

CompuLab CB-T3 rev 1.1 Bill of Materials (Doc Revision: 1.0)						
NOTE: Some of the components appear in CB-T3 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	308C2R401S	Antenna, Ceramic, 2.45GHz, 100Mhz bandwidth, 2.5VSWR	1	ANT1	ANT5220	Walsin RFANT5220110A0T
2	210E30003S	Battery, Li-AL, alloy-Manganese Dioxide, 3V, 18mAh, Rechargeable, 1220	1	BT1	BT1220SM	Maxell ML1220H-T9
3	151K33000S	Cap., 33pF, 50V, NPO, 0402 5%	6	C1, C2, C3, C4, C20, C21	RC0402	SAMSUNG ELECTRO CL05C330JB5NNNC
4	151D47580S	Cap., 4.7uF, 35V, X7R/X5R, 20%, 1210	1	C5	C1210H1_9	Taiyo_yuden GKM325BJ475[M]KJN-T
5	151B10511S	Cap., 1uF, 6.3V, X5R, 10%, 0603	2	C7, C27	RC0603	Taiyo_yuden JMK107BJ105[M]KJA-T
6	151B10400S	Cap., 100nF, 10V, X7R or X5R, 10%, 0402	74	C8, C9, C10, C11, C12, C13, C16, C19, C23, C24, C25, C26, C28, C29, C31, C33, C34, C35, C36, C37, C38, C39, C40, C41, C42, C43, C44, C45, C46, C47, C48, C49, C50, C51, C52, C57, C58, C59, C60, C61, C62, C63, C64, C65, C66, C69, C70, C71, C72, C73, C74, C75, C76, C77, C79, C80, C81, C82, C83, C84, C85, C86, C87, C89, C97, C98, C99, C102, C103, C111, C118, C119, C122, C123	RC0402	Taiyo_yuden LMK105BJ104KV-F
7	151B10500S	Cap., 1uF, 6.3V, X5R/X7R, 20%, 0402	8	C14, C15, C17, C18, C55, C56, C108, C113	RC0402	SAMSUNG ELECTRO CL05A105[M]KJQ5NNNC
8	151D22420S	Cap., 220nF, 50V, X7R, 0805	1	C22	C0805	Murata GRM21BR71H224KA01L
9	151D10100S	Cap., 100pF, 0402, NPO, 50V, 5% or 1%	1	C30	RC0402	SAMSUNG ELECTRO CL05C101JB5NNNC
10	151K47010S	Cap., 47uF, 50V, NPO, 10%, 0603	1	C32	RC0603	SAMSUNG ELECTRO CL10C470KBNC
11	151B10780S	Cap., 100uF, 6.3V, X5R, 20%, 1210, H=2.5mm	5	C53, C54, C78, C120, C121	C1210H2_5	Taiyo_yuden JMK325BJ107MM-T
12	151B10620S	Cap., 10uF, 6.3V, X5R/X7R, 20%, 0805	7	C67, C90, C104, C105, C109, C114, C116	C0805	Taiyo_yuden JMK212BJ106[M]KJG-T
13	151C10520S	Cap., 1uF, 16V, X7R, 20%, 0805	2	C68, C88	C0805	Murata GRM21BR71C105KA01L
14	151A22500S	Cap., 2.2uF, 4V, X5R/X7R, 20%	7	C91, C92, C93, C94, C95, C96, C115	RC0402	Murata GRM155R60G225ME15D
15	151B10610S	Cap., 10uF, 6.3V, X5R/X7R, 20%, 0603	1	C101	C0603-08	SAMSUNG ELECTRO CL10A106[M]KJQ8NNNC
16	151B47510S	Cap., 4.7uF, 6.3V, X7R or X5R, 10-20%, 0603	1	C106	C0603-08	Taiyo_yuden JMK107BJ475[M]KJA-T
17	151D82010S	Cap., 82pF, 50V, NPO, 5%, 0603	1	C107	RC0603	Walsin 0603N820J500LT
18	151C10300S	Cap., 10nF, 25V, X7R, 10%, 0402	1	C112	RC0402	SAMSUNG ELECTRO CL05B103KB5NNNC
19	130E05402S	Diode, Schottky, sgl. BAT54WS, SOD-323	1	D1	SOD-323	DIODES Inc BAT54WS-7-F
20	130B24000S	Diode, Zener, 24V, 500mW	1	D2	SOD-123	DIODES Inc MMS3252B-F
21	139A10020S	LED, Green, SMT, 1206	2	DS3, DS5	LED-1206	EVERLIGHT QTLP650D4TR
22	139A10010S	LED, Red, SMT, 1206	1	DS4	LED-1206	EVERLIGHT 15-21SURC/SS30-A2/TR8
23	184C5000S	Conn., Coax, Miniature 3x3mm, 6GHz, SMD U.FL, I-PEX	1	J1	CX-R3x3x1_26S	Insert MC-901
24	147A22000S	Inductor, 22uH, 0.5A	1	L1	IND4x4_5x3_2S	Murata LQH44PN220MP0L
25	142D11900S	EMI Filter, Common Mode, 90Ohm, SMT	3	L2, L3, L4	EMI1012	Murata DLP115N900SL2L (ROHS)
26	147D33100S	Ferrite Bead, 0603, Z=330 Ohm@100Mhz, 200mA, 0.5 Ohm DCR	1	L5	FB0603	Murata BLM18AG331SN1D
27	147A1R001S	Inductor, 1uH, 2A, DCR < 100mOhm	1	L7	IND-3x3_5	Murata LQH32PN1R0NN0L
28	182K14000S	Conn., B2B, 2x70 cont., P-0.6mm, Rec, H=4mm	2	P1, P2	B2B06M2x70R	AMP 8-5353189-0
29	182K06002S	Conn., B2B / B2FPC, 2x30, Rec, 0.5mm, 2mm mating	1	P3	B2FPC05M2x30	Matsushita (Panasonic) AXKF560547YG
30	180K00802S	Conn., Ultra Mini Serial, 8pin (Mini-USB type)	1	P4	UMS-8	Wieson G3169-500001
31	180K00502S	Conn., Micro-USB, AB-type (OTG), Rec, RA, with optional pegs	3	P5, P7, P9	MICRO-USB-AB-RA-SM	Hirose ZX62-AB-5PA
32	182P02000S	Conn., FPC, 0.5mm, 20 cont, RA, Downside contact, SMT	2	P6, P10	FPC05SM20-1	CVILux CF20-201D0R0
33	180K00401S	Conn., Audio Jack Stereo, 3.5mm, with switch	1	P8	AJ35-4P-SW-SM	SC_Precision SCJ305P00DGOBPG9G
34	182K00802S	Conn., Micro-SD (T-Flash), Push/pull type, SMT	1	P11	MicroSD-PP-RA-SM	Astron 1590008-0A4-R
35	182E00200S	Conn., W2B, Header, 2x1, 1.25mm, RA, SMT	1	P12	1x2W2B1_25RASM	Molex 53261-0271
36	182E00303S	Conn., W2B, Header, 3x1, 1.5mm, SMT	1	P13	1x3W2B1_5RASM	Molex 87438-0343
37	131D74130S	Transistor, P-MOSFET, 8.3A, 20V, vgs(th)=-1.8V / Rds=30mOhm	1	Q1	Powerpak1212-8	VISHAY SI7121DN-T1-GE3
38	161C12121S	Res., 12.1K, 1%, 0402, 1/16W	1	R1	RC0402	Yageo RC0402FR-0712K1L
39	161C10011S	Res., 1K, 1%, 0402, 1/16W	5	R2, R5, R10, R55, R66	RC0402	Yageo RC0402FR-071K1L
40	161C2R205S	Res., 2.2R, 5%, 0402, 1/16W	2	R3, R4	RC0402	Yageo RC0402JR-072R2L
41	161C2R205S	Res., 2.2R, 5%, 0402, 1/16W	1	R6	RC0402	Yageo RC0402JR-072R2L
42	161D10045S	Res., 1M, 5%, 0603	1	R8	RC0603	Yageo RC0603JR-071ML
43	161C00005S	Res., 0R, 5%, 0402, 1/16W	14	R9, R15, R23, R24, R29, R51, R52, R64, R70, R84, R86, R98, R99, R100	RC0402	Walsin WR04X000PTL
44	161C22015S	Res., 2.2K, 5%, 0402, 1/16W	1	R11	RC0402	Yageo RC0402JR-072K2L
45	161C10R05S	Res., 10R, 5%, 0402	1	R13	RC0402	Yageo RC0402JR-0710RL
46	161C10045S	Res., 1M, 5%, 0402, 1/16W	4	R18, R20, R42, R43	RC0402	Yageo RC0402JR-071ML
47	161C56201S	Res., 562R, 1%, 0402, 1/16W	1	R21	RC0402	Yageo RC0402FR-07562RL
48	161C17411S	Res., 1.74K, 1%, 0402, 1/16W	1	R25	RC0402	Yageo RC0402FR-071K74L
49	161C47511S	Res., 4.75K, 1%, 0402, 1/16W	1	R30	RC0402	Yageo RC0402FR-074K75L
50	161C20021S	Res., 20K, 1%, 0402, 1/16W	7	R32, R33, R34, R35, R37, R80, R81	RC0402	Yageo RC0402FR-0720KL
51	161C10521S	Res., 10.5K, 1%, 0402, 1/16W	5	R44, R46, R48, R49, R65	RC0402	Yageo RC0402FR-0710K5L
52	161C49921S	Res., 49.9K, 1%, 0402, 1/16W	1	R47	RC0402	Yageo RC0402FR-0749K9L
53	161C11511S	Res., 1.15K, 1%, 0402, 1/16W	1	R53	RC0402	Yageo RC0402FR-071K15L
54	161C20011S	Res., 2K, 1%, 0402, 1/16W	2	R54, R94	RC0402	Yageo RC0402FR-072KL
55	161C17821S	Res., 17.8K, 1%, 0402, 1/16W	1	R58	RC0402	Yageo RC0402FR-0717K8L
56	161C10001S	Res., 100R, 1%, 0402, 1/16W	3	R59, R60, R92	RC0402	Yageo RC0402FR-07100RL
57	161C10021S	Res., 10K, 1%, 0402, 1/16W	5	R63, R72, R73, R78, R79	RC0402	Yageo RC0402FR-0710KL
58	161C15001S	Res., 150R, 1%, 0402, 1/16W	1	R67	RC0402	Yageo RC0402FR-07150RL
59	161HR0181S	Res., 0.018R, 1%, 2010, 1/2W (current sense)	1	R75	R2010	Yageo RL2010FR-070R018L
60	161C10035S	Res., 100K, 5%, 0402, 1/16W	1	R82	RC0402	Yageo RC0402JR-07100KL
61	161C24911S	Res., 2.49K, 1%, 0402, 1/16W	1	R83	RC0402	Yageo RC0402FR-072K49L
62	163K04103S	Res., Array, 10K, 8P4R, 5%, 0805	6	RN1, RN6, RN9, RN10, RN11, RN12	RESNET8P0805	Walsin WA04X103_JTL
63	163K04330S	Res., Array, 33R, 8P4R, 5%, 0805	6	RN2, RN3, RN4, RN5, RN7, RN8	RESNET8P0805	Yageo YC124JR-0733RL
64	380J52020	Screw, M2, Pan head, Phillips, 3.5mm +0.1mm Length, stainless Steel, Nickel or Zinc plating	4	SCREW1, SCREW2, SCREW3, SCREW4		Federal_Screw_Works DF1402003
65	383B52530S	Spacer, Solderable, Round, M2 Threaded, H=4.0mm, SMT mount	4	SP3, SP4, SP5, SP6	SpacerM2H4SM	MAC8 2SSB-4.0
66	170B00030S	SWITCH, Push-B, Tact, RA, 6x4mm, H=1.8mm, SMT	4	SW1, SW2, SW3, SW4	TACTSW4x6SMRA	ALPS SKQLLAE012
67	170B00001S	SWITCH, Push-B, Tact, 6x6 mm, 4.3mm High, SMT	1	SW6	TACTSW6x6SM	DIPTRONICS DTSM-61N-V-TJR
68	116A25140S	IC, Interface, USB 2.0 Hub, 4 ports, High-speed	1	U1	MO-220VJJD-1	SMSC USB2514B-AEZG
69	123C20000S	IC, Led driver, Step-up, PWM, 2.7-5.5V Vin, 20mA Iout (var), 6-9 LED	1	U2	SOT23-5	Yobon YB1518ST25
70	106D20070S	IC, Logic, MicroGate, 7SZ07, Open drain buffer, Vcc1.65-5.5V	2	U3, U22	SC70	NXP 74LVC1G07GW,125
71	132D42200S	Diode, TVS, Dual USB 2.0 ESD protection, Low cap (1pF)	2	U4, U5	SOT23-6L-H1	NXP IP4220CZ6,125
72	111S30800S	IC, Memory, EEPROM, 24C02, 256x8, 1.8-5.5V, I2C interface	1	U6	MO-229VCED-2	ON_Semiconductors CAT24C02VP2I-GT3
73	106RV2452S	IC, Logic, 74AVC16T245, TSSOP-48 16bit Dual-supp xcvr w/Config level translation	1	U8	TSSOP-48	NXP 74AVC16T245DGG,112
74	208D10010	Microphone, Condenser, Omnidirectional, 6mm Dia, TH	1	U9	Mic6x1_8TH	AAC ACMG6018-02P28
75	116A10030S	IC, Interface, 4 bit bidi level translator, with auto direction sensing (TSSOP package)	1	U10	TSSOP-14	TI TXB0104PWR
76	121A48810S	IC, Analog, LM4881MM, Stereo headphone amplifier w/Shtdwn, MSOP-8	2	U11, U12	MSOP-8	TI TPA6110A2DGNRG4
77	123A5R000S	IC, Volt. Reg., Charge pump, 5V, 100mA	2	U13, U16	SOT23-6L	AIC AIC1848
78	106C20050S	IC, Logic, MicroGate, NC7SZ05P5, Open drain inverter, SC70	1	U14	SC70	FAIRCHILD NC7SZ05P5XC
79	106F20740S	IC, Logic, MicroGate, NC7SZ74, D-Type FF w/Clr, Set	1	U15	MO-187CA-8	NXP 74LVC1G74DC
80	121A03580S	IC, Analog, Op Amp, Dual, LMV358	1	U17	MSOP-8	TI LMV358IDGKR
81	123V4R500S	IC, Volt. Reg, LDO, 500mA, Adjustable 0.8-4.5V, RT9186	1	U18	DFN3x3-8	Richtek RT9186AGQV
82	123D4R201S	IC, Battery Charger with USB/Adapter changeover, 2A, 1C Li+	1	U19	MO-220W4040E2.6x2.6	MAXIM MAX8903CET+
83	123V74000S	IC, Volt. Reg, adjustable, LP3875EMP-ADJ	1	U20	SOT23-5	NS LP3875EMPX-ADJ/NOPB
84	120H27860S	IC, Battery Fuel Gauge for Li-Ion or Li-Ion Polymer	1	U21	DFN3x3-10	MAXIM DS2786G+T&R
85	132D12250S	Diode, TVS, ESD, Array 4-CH, 0.8pF, Hi speed (DP/HDMI/SATA...)	1	U25	MO-287U2510D	ON_Semiconductors CM1225-04DE
86	141B24602I	XTAL, Industrial, 24.000Mhz, 100PPM, 3x5mm 4 pads SMT	1	X1	XTAL5x3-4	Siward XTL541500NLP-24.000-20TR