

Address1	Comment	Description	Designator	Footprint	LibRef	Quantity	Pins
	TP_0.5	TEST POINT	3.3V, DC 5V, P	TP_0.5	TP_0.5	5	1
		BEAD	BD1	L1608	BD1608	1	2
	BLM18AG102SN1D	BEAD	BD2	L1608	BD1608	1	2
		BEAD	BD3, BD4	L1005	BD1005	2	2
	E/C 10V 470uF_6.5pi		C1	CSCAP_8PI_10	EEE-FK1V331F	1	2
	4.7uF/16V	Chip Capacitor	C2, C22, C28,	C1608	C1608	4	2
	4.7uF/10V	Chip Capacitor	C3, C5	C1608	C2012, C1608	2	2
	0.1uF	Chip Capacitor	C4, C13, C14,	C1005	C1608, C1608,	9	2
	1uF/10V	Chip Capacitor	C6	C1608	C1608	1	2
	10uF/6.3V	Chip Capacitor	C7	C1608	C2012	1	2
	1uF/6.3V	Chip Capacitor	C8	C1005	C1608	1	2
	1000pF	Chip Capacitor	C9	C1005	C1608	1	2
	10nF/100V	Chip Capacitor	C10, C11, C12	C1608	C1608	4	2
	1uF/6V	Chip Capacitor	C17, C19	C1005	C1608	2	2
	1nF/2kV	Chip Capacitor	C18	C3216	C3216	1	2
	470pF	Chip Capacitor	C20	C1005	C1608	1	2
	10uF/10V	Chip Capacitor	C24, C25	C1608	C1608	2	2
	RJ45-657PCB8-SM-S-A	RJ-45 R/A with	CON1	RJ45-657PCB8	RJ45-657PCB8	1	14
	HEADER4	HEADER4 2.54	CON2	HEADER4	HEADER4	1	4
	Header 2	Header, 2-Pin	CON3	Header2	Header 2	1	2
	HEADER7/NC	HEADER7 2.54	CON4	HEADER7	HEADER7	1	7
	NRVB120VLSFT1G		D1, D2, D3	SOD-123_B	NRVB120VLSFT	3	2
	SMAJ58CA		D4, D9	SMAJ58CA	SMAJ58CA	2	2
	MMSZ5228B-TP		D5, D6, D7, D8	SOD-123_B	MMSZ5228B-T	4	2
	TP	TEST POINT	GND1, TP1, TP	TP_0.9	TP	7	1
	10118194-0001LF		J1	USB_10118194	MICRO USB_10	1	11
	1-1734592-0/NC		J2	1-1734592-0	1-1734592-0	1	10
		Chip LED Lamp	LD1	LED1608	LED1608	1	2
	WP154A4SEJ3VBDZGW/C		LED1, LED2, L	RGB LED 5mm	WP154A4SEJ3V	6	4
	RT9400		MOD1	RT9400	RT9400	1	7
	ESP32-WROOM-32U		MOD2	ESP-WROOM-	ESP32-WROOM	1	39
	MDBT50Q-U1M		MOD3	MDBT50Q-U1M	MDBT50Q-U1M	1	61
	TP_1.2R_SMD	TEST POINT	P1, P2, P3, P4,	TP-1.2MM-SM	TP_1.2R_SMD	34	1
	DC-005	POWER JACK	PWR1	DC-005	DC-005	1	3
	PMV60EN		Q1, Q2, Q3	SOT23_B	PMV60EN	3	3
	150	Chip Resistor	R1, R9, R19, R	R2012	R2012	6	2
	0	Chip Resistor	R2, R3, R44, R	R1005	R1005	5	2
	82	Chip Resistor	R4, R5, R10, R	R2012	R2012	12	2
	NC	Chip Resistor	R6, R7	R1005	R1608	2	2
	10k	Chip Resistor	R8, R15, R16, R	R1005	R1608, R1608,	7	2
	10k	Chip Resistor	R11, R12, R13	R1608	R1608	3	2
	330	Chip Resistor	R20, R22, R38	R1005	R1608	3	2
	75	Chip Resistor	R21, R23, R24,	R1608	R1608	4	2
	33	Chip Resistor	R25, R37	R1005	R1608	2	2
	49.9/F	Chip Resistor	R27, R30, R33,	R1005	R1608	4	2
	1.5k	Chip Resistor	R28	R1005	R1608	1	2
	10	Chip Resistor	R29, R31, R34,	R1005	R1608	4	2
	12.1k	Chip Resistor	R39	R1005	R1608	1	2
	47.5k	Chip Resistor	R41	R1005	R1005	1	2
	22.1k	Chip Resistor	R42	R1005	R1005	1	2

	0	Chip Resistor	R52	R1608	R1608	1	2
	0/NC	Chip Resistor	R53	R1005	R1005	1	2
	2k	Chip Resistor	R55	R1005	R1005	1	2
	ST-1188U/NC		RST1	ST-1188U	ST-1188U	1	4
	ITS-1105V		SW1	ITS-1105VB_5.	ITS-1105V	1	2
	ITS-1105V_DIP_6mm		SW2	ITS-1105VB_5.	ITS-1105V	1	2
	TP	TEST POINT	TP7, TP8	TP_0.6	TP	2	1
	MCP1726T-3302E/SN		U1	SOIC8_W0600	MCP1725T-330	1	8
	PT61017PEL		U2	HS2213	PT61017PEL	1	12
	LAN8720AI		U3	QFN24_0400_0.	LAN8720AI	1	25
	CP2102N-A01-GQFN28		U4	QFN28_W0500.	CP2102N-A01-	1	29

Item	Quantity	Reference	Specifications
1	2	C1, C2	22 pF ± 5%/50 V, 0402
2	1	C3	100 pF ± 5%/50 V, 0402
3	4	C4, C9, C10, C19	0.1 uF ± 10%/10 V, 0402
4	1	C5	10 nF ± 10%/6.3 V, 0402
5	1	C6	3.3 nF ± 10%/50 V, 0402
6	3	C11, C18, C20	1 uF ± 10%/16 V, 0402
7	0	C12	NC
8	1	C13	10 uF ± 20%/6.3 V, 0603
9	1	C14	GRM1555C1H4R7BA01D (4.7 pF ± 0.1 pF, 0402)
10	1	C15	GRM1555C1H2R4CA01D (2.4 pF ± 0.25 pF, 0402)
11	2	C16, C17	270 pF ± 5%/50 V, 0402
12	1	L4	LQP15MN2N4B02D (2.4 nH ± 0.1 nH, 0402)
13	1	D1	ESD 3.3 V 88D-LCDN, DFN1006
14	1	R1	20 K ± 1%/16 W, 0402
15	1	U1	40 MHz Crystal, ±10 ppm, 3225
16	1	U2	ESP32, QFN48_6X6
17	1	U3	Flash, SOP8-208 mil, GD25Q32

* Please note that Murata is recommended for C14, C15 and L4 for good quality and accuracy.