

Bill of Materials

TI DESIGNS
Part #
Literature #

| Designator | Quantity | Value | Description | PackageReference | PartNumber | Manufacturer |
|--------------------|----------|-------------|--|---------------------------|-------------------------|-------------------------------|
| IPC B1 | 1 | | Printed Circuit Board | | SAT0047 | Any |
| C1 | 1 | 1000pF | CAP, CERM, 1000pF, 2000V, +/-10%, X7R, 1812 | | 1812 1812GC102KA1 | AVX |
| C3, C7 | 2 | 47uF | CAP, CERM, 47uF, 16V, +/-10%, X5R, 1210 | | 1210 GRM32ER61C476KE15L | MuRata |
| C4, C5 | 2 | 0.1uF | CAP, CERM, 0.1uF, 16V, +/-5%, X7R, 0603 | | 603 0603YC104JAT2A | AVX |
| C6 | 1 | 22uF | CAP, CERM, 22uF, 16V, +/-10%, X5R, 1206 | | 1206 GRM31CR61C226KE15L | MuRata |
| C9 | 1 | 0.1uF | CAP, CERM, 0.1uF, 16V, +/-10%, X7R, 0805 | | 805 C0805C104K4RACTU | Kemet |
| C10 | 1 | 0.01uF | CAP, CERM, 0.01uF, 16V, +/-10%, X7R, 0603 | | 603 GRM188R71C103KA01D | MuRata |
| C11, C12, C13, C14 | 4 | 0.01uF | CAP, CERM, 0.01uF, 16V, +/-10%, X7R, 0402 | | 402 C1005X7R1C103K | TDK |
| C15, C17 | 2 | 68pF | CAP, CERM, 68pF, 50V, +/-5%, COG/NP0, 0603 | | 603 06035A680JAT2A | AVX |
| C16 | 1 | 4700pF | CAP, CERM, 4700pF, 25V, +/-5%, COG/NP0, 0603 | | 603 C1608C0G1E472J | TDK |
| D1 | 1 | Orange | LED, Orange, SMD | 1.6x0.8x0.8mm | LTST-C190KFKT | Lite-On |
| D2 | 1 | 0.5V | Diode, Schottky, 20V, 1A, SMA | SMA | B120-13-F | Diodes Inc. |
| D3 | 1 | 5.1V | Diode, Zener, 5.1V, 550mW, SMB | SMB | 1SMB5918BT3G | ON Semiconductor |
| D4 | 1 | Green | LED, Green, SMD | 1.6x0.8x0.8mm | LTST-C190GKT | Lite-On |
| D5 | 1 | | IC TVS ASYMM RS-485V 7/12V SOT23 | 3 | SM712.TCT | Semtech |
| FID1, FID2, FID3 | 3 | | Fiducial mark. There is nothing to buy or mount. | Fiducial | N/A | N/A |
| J2 | 1 | | Header, 100mil, 2x1, Tin plated, TH | Header 2x1 | 90120-0122 | Molex |
| J3 | 1 | | Header, TH, 100mil, 5x1, Gold plated, 230 mil above insulator | TSW-105-07-G-S | TSW-105-07-G-S | Samtec, Inc. |
| J4 | 1 | | Header, TH, 100mil, 6x1, Gold plated, 230 mil above insulator | TSW-106-07-G-S | TSW-106-07-G-S | Samtec, Inc. |
| J8 | 1 | | Conn D-SUB RCPT R/A 9POS GOLD/FL, TH | D-SUB 9 PIN | 1734348-1 | TE Connectivity |
| J9 | 1 | | Header, TH, 100mil, 3x1, Gold plated, 230 mil above insulator | TSW-103-07-G-S | TSW-103-07-G-S | Samtec, Inc. |
| LBL1 | 1 | | Thermal Transfer Printable Labels, 0.650" W x 0.200" H - 10,000 per roll | 0.200"W | THT-14-423-10 | Brady |
| R2, R3 | 2 | 71.5k | RES, 71.5k ohm, 1%, 0.1W, 0603 | | 603 CRCW060371K5FKEA | Vishay-Dale |
| R4 | 1 | 26.7k | RES, 26.7k ohm, 1%, 0.1W, 0603 | | 603 CRCW060326K7FKEA | Vishay-Dale |
| R5, R7 | 2 | 1.0k | RES, 1.0k ohm, 5%, 0.1W, 0603 | | 603 CRCW06031K00JNEA | Vishay-Dale |
| R6 | 1 | | 200 RES, 200 ohm, 5%, 0.1W, 0603 | | 603 CRCW0603200RJNEA | Vishay-Dale |
| R8 | 1 | 243k | RES, 243k ohm, 1%, 0.1W, 0603 | | 603 CRCW0603243KFKEA | Vishay-Dale |
| R9 | 1 | 187k | RES, 187k ohm, 1%, 0.1W, 0603 | | 603 CRCW0603187KFKEA | Vishay-Dale |
| R10 | 1 | 61.9k | RES, 61.9k ohm, 1%, 0.1W, 0603 | | 603 CRCW060361K9FKEA | Vishay-Dale |
| R12, R14 | 2 | | 390 RES, 390 ohm, 1%, 0.25W, 1206 | | 1206 RC1206FR-07390RL | Yageo America |
| R13 | 1 | | 220 RES, 220 ohm, 1%, 0.25W, 1206 | | 1206 RC1206FR-07220RL | Yageo America |
| R16, R17 | 2 | | 60.4 RES, 60.4 ohm, 1%, 0.125W, 0805 | | 805 CRCW080560R4FKEA | Vishay-Dale |
| T1 | 1 | | Transformer | | 750314189 | Würth Electronics Midcom Inc. |
| TP1 | 1 | Red | Test Point, Miniature, Red, TH | Red Miniature Testpoint | 5000 | Keystone |
| TP2 | 1 | Black | Test Point, Miniature, Black, TH | Black Miniature Testpoint | 5001 | Keystone |
| TP3, TP4, TP5, TP6 | 4 | White | Test Point, Miniature, White, TH | White Miniature Testpoint | 5002 | Keystone |
| U1 | 1 | | Tiva C LaunchPad_2 Samtec part number SSW-110-23-S-D | | Tiva C LaunchPad | Texas Instruments |
| U2 | 1 | TPS55010RTE | IC, DC-DC Converter | QFN-16 | TPS55010RTE | TI |
| U3 | 1 | ISO1176DW | IC, ISOLATED RS-485 PROFIBUS TRANSCEIVER | SO-16 | ISO1176DW | TI |
| U4 | 1 | | IC TXRX ISOLATED CAN 5V 16SOIC | Width) | ISO1050DW | Texas Instruments |

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|------------|----------|-------|---------------------------------|------------------|-------------|------------------|
| U5 | 1 | | IC CAN BUS PROTECTOR DUAL SOT23 | 3 | NUP2105LT1G | ON Semiconductor |

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