	Manufacturer Part					Vendor Part			
Quantity	#	Manufacturer	Do Not Install	Designator	Vendor	Number	Value	Footprints	Description
1	DS3231S#T&R	Maxim		U9					Real-Time Clock Single, High
									Precision, Rail-to- Rail Output
	LMP2011MFX/NOP								Operational
2	В	Texas Instruments		U8, U10					Amplifier Voltage
									References Precision, Low-
									Power, Low-
		Analog Devices Inc./Maxim							Dropout, SOT23-3 Voltage
	MAX6045BEUR	Integrated		U7					References
1	PCA9685PW,112	NXP USA		U6					WiFi Dev Board
									with STEMMA QT - 8 MB Flash / No
1	QT PY ESP32-S3		DNI	U4	Adafruit	5426			PSRAM
1	MCP4728-E/UN	Microchip		U3					
2	MPRLS0300YG0000 1B	Honeywell		U2, U5					
		Diodes							IC REG LINEAR
1	AP2112K-3.3TRG1	Incorporated		U1					3.3V 600MA SOT25
		Panasonic Electronic							Resistor, 0.1%,
1	ERJ-PB3B1302V	Components		R11			13k	0603	1/5W
		Panasonic Electronic				]			Resistor, 0.1%,
1	ERA-3AEB163V	Components		R10 R3, R4, R5, R6, R7,		1	16k	0603	1/10W
10	ACOMOSED TIMITORS	VACEO		R8, R9, R12, R21,		]	104		RES 10 KOHM 1%
	AC0402FR-7W10KL			R22, R23, R24			10k	0402	1/8W 0402 RES 4.7K OHM 1%
1	SR0402FR-7T4K7L	YAGEO		R2 R1, R13, R14, R15,			4.7k	0402	1/5W 0402
_	CDO/OSER STICK	WACEO		R16, R17, R18,		]	1004	0/02	RES 100K OHM 1%
9	SR0603FR-7T100KL BUK98150-	YAGEO		R19, R20 Q1, Q2, Q3, Q4,			100K	0603	1/4W 0603 N-MOSFET N-CH
8	55A/CUF	Nexperia USA		Q5, Q6, Q7, Q8					55V 5.5A SOT223
									5V, 3.2A Step- Down Voltage
1	D36V28F5	Pololu Amphenol ICC		P17	Pololu	D36V28F5			Regulator
2	68000-103HLF	(FCI)		P15, P16					Header, 3-Pin
8	67997-206HLF	Amphenol ICC (FCI)		P7, P8, P9, P10, P11, P12, P13, P14					Header, 3-Pin, Dual row
									Connector Header Through Hole,
									Right Angle 4
1	0022057045	Molex		P6					position 0.098" (2.50mm)
1	BM15B-SRSS- TB(LF)(SN)	JST Sales America Inc.		P5					Header, 15-Pin
	15(21)(314)	inc.		13					
									12V, 4.5A Step- Down Voltage
									Regulator5V, 5.5A Step-Down
1	D36V50F5	Pololu		P4	Pololu	D36V50F5			Voltage Regulator
									DC DC CONVERTER 12V
1	D36V50F12	Pololu		P3	digikey	2183-4095-ND			54W CONN HEADER
1	0430451227	Molex		P2					VERT 12POS 3MM
1	0430450827	Molex		P1					CONN HEADER VERT 8POS 3MM
									10 (8 + 2) Position
									Card Connector Secure Digital -
						]			microSDâ,¢ Surface Mount,
1	5031821852	Molex		J15					Right Angle Gold
8	0430450226			J5, J6, J7, J8, J9, J10, J11, J12					CONN HEADER VERT 2POS
2	SM04B-SRSS- TB(LF)(SN)	JST Sales		J3, J4					
	BM04B-SRSS-								
5	TB(LF)(SN)	JST Sales		J1, J2, J13, J14, J16					DIODE SCHOTTKY
1	NSR0320MW2T1G	onsemi		D9					20V 1A SOD323
	S1MLHRVG	Taiwan Semiconductor	<u></u>	D1, D2, D3, D4, D5, D6, D7, D8			<u></u>	<u></u>	DIODE GEN PURP 1KV 1A SMA
2	CC0603KRX7R0BB1 03	YAGEO		C14, C15			10nF	0603	CAP CER 10000PF 100V X7R 0603
	CC0603KRX7R0BB2								CAP CER 2200PF
1	22 CC0603KPX7R9BB1	YAGEO		C13			2.2nF	0603	100V X7R 0603 CAP CER 0.1UF
2	04	YAGEO		C4, C8			0.1uF	0603	50V X7R 0603
2	AC0603KRX7R8BB1 05	YAGEO		C2, C12			1uF	0603	CAP CER 1UF 25V X7R 0603
0	CC0603KRX5R7BB1 06	YAGEO		C1, C3, C5, C6, C7, C9, C10, C11			10uF	0603	CAP CER 10UF 16V X5R 0603
	BK-917	MPD		BT 81			roui	0000	BATTERY RETAINER