

SMR4-Plus-BOM

TuBika SMR4-plus BOM				
	SMR4-Plus – BOM			
Ref	Description	Package	Value	Qty
R3, R7, R13, R21, R25, R30, R34, R37, R38	Metal film resistor 1%		220	9
R35, R36	Metal film resistor 1%		470	2
R14, R32	Metal film resistor 1%		1.0k	2
R1, R15, R19	Metal film resistor 1%		2.2k	3
R6, R10, R24, R28	Metal film resistor 1%		4.7k	4
R4, R5, R8, R9, R12, R22, R23, R26, R27, R29, R31, R39, R40	Metal film resistor 1%		10k	13
R2, R11, R16	Metal film resistor 1%		18k	3
R17	Metal film resistor 1%		47k	1
R18	Metal film resistor 1%		120k	1
R20	Metal film resistor 1%		330k	1
	Trimmer	Bourns P	50k	1
R33	Trimmer	Bourns P	20k	1
C26, C27	Ceramic	2.5mm pitch	22p	2
C4, C10	Ceramic	2.5mm pitch	100p	2
C5, C7, C15, C17	Film, 2.5%, WIMA MKS02 63V recommended	2.5 or 5.0mm	1nF	4
C2, C3, C6, C8, C9, C12, C13, C16, C18, C19, C23, C24, C25	Ceramic	2.5mm pitch	100n	13
C14, C22	Ceramic. 100n replacement is acceptable	2.5mm pitch	220n	2
C1, C21	Electrolytic NP, >35V	2.5mm pitch	4.7u	2
C11, C20, C28	Electrolytic, >= 15V, height <= 7mm	2.5mm pitch	100u	3
Q1, Q2, Q3, Q4	2N3906 PNP	TO92 Kinked		4
D1	Zener Diode	DO35	4.7V	1
LED1	T1 3mm green			1
LED2	T1 3mm orange			1
Q5	Quartz	HC49	20 MHz	1
IC5	TL072 dual op-amp	DIP8		1
IC1	TL074 quad op-amp	DIP14		1
IC2, IC3, IC4	LM13700 OTA	DIP16		3
IC6	MCP4822 dual 12 bit DAC with 4.096 VRef	DIP8		1
IC7	ATMega328p MCU, 20MHz	DIP28		1
	DIP8 socket	DIP8		2
	DIP14 socket	DIP14		1
	DIP16 socket	DIP16		3
	DIP28 socket	DIP28		1
	Male 2x3 header, 2.54mm			1
	Female 1x6 header, 2.54mm			2
	Male 1x3 header, 2.54mm			2
Jumpers	2.54 Shunt jumper			2
PCB-TubeOhm SMR4-Plus	PCB SMR4-PLUS	118.7x60.3		1

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Mouser	Farnell	Reichelt	Digikey	4UCON
660-MF1/4DCT52R2200F	9341528	METALL 220	221XBK-ND	
660-MF1/4DCT52R4700F	9341943	METALL 470	475XBK-ND	
660-MF1/4DCT52R1001F	9341102	METALL 1,00K	1.00KXBK-ND	
660-MF1/4DCT52R2201F	9341536	METALL 2,20K	2.21KXBK-ND	
660-MF1/4DCT52R4701F	9341951	METALL 4,70K	4.75KXBK-ND	
660-MF1/4DCT52R1002F	9341110	METALL 10,0K	10.0KXBK-ND	
660-MF1/4DCT52R1802F	9341447	METALL 18,0K	18.2KXBK-ND	
660-MF1/4DCT52R4702F	9341960	METALL 47,0k	47.5KXBK-ND	
660-MF1/4DCT52R1203F	9341242	METALL 120k	120KXBK-ND	
660-MF1/4DCT52R3303F	9341765	METALL 330k	332KXBK-ND	
81-PV36P503C01B00	9353135	64P-50K	3296P-503LF-ND	
81-PV36P203C01B00	9353097	64P-20K	3296P-203LF-ND	
594-K220J15C0GF5TL2	1694229	KERKO 22P	478-4846-ND	
594-K101K15C0GF53L2	1694179	KERKO 100P	399-4142-ND	
80-MMK5102K63J01TR18	1685470	MKS-02 1,0N	BC1659-ND	
75-1C10Z5U104M050B	1216444	X7R-2,5 100N	BC1148CT-ND	
810-FK18X5R1E224K	3322592	X7R-2,5 100N	445-4806-ND	
647-UVP1E4R7MDD	1236689			
140-SEA101M1CBK0607	1902049		P833-ND	
512-2N3906TA	1704728	2N 3906	2N3906FS-ND	
771-BZX79-B4V7113	1700815	ZF 4,7	1N5230BFSCT-ND	
604-WP3A8GD	1142502	LED 3MM ST GN	P607-ND	
604-WP7104LYD	1581134	LED 3MM ST GE	P608-ND	
717-9B-20.000MAAJ-B	1701141		887-1023-ND	
595-TL072CP	1103005	TL 072 DIP	497-2201-5-ND	
595-TL074CN	9755934	TL 074 DIL	497-2205-5-ND	
926-LM13700N/NOPB	1651866	LM 13700 DIL	LM13700N-ND	
579-MCP4822-E/P	1439413		MCP4822-E/P-ND	
556-ATMEGA328P-PU	1715487		ATMEGA328P-PU-ND	
571-1-390261-2	1101345	GS8	A100204-ND	4771
571-1-390261-3	1101346	GS14	A100205-ND	4774
571-1-390261-4	1101347	GS16	A100206-ND	4775
571-1-390261-9	1307839	GS 28P-S	A100210-ND	4781
649-67996-406HLF	1022230	SL 2X10G 2,54	3M9459-ND	989
				18688
649-77311-118-03LF	1668490	SL 1X36G 2,54	HTSW-103-14-L-S-LL-ND	19631
517-9691020000DA	1740370	JUMPER 2,54 SW	A31697-ND	5726