KORG

Pa2X PRO

SERVICE MANUAL

Pa2Xpro specifications

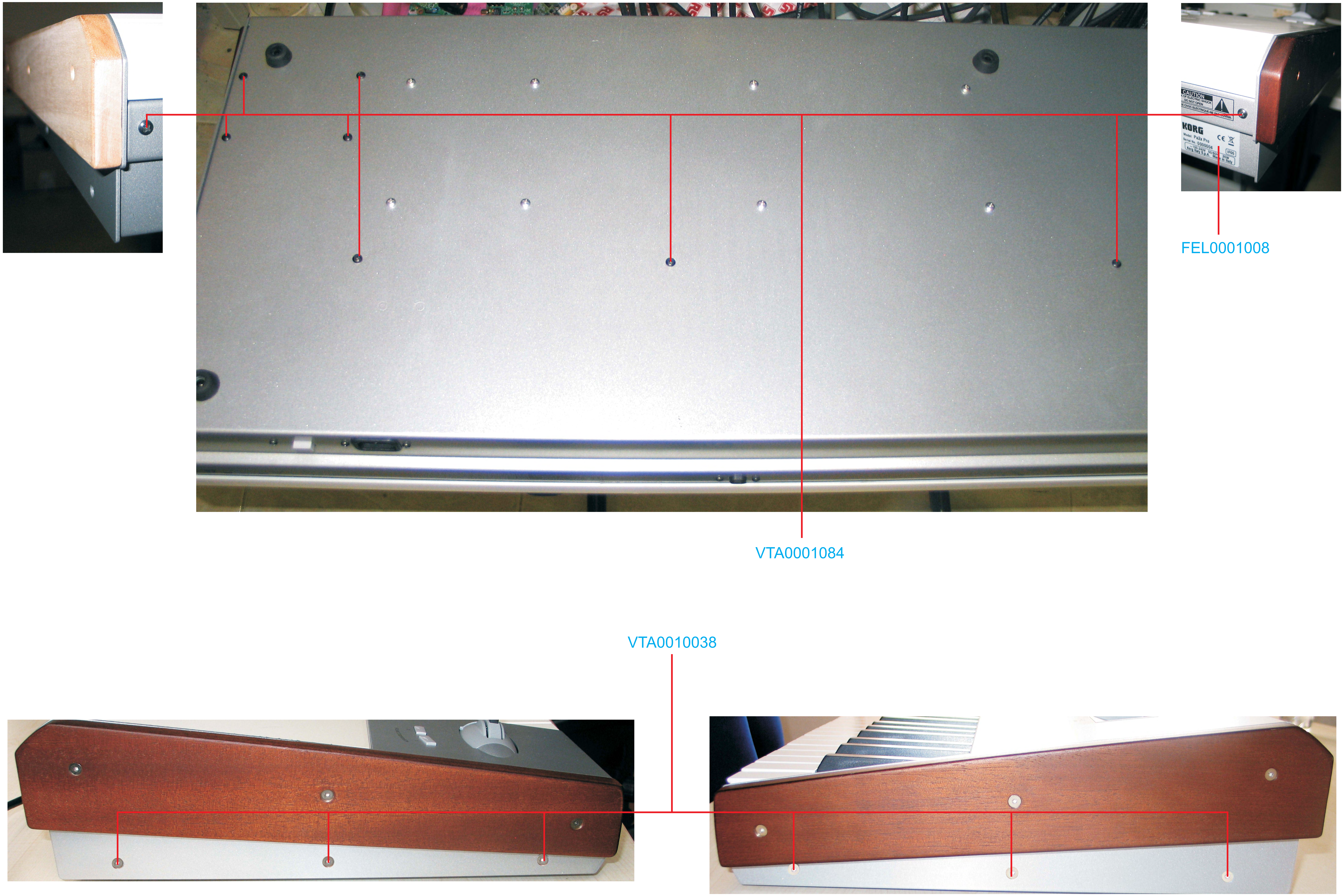
Keyboard	76 keys with Velocity and Aftertouch (TP8 same as the Pa1X pro)
	SOUND DATA
Tone Generator	120 Voices, 120 Osc. - EQ for each track - Filters with Res.+ SOUND ARTICULATION
Multitimbral-Parts	Internal: 40 channels - Midi: 16 channels
ROM Sounds	approx. 1050 (incl. Stereo Piano and GM2 sounds) + 72 Drum Kits+ GM2 Compatibility
RAM Sounds	256 Sounds - 64 Drum Kits
Digital Drawbars	9 Footages (if possible using the CX Board or DSP board)
Sound Edit	On-board full editing for Sounds and DrumKits
PCM RAM memory	128 MB ROM + 256 MB RAM
Sampling	Record, Edit, Time Slice, Load/Import, Export - PCM RAM Memory: 256MB standard
Effects	4 Stereo Master - TC Helicon for Vocal FX + new FX (TBD)
Real Time Tracks	4 (Upper 1/2/3, Lower) - 4 Pads
Performances	320 User Programmable
	STYLES DATA
Factory Styles	Up to 544 locations - Preloaded Styles: approx. 320
User Styles	96 User + 320 Favorite (all 960 styles are re-writable)
Arranger Tracks	8 (including GUITAR TRACK MODE)
Style Edit	Record & Edit functions
Patterns/Chord Variations	Up to 42 patterns for each style including 3 Intros, 3 Endings, 2 Fills + Break
Style Performance (STS)	Up to 960 x 4 (Real time tracks + Acc. tracks) all programmable
PCM Style Grooves	Using the internal PCM RAM memory
	SEQUENCER
XDS Double Sequencer	Separate transport control - Motorized Balance Slider TBD
4 STS saved with the Song	In SongBook Mode
Direct from Media	Two songs at the same time
Tracks	16 + 16
Sequencer Edit	Record & Edit functions + bmp IMAGE + Frattali o Screen Saver
Score and Lyrics	Lyrics + Cue and SCORE (TBD) !!
Backing Sequence (Quick Record)	Real Time Record - Step Record & Edit
Lyrics/Chords	On-Screen (compatible with most popular formats)
	OTHER FEATURES
Voice Processor	Same as in the Pa800
SongBook and SongBook List	Fully Programmable
MP3 Player	Double MP3 player and recorder as standard + VOCAL REMOVE (TBD)
Other MP3 feature	Pitch shifter e time stretching su Mp3 and iPod detect (file list e information TBD)
Arabic Scale	Programmable
Pads	4 + Stop button
Compatibility	i-series: styles - Pa series: Style, Perf., Sound, Song, Song Book
Operating System	OPOS Multitasking System - Load while playing - Upgradable
Internal SSD Flash memory	512 Mb for O.S, PCM and all Resources
USB for Memory Card	Yes (2 slots - 1 Host Rear , 1 Host Front)
Hard Disk	Included as standard (??)
Amplification	No Amplification (EQ available for the external output and Headphone).
Speakers	NO Speakers
Miscellaneous	Touch Control Beep - Clock (TBD)

Pa2Xpro specifications

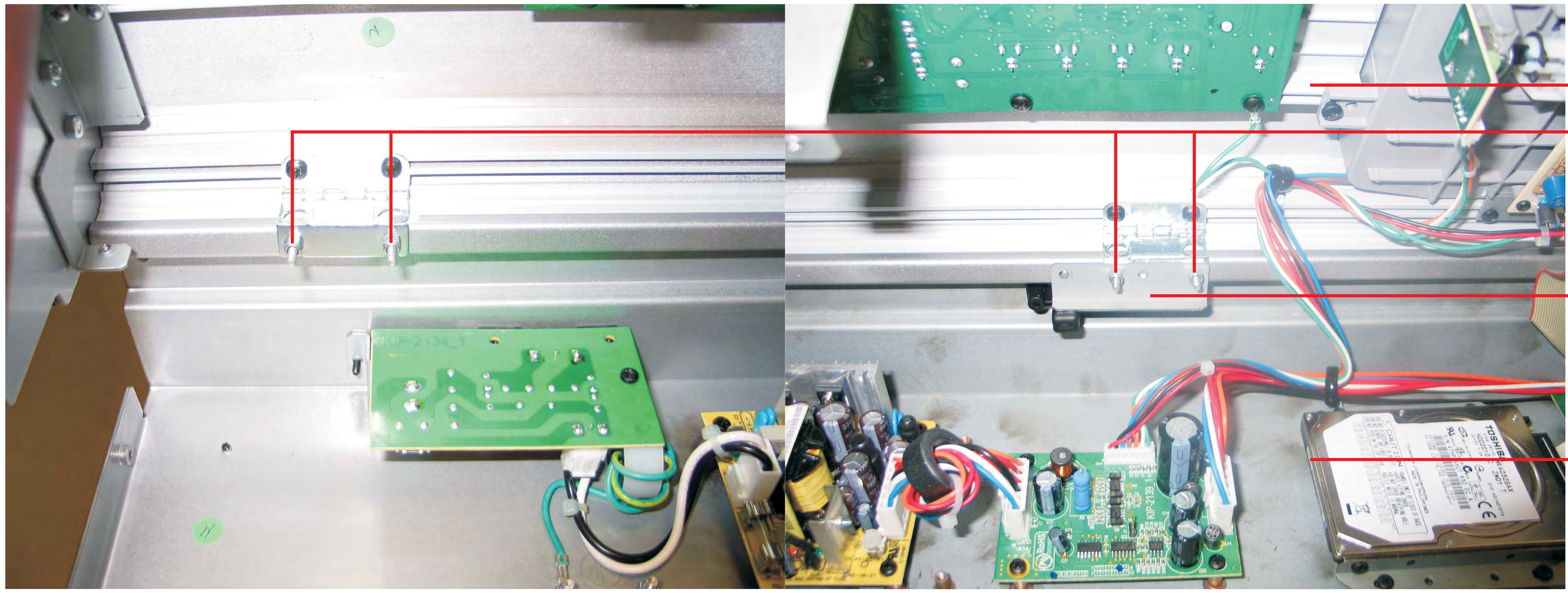
USER INTERFACE	
Mode	Style and Song in the same MODE (with the possibility to rearrange the song using the style engine)
Display	Tilted 320 x 240 Graphical Color Touch Screen Display
Display language	Different Languages for all pages!!
Controls	Joystick - Dial - Up/+ and Down/- buttons
Programmable Controls	2 Switches + 9 Sliders
Cursors	Master Volume - Acc/Seq-Real Time Volume Balance
Switches	Transp.-Memory-Bass Inv.-Man.Bass-Fade-Tap-Synchro-Ensemble
Help System	Multilanguage Hypertext - Contextual
CONNECTIONS	
MIDI	IN - OUT - THRU
USB	USB: 2 Host (2.0 Hi Speed) and 1 Device (2.0 Hi Speed)
Outputs	4 Jack Analog Balanced Output ((Left/Right/Out1/Out2)- Digital Output (TBD)
Inputs	1 Combo XLR Balanced Mic input with gain - 2 Line Inputs
Headphone	1 Front jack connection
Pedals	1 Damper - 1 Assignable Footswitch/Pedal – EC5
Power Supply	AC - Universal Voltage
OPTIONS	
USB Memory	Yes
Hard Disk	HD Included as Standard
CD - FD	through USB Host - not internal
Video Interface	Graphic Video Interface VIF4 - NTSC/PAL board - AS STANDARD
Expression/Volume Pedal	Korg EXP-2 - Korg XVP-10
Multi-Switch Pedal	Korg EC5 or NEW PEDALS?
Damper Pedal	Korg DS-1H (supporting half-pedaling)
Switch Pedal	Korg PS-1
INFO	
Consumption	35W
Dimensions	W=365mm, H1=136mm, H2(opened LCD)=221mm, L=1207mm
Weight	18Kg

W	=	365 mm	(14.4 in)
H1	=	136 mm	(5.3 in)
H2	=	221 mm	(8.7 in)
L	=	1207 mm	(47.5 in)
Weight	=	18 Kg	(39.7 lbs)

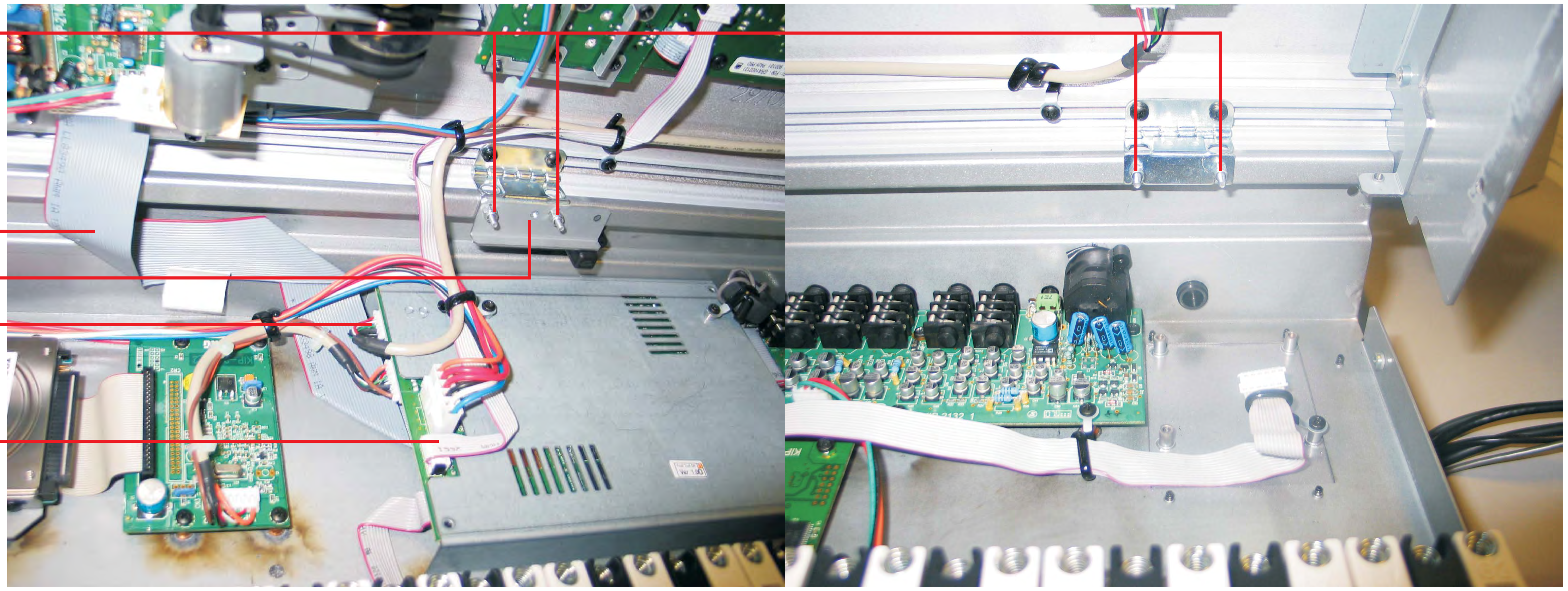
Full view



Disassembly 1



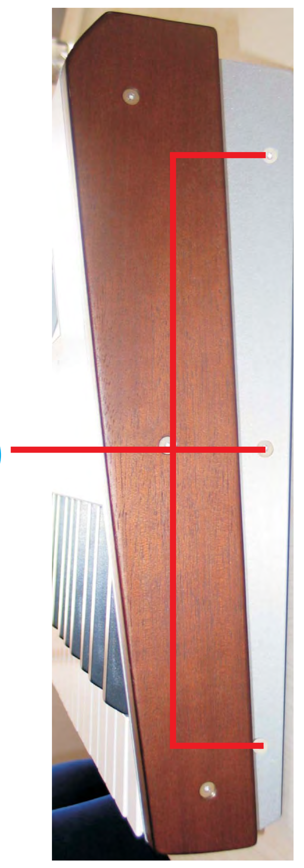
upper case
VTA0001023
FER0010117
lower case



VTA0001023
CAV0010031
FER0010117
CAV0010038
CAV0010028

PLA0010039 PLA0001146

PLA0001136
VTA0010038 (dx-sx)
PLA0001136



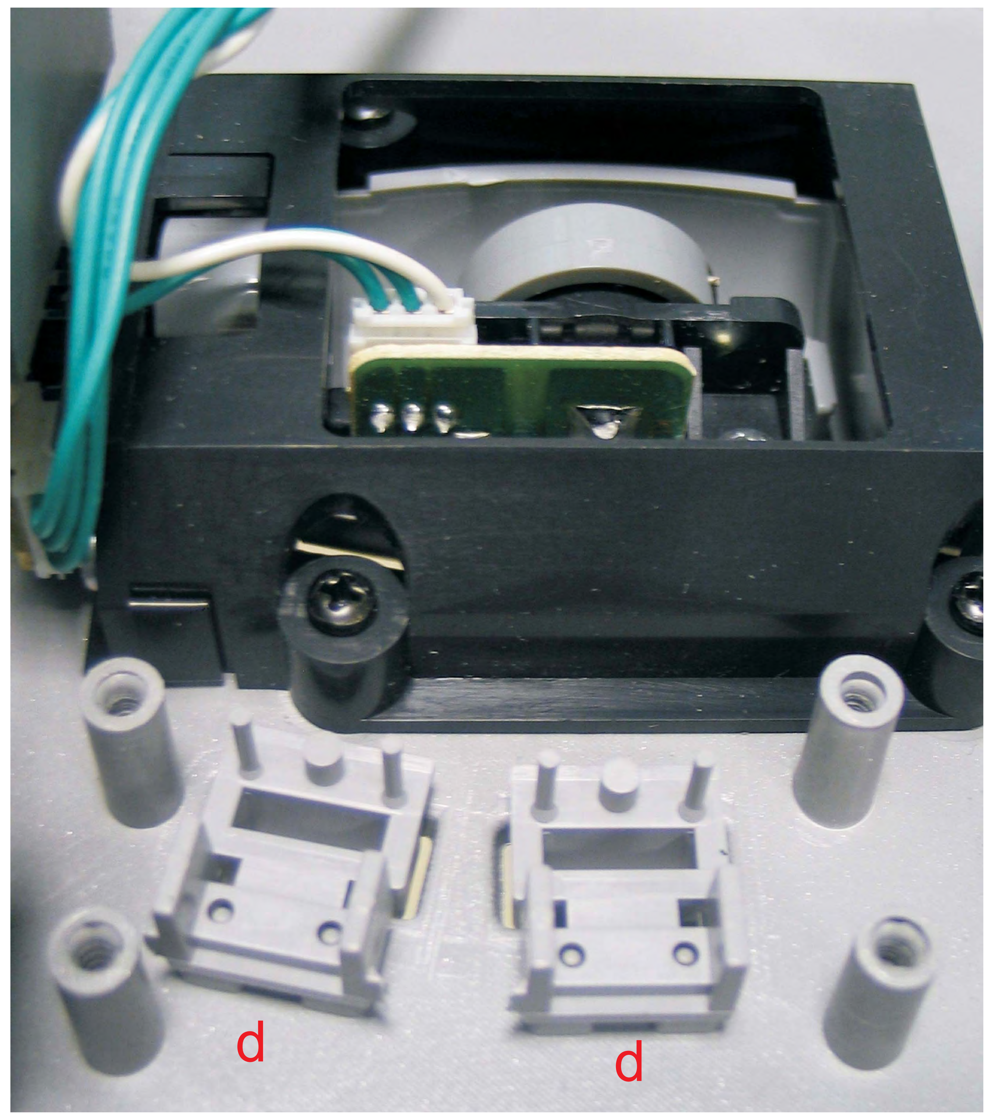
Disassembly 2

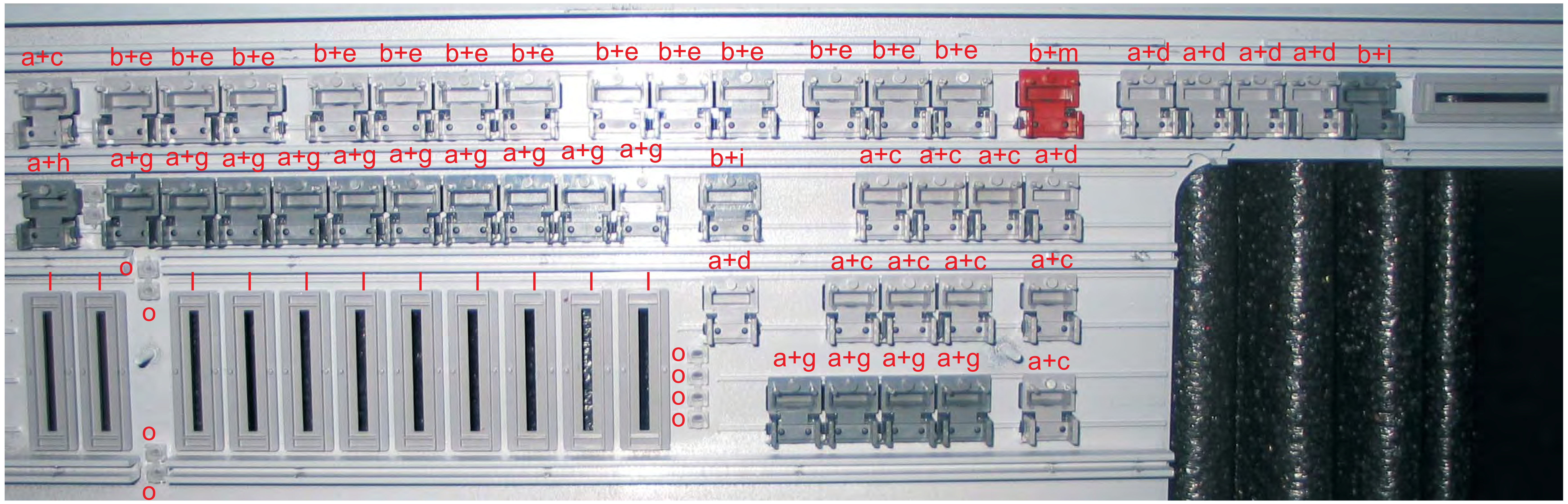
Lower Case

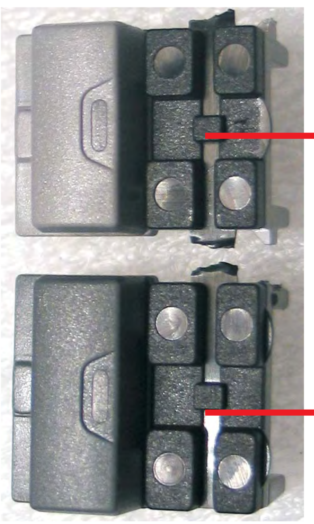
a = n° 28 VTA0001031

b = n° 9 VTA0001037

Upper Case disassembly 1

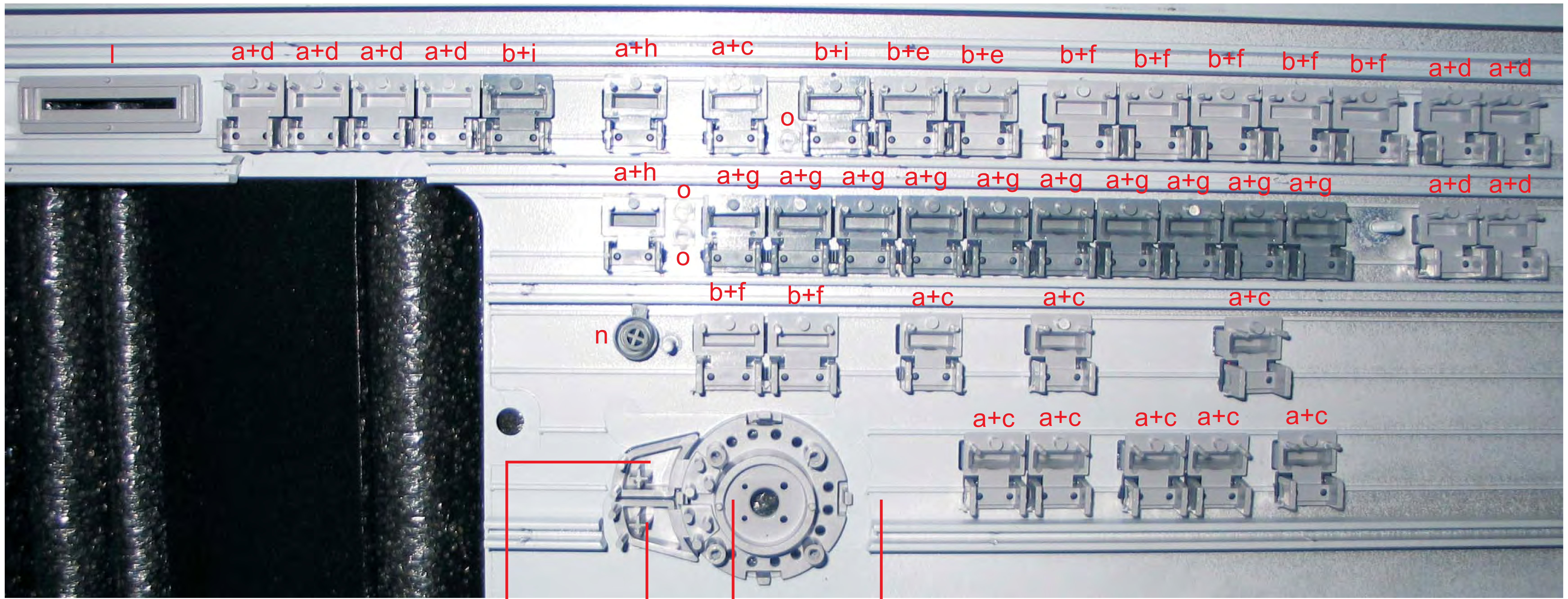




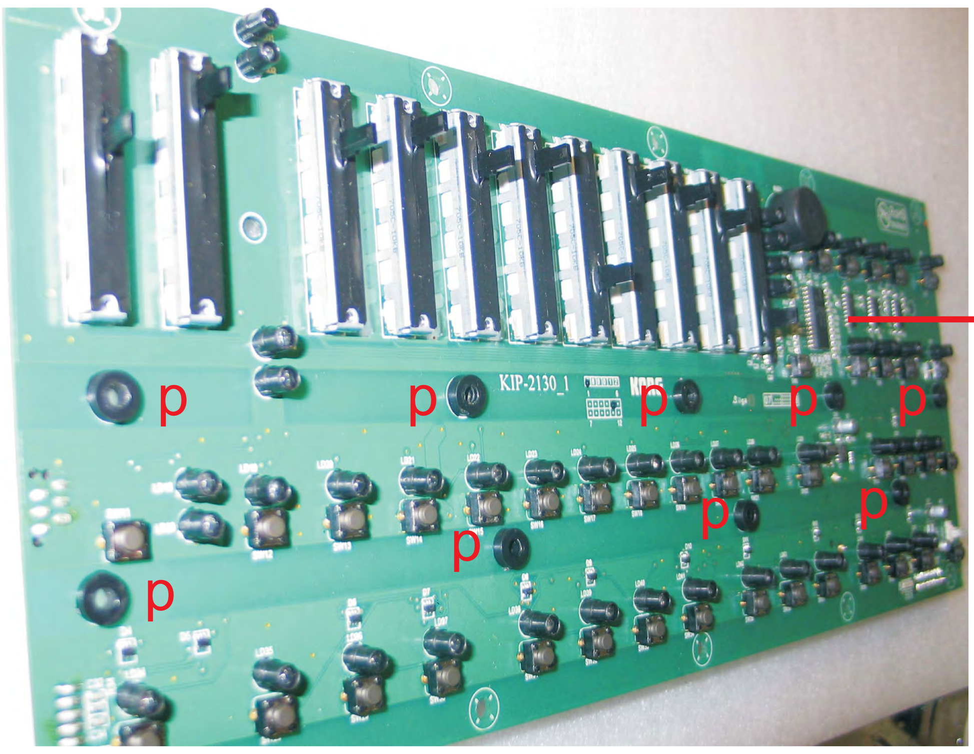


a=n°59 PLA0001137 (p=17mm)

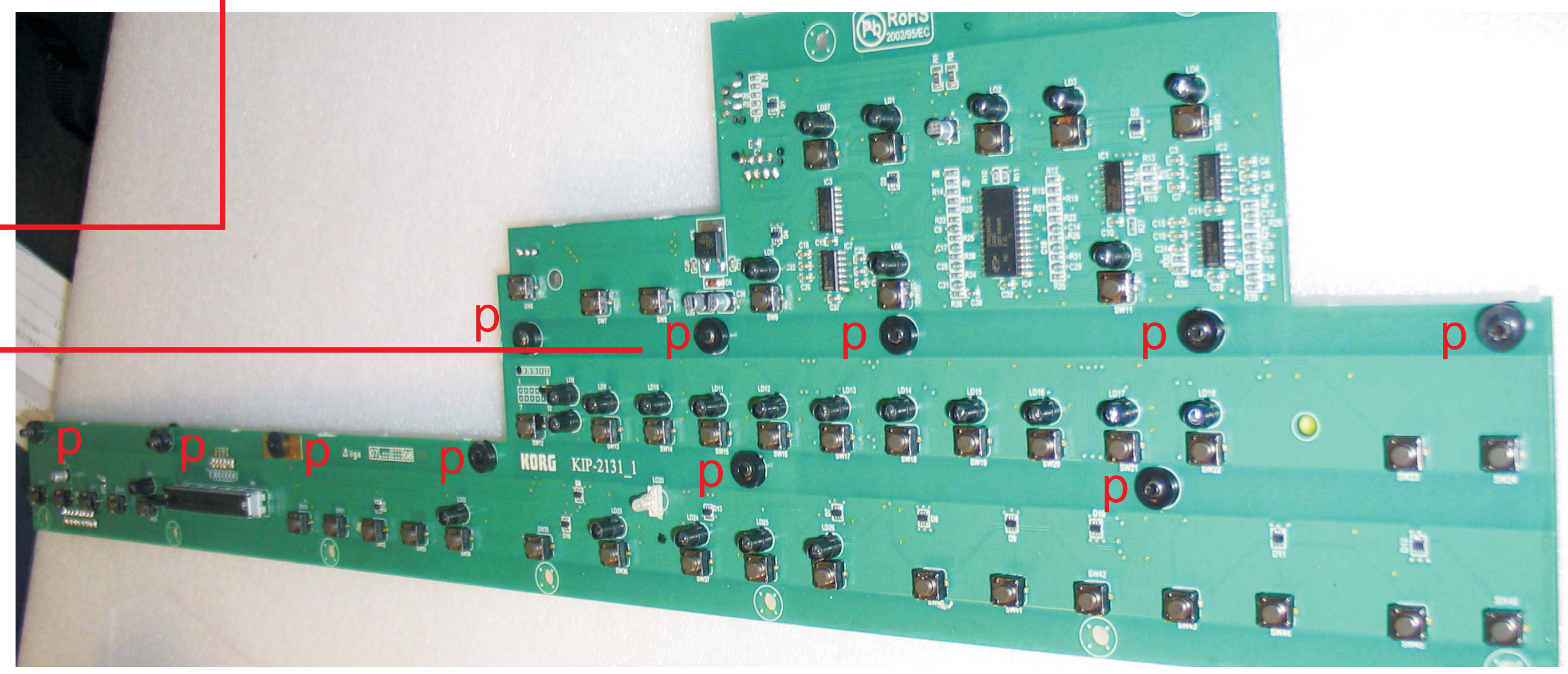
b=n°27 PLA0001138 (p=19mm)



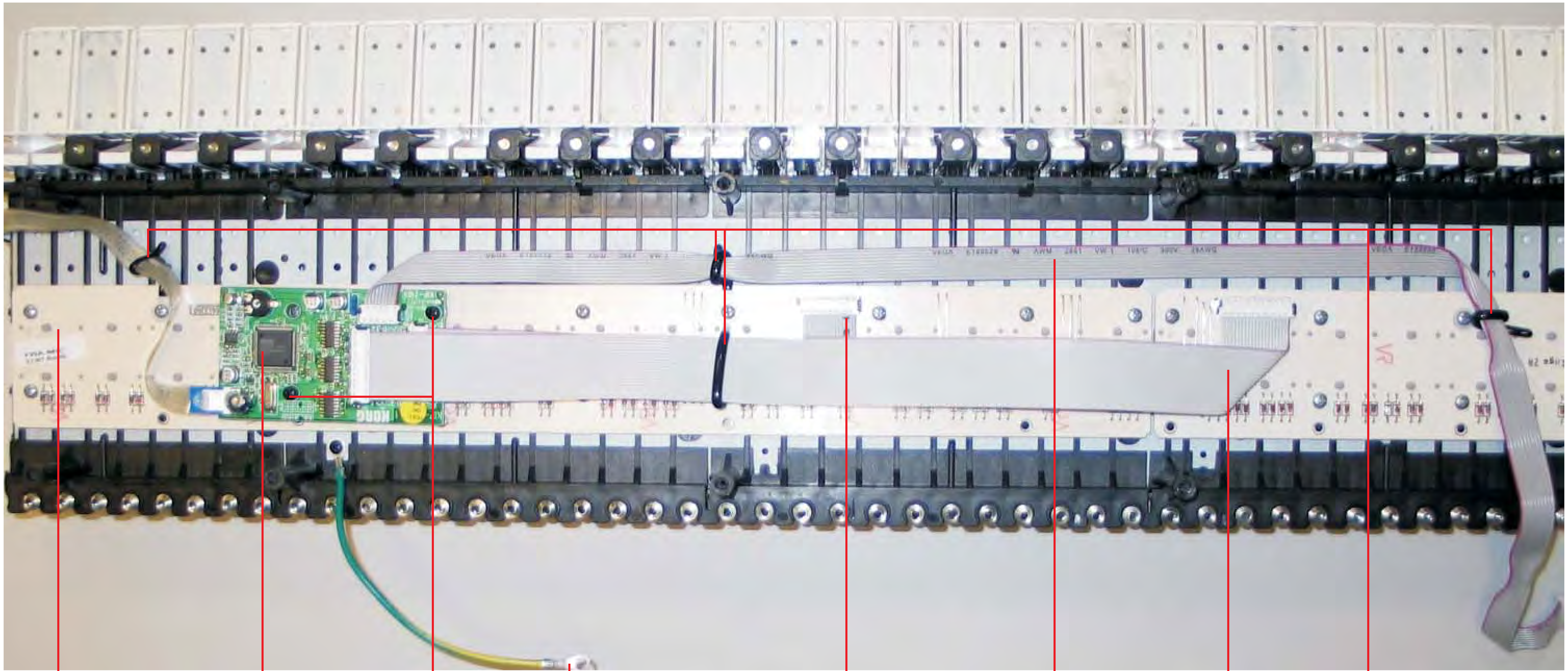
c = n°18 PLA0001139
d = n°16 PLA0001140
e = n°15 PLA0001141
f = n°7 PLA0001142
g = n°24 PLA0010035
h = n°3 PLA0010036
i = n°4 PLA0010037
l = n°12 PLA0001147
m= n°1 PLA0001148
n = n°1 PLA0010065
o = n°13 PLA0001144
p = n°20 PLA0001143



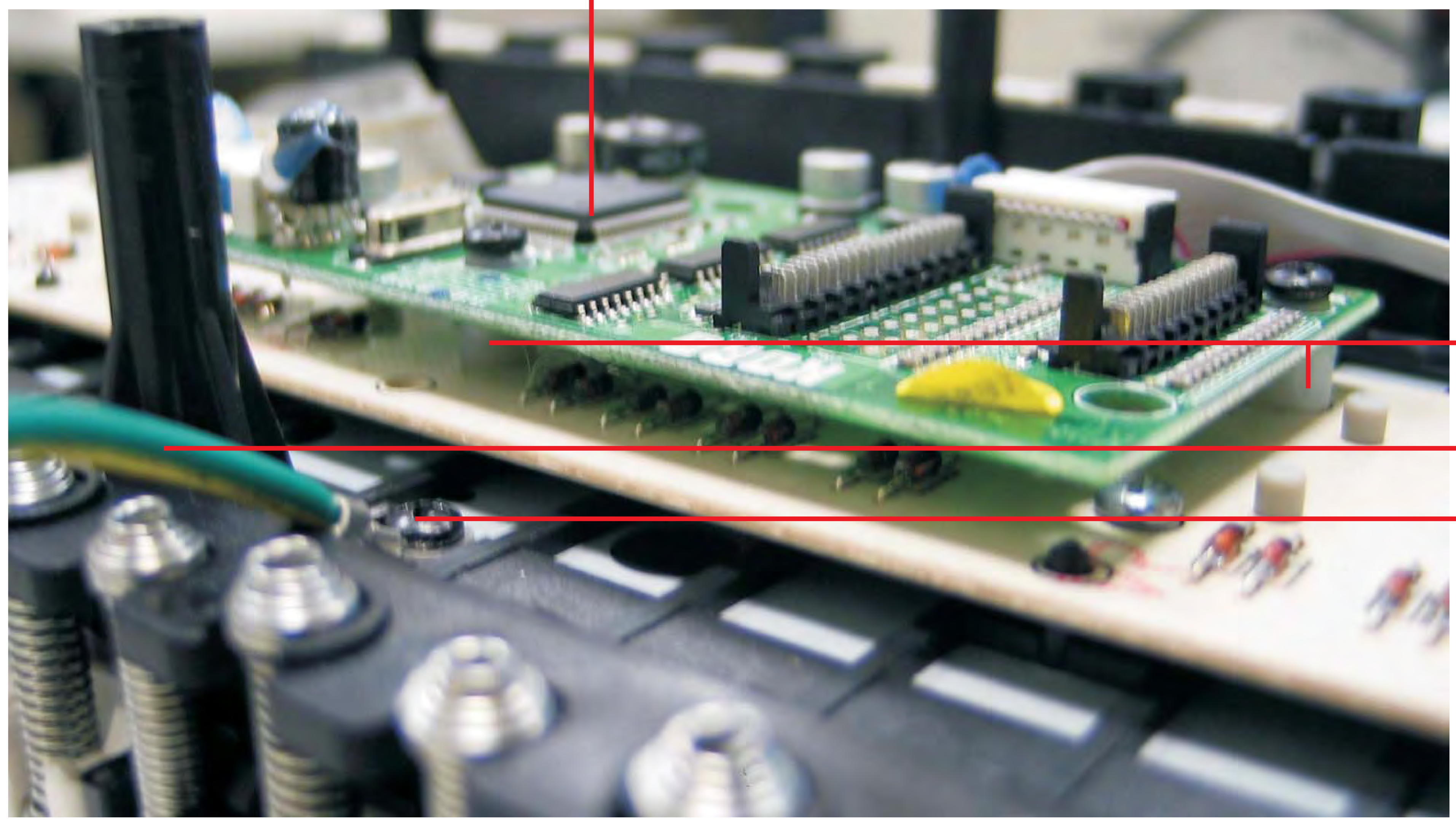
PLA0001134
PLA0001133
PLA0001135
FERL001051
GRA0002130
GRA0002131



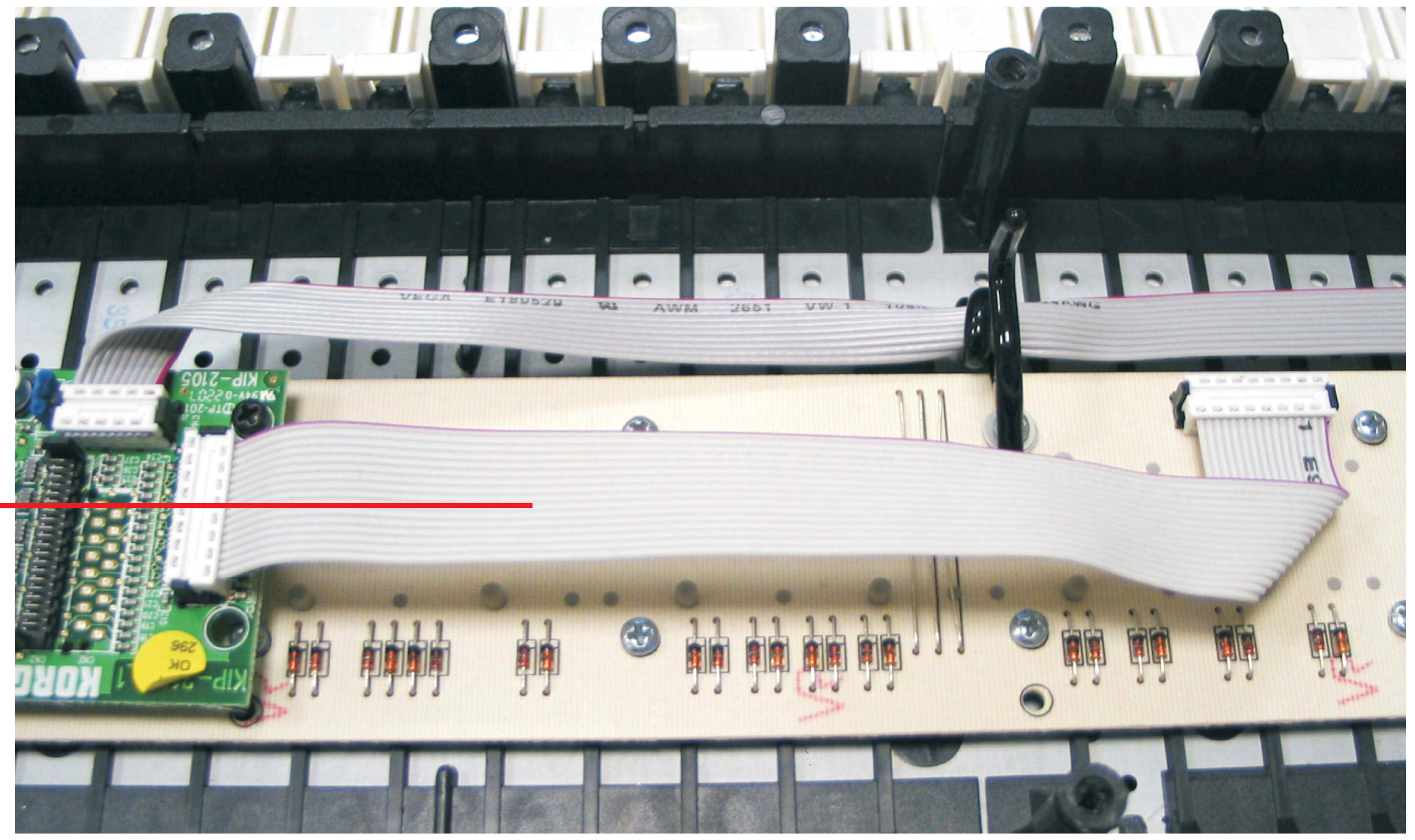
Upper Case disassembly 2



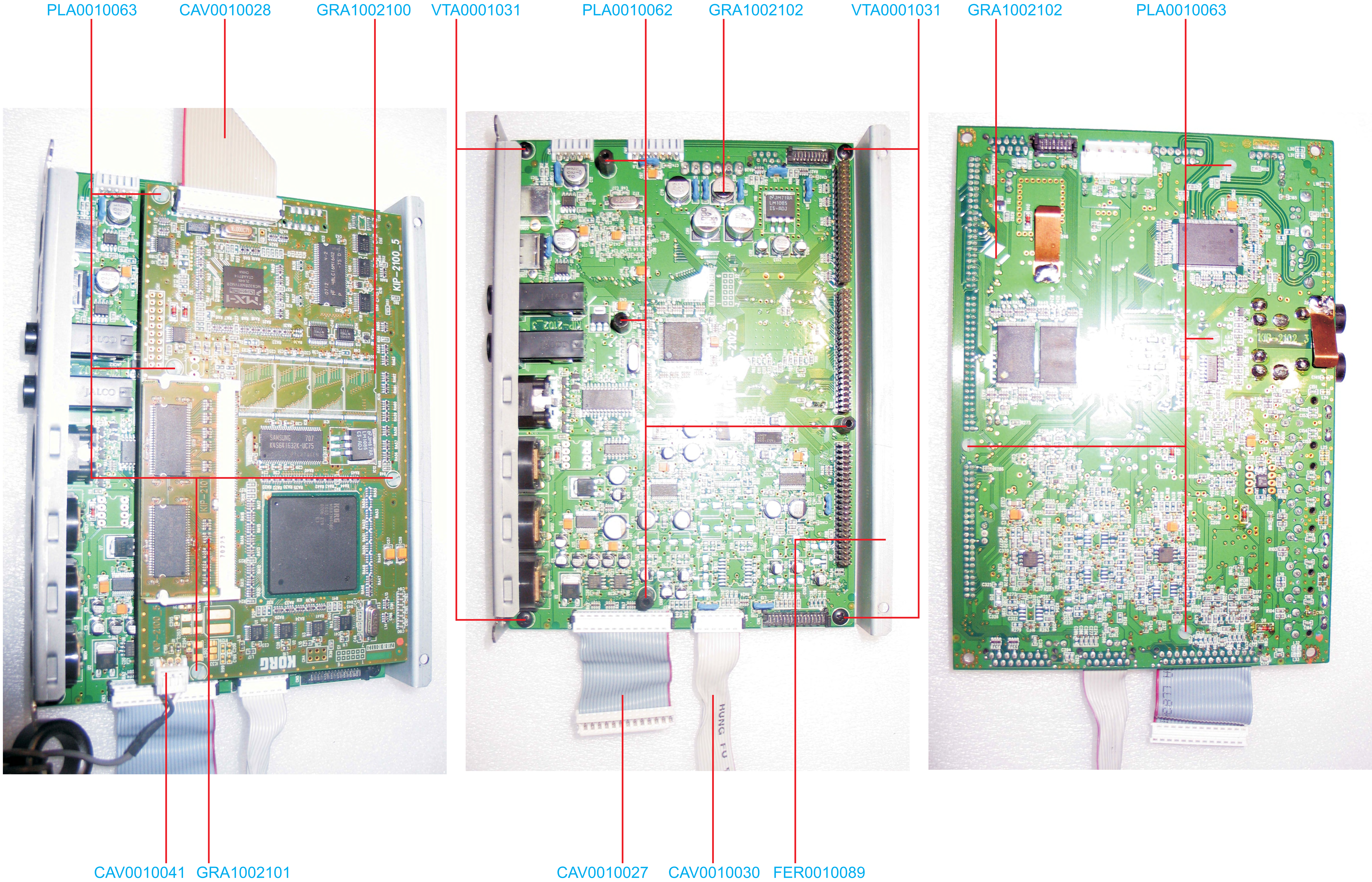
TAS0001020 GRA1002105 VTA0001016 RIL0001066 CAV0010035 CAV0010034 CAV0010036 PLA0001046



PLA0001094
RIL0001066
VTA0001037

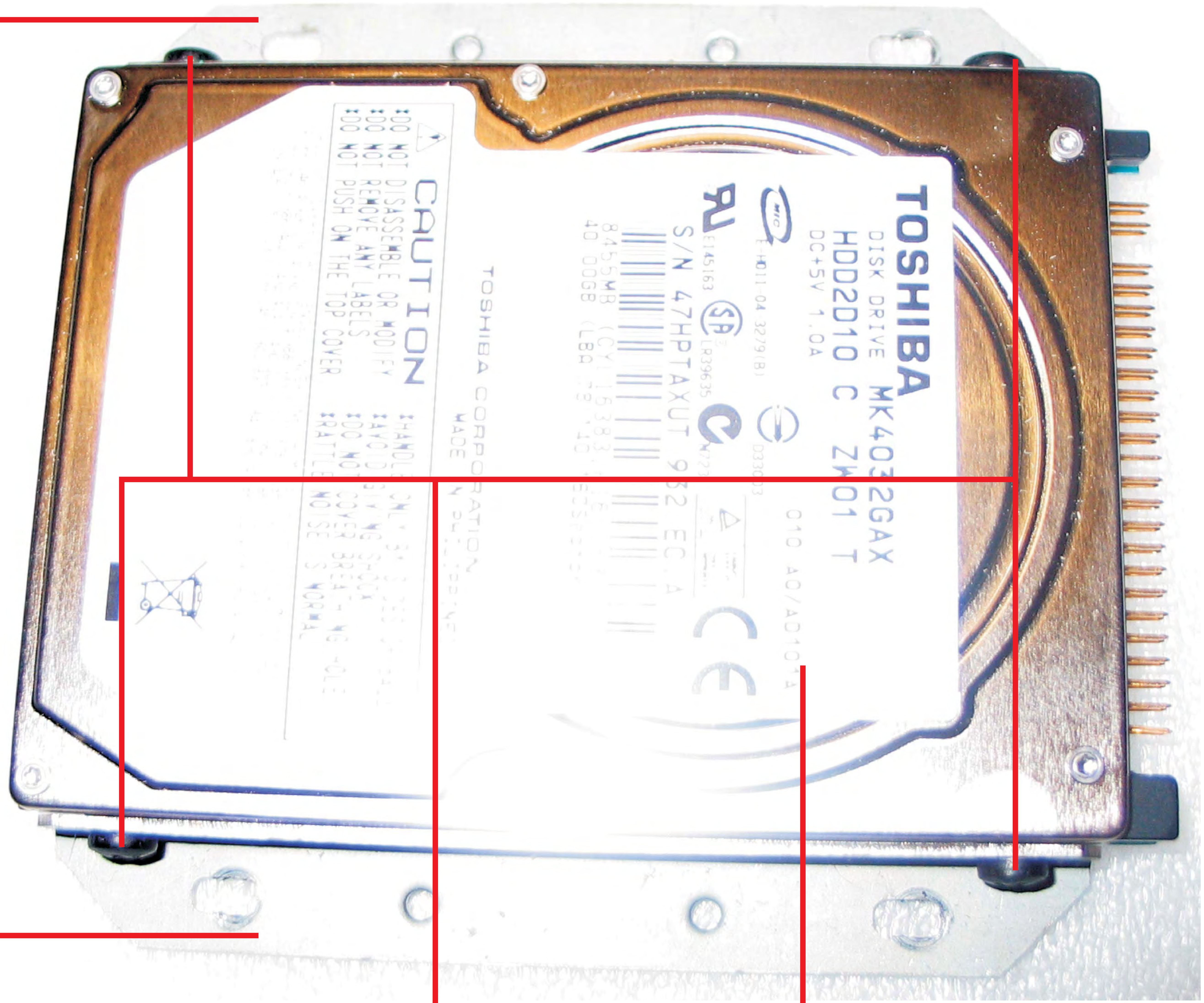


Keyboard Group


PLA0010063
CAV0010028
GRA1002100
VTA0001031
PLA0010062
GRA1002102
VTA0001031
GRA1002102
PLA0010063
CAV0010041
GRA1002101
CAV0010027
CAV0010030
FER0010089

GRF0001006

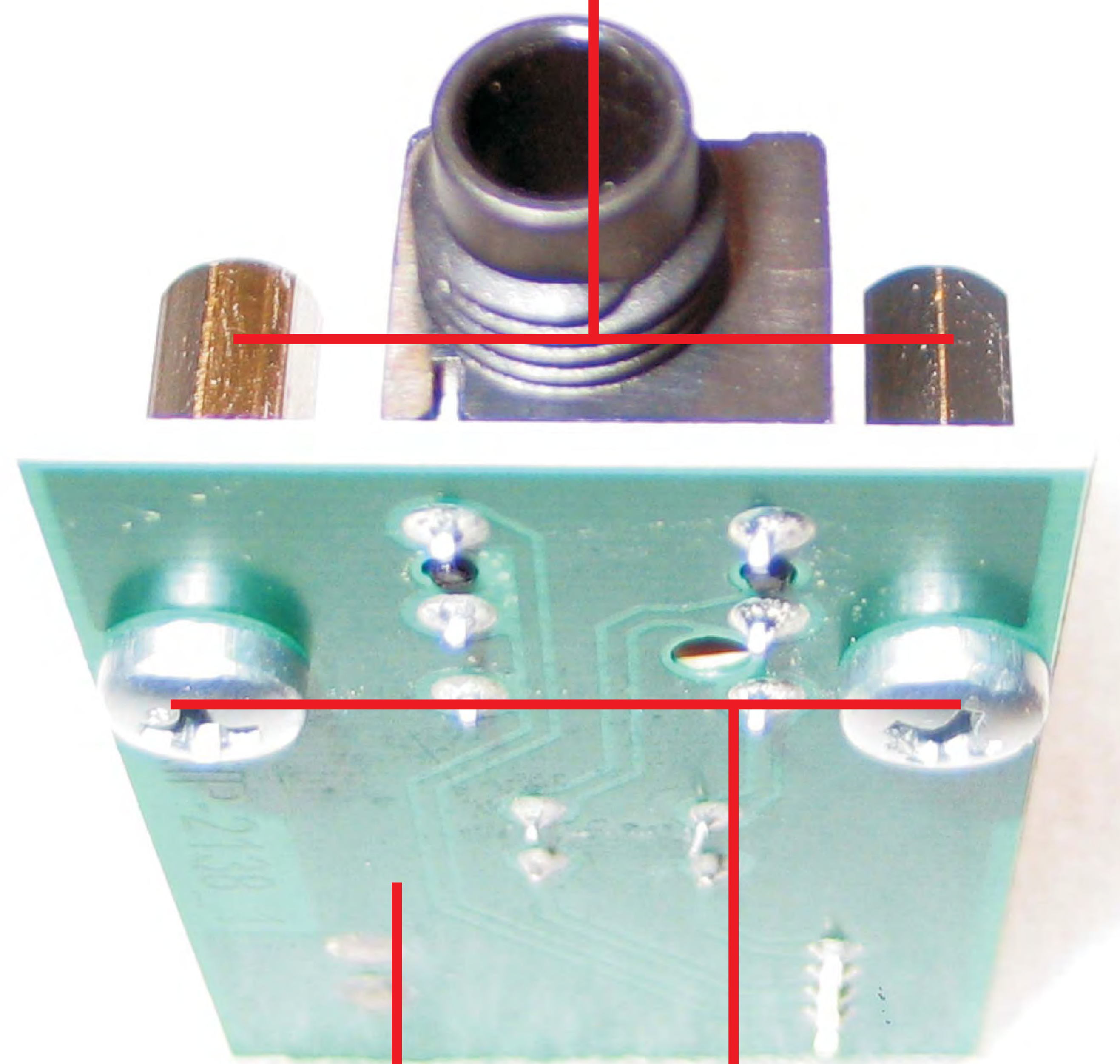
HDD group



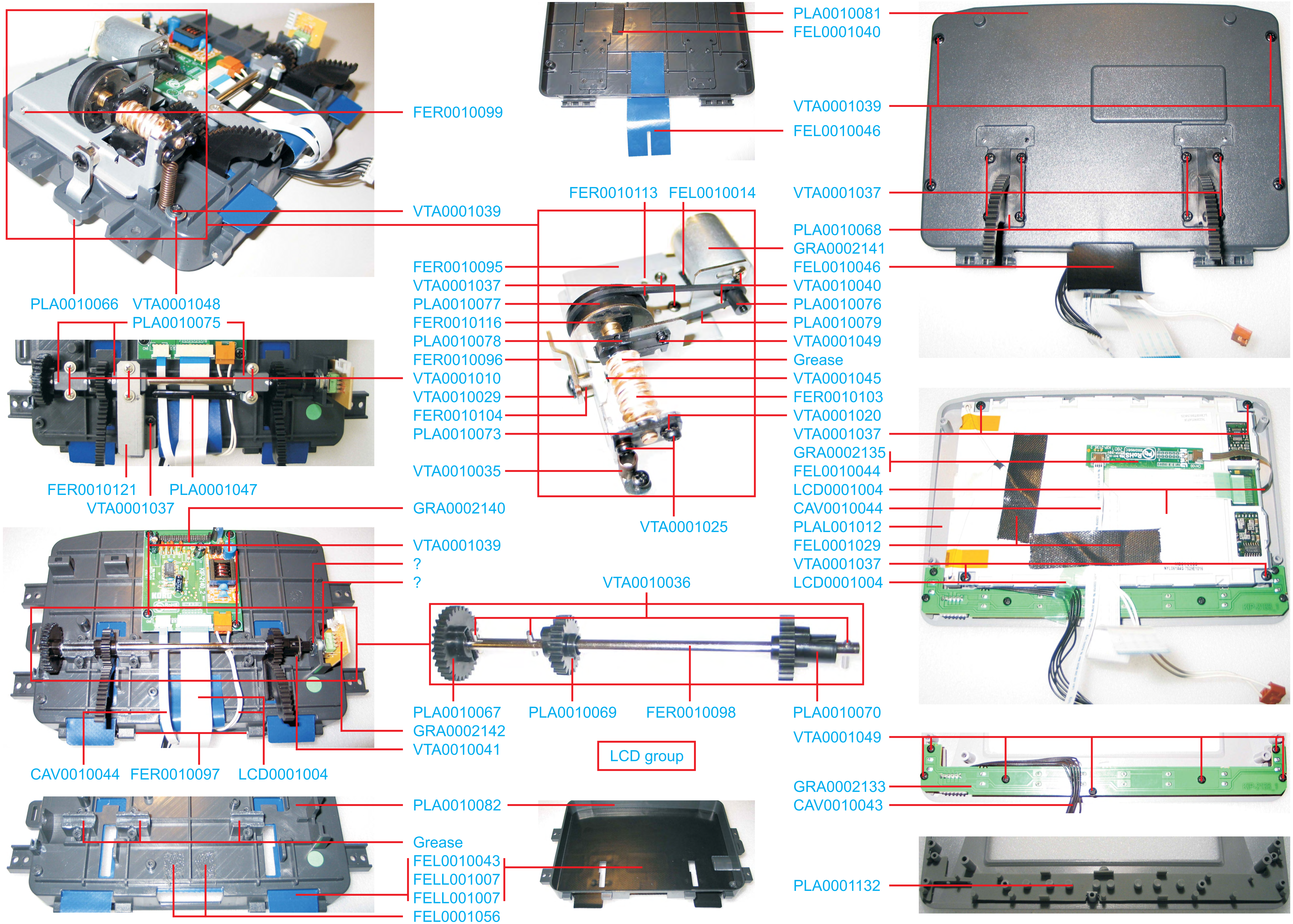
FER0001188 VTA0001031 FDD0001021

Headphone Group

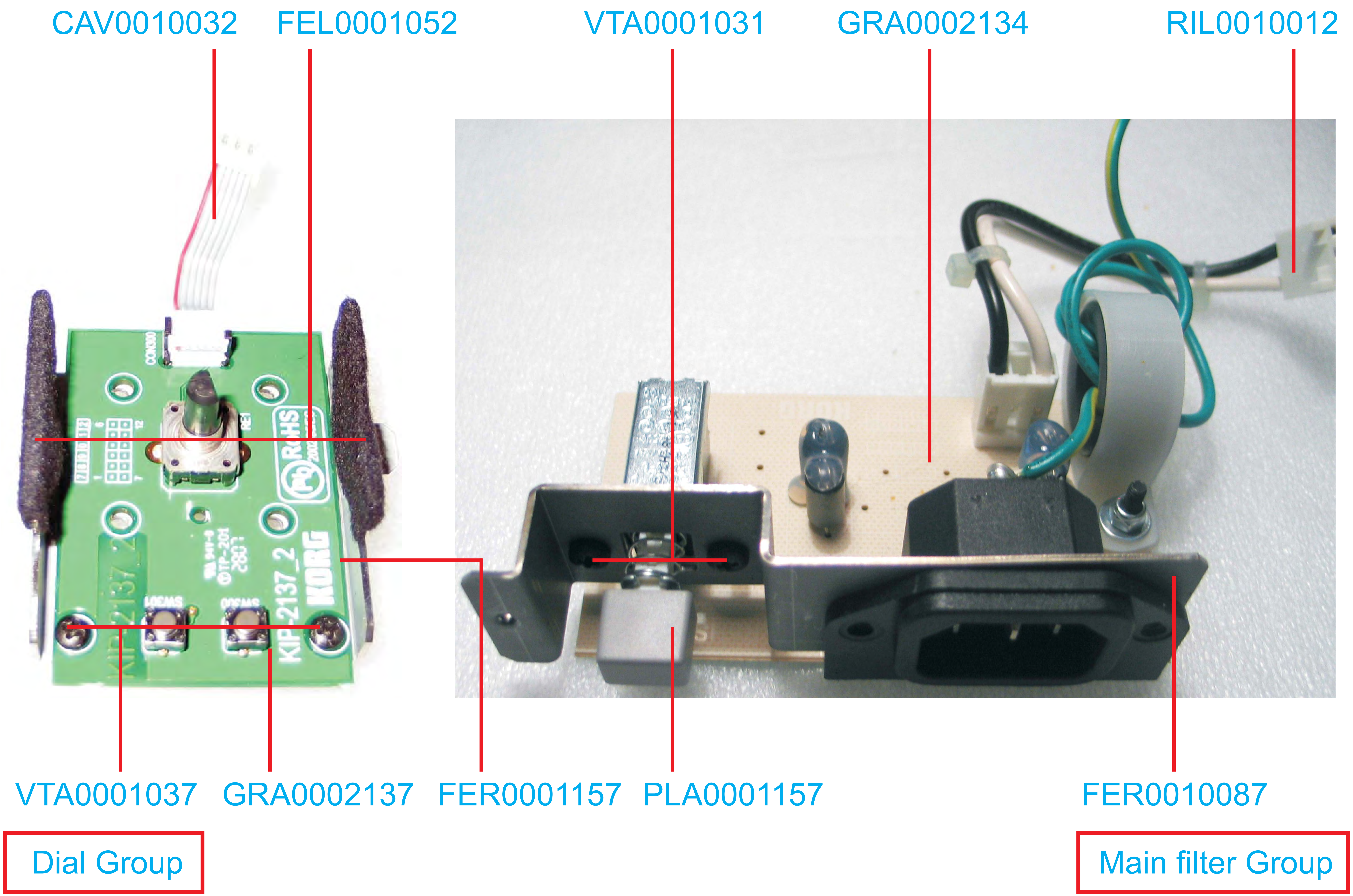
VTA0010026



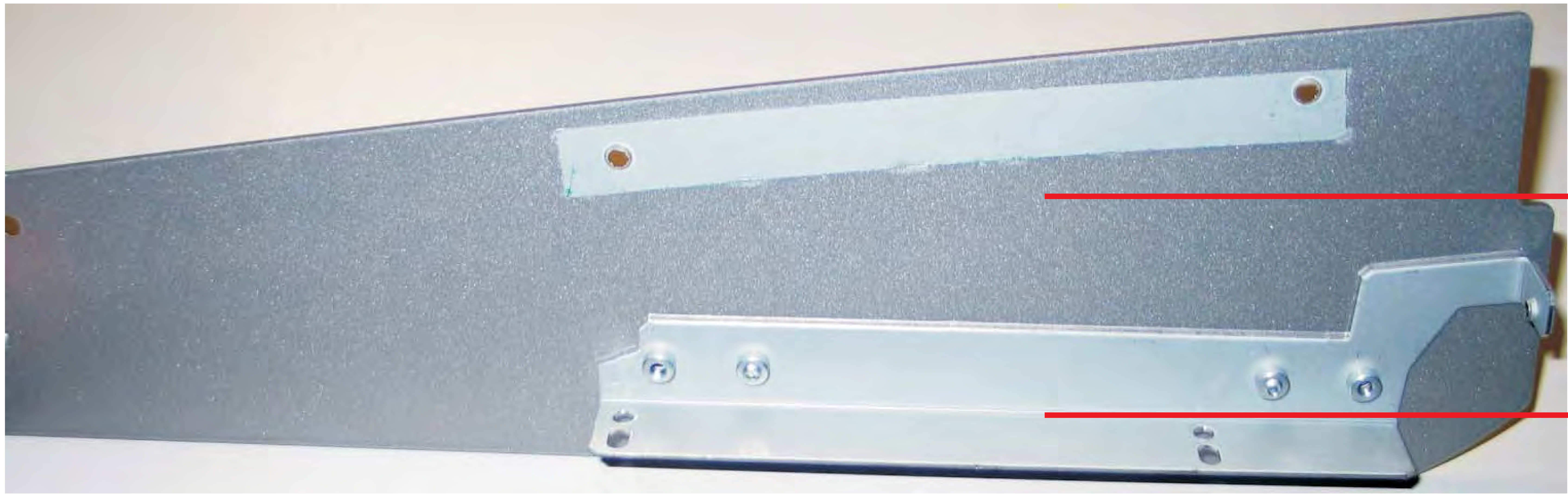
GRA0002138 VTA0001050



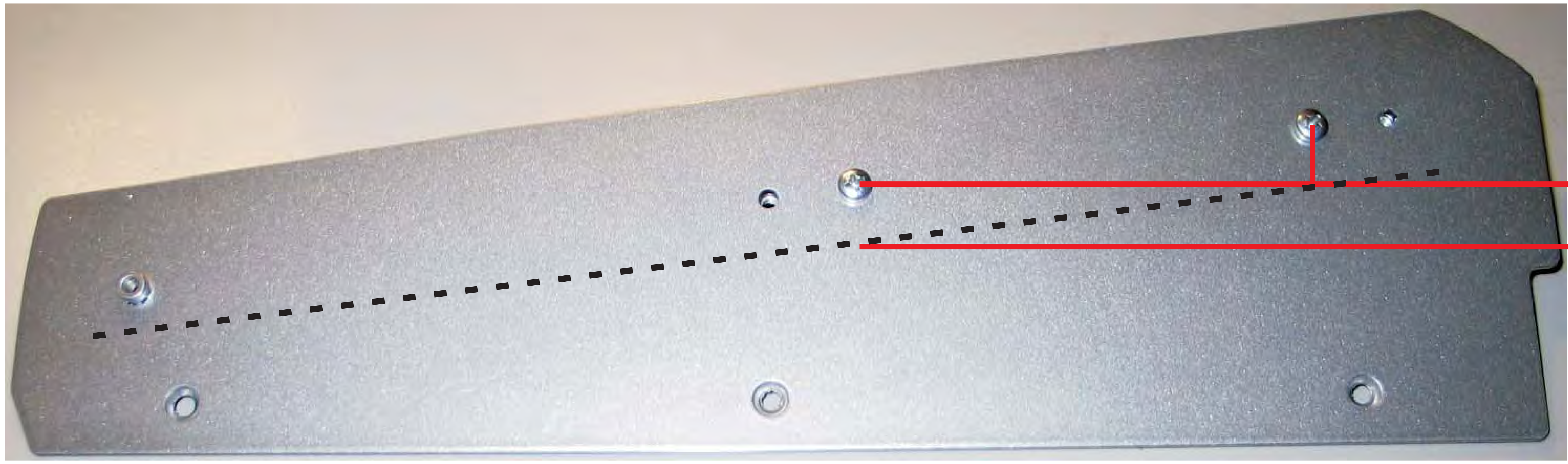
FER0010099
VTA0001039
PLA0010066
VTA0001048
PLA0010075
FER0010121
VTA0001037
PLA0001047
PLA0010081
FEL0001040
VTA0001039
FEL0010046
FER0010113
FEL0010014
VTA0001037
PLA0010068
GRA0002141
FEL0010046
FER0010095
VTA0001037
PLA0010077
FER0010116
PLA0010078
FER0010096
VTA0001010
VTA0010029
FER0010104
PLA0010073
VTA0010035
VTA0010040
PLA0010076
PLA0010079
VTA0001049
Grease
VTA0001045
FER0010103
VTA0001020
VTA0001037
GRA0002135
FEL0010044
LCD0001004
CAV0010044
PLAL001012
FEL0001029
VTA0001037
LCD0001004
VTA0001025
GRA0002140
VTA0001039
?
?
VTA0010036
PLA0010067
PLA0010069
FER0010098
PLA0010070
GRA0002142
VTA0010041
CAV0010044
FER0010097
LCD0001004
LCD group
VTA0001049
GRA0002133
CAV0010043
PLA0010082
Grease
FEL0010043
FELL001007
FELL001007
FEL0001056
PLA0001132


CAV0010032
FEL0001052
VTA0001031
GRA0002134
RIL0010012
VTA0001037
GRA0002137
FER0001157
PLA0001157
FER0010087
Dial Group
Main filter Group

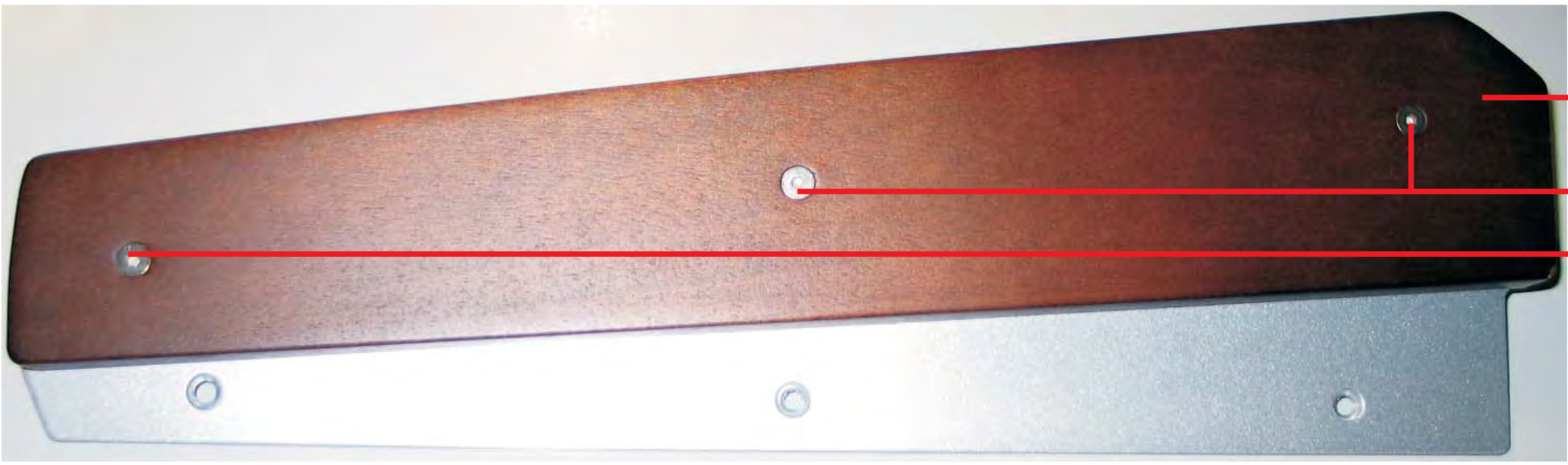
Righ-Left Side group



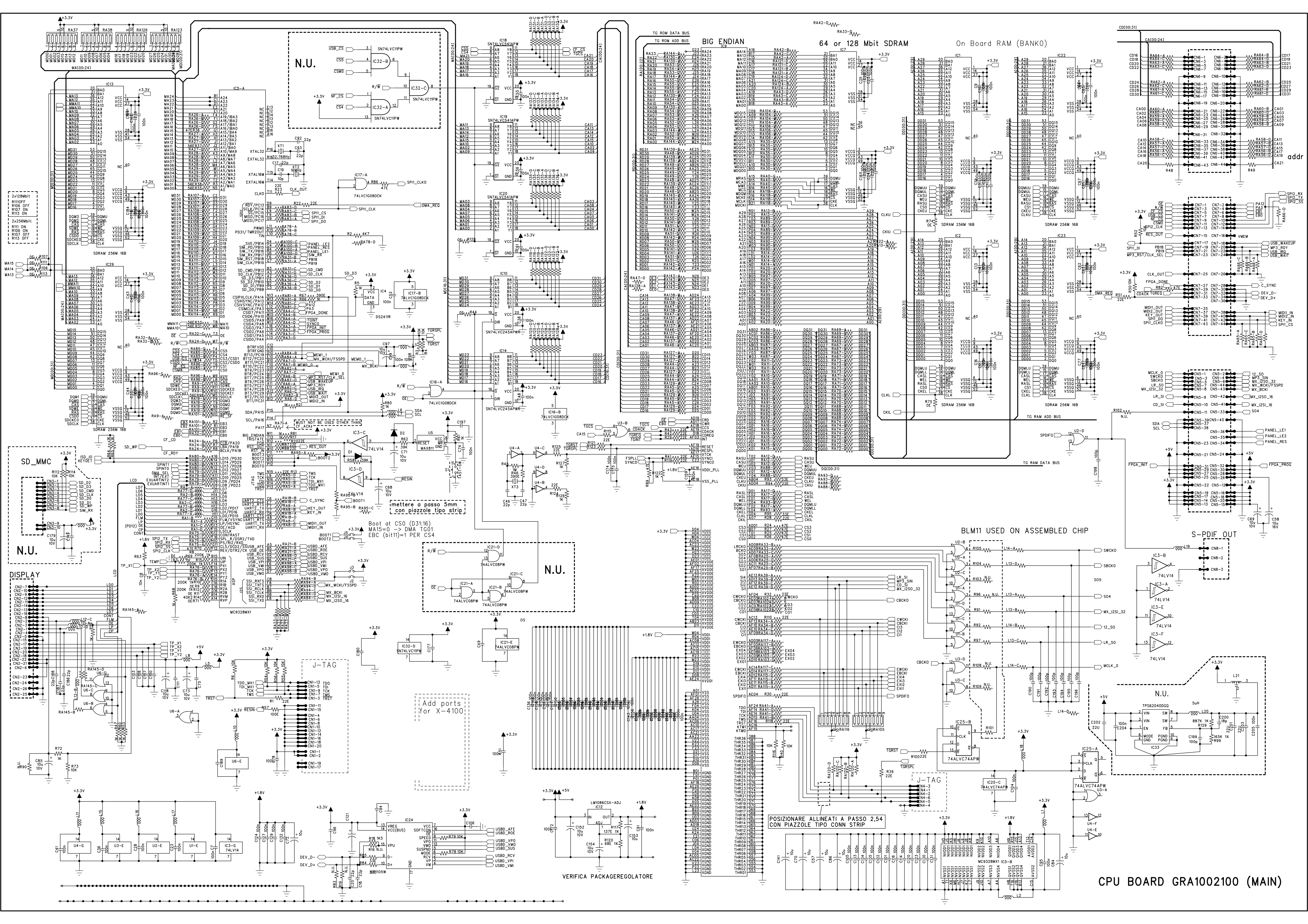
FERL001049 (right)
FERL001050 (left)
FER0010088 (right-left)



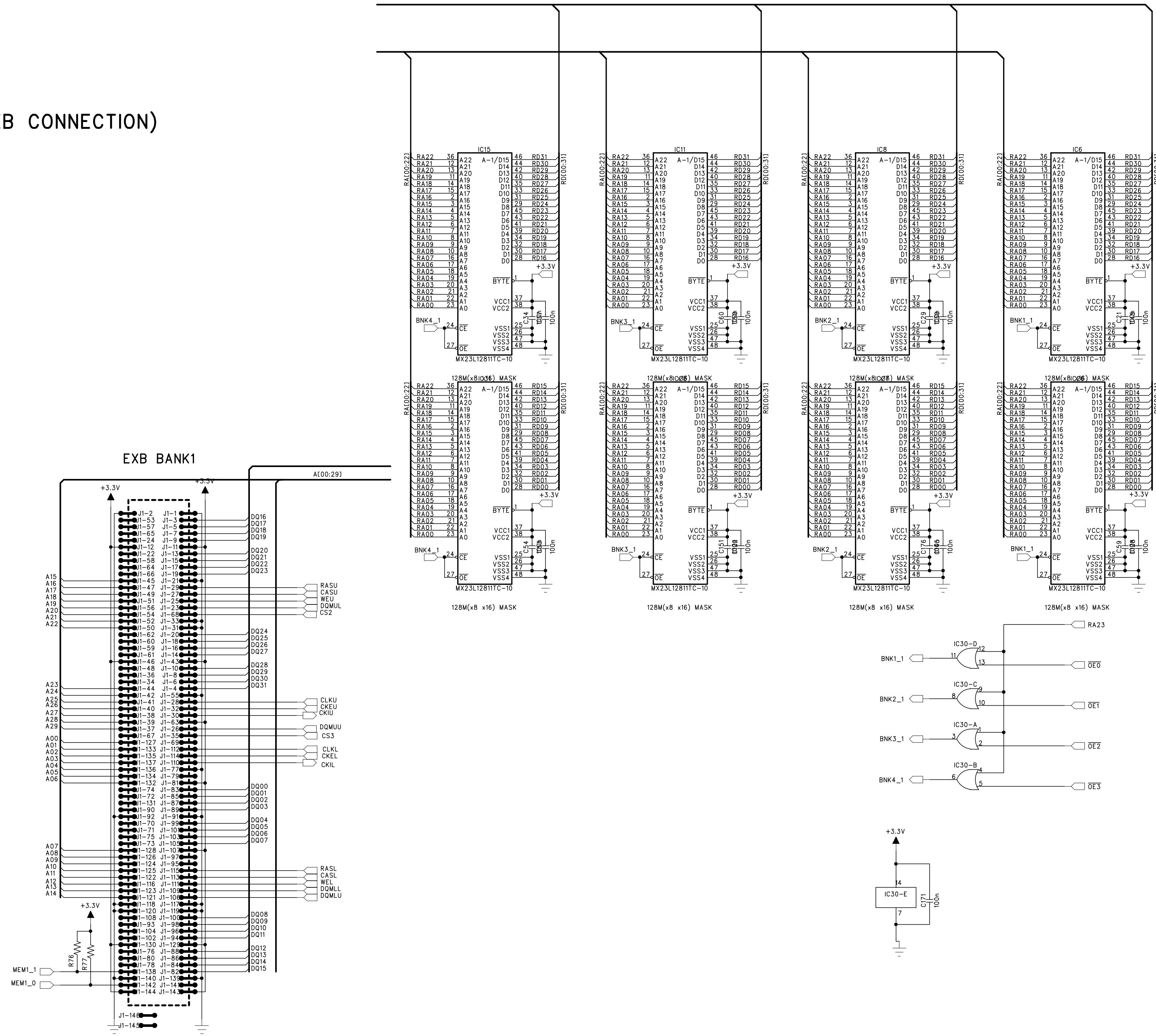
VTA0001050 (right-left)
FEL0001056 (right-left)



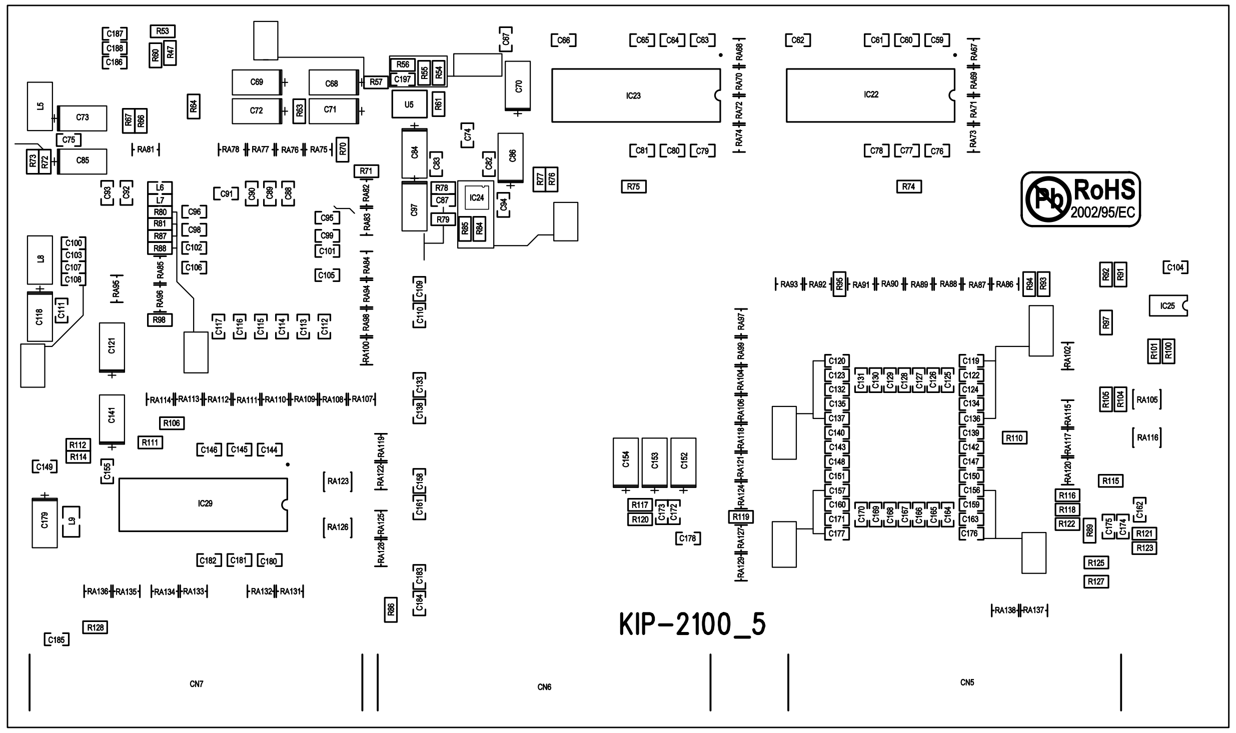
LEG0010052 (right)
LEG0010051 (left)
VTA0010039 (right-left)
VTA0010038 (right-left)

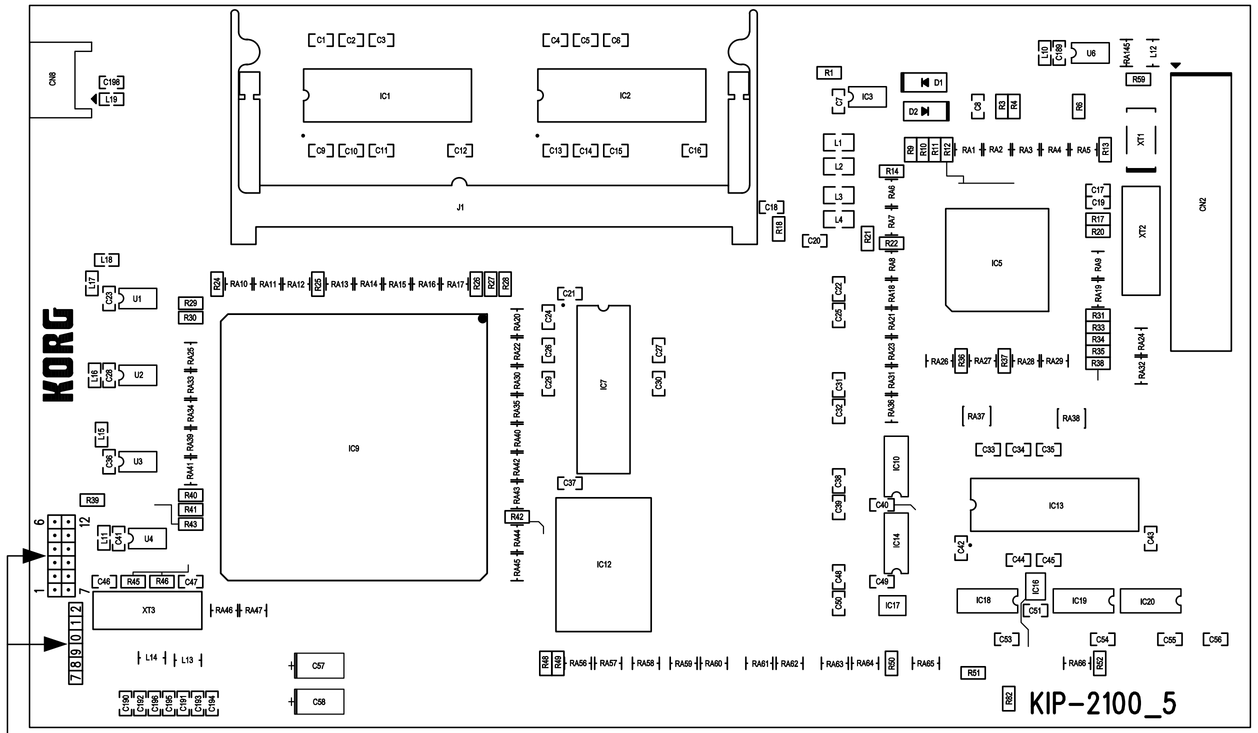

N.U.
BIG ENDIAN
64 or 128 Mbit SDRAM
On Board RAM (BANK0)
addr
SDRAM 256M 16B
SD_MMC
DISPLAY
J-TAG
Add ports for X-4100
mettere a passo 5mm con piazzole tipo strip
Boot at CS0 (D31:16)
MA15=0 -> DMA TG01
EBC (bit11)=1 PER CS4
MUST NOT BE USED OTHER THAN CF_ACK!
BLM11 USED ON ASSEMBLED CHIP
S-PDIF OUT
POSIZIONARE ALLINEATI A PASSO 2,54 CON PIAZZOLE TIPO CONN STRIP
VERIFICA PACKAGEREGOLATORE
TG ROM DATA BUS
TG ROM ADD BUS
TG RAM ADD BUS
TG RAM DATA BUS
2x128Mbit: R110FF R106 OFF R107 ON R113 ON
2x256Mbit: R111 ON R106 ON R107 OFF R113 OFF
MC9328MX1
DS2411R
MAX811
LM1086CSX-ADJ
TPS62040DGQ
CPU BOARD GRA1002100 (MAIN)

CPU BOARD GRA1002100 (EXB CONNECTION)



REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



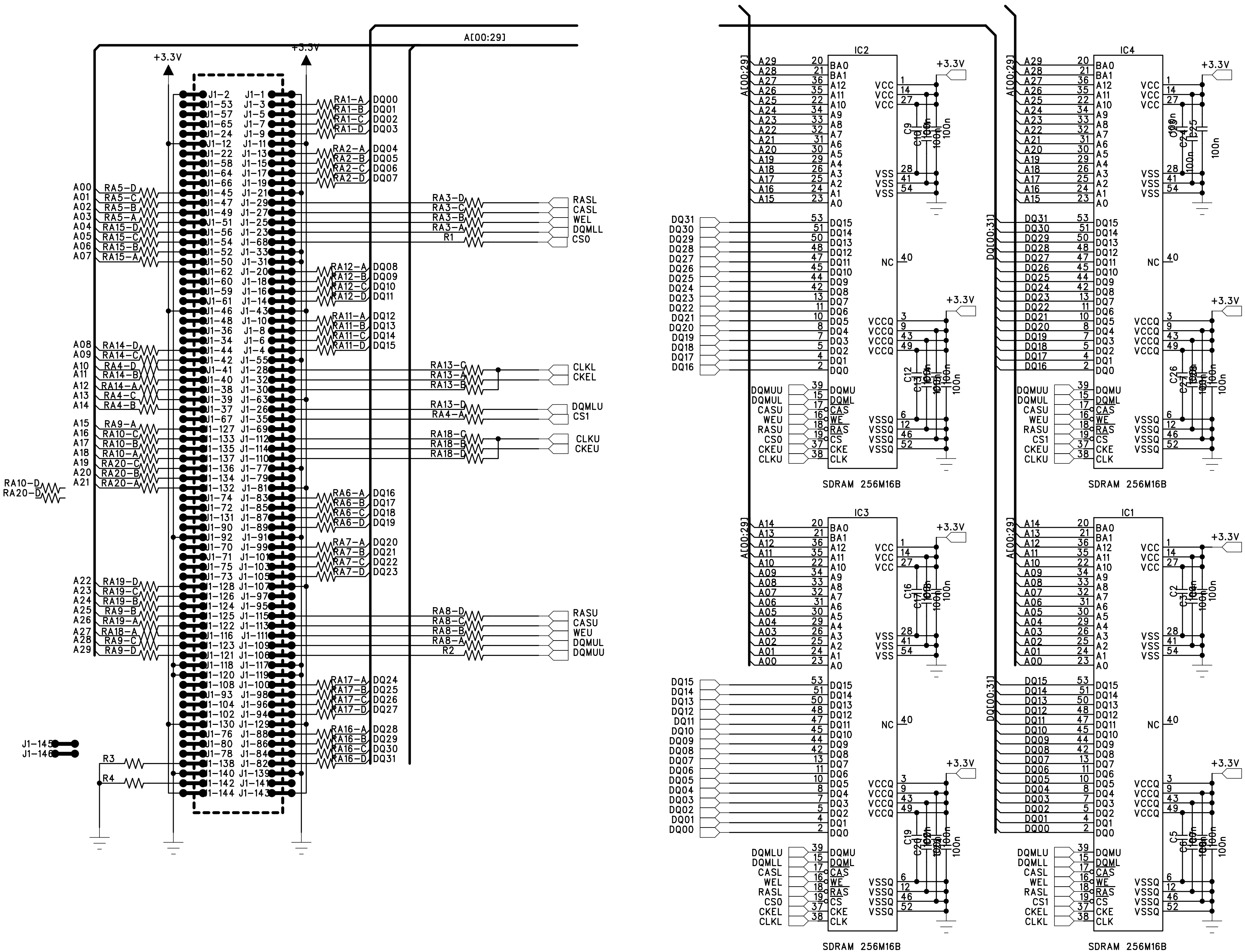


CANCELLARE CON PENNARELLO NERO
MESE E ANNO DI COLLAUDO

FASE	DESCRIZIONE
1	*CANCELLARE CON PENNARELLO NERO MESE E ANNO DI COLLAUDO*
2	
3	
4	

DRAWN:	DATED: 17/05/2007	COMPANY: KORG			
		TITLE: *SCHEDA LAVORAZIONE KIP-2100_5 CPU BOARD - PA2X -*			
CHECKED:	DATED:	CODE:	SIZE:	DRAWING NO: *KID-F102100*	REV:
QUALITY CONTROL:	DATED:				
RELEASED:	DATED:	SCALE:		SHEET: OF	

128MBYTE EXB GRA1002101

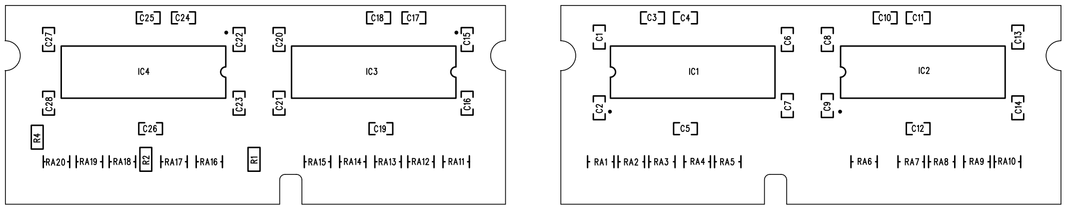


A	B	C	D	E	F

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

1

2



3

4

FASE	DESCRIZIONE
1	
2	
3	
4	

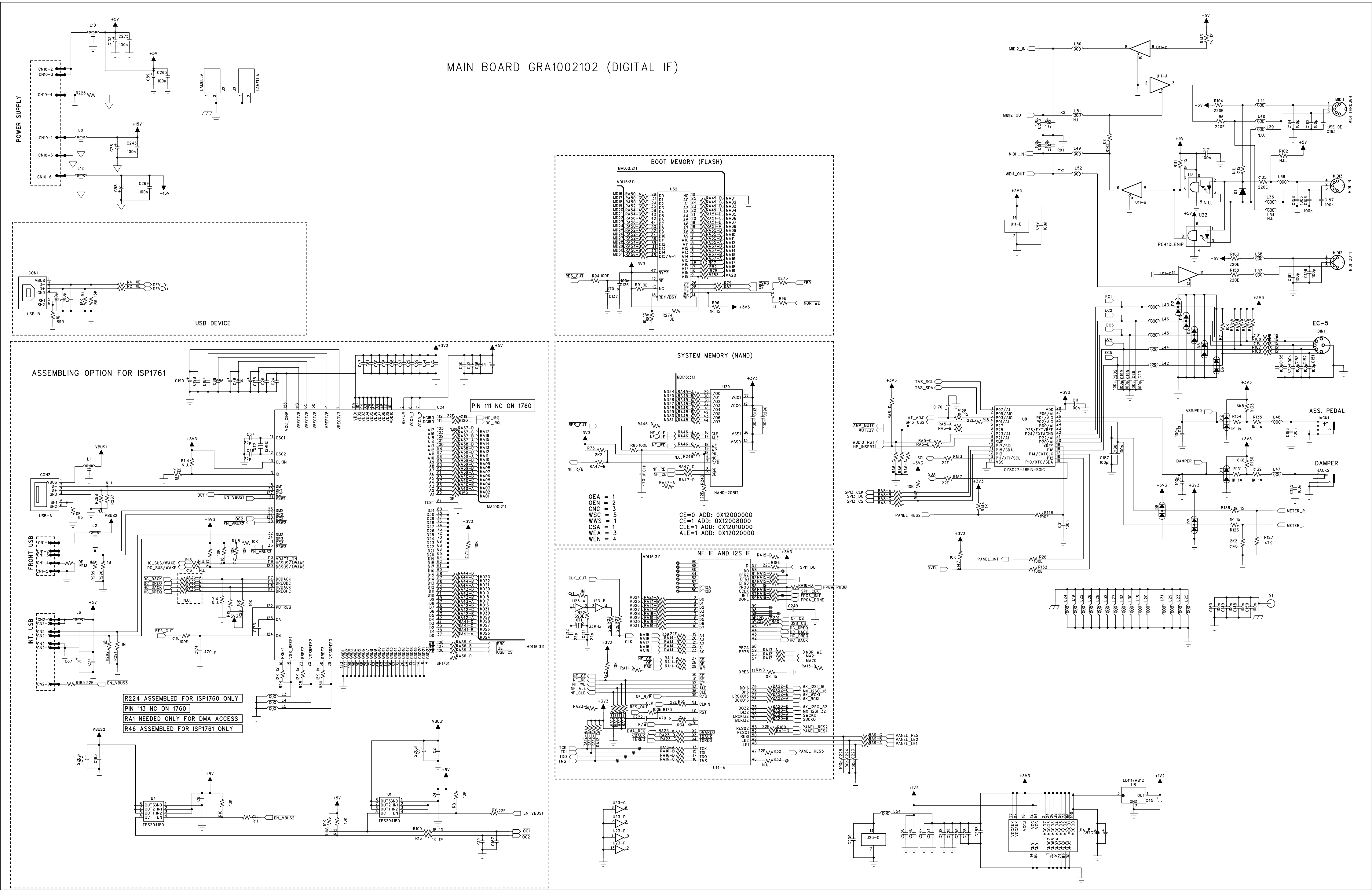
DRAWN:	DATED: 29/06/2007
CHECKED:	DATED:
QUALITY CONTROL:	DATED:
RELEASED:	DATED:

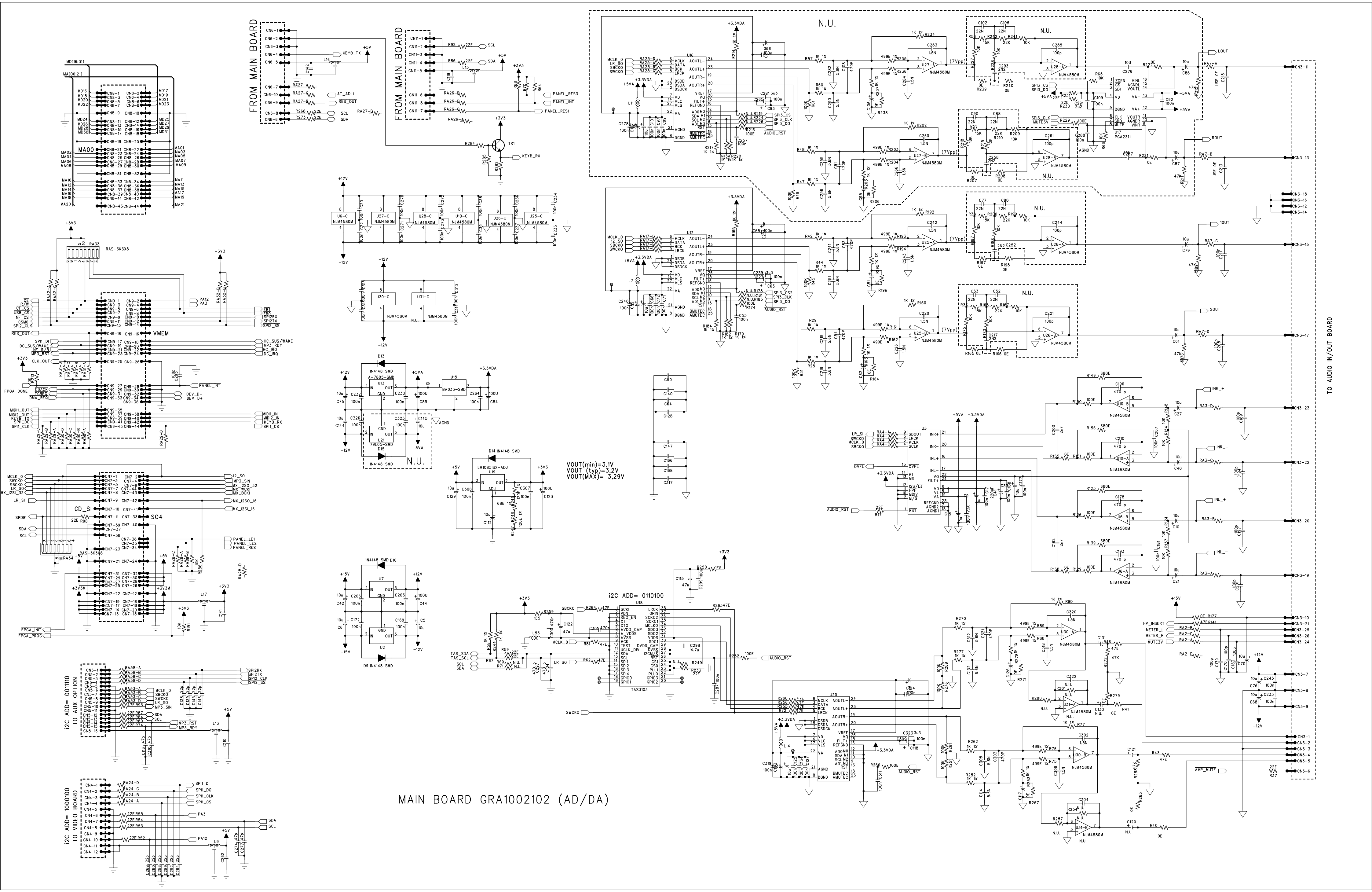
COMPANY: KORG

TITLE: *SCHEDA LAVORAZIONE KIP-2101_0 CST 128MBYTE SDRAM EXB SODIMM 144*

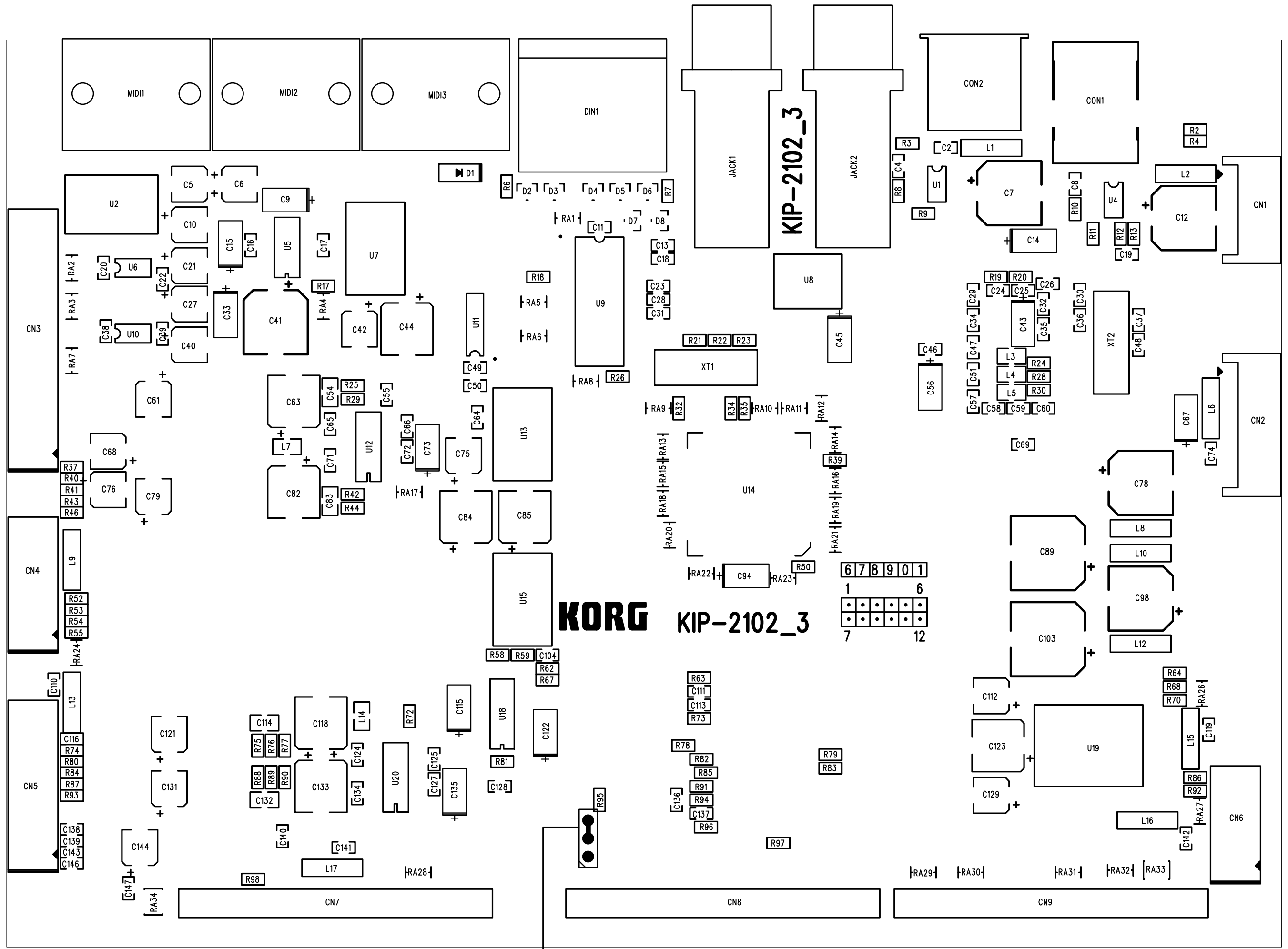
CODE:	SIZE:	DRAWING NO:	REV:
		KID-F102101_0	

SCALE: SHEET: OF

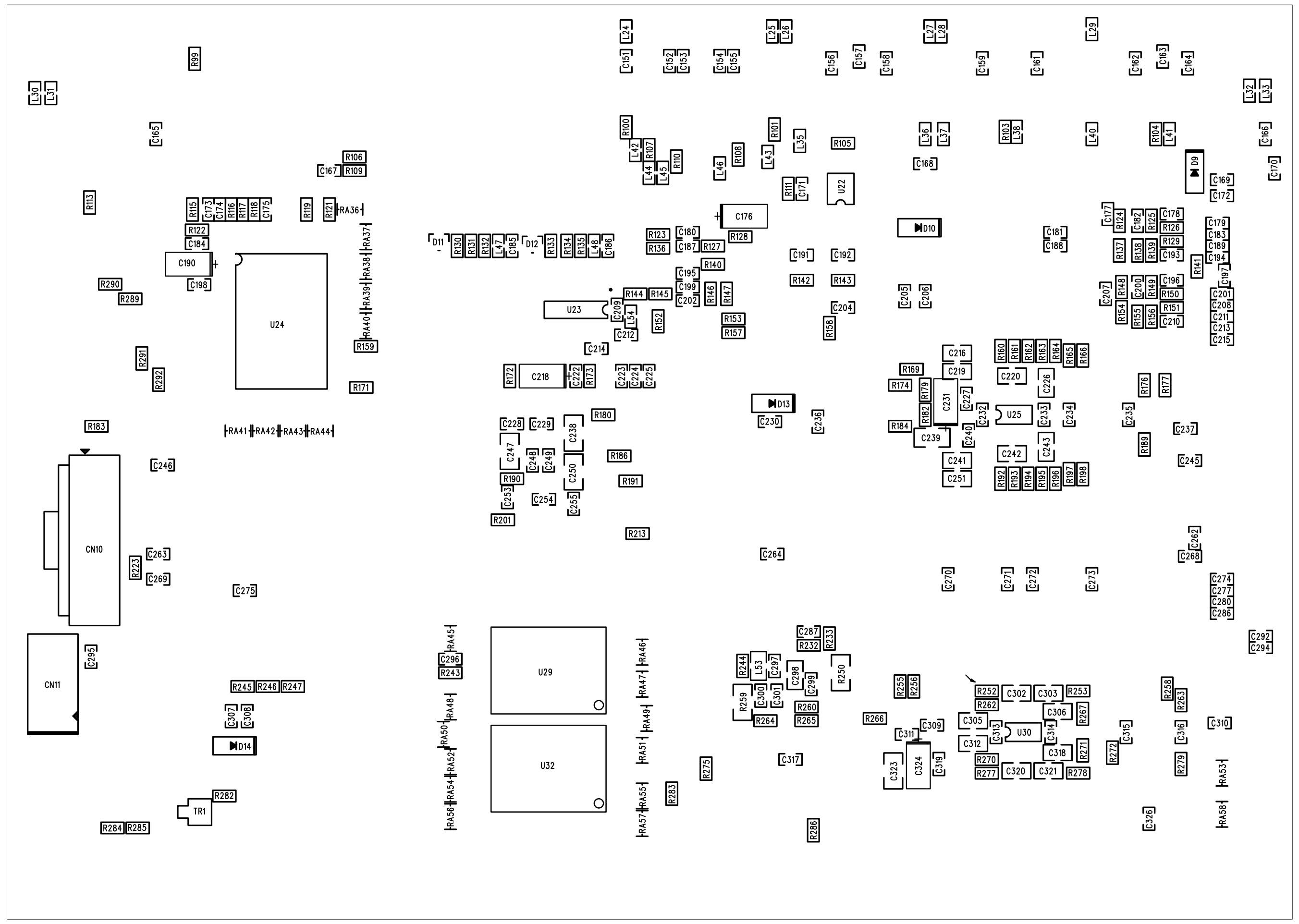

MAIN BOARD GRA1002102 (DIGITAL IF)
POWER SUPPLY
USB DEVICE
BOOT MEMORY (FLASH)
SYSTEM MEMORY (NAND)
NF IF AND I2S IF
ASSEMBLING OPTION FOR ISP1761
PIN 111 NC ON 1760
R224 ASSEMBLED FOR ISP1760 ONLY
PIN 113 NC ON 1760
RA1 NEEDED ONLY FOR DMA ACCESS
R46 ASSEMBLED FOR ISP1761 ONLY
FRONT USB
INT. USB
OEA = 1
OEN = 2
CNC = 3
WSC = 5
WWS = 1
CSA = 1
WEA = 3
WEN = 4
CE=0 ADD: 0X12000000
CE=1 ADD: 0X12008000
CLE=1 ADD: 0X12010000
ALE=1 ADD: 0X12020000
MIDI THROUGH
MIDI IN
MIDI OUT1
EC-5
ASS. PEDAL
DAMPER
CY8C27-28PIN-SOIC
ISP1761
NAND-2GBIT
TPS2041BD
LD1117AS12
PC410LENIP


FROM MAIN BOARD
FROM MAIN BOARD
N.U.
VMEM
SO4
CD_SI
VOUT(min)=3,1V
VOUT (typ)=3,2V
VOUT(MAX)= 3,29V
i2C ADD= 0110100
i2C ADD= 001110 TO AUX OPTION
i2C ADD= 1000100 TO VIDEO BOARD
TO AUDIO IN/OUT BOARD
MAIN BOARD GRA1002102 (AD/DA)

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

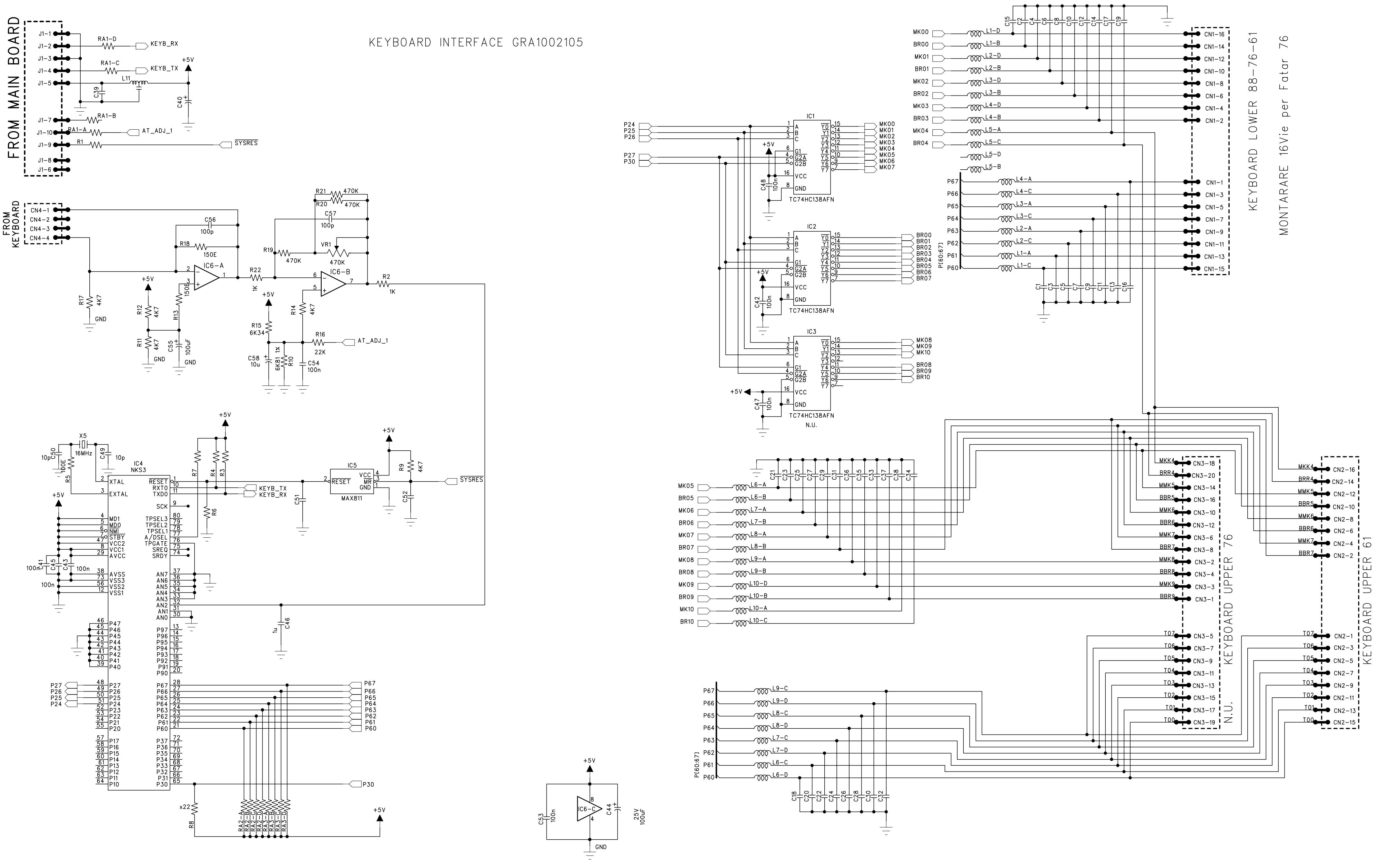


MONTARE UN PONTICELLO PASSO 2,54 mm
SU J1 COME IN FIGURA

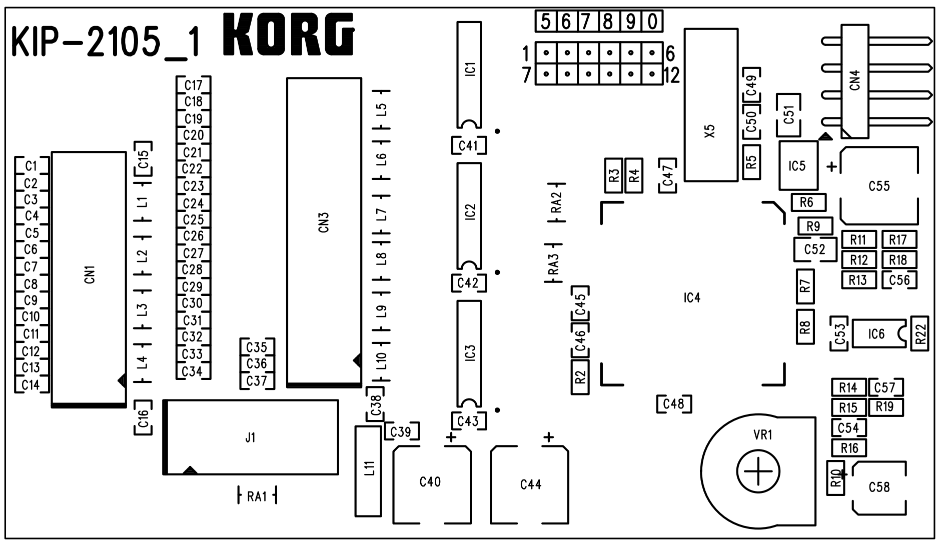


FASE	DESCRIZIONE
1	*MONTARE UN PONTICELLO PASS0 2,54 mm COME IN FIGURA*
2	*CANCELLARE CON PENNARELLO NERO MESE E ANNO DI COLLAUDO*
3	
4	

DRAWN:	DATED: *28/06/2007*	COMPANY: **KORG**			
		TITLE: *SCHEDA LAVORAZIONE KIP-2102_3 MAIN BOARD - PA2X -*			
CHECKED:	DATED:	CODE:	SIZE:	DRAWING NO: *KID-F102102_0*	REV:
QUALITY CONTROL:	DATED:				
RELEASED:	DATED:	SCALE:		SHEET: OF	


KEYBOARD INTERFACE GRA1002105
FROM MAIN BOARD
FROM KEYBOARD
KEYB_RX
KEYB_TX
AT_ADJ_1
SYSRES
IC6-A
IC6-B
IC6-C
IC1
IC2
IC3
IC4
NKS3
IC5
MAX811
TC74HC138AFN
N.U.
X5
16MHz
KEYBOARD LOWER 88-76-61
MONTARARE 16Vie per Fatar 76
KEYBOARD UPPER 76
KEYBOARD UPPER 61
P[60:67]

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



CANCELLARE CON PENNARELLO NERO
MESE E ANNO DI COLLAUDO

FASE	DESCRIZIONE
1	*CANCELLARE CON PENNARELLO NERO MESE E ANNO DI COLLAUDO*
2	
3	
4	

DRAWN:	DATED: *13/04/2007*
CHECKED:	DATED:
QUALITY CONTROL:	DATED:
RELEASED:	DATED:

COMPANY: KORG

TITLE: *SCHEDA LAVORAZIONE KIP-2105_1*
C.S. KEYBORD IF - PA2X -

CODE:	SIZE:	DRAWING NO:	REV:
		KID-F102105_1	

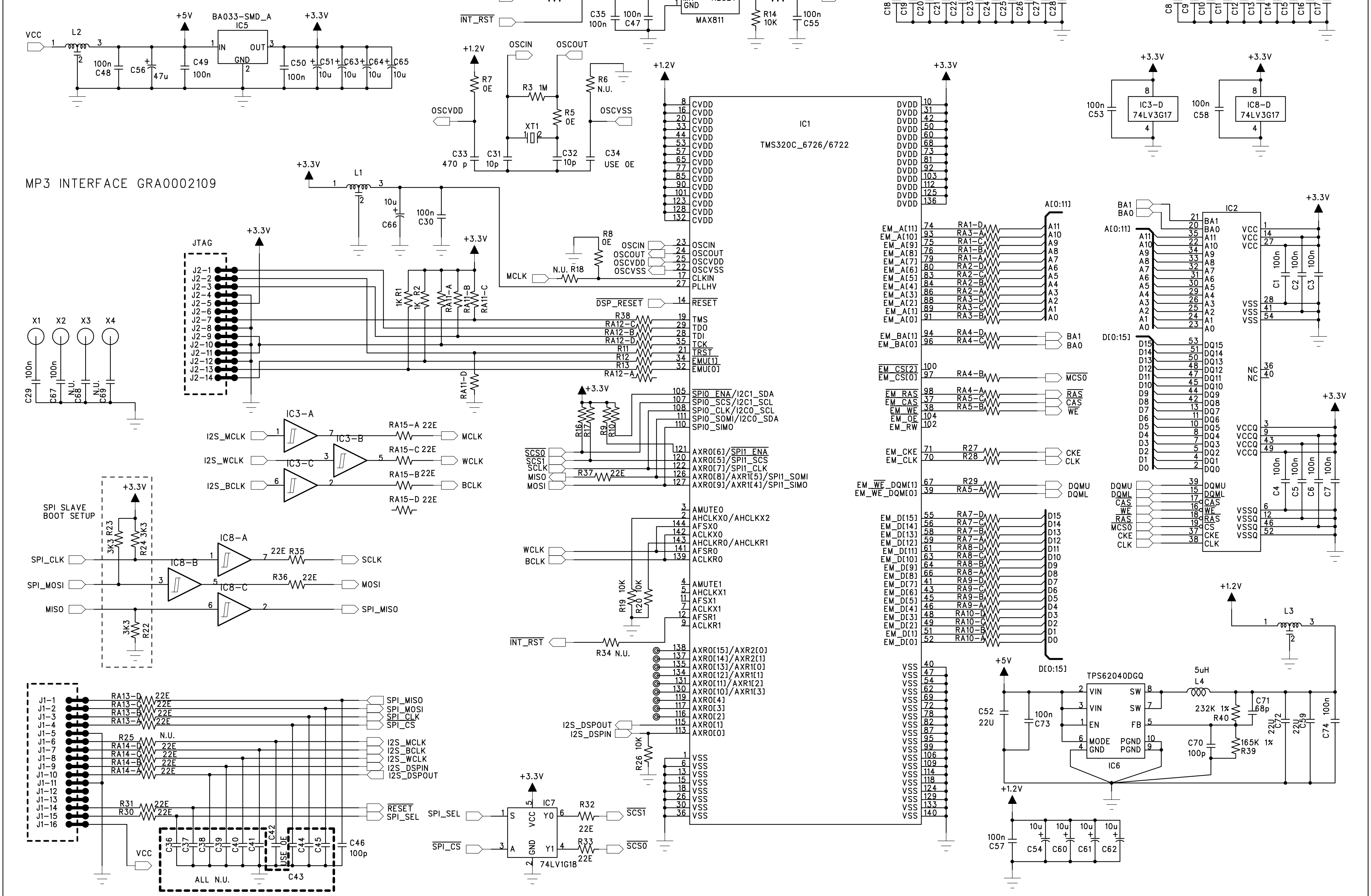
SCALE: SHEET: OF

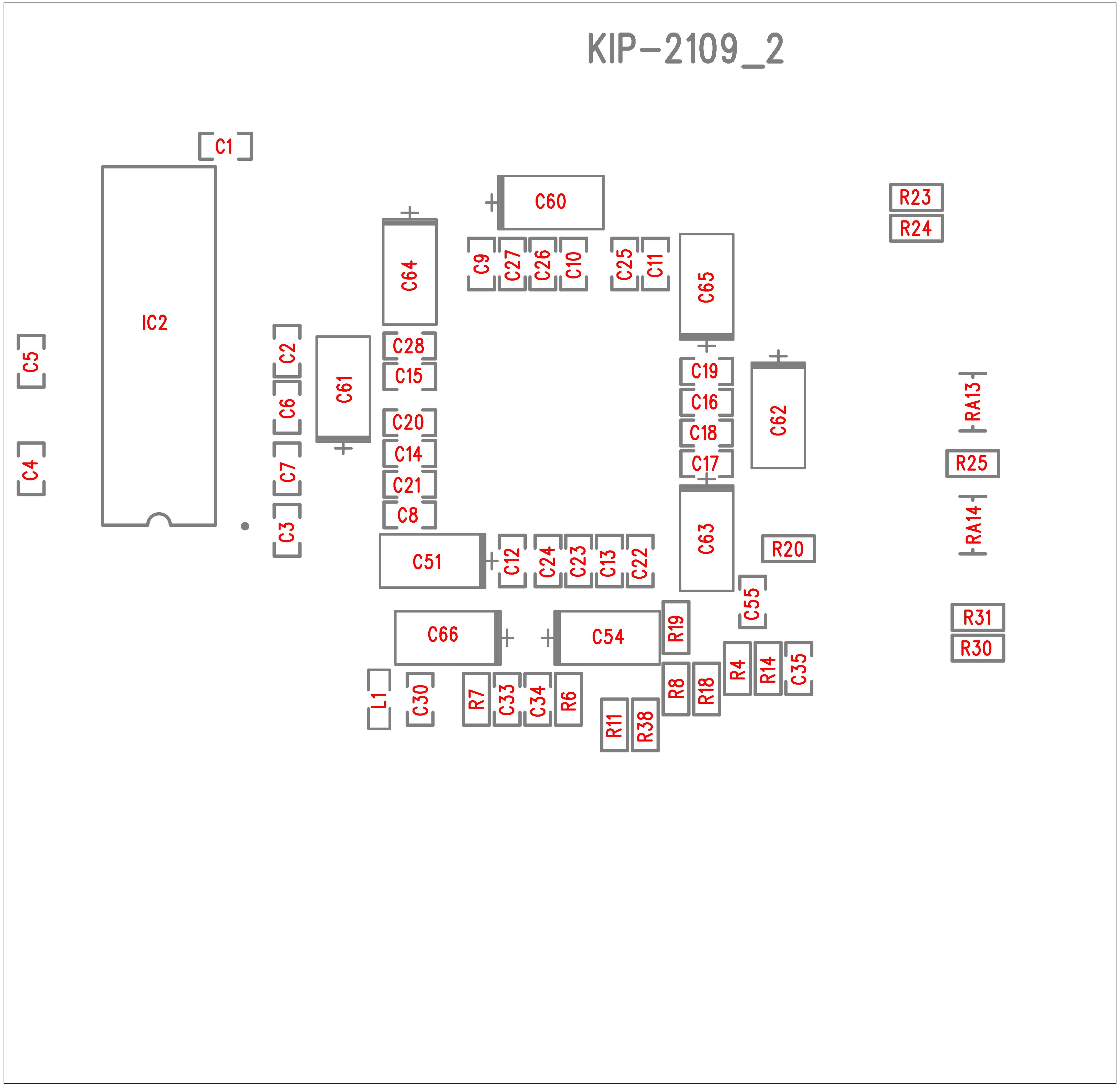
Oscillator setup:

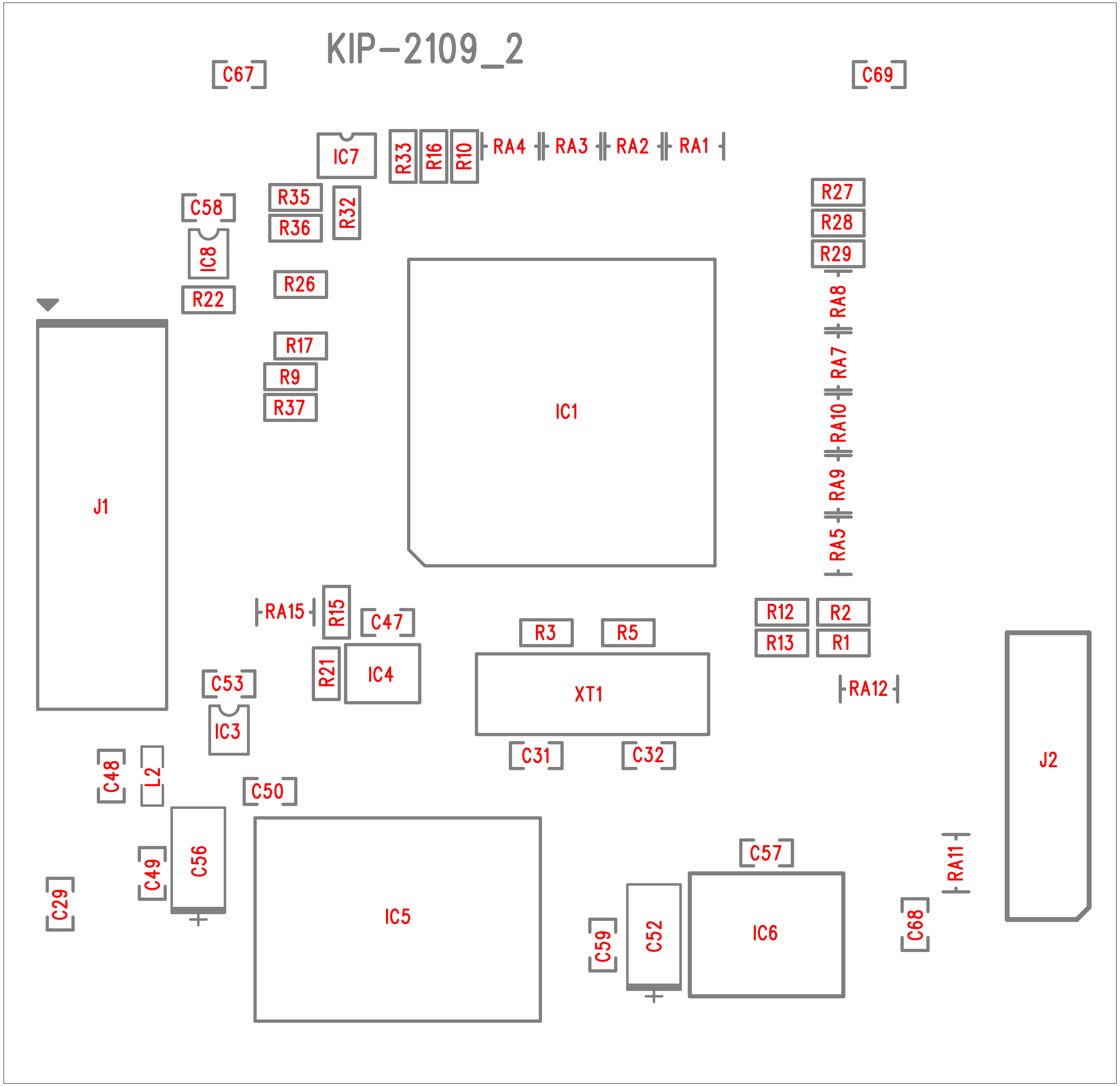
CLKIN -> use R6, R7, R18, don't use C31, C32, C33, C34, XT1, R3, R5, R8, short C31 and C34

OSCIN -> use C31, C32, XT1, R3, R5, R6, R7, R8, don't use R18, C33, C34, short C34

OSCIN "plus" -> use C31, C32, C33, C34, XT1, R3, R5, R8, don't use R6, R7, R18

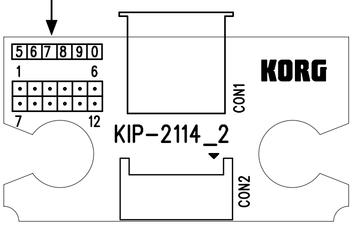



KIP-2109_2
C1
IC2
C5
C4
C2
C6
C7
C3
C61
C64
C28
C15
C20
C14
C21
C8
C51
C60
C9
C27
C26
C10
C25
C11
C65
C19
C16
C18
C17
C62
C63
C12
C24
C23
C13
C22
C66
C54
R19
C55
R20
R23
R24
RA13
R25
RA14
R31
R30
L1
C30
R7
C33
C34
R6
R11
R38
R8
R18
R4
R14
C35


KIP-2109_2
C67
C69
IC7
R33
R16
R10
RA4
RA3
RA2
RA1
R27
R28
R29
C58
R35
R36
R32
IC8
R26
R22
RA8
RA7
RA10
RA9
RA5
R17
R9
R37
IC1
J1
RA15
R15
C47
R3
R5
R12
R2
R13
R1
R21
IC4
XT1
RA12
C53
IC3
C31
C32
J2
C48
L2
C50
C57
RA11
C56
C49
C29
IC5
C52
IC6
C59
C68

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

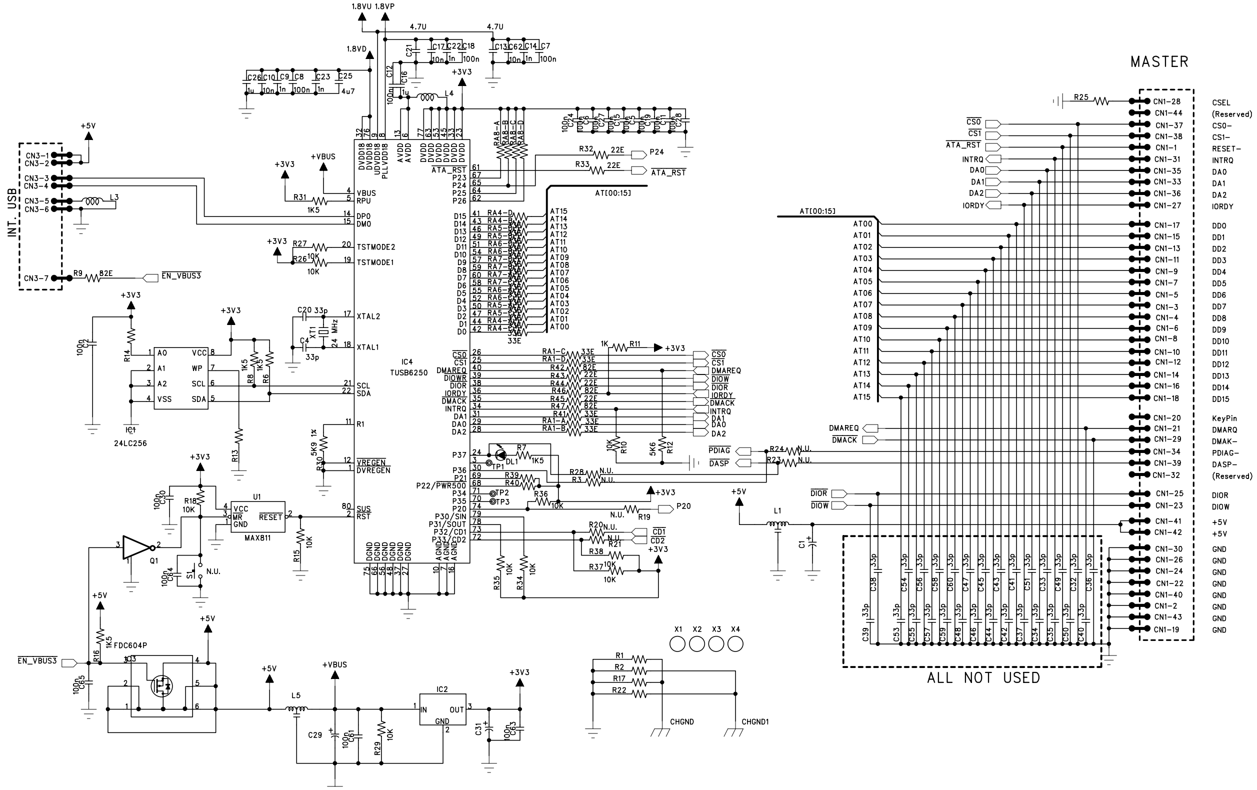
CANCELLARE CON PENNARELLO NERO
MESE E ANNO DI COLLAUDO



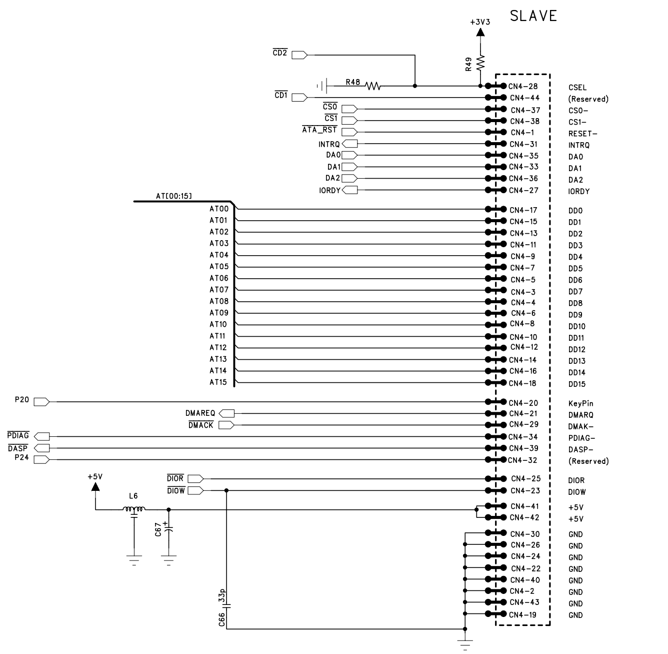
FASE	DESCRIZIONE
1	*CANCELLARE CON PENNARELLO NERO MESE E ANNO DI COLLAUDO*
2	
3	
4	

DRAWN:	DATED: *09/05/2006*	COMPANY: KORG			
		TITLE: *SCHEDA LAVORAZIONE KIP-2114_2 C.S. FRONT USB CONNETTOR - PA800 -*			
CHECKED:	DATED:	CODE:	SIZE:	DRAWING NO: *KID-F002114_0*	REV:
QUALITY CONTROL:	DATED:				
RELEASED:	DATED:	SCALE:		SHEET: OF	

HD INTERFACE GRA0002120 (MASTER)



HD INTERFACE GRA0002120 (SLAVE)



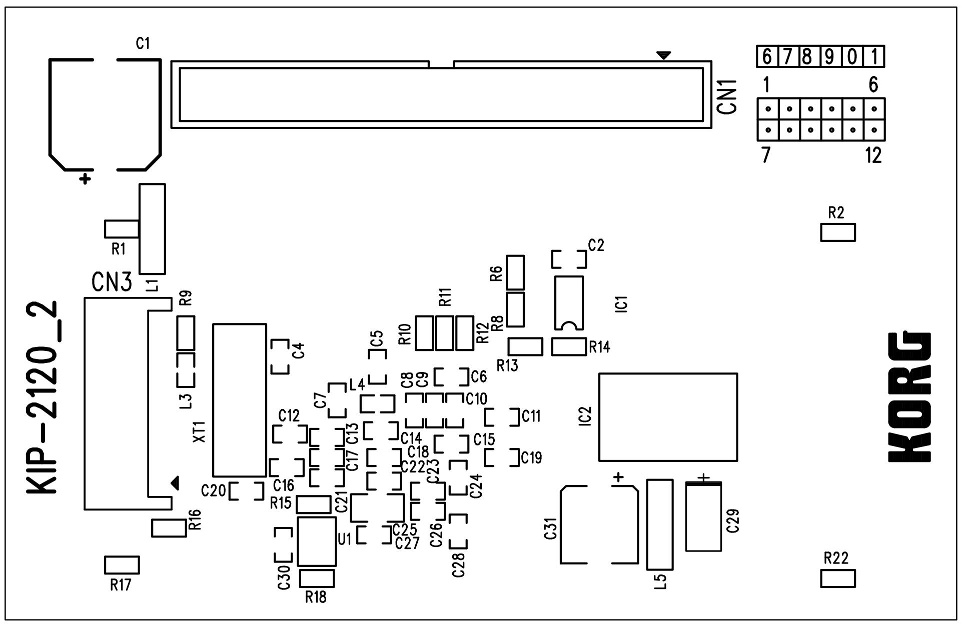
FOR SLAVE HD OR CDRW:

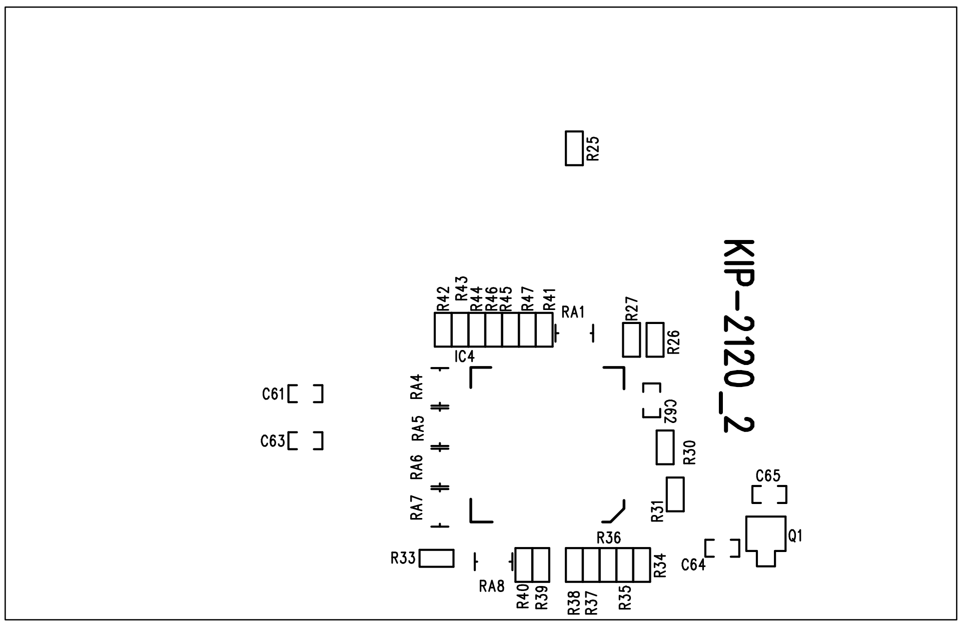
R28: 1K
R20: N.U.
R21: N.U.
R23: N.U.
R24: N.U.
R27: N.U.

FOR SLAVE C.F.:

R28: N.U.
R20: N.U.
R21: 22E
R23: 22E
R24: 22E
R27: 22E

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

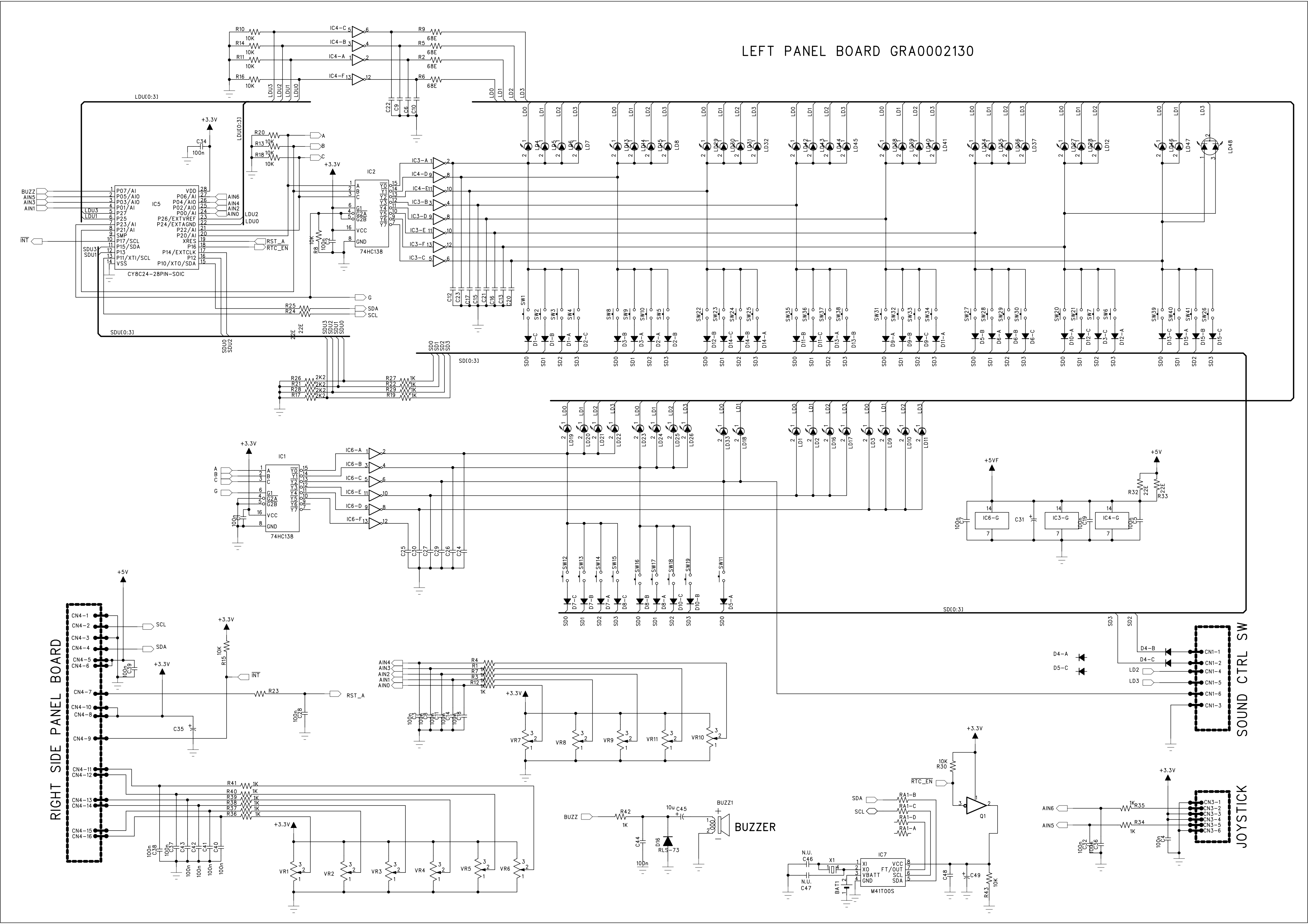


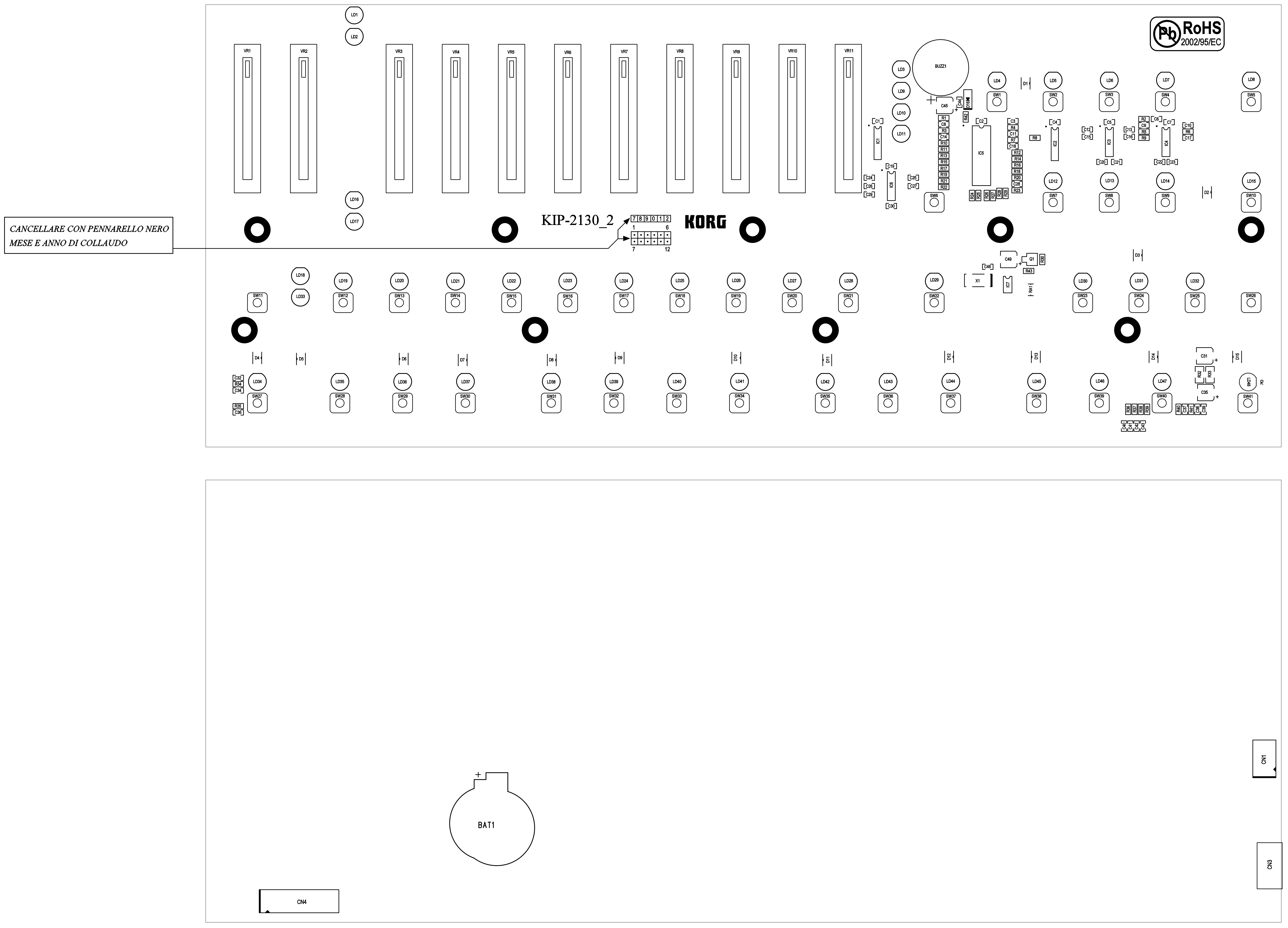


FASE	DESCRIZIONE
1	*CANCELLARE CON PENNARELLO NERO MESE E ANNO DI COLLAUDO*
2	
3	
4	

DRAWN:	DATED: *05/10/2006*	COMPANY:	**KORG**
CHECKED:	DATED:	TITLE:	*SCHEDA LAVORAZIONE KIP-2120_2 H.D. INTERFACE - PA800 -*
QUALITY CONTROL:	DATED:	CODE: / SIZE: / DRAWING NO:	*KID-F002120_0*
RELEASED:	DATED:	SCALE:	SHEET: OF

REV:


LEFT PANEL BOARD GRA0002130
RIGHT SIDE PANEL BOARD
SOUND CTRL SW
JOYSTICK
BUZZER
CY8C24-28PIN-SOIC
74HC138
74HC138
M41T00S
RLS-73



FASE	DESCRIZIONE
1	*CANCELLARE CON PENNARELLO NERO MESE E ANNO DI COLLAUDO*
2	
3	
4	

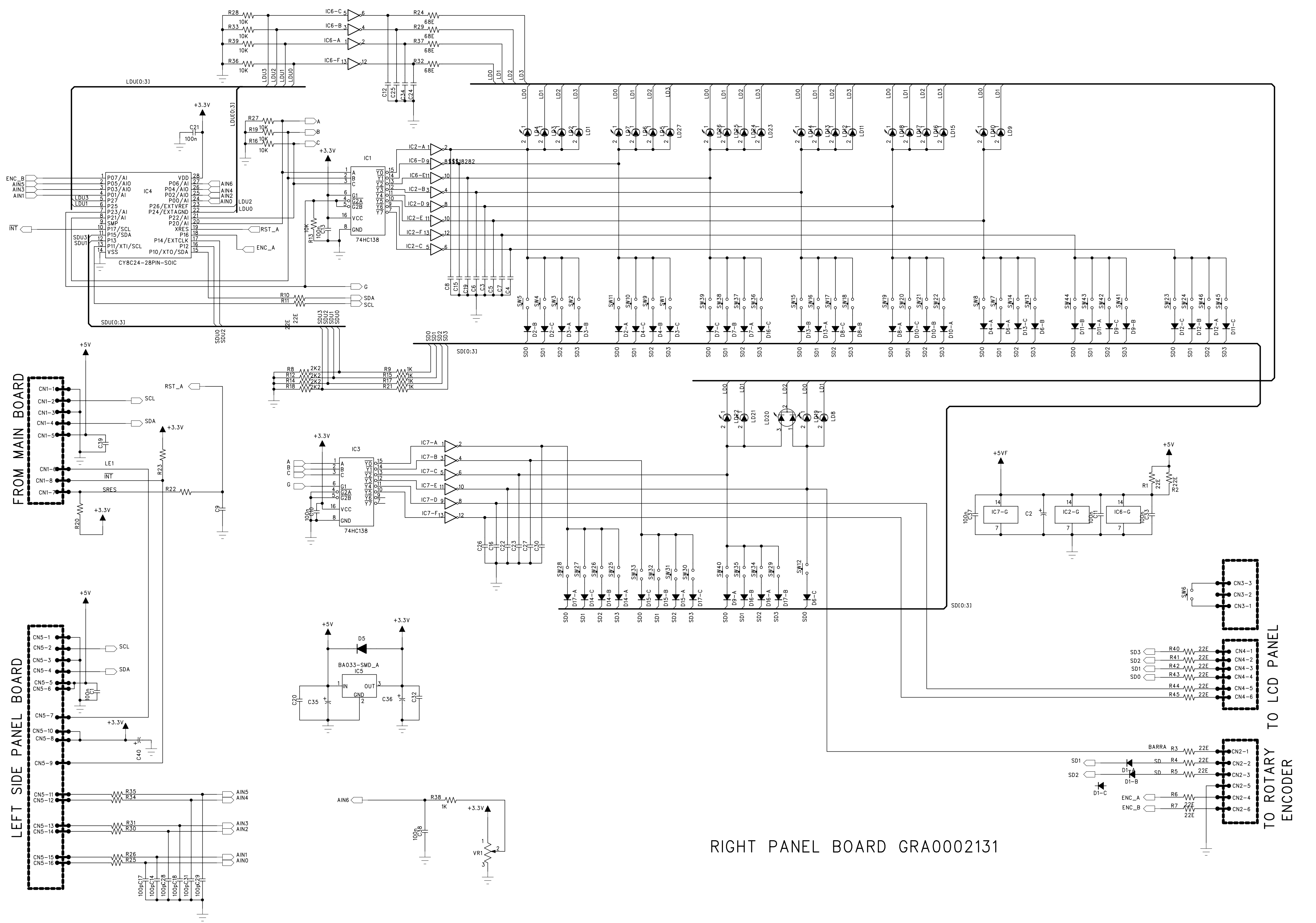
DRAWN:	DATED: 21/06/2007
CHECKED:	DATED:
QUALITY CONTROL:	DATED:
RELEASED:	DATED:

COMPANY: **KORG**

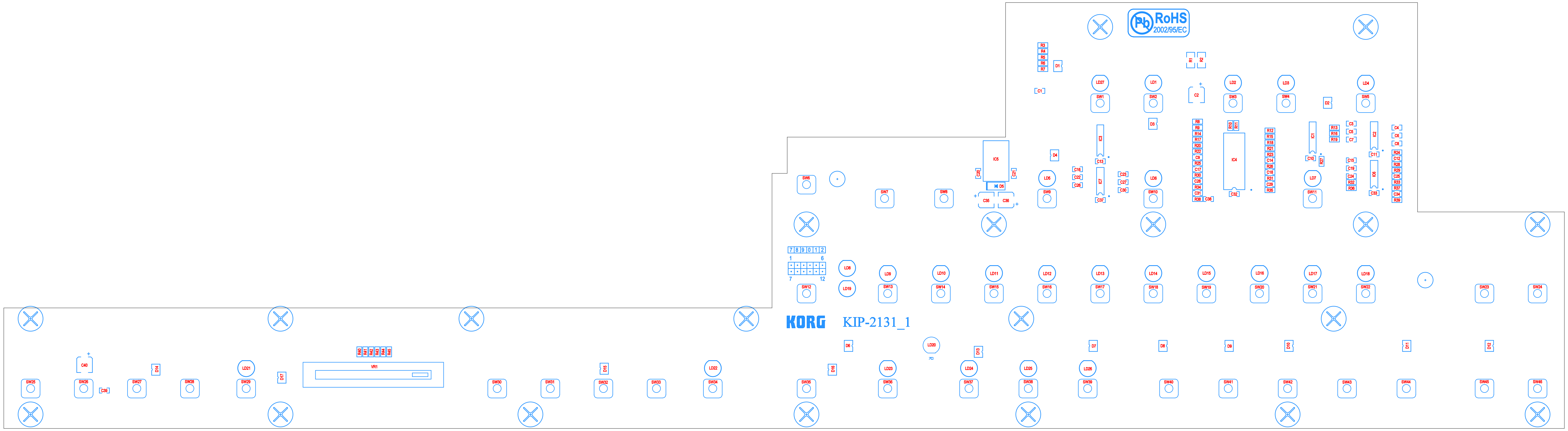
TITLE: *SCHEDA LAVORAZIONE KIP-2130_2 C.S. PANNELLO SX - PA2X -*

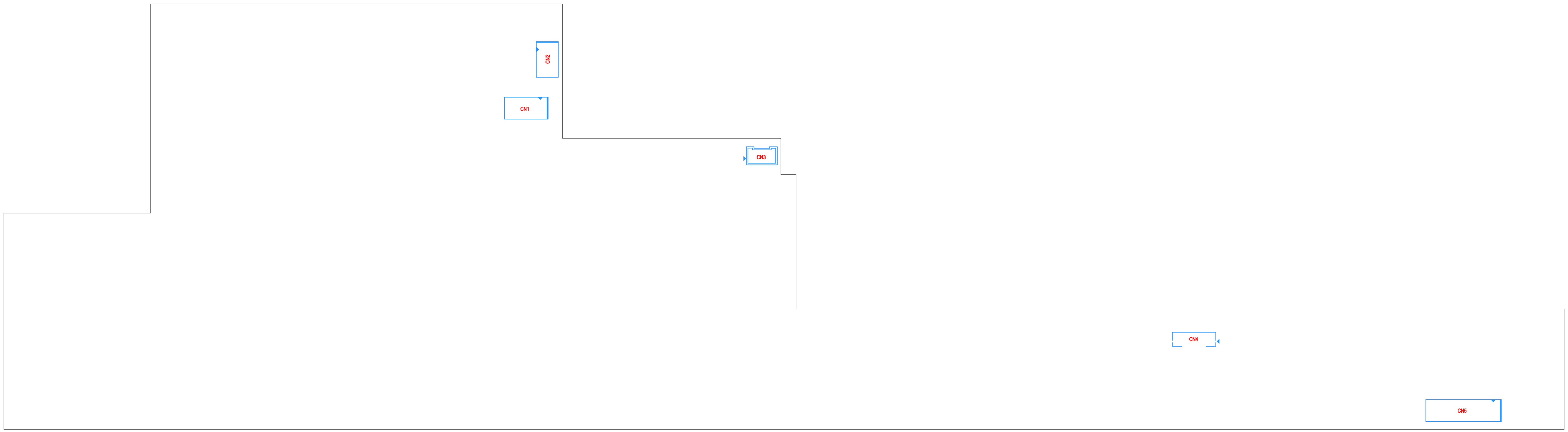
CODE:	SIZE:	DRAWING NO:	REV:
		KID-F002130_2	

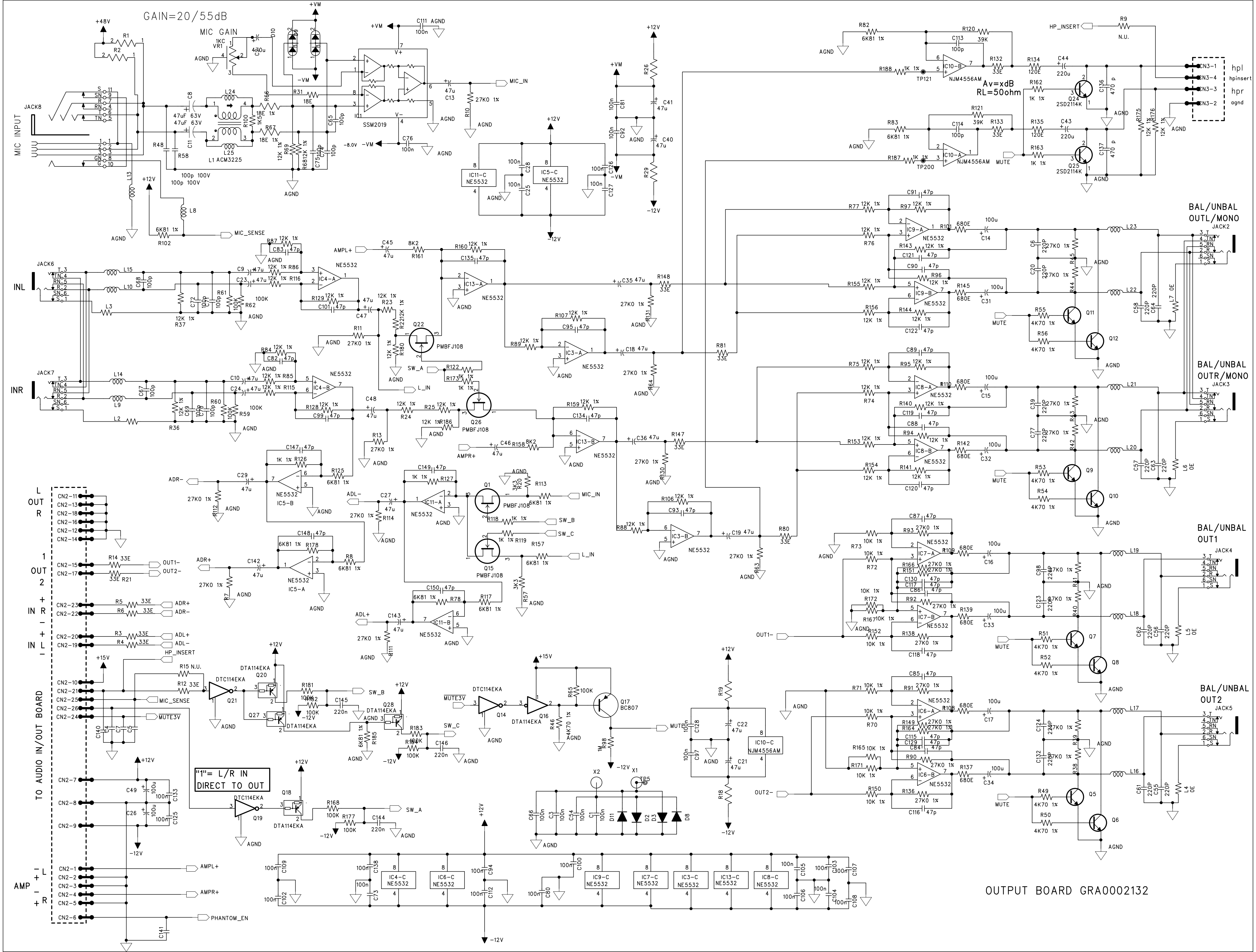
SCALE: SHEET: OF



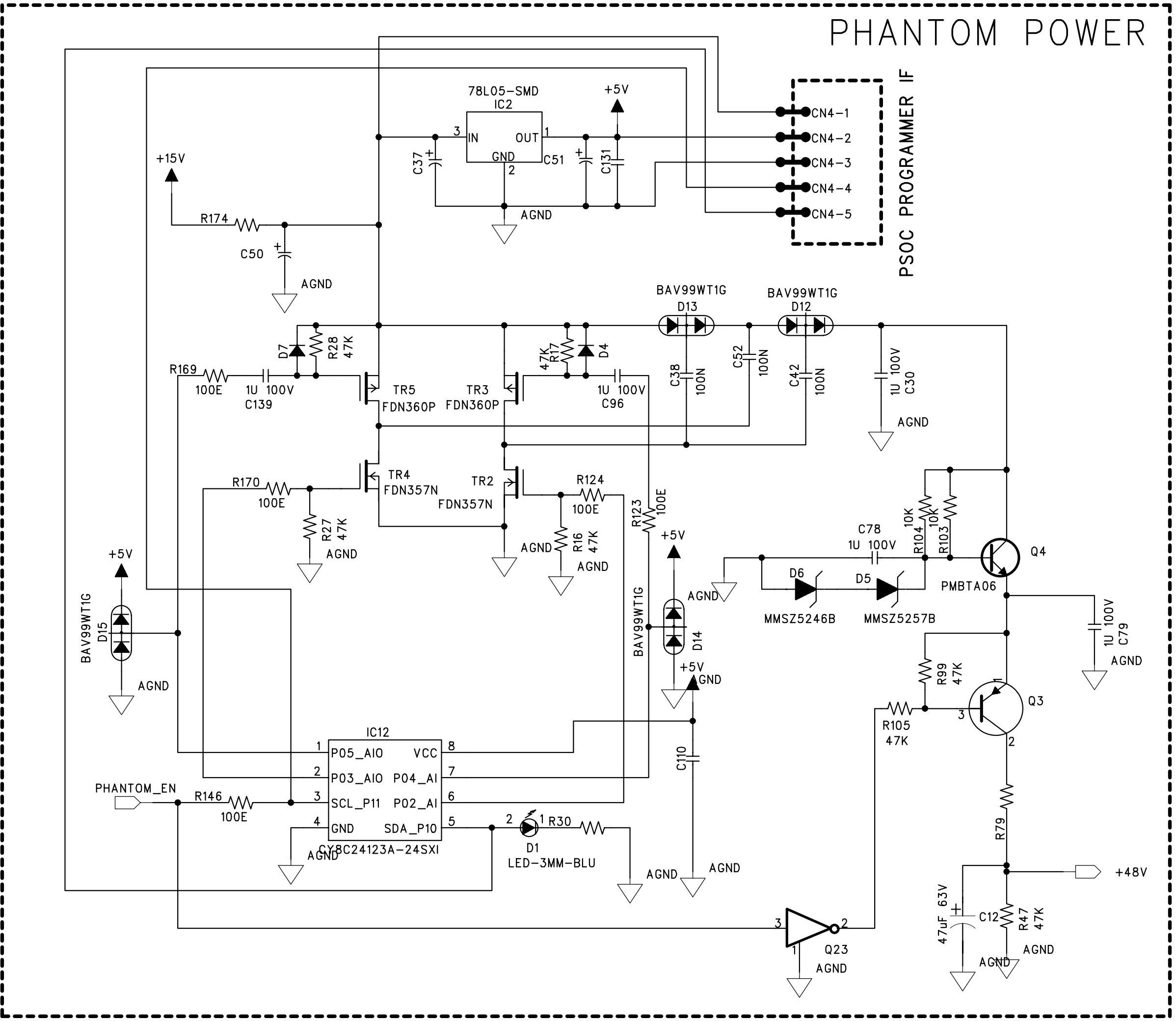
RIGHT PANEL BOARD GRA0002131

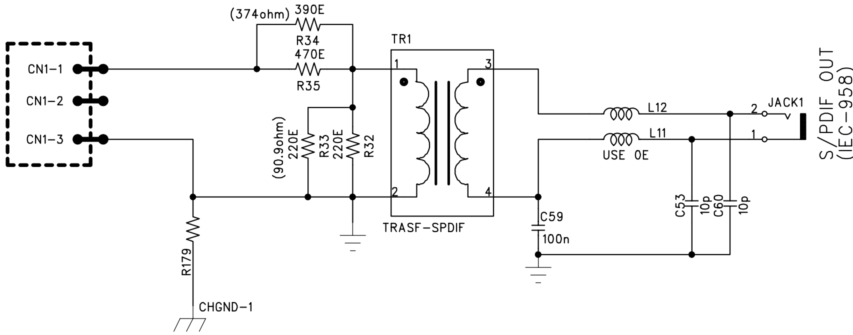

RoHS
2002/95/EC
KIP-2131_1


CN2
CN1
CN3
CN4
CN5


GAIN=20/55dB
MIC GAIN
MIC INPUT
JACK8
SSM2019
Av=xdB
RL=50ohm
NJM4556AM
HP_INSERT
hpl
hpinsert
hpr
agnd
BAL/UNBAL
OUTL/MONO
JACK2
BAL/UNBAL
OUTR/MONO
JACK3
BAL/UNBAL
OUT1
JACK4
BAL/UNBAL
OUT2
JACK5
INL
JACK6
INR
JACK7
MIC_SENSE
MIC_IN
AMPL+
AMPR+
SW_A
SW_B
SW_C
L_IN
MUTE
MUTE3V
OUT1-
OUT2-
L
OUT
R
1
OUT
2
+
IN R
−
+
IN L
−
TO AUDIO IN/OUT BOARD
AMP
"1"= L/R IN
DIRECT TO OUT
PHANTOM_EN
OUTPUT BOARD GRA0002132

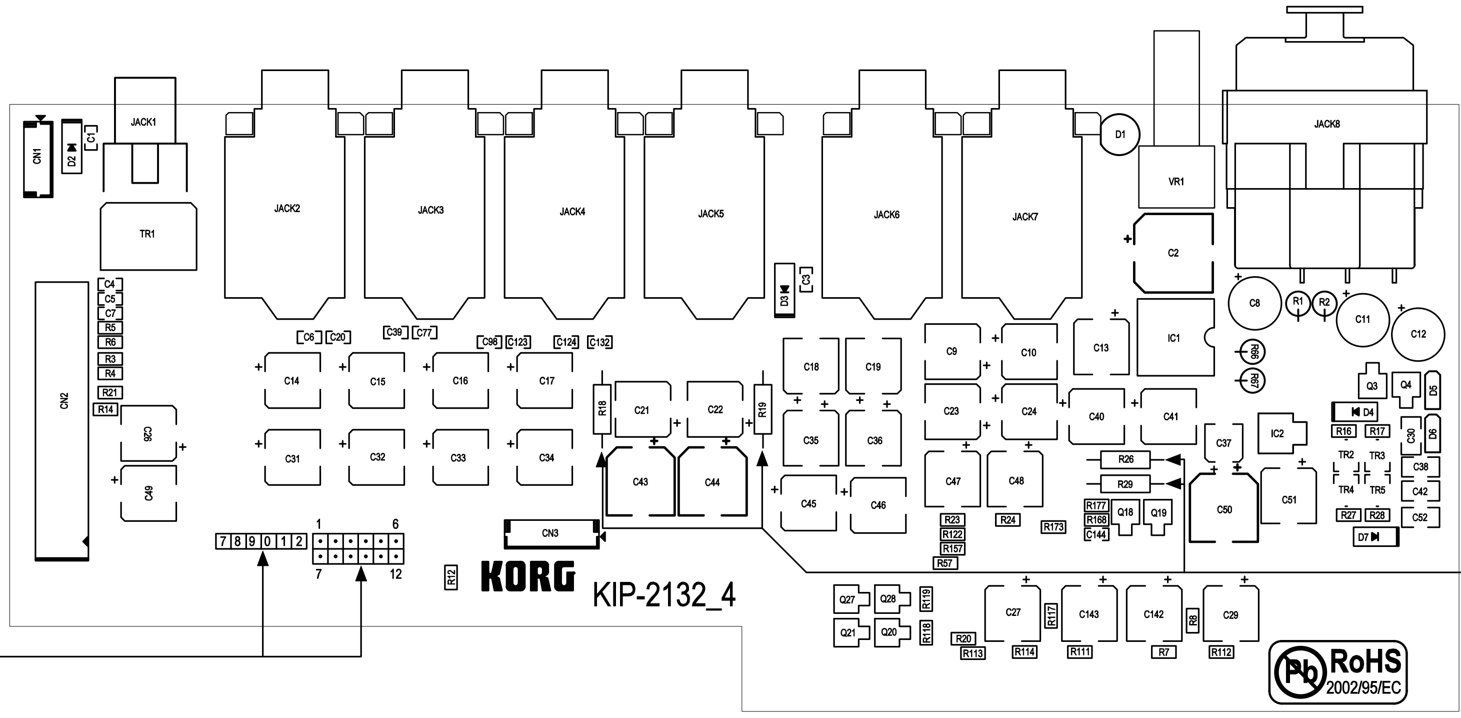
OUTPUT BOARD GRA0002132 (SPDIF)





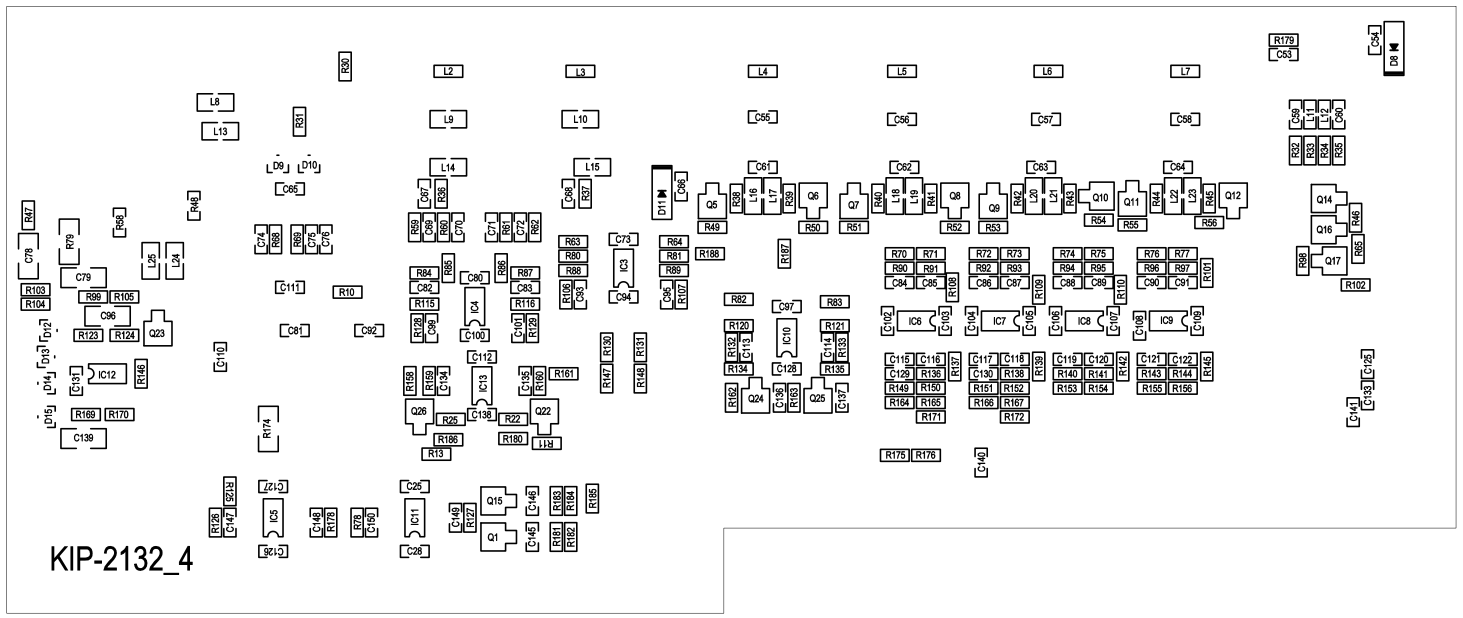
FOR SPARE PARTS OF IC12 PLEASE USE: CINL010002

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



PREFORMARE E SOLLEVARE
DI 4.3mm : R18-R19-R26-R29

CANCELLARE CON PENNARELLO NERO
MESE E ANNO DI COLLAUDO



FASE	DESCRIZIONE
1	*PREFORMARE E SOLLEVARE DI 4.3 mm LE RESISTENZE : R18 , R19 , R26 , R29 .*
2	*CANCELLARE CON PENNARELLO NERO MESE E ANNO DI COLLAUDO*
3	
4	

DRAWN:	DATED: 31/08/2007
CHECKED:	DATED:
QUALITY CONTROL:	DATED:
RELEASED:	DATED:

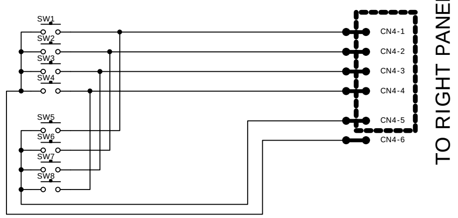
COMPANY: KORG

TITLE: *SCHEDA LAVORAZIONE KIP-2132_4*
C.S. IN/OUT BOARD - PA2X -

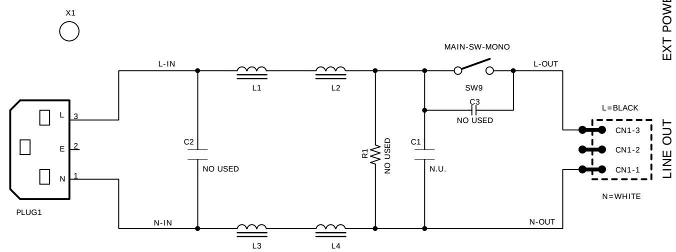
CODE:	SIZE:	DRAWING NO:	REV:
		KID-F002132_4	

SCALE: SHEET: OF

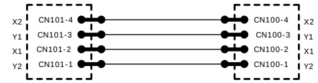
LCD PANEL GRA0002133



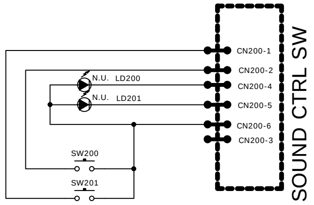
MAIN FILTER GRA0002134



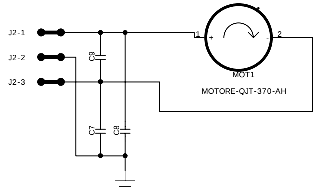
TOUCH PANEL INTERFACE GRA0002135



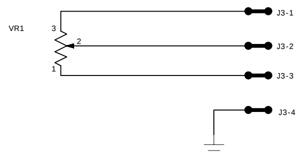
SOUND CONTROL PANEL GRA0002136



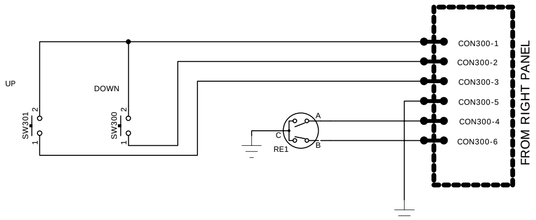
MOTOR HARNESS BOARD GRA0002141



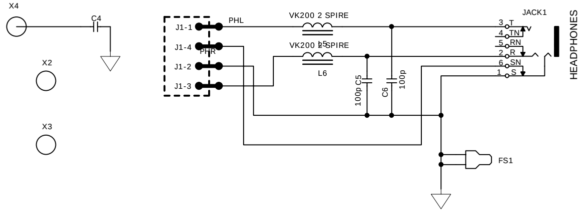
LCD HARNESS BOARD GRA0002142



ROTARY ENCODER GRA0002137

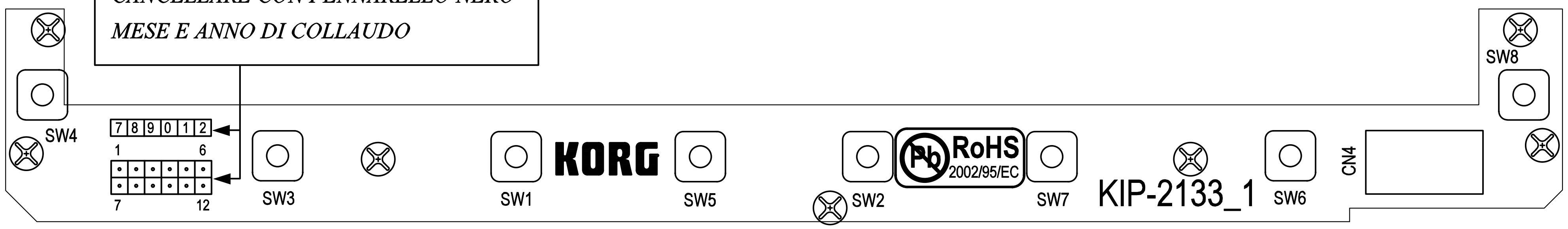


HEADPHONE BOARD GRA0002138



REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

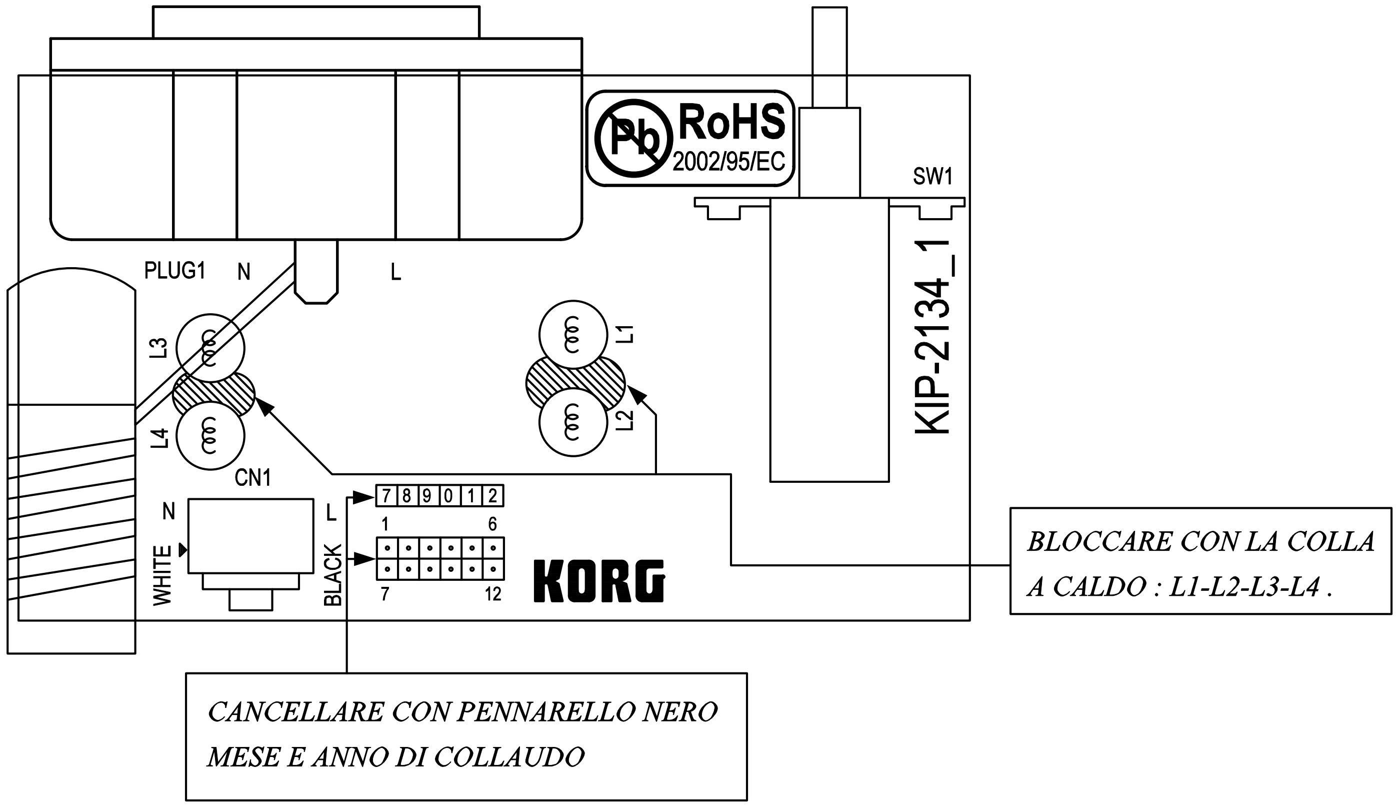
CANCELLARE CON PENNARELLO NERO
MESE E ANNO DI COLLAUDO



FASE	DESCRIZIONE
1	*CANCELLARE CON PENNARELLO NERO MESE E ANNO DI COLLAUDO .*
2	
3	
4	

COMPANY: KORG						
TITLE: *SCHEDA LAVORAZIONE KIP-2133_1 C.S. PANNELLO LCD - P2X -*						
DRAWN:	DATED: 15/05/2007					
CHECKED:	DATED:	CODE:	SIZE:	DRAWING NO: *KID-F002133*	REV:
QUALITY CONTROL:	DATED:				
RELEASED:	DATED:	SCALE:		SHEET:	OF

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



FASE	DESCRIZIONE
1	*BLOCCARE CON LA COLLA A CALDO: L1-L2-L3-L4 .*
2	*CANCELLARE CON PENNARELLO NERO MESE E ANNO DI COLLAUDO .*
3	
4	

DRAWN:	DATED: *15/05/2007*
CHECKED:	DATED:
QUALITY CONTROL:	DATED:
RELEASED:	DATED:

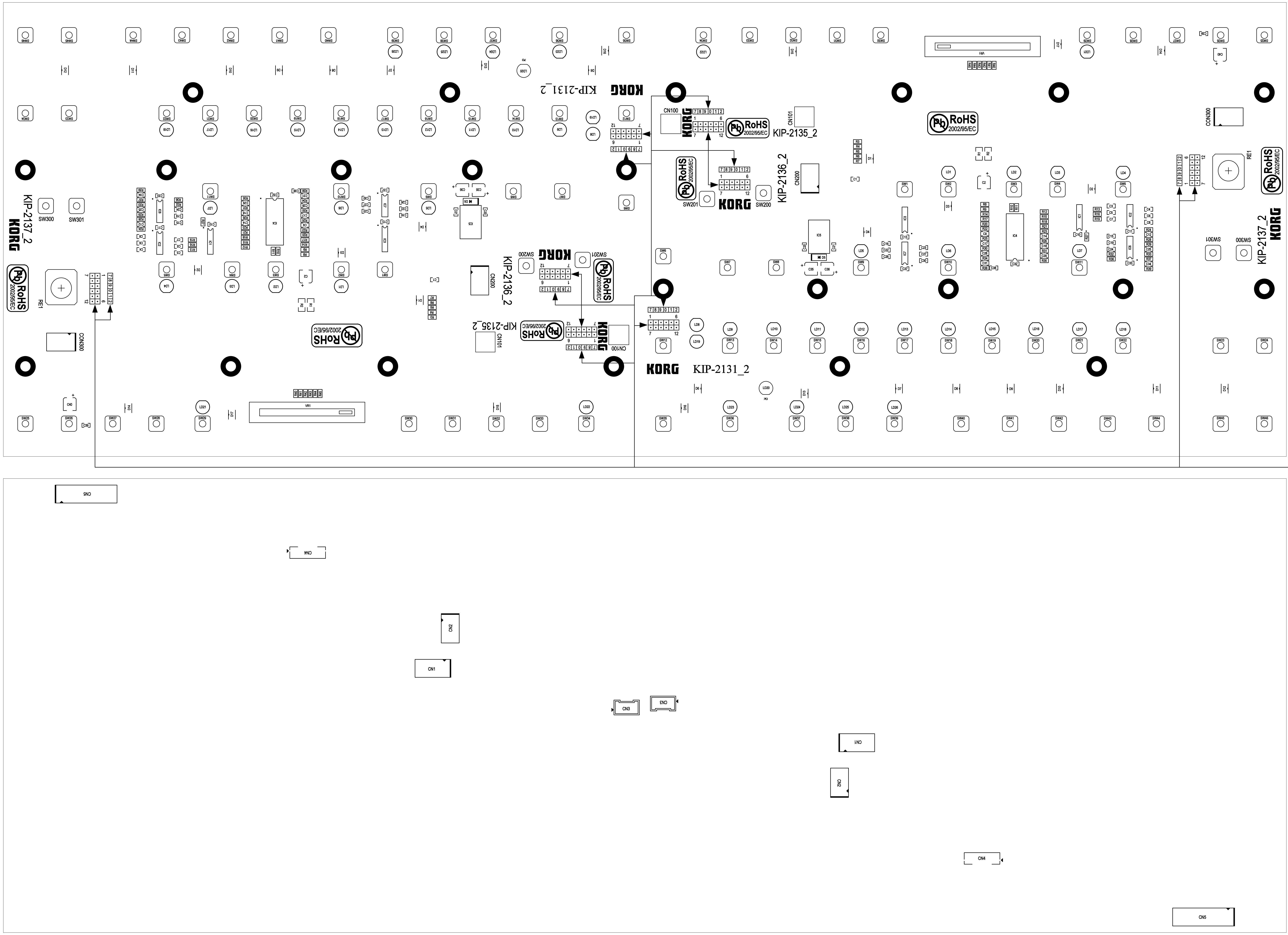
COMPANY: KORG

TITLE: *SCHEDA LAVORAZIONE KIP-2134_1*
C.S. FILTRO RETE - P2X -

CODE:	SIZE:	DRAWING NO:	REV:
		KID-F002134	

SCALE: SHEET: OF

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

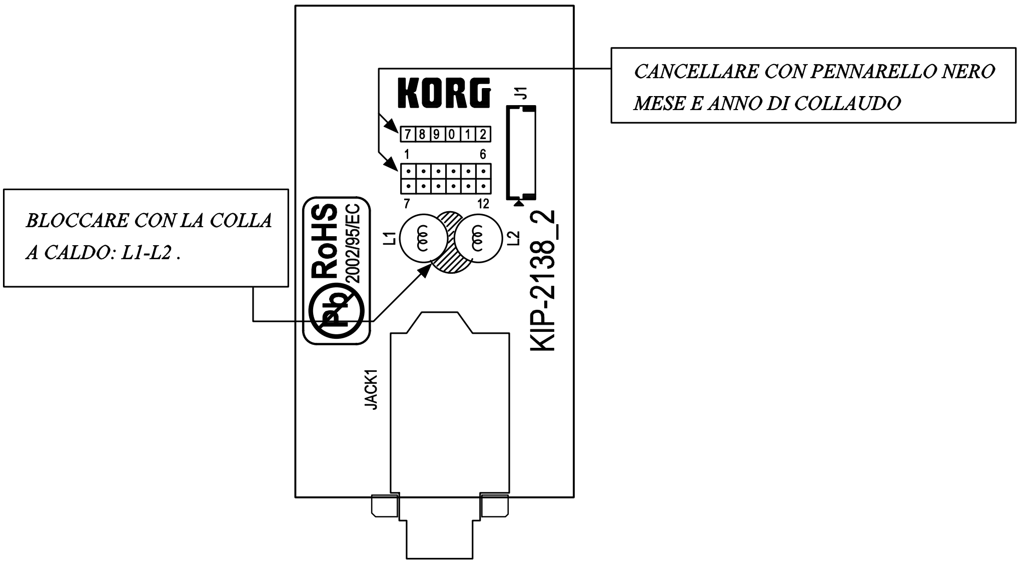


CANCELLARE CON PENNARELLO NERO
MESE E ANNO DI COLLAUDO

FASE	DESCRIZIONE
1	*CANCELLARE CON PENNARELLO NERO MESE E ANNO DI COLLAUDO*
2	
3	
4	

		COMPANY:	**KORG**		
DRAWN:	DATED: 21/06/2007	TITLE:	*SCHEDA LAVORAZIONE KIP-2131_2 KIP-2135_2 KIP-2136_2 KIP-2137_2 - PA2X -*		
CHECKED:	DATED:	CODE:	SIZE:	DRAWING NO: *KID-FM00001_1*	REV:
QUALITY CONTROL:	DATED:				
RELEASED:	DATED:	SCALE:		SHEET: OF	

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



FASE	DESCRIZIONE
1	*BLOCCARE CON LA COLLA A CALDO : L1-L2 .*
2	*CANCELLARE CON PENNARELLO NERO MESE E ANNO DI COLLAUDO*
3	
4	

DRAWN:	DATED: 22/06/2007
CHECKED:	DATED:
QUALITY CONTROL:	DATED:
RELEASED:	DATED:

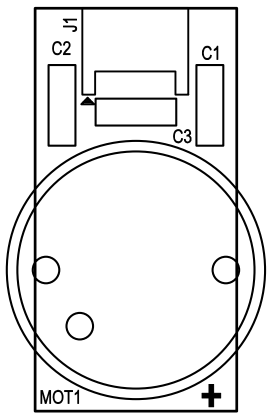
COMPANY: KORG

TITLE: *SCHEDA LAVORAZIONE KIP-2138_2*
C.S. CUFFIA - PA2X -

CODE:	SIZE:	DRAWING NO:	REV:
		KID-F002138_1	

SCALE: SHEET: OF

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



FASE	DESCRIZIONE
1	
2	
3	
4	

DRAWN:	DATED: 14/05/2007
CHECKED:	DATED:
QUALITY CONTROL:	DATED:
RELEASED:	DATED:

COMPANY: KORG

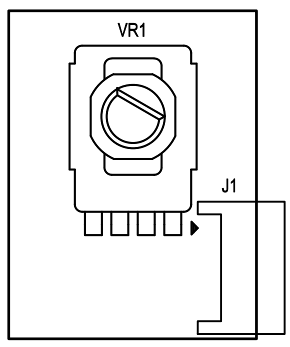
TITLE: *SCHEDA LAVORAZIONE KIP-2141_0 RILANCIO MOTORE -PA2X-*

CODE:	SIZE:	DRAWING NO:	REV:
		KID-F002141	

SCALE: SHEET: OF

A	B	C	D

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



FASE	DESCRIZIONE
1	
2	
3	
4	

DRAWN:	DATED: 14/05/2007
CHECKED:	DATED:
QUALITY CONTROL:	DATED:
RELEASED:	DATED:

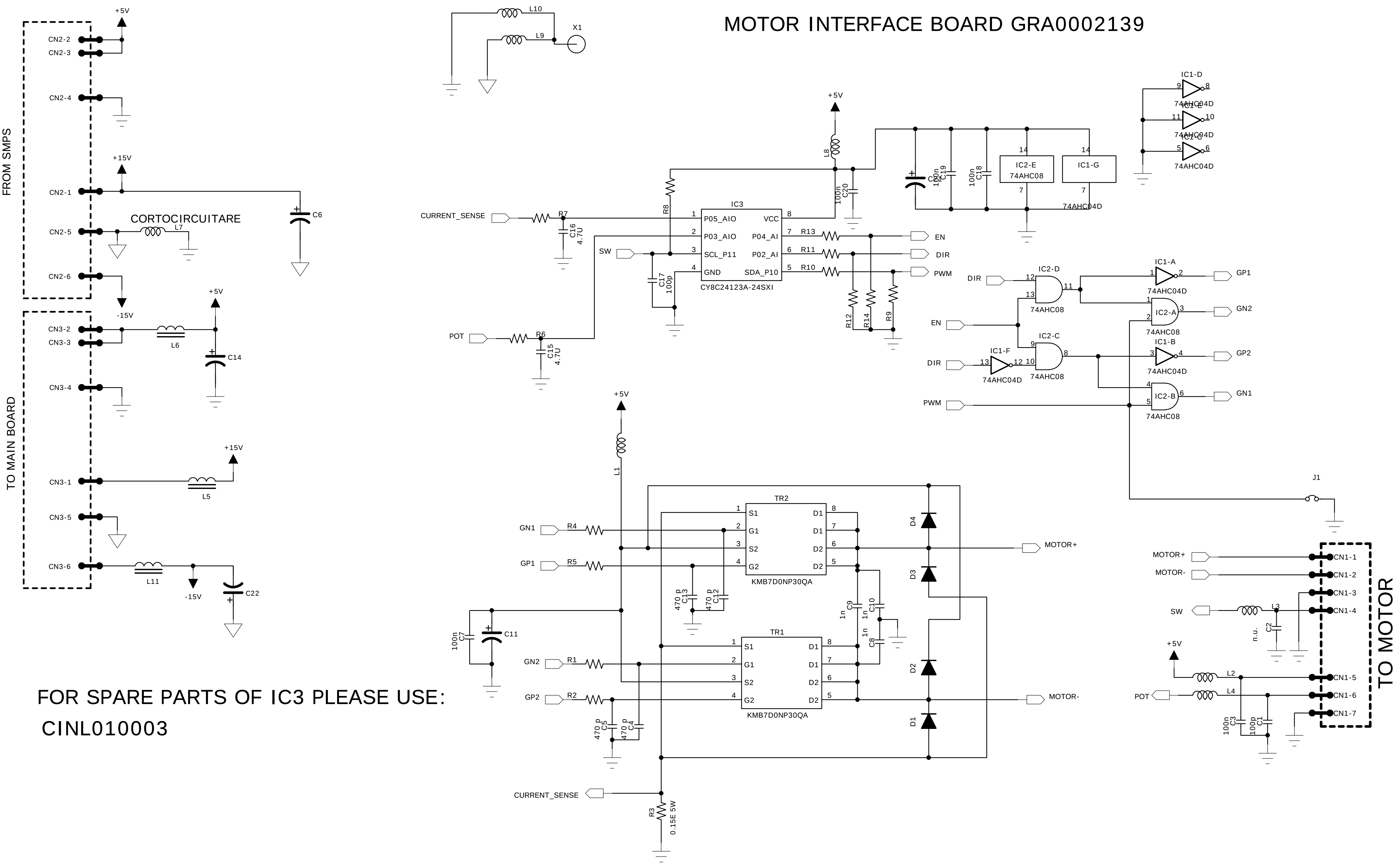
COMPANY: KORG

TITLE: *SCHEDA LAVORAZIONE KIP-2142_0 POT. POSIZIONE LCD -PA2X-*

CODE:	SIZE:	DRAWING NO:	REV:
		KIF-F002142	

SCALE: SHEET: OF

MOTOR INTERFACE BOARD GRA0002139



FOR SPARE PARTS OF IC3 PLEASE USE:
CINL010003

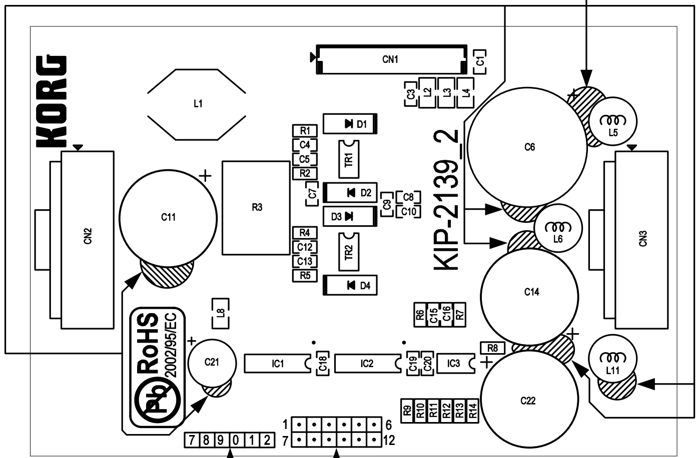
A	B	C	D	E	F

1

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

BLOCCARE CON LA COLLA A CALDO: C6,C14,C22,C11,C21,L5,L6,L11.

2



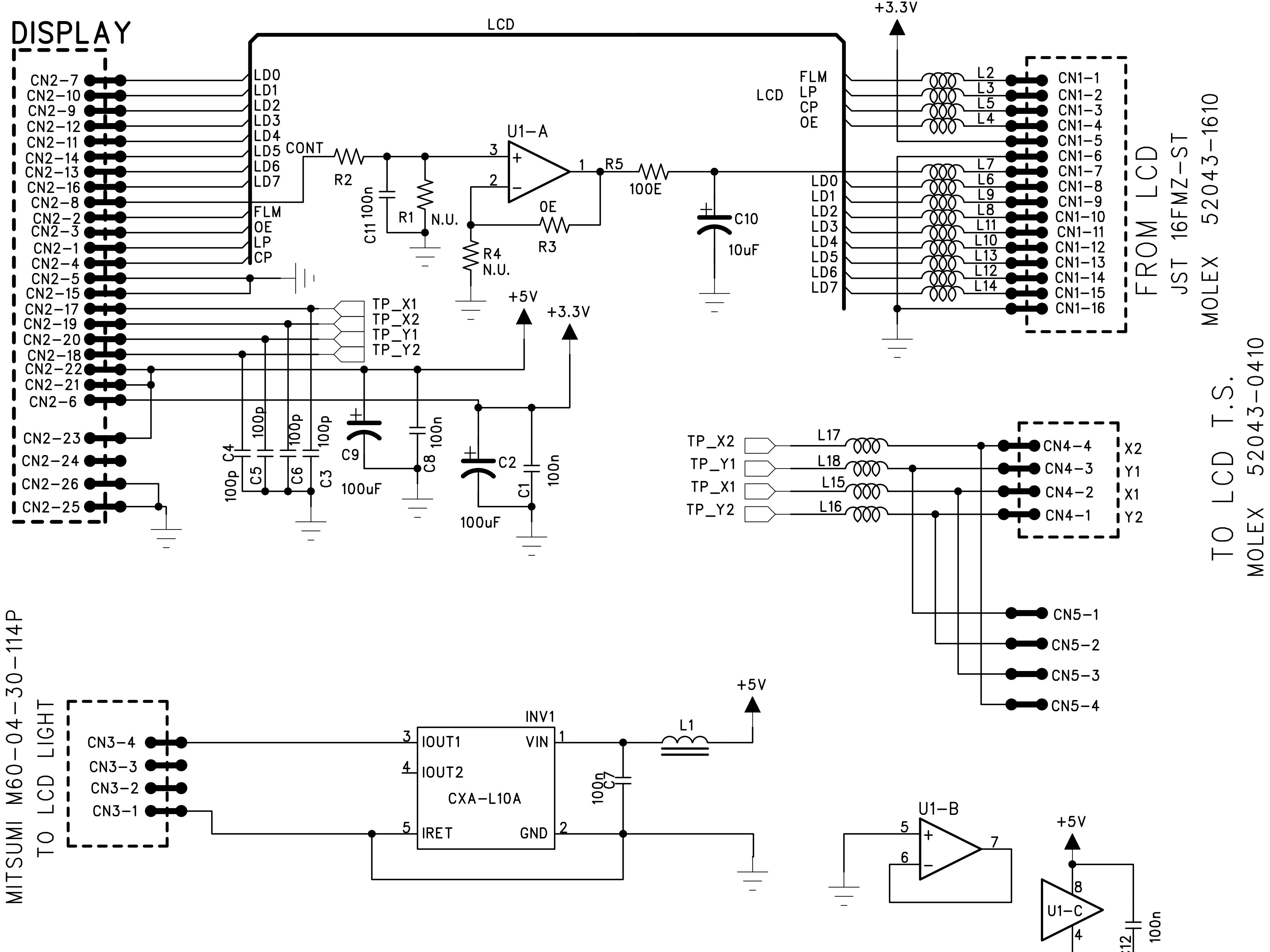
CANCELLARE CON PENNARELLO NERO MESE E ANNO DI COLLAUDO

3

4

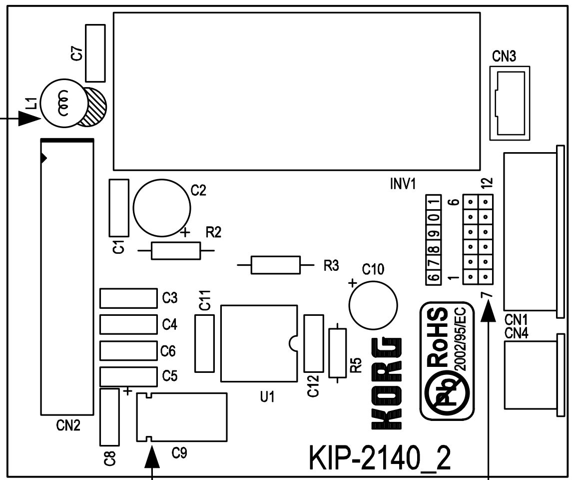
FASE	DESCRIZIONE
1	*BLOCCARE CON LA COLLA A CALDO: C6,C14,C22,C11,C21,L5,L6,L11.*
2	*CANCELLARE CON PENNARELLO NERO MESE E ANNO DI COLLAUDO*
3	
4	

DRAWN:	DATED: *22/06/2007*	COMPANY: KORG			
		TITLE: *SCHEDA LAVORAZIONE KIP-2139_2 C.S. MOTORE IF/SUPPLY -PA2X-*			
CHECKED:	DATED:	CODE:	SIZE:	DRAWING NO: *KID-F002139_1*	REV:
QUALITY CONTROL:	DATED:				
RELEASED:	DATED:	SCALE:		SHEET:	OF



LCD INTERFACE GRA0002140

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



BLOCCARE CON LA COLLA A CALDO : L1

MONTARE IL CONDENSATORE C9 IN VERTICALE

CANCELLARE CON PENNARELLO NERO MESE E ANNO DI COLLAUDO

FASE	DESCRIZIONE
1	*MONTARE IL CONDENSATORE C9 IN VERTICALE*
2	*BLOCCARE CON LA COLLA A CALDO: L1*
3	*CANCELLARE CON PENNARELLO NERO MESE E ANNO DI COLLAUDO*
4	

DRAWN:	DATED: 22/06/2007
CHECKED:	DATED:
QUALITY CONTROL:	DATED:
RELEASED:	DATED:

COMPANY: KORG

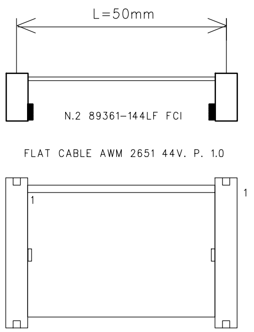
TITLE: *SCHEDA LAVORAZIONE KIP-2140_2*
C.S. KEYBORD IF - PA2X -

CODE:	SIZE:	DRAWING NO:	REV:
		KID-F002140_1	

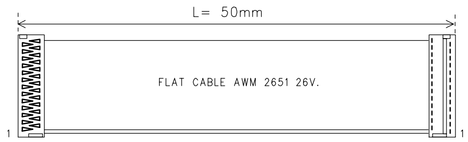
SCALE: SHEET: OF

Pa2Xpro CABLES

FLAT CABLE HDD IF OPT0001008 cod. CAV0010001 ref. LC

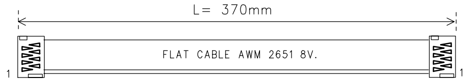


FLAT CABLE MB/OUT BOARD cod. CAV0010027 ref. LC-GRF



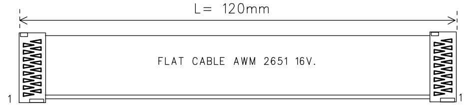
N.2 PICOFLEX 26 V. 90327-0326

FLAT CABLE MB/RIGHT PANEL cod. CAV0010028 ref. D2-UC1-GRF



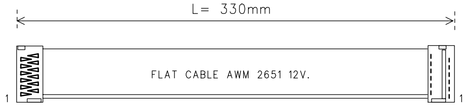
N.2 PICOFLEX 8 V. 90327-0308

FLAT CABLE RX/LX PANEL cod. CAV0010029 ref. UC1



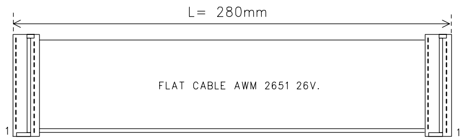
N.2 PICOFLEX 16 V. 90327-0316

FLAT CABLE MB/VIDEO BOARD cod. CAV0010030 ref. LC-GRF



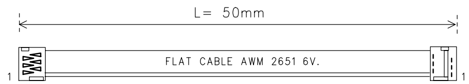
N.2 PICOFLEX 12 V. 90327-0312

FLAT CPU/LCD IF cod. CAV0010031 ref. D2-LC



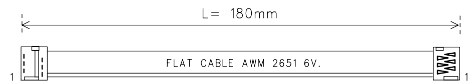
N.2 PICOFLEX 26 V. 90327-0326

FLAT RX PANEL/DIAL cod. CAV0010032 ref. DG



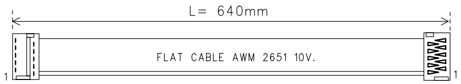
N.2 PICOFLEX 6 V. 90327-0306

FLAT SX PANEL/SOUND CTRL BOARD cod. CAV0010033 ref. UC1



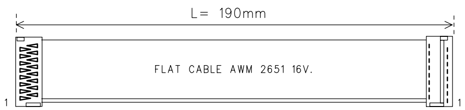
N.2 PICOFLEX 6 V. 90327-0306

FLAT CABLE MB/KEYBOARD IF cod. CAV0010034 ref. KG



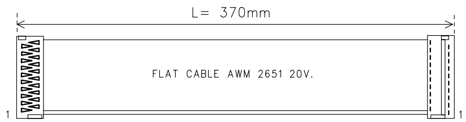
N.2 PICOFLEX 10 V. 90327-0310

FLAT CABLE KEYB IF/KEYB LOWER cod. CAV0010035 ref. KG



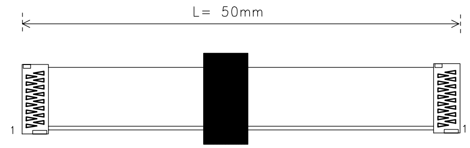
N.2 PICOFLEX 16 V. 90327-0316

FLAT CABLE KEYB IF/KEYB UPPER cod. CAV0010036 ref. KG



N.2 PICOFLEX 20 V. 90327-0320

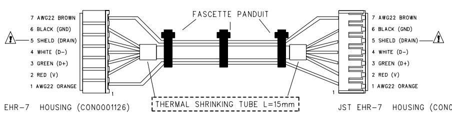
FLAT CABLE MB/MP3 BOARD cod. CAV0010046 ref. LC



FLAT CABLE AWM 2651 16V.
N.2 PICOFLEX 16 V. 90327-0316
N.1 BOB0001005 RICHCO RFS2-21-15-A5

Pa2Xpro HARNESSES

HARNESS MB/HDD IF cod. CAV0010037 ref. LC



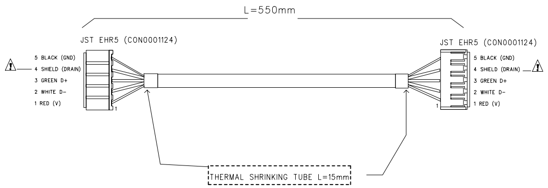
JST EHR-7 HOUSING (CON0001126)

JST EHR-7 HOUSING (CON0001126)

THERMAL SHRINKING TUBE ALSO ON SHIELD (DRAIN WIRE)

PARTS LIST
- N.14 JST SEH-001T-P0.6 TERMINALS (CON0001127)
- N.2 JST EHR-7 HOUSING (CON0001126)
- N.1 USB 2.0 HS (480Mbit/sec) CABLE L=200mm
- N.2 THERMAL SHRINKING TUBE L=15mmx2
- N.1 AWG22 BROWN WIRE L=200mm STYLE 1007
- N.1 AWG22 ORANGE WIRE L=200mm STYLE 1007

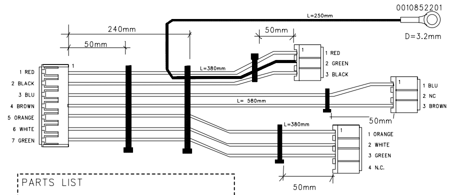
HARNESS MB/FRONT USB cod. CAV0010038 ref. D2-UC1



THERMAL SHRINKING TUBE ALSO ON SHIELD (DRAIN WIRE)

PARTS LIST
- N.10 JST SEH-001T-P0.6 TERMINALS (CON0001127)
- N.2 JST EHR5 HOUSING (CON0001124)
- N.1 USB 2.0 HS (480Mbit/sec) CABLE L=550mm
- N.2 THERMAL SHRINKING TUBE L=15mmx2

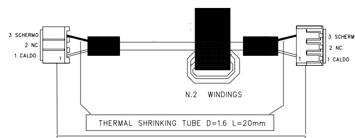
HARNESS MOTOR/POT/SWITCH cod. CAV0010045 ref. UC1



PARTS LIST
- N.15 JST SEH-001T-P0.6 TERMINALS (CON0001127)
- N.1 JST EHR-7 HOUSING (CON0001126)
- N.2 JST EHR-3 HOUSING (CON0001123)
- N.1 JST EHR-4 HOUSING (CON0010025)
- N. 5 PLA0001062
- N.1 0010852201

HARNESS SPDIF cod. CAV0010041 ref. LC-GRF

THERMAL SHRINKING TUBE. L=15MM D=4.8MM



THERMAL SHRINKING TUBE D=1.6 L=20mm

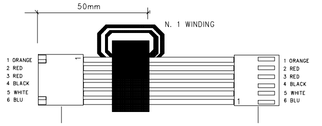
N.2 JST EHR-4 CON0010025

SH. CABLE SUMITOMO AWG24-x1

N.4 JST SEH-001T-P0.6 CON0001127

N. 1 FERRITE COILMASTER C4ST25X12X15-LF

HARNESS SUPPLY/AMPLIF cod. RIL0010016 ref. LC



N.1 43061-0006 CON0001082

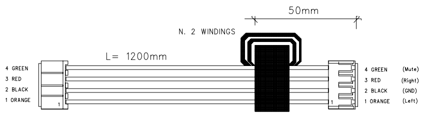
N.6 5194T CON0001009

N.1 JST VHR-6N CON0010030

N.6 JST SVH-41T-P1.1 CON0010033

N. 1 FERRITE RT250-150-120-K5B RICHCO (BOB0001001) + N°1 PLA0001062

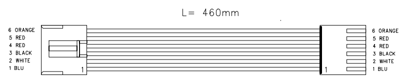
HARNESS HEADPHONE cod. CAV0010042 ref. LC



N. 1 FERRITE COILMASTER C4ST25X12X15-LF

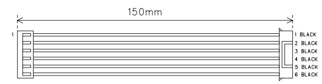
N.2 JST EHR-4 CON0010025 N.8 JST SEH-001T-P0.6 CON0001127

HARNESS MOTOR IF/MB cod. CAV0010039 ref. LC



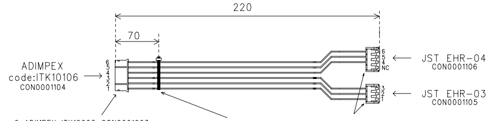
N.2 JST VHR-6N CON0010030 N.12 JST SVH-41T-P1.1 CON0010033

HARNESS RX PANEL/LCD PNEL cod. CAV0010043 ref. LCD



N.2 PH20H06 + N.12 PH20-2

HARNESS JOYSTICK cod. RIL0001281 ref. UC1

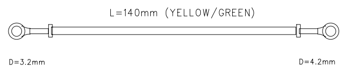


n.6 ADIMPEX ITK10005 CON0001063

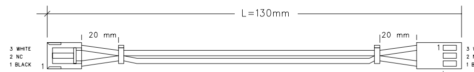
n.1 PLA0001062

n.6 JST SEH-001T-P0.6 CON0001107

AWG HARNESS cod. RIL0001066 ref. KG



HARNESS PRIMARY cod. RIL0010012 ref. LC MG



N.1 JST VHR-3N CON0010027

N.2 JST SVH-41T-P1.1 CON0010033
N.2 5194T CON0001009
N.1 CON0001036
N.1 JST VHR-3N CON0010027

CON0001036

Pa2Xpro PART LIST

PART LIST ELECTRIC COMPONENTS

CODE	DESCRIPTION	REFERENCE	Q.TY
GRF0001006	MAINBOARD-CPU GROUP	LC	1
GRA0002109	MP3 INTERFACE	LC	1
GRA0002120	HD INTERFACE	LC	1
GRA0002130	LEFT PANEL BOARD	UC1 UC2	1
GRA0002131	RIGHT PANEL BOARD	UC1 UC2	1
GRA0002132	OUTPUT BOARD	LC	1
GRA0002133	LCD PANEL	LCD	1
GRA0002134	MAIN FILTER	MG	1
GRA0002135	TOUCH PANEL INTERFACE	LCD	1
GRA0002136	SOUND CONTROL PANEL	UC1	1
GRA0002137	ROTARY ENCODER	DG	1
GRA0002138	HEADPHONE BOARD	HG	1
GRA0002139	MOTOR INTERFACE BOARD	LC	1
GRA0002140	LCD INTERFACE	LCD	1
GRA0002141	MOTOR HARNESS BOARD	LCD	1
GRA0002142	DISPLAY POTENTIOMETER BOARD	LCD	1
GRA1002105	KEYBORD INTERFACE	KG	1
GRA1002114	FRONT USB CONNECTOR	UC1	1

PART LIST MAINBOARD-CPU GROUP GRF0001006

CODE	DESCRIPTION	REFERENCE	Q.TY
GRA1002100	CPU BOARD PA2X	GRF	1
GRA1002101	128MBYTE SDRAM EXB SODIMM 144	GRF	1
GRA1002102	MAIN BOARD PA2X	GRF	1
PLA0010062	DISTANZIATORE ES.NYLON F/F HTSN-M2.5-14-05-01	GRF	4
PLA0010063	SCREW NYLON M2.5M, TC NSE-1207-M2.5-06	GRF	8
FER0010089	TELAIO MAIN BOARD	GRF	1
VTA0001031	SCREW 3MX6 TC NERE	GRF	4

Pa2Xpro PART LIST

PART LIST CPU BOARD GRA1002100

CODE	DESCRIPTION	REFERENCE	Q.TY
CIN0002075	DSP TG01 MB87M4080PB-G (KORG INC)		1
CIN0002076	USB DEVICE TRANCEIVER ISP1105BS (PHILIPS)		1
CIN0002077	INT. SYSTEM PROCESSOR MC9328MX1VM20		1
CIN0003043	IC.SDRAM 16MX16 MT48LC16M16A2TG-75 SOP54		6
CIN0004005	RES.GEN.3,3V ETC811SUC		1
CIN0010031	IC BUFFER, SN74LVC541APWR, TSSOP20		3
CIN0010032	8BIT BID.BUF. W TRIS.SN74LVC245APWR, TSSOP20		2
CIN0010033	QUAD 2 IN OR GATE, SN74LVC32APWR, TSSOP14		4
CIN0010034	HEX SCHMITT TRIG. INV. SN74LV14APWR, TSSOP14		1
CIN0010035	HEX.UNB. INV. SN74AHCU04PW, TSSOP14		1
CIN0010036	DUAL D- FLIP FLOP.SN74LVC74APWR, TSSOP14		1
CIN0010037	SDRAM, 64MBIT, 16BIT, K4S641632K-UC75, SSOP54		1
CIN0010039	SINGLE 2 IN AND GATE, 74LVC1G08DCK, DCK5		2
CON0001128	26X1.27 VER. PICOFLEX SMD 90814-0026		1
CON0001129	SODIMM CONN. 144PIN SIDE ENTRY 54698-1440		1
CON0010014	CONN. M. OR. PTH, 1 FILE, 3 VIE, 2,5MM, S3BEH, JST		1
CON0010040	STRIP F. VER. SMD, 2 F,44V,2MM, H4.6,CB74442M100		3
DIX0006003	SMD DIODE RLS-4148		2
QUA0006004	X-CRYSTAL SMD HCM49 16MHZ		1
QUA0006005	X-CRYSTAL SMD HCM49 24.576MHZ		1
QUA0006012	X-CRYSTAL SMD 32.768KHZ SMD PKG CM200S		1
TRS0002015	ADJ OUT 1.5° LD1086D2T ST/LM1086CSX-ADJ NAT.		1

PART LIST 128MBYTE SDRAM EXB SODIMM 144 GRA1002101

CODE	DESCRIPTION	REFERENCE	Q.TY
CIN0003043	IC.SDRAM 16MX16 MT48LC16M16A2TG-75 SOP54		4

Pa2Xpro PART LIST

PART LIST MAIN BOARD GRA1002102

CODE	DESCRIPTION	REFERENCE	Q.TY
CIN0002026	I.C.SN74AHCU04D HEX.UND.		1
CIN0002040	I.C.NJM4580M OP.AMP.		4
CIN0002074	I.C. SN74 LVC 125A QUAD BUFFER 3-STA		1
CIN0010000	CONV. D/A, 24BIT, DR=120DB, CS4398-CZ,TSSOP28		2
CIN0010001	CONV. A/D, 24BIT, DR=114DB, CS5361-KZ ,TSSOP24		1
CIN0010003	INTERF. USB HOST CONTR., ISP1761, LQFP128		1
CIN0010004	FPGA LFEC1E-3T100C, TQFP100		1
CIN0010007	DSP TAS3103		1
CIN0010025	1CH USB POWER SW. 0,5A-0,7A TPS2041BD, SOP8		2
CIN0010027	OPTOIS. PC410LENIP-OF, SOP6		1
CIN0010029	NANDFLASH,2GBIT,8BIT,K9F2G08U0M-PCB0,TSOP48		1
CIN0010030	PSOC UC CYPRESS CY8C27443-24SXI SOP28		1
CIN0010041	NOR FL,16MBIT,16BIT,MX29LV160CTTC-70G, TSOP48		1
CON0001075	CONN.BLK PICOFLEX 12 VIE 1.27		1
CON0001076	CONN.BLK PICOFLEX 16 VIE 1.27		1
CON0001078	CONN.BLK PICOFLEX 26 VIE 1.27		1
CON0001079	CONNETTORE USB 67068-0000		1
CON0005001	CIRCULAR 5-PIN DIN GQ004005		3
CON0005011	MIDI MG/PR6L STE.(EC.5)		1
CON0005012	STEREO JALCO JACK YKB21-5074G		2
CON0010000	CON. M. V. PTH, 2 FILE, 8 VIE, 1.27MM		1
CON0010001	CON. M. V. PTH, 2 F., 10 V., 1.27MM, 90325-0010		1
CON0010009	USB CONN. TYPE A,		1
CON0010012	MALE CONN. PTH, 1 FILE, 7 VIE, 2,5MM, S7BEH, JST		1
CON0010018	MALE CONN. PTH, 1 FILE, 5 VIE, 2,5MM, S5BEH, JST		1
CON0010039	STRIP M. V. PTH,2F,22V,2MM, H10 CH75442V111		3
CON0010022	CONN. M. V. PTH, 1 FILE, 6 V. 3,96MM, B6P-VH-K, JST		1
DIX0006000	DIODO DOPPIO SMD DA204KT146		9
DIX0006003	DIODO SMD RLS-4148		5
FER0010078	CUSNP AWG SPRING		2
QUA0006006	X-CRYSTAL SMD HCM49 33MHZ		1
QUA0010000	X-CRYSTAL SMD HCM49 12MHZ		1
TRS0002004	TRANSISTOR NPN 2SD2114KT		1
TRS0002006	REG.+5V 0.5° BA178M05FP		1
TRS0002007	REG.+3.3V 0.5A BA033FP		1
TRS0010000	LINEAR REG. -12V, 0,5A, NJM79M12, TO252		1
TRS0010001	LINEAR REG. 12V, 0.5A, 78M12, TO252		1
TRS0010002	LINEAR REG. 1,2V, 0,8A, LD1117S12, SOT223		1
TRS0010004	LINEAR REG. ADJ, 3A, LM1085ISX-ADJ, D2PACK		1

PART LIST KEYBOARD INTERFACE GRA1002105

CODE	DESCRIPTION	REFERENCE	Q.TY
CIN0002012	CIRC.INT.TC74HC138 AFN SMD		3
CIN0002056	IC.SW/LED/KBD SCAN. (NKS3,5)HD6433394A35F(S)		1
CIN0010009	OPAMP. R.TO R. 2CH LMC662CM SOP8		1
CON0001048	MALE CONN. 4 V. P.2.54		1
CON0001076	CONN.BLK PICOFLEX 16 VIE 1.27		1
CON0001077	CONN.BLK PICOFLEX 20 VIE 1.27		1
CON0010001	CON. M. V. PTH, 2 F., 10 V., 1.27MM, 90325-0010		1
QUA0006004	X-CRYSTAL SMD HCM49 16MHZ		1
TRX0005002	TRIMMER ORIZ.P5MM 470K		1

Pa2Xpro PART LIST

PART LIST MP3 INTERFACE GRA0002109

CODE	DESCRIPTION	REFERENCE	Q.TY
CIN0004005	RES.GEN.3,3V ETC811SUC		1
CIN0010037	SDRAM, 64MBIT, 16BIT, K4S641632K-UC75, SSOP54		1
CIN0010043	1 OF 2 DEMUX SN74LVC1G18DCKR		1
CIN0010044	TRIPLE N.INV. SCHMITT TRIG SN74LVC3G17DCTR		2
CIN0010046	DSP TI TMS320C6726BRFP266 HTQFP		1
CIN0010047	DC-DC CONV. ADJ 1,2A TPS62040DGQ		1
CON0010057	CON. M. V. SMD 2FILE 16V. 1.27MM MICS/SMD 16 RP		1
QUA0006005	X-CRYSTAL SMD HCM49 24.576MHZ		1
TRS0002011	REG.+3.3V 1 A BA033FP		1

PART LIST HD INTERFACE GRA0002120

CODE	DESCRIPTION	REFERENCE	Q.TY
CIN0004005	RES.GEN.3,3V ETC811SUC		1
CIN0010020	CIRC. INTERF. USB TO ATA, TUSB6250, TI, TQFP80		1
CIN0010023	EEPROM, 256KBIT, 8BIT, 24LC256I/SNG, SO8		1
CON0001102	CONN. 44 PIN FOR HD I/F HRS A3E-44PA-2DSA		1
CON0010012	MALE CONN. PTH, 1 FILE, 7 V, 2,5MM, S7BEH, JST		1
QUA0010001	X-CRYSTAL SMD HCM49, 24MHZ, ARMONICA 1,		1
TRS0002001	TRANSISTOR NPN DTC114EKA SMD		1
TRS0002011	REG.+3.3V 1 A BA033FP		1

PART LIST LEFT PANEL BOARD GRA0002130

CODE	DESCRIPTION	REFERENCE	Q.TY
ALT0001030	BUZZER PIEZO MURATA PKM17EPP-2002-B0		1
BAT0001001	BATTERY 3V 220MA CR2032		1
CIN0002012	I.C. TC74HC138 AFN SMD		2
CIN0010002	PSOC UC CYPRESS CY8C24423A-24SXI SOP28		1
CIN0010014	LOGIC CIRCUIT NOT, CD74ACT04M, SOP14		3
CIN0010051	RTC STM M41T00SM6E/DS1340-33+		1
CON0001076	CONN. BLK PICOFLEX 16 VIE 1.27		1
CON0001087	MALE CONN.6 VIE PH20W6R ORIZ.		1
CON0010065	CONN. M. VER. PTH, 2 FILE, 6 V, 1.27MM MICS 06		1
CON0010064	CONN. SOCKET BATTERY CR2032 LT100-10		1
DIX0006003	SMD DIODE RLS-4148		1
DIX0010004	DIODE ARRAY BAS16S/BAS16TW-MMBD4148TW		15
INT0001008	TACT SWITCH		41
LED0001004	DIODO LED BLUE 3MM PA1XPRO	Update 17-04-2008*	47
LED0005004	DIODO LED BICOLOR 3MM RED/GREE ALTA EFF.		1
POT0001004	LINEAR POTENTIOMETER 10KB PAR.POL		11
QUA0006012	X-CRYSTAL SMD 32.768KHZ SMD PKG CM200S		1
TRS0002002	TRANSISTOR PNP DTA114EKA SMD		1

* Click on the marked link for spare parts order details

Pa2Xpro PART LIST

PART LIST RIGHT PANEL BOARD GRA0002131

CODE	DESCRIPTION	REFERENCE	Q.TY
CIN0002012	CIRC.INT.TC74HC138 AFN SMD		2
CIN0010002	PSOC UC CYPRESS CY8C24423A-24SXI SOP28		1
CIN0010014	CIRCUITO LOGICO NOT, CD74ACT04M, SOP14		3
CON0001076	CONN.BLK PICOFLEX 16 VIE 1.27		1
CON0001072	CON.MASCHIO 6 VIE PH20W ITE		1
CON0010000	CONN. M. V. PTH, 2 FILE, 8 V, 1.27MM		1
CON0010016	CONN. M. V. PTH, 1 FILE, 3 V, 2.5MM, B3B-EH-A, JST		1
CON0010065	CONN. M. VER. PTH, 2 FILE, 6 VIE, 1.27MM MICS 06		1
DIX0006003	SMD DIODE RLS-4148		1
DIX0010004	DIODE ARRAY BAS16S/BAS16TW-MMBD4148TW		16
INT0001008	TACT SWITCH		46
LED0001004	LED DIODE BLUE 3MM PA1XPRO	Update 17-04-2008*	26
LED0005004	LED DIODE BICOLOR 3MM RED/GREE ALTA EFF.		1
POT0001004	LINEAR POTENTIOMETER 10KB PAR.POL		1
TRS0002011	REG.+3.3V 1 A BA033FP		1

PART LIST OUTPUT BOARD GRA0002132

CODE	DESCRIPTION	REFERENCE	Q.TY
CIN0003011	CIRC.INT. NMJ4556 AM SMD		1
CIN0010048	LOWNOISE LOW DIST MIC PREAMP INA217/SSM2019		1
CIN0010049	PSOC UC CYPRESS CY8C24123A-24SXI		1
CIN0010050	OPAMP 2CH NE5532D/NJM5532M SO8		9
CON0001078	CONN.BLK PICOFLEX 26 VIE 1.27		1
CON0005013	BLACK RCA PLUG GP305520		1
CON0010015	CONN. M. V. PTH, 1 FILE, 4V, 2,5MM, B4B-EH-A, JST		1
CON0010016	CONN. M. V. PTH, 1 FILE, 3V, 2.5MM, B3B-EH-A, JST		1
CON0010058	JACK STEREO 6.3MM NRJ6HH		6
CON0010059	COMBO CONNECTOR NEUTRIK NCJ10FI-H-0		1
DIX0006003	SMD DIODE RLS-4148		2
DIX0006004	SMD DIODE SHOTTLY RB051L-40TE25		4
DIX0010005	SCHOTTKY DIODE BAV99WT1G		6
DIX0010006	ZENER DIODE, VZ=33V 500MW MMSZ5257BT1G		1
DIX0010007	ZENER DIODE, VZ=16V 500MW MMSZ5246BT1G		1
LED0001004	LED DIODE BLUE 3MM PA1XPRO		1
POT0010001	POT. ROT. 270GR.1KC X1,RK09KC1110001KC1N20AC		1
TRA0001013	TRANSF. S/PIDIF DIGITAL AUDIO PE-65612		1
TRS0002001	TRANSISTOR NPN DTC114EKA SMD		4
TRS0002002	TRANSISTOR PNP DTA114EKA SMD		5
TRS0002004	TRANSISTOR NPN 2SD2114KT		10
TRS0002008	REGOLATOR 78L05(SOT89) 100MA SMD		1
TRS0002010	J-FET N CHANEL J108 SOT23 (PMBFJ108)		4
TRS0002016	TRANSISTOR PNP SMD VCE=45, IC=0.5, BC807		1
TRS0010005	N CH. MOSFET 1.9° 30V FDN357N		2
TRS0010006	P CH. MOSFET -2° -30V FDN360P		2
TRS0010007	TR. NPN SMD 80V, 500MA, PMBTA06/MMBTA06		1
TRS0010008	TR. PNP SMD 80V, 500MA, PMBTA56/MMBTA56		1

* Click on the marked link for spare parts order details

Pa2Xpro PART LIST

PART LIST LCD PANEL BOARD GRA0002133

CODE	DESCRIPTION	REFERENCE	Q.TY
CON0001087	CONN.MASCH.6 VIE PH20W6R ORIZ.		1
INT0001008	TACT SWITCH		8

PART LIST MAIN FILTER GRA0002134

CODE	DESCRIPTION	REFERENCE	Q.TY
BOB0001001	FERRITE RT25-150-120-K5B		1
BOB0005001	BOB. VK200 2,0 SPIRE		4
CON0010019	CONN. M. V. PTH, 1 FILE, 3V, 3,96MM, B3P-VH-K, JST		1
INT0001012	MAIN SWITCH SS-160-7-A		1
INT0001013	F FLAT EAR PLUG		1
PLA0001057	NYLON RING N16B RICHCO		1
RIL0001217	AWG CABLE		1
VTA0001006	SCREW 3MX14TC		1
VTA0001023	M3 SELFLOCKING NUT		1
VTA0001048	WASHER 3X9X0.8		1

PART LIST TOUCH PANEL INTERFACE GRA0002135

CODE	DESCRIPTION	REFERENCE	Q.TY
CON0010060	CONN. F. HOR. SMD 1 FILE 4 V. 1MM 04FMS-10SP-TF		2

PART LIST SOUND CONTROL PANEL GRA0002136

CODE	DESCRIPTION	REFERENCE	Q.TY
CON0010065	CONN. M. VER. PTH, 2 FILE, 6 V, 1.27MM MICS 06		1
INT0001008	TACT SWITCH		2

PART LIST ROTARY ENCODER GRA0002137

CODE	DESCRIPTION	REFERENCE	Q.TY
CON0010065	CONN. M. VER. PTH, 2 FILE, 6 V, 1.27MM MICS 06		1
INT0001008	TACT SWITCH		2
INT0001015	ENCODER STEC12E07		1

PART LIST HEADPHONE BOARD GRA0002138

CODE	DESCRIPTION	REFERENCE	Q.TY
BOB0005001	BOB. VK200 2,0 SPIRE		2
CON0010015	CONN. M. VER. PTH 1 FILE 4V 2,5MM B4B-EH-A JST		1
CON0010058	6.3MM STEREO JACK NRJ6HH		1

Pa2Xpro PART LIST

PART LIST MOTOR INTERFACE BOARD GRA0002139

CODE	DESCRIPTION	REFERENCE	Q.TY
CIN0002047	I.C.HEX INV 74AHC04D		1
CIN0002063	I.C.QUAD 2-IMPUT GATE.SN74AHC08 D SMD		1
CIN0010049	PSOC UC CYPRESS CY8C24123A-24SXI		1
CON0010022	CONN. M. V. PTH, 1 FILE, 6V, 3,96MM, B6P-VH-K, JST		2
CON0010035	CONN. M. V. PTH, 1 FILE, 7V, 2,5MM, B7B-EH-A, JST		1
DIX0006004	SMD DIODE SHOTTLY RB051L-40TE25		4
TRS0010009	COMP. P/N MOSFET 30V/-30V 7°/-5° KMB7D0NP30QA		2

PART LIST LCD INTERFACE GRA0002140

CODE	DESCRIPTION	REFERENCE	Q.TY
BOB0005001	BOBINA VK200 2,0 SPIRE		1
CIN0001004	INT.LMC662CN OP.RAIL TR.		1
CON0001078	CONN.BLK PICOFLEX 26 VIE 1.27		1
CON0001099	CONN. HOR. FFC 16V 1MM (52043-1610)		1
CON0001100	CONN. HOR. FFC 4V 1MM (52043-0410)		1
CON0010066	CONN. HOR. PTH 1F 4V 2.5MM JAE IL-G4P-S3L2-SA		1
TRA0005001	LCD INVERTER DC-AC 4,5W 10°		1

PART LIST MOTOR HARNESS BOARD GRA0002141

CODE	DESCRIPTION	REFERENCE	Q.TY
CON0010014	CONN. M. OR. PTH, 1 FILE, 3 V, 2,5MM, S3BEH, JST		1
FDD0010003	MOTORE QJT-370-AH, 6V, 6150RPM		1

PART LIST LCD HARNESS BOARD GRA0002142

CODE	DESCRIPTION	REFERENCE	Q.TY
CON0010011	MALE CONN. HOR. PTH 1 FILE 4V 2,5MM S4BEH JST		1
POT0010002	POT.ROT.OR.10KBX 1, RV110-F-40E1-175A-B10K		1

PART LIST FRONT USB CONNECTOR BOARD GRA1002114

CODE	DESCRIPTION	REFERENCE	Q.TY
CON0010009	PRESA USB TYPE A,		1
CON0010018	MALE CONN. HOR. PTH 1 FILE 5V 2,5MM S5BEH JST		1
RIL0001165	CONNESSIONE MASSA L=100 CUFFIA EC120-320		1

Pa2Xpro PART LIST

PART LIST HARNESSES

CODE	DESCRIPTION	REFERENCE	Q.TY
CAV0010001	FLAT CABLE HDD IF OPT0001008	LC	1
CAV0010027	FLAT CABLE MB/OUT BOARD	LC GRF	1
CAV0010028	FLAT CABLE MB/RX PANEL	D2 UC1 GRF	1
CAV0010029	FLAT CABLE RX/LX PANEL	UC1	1
CAV0010030	FLAT CABLE MB/VIDEO BOARD	LC GRF	1
CAV0010031	FLAT CABLE CPU/LCD IF	D2 LC	1
CAV0010032	FLAT CABLE RX PANEL/DIAL	DG	1
CAV0010033	FLAT CABLE LX PANEL/SOUND CTRL BOARD	UC1	1
CAV0010034	FLAT CABLE MB/KEYBOARD IF	KG	1
CAV0010035	FLAT CABLE KEYB IF/KEYB LOWER	KG	1
CAV0010036	FLAT CABLE KEYB IF/KEYB UPPER	KG	1
CAV0010037	HARNESS MB/HDD IF	LC	1
CAV0010038	HARNESS MB/FRONT USB	D2 UC1	1
CAV0010039	HARNESS MOTOR IF/MB	LC	1
CAV0010041	HARNESS SPDIF	LC GRF	1
CAV0010042	HARNESS HEADPHONE	LC	1
CAV0010043	HARNESS RX PANEL/LCD PANEL	LCD	1
CAV0010044	FCC CAB. 4VIE, 1MM KONTEK GK0200-04223-4CCFF	LCD	1
CAV0010045	HARNESS MOTOR/POT/SWITCH	UC1	1
CAV0010046	FLAT CABLE MB/MP3 BOARD	LC	1
RIL0001040	MAIN CABLE		1
RIL0001066	AWG HARNESS L 130 EC100 -PA80-PA60	KG	1
RIL0001281	HARNESS JOYSTICK	UC1	1
RIL0010012	HARNESS PRIMARY	LC MG	1
RIL0010016	HARNESS SUPPLY/AMPLIF	LC	1

PART LIST HARNESS SUPPLY/AMPLIF RIL0010016

CODE	DESCRIPTION	REFERENCE	Q.TY
BOB0001001	FERRITE RT25-150-120-K5B		1
PLA0001062	FASCETTA PICCOLA FCV-100 PAN TY		1

Pa2Xpro PART LIST

PART LIST PLASTIC COMPONENTS

CODE	DESCRIPTION	REFERENCE	Q.TY
PLA0001046	SMALL CABLE TIE	LC UC1 KG	8
PLA0001047	BIG CABLE TIE	LC UC1 LCD	11
PLA0001062	CABLE HOLDER PAN-TY	LC	1
PLA0001094	CST SPACER 6MM SRS4-04-01	KG	2
PLA0001110	MUSIC REST SUPPORT	LC	2
PLA0001130	FLAT CABLE HOLDER CFCC-8-04°	LC	1
PLA0001132	DISPLAY BUTTONS	LCD	1
PLA0001133	DIAL SUPPORT	UC2	1
PLA0001134	UP BUTTON	UC2	1
PLA0001135	DOWN BUTTON	UC2	1
PLA0001136	DIAL KNOB	D2	1
PLA0001137	BUTTON SUPPORT 17MM	UC2	59
PLA0001138	BUTTONM SUPPORT 19MM	UC2	27
PLA0001139	BUTTON 17MM WITH LED	UC2	18
PLA0001140	BUTTON 17MM WITHOUT LED	UC2	16
PLA0001141	BUTTON 19MM WITH LED	UC2	15
PLA0001142	BUTTON 19MM WITHOUT LED	UC2	7
PLA0001143	SPACER 4.2 X 3.7 X 8 X 2.6	UC2	20
PLA0001144	LED PROTECTION	UC2	13
PLA0001146	SLIDER KNOB	D2	10
PLA0001147	SLIDER FRAME 30MM	UC2	12
PLA0001148	RED BUTTON 19MM WITH LED	UC2	1
PLA0001157	MAIN SWITCH	LC MG	1
PLA0001163	RUBBER FEET Ø20 H10	LC	5
PLA0010035	BUTTON 17MM WITH LED (NOVODUR 700700)	UC2	24
PLA0010036	BUTTON 17MM WITHOUT LED (NOVODUR 700700)	UC2	3
PLA0010037	BUTTON 19MM WITH LED (NOVODUR 700700)	UC2	4
PLA0010039	SLIDER KNOB (NOVODUR 700700)	D2	2
PLA0010065	MOTOR CONTROL BUTTON	UC2	1
PLA0010066	MOTOR UNLOCK BUTTON	LCD	1
PLA0010067	ENDLESS SCREW RACK	LCD	1
PLA0010068	DISPLAY RACK	LCD	2
PLA0010069	RACK	LCD	1
PLA0010070	DISPLAY POTENTIOMETER RACK	LCD	1
PLA0010073	ENDLESS SCREW SUPPORT	LCD	1
PLA0010075	SHAFT SUPPORT	LCD	3
PLA0010076	SQUARE BELT PINION	LCD	1
PLA0010077	SQUARE BELT PULLEY	LCD	1
PLA0010078	ENDLESS SCREW REAR SUPPORT	LCD	1
PLA0010079	SQUARE BELT 2X2 D.42 COD. 9000420	LCD	1
PLA0010081	ROUGH DISPLAY COVER	LCD	1
PLA0010082	ROUGH DUSPLAY SUPPORT	LCD	1
PLA0010083	ROUGH USB FRAME	UC1	1
PLA0010084	VIDEO OUTPUT PLUG	LC	1
PLAL001009	JOYSTICK SUPPORT	UC1	1
PLAL001012	DISPLAY PANEL	LCD	1

PART LIST METAL COMPONENTS

CODE	DESCRIPTION	REFERENCE	Q.TY
FER0001157	DIAL SUPPORT	MG	1
FER0001162	HINGE + FIXING PROFILE	UC1	4
FER0001188	HDD SUPPORT	HDD	2
FER0010087	MAIN FILTER SUPPORT	MG	1
FER0010088	SIDE SUPPORT	RLS	2
FER0010091	RIGHT WOODEN PANEL SUPPORT	UC1	1
FER0010092	LEFT WOODEN PANEL SUPPORT	UC1	1
FER0010093	PANEL BOARD SUPPORT	UC1	1
FER0010095	DISPLAY MOTOR SUPPORT	LCD	1
FER0010096	DISPLAY MOTOR UNLOCKER CONTROL	LCD	1
FER0010097	DISPLAY FULCRUM	LCD	2
FER0010098	GEAR SHAFT	LCD	1
FER0010099	MOTOR SUPPORT FULCRUM	LCD	1
FER0010103	ENDLESS SCREW	LCD	1
FER0010104	MOTOR LEVER BUSH	LCD	1
FER0010105	CENTRAL PANEL SUPPORT	UC1	1
FER0010113	MOTOR SUPPORT PROFILE	LCD	1
FER0010114	MUSIC REST		1
FER0010116	BELT FLANGE	LCD	1
FER0010117	MUSIC REST L-PROFILE	D2	2
FER0010118	DISPLAY GROUP REINFORCING PLATE	UC1	1
FER0010121	DISPLAY SUPPORT PROFILE	LCD	1
FERL001049	RIGHT METAL SIDE	RLS	1
FERL001050	LEFT METAL SIDE	RLS	1
FERL001051	ALUMINIUM CONTROL PANEL	UC2	1
FERL001052	LOWER CASE	LC	1
FERL001053	MEMORY OPTION COVER	LC	1
FERL001054	VIDEO BOARD SUPPORT	LC	1

Pa2Xpro PART LIST

OTHER COMPONENTS

CODE	DESCRIPTION	REFERENCE	Q.TY
FEL0001029	ADHESIVE TAPE ART.389 3M 18MMX50	LC LCD	0,15
FEL0001040	ADHESIVE SPIK 5X10X30	LCD	1
FEL0001052	ADHESIVE FELT 16X40X1	DG LC	3
FEL0001056	DOUB.SIDE AD. TAPE 3M 969 BUFF.12MMX33M	LCD RLS	0,5
FEL0001059	HEADPHONE ADHESIVE LABEL	LC	1
FEL0010014	ADHESIVE FELT 15X20X1	UC1 LCD	2
FEL0010043	LCD PVC PANEL	LCD	1
FEL0010044	DOUBLE SIDE ADHESIVE TAPE 30MM 1MM	LCD	0,012
FEL0010046	DISPLAY CABLE PROTECTION	LCD	1
FELL001007	DOUBLE SIDE DIE-CUTTED ADHESIVE TAPE	LCD	2
FELL001008	SERIAL NUMBER LABEL	D1 LC	1
FELL001009	SERIAL NUMBER BOX LABEL	LC	1
IMB0001196	MUSIC REST CARDBOARD SHEET		1
IMB0010028	CARDBOARD BOX		1
IMB0010029	LEFT CUSHION		1
IMB0010030	RIGHT CUSHION		1
IMB0010031	REAR CREASED CARDBOARD SHEET		1
IMB0010032	CENTRAL CUSHION		1
IMB0010033	REAR CARDBOARD SHEET		1
JOY0001000	JOYSTICK SILVER	UC1	1
LCD0001004	DISPLAY	LCD	1
LEG0010051	LEFT WOODEN SIDE	UC1	1
LEG0010052	RIGHT WOODEN SIDE	UC1	1
MAN0010019	ENGLISH USER MANUAL		1
MSD0001004	CD O.S, DRIVER USB, DOC.		1
FDD0001021	HARD DISK 2.5 (FROM 15 GB TO 40 GB)	HDD	1
TAS0001020	FATAR KEYBOARD TP8+AFTER TOUCH+DIES.	KG	1
TRA0004001	SWITCHING POWER SUPPLY PT65C X8960	LC	1

PART LIST DISPLAY LCD0001004

CODE	DESCRIPTION	REFERENCE	Q.TY
LCD0001003	LCD 320X240 STN NANYA		1
TCP0010000	TOUCH PANEL PANASONIC EMU601A2MA32		1
FEL0010042	BIADESIVO FUST LCD 3M ART. 468MP		1

PART LIST SCREWS

CODE	DESCRIPTION	REFERENCE	Q.TY
VTA0001010	SCREW 3X16TFR HILO ZINC. BIANCA	LCD	6
VTA0001011	GROVER Ø4	LC	2
VTA0001014	WASHER 4X12X1,2	UC1	2
VTA0001016	SCREW 3X20 TC PR	KG	2
VTA0001020	GROVER Ø3	LCD	1
VTA0001023	M3 SELFLOCKING NUT	LC HDD MG	8
VTA0001025	SCREW 2.9X6.5 TC SELFTHREADING	LCD	2
VTA0001031	SCREW 3MX6 TC	UC1 DG LC LCD	34
VTA0001032	SCREW 3MX8 TC	LC	4
VTA0001037	SCREW 2,9X6,5TC SELFTHREADING SP	KG UC1 DG LC LCD	29
VTA0001039	SCREW 2.9X9.5TC SELFTHREADING SP	LC UC1 LCD	27
VTA0001045	M4 SELFLOCKING NUT	LC LCD	3
VTA0001048	WASHER 3X9X0.8	LC LCD	6
VTA0001049	SCREW 2,2X6,5 TC	LCD	8
VTA0001050	SCREW M4X8 TC SELFTAPPING	LC HG RLS	8
VTA0001051	SCREW 3X13 TCPR	LC UC1	8
VTA0001067	SCREW 3.5X16 TC AGG-BZ	LC	16
VTA0001084	SCREW 3.5X9.5 TC SELFTHREADING SP	D1 UC1	56
VTA0001087	SCREW 3.5X6.5 TC SELFTHREADING SP	UC1	18
VTA0001091	SCREW 3.9X6.5 TC SELFTHREADING D.7 BZ	UC1	12
VTA0010026	SPACER RICHCO HTSB-M4-15-6-1	HG	2
VTA0010029	SCREW M4X14 TFR	LCD	1
VTA0010035	MOTOR SPRING	LCD	1
VTA0010036	PARALLEL Ø2.5X12	LCD	3
VTA0010038	SCREW M4X14 TSP HEXAGONAL	D2 UC1	8
VTA0010039	SCREW M4X20 TSP HEXAGONAL	UC1	4
VTA0010040	SCREW M3X4 TC	LCD	2
VTA0010041	ELASTIC RING E C60 Ø10 UNI 7435.	LCD	1

KORG Italy

If it would be necessary to change or repair the LEFT PANEL BOARD PA2X PRO (GRA0002130) or the RIGHT PANEL BOARD PA2X PRO (GRA0002131), please check the serial number of the instrument and find the right WebTeam component code you're looking for from the following chart:

	PA2X PRO		PART NUMBER FOR WEBTEAM SPARE PARTS ORDER	
	INSTRUMENT SERIAL NUMBER	DIODE LED MANUFACTURER	DIODE LED PART #	PANEL BOARD PART #
GRA0002130	from 3000021 ÷ to 3000039	Type LK	LED0001004_ LK	GRA0002130_ LK
GRA0002130	from 3000042 ÷ to 3000126	Type LT	LED0001004_ LT	GRA0002130_ LT
GRA0002130	from 3000127 ÷ to 3002755	Type LK	LED0001004_ LK	GRA0002130_ LK
GRA0002130	from 3002756 ÷ to 3003xxx	Type LT	LED0001004_ LT	GRA0002130_ LT
GRA0002130	from 6001042 ÷ to 6002542	Type LK	LED0001004_ LK	GRA0002130_ LK
GRA0002131	from 3000021 ÷ to 3000039	Type LK	LED0001004_ LK	GRA0002131_ LK
GRA0002131	from 3000042 ÷ to 3000126	Type LT	LED0001004_ LT	GRA0002131_ LT
GRA0002131	from 3000127 ÷ to 3002755	Type LK	LED0001004_ LK	GRA0002131_ LK
GRA0002131	from 3002756 ÷ to 3003xxx	Type LT	LED0001004_ LT	GRA0002131_ LT
GRA0002131	from 6001042 ÷ to 6002542	Type LK	LED0001004_ LK	GRA0002131_ LK

This document will be updated. Please check the "NEWS" section in the WebTeam site.
Last update: April, 17th 2008

Back to part list

Address
KORG ITALY S.p.A.
Via Cagiata, 85
I-60027 Osimo (An)
Italy

Web servers
www.korg.it
www.korg.net
www.korg.com
www.korgpa.com

PART NUMBER: MAN0002016

Printed in Italy, October 2007