

WOWL Board Assembly/BOM
Project: 1010403 Gone Fishing
Part #: 1010403-900-0010
Revision: A

Released 02/22/2022 RWM

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	1010403-900-0011, Rev.A	N/A	N/A	N/A	N/A	N/A
2	1	PCB	PCB		1010403-900-0012, 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	-	-
4	2	B1 B2	BATTERY NIMH 1.2V 700MAH AAA	Panasonic - BSG	HHR70AAAB8T	Digi-Key	P213T-ND	PANASONIC_HHR70AAAB8T	-10°C	65°C
5	15	C1 C3 C4 C5 C7 C8 C10 C12 C13 C14 C15 C40 C42 C43 C55	0.1uF, 50V, 10%, X7R, Ceramic, 0402	TDK	CGA2B3X7R1H104K050BB	Digi-Key	445-6899-1-ND	CAPC100X50X55L20N	-55°C	125°C
6	1	C2	10uF, 10V, 20%, X5R, Ceramic, 0402	Samsung	CL05A106MP8NUB8	Digi-Key	1276-6830-1-ND	CAPC100X50X90L25N	-55°C	85°C
7	1	C11	DNP 10uF, 10V, 20%, X5R, Ceramic, 0402	Samsung	CL05A106MP8NUB8	Digi-Key	1276-6830-1-ND	CAPC100X50X90L25N	-55°C	85°C
8	1	C6	4.7uF, 10V, 10%, X5R, Ceramic, 0402	Murata	ZRB15XR61A475KE01D	Digi-Key	490-13252-1-ND	CAPC100X50X80L25N	-55°C	85°C
9	1	C9	4.7uF, 10V, 10%, X5R, Ceramic, 0402	TDK	C1005X5R1A475K050BC	Digi-Key	445-13820-1-ND	CAPC102X52X65L15N	-55°C	85°C
10	1	C16	3.4pF, 50V, ±0.1pF, C0G, Ceramic, 0402	KEMET	CBR04C349B5GAC	Digi-Key	399-16077-1-ND	CAPC100X50X55L22N	-55°C	125°C
11	1	C17	0.22uF, 35V, 10%, X7R, Ceramic, 0402	TDK	C1005X7R1V224K050BE	Digi-Key	445-173778-1-ND	CAPC100X50X60L15N	-55°C	125°C
12	1	C18	1.2PF, 50V, ±0.05pF, C0G, Ceramic, 0402	Murata	GJM1555C1H1R2WB01D	Digi-Key	490-11195-1-ND	CAPC100X50X55L25N	-55°C	125°C
13	1	C19	0.5pF, 50V, ±0.1pF, C0G, Ceramic, 0402	Murata	GJM1555C1HR50BB01D	Digi-Key	490-6077-1-ND	CAPC100X50X55L25N	-55°C	125°C
14	2	C20 C21	DNP, 1uF, 10V, 10%, X7S, Ceramic, 0402	TDK	C1005X7S1A105K050BC	Digi-Key	445-9116-1-ND	CAPC100X50X55L15N	-55°C	125°C
15	2	C22 C25	22nF, 50V, 10%, X7R, Ceramic, 0402	Murata Electronics North	GRM155R71H223KA12D	Digi-Key	490-3884-1-ND	CAPC100X50X55L25N	-55°C	125°C
16	2	C23 C24	DNP 12pF, 50V, 1%, NP0, Ceramic, 0402	Murata	GJM1555C1H120FB01D	Digi-Key	490-11190-1-ND	CAPC100X50X55L25N	-55°C	125°C
17	2	C27 C28	12pF, 50V, 1%, NP0, Ceramic, 0402	Murata	GJM1555C1H120FB01D	Digi-Key	490-11190-1-ND	CAPC100X50X55L25N	-55°C	125°C
18	2	C26 C44	0.47uF, 25V, 10%, X5R, Ceramic, 0402	TDK	C1005X5R1E474K050BB	Digi-Key	445-8020-1-ND	CAPC100X50X55L15N	-55°C	85°C
19	1	C32	15nF, 100V, 10%, X7R, Ceramic, 0603	Murata	GCM188R72A153KA37D	Digi-Key	490-8029-1-ND	CAPC160X80X90L35N	-55°C	125°C
20	1	C41	1uF, 25V, 10%, X5R, Ceramic, 0603	AVX Corporation	06033D105KAT2A	Digi-Key	478-5142-1-ND	CAPC1608X94N	-55°C	85°C
21	2	C45 C46	10nF, 50V, 10%, X8R, Ceramic, 0402	TDK Corporation	C1005X8R1H103K050BB	Digi-Key	445-8851-1-ND	CAPC100X50X55L15N	-55°C	150°C
22	2	C47 C48	68nF, 50V, 5%, X7R, Ceramic, 0603	Kemet	C0603C683J5RACTU	Digi-Key	399-9121-1-ND	CAPC160X80X87L35N	-55°C	125°C
23	1	C49	47nF, 50V, 10%, X7R, Ceramic, 0402	TDK	CGA2B3X7R1H473K050BB	Digi-Key	445-6897-1-ND	CAPC100X50X55L20N	-55°C	125°C
24	1	C50	1.8nF, 50V, 10%, X7R, Ceramic, 0402	AVX	04025C182KAT2A	Digi-Key	478-1104-1-ND	CAPC100X50X56L25N	-55°C	125°C
25	1	C51	100pF, 50V, 5%, C0G, Ceramic, 0603	KEMET	C0603T101J5GCLTU	Digi-Key	399-6300-1-ND	CAPC160X80X87L35N	-55°C	125°C
26	1	C52	0.1uF, 50V, 10%, X7R, Ceramic, 0603	AVX	06035C104KAZ2A	Digi-Key	478-3540-1-ND	CAPC1608X94N	-55°C	125°C
27	2	C53 C54	10uF, 35V, 20%, X5R, Ceramic, 0603	Murata	GRM188R6YA106MA73D	Digi-Key	490-13248-1-ND	CAPC160X80X100L37N	-55°C	85°C
28	1	D1	LED, Green, 2.1V, 20mA	SunLED	XZVG54W-8	Digi-Key	1497-1434-1-ND	LEDL200X125X120L40N	-40°C	85°C
29	1	D2	LED Red/Yel, 2.2V/2V, 20mA, 1206	SunLED	XZM2CRKCYK55W-8	Digi-Key	1497-1306-1-ND	SUNLED_XZM2CRKCYK55W-8	-40°C	85°C
30	1	D3	LED, Green, 2.1V, 10mA, 3.2mcd, 0603	Lite-On Inc.	LTST-C190GKT	Digi-Key	160-1183-1-ND	LEDL200X80N	-55°C	85°C
31	1	F1	DNP Fuse, 2A, 63VDC, Slow, 1206	Bourns	SF-1206SP200M-2	Digi-Key	SF-1206SP200M-2CT-ND	FUSC320X160X117L51N	-55°C	150°C
32	1	J1	FFC/FPC, 6pos, 0.5mm, 0.5A, 50V, R/A, SMD	Molex	5034800600	Digi-Key	WM1387CT-ND	Molex_503480-0600	-40°C	85°C
33	1	L1	3.3nH, 2A, High Freq., Wirewound, 0402	Murata	LQW15AN3N3B80D	Digi-Key	490-7641-1-ND	INDC100X60X60L20N	-55°C	125°C
34	1	L2	22nH, 350mA, High Frequency, 0402	Murata	LQG15HS22NH02D	Digi-Key	490-15112-1-ND	INDC100X50X55L25N	-55°C	125°C
35	1	L3	10uH, 200mA, 1.2 OHM, 0603	KEMET	L0603B100KPWFT	Digi-Key	399-17789-1-ND	indc160x80x90l35n	-40°C	105°C
36	1	Q2	MOSFET, P-CH, 20V, 3.6A, SOT-23	Diodes	DMP2035U-7	Digi-Key	DMP2035U-7DICT-ND	SOT23-3P91_240X120L53X44	-55°C	150°C
37	1	R1	DNP, 100K, 1%, 150V, 1/8W, Thick, 0805	Vishay	DNP(CRCW0805100KFKEA)			RESC205X125X50L35N	-55°C	155°C
38	1	R2	100K, 1%, 50V, 1/16W, Thick, 0402	Vishay	CRCW0402100KFKEA	Digi-Key	541-100KLCT-ND	RESC100X50X40L25	-55°C	155°C
39	1	R3	4.99K, 1%, 50V, 1/16W, Thick, 0402	Vishay	CRCW04024K99FKED	Digi-Key	541-4.99KLCT-ND	RESC100X50X40L25	-55°C	155°C
40	1	R4	4.99K, 1%, 50V, 1/16W, Thick, 0402	Vishay	CRCW04024K99FKED	Digi-Key	541-4.99KLCT-ND	RESC100X50X40L25	-55°C	155°C
41	1	R5	140 Ohms, 1%, 75V, 1/10W, Thick, 0603	Vishay Dale	CRCW0603140RFKEA	Digi-Key	541-140HCT-ND	RESC1609X50N	-55°C	155°C
42	1	R6	Jumper, 50V, 1.5A, Thick, 0402	Stackpole	RMCF0402ZTOR00	Digi-Key	RMCF0402ZTOR00CT-ND	RESC100X50X40L25	-55°C	155°C
43	4	R7 R8 R9 R12	33 Ohms, 1%, 50V, 1/10W, Thick, 0402	Panasonic	ERJ-2RKF33R0X	Digi-Key	P33.0LCT-ND	RESC100X50X40L25	-55°C	155°C
44	4	R10 R19 R26 R33	10K, 1%, 50V, 1/10W, Thick, 0402	Panasonic Electronic Com	ERJ-2RKF1002X	Digi-Key	P10.0KLCT-ND	RESC100X50X40L25	-55°C	155°C
45	4	R11 R35 R36 R37	1M, 1%, 50V, 1/10W, Thick, 0402	Panasonic	ERJ-2RKF1004X	Digi-Key	P1.00MLCT-ND	RESC100X50X40L25	-55°C	155°C
46	1	R13	DNP, Jumper, 50V, 1/16W, Thick, 0402	Vishay	CRCW04020000Z0ED	Digi-Key	541-0.0JCT-ND	RESC100X50X40L25	-55°C	155°C
47	1	R14	10K, 1%, 50V, 1/16W, Thick, 0402	Vishay	CRCW040210K0FKED	Digi-Key	541-10.0KLCT-ND	RESC100X50X40L25	-55°C	155°C
48	1	R15	357 Ohms, 1%, 75V, 1/10W, Thick, 0603	Vishay	CRCW0603357RFKEA	Digi-Key	541-357HCT-ND	RESC155X85X50L30N	-55°C	155°C
49	1	R16	1.5K, 5%, 75V, 1/10W, Thick, 0603	Vishay Dale	CRCW06031K50JNEA	Digi-Key	541-1.5KGCT-ND	RESC1609X50N	-55°C	155°C

50	2	R17 R20	1M, 1%, 50V, 1/16W, Thick, 0402	KOA Speer	RK73H1ETTP1004F	Mouser	660-RK73H1ETTP1004F	RESC1005X40N	-55°C	155°C
51	3	R22 R34 R39	100 Ohms, 1%, 50V, 1/10W, Thick, 0402	Panasonic	ERJ-2RKF1000X	Digi-Key	P100LCT-ND	RESC100X50X40L25	-55°C	155°C
52	1	R30	140K, 1%, 50V, 1/10W, Thick, 0402	Panasonic	ERJ-2RKF1403X	Digi-Key	P140KLCT-ND	RESC100X50X40L25	-55°C	155°C
53	1	R31	100K, 1%, 50V, 1/10W, Thick, 0402	Panasonic	ERJ-2RKF1003X	Digi-Key	P100KLCT-ND	RESC100X50X40L25	-55°C	155°C
54	2	R44 R45	4.02K, 1%, 50V, 1/10W, Thick, 0402	Panasonic	ERJ-2RKF4021X	Digi-Key	P4.02KLCT-ND	RESC100X50X40L25	-55°C	155°C
55	1	RT2	Thermistor, NTC, 10K, Max Temp 125°C,TH	Cantherm	MF52A2103J3470	Digi-Key	317-1258-ND	THRMRB220W45L300T300H950	-55°C	125°C
56	1	SW1	Switch, Reed, SPST-NO, 100mA, 30V, SM	Standex	MK24-A-3	Digi-Key	374-1138-1-ND	standex_mk24-a-3	-40°C	115°C
57	12	TP1 TP2 TP3 TP7	DNP, Test Point, SMD, 25 mil Round Pad	NA	NA	NA	NA	TP_C0635		
58	2	TP28 TP29	Test Point, Miniature, 3.4mm x 1.8mm Pad, SMD	Keystone	5015	Digi-Key	36-5015CT-ND	TP340X180N		
59	1	U1	Temperature, Digital, -40~125°C, 6WDFN	TI	TMP117AIDRV R	Digi-Key	296-51834-1-ND	son7p65_200x200x80l25x30t160x10	-55°C	150°C
60	1	U10	Buffer, Triple, Open Drain, 8XSON	Nexperia USA Inc.	74LVC3G07GS,115	Digi-Key	1727-8082-1-ND	PSON8P35_135X100X35L31X16N	-40°C	125°C
61	1	U2	Pressure Sensor, 0 ~30bar, ±400 mbar, I2C, SMD	TE Connectivity Measure	MS583730BA01-50	Digi-Key	223-1704-1-ND	icdfn4_330x330x285l130x130	-20°C	85°C
62	1	U3	RF Filter, Low Pass, 2.45GHZ Center, 4SMD	TDK	DLF162500LT-5028A1	Digi-Key	445-15658-1-ND	tdk_dlf162500lt-5028a1	-40°C	85°C
63	1	U4	IC BUFFER NON-INVERT 5.5V 6USON	TI	SN74LVC1G07QDRYRQ1	Digi-Key	296-SN74LVC1G07QDRYRQ1CT-	pson6p50_145x100x55l30x20n		-40C ~ 125C (TA
64	1	U5	SOC, 2.4 GHz Bluetooth, Cortex-M0+ MCU, 256K	STMicro	BLUENRG-355MT	Mouser	511-BLUENRG-355MT	QFN49P40_600X600X105L40X21T45	-40°C	105°C
65	1	U6	Flash Memory, 16Mbit, 80MHz, 8USON	Macronix	MX25R1635FZUIH0	Digi-Key	1092-1178-1-ND	PSON9P50_200X300X60L40X25T160	-40°C	85°C
66	1	U7	Battery Charger, Multi-Chemistry, 60V, 250mA, 1	Analog Devices Inc.	LTC4079EDD#TRPBF	Digi-Key	LTC4079EDD#TRPBFCT-ND	SON11P50_300X300X80L40X25T238	-40°C	125°C
67	1	U8	Wireless Power Supply Receiver, 20QFN	Texas Instruments	BQ51013ARHLR	Digi-Key	296-30568-1-ND	QFN50P450X350X100-21N	0°C	125°C
68	1	U9	Opamp, Single, GP, RRIO, 6.2kHz, SC70-5	Texas Instruments	LPV521MG/NOPB	Digi-Key	296-39069-1-ND	SOT23-5P65_210X110L36X22N	-40°C	125°C
69	1	Y2	Crystal, 32MHz, 8pF, SMD	ECS	ECS-320-8-37CKM	Digi-Key	XC1547CT-ND	OSCCC200X160X46-4NA	-20°C	70°C
70	1	Y4	Crystal, 32.768kHz, 9pF, SMD	Abracon	ABS05-32.768KHZ-9-T	Digi-Key	535-11897-1-ND	DFN160X100X50-2NA	-40°C	85°C
71	1	L4	Coil	TDK	WR303050-15F5-G	Digi-Key	445-16092-ND	N/A		