

WiFi Gate Control Board BOM Rev 1.1

Quantity	References	Value	Description	Manufacturer	Part Number	Vendor	Vendor Part Number
6	C1 C2 C3 C4 C55 C56	1nF	CAP, 0603, 1nF, 10%, X7R, 10V	Vishay	VJ0603Y102KXAAC31	Mouser	77-VJ0603Y102KXAAC31
2	C5 C57	100uF	CAP, SMD 8X10, 100uF, 20%, EC, 35V	United Chemi-Con	EMVH350ADA101MHA0G	Mouser	661-EMVH350ADA101M
6	C6 C8 C18 C58 C60 C63	22uF	CAP, 0805, 22uf, 20%, X5R, 25V	Taiyo Yuden	TMK212BBJ226MG-TT	Mouser	963-TMK212BBJ226MGTT
2	C7 C59	3.3nF	CAP, 0603, 3.3nF, 5%, X7R, 10V	Vishay	VJ0603Y332JXQPW1BC	Mouser	77-VJ0603Y332JXQBC
33	C9 C11 C12 C13 C14 C16 C21 C23 C24 C25 C26 C27 C30 C31 C34 C36 C37 C38 C39 C42 C43 C46 C47 C50 C51 C62 C64 C73 C76 C78 C79 C80 C82	0.1uF	CAP, 0603, 0.1uF, 5%, X7R, 50V	Yageo	CC603JRX7R9BB104	Mouser	603-CC603JRX7R9BB104
3	C10 C15 C81	4.7uF	CAP, 0603, 4.7uf, 10%, X7R, 6.3V	Taiyo Yuden	JMK107BB7475KA-T	Mouser	963-JMK107BB7475KA-T
17	C17 C19 C28 C29 C32 C33 C35 C40 C41 C44 C45 C48 C49 C52 C53 C54 C61	1uF	CAP, 0603, 1uF, 10%, X5R, 50V	Taiyo Yuden	UMK107BJ105KA-T	Mouser	963-UMK107BJ105KA-T
2	C20 C22	15pF	CAP, 0603, 15pF, 5%, C0G, 50V	AVX	06035A150JAT2A	Mouser	581-06035A150J
2	C65 C66	470uF	CAP, THT 16X15, 470uF, 20%, EC, 35V	Nichicon	UPM1V471MHD6	Mouser	647-UPM1V471MHD6
2	C67 C68	DNI	CAP, 0603, Not Installed				
2	C69 C72	10uF	CAP, 1206, 10uF, 10%, X7R, 50V	TDK	CGA5L1X7R1H106K160AC	Mouser	810-CGA5L1X7R1H106K1
4	C70 C71 C74 C75	0.22uF	CAP, 0603, 0.22uF, 10%, X7R, 50V	Taiyo Yuden	UMK107B7224KA-TR	Mouser	963-UMK107B7224KA-TR
1	C77	10nF	CAP, 0603, 10nF, 5%, X7R, 50V	Vishay	VJ0603Y103JXACW1BC	Mouser	77-VJ0603Y103JXACBC
3	D1 D2 D15	DFLS130	DIO, PowerDI123, Schottky Rectifier, 30V, 1A	Diodes Inc	DFLS130LQ	Mouser	621-DFLS130L
1	D3	PRTR5V0U2X	TVS, SOT143, ESD Protection, USB	Nexperia	PRTR5V0U2X,215	Mouser	771-PRTR5V0U2X-T/R
18	D4 D5 D6 D13 D14 D16 D17 D18 D19 D20 D21 D22 D23 D24 D25 D26 D27 D28	Red/Green	LED, PLCC4, Red/Green	Avago	HSMF-A203-A00J1	Mouser	630-HSMF-A203-A00J1
7	D7 D8 D9 D10 D11 D12 D29	TPD2E2U06	TVS, SC70-3, ESD TVS Protection, Dual	Texas Instruments	TPD2E2U06QDCKRQ1	Mouser	595-TPD2E2U06QDCKRQ1
2	F1 F2	0.75A	Fuse, PTC Resettable, 0.75A, SMT	Bourns	MFSM075-2	Mouser	652-MFSM075-2
1	F3	15A	Fuse, Mini Fuse Holder	Keystone	3568	Mouser	534-3568
1	J1	USB_B_Micro	CON, THT, Micro USB 2.0 Type AB, Vertical	Wurth Electronics	614105150721	Mouser	710-614105150621
1	J2	Cortex Debug	CON, SMD, 1.27mm Header, Dual Row, Vertical, 10 Pos	Amphenol FCI	202112100010C4LF	Mouser	649-202112100010C4LF
8	J3 J4 J5 J6 J7 J8 J10 J11	Screw Header 4 Pos	CON, THT, 5.08mm Pluggable Terminal Header, 4 Pos	Phoenix Contact	1755752	Mouser	651-1755752
8		Screw Header 4 Pos	CON, THT, 5.08mm Pluggable Terminal Plug, 4 Pos	Phoenix Contact	1757035	Mouser	651-1757035
1	J9	Screw Header 2 Pos	CON, THT, 5.08mm Pluggable Terminal Header, 2 Pos	Phoenix Contact	1755736	Mouser	651-1755736
1		Screw Header 2 Pos	CON, THT, 5.08mm Pluggable Terminal Plug, 2 Pos	Phoenix Contact	1757019	Mouser	651-1757019
1	J12	Motor	CON, THT, MATE-N-LOK, Dual Row, 8 Pos	TE Connectivity	350212-1	Mouser	571-3502121

WiFi Gate Control Board BOM Rev 1.1

Quantity	References	Value	Description	Manufacturer	Part Number	Vendor	Vendor Part Number
3	L1 L2 L5	1k@100MHz	BEAD, 1206, 1k@100MHz, 2A	Murata	BLM31KN102SH1L	Mouser	81-BLM31KN102SH1L
2	L3 L4	470@100MHz	BEAD, 0603, 470R@100MHz, 1A	Murata	BLM18PG471SN1D	Mouser	81-BLM18PG471SN1D
1	Q1	IPD90P03P4L-04	TRANSISTOR, TO-252-3, P-CH, -90A, -30V	Infineon	IPD90P03P4L-04	Mouser	726-IPD90P03P4L04
2	Q2 Q3	IFX007T	IC, Motor Driver, Half Bridge, 55A	Infineon	IFX007TAUMA1	Mouser	726-IFX007TAUMA1
2	R1 R62	1.21M	RES, 0603, 1.21M, 1/10W, 1%, T100	Yageo	RC0603FR-071M21L	Mouser	603-RC0603FR-071M21L
2	R2 R63	383k	RES, 0603, 383k, 1/10W, 1%, T100	Panasonic	ERJ-3EKF3833V	Mouser	667-ERJ-3EKF3833V
5	R3 R4 R6 R7 R8	44.2R	RES, 0603, 44.2R, 1/10W, 1%, T100	Panasonic	ERJ-3EKF44R2V	Mouser	667-ERJ-3EKF44R2V
1	R5	39R	RES, 0603, 39R, 1/10W, 1%, T100	Panasonic	ERJ-3EKF39R0V	Mouser	667-ERJ-3EKF39R0V
12	R9 R10 R20 R21 R28 R29 R36 R37 R46 R47 R54 R55	33.2k	RES, 0603, 33.2k, 1/16W, 0.5%, T25	Susumu	RR0816P-3322D51C	Mouser	754-RR0816P-3322D51C
3	R11 R12 R13	4.7k	RES, 0603, 4.7k, 1/10W, 1%, T100	Panasonic	ERJ-3EKF4701V	Mouser	667-ERJ-3EKF4701V
12	R14 R15 R22 R23 R30 R31 R38 R39 R48 R49 R56 R57	6.81k	RES, 0603, 6.81k, 1/16W, 0.5%, T25	Susumu	RR0816P-6811D81H	Mouser	754-RR0816P-6811D81H
14	R16 R18 R24 R26 R32 R34 R42 R44 R50 R52 R58 R60 R77 R78	1k	RES, 1206, 1k, 1/4W, 0.5%, T100	Yageo	AC1206DR-071KL	Mouser	AC1206DR-071KL
22	R17 R19 R25 R27 R33 R35 R43 R45 R51 R53 R59 R61 R66 R67 R68 R69 R76 R79 R80 R81 R84 R85	10k	RES, 0603, 10k, 1/16W, 0.5%, T25	Susumu	RR0816P-103-D	Mouser	754-RR0816P-103D
3	R40 R41 R65	100k	RES, 0603, 100k, 1/10W, 1%, T100	Panasonic	ERJ-3EKF1003V	Mouser	667-ERJ-3EKF1003V
1	R64	2.94k	RES, 0603, 2.94k, 1/10W, 1%, T100	Panasonic	ERJ-3EKF2941V	Mouser	667-ERJ-3EKF2941V
1	R70	2.2k	RES, 0603, 2.2k, 1/10W, 1%, T100	Panasonic	ERJ-3EKF2201V	Mouser	667-ERJ-3EKF2201V
1	R71	150R	RES, 1218, 150R, 1W, 1%, T100	Vishay / Dale	CRCW1218150RFKEK	Mouser	71-CRCW1218-150-E3
2	R72 R73	422R	RES, 0603, 422R, 1/10W, 1%, T100	Panasonic	ERJ-3EKF4220V	Mouser	667-ERJ-3EKF4220V
2	R74 R75	330k	RES, 1206, 330k, 2/3W, 5%, T200	Panasonic	ERJ-P08J334V	Mouser	667-ERJ-P08J334V
2	R82 R83	1k	RES, 0603, 1k, 1/10W, 1%, T100	Panasonic	ERJ-3EKF1001V	Mouser	667-ERJ-3EKF1001V
2	RL1 RL2	CPC1511Y	MODULE, THT, SSR, Normally Open, 450mA	IXYS	CPC1511Y	Mouser	849-CPC1511Y
2	SW1 SW2	~	SW, THT, Push Button	Wurth Electronics	430476085716	Mouser	710-430476085716
2	U1 U21	LMZ21700	MODULE, SMD, Simple Switcher, 17V, 650mA	Texas Instruments	LMZ21700SILR	Mouser	595-LMZ21700SILR
1	U2	TMP100	IC, SOT-23-6, I2C Temperature Sensor	Texas Instruments	TMP100AQDBVRQ1	Mouser	595-TMP100AQDBVRQ1
1	U3	ATWINC1500-MR210UB	MODULE, SMD, WiFi, u.FL connector	Microchip	ATWINC1500-MR210UB1140	Mouser	579-C1500MR210UB1140
1	U4	SAMD21G18-M	IC, QFN44, MCU, ARM, 256kB Flash, 32kB SRAM, 48MHz	Microchip	ATSAMD21G18A-MUT	Mouser	556-ATSAMD21G18A-MUT
1	U5	74LVC2G07	IC, SOT-23-6, Dual Buffer with Open-Drain Outputs	Texas Instruments	SN74LVC2G07DBVR	Mouser	595-SN74LVC2G07DBVR
1	U6	74LVC2G06	IC, SOT-23-6, Dual Inverter with Open-Drain Outputs	Texas Instruments	SN74LVC2G06DBVR	Mouser	595-SN74LVC2G06DBVR

WiFi Gate Control Board BOM Rev 1.1

Quantity	References	Value	Description	Manufacturer	Part Number	Vendor	Vendor Part Number
12	U7 U8 U9 U10 U13 U14 U15 U16 U17 U18 U19 U20	TPS3779	IC, SOT-23-6, Dual Voltage Detector	Texas Instruments	TPS3779BDBVR	Mouser	595-TPS3779BDBVR
1	U11	TCA6424A	IC, QFN-32, I2C IO Expander	Texas Instruments	TCA6424ARGJR	Mouser	595-TCA6424ARGJR
1	U12	REF3330	IC, SOT-23, Voltage Reference, 3.0V, 30ppm	Texas Instruments	REF3330AIDBZR	Mouser	595-REF3330AIDBZR
1	U22	LP5024	IC, QFN-32, 24-Channel, I2C LED Driver	Texas Instruments	LP5024RSMR	Mouser	595-LP5024RSMR
1	U23	TCA6408A	IC, VQFN-16, I2C IO Expander	Texas Instruments	TCA6408ARGTR	Mouser	595-TCA6408ARGTR
1	U24	ITS4075Q	IC, PG-TSDSO-14, 4-Channel, High-Side Power Switch	Infineon	ITS4075Q-EP-DXUMA1	Mouser	726-ITS4075QEPDXUMA1
1	U25	74LVC2G17	IC, SOT-23-6, Dual Schmitt-Trigger Buffer	Texas Instruments	SN74LVC2G17DBVR	Mouser	595-SN74LVC2G17DBVR
1	U26	REF3325	IC, SOT-23, Voltage Reference, 2.5V, 30ppm	Texas Instruments	REF3325AIDBZR	Mouser	595-REF3325AIDBZR
1	Y1	32.768kHz	XTL, SMD, 32.768kHz	Abracon	ABS07-32.768KHZ-9-T	Mouser	815-ABS07-32.768K9T
1	Z1	10V	Zener, 10V, SOT-23	On Semiconductor	SZBZX84C10LT1G	Mouser	863-SZBZX84C10LT1G
1	Z2	2.7V	Zener, 2.5V, SOT-23	On Semiconductor	SZBZX84C2V7LT1G	Mouser	863-SZBZX84C2V7LT1G