BOM

Title TS2 68000 Single Board Computer

Company Revision Jeff Tranter

2

Date Issue 2016-12-11

Reference	Value	Туре	# Pins	Comments
C1	0.1uF	capacitor	n/a	
C2	0.1uF	capacitor	n/a	
C3	0.47uF	capacitor	n/a	
C4	100 uF 16V	capacitor	n/a	Power supply filter
C5, etc.	0.1uF	capacitor	n/a	Bypass caps, one per IC (31 needed)
D1	RESET/HALT	diode	n/a	LED, red
D2	POWER	diode	n/a	LED, green
J1	Baud rate select	jumper	n/a	1 6-position jumper (or hardwire)
J2	DTACK speed select	jumper	n/a	4 2-position jumpers or 4 pos DIP switch
P1	FTDI (TERMINAL)	socket	6	6 pin sip socket
P2	FTDI (HOST)	socket	6	6 pin sip socket
R1	1M	resistor	n/a	
R2	4.7K	resistor	n/a	All 20 4.7K resistors use 8-position SIPs (qty 3)
R3	4.7K	resistor	n/a	
R4	1M	resistor	n/a	
R5	4.7K	resistor	n/a	
R6	470	resistor	n/a	
R7	4.7K	resistor	n/a	
R8	4.7K	resistor	n/a	
R9	4.7K	resistor	n/a	
R10	4.7K	resistor	n/a	
R11	4.7K	resistor	n/a	
R12	4.7K	resistor	n/a	
R13	4.7K	resistor	n/a	
R14	4.7K	resistor	n/a	
R15	4.7K	resistor	n/a	
R16	4.7K	resistor	n/a	
R17	4.7K	resistor	n/a	
R18	4.7K	resistor	n/a	

BOM

R19	4.7K	resistor	n/a	
R20	15M	resistor	n/a	Unusual value, used two 7.5M resistors in series.
R21	4.7K	resistor	n/a	
R22	4.7K	resistor	n/a	
R23	4.7K	resistor	n/a	
R24	4.7K	resistor	n/a	
R25	330	resistor	n/a	
R26	4.7K	resistor	n/a	
R27	4.7K	resistor	n/a	
R28	4.7K	resistor	n/a	
R29	4.7K	resistor	n/a	
R30	4.7K	resistor	n/a	
R31	4.7K	resistor	n/a	
R32	4.7K	resistor	n/a	
SW1	RESET	switch	n/a	SPDT momentary
SW2	SINGLE STEP/RUN	switch	n/a	SPDT
SW3	STEP	switch	n/a	SPDT momentary
U1	555	IC, timer	8	
U2	8 MHz	IC, oscillator	14	
U3	74LS00	IC, quad 2-input NAND	14	
U4	74LS06	IC, OC hex inverter	14	
U5	74LS04	IC, hex inverter	14	
U6	68000	IC, CPU	64	8 MHz
U7	74LS08	IC, quad 2-input AND	14	
U8	74LS32	IC, quad 2-input OR	14	
U9	74LS32	IC, quad 2-input OR	14	
U10	74LS32	IC, quad 2-input OR	14	
U11	HM6264	IC, static RAM	28	
U12	28C64	IC, EEPROM	28	Or 2764 EPROM
U13	HM6264	IC, static RAM	28	
U14	28C64	IC, EEPROM	28	Or 2764 EPROM
U15	HM6264	IC, static RAM	28	
U16	28C64	IC, EEPROM	28	Or 2764 EPROM
U17	HM6264	IC, static RAM	28	
U18	28C64	IC, EEPROM	28	Or 2764 EPROM

Page 2

BOM

74LS20	IC, dual 4-input NAND	14	
74LS74	IC, dual JK flip-flop	14	
74LS161	IC, counter	16	
74LS161	IC, counter	16	
74LS74	IC, dual JK flip-flop	14	
74LS260	IC, dual 5-input NOR	14	
74LS260	IC, dual 5-input NOR	14	
74LS138	IC, decoder	16	
25LS2548	IC, decoder	20	
74LS148	ICS, priority encoder	16	
6850	IC, ACIA	24	
6850	IC, ACIA	24	
MC14411	IC, baud rate generator	24	
74LS138	IC, decoder	16	
74LS138	IC, decoder	16	
1.8432MHz	crystal	n/a	
IC sockets	misc.	various	Wirewrap type. May need to make 64-pin from two 40-pin sockets.
wire	misc.	n/a	Wirewrap wire
protoboard	misc.	n/a	
	74LS74 74LS161 74LS161 74LS260 74LS260 74LS138 25LS2548 74LS148 6850 6850 MC14411 74LS138 74LS138 1.8432MHz IC sockets wire	74LS74 IC, dual JK flip-flop 74LS161 IC, counter 74LS161 IC, dual JK flip-flop 74LS74 IC, dual JK flip-flop 74LS260 IC, dual 5-input NOR 74LS260 IC, dual 5-input NOR 74LS138 IC, decoder 74LS148 ICS, priority encoder 6850 IC, ACIA 6850 IC, ACIA MC14411 IC, baud rate generator 74LS138 IC, decoder 74LS138 IC, decoder 74LS138 IC, decoder 1.8432MHz crystal IC sockets misc. wire misc.	74LS74 IC, dual JK flip-flop 14 74LS161 IC, counter 16 74LS161 IC, counter 16 74LS74 IC, dual JK flip-flop 14 74LS260 IC, dual 5-input NOR 14 74LS260 IC, dual 5-input NOR 14 74LS138 IC, decoder 16 25LS2548 IC, decoder 20 74LS148 ICS, priority encoder 16 6850 IC, ACIA 24 6850 IC, ACIA 24 MC14411 IC, baud rate generator 24 74LS138 IC, decoder 16 74LS138 IC, decoder 16 1.8432MHz crystal n/a IC sockets misc. various wire misc. various