Product Name: ZX127HSEC6-84S Samtec GENERATE HSEC6 / Mini Cool Edge IO, MCIO, edge card breakout adapter - Page 1 OF 2 Product Description: ZX127HSEC6-84S is Samtec HSEC6 0.6mm pitch also referred as Mini Cool Edge IO, MCIO / SFF-TA-1002, edge card breakout adapter. ZX127HSEC6-84S is designed for real-time electrical test & measurements, signal integrity, characterization, manufacturing loopback test applications. ZX127HSEC6-84S is MCIO edge card breakout adapter, supporting Samtec GENERATE HSEC6 & standard MCIO edge card 0.6mm pitch connectors using 1.6mm PCB thickness. It provides full access to all HSEC6 / MCIO connector signals from both sides of the PCB for purpose of test & measurement. 1- Provides access to all Samtec HSEC6 / MCIO signals via onboard Shunts. The Shunts are accessible on both sides of PCB for easy probe access 2- The shunts are standard 0402 SMD footprint package size. 3- Listed number adjacent to each Shunt is in reference to the Samtec HSEC6 / MCIO connector pin numbers 2.49"(63.44mm) 4- All traces are impedance controlled. 5- Four, 4, layers PCB design, inner layers are GND planes. ZX127HSCE6-84S ZEBAX.com 6- Accessible GND test point, The test point is connected to inner GND planes. 7- Ease of interface with single channel and differential scope probes. 8- Reassign any signal by cutting the shunts' inner connecting trace and rewire. 9- Probing wires ZX00BC2PH1 or similar is recommended. ZX127HSEC6-84S simplified cross section diagram **Electrical:** Insertion loss > -2dB @6GHz ZX127HSEC6-84S simplified circuit diagram Trace impedance: 50Ω Operating Temperature: -55°C to +125°C Shunts- 0402 Shunts- 0402 **Edge Card Connector:** SMD footprints SMD footprints Mates with: Samtec HSEC6 / MCIO 0.60mm pitch connector Pitch: 0.60mm pin to pin pitch Inner layers GND planes Thickness: 1.6mm (0.062") Plating: 10µ" (0.25µm) GND test point Package: Standard 0402 SMD package Samtec HSEC6 Pluc ZX00BC2PH1: 36AWG Bare copper wire to pin header Application: Manufacturing test measurement & re-use, bringup, testing, debugging Ground layers. Please note - The GND test point is connector to Samtec HSEC6 Plug Mini Cool IO Plug 2- The inner layers ground planes Mates with: Samtec GENERATE High Speed Edge Card HSEC6 & GC6 cable assembly Shunts & signal routing Industry standard Mini Cool Edge IO, MCIO, SFF-TA-1016, SFF-TA 1002 1- Shunts are standard 0402 SMD package size 2- Shunts are available on both sides of ZX127HSEC6-84S GEN-Z 1C, Amphenol G97, GH01 series. ACES Electronics, LOTES module, making ALL HSEC / MCIO connector's signals are accessible on both sides of the module MET005610101011 ME1005610203071 ME1005610201091 ME1005611201041 Note: 1- Shunts are standard 0402 SMD package size 2- Shunts are available on both sides of ZX127HSEC6-84S module ME1005611202041 ME1005610211081 ME1005610205081 ME1005613401101 # HSEC6 / MCIO signals path to Shunts and to/from HSEC6 / MCIO. making ALL Samtec connector signals accessible on sides of the module ME1005634478101 ZX127HSEC6-84S package includes: Industry Standard: HSEC6 & MCIO connectors have been adopted by industry standards such as: Part number **Quantity Description** Compliance: ZX127HSEC6-84S Breakout Adapter module SFF-TA 1002, SFF-TA-1016, PCI Express Gen 3.0, 4.0, 5.0, 6.0, OCP DC-MHS (HSIO recommended) ISO2001 certified ZX00BC2PH1 36AWG Bare Copper wire to pin header wire assembly Supporting Up to 64 Gbps PAM4 performance. PCIe, NVMe, SAS, SFP(+), SFP 28 RoHs - Lead Free EU RoHS2 UL E111594 document ELV- Vehicle Directive (Directive 2000/EC) ALL ZEBAX products are RoHS compliant and Lead Free unless otherwise indicated Access: European Union Directive (203/11/EC) For signal measurements: Halogen Free per IEC-61249-2.21: 2003 ZEBAX TECHNOLOGIES 1- Recommendation: Use 36AWG solid copper wire with pin header, ZX00BC2PH1 or similar RoHs Directive 2011/65/EU WEEE Directive (2012/12/EU) SANTA CRUZ, CA U.S.A (831) 2 2 2 - 0717 WWW.ZEBAX.COM For signal relocation: Certificate of Compliance for Radioactive substances Certificate of Compliance for Asbestos ASSEMBLY DRAWING 1- Cut the inner connecting trace within any Shunt and reassign to new location. SPECIFIED DIMENSIONS Certificate of Compliance for Ozone Depleting Substances, ODS ARE INCHES (MM). 2- Using 36AWG solid copper wire, make the required connections. See Signal Access & re-route, Page 2 Certificate REACH SVHC ITEM: ZX127HSEC6-84S ROHS COMPLIANT Certificate of Compliance RoHS EN CoC Samtec HSEC6 / Mini Cool IO, MCIO, **DESCRIPTION:** ALL ZEBAX TECHNOLOGIES DESIGN SPECIFICATIONS, DRAWINGS, PUBLICATIONS, AND OTHER DOCUMENTS (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED "AS IS." ZEBAX MAKES NO WARRANTIES. EXPRESSED. **Edge Card Breakout Adapter** IMPLIED. STATUTORY, OR OTHERWISE WITH RESPECT TO THE MATERIALS, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES OF NO INFRINGEMENT, MERCHANTABILITY, AND FITNESS FOR A PARTICULAR PURPOSE Information furnished is believed to be accurate and reliable. However, Zebax Technologies assumes no responsibility for the consequences of use of such information or for any infringement of patents or other rights of third parties that may result from its use. CHECKED: DRAWN: REVISSION: 1.0 Specifications mentioned in this publication are subject to change without notice. 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