

KORG TR61

SERVICE MANUAL



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KORG

Issued Jun.29, 2006
Ver2:changed P2/18

A B C D E F G H

1

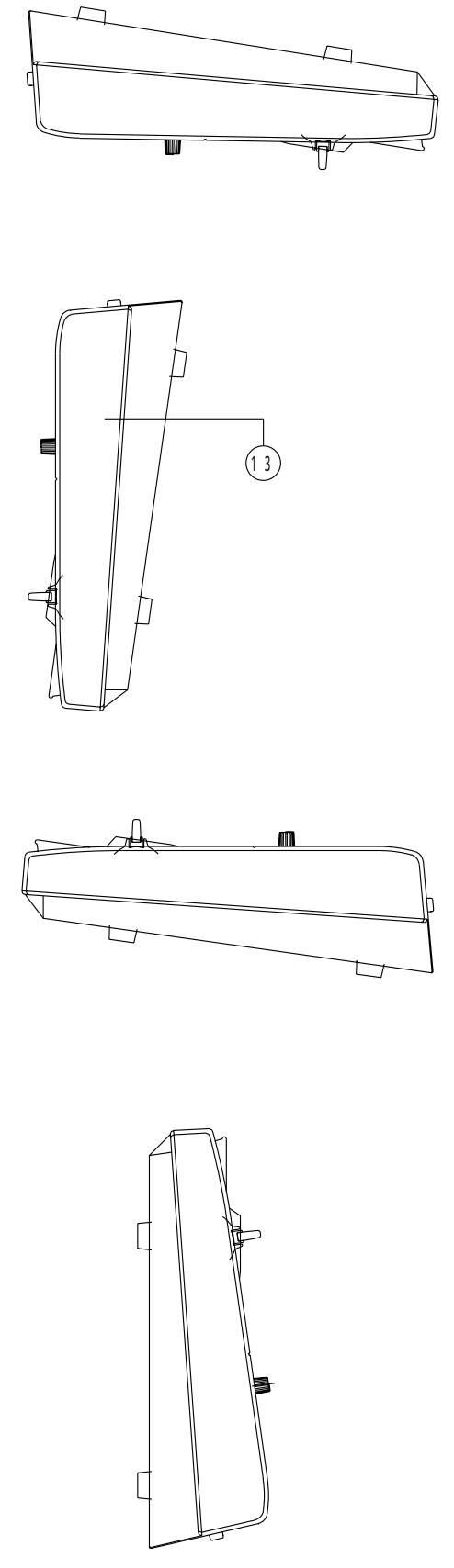
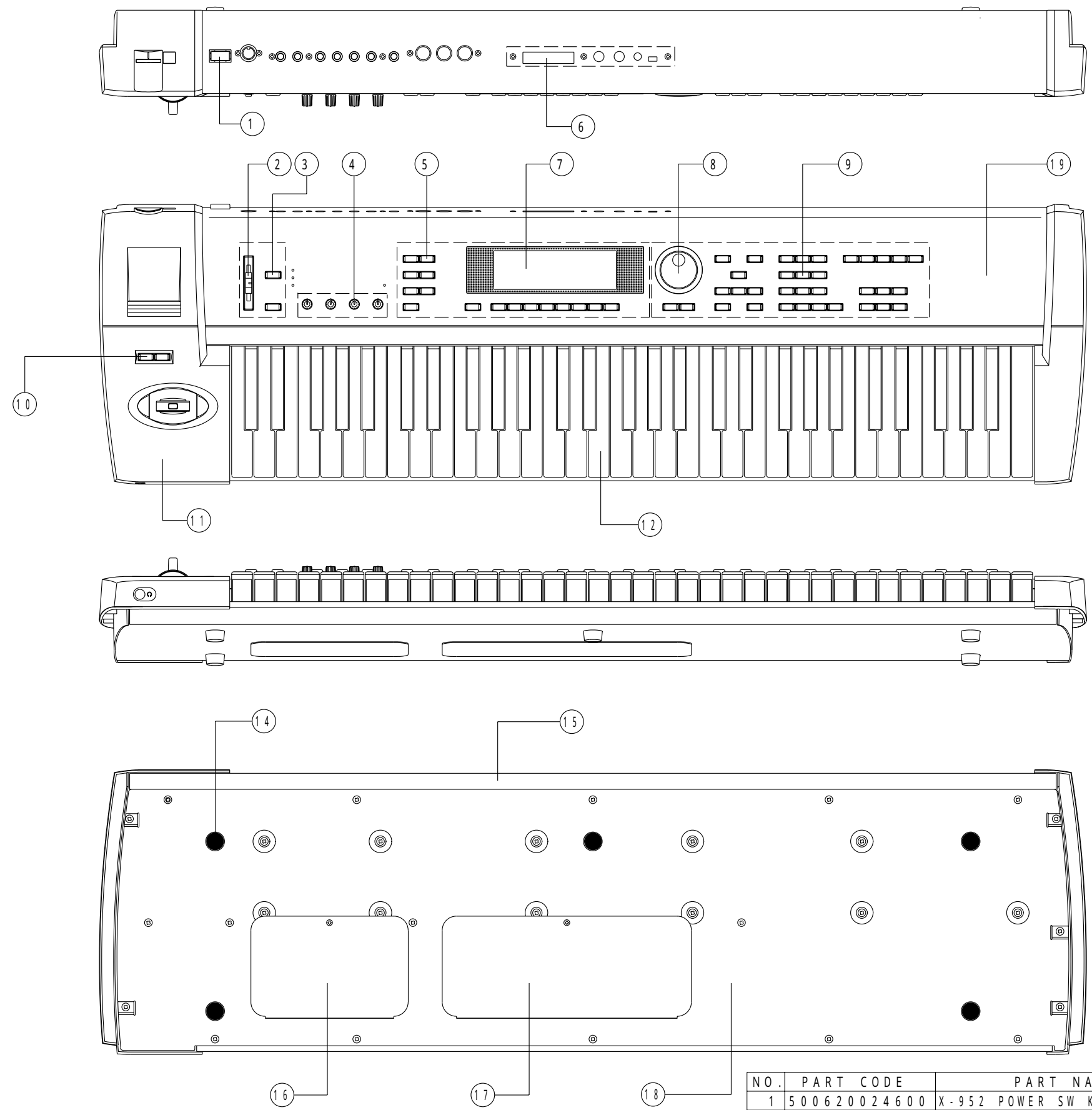
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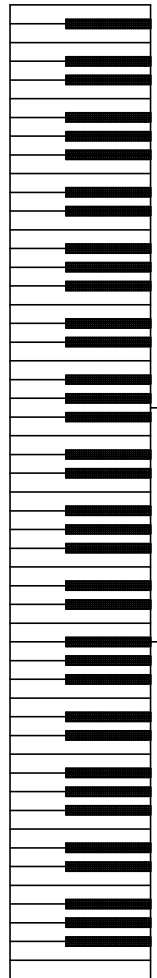
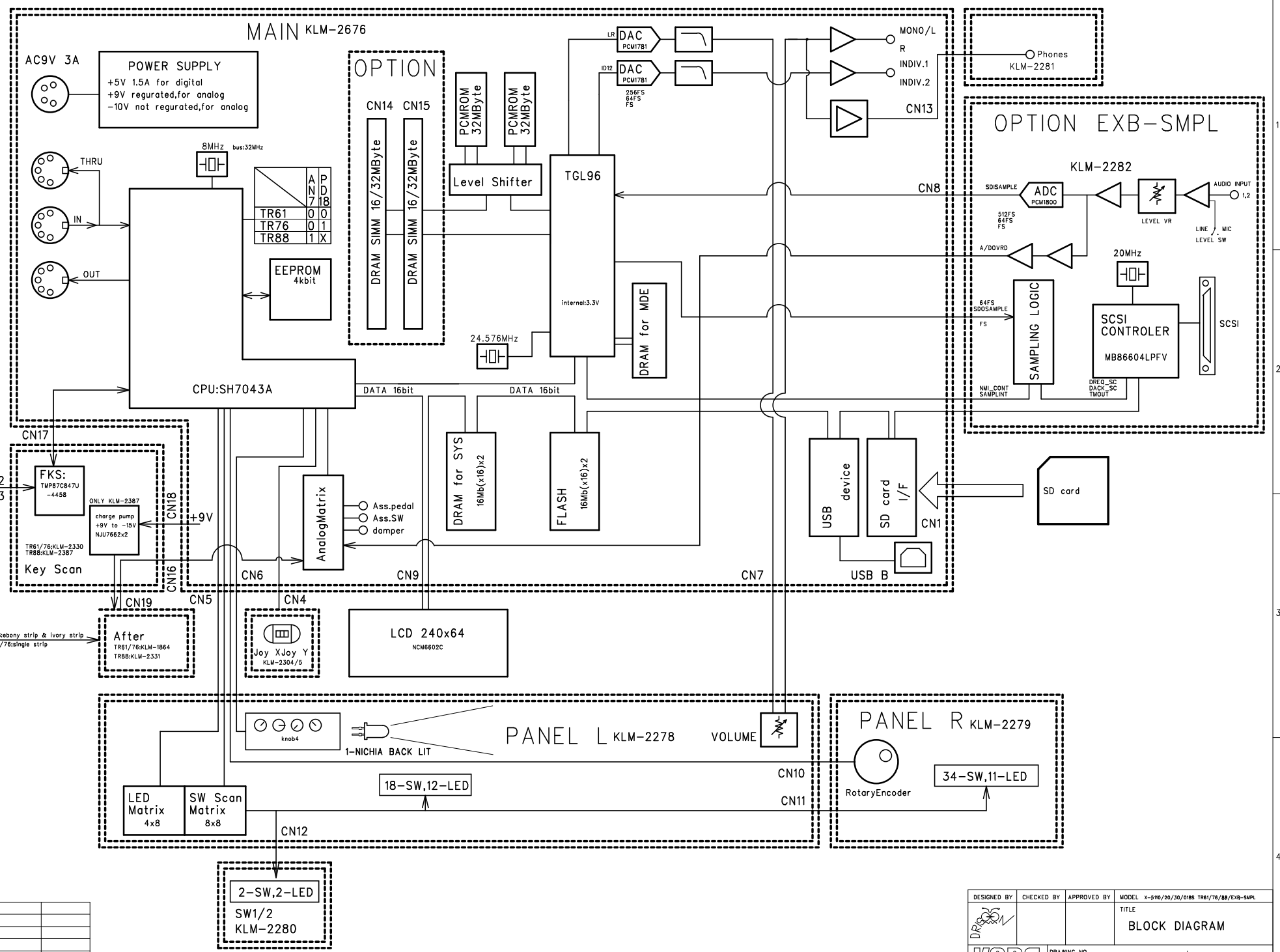


Dimensions : L = 1045.2mm
 W = 302.3mm
 H = 95.3mm

Weight : 7.8kg

NO.	PART CODE	PART NAME	QTY
1	500620024600	X-952 POWER SW KNOB E40304-2	1
2	500620026800	X-410 SVR KNOB (GRAY) E40239-3	1
3	500646100700	X-4160 KNOB BLOCK B-2 E10191-4	1
4	500620040700	KNOB P423-90F (X9100) E40519-1	4
5	500646100600	X-4160 KNOB BLOCK B-1 E10191-3	1
6	500641041651	X-0180 REAR OP COVER C41224	1
	500550023500	X-5110 REAR OP COVER SHEET F41255	1
7	500630034200	X-0180 LCD WINDOW F40962	1
8	500620036000	X-610 ENCODER KNOB E40466-3	1
9	500646100400	X-4160 KNOB BLOCK A-1 E20211-3	1

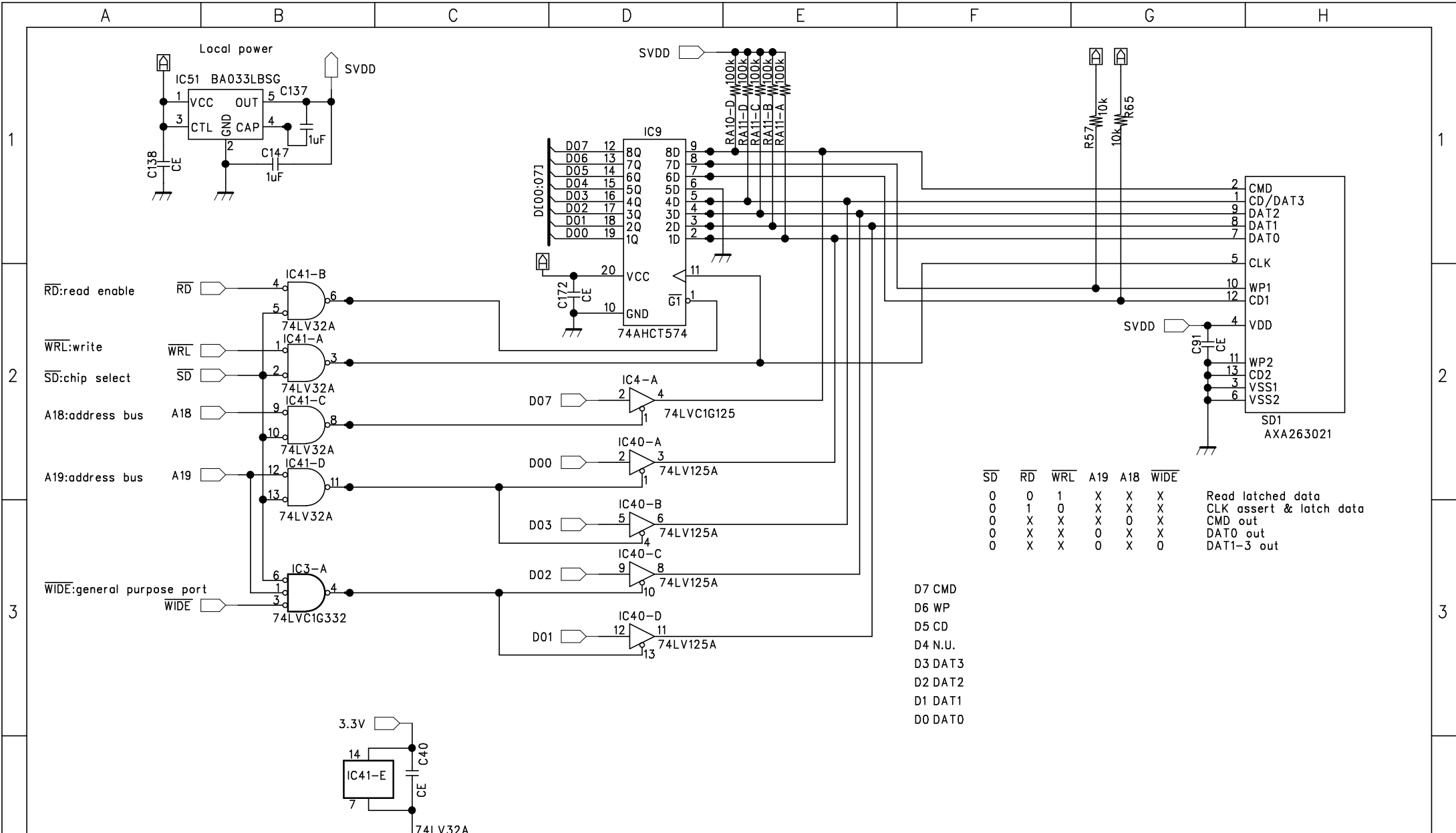
NO.	PART CODE	PART NAME	QTY
10	500646100500	X-4160 KNOB BLOCK A-2 E20211-4	1
11	500646099920	X-5100 SIDE PLATE L E10189-3	1
12	500420005800	61TP/9+PCBOARD+AFTERTOUCH	1
13	500646100300	X-4160 SIDE PLATE R E10190-3	1
14	500500022500	CASE LEG FF-004	4
15	500641041942	X-4160 FRONT BAR C41228-3	1
16	500641041653	X-0180 SIMM COVER C41227	1
17	500641041652	X-0180 OP COVER C41226	1
18	500641041650	X-0180 BOTTOM COVER C30565	1
19	500641041971	X-5110 PANEL C30555-3	1



TR61/76:TP9
TR88:TP41

MARK	REVISION REASON	DATE	REVISED BY
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DESIGNED BY <i>DRP</i>	CHECKED BY	APPROVED BY	MODEL X-510/20/0185 TR61/76/88/EXB-SMPL
TITLE BLOCK DIAGRAM			
DRAWING NO. KOD-B30105		DATE Aug,22'05	



\overline{SD}	\overline{RD}	\overline{WRL}	A19	A18	\overline{WIDE}	
0	0	1	X	X	X	Read latched data
0	1	0	X	X	X	CLK assert & latch data
0	X	X	X	0	X	CMD out
0	X	X	0	X	X	DATO out
0	X	X	0	X	0	DAT1-3 out

- D7 CMD
- D6 WP
- D5 CD
- D4 N.U.
- D3 DAT3
- D2 DAT2
- D1 DAT1
- D0 DAT0

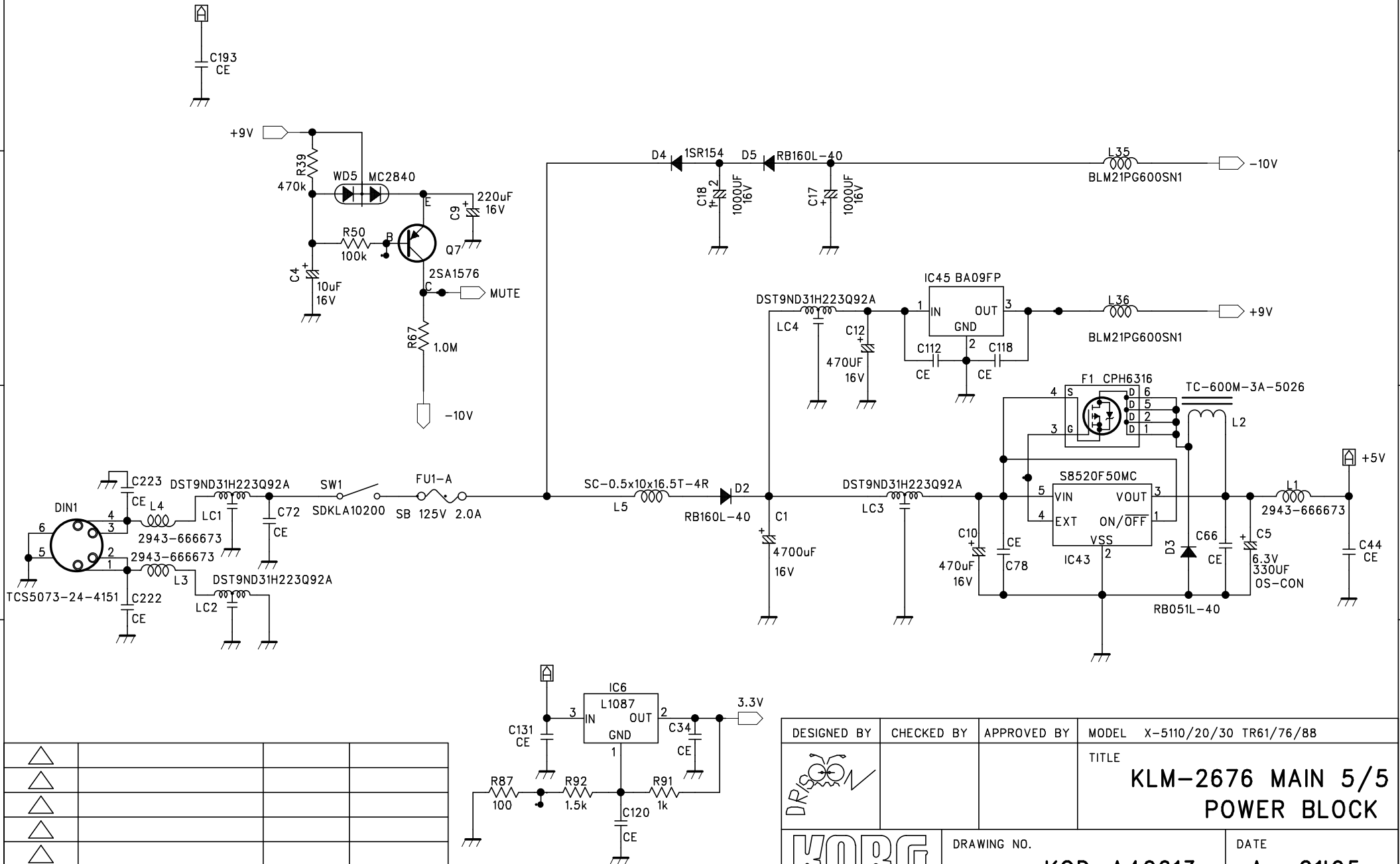
CE:C1608JF1E104ZT-AG			
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MARK	REVISION	REASON	REVISIED BY

DESIGNED BY	CHECKED BY	APPROVED BY	MODEL X-5110/20/30 TR61/76/88
			TITLE
			KLM-2676 MAIN 3/5 SD card I/F BLOCK
DRAWING NO.		DATE	
KOD-A40611		Apr.21'05	

CE:C1608JF1E104ZT-AG

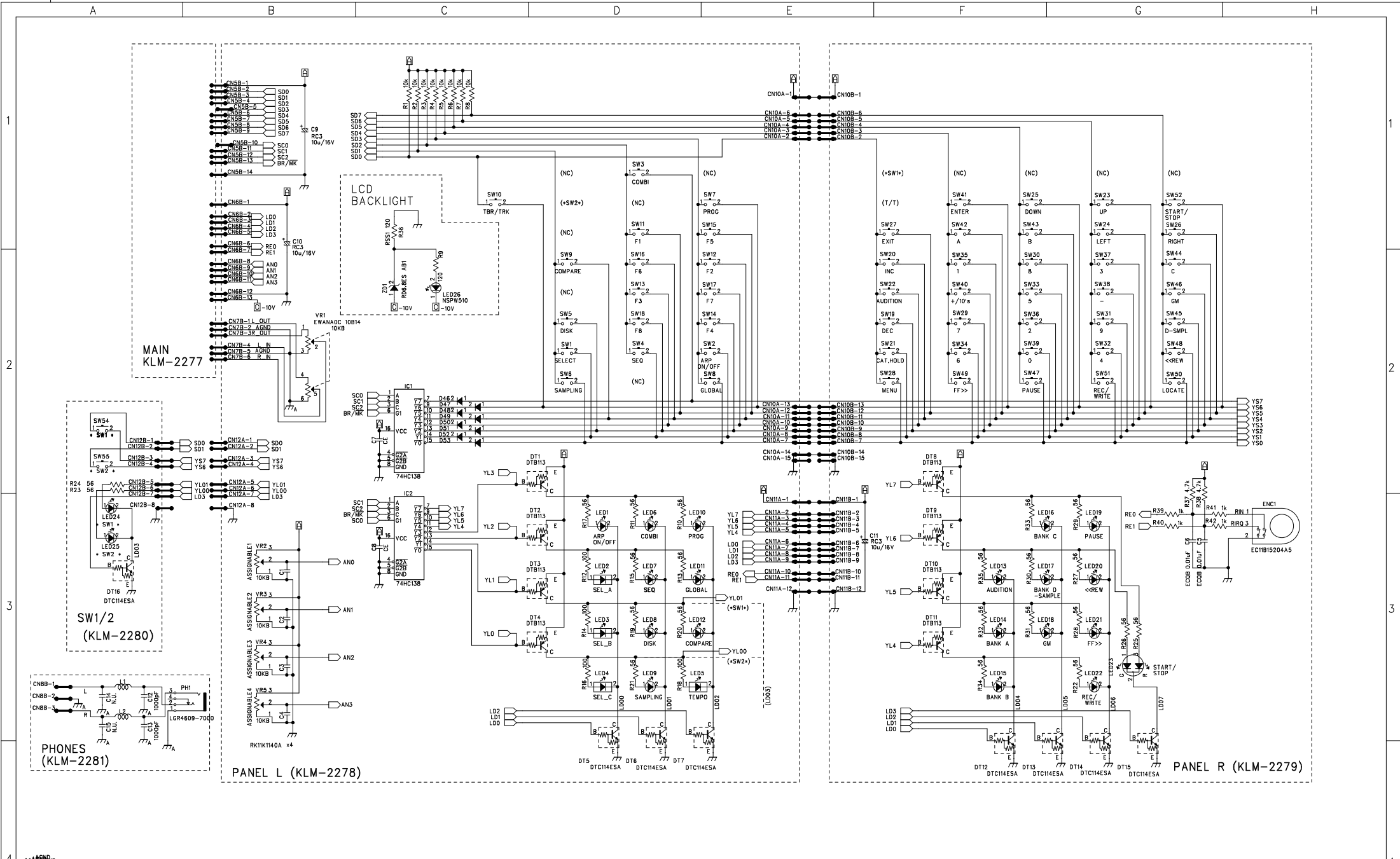
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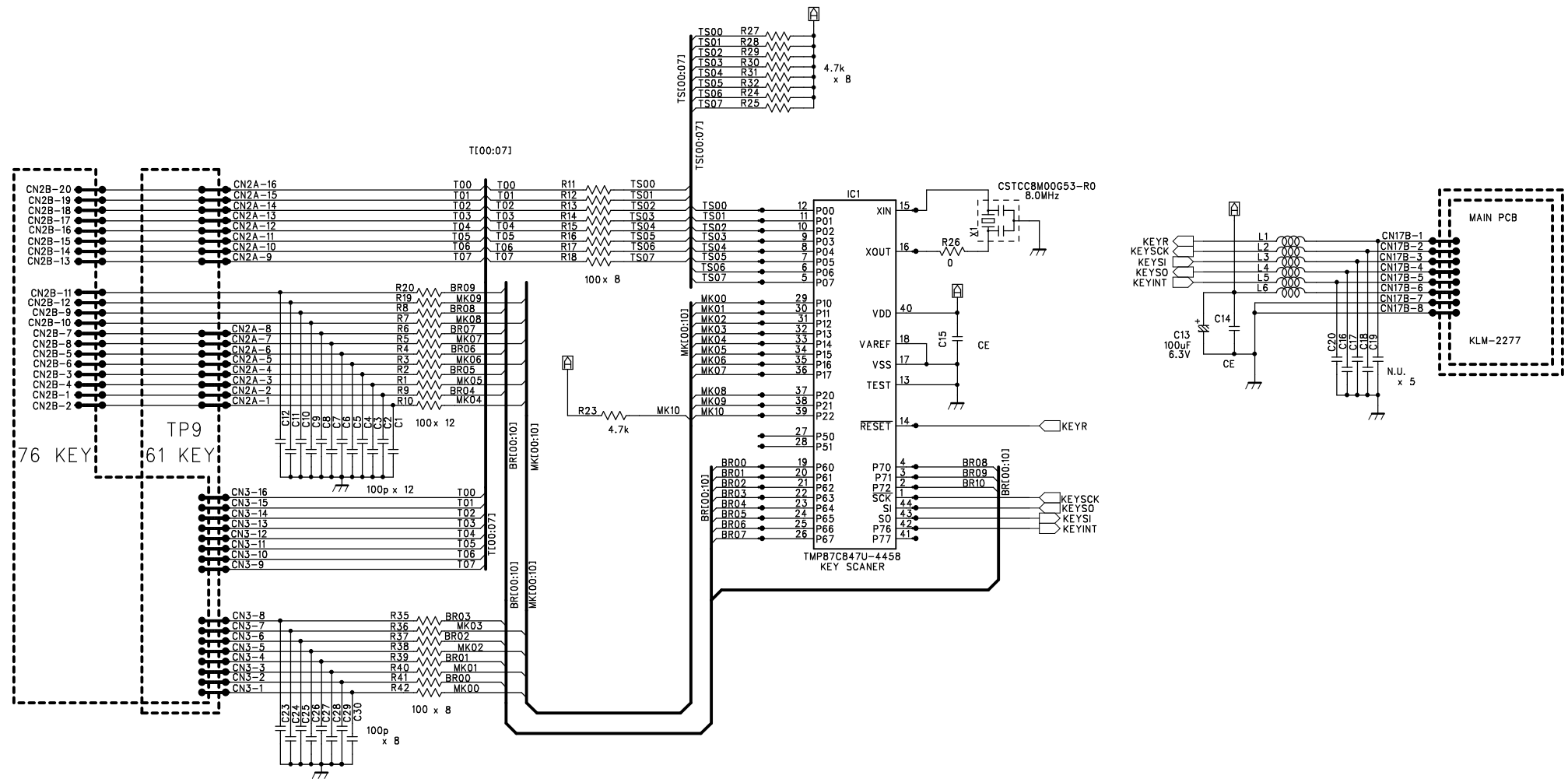
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MARK	REVISION	REASON	DATE	REVISED BY

DESIGNED BY	CHECKED BY	APPROVED BY	MODEL X-5110/20/30 TR61/76/88
			TITLE
			KLM-2676 MAIN 5/5 POWER BLOCK
DRAWING NO.		DATE	
KOD-A40613		Apr.21'05	



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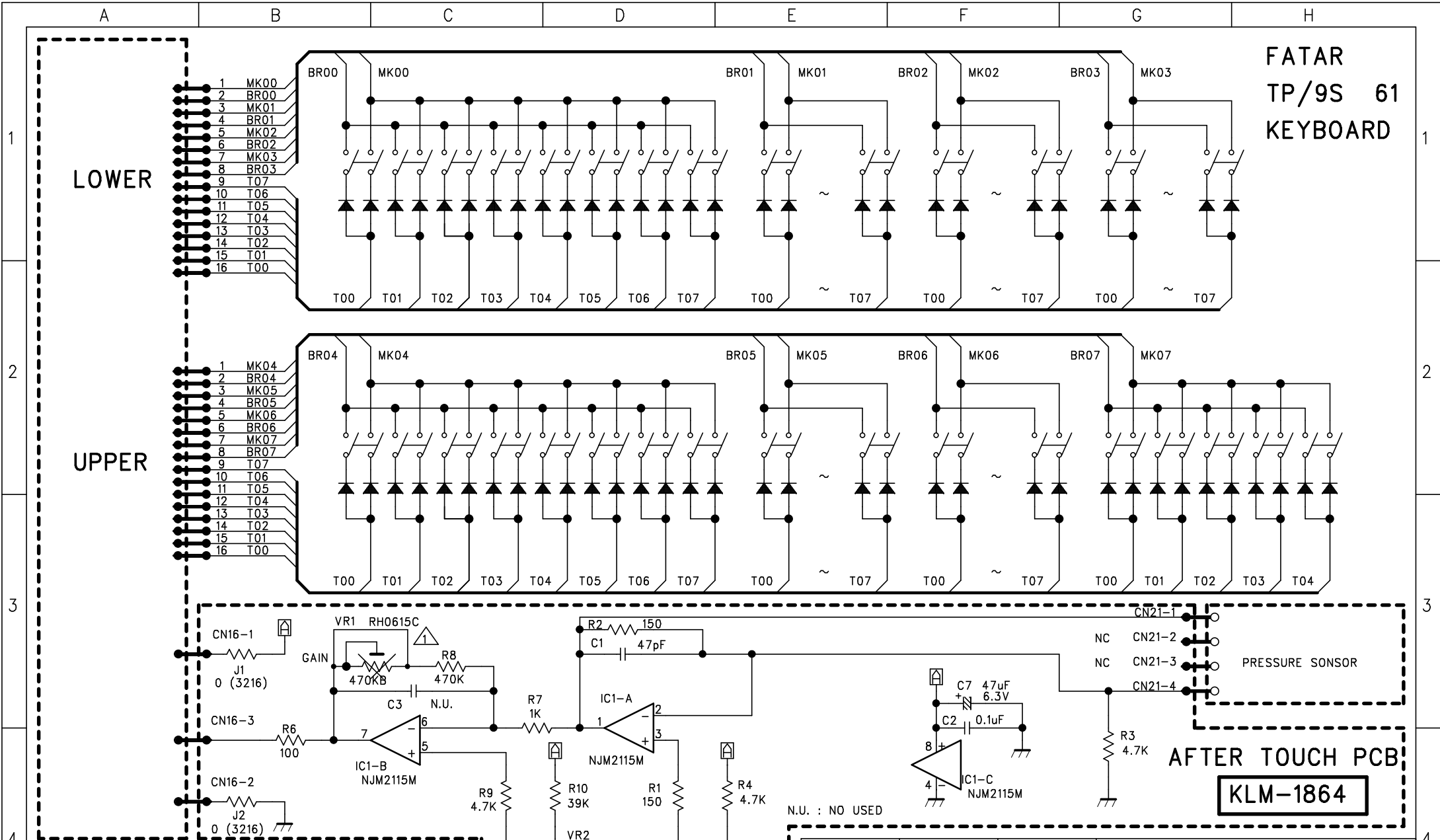
DRAWN BY	CHECKED BY	APPROVED BY	MODEL
S.Ohnishi			X-080
TITLE			
KLM-2278/9/80/1			
Schematics			
DRAWING NO.		DATE	
KORG		KOD-A30466	June 1, '01



L : BLM18BD102SN1D
 CE: C1608JF1E104ZT

MARK	REVISION REASON	DATE	REVISED BY
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DRAWN,DESIGNED BY <i>[Signature]</i>	CHECKED BY	MODEL X-0180/1120 (TRITON Le 61/76)
		TITLE KLM-2330 CIRCUIT DIAGRAM
KORG	DRAWING NO. KOD-A30470	DATE Aug.07'01



FATAR
TP/9S 61
KEYBOARD

LOWER

UPPER

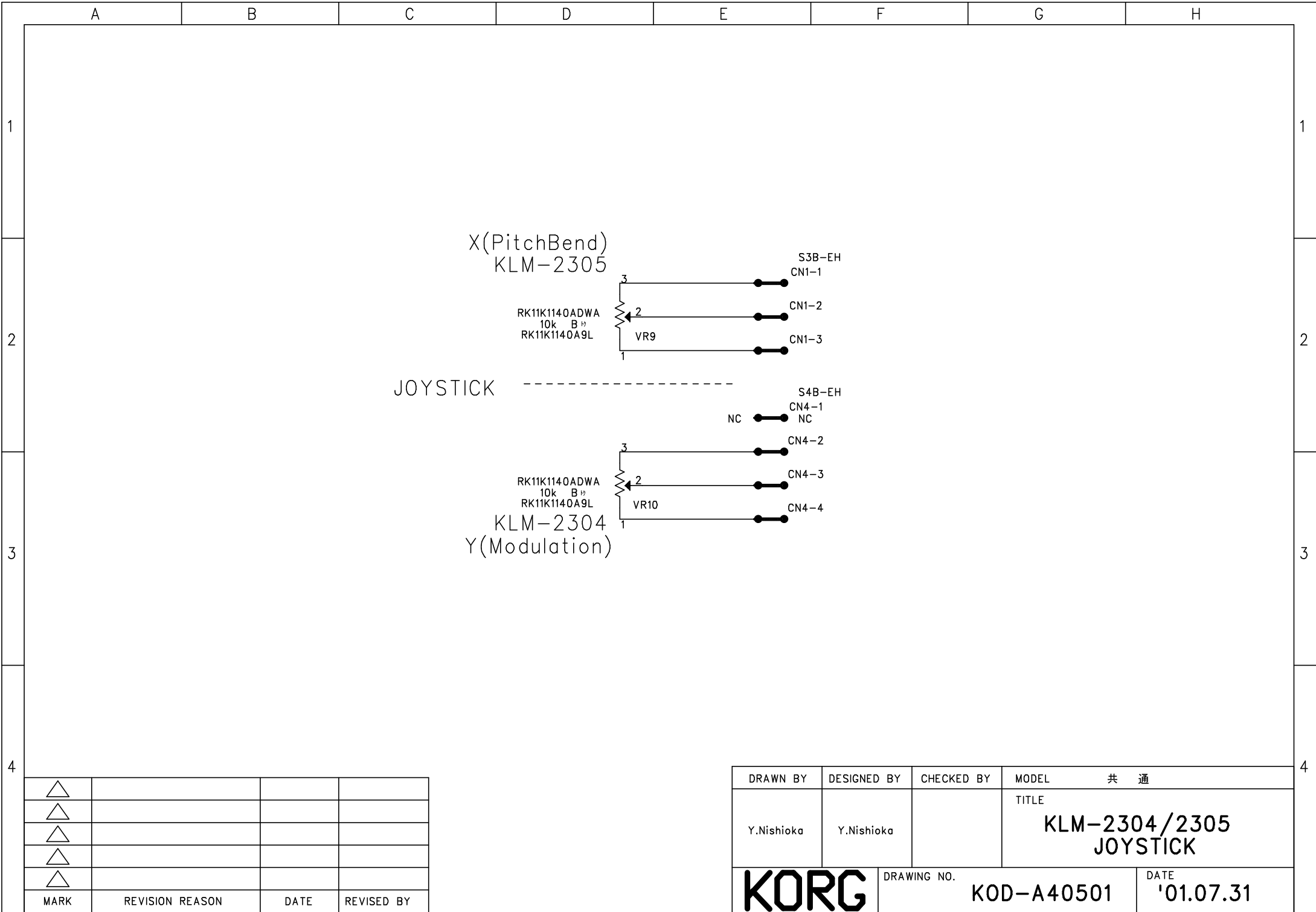
AFTER TOUCH PCB

KLM-1864

N.U. : NO USED

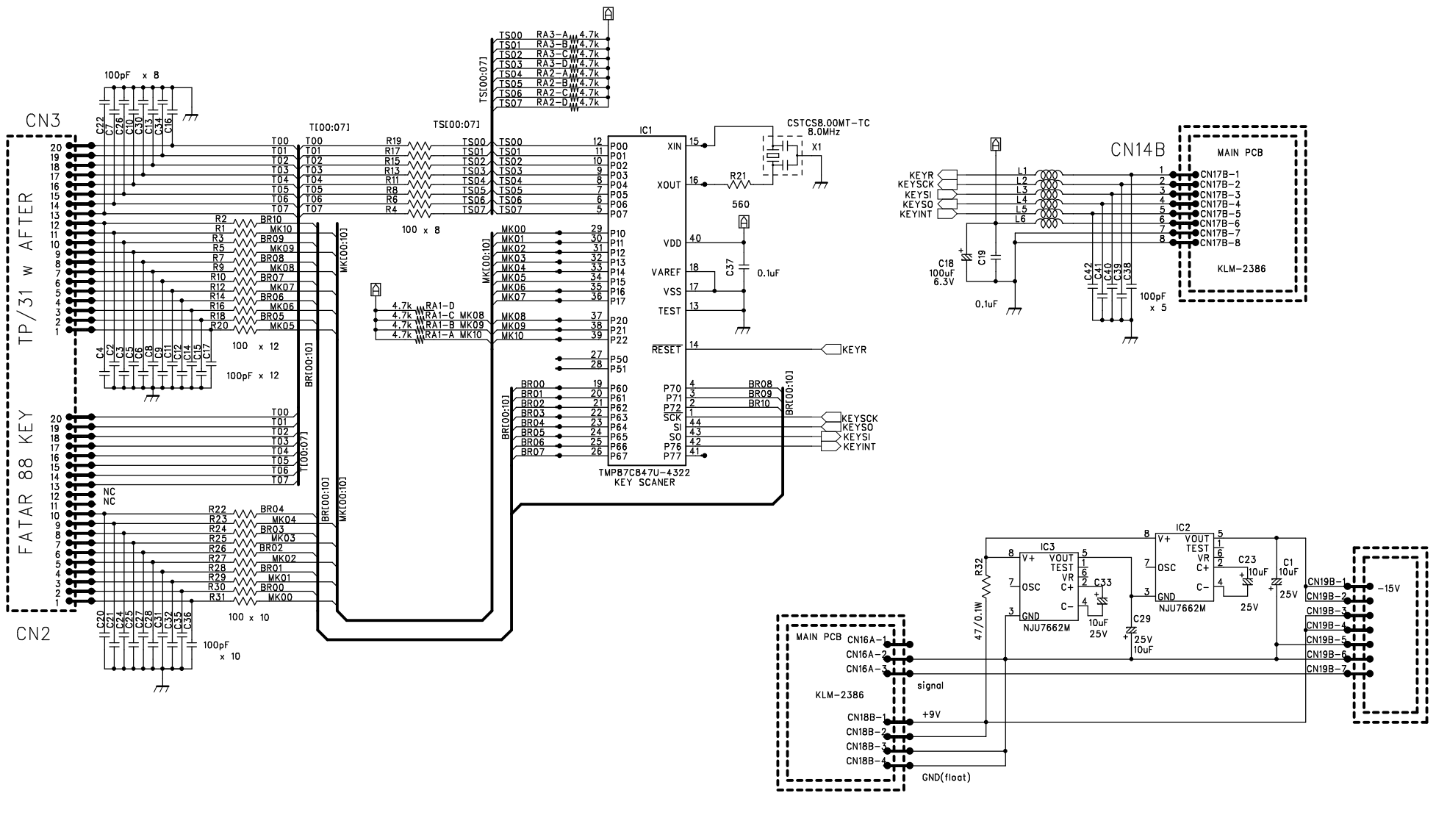
	VR1を0Ωでハイパス		
MARK	REVISION REASON	DATE	REVISED BY

DRAWN BY	DESIGNED BY	CHECKED BY	MODEL	COMMON DIAGRAM
T.TAKEUCHI	T.TAKEUCHI		TITLE	
			FATAR	
			TP/9S 61 Keyboard	
			KLM-1864(AfterTouch)	
DRAWING NO.		DATE		
KORG		KOD-A40414		'97. 9.17



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MARK	REVISION REASON	DATE	REVISED BY

DRAWN BY	DESIGNED BY	CHECKED BY	MODEL 共通
Y.Nishioka	Y.Nishioka		TITLE KLM-2304/2305 JOYSTICK
KORG		DRAWING NO. KOD-A40501	DATE '01.07.31

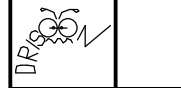


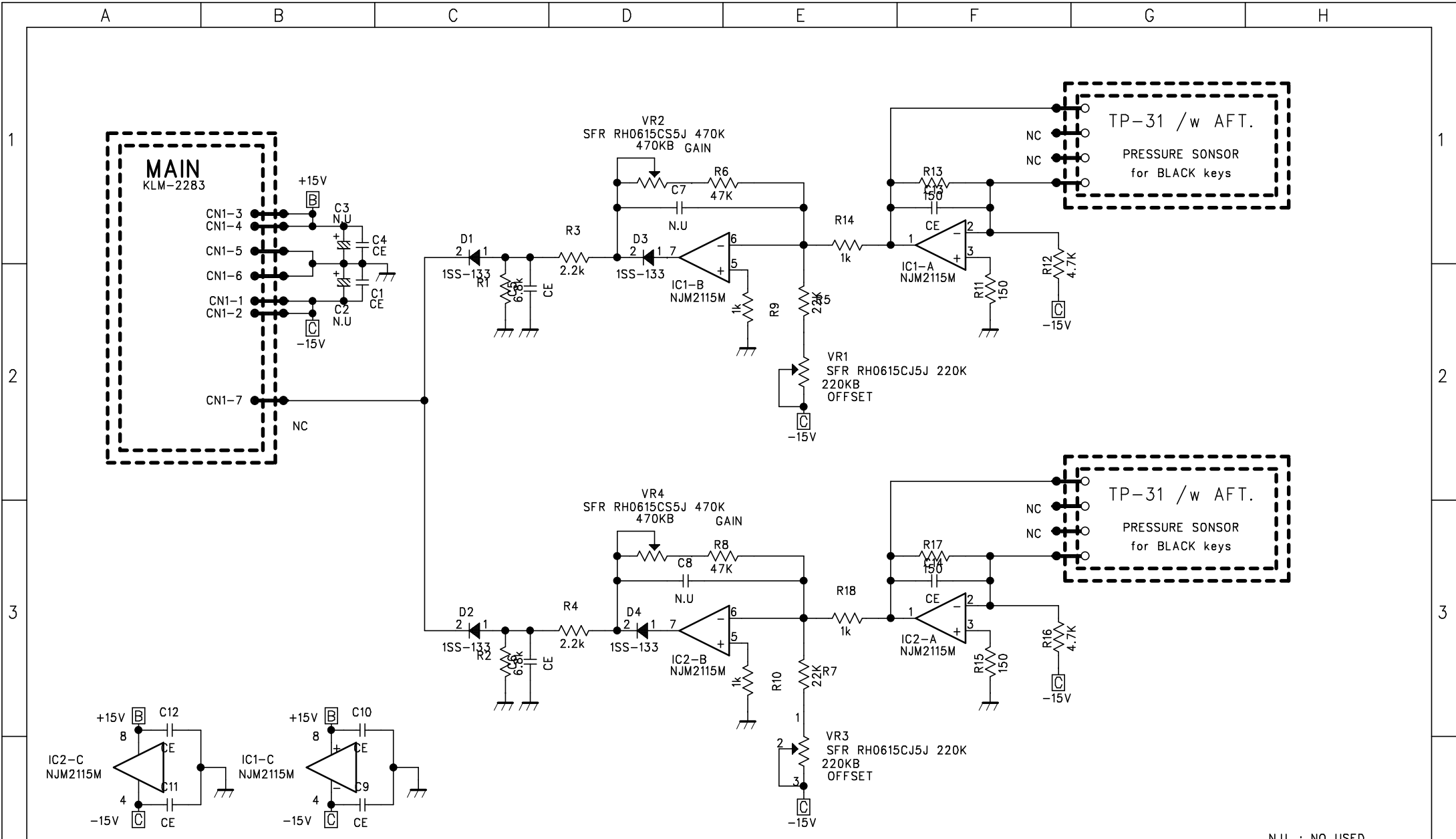
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MARK	REVISION REASON	DATE	REVISED BY
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L : BLM21B102SPT

DESIGNED BY	CHECKED BY	APPROVED BY	MODEL	X-2110 TRITON Le88
			TITLE	
			KLM-2387	
			CIRCUIT DIAGRAM	
DRAWING NO.		DATE		
KOD-A30507		Jun.05'02		



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MARK	REVISION REASON	DATE	REVISED BY

N.U. : NO USED			
DRAWN BY	DESIGNED BY	CHECKED BY	MODEL COMMON DIAGRAM
Y.Nishioka	Y.Nishioka		TITLE KLM-2332 (FATAR 88KBD AFT.)
KORG		DRAWING NO.	DATE
		KOD-A*****	'01.12.25

TR61/TR76/TR88 TEST MODE

How to start the test mode

ENTER+5+POWER ON : FULL TEST(61/76Key)

MENU+5+POWER ON : FULL TEST(88Key)

ENTER+2+POWER ON : OMIT THE INTERNAL TEST

How to operate the test mode

ENTER : PROCEED THE TEST

VALUE ▲ : ITEM UP

VALUE ▼ : ITEM DOWN

FF : STEP UP

REW : STEP DOWN

NOTE:

When the test mode starts, the calibration values of Joystick and Aftertouch are reset.

When the test mode is proceeded in order, please take the calibration at each item.

While operating the internal test, turning the Rotary encoder enables you to adjust the contrast of the LCD but the indication might not appear since the data update of the contrast cannot follow on time. So when adjusting the contrast, please do that after finishing the internal test.

*Conditions when starting the test mode

-Use a write-protected SD_CARD.

KORG TR61 Parts List

PART CODE	PART NAME	NOTE	Q'TY
200031881864	PCB ASSY KLM-1864 KARMA	TR61 M.PART	1
200033272278	PCB ASSY KLM-2278/79/80/81 LE	TR61 M.PART	1
200033272330	PCB ASSY KLM-2330 LE61/76	TR61 M.PART	1
200052572676	PCB ASSY KLM-2676 TR61	TR61 M.PART	1
500304020230	2SC3661-TA/TB(3K)	KLM-2676 TR61	30
500304020400	2SA1576A T106	KLM-2676 TR61	3
500304050220	DTC114ESA TP	KLM-2278/79/80/81 TRITON LE	48
500304050270	DTB113ZSTP	KLM-2278/79/80/81 TRITON LE	48
500304050490	CPH6316-TE-E	KLM-2676 TR61	3
500312053100	NSPW510BS	KLM-2278/79/80/81 TRITON LE	6
500313005800	MODULE NCM6602C	TR61 M.PART	3
500314001400	RLS-73 TE-11	KLM-2676 TR61	3
500314010300	1S2076TD	KLM-2278/79/80/81 TRITON LE	48
500314028800	SLZ-190B-09-T2	KLM-2278/79/80/81 TRITON LE	24
500314030500	RB160L-40TE25	KLM-2676 TR61	6
500314030600	1SR154-400TE25	KLM-2676 TR61	3
500314030700	RB051L-40TE25	KLM-2676 TR61	3
500314031000	SLR-325VR-T31-K/L/M/N	KLM-2278/79/80/81 TRITON LE	120
500314032000	SPR-325MVWT31 L/M/N	KLM-2278/79/80/81 TRITON LE	6
500314032100	RD6.8ES T1 AB1	KLM-2278/79/80/81 TRITON LE	6
500315000500	MC2840-T112-1	KLM-2676 TR61	15
500320003217	TMP87C847U-4458	KLM-2330 TRITON LE61/76	6
500320004108	HD74HC138P	KLM-2278/79/80/81 TRITON LE	12
500320004681	HD6437043AA21FV(X-0180)	KLM-2676 TR61	3
500320011250	M66291GP	KLM-2676 TR61	3
500320012223	MB87F1710PFV-G-BND	KLM-2676 TR61	3
500320012350	MB29F160BE70TN-K(X5110L)	KLM-2676 TR61	3
500320012351	MB29F160BE70TN-K(X5110H)	KLM-2676 TR61	3
500320040114	MX23L25611MC-12G(X-5110L)	KLM-2676 TR61	3
500320040115	MX23L25611MC-12G(X-5110H)	KLM-2676 TR61	3
500324001167	UPC78L05T-E2	KLM-2676 TR61	3
500324003010	TC7WU04F TE12L	KLM-2676 TR61	3
500324006007	MSM5118165F-60J3R1	KLM-2676 TR61	9
500324007011	BA09FP-E2	KLM-2676 TR61	3
500324007012	BA033LBSG2-TR	KLM-2676 TR61	3
500324009019	NJM2115M-TE1	KLM-1864 KARMA LE61/76	6
500324011004	M5216FP-600C	KLM-2676 TR61	3
500324017014	RN5VD45AA-TR	KLM-2676 TR61	3
500324021016	SN74LV32ANSR	KLM-2676 TR61	3
500324021026	SN74AHCT541PWR	KLM-2676 TR61	6
500324021102	SN74LV08APWR	KLM-2676 TR61	9
500324021103	SN74LV32APWR	KLM-2676 TR61	6
500324021104	SN74LV74APWR	KLM-2676 TR61	3
500324021106	SN74LV139APWR	KLM-2676 TR61	3
500324021108	SN74LV138APWR	KLM-2676 TR61	3
500324021114	SN74LV05APWR	KLM-2676 TR61	3
500324021119	SN74LV4051APWR	KLM-2676 TR61	3
500324021121	SN74LV541APWR	KLM-2676 TR61	9
500324021123	SN74LV125ANSR	KLM-2676 TR61	3
500324021160	NE5532DR	KLM-2676 TR61	12
500324021168	SN74LVC1G04DCKR	KLM-2676 TR61	9
500324021180	SN74LVC1G125DCKR	KLM-2676 TR61	3
500324021190	SN74LVC1G19DCKR	KLM-2676 TR61	9
500324021200	SN74LVC1G332DCKR	KLM-2676 TR61	3
500324021270	SN74AHCT574PWR	KLM-2676 TR61	3
500324021271	SN74AHCT541NSR	KLM-2676 TR61	3
500324023007	S-8520F50MC-B0JT2G	KLM-2676 TR61	3

KORG TR61 Parts List

PART CODE	PART NAME	NOTE	Q'TY
500324024001	L1087MPX-ADJ-NOPB	KLM-2676 TR61	3
500324036016	PCM1781DBQR	KLM-2676 TR61	6
500324045003	93LC66BT-I/SN	KLM-2676 TR61	3
500334001900	PC410LKNIP	KLM-2676 TR61	3
500335011900	CA-301 24.576MHZ CI=10PF	KLM-2676 TR61	3
500335012400	CA-301 8MHZ	KLM-2676 TR61	3
500335013100	CA-301 24MHZ	KLM-2676 TR61	3
500335400140	CSTCC8M00G53-R0	KLM-2330 TRITON LE61/76	6
500350002233	RH0615CN3J	KLM-1864 KARMA LE61/76	6
500362009007	RK11K1140A9L	KLM-2278/79/80/81 TRITON LE	24
500362009052	RK11K1140D1H	KLM-2304/2305	12
500365009500	EWA NA0C10B14	KLM-2278/79/80/81 TRITON LE	6
500370005000	EC11B15204A5	KLM-2278/79/80/81 TRITON LE	6
500374000600	EVQ11A09K	KLM-2278/79/80/81 TRITON LE	324
500375014800	SDKLA10200	KLM-2676 TR61	3
500402002800	2943-666671	KLM-2278/79/80/81 TRITON LE	12
500402004600	2943-666673	KLM-2676 TR61	9
500402006500	TC-600M-3A-5026	KLM-2676 TR61	3
500402007400	SC-0.5X10X16.5TX4R	KLM-2676 TR61	3
500404001050	BLM21PG600SN1D	KLM-2676 TR61	6
500404001070	BLM18BD102SN1D	KLM-2330 TRITON LE61/76	36
500404001070	BLM18BD102SN1D	KLM-2676 TR61	141
500405013500	KA-161E(100V/9V/3000MA)	TR61 JP M.PART	1
500405013600	KA-163E(120V/9V/3000MA)	TR61 US M.PART	1
500405013800	KA-169E(230V/9V/3000MA)	TR61 WG M.PART	1
500420005800	61TP/9 PCB+AFTH	TR61 M.PART	3
500450003100	LGR4609-7000	KLM-2278/79/80/81 TRITON LE	6
500454004300	YKB21-5012	KLM-2676 TR61	12
500454009900	YKB21-5074G	KLM-2676 TR61	9
500454011700	TCS5073-24-4151	KLM-2676 TR61	3
500464070001	FUSE 125V 2A 0237002.M	TR61 M.PART	3
500471070301	B3B-PH-K-S	KLM-1864 KARMA LE61/76	6
500471101030	SC25-03WS	KLM-2676 TR61	3
500471101060	SC25-06WS	KLM-2278/79/80/81 TRITON LE	6
500471101060	SC25-06WS	KLM-2676 TR61	3
500471102030	SJ20-03WX	KLM-2278/79/80/81 TRITON LE	6
500471102030	SJ20-03WX	KLM-2676 TR61	3
500471102040	SJ20-04WX	KLM-2676 TR61	3
500471102060	SJ20-06WX	KLM-2676 TR61	3
500471102080	SJ20-08WX	KLM-2278/79/80/81 TRITON LE	12
500471102080	SJ20-08WX	KLM-2330 TRITON LE61/76	6
500471102080	SJ20-08WX	KLM-2676 TR61	3
500471102120	SJ20-12WX	KLM-2278/79/80/81 TRITON LE	12
500471102130	SJ20-13WX	KLM-2278/79/80/81 TRITON LE	6
500471102130	SJ20-13WX	KLM-2676 TR61	3
500471102140	SJ20-14WX	KLM-2278/79/80/81 TRITON LE	6
500471102140	SJ20-14WX	KLM-2676 TR61	3
500471102150	SJ20-15WX	KLM-2278/79/80/81 TRITON LE	12
500472060301	S3B-EH	KLM-2304/2305	6
500472060401	S4B-EH	KLM-2304/2305	6
500474019500	1-215079-6	KLM-2330 TRITON LE61/76	12
500474019600	2-215079-0	KLM-2330 TRITON LE61/76	6
500474019700	76382-404	KLM-1864 KARMA LE61/76	6
500474031000	B16B-PHDSS	KLM-2676 TR61	3
500474033200	404A-072SABA01	KLM-2676 TR61	6
500474033700	302A-50PGAS003	KLM-2676 TR61	3
500474039400	YKF45-0021(USB RA B-TYPE)	KLM-2676 TR61	3

KORG TR61 Parts List

PART CODE	PART NAME	NOTE	Q'TY
500474042800	AXA263021T	KLM-2676 TR61	3
500475002577	HNS-2577	TR61 M.PART	3
500475002969	HNS-2969	TR61 M.PART	3
500475002970	HNS-2970	TR61 M.PART	3
500475003048	HNS-3048	TR61 M.PART	3
500475003049	HNS-3049	TR61 M.PART	3
500475003051	HNS-3051	TR61 M.PART	3
500475003052	HNS-3052	TR61 M.PART	3
500475003053	HNS-3053	TR61 M.PART	3
500475003054	HNS-3054	TR61 M.PART	3
500475003055	HNS-3055	TR61 M.PART	3
500475003058	HNS-3058	TR61 M.PART	3
500475003059	HNS-3059	TR61 M.PART	3
500475102268	HNS-2268 (L=310MM/16PIN)	TR61 M.PART	3
500475102269	HNS-2269 (L=250MM/16PIN)	TR61 M.PART	3
500480010380	YKF51-5041	KLM-2676 TR61	3
500500022500	FF-004	TR61 M.PART	15
500500033300	X-0180 KB SPONGE KOC-F40988-1	TR61 M.PART	3
500515400100	FUSE HOLDER CNT47-0003A	KLM-2676 TR61	6
500525001400	FERRITE CORE F5 T 25X12X15	TR61 M.PART	3
500580074500	X5110 SHIELD SHEET KOC-F41251	TR61 M.PART	3
500620024600	X-952 PSW KNOB KOC-E40304-2	TR61 M.PART	3
500620026800	X-410 SVR KNOB GRAY E40239-3	TR61 M.PART	3
500620036000	X-610 ENCODER KNOB(BK)E40466-3	TR61 M.PART	3
500620040700	KNOB P423-90F(X-9100) E40519-1	TR61 M.PART	12
500630034200	X-0180 LCD WINDOW KOC-F40962	TR61 M.PART	3
500630034300	X-0180 MIRROR SHEET KOC-F40967	TR61 M.PART	3
500630034400	X-0180 REFLECTION SHEET F40968	TR61 M.PART	3
500630034500	X-0180 SHEET KOC-F40969	TR61 M.PART	3
500641041172	X-323 JACK PLATE 2 KOC-C40963	KLM-2676 TR61	3
500641041650	X-0180 BOTTOM COVER KOC-C30557	TR61 M.PART	3
500641041651	X-0180 REAR OP COVER C41224	TR61 M.PART	3
500641041652	X-0180 OP COVER KOC-C41226	TR61 M.PART	3
500641041653	X-0180 SIMM COVER KOC-C41227	TR61 M.PART	3
500641041654	X-0180 SUPPORT CHASSIS C30556	TR61 M.PART	3
500641041942	X-4160 FRONT BAR KOC-C41228-3	TR61 M.PART	3
500641041971	X-5110 PANEL KOC-C30555-3	TR61 M.PART	3
500644010500	X-0100 WHEEL SPRING KOC-C41222	TR61 M.PART	6
500646079300	X-0180 HOLDER KOC-E30273	TR61 M.PART	3
500646079600	EY1L-GB01K	TR61 M.PART	3
500646080200	X-0180 JS FRAME KOC-E30272	TR61 M.PART	3
500646080400	X-0180 WHEEL SUPPORT E40533	TR61 M.PART	3
500646080500	X-0180 VR PLATE KOC-E40532	TR61 M.PART	3
500646080600	X-0180 JS LEVER KOC-E40534	TR61 M.PART	3
500646098100	X-2100 JS WHEEL KOC-E30270-4	TR61 M.PART	3
500646098200	X-2100 JS COVER KOC-E30271-4	TR61 M.PART	3
500646100300	X-4160 SIDE PLATE R E10190-3	TR61 M.PART	3
500646100400	X-4160 KNOB BLOCK A-1 E20211-3	TR61 M.PART	3
500646100500	X-4160 KNOB BLOCK A-2 E20211-4	TR61 M.PART	3
500646100600	X-4160 KNOB BLOCK B-1 E10191-3	TR61 M.PART	3
500646100700	X-4160 KNOB BLOCK B-2 E10191-4	TR61 M.PART	3