

QC2016 Main Badge BOM - rB1 - 6/21/2016

#	Designator	Name	Spec	Manufacturer	PN	Footprint	QTY
1	BT1	Battery Holder	2xAA, TH	Eagle Plastic Devices	12BH321P-GR	TH	1
2	C1, C2	PS Cap	4.7uF X7R	Murata	GRM188R60J475KE19D	0603	2
3	C20	Reset Cap	2.2nF, 25V, 20%	Murata	GRM188R71H222KA01D	0603	1
4	C3, C4, C6, C16	Bypass cap	0.1 uF	Kemet	C0603C104K3RACTU	0603	4
5	C5, C7, C17	RF Bypass	1.0uF, 25V, 10%	Murata	GRM188R61E105KA12D	0603	3
8	D0 - D14, D20-34, D40 - D54, D60 - D74	White	5 mA, White	Lite-On	LTW-C190DA5	0603	60
9	D80, D81, D82, D83, D85, D86, D87, D88	0603 RGB LEDs	0603 Chip LED	HARVATEK	HQ19-2333RGBC	1.6x1.5x055	8
10	D99	ESD	4C, Bidirectional	Diodes Inc	DT1446-04S-7	SOT-363-6	1
11	L1	PS Inductor	4.7uH, 1A, 110mOhms	Bourns	CVH252009-4R7M	1008	1
12	P1	Prog Header	4 Positions Header, Unshr	Harwin	M22-2520205	2.00 TH	0
13	P32A, P32B	Female Hat	4 Position Header Connect	Sullins	PPTC041LGBN-RC	2.54 TH	2
14	P6	Male mating	3P 2mm TH RA, Male	Harwin	M22-2530305	2.00 TH	1
15	P9	Female Mating	3P 2mm TH RA, Female	Sullins	NPPN031FGGN-RC	2.00 TH	1
16	Q1, Q2, Q3	Drivers	P-Channel MOSFET	Infineon	BSD223PH6327XTSA1	SOT-363-6	3
17	Q10	Light Sensor	Photo transistor	Fairchild	KDT00030TR	PLCC-2	1
18	R1	Reset PU	50k	Panasonic	ERJ-3EKF4992V	0603	1
19	R10, R11, R12, R13, R14, R15	Gate Limiter	100 Ohms	KOA	RK73B1ETTP101J	0402	6
20	R22	Resistor, pull down	100k	Yageo	RC0402FR-07100KL	0402	1
21	R3	LED Driver Resistor	1.8k, 1%	Panasonic	ERJ-3EKF1801V	0603	1
22	R4, R8	Resistors	1.02M	Vishay / Dale	CRCW06031M02FKEA	0603	2
23	R6	Photodiode Res	1.1k, 1%, 100mW	Vishay / Dale	CRCW06031K10FKEA	0603	1
24	R9	3.3 divider Res	604k, 1%	Yageo	RC0603FR-07604KL	0603	1
25	S0	Power Switch	SPST SMT	Alps	SSSS810701	NA	1
26	S1, S2	Button	SMT	uxcell	a13090500ux1149	5x5x1.5	2
27	TS1	Temp Sensor	Vout	Microchip	MCP9700T-E/TT	SOT-23-3	1
28	U1	MCU	16-bit Microcontroller	Texas Instruments	MSP430FR5949IDA	DA / TSOP	1

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29	U2	Wireless	2.4 GHz SOC	HopeRF	RFM75	SMT	1
30	U3	LED Controller	PWM, latching	Texas Instruments	TLC5948ADBQ	SSOP-24	1
31	VR1	Regulator	Boost Regulator	Skyworks	AAT1217ICA-1.2-T1	TSOT23-6	1
			Number of Pads	284			
			Number of Holes	18			
			Number of Unique Components	31			
			Total Number of Components	110			