Variant: 001
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# TIDA-01003 REV E4 Bill of Materials

| Item # | Designator | Quantity | Value | PartNumber | Manufacturer | Description | PackageReference |
|---|---|---|---|---|---|---|---|
| 1 | !PCB | 1 | | TIDA-01003 | Any | Printed Circuit Board | |
| 2 | C1 | 1 | 0.47uF | C1608X7R1H474K080AC | TDK | CAP, CERM, 0.47 µF, 50 V, +/- 10%, X7R, 0603 | 0603 |
| 3 | C2, C17, C41 | 3 | 0.1uF | CGA2B3X7R1H104K050BB | TDK | CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402 | 0402 |
| 4 | C3, C12, C35, C38 | 4 | 1uF | GRM155R61A105KE15D | MuRata | CAP, CERM, 1 µF, 10 V, +/- 10%, X5R, 0402 | 0402 |
| 5 | C4, C19, C23, C25, C27, C28 | 6 | 0.1uF | GRM155R71C104KA88D | MuRata | CAP, CERM, 0.1uF, 16V, +/-10%, X7R, 0402 | 0402 |
| 6 | C5, C8, C11 | 3 | 10uF | GRM21BR71A106KE51L | MuRata | CAP, CERM, 10uF, 10V, +/-10%, X7R, 0805 | 0805 |
| 7 | C6, C9 | 2 | 0.1uF | GCM155R71C104KA55D | MuRata | CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, 0402 | 0402 |
| 8 | C7, C10, C13, C16, C20, C24, C26, C29, C40 | 9 | 0.01uF | GRM155R71C103KA01D | MuRata | CAP, CERM, 0.01uF, 16V, +/-10%, X7R, 0402 | 0402 |
| 9 | C14 | 1 | 4.7uF | JMK107BB7475MA-T | Taiyo Yuden | CAP, CERM, 4.7 µF, 6.3 V, +/- 10%, X7R, 0603 | 0603 |
| 10 | C15, C39 | 2 | 0.1uF | GRM155R71C104KA88D | MuRata | CAP, CERM, 0.1 µF, 16 V, +/- 10%, X7R, 0402 | 0402 |
| 11 | C18, C22 | 2 | 4.7µF | CL10B475KQ8NQNC | Samsung Electro-Mechanics America, Inc | CAP CER 4.7UF 6.3V 10% X7R 0603 | 0603 (1608 Metric) |
| 12 | C21 | 1 | 0.047uF | CGA2B3X7R1H473K050BB | TDK | CAP, CERM, 0.047 µF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402 | 0402 |
| 13 | C30 | 1 | 10uF | CGA5L3X5R1H106K160AB | TDK | CAP, CERM, 10 µF, 50 V, +/- 10%, X5R, 1206_190 | 1206_190 |
| 14 | C31 | 1 | 22uF | CL21B226MQQNNNE | Samsung Electro-Mechanics | CAP, CERM, 22 µF, 6.3 V, +/- 20%, X7R, 0805 | 0805 |
| 15 | C32 | 1 | 10uF | CL21B106KOQNNNE | Samsung Electro-Mechanics | CAP, CERM, 10 µF, 16 V, +/- 10%, X7R, 0805 | 0805 |
| 16 | C33 | 1 | 10uF | GRM21BR71A106KE51L | MuRata | CAP, CERM, 10 µF, 10 V, +/- 10%, X7R, 0805 | 0805 |
| 17 | C34 | 1 | 4.7uF | CGA4J3X5R1H475M125AB | MuRata | CAP, CERM, 4.7 µF, 50 V, +/- 20%, X5R, AEC-Q200 Grade 3, 0805 | 0805 |
| 18 | C36 | 1 | 0.1µF | C1005X7R1E104K050BB | TDK Corporation | CAP, CERM, 0.1uF, 25V, +/-10%, X7R, 0402 | 0402 (1005 Metric) |
| 19 | C37, C42 | 2 | 1uF | LMK107B7105KAHT | Taiyo Yuden | CAP, CERM, 1 µF, 10 V, +/- 10%, X7R, 0603 | 0603 |
| 20 | FID4 | 1 | | N/A | N/A | Fiducial mark. There is nothing to buy or mount. | Fiducial |
| 21 | J1 | 1 | | 59S10H-40ML5-Z | Rosenberger | Connector, HF, 50 Ohm, TH | SMA Connector |
| 22 | L1, L7, L8, L9 | 4 | 1000 ohm | BLM15AX102SN1D | MuRata | Ferrite Bead, 1000 ohm @ 100 MHz, 0.35 A, 0402 | 0402 |
| 23 | L3 | 1 | 4.7uH | CBC3225T4R7MR | Taiyo Yuden | Inductor, Wirewound, 4.7 µH, 1.01 A, 0.1 ohm, SMD | 3.2x2.5x2.5mm |
| 24 | L4 | 1 | 100uH | CBC3225T101MR | Taiyo Yuden | Inductor, Wirewound, 100 µH, 0.27 A, 1.4 ohm, SMD | 3.2x2.5x2.5mm |
| 25 | L10 | 1 | 4.7uH | NRV2010T4R7MGF | Taiyo Yuden | Inductor, Wirewound, Ferrite, 4.7 µH, 0.76 A, 0.384 ohm, SMD | 2X2mm |
| 26 | L11 | 1 | 2.2uH | MLZ2012M2R2HTD25 | TDK | Inductor, Multilayer, Ferrite, 2.2 µH, 0.4 A, 0.16 ohm, AEC-Q200 Grade 1, SMD | 0805 |
| 27 | LBL1 | 1 | | THT-14-423-10 | Brady | Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll | PCB Label 0.650"H x 0.200"W |
| 28 | R1, R9 | 2 | 2.00k | CRCW04022K00FKED | Vishay-Dale | RES, 2.00 k, 1%, 0.063 W, 0402 | 0402 |
| 29 | R2, R15, R16 | 3 | 10k | CRCW040210K0JNED | Vishay-Dale | RES, 10k ohm, 5%, 0.063W, 0402 | 0402 |
| 30 | R3, R6 | 2 | 10k | CRCW040210K0JNED | Vishay-Dale | RES, 10 k, 5%, 0.063 W, 0402 | 0402 |
| 31 | R4, R5, R7, R8 | 4 | 3.3k | CRCW04023K30JNED | Vishay-Dale | RES, 3.3 k, 5%, 0.063 W, 0402 | 0402 |
| 32 | R10 | 1 | 1.00k | CRCW04021K00FKED | Vishay-Dale | RES, 1.00 k, 1%, 0.063 W, 0402 | 0402 |
| 33 | R12 | 1 | 49.9 | CRCW040249R9FKED | Vishay-Dale | RES, 49.9 ohm, 1%, 0.063W, 0402 | 0402 |
| 34 | R13 | 1 | 33 | CRCW040233R0JNED | Vishay-Dale | RES, 33 ohm, 5%, 0.063W, 0402 | 0402 |
| 35 | R17 | 1 | 0 | CRCW04020000Z0ED | Vishay-Dale | RES, 0 ohm, 5%, 0.063W, 0402 | 0402 |
| 36 | R18 | 1 | 4.70k | CRG0402F4K7 | TE Connectivity | RES, 4.70 k, 1%, 0.063 W, 0402 | 0402 |
| 37 | U1 | 1 | | DS90UB913ATRTVTQ1 | Texas Instruments | DS90UB913A-Q1/DS90UB914A-Q1 25 to 100 MHz 10/20-Bit FPD-Link III Serializer and Deserializer, RTV0032A | RTV0032A |
| 38 | U2 | 1 | | AS0140 | ON Semiconductor | 1MP+ISP Single Package Solution, BGA130 | BGA, 8.5x8.5mm, 130 Balls |
| 39 | U3 | 1 | | LM53600NQDSXRQ1 | Texas Instruments | Synchronous Buck Regulator for 650mA Space Constraint Applications, DSX0010A | DSX0010A |
| 40 | U4 | 1 | | LP5907QMFX-2.8Q1 | Texas Instruments | Automotive 250-mA, Ultra-Low-Noise, Low-IQ LDO, DBV0005A (SOT-5) | DBV0005A |
| 41 | U5 | 1 | | TPS62261TDRVRQ1 | Texas Instruments | 2.25-MHz 600-mA STEP-DOWN CONVERTER, DRV0006A | DRV0006A |
| 42 | Y1 | 1 | | ASDMB-48.000MHZ-LY-T | Abracon Corporation | OSC, 48MHz, 1.8 to 3.3V, SMD | 2.5x2mm |
| 43 | FID1, FID2, FID3 | 0 | | N/A | N/A | Fiducial mark. There is nothing to buy or mount. | Fiducial |

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