

STEVAL-MKI109V3

BILL OF MATERIALS

Item	Quantity	Reference	Manufacturer	Manufacturer Part Number	Description	Part / Value	Package	Additional Notes
1	3	BT1, BT2, BT3	C&K COMPONENTS	KMR211G LFS	Button KMR211G		SMD_KMR211G_S	BUTTON_SMALL
2	43	C1, C2, C23, C33, C38, C42, C44, C46, C49, C52, C53, C54, C56, C58, C57, C58, C59, C61, C62, C63, C67, C69, C70, C71, C73, C74, C75, C77, C78, C79, C80, C81, C82, C83, C84, C85, C87, C92, C98, C99, C100, C101, C102	MULTICOMP	MC0603B104K250CT	CAP CER 0603 100nF 25V X7R 10%	100nF	SMD_C_0603_REFLOW_S	CAPACITOR
3	1	C3	MULTICOMP	MC0603B103K250CT	CAP CER 0603 10nF 25V X7R 10%	10nF	SMD_C_0603_REFLOW_S	CAPACITOR
4	5	C4, C35, C43, C45, C60	MULTICOMP	MC0603X109K250CT	CAP CER 0603 1uF 25V X5R 10%	1uF	SMD_C_0603_REFLOW_S	CAPACITOR
5	3	C6, C21, C26	MULTICOMP	MC0603X47K160CT	CAP CER 0603 470nF 16V X5R 10%	470nF	SMD_C_0603_REFLOW_S	CAPACITOR
6	15	C7, C11, C12, C14, C18, C19, C20, C27, C29, C31, C34, C35, C36, C39, C30	MULTICOMP	MC0603N101J500CT	CAP CER 0603 100pF 50V COG/NP0 5%	100pF	SMD_C_0603_REFLOW_S	CAPACITOR
7	12	C8, C9, C10, C15, C16, C17, C88, C91, C93, C94, C97, C98	MULTICOMP	MC0603B22K3500CT	CAP CER 0603 22nF 50V X7R 10%	22nF	SMD_C_0603_REFLOW_S	CAPACITOR
8	3	C13, C24, C66	MULTICOMP	MC0603N151J500CT	CAP CER 0603 150pF 50V COG/NP0 5%	150pF	SMD_C_0603_REFLOW_S	CAPACITOR
9	2	C22, C32	MURATA	GRM21BR60J476ME15L	CAP CER 0805 47uF 6.3V X5R 20%	47uF	SMD_C_0805_REFLOW_S	CAPACITOR
10	7	C25, C30, C34, C37, C39, C40, C41	MULTICOMP	MC0603X106M6R3CT	CAP CER 0603 10uF 6.3V X5R 20%	10uF	SMD_C_0603_REFLOW_S	CAPACITOR
11	5	C28, C36, C51, C68, C72	MURATA	GRM188R61A475KE15D	CAP CER 0603 4.7uF 10V X5R 10%	4.7uF	SMD_C_0603_REFLOW_S	CAPACITOR
12	2	C47, C48	MULTICOMP	MC0603N180J500CT	CAP CER 0603 18pF 50V COG/NP0 5%	18pF	SMD_C_0603_REFLOW_S	CAPACITOR
13	2	C50, C76	MULTICOMP	MC0603X225K100CT	CAP CER 0603 2.2uF 25V X5R 10%	2.2uF	SMD_C_0603_REFLOW_S	CAPACITOR
14	2	D1, D4	KINGBRIGHT	KPT-1608SGC	LED GREEN 0603 12mcd 120°	12mcd	SMD_LED_0603_REFLOW_S	LED_GREEN
15	1	D2	KINGBRIGHT	KPT-1608EC	LED RED 0603 15mcd 120°	15mcd	SMD_LED_0603_REFLOW_S	LED_RED
16	2	D3, D5	KINGBRIGHT	KPT-1608YC	LED YELLOW 0603 8mcd 120°	8mcd	SMD_LED_0603_REFLOW_S	588nm
17	1	D6	KINGBRIGHT	KPT-1608BCC-D	LED BLUE 0603 100mcd 120°	100mcd	SMD_LED_0603_REFLOW_S	LED_BLUE
18	1	D7	ON SEMICONDUCTOR	BAS16XV2T1G	BAS16XV2T1G	0.15A	SMD_SOD523_REFLOW	DIODE
19	8	D10, D11, D12, D13, D14, D15, D16, D17	ON SEMICONDUCTOR	RB520S30T1G	RB520S30T1G SOD-523 0.2A 30V Schottky	0.2A	SMD_SOD523_REFLOW	DIODE
20	1	FB1	FAIR-RITE	Z506036017Y0	Z506036017Y0	0.35Ω DC, 600Ω /100MHz, 400mA	SMD_R_0603_REFLOW_S	Ferrite
21	1	FB2	LAIRD TECHNOLOGIES	HZ0603A222R-10	HZ0603A222R-10	1.50 DC, 2.2kΩ /100MHz, 100mA	SMD_R_0603_REFLOW_S	Ferrite
22	1	J1	WURTH ELEKTRONIK	61301211121	Header 1x12 pins, 2.54mm, 1-12		TRH_HDR1X12_01_TO_12	HEADER_1x12_01_TO_12
23	1	J2		Adapter DIL24	Adapter DIL24		TRH_ADAPTER_DIL24	ADAPTER_DIL24
24	1	J3	WURTH ELEKTRONIK	61301211121	Header 1x12 pins, 2.54mm, 13-24		TRH_HDR1X12_13_TO_24	HEADER_1x12_13_TO_24
25	1	J4	HARWIN	M20-9902046	Header 1x2 pins, 2.54mm, straight		TRH_HDR1X2	JUMPER2
26	1	J5	HRS	ZX62-B-5PA	MICRO USB 2.0 TYPE B, RECEPTACLE, SMD		SMD_USB-MICRO_ZX62-B-5PA	USB_MINI_MICRO_B
27	1	J6	MOLEX	87758-1016	Header 2x5 pins, 2mm, straight		TRH_HDR2X05_2MM	JUMPER5x2
28	7	J7, J10, J11, J12, J13, J14	HARWIN	M22-2510205	Header 1x2 pins, 2mm, straight		TRH_HDR1X02_2MM	JUMPER2
29	1	J8	SAMTEC	TMS-103-02-G-S	Header 1x3 pins, 1.27mm, straight		TRH_HDR1X03_1.27MM	JUMPER3
30	1	J9	SAMTEC	TMS-108-02-G-S	Header 1x8 pins, 1.27mm, straight		TRH_HDR1X08_1.27MM	JUMPER8
31	13	R1, R25, R29, R34, R42, R44, R61, R62, R73, R80, R151, R156, R160	MULTICOMP	MC0063W06031470K	RES 0603 470k 1% 1/16W	470k	SMD_R_0603_REFLOW_S	470k, 62.5mW, 1%, SMD 0603
32	6	R2, R24, R28, R55, R148, R150	SUSUMU	RR0816P-103-B-T5	RES 0603 10k 0.1% 1/16W	10k	SMD_R_0603_REFLOW_S	0.1%
33	11	R3, R6, R22, R23, R43, R56, R64, R69, R91, R142, R161	SUSUMU	RR0816P-104-B-T5	RES 0603 100k 0.1% 1/16W	100k	SMD_R_0603_REFLOW_S	0.1%
34	3	R4, R9, R84	SUSUMU	RR0816P-302-B-T5	RES 0603 3k 0.1% 1/16W	3k	SMD_R_0603_REFLOW_S	0.1%
35	4	R5, R6, R145, R146	MULTICOMP	MC0063W0603133K	RES 0603 33k 1% 1/16W	33k	SMD_R_0603_REFLOW_S	33k, 62.5mW, 1%, SMD 0603
36	9	R7, R18, R19, R36, R63, R65, R88, R141, R149	SUSUMU	RR0816P-203-B-T5	RES 0603 20k 0.1% 1/16W	20k	SMD_R_0603_REFLOW_S	0.1%
37	1	R10	MULTICOMP	MC0063W0603182K	RES 0603 82k 1% 1/16W	82k	SMD_R_0603_REFLOW_S	1%
38	26	R11, R20, R21, R36, R37, R57, R67, R74, R75, R109, R110, R111, R112, R120, R121, R122, R123, R129, R133, R143, R163, R164, R165, R167, R179, R180	MULTICOMP	MC0063W0603110K	RES 0603 10k 1% 1/16W	10k	SMD_R_0603_REFLOW_S	10k, 62.5mW, 1%, SMD 0603
39	26	R12, R13, R16, R30, R31, R32, R33, R38, R54, R66, R72, R76, R119, R126, R127, R128, R131, R132, R152, R153, R154, R155, R170, R171, R172, R173	MULTICOMP	MC0063W06031100K	RES 0603 100k 1% 1/16W	100k	SMD_R_0603_REFLOW_S	100k, 62.5mW, 1%, SMD 0603
40	1	R14	SUSUMU	RR0816P-472-B-T5	RES 0603 4k7 0.1% 1/16W	4k7	SMD_R_0603_REFLOW_S	0.1%
41	1	R15	PANASONIC	ERA3AEB243V	RES 0603 24k 0.1% 1/10W	24k	SMD_R_0603_REFLOW_S	0.1%
42	6	R17, R50, R103, R166, R168, R169	MULTICOMP	MC0063W06031100R	RES 0603 100R 1% 1/16W	100R	SMD_R_0603_REFLOW_S	100R, 62.5mW, 1%, SMD 0603
43	6	R26, R101, R124, R125, R139, R174	MULTICOMP	MC0063W060311K5	RES 0603 1k5 1% 1/16W	1k5	SMD_R_0603_REFLOW_S	1k5, 62.5mW, 1%, SMD 0603
44	3	R27, R58, R147	PANASONIC	ERA3AEB273V	RES 0603 27k 0.1% 1/10W	27k	SMD_R_0603_REFLOW_S	0.1%
45	4	R39, R59, R77, R144	MULTICOMP	MC0063W060313K3	RES 0603 3k3 1% 1/16W	3k3	SMD_R_0603_REFLOW_S	3k3, 62.5mW, 1%, SMD 0603
46	2	R40, R78	MULTICOMP	MC0063W060312K4	RES 0603 2k4 1% 1/16W	2k4	SMD_R_0603_REFLOW_S	2k4, 62.5mW, 1%, SMD 0603
47	4	R41, R47, R79, R81	MULTICOMP	MCMR06X120FTL	RES 0603 12k 1% 1/16W	12k	SMD_R_0603_REFLOW_S	12k, 62.5mW, 1%, SMD 0603
48	2	R45, R82	VISHAY	TFPT0603L2700FV	Thermistor PTC 0603 270R 1% 75mW	270R	SMD_R_0603_REFLOW_S	270R PTC 4110ppm/K, 75mW, 1%, SMD 0603
49	2	R46, R83	VISHAY	TFPT0603L8200FV	Thermistor PTC 0603 820R 1% 75mW	820R	SMD_R_0603_REFLOW_S	820R PTC 4110ppm/K, 75mW, 1%, SMD 0603
50	2	R48, R87	TE CONNECTIVITY	CPF0603B300RE1	RES 0603 300R 0.1% 1/16W	300R	SMD_R_0603_REFLOW_S	0.1%
51	1	R116	PANASONIC	ERA3AEB682V	RES 0603 68k 0.1% 1/10W	68k	SMD_R_0603_REFLOW_S	0.1%
51a	1	R49	MULTICOMP	MC0063W060318K2	RES 0603 8k2 1% 1/10W	8k2	SMD_R_0603_REFLOW_S	8k2, 62.5mW, 1%, SMD 0603
52	1	R51	PANASONIC	ERA3AEB242V	RES 0603 2k4 0.1% 1/10W	2k4	SMD_R_0603_REFLOW_S	0.1%
53	2	R70, R92	SUSUMU	RR0816P-102-B-T5	RES 0603 1k 0.1% 1/16W	1k	SMD_R_0603_REFLOW_S	0.1%
53a	1	R52	SUSUMU	RR0816P-471-B-T5	RES 0603 470R 0.1% 1/16W	470R	SMD_R_0603_REFLOW_S	0.1%
54	2	R53, R113	WELWYN	ASC0805-6R8F-T5	RES 0805 6R8 1% /8W	6.8R	SMD_R_0805_REFLOW_S	6R8, 0.125W, 1%, SMD 0805
55	1	R66	VISHAY DRALORIC	CRCW0603137KFKEA	RES 0603 137k 1% 1/10W	137k	SMD_R_0603_REFLOW_S	1%
56	2	R71, R94	BOURNS	CRT0805-BY-10R0ELF	RES 0805 10R 0.1% /8W	10R	SMD_R_0805_REFLOW_S	0.1% 0805
57	1	R85	SUSUMU	RR0816P-152-B-T5	RES 0603 1k5 0.1% 1/16W	1k5	SMD_R_0603_REFLOW_S	0.1%
58	3	R86, R130, R140	MULTICOMP	MC0063W0603110R	RES 0603 10R 1% 1/16W	10R	SMD_R_0603_REFLOW_S	10R, 62.5mW, 1%, SMD 0603
59	3	R89, R108, R137	MULTICOMP	MC0063W06031470R	RES 0603 470R 1% 1/16W	470R	SMD_R_0603_REFLOW_S	470R, 62.5mW, 1%, SMD 0603
60	1	R90	MULTICOMP	MC0063W0603147K	RES 0603 47k 1% 1/16W	47k	SMD_R_0603_REFLOW_S	47k, 62.5mW, 1%, SMD 0603
61	8	R93, R98, R102, R134, R135, R157, R158, R159	MULTICOMP	MC0063W0603122R	RES 0603 22R 1% 1/16W	22R	SMD_R_0603_REFLOW_S	22R, 62.5mW, 1%, SMD 0603
62	1	R95	WELWYN	PCF0603P-R-5K1-BT1	RES 0603 5k1 0.1% 1/10W	5k1	SMD_R_0603_REFLOW_S	0.1%
63	1	R96	MULTICOMP	MCMR06X2703FTL	RES 0603 270k 1% 1/10W	270k	SMD_R_0603_REFLOW_S	270k, 100mW, 1%, SMD 0603
64	1	R97	MULTICOMP	MC0063W06031120K	RES 0603 120k 1% 1/16W	120k	SMD_R_0603_REFLOW_S	120k, 62.5mW, 1%, SMD 0603
65	1	R99	PANASONIC	ERA3AEB362V	RES 0603 36k 0.1% 1/10W	36k	SMD_R_0603_REFLOW_S	0.1%
66	2	R106, R115	MULTICOMP	MC0063W06031220R	RES 0603 220R 1% 1/16W	220R	SMD_R_0603_REFLOW_S	220R, 62.5mW, 1%, SMD 0603
67	2	R107, R114	MULTICOMP	MC0063W06031330R	RES 0603 330R 1% 1/16W	330R	SMD_R_0603_REFLOW_S	330R, 62.5mW, 1%, SMD 0603
68	8	R60, R100, R117, R118, R175, R176, R177, R178	MULTICOMP	MC0063W060314K7	RES 0603 4k7 1% 1/16W	4k7	SMD_R_0603_REFLOW_S	4k7, 62.5mW, 1%, SMD 0603
69	2	R136, R162	MULTICOMP	MC0063W060311K	RES 0603 1k 1% 1/16W	1k	SMD_R_0603_REFLOW_S	1k, 62.5mW, 1%, SMD 0603
70	1	R138	MULTICOMP	MC0063W0603136K	RES 0603 36k 1% 1/16W	36k	SMD_R_0603_REFLOW_S	36k, 62.5mW, 1%, SMD 0603
71	2	T1, T5	NXP SEMICONDUCTOR	BCM847BS	BCM847BS	0.1A 45V	SMD_SOT363_REFLOW_S	BCM847 - Matched Pair

72	3	T2, T10, T17	STMICROELECTRONICS	ST17P2UH7	ST17P2UH7	7A -20V	SMD_SOT23-6_REFLOW	MOSFET-P+D_(G3,S4,D1256)
73	3	T3, T8, T22	NXP SEMICONDUCTOR	BC857BT.115	BC857BT PNP 65V 0.1A	0.1A -65V	SMD_SOT416-3_REFLOW	
74	4	T4, T9, T18, T19	STMICROELECTRONICS	ZSTR2230	ZSTR2230	1.5A -30V	SMD_SOT23-3	
75	2	T6, T12	ON SEMICONDUCTOR	DTC144EET1G	DTC144EET1G NPN+R 50V 0.1A	0.1A -50V	SMD_SC75-3_REFLOW	NPN+2R_(B1,E2,C3)
76	2	T7, T11	STMICROELECTRONICS	STR2N2VH5	STR2N2VH5	2.3A -20V	SMD_SOT23-3	MOSFET-N+D_(G1,S2,D3)
77	4	T13, T14, T20, T21	ON SEMICONDUCTOR	NTA4153NT1G	NTA4153NT1G	0.9A 20V	SMD_SC75-3_REFLOW	MOSFET-N+D_(G1,S2,D3)
78	1	T16	NXP SEMICONDUCTOR	BC846S	BC846S	0.1A 65V	SMD_SOT363_REFLOW_S	
79	3	U1, U2, U11	STMICROELECTRONICS	TSV632IQ2T	TSV632IQ2T_ver1	TSV632IQ2T	SMD_DFN8_2x2_REFLOW	1.5 to 5.5V
80	6	U3, U4, U7, U15, U16, U31, U32	STMICROELECTRONICS	TSZ122IQ2T	TSZ122IQ2T_ver1	TSZ122IQ2T	SMD_DFN8_2x2_REFLOW	1.8 to 5.5V
81	5	U5, U8, U9, U13, U17	STMICROELECTRONICS	AS21P2TLR	AS21P2TLR	AS21P2TLR	SMD_QFN10L_1.8x1.4_REFLOW	1.65 to 4.3V
82	1	U10	STMICROELECTRONICS	TS3431CILT	TS3431CILT	TS3431CILT	SMD_SOT23-3	
83	1	U19	STMICROELECTRONICS	LDK120PU25R	LDK120PU25R	LDK120PU25R	SMD_DFN6L_1.2x1.3_REFLOW	200mA, 2.5V
84	1	U22	TEXAS INSTRUMENTS	SN74AVC2T244DQMR	SN74AVC2T244DQMR	SN74AVC2T244DQMR	SMD_DFN8_1.8x1.2_TL_REFLOW	1.2 to 3.6V
85	1	U24	STMICROELECTRONICS	STM32F401VET6	STM32F401VET6	STM32F401VET6	SMD_LQFP100_REFLOW	1.8 to 3.6V
86	1	U25	STMICROELECTRONICS	LDK220M36R	LDK220M36R	LDK220M36R	SMD_SOT23-5_REFLOW	200mA, 3.6V
87	1	U27	STMICROELECTRONICS	USBLC6-2P6	USBLC6-2P6	USBLC6-2P6	SMD_SOT666_REFLOW	17V
88	2	U28, U29	TEXAS INSTRUMENTS	SN74AVC4T245RSVR	SN74AVC4T245RSVR	SN74AVC4T245RSVR	SMD_UQFN16_2.6x1.8_TL_REFLOW	1.2 to 3.6V
89	2	U30, U33	NXP SEMICONDUCTOR	NTS0104GU12	NTS0104GU12	NTS0104GU12	SMD_UQFN12_2.0x1.7_TL_HAND	1.65 to 5.5V
90	1	X1	ABRACOM	ABM8-16.000MHZ-B2-T	Q ABM8-16MHz SMD	ABM8-16.000MHZ-B2-T	SMD_X_ABM8	CRYSTAL_ABM8
91	3	SJ7, SJ13, SJ14	MULTICOMP	SPC20180	Jumper Shunt 1x2 pins, 2mm		---	Put on J7, J13, J14 Headers