

CompuLab SB-T35 rev 1.3 Bill of Materials (Doc Revision: 1.0)							
NOTE: Some of the components appear in SB-T35 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	210E30003S	Battery, Li-AL, alloy-Manganese Dioxide, 3V, 18mAh, Rechargeable, 1220	1	BT1	BT1220SM	Maxell	ML1220H-T9
2	151B10400S	Cap., 100nF, 10V, X7R or X5R, 10%, 0402	110	C1, C2, C3, C4, C6, C7, C8, C9, C10, C13, C14, C15, C19, C20, C21, C22, C23, C24, C25, C26, C27, C29, C30, C31, C32, C33, C34, C39, C40, C61, C64, C65, C79, C80, C81, C82, C84, C85, C87, C98, C99, C100, C101, C102, C105, C106, C107, C108, C109, C110, C111, C112, C113, C114, C115, C116, C117, C118, C119, C120, C121, C122, C123, C124, C125, C126, C128, C130, C133, C134, C135, C136, C139, C140, C141, C142, C143, C145, C146, C147, C148, C149, C150, C151, C152, C153, C154, C155, C156, C157, C158, C159, C160, C161, C166, C167, C172, C175, C176, C177, C343, C344, C349, C350, C351, C352, C353, C354, C356, C357	RC0402		
3	151C10300S	Cap., 10nF, 25V, X7R, 10%, 0402	7	C5, C11, C43, C50, C63, C184, C185	RC0402		
4	151B10620S	Cap., 10uF, 6.3V, X5R/X7R, 20%, 0805	8	C12, C18, C53, C54, C88, C94, C129, C131	C0805		
5	151K33000S	Cap., 33pF, 50V, NPO, 0402 5%	4	C16, C17, C168, C169	RC0402		
6	151B47510S	Cap., 4.7uF, 6.3V, X7R or X5R, 10-20%, 0603	9	C28, C35, C42, C49, C62, C95, C96, C97, C103	C0603-08		
7	151C47680S	Cap., 47uF, 16V, X5R, 20%, 1210, H=2.5mm	2	C36, C38	C1210H2_5		
8	151B10500S	Cap., 1uF, 6.3V, X5R/X7R, 20%, 0402	9	C37, C60, C90, C92, C104, C164, C165, C186, C187	RC0402		
9	151D10200S	Cap., 1nF 0402, X7R, 50V, 10%	1	C41	RC0402		
10	151B10780S	Cap., 100uF, 6.3V, X5R, 20%, 1210, H=2.5mm	12	C44, C45, C58, C59, C68, C69, C89, C93, C173, C174, C358, C359	C1210H2_5		
11	151D10100S	Cap., 100pF, 0402, NPO, 50V, 5% or 1%	2	C46, C91	RC0402		
12	151D22200S	Cap., 2.2nF, 50V, X7R, 10%, 0402	2	C47, C51	RC0402		
13	151B10511S	Cap., 1uF, 6.3V, X5R, 10%, 0603	4	C48, C55, C56, C77	RC0603		
14	151D82010S	Cap., 82pF, 50V, NPO, 5%, 0603	1	C52	RC0603		
15	151C22310S	Cap., 22nF 0603, X7R, 25V, 20%	1	C57	RC0603		
16	151D20110S	Cap., 200pF 0603, NPO, 50V, 0603	2	C66, C67	RC0603		
17	151D22420S	Cap., 220nF, 50V, X7R, 0805	2	C74, C78	C0805		
18	151D47580S	Cap., 4.7uF, 35V, X7R/X5R, 20%, 1210	1	C76	C1210H1_9		
19	151A22500S	Cap., 2.2uF, 4V, X5R/X7R, 20%	9	C162, C163, C170, C178, C179, C180, C181, C182, C183	RC0402		
20	132D10010S	Diode, Transzorb, 5.8V, Bi-Di, 600W	1	D1	SOD-123	VISHAY	SMBJ6.0CA-E3/5B
21	130E05402S	Diode, Schottky, sgl, BAT54WS, SOD-323	2	D2, D3	SOD-323	VISHAY	BAT54WS-GS08
22	130B24000S	Diode, Zener, 24V, 500mW	1	D4	SOD-123	VISHAY	MMSZ5252B-VGS08
23	130E83500S	Diode, Schottky, MBRD-835L, 8A, 35V, DPAK	1	D5	DPAK369A-13	ST	STPS8L30B-TR
24	130E05400S	Diode, Schottky, dual, common cathode, BAT54C, SOT23	1	D12	SOT23	NXP	BAT54C,215
25	130B2R300S	Diode, Zener, 2.4V, SOD-123	1	D13	SOD-123	ON_Semiconductors	MMSZ4681T1
26	139A10020S	LED,Green,SMT,1206	1	DS1	LED-1206	EVERLIGHT	15-21VGC/TR8/T1
27	139A10010S	LED,Red,SMT,1206	1	DS2	LED-1206	EVERLIGHT	15-21SURC/S530-A2/TR8
28	190C00200	Conn., Header, 1x 2, 100MIL, TH, JP2, 3mm tail, 6mm mating length	5	E1, E6, E7, E11, E12	1X2THHDR		
29	190C00300	Conn., Header, 1x 3, 100MIL, TH, JP3, 3mm tail, 6mm mating length	1	E8	1X3THHDR		
30	175P15200S	Fuse, Resettable PTC, 0.75A 1h, 1.5A 1t	1	F1	FUSE-1206	Inpaq	PFS1206I075S
31	182K00304S	Conn. DC Jack, 3.9/1.3mm ext/int Dia., SMT, 3A	1	J1	PJ-0203SM	Astron	15-02037-R
32	180K01900S	Conn., HDMI-A, Rec, RA, th pins <1.6mm, SMT, no screw	1	J2	HDMI-A19-RASM	Astron	12-0113-19-R
33	182K00300S	Conn., Audio Jack stereo, 3.5mm, 3 pin, no switch, SMT	2	J3, J4	AJ35-3P-SM	Kycon	ST-3500-3N-TR
34	185B10010	Conn., Jumper Plug (shunt), 2.54mm (.1") spacing, Gold plated, Black color	9	JP1, JP2, JP3, JP4, JP5, JP6, JP7, JP8, JP9	Shunt/Jumper	Jih_Vei_Electronics	S1002-CLE65-01G
35	147D60000S	Ferrite Bead, Z=60 Ohm@100Mhz,500mA, 0.3 Ohm DCR	3	L1, L2, L3	FB0603	Murata	BLM11P600SPT
36	147D33100S	Ferrite Bead, 0603, Z=330 Ohm@100Mhz,200mA, 0.5 Ohm DCR	3	L4, L5, L6	FB0603	Murata	BLM18AG331SN1D
37	147A2R201S	Inductor, 2.2uH, Isat=14A, 18Mohm DCR	1	L7	IND7x7_2SM	Delta	MPL73-2R2
38	147A22000S	Inductor, 22uH, 0.5A	1	L8	IND4x4_5x3_2S	Delta	SI54-220
39	142D11900S	EMI Filter, Common Mode, 90Ohm, SMT	10	L12, L13, L14, L16, L17, L18, L19, L20, L21, L22	EMO1012	Murata	DLP11SN900HL2L
40	381A54000	Nut, Hex, M3, Steel, Zinc plating, 2.4mm thick, 5.5mm Width	6	NUT1, NUT2, NUT3, NUT4, NUT5, NUT6	NONE	Alka	5FM03
41	182K14000S	Conn., B2B, 2x70 cont., P:0.6mm, Rec, H:4mm	2	P1, P2	B2B06M2X70P	AMP	8-5353189-0
42	190C01402	Conn., Header, 2x 7, 100MIL, TH	1	P4	2X7THHDR		
43	182E00303S	Conn., W2B, Header, 3x1, 1.5mm, SMT	1	P5	1x3W2B1_5SRASM	Molex	87438-0343
44	182P04000S	Conn., FPC, 0.5mm, 40 cont, RA, Downside contact, SMT	2	P7, P26	FPC05SM40-1	CVILux	CF20-401D0R0
45	180K00901S	Conn., Mini-USB, Type AB, SMT, 5 pin	1	P8	MUSB-AB-SM	Astron	22-2605A-5-XT-R
46	190C01600S	Conn., Header, 2x 8, 100MIL, SMT, DR16, 6mm mating length	2	P9, P11	2X8SMHDR		
47	182P02000S	Conn., FPC, 0.5mm, 20 cont, RA, Downside contact, SMT	1	P10	FPC05SM20-1	CVILux	CF20-201D0R0
48	180K00802S	Conn., Ultra Mini Serial, 8pin (Mini-USB type)	1	P12	UMS-8	Wieson	G3169-500001
49	180K00900S	Conn.socket slot SD/MM SDIO card reader, SMT, Push-Push	1	P13	SD-RA-SM	Astron	C54-2108-9-R
50	182K00400	Conn., Mini-Din, 4 pin (S-video app), TH, Full Shield	1	P14	MDIN4TH	Amco	503-4AG1B[A]N]
51	182K06002S	Conn., B2B / B2FPC, 2x30, Rec, 0.5mm, 2mm mating	1	P15	B2FPC05M2x30	Matsushita (Panasonic)	AXK5F60547YG
52	182K01400	Conn., RJ45, W/100B-T mag and Y/G LED, TH	2	P16, P18	RJETH-LED-TH	UDE	RTA-1D4B8V1A
53	180K00801	Conn., USB x2 (dual) Type A, FEM, RA, PC Mount, TH	1	P17	USB-2XA-TH	Astron	22-2104-8(W)-1T-R
54	182P02400S	Conn., FPC, 0.5mm, 24 cont, RA, Downside contact, SMT	1	P19	FPC05SM24-1	CVILux	CF20-241D0R0
55	190C01000S	Conn., Header, 2x 5, 100MIL, SMT, DR10, 6mm mating length	1	P20	2X5SMHDR		
56	190C00400	Conn., Header, 1x4, 100MIL, TH, JP4, 3mm tail, 6mm mating length	4	P22, P23, P24, P25	1X4THHDR		
57	133A99260S	Transistor Array, Dual N-MOSFET, 2.5V Vgs,6A, 20V	1	Q1	SO-8-150	FAIRCHILD	FDS9926A
58	131D41510S	Transistor, P-MOSFET, 3A, 20V, vgs(th)=-0.7V	6	Q4, Q5, Q6, Q7, Q8, Q9	SOT23	International_Rectifier	IRLML6402TRPBF
59	131D03350S	Transistor, N-MOSFET, NDS335N,Vgs=100mOhm@2.5V,1.7A,20V	4	Q16, Q17, Q18, Q19	SOT23	International_Rectifier	IRLML2502TRPBF
60	161C47511S	Res., 4.75K, 1%, 0402, 1/16W	42	R1, R5, R7, R9, R12, R16, R17, R22, R23, R25, R37, R42, R43, R52, R57, R67, R80, R81, R82, R83, R84, R85, R95, R97, R99, R101, R105, R109, R113, R121, R122, R123, R124, R140, R143, R176, R177, R178, R179, R180, R183, R185	RC0402		
61	161C10021S	Res., 10K, 1%, 0402, 1/16W	9	R3, R8, R26, R48, R89, R90, R159, R169, R170	RC0402		
62	161C11511S	Res., 1.15K, 1%, 0402, 1/16W	2	R4, R6	RC0402		
63	161C25501S	Res., 255R , 1%, 0402, 1/16W	2	R13, R15	RC0402		
64	161C12421S	Res., 12.4K, 1%, 0402, 1/16W	1	R20	RC0402		
65	161C10045S	Res., 1M , 5%, 0402, 1/16W	1	R24	RC0402		
66	161C10R05S	Res., 10R, 5%, 0402	3	R27, R62, R65	RC0402		
67	161C00005S	Res., 0R, 5%, 0402, 1/16W	10	R28, R53, R58, R59, R70, R72, R73, R141, R144, R166	RC0402		
68	161C22121S	Res., 22.1K, 1%, 0402, 1/16W	1	R29	RC0402		
69	161C47025S	Res., 47K, 5%, 0402, 1/16W	2	R30, R49	RC0402		
70	161C47501S	Res., 475R, 1%, 0402, 1/16W	1	R31	RC0402		
71	161C30021S	Res., 30K, 1%, 0402, 1/16W	2	R32, R167	RC0402		
72	161C71521S	Res., 71.5K, 1%, 0402, 1/16W	1	R33	RC0402		
73	161C10035S	Res., 100K, 5%, 0402, 1/16W	2	R34, R91	RC0402		
74	161C75011S	Res., 7.5K, 1%, 0402, 1/16W	1	R35	RC0402		
75	161C49911S	Res., 4.99K, 1%, 0402, 1/16W	1	R36	RC0402		
76	161C17821S	Res., 17.8K, 1%, 0402, 1/16W	2	R38, R165	RC0402		
77	161C80R61S	Res., 80.6R, 1%, 0402, 1/16W	1	R39	RC0402		
78	161C10521S	Res., 10.5K, 1%, 0402, 1/16W	1	R40	RC0402		
79	161C20001S	Res., 200R, 1%, 0402, 1/16W	1	R41	RC0402		
80	161C16531S	Res., 165K, 1%, 0402, 1/16W	1	R45	RC0402		
81	161C56221S	Res., 56.2K, 1%, 0402, 1/16W	2	R46, R86	RC0402		
82	161C39221S	Res., 39.2K , 1%, 0402, 1/16W	1	R47	RC0402		
83	161C10011S	Res., 1K, 1%, 0402, 1/16W	6	R50, R55, R66, R79, R92, R188	RC0402		
84	161C15001S	Res., 150R, 1%, 0402, 1/16W	1	R51	RC0402		
85	161HR0181S	Res, 0.018R, 1%, 2010, 1/2W (current sense)	1	R54	R2010		
86	161C34801S	Res., 348R, 1%, 0402, 1/16W	4	R60, R61, R63, R64	RC0402		
87	161C2R205S	Res., 2.2R, 5%, 0402, 1/16W	2	R68, R69	RC0402		
88	161C20021S	Res., 20K, 1%, 0402, 1/16W	4	R75, R76, R77, R78	RC0402		
89	161C43221S	Res., 43.2K, 1%, 0402, 1/16W	1	R87	RC0402		
90	161C22R05S	Res., 22R, 5%, 0402, 1/16W	1	R88	RC0402		
91	161C12121S	Res., 12.1K, 1%, 0402, 1/16W	1	R93	RC0402		
92	161C33R05S	Res., 33R, 5%, 0402, 1/16W	1	R125	RC0402		
93	161D10045S	Res., 1M, 5%, 0603	1	R136	RC0603		
94	161C91011S	Res., 9.1K, 1%, 0402, 1/16W	1	R168	RC0402		
95	161C22015S	Res., 2.2K, 5%, 0402, 1/16W	1	R187	RC0402		
96	163K04510S	Res., Array, 51R, 8P4R, 5%, 0805	2	RN1, RN2	RESNET8P0805		
97	163K04330S	Res., Array, 33R, 8P4R, 5%, 0805	14	RN3, RN4, RN5, RN6, RN7, RN8, RN9, RN10, RN11, RN12, RN13, RN14, RN15, RN16	RESNET8P0805		
98	163K04472S	Res., Array, 4.7K, 8P4R, 5%, 0805	2	RN24, RN31	RESNET8P0805		
99	163I08472S	Res., Netwrk, 4.7K 10P8R, Bussed, 1206 pkg	1	RN25	RESNET10P1206		
100	163K04000S	Res., Array, 0R, 8P4R, 5%, 0805, Convex	1	RN30	RESNET8P0805		
101	380J52020	Screw, M2, Pan head, Phillips, 3.5mm +-0.1mm Length, stainless Steel, Nickel or Zinc plating	4	SCREW1, SCREW2, SCREW3, SCREW4	NONE	Federal_Screw_Works	DF1402003
102	383D52530	Spacer, Hexagonal, M2x.4 thread, 4.14mm Length, Brass with tin coating	4	SP1, SP2, SP3, SP4	M2PAD	WORLD_BRIDGE_MACHINARY	Spacer,M2,L=4.14mm, Brass, Tin coating
103	383L54590	Spacer,(Standoff) Hexagonal+ext, M3/L12mm+M3/L6mm, Brass, Nickel coating	6	STANDOFF1, STANDOFF2, STANDOFF3, STANDOFF4, STANDOFF5, STANDOFF6	NONE	WORLD_BRIDGE_MACHINARY	Spacer, Hexagonal+ext, M3/L12mm+M3/L6mm, Brass, Nickel coating
104	170B00001S	SWITCH, Push-B,Tact, 6x6 mm, 4.3mm High, SMT	2	SW1, SW2	TACTSW6x6SM	APEM-MORS	MJTP1122B
105	116A03650S	IC, Interface, LVDS transmitter, 18 bit, 85Mhz, 3.3V	1	U1	TSSOP-48	NS	DS90C365AMT
106	116A01640S	IC, Interface, Sli164, PanelLink transmitter	1	U2	TQFP-64	Silicon_Image	Sii 164CT64
107	106C20050S	IC, Logic, MicroGate, NC7SZ05P5, Open drain inverter, SC70	1	U3	SC70	ON_Semiconductors	MC74VHC1G05DFT2
108	116B10020S	IC, Periph, 10/100 Ethernet Mac+Phy, Local bus, 16bit, LAN9220	1	U4	QFN-56	SMSC	LAN9220-ABZJ
109	123V90000S	IC, Volt. Reg. Si9183DT-AD-T1, Adjustable, 150mA	3	U5, U9, U27	SOT23-5	EXAR	SPX5205M5-L/TR
110	123V16000S	IC, Volt Reg., LM2743, Sync Buck controller, Step down	1	U6	TSSOP-14	NS	LM2743MTC/NOPB
111	123V74000S	IC, Volt. Reg., adjustable, LP3875EMP-ADJ	1	U7	SOT223-5	NS	LP3965EMP-ADJ
112	123D4R200S	IC, Battery Charger, Li-Ion/Li Polymer, Linear	1	U8	MO-220VHHB	Intersil	ISL6291-2CRZ
113	120H27860S	IC, Battery Fuel Gauge for Li-Ion or Li-Ion Polymer	1	U10	DFN3x3-10	MAXIM	DS2786G+T&R
114	132D42200S	Diode, TVS, Dual USB 2.0 ESD protection, Low cap (1pF)	2	U11, U12	SOT23-6L	AOS	AOZ8007CI
115	106RV2450S	IC, Logic, 74VCX163245, 16bit Dual-supp xcvr w/Config level translation	1	U13	BGA-54-08	TI	74AV