

Variant: 001  
Generated: 1/17/2024 10:58 AM  
TID #: N/A



TIDA-050065 REV C Bill of Materials

| Item # | Designator            | Quantity | Value  | PartNumber           | Manufacturer                    | Description                                                                                                            | PackageReference |
|--------|-----------------------|----------|--------|----------------------|---------------------------------|------------------------------------------------------------------------------------------------------------------------|------------------|
| 1      | PCB1                  | 1        |        | TIDA-050065          | Any                             | Printed Circuit Board                                                                                                  |                  |
| 2      | C1                    | 1        | 1500pF | CGA3E2X7R2A152K080AA | TDK                             | CAP, CERM, 1500 pF, 100 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0603                                                        | 0603             |
| 3      | C2, C8, C9, C11, C17  | 5        | 10uF   | GMK316AB7106KL-TR    | Taiyo Yuden                     | CAP, CERM, 10 uF, 35 V, +/- 10%, X7R, 1206_190                                                                         | 1206_190         |
| 4      | C3, C5, C10, C13, C16 | 5        | 0.1uF  | GCM155R71H104KE02D   | MuRata                          | CAP, CERM, 0.1 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402                                                          | 0402             |
| 5      | C4                    | 1        | 2.2uF  | CGA4J3X7R1H225K125AB | TDK                             | CAP, CERM, 2.2 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805                                                          | 0805             |
| 6      | C6                    | 1        |        | 101X18W103MV4E       | Johanson Dielectrics            | Multilayer Ceramic Capacitor, X2Y Series, 0.01 - F, - 20%, X7R, 100 V, 1206 [3216 Metric] Rohs Compliant: Yes          | 1206             |
| 7      | C7                    | 1        |        | 101X15W472MV4E       | Johanson Dielectrics            | Feed Through Capacitors 100volts 4700pF 20% X7R                                                                        | 0805             |
| 8      | C12                   | 1        | 2.2uF  | CGA4J3X7R1H225K125AE | TDK                             | CAP, CERM, 2.2 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0805                                                          | 0805             |
| 9      | C15                   | 1        | 4.7uF  | CGA5L3X7R1H475K160AE | TDK                             | CAP, CERM, 4.7 uF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 1206                                                          | 1206             |
| 10     | C19, C20              | 2        | 330pF  | CGA2B2X7R1H331K050BA | TDK                             | CAP, CERM, 330 pF, 50 V, +/- 10%, X7R, AEC-Q200 Grade 1, 0402                                                          | 0402             |
| 11     | J1                    | 1        |        |                      |                                 | EECE Thor labs enclosure connector                                                                                     |                  |
| 12     | L1                    | 1        | 22uH   | LPS4018-223MRB       | Coilcraft                       | Inductor, Shielded Drum Core, Ferrite, 22 uH, 0.83 A, 0.36 ohm, SMD                                                    | LPS4018          |
| 13     | L2                    | 1        |        | DLW32PH122XK2B       | Murata                          | Chip Common Mode Choke Coil 1200 Ohm @ 100 MHz 1200mA                                                                  | SMT4 3MM2 2MM5   |
| 14     | R1, R3, R4            | 3        | 10.0k  | CRCW080510K0FKEA     | Vishay-Dale                     | RES, 10.0 k, 1%, 0.125 W, AEC-Q200 Grade 0, 0805                                                                       | 0805             |
| 15     | R2                    | 1        | 100k   | ERJ-2GEJ104X         | Panasonic                       | RES, 100 k, 5%, 0.1 W, AEC-Q200 Grade 0, 0402                                                                          | 0402             |
| 16     | R5                    | 1        | 1.00k  | CRCW08051K00FKEA     | Vishay-Dale                     | RES, 1.00 k, 1%, 0.125 W, AEC-Q200 Grade 0, 0805                                                                       | 0805             |
| 17     | R6, R7                | 2        | 270    | 3521270RFT           | TE Connectivity                 | RES, 270, 1%, 2 W, 2512                                                                                                | 2512             |
| 18     | R8                    | 1        | 69.8k  | ERA-3AEB6982V        | Panasonic Electronic Components | Res Thin Film 0603 69.8K Ohm 0.1% 1/10W ±25ppm/°C Molded SMD SMD Punched Carrier T/R                                   | 0603             |
| 19     | R9, R11               | 2        | 49.9k  | RN73C1J49K9BTG       | TE Connectivity                 | Thin Film Resistors RN 0603 49.9KΩ 0.1% 10ppm/°C                                                                       | 0603             |
| 20     | R10                   | 1        | 10k    | ERA-3ARB103V         | Panasonic                       | Res Thin Film 0603 10K Ohm 0.1% 1/10W ±10ppm/°C Molded SMD SMD Punched Carrier T/R                                     | 0603             |
| 21     | U1                    | 1        |        | TL431BCDBVTG4        | Texas Instruments               | Adjustable Precision Shunt Regulator, 34 ppm / degC, 100 mA, 0 to 70 degC, 5-pin SOT-23 (DBV), Green (RoHS & no Sb/Br) | DBV0005A         |
| 22     | U2                    | 1        |        | UCC14240DWNQ1        | Texas Instruments               | 2W, 24V-Vin, 25V-Vout, High-Efficiency, >2. 5 kVRMS Isolated DC-DC Converter                                           | SOIC36           |
| 23     | FID1, FID2, FID3      | 0        |        | N/A                  | N/A                             | Fiducial mark. There is nothing to buy or mount.                                                                       | N/A              |