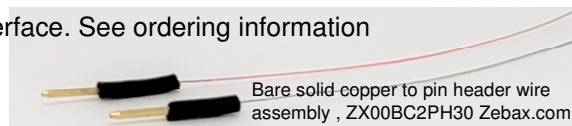


Product Name: ZX120G – PCISIG mini PCIe passive breakout extender adapter

Product Description: ZX120G is a mini PCIe passive breakout extender adapter module, providing access to all mini PCIe signals. ZX120G mates with host. It is designed for real-time Test & Measurement, signal integrity, characterization, manufacturing test and debug of any mini PCIe design interface. All reserved mini PCIe Ground signals are inner connected to GND planes as well as GND stitching vias. It is available at the GND Test Points, TP, and 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- ZX120G 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 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

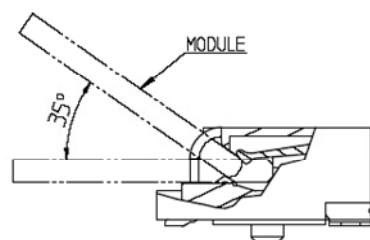


Electrical: Insertion loss > -2dB @3GHz
 Trace impedance: 50 Ω
 Operating Temperature: -65°C to +170°C
 mini PCIe Edge Connector type (J1) : mini PCIe, 52 position
 Mates with: mini PCIe, 52 position
 Plating: Gold 75U
 Through Hole Test Point :
 Diameter : Standard 0.1" (2.54mm) post - 0.025" (0.064mm) 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 with any standard mini PCIe PCISIG host and device – TE 1775861 Molex SD-48338 and more

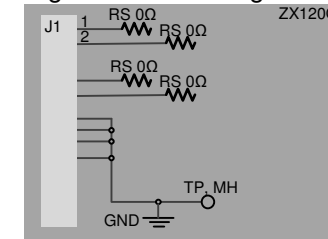
Ground : All reserved mini PCIe Ground signals are inner connected to GND planes as well as GND stitching vias. Access to the GND is available at the GND Test Points, TP, and the Mounting Holes, MH. Please refer to table 1 for the list of the reserved GND signals.



Compliance:

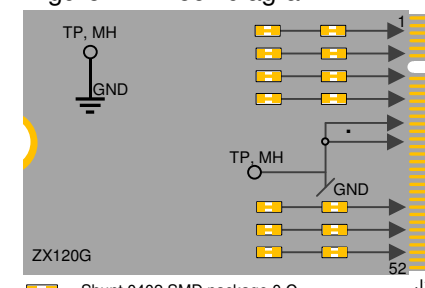
- ISO2001 certified
- RoHS - Lead Free
- EU RoHS2
- UL E111594 document
- ELV- Vehicle Directive (Directive 2000/EC)
- European Union Directive (203/11/EC)
- Halogen Free per IEC-61249-2.21 : 2003
- RoHS Directive 2011/65/EU
- WEEE Directive (2012/12/EU)
- Certificate of Compliance for Radioactive substances
- 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 – All reserved mini PCIe Ground signals are inner connected to GND planes as well as GND stitching vias. It is 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 – All reserved mini PCIe Ground signals are inner connected to GND planes as well as GND stitching vias. It is available at the GND Test Points, TP, and the Mounting Holes, MH.

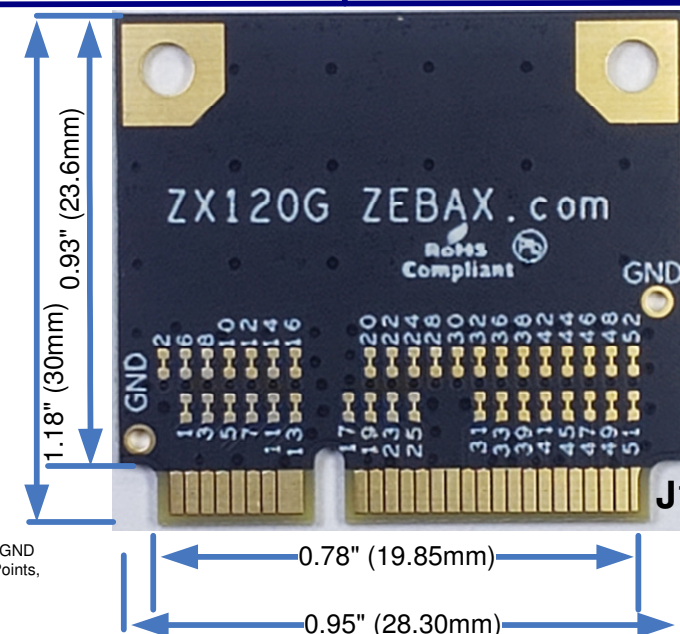


Figure 3- 0402 SMD shunt – not scaled

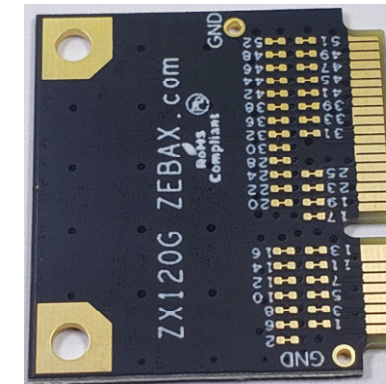
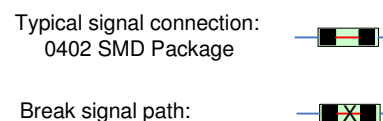


Table 1 – Standard PCIe Signal assignments

Pin #	Name	Pin #	Name
51	Reserved	52	+3.3Vaux
49	Reserved	50	GND
47	Reserved	48	+1.5V
45	Reserved	46	LED_WLAN#
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

Ordering Information:

Part number	Description
ZX120G	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.

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 WWW.ZEBAX.COM

SPECIFIED DIMENSIONS ARE INCHES (MM). ROHS COMPLIANT	ASSEMBLY DRAWING	
	ITEM: ZX120G mini PCIe PCISIG	
DESCRIPTION: PCISIG mini PCIe passive breakout extender adapter		
CHECKED: M. MARINA	DRAWN: SONYA	REVISION: 1.0
		SHEET: 1 OF 1

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