

CompuLab SB-X300L rev 1.3 FULL BOM Revision: 1.3							
NOTE: some of the components listed here are not assembled, on the PCB, only PLACEHOLDERS exist							
NOTE: some manual changes might be needed. (Manual fixes etc..)							
Item	Quantity	Schematic Reference	Compulab P/N	Description	PCB Footprint	RECOMMENDED COMPONENTS	
						Manufacturer	Manufacturer part number
1	1	BT1	210E30003S	Battery, Li-AL,	BT1220SM	Maxell	ML1220H-T9
2	1	C1	151D47580S	Cap., 4.7uF,	C1210H1_9	Murata	GRM32ER71H475KA88L
3	4	C2,C26,C38,C43	151D10200S	Cap., 1nF 0402,	RC0402	Murata	GRP155R71H102KA01E
4	8	C3,C6,C7,C8,C13,C16,C45, C46	151K10410S	Cap., 100nF	RC0603	Murata	GRM188R71C104KA01D
5	4	C4,C22,C57,C81	151B47510S	Cap., 4.7uF, 6.3	C0603-08	Murata	GRM188R60J475KE19
6	28	C5,C12,C17,C20,C21,C23, C27,C32,C39,C41,C47,C70, C71,C72,C74,C75,C78,C79, C87,C88,C89,C90,C91,C94, C95,C97,C101,C102	151B10400S	Cap., 100nF,	RC0402	Murata	GRM155R61A104KA01D
7	6	C28,C42,C44,C66,C68,C82	151B10620S	Cap., 10uF, 6.3	C0805	Murata	GRM21BR60J106KE01L
8	11	C30,C36,C73,C76,C77,C83, C84,C85,C86,C98,C100	151B10780S	Cap., 100uF, 6.3	C1210H2_5	Murata	GRM32ER60J107ME20K
9	5	C31,C33,C34,C35,C58	151D10100S	Cap., 100pF,	RC0402	Murata	GRP1555C1H101JD01E
10	2	C37,C67	151B10511S	Cap., 1uF, 6.3V,	RC0603	Murata	GRM188R60J105KA01D
11	3	C50,C52,C92	151C10300S	Cap., 10nF, 25V,	RC0402	Murata	GRM155R71E103KA01D
12	1	C59	151K47010S	Cap., 47pF, 50V,	RC0603	VISHAY	VJ0603A470KXAAC
13	4	C60,C62,C63,C64	151A22500S	Cap., 2.2uF, 4V,	RC0402	Murata	GRM155R60G225ME15D
14	2	C61,C65	151D22420S	Cap., 220nF,	C0805	Murata	GRM21BR71H224KA01L
15	1	C69	151C22310S	Cap., 22nF	RC0603	Murata	GRM39X7R223M25PT
16	1	C80	151D82010S	Cap., 82pF, 50V,	RC0603	VISHAY	VJ0603A820JXAAC
17	2	C93,C99	151D22200S	Cap., 2.2nF,	RC0402	Murata	GRP155R71H222KA01E
18	1	C96	151C10680S	Cap., 10uF, 25V,	C1210	Murata	GRM32DR61E106[K J A]12L
19	2	DS1,DS3	139A10130S	LED, Chip	LED3x1RASM	DIALIGHT	597-2311-407
20	1	DS2	139A10140S	LED, Chip	LED3x1RASM	DIALIGHT	597-2201-407
21	2	DS4,DS5	139A10020S	LED,Green,SMT,	LED-1206	DIALIGHT	597-3311-407
22	2	D2,D4	130E05402S	Diode, Schottky,	SOD-323	VISHAY	BAT54WS-GS08
23	1	D3	130B24000S	Diode, Zener,	SOD-123	VISHAY	MMSZ5252B-VGS08
24	3	D5,D6,D8	130E13000S	Diode, Schottky,	SOD-123	FAIRCHILD	FBR130
25	1	D7	130E83500S	Diode, Schottky,	DPAK369A-13	ON_Semiconductors	MBRD-835L
26	1	D9	130E30000S	Diode, Schottky,	DO-214AB	FAIRCHILD	MBRS340
27	1	D12	130E05400S	Diode, Schottky,	SOT23	FAIRCHILD	BAT54C
28	1	D13	130B2R300S	Diode, Zener,	SOD-123	VISHAY	MMSZ4681 GS08
29	1	E1	190C00300	Conn., Header,	1X3THHDR	Wieson	2100-1*3ST1
30	1	E2	190C00200	Conn., Header,	1X2THHDR	Wieson	2100-1*2ST1
31	2	J1,J2	182K00300S	Conn., Audio	AJ35-3P-SM	Kycon	ST-3500-3N
32	1	J3	182K00304S	Conn. DC Jack,	PJ-0203SM	Astron	15-02037-R
33	1	L1	147A47000S	Inductor, 47uH,	IND-1812	TDK	NLC453232T-470K
34	3	L5,L6,L7	142D11900S	EMI Filter,	EMI1012	TDK	MCZ1210AH900T
35	1	L8	147A2R201S	Inductor, 2.2uH,	IND7x7_2SM	TDK	SPM6530T-2R2M
36	1	L17	147A4R702S	Inductor, 4.7uH,	IND7_3x7_3SM	TDK	RLF7030T-4R7M3R4
37	2	P1,P2	182K14000S	Conn., B2B,	B2B06M2X70R	AMP	8-5353189-0
38	1	P3	182K06002S	Conn., B2B /	B2FPC05M2x30	Matsushita_(Panasonic)	AXK5F60547YG
39	2	P4,P6	190C01000S	Conn., Header,	2X5SMHDR	CVILux	CH81101M010P
40	1	P5	182E00303S	Conn., W2B,	1x3W2B1_5RASM	Molex	87438-0343
41	1	P7	182K01400	Conn., RJ45,	RJETH-LED-TH	UDE	RTA-1D4B8V1A
42	3	P8,P9,P10	180K00901S	Conn., Mini-	MUSB-AB-SM	CVILux	CU04SAM95C0R0
43	1	P11	182P04000S	Conn., FPC, 0.5	FPC05SM40	CVILux	CF20-401D0R0
44	1	P12	182P02400S	Conn., FPC, 0.5	FPC05SM24-1	CVILux	CF20-241D0R0
45	1	P13,P15	182P02000S	Conn., FPC, 0.5	FPC05SM20-1	CVILux	CF20-201D0R0
46	1	P14	180K00900S	Conn.socket slot	SD-RA-SM	Astron	C54-2108-9-R
47	1	P16	180K00802S	Conn., Ultra Mini	UMS-8	Foxconn	UH51813-DHQ5-7F
48	5	Q1,Q5,Q6,Q7,Q10	131D74130S	Transistor, P-	Powerpak1212-8	ON_Semiconductors	NLTLS3107PR2G
49	6	Q2,Q3,Q4,Q8,Q9,Q11	131D03350S	Transistor, N-	SOT23	FAIRCHILD	FDN335N
50	5	RN1,RN2,RN3,RN5,RN7	163K04510S	Res., Array, 51R,	RESNET8P0805	SAMSUNG_ELECTRO	RP104PJ510CS
51	2	RN4,RN6	163K04000S	Res., Array, 0R,	RESNET8P0805	SAMSUNG_ELECTRO	RP104PJ000CS
52	1	RN8	163K04750S	Res., Array, 75R,	RESNET8P0805	SAMSUNG_ELECTRO	RP104PJ750CS
53	12	R1,R4,R6,R17,R25,R31,R35, R41,R77,R88,R93,R121	161C10021S	Res., 10K, 1%,	RC0402	PDC	FCR02FV1002
54	1	R2	161C49R91S	Res., 49.9R, 1%,	RC0402	PDC	FCR02FV49R9
55	1	R3	161C12121S	Res., 12.1K, 1%,	RC0402	PDC	FCR02FV1212
56	45	R7,R33,R34,R36,R37,R57, R58,R59,R60,R65,R66,R85, R86,R87,R92,R95,R96,R97, R109,R110,R111,R112,R113, R114,R115,R116,R117,R119, R120,R122,R123,R124,R125, R126,R127,R128,R130,R131, R133,R138,R139,R140,R141, R142,R143	161C00005S	Res., 0R, 5%,	RC0402	PDC	FCR02JV000
57	11	R8,R38,R44,R54,R55,R64, R71,R72,R74,R107,R129	161C10011S	Res., 1K, 1%,	RC0402	PDC	FCR02FV1001
58	2	R18,R32	161C10035S	Res., 100K, 5%,	RC0402	PDC	FCR02JV1003
59	1	R19	161C34801S	Res., 348R, 1%,	RC0402	PDC	FCR02FV3480
60	2	R26,R83	161C10521S	Res., 10.5K, 1%,	RC0402	SAMSUNG_ELECTRO	RC1005F1052CS
61	3	R28,R29,R63	161C15001S	Res., 150R, 1%,	RC0402	PDC	FCR02FV1500
62	1	R30	161C22015S	Res., 2.2K, 5%,	RC0402	SAMSUNG_ELECTRO	RC1005J222CS
63	2	R39,R40	161C2R205S	Res., 2.2R, 5%,	RC0402	PDC	FCR02JV2R2
64	1	R42	161C47511S	Res., 4.75K, 1%,	RC0402	SAMSUNG_ELECTRO	RC1005F4751CS
65	2	R43,R56	161C30001S	Res., 300R, 1%,	RC0402	PDC	FCR02FV3000
66	2	R46,R51	161D12001S	Res., 120R, 1%,	RC0603	BOURNS	CR0603-FX-1200E
67	3	R52,R53,R108	161C15011S	Res., 1.5K, 1%,	RC0402	PDC	FCR02FV1501
68	2	R61,R62	161C61901S	Res., 619R, 1%,	RC0402	SAMSUNG_ELECTRO	RC1005F6190CS
69	1	R67	161C56221S	Res., 56.2K, 1%,	RC0402	SAMSUNG_ELECTRO	RC1005F5622CS
70	1	R68	161C16531S	Res., 165K, 1%,	RC0402	SAMSUNG_ELECTRO	RC1005F1653CS
71	1	R69	161C22121S	Res., 22.1K, 1%,	RC0402	PDC	FCR02FV2212
72	3	R70,R73,R84	161HR0051S	Res., 0.005R,	R2512	SAMSUNG_ELECTRO	RCT2512FR005CS
73	7	R75,R78,R79,R89,R94,R132, R134	161C47035S	Res., 470K, 5%,	RC0402	PDC	FCR02JV4703
74	2	R76,R81	161C10001S	Res., 100R, 1%,	RC0402	PDC	FCR02FV1000
75	1	R80	161C10R05S	Res., 10R, 5%,	RC0402	PDC	FCR02JV100
76	1	R82,R137,R144	161C17821S	Res., 17.8K, 1%,	RC0402	SAMSUNG_ELECTRO	RC1005F1782CS
77	11	R90,R91,R98,R99,R100, R101,R102,R103,R104,R105, R106	161C11511S	Res., 1.15K, 1%,	RC0402	SAMSUNG_ELECTRO	RC1005F1151CS
78	1	R118	161C40221S	Res., 40.2K, 1%,	RC0402	SAMSUNG_ELECTRO	RC1005F4022CS
79	1	R135	161C34011S	Res., 3.4K, 1%,	RC0402	SAMSUNG_ELECTRO	RC1005F3401CS
80	1	R136	161C91011S	Res., 9.1K, 1%,	RC0402	SAMSUNG_ELECTRO	RC1005F9101CS
81	4	SCREW1,SCREW2,SCREW3, SCREW4	380J52020	Screw, M2, Pan	NONE	Acton_InoxPro	BF22102003
82	4	SP1,SP2,SP3,SP4	383D52530	Spacer,	M2PAD	Hirosugi	ASU-2004
83	1	SW1	170B00050	Switch, Push-B,	TACTSW6x6THRA	ALPS	SKHHLUA010
84	1	SW2	170B00030S	SWITCH, Push-	TACSW4x6SMRA	ALPS	SKQLLAE012
85	3	U1,U13,U17	123V90000S	IC, Volt. Reg.	SOT23-5	EXAR	SPX5205M5-L/TR
86	2	U2,U5	116A32430I	IC, Interface,	SSOP-28	Intersil	ICL3243EIAZ-T
87	1	U4	106C20000S	IC, Logic,	SC70	FAIRCHILD	NC7SZ00P5
88	1	U6	116A34910S	IC, Interface.	SO-14-150	EXAR	SP3491CN
89	1	U7	120B38180S	IC, Analog, DAC,	LQFP-48	FAIRCHILD	FMS3818KRC(_NL)
90	5	U11,U12,U22,U23,U24	132D42200S	Diode, TVS,	SOT23-6L	AOS	AOZ8007CI
91	1	U14	123V15001S	IC, Volt Reg.,	PSOP-8-2X2	Richtek	RT8272-GSP
92	1	U16	123C20000S	IC, Led driver,	SOT23-5	AIC	AIC1647PVT-R
93	1	U18	106C20580S	IC, Logic,	SC70-6	FAIRCHILD	NC7SZ58P6X(_NL)
94	1	U19	121A03580S	IC, Analog, Op	MSOP-8	ANALOG_DEVICES	AD8542ARMZ-REEL
95	3	U20,U21,U30	117A63150S	IC, Periph.,	SOT-143	ANALOG_DEVICES	ADM6315-29D4ARTRL7
96	2	U25,U26	123A5FR000S	IC, Volt. Reg.,	SOT23-6L	AIC	AIC1845PGTR
97	1	U27	123D4R200S	IC, Battery	MO-220VHHB	Intersil	ISL6291-2CRZ
98	1	U28	102E80660S	IC, Logic, Bus	MO-187CA-8	FAIRCHILD	NC7WB66K8X
99	1	U29	120H27860S	IC, Battery Fuel		MAXIM	DS2786G+T&R
100	1	U31	124D44120S	IC, Analog, Gate	SOT23-6L	LTC	LTC4412[E J]S6#TRPBF
101	1	U32	123M3R600S	IC, Volt Reg.,		Marvell	88PG847B-NAM1-C000-T
102	1	U33	123V74000S	IC, Volt. Reg.,	SOT223-5	NS	LP3965EMP-ADJ
103	1	U34	106D20070S	IC, Logic,	SC70	NXP	74LVC1G07GW,125
104	1	U35	111S30800S	IC, Memory,	MO-229VCED-2	ATMEL	AT24C02BY6-YH-T