

SOURCE OF UNCERTAINTY MODEL 266

BILL OF MATERIALS REV 3.0

PCB1

SEMICONDUCTORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
TL071	IC1	1		595-TL071CP
CA3080	IC2	1		eBay
TL074	IC3, IC4, IC7	3		595-TL074CN
CD4015	IC5, IC27	2		595-CD4015BE
CD4030	IC6	1		595-CD4030BE
CD4013	IC8, IC9	2		595-CD4013BE
LF398	IC10, IC11	2		926-LF398N/NOPB
CD4016	IC12	1		595-CD4016BE
2N3906	Q1, Q2	2		610-2N3906
J201	Q3	1		106-J201
2N3904	Q4, Q5, Q6, Q7, Q8, Q9	6		610-2N3904
1N457	D1-D15	15		512-1N457
1N5240	Z1	1		512-1N5240B

CAPACITORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
1uFx50V	C1	1	ELECTROLYTIC 2MM LS	647-URS1H010MDD
180nF	C8, C9	2	FILM 5MM LS	871-B32529C184J289
47nF	C2, C11, C13	3	FILM 5MM LS	871-B32529C1473J
10nF	C7, C12	2	FILM 5MM LS	871-B32529C103J
0.1uF	F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, F13, F14, F15, F16, F17, F18, F19, F38	20	SMT 0805	581-08055C104K
100pF	C3, C4, C5, C6, C10	5	CERAMIC 5MM LS	581-SA102A101J

RESISTORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
100K	R1, R8, R10, R15, R25, R42, R51, R52, R56, R63, R66, R76, R84, R85, R94, R99, R105, R107, R112, R115, R117, R118, R119, R127, R128, R129	26	1% 1/4W	271-100K-RC
10K	R2, R4, R7, R12, R13, R14, R23, R69, R77, R80, R89, R97, R102, R104, R109, R111	16	1% 1/4W	271-10K-RC
150K	R3, R34, R40, R41, R59, R116, R126, R134	8	1% 1/4W	271-150K-RC
2K	R5	1	1% 1/4W	271-2K-RC
120K	R6, R17, R18, R27, R29, R31, R98, R100, R108	9	1% 1/4W	271-120K-RC
2M2	R9, R16, R22, R96	4	5% 1/4W	291-2.2M-RC
1K	R11, R82, R90, R91	4	1% 1/4W	271-1K-RC
33K	R19, R67	2	1% 1/4W	271-33K-RC
1M	R20, R83	2	1% 1/4W	271-1.0M-RC
47K	R21, R24, R26, R47, R73, R78, R92, R95, R101, R110, R113, R114	12	1% 1/4W	271-47K-RC
130K	R28, R36, R38	3	1% 1/4W	271-130K-RC
180K	R30, R32, R39	3	1% 1/4W	271-180K-RC
200K	R33, R35, R37, R43	4	1% 1/4W	271-200K-RC
820K	R44	1	1% 1/4W	271-820K-RC
390K	R45	1	1% 1/4W	271-390K-RC
1M5	R46	1	5% 1/4W	291-1.5M-RC
3M3	R48	1	5% 1/4W	291-3.3M-RC
24K	R49	1	1% 1/4W	271-24K-RC
220R	R50, R58, R81, R87, R88	5	1% 1/4W	271-220-RC
6K8	R53, R61, R124, R125, R135, R136	6	1% 1/4W	271-6.8K-RC
2K2	R54, R74, R120, R121, R130, R131	6	1% 1/4W	271-2.2K-RC
820R	R55, R75, R122, R123, R132, R133	6	1% 1/4W	271-820-RC
30K	R57	1	1% 1/4W	271-30K-RC
15K	R60, R62, R79, R106	4	1% 1/4W	271-15K-RC
18K	R64, R68, R70	3	1% 1/4W	271-18K-RC
4K7	R65, R71, R72	3	1% 1/4W	271-4.7K-RC
22K	R86, R93	2	1% 1/4W	271-22K-RC
220K	R103	1	1% 1/4W	271-220K-RC
100K	TR1	1	SINGLE TURN	858-25PR100KLF
10-100K LIN	POT1, POT2, POT3, POT4, POT5	5	9MM POTENTIOMETER	http://smallbear-electronics.mybigcommerce.com/alpha-single-gang-9mm-right-angle-pc-mount/

MISC

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
	J1, J2, J3, J4, J5, J6	6	TINY JAX	502-41
	LED1, LED2, LED3, LED4, LED5, LED6	6	RED 3MM LED	630-HLMP-K101
	PLD1	1	PLD 16 PIN (FEMALE)	517-929975-01-08-RK
		3	ORANGE BANANA JACK	530-108-0906-1
		7	BLACK BANANA JACK	530-108-0903-1
		2	RED BANANA JACK	530-108-0902-1
		5	BLUE BANANA JACK	530-108-0910-1
		5	VIOLET BANANA JACK	530-108-0912-1

PCB2

SEMICONDUCTORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
7810	IC13	1	10V TO-252	755-BA7810FP-E2
PIC12F675	IC14	1	PREPROGRAMMED NOISE PIC	http://electricdruoid.net/product/noise-1b-noise-generator/
TL074	IC15, IC16, IC17, IC24, IC25	5		595-TL074CN
NE556	IC18	1		595-NE556N
CD4016	IC19, IC20, IC21	3		595-CD4016BE
CD4030	IC22	1		595-CD4030BE
CD4006	IC23	1		eBay
TL072	IC26	1		595-TL072IP
1N457	D16, D17, D18	3		512-1N457
1N5228	Z2, Z3	2		512-1N5228B

CAPACITORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
15uF	C14, C15, C16, C18, C20, C23	6	ELECTROLYTIC 2MM LS	647-UKL1V150MDDANA
10uFx50V	C35, C36, C43, C44	4	ELECTROLYTIC 2MM LS	667-ECA-1HHG100
2.2uFx50V	C40, C48	2	ELECTROLYTIC 2MM LS	647-URZ1H2R2MDD
1uFx50V	C27, C32, C38, C39, C46, C47	6	ELECTROLYTIC 2MM LS	647-URS1H010MDD
47nF	C24, C50	2	FILM 5MM LS	871-B32529C1473J
22nF	C33	1	FILM 5MM LS	871-B32529C1223J
10nF	C25, C30, C41, C49	4	FILM 5MM LS	871-B32529C103J
2nF	C29	1	FILM 5MM LS	871-B32529C1222J189
0.1uF	C17, C19, C21, C22	4	CERAMIC 5MM LS	581-SA105E104M
0.1uF	F20, F21, F22, F23, F24, F25, F26, F27, F28, F29, F30, F31, F32, F33, F34, F35, F36, F37	18	SMT 0805	581-08055C104K
1000pF	C34, C37, C42, C45	4	CERAMIC 5MM LS	581-SA105A102JAR
470pF	C26	1	CERAMIC 5MM LS	581-SA101A471JAR
220pF	C28	1	CERAMIC 5MM LS	581-SA101A221JAR
100pF	C31, C51, C52, C53	4	CERAMIC 5MM LS	581-SA102A101J

RESISTORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
1K	R137, R138, R139, R140, R166, R181	6	1% 1/4W	271-1K-RC
220K	R141	1	1% 1/4W	271-220K-RC
47K	R142, R234, R237, R238	4	1% 1/4W	271-47K-RC
6K8	R143	1	1% 1/4W	271-6.8K-RC
4K7	R144, R172, R187	3	1% 1/4W	271-4.7K-RC
10K	R145, R150, R153, R155, R156, R159, R161, R163, R164, R168, R176, R183, R192, R195, R207, R215, R220, R225, R230	19	1% 1/4W	271-10K-RC
150K	R146	1	1% 1/4W	271-150K-RC
12K	R147	1	1% 1/4W	271-12K-RC
470K	R148, R149	2	1% 1/4W	271-470K-RC
100K	R151, R158, R178, R193, R197, R198, R204, R209, R210, R213, R217, R221, R228, R235, R240	15	1% 1/4W	271-100K-RC
180K	R152	1	1% 1/4W	271-180K-RC
120K	R154, R214, R229	3	1% 1/4W	271-120K-RC
27K	R157	1	1% 1/4W	271-27K-RC
33K	R160, R162, R165, R173, R180, R188	6	1% 1/4W	271-33K-RC
3K3	R167, R182	2	1% 1/4W	271-3.3K-RC
10M	R169, R170, R171, R184, R185, R186	6	5% 1/4W	291-10M-RC
100R	R174, R189	2	1% 1/4W	271-100-RC
10R	R175, R190	2	1% 1/4W	271-10-RC
22M	R177, R191	2	5% 1/4W	291-22M-RC
1M	R179, R194, R199, R203, R211, R216, R222, R227	8	1% 1/4W	271-1.0M-RC
2M2	R196, R226	2	1% 1/4W	271-2.2M-RC
680R	R200	1	1% 1/4W	271-680-RC
24K9	R201	1	1% 1/4W	271-24.9K-RC
220R	R202, R208, R236, R239	4	1% 1/4W	271-220-RC
1M2	R205, R212, R218, R223, R231	5	5% 1/4W	291-1.2M-RC
49K9	R206	1	1% 1/4W	271-49.9K-RC
200K	R219	1	1% 1/4W	271-200K-RC
402K	R224	1	1% 1/4W	271-402K-RC
820K	R232	1	1% 1/4W	271-820K-RC
68K1	R233	1	1% 1/4W	271-68.1K-RC
82K	R241	1	1% 1/4W	271-82K-RC
60K4	R242	1	1% 1/4W	271-60.4K-RC

MISC

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
VTL5C3	V1, V3	2	SINGLE VACTROL	http://smallbear-electronics.mybigcommerce.com/photocoupler-vactec-vtl5c3/
VTL5C3/2	V2, V4	2	DUAL VACTROL	http://smallbear-electronics.mybigcommerce.com/photocoupler-vactec-vtl5c3-2/
	PBD1	1	PLD 16 PIN (MALE)	517-929836-09-08-RK
		1	POWER CONNECTOR	587-306-50-010