



Bill of Materials

TI DESIGNS

TIDA-00499_DFR

| Item | Qty | Reference | Fitted | Part Description | Manufacturer | Manufacturer Part Number | Supplier part number | PCB Footprint |
|------|-----|--|--------|---|---------------------|--------------------------|----------------------|----------------------|
| 2 | 5 | C3, C16, C29, C41, C60 | Fitted | CAP, CERM, 0.1uF, 16V, +/-5%, X7R, 0603 | Kemet | C0603C104J4RACTU | 399-1097-1-ND | 603 |
| 3 | 4 | C6, C21, C32, C45 | Fitted | CAP, CERM, 0.01uF, 16V, +/-10%, X7R, 0603 | Kemet | C0603C103K4RACTU | 399-7841-1-ND | 0603 |
| 4 | 4 | C11, C24, C38, C50 | Fitted | CAP, CERM, 1uF, 25V, +/-10%, X7R, 0603 | MuRata | GRM188R71E105KA12D | 490-5307-1-ND | 0603 |
| 5 | 4 | C12, C25, C37, C51 | Fitted | CAP, CERM, 1 µF, 16 V, +/- 10%, X7R, 0603 | MuRata | GRM188R71C105KA12D | 490-3900-1-ND | 0603 |
| 6 | 4 | C13, C26, C39, C52 | Fitted | CAP, CERM, 10 µF, 16 V, +/- 10%, X5R, 1206 | MuRata | GRM319R61C106KE15D | 490-6494-1-ND | 1206 |
| 7 | 2 | C53, C58 | Fitted | CAP, CERM, 1uF, 16V, +/-10%, X7R, 0603 | TDK | C1608X7R1C105K | 445-1604-1-ND | 0603 |
| 8 | 1 | C54 | Fitted | CAP, CERM, 10uF, 16V, +/-20%, X5R, 0603 | Taiyo Yuden | EMK107BBJ106MA-T | 587-3238-1-ND | 0603 |
| 9 | 2 | C55, C62 | Fitted | CAP, CERM, 1uF, 10V, +/-10%, X7R, 0805 | Kemet | C0805C105K8RACTU | 399-1172-1-ND | 0805_HV |
| 10 | 1 | C56 | Fitted | CAP, CERM, 0.1uF, 10V, +/-10%, X7R, 0603 | Kemet | C0603C104K8RACTU | 399-1095-1-ND | 0603 |
| 11 | 2 | C57, C61 | Fitted | CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603 | Kemet | C0603C104K5RACTU | 399-5089-1-ND | 0603 |
| 12 | 1 | C59 | Fitted | CAP, TA, 4.7uF, 35V, +/-10%, 1.9 ohm, SMD | Vishay-Sprague | 293D475X9035C2TE3 | 718-1083-1-ND | 6032-28 |
| 13 | 4 | D1, D4, D7, D10 | Fitted | DIODE, TVS, BIDIRECTIONAL, 3.3VVM, 26VC, SOD323 | NXP Semiconductor | PESD3V3L1BA | 568-4040-1-ND | DIO_SOD323 |
| 14 | 8 | D2, D3, D5, D6, D8, D9, D11, D12 | Fitted | Diode, P-N, 70V, 0.2A, SOT-323 | Diodes Inc | DESD1P0RFW-7 | DESD1P0RFW-7DIDKR-ND | SOT-323 |
| 15 | 1 | D13 | Fitted | LED SmartLED Green 570NM | OSRAM | LG L29K-G2J1-24-Z | 475-2709-1-ND | LED0603AA |
| 16 | 1 | D14 | Fitted | Diode, Zener, 5.6 V, 500 mW, SOD-123 | Diodes Inc. | MMSZ5232B-7-F | MMSZ5232B-FDICT-ND | SOD-123 |
| 17 | 1 | FB1 | Fitted | FERRITE CHIP 1000 OHM 300MA 0603 | TDK Corporation | MMZ1608B102C | 445-8672-1-ND | 0603 |
| 18 | 8 | J1, J4, J5, J8, J9, J12, J13, J16 | Fitted | Connector, TH, SMA | Emerson Network | 142-0701-201 | J500-ND | Johnson_142-0701-20x |
| 19 | 6 | J2, J6, J10, J14, J17, J18 | Fitted | Terminal Block, 4x1, 2.54mm, TH | On Shore Technology | OSTVN02A150 | ED10561-ND | CN2_MTB_P100_PD80_D1 |
| 20 | 5 | J3, J7, J11, J15, J19 | Fitted | TERMINAL BLOCK 5.08MM VERT 2POS, TH | On-Shore Technology | ED120/2DS | ED1609-ND | CONN_ED120-2DS |
| 21 | 20 | R3, R4, R5, R6, R9, R24, R25, R26, R27, R30, R46, R47, R48, R49, R53, R67, R68, R69, R70, R74 | Fitted | RES, 110 k, 1%, 0.25 W, 1206 | Vishay-Dale | CRCW1206110KFKEA | 541-110KFCT-ND | 1206 |
| 22 | 8 | R7, R21, R29, R42, R51, R63, R73, R85 | Fitted | RES, 499 ohm, 1%, 0.1W, 0603 | Vishay-Dale | CRCW0603499RFKEA | 541-499HCT-ND | 0603 |
| 23 | 4 | R8, R31, R52, R75 | Fitted | RES, 487 ohm, 1%, 0.1W, 0603 | Vishay-Dale | CRCW0603487RFKEA | 541-487HCT-ND | 0603 |
| 25 | 38 | R10, R11, R13, R14, R15, R16, R18, R19, R32, R33, R34, R36, R37, R38, R39, R41, R54, R55, R57, R58, R59, R60, R62, R65, R76, R77, R79, R80, R81, R82, R84, R87, R91, R92, R93, R94, R97, R98 | Fitted | RES, 0 ohm, 5%, 0.1W, 0603 | Vishay-Dale | CRCW06030000Z0EA | 541-0.0GCT-ND | 0603 |

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| 26 | 8 | R12, R17, R35, R40, R56, R61, R78, R83 | Fitted | RES, 22 ohm, 5%, 0.1W, 0603 | Vishay-Dale | CRCW060322R0JNEA | 541-22GCT-ND | 0603 |
| 27 | 4 | R20, R44, R66, R88 | Fitted | RES, 0, 5%, 0.1 W, 0603 | Yageo America | RC0603JR-070RL | 311-0.0GRCT-ND | 0603 |
| 28 | 4 | R22, R43, R64, R86 | Fitted | RES, 523 ohm, 1%, 0.1W, 0603 | Vishay-Dale | CRCW0603523RFKEA | 541-523HCT-ND | 0603 |
| 29 | 1 | R89 | Fitted | RES, 300 ohm, 5%, 0.1W, 0603 | Vishay-Dale | CRCW0603300RJNEA | 541-300GCT-ND | 0603 |
| 30 | 1 | R90 | Fitted | RES, 1.00k ohm, 1%, 0.1W, 0603 | Yageo America | RC0603FR-071KL | 311-1.00KHRCT-ND | 0603 |
| 31 | 4 | U1, U2, U3, U4 | Fitted | Ultra Low Power, Rail-to-Rail Output, Fully- | Texas Instruments | THS4531IDGK | 296-30342-1-ND | DGK0008A_N |
| 32 | 1 | U5 | Fitted | IC REG LDO 5V 0.3A TO252-3 | TI | TPS7A6550QKVURQ1 | 296-28461-1-ND | KVU_1 |
| 33 | 1 | U6 | Fitted | 20 MHz, Low Noise, RRIO, CMOS Operational | Texas Instruments | OPA322AIDBVR | 296-29488-1-ND | DBV0005A_N |
| 34 | 1 | U7 | Fitted | Precision Micropower Low Dropout Voltage | Texas Instruments | LM4140CCM- | LM4140CCM-2.5-ND | M08A_N |
| 35 | 0 | C1, C14, C27, C40 | Not Fitted | CAP, CERM, 1000pF, 50V, +/-5%, C0G/NP0, | TDK | C1608C0G1H102J | 445-1293-1-ND | 0603 |
| 36 | 0 | C2, C9, C15, C20 | Not Fitted | CAP, CERM, 1000 pF, 16 V, +/- 10%, X7R, 0603 | Kemet | C0603C102K4RACTU | 399-7835-1-ND | 0603 |
| 37 | 0 | C4, C10, C17, C23, C30, C36, C43, C48 | Not Fitted | CAP, CERM, 0.01uF, 16V, +/-10%, X7R, 0603 | Kemet | C0603C103K4RACTU | 399-7841-1-ND | 0603 |
| 38 | 0 | C5, C7, C8, C18, C19, C22 | Not Fitted | CAP, CERM, 0.039uF, 16V, +/-10%, X7R, 0603 | Kemet | C0603C393K4RACTU | 399-9078-1-ND | 0603 |
| 39 | 0 | C28, C34, C42, C47 | Not Fitted | CAP, CERM, 1000 pF, 16 V, +/- 10%, X7R, 0603 | MuRata | GRM188R71C102KA01 | GRM188R71C102KA01D- | 0603 |
| 40 | 0 | C31, C33, C35, C44, C46, C49 | Not Fitted | CAP, CERM, 0.039uF, 16V, +/-10%, X7R, 0603 | MuRata | GRM188R71C393KA01 | GRM188R71C393KA01D- | 0603 |
| 41 | 0 | R1, R2, R23, R28, R45, R50, R71, R72 | Not Fitted | RES, 2.20 k, 1%, 0.1 W, 0603 | Yageo America | RC0603FR-072K2L | 311-2.20KHRCT-ND | 0603 |