

TIDA-01463 REV A Bill of Materials



| Item # | Designator | Quantity | Value | PartNumber | Manufacturer | Description | PackageReference |
|--------|---|----------|---------|----------------------------|-------------------------|---|----------------------------------|
| 1 | PCB1 | 1 | | TID0-01463 | Any | Printed Circuit Board | |
| 2 | C1, C3, C34, C48 | 4 | 1uF | C1005XR1A106K050BB | TDK | CAP. CERM. 1 uF, 10 V, +/- 10%, XSR, 0402 | 0402 |
| 3 | C2, C4, C36, C37, C38, C39, C40, C41, C42, C43, C44, C45, C48, C51, C54 | 15 | 0.1uF | 885012205037 | Wurth Elektronik | CAP. CERM. 0.1 uF, 16 V, +/- 10%, XFR, 0402 | 0402 |
| 4 | C5 | 1 | 4700pF | 1812C2C4ZKAT1A | AVX | CAP. CERM. 4700 pF, 2000 V, +/- 10%, XFR, 1812 | 1812 |
| 5 | C6, C7, C8, C9 | 4 | 0.01uF | GRM188R72A103KA01D | MuRata | CAP. CERM. 0.01 uF, 100 V, +/- 10%, XFR, 0603 | 0603 |
| 6 | C10 | 1 | 1000pF | GR443QR73102K0W0L | MuRata | CAP. CERM. 1000 pF, 2000 V, +/- 10%, XFR, 1812 | 1812 |
| 7 | C11, C12 | 2 | 1000pF | C1808X0FZ2A102K060A | TDK | CAP. CERM. 1000 pF, 100 V, +/- 10%, XFR, 0603 | 0603 |
| 8 | C13, C14, C15, C16 | 4 | 330pF | 885012006060 | Wurth Elektronik | CAP. CERM. 330 pF, 50 V, +/- 5%, COG/NPO, 0603 | 0603 |
| 9 | C17 | 1 | 100uF | EEV-FK2A101M | Panasonic | CAP. AL. 100 uF, 100 V, +/- 20%, 0.17 ohm, SMD | SMT Radial J16 |
| 10 | C18, C23, C24 | 3 | 0.1uF | C0603C104K8RACTU | Kemet | CAP. CERM. 0.1 uF, 100 V, +/- 10%, XFR, 0605 | 0605 |
| 11 | C19, C20, C21, C22, C31 | 5 | 2.2uF | C1210C225K1RACTU | Kemet | CAP. CERM. 2.2 uF, 100 V, +/- 10%, XFR, 1210 | 1210 |
| 12 | C25 | 1 | 1uF | 885012206052 | Wurth Elektronik | CAP. CERM. 1 uF, 16 V, +/- 10%, XFR, 0603 | 0603 |
| 13 | C26 | 1 | 4700pF | 0603047J1A12A | AVX | CAP. CERM. 470 pF, 50 V, +/- 5%, COG/NPO, 0603 | 0603 |
| 14 | C27 | 1 | 22uF | GRM218R60J225ME39L | MuRata | CAP. CERM. 22 uF, 6.3 V, +/- 20%, XSR, 0605 | 0605 |
| 15 | C28, C29 | 2 | 10uF | GRM188R60J106ME47D | MuRata | CAP. CERM. 10 uF, 6.3 V, +/- 20%, XSR, 0603 | 0603 |
| 16 | C30 | 1 | 2200pF | 885012206056 | Wurth Elektronik | CAP. CERM. 2200 pF, 16 V, +/- 10%, XFR, 0603 | 0603 |
| 17 | C32 | 0 | 0.01uF | 885012209040 | Wurth Elektronik | CAP. CERM. 0.01 uF, 16 V, +/- 10%, XFR, 0603 | 0603 |
| 18 | C33 | 1 | 0.022uF | 885012206059 | Wurth Elektronik | CAP. CERM. 0.022 uF, 50 V, +/- 10%, XFR, 0603 | 0603 |
| 19 | C35 | 1 | 0.22uF | 885012206048 | Wurth Elektronik | CAP. CERM. 0.22 uF, 16 V, +/- 10%, XFR, 0603 | 0603 |
| 20 | C45, C58, C58 | 2 | 0.1uF | 885012205031 | Wurth Elektronik | CAP. CERM. 0.01 uF, 16 V, +/- 10%, XFR, 0402 | 0402 |
| 21 | C47 | 1 | 2.2uF | 885012105013 | Wurth Elektronik | CAP. CERM. 2.2 uF, 10 V, +/- 20%, XSR, 0402 | 0402 |
| 22 | C50 | 1 | 0.1uF | 885012206046 | Wurth Elektronik | CAP. CERM. 0.1 uF, 16 V, +/- 10%, XFR, 0603 | 0603 |
| 23 | C52, C53 | 2 | 1uF | GRM188R60J106ME47D | MuRata | CAP. CERM. 1 uF, 16 V, +/- 5%, COG/NPO, 0402 | 0402 |
| 24 | C55, C56 | 2 | 22pF | GRM1555C1H220A01D | MuRata | CAP. CERM. 22 pF, 50 V, +/- 5%, COG/NPO, 0402 | 0402 |
| 25 | C57, C61 | 2 | 10uF | CGA6P1X7R1E106M250AC | TDK | CAP. CERM. 10 uF, 25 V, +/- 20%, XFR, AEC-Q200 Grade 1, 1210 | 1210 |
| 26 | C59, C63 | 2 | 1000pF | 885012205061 | Wurth Elektronik | CAP. CERM. 1000 pF, 50 V, +/- 10%, XFR, 0402 | 0402 |
| 27 | C50, C54 | 2 | 100pF | 885012005051 | Wurth Elektronik | CAP. CERM. 100 pF, 50 V, +/- 5%, COG/NPO, 0402 | 0402 |
| 28 | C55, C56 | 2 | 12pF | 09402C120J3GACCAU10 | Kemet | CAP. CERM. 12 pF, 25 V, +/- 5%, COG/NPO, AEC-Q200 Grade 1, 0402 | 0402 |
| 29 | D1, D2, D3, D4 | 4 | 100V | B2100-13F | Diodes Inc. | Diode, Schottky, 100 V, 2 A, SMB | SMB |
| 30 | D5 | 1 | 56V | B24520581 | Wurth Elektronik | Diode, TVS, Uni, 56 V, DO-214 | DO-214 |
| 31 | D6, D7, D8 | 3 | Yellow | 15060Y0375000 | | LED, Yellow, SMD | LED 0603 |
| 32 | D10 | 1 | 100V | SS2P1H0M3 | Vishay-Semiconductor | Diode, Schottky, 100 V, 2 A, DO-220AA | DO-220AA |
| 33 | F101, F102, F103 | 3 | N/A | N/A | N/A | Footcandle. There is nothing to buy or mount. | Footcandle |
| 34 | H1, H2, H3, H4, H5, H6, H7 | 7 | | SJ382 | 3M | Bumper, Hemisphere, 0.25 X 0.075, Clear | 75x250 mil |
| 35 | J1 | 1 | | 1-406241-1 | TE Connectivity | RJ-45, No LED, tab up, R/A, TH | 15.26x14.54x15.75 |
| 36 | J2, J4, J5, J6, J8, J12 | 6 | | PTT-102-01-L-S | Samtec | Header, 2mm, 2x1, Gold, TH | Header, 2mm, 2x1, TH |
| 37 | J3, J11 | 2 | | PTT-103-01-L-S | Samtec | Header, 2mm, 3x1, Gold, TH | Header, 2mm, 3x1, TH |
| 38 | J7 | 1 | | 891210910002 | Wurth Elektronik | Receptacle, 2.54mm, 2x1, Tin, R/A, TH | Receptacle, 2.54mm, 2x1, R/A, TH |
| 39 | J8 | 1 | | FTSH-105-01-F-DV | Samtec | Header, 1.27mm, 5x2, Gold, Black, SMT | Header, 1.27mm, 5x2, SMT |
| 40 | J10 | 1 | | PTT-104-01-L-S | Samtec | Header, 2mm, 4x1, Gold, TH | Header, 2mm, 4x1, TH |
| 41 | L1, L2 | 2 | 300 ohm | 742792641 | Wurth Elektronik | Ferrite Bead, 300 ohm @ 100 MHz, 2 A, 0603 | 0603 |
| 42 | L3 | 1 | 3.3uH | 744025500 | Wurth Elektronik | Inductor, Shielded Drum Core, Ferrite, 3.3 uH, 1.5 A, 0.065 ohm, SMD | Inductor, 2.8x2.8x2.8mm |
| 43 | L4 | 1 | 33uH | 744714330 | Wurth Elektronik | Inductor, Shielded Drum Core, Ferrite, 33 uH, 2.5 A, 0.066 ohm, SMD | SMD |
| 44 | L5 | 1 | 2.2uH | 744028002 | Wurth Elektronik | Inductor, Shielded Drum Core, Ferrite, 2.2 uH, 1 A, 0.125 ohm, SMD | WE-1PC-1 |
| 45 | L6 | 1 | 330uH | 744779233 | Wurth Elektronik | Inductor, Shielded Drum Core, Metal Composite, 330 uH, 0.39 A, 1.15 ohm, SMD | SMD |
| 46 | Q1, Q2, Q3, Q4 | 4 | 100V | FDN8601 | Fairchild Semiconductor | MOSFET, N-CH, 100V, 2.7A, SSO-3 | SSOT-3 |
| 47 | Q5 | 1 | 100V | ZMP10A1KTC | Diodes Inc. | MOSFET, P-CH, 100 V, 3 A, DPAK | DPAK |
| 48 | R1, R2, R3, R4, R5, R6, R7, R9 | 8 | 75.0 | CRCW060375R0FKEA | Vishay-Dale | RES, 75.0 ohm, 1%, 0.1W, 0603 | 0603 |
| 49 | R9, R10, R11, R12 | 4 | 1.00Meg | CRCW06031M00FKEA | Vishay-Dale | RES, 1.00 M, 1%, 0.1 W, 0603 | 0603 |
| 50 | R13, R14, R15, R16 | 4 | 232k | CRCW0603232KFKEA | Vishay-Dale | RES, 232 k, 1%, 0.1 W, 0603 | 0603 |
| 51 | R17 | 1 | 53.6k | CRCW0603536KFKEA | Vishay-Dale | RES, 53.6 k, 1%, 0.1 W, 0603 | 0603 |
| 52 | R18, R19, R20, R1 | 4 | 1.30k | RC0603FR-071K3L | Yageo America | RES, 1.30 k, 1%, 0.1 W, 0603 | 0603 |
| 53 | R21 | 1 | 27.4k | CRCW0603274KFKEA | Vishay-Dale | RES, 27.4 k, 1%, 0.1 W, 0603 | 0603 |
| 54 | R22 | 1 | 1.00Meg | CRCW04021M00FKEA | Vishay-Dale | RES, 1.00 M, 1%, 0.063 W, 0402 | 0402 |
| 55 | R23 | 1 | 0.10 | RC0603FR-071R0 | Yageo America | RES, 0.10, 1%, 0.1 W, 1210 | 1210 |
| 56 | R24 | 1 | 1.3k | ERJ4GEV1J30V | Panasonic | RES, 1.3k, 5%, 0.125 W, 0605 | 0605 |
| 57 | R26, R31, R33 | 3 | 49.9k | CRCW0603499KFKEA | Vishay-Dale | RES, 49.9 k, 1%, 0.1 W, 0603 | 0603 |
| 58 | R27 | 1 | 0 | CRCW0603000020EA | Vishay-Dale | RES, 0, 5%, 0.1 W, 0603 | 0603 |
| 59 | R28, R49, R51, R58, R59 | 5 | 0 | ERJ-ZGE0R0X | Panasonic | RES, 0, 5%, 0.063 W, 0402 | 0402 |
| 60 | R29 | 1 | 63.4 | RC0603FR-0763R4L | Yageo America | RES, 63.4, 1%, 0.1 W, 0603 | 0603 |
| 61 | R30 | 1 | 243 | RC0603FR-07243R | Yageo America | RES, 243, 1%, 0.1 W, 0603 | 0603 |
| 62 | R32 | 1 | 23.2k | CRCW0603232KFKEA | Vishay-Dale | RES, 23.2 k, 1%, 0.1 W, 0603 | 0603 |
| 63 | R34, R39, R40, R41, R42, R44, R47, R60 | 8 | 10.0k | CRCW040210K0FKEA | Vishay-Dale | RES, 10.0 k, 1%, 0.063 W, 0402 | 0402 |
| 64 | R35 | 1 | 301k | CRCW0603301KFKEA | Vishay-Dale | RES, 301 k, 1%, 0.1 W, 0603 | 0603 |
| 65 | R36 | 1 | 105k | CRCW0402105KFKEA | Vishay-Dale | RES, 105 k, 1%, 0.063 W, 0402 | 0402 |
| 66 | R37 | 1 | 24.9k | CRCW0402249KFKEA | Vishay-Dale | RES, 24.9 k, 1%, 0.063 W, 0402 | 0402 |
| 67 | R38 | 1 | 5.76k | CRCW0402576KFKEA | Vishay-Dale | RES, 5.76 k, 1%, 0.063 W, 0402 | 0402 |
| 68 | R43, R48 | 2 | 100 | ERJ-2RKF-1000X | Panasonic | RES, 100, 1%, 0.1 W, 0402 | 0402 |
| 69 | R45 | 1 | 1.00k | CRCW06031K00FKEA | Vishay-Dale | RES, 1.00 k, 1%, 0.1 W, 0603 | 0603 |
| 70 | R46, R52, R53, R54, R55 | 5 | 49.9 | CRCW0402499KFKEA | Vishay-Dale | RES, 49.9, 1%, 0.063 W, 0402 | 0402 |
| 71 | R56 | 1 | 4.87k | CRCW0402487KFKEA | Vishay-Dale | RES, 4.87 k, 1%, 0.063 W, 0402 | 0402 |
| 72 | R57 | 1 | 2.21k | CRCW0402221KFKEA | Vishay-Dale | RES, 2.21 k, 1%, 0.063 W, 0402 | 0402 |
| 73 | R52 | 1 | 2.49k | CRCW0402249KFKEA | Vishay-Dale | RES, 2.49 k, 1%, 0.063 W, 0402 | 0402 |
| 74 | S1 | 1 | | SKRR-AE-010 | Alps | Switch, Push Button, SMD | 2.9x2x3.9mm SMD |
| 75 | SH-J1, SH-J4, SH-J5, SH-J6, SH-J7, SH-J8 | 6 | 1x2 | 25N-BK-G | Samtec | Shunt, 2mm, Gold plated, Black | 2mm Shunt, Closed Top |
| 76 | T1 | 1 | 350 uH | 7489220122 | Wurth Elektronik | Transformer, 350 uH, SMT | 14.7x18.29mm |
| 77 | TP1, TP2 | 2 | | 5019 | Keystone | Test Point, Miniature, SMT | Test Point, Miniature, SMT |
| 78 | U1 | 1 | | TPS2372-4RGWR | Texas Instruments | Mid Power bt PoE PD Interface with Automatic Maintain Power Signature, Advanced Startup and Ultra-Low Standby Power, RGW0020B (VOPN-20) | RGW0020B |
| 79 | U2 | 1 | | LM3409HVMYXNPB | Texas Instruments | PFET Buck Controller for High Power LED Drivers, 10-pin eMSOP, Pb-Free | MUC10A |
| 80 | U3 | 1 | | TPS82740DSR | Texas Instruments | 360mA IQ Step Down Converter for Low Power Applications, DSS0012A (VSON-12) | DSS0012A |
| 81 | U4 | 1 | | LM5165DRCR | Texas Instruments | 3V-65V, 150mA Synchronous Buck Converter With Ultra-Low I2, DRCC010J (VSON-10) | DRCC010J |
| 82 | U5 | 1 | | TM4C129CNPDT01B | Texas Instruments | TM4C Series Microcontroller, PDT0128A | PDT0128A |
| 83 | U6 | 1 | | DP83822R1BDR | Texas Instruments | Robust Low Power 10/100 Ethernet Physical Layer Transceiver, RH00032B (VOPN-32) | RH00032B |
| 84 | U7 | 1 | | TPD4E050600DQARQ1 | Texas Instruments | 1, 4, 6 CHANNEL PROTECTION SOLUTION FOR SUPER-SPEED (UP TO 6 GBPS) INTERFACE, DQ40010A | DQ40010A |
| 85 | Y1 | 1 | | ABS07-32-768KHZ-9-T | Abracon Corporation | CRYSTAL, 32.768KHZ, 9PF, SMD | 3.2x0.9x1.5mm |
| 86 | Y2 | 1 | | NV5032GA-25.000M-S1D-CSK-4 | NDK | Crystal, 25MHz, SMD | 5x3 2mm |
| 87 | Y3 | 1 | | CX3225CA250000HSSCC | Kyocera | Crystal, 25MHz, 8pF, SMD | 3.2x2.5mm |
| 88 | D9 | 0 | 30V | SD107WS-7-F | Diodes Inc. | Diode, Schottky, 30 V, 0.1 A, SOD-323 | SOD-323 |
| 89 | D10 | 0 | Yellow | 18-21UYC3530-A4/TR8 | Evertight | LED, Yellow, SMD | 0.8x1.6mm |
| 90 | R25 | 0 | 100k | CRCW0402100KFKEA | Vishay-Dale | RES, 100 k, 1%, 0.063 W, 0402 | 0402 |
| 91 | R51 | 0 | 0 | ERJ-ZGE0R0X | Panasonic | RES, 0, 5%, 0.063 W, 0402 | 0402 |
| 92 | R58 | 0 | 3.32k | CRCW0402332KFKEA | Vishay-Dale | RES, 3.32 k, 1%, 0.063 W, 0402 | 0402 |
| 93 | R61, R65 | 0 | 10.0k | CRCW040210K0FKEA | Vishay-Dale | RES, 10.0 k, 1%, 0.063 W, 0402 | 0402 |
| 94 | R63, R66, R67, R68 | 0 | 2.49k | CRCW0402249KFKEA | Vishay-Dale | RES, 2.49 k, 1%, 0.063 W, 0402 | 0402 |
| 95 | R64 | 0 | 332 | CRCW0402332KFKEA | Vishay-Dale | RES, 332, 1%, 0.063 W, 0402 | 0402 |
| 96 | SH-J2, SH-J3 | 0 | 1x2 | 25N-BK-G | Samtec | Shunt, 2mm, Gold plated, Black | 2mm Shunt, Closed Top |

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