

CV TOOLBOX MODEL 244

BILL OF MATERIALS REV 1.1

PCB1

SEMICONDUCTORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
2N3904	Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8	8		610-2N3904
TL072	IC4	1		595-TL072CP
TL074	IC2	1		595-TL074CN
DG202	IC1	1		781-DG202BDJ-E3
V2164	IC3	1		http://smallbear-electronics.mybigcommerce.com/ic-v2164d/
1N457	D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, D12, D13, D14, D15, D16, D17, D18, D19, D20, D21, D22, D23, D24, D25	25		512-1N457

CAPACITORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
0.1uF	C1, C2, C3, C4, C5, C6, C7, CX1, CX2, CX3, CX4, CX5, CX6, CX7	14	CERAMIC 5MM LS	581-SA105E104M
0.01uF	C8, C9, C10, C11, C12, C13, C14, C15	8	CERAMIC 5MM LS	581-SA105E103M
100pF	C16, C18, C20, C21, C22, C23	6	CERAMIC 5MM LS	581-SA102A101J
560pF	C17, C19, C24, C25	4	CERAMIC 5MM LS	810-FK28C0G2A561J
0.1uF	F1, F2, F3, F4, F5, F6, F7, F8	8	CERAMIC SMT 0805	GRM21BR71H104KA01L

RESISTORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
0R	R17	1		603-MFR-25FTE52-0R
499R	R47, R48, R61, R63	4	1% 1/4W	271-499-RC
1K	R8, R25, R27, R29, R31, R33, R35, R37	8	1% 1/4W	271-1K-RC
2K2	R7	1	1% 1/4W	271-2.2K-RC
3K6	R38, R39, R40, R41, R42, R43, R44	7	1% 1/4W	271-3.6K-RC
4K7	R1, R2, R3, R4, R5, R9, R10, R12	8	1% 1/4W	271-4.7K-RC
6K8	R6, R24, R26, R28, R30, R32, R34, R36	8	1% 1/4W	271-6.8K-RC
7K5	R62	1	1% 1/4W	271-7.5K-RC
30K	R49, R50, R51, R52, R53, R55, R56, R57, R59, R60	10	1% 1/4W	271-30K-RC
47K	R11, R13	2	1% 1/4W	271-47K-RC
60K4	R54, R58	2	1% 1/4W	271-60.4K-RC
100K	R18, R20, R21, R22, R23, R46	6	1% 1/4W	271-100K-RC
2M2	R14, R15, R16, R19, R45	5	5% 1/4W	291-2.2M-RC
10K	RX1, RX2, RX3, RX4, RX5, RX6, RX7	7	1% SMT 0805	71-CRCW0805-10K-E3
1M		7	5% 1/4W	291-1M-RC

MISC

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
SPDT ON-OFF-ON	SW1	1	TOGGLE SWITCH	633-M201301
SPDT (ON)-OFF-(ON)	SW2	1	TOGGLE SWITCH	633-M201801
SPDT (ON)-ON	SW3, SW4, SW5, SW6, SW7, SW8, SW9, SW10	8	TOGGLE SWITCH	633-M201501
	PLD1, PLD2, PLD3	3	PLD 14 PIN (FEMALE)	517-929975-01-07-RK
	LED1, LED2, LED3, LED4, LED5, LED6, LED7, LED8, LED9, LED10, LED11, LED12, LED13, LED14, LED15, LED16	16	RED 3MM LED	630-HLMP-K101
		11	BANANA JACK BLACK	530-108-0903-1
		9	BANANA JACK BLUE	530-108-0910-1
		1	BANANA JACK VIOLET	530-108-0912-1
		8	BANANA JACK ORANGE	530-108-0906-1
		7	BANANA JACK RED	530-108-0902-1
		2	BANANA JACK GREY	530-108-0913-1
		5	BLUE SWITCH CAP	
		2	YELLOW SWITCH CAP	
		1	WHITE SWITCH CAP	
		1	RED SWITCH CAP	

PCB2

SEMICONDUCTORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
1N457	D26, D27, D28, D29, D30, D31, D32, D33, D34, D35	10		512-1N457
TL071	IC21	1		595-TL071CP
TL072	IC7, IC12	2		595-TL072CP
TL074	IC6, IC20, IC24, IC25	4		595-TL074CN
CD4017	IC8, IC9, IC10, IC11	4		595-CD4017BE
CD4024	IC13	1		595-CD4024BE
CD4052	IC14, IC15	2		595-CD4052BE
CA3140	IC16, IC17, IC18, IC19	4		968-CA3140AEZ
ATTINY84A	IC22	1		556-ATTINY84A-PU
ATTINY88	IC5	1		556-ATTINY88-PU
MAX5250	IC23	1		700-MAX5250BCPP

CAPACITORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
15uF	C27, C28, C30, C41	4	ELECTROLYTIC 2MM LS	647-UPJ1H150MDD
100nF	C34, C37, C38, C40	4	FILM 5MM LS	871-B32529C3104J189
47pF	C33, C35, C36, C39	4	CERAMIC 5MM LS	581-SA102A470J
0.01uF	C32, C42, C43, C44, C45	5	CERAMIC 5MM LS	581-SA105E103M
0.1uF	C26, C29, C31	3	CERAMIC 5MM LS	581-SA105E104M
0.1uF	F9, F10, F11, F12, F13, F14, F15, F16, F17, F18, F19, F20, F21, F22, F23, F24, F25, F26, F27, F28, F29, F30, F31, F32, F33, F34, F35, F36, F37, F39, F40, F41, F42, F43, F44, F45, F46, F47	38	CERAMIC SMT 0805	GRM21BR71H104KA01L
2.2uF	F38	1	CERAMIC SMT 0805	81-GRM21BR71E225KA73

RESISTORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
330R	R98, R105, R109	3	1% 1/4W	271-330-RC
1K	R119, R131, R140, R152	4	1% 1/4W	271-1K-RC
2K	R117, R129, R138, R147	4	1% 1/4W	271-2K-RC
6K8	R121	1	1% 1/4W	271-6.8K-RC
9K76	R114, R123, R134, R144	4	1% 1/4W	271-9.76K-RC
10K	R64, R67, R73, R75, R79, R87, R92, R97, R102, R103, R108, R112, R116, R118, R120, R127, R128, R130, R137, R139, R146, R150	22	1% 1/4W	271-10K-RC
12K	R115	1	1% 1/4W	271-12K-RC
15K	R89, R91, R94	3	1% 1/4W	271-15K-RC
20K	R65, R68, R74, R76, R104	5	1% 1/4W	271-20K-RC
22K	R95, R96, R99, R100, R101, R106, R107	7	1% 1/4W	271-22K-RC
47K	R66, R69, R70, R71, R72, R124, R125, R126, R132, R135, R136	11	1% 1/4W	271-47K-RC
100K	R78, R80, R81, R82, R83, R84, R85, R88, R90, R93, R110, R111, R141, R142, R145, R148, R149, R151, R153, R154, R155, R156, R157, R158	24	1% 1/4W	271-100K-RC
2M2	R113, R122, R133, R143	4	5% 1/4W	291-2.2M-RC
4M7	R77, R86	2	5% 1/4W	291-4.7M-RC
500R	TR2, TR5, TR7, TR9	4	SINGLE TURN	652-3362P-1-501LF
5K	TR1	1	SINGLE TURN	652-3362P-1-502LF
100K	TR3, TR6, TR8, TR10	4	SINGLE TURN	652-3362P-1-104LF
100K	TR4	1	MULTI TURN	652-3296W-1-104LF

MISC

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
	SW11	1	DIP SWITCH	774-2083
	PBD1, PBD2, PBD3	3	PLD 14 PIN (MALE)	517-929836-01-07-RK
		1	POWER CONNECTOR	587-306-50-010