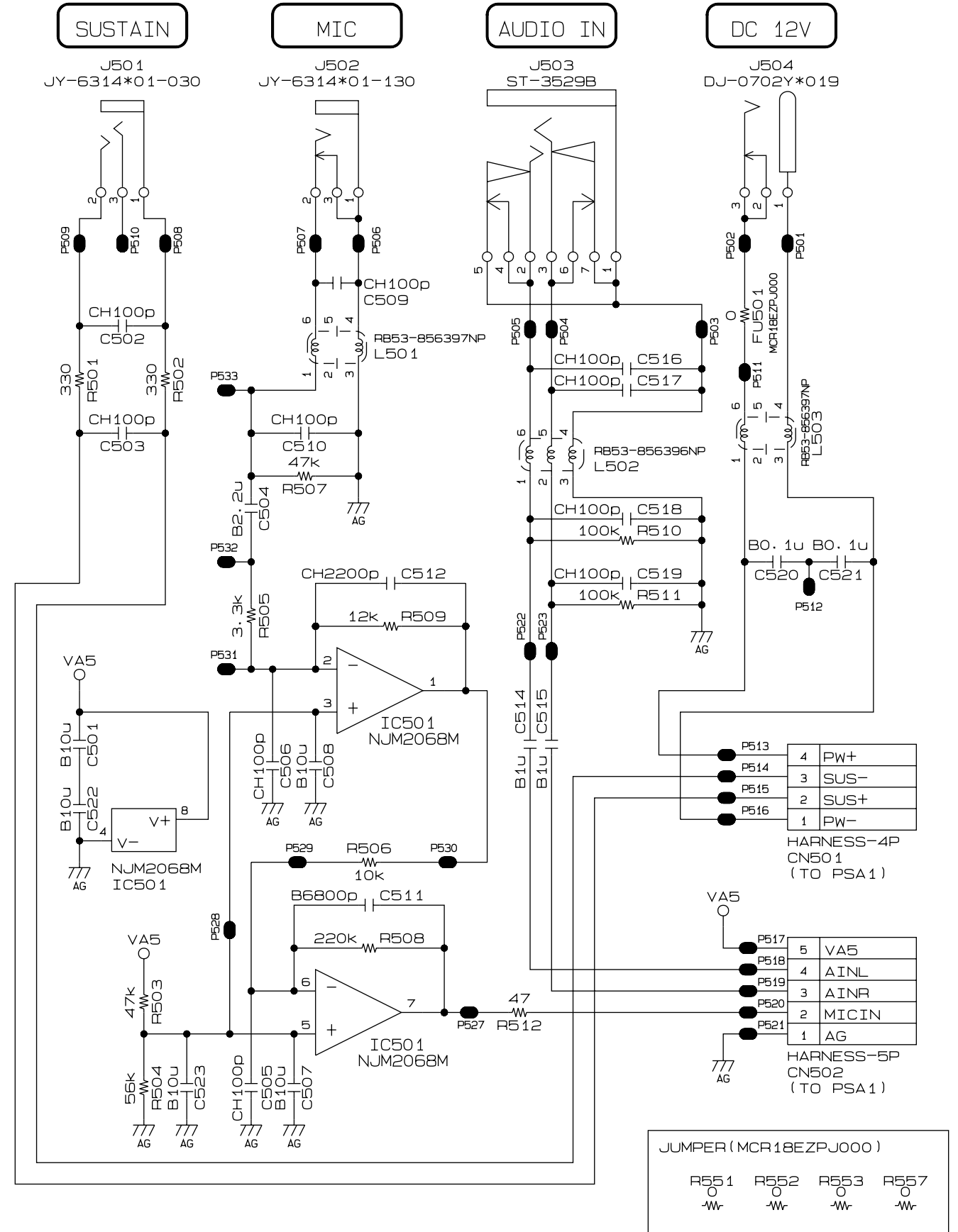
Console PCB M810-CNA6



SD card PCB M810-SDA1

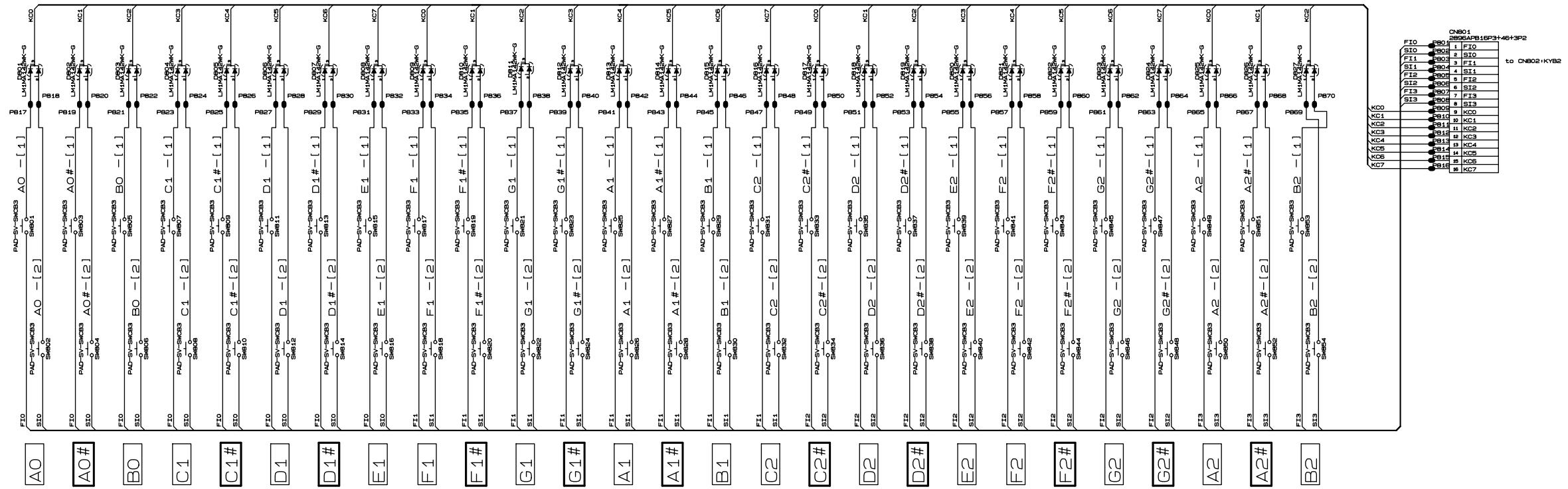


Jack PCB M810-jka1

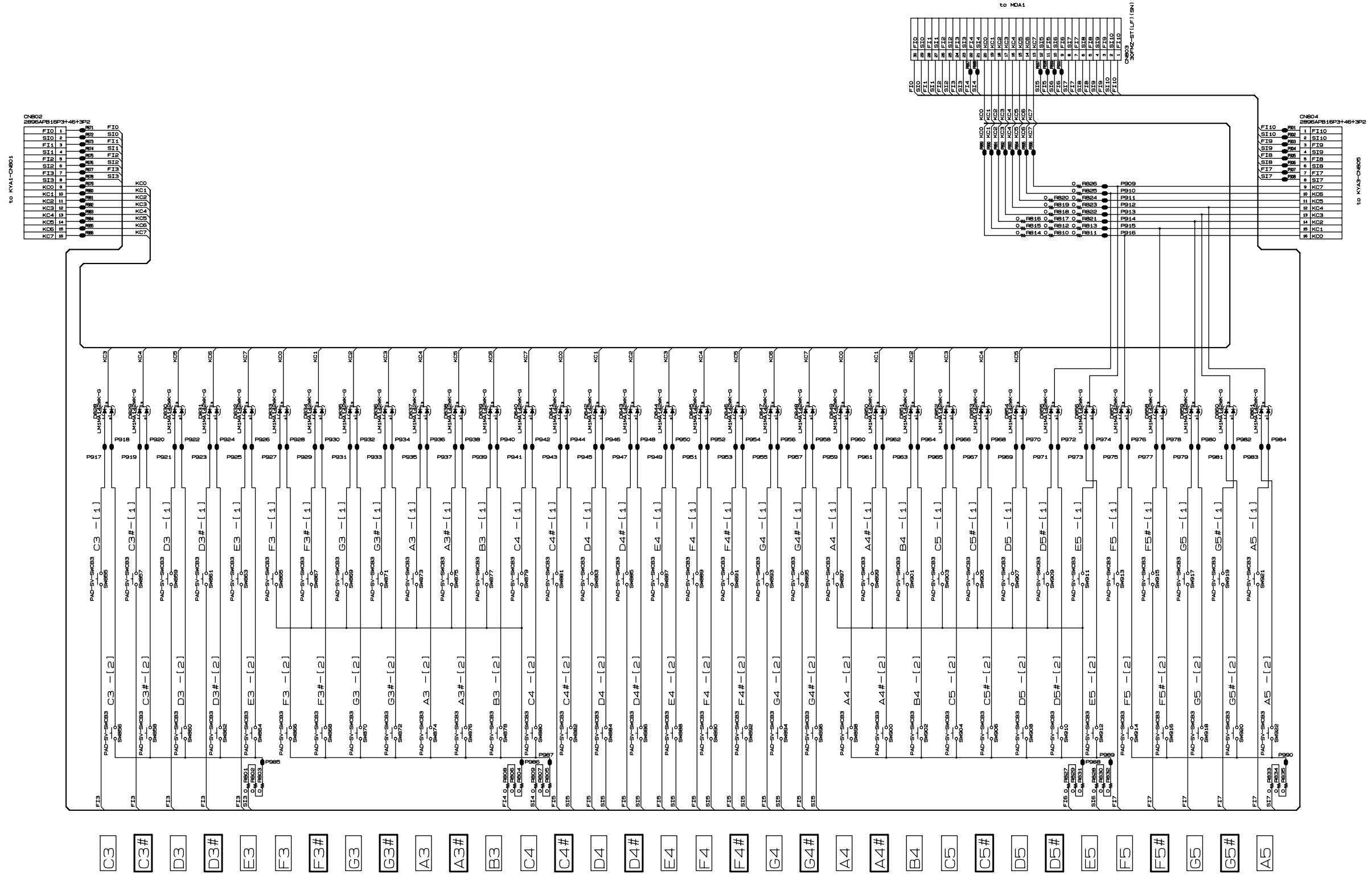




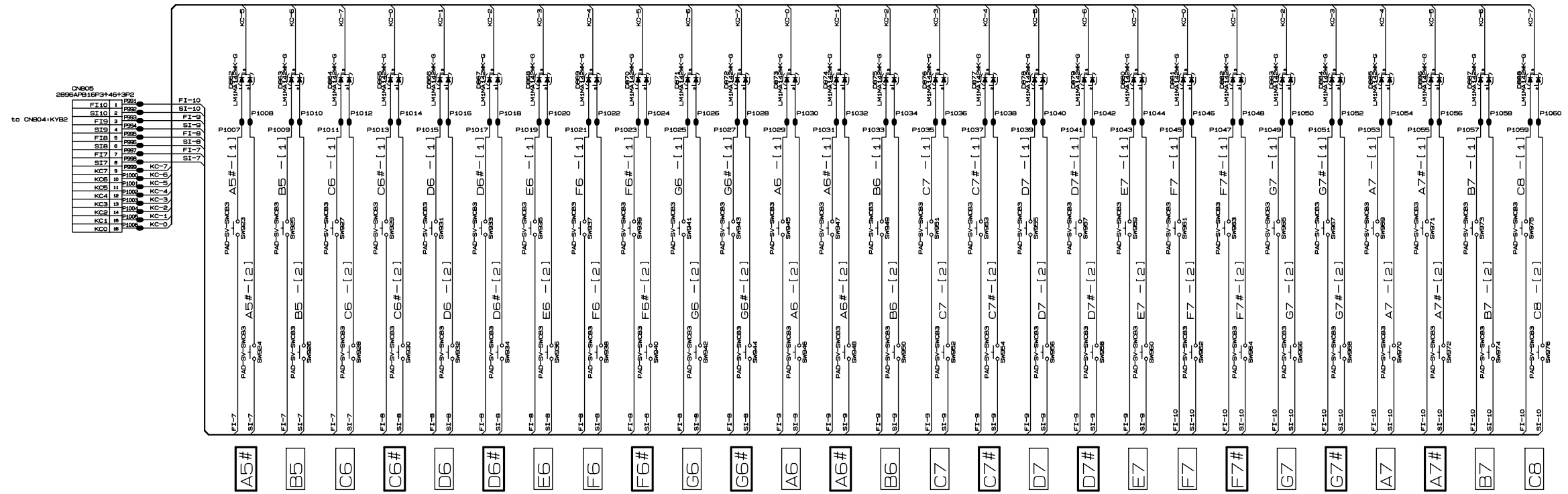
# PWB-MCZS-KYA1



Keyboard PCB MCZS-KYB1



# PWB-MCZS-KYC1



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