







Bearbeiter: S. Hofmann
 Tel: 040 /
 Fax: 040 / 76906856
 Email: shop@shotech.de

Bill of Materials

Datum:	17. Februar 2024
Zeit:	14:40:42
Variante:	None
Bezeichnung:	Kramer MC Y23VO
Revision:	0.4
Description:	BWS1

Quantity	Designator	Footprint	Bemerkung	Value	MFT	Order-Code	Second-source	shotech
1	C1	CAP_Radial_5MM	Ker-Ko 47pF 100V RM5.08 5% SL	47pF	Richwell	TSL2A470J05S505N		2019
1	C2	CAP_Radial_5MM	Vs-Kond 470pF 100V NPO RM5.08 5%	470pF	KEMET	C317C471J1G5TA		2020
2	C3, C27	CAP_Radial_5MM	100nF/50V/±10%/X7R/RM 5.08	100nF	Vishay / BC Components	K104K15X7RF53H5	C322C104K5R5TA - shotech	1347
1	C4	CAPPR5-10x12 - RM5	470uF/16V/20%/5000h/RM5.0, ESR 53mR, Ripple 1030mA	470uF/16V	Chang	GK1C471MG125B50CE0		1340
22	C12, C13, C14, C15, C16, C17,	CAP_Radial_5MM	100nF/50V/±10%/X7R/RM 5.08	100nF/50V	Vishay / BC Components	K104K15X7RF53H5	C322C104K5R5TA - shotech	1347
2	CS1, CS2		Circuit socket DIP24-LC	Circuit socket DIP24-LC	ASS	A 24-LC-TT		1815
1	D2	LED-A214B	LED diffus grün 200mcd 25° 3mm	LED-A214B	Everlight	A214B/SYG/S530-E2		2004
2	HS1, HS2		Head Screws M2,5 x 10	Head Screws M2.5 x 10	frei	7985-2Z-2.5x10/100		2103
1	KL1		BWS1-R02 Kramer System PCB	PCB	frei	KRM-BWS1-R02-Z80-PCB		2363
1	P1	0902164x921	Messerfeiste A+B gewinkelt 64polig	A-BM64ABR	Assmann WSW	A-BM64ABR		2021
2	PP1, PP2	VERO_Testpoint_Blue	Test Point PCB black	Testpoint black	free	Test Point PCB black		2307
3	PP3, PP4, PP5	VERO_Testpoint_Blue	Test Point PCB yellow	Testpoint yellow	free	Test Point PCB yellow		2308
1	PP6	VERO_Testpoint_Blue	Test Point PCB red	Testpoint red	free	Test Point PCB red		2308
1	Q1	HC49/4H_SMX	Quarze +/-30ppm, 50ppm, 30pF, 50Ohm, 12MHZ FUNDAMENTAL	12MHz	Multicomp	ATF		2018
1	Q2	SC_TO-92	Hole TO-92-3	BC548CBU	Fairchild	BC548CBU	BC548BU (On Semi)	1169
1	R1	RES10-7.8X2.8	WIDERSTAND, 207, axial, 1%	4k7				1587
1	R2	RES10-7.8X2.8 - 220R	WIDERSTAND, 207, axial, 1%	200R	frei	RMGE220		2015
1	R3	RES10-7.8X2.8	WIDERSTAND, 207, 1%	100R				1678
1	R4	RES10-7.8X2.8 - 220R	WIDERSTAND, 207, axial, 1%	220R	frei	RMGE220		1239
1	R5	RES10-7.8X2.8	WIDERSTAND, 207, 1%	510R	Vishay / Dale			2016
1	R6	RES10-7.8X2.8 - 330R	WIDERSTAND, 207, axial, 1%	330R				1588
1	R7	RES10-7.8X2.8	WIDERSTAND, 207, axial, 1%	75R	frei	RMGE075		2008
1	R8	RES10-7.8X2.8	WIDERSTAND, 207, axial, 1%	270R				1677
1	R9	RES10-7.8X2.8	WIDERSTAND, 207, 5%	0R				2052
2	SN1, SN2		DIN 934 6KT-Mutter Edelstahl A2 M2.5	steel nuts M2,5	frei	934-2-2.5/1000		1872
5	U1, U2, U3, U4, U15	N016	UP-Down Counter	SN74LS193N	TI	SN74LS193N	DL193D	1174
2	U5, U7	N014	Dual D-Type Positive-Edge-Triggered Flip-Flop with Preset and Clear	SN74LS74N	TI	SN74LS74N	DL074D	1545
1	U6	N014	AND-Gate, 2 Element	SN74LS08N	TI	SN74LS08N	DL008D	1547
2	U8, U10	N014	Dual 4-Input Positive-NAND Gate	74LS20N	TI	74LS20N	DL020D	1548
2	U9, U14	N014	Hex Inverter	SN74LS04N	TI	SN74LS04N	DL004D	1549
3	U11, U12, U13	N016	Quad 2Inp Multiplex DIP16	SN74LS157N		SN74LS157N		2012
1	U16	N016	8Bit Shift Reg P-In/S-Out SO16	SN74LS165N		SN74LS165N		1287
1	U17	PDIP24	EPROM 2KBx8 , Zeichengenerator KRM	U2716C	DDR	generator 2716	CAT28C16 (EEPROM)	2378
1	U18	N020	Bustransceiver Octal Bus	SN74LS245N	Texas Instruments	SN74LS245N	SN74HCT245N	2174
1	U19	PDIP28 - 24	64-kbit (8 K x 8) 5 V 70 ns CMOS Static RAM - PDIP-28	6264-70	frei	6264-70	SRAM 2Kb x 8 (6116)	1318
1	U20	N020	FLIP-FLOPS	SN74LS373N	Texas Instruments	SN74LS373N	SN74HCT373N	1593
2	U21, U23	N014	Quadruple 2-Input Positive-NAND Gate	SN74LS00N	Texas Instruments	SN74LS00N	DL000D	1546
1	U22	N014	Quadruple 2-Input Positive-NAND Buffer with Open-Collector Outputs	SN74LS03N	TI	SN74LS03N	DL003D	1543
2	W1, W2	JP2	Jumper 3pin	Jumper 3pin	frei	frei		1564
2	W3, W4	JP1	Jumper RM2.54, rot	JUMP-RT		JUMP-RT		
1	X1	1X10					CON-1x10	
1	X2	Cinch - FC68391	Cinch-Einbauprintchuse		Cliff	FC68391	T709	2024