

TRS80_Model_I_G_E1_BOM

Reference	Quantity	Value	Component	Description	Alternatives
C1	1	220uF 16V	C_Polarized	Polarized capacitor	
C2, C4, C5, C10, C11, C57	6	10uF 16V	C_Polarized	Polarized capacitor	
C3, C7, C14, C15	4	0.01uF 24V	C (103)	Unpolarized capacitor	
C6	1	100uF 16V	C_Polarized	Polarized capacitor	
C8	1	2200uF 35V	C_Polarized	Polarized capacitor	
C9	1	10000uF 16V	C_Polarized	Polarized capacitor	
C12, C13	2	470pF	C (471)	Unpolarized capacitor	
C16, C17, C18, C19, C22, C23, C28, C29, C30, C31, C32, C33, C34, C35, C36, C37, C38, C39, C40, C41, C44, C45, C46, C47, C48, C49, C50, C51, C52, C53, C54, C55, C56, C58	34	0.1uF 25V	C (104)	Unpolarized capacitor	
C20	1	330pF	C (331)	Unpolarized capacitor	
C21	1	750pF	C (750)	Unpolarized capacitor	
C24, C25	2	220pF	C (221)	Unpolarized capacitor	
C26	1	0.047uF	C (47nF)	Unpolarized capacitor	
C27	1	0.022uF	C (22nF)	Unpolarized capacitor	
C42	1	22uF 16V	C_Polarized	Polarized capacitor	
C43	1	47pF	C (47)	Unpolarized capacitor	
CR1	1	1N4735	D_Zener	Zener diode	
CR2	1	1N5231	D_Zener	Zener diode	
CR3, CR4, CR5, CR6, CR7	5	1N4148	D	Diode	
CR8	1	MDA202	D_Bridge_+AA-	Diode bridge, +ve/AC/AC/-ve	Replacement KBP210
CR9, CR10	2	1N982	D_Schottky	Schottky diode	Replacement can be lower than 75V
J1, J2, J3	3	Front View	DIN-5_180degree	5-pin DIN connector (5-pin DIN-5 stereo)	
J100	1	Connector	Conn_01x20	Generic connector, single row, 01x20	
K1	1	Relay_SPST-NO	TRS80_Model_I_Relay_NO	Relay SPST, Normally Open, EN50005	
Q1	1	2N3904	2N3904	0.2A Ic, 40V Vce, Small Signal NPN Transistor, TO-92	
Q2, Q5	2	2N3906	2N3906	-0.2A Ic, -40V Vce, Small Signal PNP Transistor, TO-92	
Q3	1	TIP29A	Q_NPN_BCE	NPN transistor, base/collector/emitter	
Q4	1	2N6594	Q_PNP_BEC	PNP transistor, base/emitter/collector	Replacement RS2040
Q6	1	MJE34	Q_PNP_BCE	PNP transistor, base/collector/emitter	Replacement TIP32C
-	1			Q4 Heatsink	
-	1			Q6 Heatsink	Smaller than original
R1	1	68	R	Resistor 0.25W	
R2	1	2.7k	R	Resistor 0.25W	
R3	1	750	R	Resistor 0.25W	
R4	1	0.33	R	Resistor 2W	
R5, R10	2	1k	R_Potentiometer	Potentiometer	
R6, R7, R16, R53	4	1.2k	R	Resistor 0.25W	
R8	1	100k	R	Resistor 0.25W	
R9, R11, R12	3	3.3k	R	Resistor 0.25W	
R13	1	2.2k	R	Resistor 0.25W	
R14	1	12k	R	Resistor 0.25W	
R15	1	1.5k	R	Resistor 0.25W	
R17	1	2k	R	Resistor 0.25W	
R18	1	5.6	R	Resistor 3W	
R19, C_R67	2	220	R	Resistor 0.5W	
R20, R21	2	100k	R_Potentiometer	Potentiometer	
R22	1	75	R	Resistor 0.25W	
R23	1	120	R	Resistor 0.25W	
R24	1	680k	R	Resistor 0.25W	
R25	1	1.6M	R	Resistor 0.25W	
R26, R42	2	1M	R	Resistor 0.25W	
R27, R64	2	330	R	Resistor 0.25W	
R28	1	270	R	Resistor 0.25W	
R29	1	1.8k	R	Resistor 0.25W	
R30	1	47	R	Resistor 0.25W	
R31	1	10	R	Resistor 0.25W	
R32, R43, R44, R47, R65	5	10k	R	Resistor 0.25W	

R33, R36	2	360k	R	Resistor 0.25W	
R34, R35, R38, R41, R45	5	470k	R	Resistor 0.25W	
R37	1	560k	R	Resistor 0.25W	
R39, R40, R48, R49, R50, R51, R57, R58, R59, R60, R61, R62, R63, R66, R67, R68, R69	17	4.7k	R	Resistor 0.25W	
R46, R52	2	910	R	Resistor 0.25W	
R54, R55	2	7.5k	R	Resistor 0.25W	
R56	1	220k	R	Resistor 0.25W	
S1	1	Power	SW_4PST		
S2	1	Reset	SW_DPST		
Y1	1	10.6445 MHz	Crystal	Two pin crystal	10.6MHz
Z1, Z2	2	LM723C	LM723C_1	Linear Regulator (adjustable)	
Z3, Z71	2	Jumper	TRS80ModellX71	8-Bit DIP Switch	Replacement
Z4	1	LM3900	LM3900	Quad operational amplifier	
Z5	1	74C00	74LS00	quad 2-input NAND gate	
Z6, Z57	2	74C04	74LS04	Hex Inverter	
Z7, Z69, Z70	3	74LS74	74LS74	Dual D Flip-flop, Set & Reset	
Z8	1	74LS153	74LS153	Dual Multiplexer 4 to 1	
Z9, Z42, Z52	3	74LS04	74LS04	Hex Inverter	
Z10, Z11	2	74LS166	74LS166	Shift Register 8-bit, parallel load	
Z12, Z32, Z50, Z65	4	74LS93	74LS93	Divide by 2 & 8 counter	
Z13, Z14, Z15, Z16, Z17, Z18, Z19, Z20	8	MK4116	4116	16kBit x 1 Bit Dynamic RAM	
Z21	1	74LS156	74LS156	Dual 2 to 4 lines Decoder/Demultiplexer, Open Collector	
Z22, Z38, Z39, Z44, Z55, Z60, Z67, Z68, Z72, Z75, Z76	11	74LS367	74LS367_Split	Hex buffer 3-State outputs	
Z23, Z25, Z36, Z73	4	74LS32	74LS32	Quad 2-input OR	
Z24, Z53	2	74LS132	74LS132	Quad 2-input NAND Schmitt trigger	
Z26	1	74LS20	74LS20	Dual 4-input NAND	
Z27, Z59	2	74LS175	74LS175	4-bit D Flip-Flop, reset	
Z28	1	74LS174	74LS174	Hex D-type Flip-Flop, reset	
Z29	1	MCM6670	MCM6670P	128 x 7 x 5 Character Generator	Adapter needed
Z30, Z37	2	74LS02	74LS02	quad 2-input NOR gate	
Z31, Z35, Z43, Z49, Z51, Z64	6	74LS157	74LS157	Quad 2 to 1 line Multiplexer	
Z33	1	2364_20L	2364_20L	2364 64kBit (8kb x 8) PROM	Adapter needed
Z34	1	2332_20L_21L	2332_20L_21L	2332 32kBit (4kb x 8) PROM	Adapter needed
Z40	1	Z80CPU	Z80	Z80 CPU	
Z41	1	75452	75452	Dual-Peripheral Drivers for High-Current, High-Speed Switching	
Z45, Z46, Z47, Z48, Z61, Z62, Z63	7	2102	2102_1	1K Static RAM (SRAM)	
Z54	1	74LS30	74LS30	8-input NAND	
Z56, Z58	2	74LS92	74LS92	Divide by 12 counter	
Z66	1	74LS11	74LS11	Triple 3-input AND	
Z74	1	74LS00	74LS00	quad 2-input NAND gate	
-	30	DIP-14	DIP-14	DIP-14 Socket	Optional
-	39	DIP-16	DIP-16	DIP-16 Socket	Optional
-	1	DIP-18	DIP-18	DIP-18 Socket	Optional
-	1	DIP-40	DIP-40	DIP-40 Socket	Optional
-	1	DIP-8	DIP-8	DIP-8 Socket	Optional
-	2	DIP-24	DIP-24	DIP-24 Socket	Optional