

TIDA-00760 REV E1 Bill of Materials

| Item # | Designator | Quantity | Value | PartNumber | Manufacturer | Description | PackageReference |
|--------|--|----------|---------|--------------------|-------------------------|---|-------------------------------|
| 1 | D2, D3 | 2 | 15V | SMBJ15A-13-F | Diodes Inc. | Diode, TVS, Uni, 15 V, 600 W, SMB | SMB |
| 2 | D1, D4 | 2 | Green | LTST-C190KGKT | Lite-On | LED, Green, SMD | 1.6x0.8x0.8mm |
| 3 | C15, C20 | 2 | 10uF | 293D106X9050E2TE3 | Vishay-Sprague | CAP, TA, 10 µF, 50 V, +/- 10%, 0.8 ohm, SMD | 7343-43 |
| 4 | C40 | 1 | 0.022uF | C1608X7R1H223K | TDK | CAP, CERM, 0.022 µF, 50 V, +/- 10%, X7R, 0603 | 0603 |
| 5 | C14, C22, C35, C37, C39, C48, C53, C54 | 8 | 100pF | 06035A101JAT2A | AVX | CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0603 | 0603 |
| 6 | J5 | 1 | | ED555/3DS | On-Shore Technology | Terminal Block, 6A, 3.5mm Pitch, 3-Pos, TH | 10.5x8.2x6.5mm |
| 7 | C9, C10, C11, C12, C27, C28, C29, C30 | 8 | 0.022uF | C0603X223K5RACTU | Kemet | CAP, CERM, 0.022 µF, 50 V, +/- 10%, X7R, 0603 | 0603 |
| 8 | C5, C6, C7, C8, C13, C21, C23, C24, C25, C26, C31, C32, C33, C34, C36, C38, C41, C42, C43, C44, C45, C46, C47, C49, C51, C52, C55, C56 | 28 | 0.1uF | GRM188R71H104KA93D | MuRata | CAP, CERM, 0.1 µF, 50 V, +/- 10%, X7R, 0603 | 0603 |
| 9 | 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 |
| 10 | H5, H6, H7, H8 | 4 | | 1902C | Keystone | Standoff, Hex, 0.5"L #4-40 Nylon | Standoff |
| 11 | J1, J2, J3, J4, J7, J8, J9, J11, J12 | 9 | | ED555/2DS | On-Shore Technology | Terminal Block, 6A, 3.5mm Pitch, 2-Pos, TH | 7.0x8.2x6.5mm |
| 12 | Q1, Q2, Q5, Q6 | 4 | 60 V | MMBT2907A | Fairchild Semiconductor | Transistor, PNP, 60 V, 0.8 A, SOT-23 | SOT-23 |
| 13 | J10 | 1 | | 61300211021 | Würth Elektronik | Header, 2.54 mm, 2x1, Gold, R/A, TH | Header, 2.54 mm, 2x1, R/A, TH |
| 14 | J6 | 1 | | TSW-111-07-G-S | Samtec | Header, 100mil, 11x1, Gold, TH | 11x1 Header |
| 15 | PCB1 | 1 | | TIDA-00760 | Any | Printed Circuit Board | |
| 16 | Q3, Q4, Q7, Q8 | 4 | -60V | BSP613PH6327XTSA1 | Infineon Technologies | MOSFET, P-CH, -60 V, -2.9 A, SOT-223 | SOT-223 |
| 17 | R1, R2, R3, R4, R14, R15, R16, R17, R18, R19, R20, R21, R30, R31, R32, R33, R39, R40, R51, R52 | 20 | 2.00k | CPF0603B2K0E | TE Connectivity | RES, 2.00 k, 0.1%, 0.063 W, 0603 | 0603 |
| 18 | R5, R6, R7, R8, R22, R23, R24, R25 | 8 | 100 | CRCW0603100RFKEA | Vishay-Dale | RES, 100, 1%, 0.1 W, 0603 | 0603 |
| 19 | R9, R10, R11, R12, R26, R27, R28, R29 | 8 | 0 | CRCW06030000Z0EA | Vishay-Dale | RES, 0, 5%, 0.1 W, 0603 | 0603 |
| 20 | R13, R34, R37, R38, R47, R48 | 6 | 10k | CRCW060310K0JNEA | Vishay-Dale | RES, 10 k, 5%, 0.1 W, 0603 | 0603 |
| 21 | R35, R36, R41, R42, R45, R46, R49, R50, R53, R54 | 10 | 15.0 | CRCW060315R0FKEA | Vishay-Dale | RES, 15.0, 1%, 0.1 W, 0603 | 0603 |
| 22 | R43 | 1 | 15 | RPC2512JT15R0 | Stackpole Electronics | RES 15 OHM 1W 5% 2512 | 2512 |
| 23 | R44 | 1 | 15.0k | RT0603BRD0715KL | Yageo America | RES, 15.0 k, 0.1%, 0.1 W, 0603 | 0603 |
| 24 | U1, U2, U3, U4, U5, U6, U7, U8 | 8 | | OPA188AIDBVR | Texas Instruments | Precision, Low-Noise, Rail-to-Rail Output, 36 V, Zero-Drift Operational Amplifiers, DBV0005A | DBV0005A |
| 25 | U9 | 1 | | DAC8760IPWP | Texas Instruments | Single-Channel, 16-Bit Programmable Current Output and Voltage Output DIGITAL-TO-ANALOG CONVERTER for 4-mA to 20-mA Current Loop Applications, PWP0024J | PWP0024J |
| 26 | U10, U11, U13, U14 | 4 | | XTR111AIDGQT | Texas Instruments | Precision Voltage-to-Current Converter/Transmitter, DGQ0010D | DGQ0010D |
| 27 | U12 | 1 | | MUX36S08IPWR | Texas Instruments | Fault-Protected, 8-Channel, Single-Ended Multiplexer, PW0016A | PW0016A |
| 28 | FID1, FID2, FID3 | 0 | | N/A | N/A | Fiducial mark. There is nothing to buy or mount. | N/A |
| 29 | C50 | 0 | 100pF | 06035A101JAT2A | AVX | CAP, CERM, 100 pF, 50 V, +/- 5%, C0G/NP0, 0603 | 0603 |
| 30 | C1, C2, C3, C4, C16, C17, C18, C19 | 0 | 2200pF | GRM1885C1H222JA01D | MuRata | CAP, CERM, 2200 pF, 50 V, +/- 5%, C0G/NP0, 0603 | 0603 |

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