			NTO4_V2_1 BOM		
1		OR, 1/16W, 0402, ±5%	R125, R164, R209, R220, R221, R224, R225, R226, R228, R 229, R230, R231, R232, R233, R234, R235, R236, R258, R3 41, R343, L1, R345	22	
2		10R, $1/16$ W, 0402, ± 5 %	R268, R270, R272, R274	4	
3		33R, $1/16$ W, 0402 , ± 5 %	R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24, R25, R 26, R27, R28, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R45, R46, R47, R48, R58, R59, R 60, R61, R62, R80, R106, R142, R143, R144, R146, R149, R 154, R157, R159, R161, R163, R167, R254	65	
4		49R9, 1/16W, 0402, \pm 1%	R49, R138, R139, R140, R141	5	
5		68R, $1/16$ W, 0402 , ± 5 %	R267, R269, R271, R273	4	
6		75R, $1/16$ W, 0402, ± 5 %	R148, R150, R151, R152	4	
7		1K, $1/16$ W, 0402, ± 1 %	R44, R50, R83, R304, R342, R145, R158, R160	8	
8		4. 7K, 1/16W, 0402, ±5%	R53, R54, R67, R69, R73, R74, R79, R126, R130, R131, R16 2, R346	12	
9	RES	10K, 1/16W, 0402, \pm 1%	R81, R82, R101, R107, R109, R110, R111, R112, R113, R11 4, R115, R116, R117, R120, R121, R134, R135, R137, R203 , R204, R205, R206, R207, R227, R260, R329, R330, R331, R332, R333, R334, R335, R336, R337, R338, R339, R340, R344	38	YAGO
10		47K, $1/16$ W, 0402, ± 5 %	R208	1	
11		100K, 1/16W, 0402, ±6%	R84, R86, R96, R97, R100, R211, R287, R288, R289, R290	10	
12		10M, $1/16$ W, 0402 , ± 5 %	R104, R124, R166, R215	4	
13		0R, $1/16$ W, 0603, ± 6 %	R319, R347, L2, L3	4	
14		330R, $1/16$ W, 0603 , ± 1 %	R78, R165, R168, R213, R315, R316	6	
15		162R, 1/16W, 0603, ±1%	R283, R284, R285, R286	4	
16		6. 49K, 1/16W, 0402, \pm 1%	R127	1	
17		7. 68K, 1/16W, 0603, \pm 1%	R303	1	
18		10K, $1/16$ W, 0603 , ± 1 %	R252	1	
19		10K2, 1/16W, 0603, \pm 1%	R293, R295, R298, R301	4	
20		40K2, 1/16W, 0603, ±1%	R210, R212, R291, R292, R294, R296, R297, R299, R300, R302	10	
21		15pF, 50V, 0402, COG, \pm 20%	C106, C108, C109, C110, C111	5	
22		10pF, 50V, 0402, X7R, ±20%	C218, C337, C339, C341, C343, C346, C351, C354, C357, C 362	10	
23		22pF, 50V, 0402, COG, $\pm 20\%$	C29, C30, C31, C32, C114, C115, C157, C158	8	

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24		33pF, 50V, 0402, C0G, ±20%	C217, C336, C338, C340, C342, C345, C348, C349, C350, C 353, C356, C358, C359, C361, C364, C365	16		
25		100pF, 50V, 0402, ±5%, COG	C416	1		
26		0. 1uF, 16V, 0402, X7R, ±20%	C1, C2, C3, C24, C26, C99, C101, C102, C103, C104, C134, C135, C136, C137, C181, C182, C183, C184	18		
27		0. 01uF, 16V, 0402, X7R, ±20%	C5, C6, C7, C8, C9, C10, C11, C12, C14, C15, C16, C17, C18, C19, C20, C21, C23, C28, C34, C35, C36, C37, C39, C40, C41, C42, C44, C45, C46, C47, C49, C50, C52, C53, C55, C56, C58, C59, C60, C61, C62, C63, C65, C66, C67, C68, C69, C71, C72, C73, C74, C75, C76, C77, C78, C83, C84, C85, C86, C87, C88, C89, C90, C91, C93, C94, C95, C96, C97, C98, C168	71		
28		1uF, 10V, 0402, X7R, ±20%	C215, C216, C344, C347, C352, C355, C360, C363, C368, C 371, C376, C379, C384, C387, C392, C395	16	YAGO	
29	CAP	1uF, 10V, 0603, X7R, ±20%	C25, C27, C79, C80, C81, C92, C143, C144, C152, C296, C297, C298, C299	13		
30		4. 7uF, 10V, 0603, X7R, ±20%	C105, C159, C169, C170, C175, C176, C276, C283, C315, C316, C318	11		
31		0. 1uF, 50V, 0603, X7R, ±20%	C139, C141, C146, C148, C151, C193, C194, C275, C277, C 289, C291, C293, C295, C303, C306, C308, C311, C319, C3 20, C322, C323, C324, C325, C326, C327, C334, C335, C27 3	29		
32		2. 2uF, 16V, 0603, X7R, ±20%	C161, C171, C172, C173, C174, C177, C178, C179, C180	9		
33		10uF, 10V, 0805, X5R, ±20%	C4, C13, C38, C54, C57, C64, C70, C82, C107, C133, C162, C163, C164, C165, C166, C167, C100	17		
34		22uF, 10V, 1206, X5R, ±20%	C155, C156, C300, C301, C302, C304, C305, C307, C309, C310	10		
35		10uF, 16V, 1206, X5R, ±20%	C149, C150, C287, C288, C290, C292, C294, C312, C313, C314	10		
36		1000pF, 2KV, 1206, X7R, ±20%	C113	1		
37		100uF, 6.3V, B style, ±20%	C145	1		
38		470uF, 16V, 8.2*11.2mm OR: 220uF,25V, 8*12mm	C138	1		
39		2. 2uH, $\pm 30\%$, 2. 8*2. 8*1. 1mm, Idc:1. 9A, Rdc: $85 \text{m}\Omega$, 744029002	L8, L9, L10	3		
40	Inductance	6.8uH, ±20%, 5.8*5.2*4.5mm, Idc:2.4A, Rdc: 71mΩ, 744774068	L6, L23, L24, L25, L26	5		
41		SMD, H1102, SOP-16 OR:SMD, FC1680C	T1	1		
42		SMD, B530C-13-F, SMC	D1	1		
43	DIODES	SMBJ12CA, SMB/DO-214AA	R259	1		
44		MI, HFG203P, LED φ 3, GREEN	J25 (Insert the location 2 LED), D2, D3	4		

45	Triode	NPN, 60V, MMBT2222A 1P, hfe 100-200, SOT-23	Q5-Q8	4	
46	SIM card seat	SIM card seat 475531001_sd	SIM2, SIM4	2	
47	FUSE	FUSE, 0451005. MRL	F1	1	
48	button	CR1220, 3. 0V, 10mAh, 12. 5mm, high-2. 0mm	BT1	1	
49		OSC-SMD-2.048M-30ppm-3.3V-5*7	X1	1	
50	Crystal	Crystal-SMD-25M-30ppm-15pF-3.2*2.5	У 3	1	
51	/Oscillator	Crystal-SMD-24M-20ppm-15pF-3.2*2.5	Y2	1	
52		Crystal-DIP-32.768K-20ppm-12.5pF-3*8	Y5	1	
53		PIN HEADER-1*2P-2.54mm-180 DEG	J5	1	
54		PIN HEADER-1*5P-2.54mm-180 DEG	Ј18	1	
55		1*6P, 2. 54*7. 1—IDC6	J13, J14, J15, J16	4	
56		2*12P, 2. 54*7. 1-IDC20	J19, J20, J21, J22	4	
57		FH2. 54*7. 1, 5P6P, PA6T, 1. 5u	J26, J27	2	
58		LED holder, φ3,2PIN,A1370D	D2, D3	2	
59	Connector	LED holder, φ3,4PIN,H307A	J25	1	
60		SMD, battery holder CR1220-2, Φ13mm	BT1	1	
61		WAFER, 2. 54mm*5PIN, 180 DEG	Ј6	1	
62		RJ45/HY5JA88-1210723 OR:RJ45-ZW2J88-JD01S12-P1	Ј3	1	
63	Switch	Switch-6*6*6mm-90	SW1	1	
64		SMD, AM3352BZCZ60, NFBGA-324 OR:SMD, AM3352BZCZD60, NFBGA-324 OR:SMD, AM3354BZCZ60, NFBGA-324	U1	1	
65		SMD, TPS65910AA1RSL, VQFN48	U13	1	
66		SMD, TC58NVGOS3ETA00, TSSOP-48 OR: SMD, MT29F1G08ABADAWP, TSSOP-48 OR: SMD, MT29F1G08ABAEAWP, TSSOP-48 OR: K9F1G08U0D-SCB0/SIB0, TSSOP-48 OR: SMD, S34ML01G100TF1000, TSOP-48	U7	1	
67		SMD, M25P40, S08N	U8	1	
68	IC	SMD, MT47H64M16HR-25, 84 Ball, TFBGA OR:SMD, NT5TU64M16HG-AC DDR2-800-CL5, FBGA-84 OR:SMD, K4T1G164QF-BCE7 DDR2-800 5-5-5, BGA-84 OR:SMD, EM68C16CWQD-25H, FBGA-84 OR:SMD, H5PS1G63KFR-S5C, FBGA-84	U2	1	
69		SMD, KSZ8041NL, QFP32	U5	1	

70		SMD, LC1117CLTR33, 4-pin, SOT-223-3L OR: SA1117BH-3.3TR, SOT-223-3L OR: ID1117-33A75, SOT-223	U11	1	
71		SMD, SP3232EEY-L, TSSOP-16	U49	1	
72		SMD, TPS77018-DBV, SOT-23	U10	1	
73		SMD, SMF05C, SC70_6	U21, U23	2	
74		SMD, LE58QL021-VC, TQFP-44	U28	1	
75		SMD, DM2016N, 8-pin, SOP	U9	1	
76		SMD, MP1471, 6-pin, TSOT-23	U12, U44, U45, U46, U47	5	
77		SMD, CP2108, 64-pin, QFN-64	U48	1	
78		SMD, SN74LVC1G08DBVR, SOT(SOT-23) - DBV 5pin	U18, U19	2	
	Circuit Board	Main Board, Immersion gold process material: FR4, thickness: 1.8mm, 4 layers		1	
	power	AC: 100-240V, 1A, DC: DC12V/2.5A, MADE IN CHINA		1	
	Antenna	Antenna, frequency coverage: 824~960 MHz, 1710~1990 MHz, input impedance: 50Ω, standing wave ratio<2, gain:2.5 dBi (824~960 MHz)3 dBi 1710~1990 MHz), polarization mode vertical, radiation direction: omnidirectional, power: 20 W, Height: 208±2 mm, connector: SMA-J, radome material: TPEE, color: black		4	
		RF Jumper Cable, SMAK-TC35-24 tieline, frequency coverage: 800-2000 MHz, length 100 mm, input impedance: 50Ω, connector: SMA-K, loss≤0.2dB, COAXIAL CABLE: UL1354 RF-1.13 (black), power: 50W, adapter: I-PEX		4	
	GSM module	SIM800 S2-105MB-Z1603, FCC ID:UDV-201314	Mount in GSM1, GSM2, GSM3, GSM4 location	4	