

Bill of Materials for OSHChip V1.0 11/30/2015

#	Description	Designator	Footprint	Comment	Quantity	Supplier	Supplier Part Number
1	Chip Antenna 2.4 GHz	A1	AMCA31-2R450G-S1F-T	Chip Antenna, 2.450 GHz	1	Mouser	815-CA312R450GS1FT
2	Capacitor 12 pF 0402 50V NP0 5%	C1, C2	0402 CAP RouteThru	12 pF 0402	2	Digi-Key	1276-1178-1-ND
3	Capacitor 0.1 uF 0402 10 V X5R 10%	C3, C5, C8, C9	0402 CAP RouteThru	0.1 uF 0402	4	Digi-Key	1276-1001-1-ND
4	Capacitor 1.0 nF 0402 25 V X7R 10%	C4	0402 CAP RouteThru	1.0 nF 0402	1	Newark	06R4614
5	Capacitor 47 nF 0402 16V X7R 10%	C6	0402 CAP RouteThru	47 nF 0402	1	Digi-Key	587-1225-1-ND
6	Capacitor 2.2 nF 0402 50 V X7R 10%	C7	0402 CAP RouteThru	2.2 nF 0402	1	Digi-Key	311-1037-1-ND
7	LED Red 630 nm 0402	D1	0402 LED Route Thru RED	Red LED 0402	1	Mouser	604-APHHS1005SURCK
8	LED APHHS1005CGCK Green 570nm 0402	D2	0402 LED Route Thru GREEN	Green LED 0402	1	Mouser	604-APHHS1005CGCK
9	LED Blue 466 nm 0402	D3	0402 LED Route Thru BLUE	Blue LED 0402	1	Mouser	720-LBQH9G-N1P2-35-1
10	DIP Pin 8 Etched	J1, J2	SIP 8 P2.54MM	DIP Pin 8	2	Fliptronics	OSHChip_Pin_8
11	FTSH-102-01-L-D	J3	HDR_2x2_1.27mm-Through_Hole_SW	FTSH-102-01-L-D	1	Newark	01R3028
12	CPW 125mil , over ground plane, .062" board, 50 Ohm	L1	CPW_125	CPW 125mil	1	Fliptronics	CPW-125mil
13	Balun matched to WLCSP nRF61822	L2	BAL-ST-WLCSP	Balun WLCSP	1	Mouser	511-BAL-NRF02D3
14	Resistor 4.7K 0402 1/16 W 1%	R1, R2, R3	0402 Res Route Thru	4.7K 0402	3	Mouser	603-AC0402FR-074K7L
15	Multi-protocol Bluetooth Low Energy and 2.4GHz proprietary system-on-chip	U1	BGA62C40P9X9_383X383X55	nRF51822_CFAC WLCSP	1	Digi-Key	1490-1041-1-ND
16	16MHz Xtal, 2.5mmx2.0mm, 10ppm, 8 pF	X1	BT-XTAL_2520	16 MHz 2.5mm x 2.0mm	1	Digi-Key	SER3913CT-ND