

OSW-827N Bill of material				
No.	Material Name	Description	Reference Designator	Quantity
1	NTC Thermistor	R0402; 100K Ω @25°C; Tolerance: $\pm 1\%$; B-value: 6250K; Power: 1/10W; Pitch: 0.5mm; SDNT1005X104F4250FTF (SUNROK)	R16	1
2	Multilayer Power Inductor	L2016; Inductance: 4.7 μ H; Tolerance: $\pm 20\%$; Resonant Frequency: 26MHz; Max Current: 1.4A; PSM201610-4R7MTH (FANGCI)	L2	1
3	Bidirectional ESD Diode	SOD-123FL; Breakdown Voltage: 12V; Capacitance: 400pF; MT12V1DLB (MILLER)	T5	1
4	Unidirectional ESD Diode	DFN1006-2L; Breakdown Voltage: 4.8V; Capacitance: 160pF; PESDHC2FD4V8UF (XCeleT)	T19	1
5	Bidirectional ESD Diode	DFN0603-2L; Breakdown Voltage: ± 5 V; Capacitance: 10pF; PESDNC2XD5VB (XCeleT)	T4, T15, T16, T17, T18	1
6	Bidirectional ESD Diode	SOD882; Breakdown Voltage: 5V; Capacitance: 20pF; LESD8D5.0CB1T5G (LRC)	T3	1
7	PMOS Transistor	SOT-723; Rds(on): Typ. 120m Ω @-2.5V, Max. 210m Ω ; Id: -1.1A; Vgs: ± 12 V; VC9327A (WinChip)	Q1	1
8	Schottky Diode	SOD523; Max Current: 200mA@0.6V; VCRB520S-30B (WinChip)	D1	1
9	Gyroscope Sensor	LGA-12-2x2x1.0mm; SC7A20HTR (STMicroelectronics)	U4	1
10	Power Amplifier IC	DFN8L_220.8mm; HAA9209 (Kiloforce)	U7	1
11	3.0V LDO Regulator	DFN1x1-4; Output Voltage: 3.0V; Quiescent Current: 35 μ A; ETA5053V300DD1E (ETA)	U1	1
12	3.3V LDO Regulator	DFN1x1-4; Output Voltage: 3.3V; Quiescent Current: 4.5 μ A; ETA5055V330DD1E (ETA)	U3	1

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13	LDO Regulator	DFN1x1-4; Output Voltage: 3.3V; Quiescent Current: 35μA; ETA5053V330DD1E (ETA)	U9	1
14	Overcurrent/Overvoltage Protection IC	SOT23; Operating Voltage: 3V~32V; Max Current: 1A; Rds(on): 270mΩ; VCP14C13P-A (WinChip)	U10	1
15	Bluetooth Module	QFN40-5x5mm; Flash: 128M; Operating Voltage: 2.8-4.5V; AB5691G (Zhongke)	U6	1
16	Crystal Oscillator	SMD3225; Frequency: 24MHz; Tolerance: ±10ppm; Capacitance: 9pF; SX32H024000B91T001 (Taiting)	Y1	1
17	13-Pin ZIF Connector	Height: 1mm; CFPC0310B-13RL-TAG (Hengying)	J1	1
18	Board-to-Board Connector	24-Pin Female; Height: 0.8mm; Pitch: 0.4mm; OK-14F024-04 (Achi)	J2	1
19	Low-Capacitance Bidirectional ESD Diode	DFN0603-2L (SOD962); Breakdown Voltage: ±5V; Capacitance: 0.18pF; ESD1EL2BY1 (Asem)	T2	1