

XK-1 BOM - Revised for L1 Design Recommendations

ITEM	QTY	REFDES	XMOS_PART_NUMBER	DESCRIPTION	MANUFACTURER	PART_NUMBER	PACKAGE	
1	5	R9,R10,R11,R12,R13	E-01-0001	RES 1k 0603 1%	ROHM	MCR03EZPFX1001		603
2	5	R5,R8,R14,R15,R16	E-01-0002	RES 10k 0603 1%	ROHM	MCR03EZPFX1002		603
3	1	R17	E-01-0008	RES 33R 0603 1%	ROHM	MCR03EZPFX33R0		603
4	1	R6	E-01-0019	RES 4.7R 0603 1%	ROHM	MCR03EZPJ4R7		603
5	1	R1	E-01-0032	RES 100k 0603 1%	ROHM	MCR03EZPFX1003		603
6	1	R2	E-01-0034	RES 68k 0603 1%	ROHM	MCR03EZPFX6802		603
7	2	R3,R4	E-01-0039	RES 47k 0603 1%	ROHM	MCR03EZPFX4702		603
8	1	R7	E-01-0150	RNET 47k 0603x4 5%	ROHM	MNR14E0APJ473	RNET0603X4	
9	1	C4	E-02-0007	MLCC 10uF 0805 X5R 10V	Murata	GRM21BR61A106KE19		805
10	16	C5,C6,C7,C8,C9,C10,C11,C12,C13,C14,C15,C16,C17,C18,C19,C20	E-02-0017	MLCC 100nF 0603 X7R 16V	Murata	GRM188R71C104KA01		603
11	1	C23	E-02-0018	MLCC 33pF 0603 COG 50V	Murata	GRM1885C1H330JA01		603
12	1	C24	E-02-0019	MLCC 2.2uF 0603 X5R 10V	Murata	GRM188R61A225KE34		603
13	2	C1,C2	E-02-0020	MLCC 1uF 0603 X5R 10V	Murata	GRM188R61A105KA61		603
14	1	C3	E-02-0021	MLCC 4.7uF 0805 X5R 10V	Murata	GRM219R61A475KE34		805
15	2	C21,C22	E-02-0022	MLCC 10nF 0603 X7R 50V	Murata	GRM188R71H103KA01		603
16	1	U3	E-03-0004	Memory, Flash, SPI, 1Mb (128kx8), SOIC-8	Atmel	AT25FS010N-SH27	SOIC8	
17	2	J3,J4	E-04-0004	Male Header, Unshrouded, 16 Way, 2x8, 0.1" Pitch	FCI	68602-116HLF	HEADER_16PIN	
18	1	J5	E-04-0006	DC Power Jack, SMD, 3.5mm OD, 1.35mm ID	CUI	PJ-014D-SMT	PWR_JACK_SMD_35	
19	1	J2	E-04-0020	Box Header, Female, Right Angle, Through Hole, Polarised, 20 Way, 2x10, 0.1" Pitch	Sullins	SFH11-PBPC-D10-RA-BK	HEADER_FEM_RA_20PIN	
20	1	J1	E-04-0022	IDC Boxed Header, Right Angle, PCB Mount, Polarised, 20 Way, 2x10, 0.1" Pitch	Sullins	SBH11-PBPC-D10-RA-BK	IDC_HEADER_RA_20PIN	
21	1	U5	E-05-0007	DC-DC Converter, 1.5MHz, 600mA	ON Semiconductor	NCP1521BSNT1G	SOT23_5	
22	1	U4	E-05-0011	Voltage regulator, LDO, Fixed, 3.3V, 180mA	Fairchild Semiconductor	FAN2558S33X	SOT23_5	
23	1	X1	E-07-0018	Crystal Oscillator, 3.3V, 20MHz, 5x3.2mm SMD, Overall Stab. ±100ppm	Abracon	ASE-20.000MHZ-ET	OSC_SM_32X25	
24	1	L1	E-09-0004	Power Inductor, 2.2uH, 0.7A, 260mR DCR	Taiyo Yuden	CBC2016T2R2M	TAIYO_2016	
25	1	Q1	E-10-0002	MOSFET, P-Channel, Logic Level, 20V, 2.4A	ON Semiconductor	NTR4101PT1G	SOT23	
26	1	U1	E-11-0004	XMOS XS1-L1 Processor, 128TQFP	XMOS	XS1-L01A-TQ128-C4	TQFP128_XMOS	
27	4	D1,D2,D3,D4	E-12-0001	LED, GREEN, 0603	Kingbright	APT1608CGCK	0603_LED	
28	1	U2	E-13-0009	2-Input Multiplexer, UHS Series, SC70	Fairchild	NC7SZ157P6X	SC70_6	
29	2	U8,U9	E-13-0015	Dual Logic Buffer, Schmitt Trigger, UHS Series, SC70	Fairchild	NC7WZ17P6X	SC70_6	
30	1	U6	E-13-0019	Voltage Detector, Programmable Delay, SOT23-5	ON Semiconductor	NCP303LSN09T1G	SOT23_5	
31	1	U7	E-13-0026	Dual Logic Buffer, Open Drain Output, UHS Series, SC70	Fairchild	NC7WZ07P6X	SC70_6	
32	4	MTH1,MTH2,MTH3,MTH4	E-14-0002	Mounting Hole, Plated, for M3 Screw, 6mm Dia	NA	NA	MTG_PTH_M3_6MM	
33	1	JP1	E-15-0002	Jumper, 2 Pin, 0.1" Pitch, THT	NA	NA	HEADER_2PIN	
34	2	SWA,SWB	E-16-0003	Tactile Switch, Momentary, SMD, J Bend	C&K	KSC421J 70SH LFS	SW_PB_KSC_JBEND	