Variant: 001
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TID #: TIDA-00756

# TIDA-00756 REV E2 Bill of Materials

| Item # | Designator | Quantity | Value | PartNumber | Manufacturer | Description | PackageReference |
|---|---|---|---|---|---|---|---|
| 1 | !PCB1 | 1 | | TIDA-00756 | Any | Printed Circuit Board | |
| 2 | BT1 | 1 | | BS-7 | Memory Protection Devices | Battery Holder, CR2032, Retainer clip, TH | CR2032 holder |
| 3 | C4 | 1 | 1uF | C1608X5R1E105K080AC | TDK | CAP, CERM, 1 µF, 25 V, +/- 10%, X5R, 0603 | 0603 |
| 4 | C8 | 1 | 0.1uF | C1005X7R1H104K | TDK | CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0402 | 0402 |
| 5 | C9, C12 | 2 | 0.1uF | C0603C104K8RACTU | Kemet | CAP, CERM, 0.1 µF, 10 V, +/- 10%, X7R, 0603 | 0603 |
| 6 | C10, C13 | 2 | 10uF | C2012X5R0J106M | TDK | CAP, CERM, 10 µF, 6.3 V, +/- 20%, X5R, 0805 | 0805 |
| 7 | C14 | 1 | 100uF | C3216X5R1A107M160AC | TDK | CAP, CERM, 100 µF, 10 V, +/- 20%, X5R, 1206_190 | 1206_190 |
| 8 | C15 | 1 | 10uF | C1608X5R0J106M | TDK | CAP, CERM, 10 µF, 6.3 V, +/- 20%, X5R, 0603 | 0603 |
| 9 | C15 | 1 | 0.01uF | GRM155R71C103KA01D | MuRata | CAP, CERM, 0.01 µF, 16 V, +/- 10%, X7R, 0402 | 0402 |
| 10 | C16 | 1 | 1uF | C1608X7R1C105K | TDK | CAP, CERM, 1 µF, 16 V, +/- 10%, X7R, 0603 | 0603 |
| 11 | C17 | 1 | 0.1uF | C1005X7R1H104K050BB | TDK | CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0402 | 0402 |
| 12 | C17 | 1 | 12pF | GRM1555C1H120JA01D | MuRata | CAP, CERM, 12 pF, 50 V, +/- 5%, C0G/NP0, 0402 | 0402 |
| 13 | C18 | 1 | 0.01uF | C1005X7R1C103K050BA | TDK | CAP, CERM, 0.01 µF, 16 V, +/- 10%, X7R, 0402 | 0402 |
| 14 | C20 | 1 | 1.2pF | GRM1555C1H1R2BA01D | MuRata | CAP, CERM, 1.2 pF, 50 V, +/- 8.3%, C0G/NP0, 0402 | 0402 |
| 15 | C23 | 1 | 1uF | GRM155R61A105KE15D | MuRata | CAP, CERM, 1 µF, 10 V, +/- 10%, X5R, 0402 | 0402 |
| 16 | C24, C25 | 2 | 12pF | GRM1555C1E120JA01D | MuRata | CAP, CERM, 12 pF, 25 V, +/- 5%, C0G/NP0, 0402 | 0402 |
| 17 | C27, C28, C34, C35 | 4 | 0.1uF | GRM155R70J104KA01D | MuRata | CAP, CERM, 0.1 µF, 6.3 V, +/- 10%, X7R, 0402 | 0402 |
| 18 | C29, C33 | 2 | 10uF | GRM188R60J106ME47D | MuRata | CAP, CERM, 10 µF, 6.3 V, +/- 20%, X5R, 0603 | 0603 |
| 19 | C30 | 1 | 0.1uF | GRM188R71E104KA01D | MuRata | CAP, CERM, 0.1 µF, 25 V, +/- 10%, X7R, 0603 | 0603 |
| 20 | C31, C32 | 2 | 2200pF | C1005X7R1H222K | TDK | CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0402 | 0402 |
| 21 | CF1 | 1 | 0.1uF | 08053C104KAT2A | AVX | CAP, CERM, 0.1 µF, 25 V, +/- 10%, X7R, 0805 | 0805 |
| 22 | D6 | 1 | Red | LS L29K-G1J2-1-Z | OSRAM | LED, Red, SMD | SMD, 2-Leads, Body 1.3x0.8mm |
| 23 | D7 | 1 | Yellow | LY L29K-H1K2-26-Z | OSRAM | LED, Yellow, SMD | LED, 1.3x0.65x0.8mm |
| 24 | E1 | 1 | | ANTENNA_DN007A | N/A | 2.4GHz PCB Antenna. There is nothing to buy or mount. | SMD, 3-Leads |
| 25 | FID1, FID2, FID3, FID4, FID5, FID6 | 6 | | N/A | N/A | Fiducial mark. There is nothing to buy or mount. | Fiducial |
| 26 | H1, H2, H3, H4 | 4 | | NY PMS 440 0025 PH | B&F Fastener Supply | Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead | Screw |
| 27 | H5, H6, H7, H8 | 4 | | 1902C | Keystone | Standoff, Hex, 0.5"L #4-40 Nylon | Standoff |
| 28 | J1, J2 | 2 | | 87898-0204 | Molex | Header, 2.54 mm, 2x1, Gold, R/A, SMT | Header, 2.54 mm, 2x1, R/A, SMT |
| 29 | J4 | 1 | | 5-146280-3 | TE Connectivity | Header, 2.54mm, 3x1, Gold, TH | Header, 2.54mm, 3x1, TH |
| 30 | J6 | 1 | | GRPB052VWVN-RC | Sullins Connector Solutions | Header, 50mil, 5x2, Gold, TH | Header, 5x2, 50mil |
| 31 | L1 | 1 | 15nH | LQG15HS15NJ02D | MuRata | Inductor, Multilayer, Air Core, 15 nH, 0.3 A, 0.32 ohm, SMD | 0402 polarized |
| 32 | L2 | 1 | 2nH | LQG15HS2N0S02D | MuRata | Inductor, Multilayer, Air Core, 2 nH, 0.3 A, 0.1 ohm, SMD | 0402 polarized |
| 33 | L3 | 1 | 1500 ohm | BLM18HE152SN1D | MuRata | Ferrite Bead, 1500 ohm @ 100 MHz, 0.5 A, 0603 | 0603 |
| 34 | L4 | 1 | 10uH | CKS2125100M-T | Taiyo Yuden | Inductor, Multilayer, Ferrite, 10uH, 0.11A, 0.52 ohm, SMD | 0805 |
| 35 | Q1, Q2 | 2 | -30V | MMBFJ270 | Fairchild Semiconductor | JFET, P-CH, -30 V, -0.015 A, SOT-23 | SOT-23 |
| 36 | Q3 | 1 | -20V | SI2323DS | Vishay-Siliconix | MOSFET, P-CH, -20 V, -3.7 A, SOT-23 | SOT-23 |
| 37 | R1, R3 | 2 | 0 | CRCW06030000Z0EA | Vishay-Dale | RES, 0, 5%, 0.1 W, 0603 | 0603 |
| 38 | R2 | 1 | 2.0Meg | CRCW08052M00JNEA | Vishay-Dale | RES, 2.0 M, 5%, 0.125 W, 0805 | 0805 |
| 39 | R4 | 1 | 22Meg | ERJ-6GEYK226V | Panasonic | RES, 22 M, 10%, 0.125 W, 0805 | 0805 |
| 40 | R5 | 1 | 2.55Meg | CRCW08052M55FKEA | Vishay-Dale | RES, 2.55 M, 1%, 0.125 W, 0805 | 0805 |
| 41 | R6 | 1 | 2M | 3224W-1-205E | Bourns | TRIMMER 2M OHM 0.25W SMD | 3.5x5.3x4.8mm |
| 42 | R7, R19, R21, RL1 | 4 | 0 | CRCW08050000Z0EA | Vishay-Dale | RES, 0, 5%, 0.125 W, 0805 | 0805 |
| 43 | R17, R18 | 2 | 4.75k | CRCW04024K75FKED | Vishay-Dale | RES, 4.75 k, 1%, 0.063 W, 0402 | 0402 |
| 44 | R20, R23, R24, R25 | 4 | 0 | CRCW04020000Z0ED | Vishay-Dale | RES, 0, 5%, 0.063 W, 0402 | 0402 |
| 45 | R26 | 1 | 54.9k | ERJ-6ENF5492V | Panasonic | RES, 54.9 k, 1%, 0.125 W, 0805 | 0805 |

| Item # | Designator | Quantity | Value | PartNumber | Manufacturer | Description | PackageReference |
|---|---|---|---|---|---|---|---|
| 46 | R27 | 1 | 196k | ERJ-6ENF1963V | Panasonic | RES, 196 k, 1%, 0.125 W, 0805 | 0805 |
| 47 | R28 | 1 | 10.0k | CRCW040210K0FKED | Vishay-Dale | RES, 10.0 k, 1%, 0.063 W, 0402 | 0402 |
| 48 | R29, R30 | 2 | 47.5k | CRCW040247K5FKED | Vishay-Dale | RES, 47.5 k, 1%, 0.063 W, 0402 | 0402 |
| 49 | R31 | 1 | 442 | CRCW0805442RFKEA | Vishay-Dale | RES, 442, 1%, 0.125 W, 0805 | 0805 |
| 50 | R32 | 1 | 487 | CRCW0805487RFKEA | Vishay-Dale | RES, 487, 1%, 0.125 W, 0805 | 0805 |
| 51 | RF1 | 1 | 1.78Meg | CRCW08051M78FKEA | Vishay-Dale | RES, 1.78 M, 1%, 0.125 W, 0805 | 0805 |
| 52 | RO1 | 1 | 49.9k | CRCW060349K9FKEA | Vishay-Dale | RES, 49.9 k, 1%, 0.1 W, 0603 | 0603 |
| 53 | S1, S2 | 2 | | B3U-1000P | Omron Electronic Components | SWITCH TACTILE SPST-NO 0.05A 12V | 3x1.6x2.5mm |
| 54 | SH-J1, SH-J2 | 2 | 1x2 | 969102-0000-DA | 3M | Shunt, 100mil, Gold plated, Black | Shunt |
| 55 | TP1, TP2, TP3, TP4 | 4 | Yellow | 5004 | Keystone | Test Point, Miniature, Yellow, TH | Yellow Miniature Testpoint |
| 56 | TP4, TP5 | 2 | | 5011 | Keystone | Test Point, Multipurpose, Black, TH | Black Multipurpose Testpoint |
| 57 | TP5, TP6 | 2 | SMT | 5015 | Keystone | Test Point, Miniature, SMT | Testpoint_Keystone_ Miniature |
| 58 | U1 | 1 | | LPV811DBVR | Texas Instruments | Precision 425 nA Nanopower Operational Amplifier, DBV0005A (SOT-5) | DBV0005A |
| 59 | U2 | 1 | | TGS5342 | Any | Carbon Monoxide Detector, TH | 15x27.9mm |
| 60 | U2 | 1 | | TMP103AYFFR | Texas Instruments | Low-Power, Digital Temperature Sensor with Two-Wire Interface in WCSP, YFF0004AAAA | YFF0004AAAA |
| 61 | U3 | 1 | | CC2650F128RSMR | Texas Instruments | Ultra low-power ARM Cortex M3 2.4 GHz Radio MCU, RSM0032B | RSM0032B |
| 62 | U3 | 1 | | TLV3691IDCKR | Texas Instruments | 0.9-V to 6.5-V, Nanopower Comparator, DCK0005A | DCK0005A |
| 63 | U4 | 1 | | TPL5111DDCR | Texas Instruments | Nano-power System Timer for Power Gating, DDC0006A | DDC0006A |
| 64 | U5, U6, U7, U8 | 4 | | TPD1E10B06DPYR | Texas Instruments | ESD in 0402 Package with 10 pF Capacitance and 6 V Breakdown, 1 Channel, -40 to +125 degC, 2-pin X2SON (DPY), Green (RoHS & no Sb/Br) | DPY0002A |
| 65 | Y1 | 1 | | TSX-3225 24.0000MF20G-AC3 | Epson | Crystal, 24 MHz, 9 pF, SMD | SMD, 4-Leads, Body 2.65x3.35mm, Height 0.6mm |
| 66 | Y2 | 1 | | FC-12M 32.7680KA-A3 | Epson | Crystal, 32.768kHz, 12.5pF, SMD | Crystal 2.05x.6x1.2mm |
| 67 | C1, C2, C3, C6, C7, C11 | 0 | 15pF | CC0402JRNPO9BN150 | Yageo America | CAP, CERM, 15 pF, 50 V, +/- 5%, C0G/NP0, 0402 | 0402 |
| 68 | C5 | 0 | 1000pF | C0402C102J3RACTU | Kemet | CAP, CERM, 1000 pF, 25 V, +/- 5%, X7R, 0402 | 0402 |
| 69 | C16, C18 | 0 | 12pF | GRM1555C1E120JA01D | MuRata | CAP, CERM, 12 pF, 25 V, +/- 5%, C0G/NP0, 0402 | 0402 |
| 70 | C19 | 0 | 1.2pF | GRM1555C1H1R2BA01D | MuRata | CAP, CERM, 1.2 pF, 50 V, +/- 8.3%, C0G/NP0, 0402 | 0402 |
| 71 | C21, C22, C36 | 0 | | Used in BOM report | Used in BOM report | CAP, CERM, xxxF, xxV, [TempCo], xx%, [PackageReference] | 0402 |
| 72 | C26 | 0 | | Used in BOM report | Used in BOM report | CAP, CERM, xxxF, xxV, [TempCo], xx%, [PackageReference] | 0603 |
| 73 | J3, J4, J5 | 0 | | 2-50871-2 | TE Connectivity | CONN SOCKET RCPT .056-.065 30AU, Gold, TH | CONN SOCKET RCPT .056-.065 30AU, Gold, TH |
| 74 | J5 | 0 | | CONSMA001-SMD-G | Linx Technologies | Jack, SMA, PCB, Gold, SMT | SMA Jack |
| 75 | R22 | 0 | 0 | CRCW04020000Z0ED | Vishay-Dale | RES, 0, 5%, 0.063 W, 0402 | 0402 |

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