



Component	Description	Designator	Footprint	Library	Quantity
IC1	1.5A/0.1A 1A 1.25V@1A (TA) ±125°C@Tj Fixed 3.3V ±3.0V Positive 20V SOT-89 Linear Voltage Regulators (LDO) RCHS	AMS1_ AMS2	SOT89-150P350X150 3N	IC1	2
10D561K	1020V 42.3J 180µF@150V 400V 350W 504V -414V E-264 Plug-in Variators RCHS	B1	10D561K	10D561K	1
UJ09-BY-10MH	10mH@1kHz 1.2Ω 2 500mA 50V Plug-in Common Mode Filters RCHS	B2	UJ09BY10MH	UJ09-BY-10MH	1
32W6X-1-103	±10% 10kΩ Plug-in Variable Resistors/Potentiometers RCHS	B3	32W6X122JLF	32W6X-1-103	1
CP1102N-A02-02P7024H	USB Interface IC USB to UART Bridge - CP1024	B4	CP100P400K4000B0-03N-D	CP1102N-A02-02P7024H	1
ESP32-WROOM-32D	WiFi Modules (802.11) SMD Module, ESP32 30W, 32MHz SPI flash, UART mode, PCB antenna	B5	ESP32-WROOM32D	ESP32-WROOM-32D	1
0.1uF	0.1µF ±10% 40V ±110°C X2 275VAC Radial Leaded P-15mm Suppression Capacitors RCHS	C1	MPX-104K275VAC-C-D2	MPX-104K275VAC-C-D2	1
220uF	40V ±10% 2000hrs@85°C 220µF 10mm 14V 8mm 215mA@120kHz 4.20% SMD 0804 10mm Aluminum Electrolytic Capacitors - SMD RCHS	C2	CAPAEER30X1050N	UBR1C221MML105	1
22uF	Chip Multilayer Ceramic Capacitors for General Purpose 50V, 22µF, 50V, 15%, 20%, 16V	C3, C10	FP-050M15-VL-2-L-15-IPC-A	CMP-0603S-050V25-1	2
10uF	6.3V 10µF X5R ±20% 402 Multilayer Ceramic Capacitors MLC - SMD/SMT RCHS	C4, C11	CAPC1005X70N	CL05A100M020NUNC	2
4.7uF	X5R 25V 4.7µF ±10% 402 Multilayer Ceramic Capacitors MLC - SMD/SMT RCHS	C5	FP-CL21-IPC_A	CMP-13271-00264-1	1
100nF	X7R 100nF 16V 410V 0402 Multilayer Ceramic Capacitors MLC - SMD/SMT RCHS	C6, C7, C8, C9	CAPC1050X5X23M-D111	CMP-2000-05439-1	4
ESD0505-0CT10	Transient Voltage Suppression for ESD Protection	D1, D2, D3	ESD05050CT10	ESD0505-0CT10	3
0A125-02-0-5A 0004	0.5A 125V RCHS PC TEST POINT SIMULTANEOUS YELLOW	J1, J2, J3, J4, J5	CAPC612502N	0A125-02-0-5A	1
10118192-0001LF	Single Port 5 Contact Horizontal Right Angle Shielded Micro B USB 2.0 Connector	J6	AMPHENOL-1011819-2-0001LF	10118192-0001LF	1
AC Current supply pin Header 2	Header, 2-Pin	H1	HDR1X2	Header 2	1
uv lamp connect pin Header 2	Header, 2-Pin	H2	HDR1X2	Header 2	1
Header 3	Header, 3-Pin	H3	HDR1X3	Header 3	1
SI7021 Sensor Header	Header, 4-Pin	H4	HDR1X4	Header 4	1
SGP30 Sensor Header	Header, 4-Pin	H5	HDR1X4	Header 4	1
HT68-CHQ0 sensor Header	Sensor Modules RCHS	H6	HDR1X4	Header 4	1
HT3 sensor Header	Header, 4-Pin	H7	HDR1X4	Header 4	1
HC131 sensor Header	Header, 4-Pin	H8	HDR1X4	Header 4	1
5V FAN Header 2 Header 20 Header 19	Header, 2-Pin Header 20-Pin Header 19-Pin	H9, H10, H11	HDR1X2 HDR1X20 HDR1X19	Header 2 Header 20 Header 19	1 1 1
PM55003	PM55003 Sensor Module RCHS	PM55003	PM55003 PM2.5 Sensor	PM55003 PM2.5 Sensor	1
25C1384-1A	TD-92-3 Bipolar Transistors - BJT RCHS	Q1	25C1384-1A	25C1384-1A	1
538050-G	100mA 25V 300mW 200H100mA TV 1.5A 1000Hz 500mV@800mA-B0H A NPN ±150°C@Tj T01-23 Bipolar Transistors - BJT RCHS	Q2, Q3	SOT95FP400X115-3N	538050-G	2
DR	865 SMD 0 OHM 0.80PFER 1/16W 0402 R20, R21, R22	R1, R2, R6, R7, R8, R20, R21, R22	FP-R0402-0-L-4-IPC-A	CMP-2002-07342-2	8
3.3kΩ	100mW Thick Film Resistors 75V ±100ppm/°C ±1%, 50°C ±15°C 3.3kΩ 0603 Chip Resistor - Surface Mount RCHS	R3	RES1608X5X23ML10T15	CMP-1012-00567-2	1
10kΩ	62.5mW 50V ±100ppm/°C ±1%, 50°C ±15°C 10kΩ 0402 Chip Resistor - Surface Mount RCHS	R4, R5, R12, R13, R14, R19	RES1C1005X40X25L610	CMP-2002-07353-1	6
22.1kΩ	62.5 SMD 0 OHM 75V 1/16W 0402	R9	FP-R0402-0-L-4-IPC-B	CMP-2002-07515-2	1
47.5kΩ	62.5mW Thick Film Resistors 50V ±100ppm/°C ±1%, 50°C ±15°C 47.5kΩ 0402 Chip Resistor - Surface Mount RCHS	R10	RES1C1005X40X25L610	CMP-1011-00700-2	1
3kΩ	62.5mW Thick Film Resistors 50V ±100ppm/°C ±1%, 50°C ±15°C 3kΩ 0402 Chip Resistor - Surface Mount RCHS	R11	FP-RC_0402-MFG	CMP-2002-07580-2	1
100Ω	100Ω 62.5mW 50V ±1%, 50°C ±15°C ±100ppm/°C 0402 Chip Resistor - Surface Mount RCHS	R15, R16, R17, R18	RES1C1005X40X25M-D1T10	CMP-2002-07344-1	4
SK-3240SL-1-A	Surface Mount 50mA 0.01F 3.2mm 1.2V 9.1mm 12V 3.15mm 50mA 10000 SMD/Splcing Rectangular column - 40°C ±80°C Black SMD Slide Switches RCHS	S1	SK3240SL1A	SK-3240SL-1-A	1
TL1105AF1600	6mm 1.6mm Round Button 50mA Straight 6mm SPST 12V Plug-in 6x6mm Tactile Switches RCHS	S2, S3	TL1105AF1600	TL1105AF1600	2
Display	Header, 4-Pin	SD1306	HDR1X4	Header 4	1
HLK-10M05	5V 2A PFM/AC-280V@NC 1 120V -350V Isolated Regulated 10W AC-DC 50% Plug-in Power Modules RCHS	H1	FP-HLK-10M05-MFG	CMP-218581-000001-1	1