

CompuLab SB-A510 rev 1.0 Bill of Materials					Revision: 1.0		
NOTE: Some of the components appear in SB-A510 schematics, but do not appear in the BOM. Do not populate such components							
NOTE: some manual changes might be needed. (Manual fixes etc..)							
Item #	Compulab P/N	Description	Quantity	Schematic Reference	PCB Footprint	Recommended Manufacturer	MFG P/N
1	190Z00201	Battery holder for 2032 button battery. TH	1	BH1	BattH20mm	AUK	BH20D66 (ROHS)
2	210C30002	Battery, Lithium, Cell 20x3.2mm, 3V, 210mAh, 2032	1	BT1	BattH20mm	Panasonic_Industrial	CR2032
3	151B10400S	Cap., 100nF, 10V, X7R or X5R, 10%, 0402	137	C1, C2, C3, C5, C8, C9, C10, C11, C12, C15, C16, C26, C27, C28, C31, C32, C33, C34, C35, C36, C37, C38, C39, C40, C41, C42, C43, C46, C48, C50, C51, C52, C53, C54, C55, C56, C58, C59, C60, C61, C62, C63, C64, C65, C66, C67, C68, C69, C70, C72, C73, C74, C75, C76, C79, C80, C81, C82, C85, C86, C90, C91, C95, C104, C111, C115, C139, C148, C150, C151, C152, C153, C154, C155, C156, C158, C159, C160, C162, C163, C164, C165, C166, C167, C168, C169, C170, C171, C172, C173, C174, C175, C176, C177, C178, C179, C180, C181, C186, C187, C188, C189, C190, C191, C192, C193, C194, C195, C196, C197, C198, C199, C200, C201, C202, C203, C204, C205, C206, C207, C208, C209, C210, C211, C212, C213, C214, C215, C216, C217, C218, C219, C221, C222, C223, C224, C225	RC0402		
4	151C10300S	Cap., 10nF, 25V, X7R, 10%, 0402	10	C4, C13, C18, C24, C25, C87, C88, C89, C92, C101	RC0402		
5	151B47510S	Cap., 4.7uF, 6.3V, X7R or X5R, 10-20%, 0603	15	C6, C7, C22, C23, C29, C30, C44, C45, C57, C71, C77, C78, C83, C157, C161	C0603-08		
6	151B10620S	Cap., 10uF, 6.3V, X5R/X7R, 20%, 0805	10	C14, C47, C49, C94, C98, C106, C107, C110, C113, C114	C0805		
7	154C106C1S	Cap., 10uF 16v TANT C, std profile, 10%	1	C17	TANT6032		
8	151B10610S	Cap., 10uF, 6.3V, X5R/X7R, 20%, 0603	1	C84	C0603-08		
9	151D22200S	Cap., 2.2nF, 50V, X7R, 10%, 0402	2	C93, C102	RC0402		
10	151C10680S	Cap., 10uF, 25V, X7R/X5R, 20%, 1210	2	C96, C103	C1210		
11	151B10500S	Cap., 1uF, 6.3V, X5R/X7R, 20%, 0402	4	C97, C105, C112, C220	RC0402		
12	151B10780S	Cap., 100uF, 6.3V, X5R, 20%, 1210, H=2.5mm	8	C100, C109, C140, C141, C182, C183, C184, C185	C1210H2_5		
13	151K10010S	Cap., 10pF, 0603, NPO, 50V	5	C142, C143, C144, C145, C146	RC0603		
14	151D27100S	Cap., 270pF, 50V, X7R, 5%, 0402	1	C149	RC0402		
15	130E05410S	Diode, Schottky, dual, common Anode, BAT54S, SOT23	1	D1	SOT23	DIODES_Inc	BAT54s-7-F
16	130E30000S	Diode, Schottky, 3A, 30V	2	D3, D4	DO-214AB	ON_Semiconductors	MBRS330T3G
17	139A10020S	LED,Green,SMT,1206	9	DS1, DS2, DS3, DS4, DS5, DS15, DS17, DS18, DS19	LED-1206	EVERLIGHT	QTLP650D4TR
18	190C00300	Conn., Header, 1x 3, 100MIL, TH, JP3, 3mm tail, 6mm mating length	2	E2, E4	1X3THHDR		
19	190C00200	Conn., Header, 1x 2, 100MIL, TH, JP2, 3mm tail, 6mm mating length	4	E3, E5, E6, E8	1X2THHDR		
20	175P15200S	Fuse, Resettable PTC, 0.75A 1h, 1.5A It	1	F1	FUSE-1206	BOURNS	MF-NSMF075
21	147D12101S	Ferrite Bead, Z=120 Ohm@100Mhz, 3A,	1	FB3	FB1206	Chilisin	UPB321611T-121Y-N
22	182K00300S	Conn., Audio Jack stereo, 3.5mm, 3 pin, no switch, SMT	2	J1, J3	AJ35-3P-SM	Lih_Sheng	LJE0372-3RT{ROHS}
23	182K00304S	Conn. DC Jack, 3.9/1.3mm ext/int Dia., SMT, 3A	1	J2	PJ-0203SM	Astron	15-02037-R
24	180K01900S	Conn., HDMI-A, Rec, RA, th pins <1.6mm, SMT, no screw	1	J4	HDMI-A19-	Astron	3690019-023-R
25	185B10010	Conn., Jumper Plug (shunt), 2.54mm (.1") spacing, Gold plated, Black color	8	JP7, JP8, JP9, JP10, JP11, JP12, JP13, JP14	Shunt/Jumper		
26	147D60000S	Ferrite Bead, Z=60 Ohm@100Mhz,500mA, 0.3 Ohm DCR	6	L1, L2, L3, L14, L15, L16	FB0603	Chilisin	PBY160808T-600Y-N
27	147D33100S	Ferrite Bead, 0603, Z=330 Ohm@100Mhz,200mA, 0.5 Ohm DCR	2	L4, L5	FB0603	Murata	BLM18AG331SN1D
28	142D11900S	EMI Filter, Common Mode, 90Ohm, SMT	12	L6, L7, L8, L9, L10, L11, L12, L13, L20, L21, L22, L23	EMI1012	Murata	DLP11SN900HL2L
29	147A4R702S	Inductor, 4.7uH, 20%, 3.5A, 0.045ohm	2	L17, L18	IND7_3x7_3SM	TDK	RLF7030T-4R7M3R4
31	182K14000S	Conn., B2B, 2x70 cont., P:0.6mm, Rec, H:4mm	2	P1, P2	B2B06M2x70R	AMP	8-5353189-0
32	182K12000	Conn., Edge, PCI 32 bit, 3.3V, TH, 1.27mm	1	P3	PCI120TH3_3V	Foxconn	EH06011-DAW-DF
33	182K05200S	Conn., Mini-PCle socket, card H=2.6mm (4mm connector body), Black	1	P4	MINIPCIE-4	Molex	679101002
34	180K00900S	Conn.socket slot SD/MM SDIO card reader, SMT, Push-Push	1	P5	SD-RA-SM	Astron	C54-2108-9-R
35	203H10030	Conn. Acc, Mini-PCle card mount/latch	1	P6	MINIPCIE-4-	Lotes	AAA-PCI-051-K01
36	180K01501	Conn., DB15 HD, 3.08mm, RA, Fem, Blue, PC99, TH	1	P7	DB15HD308TH	Astron	HD6A-15-PFHN1T-R
37	190C01000S	Conn., Header, 2x 5, 100MIL, SMT, DR10, 6mm mating length	2	P9, P12	2X5SMHDR	Jih_Vei_Electronics	N2264-10M15-01G {ROHS}
38	180K00802S	Conn., Ultra Mini Serial, 8pin (Mini-USB type)	1	P10	UMS-8	Wieson	G3169-500001
39	180K03000	Conn., Combo, Dual stacked USB +Giga RJ45 w/mag&LED	2	P11, P15	DUSBRJGB	YDS	45F-10202GDD2
40	182P04000S	Conn., FPC, 0.5mm, 40 cont, RA, Downside contact, SMT	2	P13, P25	FPC05SM40-1	CVILux	CF20-401D0R0
41	190C02401	Conn., Header, 2x12, 100MIL, TH, 3mm tail, 6mm mating length	3	P14, P16, P21	2X12THHDR		
42	178A00200	Terminal Block, Socket, 2P, 3.5mm pitch, Screw, RA	2	P17, P19	TB3.5mmRA-2P	Tyco	1776275-2
43	182E00700S	Conn., SATA, 7 cont, Vert, SMT	1	P18	SATA-V-SM	AMP	1734058-1
44	180K00401	Conn., RCA Jack, 8.3mm Dia, 6.5mm H, Yellow, RA, TH, PC99	1	P22	RCA8_3RATH	Cherng_Weei	SCP625UNS400000
45	190C00601	Conn., Header, 2x 3, 100MIL, TH, 3mm tail, 6mm mating length	1	P23	2X3THHDR		
47	131D03350S	Transistor, N-MOSFET, NDS335N,Vgs=100mOhm@2.5V,1.7 A,20V	11	Q1, Q2, Q4, Q6, Q9, Q22, Q24, Q26, Q28, Q32, Q33	SOT23	International_Rectifier	IRLML2502TRPBF
48	131D41510S	Transistor, P-MOSFET, 3A, 20V, vgs(th)=-0.7V	4	Q3, Q5, Q8, Q10	SOT23	International_Rectifier	IRLML6402TRPBF
49	131D21010S	Transistor, P-MOSFET, 1.5A, 8V, vgs(th)=-0.6V	2	Q7, Q30	SOT23	International_Rectifier	IRLML6401TRPBF
50	161C47511S	Res., 4.75K, 1%, 0402, 1/16W	41	R3, R6, R8, R10, R17, R18, R19, R20, R22, R23, R27, R38, R39, R40, R41, R48, R52, R55, R60, R62, R64, R65, R66, R69, R74, R76, R82, R89, R90, R94, R100, R106, R110, R113, R114, R115, R130, R132, R142, R143, R144	RC0402		
51	161C00005S	Res., 0R, 5%, 0402, 1/16W	20	R4, R54, R56, R58, R70, R97, R126, R131, R135, R140, R147, R148, R164, R165, R166, R167, R168, R169, R186, R188	RC0402		
52	161C22R05S	Res., 22R, 5%, 0402, 1/16W	3	R5, R68, R117	RC0402		
53	161C10021S	Res., 10K, 1%, 0402, 1/16W	2	R9, R33	RC0402		
54	161C25501S	Res., 255R , 1%, 0402, 1/16W	2	R25, R29	RC0402		
55	161C11511S	Res., 1.15K, 1%, 0402, 1/16W	3	R30, R32, R128	RC0402		
56	161C10001S	Res., 100R, 1%, 0402, 1/16W	2	R43, R141	RC0402		
57	161C10011S	Res., 1K, 1%, 0402, 1/16W	3	R47, R85, R91	RC0402		
58	161C47501S	Res., 475R, 1%, 0402, 1/16W	4	R50, R51, R57, R59	RC0402		
59	161C10521S	Res., 10.5K, 1%, 0402, 1/16W	3	R61, R72, R183	RC0402		
60	161C30001S	Res., 300R, 1%, 0402, 1/16W	2	R63, R67	RC0402		
61	161C10035S	Res., 100K, 5%, 0402, 1/16W	3	R71, R79, R87	RC0402		
62	161C43221S	Res., 43.2K, 1%, 0402, 1/16W	1	R73	RC0402		
63	161C40221S	Res., 40.2K, 1%, 0402, 1/16W	2	R75, R83	RC0402		
64	161C23711S	Res., 2.37K, 1%, 0402, 1/16W	2	R77, R84	RC0402		
65	161C49921S	Res., 49.9K, 1%, 0402, 1/16W	2	R78, R92	RC0402		
66	161C61911S	Res., 6.19K, 1%, 0402, 1/16W	1	R80	RC0402		
67	161C24911S	Res., 2.49K, 1%, 0402, 1/16W	1	R81	RC0402		
68	161C20011S	Res., 2K , 1%, 0402, 1/16W	1	R86	RC0402		
69	161C12421S	Res., 12.4K, 1%, 0402, 1/16W	1	R88	RC0402		
70	161C86R61S	Res., 86.6R, 1%, 0402, 1/16W	1	R95	RC0402		
71	161C34801S	Res., 348R, 1%, 0402, 1/16W	1	R96	RC0402		
72	161C56R01S	Res., 56R, 1%, 0402, 1/16W	3	R173, R174, R175	RC0402		
73	161C15001S	Res., 150R, 1%, 0402, 1/16W	2	R176, R177	RC0402		
74	161C17411S	Res., 1.74K, 1%, 0402, 1/16W	1	R178	RC0402		
75	161C33R05S	Res., 33R, 5%, 0402, 1/16W	16	R189, R190, R191, R192, R193, R194, R195, R196, R197, R198, R199, R200, R201, R202, R203, R204	RC0402		
76	163K04330S	Res., Array, 33R, 8P4R, 5%, 0805	3	RN1, RN2, RN3	RESNET8P0805		
77	163K04472S	Res., Array, 4.7K, 8P4R, 5%, 0805	3	RN8, RN14, RN15	RESNET8P0805		
78	163I08472S	Res., Netwrk, 4.7K 10P8R, Bussed, 1206 pkg	3	RN9, RN12, RN13	RESNET10P120		
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