Reference	Value	Footprint	Description	Datasheet	Suppier link #	± Use Qty Bu	y Qty	Unit price	Ext price (Use Qty * Unit price)	NOTE
C46,C47	15pF	Capacitor_SMD:C_0402_1005Metric	15 pF ±5% 50V Ceramic Capacitor COG, NP0 0402 (1005 Metric)	https://www.yag	https://www.dig	2	1000	\$0.01		\$0.02
C67,C68	18pF	Capacitor_SMD:C_0603_1608Metric	18 pF ±5% 50V Ceramic Capacitor C0G, NP0 0603 (1608 Metric)	https://www.yag	https://www.dig	2	1000	\$0.01	:	\$0.02
C69,C70	27pF	Capacitor_SMD:C_0603_1608Metric	27 pF ±5% 50V Ceramic Capacitor C0G, NP0 0603 (1608 Metric)	https://content.l	https://www.dig	2	1000	\$0.01		\$0.02
C63	200pF	Capacitor_SMD:C_0603_1608Metric	200 pF ±10% 50V Ceramic Capacitor X7R 0603 (1608 Metric)	https://mm.digil	https://www.dig	1	1000	\$0.03	:	\$0.03
C76	10nF/10000pF	Capacitor_SMD:C_0603_1608Metric	10000 pF ±10% 50V Ceramic Capacitor X7R 0603 (1608 Metric)	https://mm.digil	https://www.dig	1	1000	\$0.00	:	\$0.00
C71,C85	22nF/0.22uF	Capacitor_SMD:C_0603_1608Metric	0.022 µF ±10% 25V Ceramic Capacitor X7R 0603 (1608 Metric)	https://www.we-	https://www.dig	2	500	\$0.02	:	\$0.04
C36,C37,C38,C39,C40,C51,C53,C55,C56,C57,C58,C	100nF/0.1uF	Capacitor_SMD:C_0603_1608Metric	0.1 µF ±10% 25V Ceramic Capacitor X7R 0603 (1608 Metric)	https://mm.digil	https://www.dig	55	1000	\$0.00	:	\$0.19
C45,C52,C54	1uF	Capacitor_SMD:C_0603_1608Metric	1 µF ±10% 25V Ceramic Capacitor X7R 0603 (1608 Metric)	https://mm.digil	https://www.dig	3	1000	\$0.01	:	\$0.03
C29,C34,C35,C101,C41,C42,C65	10uF	Capacitor_SMD:C_0603_1608Metric	10 µF ±20% 10V Ceramic Capacitor X5R 0603 (1608 Metric)	https://weblib.sa	https://www.dig	7	1000	\$0.02	:	\$0.12
C100	22uF	Capacitor_SMD:C_0603_1608Metric	22 µF ±20% 10V Ceramic Capacitor X5R 0603 (1608 Metric)	https://mm.digil	https://www.dig	1	1000	\$0.02	:	\$0.02
C5,C6,C7,C50	100uF	Capacitor_SMD:C_0603_1608Metric		https://mm.digil	https://www.dig	4	1000	\$0.12	:	\$0.47 there is no 0603
C3,C4	150uF	Capacitor SMD:C 0603 1608Metric	100 μF ±20% 6.3V Ceramic Capacitor X5R 1206 (3216 Metric)		https://www.digi	2	100	\$0.58		\$1.15 there is no 0603
R24	DNF	Resistor SMD:R 0603 1608Metric	150 µF ±20% 6.3V Ceramic Capacitor X5R 1210 (3225 Metric)	пирал мерпра	intpa//www.uigi	1	100	Q0.30		\$0.00
R25,R26	27Ω		27 Ohms ±5% 0.1W, 1/10W Chip Resistor 0603 (1608 Metric) Moisture Resist	httns://www.van	https://www.digi	2	1000	\$0.01		\$0.00
R30,R31,R33	51Ω	Resistor_SMD:R_0603_1608Metric	51 Ohms ±5% 0.1W, 1/10W Chip Resistor 0603 (1608 Metric) Moisture Resist			3	1000	\$0.01		\$0.02
R27,R28	150Ω	Resistor SMD:R 0603 1608Metric	150 Ohms ±5% 0.1W, 1/10W Chip Resistor 0603 (1608 Metric) Moisture Resist			2	1000	\$0.01		\$0.02
R40	470R	Resistor SMD:R 0603 1608Metric				1	1000	\$0.01		\$0.01
R23	1kΩ		470 Ohms ±5% 0.1W, 1/10W Chip Resistor 0603 (1608 Metric) Moisture Resist 1 kOhms ±5% 0.1W, 1/10W Chip Resistor 0603 (1608 Metric) Moisture Resist			1	1000	\$0.01		\$0.01
R29,R32	2.2kΩ	Designation ONED DOCOD ACCOMMENT			https://www.dig	2	500	\$0.00		\$0.01
R39	2.49K		2.2 kOhms ±5% 0.1W, 1/10W Chip Resistor 0603 (1608 Metric) Thick Film 2.49 kOhms ±1% 0.1W, 1/10W Chip Resistor 0603 (1608 Metric) Automotive A			1	1000	\$0.00		\$0.01
R20	4.7k	Resistor SMD:R 0603 1608Metric				1	1000	\$0.01		\$0.00
R22,R35,R36,R37,R38	4.7K	Resistor_SMD:R_0402_1005Metric	4.7 kOhms ±5% 0.1W, 1/10W Chip Resistor 0603 (1608 Metric) Automotive Al		https://www.dig	5	1000	\$0.00		\$0.00
R18	4.7K 9.53K	Resistor_SMD:R_0402_1005Metric Resistor_SMD:R_0402_1005Metric	4.7 kOhms ±5% 0.063W, 1/16W Chip Resistor 0402 (1005 Metric) Thick Film			5	1000	\$0.00		\$0.00
R17,R42,R43	9.53K 10K	Resistor_SMD:R_0402_1005Metric Resistor_SMD:R_0402_1005Metric	9.53 kOhms ±1% 0.063W, 1/16W Chip Resistor 0402 (1005 Metric) Moisture I 10 kOhms ±1% 0.063W, 1/16W Chip Resistor 0402 (1005 Metric) Thick Film		https://www.dig	1	1000	\$0.00		\$0.00
			TO KOTHIS 21% 0.005W, 17 TOW CHIP RESISTOR 0402 (1005 Metric) THICK PHILI			3				
R45	11K	Resistor_SMD:R_0603_1608Metric	11 kOhms ±1% 0.1W, 1/10W Chip Resistor 0603 (1608 Metric) Thick Film		https://www.dig	1	1000	\$0.01		\$0.01
R44	25.5K		25.5 kOhms ±1% 0.063W, 1/16W Chip Resistor 0402 (1005 Metric) Moisture F			1	1000	\$0.01		\$0.01
R46	26.1K		26.1 kOhms ±1% 0.1W, 1/10W Chip Resistor 0603 (1608 Metric) Moisture Res			1	100	\$0.01		\$0.01
R16	90.9K	Resistor_SMD:R_0402_1005Metric	90.9 kOhms ±1% 0.063W, 1/16W Chip Resistor 0402 (1005 Metric) Moisture F			1	1000	\$0.00		\$0.00
R19	200K 900K	Resistor_SMD:R_0603_1608Metric Resistor_SMD:R_0603_1608Metric	200 kOhms ±5% 0.1W, 1/10W Chip Resistor 0603 (1608 Metric) Automotive A			1	1000	\$0.01 \$0.01		\$0.01 \$0.01 There is no 900k
R34	1ΜΩ	Resistor_SMD:R_0603_1608Metric	910 kOhms ±1% 0.1W, 1/10W Chip Resistor 0603 (1608 Metric) Moisture Res 1 MOhms ±1% 0.1W, 1/10W Chip Resistor 0603 (1608 Metric) Thick Film		https://www.dig	1	1000	\$0.01		\$0.01 There is no 9008
D1,D2	SMBJ33CA	DIONM5436X261N	53.3V Clamp 11.3A lpp Tvs Diode Surface Mount D0-214AA (SMBJ)		https://www.dig	2	2	\$0.01		\$0.70
D3,D4	LED	LED_SMD:LED_0603_1608Metric	Green 525nm LED Indication - Discrete 3.3V 0603 (1608 Metric)		https://www.dig	2	10			\$0.47
FB1,FB2,FB5,FB6	220 @100MHz		220 Ohms @ 100 MHz 1 Power Line Ferrite Bead 0805 (2012 Metric) 3A 40m			4	10			\$0.21
H1,H2,H3,H4	MountingHole	MountingHole:MountingHole_2.7mm_M2.5	220 011110 @ 100 1111 2 1 1 01101 21101 01110 Dead 0000 (2012 1110110) 01 1 1011	~	intego.// www.dig	4				yo.21
J2,J3		R GSB4111312HR:AMPHENOL_GSB4111312HR	USB-A (USB TYPE-A) USB 3.2 Gen 2 (USB 3.1 Gen 2, Superspeed + (USB 3.1))	https://cdn.amp	https://www.dia	3	3			\$3.24
J5			1 Port RJ45Through Hole 10/100/1000 Base-T, AutoMDIX		https://www.dig	1	0			\$0.00 น่าจะฟรีจากชั้น 2
J6			Power Barrel Connector Jack 2.05mm ID (0.081"), 5.50mm OD (0.217") Throu			1	1			\$0.72
J7,J10	Conn_01x02		Connector Header Through Hole 2 position 0.100° (2.54mm)		https://www.dig	2	10			\$1.02
J9	Conn_01x03	Connector_PinSocket_2.54mm:PinSocket_1x03_P2.54	Connector Header Through Hole 3 position 0.100° (2.54mm)	https://www.we	https://www.dig	1	10		:	\$1.02
L2	1uH	Inductor_SMD:L_1008_2520Metric	1 µH Shielded Drum Core, Wirewound Inductor 3.3 A 40m0hm Max 1008 (252	https://www.mu	https://www.dig	1	10	\$0.20		\$0.20
MK2	SPH0645LM4H	Sensor_Audio:Knowles_SPH0645LM4H-6_3.5x2.65mn	20 Hz \sim 10 kHz Digital, I2S Microphone MEMS (Silicon) 1.62 V \sim 3.6 V Omnid	https://mm.digil	https://www.dig	1	1		:	\$2.73
Q1,Q2		NVTFS6H854NTAG	N-Channel 60 V 13A (Ta), 50A (Tc) 3.1W (Ta), 46W (Tc) Surface Mount 8-WDF			2	2			\$0.76
SW2	SW_Push	Button_Switch_THT:SW_PUSH_1P1T_6x3.5mm_H4.3_	Tactile Switch SPST-NO Top Actuated Through Hole	https://mm.digil	https://www.dig	1	1		:	\$0.37
U1	RTL8153B-VB-C	RTL8153B-VB-CG:QFN40P500X500X90-41N	Integrated 10/100/1000M Ethernet Controller for USB 3.0 Applications USB Q	https://www.lcs	https://www.lcsi	1	10			\$2.69
U11	RP2040	Package_DFN_QFN:QFN-56-1EP_7x7mm_P0.4mm_EP	ARM® Cortex®-M0+ - Microcontroller IC 32-Bit Dual-Core 133MHz External P	https://datashee	https://www.digi	1	1		:	\$0.80

Reference	Value	Footprint	Description	Datasheet	Suppier link	# Use Qty	Buy Qty	Unit price	Ext price (Use Qty * Unit price)	NOTE
U12	TUSB8041	Package_DFN_QFN:QFN-64-1EP_9x9mm_P0.5mm_EP	USB Hub Controller USB 3.0 USB, GPIO, I2C, SMBus Interface 64-VQFN (9x9)	http://www.ti.co	https://th.mouse	1		10		\$4.97
U14	NCP1117-3.3_S	Package_T0_SOT_SMD:SOT-223-3_TabPin2	Linear Voltage Regulator IC Positive Fixed 1 Output 1A SOT-223	http://www.ons	https://www.dig	1		10		\$0.71
U15	VEML6040	VEML6040:VISHAY_VEML6040_1.25X2X1	Color Sensor 16 b Low Power Consumption 4-TFLGA	https://www.vis	https://www.lcs	1		10		\$0.99
U16	MAX98357A	Package_DFN_QFN:TQFN-16-1EP_3x3mm_P0.5mm_E	Amplifier IC 1-Channel (Mono) Class D 16-TQFN (3x3)	https://www.an	https://www.lcs	1		10		\$1.52
U2	TPS2561DRCR	DRC10_2P4X1P65	Power Switch/Driver 1:2 N-Channel 2.5A 10-VSON (3x3)	https://www.ti.c	https://www.lcs	1		10		\$0.67
U3,U5	LM74700	Package_TO_SOT_SMD:SOT-23-6	OR Controller N+1 ORing Controller N-Channel 1:1 SOT-23-6	http://www.ti.co	https://www.lcs	2		10		\$1.03
U4	TPS62902RPJR	QFN_902RPJR_TEX	Buck Switching Regulator IC Positive Adjustable 0.4V 1 Output 2A 9-VFQFN	https://www.ti.c	https://www.dig	1		10		\$0.95
U8	ABM8-272-T3	ABM8-272-T3:ABM8-272-T3	12 MHz ±30ppm Crystal 10pF 50 Ohms 4-SMD, No Lead	https://mm.digi	https://www.lcs	1		10		\$0.29
U9	W25Q128JVS	Package_S0:S0IC-8_5.3x5.3mm_P1.27mm	FLASH - NOR Memory IC 128Mbit SPI - Quad I/O, QPI 133 MHz 8-SOIC	https://www.wir	https://www.lcs	1		10		\$0.54
Y2	ABLS-25.000MF	ABLS_25_000MHZ_B2F_T:XTAL_ABLS-25.000MHZ-B2	25 MHz ±20ppm Crystal 18pF 40 Ohms HC-49/US	https://abracon	https://www.dig	1		10		\$0.22
Y3	ABM3C-24.000N	CRYSTAL_ABM3C_ABR	24 MHz ±30ppm Crystal 18pF 50 Ohms 4-SMD, No Lead	https://abracon	https://www.dig	1		10		\$0.63
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