

TIDA-00907-SB REV E2 Bill of Materials

| Designator | Quantity | Value | PartNumber | Manufacturer | Description | PackageReference |
|--|----------|-------|----------------------|----------------------------|---|-----------------------------|
| PCB1 | 1 | | TIDA-00907-SB | Any | Printed Circuit Board | |
| C1 | 1 | 0.1uF | 0603YC104JAT2A | AVX | CAP, CERM, 0.1 μ F, 16 V, +/- 5%, X7R, 0603 | 0603 |
| C2, C3, C4, C5, C6, C7 | 6 | 1uF | C0603C105K3RACTU | Kemet | CAP, CERM, 1 μ F, 25 V, +/- 10%, X7R, 0603_095 | 0603_095 |
| C25 | 1 | 33uF | C2012X5R1A336M125AC | TDK | CAP, CERM, 33 μ F, 10 V, +/- 20%, X5R, 0805 | 0805 |
| C28 | 1 | 0.1uF | GRM188R71C104KA01D | MuRata | CAP, CERM, 0.1 μ F, 16 V, +/- 10%, X7R, 0603 | 0603 |
| C29 | 1 | 10uF | GRM21BR61C106KE15L | MuRata | CAP, CERM, 10uF, 16V, +/-10%, X5R, 0805 | 0805 |
| D1, D2, D3, D8, D9, D10 | 6 | 30V | BAT54S-E3-08 | Vishay-Semiconductor | Diode, Schottky, 30 V, 0.2 A, SOT-23 | SOT-23 |
| D4, D5, D6, D7, D11, D12, D16 | 7 | Green | 150060GS75000 | Würth Elektronik | LED, Green, SMD | LED_0603 |
| D18 | 1 | 15V | LSM115JE3/TR13 | Microsemi | Diode, Schottky, 15 V, 1 A, DO-214BA | DO-214BA |
| E1, E2, E3, E4, E5, E6 | 6 | | 7461086 | Würth Elektronik | Power Element Bush, M4, 12, TH | Bush, M4, TH |
| FID4, FID5, FID6 | 3 | | N/A | N/A | Fiducial mark. There is nothing to buy or mount. | Fiducial |
| 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 |
| H5, H6, H7, H8 | 4 | | 1902C | Keystone | Standoff, Hex, 0.5"L #4-40 Nylon | Standoff |
| J1, J2, J3, J15, J16 | 5 | | TMM-102-01-F-S | Samtec | Header, 2mm, 2x1, Gold, TH | Header, 2mm, 2x1, TH |
| J11 | 1 | | PJ-202AH | CUI Inc. | Connector, DC Jack 2.1X5.5 mm, TH | Conn, DC Jack, pin 2mm Dia. |
| J12 | 1 | | 800-10-002-10-001000 | Mill-Max | Header, 100mil, 2x1, TH | Header, 2x1, 100mil, TH |
| J14 | 1 | | ED555/2DS | On-Shore Technology | Terminal Block, 3.5mm Pitch, 2x1, TH | 7.0x8.2x6.5mm |
| 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 |
| R1, R7, R19, R37, R55 | 5 | 10k | RC0603JR-0710KL | Yageo America | RES, 10 k, 5%, 0.1 W, 0603 | 0603 |
| R2, R86, R87, R88, R89, R90, R91 | 7 | 0 | RC0603JR-070RL | Yageo America | RES, 0, 5%, 0.1 W, 0603 | 0603 |
| R10, R26, R28, R30, R32, R45, R46, R47, R49, R61 | 10 | 0 | ERJ-3GEY0R00V | Panasonic | RES, 0, 5%, 0.1 W, 0603 | 0603 |
| R12, R14, R16 | 3 | 1.00 | CSR1206FK1R00 | Stackpole Electronics Inc | RES, 1.00, 1%, 0.5 W, 1206 | 1206 |
| R13, R15, R17 | 3 | 1.20 | CRCW12061R20FKEA | Vishay-Dale | RES, 1.20, 1%, 0.25 W, AEC-Q200 Grade 0, 1206 | 1206 |
| R21, R22, R23, R24, R34, R35 | 6 | 200 | CRCW0603200RJNEA | Vishay-Dale | RES, 200, 5%, 0.1 W, 0603 | 0603 |
| R25, R27, R29 | 3 | 8.87 | CRCW06038R87FKEA | Vishay-Dale | RES, 8.87, 1%, 0.1 W, 0603 | 0603 |
| R76 | 1 | 750 | CRCW0603750RJNEA | Vishay-Dale | RES, 750, 5%, 0.1 W, 0603 | 0603 |
| S1 | 1 | | B3U-1000P | Omron Electronic Component | SWITCH TACTILE SPST-NO 0.05A 12V | 3x1.6x2.5mm |
| T1, T2, T3 | 3 | | SC3113-50 | Sumida | Transformer, TH | 31.3x29.6mm |
| U1, U2, U3 | 3 | | DRV421RTJR | Texas Instruments | 5-V, Closed-Loop, Current Sense Conditioner with Integrated Fluxgate Sensor, RTJ0020G | RTJ0020G |

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|---|----------|---------|---------------------|-----------------------------|--|--|
| C8, C9, C10, C12, C15, C16, C17, C18, C19, C30 | 0 | 0.1uF | 0603YC104JAT2A | AVX | CAP, CERM, 0.1 μ F, 16 V, +/- 5%, X7R, 0603 | 0603 |
| C11, C13, C14, C20, C21, C22 | 0 | 0.1uF | C0603C104J4RACTU | Kemet | CAP, CERM, 0.1uF, 16V, +/-5%, X7R, 0603 | 0603 |
| C23, C31, C32 | 0 | 820pF | GRM188R71H821KA01D | MuRata | CAP, CERM, 820 pF, 50 V, +/- 10%, X7R, 0603 | 0603 |
| C24 | 0 | 0.1uF | GRM188R71H104KA93D | MuRata | CAP, CERM, 0.1 μ F, 50 V, +/- 10%, X7R, 0603 | 0603 |
| C26, C27 | 0 | 33uF | C2012X5R1A336M125AC | TDK | CAP, CERM, 33 μ F, 10 V, +/- 20%, X5R, 0805 | 0805 |
| D13, D14, D15, D17 | 0 | Green | 150060GS75000 | Würth Elektronik | LED, Green, SMD | LED_0603 |
| FID1, FID2, FID3 | 0 | | N/A | N/A | Fiducial mark. There is nothing to buy or mount. | Fiducial |
| J4, J5, J6 | 0 | | 142-0701-201 | Emerson Network Power | Connector, TH, SMA | SMA |
| J7, J8, J9 | 0 | | PBC02SAAN | Sullins Connector Solutions | Header, 100mil, 2x1, Gold, TH | Sullins 100mil, 1x2, 230 mil above insulator |
| J10 | 0 | | PBC03SAAN | Sullins Connector Solutions | Header, 100mil, 3x1, Gold, TH | PBC03SAAN |
| J13 | 0 | | TSW-110-07-G-D | Samtec | Header, 100mil, 10x2, Gold, TH | 10x2 Header |
| R3, R4, R5 | 0 | 2.20 | RC1206FR-072R2L | Yageo America | RES, 2.20, 1%, 0.25 W, 1206 | 1206 |
| R6, R8, R18, R20, R36, R38, R54, R56 | 0 | 10k | RC0603JR-0710KL | Yageo America | RES, 10 k, 5%, 0.1 W, 0603 | 0603 |
| R9, R11, R31, R33, R48, R50, R60, R62, R72, R83 | 0 | 0 | ERJ-3GEY0R00V | Panasonic | RES, 0, 5%, 0.1 W, 0603 | 0603 |
| R39, R40, R41, R42, R43, R44, R51, R52, R53, R78, R80 | 0 | 0 | RC0603JR-070RL | Yageo America | RES, 0, 5%, 0.1 W, 0603 | 0603 |
| R57, R58, R59, R69, R70, R71 | 0 | 1.20k | RG1608P-122-B-T5 | Susumu Co Ltd | RES, 1.20 k, 0.1%, 0.1 W, 0603 | 0603 |
| R63, R64, R65, R82 | 0 | 200 | CRCW0603200RJNEA | Vishay-Dale | RES, 200, 5%, 0.1 W, 0603 | 0603 |
| R66, R67, R68 | 0 | 6.98k | RT0603BRD076K98L | Yageo America | RES, 6.98 k, 0.1%, 0.1 W, 0603 | 0603 |
| R73 | 0 | 10.7k | RG1608P-1072-B-T5 | Susumu Co Ltd | RES, 10.7 k, 0.1%, 0.1 W, 0603 | 0603 |
| R74 | 0 | 11.0k | RT0603BRD0711KL | Yageo America | RES, 11.0 k, 0.1%, 0.1 W, 0603 | 0603 |
| R75 | 0 | 5.11Meg | CRCW06035M11FKEA | Vishay-Dale | RES, 5.11 M, 1%, 0.1 W, 0603 | 0603 |
| R77, R79, R81, R85 | 0 | 10.0k | PHT0603Y1002BGT200 | Vishay Sfernice | RES, 10.0 k, 0.1%, 0.0375 W, 0603 | 0603 |
| R84 | 0 | 10.2k | RG1608P-1022-B-T5 | Susumu Co Ltd | RES, 10.2 k, 0.1%, 0.1 W, 0603 | 0603 |
| U4, U5, U6, U7 | 0 | | TLC372QDR | Texas Instruments | LinCMOS Dual Differential Comparators, D0008A | D0008A |
| U8 | 0 | | TLV1117-33IDRJ | Texas Instruments | LDO with 4.7 to 15 V Input and 3.3 V Output, -40 to 125 degC, 8-Pin SON (DRJ), Green (RoHS & no Sb/Br) | DRJ0008A |