

**USER
REF
KO**

Pa60

*Professional
Arranger*



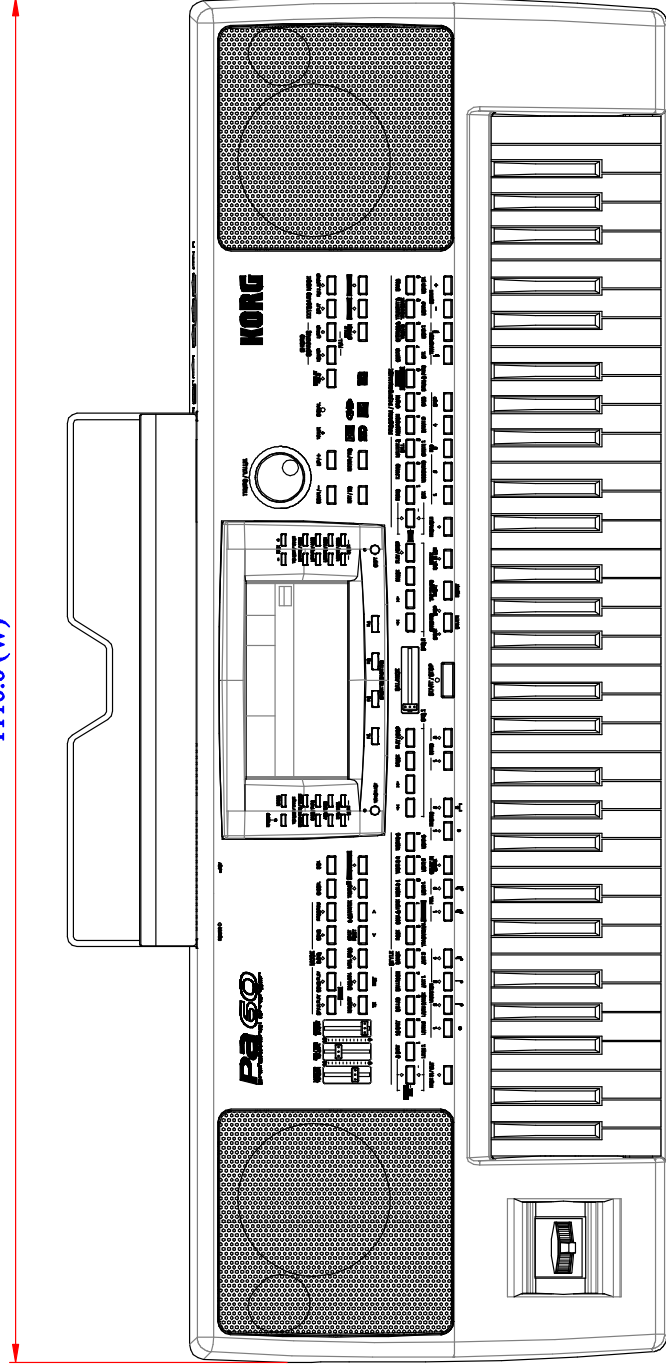
Service Manual

Pa60 Specifications

Keyboard	61 notes with Velocity
System	OPOS – Objective Portable Operating System: multitasking system, load while playing feature. Upgradable Operating System. SSD Solid State Disk
Tone generator	HI Synthesis (Hyper Integrated Synthesis System) – 62 Voices, 62 Oscillators – Filters with Resonance
Waveform Memory	32 Mbyte PCM ROM (Stereo Piano Sound)
Effects	4 Stereo Digital Multi-Effect systems (89 Effects available)
Programs	More than 660 Programs (including Stereo Piano and GM Level 2 Programs). 32 Drum Kits. 128 User Programs + 64 User Drum Kits. Full edit feature for Programs and Drum Kits
Styles	Up to 304 styles in solid state disk. All reconfigurable. 8 accompaniment tracks. 48 user Styles. All Style Performances are programmable (included 4 Single Touch Settings for each style). Direct Floppy Disk/Direct Hard Disk (optional) feature. Compatible with old i-series style format. Style Record with Edit functions, Step Edit, Event Edit
Styles Controls	4 Variations, 2 Fills, 2 Intros, 2 Endings, Counter In/Break, Synchro Start/Stop, Tap Tempo/Reset, Fade In/Out, Bass Inversion, Manual Bass, Tempo Lock, Memory, Accompaniment Volume, Accompaniment Mute, Drum Mapping, Snare & Kick Designation, Single Touch
Performance	160 real-time Performances + up to 304 Styles Performances (that contains 4 Single Touch Settings each)
General Controls	Master Volume, Ensemble, Octave Transpose, Master Transpose, Split Point, Style Change, Tracks Volume, Quarter Tone Function, Programmable Slider, Joystick, Dial
Multi PAD	4 assignable (both sound or functions) Pads + Stop button
Song Play	XDS* Crossfade Dual Sequencer player – 2 Sequencers with separate Start/Stop, Pause, '<< Rew' and '>> FF' controls. Balance control. Lyrics are displayed on-screen. Jukebox Function. SMF Direct Player (format 0 and 1)
Song	Song Record, Song Edit, Event Edit, Step Edit – Easy Sound Edit - 16 Tracks – SMF format
Backing Sequence	Easy Record – 16 Tracks – SMF format – Step Chord/Acc Edit
Control Inputs	Damper Pedal, Assignable Pedal/Switch
Audio Outputs	Left/Mono, Right
Audio Inputs	Left/Mono, Right (Line Input)
MIDI	In, Out, Thru
Floppy Disk	3.5 inch 2DD/2HD (Ms-Dos? compatible)
Hard Disk	Optional Hard Disk (with installation kit)
Display	Backlit Custom LCD
Main Amplifier	2 x 15 Watt
Speakers	2 x 10 cm Double-Cone Speakers in Bass Reflex Box
Power Consumption	30 Watt
Dimensions	W = 1110mm, D = 388mm, H = 164mm without music rest
Weight	13.5 kg
Accessories	Music Rest
Options	HDIK Hard Disk Installation Kit, VIF2 Video Interface Kit, EXP-2 Exp/Volume Pedal, XVP-10 Exp/Volume Pedal, PS-1 Footswitch, DS-1H Damper Pedal

Specification and design are subject to change without notice for the purpose of product enhancement.

1110.0 (W)

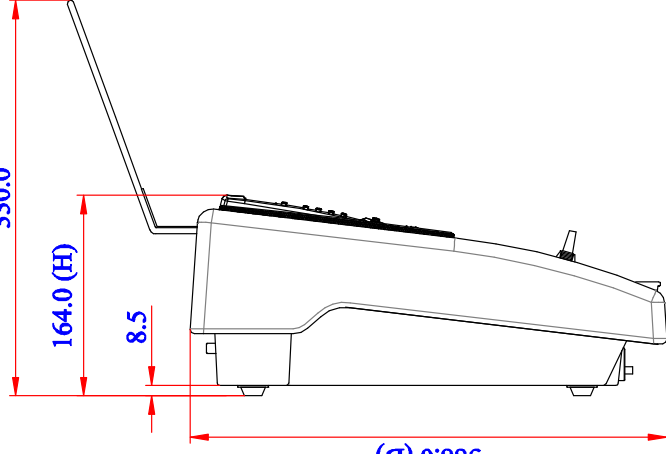


330.0

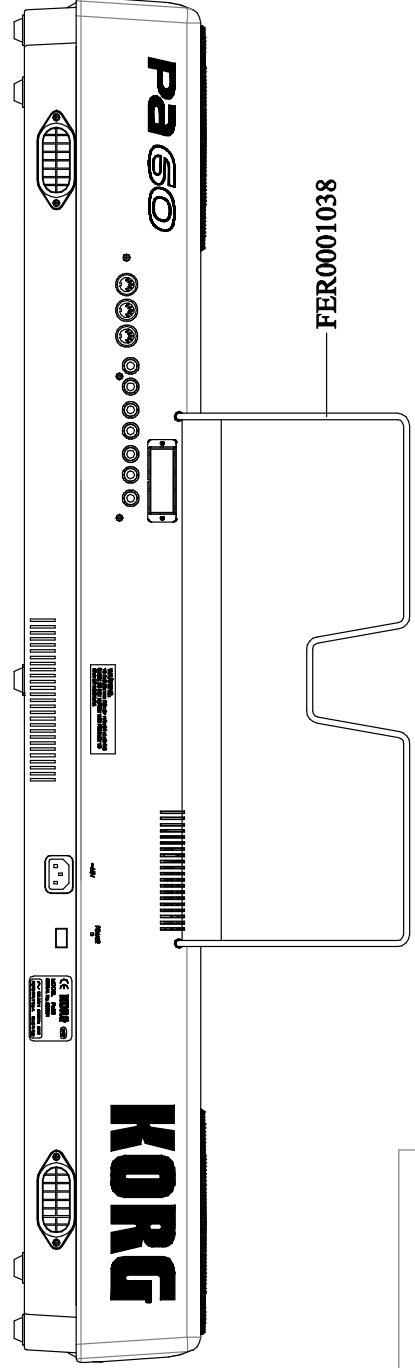
164.0 (H)

8.5

388.0 (D)



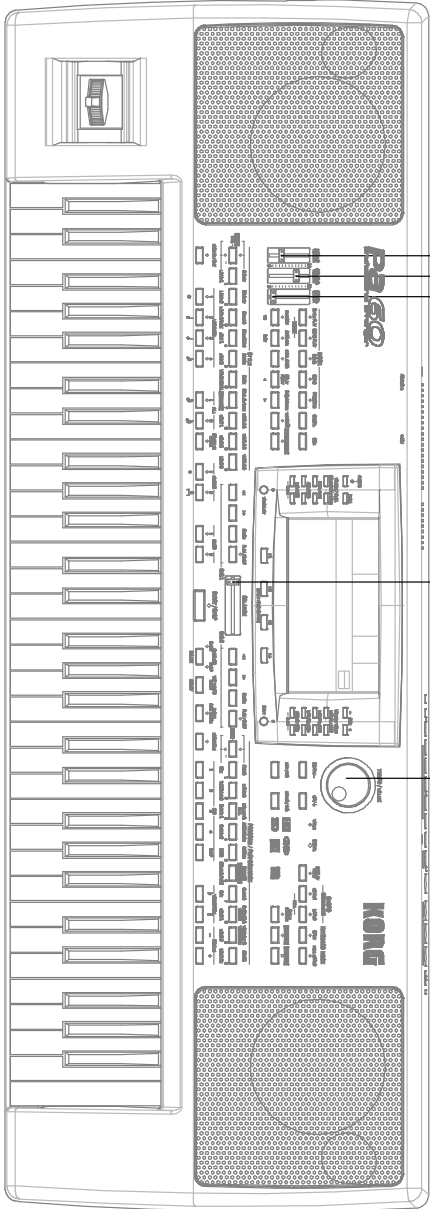
WEIGHT = 13.5 Kg



FER0001038

Pa60 Full View

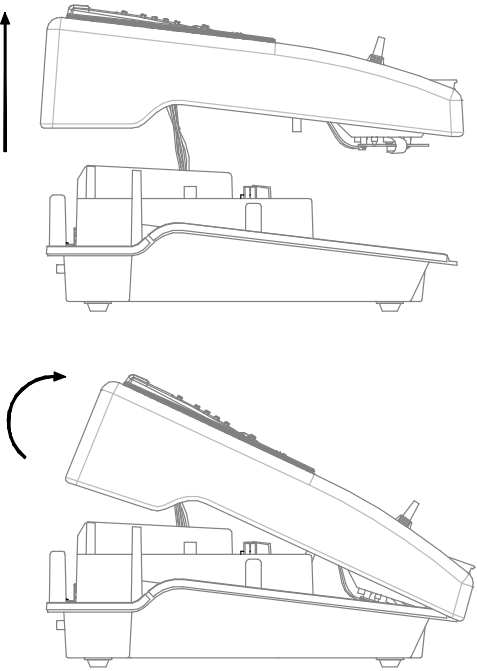
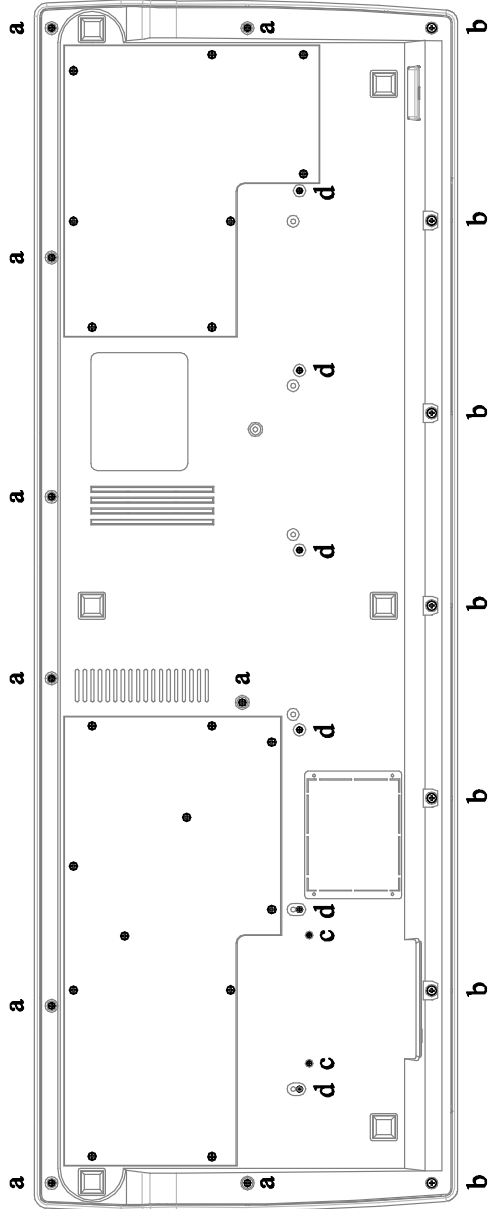
d	VTA0001010	Screw 3x16 TC PR	6
c	VTA0001039	Screw 2.9x9.5 TC Selfth. SP	2
b	VTA0001004	Screw 4x15 TFR PR	7
a	VTA0001067	Screw 3.5x16 TC AGG BZ	9
Ref. Code	Description		
			Q.ty



Remove the marked screws from the bottom of Pa60 and then lift the upper case to separate it from the lower case and have access inside Pa60.

PLA0001085

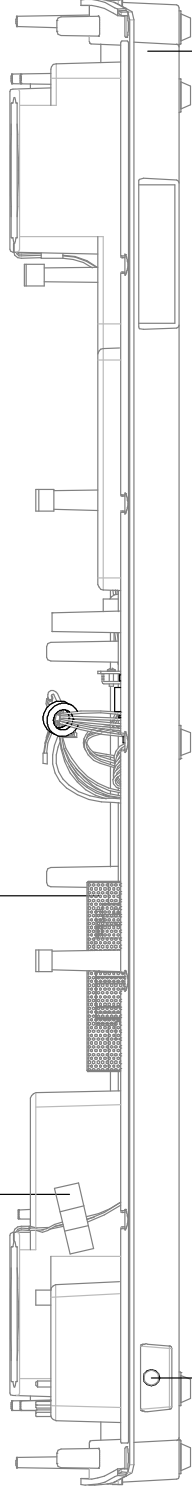
PLA0001080



Pa60 Disassembly

FEL0001029

FER0001097



PLA0001121

ALT0001015

RIL0001177

FER0001097

RIL0001190

Power supply

RIL0001123

BOB0001001

RIL0001184

PLA0001062

GRA0002055

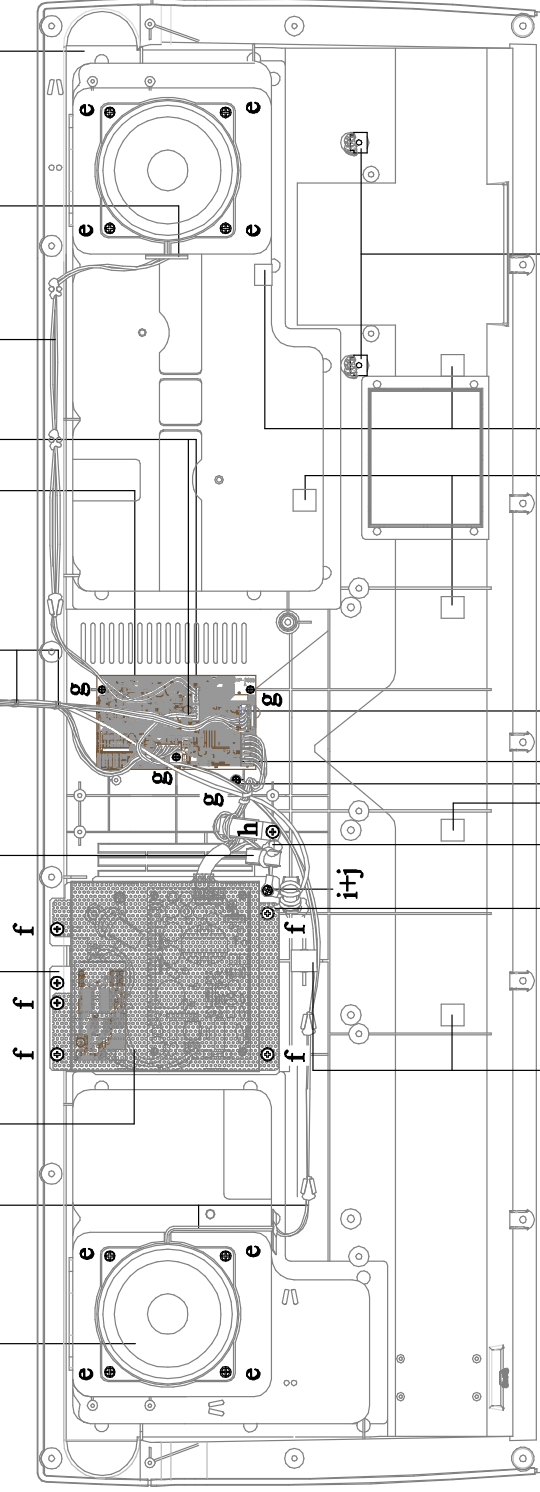
RIL0001177

FEL0001029

PLA0002044

FEL0001034

FEL0001035



PLA0001047

FEL0001052

PLA0001046

FER0001153

FEL0001052

RIL0001190

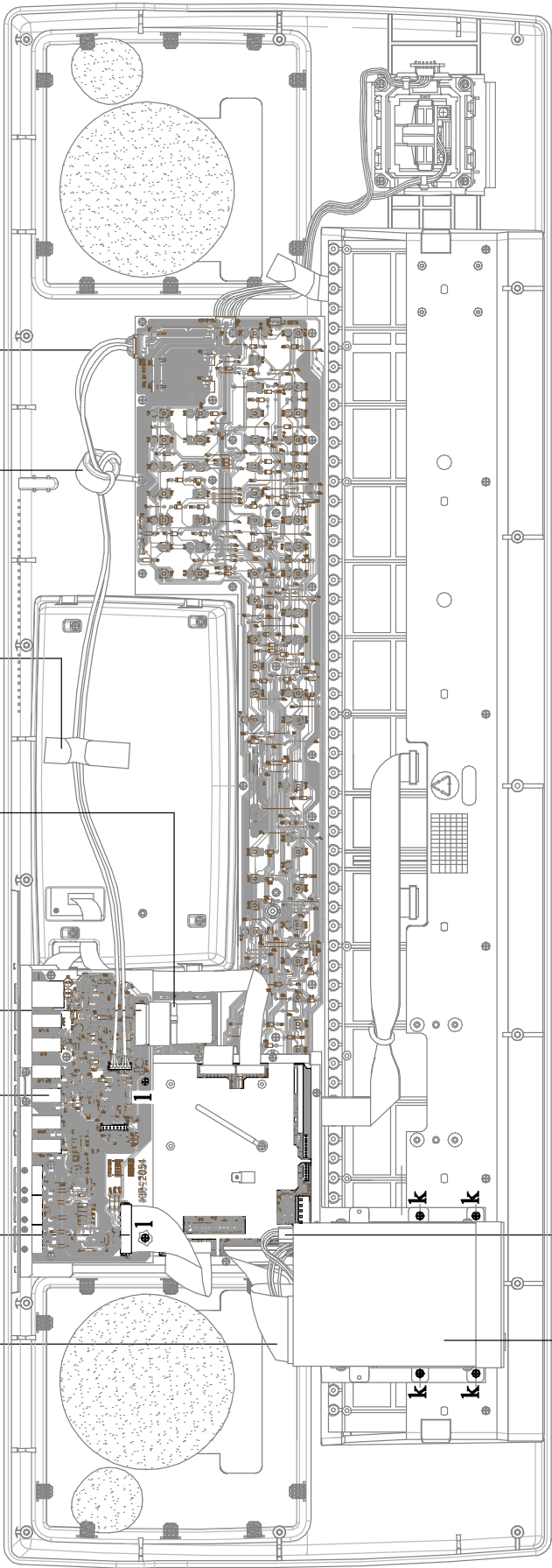
RIL0001178

Ref. Code	Description	Q.ty
g	VTA0001051 Screw 3x13 TC PR Zn	4
f	VTA0001040 Screw 4.2x8 TFR Selfthreading SP Tropicalized	5
e	VTA0001034 Screw 4x20 TC PR Zn	8

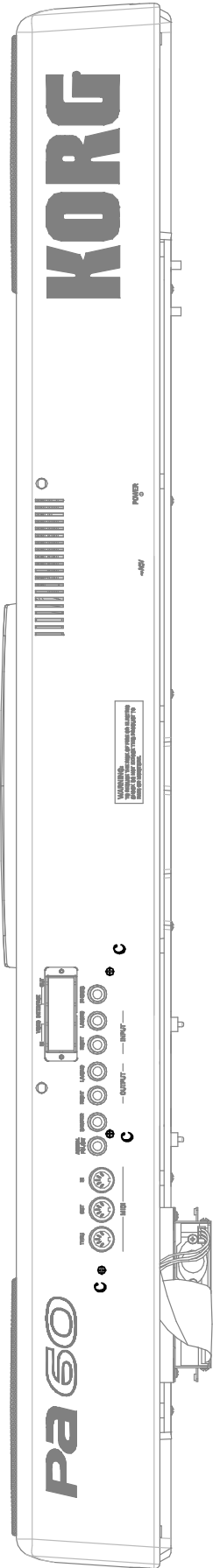
Ref. Code	Description	Q.ty
j	VTA0001011 Groover Ø 4mm	1
i	VTA0001050 Screw M4x8 TC Selftapping	1
h	VTA0001002 Screw 4x12 TFR PR	1

Lower Case Disassembly 1

RIL0001139 RIL0001133 Output board RIL0001191 PLA0001062 FEL0001029 BOB0001001 RIL0001030



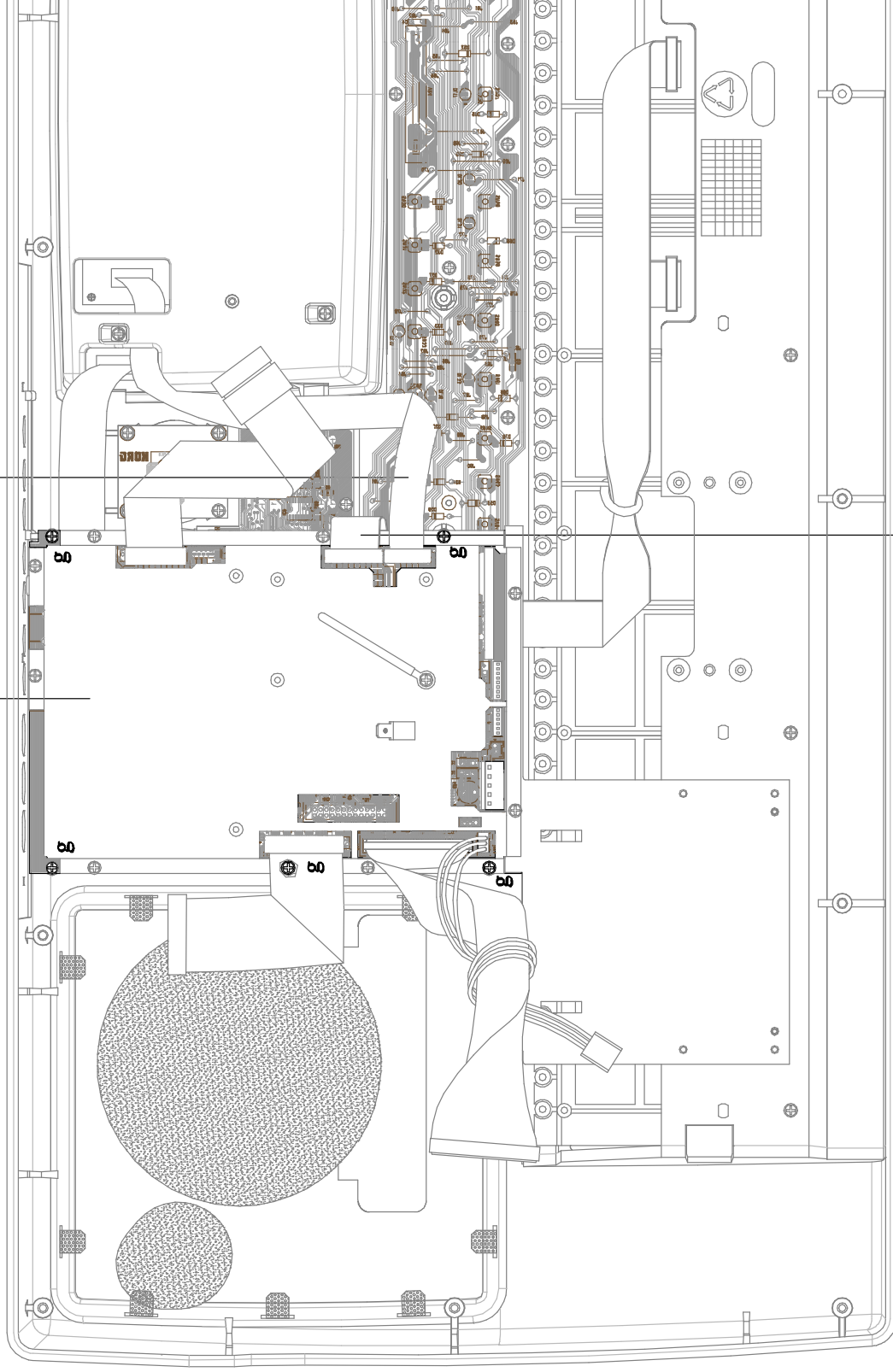
Floppy Disk Group RIL0001127



1	VTA0001032	Screw M3x8 TC	2
k	VTA0001038	Screw 3x8 TC PR SP Tropicalized	4
c	VTA0001039	Screw 2.9x9.5 TC Selfthreading SP	3
Ref. Code	Description		Q.ty

Main Board Group

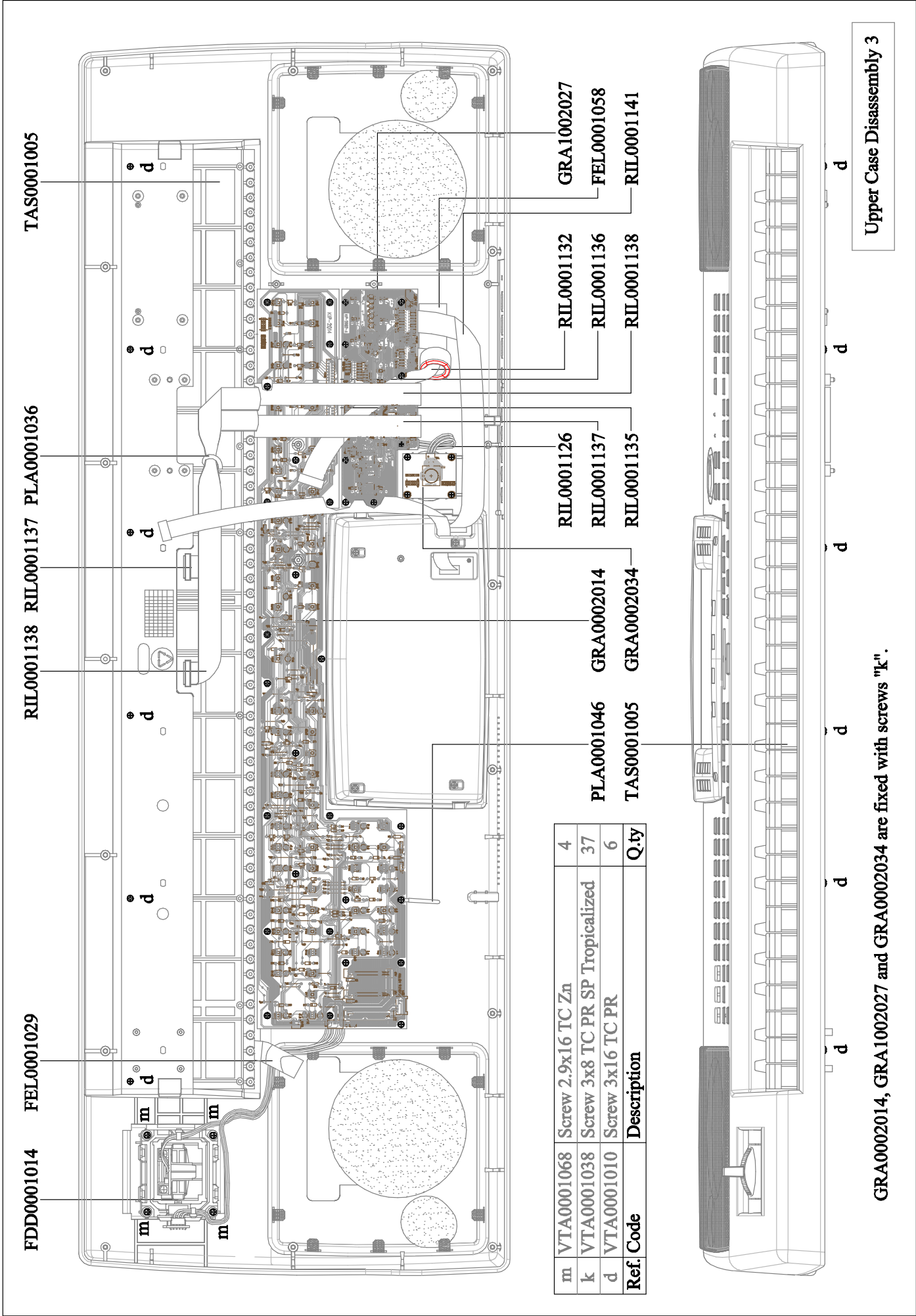
RIL0001140

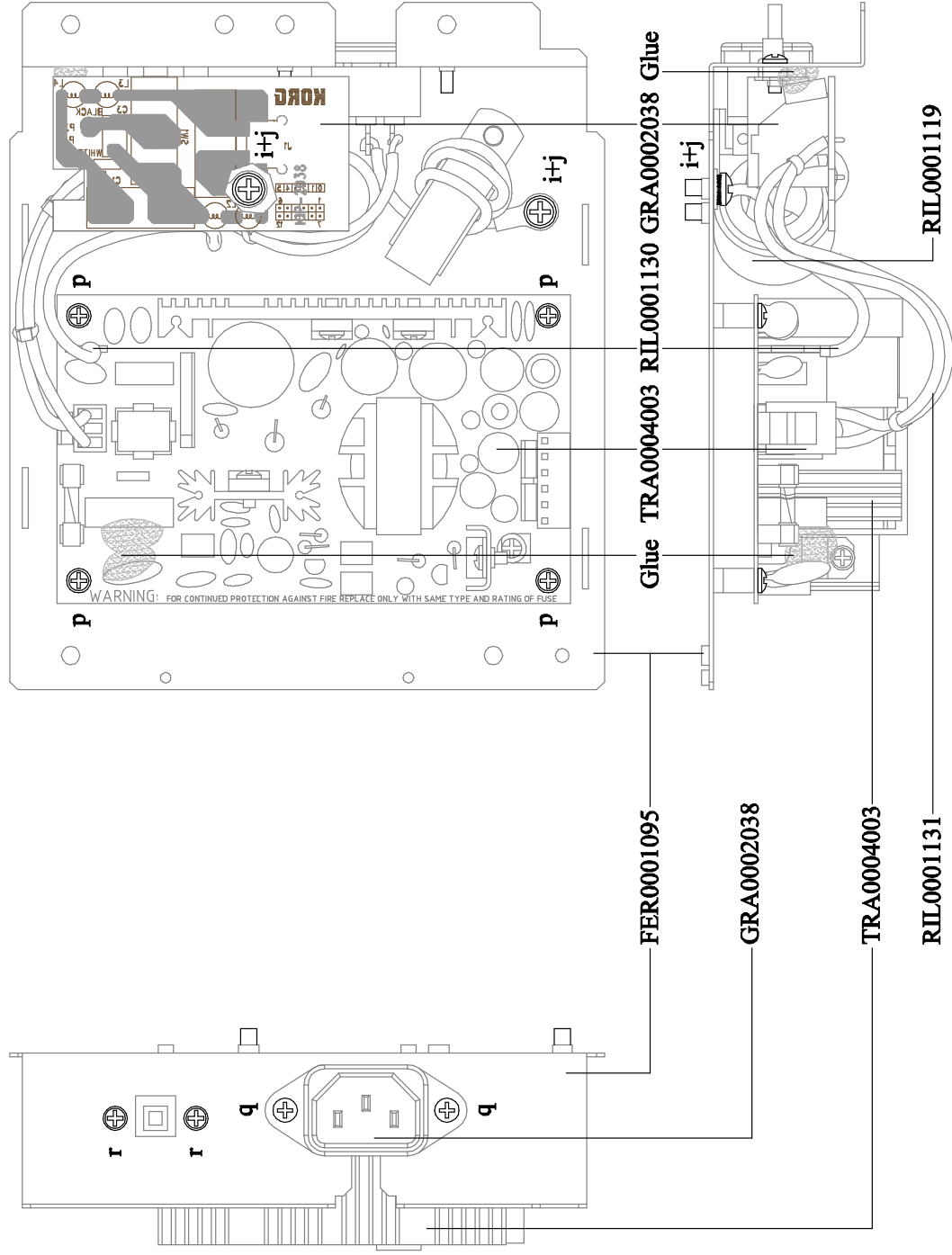


RIL0001132

g	VTA0001051	Screw 3x13 TC PR Zn	5
Ref. Code	Description		Q.ty

Upper Case Disassembly 2

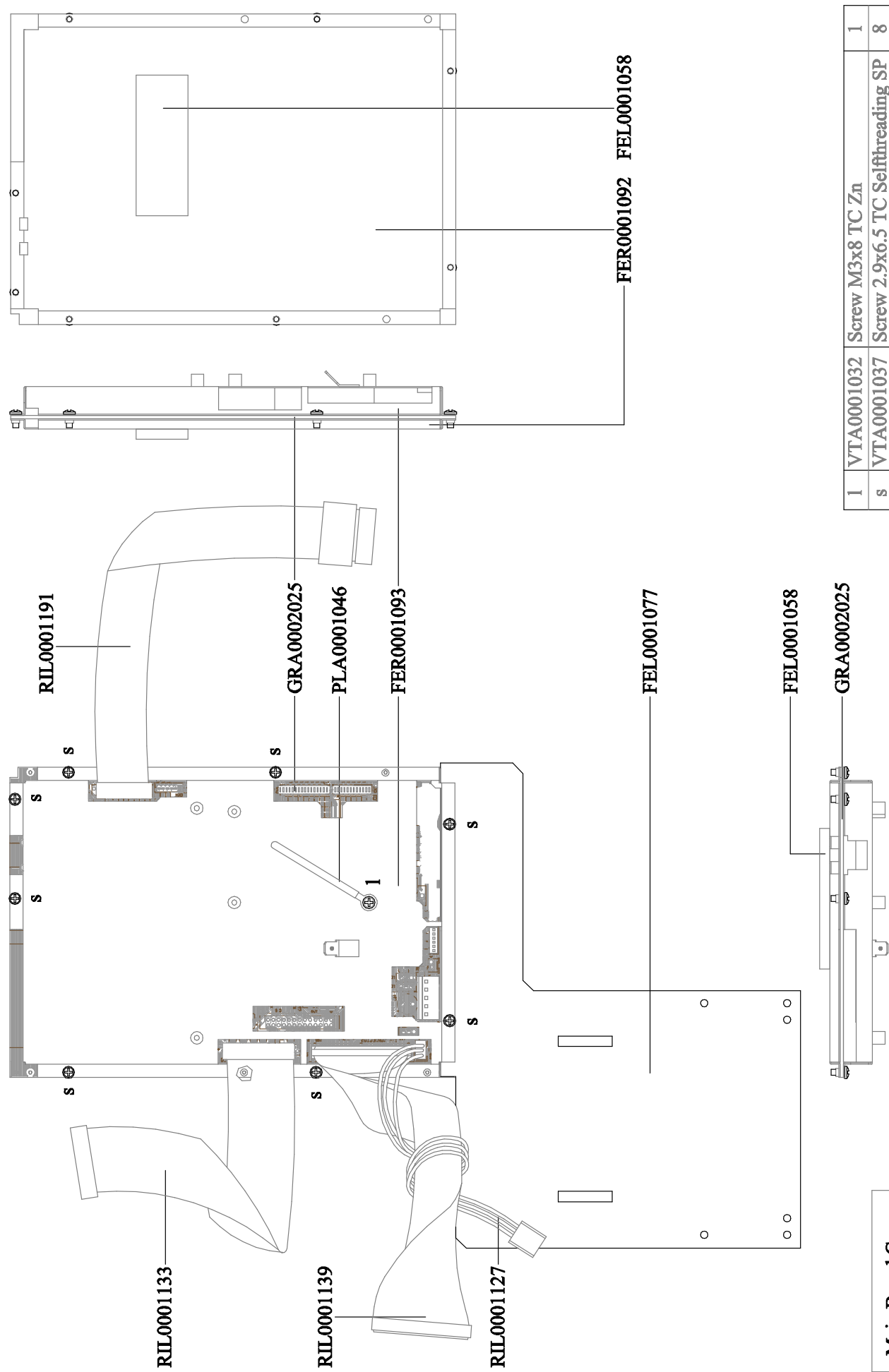




Ref. Code	Description	Q.ty
p	VTA0001005 Screw M3x10 TC Zn	4
j	VTA0001011 Groover Ø 4mm	2
i	VTA0001050 Screw M4x8 TC Selftapping	2

Ref. Code	Description	Q.ty
r	VTA0001046 Screw M3x6 TC Selftapping	2
q	VTA0001060 Screw 2.9x9.5 TSP Zn	2

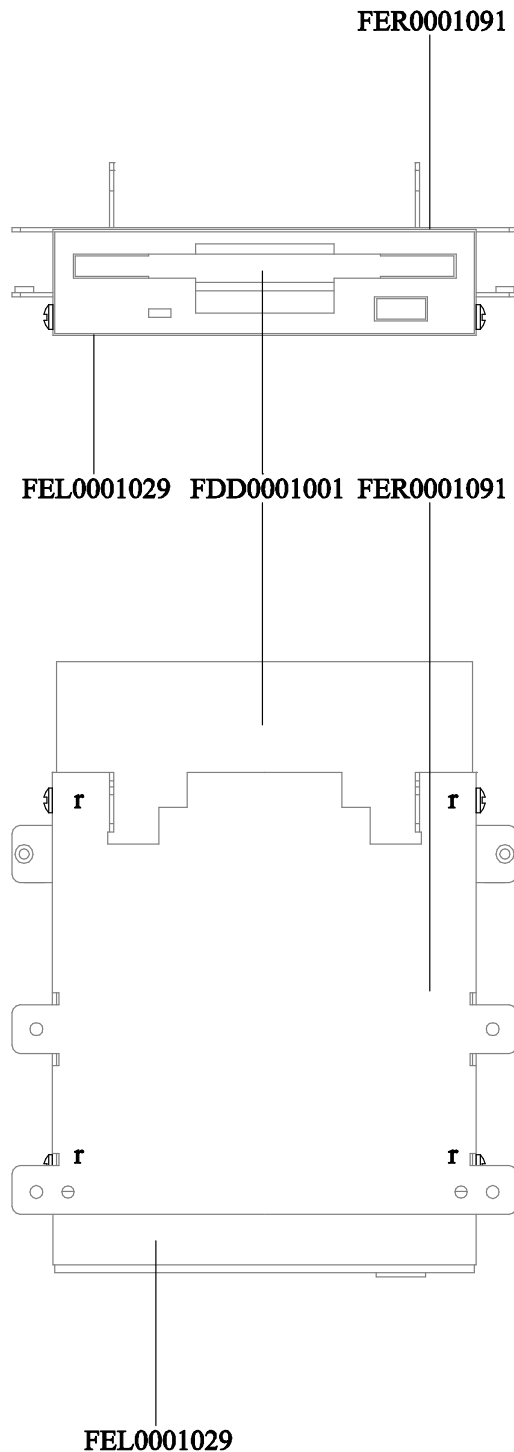
Power Switching Supply



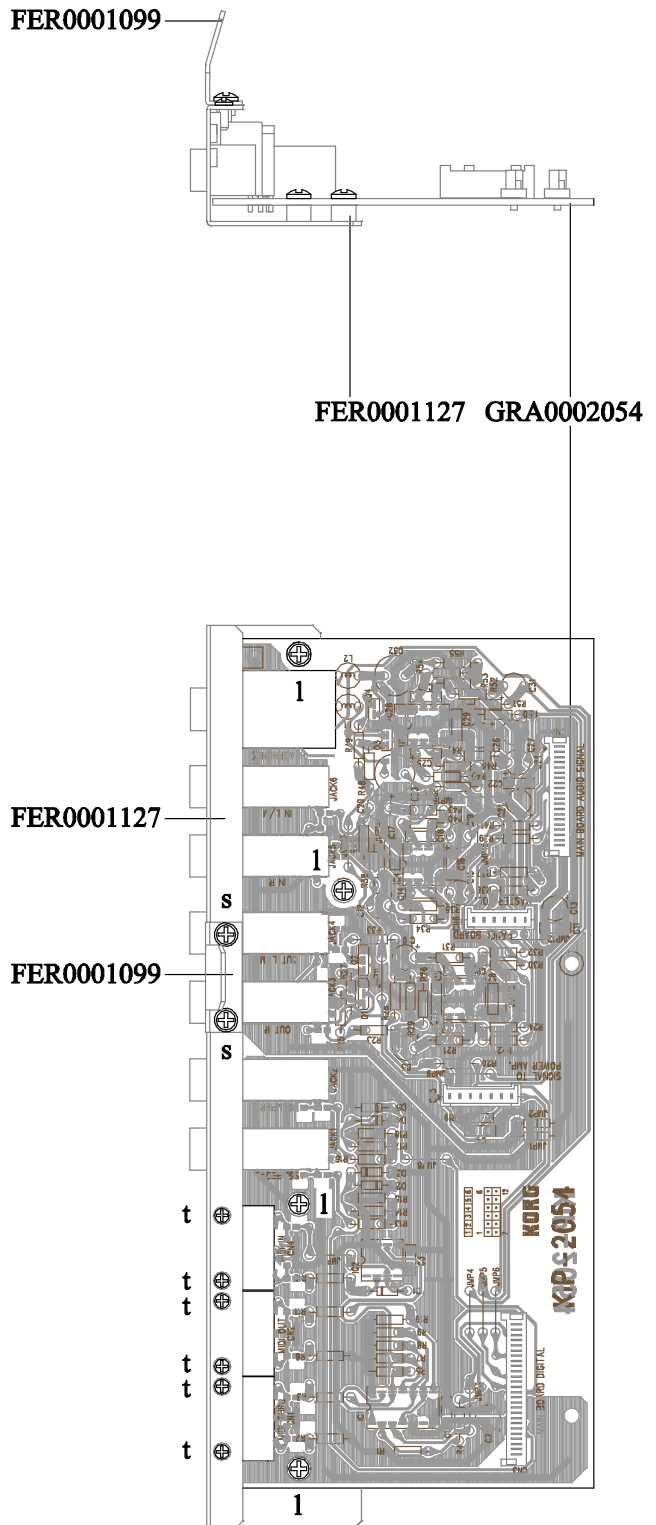
Main Board Group

1	VTA0001032	Screw M3x8 TC Zn	1
s	VTA0001037	Screw 2.9x6.5 TC Selfthreading SP	8
Ref. Code		Description	Q.ty

Floppy Disk Group



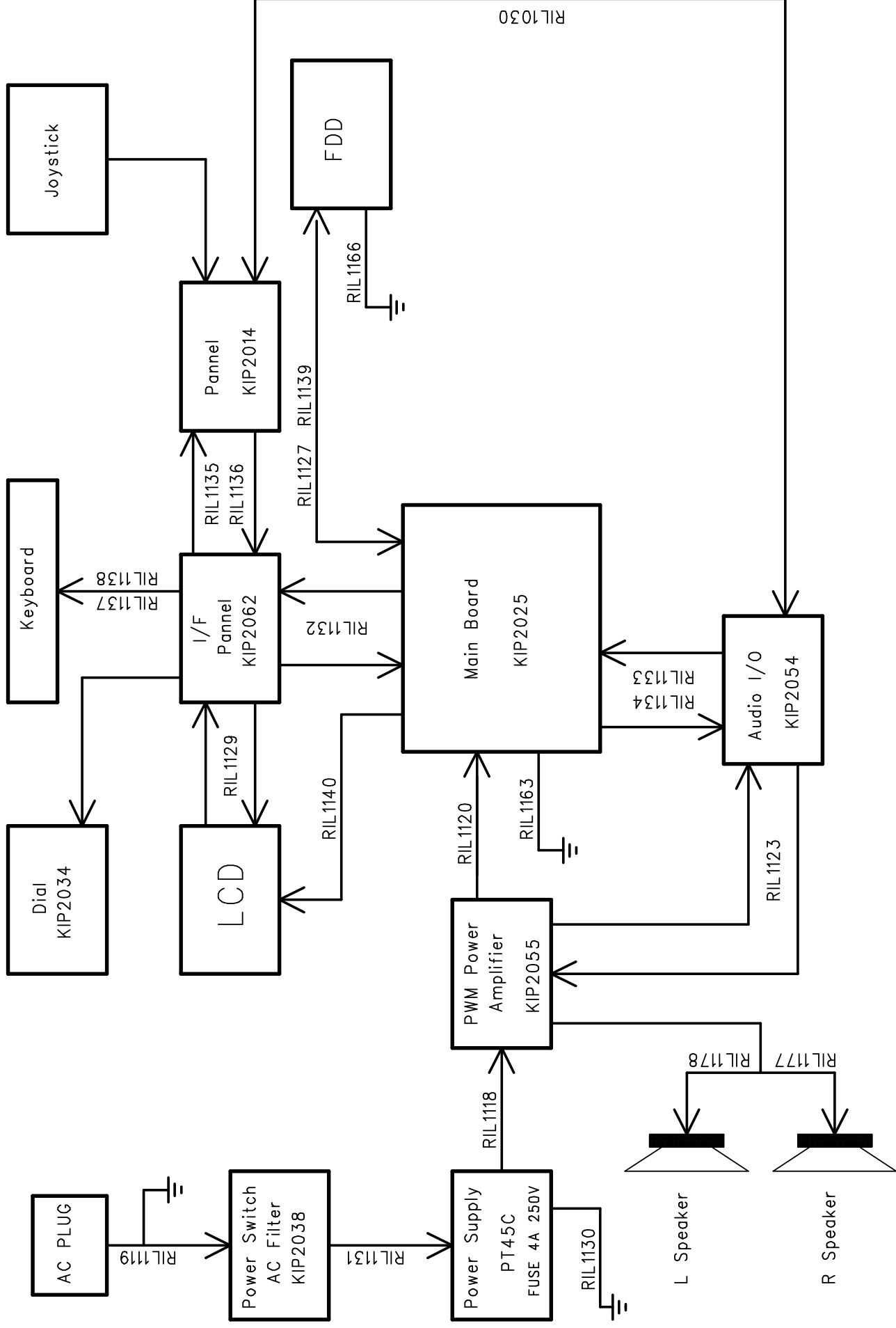
Output Board



t	VTA0001049	Screw 2.2x6.5 TC Selfthreading SP	6
s	VTA0001037	Screw 2.9x6.5 TC Selfthreading SP	2
l	VTA0001032	Screw M3x8 TC Zn	4
r	VTA0001046	Screw M3x6 TC Selftapping	4
Ref.	Code	Description	Q.ty

Floppy Disk Group - Output Board

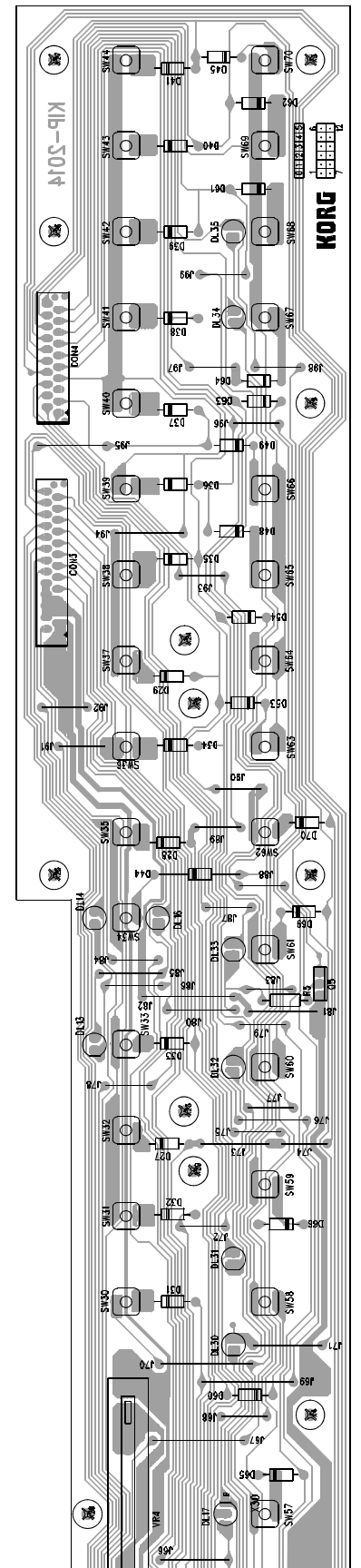
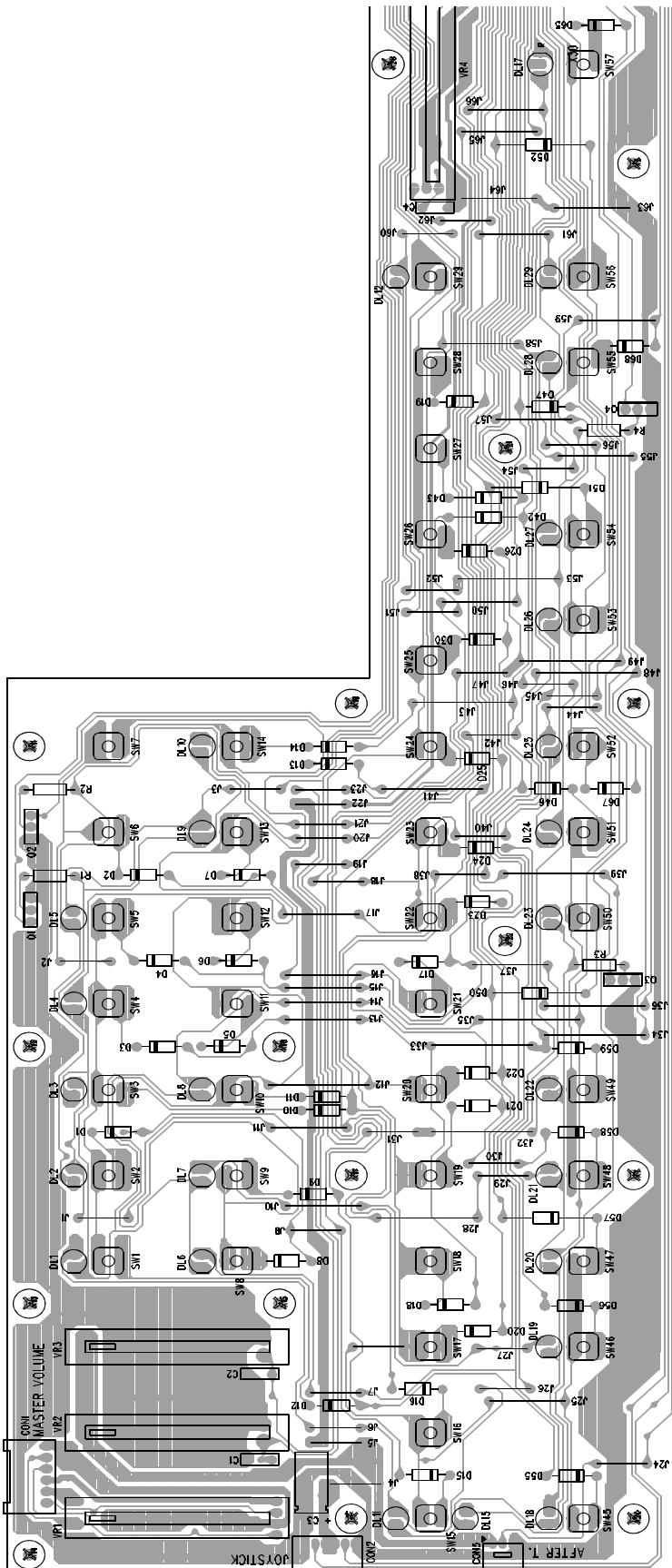
Pa60 BLOCK DIAGRAM

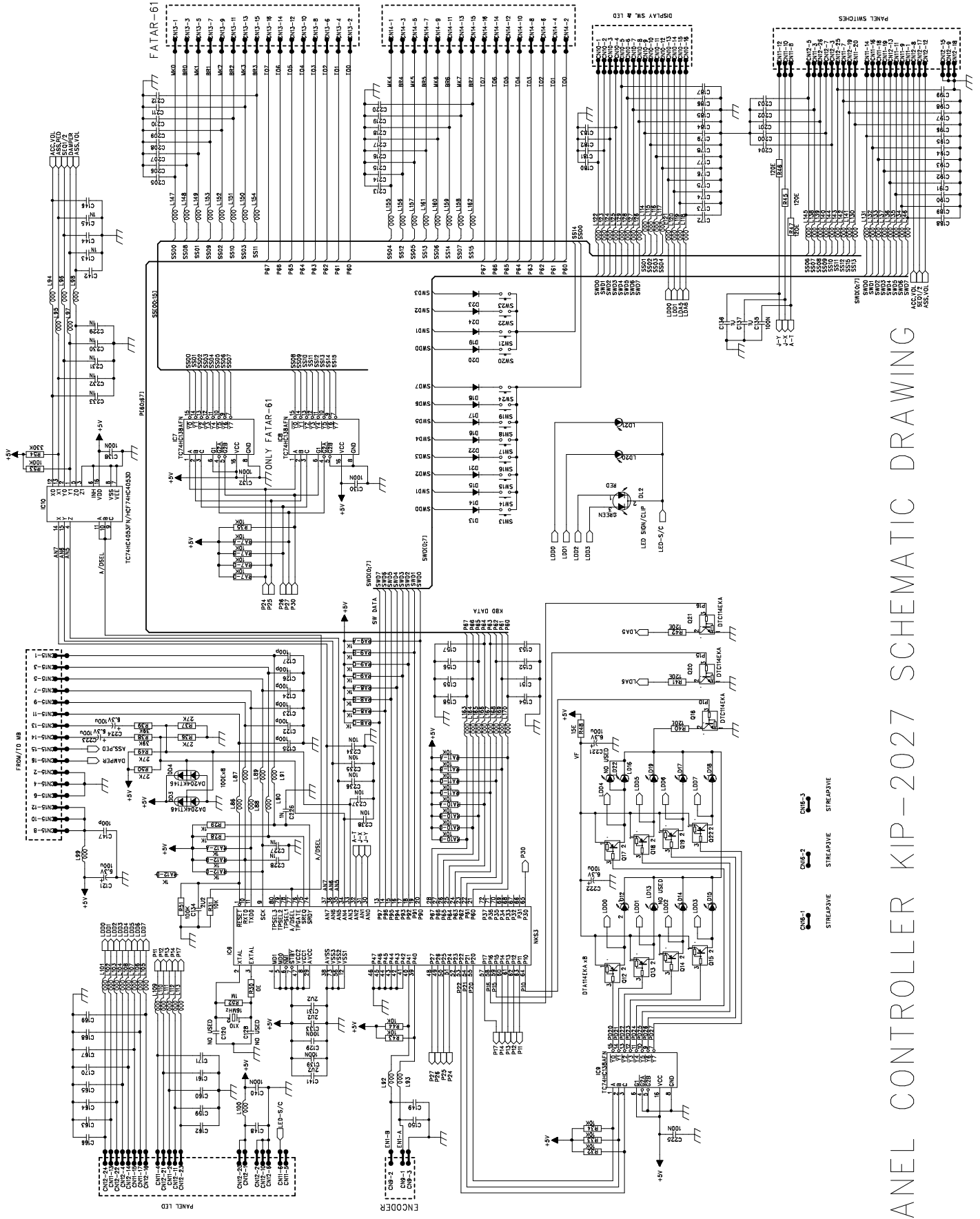


The schematic diagram illustrates the internal circuitry of a portable music player, organized into several functional blocks:

- Power Supply:** A +5V regulator (A.T.) provides power to the system. It includes decoupling capacitors (C5, C6, C7, C8) and a 100N resistor network.
- Volume Control:** A potentiometer (VR5) is used for volume control, connected to a 100E resistor network. The output is buffered by op-amp buffers (Q9, Q10).
- LED Display:** A 4x4 matrix of LEDs (DL37-DL60) is used for display. The LEDs are connected to a 100E resistor network. The display is controlled by a 7-segment display (DL69-DL70) and a master volume potentiometer (VR5-A).
- Control Section:** A 7-segment display (DL69-DL70) is used for control. It is connected to a 100E resistor network. The display is controlled by a master volume potentiometer (VR5-A).
- Other Components:** The circuit includes various other components such as resistors (R6, R7, R8, R9, R10), capacitors (C1, C2, C3, C4, C5, C6, C7, C8), diodes (D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, D12, D13, D14, D15, D16, D17, D18, D19, D20, D21, D22, D23, D24, D25, D26, D27, D28, D29, D30, D31, D32, D33, D34, D35, D36, D37, D38, D39, D40, D41, D42, D43, D44, D45, D46, D47, D48, D49, D50, D51, D52, D53, D54, D55, D56, D57, D58, D59, D60, D61, D62, D63, D64, D65, D66, D67, D68, D69, D70, D71, D72, D73, D74, D75, D76, D77, D78, D79, D80, D81, D82, D83, D84, D85, D86, D87, D88, D89, D90, D91, D92, D93, D94, D95, D96, D97, D98, D99, D100, D101, D102, D103, D104, D105, D106, D107, D108, D109, D110, D111, D112, D113, D114, D115, D116, D117, D118, D119, D120, D121, D122, D123, D124, D125, D126, D127, D128, D129, D130, D131, D132, D133, D134, D135, D136, D137, D138, D139, D140, D141, D142, D143, D144, D145, D146, D147, D148, D149, D150, D151, D152, D153, D154, D155, D156, D157, D158, D159, D160, D161, D162, D163, D164, D165, D166, D167, D168, D169, D170, D171, D172, D173, D174, D175, D176, D177, D178, D179, D180, D181, D182, D183, D184, D185, D186, D187, D188, D189, D190, D191, D192, D193, D194, D195, D196, D197, D198, D199, D200, D201, D202, D203, D204, D205, D206, D207, D208, D209, D210, D211, D212, D213, D214, D215, D216, D217, D218, D219, D220, D221, D222, D223, D224, D225, D226, D227, D228, D229, D230, D231, D232, D233, D234, D235, D236, D237, D238, D239, D240, D241, D242, D243, D244, D245, D246, D247, D248, D249, D250, D251, D252, D253, D254, D255, D256, D257, D258, D259, D260, D261, D262, D263, D264, D265, D266, D267, D268, D269, D270, D271, D272, D273, D274, D275, D276, D277, D278, D279, D280, D281, D282, D283, D284, D285, D286, D287, D288, D289, D290, D291, D292, D293, D294, D295, D296, D297, D298, D299, D300, D301, D302, D303, D304, D305, D306, D307, D308, D309, D310, D311, D312, D313, D314, D315, D316, D317, D318, D319, D320, D321, D322, D323, D324, D325, D326, D327, D328, D329, D330, D331, D332, D333, D334, D335, D336, D337, D338, D339, D340, D341, D342, D343, D344, D345, D346, D347, D348, D349, D350, D351, D352, D353, D354, D355, D356, D357, D358, D359, D360, D361, D362, D363, D364, D365, D366, D367, D368, D369, D370, D371, D372, D373, D374, D375, D376, D377, D378, D379, D380, D381, D382, D383, D384, D385, D386, D387, D388, D389, D390, D391, D392, D393, D394, D395, D396, D397, D398, D399, D400, D401, D402, D403, D404, D405, D406, D407, D408, D409, D410, D411, D412, D413, D414, D415, D416, D417, D418, D419, D420, D421, D422, D423, D424, D425, D426, D427, D428, D429, D430, D431, D432, D433, D434, D435, D436, D437, D438, D439, D440, D441, D442, D443, D444, D445, D446, D447, D448, D449, D450, D451, D452, D453, D454, D455, D456, D457, D458, D459, D460, D461, D462, D463, D464, D465, D466, D467, D468, D469, D470, D471, D472, D473, D474, D475, D476, D477, D478, D479, D480, D481, D482, D483, D484, D485, D486, D487, D488, D489, D490, D491, D492, D493, D494, D495, D496, D497, D498, D499, D500, D501, D502, D503, D504, D505, D506, D507, D508, D509, D510, D511, D512, D513, D514, D515, D516, D517, D518, D519, D520, D521, D522, D523, D524, D525, D526, D527, D528, D529, D530, D531, D532, D533, D534, D535, D536, D537, D538, D539, D540, D541, D542, D543, D544, D545, D546, D547, D548, D549, D550, D551, D552, D553, D554, D555, D556, D557, D558, D559, D560, D561, D562, D563, D564, D565, D566, D567, D568, D569, D570, D571, D572, D573, D574, D575, D576, D577, D578, D579, D580, D581, D582, D583, D584, D585, D586, D587, D588, D589, D590, D591, D592, D593, D594, D595, D596, D597, D598, D599, D600, D601, D602, D603, D604, D605, D606, D607, D608, D609, D610, D611, D612, D613, D614, D615, D616, D617, D618, D619, D620, D621, D622, D623, D624, D625, D626, D627, D628, D629, D630, D631, D632, D633, D634, D635, D636, D637, D638, D639, D640, D641, D642, D643, D644, D645, D646, D647, D648, D649, D650, D651, D652, D653, D654, D655, D656, D657, D658, D659, D660, D661, D662, D663, D664, D665, D666, D667, D668, D669, D670, D671, D672, D673, D674, D675, D676, D677, D678, D679, D680, D681, D682, D683, D684, D685, D686, D687, D688, D689, D690, D691, D692, D693, D694, D695, D696, D697, D698, D699, D700, D701, D702, D703, D704, D705, D706, D707, D708, D709, D710, D711, D712, D713, D714, D715, D716, D717, D718, D719, D720, D721, D722, D723, D724, D725, D726, D727, D728, D729, D730, D731, D732, D733, D734, D735, D736, D737, D738, D739, D740, D741, D742, D743, D744, D745, D746, D747, D748, D74

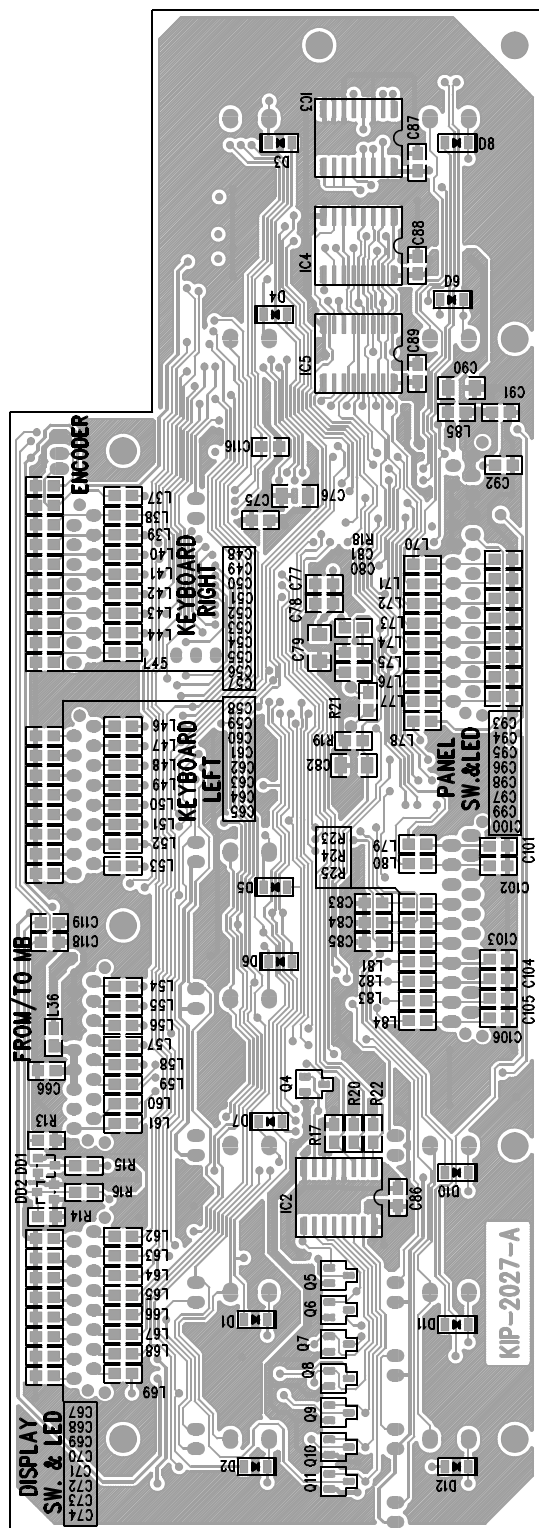
PANEL BOARD KIP-2014 COMPONENT SIDE



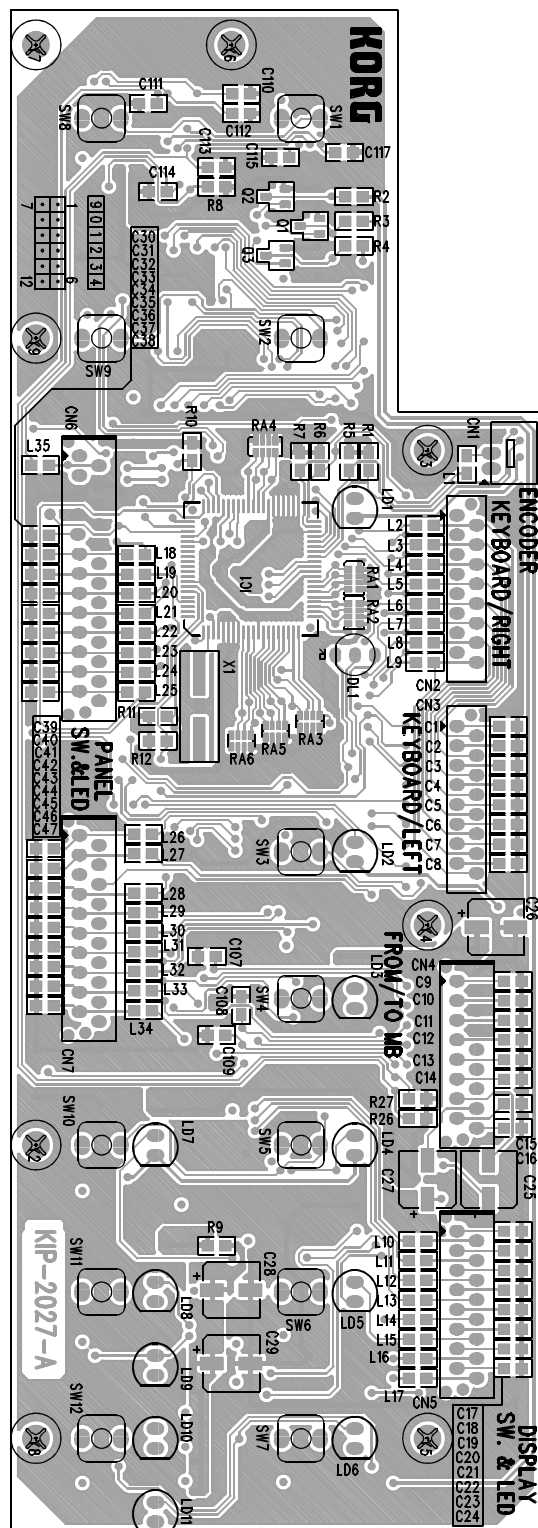


PANEL CONTROLLER KIP-2027 SCHEMATIC DRAWING

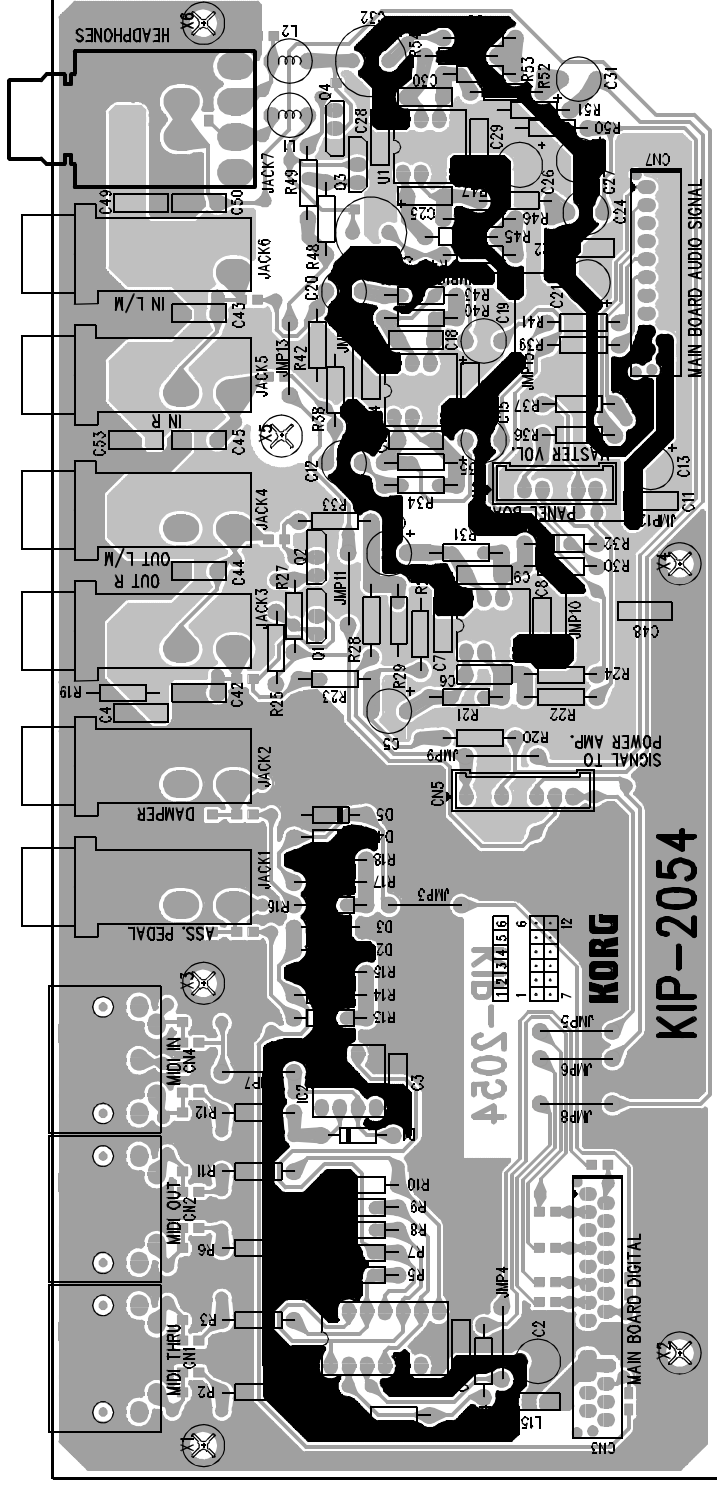
PANEL CONTROLLER KIP-2027 BOTTOM SIDE



PANEL CONTROLLER KIP-2027 TOP SIDE

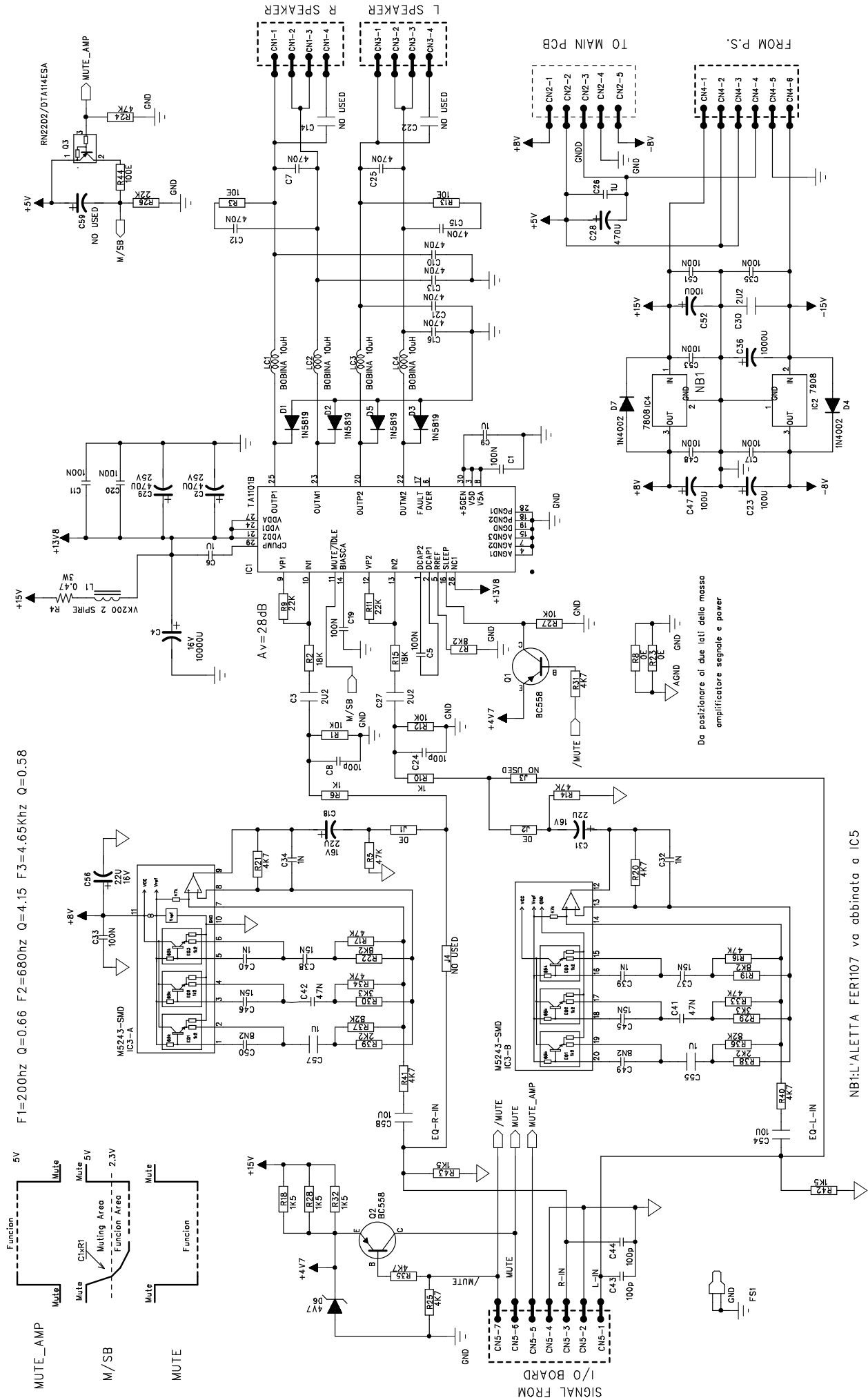


OUTPUT BOARD KIP-2054 COMPONENT SIDE



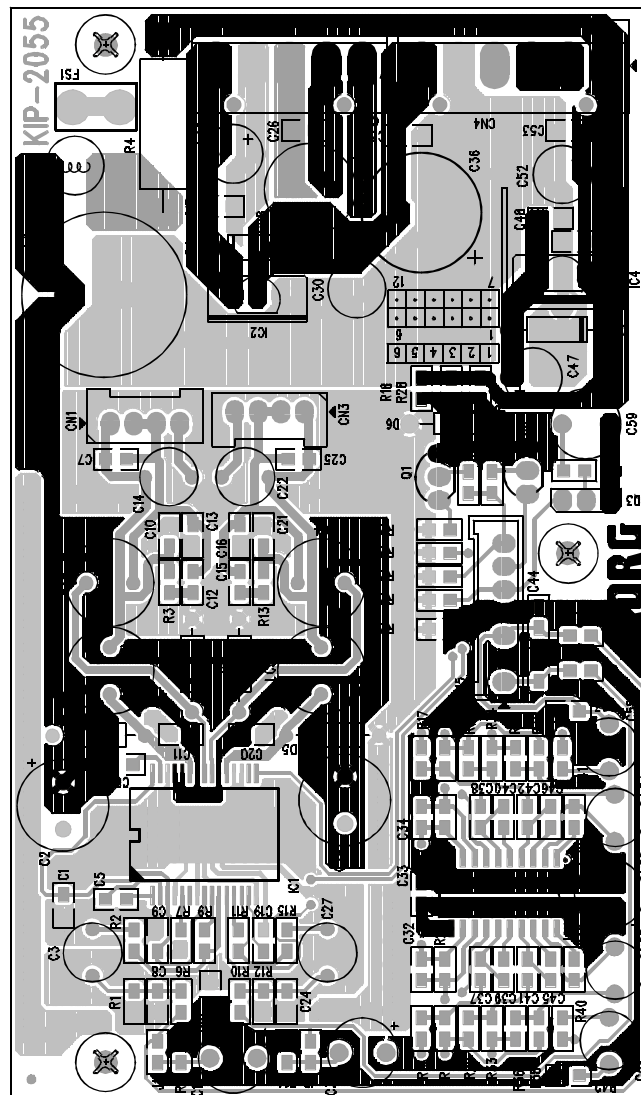
POWER AMPLIFIER KIP-2055 SCHEMATIC DRAWING

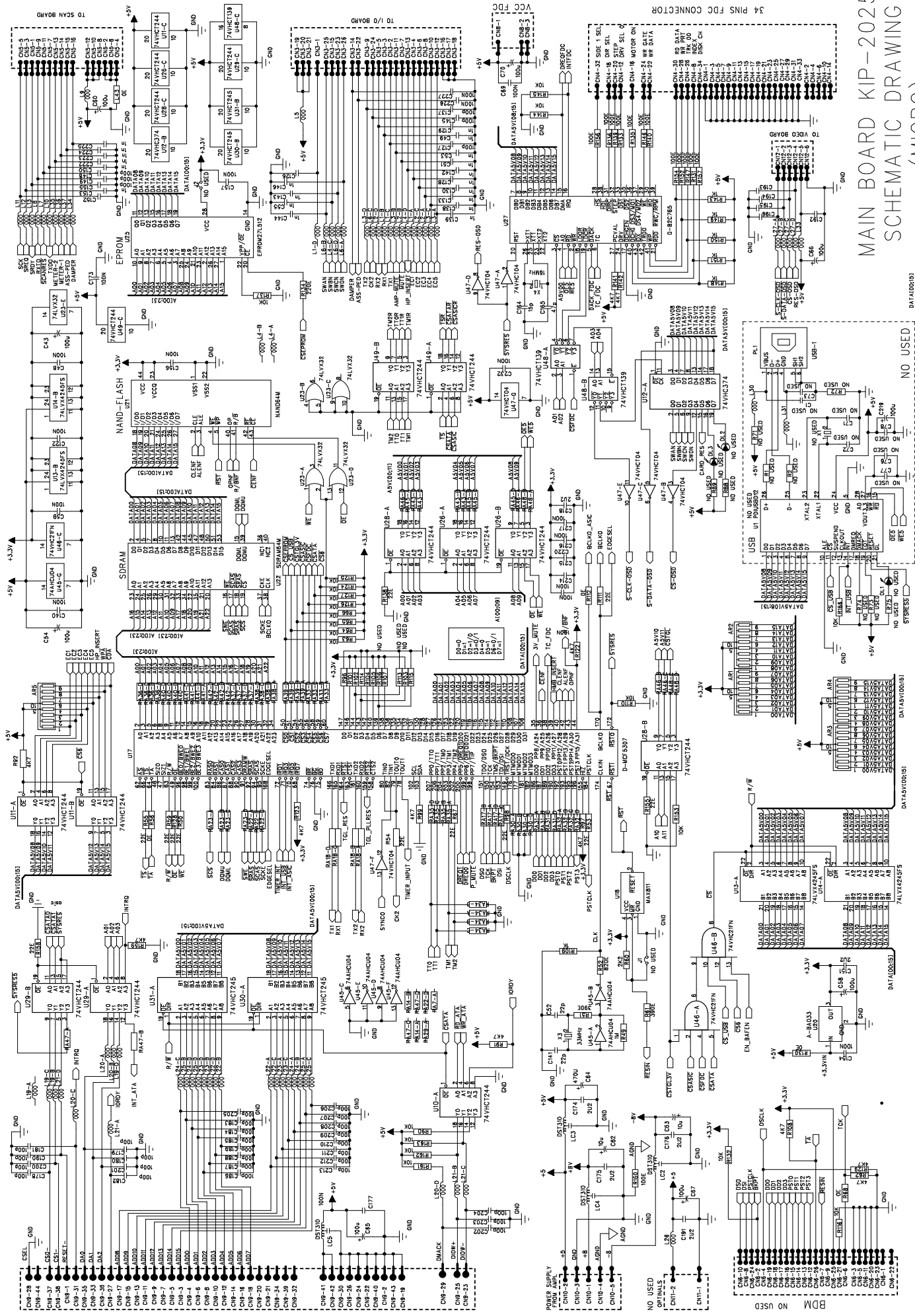
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NB1:LALETTA FER1107 va abbinata a IC5

POWER AMPLIFIER KIP-2030 COMPONENT SIDE





MAIN BOARD KIP-2025
SCHEMATIC DRAWING
(MICRO)

DATA10001

NO USED

NO USED

NO USED

NO USED

NO USED

NO USED

NO USED

NO USED

NO USED

NO USED

NO USED

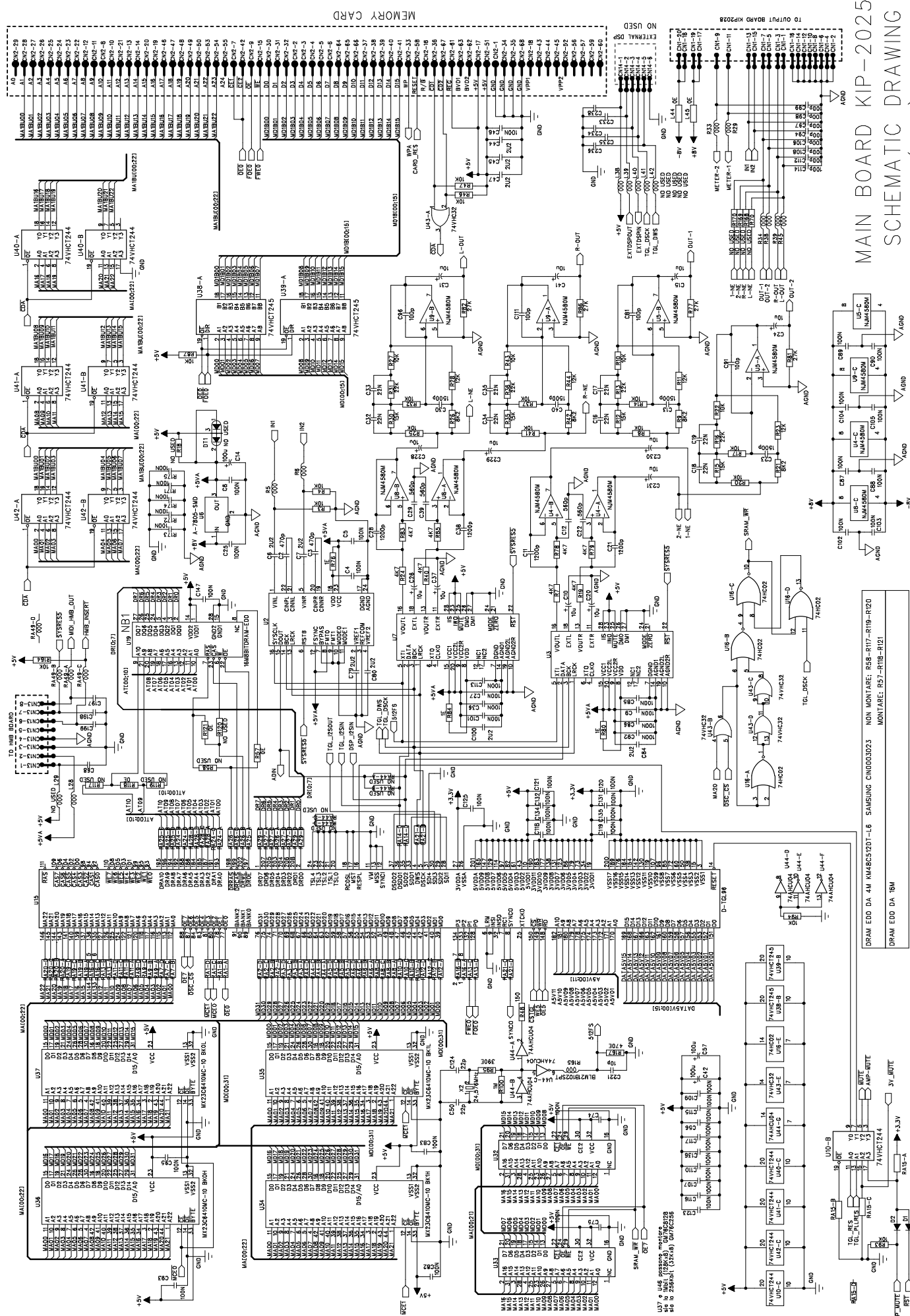
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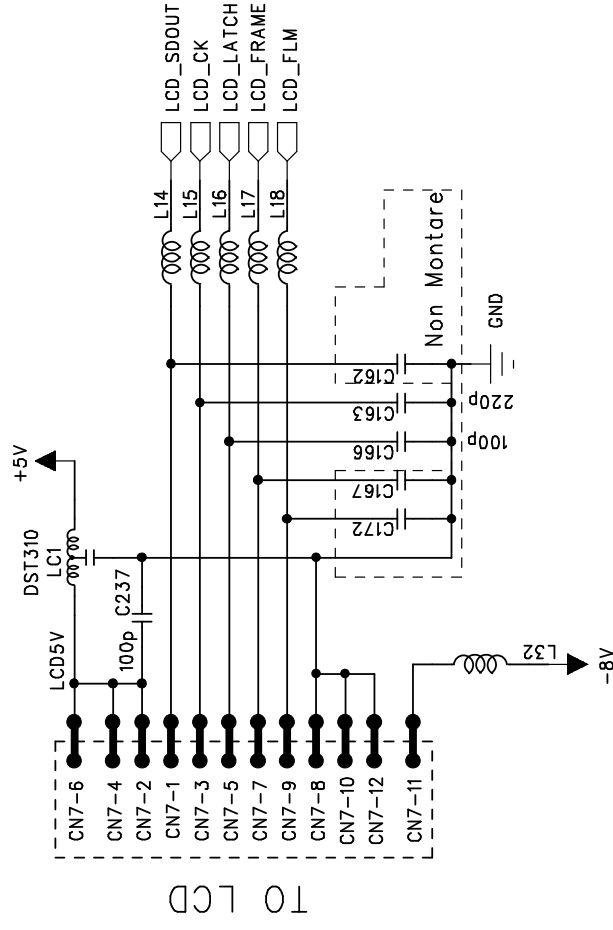
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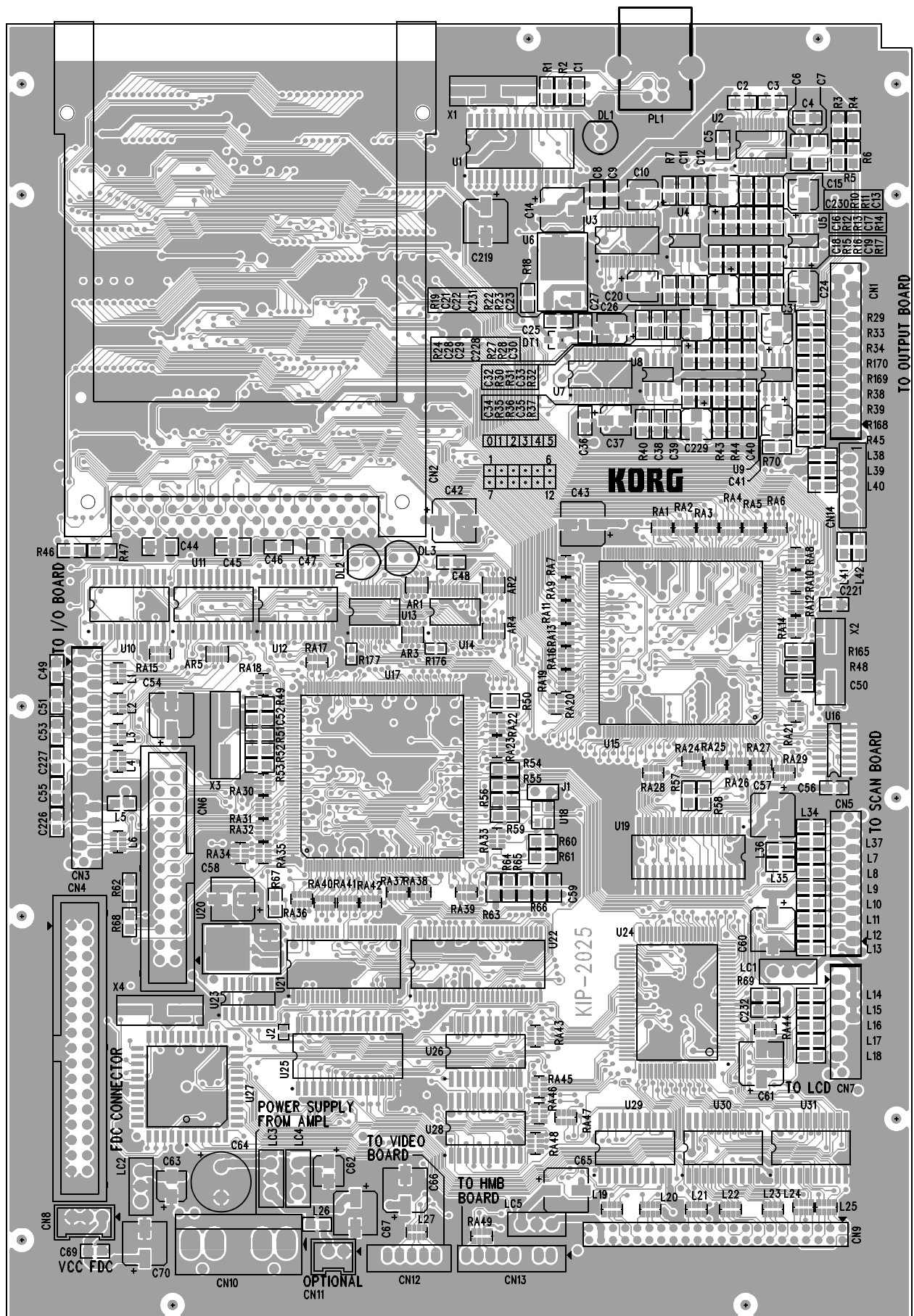


MAIN BOARD KIP-2025 SCHEMATIC DRAWING (TGL)

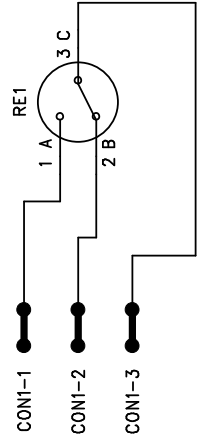


MAIN BOARD KIP-2025 SCHEMATIC DRAWING (ASIC)

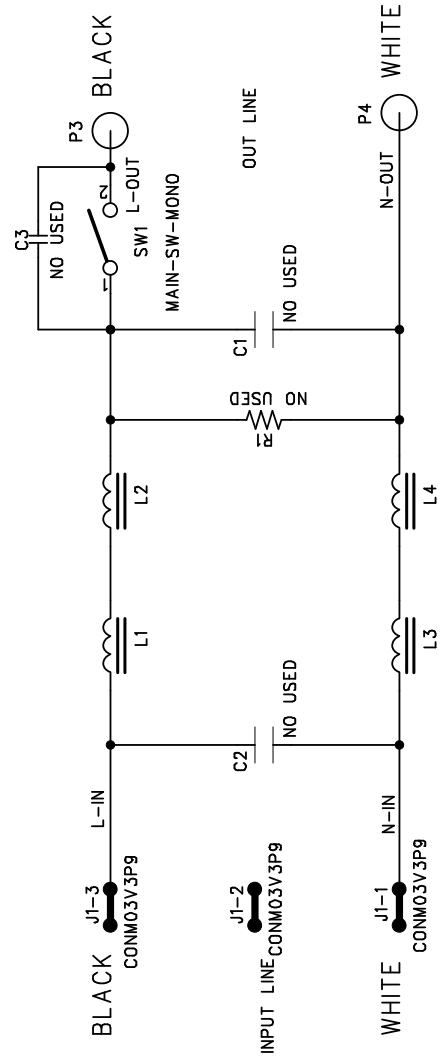
MAIN BOARD KIP-2025 TOP SIDE



ENCODER KIP-2034 SCHEMATIC DRAWING



MAIN FILTER KIP-2038 SCHEMATIC DRAWING



HARNESSES (FOR Pa80 UNLESS OTHERWISE SPECIFIED)

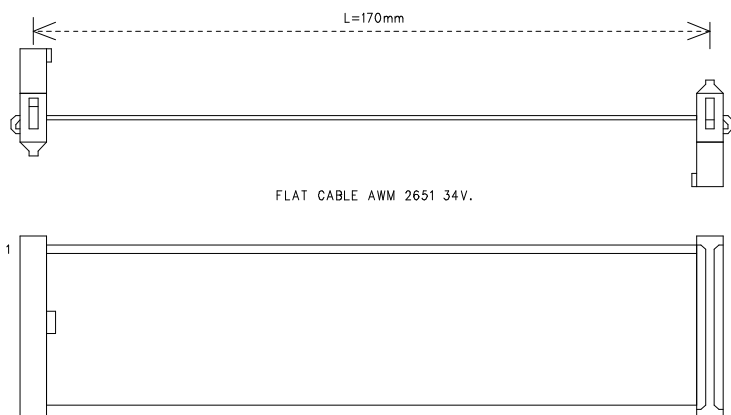
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FDD/MAIN BOARD



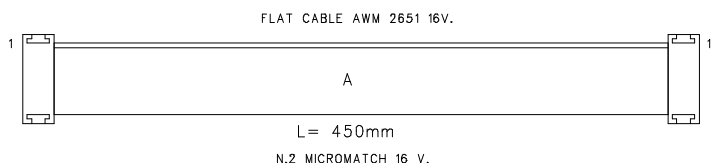
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FDD/MAIN BOARD



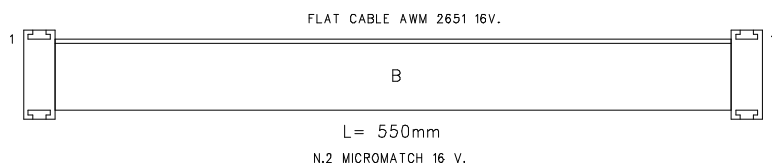
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KEYBOARD A/MAIN BOARD



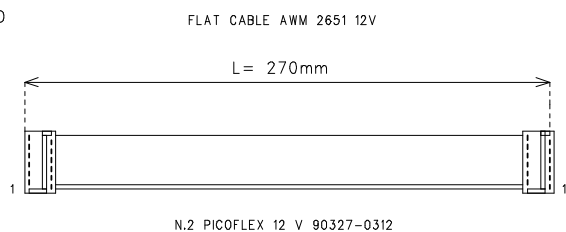
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KEYBOARD B/MAIN BOARD



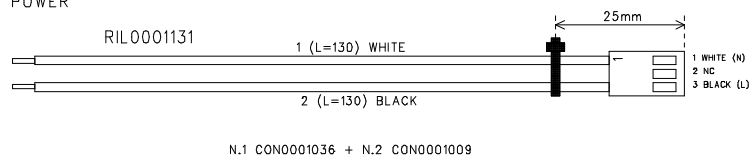
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LCD



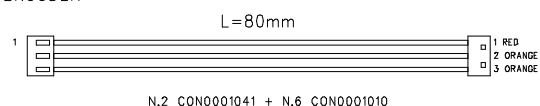
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POWER



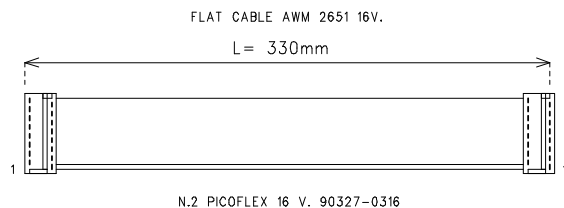
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ENCODER



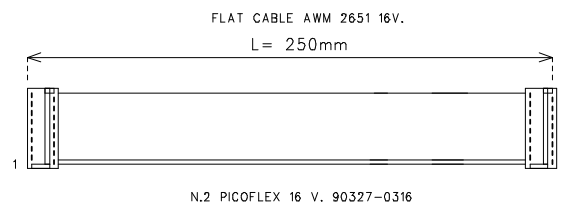
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LCD SWITCH



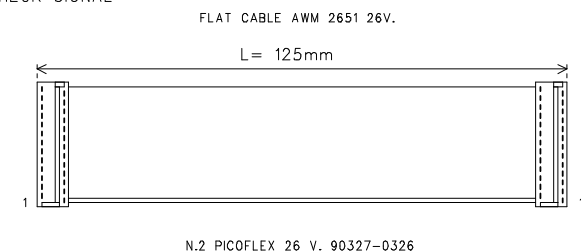
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SCAN MAIN BOARD



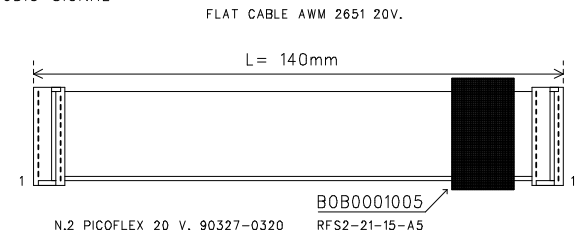
CODE: RIL0001133

CHECK SIGNAL



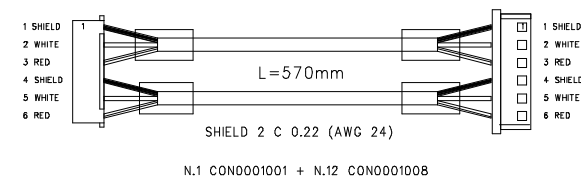
CODE: RIL0001191

AUDIO SIGNAL



CODE: RIL0001130

POTENTIOMETERS



HARNESSES (FOR Pd80 UNLESS OTHERWISE SPECIFIED)

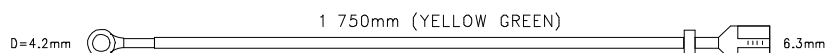
RIL0001130

GROUND CABLE



RIL0001184

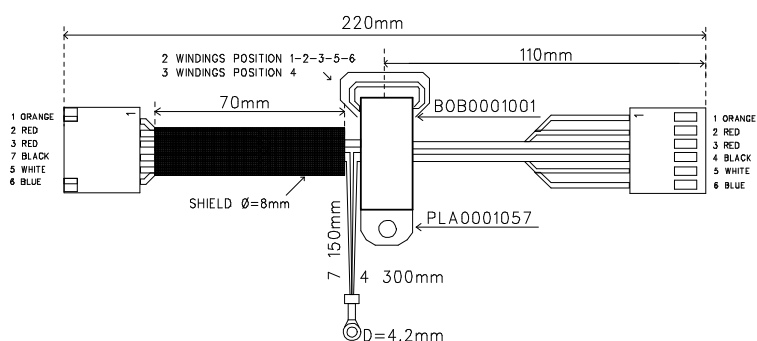
GROUND CABLE



RIL0001178

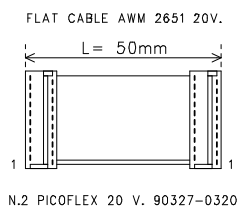
PTSC45/AMPLIFIER

CABLAGGIO PT45C/AMPLIFICATORE PA60



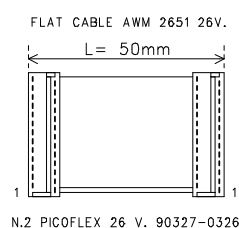
RIL0001136

PANEL/CONTROLLER



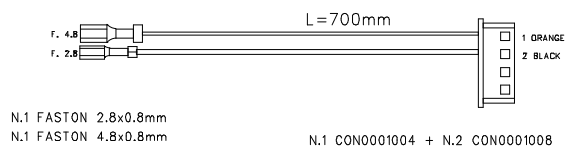
RIL0001135

PANEL/CONTROLLER



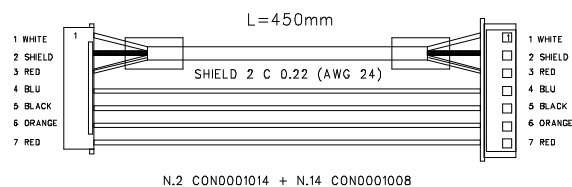
CODE: RIL0001177

SPEAKERS



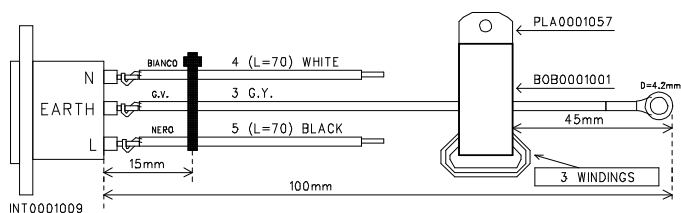
CODE: RIL0001123

MAIN BOARD POWER AMPLIFIER



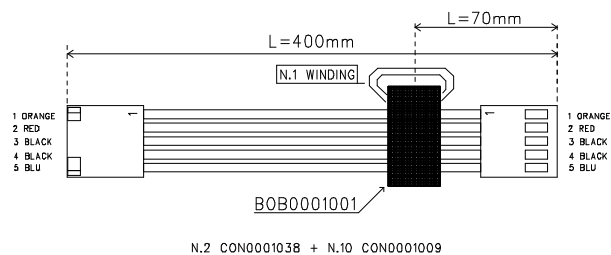
CODE: RIL0001119

POWER



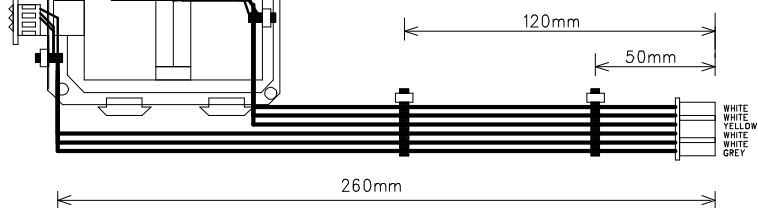
CODE: RIL0001190

MAIN BOARD/POWER AMPLIFIER



FDD0001014

JOYSTICK



Pa60 PART LIST

PART LIST ELECTRIC COMPONENTS

CODE	PART-TYPE	DESCRIPTION	QTY
GRA0002014	PCB ASSEMBLY KIP-2014	PANEL BOARD	1
GRA1002027	PCB ASSEMBLY KIP-2027	PANEL CONTROLLER	1
GRA0002054	PCB ASSEMBLY KIP-2054	OUTPUT BOARD	1
GRA0002055	PCB ASSEMBLY KIP-2055	DIGITAL AMPLIFIER	1
GRA0002034	PCB ASSEMBLY KIP-2034	ROTARY ENCODER	1
GRA0002025	PCB ASSEMBLY KIP-2025	MAIN BOARD	1
GRA0002038	PCB ASSEMBLY KIP-2038	MAIN FILTER	1

PART LIST PANEL BOARD KIP-2014

CODE	PART-TYPE	REFERENCE	QTY
DIX0005300	SIGNAL DIODE 1 N 4148	D1-70	70
INT0001008	SWITCH	SW1-70	70
LED0001002	RED LED 2mm WITH SPACER	DL1-16 DL18-33	32
LED0005002	BICOLOR LED 3mm red/green	DL17	1
POT0001003	LIN. POTENTIOMETER 10KBX2 PAR.P	VR1	1
POT0001004	LIN. POTENTIOMETER 10KB PAR.POL	VR2-3	2
POT0001008	LIN. POTENTIOMETER 10KB 45mm	VR4	1
TRS0001001	NPN DIGITAL TRANSISTOR	Q1-5	5

PART LIST PANEL CONTROLLER KIP-2027

CODE	PART-TYPE	REFERENCE	QTY
BOB0005002	EMI FERRITE BLM21B102SPT	L1-85	85
CIN0002012	I.C. TC74HC138 AFN SMD	IC2 IC4-5	3
CIN0002041	I.C. SW/LED/KBD SCANNER (NKS3)	IC1	1
CIN0002043	I.C. HCF74HC4053D SMD	IC3	1
DIX0006000	DOUBLE DIODE SMD DA204KT146	DD1-2	2
DIX0006003	DIODE SMD RLS-4148	D1-12	12
INT0001008	SWITCH	SW1-12	12
LED0005001	RED LED 2mm WITH SPACER	LD1-8 LD10	9
LED0005002	BICOLOR LED 3mm red/gree	DL1	1
QUA0005003	CER. RESONATOR 16 Mhz 3 PIN	X1	1
TRS0002001	NPN TRANSISTOR DTC114EKA SMD	Q1-3	3
TRS0002002	PNP TRANSISTOR DTA114EKA SMD	Q4-11	8

PART LIST OUTPUT BOARD KIP-2054

CODE	PART-TYPE	REFERENCE	QTY
BOB0005001	EMI SUPP. COIL VK200	L1-2	2
BOB0005002	EMC COIL SMD	L3-8 L16-22	13
BOB0005003	EMI FILTER DST310	L15	1
CIN0001009	DUAL HEADPH.OP. AMP.	U1	1
CIN0001012	PHOTOCOUPLER	IC2	1
CIN0001020	HEX INV	IC1	1
CIN0001021	BA15218 DUAL LOW NOISE OP. AMP.	IC3-4	2
DIX0005300	1N4148 H. SPEED SW. DIODE	D1-5	5

FV = FULL VIEW **D** = Pa80 DISASSEMBLY **LD1** = LOWER CASE DISASSEMBLY 1 **LD1** = LOWER CASE DISASSEMBLY 2
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UD4 = UPPER CASE DISASSEMBLY 4 **PSS** = POWER SWITCHING SUPPLY **MB** = MAIN BOARD GROUP
FD = FLOPPY DISK GROUP **OB** = OUTPUT BOARD

PART LIST DIGITAL AMPLIFIER KIP-2055

CODE	PART-TYPE	REFERENCE	QTY
BOB0001004	BOBINA 10uH	LC1-4	4
BOB0005001	EMI SUPP. COIL VK200	L1	1
CIN0002046	SMD 3 ELEM. DUAL CH. GRAPHIC EQ.	IC3	1
DIX0005002	SIGNAL DIODE	D4 D7	2
DIX0005004	DIODO FAST 1N5819	D1-3 D5	4
DIX0005301	ZENER VOLTAGE REG. DIODE, VZ=4.7V	D6	1
FER0001107	DISSIPATORE TO220	X6	1
TRS0001002	TRANSISTOR PNP DIGITALE RN2202	Q3	1
TRS0001010	+8V REG. 1A TO220	IC4	1
TRS0001014	STEREO PWM AMPLIFIER	IC1	1
TRS0001011	-8V REG. 1A TO220	IC2	1
TRS0005002	PNP TRANSISTOR BC558	Q1-2	2

PART LIST MAIN BOARD KIP-2017

CODE	PART-TYPE	REFERENCE	QTY
BOB0005002	EMI FERRITE BLM21B102SPT	L5 L7-18 L26 L28 L32-37 R5-6 R29 R33-34 R38-39 R45 R165	30
BOB0005003	FERRITE DST310-55Y5S223S50	LC1-5	5
BOB0005004	ARRAY IND.BLA3216A102S4 SMD	L1-4 L6 L19-25 L27 RA49	14
CIN0002006	I.C. PCM1716E SMD	U3 U7	2
CIN0002025	I.C. GM82C765BS-44 (F.D.C)	U27	1
CIN0002026	I.C. SN74AHC04D HEX.UND.	U44-45	2
CIN0002027	I.C. TC74HC02AFN QU.2INP	U16	1
CIN0002028	I.C. TC74LVX4245FS TRANSCE	U13-14	2
CIN0002029	I.C. TC74VHC21FN	U46	1
CIN0002030	I.C. SN74AHC32D	U43	1
CIN0002031	I.C. SN74AHC374DW	U12	1
CIN0002032	I.C. SN74AHCT04D	U47	1
CIN0002033	I.C. SN74AHCT139D	U48	1
CIN0002034	I.C. SN74AHCT244DW	U10-11 U26 U28-29 U40-42 U49	9
CIN0002035	I.C. SN74AHCT245DW	U30-31 U38-39	4
CIN0002036	I.C. FSC74LVX32M QUA.2-INP	U23	1
CIN0002037	I.C. TGL96 MB87F1710-PFV-S	U15	1
CIN0002038	I.C. PCM1800 20bit CONV.	U2	1
CIN0002039	I.C. MICRO 32b.XCF5307FT66B	U17	1
CIN0002040	I.C. NJM4580M OP.AMP.	U4-5 U8-9	4
CIN0003013	I.C. GM76C256CLLFW-55	U32-33	2
CIN0003016	I.C. MX23C6410MC-10 BKOL	U37	1
CIN0003017	I.C. MX23C6410MC-10 BKOH	U36	1
CIN0003018	I.C. MX23C6410MC-10 BK1L	U35	1
CIN0003019	I.C. MX23C6410MC-10 BK1H	U34	1
CIN0003020	I.C. MBCG46183-205(MCM99)KORG IT	U24	1
CIN0003021	I.C. OTP MX27L512MC-12	U25	1
CIN0003022	NAND FLASH TC58V64AFT	U21	1
CIN0003023	I.C. DRAM KM48C512DT-L6(4MX8)	U19	1
CIN0003025	IC. SDRAM 64M GM72V661641CT-7J	U22	1
CIN0004005	RES. GEN.3,3V ETC811SUC	U18	1
QUA0006003	CER. RES. SMD HCM49 6MHz	X1	1
QUA0006004	CER. RES. SMD HCM49 16MHz	X4	1
QUA0006005	CER. RES. SMD HCM49 24.576MHz	X2	1
QUA0006006	CER. RES. SMD HCM49 33MHz	X3	1
TRS0002006	REG. +5V 0.5A BA178M05FP	U6	1
TRS0002007	REG. +3.3V 0.5A BA033FP	U20	1
VTA0001065	SCREWS M2X8 TC Zn	Y1-4	4

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PART LIST HEADPHONE BOARD KIP-2031

CODE	PART-TYPE	REFERENCE	QTY
BOB0005002	EMI FERRITE BLM21B102SPT	L1-2	2
CIN0001009	DUAL HEADPH. OP.M5216P	U1	1
TRS0001008	NPL BIPOLAR TRASISTOR 2SD2144S	Q1-2	2

PART LIST ROTARY ENCODER KIP-2034

CODE	PART-TYPE	REFERENCE	QTY
INT0001006	INCREMENTAL ENCODER	RE1	1

PART LIST MAIN FILTER KIP-2038

CODE	PART-TYPE	REFERENCE	QTY
BOB0005001	COIL VK200 2 SPIRE	L1-4	4
INT0001012	POWER SWITCH SS-160-7-A	SW1	1

PART LIST AFTERTOUCHE BOARD KIP-2006

CODE	PART-TYPE	REFERENCE	QTY
CIN0001004	INT.LMC662ACN OP.RAIL TR.	U1-B	1
TRX0005001	ORIZ. TRIMMER P5mm 3k3	VR2	1
TRX0005002	ORIZ. TRIMMER P5mm 470k	VR1	1

PART LIST WOOD COMPONENTS

CODE	PART-TYPE	REFERENCE	QTY
LEG0001005	DX SPEAKER BOX PANEL	LD2	1
LEG0001006	SX SPEAKER BOX PANEL	LD2	1

PART LIST METAL COMPONENTS

CODE	PART-TYPE	REFERENCE	QTY
FER0001090	SPEAKER NET	UD4	2
FER0001091	F.D.D. SUPPORT	FD	1
FER0001092	MAIN BOARD LOWER SHIELD	MB	1
FER0001093	MAIN BOARD UPPER SHIELD	MB	1
FER0001127	OUTPUT BOARD SUPPORT	OB	1
FER0001095	POWER SUPPLY SUPPORT	PSS	1
FER0001038	MUSIC REST	FV	1
FER0001097	POWER SUPPLY GRID	LD1	1
FER0001099	UPPER CASE HOLDER	OB	1
FER0001153	KEYBOARD SUPPORT	LD1	2

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PART LIST PLASTIC COMPONENTS

CODE	PART-TYPE	REFERENCE	QTY
PLA0001037	BASS REFLEX TUBE	LD2	2
PLA0001046	SMALL CABLE HOLDER	LD1 UD3 MB	4
PLA0001047	BIG CABLE HOLDER	LD1	1
PLA0001052	MAIN BLACK SWITCH	LD2	1
PLA0001062	FCV-100 PAN TY CABLE TIE	LD1 UD1	3
PLA0001036	PLT1-M PAN TY CABLE TIE	UD3	1
PLA0001080	POTENTIOMETER KNOB	D	4
PLA0001081	RUBBER KNOB	UD4	81
PLA0001085	DIAL KNOB	D	1
PLA0001091	START STOP SWITCH	UD4	1
PLA0001121	BLACK PLUG	LD1	1
PLA0002044	LOWER CASE	LD1	1
PLA0002045	UPPER CASE	UD4	1

PART LIST HARNESSSES

CODE	PART-TYPE	REFERENCE	QTY
RIL0001030	MASTER VOLUME	UD1	1
RIL0001040	PLUG		1
RIL0001123	AMPLIFIER	LD1	1
RIL0001126	ROTARY ENCODER	UD3	1
RIL0001127	FDD/CPU SUPPLY	UD1 MB	1
RIL0001130	GROUND	PSS	1
RIL0001132	SCAN/CPU FLAT CABLE	UD2 UD3	1
RIL0001133	SIGNAL FLAT CABLE	UD1 MB	1
RIL0001135	PANEL-A FLAT CABLE	UD3	1
RIL0001136	PANEL-B FLAT CABLE	UD3	1
RIL0001137	KEYB/CPU-A FLAT CABLE	UD3	1
RIL0001138	KEYB/CPU-B FLAT CABLE	UD3	1
RIL0001139	FDD/CPU FLAT CABLE	UD1 MB	1
RIL0001140	LCD FLAT CABLE	UD2 UD4	1
RIL0001141	LCD SWITCH FLAT CABLE	UD3 UD4	1
RIL0001177	SPEAKERS	LD1	2
RIL0001178	PT45C/AMPLIF.	LD1	1
RIL0001184	MAIN BOARD GND	LD1	1
RIL0001190	CPU SUPPLY	LD1	1
RIL0001191	AUDIO SIGNAL FLAT CABLE	UD1 MB	1
RIL0001119	MAIN INPUT	PSS	1
RIL0001131	MAIN OUTPUT	PSS	1

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PART LIST SCREWS

CODE	PART-TYPE	REFERENCE	kgf per cm	QTY
VTA0001002	4x12TFR ZN PR	LD1	12	1
VTA0001004	4x15 TFR ZN PR	D LD2	10 – 12	8
VTA0001005	3Mx10 TC ZN	PSS	6	4
VTA0001010	3x16TC ZN PR	D UD3	8 – 10	12
VTA0001011	GROVER Ø 4mm	LD1 PSS		3
VTA0001032	3Mx8 TC ZN	MB OB UD1	6 – 8 – 6	7
VTA0001034	4x20 TC PR ZN	LD1 LD2	12	27
VTA0001037	2,9x6,5 TC SELFTHREADING NERE SP	MB OB	8	10
VTA0001038	3x8 TC PR TROP.SP	UD1 UD3	8 – 6	41
VTA0001039	2.9x9.5TC SELFTHREADING ZN SP	D UD1 UD4	8	9
VTA0001040	4,2x8 TFR SELFTHREADING TROP. SP	LD1 LD2	12	7
VTA0001046	3Mx6 TC SELF TAPPING	PSS FD	10 – 6	6
VTA0001049	2,2x6,5 TC ZN	OB	6	6
VTA0001050	M4x8 TC SELF TAPPING	LD1 PSS	15	3
VTA0001051	3x13 TC PR ZN	LD1 LD2 UD2	8	13
VTA0001060	2.9x9.5 TSP ZN	PSS	6	2
VTA0001067	3.5x16 TC AGG-BZ	D	10	9
VTA0001068	2.9x16 TC ZN	UD3	6	4

OTHER PARTS

CODE	PART-TYPE	REFERENCE	QTY
ALT0001015	WIDE RANGE SPEAKER	LD1	2
BOB0001001	FERRITE RT25-150-120-K5B	LD1 UD1	2
TAS0001005	KEYBOARD TP7	UD3	1
TRA0004003	POWER SWITCHING SUPPLY	PSS	1
FEL0001022	FIBERFORM 62 TE 200X200x40	LD2	2
FEL0001029	3M 18m.m. ADHESIVE TAPE	LD1 UD1 UD3 FD	0.6 m
FEL0001030	BUMPON 3M ART.SJ5023	LD2	6
FEL0001034	1.5x13x1200 ADHESIVE RUBBER	LD2	1
FEL0001035	1.5X13X250 ADHESIVE RUBBER	LD1	2
FEL0001040	5X10X30 ADHESIVE RUBBER	LD2	2
FEL0001052	16X40X1 ADHESIVE FELT	LD1	7
FEL0001055	AD-30M (177.2X182X4) FILTER	UD4	2
FEL0001056	12mm DOUBLE SIDE ADHESIVE TAPE		1,32 m
FEL0001058	68X25X5 ADHESIVE RUBBER	UD3 MB	2
FEL0002037	PA60 SERIAL NUMBER	LD2	1
FEL0001077	FDD-MAINBOARD SHIELD	MB	1
FDD0002005	DISPLAY GROUP 901- RI.CO	UD4	1
FDD0001014	BLACK JOYSTICK	UD3	1
FDD0001001	FLOPPY D.D. LOW NOISE	FD	1

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