

KM4000 LOGIC - BLOCK DIAGRAM Revised: Wednesday, January 31, 2007

PB02091-01-A Revision: A

Item	Quantity	Reference	Part	Part Number	Description
1	1	R2	0R	1001-0000	SMT RESISTOR 1/16W 5% 0603 0R
2	27	R28,R29,R31,R33,R78,R82, R106,R108,R111,R112,R115, R116,R117,R122,R125,R127, R129,R131,R132,R135,R136, R141,R142,R147,R148,R150, R174	1K	1001-1020	SMT RESISTOR 1/16W 5% 0603 1K
3	18	R21,R34,R44,R53,R55,R56, R58,R74,R75,R80,R81,R121, R126,R130,R143,R149,R155, R163	10K	1001-1030	SMT RESISTOR 1/16W 5% 0603 10K
4	25	R3,R5,R6,R7,R9,R10,R11, R12,R14,R17,R18,R19,R20, R23,R37,R48,R54,R57,R59, R71,R72,R144,R154,R168, R169	100K	1001-1040	SMT RESISTOR 1/16W 5% 0603 100K
5	2	R124,R165	1M	1001-1050	SMT RESISTOR 1/16W 5% 0603 1M
6	1	R137	1K2	1001-1220	SMT RESISTOR 1/16W 5% 0603 1K2
7	3	R139,R145,R146	12K	1001-1230	SMT RESISTOR 1/16W 5% 0603 12K
8	2	R15,R16	120K	1001-1240	SMT RESISTOR 1/16W 5% 0603 120K
9	43	R24,R25,R26,R30,R32,R35, R36,R38,R39,R40,R41,R42, R43,R45,R46,R47,R49,R50, R51,R52,R60,R61,R62,R63, R64,R65,R66,R67,R69,R70, R73,R77,R79,R92,R93,R94, R102,R103,R104,R105,R107, R109,R110	150R	1001-1510	SMT RESISTOR 1/16W 5% 0603 150R
10	1	R76	15K	1001-1530	SMT RESISTOR 1/16W 5% 0603 15K
11	1	R134	18K	1001-1830	SMT RESISTOR 1/16W 5% 0603 18K
12	4	R1,R8,R164,R175	2K2	1001-2220	SMT RESISTOR 1/16W 5% 0603 2K2
13	1	R173	2K94	1001-0001	SMT RESISTOR 1/16W 5% 0603 2K94
14	1	R138	220K	1001-2240	SMT RESISTOR 1/16W 5% 0603 220K
15	2	R4,R13	3K3	1001-3320	SMT RESISTOR 1/16W 5% 0603 3K3
16	1	R68	330K	1001-3340	SMT RESISTOR 1/16W 5% 0603 330K

17	3 R96,R98,R99	390R	1001-3910	SMT RESISTOR 1/16W 5% 0603 390R
18	1 R101	470R	1001-4710	SMT RESISTOR 1/16W 5% 0603 470R
19	12 R27,R118,R119,R120,R151, R152,R153,R166,R167,R170, R171,R172	4K7	1001-4720	SMT RESISTOR 1/16W 5% 0603 4K7
20	1 R95	47K	1001-4730	SMT RESISTOR 1/16W 5% 0603 47K
21	1 R140	6K8	1001-6820	SMT RESISTOR 1/16W 5% 0603 6K8
22	1 R22	3R3	1004-3380	SMT RESISTOR 1W 5% 2512 3R3
23	2 C5,C6	10PF	1101-1002	SMT CAP C0G 5% 0603 10pF
24	3 C195,C199,C203	100PF	1101-1012	SMT CAP C0G 5% 0603 100pF
25	50 C22,C23,C24,C25,C26,C27, C28,C29,C30,C31,C32,C33, C34,C35,C37,C38,C40,C41, C42,C43,C44,C45,C48,C49, C50,C51,C56,C57,C58,C59, C60,C61,C62,C63,C64,C65, C66,C70,C73,C74,C107, C108,C109,C126,C127,C128, C129,C130,C131,C132	1NF	1101-1021	SMT CAP X7R 10% 0603 1nF
26	9 C18,C137,C138,C154,C158, C165,C166,C196,C201	10NF	1101-1031	SMT CAP X7R 10% 0603 10nF
27	61 C10,C19,C36,C39,C46,C47, C52,C53,C54,C55,C67,C68, C69,C75,C76,C77,C78,C99, C100,C101,C102,C103,C105, C106,C110,C112,C116,C117, C119,C121,C123,C124,C133, C136,C140,C147,C151,C155, C156,C157,C164,C167,C168, C169,C170,C171,C172,C173, C174,C175,C176,C177,C179, C180,C181,C182,C183,C184, C185,C205,C206	100NF	1101-1040	SMT CAP Y5V 20% 0603 100nF 16V
28	2 C13,C17	22PF	1101-2202	SMT CAP C0G 5% 0603 22pF
29	3 C14,C15,C16	220PF	1101-2212	SMT CAP C0G 5% 0603 220pF
30	2 C160,C162	2.2NF 5%	1101-2222	SMT CAP X7R 5% 0603 2.2nF
31	9 C1,C2,C3,C4,C7,C8,C9,C11, C190	220NF	1101-2241	SMT CAP X7R 10% 0603 220nF 16V
32	1 C104	47PF	1101-4702	SMT CAP C0G 5% 0603 47pF
33	1 C72	470NF	1101-4740	SMT CAP X7R 10% 0603 470nF
34	8 C12,C20,C159,C163,C194, C198,C200,C204	1UF	1102-1050	SMT CAP Y5V 20% 0805 1uF 16V

35	1 C161	470NF	1102-4740	SMT CAP Y5V 20% 0805 470nF 16V
36	17 C21,C122,C125,C135,C141, C148,C152,C186,C187,C188, C189,C191,C192,C193,C197, C202,C207	10uF 6.3V	1120-1002	SMT TANT CAP 10uF 6.3V CASE A RS 4069794
37	1 C146	3.3uF 6.3V	1120-3385	SMT TANT CAP 3.3uF 6.3V CASE A
38	3 C149,C150,C153	22uF 25V	1150-2200	ELECTRO RAD 22uF 25V
39	2 C111,C113	47uF 25V	1156-4700	ELECTRO AX 47uF 25V PH030 36479
40	1 Q18	BC847	1200-0001	SOT23 TRANSISTOR NPN BC847
41	2 D1,D2	BZX84C5V6	1212-0003	SOT23 ZENER DIODE 5.6V BZX84C5V6
42	2 D3,D10	BZX84C5V1	1212-0006	SOT23 ZENER DIODE 5.1V BZX84C5V1
43	2 U25,U28	MAX232CWE	1232-0001	SO16W RS232 TRX MAX232CWE
44	2 U15,U21	TC7S14F	1233-0028	SOT23-5 SCHMITT INVERTOR TC7S14F
45	1 U36	TC4S66F	1233-0031	SOT23-5 CMOS SWITCH TC4S66F
46	1 X1	3.579MHZ	1350-0002	HC49/4 3.579MHZ CRYSTAL 4MM HIGH
47	1 Y2	4MHZ	1350-0012	HC49/4 4.000 MHZ CRYSTAL 4MM HIGH
48	1 J21	HEADER 3X2	1516-0017	3X2 WAY HEADER 0.1" PITCH
49	1 J22	HEADER 4	1516-0019	4 PIN PCB PLUG 0.1"
50	1 J9	53014-0810	1516-0022	8 PIN PCB PLUG 53014-0810
51	1 J11	53014-0710	1516-0021	7 PIN PCB PLUG 53014-0710
52	1 J3	HEADER 13X2	1524-0010	13 X 2 MX PIN HEADER 5532-26A
53	1 J10	HEADER 5	1524-0021	5 WAY JST UPRIGHT MALE B5B-ZR
54	1 J6	HEADER 4	1524-0058	4 WAY JST UPRIGHT MALE B4B-ZR
55	1 J4	HEADER 8	1524-0022	8 WAY JST UPRIGHT MALE B8B-ZR
56	4 J7,J16,J17,J18	HEADER 10	1524-0023	10 WAY JST UPRIGHT MALE B10B-ZR
57	1 J19	CONN DIL 24	1546-0009	24 PIN X 0.6" IC SOCKET
58	1 U35	IC SKT	1546-0011	8 PIN X 0.6" IC SOCKET
59	1 Y1	18.432MHZ	1350-0015	HC49 18.432MHZ CRYSTAL 4mm high
60	10 Q1,Q2,Q3,Q4,Q7,Q10,Q13, Q15,Q16,Q19	DTD114EKT	1200-0005	DTD114EKT NPN DIGITAL TRANSISTOR 100MA
61	1 SW1	MOTION	1409-0002	MOTION DETECTOR SWITCH RS 361-5100
62	2 Q8,Q11	SI4435DY	1205-0003	SO8 MOSFET P SI4435DY
63	1 U1	CMX881E1	1237-0025	CMX881E1 CML
64	4 D4,D6,D8,D9	1SS355	1210-0009	1SS355 DIODE ROHM KYODO
65	2 F1,F2	SMD100/33	1425-0001	RAYCHEM POLY SWITCH SMD100/33
66	4 Q5,Q6,Q14,Q17	2SB1197K	1200-0007	SC59 TRANSISTOR PNP 2SB1197K
67	1 J20	FTM-110-03	1516-0046	SAMTEC FTM-110-03-F-DV-P-TR
68	3 C120,C134,C139	1uF 20V	1120-1183	SMT TANT CAP 1uF 20V CASE A
69	1 U5	DS9503	1239-0014	DS9503 ESD PROTECTION DIODE MAXIM/DALLAS TSOC 6 PACKAGE
70	1 U19	M2950-5.0	1285-0046	M2950-5.0 5V REGULATOR UTC SOP8 PACKAGE
71	2 U17,U18	M2950-3.3	1285-0048	M2950-3.3 3.3V REGULATOR UTC SOP8 PACKAGE
72	2 L4,L6	220UH	1320-0009	220UH INDUCTOR Wurth Elektronik 744743221 RS 489-0087

73	3 L1,L2,L9	100UH	1320-0010	100UH INDUCTOR Wurth Elektronik 74476620 RS 367-4424
74	1 U13	ULN2003AD	1282-0004	ULN2003AD SO DARLINGTON DRIVER
75	1 U30	SP3483EN	1232-0006	SP3483EN RS485 TRANCEIVER NSOIC8 PACKAGE SIPEX
76	3 U2,U3,U23	TLV272ID	1230-0003	TLV272ID SO8 DUAL CMOS OP-AMP
77	1 U22	CS5171EDG8	1285-0015	CS5171EDG8 SOIC8 SWITCHED MODE REGULATOR ONSEMI
78	1 U16	CS51414E	1285-0015	CS51414E SOIC8 SWITCHED MODE REGULATOR ONSEMI
79	2 U12,U14	74LVC573AD	1233-0052	74LVC573A SO20 PACKAGE OCTAL LATCH
80	1 U33	MAX823TEUK	1239-0006	MAX823TEUK SOT23-5 PACKAGE WATCHDOG TIMER MAXIM
81	1 U31	MC9S12XEP100CAG	1232-0004	MC9S12XEP100CAG CPU FREESCALE CAG MAG OR VAG 144 PIN PACKAGE
82	3 U7,U8,U24	BU4S584G2	1472-0001	BU4S584G2 SSOP5 SCHMITT INVERTER ROHM
83	1 U6	MT88L70AS	1233-0055	MT88L70AS SOIC18(W) DTMF DECODER 3V ZARLINK
84	1 U4	74LV14D	1472-0002	74LV14D SO14 HEX SCHMITT INVERTER PHILIPS
85	2 L7,L8	22UH	1320-0018	22UH WURTH 744030220
86	1 L5	15UH	1320-0016	15UH WURTH 744777115
87	1 D5	1N5821	1260-0006	1N5821 AXIAL 3A SCOTTKY DIODE ONSEMI FAIRCHILD
88	1 D7	MBR130T1G	1260-0007	MBR130T1G SOD123 PACKAGE 1A SCHOTTKY DIODE ONSEMI
89	4 C114,C115,C118,C143	47UF 6.3V	1120-4700	SMT TANT CAP 47uF 6V CASE D
90	1 U32	24VLC64-I/SN	1284-0004	24LC64-I/SN 150MIL SOIC 64K SERIAL EEPROM MICROCHIP
91	1 R100	127R	1001-0002	SMT RESISTOR 1/16W 5% 0603 127R
92	1 R97	205R	1001-0003	SMT RESISTOR 1/16W 5% 0603 205R
93	1 R133	5K	1001-5020	SMT RESISTOR 1/16W 5% 0603 5K
94	1 J12	CON40	1510-0141	40 PIN DUAL ROW PIN HEADER 0.1"
95	1 U34	LM2941/TO220	1285-0002	LM2941T TO220 PACKAGE NATIONAL SEMI
96	2 J13,J23	HEADER 8	XXXX-XXXX	8 PIN 0.1" HEADER RS 251-8238
97	2 JP1,JP2	BLOB3		
98	1 C71	NNF		NOT NORMALLY FITTED