

Product Name: ZX121 – PCISIG mini PCIe passive breakout extender adapter

Product Description: ZX121 is a mini PCIe passive breakout extender adapter module, providing access to all 52 PCIe signals. ZX121 mates with host and device under test. It is designed for real-time Test & Measurement , signal integrity , characterization , manufacturing test and debug of any mini PCIe design interface. ZX121 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 52 mini PCIe PCISIG signals via onboard 0402 SMD shunt packages.
- 2- Onboard 0402 SMD shunt package may be cut and redirected to another signal or probed for signal test & measurement.
- 3- ZX121 is designed to be inserted into the host and interfaced with target , or any evaluation board (development board) 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.
- 7- Mates with any standard mini PCIe connector, Host and Device / DUT
- 8- Probing wire , ZX00BC2PH30, is offered to applications requiring scope probe interface. See ordering information

Electrical: Insertion loss > -1.6dB @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 100U
Receptacle (J2) :
Type: mini PCIe, 52 position
Height: 0.16" (4.2mm)
Spacer : 0.1" (2.54mm) – See Figure 4
Plating: Gold 100U
Current per pin: 0.5A (maximum)
Shunt:
Package: 0402 SMD

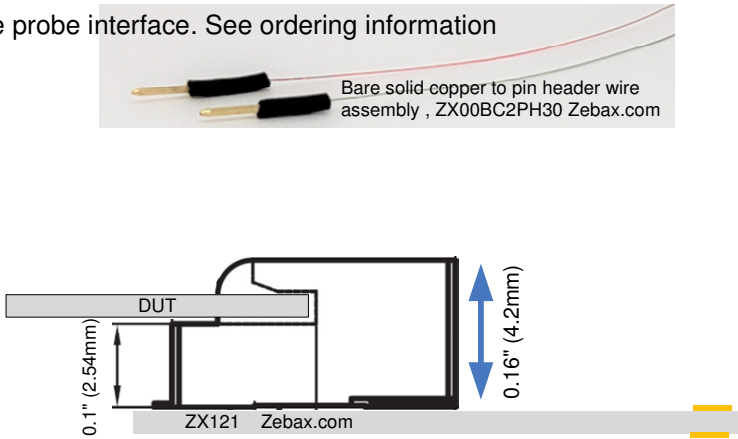


Figure 4- ZX121 mini PCIe – side view dimensions

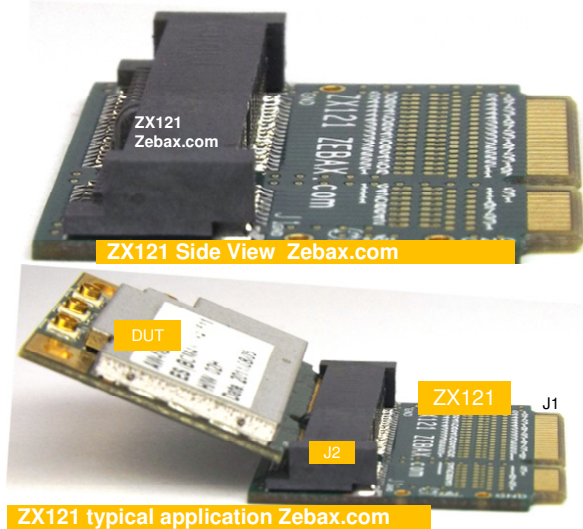


Figure 1 Circuit diagram

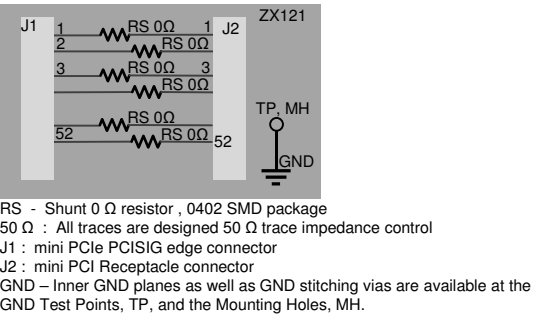


Figure 2 – ZX121 block diagram

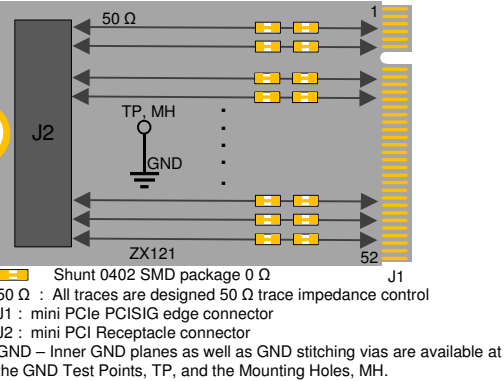
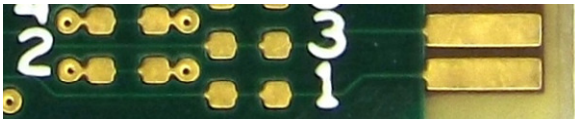


Figure 3- 0402 SMD shunt – not scaled

Typical signal connection:
0402 SMD Package

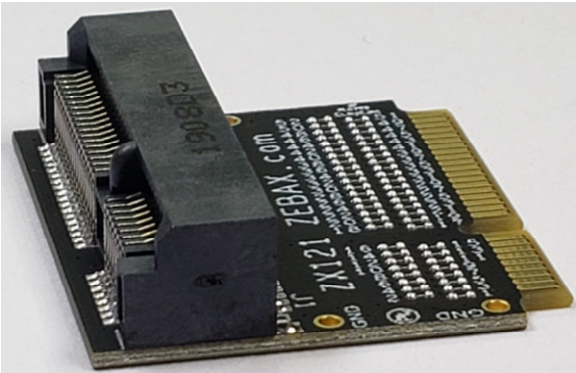
Break signal path:



Application: Bringup, testing, emulation, development, modular design evaluations , manufacturing loopback test, functional connector saver

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

Ground : ZX121 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.



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- 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

Ordering Information:

Part number	Description
ZX121	mini PCIe PCISIG passive breakout adapter
ZX00BC2PH30	30AWG Bare Copper wire to pin header wire assembly

ZX00BC2PH30 site page for viewing ZX00BC2PH30 wire assembly

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

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SPECIFIED DIMENSIONS ARE INCHES (MM). ROHS COMPLIANT	ASSEMBLY DRAWING	
	ITEM: ZX121 mini PCIe PCISIG	
DESCRIPTION: PCISIG mini PCIe passive breakout extender adapter		
CHECKED: M. MARINA	DRAWN: SONYA	REVISSION: 1.0
		SHEET: 1 OF 1