

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

**Product Description:** PCISIG mini PCIe passive breakout extender adapter providing access to all 52 pins signals. Designed in 4 layer PCBoard with 50Ω trace impedance on all traces, improved signal integrity and crosstalk.

Provides access to all 52 signals via 0405 SMD standard package. DUT can be inserted to PCISIG housing while monitoring I/O signal for purpose of debugging, bringup, development, or characterization.

- Designed in 4 layer PCB
- All signals accessible via 0402 SMD footprint. Default - One to One connection
- Matching 50Ω trace impedance on all traces.

GND test points for easy access as well as applying system ground reference. The GND test points are connected to inner ( 2 internal layers ) ground planes. Providing extra system ground connection for probing, and improved signal integrity.

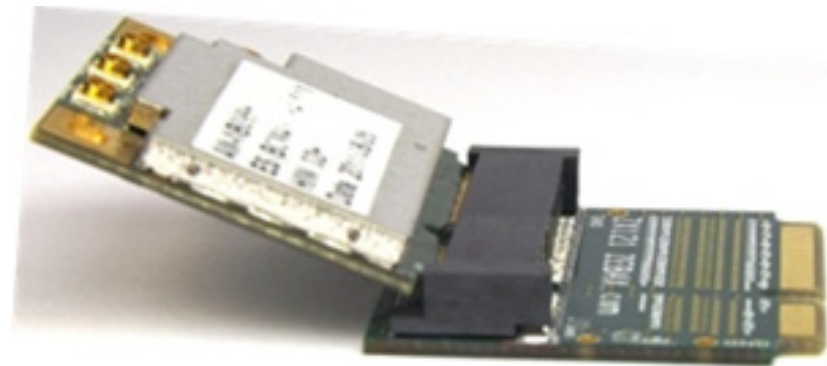
**Application:** Bringup, testing, emulation, development, modular design evaluations

**Mates with :** PCIe Mini connector, Samtec SD-80052-001 Tyco 1775861 Molex SD-48338

**Pitch:** 0.8mm

**Breakout Access:** Accessible **0402 SMD footprint package** – Default – One to One connection where all signals are connected from finger edge to mini PCIe connector via 0402 SMD footprint.

**MiniPCIe Connector:** ZX121 utilizes Molex SD-48338 connector enabling DUT access to miniPCI connector.



1.18" (30mm)

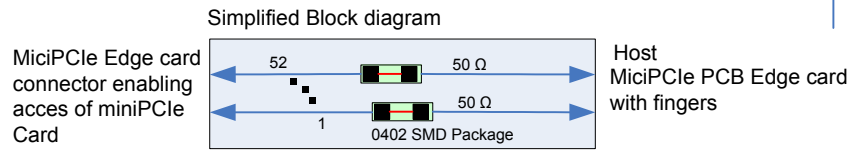
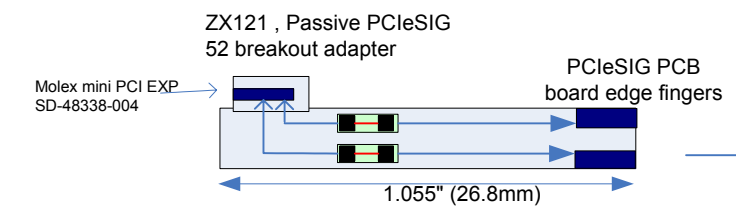
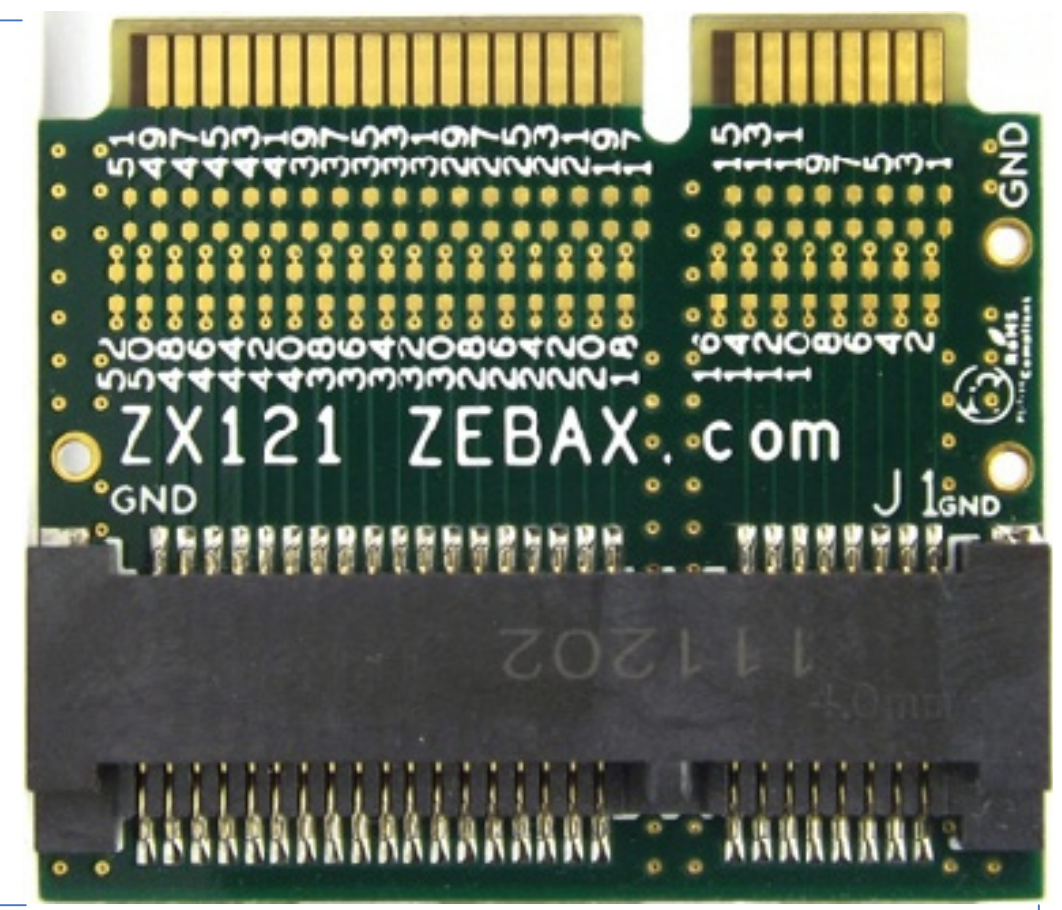


Table 1 – Standard PCIe Signal assignments

| Pin #          | Name               | Pin # | Name       |
|----------------|--------------------|-------|------------|
| 51             | Reserved           | 52    | +3.3Vaux   |
| 49             | Reserved           | 50    | GND        |
| 47             | Reserved           | 48    | +1.5V      |
| 45             | Reserved           | 46    | LED_WPAN#  |
| 43             | GND                | 44    | LED_WLAN#  |
| 41             | +3.3Vaux           | 42    | LED_WWAN#  |
| 39             | +3.3Vaux           | 40    | GND        |
| 37             | GND                | 38    | USB_D+     |
| 35             | GND                | 36    | USB_D-     |
| 33             | PETp0              | 34    | GND        |
| 31             | PETn0              | 32    | SMB_DATA   |
| 29             | GND                | 30    | SMB_CLK    |
| 27             | GND                | 28    | +1.5V      |
| 25             | PERp0              | 26    | GND        |
| 23             | PERn0              | 24    | +3.3Vaux   |
| 21             | GND                | 22    | PERST#     |
| 19             | Reserved* (UIM_C4) | 20    | W_DISABLE# |
| 17             | Reserved* (UIM_C8) | 18    | GND        |
| Mechanical Key |                    |       |            |
| 15             | GND                | 16    | UIM_VPP    |
| 13             | REFCLK+            | 14    | UIM_RESET  |
| 11             | REFCLK-            | 12    | UIM_CLK    |
| 9              | GND                | 10    | UIM_DATA   |
| 7              | CLKREQ#            | 8     | UIM_PWR    |
| 5              | COEX2              | 6     | 1.5V       |
| 3              | COEX1              | 4     | GND        |
| 1              | WAKE#              | 2     | 3.3Vaux    |

1.055" (26.8mm)

Typical signal connection: 0402 SMD Package

Break signal path:



**Note**  
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| SPECIFIED DIMENSIONS ARE INCHES (MM). ROHS COMPLIANT                                  | <b>ASSEMBLY DRAWING</b> |  |
| <b>ITEM: ZX121 mini PCIe</b>  |                         |  |
| <b>DESCRIPTION: PCISIG mini PCIe passive breakout extender adapter</b>                |                         |  |
| CHECKED:<br><b>M. MARINA</b>  | DRAWN:<br><b>SLAVIK</b> | REVISION: <b>1.0</b><br>SHEET: <b>1 OF 1</b> |