

# **KORG TR88**

# **SERVICE MANUAL**



## **TABLE OF CONTENTS**

**ASSEMBLY SKETCH (HOOKUP): 2**  
**BLOCK DIAGRAM: 3**  
**SCHEMATIC DIAGRAM: 4-14**  
**TEST MODE:15**  
**PARTS LIST: 16-18**

# **KORG**

Issued Jun.29, 2006  
Ver1

A B C D E F G H

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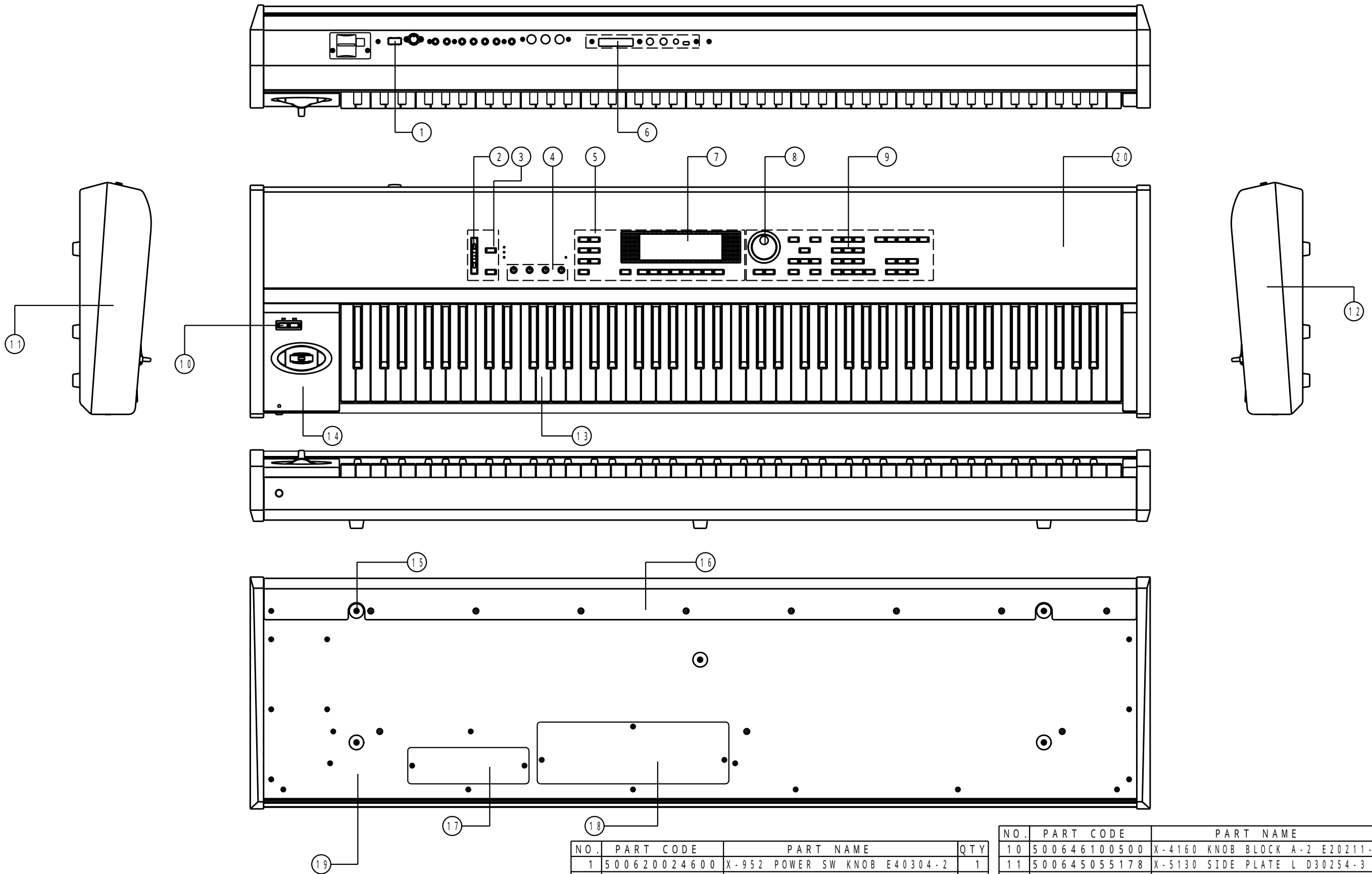
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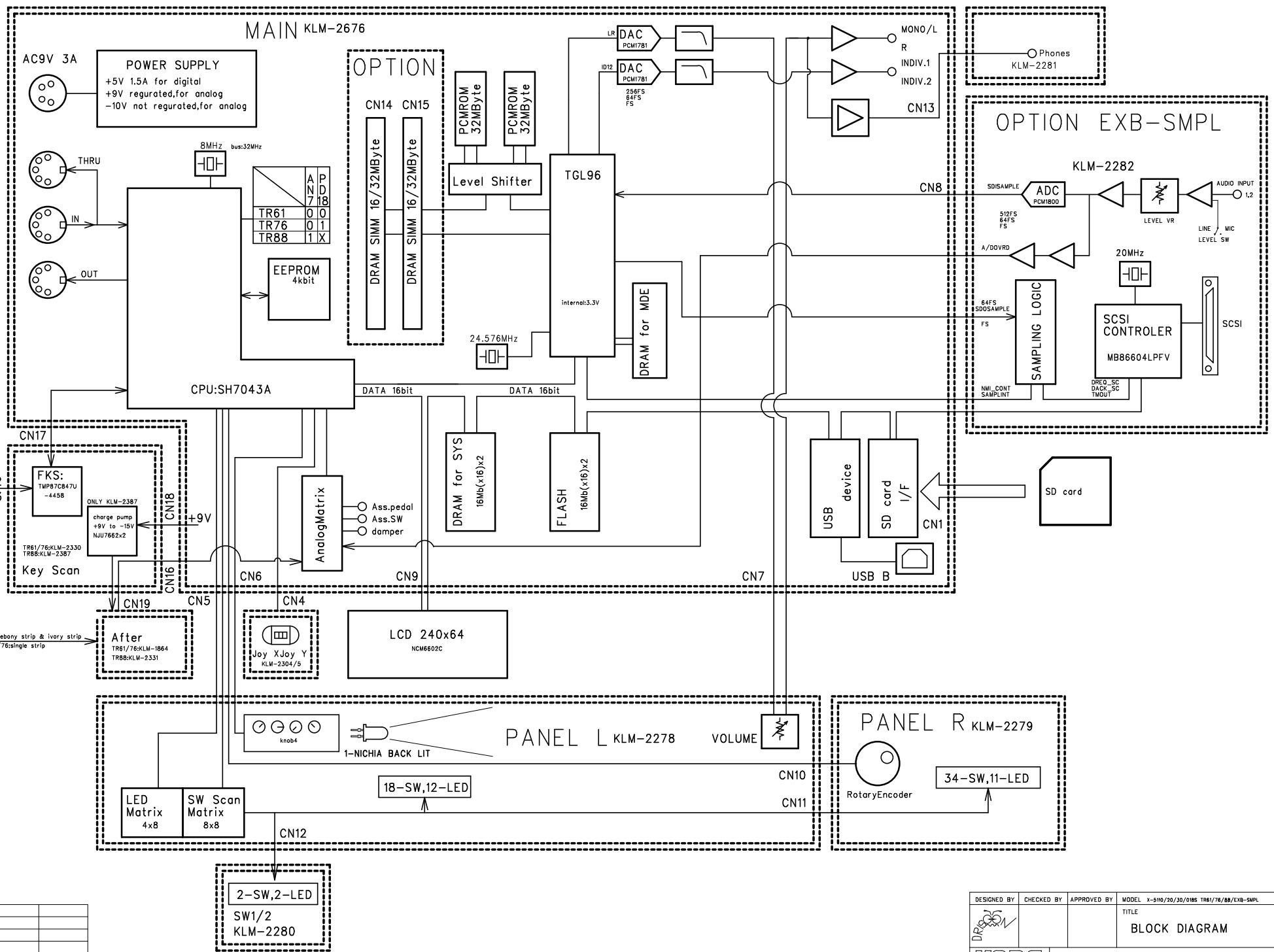


Dimensions : L = 1414 . 0 mm  
 W = 364 . 7 mm  
 H = 123 . 2 mm

Weight : 23 . 8 kg

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	500645055178	X-5130 SIDE PLATE L D30254-3	1
12	500645055179	X-5130 SIDE PLATE R D30254-4	1
13	500420007002	88NOTE TP/41+PCB+AFTH	1
14	500646099951	X-5130 JS PANEL E20220-2	1
15	500500033200	CASE LEG K-23	5
16	500641042003	X-5130 FRONT BAR C30590-2	1
17	500641041750	X-2110 SIMM COVER C41273	1
18	500641041749	X-2110 OP COVER C30591	1
19	500645053298	X-2110 BOTTOM BOARD D10082	1
20	500641041937	X-5130 PANEL C10240-2	1

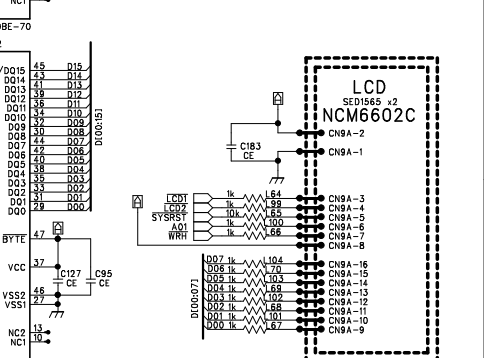
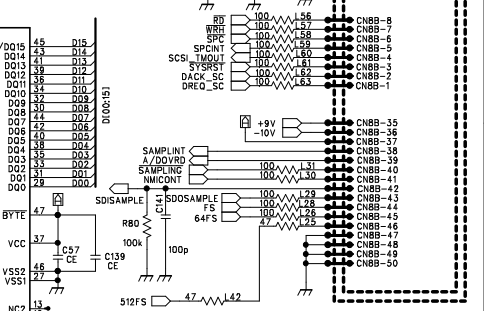
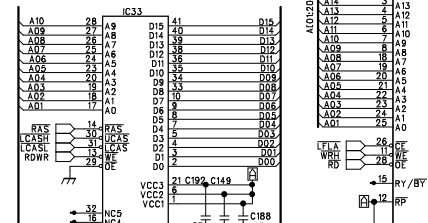
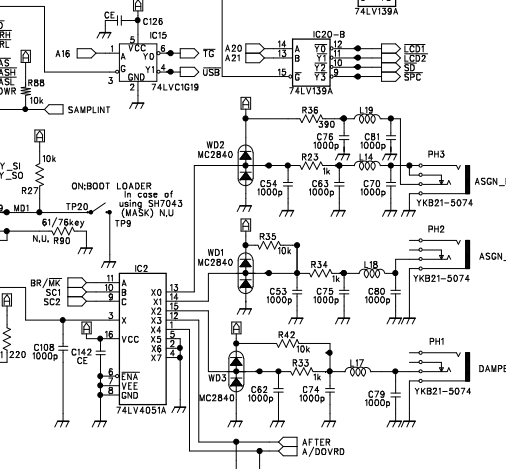
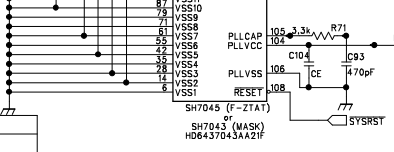
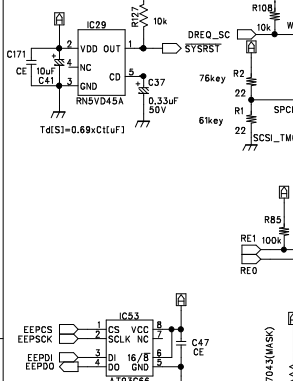
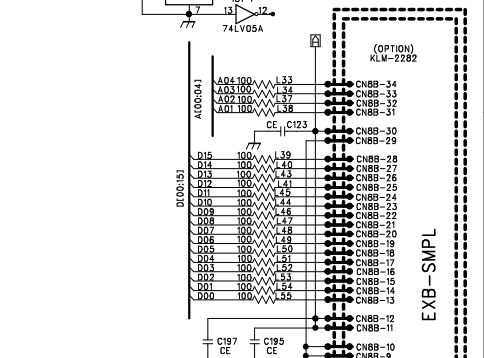
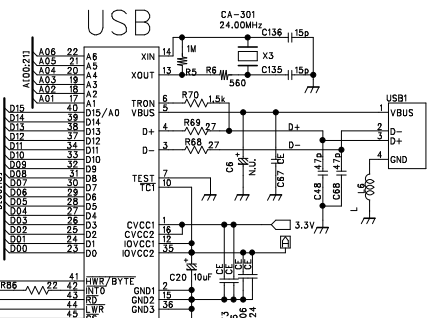
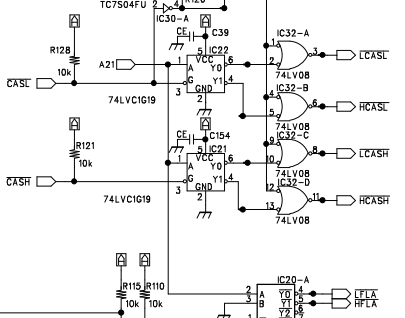
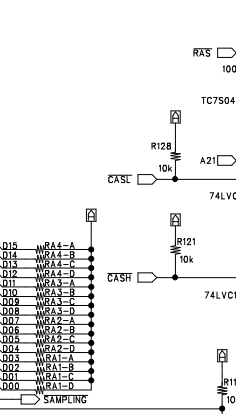
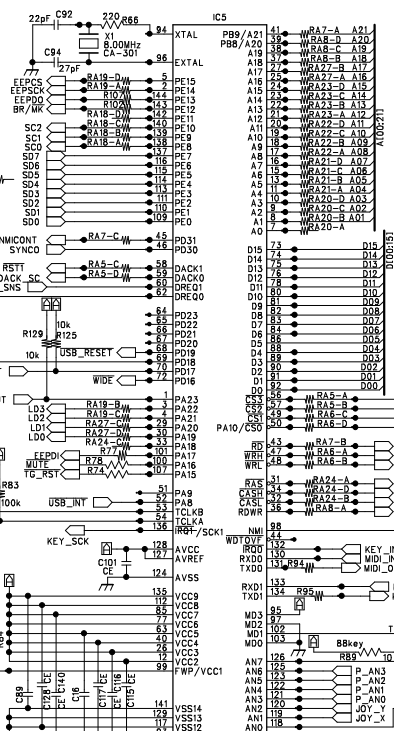
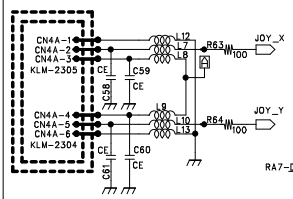
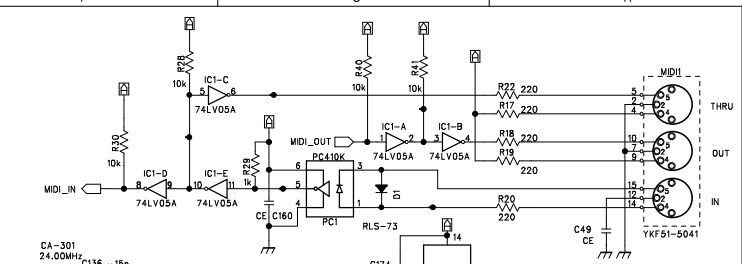
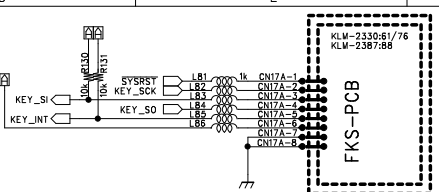
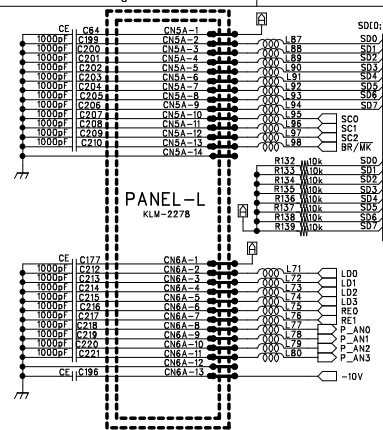
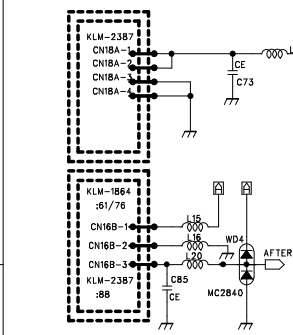


TR61/76:TP9  
 TR88:TP41

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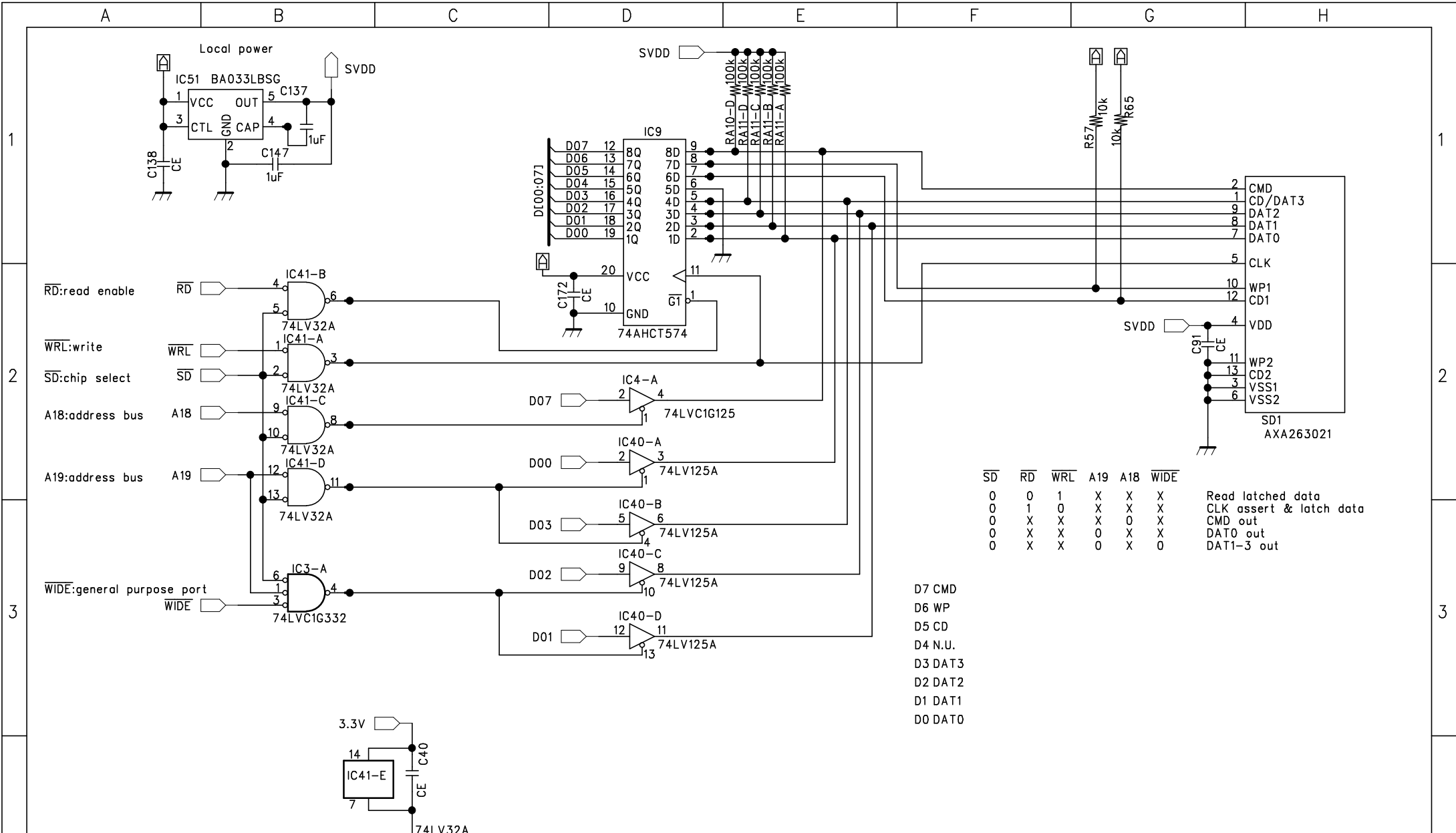
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TITLE BLOCK DIAGRAM			
DRAWING NO. KOD-B30105		DATE Aug,22'05	

CE:C1608JF1E104ZT-AG  
no value R,RA : 22ohm  
no value L : BLM18BD102SN1D



Revision history table with columns: MARK, REVISION, REASON, DATE, REVISED BY. Includes revision 1 and 2.

Metadata table with columns: DRAWN BY, CHECKED BY, APPROVED BY, MODEL, TITLE, DATE. Includes title 'KLM-2676 MAIN 1/5 CPU BLOCK' and date 'Apr.21'05'.

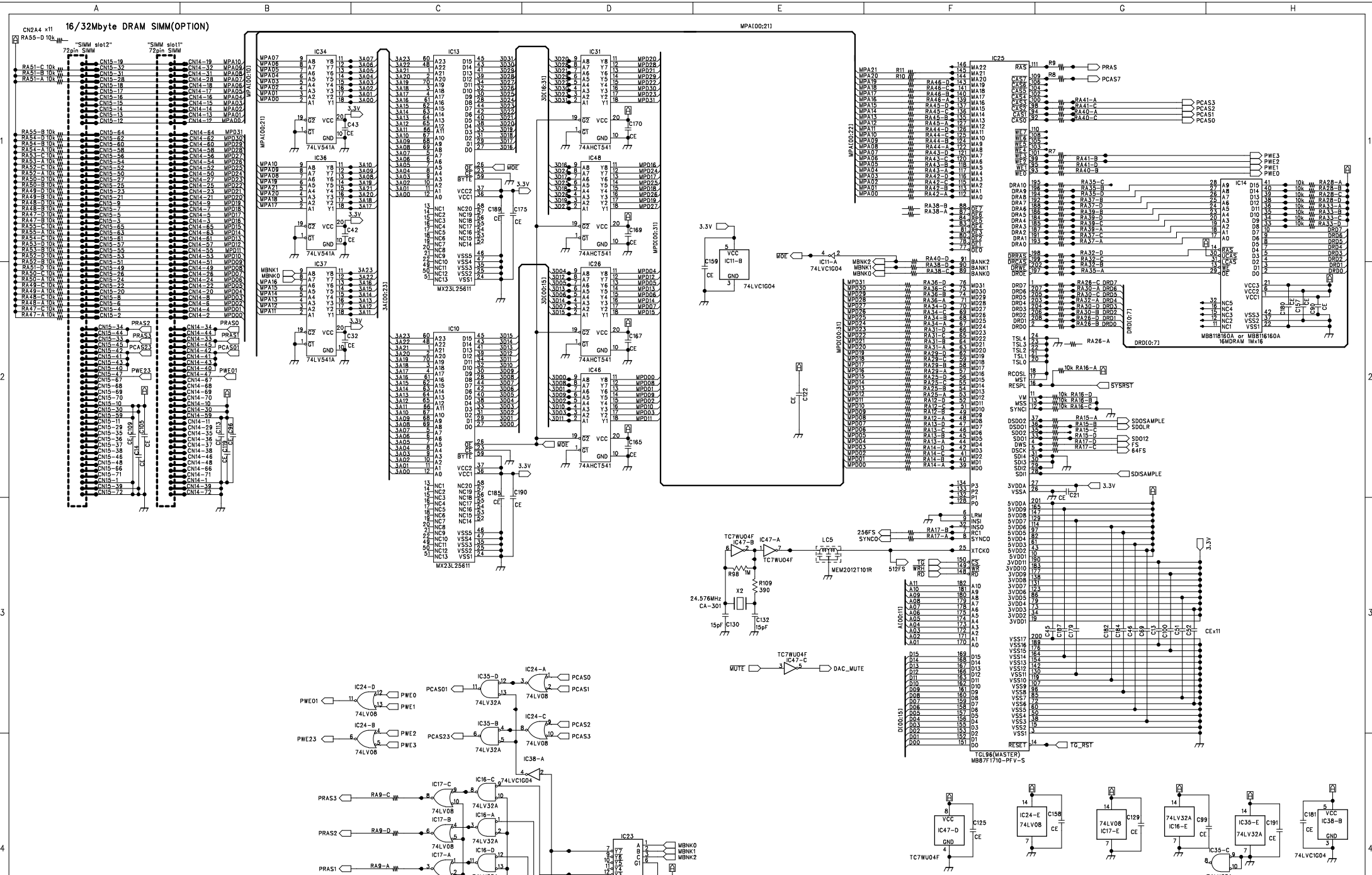


$\overline{SD}$	$\overline{RD}$	$\overline{WR}$	A19	A18	$\overline{WIDE}$	
0	0	1	X	X	X	Read latched data
0	1	0	X	X	X	CLK assert & latch data
0	X	X	X	0	X	CMD out
0	X	X	0	X	X	DAT0 out
0	X	X	0	X	0	DAT1-3 out

- 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	DATE
MARK	REVISION	REASON	DATE

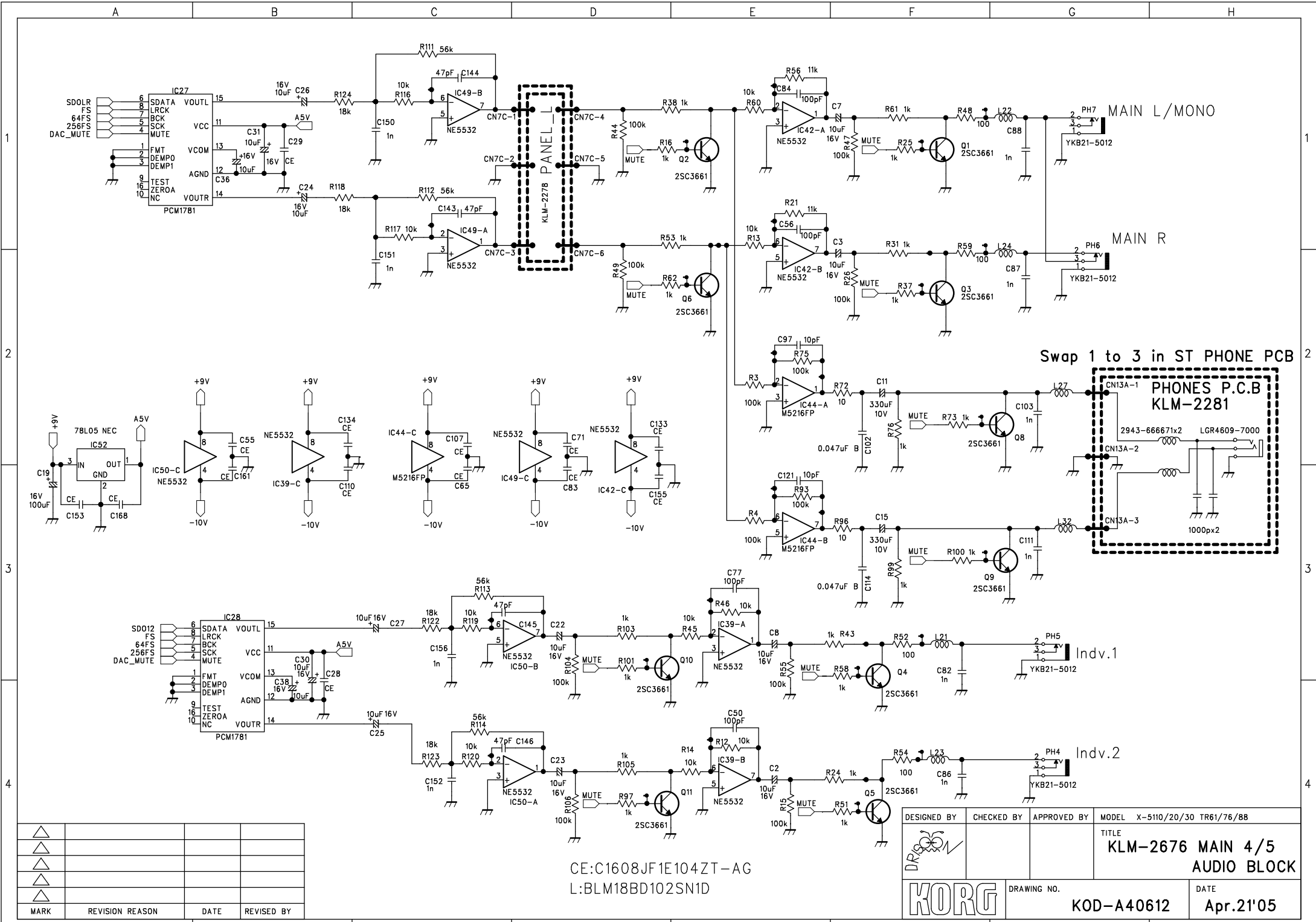
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			TITLE
			<b>KLM-2676 MAIN 3/5</b>
			<b>SD card I/F BLOCK</b>
DRAWING NO.		DATE	
<b>KOD-A40611</b>		<b>Apr.21'05</b>	



MARK	REVISION	REASON	DATE	REVISED BY

CE:C1608JF1E104ZT-AG  
no value R,RA : 22ohm

DRAWN BY	CHECKED BY	APPROVED BY	MODEL	X-5110/20/30 TR61/76/88
TITLE				KLM-2676 MAIN 2/5
TG BLOCK				
DRAWING NO.			KOD-A30660	DATE
				Apr.'105



CE:C1608JF1E104ZT-AG  
 L:BLM18BD102SN1D

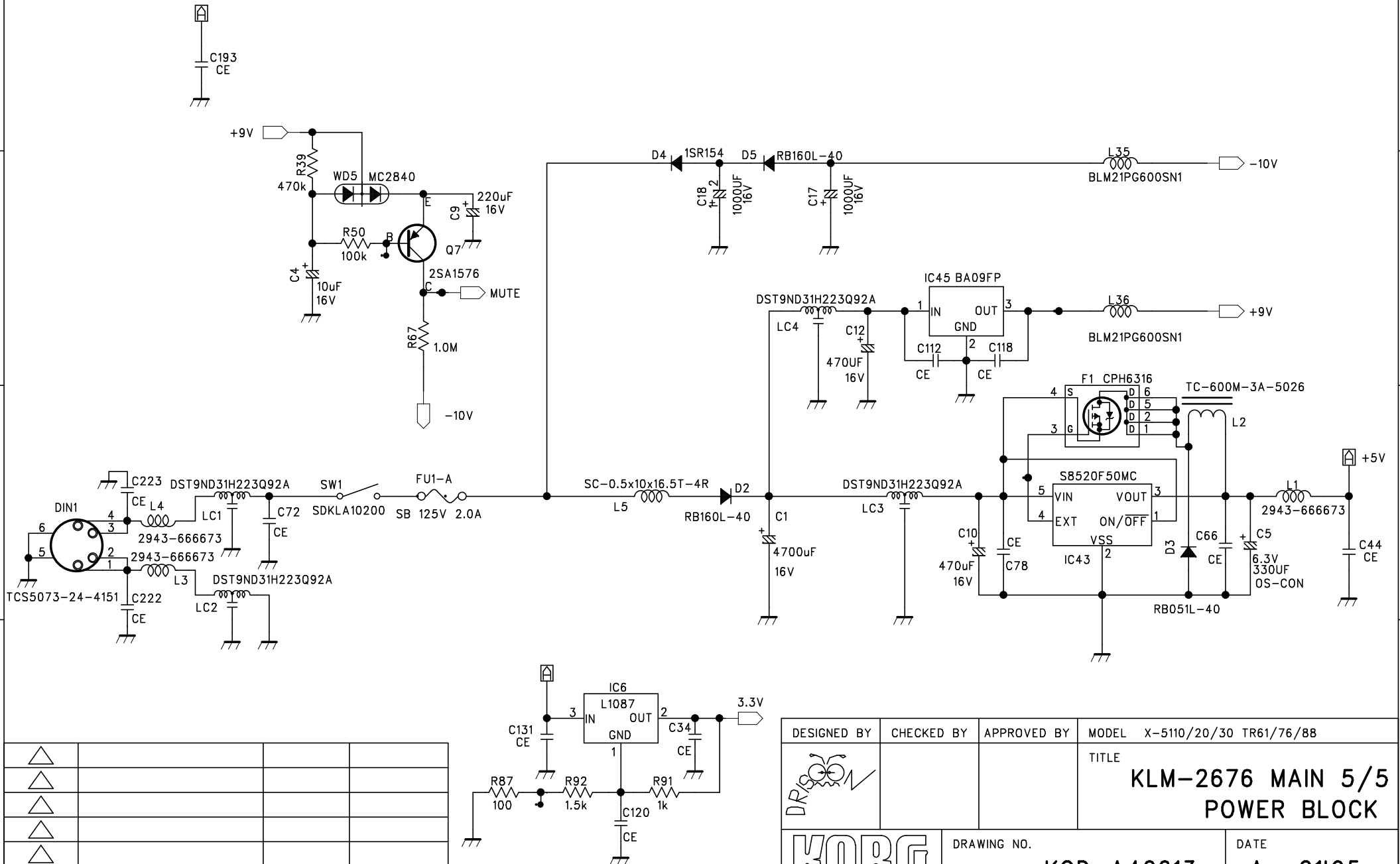
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DESIGNED BY	CHECKED BY	APPROVED BY	MODEL X-5110/20/30 TR61/76/88
			TITLE <b>KLM-2676 MAIN 4/5 AUDIO BLOCK</b>
DRAWING NO. <b>KOD-A40612</b>		DATE <b>Apr.21'05</b>	

CE:C1608JF1E104ZT-AG

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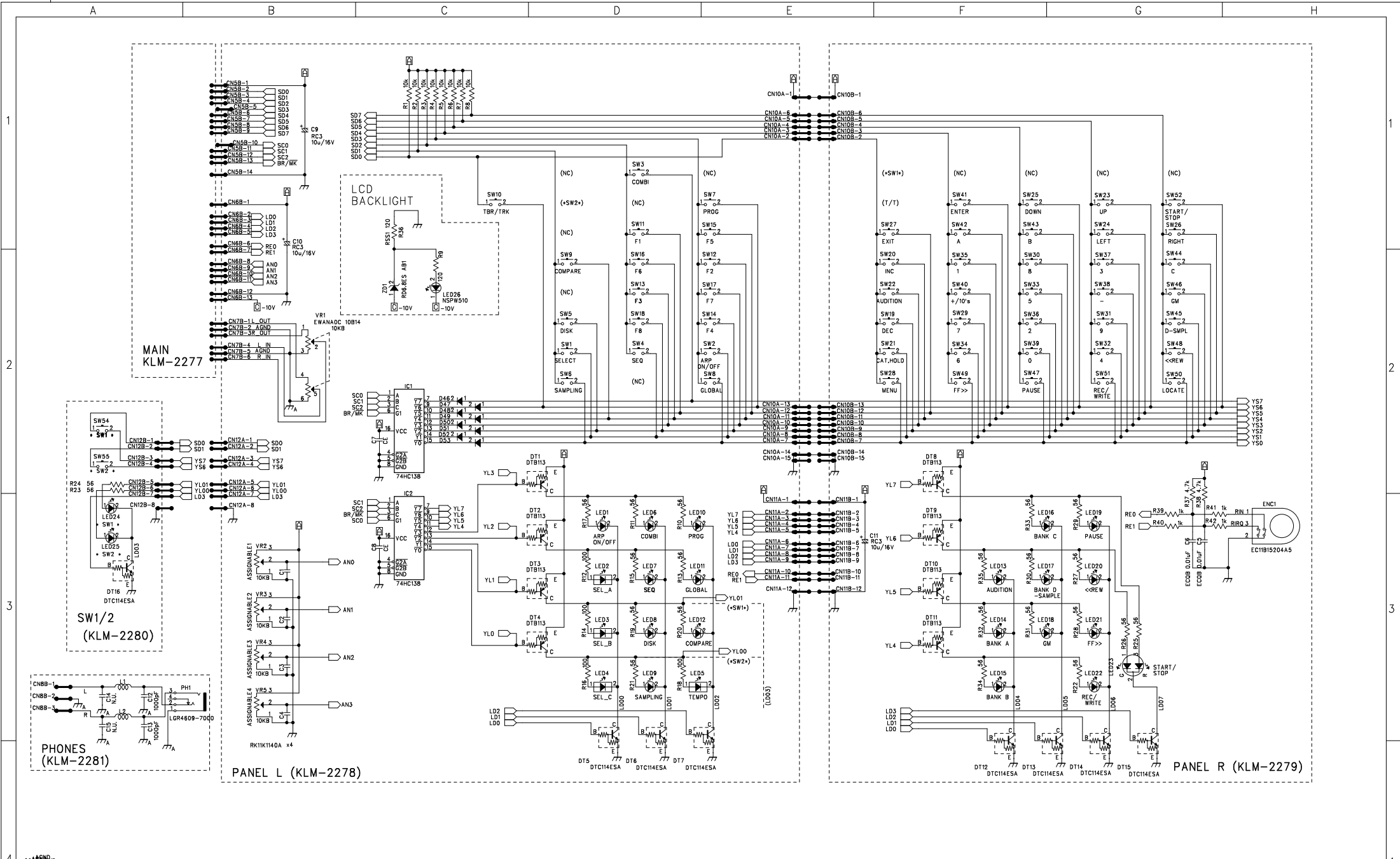
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MARK	REVISION	REASON	DATE	REVISED BY

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	

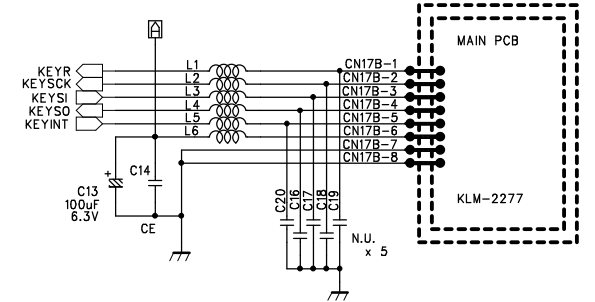
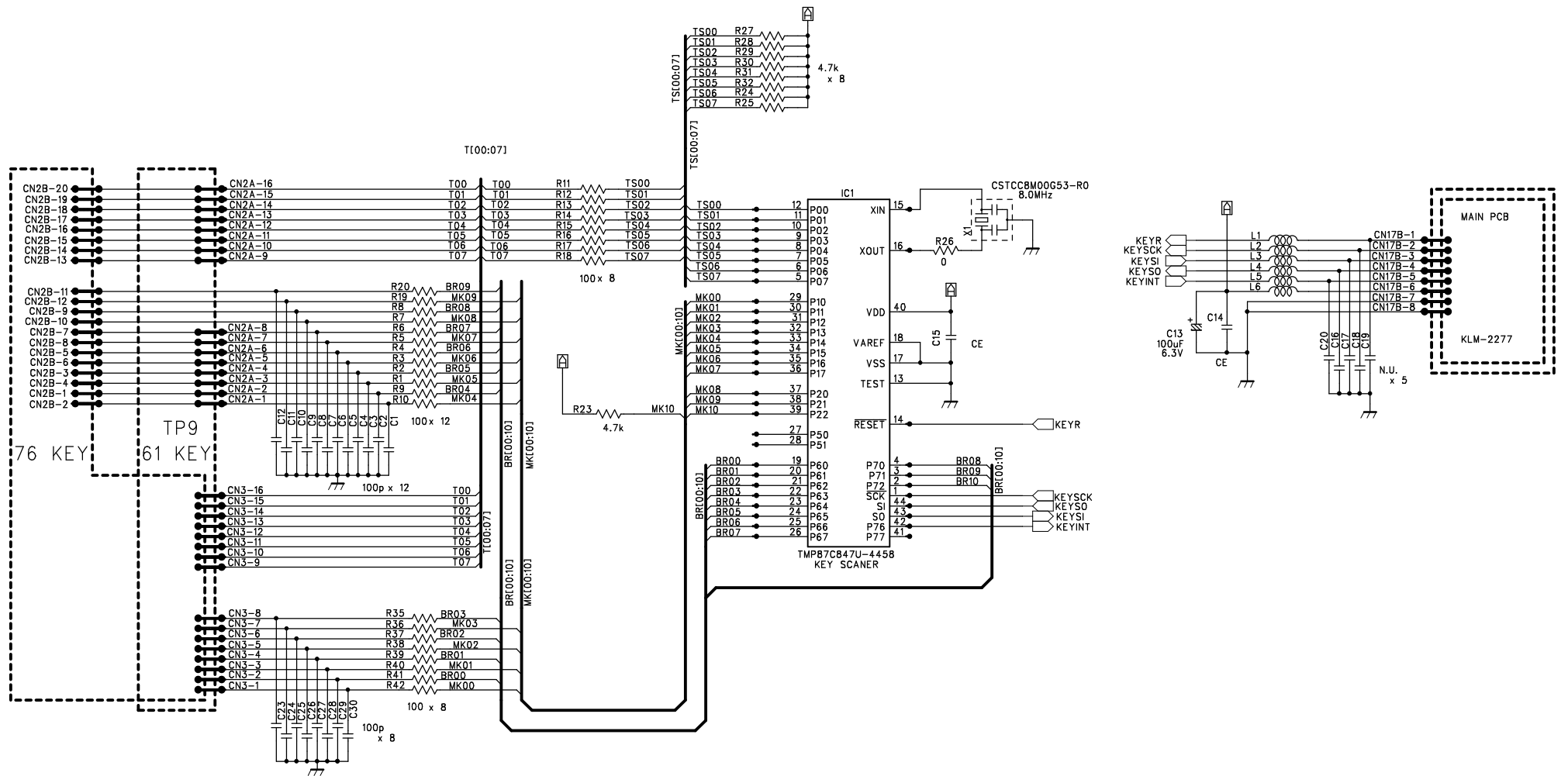




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DRAWN BY	CHECKED BY	APPROVED BY	MODEL
S.Ohnishi			X-080
TITLE			
KLM-2278/9/80/1			
Schematics			
DRAWING NO.		DATE	
KOD-A30466		June 1, '01	



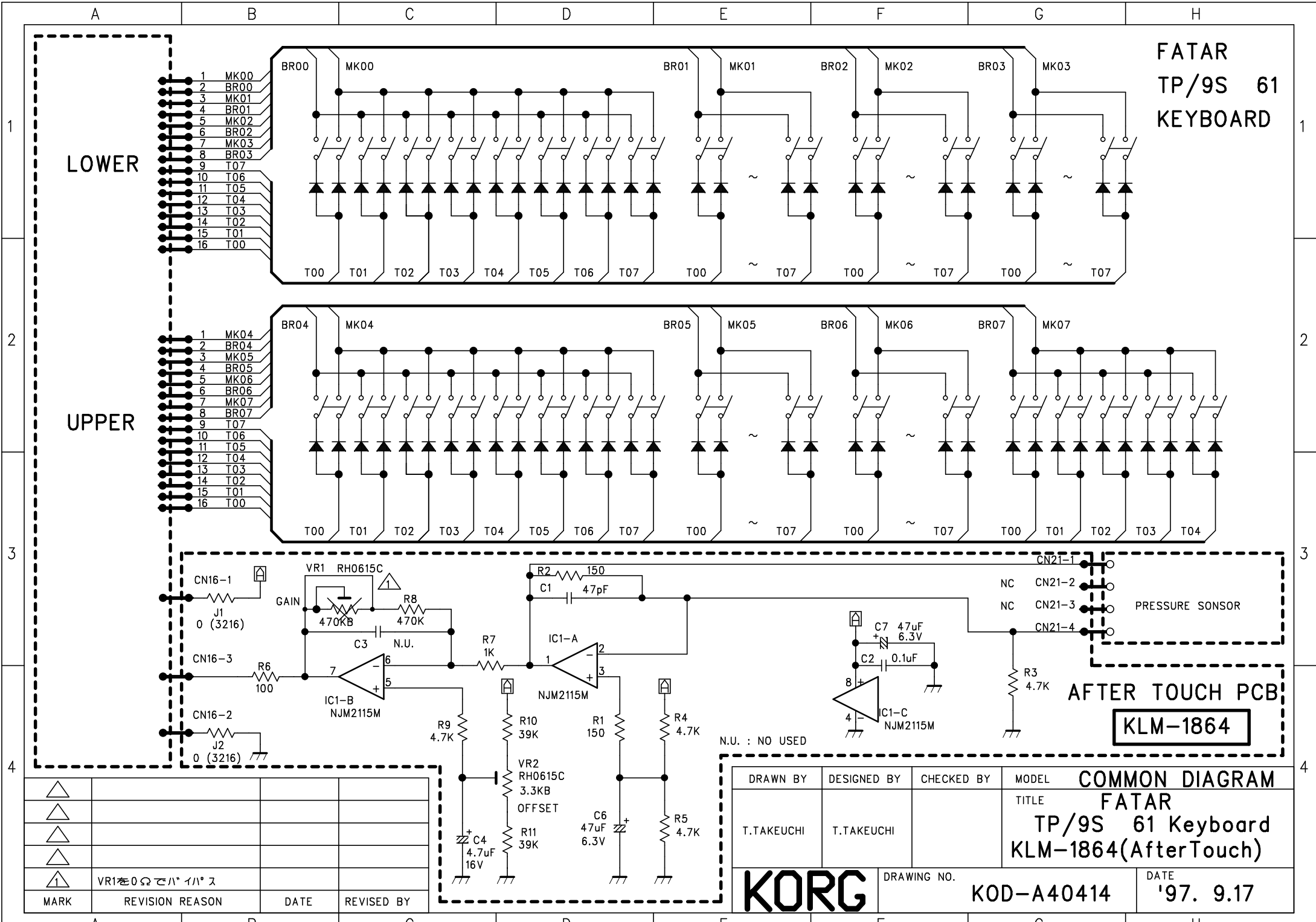


L : BLM18BD102SN1D  
 CE: C1608JF1E104ZT

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

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FATAR  
TP/9S 61  
KEYBOARD

LOWER

UPPER

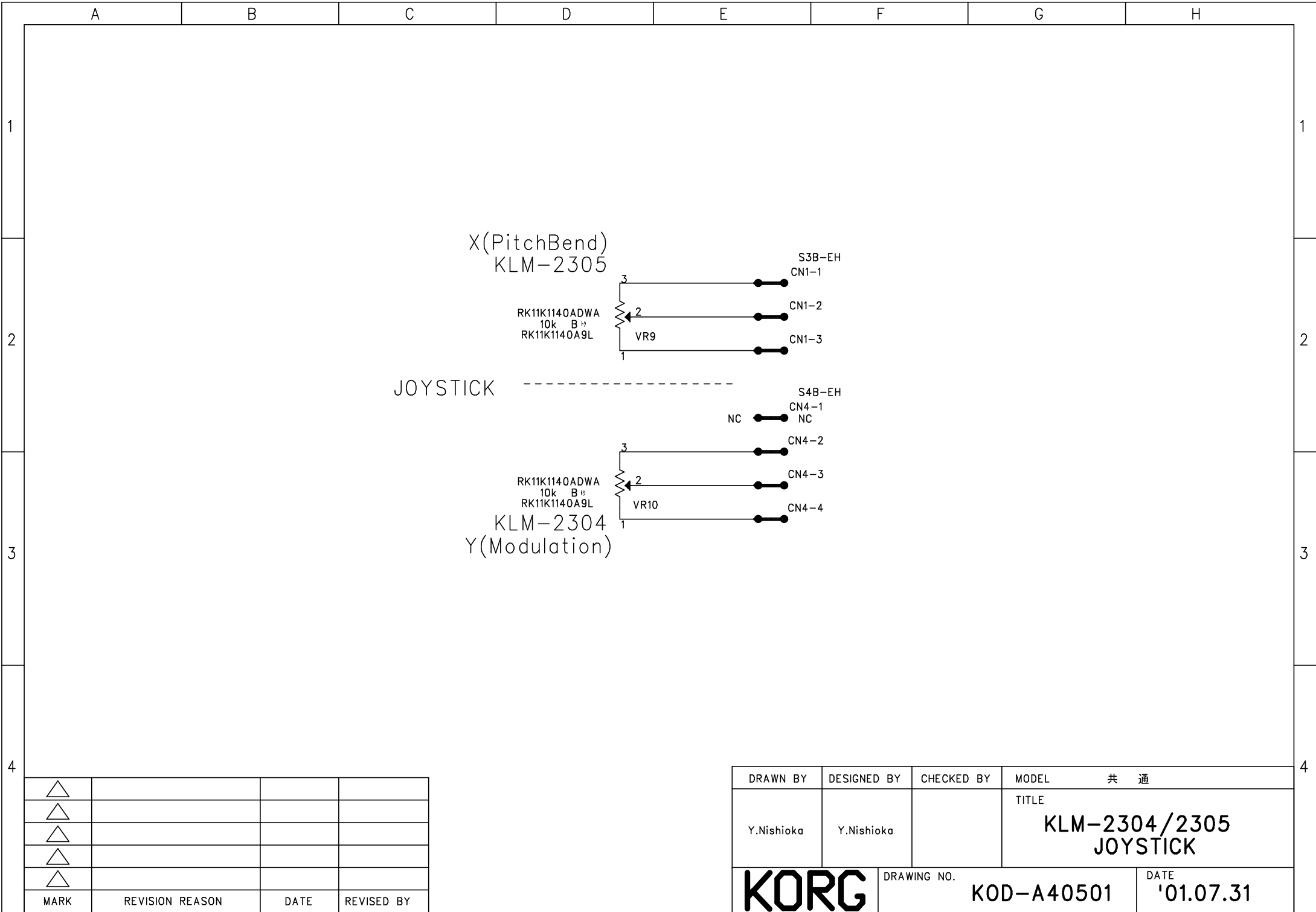
AFTER TOUCH PCB

KLM-1864

N.U. : NO USED

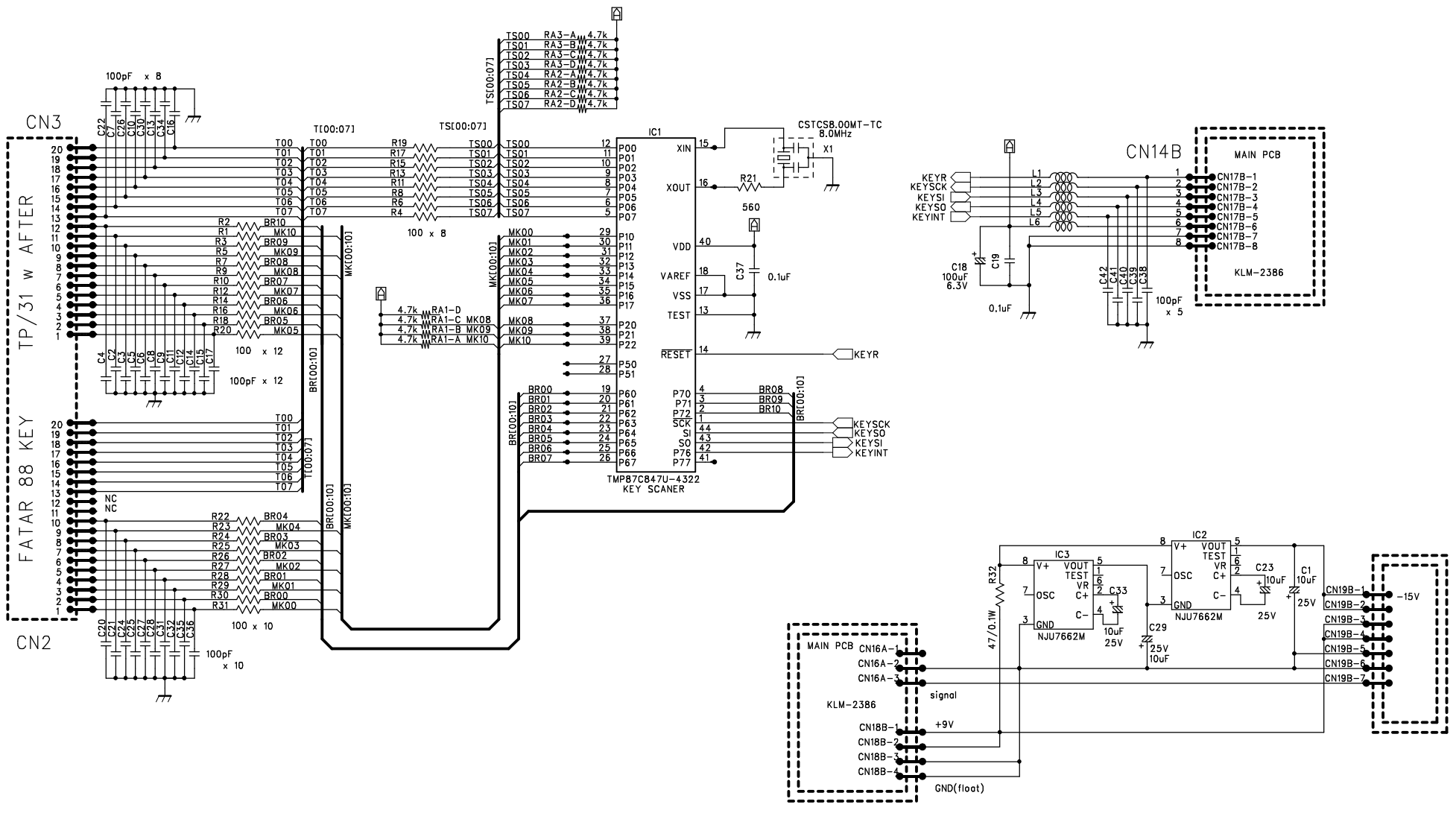
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1	VR1を0Ωでハ イパ ス		
MARK	REVISION REASON	DATE	REVISED BY

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
<b>KORG</b>		DRAWING NO. KOD-A40501	DATE '01.07.31



3

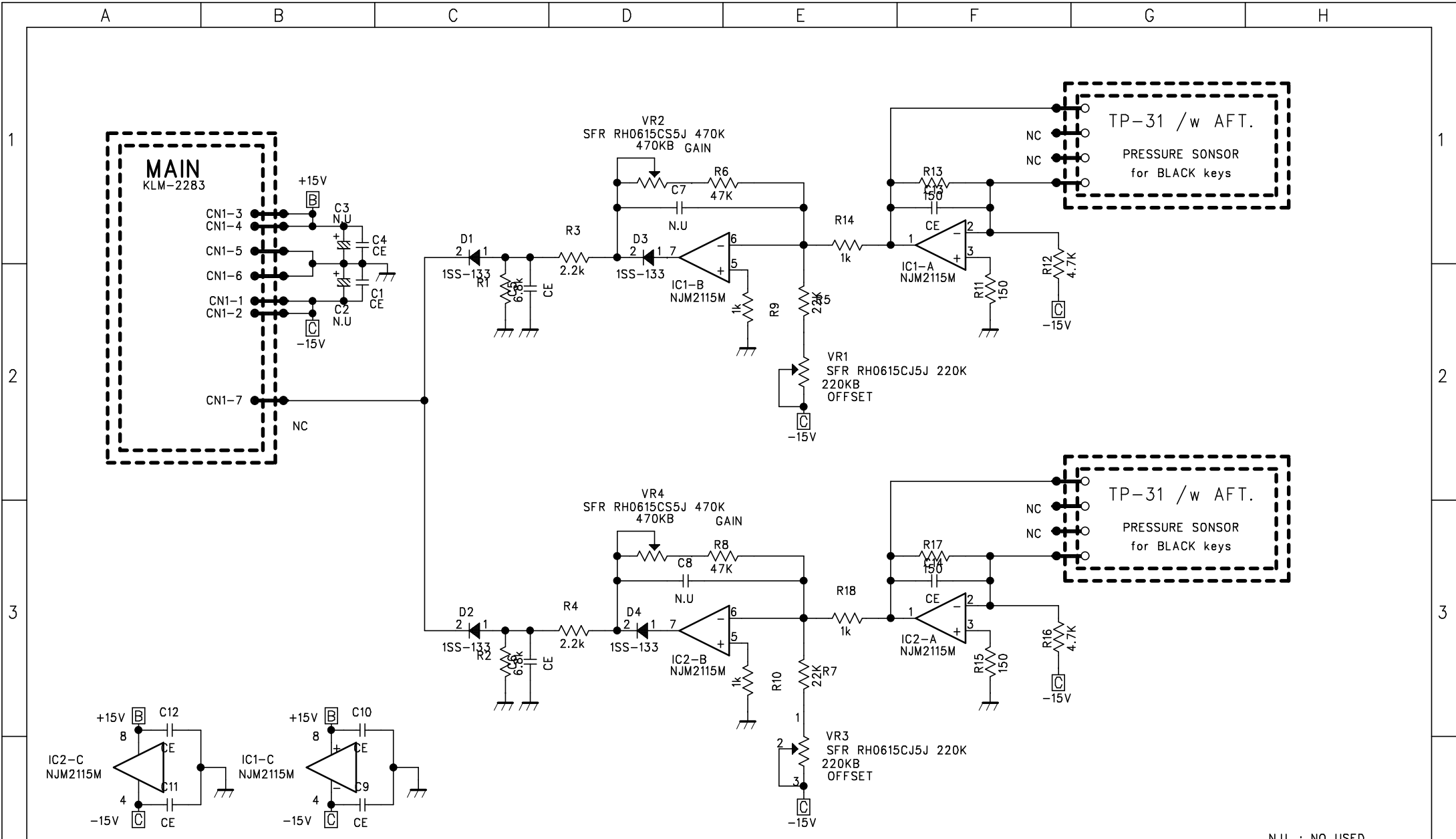
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L : BLM21B102SPT

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

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MARK	REVISION REASON	DATE	REVISED BY

N.U. : NO USED			
DRAWN BY	DESIGNED BY	CHECKED BY	MODEL <b>COMMON DIAGRAM</b>
Y.Nishioka	Y.Nishioka		TITLE
			KLM-2332 (FATAR 88KBD AFT.)
<b>KORG</b>		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 TR88 Parts List

Part No.	Part Name	Note	QTY
200033272278	KLM-2278/79/80/81 LE TR (ASS'Y)		(1)
200033272304	KLM-2304/2305 JOYSTIC (ASS'Y)		(1)
200036072331	KLM-2331/32 TRITON LE88/TR88 (ASS'Y)		(1)
200036072387	KLM-2387 TRITON LE88/TR88 (ASS'Y)		(1/4)
200056632676	KLM-2676 TR88 (ASS'Y)		(1)
500304050220	DTR DTC114ESA TP	KLM2278/79/80/81	8
500304050270	DTR DTB113ZSTP	KLM2278/79/80/81	8
500312053100	LED NSPW510BS	KLM2278/79/80/81	1
500314010300	D 1S2076TD	KLM2278/79/80/81	8
500314028800	LED SLZ-190B-09-T2	KLM2278/79/80/81	4
500314031000	LED SLR-325VR-T31-K/L/M/N	KLM2278/79/80/81	20
500314032000	LED SPR-325MVWT31 L/M/N	KLM2278/79/80/81	1
500314032100	D RD6.8ES T1 AB1	KLM2278/79/80/81	1
500320004108	IC HD74HC138P	KLM2278/79/80/81	2
500362009007	VR RK11K1140A9L	KLM2278/79/80/81	4
500365009500	VR EWA NA0C10B14	KLM2278/79/80/81	1
500370005000	SW EC11B15204A5	KLM2278/79/80/81	1
500374000600	SW EVQ11A09K	KLM2278/79/80/81	54
500402002800	BEADS 2943-666671	KLM2278/79/80/81	2
500450003100	PHONE JACK LGR4609-7000	KLM2278/79/80/81	1
500471101060	CONNECTOR SC25-06WS	KLM2278/79/80/81	1
500471102030	CONNECTOR SJ20-03WX	KLM2278/79/80/81	1
500471102080	CONNECTOR SJ20-08WX	KLM2278/79/80/81	2
500471102120	CONNECTOR SJ20-12WX	KLM2278/79/80/81	2
500471102130	CONNECTOR SJ20-13WX	KLM2278/79/80/81	1
500471102140	CONNECTOR SJ20-14WX	KLM2278/79/80/81	1
500471102150	CONNECTOR SJ20-15WX	KLM2278/79/80/81	2
500575019700	LED SPACER LH-5-5 L=5MM	KLM2278/79/80/81	1
500362009052	VR RK11K1140D1H	KLM-2304/05	2
500472060301	CONNECTOR S3B-EH	KLM-2304/05	1
500472060401	CONNECTOR S4B-EH	KLM-2304/05	1
500314001300	D 1SS-133 T-77	KLM-2331/32	4
500320009001	IC NJM-4558D-V	KLM-2331/32	2
500350002422	TRIM VR RH0615CJ5J	KLM-2331/32	2
500350002447	TRIM VR RH0615CS5J	KLM-2331/32	2
500472070701	CONNECTOR S7B-PH-K-S	KLM-2331/32	1
500474019700	CONNECTOR 76382-404	KLM-2331/32	2
500320003217	IC TMP87C847U-4458	KLM-2387	1
500324009058	IC NJU7662M-TE1	KLM-2387	2
500335400140	CERA. RESONATOR CSTCC8M00G53-R0	KLM-2387	1
500404001070	INDUCTOR BLM18BD102SN1D	KLM-2387	6
500471102030	CONNECTOR SJ20-03WX	KLM-2387	1
500471102040	CONNECTOR SJ20-04WX	KLM-2387	1
500471102070	CONNECTOR SJ20-07WX	KLM-2387	1
500471102080	CONNECTOR SJ20-08WX	KLM-2387	1
500474019600	CONNECTOR 2-215079-0	KLM-2387	2
500304020230	TR 2SC3661-TA/TB(3K)	KLM-2676	10
500304020400	TR 2SA1576A T106	KLM-2676	1
500304050490	FET CPH6316-TE-E	KLM-2676	1
500314001400	D RLS-73 TE-11	KLM-2676	1
500314030500	D RB160L-40TE25	KLM-2676	2
500314030600	D 1SR154-400TE25	KLM-2676	1
500314030700	D RB051L-40TE25	KLM-2676	1
500315000500	D MC2840-T12-1	KLM-2676	5
500320004681	IC HD6437043AA21FV(X-0180)	KLM-2676	1
500320012223	IC MB87F1710PFV-G-BND	KLM-2676	1
500324006007	IC MSM5118165F-60J3R1	KLM-2676	3
500320012350	IC MB29F160BE70TN-K(X5110L)	KLM-2676	1
500320012351	IC MB29F160BE70TN-K(X5110H)	KLM-2676	1
500320040114	IC MX23L25611MC-12G(X-5110L)	KLM-2676	1
500320040115	IC MX23L25611MC-12G(X-5110H)	KLM-2676	1
500320011250	IC M66291GP	KLM-2676	1
500324036016	IC PCM1781DBQR	KLM-2676	2



Part No.		Part Name	Note	QTY
500324021160	IC	NE5532DR	KLM-2676	4
500324003010	IC	TC7WU04F TE12L	KLM-2676	1
500324007011	IC	BA09FP-E2	KLM-2676	1
500324007012	IC	BA033LBSG2-TR	KLM-2676	1
500324011004	IC	M5216FP-600C	KLM-2676	1
500324017014	IC	RN5VD45AA-TR	KLM-2676	1
500324021168	IC	SN74LVC1G04DCKR	KLM-2676	3
500324021190	IC	SN74LVC1G19DCKR	KLM-2676	3
500324021180	IC	SN74LVC1G125DCKR	KLM-2676	1
500324021200	IC	SN74LVC1G332DCKR	KLM-2676	1
500324021026	IC	SN74AHCT541PWR	KLM-2676	2
500324021270	IC	SN74AHCT574PWR(TS)	KLM-2676	1
500324021271	IC	SN74AHCT541NSR(TS)	KLM-2676	2
500324021114	IC	SN74LV05APWR	KLM-2676	1
500324021102	IC	SN74LV08APWR	KLM-2676	3
500324021103	IC	SN74LV32APWR	KLM-2676	2
500324021016	IC	SN74LV32ANSR	KLM-2676	1
500324021104	IC	SN74LV74APWR	KLM-2676	1
500324021106	IC	SN74LV139APWR	KLM-2676	1
500324021108	IC	SN74LV138APWR	KLM-2676	1
500324021123	IC	SN74LV125ANSR	KLM-2676	1
500324021121	IC	SN74LV541APWR	KLM-2676	3
500324021119	IC	SN74LV4051APWR	KLM-2676	1
500324001167	IC	UPC78L05T-E2	KLM-2676	1
500324024001	IC	L1087MPX-ADJ-NOPB (TS)	KLM-2676	1
500324023007	IC	S-8520F50MC-B0JT2G	KLM-2676	1
500324045003	IC	93LC66BT-I/SN	KLM-2676	1
500334001900	PHOTOCOUPLER	PC410LKNIPI	KLM-2676	1
500335013100	CRYSTAL	CA-301 24.000MHZ	KLM-2676	1
500335011900	CRYSTAL	CA-301 24.576MHZ CI=10PF	KLM-2676	1
500335012400	CRYSTAL	CA-301 8MHZ	KLM-2676	1
500375014800	SW	SDKLA10200	KLM-2676	1
500402004600	BEAD	2943-666673	KLM-2676	3
500402006500	INDUCTORS	TC-600M-3A-5026	KLM-2676	1
500402007400	INDUCTORS	SC-0.5X10X16.5TX4R	KLM-2676	1
500404001050	INDUCTORS	BLM21PG600SN1D	KLM-2676	2
500404001070	INDUCTORS	BLM18BD102SN1D	KLM-2676	48
500454004300	PHONE JACK	YKB21-5012	KLM-2676	4
500454009900	PHONE JACK	YKB21-5074G	KLM-2676	3
500454011700	DIN JACK	TCS5073-24-4151	KLM-2676	1
500471101030	CONNECTOR	SC25-03WS	KLM-2676	1
500471101060	CONNECTOR	SC25-06WS	KLM-2676	1
500471102030	CONNECTOR	SJ20-03WX	KLM-2676	1
500471102040	CONNECTOR	SJ20-04WX	KLM-2676	1
500471102060	CONNECTOR	SJ20-06WX	KLM-2676	1
500471102080	CONNECTOR	SJ20-08WX	KLM-2676	1
500471102130	CONNECTOR	SJ20-13WX	KLM-2676	1
500471102140	CONNECTOR	SJ20-14WX	KLM-2676	1
500474042800	SD SOCKET	AXA263021T	KLM-2676	1
500474039400	CONNECTOR	YKF45-0021(USB RA B-TYPE)	KLM-2676	1
500515400100	FUSE HOLDER	CNT47-0003A	KLM-2676	2
500474031000	CONNECTOR	B16B-PHDSS	KLM-2676	1
500474033200	SIMM CONNECTOR	404A-072SABA01	KLM-2676	2
500474033700	CONNECTOR	302A-50PGAS003	KLM-2676	1
500480010380	MIDI JACK	YKF51-5041	KLM-2676	1
500641041172		X-323 JACK PLATE 2 KOC-C409	KLM-2676	1
500313005800	LCD	MODULE NCM6602C	ELCTRONIC	1
500420007002	KEYBOARD	88NOTE TP/41+PCB+AFTH	ELCTRONIC	1
500464070001	FUSE	FUSE 125V 2A 0237002.M	ELCTRONIC	1
500525001400	FERRITE CORE	F5 T 25X12X15	ELCTRONIC	1
500475002577	HARNESS	HNS-2577	ELCTRONIC	1
500475003049	HARNESS	HNS-3049	ELCTRONIC	1
500475003051	HARNESS	HNS-3051	ELCTRONIC	1
500475003052	HARNESS	HNS-3052	ELCTRONIC	1
500475003054	HARNESS	HNS-3054	ELCTRONIC	1
500475003101	HARNESS	HNS-3101	ELCTRONIC	1

Part No.	Part Name		Note	QTY
500475003181	HARNESS	HNS-3181	ELCTRONIC	1
500475003182	HARNESS	HNS-3182	ELCTRONIC	1
500475003183	HARNESS	HNS-3183	ELCTRONIC	1
500475003184	HARNESS	HNS-3184	ELCTRONIC	1
500475003185	HARNESS	HNS-3185	ELCTRONIC	1
500475003186	HARNESS	HNS-3186	ELCTRONIC	1
500475003187	HARNESS	HNS-3187	ELCTRONIC	1
500475102941	HARNESS	HNS-2941(L=400MM/20PIN)	ELCTRONIC	2
500540026500	X-0100 JS WASHER	KOC-F40979	MECHANICAL	2
500550019400	X-2110 KB FELT 5	KOC-F41031	MECHANICAL	2
500550019600	X-0120 KB FELT 6	KOC-F41032	MECHANICAL	1
500620024600	X-952 POW SW KNOB(NO SILK)	E40304-2	MECHANICAL	1
500620026800	X-410 SVR KNOB GREY	KOC-E40239-3	MECHANICAL	1
500620036000	X-610 ENCODER KNOB(BLK)	E40466-3	MECHANICAL	1
500620040700	KNOB P423-90F(X-9100)	E40519-1	MECHANICAL	4
500630034200	X-0180 LCD WINDOW	KOC-F40962	MECHANICAL	1
500630034300	X-0180 MIRROR SHEET	KOC-F40967	MECHANICAL	1
500630034400	X-0180 DIFFUSION SHEET	KOC-F40968	MECHANICAL	1
500630034500	X-0180 SHADE SHEET	KOC-F40969	MECHANICAL	1
500641041651	X-0180 REAR OP COVER	KOC-C41224	MECHANICAL	1
500641041666	X-0390/1310 KB BASE	C41239-1	MECHANICAL	3
500641041671	X-0370 HP ANGLE	KOC-C41230	MECHANICAL	1
500641041937	X-5130 PANEL	KOC-C10240-2	MECHANICAL	1
500641041740	X-2110 COVER ANGLE	KOC-C41274	MECHANICAL	5
500641041741	X-2110 SIDE CHASSIS L	KOC-C20384	MECHANICAL	1
500641041742	X-2210 SIDE CHASSIS R	KOC-C20385	MECHANICAL	1
500641041743	X-2110 JS SUPPORT	KOC-C20386	MECHANICAL	1
500641041744	X-2110 HP ANGLE 1	KOC-C30592-1	MECHANICAL	1
500641041745	X-2110 HP ANGLE 2	KOC-C30592-2	MECHANICAL	1
500641041746	X-2110 SUPPORT CHASSIS	KOC-C30593-1	MECHANICAL	1
500641042003	X-5130 FRONT BAR	KOC-C30590-2	MECHANICAL	1
500641041748	X-2110 PCB BOX	KOC-C10241	MECHANICAL	1
500641041749	X-2110 OP COVER	KOC-C30591	MECHANICAL	1
500641041750	X-2110 SIMM COVER	KOC-C41273	MECHANICAL	1
500644009000	X-8510 GND SPRING(K)	C41167	MECHANICAL	2
500644010500	X-0100 WHEEL SPRING	KOC-C41222	MECHANICAL	2
500645055178	X-5130 SIDE BOARD L	KOC-D30254-3	MECHANICAL	1
500645055179	X-5130SIDE BOARD R	KOC-D30254-4	MECHANICAL	1
500645053298	X-2110 BOTTOM BOARD	KOC-D10082	MECHANICAL	1
500646100400	X-4160 KNOB BLOCK A-1	E20211-3	MECHANICAL	1
500646100500	X-4160 KNOB BLOCK A-2	E20211-4	MECHANICAL	1
500646100600	X-4160 KNOB BLOCK B-1	E10191-3	MECHANICAL	1
500646100700	X-4160 KNOB BLOCK B-2	E10191-4	MECHANICAL	1
500646079300	X-0180 LIGHT GUIDE HOLDER	E30273	MECHANICAL	1
500646079600	LIGHT GUIDE PLATE	EY1L-GB01K	MECHANICAL	1
500646080200	X-0180 JS FRAME	KOC-E30272	MECHANICAL	1
500646098100	X-2100 JS WHEEL	KOC-E30270-4	MECHANICAL	1
500646080400	X-0180 #WHEEL SUPPORT	KOC-E40533	MECHANICAL	1
500646080500	X-0180 VR PLATE	KOC-E40532	MECHANICAL	1
500646080600	X-0180 JS LEVER	KOC-E40534	MECHANICAL	1
500646099951	X-5130 JS PANEL	KOC-E20220-2	MECHANICAL	1
500646099952	X-5130 KEYBOARD BLOCK	KOC-E30291-2	MECHANICAL	1
500646099923	X-5130 SD FRAME	KOC-E40659	MECHANICAL	1
500540028901	GASKET E02S130020ET	L=7	MECHANICAL	1
500550023500	5110 REAR OP COVER SHEET	KOC-F41255	MECHANICAL	1
500405013500	AC ADAPTOR KA-161E(100V/9V/3000MA)		MECHANICAL	(1)
500405013600	AC ADAPTOR KA-163E(120V/9V/3000MA)		MECHANICAL	(1)
500405013700	AC ADAPTOR KA-165E(240V/9V/3000MA)		MECHANICAL	(1)
500405013800	AC ADAPTOR KA-169E(230V/9V/3000MA)		MECHANICAL	(1)
500540023500	CONVERTER PLUG	ECP01 05A (UK ONLY)	MECHANICAL	(1)