

**Product Name:** ZX120 – PCISIG mini PCIe passive breakout adapter

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

Provides access to all 52 signals via accessible standard header through hole. Standard PCIe ground (GND) connections are accessible via 0405 SMD and TH test point, enabling application dependent configuration. The GND signal assignment can be cut ( removed ) for use for general signal activity. See figure 3.

ZX120 can be inserted into any mini PCIe PCISIG housing and wired ( stitched ) to any Evaluation board ( development board ) for purpose of debugging, development, testing, or characterization.

- Designed in 4 layer PCB
- All signals accessible via TH pins. All GND ( see Table 1 ) signals are supplied 0402 SMD footprint to Ground layers.
- Dedicated “GND” test point, accessing inner layer ground layers.
- Matching 50Ω trace impedance on all traces.

“GND” test points and Mounting holes are connected to 2 inner (internal ) layer GND layers. **Note:** As default all standard GND assigned signals ( see table 1 ) are connected to Board GND layers via 0405 SMD package. User **MUST** cut the connecting trace to remove the GND connection, if required. See table 1.

**Application:** Bringup, testing, emulation, development, modular design evaluations for wifi GPS GYRO Compass BT FM sensor module

**Mates with :** Any standard mini PCIe connector such as Samtec SD-800052-001 Tyco 1775861 Molex SD-48338

**Pitch:** 0.8mm

**Breakout Access:** Accessible Through hole, TH, connection on ALL 52 signals. Additional 0402 SMD footprint package for dedicated PCISIG Ground ( GND ) signals. Ground signal assignment can be cut ( removed ) for use for general signal activity. See figure 3.

**MiniPCIe Connector:** ZX120 includes standard mini PCIe ( mini PCI Express ) card edge finger connector. It mates with ANY standard miniPCIe connector.

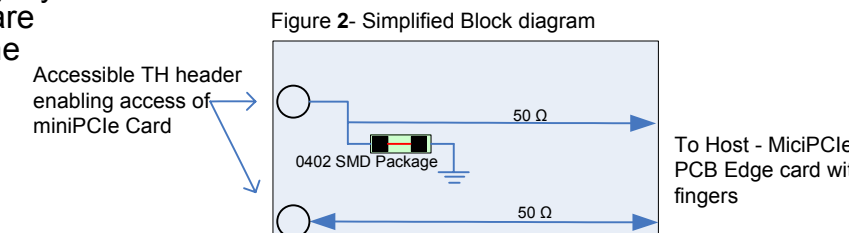
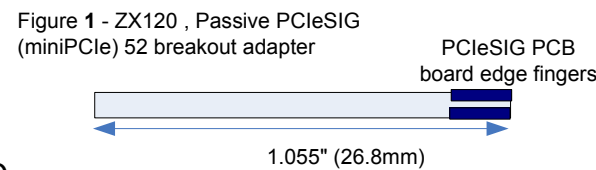
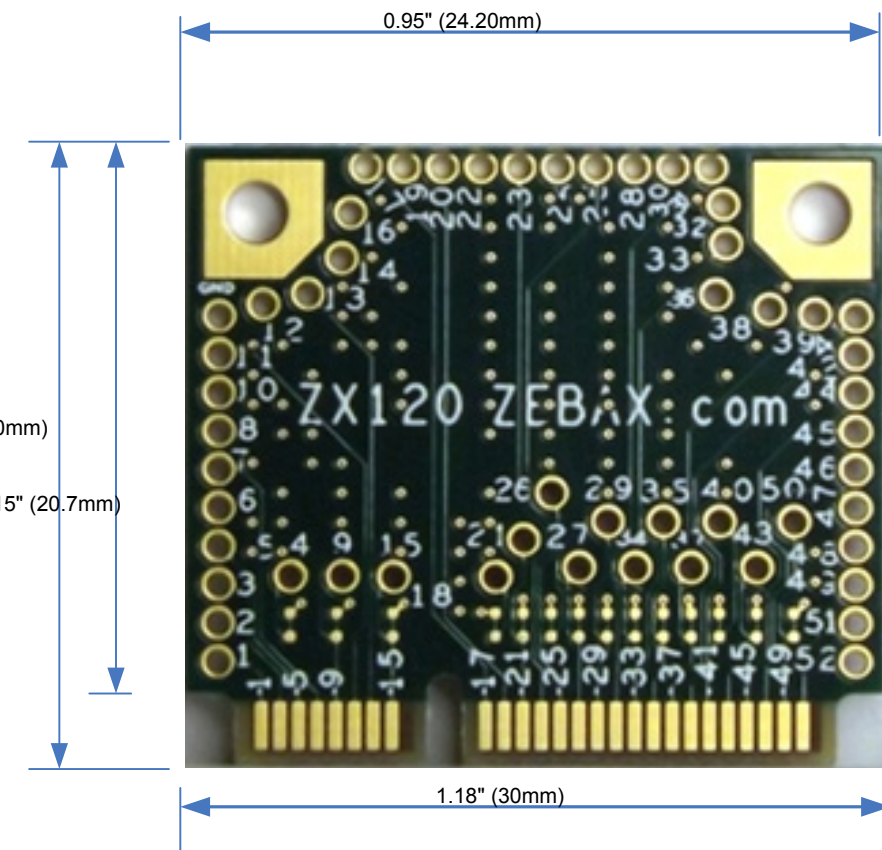


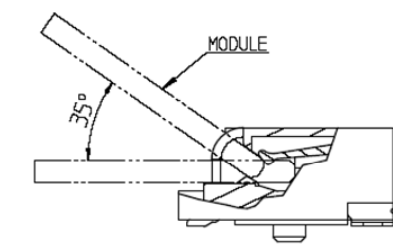
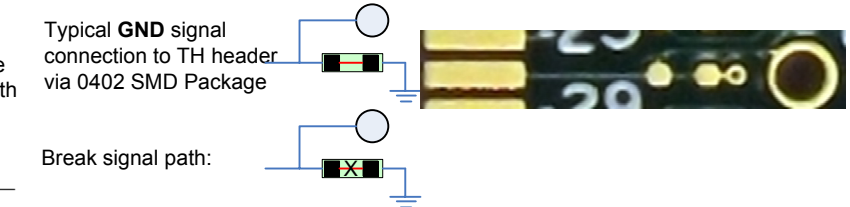
Table 1 – Standard PCIe Signal assignments

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

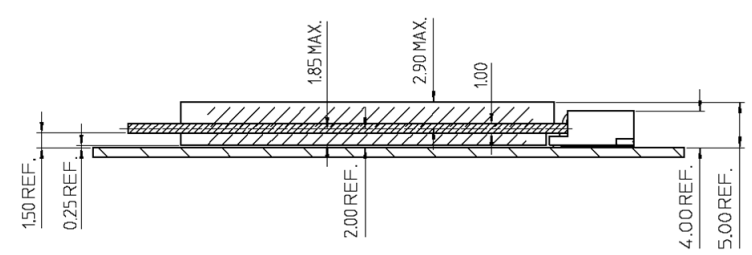
  

Mechanical Key			
15	GND	16	UIM_VPP
13	REFCLK+	14	UIM_RESET
11	REFCLK-	12	UIM_CLK
9	GND	10	UIM_DATA
7	CLKREQ#	8	UIM_PWR
5	COEX2	6	1.5V
3	COEX1	4	GND
1	WAKE#	2	3.3Vaux

Figure 3- PCIe GND connection Via 0405 SMD Package



**Note**  
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**ASSEMBLY DRAWING**  
ITEM: ZX120 mini PCIe

**DESCRIPTION:** PCISIG mini PCIe passive breakout adapter

CHECKED: M. MARINA	DRAWN: SLAVIK	REVISION: 1.0 SHEET: 1 OF 1
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