WOWL Board Assembly/BOM

Project: 1010309 Gone Fishing
Part #: 1010309-900-0010

Released 8/31/2020 RMP

Revision: A

Part Supplied by Creare
DNP = Do Not Populate

Item	Quantity	Reference	Description	Manufacturer	Manufacturer Part#	Suggested Vendor	Suggested Vendor Part #	Footprint	Temp Min	Temp Max
1	1	DOC	Schematic	Creare	1010309-900-0011, Rev.A	N/A	N/A	N/A	N/A	N/A
2	1	PCB	PCB		1010309-900-0012, Rev.A	N/A	N/A	N/A	N/A	N/A
3	1	ANT1	PCB Antenna, 2.4GHz	DNP	DNP	DNP	DNP	pcbantenna_an043	DNP	DNP
4	2	B1,B2	BATTERY NIMH 1.2V 700MAH AAA	Panasonic - BSG	HHR70AAAB8T	Digi-Key	P213T-ND	PANASONIC HHR70AAAB8T	65°C	-10°C
5	4	C1,C7,C9,C17	1.5nF, 100V, 5%, C0G, Ceramic, 0603	Murata	GCM1885C2A152JA16D	Digi-Key	490-4951-1-ND	CAPC160X80X90L35N	125°C	-55°C
6	16	C2,C3,C4,C6,C8,C10,C11,C14,C15,C18,C20,C2	0.1uF, 50V, 10%, X7R, Ceramic, 0402	TDK	CGA2B3X7R1H104K050BB	Digi-Key	445-6899-1-ND	CAPC100X50X55L20N	125°C	-55°C
7	3	1,C30,C40,C42,C43 C5,C13,C32	15nF. 100V. 10%. X7R. Ceramic. 0603	Murata	GCM188R72A153KA37D	Digi-Key	490-8029-1-ND	CAPC160X80X90L35N	125°C	-55°C
8	6	C12,C31,C36,C37,C38,C39	22uF, 25V, 20%, X5R, Ceramic, 0805	TDK Corporation	C2012X5R1E226M125AC	Digi-Key	445-9112-1-ND	CAPC2013X145N	85°C	-55°C
9	2	C16.C22	DNP, Capacitor, 0402	NA NA	NA NA	DNP	DNP	CAPC1005X55L25N	00 0	00 0
10	1	C19	0.8pF, 50V, ±0.1pF, NP0, Ceramic, 0402	Murata	GJM1555C1HR80BB01D	Digi-Key	490-6080-1-ND	CAPC100X50X55L25N	125°C	-55°C
11	4	C23,C24,C27,C28	12pF, 50V, 1%, NP0, Ceramic, 0402	Kemet	C0402C120F5GACTU	Mouser	80-C0402C120F5GACTU	CAPC100X50X55L25N	125°C	-55°C
12	1	C25	100pF, 50V, 1%, C0G, Ceramic, 0402	AVX	04025A101FAT2A	Digi-Key	478-3658-1-ND	CAPC100X50X56L25N	125°C	-55°C
13	2	C26,C41	1uF, 25V, 10%, X5R, Ceramic, 0603	AVX Corporation	06033D105KAT2A	Digi-Key	478-5142-1-ND	CAPC1608X94N	85°C	-55°C
14	1	C29 C33,C34	10nF, 50V, 5%, X7R, Ceramic, 0603	Kemet Murata	C0603C103J5RACTU GRM1555C1H102FA01D	Digi-Key	399-1092-1-ND 490-6189-1-ND	CAPC160X80X87L35N	125°C	-55°C
15 16	1	C35,C34	1nF, 50V, 1%, C0G, Ceramic, 0402 47nF, 50V, 10%, X7R, Ceramic, 0402	Murata TDK	CGA2B3X7R1H473K050BB	Digi-Key Digi-Kev	445-6897-1-ND	CAPC100X50X55L25N CAPC100X50X55L20N	125°C 125°C	-55°C -55°C
17	1	D1	LED, Green, 2.1V, 20mA	SunLED	XZVG54W-8	Digi-Key Digi-Key	1497-1434-1-ND	LEDC200X125X120L40N	85°C	-35 C
18	1	D2	LED Red/Yel, 2.2V/2V, 20mA, 1206	SunLED	XZM2CRKCYK55W-8	Digi-Key	1497-1306-1-ND	SUNLED XZM2CRKCYK55W-8	85°C	-40°C
19	1	F1	Fuse, 2A, 63VDC, Slow, 1206	Bourns	SF-1206SP200M-2	DNP	DNP	DNP	DNP	DNP
20	1	J1	FFC/FPC, 6pos, 0.5mm, 0.5A, 50V, R/A, SMD	Molex	5034800600	Digi-Key	WM1387CT-ND	Molex 503480-0600	85°C	-40°C
	1	J1				<u> </u>		_		
21	1	L1	3.9nH, 400mA, High Frequency, 0402	TDK	MLK1005S3N9ST000	Digi-Key	445-1462-1-ND	INDC1005X60L15	125°C	-55°C
22	1	L2	10uH, 100mA, Wirewound, 0603	Abracon	AISC-0603F-100J-T	Digi-Key	535-12537-1-ND	Abracon AISC-0603F	85°C	-40°C
23 24	1	L3 L4	15nH, 300mA, High Frequency, 0402	TDK Corporation EPCOS (TDK)	MLK1005S15NJT000	Digi-Key	445-1469-1-ND 495-2649-1-ND	INDC1005X60L15 INDM3225X240N	125°C 150°C	-55°C -55°C
25	1	D2	4.7uH, 700mA, Wirewound, 1210 MOSFET, P-CH, 20V, 3.6A, SOT-23	Diodes	B82422H1472K DMP2035U-7	Digi-Key Digi-Key	DMP2035U-7DICT-ND	SOT23-3P91 240X120L53X44	150°C	-55°C
	'	R1,R2,R3,R4,R6,R7,R8,R9,R12,R13,R14,R15,R								
26	14	16.R18	33 Ohms, 1%, 50V, 1/10W, Thick, 0402	Panasonic	ERJ-2RKF33R0X	Digi-Key	P33.0LCT-ND	RESC100X50X40L25	155°C	-55°C
27	6	R5,R11,R17,R35,R36,R37	1M, 1%, 50V, 1/10W, Thick, 0402	Panasonic	ERJ-2RKF1004X	Digi-Key	P1.00MLCT-ND	RESC100X50X40L25	155°C	-55°C
28	10	R10,R19,R20,R26,R27,R28,R29,R32,R33,R38	10K, 1%, 50V, 1/10W, Thick, 0402	Panasonic Electronic	ERJ-2RKF1002X	Digi-Key	P10.0KLCT-ND	RESC100X50X40L25	155°C	-55°C
				Components		= :				
29	8	R21,R22,R23,R34,R39,R43,R46,R50	100 Ohms, 1%, 50V, 1/10W, Thick, 0402	Panasonic	ERJ-2RKF1000X	Digi-Key	P100LCT-ND	RESC100X50X40L25	155°C	-55°C
30 31	2	R24,R25 R30	12K, 0.1%, 150V, 1/4W, Thick, 0805 140K, 1%, 50V, 1/10W, Thick, 0402	Panasonic Panasonic	ERJ-PB6B1202V ERJ-2RKF1403X	Digi-Key Digi-Kev	P20716CT-ND P140KLCT-ND	RESC200X125X70L40N RESC100X50X40L25	155°C 155°C	-55°C -55°C
32	1	R31	100K, 1%, 50V, 1/10W, Thick, 0402	Panasonic	ERJ-2RKF1403X ERJ-2RKF1003X	Digi-Key Digi-Key	P100KLCT-ND	RESC100X50X40L25	155°C	-55°C
33	2	R44.R45	4.02K, 1%, 50V, 1/10W, Thick, 0402	Panasonic	ERJ-2RKF4021X	Digi-Key	P4.02KLCT-ND	RESC100X50X40L25	155°C	-55°C
34	1	R51	Jumper, 50V, 1/16W, Thick, 0402	Vishay	CRCW04020000Z0ED	Digi-Key	541-0.0JCT-ND	RESC100X50X40L25	155°C	-55°C
35	1	RT1	Thermistor, NTC, 100 Ohms,max Temp 15°C,	Heraeus Nexensos USA	32208551	Digi-Key	1759-1034-ND	Heraeus 32208551	150°C	0°C
	'		TH			= :		_		
36	1	RT2	Thermistor, NTC, 10K, Max Temp 125°C,TH	Cantherm	MF52A2103J3470	Digi-Key	317-1258-ND	THRMRB220W45L300T300H950	125°C	-55°C
37	1	RT3	THERMISTOR, NTC, 10KOHM, 3976K, Radial	TE	GA10K3A1A	Digi-Key	223-1537-ND	TE GA10K3A1A	125°C	-40°C
38	26	TP1,TP2,TP3,TP4,TP5,TP6,TP7,TP8,TP9,TP10,TP11 ,TP12,TP13,TP14,TP15,TP16,TP17,TP18,TP19,TP2 0,TP21,TP23,TP24,TP25,TP26,TP27	DNP, Test Point, SMD, 25 mil Round Pad	NA	NA	DNP	DNP	TP_C0635	DNP	DNP
39	1	TP28,TP29	Wireless Charging Coil	TDK	WR303050-15F5-G	Mouser	810-WR303050-15F5-G	TP340X180N		
40	1	U1	Temperature, Digital, -40~125°C, 6SON	Silicon Labs	SI7051-A20-IMR	Digi-Key	336-4764-1-ND	SON7P100_300X300X80L40X40T24 0X150N	125°C	-40°C
41	1	U10	Buffer, Triple, Open Drain, 8XSON	Nexperia USA Inc.	74LVC3G07GS,115	Digi-Key	1727-8082-1-ND	PSON8P35_135X100X35L31X16N	125°C	-40°C
42	1	U2	Pressure Sensor, 0 ~30bar, ±400 mbar, I2C, SMD	TE Connectivity Measurement Specialties	MS583730BA01-50	Digi-Key	223-1704-1-ND	icdfn4_330x330x285l130x130	85°C	-20°C
43	2	U3,U4	ADC, 16-Bit, 4-Ch, 2KSPS, PGA, 17VQFN	Texas Instruments	ADS1120IRVAT	Digi-Key	296-39849-1-ND	QFN17P50_350X350X100L40X24T2 14N	125°C	-40°C
44	1	U5	SOC, 2.4 GHz Bluetooth, Cortex M4 MCU, 512K Flash, 64K RAM, 48QFN	Nordic	NRF52832-QFAA-R	Digi-Key	1490-1052-1-ND	QFN40P600X600X90-49N	85°C	-40°C
45	1	U6	Flash Memory, 16Mbit, 80MHz, 8USON	Macronix	MX25V1635FZUI	Digi-Key	1092-1264-1-ND	PSON9P50_200X300X60L40X25T1 60X20N	85°C	-40°C
46	1	U7	Battery Charger, Multi-Chemistry, 60V, 250mA, 10DFN	Analog Devices Inc.	LTC4079EDD#TRPBF	Digi-Key	LTC4079EDD#TRPBFCT-ND	SON11P50_300X300X80L40X25T23 8X165N	125°C	-40°C
47	1	U8	Wireless Power Receiver 20-WLCSP	Semtech Corporation	TS51223-M000WCSR	Digi-Key	TS51223-M000WCSRCT-ND	BGA20NP40_5X4_230X190X57B26 N	85°C	-40°C
48	1	U9	Opamp, Single, GP, RRIO, 6.2kHz, SC70-5	Texas Instruments	LPV521MG/NOPB	Digi-Key	296-39069-1-ND	SOT23-5P65 210X110L36X22N	125°C	-40°C
49 50	1	Y1	Crystal, 32.768kHz, 9pF, SMD	Abracon	ABS05-32.768KHZ-9-T	Digi-Key	535-11897-1-ND	DFN160X100X50-2NA	85°C	-40°C
	. 1	Y2	Crystal, 32MHz, 8pF, SMD	ECS	ECS-320-8-37CKM	Digi-Key	XC1547CT-ND	OSCCC200X160X46-4NA	70°C	-20°C