

# WiFi Gate Control Board BOM Rev 1.0

Quantity	References	Description	Manufacturer	Part Number	Vendor	Vendor Part Number
34	C1 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 C70 C73 C75 C76 C77 C78 C80	CAP, 0603, 0.1uF, 5%, X7R, 50V	Yageo	CC603JRX7R9BB104	Mouser	603-CC603JRX7R9BB104
6	C2 C3 C4 C5 C55 C56	CAP, 0603, 1nF, 10%, X7R, 10V	Vishay	VJ0603Y102KXAAC31	Mouser	77-VJ0603Y102KXAAC31
2	C6 C57	CAP, SMD 8X10, 100uF, 20%, EC, 35V	United Chemi-Con	EMVH350ADA101MHA0G	Mouser	661-EMVH350ADA101M
6	C7 C9 C18 C58 C60 C63	CAP, 0805, 22uf, 20%, X5R, 25V	Taiyo Yuden	TMK212BBJ226MG-TT	Mouser	963-TMK212BBJ226MGTT
2	C8 C59	CAP, 0603, 3.3nF, 5%, X7R, 10V	Vishay	VJ0603Y332JXQPW1BC	Mouser	77-VJ0603Y332JXQPBC
3	C10 C15 C79	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	CAP, 0603, 1uF, 10%, X5R, 50V	Taiyo Yuden	UMK107BJ105KA-T	Mouser	963-UMK107BJ105KA-T
2	C20 C22	CAP, 0603, 15pF, 5%, C0G, 50V	AVX	06035A150JAT2A	Mouser	581-06035A150J
1	C65	CAP, THT 16X20, 1000uF, 20%, EC, 35V	Panasonic	EEU-FC1V102S	Mouser	667-EEU-FC1V102S
2	C66 C69	CAP, 1206, 10uF, 10%, X7R, 50V	TDK	CGA5L1X7R1H106K160AC	Mouser	810-CGA5L1X7R1H106K1
4	C67 C68 C71 C72	CAP, 0603, 0.22uF, 10%, X7R, 50V	Taiyo Yuden	UMK107B7224KA-TR	Mouser	963-UMK107B7224KA-TR
1	C74	CAP, 0603, 10nF, 5%, X7R, 50V	Vishay	VJ0603Y103JXACW1BC	Mouser	77-VJ0603Y103JXACBC
2	D1 D2	DIO, PowerDI123, Schottky Rectifier, 30V, 1A	Diodes Inc	DFLS130LQ	Mouser	621-DFLS130L
1	D3	TVS, SOT143, ESD Protection, USB	Nexperia	PRTR5V0U2X,215	Mouser	771-PRTR5V0U2X-T/R
18	D4 D5 D6 D13 D14 D15 D16 D17 D18 D19 D20 D21 D22 D23 D24 D25 D26 D27	LED, PLCC4, Red/Green	Avago	HSMF-A203-A00J1	Mouser	630-HSMF-A203-A00J1
7	D7 D8 D9 D10 D11 D12 D28	TVS, SC70-3, ESD TVS Protection, Dual	Texas Instruments	TPD2E2U06QDCKRQ1	Mouser	595-TPD2E2U06QDCKRQ1
2	F1 F2	Fuse, PTC Resettable, 0.75A, SMT	Bourns	MFSM075-2	Mouser	652-MFSM075-2
1	F3	Fuse, Mini Fuse Holder	Keystone	3568	Mouser	534-3568
1	J1	CON, THT, Micro USB 2.0 Type AB, Vertical	Wurth Electronics	614105150721	Mouser	710-614105150621
1	J2	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	CON, THT, 5.08mm Pluggable Terminal Header, 4 Pos	Phoenix Contact	1755752	Mouser	651-1755752
8		CON, THT, 5.08mm Pluggable Terminal Plug, 4 Pos	Phoenix Contact	1757035	Mouser	651-1757035
1	J9	CON, THT, 5.08mm Pluggable Terminal Header, 2 Pos	Phoenix Contact	1755736	Mouser	651-1755736
1		CON, THT, 5.08mm Pluggable Terminal Plug, 2 Pos	Phoenix Contact	1757019	Mouser	651-1757019
1	J12	CON, THT, MATE-N-LOK, Dual Row, 8 Pos	TE Connectivity	350212-1	Mouser	571-3502121
3	L1 L2 L5	BEAD, 1206, 1k@100MHz, 2A	Murata	BLM31KN102SH1L	Mouser	81-BLM31KN102SH1L
2	L3 L4	BEAD, 0603, 470R@100MHz, 1A	Murata	BLM18PG471SN1D	Mouser	81-BLM18PG471SN1D
1	Q1	TRANSISTOR, TO-252-3, P-CH, -90A, -30V	Infineon	IPD90P03P4L-04	Mouser	849-CPC1511
2	Q2 Q3	IC, Motor Driver, Half Bridge, 55A	Infineon	IFX007TAUMA1	Mouser	726-IFX007TAUMA1
4	R1 R12 R13 R14	RES, 0603, 4.7k, 1/10W, 1%, T100	Panasonic	ERJ-3EKF4701V	Mouser	667-ERJ-3EKF4701V
2	R2 R63	RES, 0603, 1.21M, 1/10W, 1%, T100	Yageo	RC0603FR-071M21L	Mouser	603-RC0603FR-071M21L
2	R3 R64	RES, 0603, 383k, 1/10W, 1%, T100	Panasonic	ERJ-3EKF3833V	Mouser	667-ERJ-3EKF3833V
2	R4 R5	RES, 0603, 143R, 1/10W, 1%, T100	Panasonic	ERJ-3EKF1430V	Mouser	667-ERJ-3EKF1430V
1	R6	RES, 0603, 39R, 1/10W, 1%, T100	Panasonic	ERJ-3EKF39R0V	Mouser	667-ERJ-3EKF39R0V
3	R7 R8 R9	RES, 0603, 73.2R, 1/10W, 1%, T100	Panasonic	ERJ-3EKF73R2V	Mouser	667-ERJ-3EKF73R2V
12	R10 R11 R21 R22 R29 R30 R37 R38 R47 R48 R55 R56	RES, 0603, 6.81k, 1/16W, 0.5%, T25	Susumu	RR0816P-3322D51C	Mouser	754-RR0816P-3322D51C
12	R15 R16 R23 R24 R31 R32 R39 R40 R49 R50 R57 R58	RES, 0603, 6.81k, 1/16W, 0.5%, T25	Susumu	RR0816P-6811D81H	Mouser	754-RR0816P-6811D81H
14	R17 R19 R25 R27 R33 R35 R43 R45 R51 R53 R59 R61 R78 R79	RES, 1206, 1k, 1/4W, 0.5%, T100	Yageo	AC1206DR-071KL	Mouser	AC1206DR-071KL
12	R18 R20 R26 R28 R34 R36 R44 R46 R52 R54 R60 R62	RES, 0603, 10k, 1/16W, 0.5%, T25	Susumu	RR0816P-103-D	Mouser	754-RR0816P-103D
3	R41 R42 R66	RES, 0603, 100k, 1/10W, 1%, T100	Panasonic	ERJ-3EKF1003V	Mouser	667-ERJ-3EKF1003V
1	R65	RES, 0603, 3.74k, 1/10W, 1%, T100	Panasonic	ERJ-3EKF3741V	Mouser	667-ERJ-3EKF3741V
10	R67 R68 R69 R70 R77 R80 R81 R84 R85 R86	RES, 0603, 10k, 1/10W, 1%, T100	Panasonic	ERJ-3EKF1002V	Mouser	667-ERJ-3EKF1002V
1	R71	RES, 0603, 2.2k, 1/10W, 1%, T100	Panasonic	ERJ-3EKF2202V	Mouser	667-ERJ-3EKF2202V
1	R72	RES, 1218, 150R, 1W, 1%, T100	Vishay / Dale	CRCW1218150RFKEK	Mouser	71-CRCW1218-150-E3
2	R73 R74	RES, 0603, 42R, 1/10W, 1%, T100	Panasonic	ERJ-3EKF4220V	Mouser	667-ERJ-3EKF4220V
2	R75 R76	RES, 1206, 330k, 2/3W, 5%, T200	Panasonic	ERJ-P08J334V	Mouser	667-ERJ-P08J104V
2	R82 R83	RES, 0603, 1k, 1/10W, 1%, T100	Panasonic	ERJ-3EKF1001V	Mouser	667-ERJ-3EKF1001V
2	RL1 RL2	MODULE, THT, SSR, Normally Open, 450mA	IXYS	CPC1511Y	Mouser	849-CPC1511Y
1	SW1	SW, THT, Push Button	Wurth Electronics	430476085716	Mouser	710-430476085716
1	SW2	SW, THT, Push Button	Wurth Electronics	430476085716	Mouser	710-430476085716
2	U1 U21	MODULE, SMD, Simple Switcher, 17V, 650mA	Texas Instruments	LMZ21700SILR	Mouser	595-LMZ21700SILR
1	U2	IC, MSOP8, 1-Wire Temperature Sensor	Maxim	DS18B20U+	Mouser	700-DS18B20U
1	U3	MODULE, SMD, WiFi, u.FL connector	Microchip	ATWINC1500-MR210UB1140	Mouser	579-C1500MR210UB1140
1	U4	IC, QFN44, MCU, ARM, 256kB Flash, 32kB SRAM, 48MHz	Microchip	ATSAMD21G18A-MUT	Mouser	556-ATSAMD21G18A-MUT

1	U5	IC, SOT-23-6, Dual Buffer with Open-Drain Outputs	Texas Instruments	SN74LVC2G07DBVR	Mouser	595-SN74LVC2G07DBVR
1	U6	SW, THT, Push Button	Texas Instruments	SN74LVC2G06DBVR	Mouser	595-SN74LVC2G06DBVR
12	U7 U8 U9 U10 U13 U14 U15 U16 U17 U18 U19 U20	IC, SOT-23-6, Dual Voltage Detector	Texas Instruments	TPS3779BDBVR	Mouser	595-TPS3779BDBVR
1	U11	IC, QFN-32, I2C IO Expander	Texas Instruments	TCA6424ARGJR	Mouser	595-TCA6424ARGJR
1	U12	IC, SOT-23, Voltage Reference, 3.0V, 30ppm	Texas Instruments	REF3330AIDBZR	Mouser	595-REF3330AIDBZR
1	U22	IC, QFN-32, 24-Channel, I2C LED Driver	Texas Instruments	LP5024RSMR	Mouser	595-LP5024RSMR
1	U23	IC, VQFN-16, I2C IO Expander	Texas Instruments	TCA6408ARGTR	Mouser	595-TCA6408ARGTR
1	U24	IC, PG-TSDSO-14, 4-Channel, High-Side Power Switch	Infineon	ITS4075Q-EP-DXUMA1	Mouser	726-ITS4075QEPDXUMA1
1	U25	IC, SOT-23-6, Dual Schmitt-Trigger Buffer	Texas Instruments	SN74LVC2G17DBVR	Mouser	595-SN74LVC2G17DBVR
1	U26	IC, SOT-23-5, Single Inverter Gate	Texas Instruments	SN74LVC1G04DBVR	Mouser	595-SN74LVC1G04DBVR
1	U27	IC, SOT-23, Voltage Reference, 2.5V, 30ppm	Texas Instruments	REF3325AIDBZR	Mouser	595-REF3325AIDBZR
1	Y1	XTL, SMD, 32.768kHz	Abracon	ABS07-32.768KHZ-9-T	Mouser	815-ABS07-32.768K9T
1	Z1	Zener, 10V, SOT-23	On Semiconductor	SZBZX84C10LT1G	Mouser	863-SZBZX84C10LT1G
1	Z2	Zener, 2.5V, SOT-23	On Semiconductor	SZBZX84C2V7LT1G	Mouser	863-SZBZX84C2V7LT1G