



Bill of Materials for the DVK-SFAZ-1-GEVK Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free	Comments
C1	1	CAP CER 12PF 25V NP0 0402	12pF	5%	C0402	Murata Electronics North America	GRM1555C1E120JA01D	Yes	Yes	32kHz OSC NOT required for Sigfox firmware
C2	1	CAP CER 10000PF 25V X7R 0402	10nF	10%	C0402	Murata Electronics North America	GRM155R71E103KA01D	Yes	Yes	
C3	1	CAP CER 10000PF 25V X7R 0402	10nF	10%	C0402	Murata Electronics North America	GRM155R71E103KA01D	Yes	Yes	
C4	1	CAP CER 12PF 25V NP0 0402	12pF	5%	C0402	Murata Electronics North America	GRM1555C1E120JA01D	Yes	Yes	32kHz OSC NOT required for Sigfox firmware
C5	1	CAP CER 10000PF 25V X7R 0402	10nF	10%	C0402	Murata Electronics North America	GRM155R71E103KA01D	Yes	Yes	
C6	1	CAP CER 10000PF 25V X7R 0402	10nF	10%	C0402	Murata Electronics North America	GRM155R71E103KA01D	Yes	Yes	
C7	1	CAP CER 10000PF 25V X7R 0402	10nF	10%	C0402	Murata Electronics North America	GRM155R71E103KA01D	Yes	Yes	
C8	1	CAP CER 4.7UF 6.3V X5R 0603	4.7uF	10%	C0603	Murata Electronics North America	GRM188R60J475KE19J	Yes	Yes	
C9	1		NC		C0402				Yes	
C11	1	CAP CER 100PF 50V NP0 0402	100pF	5%	C0402	Murata Electronics North America	GRM1555C1H101JA01D	Yes	Yes	
C100	1	CAP CER 100PF 50V NP0 0402	100pF	5%	C0402	Murata Electronics North America	GRM1555C1H101JA01D	Yes	Yes	
C101	1	CAP CER 100PF 50V NP0 0402	100pF	5%	C0402	Murata Electronics North America	GRM1555C1H101JA01D	Yes	Yes	
C102	1	CAP CER 10000PF 25V X7R 0402	10nF	10%	C0402	Murata Electronics North America	GRM155R71E103KA01D	Yes	Yes	
C103	1	CAP CER 4.7UF 6.3V X5R 0603	4.7uF	10%	C0603	Murata Electronics North America	GRM188R60J475KE19J	Yes	Yes	
C105	1	CAP CER 100PF 50V NP0 0402	100pF	5%	C0402	Murata Electronics North America	GRM1555C1H101JA01D	Yes	Yes	
CB1	1		NC		C0402				Yes	
CB2	1	CAP CER 2.7PF 50V NP0 0402	2.7pF	0.1pF	C0402	Murata Electronics North America	GRM1555C1H2R7BA01D	No	Yes	
CC1	1		NC		C0402				Yes	
CC2	1		NC		C0402				Yes	
CH1	1	CAP CER 6PF 50V NP0 0402	6pF	0.1pF	C0402	Murata Electronics North America	GRM1555C1H6R0BA01D	No	Yes	
CH2	1	CAP CER 8.2PF 25V NP0 0402	8.2pF	0.25pF	C0402	Murata Electronics North America	GRM1555C1E8R2CA01D	No	Yes	
CH3	1	CAP CER 6PF 50V NP0 0402	6pF	0.1pF	C0402	Murata Electronics North America	GRM1555C1H6R0BA01D	No	Yes	
CH4	1		NC		C0402				Yes	
CH5	1		NC		C0402				Yes	
CLF	1	CAP CER 82PF 50V NP0 0402	82pF	2%	C0402	Murata Electronics North America	GRM1555C1H820GA01D	Yes	Yes	
CM3	1		NC		C0402				Yes	
CT3	1	CAP CER 6.2PF 50V NP0 0402	6.2pF	0.1pF	C0402	Murata Electronics North America	GRM1555C1H6R2BA01D	No	Yes	
IC1	1	AX-SFAZ-X-XX Silicon	-	-	QFN40	ON Semiconductor	AX-SFAZ-X-XX	No	Yes	
LB1	1	FIXED IND 12NH 500MA 140 MOHM	12nH	2%	L0402	Murata Electronics North America	LQW15AN12NG00D	No	Yes	
LB2	1	FIXED IND 12NH 500MA 140 MOHM	12nH	2%	L0402	Murata Electronics North America	LQW15AN12NG00D	No	Yes	
LC1	1	FIXED IND 18NH 370MA 270 MOHM	18nH	2%	L0402	Murata Electronics North America	LQW15AN18NG00D	No	Yes	
LC2	1	FIXED IND 18NH 370MA 270 MOHM	18nH	2%	L0402	Murata Electronics North America	LQW15AN18NG00D	No	Yes	
LC3	1	FIXED IND 18NH 370MA 270 MOHM	18nH	2%	L0402	Murata Electronics North America	LQW15AN18NG00D	No	Yes	
LED1	1	Generic GREEN LED 0603	GREEN	-	LED0603	ROHM Semiconductor	SML-D12FWT86	Yes	Yes	Any generic GREEN LED 0603, control current with R1
LH1	1	FIXED IND 8.2NH 540MA 140 MOHM	8.2nH	2%	L0402	Murata Electronics North America	LQW15AN8N2G00D	No	Yes	
LH2	1	FIXED IND 8.2NH 540MA 140 MOHM	8.2nH	2%	L0402	Murata Electronics North America	LQW15AN8N2G00D	No	Yes	
LPA1	1	FIXED IND 3.3NH 1A 27 MOHM SMD	3.3nH	0.2nH	L0402	Murata Electronics North America	LQW15AN3N3C80D	No	Yes	
LPA2	1	FIXED IND 2.2NH 1A 27 MOHM SMD	6.2nH	0.2nH	L0402	Murata Electronics North America	LQW15AN6N2C00D	No	Yes	
LT3	1	FIXED IND 12NH 500MA 140 MOHM	16nH	2%	L0402	Murata Electronics North America	LQW15AN16NG00D	No	Yes	
LVCO	1	RES SMD 0.0OHM JUMPER 1/16W 0402	0OHM	-	L0402	Yaego	RC0402JR-070RL	Yes	Yes	
Q1	1	32kHz Oscillator	32.768kHz	20ppm	TF20	NDK (Nihon Dempa Kogyo Co. Ltd)	NX2012SA 32.768kHz EXS00A-M1J00788	Yes	Yes	32kHz OSC NOT required for Sigfox firmware
Q2	1	NDK 48MHz TCXO	48MHz	1ppm	X2016	NDK (Nihon Dempa Kogyo Co. Ltd)	NT2016SA 48 MHz END4	No	Yes	
R1	1	RES SMD 220 OHM 5% 1/16W 0402	220	5%	R0402	Yaego	RC0402JR-07220RL	Yes	Yes	
R2	1	RES SMD 1K OHM 5% 1/16W 0402	2.7k	5%	R0402	Yaego	RC0402JR-072K7L	Yes	Yes	
R3	1	FERRITE CHIP 600 OHM 300MA 0402	600BEAD	-	R0402	Murata Electronics North America	BLM15AG601SN1D	Yes	Yes	
R4	1	RES SMD 0.0OHM JUMPER 1/16W 0402	0	5%	R0402	Yaego	RC0402JR-070RL	Yes	Yes	

R5	1		NC		R0402				Yes	
R6	1	RES SMD 12K OHM 5% 1/16W 0402	12k	5%	R0402	Yaego	RC0402JR-0712KL	Yes	Yes	
R7	1	RES SMD 150 OHM 5% 1/16W 0402	150	5%	R0402	Yaego	RC0402JR-07150RL	Yes	Yes	
R8	1	RES SMD 82 OHM 5% 1/16W 0402	82	5%	R0402	Yaego	RC0402JR-0782RL	Yes	Yes	
R9	1	RES SMD 82 OHM 5% 1/16W 0402	82	5%	R0402	Yaego	RC0402JR-0782RL	Yes	Yes	
R10	1	RES SMD 0.00OHM JUMPER 1/16W 0402	0	5%	R0402	Yaego	RC0402JR-070RL	Yes	Yes	
R11	1		NC		R0402				Yes	
R12	1		NC		R0402				Yes	
S1	1	Tactile Switch SPST-NO Top Actuated	STER4-PAD-SMD-SMA	-	ER_SMALL_SMD	C&K	PTS810 SJK 250 SMTR L	Yes	Yes	
U\$2	1	RF Front End Module (Tx and Rx)	RFX1010	-	QFN16_TH	Skyworks	RFX1010	No	Yes	
U\$3	1	SAW Filter 923.5 MHz SMD 3.0x3.0 mm	TA0644A	-	DCC6E	TAI-SAW	TA0644A	No	Yes	
U\$4	1	SAW Filter 923.5 MHz SMD 3.0x3.0 mm	TA0644A	-	DCC6E	TAI-SAW	TA0644A	No	Yes	
X1	1	Generic header 2 rows, 5 positions, 2mm pitch	HM-2X52MM-SMD	-	HM-2MM-2X5-SMD	Harwin	M22-5320505	Yes	Yes	Any 2x5 2mm pitch surface mount header
X2	1	CONN SMA JACK STR 50OHM SMD	SMA-SMD	-	SMA-SMD	Linx Technologies Inc.	CON SMA001-SMD-G	Yes	Yes	
-	1	Antenna 916MHz 1/2 wave dipole, 1.2dBi gain, 50 ohms, 900MHz to 930MHz	-	-	SMA - Male	Linx Technologies Inc.	ANT-916-CW-HW-SMA	Yes	Yes	Generic 902-928MHz whip antenna