

Product Name: ZX120X – PCISIG mini PCIe passive breakout extender adapter

Product Description: ZX120X is a mini PCIe passive breakout extender adapter module, providing access to all mini PCIe signals. ZX120X mates with host. It is designed for real-time Test & Measurement , signal integrity , characterization , manufacturing test and debug of any mini PCIe design interface. ZX120X 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.

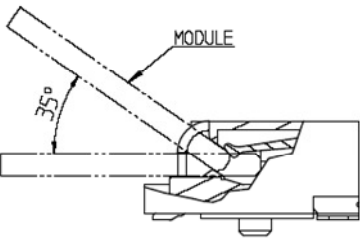
- 1- Provides access to ALL mini PCIe PCISIG signals via standard 0402 SMD shunt footprint, test points.
- 2- Onboard 0402 SMD shunt package may be cut and redirected to another signal or probed for signal test & measurement.
- 3- ZX120X is designed to be inserted into the host for purpose of debugging, development, testing and characterization.
- 4- Listed number adjacent to each 0402 SMD shunt package represents the associated mini PCIe connector's pin number.
- 5- All traces are 50 Ohms impedance controlled with exceptional signal integrity & crosstalk.
- 6- Four layers PCB design, inner layers are GND planes with direct connection to GND stitching vias & top/bottom GND fills + the mounting holes.
- 7- Mates with any standard mini PCIe connector.
- 8- Probing wire , ZX00BC2PH30, is offered to applications requiring scope probe interface. See ordering information

Electrical: Insertion loss > -2dB @3GHz
Trace impedance: 50 Ω
Operating Temperature: -65°C to +170°C
mini PCIe Edge Connector type (J1) : mini PCIe, 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
Plating: Gold 75U
Current per pin: 0.5A (maximum)
Shunt:
Package: 0402 SMD

Application: Bringup, testing, emulation, development, modular design evaluations , manufacturing loopback test, wifi GPS GYRO Compass BT FM sensor

Mates with : Any standard mini PCIe PCISIG host and device – TE 1775861 Molex SD-48338 and more

Ground : ZX120X 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.



Notice

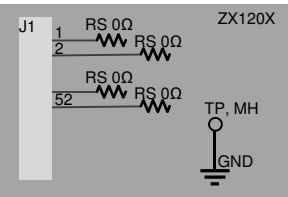
ALL ZEBAX TECHNOLOGIES DESIGN SPECIFICATIONS, DRAWINGS, PUBLICATIONS, AND OTHER DOCUMENTS (TOGETHER AND SEPARATELY, "MATERIALS") ARE BEING PROVIDED "AS IS." ZEBAX MAKES NO WARRANTIES, EXPRESSED, IMPLIED, STATUTORY, OR OTHERWISE WITH RESPECT TO THE MATERIALS, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES 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. 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.

Compliance:

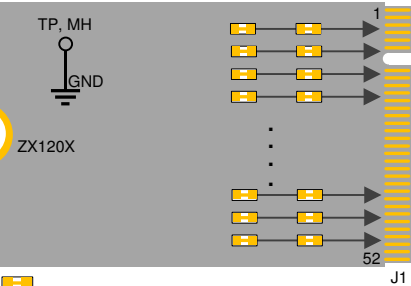
- ISO2001 certified
- RoHs - Lead Free
- EU RoHS2
- UL E111594 document
- ELV- Vehicle Directive (Directive 2000/EC)
- European Union Directive (203/11/EC)
- Halogen Free per IEC-61249-2.21 : 2003
- RoHs Directive 2011/65/EU
- WEEE Directive (2012/12/EU)
- Certificate of Compliance for Radioactive substances
- Certificate of Compliance for Asbestos
- Certificate of Compliance for Ozone Depleting Substances, ODS
- Certificate REACH SVHC
- Certificate of Compliance RoHS_EN_CoC

Figure 1 Circuit diagram



RS - Shunt 0 Ω resistor , 0402 SMD package
50 Ω : All traces are designed 50 Ω trace impedance control
J1 : mini PCIe PCISIG edge connector
GND – Inner GND planes as well as GND stitching vias are available at the GND Test Points, TP, and the Mounting Holes, MH.

Figure 2 – Block diagram



Shunt 0402 SMD package 0 Ω
50 Ω : All traces are designed 50 Ω trace impedance control
J2 : mini PCIe PCISIG receptacle connector
GND – Inner GND planes as well as GND stitching vias are available at the GND Test Points, TP, and the Mounting Holes, MH.

Figure 3- 0402 SMD shunt – not scaled

Typical signal connection:
0402 SMD Package
Break signal path:



Ordering Information:

Part number	Description
ZX120X	mini PCIe PCISIG passive breakout adapter
ZX00BC2PH30	30AWG Bare Copper wire to pin header wire assembly

ZX00BC2PH30 site page for ordering ZX00BC2PH30 wire assembly

Note ALL ZEBAX products are RoHS compliant and Lead Free unless otherwise indicated.

ZEBAX TECHNOLOGIES		
SANTA CRUZ, CA U.S.A (831) 222-0717		
WWW.ZEBAX.COM		
SPECIFIED DIMENSIONS ARE INCHES (MM). ROHS COMPLIANT		ASSEMBLY DRAWING
		ITEM: ZX120X mini PCIe PCISIG
DESCRIPTION: PCISIG mini PCIe passive breakout extender adapter		
CHECKED:	DRAWN:	REVISION: 1.0
M. MARINA	SONYA	
		SHEET: 1 OF 1