1 ZX120T – PCISIG mini PCle passive breakout extender adapter **Product Name:** ZX120T ZEBAX.com **Product Description:** ZX120T is a mini PCle passive breakout extender adapter module, providing access to all mini PCle signals. ZX120T Mates with host. It is designed for real-time Test & Measurement, signal integrity, characterization, manufacturing test (23. and debug of any mini PCIe design interface. ZX120T inner ground planes, stitching vias and the top & bottom GND fills are all connected together and accessible via the 28 32 36 40 44 48 GND Test Points, TP, as well as the Mounting Holes, MH. Figure 1 Circuit diagram (30mm) 1- Provides access to ALL mini PCIe PCISIG signals via standard through hole, TH, test points. 2- ZX120T is designed to be inserted into the host for purpose of debugging, development, testing and characterization. 3- Listed number adjacent to each TH test point represents the associated mini PCIe connector's pin number. <u>+</u> 4- All traces are 50 Ohms impedance controlled with exceptional signal integrity & crosstalk. 5- Four layers PCB design, inner layers are GND planes with direct connection to GND stitching vias & top/bottom GND fills + the mounting holes. Е Е 6- Mates with any standard mini PCle connector. 50Ω : All traces are designed 50Ω trace impedance control J1 : mini PCle PCISIG edge connector GND - ZX120T inner ground planes, stitching vias and the top & bottom GND 0.78" (19.85mm) fills are all connected together and accessible via the GND test points. TP. as **Electrical:** Insertion loss > -2dB @3GHz well as the Mounting Holes, MH. Trace impedance: 50 Ω 0.95" (28.30mm) Operating Temperature: -65°C to +170°C Figure 2 – ZX120T Circuit diagram mini PCle Edge Connector type (J1): mini PCle, 52 position Mates with: mini PCIe, 52 position Plating: Gold 75U Through Hole Test Point: Diameter: Standard 0.1" (2.54mm) post - 0.025" (0.064mm) diameter D Plating: Gold 75U Current per pin: 0.5A (maximum) Application: Bringup, testing, emulation, development, modular design evaluations, manufacturing loopback test, $\overline{$ 50 Ω : All traces are designed 50 Ω trace impedance of troi @@@CO_O J2: mini PCIe PCISIG receptacle connector wifi GPS GYRO Compass BT FM sensor 0000 $\mbox{GND}-\mbox{ZX120T}$ inner ground planes, stitching vias and the top & bottom GND fills are all connected together and accessible via the GND test points. TP. as Mates with: Any with any standard mini PCIe PCISIG host and device - TE 1775861 Molex SD-48338 and more Ground: ZX120T inner ground planes, stitching vias and the top & bottom GND fills are all connected together and accessible via the GND Test Points, TP, as well as the Mounting Holes, MH. **Ordering Information:** Compliance: ISO2001 certified Part number Description RoHs - Lead Free ZX120T mini PCle PCISIG passive breakout adapter EU RoHS2 UL E111594 document В ELV- Vehicle Directive (Directive 2000/EC) European Union Directive (203/11/EC) Halogen Free per IEC-61249-2.21: 2003 RoHs Directive 2011/65/EU Note ALL ZEBAX products are RoHS compliant and Lead Free unless otherwise indicated WEEE Directive (2012/12/EU) ZEBAX TECHNOLOGIES Certificate of Compliance for Radioactive substances Certificate of Compliance for Asbestos SANTA CRUZ, CA U.S.A (831) 2 2 2 - 0717 Certificate of Compliance for Ozone Depleting Substances, ODS WWW.ZEBAX.COM Certificate REACH SVHC ASSEMBLY DRAWING Certificate of Compliance RoHS EN CoC SPECIFIED DIMENSIONS ARE INCHES (MM). ITEM: ZX120T mini PCle PCISIG ROHS COMPLIANT PCISIG mini PCle passive breakout **DESCRIPTION:** ALL ZERAX TECHNOLOGIES DESIGN SPECIFICATIONS, DRAWINGS, PLIBLICATIONS, AND OTHER DOCUMENTS (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED "AS IS." ZERAX MAKES NO WARRANTIES, EXPRESSED extender 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 CHECKED: 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. DRAWN: REVISSION: 1.0 Specifications mentioned in this publication are subject to change without notice. This publication replaces all other information previously supplied. Zebax Technologies products are not authorized as in life support devices or systems M. MARINA SONYA SHEET: 1 OF 1