

Bill of Materials for the BLE-IOT-GEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
AD1	1	Arduino Stackable Header 6-pin	CONN TRBLK 6	-	n/a	Adafruit Industries LLC	85		YES
C2, C3, C4, C5, C6	5	Capacitor, NP0, ±2%	12pF	2%	0402	Murata	GRM1555C1E120QA01D	DNP	YES
C7	1	CAP CER 2.2UF 10V X5R 0402	2.2uF	-	0402	Murata	GRM155R61A222KE9SD		YES
C8, C16, C40	3	CAP CER 4.7UF 10V X5R 0603, CAP CER 4.7UF 25V X5R 0603	4.7uF	-	0603	Murata	GRM188R61A475KE15D		YES
C11	1	Capacitor, NP0, ±2%	100pF	2%	0402	Murata	GRM1555C1H101JA01J		YES
C12, C13	2	CAP CER 1.5PF 50V NP0 0402	1.5pF	-	0402	Murata	GCM1555C1H1R5CA16D		YES
C14	1	Capacitor, NP0, ±2%	15pF	2%	0402	Murata	GRM1555C1E120QA01D		YES
C17, C18, C19, C20, C21, C22, C23, C24, C25, C26, C27, C28, C29	18	Capacitor, NP0, ±2%	100nF	2%	0402	Murata	GRM155R61E104KA87D		YES
C22	1	Capacitor, NP0, ±2%	10pF	2%	0402	Murata	GRM1555C1E100JA01D		YES
C24, C34, C35	3	Capacitor, X5R, ±10%	10uF	10%	0603	Murata	GRM188R61A10RKE99D		YES
C28, C29	2	Capacitor, NP0, ±2%	15pF	2%	0402	Murata	GRM1555C1E150JA01D		YES
C1, C8, C17, C41, C42, C45, C46	7	Capacitor, NP0, ±10%	1uF	10%	0402	Murata	GRM155R61A105KE16D		YES
C44, C47	2	Capacitor, NP0, ±2%	10nF	2%	0402	Murata	GRM155R71H10KA88D		YES
D1	1	Ultra low capacitance double rail-to-rail ESD protection diode	PRT1RSV0L2X	-	SOT-143B	Wurth	PRT1RSV0L2X,215		YES
IOH1	1	Arduino Stackable Header 10-pin	CONN TRBLK 10	-		Adafruit Industries LLC	85		YES
IOL1, POWER1	2	Arduino Stackable Header - 8 Pin	CONN TRBLK 8	-		Adafruit Industries LLC	85		YES
J1	1	Coaxial Connector with Switch	MM8130-2600	-	COAXIAL-SWF	Murata	MM8130-2600		YES
J2	1	MicroUSB-B-SMT	MicroUSB-B	-	FCI 10118193-0001LF	FCI	10118193-0001LF		YES
J4	1	WR-PHD 2.54 mm Angled Dual Socket Header, 12p		-		Würth Elektronik	613012243121		YES
J5	1	HOLDER BATTERY 12MM COIN	Value	-		Keystone	2996	DNP	YES
L1	1	FIXED IND 3NH 800MA 170 MOHM SMD	3nH	-	0402	Murata	LOG15HS3N0S02D		YES
L2	1	FIXED IND 1.8NH 950MA 100 MOHM	1.8nH	-	0402	Murata	LOG15HS1N8S02D		YES
L3	1	Inductor, 320mA, ±5%	15nH	5%	0402	Taiyo Yuden	HK100515NJ-F		YES
L4	1	Imported	2.2uH	-	0805	Würth Elektronik	7447977522		YES
LD1	1	Ultra bright AllnGaP Bi-Color LED	150066SV74000	-	LED_DUAL_0606	Würth Elektronik	150066SV74000		YES
LED 1	1	LED SMARTLED GREEN 570NM 0603	150060VS75000	-	0603	Würth Elektronik	150060VS75000		YES
P1, P4	2	Header 2x3 SMT		-		Würth Elektronik	61000821121		YES
P2	1	SAMTEC - CONN HEADER 10POS DUAL .05" SMD KEYING SHROUD	FTSH-105	-	FTSH-105	Samtec	FTSH-105-01-F-DV-K		YES
P3, P5	2	HEADER, 2POS, 1ROW, Pitch Spacing: 2.54mm		-		Würth Elektronik	61300211021		YES
P6	1	2x4 Pin Header		-		Würth Elektronik	61000821121		YES

P7, P8, P9, P10	4	HEADER, 3POS, 1ROW; Pitch Spacing: 2.54mm;				Wurth Elektronik	6130031121		
Q1	1	NMOS Transistor		-	SOT66P210X105-3N	RoHM	BUJ002YNTCL		YES
R30, R31		Resistor, ±1%, 0.063W	88	1%	0402	Panasonic	ERJ-2RKF68R0X		YES
R1, R2, R4, R9	6	Resistor, ±1%, 0.063W	88	1%	0402	Panasonic	ERJ-2RKF68R0X		YES
R3, R5, R6, R26, R27, R32, R45, R47, R52, R53, R35, R34	12	Resistor, ±1%, 0.063W	68, 68, 68, 0, 0, 0, 0, 0, 0, 0, 0	1%	0402	Panasonic	ERJ-2RKF68R0X, ERJ-2RKF68R0X, ERJ-2RKF68R0X, ERJ-2GE0R00X, ERJ-2GE0R00X, ERJ-2GE0R00X, ERJ-2GE0R00X, ERJ-2GE0R00X, ERJ-2GE0R00X, ERJ-2GE0R00X, ERJ-2GE0R00X, ERJ-2GE0R00X, ERJ-2GE0R00X, ERJ-2GE0R00X	DNP	YES
R44, R48, R49, R50, R46	5	Resistor, ±1%, 0.063W	0	1%	0402	Panasonic	ERJ-2GE0R00X		YES
R41, R42, R43, R51	4	Resistor, ±1%, 0.063W	10k	1%	0402	Panasonic	ERJ-2RKF1002X, ERJ-2GEJ103X, ERJ-2GEJ103X		YES
R7, R36, R40	3	Resistor, ±1%, 0.063W	10k	1%	0402	Panasonic	ERJ-2RKF1002X, ERJ-2GEJ103X, ERJ-2GEJ103X		YES
R10, R11	2	Resistor, ±1%, 0.063W	39	1%	0402	Panasonic	ERJ-2RKF39R0X		YES
R12, R13, R14, R20	4	Resistor, ±1%, 0.063W	4k7	1%	0402	Panasonic	ERJ-2RKF4701X		YES
R15, R16	2	Resistor, ±1%, 0.063W	220	1%	0402	Panasonic	ERJ-2RKF2200X		YES
R17, R18, R19, R29	4	Resistor, ±1%, 0.063W	688	1%	0402	Panasonic	ERJ-2RKF6801X		YES
R21	1	Resistor, ±1%, 0.063W	0	1%	0402	Panasonic	ERJ-2GE0R00X		YES
R22, R23, R24, R25, R28	5	Resistor, ±1%, 0.063W	150	1%	0402	Panasonic	ERJ-2RKF1500X		YES
R54	1	Resistor, ±1%, 0.063W	100k	1%	0402	Panasonic	ERJ-2RKF1003X		YES
SW1, SW2	2	SWITCH TACTILE SPST-NO 0.05A 12V	PB SW			Panasonic	ERJ-2RKF1003X		YES
U1	1	RSL10 QFN				Wurth Elektronik	450483025816		YES
U2	1	J-link debugger MCU						No	YES
U3	1	IC REG LIN 3.3V 600MA STSOP			LQFP-100				YES
U4	1	TRANSISTOR LEVEL 4BIT 14-TSSOP			TSOP-96PC	ON Semiconductor	NDP114ASN30IT1G		YES
U5	1	Remote 16-bit expander	PCAB656		TSOP64P640X120-14N	ON Semiconductor	NL5X514D1TR92C		YES
X1	1	ECS 48MHz Crystal			QFN56P400X400	ON Semiconductor	PCA9656EMT1XG	No	YES
X2	1	EPSON TOYOCOM - FC-135 32.768KHZ ±20PPM 9.0PF - CRYSTAL SM_WATCH		48MHz	XTAL 4 pads	ECS	ECS-480-8-47-JTN-TR		YES
X3	1	EPSON TOYOCOM - FC-135 32.768KHZ ±20PPM 9.0PF - CRYSTAL SM_WATCH		32.768KHz	XTAL 3216	Epson Toyocom	FC-135 32.768KHZ ±20PPM 9.0PF		YES
X3	1	XTAL SMD 3225, 12MHz, 18pF, ±30ppm		12MHz	BT-XTAL 3225	TXC Corporation	7M-12.000MAAJ-T		YES
See Jumper Location	8	(21X2) Position Shunt Connector Black Open Top 0.100"(2.54mm)	n/a		CONN JUMPER (2.54mm) Gold	Wurth Elektronik	60900213421		YES