

Product Name: ZX230CAS USB type C test fixture TPA-R TDR electrical test fixture breakout adapter for 10+GHz bandwidth applications

Product Description: USB Type C TPA-R TDR electrical test fixture breakout adapter supporting **USB Type C receptacle** connector. **ZX230CAS** TPA USB type C electrical test fixture is designed for application requiring USB type C connector, but have application specific signal assignments, including **Display Port (DP) HDMI** , connector characterization and more. ALL USB type C signals are accessible for test and measurement. ZX230CAS is designed for 16GHz applications offering reduced insertion loss and full flexibility in adapting to any designs applications for purpose of validation, characterization and functional test.

The ZX230CAS is designed in multi-layer PCB with 50 Ohms trace impedance. ZX230CAS USB type C test fixture offering best in class signal integrity and performance. The test fixture is designed to meet variety of applications using USB type C connector such as DP, HDMI and more.

- 1- All signals (from USB type C connector) are accessible at SMA connector.
- 2- Accessible GND test points for easy access to the fixture GND layers
- 3- Using ZX00SMAS-P cable assembly, the ZX230CAS may be interfaced with any test equipment, evaluation module requiring standard pin header.

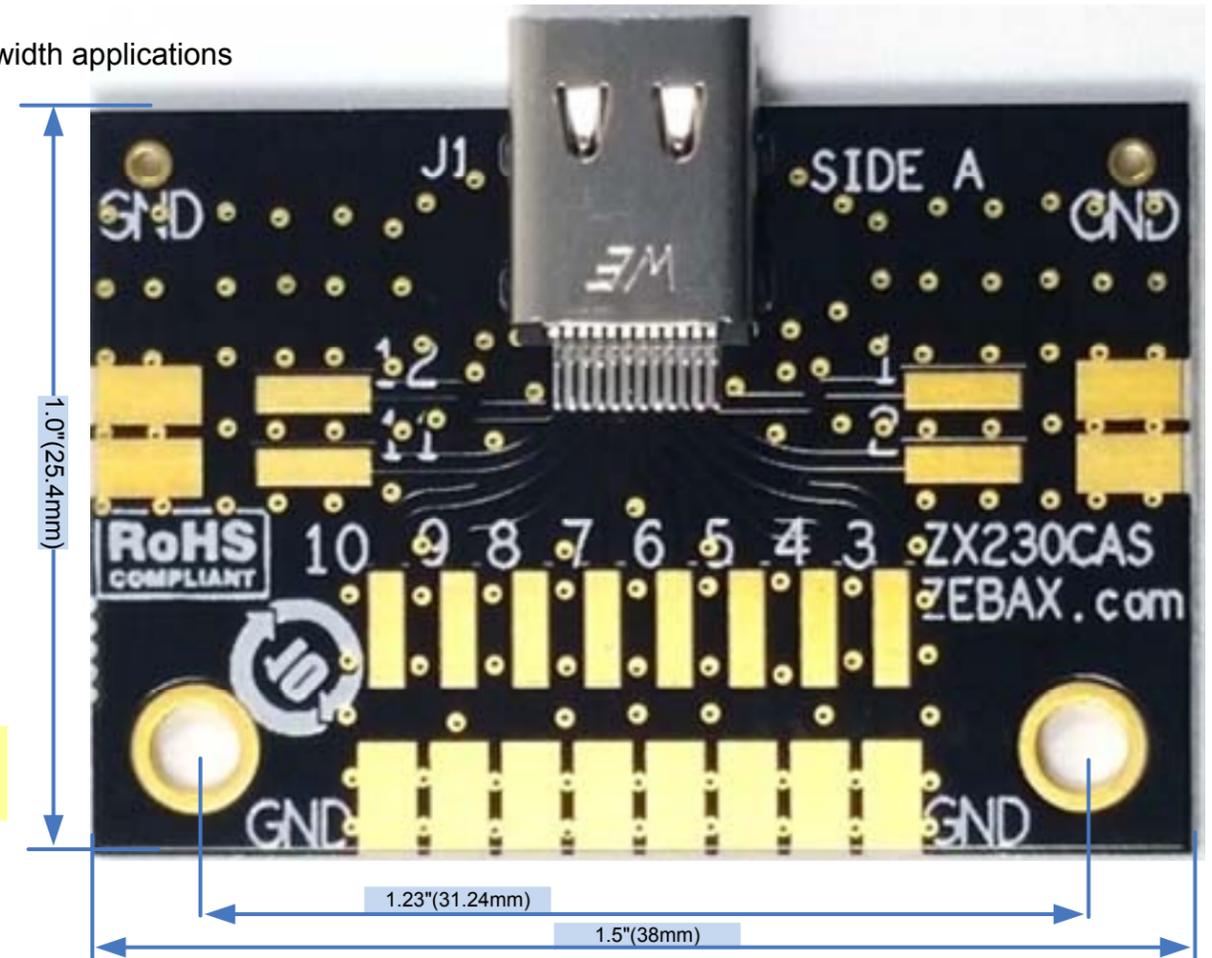
ZX230CAS is offered with 5.5" (14cm) long semi-flexible coax cable assemblies with SMA Jack connectors interfacing directly to scope probe , test equipment or other cable assemblies, Please see ordering Information.

Application: Full USB 3.1 electrical test fixture – Electrical measurement of application specific designs such as Display Port, DP, or HDMI, connector characterization and more.

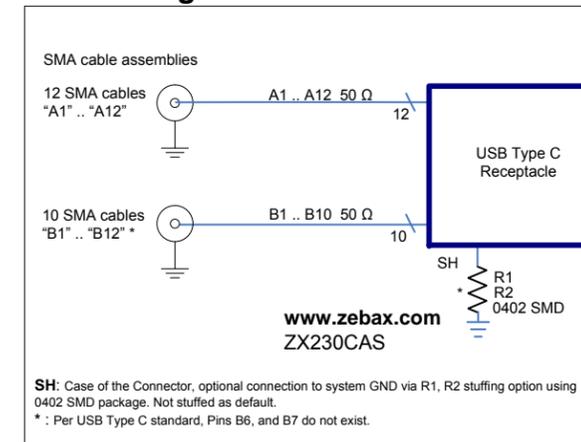
See Page 2 for more information

Supported bandwidth: Supporting SuperSpeed Gen1 (2.5GHz) SuperSpeed Gen2 (5GHz) and future 20Gbps (10GHz) Nyquist frequencies, bandwidth.

Mates with : **USB Type C Socket (receptacle)** connector.
SMA connectors mates with standard SMA cable assembly , see ordering information



Circuit Diagram



Ordering INFO:
Part Number
ZX230CAS

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

Package includes:

Item	Part number	Quantity	Description
1	ZX230CAS	1	USB Type C test fixture
2	ZX230CR	0	USB Type C test fixture
3	ZX230CAS	0	USB Type C test fixture - application specific
4	ZX00SMAH-P	0	SMA to 2 pin header cable assembly
5	ZX00WT-09NM	0	SMA Wrench Torque 5/16" (8mm)

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SPECIFIED DIMENSIONS ARE INCHES (MM). ROHS COMPLIANT

ASSEMBLY DRAWING
ITEM: ZX230CAS

DESCRIPTION: USB 3.1 Type C Receptacle TPA-R electrical test fixture breakout adapter Gen1 Gen2

CHECKED: M. MARINA
DRAWN: SLAVIK
REVISION: 1.0
SHEET 1 OF 2

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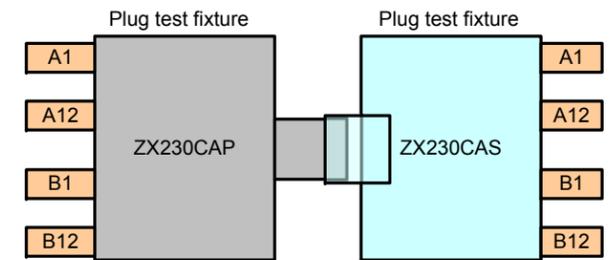
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S-Parameter, Insertion loss: The ZX230CAS USB type C test fixture exhibits unprecedented insertion loss. Using Agilent NA, the s-parameter for all the signal lanes have been compiled for reference, see below.

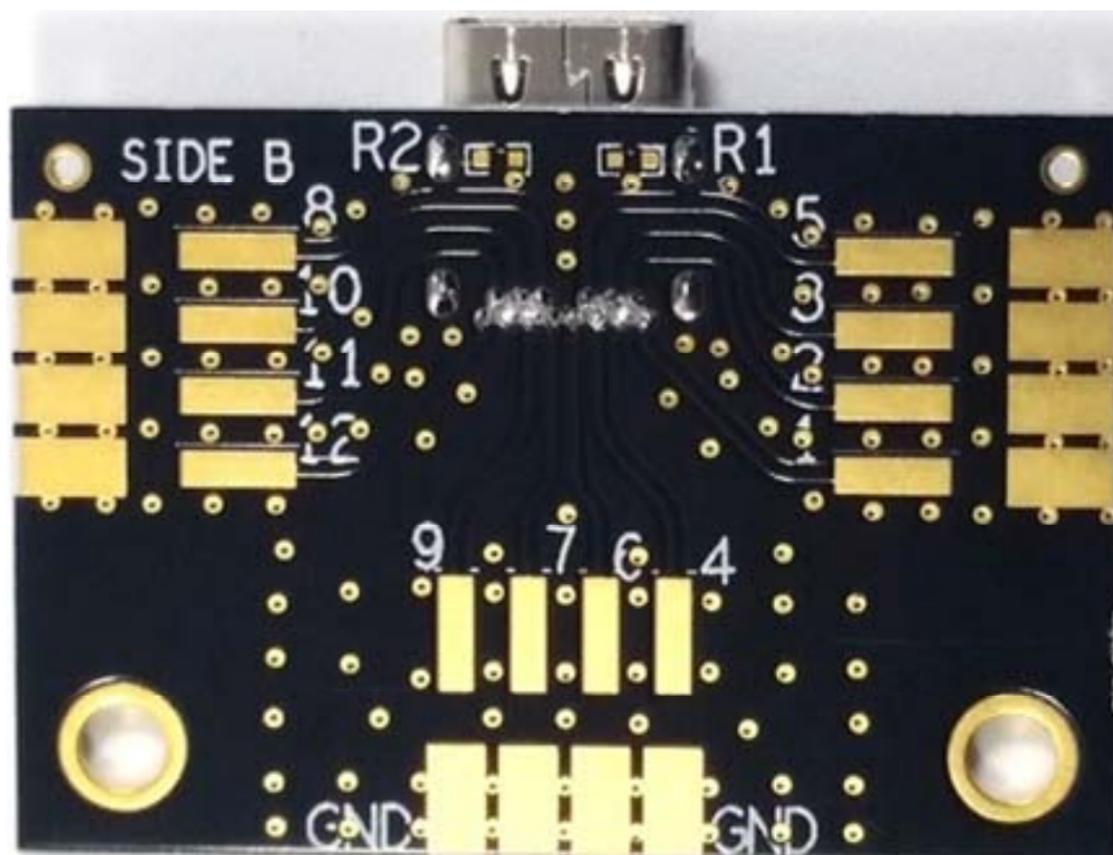
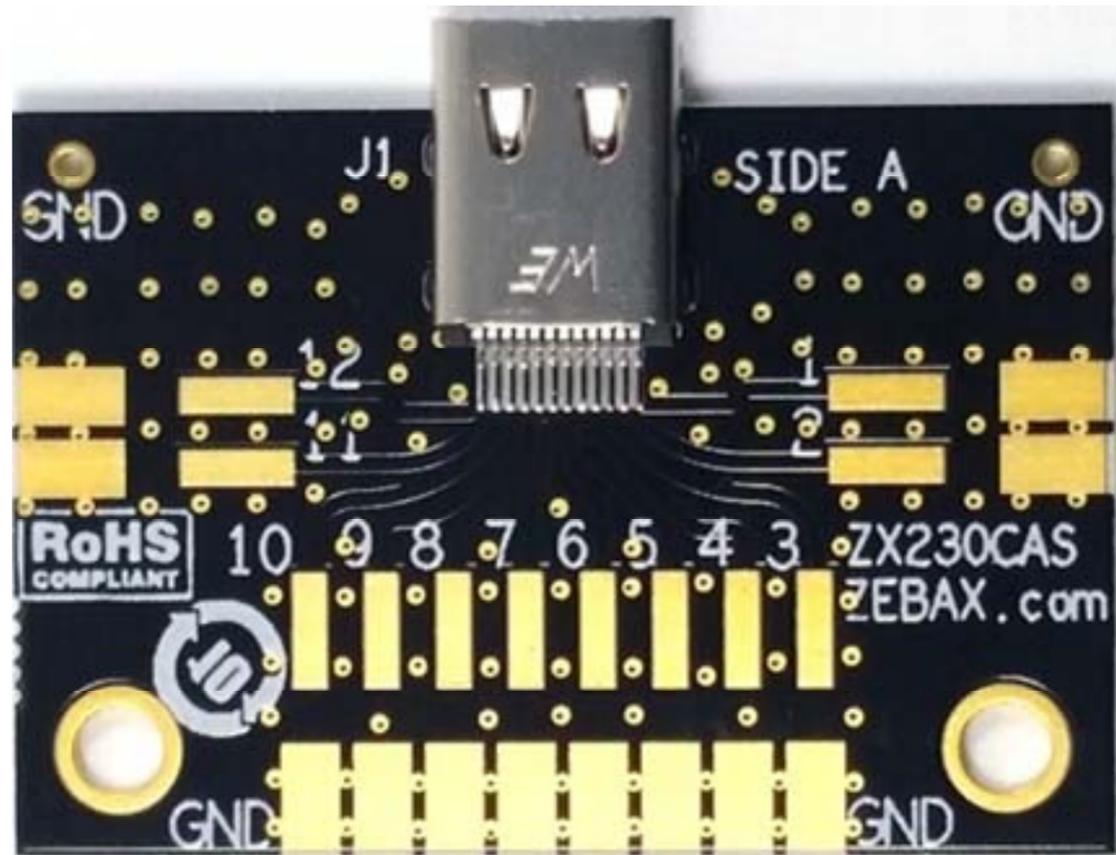
Test case: Using mated network configuration (ZX230CAP – ZX230CAS)

S-Parameter files: ZX230CAP-ZX230CAS – It is .7z file. It consists of 22 .s4p files.



Test network : ZX230CAP – ZX230CAS Plug and Receptacle via the supplied SMA cable assembly

S12 : A1 A2 A3 A4 A5 A6 A7 A8 A9 A10 A11 A12
S11: B6, B7 on ZX230CAS module only



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