IoT Development Kit - BLE and Sensor Board 150-00001-C1 Revision: C2

Bill Of Materials

| Quantity | Reference | Description | Manufacturer | Manufacturer Part Num |
|----------|-----------------------|---|------------------------------|-------------------------|
| 1 | U3 | IC - 0.6A SYNCH BUCK REGULATOR WITH INTEGR | Altera | EP5358HUI |
| 1 | U4 | IC - 3-AXIS ACCELEROMETER, 12-BIT RESOLUTUIC | Analog Devices | ADXL362BCCZ-R2 |
| 1 | U5 | IC - BLUETOOTH LOW ENERGY SIP MODULE, 48-L | Broadcom | BCM20737S |
| 1 | U2 | IC - 4MBIT (512K x 8) SRAM, 2.2V-3.6V, 36-VFBG | Cypress | CY62148EV30LL-45BVXI |
| 1 | U8 | IC - DUAL 4A IDEAL DIODES WITH ADJ CURRENT I | Linear Technology | LTC4415EDHC#PBF |
| 1 | U10 | OSC - ULTRA-LOW PWR 32.768KHZ OSCILLATOR, | Si Time | SiT1532AI-J4-DCC-32.768 |
| 1 | U6 | IC - 32 BIT MCU, 512KB FLASH, 128KB RAM, 2.0 L | Silicon Labs | EFM32GG395F512-BGA120 |
| 1 | U7 | IC - I2C PROXIMITY/UV/AMBIENT LIGHT SENSOR, | Silicon Labs | SI1147-A10-GMR |
| 1 | U1 | IC - I2C HUMIDITY AND TEMPERATURE SENSOR, | Silicon Labs | SI7020-A10-GM1 |
| 1 | D2 | DIODE - TVS DIODE, HIGH SPEED SERIES, 2-CHAN | Wurth Elektronik | 82400152 |
| 4 | MH1,MH2,MH3,MH4 | HARDWARE - POLYAMIDE SPACER, 2MM PCB DIA | Wurth Elektronik | 709651000 |
| 2 | L1,L2 | FERRITE BEAD - 180-OHM@100MHZ, 0.4A, DCR I | Wurth Elektronik | 7427927218 |
| 1 | D1 | LED - GREEN LED, VF 2.0V, IF 30mA, SMD 0603 | Wurth Elektronik | 150060VS75000 |
| 1 | D4 | LED - LED CHIPLED 645NM SUPER RED DIFF, VF=1 | Wurth Elektronik | 150080SS75000 |
| 1 | Y2 | CRYSTAL - 48MHZ, CL 10PF, ESR MAX 60-OHM, -4 | Abracon Corporation | ABM11-48.000MHZ-D2X |
| 1 | D3 | LED - LED IR, TOP VIEW, FLAT CLEAR, SMD 1206 | Everlight Electronics Co Ltd | IR11-21C/TR8 |
| 1 | SW1 | IC - SWITCH DUAL-SPDT, RON 0.35-OHM, VCC 2.3 | Fairchild Semiconductor | FSA2267AL10X |
| 1 | SW2 | IC - SWITCH SPDT, RON 0.40-OHM, VCC 1.65V-4. | Fairchild Semiconductor | FSA5157L6X |
| 1 | J1 | CONN - MICRO USB TYP B RECEPTACLE, RIGHT AI | Hirose Electric Co. | ZX62D-B-5PA8 |
| 1 | ORING1 | HARDWARE - SQUARE BUNA-N O-RING, ID 1/8", | McMASTER-CARR | 4061T111 |
| 1 | U9 | IC - FLASH, 16MBIT, 75MHZ, X1/X2, 2.3V-3.6V, SC | Micron | M25PX16-VMN6P |
| 1 | J2 | CONN - 0.5MM PITCH SLIM STACK, 30 POS PLUG | Molex | 501920-3001 |
| 2 | C26,C34 | CAP - CER 16PF, 50V, 5%, COG, 0402 | Murata | GRM1555C1H160JA01D |
| | C2,C4,C6,C7,C8,C11,C1 | | | |
| | 2,C13,C19,C21,C22,C23 | | | |
| 17 | ,C24,C25,C27,C28,C29 | CAP - CER, 0.1UF, 25V, 10%, X5R, 0402 | Murata | GRM155R61E104KA87D |

| 1 | S1 | SWITCH - PUSHBUTTON, SPST-NO, SMD 3MM X 2 | Omron | B3U-1000P |
|----|----------------------|---|------------------------------|---------------------|
| 1 | S2 | SWITCH - PUSHBUTTON, SPST-NO, RIGHT ANGLE | Omron | B3U-3000P |
| 2 | D5,D6 | IR EMITTER, HALF ANGLE +/-22 DEGREES, WAVEL | Osram | SFH 4056-NQ |
| 1 | R11 | RES - 0.0 OHM, 1/10W, JUMP, SMD 0402 | Panasonic | ERJ-2GE0R00X |
| | R1,R4,R10,R14,R16,R1 | | | |
| 14 | 8,R19,R20,R21,R23,R3 | RES - 10.0K,1.0%,1/10W, 0402 | Panasonic | ERJ-2RKF1002X |
| 3 | R3,R27,R28 | RES - 133K OHM, 1/10W, 1%, 0402 SMD | Panasonic | ERJ-2RKF1333X |
| 2 | R6,R8 | RES - 15 OHM, 1/10W, 1%, 0402 SMD | Panasonic | ERJ-2RKF15R0X |
| 1 | R31 | RES - 30 OHM, 1/10W, 1%, SMD 0402 | Panasonic | ERJ-2RKF30R0X |
| 1 | R22 | RES - 39 OHM, 1/10W, 1%, 0402 SMD | Panasonic | ERJ-2RKF39R0X |
| 4 | R5,R7,R13,R15 | RES 4.7K OHM 1/10W 1% 0402 SMD | Panasonic | ERJ-2RKF4701X |
| 1 | R2 | RES - 845 OHM, 1/10W, 1%, 0402 SMD | Panasonic | ERJ-2RKF8450X |
| 2 | R34,R39 | RES - 1 OHM, 1/4W, 5%, 0603 SMD | Rohm | ESR03EZPJ1R0 |
| 1 | D7 | DIODE - SCHOTTKY, VR=5V, IF=0.01A,VF=0.29V, E | Rohm | RB861YT2R |
| 1 | R37 | RES - 47K OHM, 1/16W, 1%, 0402 SMD | Rohm Semiconductor | MCR01MRTF4702 |
| 2 | R24,R25 | RES - 620K OHM, 1/16W, 1%, 0402 SMD | Rohm Semiconductor | MCR01MRTF6203 |
| 2 | C5,C14 | CAP - CER 4.7UF, 25V, 10%, X5R, 0603 | Samsung Electro-Mechanics An | CL10A475KA8NQNC |
| 2 | C17,C30 | CAP - CER, 1UF, 16V, 10%, X5R, 0402 | TDK Corporation | C1005X5R1C105K050BC |
| 5 | C9,C10,C31,C32,C35 | CAP - CER, 0.01UF, 25V, 10%, X5R, 0402 | TDK Corporation | C1005X5R1E103K050BA |
| 4 | C1,C3,C18,C33 | CAP - CER, 10UF, 25V, 20%, X5R, 0603 | TDK Corporation | C1608X5R1E106M080AC |
| 1 | C20 | CAP - CER 33UF, 10V, 20%, X5R, 0805 | TDK Corporation | C2012X5R1A336M125AC |
| 1 | Q1 | MOSFET - N-CHANNEL, VDS=12V, RDS=0.022@V0 | Vishay | SiB404DK |