

Bill of Materials

TI DESIGNS

TIDA-00738

| ltem | Qty | Reference | Fitted | Part Description | Manufacturer | Manufacturer Part Number | Supplier part number | PCB Footprint |
|------|-----|---|------------|---|-----------------------------|-----------------------------|-------------------------|----------------------------------|
| 2 | 4 | C1, C3, C61, C62 | Fitted | CAP, CERM, 0.01uF, 100V, +/-5%, X7R, 0603 | AVX | 06031C103J4Z4A | 478-7418-1-ND | 0603 |
| 3 | | C2, C5, C6, C9, C10, C11, C13, C17, C18, C19, C20, C21, C23, C29, C30, C31, C33, C36, C38, C39, C41, C42, C51, C53, C54, C55, C56, C57, C60, C63, C71, C83, C84 | Fitted | CAP, CERM, 0.1uF, 50V, +/-10%, X7R, 0603 | Kemet | C0603C104K5RACTU | 399-5089-1-ND | 0603 |
| 4 | | C4, C7, C12, C49, C64, C65, C67, C68, C69, C70, C72, C73, C76, C78, C79, C80, C81 | Fitted | CAP, CERM, 10uF, 35V, +/-20%, X7R, 1210 | Taiyo Yuden | GMK325AB7106MM-T | 587-2779-1-ND | 1210 |
| 5 | 6 | C8, C16, C50, C52, C66, C82 | Fitted | CAP, CERM, 4.7uF, 50V, +/-10%, X5R, 0805 | TDK | C2012X5R1H475K125AB | 445-5980-1-ND | 0805 |
| 6 | 2 | C14, C58 | Fitted | CAP, AL, 22uF, 25V, +/-20%, 0.76 ohm, SMD | Nichicon | UUD1E220MCL1GS | 493-2270-1-ND | 5x5.8 |
| 7 | 0 | C15, C59 | Not Fitted | CAP CER 1000PF 1KV 10% RADIAL | Vishay BC Components | S102K29Y5PN63J5R | 1251PH-ND | |
| 8 | 0 | C22 | Not Fitted | CAP, CERM, 0.01 μF, 50 V, +/- 5%, C0G/NP0, 0805 | MuRata | GRM2195C1H103JA01D | 490-1642-1-ND | 0805 |
| 9 | 3 | C24, C35, C44 | Fitted | CAP, CERM, 2.2 μF, 10 V, +/- 10%, X7R, 0603 | MuRata | GRM188R71A225KE15D | 490-4520-1-ND | 0603 |
| 10 | 6 | C25, C26, C27, C34, C43, C74 | Fitted | CAP, CERM, 0.1uF, 25V, +/-5%, X7R, 0603 | AVX | 06033C104JAT2A | 478-3713-1-ND | 0603 |
| 11 | 0 | C28, C32, C46 | Not Fitted | CAP, CERM, 0.1 μF, 100 V, +/- 10%, X7R, 0603 | MuRata | GRM188R72A104KA35D | 490-3285-1-ND | 0603 |
| 12 | 2 | C37, C45 | Fitted | CAP, CERM, 1000 pF, 50 V, +/- 1%, C0G/NP0, 0603 | MuRata | GRM1885C1H102FA01J | 490-6377-1-ND | 0603 |
| 13 | 0 | C40 | Not Fitted | CAP, CERM, 1000 pF, 50 V, +/- 1%, C0G/NP0, 0603 | MuRata | GRM1885C1H102FA01J | 490-6377-1-ND | 0603 |
| 14 | 1 | C75 | Fitted | CAP, CERM, 1uF, 10V, +/-10%, X7R, 0603 | MuRata | GRM188R71A105KA61D | 490-3899-1-ND | 0603 |
| 15 | 6 | D1, D5, D7, D13, D14, D18 | Fitted | LED SmartLED Green 570NM | OSRAM | LG L29K-G2J1-24-Z | 475-2709-1-ND | 0603 |
| 16 | 4 | D2, D8, D15, D19 | Fitted | Diode, Zener, 3.9 V, 500 mW, SOD-123 | Diodes Inc. | MMSZ5228B-7-F | MMSZ5228B-FDICT-ND | SOD-123 |
| 17 | 4 | D3, D6, D16, D17 | Fitted | Diode, Schottky, 20V, 0.5A, SOD-123 | Fairchild Semiconductor | MBR0520L | MBR0520LCT-ND | SOD-123 |
| 18 | 2 | D4, D12 | Fitted | Diode, Zener, 6.2V, 1W, PowerDI123 | Diodes Inc. | DFLZ6V2-7 | DFLZ6V2DICT-ND | PowerDI123 |
| 19 | 3 | D9, D10, D11 | Fitted | Diode, Schottky, 30 V, 0.2 A, SOT-323 | Fairchild Semiconductor | BAT54SWT1G | BAT54SWT1GFSCT-ND | SOT-323 |
| 20 | 1. | J1 | Fitted | TERMINAL BLOCK 5.08MM VERT 2POS, TH | On-Shore Technology | ED120/2DS | ED1609-ND | TERM_BLK, 2pos, 5.08mm |
| 21 | 1. | J2 | Fitted | CONN HEADER 2MM DUAL STR 60POS | Sullins Connector Solutions | NRPN302PAEN-RC | S5801-30-ND | Header, 2Rows, 2mm Pitch, 60 Pin |
| 22 | 1 | 13 | Fitted | Header, 2.54 mm, 3x1, TH | Molex | 22-11-2032 | WM2701-ND | Header, 2.54mm, 3x1, TH |
| 23 | 2. | J4, J5 | Fitted | MECHANICAL LUG ALUM 2-14 AWG | Panduit Corp | LAMA2-14-QY | 298-10109-ND | - |
| | | | | | | | | |
| 25 | 10 | L1, L2, L5, L8, L9, L11, L14, L15, L16, L17 | Fitted | Ferrite Bead, 1000 ohm @ 100 MHz, 0.3 A, 0603 | TDK | MMZ1608B102CTA00 | 445-8672-1-ND | 0603 |
| 26 | 1 | L6 | Fitted | Ferrite Bead, 600 ohm @ 100MHz, 1.3A, 0603 | MuRata | BLM18KG601SN1D | 490-5258-1-ND | 0603 |

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|------|-----|--|------------|--|--------------------------|-----------------------------|----------------------|-------------------------|
| 27 | 2 | R1, R50 | Fitted | RES, 10.2 k, 1%, 0.1 W, 0603 | Vishay-Dale | CRCW060310K2FKEA | 541-10.2KHCT-ND | 0603 |
| 28 | 6 | R2, R4, R5, R52, R53, R54 | Fitted | RES, 1.20 k, 1%, 0.1 W, 0603 | Yageo America | RC0603FR-071K2L | 311-1.20KHRCT-ND | 0603 |
| 29 | 2 | R3, R51 | Fitted | RES, 11.3 k, 1%, 0.1 W, 0603 | Vishay-Dale | CRCW060311K3FKEA | 541-11.3KHCT-ND | 0603 |
| 30 | 2 | R6, R49 | Fitted | RES, 3.9k ohm, 5%, 0.1W, 0603 | Vishay-Dale | CRCW06033K90JNEA | 541-3.9KGCT-ND | 0603 |
| 31 | 1 | R7 | Fitted | RES, 0, 5%, 0.25 W, 1206 | Yageo America | RC1206JR-070RL | 311-0.0ERCT-ND | 1206 |
| 32 | 1 | R8 | Fitted | RES SMD 1.02K OHM 1% 1/4W 1206 | Yageo America | RC1206FR-071K02L | 311-1.02KFRCT-ND | 1206 |
| 33 | 0 | R9 | Not Fitted | RES, 2.40 k, 1%, 0.25 W, 1206 | Yageo America | RC1206FR-072K4L | 311-2.40KFRCT-ND | 1206 |
| 34 | 3 | R10, R33, R41 | Fitted | RES, 10.0 ohm, 1%, 0.1W, 0603 | Vishay-Dale | CRCW060310R0FKEA | 541-10.0HCT-ND | 0603 |
| 35 | 30 | R11, R12, R18, R21, R23, R24, R27, R28, R31, R32, R34, R38, R39, R45, R46, R55, R56, R58, R59, R61, R65, R68, R70, R71, R72, R74, R75, R78, R80, R81 | Fitted | RES, 0 ohm, 5%, 0.1W, 0603, R | Vishay-Dale | CRCW06030000Z0EA | 541-0.0GCT-ND | 0603 |
| 36 | + | R13, R14, R15, R16, R17 | Fitted | RES, 332 k, 1%, 0.25 W, 1206 | Panasonic | ERJ-8ENF3323V | P332KFCT-ND | 1206 |
| 37 | 0 | R19, R36 | Not Fitted | RES, 10.0, 1%, 0.1 W, 0603 | Yageo America | RC0603FR-0710RL | 311-10.0HRCT-ND | 0603 |
| 38 | 0 | R20 | Not Fitted | RES, 100 k, 5%, 0.1 W, 0603 | Vishay-Dale | CRCW0603100KJNEA | 541-100KGCT-ND | 0603 |
| 39 | 4 | R22, R25, R26, R29 | Fitted | RES, 100, 1%, 0.1 W, 0603 | Vishay-Dale | CRCW0603100RFKEA | 541-100HCT-ND | 0603 |
| 40 | 1 | R30 | Fitted | RES, 1.0k ohm, 5%, 0.1W, 0603 | Vishay-Dale | CRCW06031K00JNEA | 71-CRCW0603J-1.0K-E3 | 0603 |
| 41 | 0 | R35, R43, R60, R73, R76, R79, R82, R83 | Not Fitted | RES, 0 ohm, 5%, 0.1W, 0603 | Vishay-Dale | CRCW06030000Z0EA | 541-0.0GCT-ND | 0603 |
| 42 | 1 | R37 | Fitted | RES, 1.00 k, 1%, 0.1 W, 0603 | Vishay-Dale | CRCW06031K00FKEA | 541-1.00KHCT-ND | 0603 |
| 43 | 2 | R40, R44 | Fitted | RES, 806, 1%, 0.1 W, 0603 | Vishay-Dale | CRCW0603806RFKEA | 541-806HCT-ND | 0603 |
| 44 | 1 | R42 | Fitted | RES SMD 0.0007 OHM 1% 7W 2726 | VISHAY | WSLP2726L7000FEA-ND | WSLP2726L7000FEA-ND | - |
| 45 | 1 | R47 | Fitted | RES, 10.0 k, 1%, 0.1 W, 0603 | Yageo America | RC0603FR-0710KL | 311-10.0KHRCT-ND | 0603 |
| 46 | 0 | R48 | Not Fitted | RES, 11.0, 1%, 0.1 W, 0603 | Yageo America | RC0603FR-0711RL | 311-11.0HRCT-ND | 0603 |
| 47 | 0 | R57 | Not Fitted | RES, 0, 5%, 0.25 W, 1206 | Vishay-Dale | CRCW12060000Z0EA | 541-0.0ECT-ND | 1206 |
| 48 | 1 | R62 | Fitted | RES, 0, 5%, 0.25 W, 1206 | Vishay-Dale | CRCW12060000Z0EA | 541-0.0ECT-ND | 1206 |
| 49 | 0 | R63 | Not Fitted | RES, 10.0 k, 1%, 0.1 W, 0603 | Yageo America | RC0603FR-0710KL | 311-10.0KHRCT-ND | 0603 |
| 50 | + | R64, R66 | Not Fitted | RES, 806, 1%, 0.1 W, 0603 | Vishay-Dale | CRCW0603806RFKEA | 541-806HCT-ND | 0603 |
| 51 | 0 | R67 | Not Fitted | RES, 1.00 k, 1%, 0.1 W, 0603 | Vishay-Dale | CRCW06031K00FKEA | 541-1.00KHCT-ND | 0603 |
| 52 | 0 | R69, R77 | Not Fitted | RES, 32.4 k, 1%, 0.1 W, 0603 | Vishay-Dale | CRCW060332K4FKEA | 541-32.4KHCT-ND | 0603 |
| 53 | 2 | T1, T2 | Fitted | Transformer 469uH SMD | Wurth Electronics Midcom | 750342271 | | 10.05mm L x 6.73mm W |
| 54 | 2 | U1, U14 | Fitted | -36V, -200mA, Ultralow-Noise, Negative Linear Regulator | Texas Instruments | TPS7A3001DGNR | 296-27750-1-ND | MSOP-PowerPAD (DGN) 8 |
| 55 | 2 | U2, U13 | Fitted | Transformer Driver for Isolated Power Supplies, DBV0005A | Texas Instruments | SN6501DBV | 296-37700-1-ND | DBV0005A |
| 56 | 2 | U3, U11 | Fitted | Regulator, LDO, 5V, 0.15A, SOT23-5 | Texas Instruments | TLV70450DBV | 296-39287-1-ND | DBV0005A |
| 57 | 2 | U4, U12 | Fitted | 150-mA, 30-V, 1-μA IQ Voltage Regulator with Enable, DBV0005A | Texas Instruments | TPS70925DBVR | 296-40923-1-ND | DBV0005A |
| 58 | 1 | U5 | Fitted | 20 MHz, Isolated Delta-Sigma Modulator, DW0016B | Texas Instruments | AMC1304M25DW | 296-42617-ND | DW0016B |
| 59 | 3 | U6, U10, U15 | Fitted | Operational Amplifiers, DBV0005A | Texas Instruments | OPA188AIDBVR | 296-40438-1-ND | DBV0005A |
| 60 | 1 | U7 | Fitted | 3.3 V and 2.5 V LVCMOS High-Performance Clock Buffer | Texas Instruments | CDCLVC1104PW | 296-27549-1-ND | PW0008A |
| 61 | 2 | U8, U9 | Fitted | with LDO, DW0016B | Texas Instruments | AMC1304M05DWR | AMC1304M05DW-ND | DW0016B |

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