

QC2018 Main Badge BOM - rB4

#	Designator	Name	Spec	Manufacturer	PN	Footprint	Pads	THs	QTY
1	BT1, BT2	Battery holder	Battery holder AA	Keystone	2460	TH	0	2	2
2	C1, C2, C9, C8	Pwr caps	4.7uF, X7R	Samsung	CL10B475KQ8NQNQC	0603	2		4
3	C12, C14, C16, C7	Bypass	1uF, POL	Samsung	CL10B105KP8NNNC	0603	2		4
4	C21, C22	Xtal Caps	22pF, 1%x 16V	KEMET	C0603C220K3GACTU	0603	2		2
5	C3, C10	Reset Cap	1nF (1000 pF)	Vishay	VJ0603Y102JXQCW1BC	0603	2		2
6	C4	Bypass	10uF, Pol	Murata	GRM188C80G106ME47D	0603	2		1
7	C5, C11, C13, C15, C6, C25, C26, C27, C28, C29, C17	Bypass	100nF / 0.1u	Samsung	CL10F104ZO8NNNC	0603	2		11
8	D1 - D18	Side View LED	1204 Side View	Harvatek	HQ12-2353RGBC	1204	4		18
9	D19 - D24	RGB	0603 Top View 20mA	Harvatek	HQ67-2302RGBC	0605	4		6
10	D99 - DNP	TVS	4xBi	Diodes Inc	DT1446-04S-7	SOT-363-6	6		
11	DNP	Screws	4-40 ??"			NA			4
12	DNP	Acrylic	1/4" cut			NA			1
13	DNP	Top Board	NA	Queercon	DNP	NA			1
14	DS1, DS2	Character Disp	1x24 character display	Wintek	WD-C2401P-1GNN	TH		14	2
15	J1, J2, J3, J4	Recepticles	4-40, 0.375"	Keystone	4881	SMT	1	0	4
16	L1, L2	Pwr ind	4.7uH	Bourns	CV201210-4R7K	0805	2		2
17	P0	Power Header	DNP	DNP	DNP	2.54			0
18	P1	U1 Prog	5x2.54	DNP	DNP	2.54			0
19	P2	U2 Prog	5x2.54	DNP	DNP	2.54			0
20	P5	U5 Prog	2x4x2.54	DNP	DNP	2.54			0
21	P9	Crappy Add On	6x2.54	DNP	DNP	2.45			1
22	R1, R3	Reset Res	47k	Bourns	CR0603-JW-473GLF	0603	2		2
23	R11	Div Res 5V	342k, 1%	Vishay	CRCW0805340KFKEA	0805	2		1
24	R2, R4, R8, R10	Pwr res	1.02M, 1%	Yageo	RC0603JR-131ML	0603	2		4
25	R5	Reference resistor	1k 0603 TBD	Rohm	ESR03EZPJ102	0603	2		1
26	R6, R7	Pull Up Resistor	2k	KOA Speer	RK73B1JTTDD202J	0603			2
27	R9	Div Res 3.3	529k, 1%	Yageo	RC0805FR-07536KL	0805	2		1

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28	S0	Slide switch	SPDT	TE Connectivity	1825232-1	2.0mm		5	1
29	S1, S2, S3, S4	Buttons	13mm	Apem	ADTSM66NVTR	6x6mm 13h	4		4
30	U1	Display CPU		TI	MSP430FR5972IPMR	TSSOP/ RGC	64		1
31	U2	Game CPU		TI	MSP430FR2422	PW	48		1
32	U3	Radio		HopeRF	RFM75	SMT	12		1
33	U4	LED Controller		Holtek	HT16D35B	SOP-24	48		1
34	U5	Flash Chip	16 Mbit	Cypress	S25FS064SAGMFV01	8-SOIC	8		1
35	U6	Shift	8 bit shift register	Toshiba	74HC164D(BJ)	SOIC-14	14		1
36	VR1, VR2	Boost Regulator	Boost Regulator	Skyworks	AAT1217ICA-1.2-T1	TSOT23-6	6		2
37	X1	Clock XTL	32k Crystal	ABRACON	ABS25-32.768KHz-4-T	4-SOJ	4		1
			Total Badges		450				
			Number of Pads		396				
			Number of Holes		37				
			Number of Unique Components		29				
			Total Number of Components		90				