















Description Consolitor SMT 10pF FOV 0403 +109/	Designator	Footprint CARCIOGEVOAN 0403	LCSC_Part
Capacitor SMT 10nF 50V 0402 ±10%	C1, C2, C3, C4, C5 C6, C8, C9, C12, C14, C15, C17,	CAPC1005X06N_0402	C15195
Capacitor SMT 100nF 50V 0402 ±10%	C18, C22	CAPC1005X06N_0402	C307331
Capacitor SMT 10uF 6.3V 0402 ±20%	C7, C47, C48	CAPC1005X06N_0402	C15525
Capacitor SMT 1uF 25V 0402 ±10%	C10, C16, C20	CAPC1005X06N_0402	C52923
Capacitor SMT 10uF 25V 0603 ±20%	C11, C13, C21	CAPC1608X09N_0603	C96446
Capacitor SMT 4.7uF 10V 0402 ±20%	C19, C24, C25, C26, C28, C29, C30, C32, C33, C34, C36, C37, C38, C40, C41, C42, C44, C45, C46	CAPC1005X06N_0402	C23733
Capacitor SMT 4.7uF 16V 0603 ±10%	C23, C27, C31, C35, C39, C43	CAPC1608X09N_0603	C19666
Capacitor SMT 100nF 100V 0805 ±10%	C49, C55	CAPC2012X14N_0805	C28233
Capacitor SMT 470pF 50V 0603 ±10%	C50	CAPC1608X09N_0603	C1620
Capacitor SMT 22uF 25V 0805 ±20% Capacitor SMT 10uF 50V 0805 ±10%	C51, C52 C53, C54	CAPC2012X14N_0805 CAPC2012X14N_0805	C45783 C440198
ED Red 20mcd@5mA 1.8V 0402	D1, D2, D3, D39, D40	DIOC1005X04N	C130719
	D4, D9, D12, D15, D18, D21,		
.ED Blue 78mcd .ED Green 275mcd	D24 D5, D7, D10, D13, D16, D19,	DIOC1005X04N	C434447
LED Yellow 24mcd	D22, D41 D6, D8, D11, D14, D17, D20,	DIOC1005X04N	C130721
LED WS2812B-2020 RGB	D23, D38, D42 D25, D26, D27, D28, D29, D30,	WS2812B_2020_CAC-100P200X182-4N	C965555
	D31, D32, D33, D34, D35, D36		
Diode Schottky 100V 10A 850mV	D37	DIOM6959X26N	C65020
Header JST XH 3Pos CON PWR JCK 2.0 X 6.5MM HIGH CUR	J1, J2 J3	Header JST XH 3Pos Straight DC POWER RECEPTACLE 5A	C144394 C426213
JSB Connector Type-C	J4	USB Connector Type-C	C134092
Header 1x3P Male	J5, J13, J21, J29, J37, J45	Header 1x3P MALE	C49257
Receptacle Assembly, 9 Position, Right Angle		DSUB1.385-2H9 Straight Female W/Nuts	C183530
Header 1x1P Male	J7, J10, J15, J18, J23, J26, J31, J34, J39, J42, J47, J50	Header 1x1P MALE	C492400
Header JST XH 5Pos	J8, J16, J24, J32, J40, J48	Header JST XH 5Pos Straight	C157991
Header 1x3P Male		Header 1x3P MALE	C49257
Header 1x4P Female	J44, J49, J51, J52 J53	Header 1x4P FEMALE	C2718488
Inductor 8.2uH 4.5A	L1	INDP7366X30N	C516306
I2C 16-Bit I/O Expander	01	TSOP65P640X120-24N	C255606
2K EEPROM	Q2	SOIC127P600X175-8N	C7562
Transistor NPN 1.5A 25V SS8050	Q3, Q5	SOT95P237X117-3N	C2150
USBLC6-2P6	Q4	SOTFL50P162X60-6N	C2827693
Voltage Regulator 3.3V 1A	Q6	SOT230P700X180-4N TAB THERMAL QFN50P400X400X80_HS-25N_CP2014	C6186
USB/UART CP2104 ESP32-WROOM-32E	Q7 Q8	ESP32-WROOM	C47742 C701343
AM26LV32 5V Differential Receiver	Q9, Q13, Q17, Q21, Q25, Q29	SOIC127P600X175-16N_3.9mm	C3019543
Multiplexer 2:1 74LVC1G157GW	Q10, Q11, Q12, Q14, Q15, Q16, Q18, Q19, Q20, Q22, Q23, Q24, Q26, Q27, Q28, Q30, Q31, Q32	SOT65P210X110-6N	C135822
SN74LVC1T45DCKR Push-Pull Transceiver	Q33	SOT65P210X110-6N	C9382
SSD1306 OLED	Q34	SSD1306 OLED Display	
Voltage Regulator	Q35	SOIC127P600X175_HS-9N_3.9mm_LargeThermal	C90665
Mosfet P-Channel 30V 9A 16mOhm	Q36, Q38	SOT95P237X117-3N	C2758226
Transistor Dual Matched PNP	Q37, Q39 R1, R2, R3, R4, R5, R7, R18, R19, R20, R33, R36, R38, R42, R45,	SOT65P210X110-6N	C156320
Resistor 10kΩ 0402 SMT ±1% 62.5mW	R47, R51, R54, R56, R60, R63, R65, R69, R72, R74, R78, R81, R83	RESC1005X04N_0402	C25744
Resistor 47kΩ 0402 SMT ±1% 62.5mW	R6, R9, R28	RESC1005X04N_0402	C25792
Resistor 4.7kΩ 0402 SMT ±1% 62.5mW	R8, R10, R11, R14, R27 R12, R13, R29, R31, R34, R35,	RESC1005X04N_0402	C25900
Resistor 3.3kΩ 0402 SMT ±1% 62.5mW	R37, R40, R43, R44, R46, R49, R52, R53, R55, R58, R61, R62, R64, R67, R70, R71, R73, R76, R79, R80, R82, R86, R96	RESC1005X04N_0402	C25890
	R52, R53, R55, R58, R61, R62,	RESC1005X04N_0402 RESC1005X04N_0402	C25890 C25862
Resistor 1.2kΩ 0402 SMT ±1% 62.5mW Resistor 2.4kΩ 0402 SMT ±1% 62.5mW	R52, R53, R55, R58, R61, R62, R64, R67, R70, R71, R73, R76, R79, R80, R82, R86, R96 R15, R17 R16, R93, R94	RESC1005X04N_0402 RESC1005X04N_0402	C25862 C25882
Resistor 1.2k\(\Omega\) 0402 SMT ±1% 62.5mW Resistor 2.4k\(\Omega\) 0402 SMT ±1% 62.5mW Resistor 5.1k\(\Omega\) 0402 SMT ±1% 62.5mW	R52, R53, R55, R58, R61, R62, R64, R67, R70, R71, R73, R76, R79, R80, R82, R86, R96 R15, R17 R16, R93, R94 R21, R22	RESC1005X04N_0402 RESC1005X04N_0402 RESC1005X04N_0402	C25862 C25882 C25905
Resistor 1.2kg 0402 SMT ±1% 62.5mW Resistor 2.4kg 0402 SMT ±1% 62.5mW Resistor 5.1kg 0402 SMT ±1% 62.5mW Resistor 220g 0402 SMT ±1% 62.5mW	R52, R53, R55, R58, R61, R62, R64, R67, R70, R71, R73, R76, R79, R80, R82, R86, R96 R75, R17 R16, R93, R94 R21, R22 R23	RESC1005X04N_0402 RESC1005X04N_0402 RESC1005X04N_0402 RESC1005X04N_0402	C25862 C25882 C25905 C25091
Resistor 1, 2kg 0402 SMT ±1% 62.5mW Resistor 2, 4kg 0402 SMT ±1% 62.5mW Resistor 5, 1kg 0402 SMT ±1% 62.5mW Resistor 2020 0402 SMT ±1% 62.5mW Resistor 1.5kg 0402 SMT ±1% 62.5mW	R52, R53, R55, R58, R61, R62, R64, R67, R70, R71, R73, R76, R79, R80, R82, R86, R96 R15, R17 R16, R93, R94 R21, R22 R23 R24	RESC1005X04N_0402 RESC1005X04N_0402 RESC1005X04N_0402 RESC1005X04N_0402 RESC1005X04N_0402	C25862 C25882 C25905 C25091 C25867
Resistor 1.2k\(\Omega\) 0402 SMT ±1% 62.5mW Resistor 2.4k\(\Omega\) 0402 SMT ±1% 62.5mW Resistor 5.1k\(\Omega\) 0402 SMT ±1% 62.5mW Resistor 1.5k\(\Omega\) 0402 SMT ±1% 62.5mW Resistor 1.5k\(\Omega\) 0402 SMT ±1% 62.5mW Resistor 1.5k\(\Omega\) 0402 SMT ±1% 62.5mW	R52, R53, R55, R58, R61, R62, R64, R67, R70, R71, R73, R76, R79, R80, R82, R86, R96 R75, R17 R16, R93, R94 R21, R22 R23	RESC1005X04N_0402 RESC1005X04N_0402 RESC1005X04N_0402 RESC1005X04N_0402 RESC1005X04N_0402 RESC1005X04N_0402 RESC1005X04N_0402	C25862 C25882 C25905 C25091 C25867 C25918
Resistor 1.2kΩ 0402 SMT ±1% 62.5mW Resistor 2.4kΩ 0402 SMT ±1% 62.5mW Resistor 5.1kΩ 0402 SMT ±1% 62.5mW Resistor 220Ω 0402 SMT ±1% 62.5mW Resistor 1.5kΩ 0402 SMT ±1% 62.5mW Resistor 7.5kΩ 0402 SMT ±1% 62.5mW Resistor 7.5kΩ 0402 SMT ±1% 62.5mW	R52, R53, R58, R58, R61, R62, R64, R67, R70, R71, R73, R76, R79, R80, R82, R86, R96 R15, R17 R16, R93, R94 R21, R22 R23 R24	RESC1005X04N_0402 RESC1005X04N_0402 RESC1005X04N_0402 RESC1005X04N_0402 RESC1005X04N_0402	C25862 C25882 C25905 C25091 C25867
Resistor 1.2kΩ 0402 SMT ±1% 62.5mW Resistor 2.4kΩ 0402 SMT ±1% 62.5mW Resistor 5.1kΩ 0402 SMT ±1% 62.5mW Resistor 5.200 0402 SMT ±1% 62.5mW Resistor 7.200 0402 SMT ±1% 62.5mW Resistor 7.5kΩ 0402 SMT ±1% 62.5mW	R52, R53, R55, R58, R61, R62, R64, R67, R70, R71, R73, R76, R79, R80, R82, R86, R96 R15, R17 R16, R93, R94 R21, R22 R23 R24 R25 R26 R27 R26, R27 R27 R27 R28 R29 R29 R29 R29 R29 R29 R29 R29 R29 R29	RESC1005X04N_0402 RESC1005X04N_0402 RESC1005X04N_0402 RESC1005X04N_0402 RESC1005X04N_0402 RESC1005X04N_0402 RESC1005X04N_0402 RESC1005X04N_0402	C25862 C25882 C25905 C25091 C25867 C25918 C25768
Resistor 1. 2kΩ 0402 SMT ±1% 62.5mW Resistor 2.4kΩ 0402 SMT ±1% 62.5mW Resistor 20.0402 SMT ±1% 62.5mW Resistor 220.0402 SMT ±1% 62.5mW Resistor 210.0402 SMT ±1% 62.5mW Resistor 1.5kΩ 0402 SMT ±1% 62.5mW Resistor 7.5kΩ 0402 SMT ±1% 62.5mW Resistor 22kΩ 0402 SMT ±1% 62.5mW Resistor 27kΩ 0402 SMT ±1% 62.5mW Resistor 27kΩ 0402 SMT ±1% 62.5mW Resistor 28kΩ 0402 SMT ±1% 62.5mW	R52, R53, R58, R58, R61, R62, R64, R67, R70, R71, R73, R76, R79, R80, R82, R86, R96 R15, R17 R16, R93, R94 R21, R22 R23 R24 R25 R26 R26 R27 R27 R28 R29	RESC1005X04N_0402	C25862 C25882 C25905 C25091 C25867 C25918 C25768 C25771 C25924 C25765
Resistor 1. 2kg 0402 SMT ±1% 62.5mW Resistor 2. 4kg 0402 SMT ±1% 62.5mW Resistor 5.1kg 0402 SMT ±1% 62.5mW Resistor 1.5kg 0402 SMT ±1% 62.5mW Resistor 1.5kg 0402 SMT ±1% 62.5mW Resistor 7.8kg 0402 SMT ±1% 62.5mW Resistor 7.8kg 0402 SMT ±1% 62.5mW Resistor 7.8kg 0402 SMT ±1% 62.5mW Resistor 27kg 0402 SMT ±1% 62.5mW Resistor 20kg 0402 SMT ±1% 62.5mW Resistor 20kg 0402 SMT ±1% 62.5mW Resistor 20kg 0402 SMT ±1% 62.5mW	R52, R53, R55, R58, R61, R62, R64, R67, R70, R71, R73, R76, R79, R80, R82, R86, R96 R15, R17 R16, R93, R94 R21, R22 R23 R24 R25 R26 R26 R27 R27 R28, R28, R48, R57, R66, R75, R95 R32, R41, R50, R59, R68, R77 R84	RESC1005X04N_0402	C25862 C25882 C25905 C25901 C25091 C25867 C25918 C25768 C25771 C25924 C25765 C23231
Resistor 1.2kΩ 0402 SMT ±1% 62.5mW Resistor 2.4kΩ 0402 SMT ±1% 62.5mW Resistor 20.4kΩ 0402 SMT ±1% 62.5mW Resistor 20.0402 SMT ±1% 62.5mW Resistor 1.5kΩ 0402 SMT ±1% 62.5mW Resistor 1.5kΩ 0402 SMT ±1% 62.5mW Resistor 7.5kΩ 0402 SMT ±1% 62.5mW Resistor 27kΩ 0402 SMT ±1% 62.5mW Resistor 27kΩ 0402 SMT ±1% 62.5mW Resistor 27kΩ 0402 SMT ±1% 62.5mW Resistor 68kΩ 0403 SMT ±1% 62.5mW Resistor 68kΩ 0403 SMT ±1% 100mW Resistor 47kΩ 0403 SMT ±1% 100mW Resistor 47kΩ 0403 SMT ±1% 100mW	R52, R53, R55, R58, R61, R62, R64, R67, R70, R71, R73, R76, R79, R80, R82, R86, R96 R15, R17 R16, R93, R94 R21, R22 R23 R24 R25 R26 R30, R39, R48, R57, R66, R75, R95 R32, R41, R50, R59, R68, R77 R84 R85 R87	RESC1005X04N_0402	C25862 C25882 C25905 C25905 C25918 C25768 C25771 C25924 C25765 C23231 C23182
Resistor 1. 2kΩ 0402 SMT ±1% 62.5mW Resistor 2.4kΩ 0402 SMT ±1% 62.5mW Resistor 20.4kΩ 0402 SMT ±1% 62.5mW Resistor 20.0402 SMT ±1% 62.5mW Resistor 20.0402 SMT ±1% 62.5mW Resistor 1.5kΩ 0402 SMT ±1% 62.5mW Resistor 7.5kΩ 0402 SMT ±1% 62.5mW Resistor 8.2kΩ 0402 SMT ±1% 62.5mW Resistor 6.8kΩ 0402 SMT ±1% 62.5mW Resistor 6.8kΩ 0403 SMT ±1% 0.0mW Resistor 7.0kΩ 0402 SMT ±1% 100mW Resistor 1.2kΩ 0603 SMT ±1% 100mW Resistor 1.2kΩ 0603 SMT ±1% 100mW	R52, R53, R58, R58, R61, R62, R64, R67, R70, R71, R73, R76, R79, R80, R82, R86, R96 R15, R17 R16, R93, R94 R21, R22 R23 R24 R25 R26 R26 R26 R27 R27 R28 R30, R39, R48, R57, R66, R75, R95 R32, R41, R50, R59, R68, R77 R84 R85	RESC1005X04N_0402 RESC1005X04N_0403 RESC1005X04N_0603 RESC1005X06N_0603	C25862 C25882 C25905 C25091 C25867 C25918 C25768 C25771 C25924 C25765 C23231 C23182 C22790
Resistor 1. 2kg 0402 SMT ±1% 62.5mW Resistor 2. 4kg 0402 SMT ±1% 62.5mW Resistor 5. 1kg 0402 SMT ±1% 62.5mW Resistor 5.1kg 0402 SMT ±1% 62.5mW Resistor 7.5kg 0402 SMT ±1% 62.5mW Resistor 7. 5kg 0402 SMT ±1% 62.5mW Resistor 7. 5kg 0402 SMT ±1% 62.5mW Resistor 22kg 0402 SMT ±1% 62.5mW Resistor 27kg 0402 SMT ±1% 62.5mW Resistor 27kg 0402 SMT ±1% 62.5mW Resistor 8.2kg 0402 SMT ±1% 62.5mW Resistor 8.2kg 0402 SMT ±1% 62.5mW Resistor 8.0cg 3 SMT ±1% 100mW Resistor 12kg 0603 SMT ±1% 100mW Resistor 12kg 0403 SMT ±1% 100mW Resistor 68kg 0402 SMT ±1% 100mW Resistor 68kg 0402 SMT ±1% 100mW	R52, R53, R55, R58, R61, R62, R64, R67, R70, R71, R73, R76, R79, R80, R82, R86, R96 R15, R17 R16, R93, R94 R21, R22 R23 R24 R25 R26 R26 R27 R27 R28 R29	RESC1005X04N_0402 RESC1005X04N_0403 RESC1005X04N_0403 RESC1005X04N_0403 RESC1005X04N_0603 RESC1005X06N_0603 RESC1005X06N_0603 RESC1005X06N_0603	C25862 C25882 C25905 C25091 C25967 C25918 C25768 C25771 C25924 C25765 C23231 C22790 C36871
Resistor 1. 2k _Ω 0402 SMT ±1% 62.5mW Resistor 2. 4k _Ω 0402 SMT ±1% 62.5mW Resistor 5.1k _Ω 0402 SMT ±1% 62.5mW Resistor 1.5k _Ω 0402 SMT ±1% 62.5mW Resistor 7. 5k _Ω 0402 SMT ±1% 62.5mW Resistor 7. 5k _Ω 0402 SMT ±1% 62.5mW Resistor 2k _Ω 0402 SMT ±1% 62.5mW	R52, R53, R58, R58, R61, R62, R64, R67, R70, R71, R73, R76, R79, R80, R82, R86, R96 R15, R17 R16, R93, R94 R21, R22 R23 R24 R25 R26 R26 R26 R27 R27 R28 R30, R39, R48, R57, R66, R75, R95 R32, R41, R50, R59, R68, R77 R84 R85	RESC1005X04N_0402 RESC1005X04N_0403 RESC1005X04N_0603 RESC1005X06N_0603	C25862 C25882 C25905 C25091 C25867 C25918 C25768 C25771 C25924 C25765 C23231 C23182 C22790