

Bill of Materials

TI DESIGNS

TIDA-00409

| Item | Qty | Reference | Value | Part Description | Manufacturer | Manufacturer Part Number | Alternate Part | PCB Footprint | Note |
|------|-----|---|--------|------------------|--------------|--------------------------|----------------|---------------|------|
| 1 | 0 | C1 C8 C12 C16 C69-C73 | .01uF | | MURATA | GRM155R71H103KA88D_DNI | | 0402 | DNI |
| 2 | 10 | C2 C30 C96 C102 C107 C130 | 10uF | | MURATA | GRM21BR71A106KE51L | | 0805 | |
| 3 | 10 | C3 C6 C10 C11 C15 C17 C18 C20-C22 | 10uF | | TDK CORP | C1608X5R1C106M080AB | | 0603 | |
| 4 | 49 | C4 C5 C7 C9 C13 C14 C23- C28 C31-C40 C169-C171 C174-C197 | .1uF | | MURATA | GRM033R61A104KE15D | | 0201 | |
| 5 | 4 | C19 C99 C110 C270 | 47uF | | MURATA | GRM31CR61A476ME15L | | 1206 | |
| 6 | 9 | C29 C209 C211 C222 C227 | 4.7pF | | MURATA | GJM1555C1H4R7BB01D | | 0402 | |
| 7 | 11 | C41 C47 C104 C105 C117 | .01uF | | KEMET | C0603C103K5RACTU | | 0603 | |
| 8 | 2 | C42 C55 | 27pF | | MURATA | GRM1555C1H270GA01D | | 0402 | |
| 9 | 2 | C43 C49 | 100uF | | KEMET | C1206C107M9PACTU | | 1206 | |
| 10 | 2 | C44 C46 | 4.7uF | | Kemet | C0603C475K8PACTU | | 0603 | |
| 11 | 57 | C45 C48 C58 C60 C64 C67 | .1uF | | MURATA | GRM155R71C104KA88D | | 0402 | |
| 12 | 0 | C50 C92 C420 | .1uF | | MURATA | GRM155R71C104KA88D_DNI | | 0402 | DNI |
| 13 | 0 | C51 C52 | 22pF | | AVX | 04025A220KAT2A_DNI | | 0402 | DNI |
| 14 | 0 | C53 | .001uF | | AVX | 04025C102JAT2A_DNI | | 0402 | DNI |
| 15 | 2 | C54 C56 | 10uF | | MURATA | GRM31CR61E106KA12L | | 1206 | |
| 16 | 22 | C57 C66 C125 C212 C223 C244 C248 C250 C251 C256 C264 C272 C274 C277 C340 C341 C392 C394 C396 C405 C409 C411 | 1uF | | MURATA | GRM155R61A105KE15D | | 0402 | |
| 17 | 0 | C265 | 1uF | | MURATA | GRM155R61A105KE15D_DNI | | 0402 | DNI |
| 18 | 16 | C59 C65 C276 C278 C391 C393 C395 C397 C399 C401 C406 C407 C410 C412 C413 C415 | .01uF | | MURATA | GRM155R71H103KA88D | | 0402 | |
| 19 | 1 | C61 | .68uF | | MURATA | GRM155F50J684ZE01D | | 0402 | |
| 20 | 1 | C62 | 3900pF | | MURATA | GRM155R71H392KA01D | | 0402 | |
| 21 | 3 | C63 C360 C362 | 47pF | | MURATA | GRM1555C1H470JA01D | | 0402 | |
| 22 | 1 | C76 | 100uF | | Rohm Semi | TCFGB1A107M8R | | TANT_B | |
| 23 | 5 | C77 C111 C112 C114 C140 | .01uF | | MURATA | GRM155R71H103KA88D | | 0402 | |
| 24 | 2 | C81 C120 | 100pF | | AVX CORP | 06031A101GAT2A | | 0603 | |
| 25 | 1 | C84 | 2200pF | | MURATA | GRM155R71E222KA01D | | 0402 | |
| 26 | 1 | C85 | 10pF | | MURATA | GRM1555C1H100JA01D | | 0402 | |
| 27 | 1 | C87 | 10uF | | TDK CORP | C1608X5R1C106M080AB | | 0603 | |
| 28 | 12 | C98 C106 C109 C116 C127 | 1uF | | Yageo | CC0603KRX7R7BB105 | | 0603 | |
| 29 | 0 | C100 C113 | 4.7uF | | AVX | TAJB475K010RNJ_DNI | | TANT_B | DNI |
| 30 | 1 | C101 | 33uF | | AVX | TPSB336K016R0350 | | TANT_B | |
| 31 | 6 | C115 C118 C131 C132 C141 | 1uF | | TDK | C1005X5R1C105K050BC | | 0402 | |
| 32 | 2 | C126 C135 | 2.2uF | | MURATA | GRM188R71A225KE15D | | 0603 | |
| 33 | 2 | C133 C136 | .015uF | | MURATA | GRM155R71C153KA01D | | 0402 | |
| 34 | 2 | C145 C147 | 22uF | | Murata | GRM31CR60J226KE19L | | 1206 | |
| 35 | 1 | C148 | 33pF | | KEMET | C0402C330J3GACTU | | 0402 | |
| 36 | 1 | C151 | 4.7uF | | AVX | TAJB475K010RNJ | | TANT_B | |
| 37 | 4 | C168 C259 C372 C383 | .001uF | | AVX | 04025C102JAT2A | | 0402 | |

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|------|-----|-----------------------------|----------------------------------|------------------|---------------------------|----------------------------|----------------|-------------------------------|-------------|
| 38 | 2 | C172 C173 | .01uF | | TDK | C0603X5R1A103K030BA | | 0201 | |
| 39 | 0 | C201-C204 C214 C216 C218 | CAP NP_1 | | DNI | DO NOT INSTALL | | 0402 | DNI |
| 40 | 0 | C205 C213 C348 C349 | 1.0pF | | MURATA | GJM1555C1H1ROC801D_DNI | | 0402 | DNI |
| 41 | 7 | C210 C224 C243 C254 C263 | 100pF | | AVX CORP | 04025A101FAT2A | | 0402 | |
| 42 | 0 | C220 C247 C253 C266 | 4.7pF | | MURATA | GJM1555C1H4R7BB01D_DNI | | 0402 | DNI |
| 43 | 3 | C221 C280 C281 | 10uF | | Murata | GRM188R60J106ME47D | | 0402 | |
| 44 | 0 | C252 | 10uF | | Murata | GRM188R60J106ME47D_DNI | | 0402 | DNI |
| 45 | 1 | C235 | 47uF | | Kemet | T491B476M010AT | | tant_b | |
| 46 | 0 | C246 C249 C353 | 100pF | | AVX CORP | 04025A101FAT2A_DNI | | 0402 | DNI |
| 47 | 2 | C257 C260 | 330pF | | MURATA | GRM155R71H331KA01D | | 0402 | |
| 48 | 1 | C258 | 10,000pF | | MURATA | GRM155R71H103KA88D | | 0402 | |
| 49 | 0 | C262 C363 C364 C367 C371 | .5pF | | Taiyo Yuden | UVK105CH0R5BW-F_DNI | | 0402 | DNI |
| 50 | 1 | C417 | 49.9 | | PANASONIC | ERJ-2RKF49R9X | | 0402 | |
| 51 | 1 | C369 | 6.8pF | | Murata | GJM1555C1H6R8CB01D | | 0402 | |
| 52 | 2 | C374 C377 | 3.3pF | | MURATA | GJM1555C1H3R3CB01D | | 0402 | |
| 53 | 2 | C381 C389 | 4.7uF | | AVX | TAJA475K020RNJ | | TANT_A | |
| 54 | 1 | C386 | .2pF | | Johanson Technology Inc | 500R0750R2BV4T | | 0402 | |
| 55 | 1 | C402 | .1uF | | MURATA | GRM155R71C104KA33D | | 0402 | |
| 56 | 1 | C408 | .1uF | | MURATA | GRM155R71C104KA33D | | 0402 | |
| 57 | 1 | D1 | LED BLUE | | LITE ON | LTST-C150TBKT | | LED_1206 | |
| 58 | 3 | D2 D3 D9 | LED BLUE | | LITE ON | LTST-C170TBKT | | LED_0805 | |
| 59 | 4 | D4-D7 | LED GREEN | | LITE ON | LTST-C150KGKT | | LED_1206 | |
| 60 | 1 | D8 | LED AMBER | | LITE ON | LTST-C150AKT | | LED_1206 | |
| 61 | 0 | D10 | MMSZ5235B | | FAIRCHILD | MMSZ5235B_DNI | | DIODE_SM_SOD_123 | DNI |
| 62 | 1 | D11 | LED GREEN | | LITE-ON | LTST-C170KGKT | | LED_0805 | |
| 63 | 0 | F1 | FUSE 2.0A 63V FAST | | TE Connectivity | 1206SFF200F/63-2_DNI | | 1206 | DNI |
| 64 | 13 | FB2-FB11 FB15-FB17 | 120 OHM @ 100MHz | | MURATA | BLM31PG121SN1L | | 1206 | |
| 65 | 4 | FB14 FB34 FB37 FB38 | 1K | | TAIYO YUDEN | FBMH4525HM102NT | | 1810 | |
| 66 | 7 | FB18 FB19 FB21 FB25 FB29 | 120 OHM @ 100MHz | | MURATA | BLM15AG121SN1 | | IND_0402 | |
| 67 | 2 | FB20 FB24 | 50 OHM @ 100MHz | | MURATA | BLM31PG500SN1 | | 1206 | |
| 68 | 10 | FB22 FB27 FB28 FB35 FB39- | 1K | | MURATA | BLM15AG102SN1 | | IND_0402 | |
| 69 | 2 | FB30 FB31 | 27uF | | MURATA | NFM31PC276B0J3B | | 1206_BEAD_NFM31P | |
| 70 | 0 | FB36 | 1K @ 100MHz | | TAIYO YUDEN | BLM21AG102SN1D_DNI | | 0603 | DNI |
| 71 | 2 | FL11 - FL14 | HMD6108F-T | | SOSHIN ELECTRIC | HMD6108F-T | | FILTER_SOSHIN | |
| 72 | 9 | J1 J3 J5 J7 J13 J18-J20 J22 | SMP_PCB_SMT | | MOLEX INC. | 0853050232 | | SMP_B120 | |
| 73 | 1 | J16 | CON_SMVLT_40x10_SEAM | | SAMTEC | SEAM-40-02.0-S-10-2-A-K-TR | | CON_SMVLT_40x10_SEAM_MTG | |
| 74 | 4 | J2 J4 J8 J11 | SMA END LAUNCH | | Johnson Components | 142-0711-821 | | SMA_SMEL_DUAL_PSF-501_250x215 | |
| 75 | 1 | J6 | CONN JACK PWR | | Switchcraft | RAPC722X | | CON_RAPC722_JACK_THVT_3 | |
| 76 | 0 | J9 | HTSW-110-07-G-D | | SAMTEC | HTSW-110-07-G-D_DNI | | HDR_THVT_2x10_100_M | DNI |
| 77 | 0 | J10 | HTSW-110-07-G-D | | SAMTEC | HTSW-110-07-G_DNI | | HDR_THVT_2x10_100_M | DNI |
| 78 | 0 | J12 | SMP_PCB_SMT | | MOLEX INC. | 0853050232_DNI | | smc_b120 | DNI |
| 79 | 1 | J14 | USB_MINI_AB | | WURTH ELEKTRONIK | 651305142821 | | CON_SMRT_USBMINI_AB_WURTH | |
| 80 | 1 | J15 | HTSW-105-07-G-D | | SAMTEC | HTSW-105-07-G-D | | HDR_THVT_2x5_100_M | |
| 81 | 1 | J17 | SMB_THVT_REC | | Johnson Components | 142-0701-201 | | SMA_THVT_312x312 | |
| 82 | 1 | J21 | HMTSW-104-07-G-D-.240 | | SAMTEC | HTSW-104-07-G-D-.240 | | HDR_THVT_2x4_100_M | |
| 83 | 1 | JP1 | HDR, THVT, 3POS | | SAMTEC | HTSW-103-07-G-S | | HDR_THVT_1x3_100_M | (SHUNT 1-2) |
| 84 | 1 | JP2 | HDR, THVT, 2POS | | SAMTEC | HTSW-102-08-G-S | | HDR_THVT_1X2_100_M | (SHUNT 1-2) |
| 85 | 8 | JP3-JP10 | HDR, THVT, 3POS | | SAMTEC | HTSW-103-07-G-S | | HDR_THVT_1x3_100_M | (SHUNT 2-3) |
| 86 | 2 | L1 L2 | 2.2uH | | Coilcraft | LPS3015-222MR | | LPS3015 | |
| 87 | 1 | L3 | 0 | | PANASONIC | ERJ-6GEY0R00V | | 0805 | |
| 88 | 8 | MT1-MT8 | STANDOFF, FEMALE, 4-40 x 1 3/16" | | RAF ELECTRONIC | 1648-440-AL | | MFG125_PLATED | STANDOFF |
| 89 | 0 | PP1-PP10 | PROBE POINT | | N/A | N/A | | PROBE_POINT_22PAD | |
| 90 | 1 | Q1 | CSD17313Q2 | | Texas Instruments | CSD17313Q2 | | mosfet_8_2mmx2mm_0p65 | |
| 91 | 3 | Q2-Q4 | DTC114EET1G | | ON Semiconductor | DTC114EET1G | | SOT_416_3_63x31 | |
| 92 | 2 | R1 R220 | 0 | | PANASONIC | ERJ-6GEY0R00V | | 0805 | |
| 93 | 0 | R32 R33 R131 R132 R160 | 0 | | PANASONIC | ERJ-6GEY0R00V_DNI | | 0805 | DNI |
| 94 | 19 | R4 R7 R15 R16 R18 R90 R91 | 0 | | PANASONIC | ERJ-2GEOR00X | | 0402 | |
| 95 | 0 | R5 R11 R17 R19-R24 R27 | 0 | | PANASONIC | ERJ-2GEOR00X_DNI | | 0402 | DNI |
| 96 | 0 | R6 R10 R13 R112 | 49.9 | | PANASONIC | ERJ-2EKF49R9X_DNI | | 0402 | DNI |
| 97 | 43 | R8 R12 R31 R34 R35 R37- | 0 | | Stackpole Electronics Inc | RMCF0402ZTOR00 | | 0402 | |
| 98 | 0 | R203 R219 | 0 | | Stackpole Electronics Inc | RMCF0402ZTOR00_DNI | | 0402 | DNI |
| 99 | 10 | R14 R29 R41 R42 R130 | 49.9 | | PANASONIC | ERJ-1GEF49R9C | | 0201 | |

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|------|-----|-------------------------|----------------------------|------------------|--------------------|--------------------------|----------------|------------------------------|------|
| 100 | 8 | R25 R88 R105 R106 R115 | 100 | | PANASONIC | ERJ-2RKF1000X | | 0402 | |
| 101 | 0 | R26 R28 | 49.9 | | PANASONIC | ERJ-2RKF49R9X_DNI | | 0402 | DNI |
| 102 | 13 | R30 R36 R43 R47 R77 R99 | 49.9 | | PANASONIC | ERJ-2RKF49R9X | | 0402 | |
| 103 | 7 | R51 R119-R121 R226 R228 | 0 | | PANASONIC | ERJ-3GEY0R00V | | 0603 | |
| 104 | 1 | R52 | 12K | | PANASONIC | ERJ-2RKF1202X | | 0402 | |
| 105 | 1 | R53 | 4.7K | | PANASONIC | ERJ-2RKF4701X | | 0402 | |
| 106 | 5 | R54 R57 R63 R101 R110 | 1K | | PANASONIC | ERJ-2RKF1001X | | 0402 | |
| 107 | 2 | R55 R56 | 10 | | PANASONIC | ERJ-2RKF10R0X | | 0402 | |
| 108 | 6 | R58 R60 R61 R64 R107 | 10K | | PANASONIC | ERJ-2RKF1002X | | 0402 | |
| 109 | 1 | R59 | 2.2K | | Yageo | RC0402FR-072K2L | | 0402 | |
| 110 | 0 | R62 | 1K | | PANASONIC | ERJ-2RKF1001X_DNI | | 0402 | DNI |
| 111 | 1 | R65 | 620 | | PANASONIC | ERJ-2GEJ621X | | 0402 | |
| 112 | 1 | R66 | 39K | | PANASONIC | ERJ-2GEJ393X | | 0402 | |
| 113 | 0 | R67-R70 R79 R80 R122- | 240 | | PANASONIC | ERJ-2RKF2400X_DNI | | 0402 | DNI |
| 114 | 2 | R71 R72 | 121 | | PANASONIC | ERJ-2RKF1210X | | 0402 | |
| 115 | 0 | R73 R78 | 130 | | DALE | CRCW0603130RFKEA_DNI | | 0603 | DNI |
| 116 | 0 | R74 R87 | 82 | | DALE | CRCW060382R0FKEA_DNI | | 0603 | DNI |
| 117 | 4 | R75 R76 R83 R84 | 240 | | PANASONIC | ERJ-2RKF2400X | | 0402 | |
| 118 | 4 | R81 R82 R85 R86 | 750 | | DALE | CRCW0603750RFKEA | | 0603 | |
| 119 | 3 | R89 R98 R144 | 200 | | PANASONIC | ERJ-2RKF2000X | | 0402 | |
| 120 | 3 | R102 R139 R140 | 1.1K | | PANASONIC | ERJ-2RKF1101X | | 0402 | |
| 121 | 0 | R113 R114 | 121 | | PANASONIC | ERJ-2RKF1210X_DNI | | 0402 | DNI |
| 122 | 4 | R126-R128 R143 | 10K | | PANASONIC | ERJ-3EKF1002V | | 0603 | |
| 123 | 1 | R135 | 1.91K | | PANASONIC | ERJ-2RKF1911X | | 0402 | |
| 124 | 1 | R148 | 475K | | PANASONIC | ERJ-2RKF4753X | | 0402 | |
| 125 | 1 | R150 | 95.3K | | PANASONIC | ERJ-2RKF9532X | | 0402 | |
| 126 | 1 | R151 | 150K | | Yageo | RC0402FR-07150KL | | 0402 | |
| 127 | 1 | R153 | 182K | | Vishay/Dale | CRCW0402182KFKED | | 0402 | |
| 128 | 1 | R173 | 2.87K | | PANASONIC | ERJ-3EKF2871V | | 0603 | |
| 129 | 1 | R174 | 3.65K | | PANASONIC | ERJ-3EKF3651V | | 0603 | |
| 130 | 1 | R175 | 4.99K | | PANASONIC | ERJ-3EKF4991V | | 0603 | |
| 131 | 1 | R176 | 634 | | PANASONIC | ERJ-3EKF6340V | | 0603 | |
| 132 | 0 | SH1-SH8 | RF SHIELD | | LEADER TECH | SL-11412 | | | |
| 133 | 0 | SJP1-SJP3 | JUMPER_L_0603_SMT | | DNI | DNI | | JUMPER_SMD_L_0603 | |
| 134 | 1 | SW1 | SW RESET | | C&K | KT11P3JM34LFS | | SW_SMVT_RESET | |
| 135 | 1 | SW2 | B3F-1002 | | OMRON | B3F-1002 | | SW_THVT_SPST_4_B3F | |
| 136 | 5 | TP1 TP2 TP29 TP31 TP32 | RED | | KEystone | 5000 | | TP_THVT_100_RND | |
| 137 | 15 | TP3-TP12 TP22 TP27 TP30 | BLK | | KEystone | 5001 | | TP_THVT_100_RND_GND | |
| 138 | 4 | TP13 TP21 TP26 TP28 | GRN | | KEystone | 5116 | | TP_THVT_100_RND | |
| 139 | 10 | TP14-TP20 TP23-TP25 | BLU | | KEystone | 5117 | | TP_THVT_100_RND | |
| 140 | 1 | U1 | 5M80ZT100 | | ALTERA | 5M80ZT100C5N | | tqfp_100_551x551_20 | |
| 141 | 1 | U2 | DAC38J84 | | Texas Instruments | DAC38J84IAAV | | BGA_144_10MMx10MM_0P80MM | |
| 142 | 1 | U3 | FT2232HL | | FTDI | FT2232HL-TRAY | | LQFP_64_402x402_20 | |
| 143 | 1 | U4 | 93LC46B-I/MS | | Microchip | 93LC46B-I/MS | | MSOP_8_118X118_26 | |
| 144 | 1 | U5 | LMK04828 | | TI | LMK04828BISQ/NOPB | | QFN_64_360X360_0P50MM_PWRPAD | |
| 145 | 2 | U6 U8 | TPS7A4700 | | Texas Instruments | TPS7A4700RGWT | | qfn20_rgw_p65pitch | |
| 146 | 1 | U7 | TPS62420 | | Texas Instruments | TPS62420DRCR | | SON_DRC_10 | |
| 147 | 2 | U9 U11 | TPS74201 | | Texas Instruments | TPS74201RGWR | | qfn20_rgw_p65pitch | |
| 148 | 1 | U10 | TPS2400 | | Texas Instruments | TPS2400DBVT | | DBV5 | |
| 149 | 1 | U12 | TLV70233DBV | | TI | TLV70233DBVR | | SOT_5_118X67_57 | |
| 150 | 1 | U13 | TPS7A4700 | | Texas Instruments | TPS7A4700RGWT | | QFN_20_199X199_0P65MM_RGW | |
| 151 | 1 | U14 | TRF3722 | | TI | TRF3722IRGZ | | QFN_48_281X281_0P50MM_RGZ | |
| 152 | 1 | U15 | SN74AUP1T14DCK | | TI | SN74AUP1T14DCKR | | SOP_5_85X55_26 | |
| 153 | 1 | U16 | TRF37T05 | | Texas Instruments | TRF37T05IRGET | | QFN_24_163x163_0p50mm_pwrpad | |
| 154 | 1 | Y1 | 122.88MHz | | Crystek | CVHD-950-122.88 | | VCXO_6_CUSTOM | |
| 155 | 1 | Y2 | 12MHz w/ 10pF | | Abrakon | ABM8G-12.000MHZ-B4Y-T | | XTAL_4_SM_130X102 | |
| 156 | 1 | | BARE BOARD, TSW38J84 | | VIASYSTEMS | TSW38J84 REV B | | | |
| 157 | 8 | OR EQUIVALENT | SCREW, PHIL, 4-40x3/4", SS | | BUILDING FASTENERS | PMSSS 440 0075 PH | | | |
| 158 | 10 | SHUNT FOR HEADER | SHUNT-HEADER | | TE CONNECTIVITY | 382811-8 | | | |
| 159 | 2 | SHUNT FOR HEADER | SHUNT-JUMPER-0603 | | PANASONIC | ERJ-3GEY0R00V | | | |

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TI has specifically designated certain components as meeting ISO/TS16949 requirements, mainly for automotive use. In any case of use of non-designated products, TI will not be responsible for any failure to meet ISO/TS16949.