

S-100 MSDOS PC-AT Support Board V3a

BOM revised with active and in stock (as of Feb 22nd, 2017) components at Digikey.com (except when noted otherwise)

by Suavek® <http://www.eskwadrat.com>

Supplier search order: 1. Digikey 4. Mouser
2. Jameco 5. eBay
3. Newark 6. others

Digikey cost ea.	p/n at Digikey	Ref	Value	BOM Qty	OrderQty	part_no	Each	Src	Footprint	Info
\$1.350	BH32T-C-G	BT1	Battery Holder for CR2032, PC Mount	1	1	236996	\$ 1.65	Jameco	CR2032H	
\$0.290	FG28C0G1H470JNT06	C2, C4, C5, C6, C18	5% Npo -10	5	10	332567	\$ 0.19	Jameco	C1	multiples of 10
\$0.260	C322C103K1R5TA	C60	0.01 uF, 100 Volt X7R 10% Radial	1	1	597281	\$ 0.29	Jameco	C2	
\$0.112	399-9877-1-ND	C22, C34, C35, C36, C37, C38, C39, C40, C41, C42, C43, C44, C45, C46, C55, C56, C57, C58, C59, C63, C64, C65, C66, C67, C68, C69, C70, C71, C72, C73, C74, C75, C76, C77, C78, C79, C80, C81, C82, C83, C84, C85	0.1 uF, 50 Volt, Monolithic Z5U, Radial	42	100	25523	\$ 0.07	Jameco	C2	multiples of 100
\$0.730	TAP105K035CRW	C7, C8, C9, C10	1 uF, 35 Volt, 10%, Radial Tantalum	4	4	33662	\$ 0.39	Jameco	C1V5	
\$0.860	AP106M025SCS	C3, C27, C28, C47, C48, C49, C50, C51, C52, C53, C54	10 uF, 25 Volt, 10%, Radial Tantalum	11	11	545641	\$ 0.59	Jameco	C1V5	
\$3.180	TAP336K025SCS	C1	33 uF, 25 Volt, 10%, Radial Tantalum	1	1	2044074	\$ 2.59	Jameco	C1V5	
\$1.400	160-1919-5-ND	BAR1	LED, 10 Bar LED Display, 20-pin DIP	1	1	697477	\$ 1.39	Jameco	20dip300	
\$0.380	754-1264-ND	D1	LED, Red Diffused T-1 3/4, 19mcd 635nm	1	10	697522	\$ 0.09	Jameco	LEDV	multiples of 10
\$0.380	754-1263-ND	D2	LED, Green T-1 3/4, 25mcd 565nm	1	10	333227	\$ 0.10	Jameco	LEDV	multiples of 10
\$0.390	754-1284-ND	D4	LED, Yellow Diffused T-1 3/4, 29mcd 585nm	1	10	697549	\$ 0.09	Jameco	LEDV	multiples of 10
\$0.120	1N5240B	D3	1N5240B Zener Diode 10V 0.5W	1	1	512-1N5240BTR	\$ 0.11	Mouser	D3	
\$0.145	PRPC002SAAN-RC	JP1, JP2, JP3, JP4, JP5, JP6, K2, K6	Jumper, 2 Position, Unshrouded Header 2.54mm Solder Straight	8		68339	\$ 0.49	Jameco	SIL-2	order 36 Pin strip
\$0.180	PRPC003SAAN-RC	K4, K7, K10, P52, K101	Jumper, 3 Position, Unshrouded Header 2.54mm Solder Straight	5		68339	\$ 0.49	Jameco	SIL-3	order 36 Pin strip
\$0.200	PRPC004SAAN-RC	P51	Jumper, 4 Position, Unshrouded Header 2.54mm Solder R/A	1	1	517-835-01-05	\$ 0.33	Mouser	SIL-4	order 5 Pin strip
\$0.210	PRPC005SAAN-RC	P6	Jumper, 5 Position, Unshrouded Header 2.54mm Solder Straight	1		68339	\$ 0.49	Jameco	SIL-5	order 36 Pin strip
\$0.235	PRPC008SAAN-RC	P37, P38, P39, P41, P43, P46, P48, P50, P53	Jumper, 8 Position, Unshrouded Header 2.54mm Solder Straight	9		68339	\$ 0.49	Jameco	SIL-8	order 36 Pin strip
\$0.280	302-S101	P5, P101, P102	Jumper, 5x2 Position, Shrouded Header 2.54mm Solder, R/A	3	3	517-N2510-5002RB	\$ 1.86	Mouser	pin_array_5x2	
\$0.430	PRPC005DAAN-RC	P4	Jumper, 5x2 Position, Unshrouded Header 2.54mm Solder Straight	1		109568	\$ 0.59	Jameco	pin_array_5x2	order 16x2 Pin strip
\$0.530	PRPC008DAAN-RC	P2, P54	Jumper, 8x2 Position, Unshrouded Header 2.54mm Solder Straight	2		109568	\$ 0.59	Jameco	pin_array_8x2	order 16x2 Pin strip
\$1.000	MD-60S	P104, P103	Circular DIN Connectors, MINI DIN, 6 Position, Mouse/Keyboard	2	2	161-2306	\$ 1.75	Mouser	MINIDIN-6	
\$0.100	RNF14FTD33R2	R4	33 Ohm 5% 1/4W	1					R3	
\$0.100	RNF14FTD150R	R5	150 Ohm 5% 1/4W	1					R3	
\$0.100	RNF14FTD274R	R1	270 Ohm 5% 1/4W	1					R3	
\$0.100	RNF14FTD4K75	R2, R7	4.7K Ohm 5% 1/4W	2					R3	
\$0.630	4610X-101-331LF	RR6	330 Ohm SIP 10pin, 9 Resistors	1	1	97851	\$ 0.29	Jameco	r_pack9	
\$0.500	4605X-101-471LF	RR3	470 Ohm SIP 5pin, 4 Resistors	1	1	652-4605X-1LF-470	\$ 0.27	Mouser	r_pack4	

\$0.660	4609X-101-103LF	RR2, RR7, RR101	1K Ohm SIP 10pin, 9 Resistors	3	3	97877	\$ 0.17	Jameco	r_pack9	
\$0.520	4610X-101-202LF	RR9	2K Ohm SIP 10pin, 9 Resistors	1	1	652-4610X-1LF-2K	\$ 0.40	Mouser	r_pack9	
\$0.500	4605X-101-472LF	RR4, RR8	4.7K Ohm SIP 5pin, 4 Resistors	2	2	652-4605X-1LF-4.7K	\$ 0.27	Mouser	r_pack4	
\$0.580	4610X-101-472LF	RR5	4.7K Ohm SIP 10pin, 9 Resistors	1	1	24660	\$ 0.29	Jameco	r_pack9	
\$1.470	76SB08T	SW1, SW5, SW6, SW10	DIP Switch, 8-Pos, On-Off, SPST, Raised Rocker	4	4	696917	\$ 1.39	Jameco	SWDIP8	
\$2.370	ECS-2200B-080	P3	TTL Clock Oscillator, 8MHz, 1/2 Can, DIP-8, 5V	1	1	815-ACH-8-EK	\$ 2.01	Mouser	8dip300	
\$2.470	ECS-2100A-018	P7	TTL Clock Oscillator, 1.8432Mhz, 1/2 Can, DIP-8, 5V	1	1	774-MXO45HS-3C-1.8	\$ 1.87	Mouser	8dip300	
\$2.370	ECS-100A-143	P55	TTL Clock Oscillator, 14.31818MHz, DIP-14, 5V	1	1	520-TCF1431-X	\$ 1.87	Mouser	14dip300	
\$0.630	SN74F32N	U35	74F32	1	1	47466	\$ 0.45	Jameco	14dip300	
\$0.890	SN74ALS00AN	U28	74LS00	1	1	46252	\$ 0.45	Jameco	14dip300	
\$0.820	SN74ALS02AN	U42	74LS02	1	1	46287	\$ 0.39	Jameco	14dip300	
\$0.870	SN74LS06N	U9, U12, U56	74LS06	3	3	46359	\$ 0.75	Jameco	14dip300	
\$0.950	SN74LS07N	U55	74LS07	1	1	46367	\$ 0.75	Jameco	14dip300	
\$0.630	SN74LS14N	U41	74LS14	1	1	46640	\$ 0.49	Jameco	14dip300	
\$0.870	SN74ALS74AN	U61	74LS74	1	1	48004	\$ 0.75	Jameco	14dip300	
\$2.650	SN74LS92N	U62	74LS92	1	1	48143	\$ 1.95	Jameco	14dip300	
\$0.810	SN74LS123N	U5, U24, U25, U26, U27	74LS123	5	5	300880	\$ 0.65	Jameco	16dip300	
\$0.950	SN74ALS165N	U15, U29	74LS165	2	2	46877	\$ 0.65	Jameco	16dip300	
\$1.230	SN74ALS240AN	U13	74LS240	1	1	47141	\$ 0.69	Jameco	20dip300	
\$1.150	SN74ALS244CN	U52, U54	74LS244	9	9	47183	\$ 0.65	Jameco	20dip300	
\$2.360	SN74LS682N	U4, U32, U58	74LS682	3	3	309260	\$ 1.75	Jameco	20dip300	
\$6.520	AT28C256-15PU-ND	U102, U103	28C256-15, EEPROM, 5V 32x8, DIP-28, 150ns	2	2	74843	\$ 5.49	Jameco	28dip600	
\$7.812	CP82C54-10Z	U53	8254-2 (82C54-2), PROG INTRV TIMER DIP-24, 10MHZ	1	1	52716	\$ 3.95	Jameco	24dip600	
\$11.820	CP82C59A-12Z	U7	8259A-2 (82C59A-2), PROG INTERRUPT CONTROLLER, DIP-28, 10MHZ	1	1	8259A-2	\$ 5.33	www.UTSource.net	28dip600	
\$6.830	DS12885+	U19	DS12885 Real Time Clock RTC	1	1	700-DS12885	\$ 6.75	Mouser	24dip600	
\$1.660	ATF22V10C-15PU	U2, U11	GAL22V10, 15nS	2	2	39159	\$ 3.75	Jameco	24dip300	
\$4.670	HT6542B (UTsource.net)	U104	HT6542B Keyboard Controller	1	1	HT6542B	\$ 4.67	www.UTSource.net	40dip600	
\$5.790	MAX239CNG+	U16	MAX239 RS-232 Interface IC 5V, MultiCh RS-232 Driver/Receiver	1	1	700-MAX239CNG	\$ 5.78	Mouser	24dip300	
\$7.400	PC16550DVX/NOPB	U3	PC16550DV/NOPB, UART WITH FI/FO IN PLCC44	1	1	844887	\$ 7.89	Jameco	44PLCC	
\$0.830	SN75477P	U47	SN75477 Dual Peripheral Driver	1	1	595-SN75477P	\$ 0.88	Mouser	8dip300	
	NOT USED	Vol_Reg101 (Alternate for LM323K at U101)	D24V25F5 (Alternate for LM323 at U101) Pololu 5V 2.5A Step-Down Voltage Regulator	1	1	D24V25F5	\$ 10.95	Pololu		
	NOT USED	(Alternate for LM323K at U101)	EzSBC PSU5, 5V 3A Drop-in replacement of LM323K (Alternate for LM323 at U48)	1	1	PSU5	\$ 8.95	EzSBC.com	TO3	

\$4.750	LM32K (JAMECO)	U101	LM323K Regulator, (Alternate for D24V25F5 at VReg-101) 5 Volt 3 Amp TO-3	1	1	23667	\$ 4.75	Jameco	5V_3AMP_(TO3)	
\$3.030	UP-T03-CB	U101	Heat Sink, Passive TO-3 (for LM323K)	1	1	151547	\$ 1.49	Jameco	TO3	
	OWNED	U101	Screw, 6-32, 3/8" Phillips	2						
	OWNED	U101	NUT, HEX, 6-32	2						
\$0.600	ECS-.327-CDX-1038	X1	CRYSTAL OSCILLATOR, 32.768KHZ, TUNING FORK, 12.5PF	1	1	325244	\$ 0.49	Jameco	HC-18UV	
\$0.470	SA083000	DIP08	DIP Socket 8	1					8dip300	
\$0.470	SA083000	DIP08S (P3, P7)	DIP Socket, Osc, 4-Pins (DIP-8)	2	2	676385	\$ 0.55	Jameco	8dip300	
\$0.540	SA143000	DIP14S (P55)	DIP Socket, Osc, 4-Pins (DIP-14)	1	1	133006	\$ 0.65	Jameco	14dip300	
\$0.540	SA143000	DIP14	DIP socket 14	7	10	112214	\$ 0.14	Jameco	14dip300	multiples of 10
\$0.750	SA163000	DIP16	DIP socket 16	7	10	112222	\$ 0.20	Jameco	16dip300	multiples of 10
\$0.819	SA203000	DIP20	DIP socket 20	13	20	112248	\$ 0.17	Jameco	20dip300	multiples of 10
\$1.120	SA243000	DIP24 (.300")	DIP socket 24 (.300")	3	10	39378	\$ 0.25	Jameco	24dip300	multiples of 10
\$2.000	SA246000	DIP24 (.600")	DIP socket 24 (.600")	2	10	112282	\$ 0.27	Jameco	24dip600	multiples of 10
\$1.300	SA286000	DIP28 (.600")	DIP socket 28 (.600")	3	10	40301	\$ 0.26	Jameco	28dip600	multiples of 10
\$1.730	SA406000	DIP40 (.600")	DIP socket 40 (.600")	1	10	41111	\$ 0.33	Jameco	40dip600	multiples of 10
\$2.510	A-CCS 044-G-T	DIP44	44-Lead Plastic Chip Carrier, PLCC44	1	1	71618	\$ 0.75	Jameco	44PLCC	multiples of 5
\$0.370	749-CP-06-WE (Mouser)	Card Ejector	Circuit Board Card Ejector, 0.062 inch, Nylon, White, BIVAR PN# CP-06 WE	2	2	749-CP-06-WE	\$ 0.49	Mouser		