Product Name: **ZX122AX – PCISIG M.2 NGFF passive adapter converter module, converting ANY M.2 finger connector type to any M.2 connector type**

Product Description: ZX122AX enables conversion of M.2 Key_id to any Key_id connector. All signals are available for converting any M.2 finger edge connector KEY_ID to any M.2 connector KEY ID.

PCISIG M.2 a.k.a. Next Generation Form Factor , NGFF, passive breakout adapter enabling access to all accessible M.2 signals while the ZX122AX is placed between Host and Target. Designed with 50Ω trace impedance on all traces, improved signal integrity and crosstalk.

ZX122AX provides access to all 75 signals via accessible 0402 SMD landing pads. Dedicated GND test point, interfacing with the inner ground layers + top/bottom GND fills.

ZX122AX can be inserted into any M.2 NGFF PCISIG connector 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 0402 SMD landing pads.
- Dedicated Module GND test point for ease of probing and system ground reference.
- The “GND” test point, accessing inner ground layers for improved signal integrity and crosstalk.
- Matching 50Ω trace impedance on all traces.

“GND” test points and Mounting holes are connected to 2 internal GND layers.

M.2 Connector installed here, see ordering info

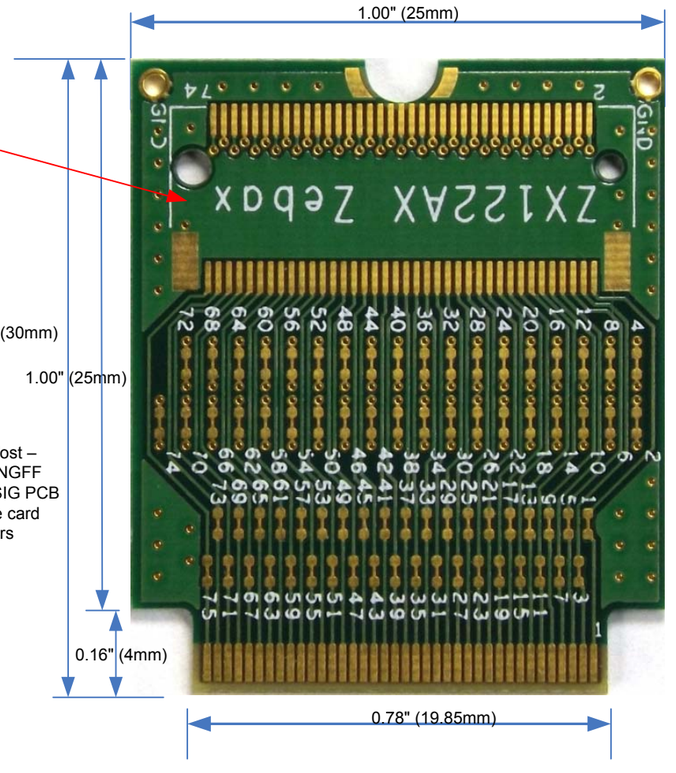
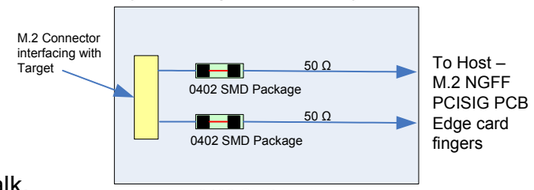
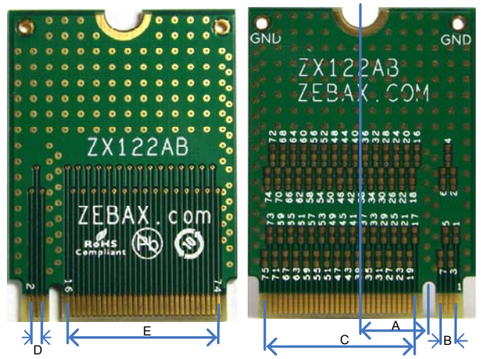


Figure 2- Simplified Block diagram



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

Mates with : Any standard M.2 NGFF PCISIG connector, please see ORDER info for “Key”, meeting Keys A, B, E, M and ANY configuration –
TE 2199125 2199119 2199230 2199133
JAE SM3ZS067
Bellwether: SD-80148 SD-80149 SD-80152 SD-80159



OnBoard M.2 connector 4.1 mm Height

Pitch: 0.5mm

Breakout Access: Accessible via 0402 SMD landing pads. All signals are accessible on top layer of the module. Dedicated GND test point interfacing with the inner ground layers + top/bottom GND fills.

Ordering INFO:

Part Number ZX122AX	M.2 Connector	Finger
	A	X
	B	X
	E	X
	M	X
	Z	X
	Z	Z

X: Any M.2 KEY_ID Combination
Z: Bank – Do not stuff M.2 connector or make any M.2 KEY_ID cutout on the Finger edge connector.

Device Under Test, DUT

ZX122AX

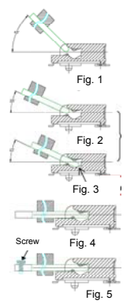
Key ID	Pin	Interface
A	8-15	PCIe X2/ USB / I2C / DP X4
B	12-19	PCIe X2 / SATA / USB / PCM / UIM / SSIC / UART-I2C
C	16-23	Reserved for Future Use
D	20-27	Reserved for Future Use
E	24-31	PCIe / USB / I2C / SDIO / UART / PCM
F	28-35	Reserved for Future Use
G	39-46	Future Memory Interface (FMI)
H	43-50	Reserved for Future Use
J	47-54	Reserved for Future Use
K	51-58	Reserved for Future Use
L	55-62	Reserved for Future Use
M	59-66	PCIe X4 / SATA

		KEY ID					
		A	B	C	D	E	F
Diemsion	A	6.625	5.625	4.625	3.625	2.625	1.625
	B	1.500	3.500	3.500	4.500	5.500	6.500
	C	14.500	13.500	12.500	11.500	10.500	9.500
	D	1.000	2.000	3.000	4.000	5.000	6.000
	E	14.500	13.500	12.500	11.500	10.500	9.500

Dimension, See ZX122AB reference listed above

Module Insertion, Removal process:

1- Move the Module against the housing chamber, see figure 1
2- Rotate module to 25°, insert it until the module surface reaches the ramp, figure 2, 3
3- Rotate the module to horizontal position, see figure 4
4- Fix the module by screw, see figure 5



Note

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

Notice

ZEBAX TECHNOLOGIES
SANTA CRUZ, CA U.S.A (831) 2 2 2 – 0717
WWW.ZEBAX.COM

SPECIFIED DIMENSIONS ARE INCHES (MM).
ROHS COMPLIANT

ASSEMBLY DRAWING

ITEM: ZX122AX M.2 NGFF PCISIG

DESCRIPTION: M.2 NGFF PCISIG passive adapter converter module ANY keys A B E and M

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