

BOM(V0.4)_ESP32-WROOM-32UE_V1.0_2020/06/24							
Item	Qty	Reference	Value	Package	ICs	Description	Notes
1	2	C1, C2	TBD	C0201	Capacitor	Ceramic Capacitors	Defined by RF Test
2	1	C3	100 pF / 6.3 V (5%), -55 ~ +125 °C	C0201	Capacitor	Ceramic Capacitors	
3	4	C4, C9, C10, C19	0.1 uF / 6.3 V (10%), -55 ~ +85 °C	C0201	Capacitor	Ceramic Capacitors	
4	1	C5	10 nF / 6.3 V (10%), -55 ~ +125 °C	C0201	Capacitor	Ceramic Capacitors	
5	1	C6	3.3 nF / 6.3 V (10%), -55 ~ +125 °C	C0201	Capacitor	Ceramic Capacitors	
6	3	C11, C18, C20	1 uF / 6.3 V (20%), -55 ~ +85 °C	C0201	Capacitor	Ceramic Capacitors	
7	1	C13	10 uF / 6.3 V (20%), -55 ~ +85 °C	C0402	Capacitor	Ceramic Capacitors	
8	1	C14	TBD	C0201	Capacitor	Ceramic Capacitors	Defined by RF Test
9	1	C15	TBD	C0201	Capacitor	Ceramic Capacitors	Defined by RF Test
10	1	L4	TBD	L0201	Inductor	Inductor	Defined by RF Test
11	1	L5	2.0 nH (0.1 nH), 600 mA, -55 ~ +125 °C	L0201	Inductor	Inductor	Defined by RF Test
12	1	R1	20 K Ω (5%), 1/20 W, -55 ~ +125 °C	R0201	Resistor	Chip Resistors	
13	1	R2	0 Ω (5%), 1/20 W, -55 ~ +125 °C	R0201	Resistor	Chip Resistors	Defined by RF Test
14	1	R3	499 Ω (5%), 1/20 W, -55 ~ +125 °C	R0201	Resistor	Chip Resistors	
15	1	D1	TVS Diode, Bi-Direction, 3.3V, -55 ~ +150 °C	SOD882	ESD / TVS	TVS Diode, 3.3 V	
16	1	U1	40 MHz, ± 10 ppm, 15 pF, 100 uW, -40 ~ +85 °C	3225	Crystal	40MHz Crystal	
17	1	U2	ESP32-D0WD-V3, Wi-Fi + BT + MCU, -40 ~ +125 °C	QFN48EB_0P35_5	Chip	Wi-Fi + BT + MCU	
18	1	U3	2.7 ~ 3.6 V, 32 Mbit, Standard&Dual&Quad SPI, -40 ~ +85 °C	SOIC08-WN	Chip	3.3 V SPI FLASH	SOP8-150mil
19	1	J39	USS RF Receptacle Connector, Generation I, 60 VAC, DC ~ 6G, 50 $\pm$ 5 Ω , -40 ~ +90 °C	IPEX_3P	Connector	RF Connector	
20	1	Shield Box	Shield Box Size: 17.5 mm * 15.65 mm * 2.4 mm, Thickness = 0.20 mm, Material: C7701R-H	-	-	-	
21	1	PCB	ESP32-WROOM-32UE_V1.0, 4L, 18 mm * 19.2 mm * 0.8 mm, Matte black for Solder amsk and white for Silkscreen. Immersion gold and 50 Ω impedance control.	-	-	-	

* Please be noted that C14, C15 and L4 are recommended to use Murata for good quality and accuracy.