



BOM -- EVB-USB82640

Tyche, Evaluation Board for commercial USB82640, QFN48 pkg
Revision A

Revised: 20110801

| Item | Qty | Qty Pop'd | Reference Designator(s) | Description | Manufacturer | Manufacturer Part Number | Notes |
|------|-----|-----------|---|---|------------------|--------------------------|---------------------------|
| 1 | 2 | 2 | C1,C2 | Capacitor, Low ESR, 10uF, 10VDC, 20%, Tantalum, EIA-B | Kemet | T494B106M010AS | |
| | | | C3,C9,C11,C15,C16,C17,C18,C20,C22,C24,C25,C27,C33,C34,C36,C38,C40,C42,C43,C46,C48,C50 | Capacitor, 0.1uF, 6.3V, 10%, X5R, 0402 | Panasonic | ECJ-0EB1A104K | |
| 2 | 22 | 22 | C6,C13,C14,C39,C41 | Capacitor, 1.0uF, 16VDC, 10%, X5R, 0603 | Panasonic | ECJ-1VB1C105K | |
| 3 | 5 | 5 | C8,C19 | Capacitor, Low ESR, 100uF, 6.3VDC, 20%, Aluminum, Radial-SMT, 5mm x 5.8mm | United Chemi-Con | EMZA6R3ADA101ME61G | |
| 4 | 2 | 2 | C10,C12 | Capacitor, 18pF, 50V, 5%, NPO, 0402 | Murata | GRM1555C1H180JZ01 | |
| 5 | 2 | 2 | C26 | Capacitor, 4.7uF, 6.3VDC, 20%, X5R, 0603 | Panasonic | ECJ-1VB0J475M | |
| 6 | 1 | 1 | R2,R20,R22,R31,R34 | Resistor, 330, 5%, 1/16W, 0603 | Yageo America | 9C06031A3300JLHFT | |
| 7 | 5 | 5 | R16,R18,R47 | Resistor, 100K, 5%, 1/16W, 0603 | Yageo America | 9C06031A1003JLHFT | |
| 8 | 3 | 3 | R24 | Resistor, 1Meg, 5%, 1/16W, 0603 | Yageo America | 9C06031A1004JLHFT | |
| 9 | 1 | 1 | R32 | Resistor, 12.0K, 1%, 1/16W, 0603 | Yageo America | 9C06031A1202FKHFT | |
| 10 | 1 | 1 | R53,R57 | Resistor, 10K, 5%, 1/16W, 0603 | Yageo America | 9C06031A1002JLHFT | |
| 11 | 2 | 2 | R69 | Resistor, 2.2K, 5%, 1/16W, 0603 | KOA Speer | RK73B1JLTD222J | |
| 12 | 1 | 1 | J2,J3 | Receptacle, USB, Style A, Right Angle, Through-hole | AMP | 787616-1 | |
| 13 | 2 | 2 | J0 | Receptacle, USB, Style B, Right Angle, Through-hole | AMP | 292304-1 | |
| 14 | 1 | 1 | J9 | Connector, Power Jack, 2.0mm, 12V, 4A, Right Angle, TH | Cui Stack | PJ-002AH | |
| 15 | 1 | 1 | J13 | Connector, SD/MMC4.0, Normal Mount, SMT | Proconn | SDC013-A0-5002 | Hand soldered bottom side |
| 16 | 1 | 1 | J14 | Connector, Mem. Stick, Classic-Duo-Pro-HG, Top Mount, SMT | Proconn | MSCN14-X0-2200 | |
| 17 | 1 | 1 | TP17 | Pin, Ferrule, Uninsulated, for 0.5mm wire, 6mm long | Phoenix Contact | 3200218 | Hand soldered bottom side |
| 18 | 1 | 1 | TP18,TP27 | Test Point, Yellow, Loop, 0.04 Inch ID | Keystone | 5004 | |
| 19 | 2 | 2 | TP19,TP23,TP28 | Test Point, Black, Loop, 0.04 Inch ID | Keystone | 5001 | |
| 20 | 3 | 3 | TP22 | Test Point, Orange, Loop, 0.04 Inch ID | Keystone | 5003 | |
| 21 | 1 | 1 | LED7 | LED, Bright Green, 0603 | Rohm | SML-412MWT86 | |
| 22 | 1 | 1 | LED8,LED10,LED12,LED13 | LED, Green, 0603 | Stanley Electric | BG1111C-TR | |
| 23 | 4 | 4 | U6 | IC, Lx1086-3.3, 3.3V, 1.5A, LDO Regulator, DDPAK | Fairchild | FAN1086M33 | |
| 24 | 1 | 1 | U8 | IC, MIC2026-1BM, Power Distribution Switch, SO-8 | Micrel | MIC2026-1YM | |
| 25 | 1 | 1 | U9 | IC, 25x20, 2Mb (256K x 8) SPI Serial FLASH, 2.5V-3.3V, 75MHz, SO8 | Atmel | AT26DF081A-SSU | |
| 26 | 1 | 1 | U10 | IC, USB82640, USB 2.0 Hub/Cardreader, QFN-48 | SMSC | USB82640AM | |
| 27 | 1 | 1 | Y1 | Crystal, 24.000MHz, 50ppm, 18pF, HC-49SMT | Citizen America | HCM49-24.000MAJB-UT | |
| 28 | 1 | 1 | | Rubber feet | Richco | RBS-35 | Place on bottom side |
| 29 | 4 | 4 | PCB Fab | PCB, Tyche (EVB-USB82640), Rev. A | | EVB-USB82640_A | Supplied by SMSC |
| 30 | 1 | 1 | Assembly | Assembly, Tyche (EVB-USB82640), Rev. A | | EVB-USB82640_A | |

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|----|---|---|---------------------------------------|---|----------------------|--------------------|-----|
| 32 | 2 | 0 | BR2,BR3 | Diode, Bridge, Switching, 50V, 140mA, SOT-143 | Infineon Tech | BGX50A | DNP |
| 33 | 1 | 0 | C21 | Capacitor, Low ESR, 100uF, 6.3VDC, 20%, Aluminum, Radial-SMT, 5mm x 5.8mm | United Chemi-Con | EMZA6R3ADA101ME61G | DNP |
| 34 | 4 | 0 | C23,C28,C29,C30 | Capacitor, 33pF, 25V, 10%, NPO, 0402 | Panasonic ECG | ECJ-0EC1H330J | DNP |
| 35 | 1 | 0 | C37 | Capacitor, 0.1uF, 6.3V, 10%, X5R, 0402 | Panasonic | ECJ-0EB1A104K | DNP |
| 36 | 4 | 0 | C45,C47,C51,C52 | Capacitor, 1000pF, 50V, 10%, X7R, 0402 | SMEC | MCCJ102KONRTF | DNP |
| 37 | 1 | 0 | C49 | Capacitor, Do Not Populate, 0603 | | | DNP |
| 38 | 1 | 0 | FB1 | Ferrite Bead, 120 Ohm, 0.5A, 0.1DCR, 0603 | Panasonic | EXC-3BP121H | DNP |
| 39 | 4 | 0 | FB3,FB7,FB8, FB10 | Ferrite Bead, 220 Ohm, 2A, 0.05DCR, 0603 | TDK | MPZ1608S221A | DNP |
| 40 | 1 | 0 | R58 | Resistor, 10K, 5%, 1/16W, 0603 | Yageo America | 9C06031A1002JLHFT | DNP |
| 41 | 1 | 0 | R63 | Resistor, ZERO, 0.1W, 0603 | Yageo America | 9C06031A0R00JLHFT | DNP |
| 42 | 1 | 0 | R64 | Resistor, 470, 5%, 1/16W, 0603 | Yageo America | 9C06031A4700JLHFT | DNP |
| 43 | 1 | 0 | R70 | Resistor, Do Not Populate, 0603 | | | DNP |
| 44 | 1 | 0 | R71 | Resistor, 1K, 5%, 1/16W, 0603 | Panasonic | ERJ-3GEYJ102V | DNP |
| 45 | 9 | 0 | TP1,TP2,TP3,TP5,TP6,TP7,TP9,TP20,TP21 | Header, 1 x 1, 0.1 Inch, Vertical | Amp/Tyco | 103185-1 | DNP |
| 46 | 1 | 0 | J39 | Header, 1 x 4, 0.1 Inch, Vertical | Samtec | TSW-104-14-L-S | DNP |
| 47 | 3 | 0 | TP24,TP25,TP26 | Test Point, White, Loop, 0.04 Inch ID | Keystone | 5002 | DNP |
| 48 | 1 | 0 | LED6 | LED, Orange, 5mm, TH, Right Angle | Dialight | 550-2505 | DNP |
| 49 | 2 | 0 | L2,L3 | Inductor, Common Mode Choke, DLP11SN900SL2, 0504 | Murata | DLP11SN900SL2 | DNP |
| 50 | 1 | 0 | U7 | IC, 24C04, 2 Wire Serial EPROM, 4Kb, 2.5V, DFN-8 | Microchip Technology | 24LC04BT-1/MC | DNP |