



Bill of Materials

TI DESIGNS

TIDA-080000

System Board

| Item | Qty | Reference | Value | Part Description | Manufacturer | Manufacturer Part Number | Alternate Part | PCB Footprint | Note |
|------|-----|--|-------------------------------|--|--------------|--------------------------|----------------|-----------------------------|------|
| 1 | 3 | C1,C2,C3 | 47uF | CAP CER 47UF 10V X5R 1206 | Taiyo Yuden | LMK316BJ476ML-T | | 1206 | |
| 2 | 2 | C4,C5 | 100uF | CAP ALUM 100UF 25V 20% SMD | Panasonic | EEE-FT1E101AP | | sizeD_260x260mil_radial_can | |
| 3 | 6 | C6,C10,C15,C16,C17,C18 | 10uF | CAP CER 10UF 35V 10% X5R 1206 SMD | Murata | GRM31CR6YA106KA12L | | 1206 | |
| 4 | 30 | C7,C14,C27,C35,C37,C41,C42,C52,C53,C56,C57,C58,C59,C60,C61,C62,C63,C64,C68,C69,C70,C71,C72,C73,C74,C75,C76,C77,C86,C88 | 0.1uF | CAP CER 0.10uF 50V X7R 0402 | TDK | CGA2B3X7R1H104K050BB | | 0402 | |
| 5 | 1 | C8 | 3300pF | CAP CER 3300pF 25V X7R 0805 | Murata | GRM216R71E332KA01D | | 0805 | |
| 6 | 1 | C9 | 56pF | CAP CER 56pF 50V COG, NP0 0805 | Yageo | CC0805JRNPO9BN560 | | 0805 | |
| 7 | 1 | C11 | 100uF | CAP CER 100UF 6.3V X5R 1206 | Yageo | CC1206MKX5R5B8107 | | 1206 | |
| 8 | 1 | C12 | 680pF | CAP CER 680pF 50V X7R 0805 | Yageo | CC0805KRX7R9BB681 | | 0805 | |
| 9 | 1 | C13 | 39.0nF | CAP CER 0.039uF 10V X5R 0402 | Murata | GRM155R61A393KA01D | | 0402 | |
| 10 | 1 | C19 | 22pF | CAP CER 22PF 50V 5% NP0 0402 | Murata | GRM1555C1H220JA01D | | 0402 | |
| 11 | 2 | C20,C31 | 4.7uF | CAP CER 4.7UF 6.3V 20% X5R 0402 | TDK | C1005X5R0J475M | | 0402 | |
| 12 | 8 | C21,C22,C23,C24,C26,C28,C32,C65 | 2.2uF | CAP CER 2.2uF 25V X5R 0603 | Taiyo Yuden | TMK107ABJ225KA-T | | 0603 | |
| 13 | 3 | C25,C33,C39 | 10uF | CAP CERAMIC 10UF 6.3V X5R 0603 | TDK | C1608X5R0J106M080AB | | 0603 | |
| 14 | 1 | C29 | 30pF | CAP CER 30PF 50V 5% NP0 0402 | Murata | GRM1555C1H300JA01D | | 0402 | |
| 15 | 1 | C30 | 27pF | CAP CER 27PF 50V 5% NP0 0402 | Murata | GRM1555C1H270JA01D | | 0402 | |
| 16 | 1 | C34 | 10nF | CAP CER 10000pF 25V X7R 0402 | Murata | GRM155R71E103KA01D | | 0402 | |
| 17 | 1 | C36 | 1uF | CAP CER 1.0UF 10V X5R 0402 | Murata | GRM155R61A105ME01D | | 0402 | |
| 18 | 25 | C38,C43,C44,C45,C46,C47,C48,C50,C51,C55,C66,C67,C80,C81,C82,C83,C84,C85,C87,C90,C91,C92,C93,C94,C95 | 0.1uF | CAP CER .1UF 16V X7R 0402 | TDK | C1005X7R1C104K050BC | | 0402_AVXA | |
| 19 | 0 | C40,C89 | 0.1uF | CAP CER .1UF 16V X7R 0402 | TDK | C1005X7R1C104K050BC | | 0402_AVXA | |
| 20 | 1 | C49 | 0.47uF | CAP CER 0.47UF 35V 10% X5R 0402 | TDK | C1005X5R1V474K050BC | | 0402 | |
| 21 | 1 | C54 | 0.22uF | CAP CER .22UF 6.3V X7R 10% 0402 | Taiyo Yuden | JMK105B7224KV-F | | 0402 | |
| 22 | 2 | C78,C79 | 18pF | CAP CER 18PF 50V NP0 5% 0402 | Murata | GRM1555C1H180JA01D | | 0402 | |
| 23 | 1 | DN1 | BAT54C | DIODE ARRAY SCHOTTKY 30V 200mA SOT23-3 | Diodes Inc. | BAT54C-7-F | | SOT-23-3 | |
| 24 | 8 | D1,D3,D4,D5,D6,D7,D9,D10 | blue | LED INGAN/SIC U-BLUE CLR 1206SMD | Lumex | SML-LX1206USBC-TR | | 1206 | |
| 25 | 1 | D2 | SMAJ22A | TVS DIODE 22VWM SMD package DO214AC_SMA | Bourns | SMAJ22A | | SMA | |
| 26 | 1 | D8 | green | LED 565NM WTR CLR GREEN 1206 SMD | Lumex | SML-LX1206GC-TR | | 1206 | |
| 27 | 5 | FB1,FB2,FB3,FB4,FB5 | BKP1005EM121-T | FERRITE CHIP 80 OHM 1500MA 0402 | Taiyo Yuden | BKP1005EM121-T | | 0402 | |
| 28 | 1 | F1 | 5A | FUSE BRD MNT 5A 32VAC 35VDC 1206 | LittleFuse | 0437005.WR | | 1206 | |
| 29 | 1 | J1 | SBH11-PBPC-D07-RA-BK | CONN HEADER 2.54MM 14POS GOLD R/A | Sullins | SBH11-PBPC-D07-RA-BK | | SBH11-D07-RA | |
| 30 | 0 | J2 | B5B-ZR | CONN HEADER 2H TOP 5POS 1.5MM | JST | B5B-ZR-SM4-TF(LF)(SN)(P) | | JST_B5B-ZR-SM4-TF_LF_SN_P | |
| 31 | 0 | J3 | B4B-ZR | CONN HEADER 2H TOP 4POS 1.5MM | JST | B4B-ZR-SM4-TF(LF)(SN)(P) | | JST_B4B-ZR-SM4-TF_LF_SN_P | |
| 32 | 1 | J4 | PJ-082BH | CONN PWR JACK 2.5X5.5MM SOLDER | CUI Inc | PJ-082BH | | CUI_PJ-082BH | |
| 33 | 0 | J5 | B6B-ZR | CONN HEADER 2H TOP 6POS 1.5MM | JST | B6B-ZR-SM4-TF(LF)(SN)(P) | | JST_B6B-ZR-SM4-TF_LF_SN_P | |
| 34 | 1 | J6 | M20-9990245 | CONN HEADER 2 POS 0.1IN SIL VERT | Harwin | M20-9990245 | | HDR2P_1R | |
| 35 | 3 | J7,J8,J9 | S2B-ZR | CONN HEADER 2H SIDE 2POS 1.5MM | JST | S2B-ZR(LF)(SN) | | JST_S2B_ZR | |
| 36 | 1 | J10 | QSH-030-01-L-D-A | CONN RCPT HI-SPD .5MM 60POS DL (stacking ht 5mm) | Samtec | QSH-030-01-L-D-A | | Samtec_QSH-030-xx-x-D-A | |
| 37 | 1 | J11 | HDMI Type C (Mini) Receptacle | MINI HDMI 19P FEMALE SMT | CNC Tech | 2001-1-2-21-00-BK | | CNC-2001-1-2-21-00-BK | |
| 38 | 1 | J12 | USB - Mini-B USB 2.0 | CONN RECEPT MINI-USB R/A 5POS SMD | Molex | 513870578 | | MOLEX_USB_CONN_0513870578 | |
| 39 | 0 | J13 | S4B-EH(LF)(SN) | CONN HEADER EH SIDE 4POS 2.5MM | JST | S4B-EH(LF)(SN) | | CONN4-S4B-EH_JST | |
| 40 | 1 | L1 | 10uH | INDUCTOR 10 uH 6 A 20% SMD | Coilcraft | XAL8080-103MEB | | Coilcraft_XAL8080 | |
| 41 | 1 | L2 | 10uH | FIXED IND 10UH 3.8A 25 MOHM SMD | Bourns | SRU1038-100Y | | Bourns_SRU1038 | |
| 42 | 1 | L3 | 2.2uH | INDUCTOR 2.2UH 20% 1300MA 1008 | Murata | LOM2HPN2R2MG0L | | 1008_2p5mmx2mm | |
| 43 | 1 | Q1 | DMN26D0UT-7 | MOSFET N-CH 20V 230MA SOT523 | Diodes | DMN26D0UT-7 | | SOT_523 | |
| 44 | 6 | RP1,RP2,RP3,RP4,RP5,RP6 | 22 | RES ARRAY 4 RES 22 OHM 0804 | Panasonic | EXB-N8V220JX | | 0804 | |
| 45 | 2 | R1,R8 | 0 | RES SMD 0.0 OHM JUMPER 1/8W 0805 | Panasonic | ERJ-6GEY0R00V | | 0805 | |
| 46 | 1 | R2 | 150 | RES SMD 150 OHM 1/10W 1% 0402 | Panasonic | ERJ-2RKF1500X | | 0402 | |
| 47 | 1 | R3 | 10.7k | RES SMD 10.7K OHM 1% 1/16W 0402 | Vishay Dale | CRCW040210K7FKED | | 0402 | |
| 48 | 15 | R4,R33,R36,R42,R50,R52,R53,R59,R60,R61,R77,R87,R88,R91,R93 | 0 | RES SMD 0.0 OHM 1/16W 0402 | Panasonic | ERJ-2GE0R00X | | 0402 | |
| 49 | 4 | R5,R9,R71,R76 | 100k | RES SMD 100K OHM 1% 1/16W 0402 | Vishay Dale | CRCW0402100KFKED | | 0402 | |
| 50 | 1 | R6 | 19.1k | RES SMD 19.1K OHM 1% 1/8W 0805 | Panasonic | ERJ-6ENF1912V | | 0805 | |
| 51 | 7 | R7,R18,R19,R20,R24,R82,R89 | 10 | RES SMD 10.0 OHM 1/10W 1% 0402 | Panasonic | ERJ-2RKF10R0X | | 0402 | |
| 52 | 1 | R10 | 32.4k | RES SMD 32.4K OHM 1% 1/8W 0805 | Panasonic | ERJ-6ENF3242V | | 0805 | |
| 53 | 1 | R11 | 2.15k | RES SMD 2.15K OHM 1% 1/16W 0402 | Vishay Dale | CRCW04022K15FKED | | 0402 | |
| 54 | 2 | R12,R15 | 274k | RES SMD 274K OHM 1% 1/16W 0402 | Vishay Dale | CRCW0402274KFKED | | 0402 | |
| 55 | 2 | R13,R16 | 30.9k | RES SMD 30.9K OHM 1% 1/16W 0402 | Vishay Dale | CRCW040230K9FKED | | 0402 | |
| 56 | 1 | R14 | 95.3k | RES SMD 95.3K OHM 1% 1/16W 0402 | Vishay Dale | CRCW040295K3FKED | | 0402 | |
| 57 | 1 | R17 | 97.6k | RES SMD 97.6K OHM 1% 1/16W 0402 | Vishay Dale | CRCW040297K6FKED | | 0402 | |
| 58 | 12 | R21,R22,R23,R31,R32,R47,R48,R49,R54,R67,R68,R69 | 30.1 | RES SMD 30.1 OHM 1/16W 1% 0402 | Panasonic | ERJ-2RKF30R1X | | 0402 | |
| 59 | 25 | R25,R27,R30,R35,R57,R70,R72,R73,R78,R80,R81,R83,R85,R90,R95,R96,R97,R98,R99,R101,R102,R103,R106,R107,R109 | 10k | RES SMD 10K OHM 1% 1/10W 0402 | Panasonic | ERJ-2RKF1002X | | 0402 | |
| 60 | 2 | R26,R92 | 47k | RES SMD 47.0K OHM 1/10W 1% 0402 | Panasonic | ERJ-2RKF4702X | | 0402 | |
| 61 | 2 | R28,R29 | 180k | RES SMD 180K OHM 1/16W 1% 0402 | Yageo | RC0402FR-07180KL | | 0402 | |
| 62 | 0 | R34,R41,R51,R58,R79,R86,R94,R108 | 0 | RES SMD 0.0 OHM 1/16W 0402 | Panasonic | ERJ-2GE0R00X | | 0402 | |

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|------|-----|---|------------------|---|-------------------|--------------------------|----------------|---------------------------|------|
| 63 | 12 | R37,R39,R40,R43,R44,R45,R46,R62,R63,R64,R65,R66 | 22 | RES SMD 22 OHM 1% 1/10W 0402 | Panasonic | ERJ-2RKF22R0X | | 0402 | |
| 64 | 1 | R38 | 3.16k | RES SMD 3.16K OHM 1% 1/10W 0603 | Panasonic | ERJ-3EKF3161V | | 0603 | |
| 65 | 1 | R55 | 30.1k | RES SMD 30.1K OHM 1% 1/10W 0402 | Panasonic | ERJ-2RKF3012X | | 0402 | |
| 66 | 1 | R56 | 14.3k | RES SMD 14.3K OHM 1% 1/10W 0402 | Panasonic | ERJ-2RKF1432X | | 0402 | |
| 67 | 1 | R74 | 100 | RES SMD 100 OHM 1/10W 1% 0402 | Panasonic | ERJ-2RKF1000X | | 0402 | |
| 68 | 1 | R75 | 1k | RES SMD 1K OHM 1% 1/16W 0402 | Yageo | RC0402FR-071KL | | 0402 | |
| 69 | 0 | R84 | 10k | RES SMD 10K OHM 1% 1/10W 0402 | Panasonic | ERJ-2RKF1002X | | 0402 | |
| 70 | 1 | R100 | 1.5k | RES SMD 1.50K OHM 1/10W 1% 0402 | Panasonic | ERJ-2RKF1501X | | 0402 | |
| 71 | 2 | R104,R105 | 1M | RES SMD 1M OHM 1/10W 1% 0402 | Panasonic | ERJ-2RKF1004X | | 0402 | |
| 72 | 1 | SW1 | TL1105F100Q | SWITCH TACTILE SPST-NO 0.05A 12V TH | Eswitch | TL1105F100Q | | TL1105F100Q | |
| 73 | 1 | SW2 | GT11MSCBE | SWITCH TOGGLE SPDT ULTRAMINI SMD | C&K | GT11MSCBE | | GT11MSCBE | |
| 74 | 8 | TPGND1,TPGND2,TPGND3,TPGND4,TPGND5,TPGND6,TPGND7,TPGND8 | TP_BLK | TEST POINT PC MINI .040inD BLACK | Keystone | 5001 | | KEYSTONE_TP_MINIATURE | |
| 75 | 2 | U1,U2 | TPS54335ADDAR | IC REG BCK ADJ 3A SYNC 8SOPWRPAD | Texas Instruments | TPS54335ADDAR | | 8-SO-PWRPAD_DDA_R-PDSO-G8 | |
| 76 | 4 | U3,U4,U6,U22 | SN74AUP1G06DCK | IC INVERTER SINGLE 1INPUT SC705, open drain | Texas Instruments | SN74AUP1G06DCKR | | U_5_DCK | |
| 77 | 3 | U5,U9,U12 | SN74AVC4T774PWR | IC BUS TRANSCVR 4BIT DL 16TSSOP | Texas Instruments | SN74AVC4T774PWR | | TSSOP16_PW | |
| 78 | 4 | U7,U16,U23,U30 | SN74AUP1G07DCK | IC BUFF/DVR LOW PWR N-INV SC705, open drain | Texas Instruments | SN74AUP1G07DCKR | | U_5_DCK | |
| 79 | 1 | U8 | TPS62260DDCT | IC REG BUCK SYNC ADJ TSOT23-5 | Texas Instruments | TPS62260DDCT | | TSOT-23_DDC_R-PDSO-G5 | |
| 80 | 2 | U10,U31 | SN74AUP1T17DCK | IC BUFFER SCHMITT TRIG LP SC70-5 | Texas Instruments | SN74AUP1T17DCKR | | SC70_5_DCK | |
| 81 | 1 | U11 | M24C02-WMN | IC EEPROM 2KBIT 400KHZ 8SO | STMicro | M24C02-WMN6TP | | S08 | |
| 82 | 1 | U13 | MSP430F5529IPN | IC MCU 16BIT 128KB FLASH 80LQFP | Texas Instruments | MSP430F5529IPN | | 80-LQFP_PN_5-PQFP-G80 | |
| 83 | 1 | U14 | IT6801FN | IC RCVR HDMI SINGLE PORT 76-QFN | ITE | IT6801FN | | ITE6801_76pin_QFN | |
| 84 | 1 | U15 | TPS73001DBV | IC REG LDO ADJ 0.2A SOT23-5 | Texas Instruments | TPS73001DBVR | | SOT23-6_DBV_R-PDSO-G6 | |
| 85 | 3 | U17,U18,U20 | TXS0102 | IC VOLT-LEVEL TRANSLATOR 8-US8 | Texas Instruments | TXS0102DCU | | VSSOP-8_DCU | |
| 86 | 1 | U19 | TPS2061CDBVT | IC PWR DIST SWITCH SGL SOT23-5 | Texas Instruments | TPS2061CDBVT | | SOT-753 | |
| 87 | 1 | U21 | CY7C65215-32LTXI | IC USB TO UART BRIDGE DUAL 32QFN | Cypress | CY7C65215-32LTXI | | CY7C65215_32pin_QFN | |
| 88 | 3 | U24,U25,U29 | TPD2E001DRY | IC ESD-PROT ARRAY 2CH 6-SON | Texas Instruments | TPD2E001DRYR | | U_6_DRY | |
| 89 | 2 | U26,U27 | TPD4E05U06DQAR | TVS DIODE 5.5VWM 14VC 10SON | Texas Instruments | TPD4E05U06DQAR | | 10-UFDFN | |
| 90 | 1 | U28 | TPD2E2U06DRL | TVS DIODE 5.5VWM 12.4VC 5SOT | Texas Instruments | TPD2E2U06DRLR | | SOT-5_DRL_R-PDSO-N5 | |
| 91 | 1 | X1 | 27MHz | CRYSTAL 27MHZ 18P ±30ppm 60 Ohm 4P CSMD | CTS | 403C35D27M00000 | | 45MD | |