

# Bill of Materials PHCC: **Motherboard Rev4B** (North America)

Parts Count 141  
Parts Total \$53.82

IDEN	Part No.	Qty	Nomenclature	Manufacturer		
Vendor	SKU/Article No	U/I	Unit Cost	Unit Total	Item Total	Remarks
<input type="checkbox"/>	<b>AN1-AN32</b>	2556P03JL62	32	Header, male, .100" (2.54mm), 1x3, single row	Eoco	
Jameco Electronics	679092	EA	\$0.27	1	\$8.64	straight, single row, gold plated, 0.125" tail, 0.240" pin, contact 0.025" square, 3A, 250 VDC
<input type="checkbox"/>	<b>ANP1-ANP3</b>	2556P03JL62	3	Header, male, .100" (2.54mm), 1x3, single row	Eoco	
Jameco Electronics	679092	EA	\$0.27	1	\$0.81	straight, single row, gold plated, 0.125" tail, 0.240" pin, contact 0.025" square, 3A, 250 VDC
<input type="checkbox"/>	<b>C1-C4</b>	140-XRL63V1.0-RC	4	Capacitor, Radial Electrolytic, 1uF, 63V, 20% tol, 5mm dia, 11mm ht.	Xicon	
Mouser Electronics	140-XRL63V1.0-RC	EA	\$0.06	1	\$0.24	
<input type="checkbox"/>	<b>C5</b>	140-XRL100V10-RC	1	Capacitor, Radial Electrolytic, 10uF, 100V, 20% tol	Xicon	
Mouser Electronics	140-XRL100V10-RC	EA	\$0.08	1	\$0.08	6.3 mm Dia. x 11 mm L, lead spacing 2.5mm
<input type="checkbox"/>	<b>C6, C7</b>	C114K180K1X5CA	2	Capacitor, Molded Axial Ceramic, 100V, 18pF, 10% Tol	Kemet	
Mouser Electronics	80-C114K180K1X	EA	\$0.38	1	\$0.76	
<input type="checkbox"/>	<b>C8</b>	140-XRL25V100-RC	1	Capacitor, Radial Electrolytic, 100uF, 25V, 20% tol	Xicon	
Mouser Electronics	140-XRL25V100-RC	EA	\$0.09	1	\$0.09	6.3 mm Dia. x 11 mm L, lead spacing 2.5mm
<input type="checkbox"/>	<b>C9-C14</b>	C323C104K1R5CA	6	Capacitor, ceramic, multilayer, X7R, 0.1 uF (100nF), 100V, 10%	Kemet	
Mouser Electronics	80-C323C104K1R5C	EA	\$0.25	1	\$1.50	0.200 in L x 0.320 in H, lead spacing 0.2 in, Radial
<input type="checkbox"/>	<b>CON1</b>	2556P02JL62	1	Header, male, .100" (2.54mm), 1x2, single row	Eoco	
Jameco Electronics	679084	EA	\$0.20	1	\$0.20	.125" solder tail, 0.240" post, contact 0.025" square

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<input type="checkbox"/> <b>CON2</b>	109146	1	Connector: 5.25 disk drive power, 4-pos, vert, PCB mount, .200"	Generic
Jameco Electronics	109146	EA	\$0.65	\$0.65 5.08mm spacing, 250V, 1.5A, 18-24AWG
<input type="checkbox"/> <b>CON3</b>	D09P13A4GX00LF	1	Connector D-sub, 9 pos, plug (M), PCB right angle,	FCI
Newark	62K4106	EA	\$2.10	0.370" (9.4mm) footprint, Euro style, W/ board locks, UNC 4-40 threaded inserts; spacing 2.74mm, 2.54mm centers; Note: NOT STANDARD PCB D-SUB CONNECTOR
<input type="checkbox"/> <b>CON4</b>	2556P04JL62	1	Header, male, .100" (2.54mm), 1x4, single row	Eoco
Jameco Electronics	679105	EA	\$0.28	.125" solder tail, 0.240" post, contact 0.025" square
<input type="checkbox"/> <b>CON5, CON6</b>	103309-1	2	CONNECTOR,HEADER,10POS,30AU,STRAIGHT,LOW PROFILE,.100"x.1	AMP
Jameco Electronics	496051	EA	\$0.59	\$1.18
<input type="checkbox"/> <b>CON7</b>	FDP-08-T	1	DIP plug, 8 pos, .100"x.300", IDC	Adam Tech
Mouser Electronics	737-FDP-08-T	EA	\$0.86	\$0.86
<input type="checkbox"/> <b>IC1</b>	PIC18F452-E/P	1	Microcontroller, PIC18Fxxx Flash MCUs 32KB 1536 RAM 34I/O, 40 pin DI	Microchip
Mouser Electronics	579-PIC18F452-E/P	EA	\$8.66	8 bit , PIC18, RISC , PDIP, Flash, 32 KB , 1.5 KB , 40 MHz , 8-chx10-bit , 2 V to 5.5 V
<input type="checkbox"/> <b>IC2</b>	MAX232IN	1	RS-232 Interface ICs Dual EIA-232 Driver, 16 pin DIP	Texas Instruments
Mouser Electronics	595-MAX232IN	EA	\$0.90	EIA/TIA-232-F or V.28 , 0.12 Mbps (Min) , 5.0V
<input type="checkbox"/> <b>IC3, IC4</b>	CD4067B	2	Multiplexer/demultiplexer, CMOS, analog, 24 pin DIP, 16 channel	Texas Instruments
Jameco Electronics	13215	EA	\$0.85	\$1.70 single circuit, 16 channels

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<input type="checkbox"/> IC5	74HCT154E	1	Decoder/demultiplexer, CMOS, 4-to-16 line, 24 pin DIP	Texas Instruments		
Jameco Electronics	88057	EA	\$0.95	1	\$0.95	
<input type="checkbox"/> J1	2556P02JL62	1	Header, male, .100" (2.54mm), 1x2, single row	Eoco		
Jameco Electronics	679084	EA	\$0.20	1	\$0.20	.125" solder tail, 0.240" post, contact 0.025" square
<input type="checkbox"/> JP1-JP35	19141	35	Shorting block, .100", closed top, black, 0.025" receptacle	Imported		
Jameco Electronics	19141	PG	\$1.20	10	\$4.20	Mates with standard 0.100" header
<input type="checkbox"/> KEY1-KEY16	51303309-2	16	Connector header, 14 pos, 2x7, .100"x.100", .150" end, LP	AMP		
Jameco Electronics	753571	EA	\$0.85	1	\$13.60	.120" solder tail, 0.025" square posts, gold/tin plated
<input type="checkbox"/> LED1, LED3	LTL-4231	2	LED, green/green diffused, T1, 3mm dia	LITEON		
Jameco Electronics	697629	PG	\$0.36	5	\$0.14	lead spacing .100", Vf 2.1, 12.6 mcd, viewing angle 60 deg.
<input type="checkbox"/> LED2	LTL-4221N	1	LED, hi-eff red/red diffused, T1, 3mm dia	LITEON		
Jameco Electronics	697590	PG	\$0.21	5	\$0.04	lead spacing .100", Vf 2.0, 8.7 mcd, viewing angle 60 deg
<input type="checkbox"/> MA	499252-5	1	Strain relief, IDC connector, 10 pos	AMP		
Jameco Electronics	526045	EA	\$0.20	1	\$0.20	Use with 10 pos AMPLATCH IDC connector
<input type="checkbox"/> MA	207952-3	1	Jack screw female, 4-40, thd lg .25"	AMP		
Jameco Electronics	613886	ST	\$0.97	1	\$0.97	use with right angle PCB D-sub connector, 2 female screw locks, 2 sq. nuts (4-40), 4 flat washers
<input type="checkbox"/> MA	ZPHP-0632-08-C	4	screw, No.6-32 x 1/2", panhead, phillips	Imported		
Small Parts Inc	ZPHP-0632-08-C	PG	\$1.60	100	\$0.06	Zinc plated steel

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<input type="checkbox"/> <b>MA/IC1</b>	40MLP	1	DIP Socket, 40 pin DIL, low profile, machined, width .6"			Generic
Jameco Electronics	41136	EA	\$1.19	1	\$1.19	solder tail, body ht .117"
<input type="checkbox"/> <b>MA/IC2</b>	1-390261-4	1	DIP socket, 16 position			AMP
Jameco Electronics	683121	PG	\$0.49	5	\$0.10	
<input type="checkbox"/> <b>MA/IC3-4</b>	1-390262-1	2	DIP Socket, 24 pin DIL, standard, width .6"			AMP
Jameco Electronics	683198	PG	\$0.90	5	\$0.36	
<input type="checkbox"/> <b>MA/IC5</b>	1-390261-8	1	DIP socket, 24 pin DIL, slim, width .3"			AMP
Jameco Electronics	683163	PG	\$0.89	5	\$0.18	
<input type="checkbox"/> <b>P1</b>	499997-1	1	IDC connector, 10 pos, 2x5, .100" x .100", AWG 28-26			AMP
Jameco Electronics	849354	EA	\$0.70	1	\$0.70	
<input type="checkbox"/> <b>R1, R9</b>	291-10K-RC	2	Resistor, 1/4W carbon film, +/- 5%, 10K			Xicon
Mouser Electronics	291-10K-RC	BG	\$0.40	10	\$0.08	
<input type="checkbox"/> <b>R2, R3</b>	291-220-RC	2	Resistor carbon film, 220 ohm, 1/4W, 5%			Xicon
Mouser Electronics	291-220-RC	EA	\$0.10	1	\$0.20	
<input type="checkbox"/> <b>R4, R5</b>	291-4.7K-RC	2	Resistor carbon film, 4.7K, 1/4W, 5%			Xicon
Mouser Electronics	291-4.7K-RC	EA	\$0.10	1	\$0.20	
<input type="checkbox"/> <b>R6-R8</b>	291-330-RC	3	Resistor carbon film, 330 ohm, 1/4W, 5%			Xicon
Mouser Electronics	291-330-RC	EA	\$0.10	1	\$0.30	

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<input type="checkbox"/> <b>RN1, RN2</b>	4605M-101-103LF	2	Resistor network, bussed, 10K, 4 resistors, 5 pin SIP-5 package	Bourns		
Mouser Electronics	652-4605M-1LF-10K	EA	\$0.36	1	\$0.72	2% tol, 1/4W, 4 bussed resistors, 6.35 mm W x 12.65 mm L x 2.49 mm H , spacing .100" (2.54mm), thru hole
<input type="checkbox"/> <b>W1</b>	28RC10-10	1	Ribbon cable, 10 conductor, 28 AWG, stranded copper	Imported		
Jameco Electronics	639672	FT	\$3.19	10	\$0.32	7x36, stranded, AWG 28, spacing 0.05", 300V
<input type="checkbox"/> <b>X1</b>	ECS-98.3-20-1X	1	Crystal, 9.8304 MHz, HC-49/U (HC-18/U) case, freq tol: 30ppm,	ECS		
Mouser Electronics	520-HCA983-20X	EA	\$0.46	1	\$0.46	freq stab: 50ppm, load cap: 20pF,