

I2C 555 Controller BOM								
Item #	Reference Designator	Qty	Manufacturer	Mfg Part #	Description / Value	Package/Footprint	Type	Instructions / Notes
1	C11 C12	2	Samsung	CL21B103KBANNNC	CAP CER 10000PF 50V X7R 0805	0805	SMD	
2	C8 C10	2	Samsung	CL21B473KBCNNNC	CAP CER 0.047UF 50V X7R 0805	0805	SMD	
3	C14 C15 C16 C17 C18 C19 C20 C21 C22 C23 C24 C25 C26 C27 C28 C29	16	Samsung	CL21B104KBCNNWC	CAP CER 0.1UF 50V X7R 0805	0805	SMD	
4	C1 C3 C5 C7 C9 C13	6	Samsung	CL21A105KBCLNNC	CAP CER 1UF 50V X5R 0805	0805	SMD	
5	C30	1	Panasonic	ECA-1CM100I	10 µF 16 V Aluminum Electrolytic Capacitor Radial	2.5mm Pitch	THRU-HOLE	
6	C6	1	Samsung	CL21A106KOQNNNE	CAP CER 10UF 16V X5R 0805	0805	SMD	
7	C2 C4	2						Do Not Populate
8	D2	1	Micro Commercial Co	SS16-LTP	DIODE SCHOTTKY 60V 1A DO214AC	DO214AC	SMD	
9	D1 D3 D4 D6 D7 D8	6	Harvatek	B1911PG--20D000514U1930	Green 562nm LED Indication - Discrete 2V 0603 (1608 Metric)	0603	SMD	
10	D5	1	Harvatek	B1911UY--20D000114U1930	Amber 589nm LED Indication - Discrete 2V 0603 (1608 Metric)	0603	SMD	
11	J1 J2 J3 J4 J5 J7 J8 J9 J13 J14 J15	11	Sullins Connector Solutions	PREC002SAAN-RC	Connector Header Through Hole 2 position 0.100"	2POS	THRU-HOLE	
12	J6 J10 J11 J12	4	Sullins Connector Solutions	PREC003SAAN-RC	Connector Header Through Hole 3 position 0.100"	3POS	THRU-HOLE	
13	Q1 Q2 Q3 Q4 Q5 Q6	6	Onsemi	BSS138	MOSFET N-CH 50V 220MA SOT23-3	SOT23-3	SMD	
14	R10 R64	2	Panasonic	ERJ-6GEY0R00V	RES SMD 0 OHM JUMPER 1/8W 0805	0805	SMD	
15	R2 R50 R51 R53 R55 R58 R61 R63	8	Panasonic	ERJ-6GEYJ102V	RES SMD 1K OHM 5% 1/8W 0805	0805	SMD	
16	R1 R4 R15	3	Panasonic	ERJ-6GEYJ202V	RES SMD 2K OHM 5% 1/8W 0805	0805	SMD	
17	R3 R14	2	Panasonic	ERJ-6GEYJ682V	RES SMD 6.8K OHM 5% 1/8W 0805	0805	SMD	
18	R6 R7 R9 R11 R12 R13 R16 R17 R19 R20 R28 R31 R32 R33 R34 R35 R39 R40 R41 R47 R57	21	Panasonic	ERJ-6GEYJ103V	RES SMD 10K OHM 5% 1/8W 0805	0805	SMD	
19	R18 R42 R43 R44 R45	5	Panasonic	ERJ-6GEYJ104V	RES SMD 100K OHM 5% 1/8W 0805	0805	SMD	
20	R5 R8	2	ALPSALPINE	RK097111091H	100kΩ ±20% 50mW Potentiometer	2.5mm Pitch	THRU-HOLE	
21	R21 R22 R23 R24 R25 R26 R27 R29 R30 R36 R37 R38 R46 R48 R49 R52 R54 R56 R59 R60 R62	21						Do Not Populate
22	SW1	1	APEM Inc.	MHSS1105	SWITCH SLIDE SPDT 300MA 6V	2.5mm Pitch	THRU-HOLE	
23	U4 U10 U11	3	Texas Instruments	CD4066BE	IC BILATERAL SW 14DIP	DIP14	THRU-HOLE	
24	U1 U2	2	Texas Instruments	NE555P	IC OSC SINGLE TIMER 100KHZ 8-DIP	DIP8	THRU-HOLE	
25	U6 U7	2	Texas Instruments	SN74HC74N	IC FF D-TYPE DUAL 1BIT 14DIP	DIP14	THRU-HOLE	
26	U8 U9	2	Texas Instruments	PCF8574DW	IC XPNDR 100KHZ I2C 16SOIC	SOIC-16	SMD	
27	U3	1	Texas Instruments	TL072BCP	IC OPAMP JFET 2 CIRCUIT 8DIP	DIP8	THRU-HOLE	
28	U5 U12 U13 U14 U15	5	Renesas	X9C104P	IC DCTL POT 100KOHM 100TAP 8DIP	DIP8	THRU-HOLE	