

Product Name: ZX200L508-HD-x HDMI 2.0 TPA-T termination module – High frequency 50 75 Ohms

Product Description: HDMI 2.0 TPA-T termination load module as required by HDMI Compliance Test Specification, CTS. ZX200L508-HD-x complements Zebax's ZX200x-x HDMI 2.0 test board or other HDMI solution with built-in termination and precision termination supply voltage at 3.3VDC. Other applications may apply any external termination supply voltage via the J10, standard 2x1 0.1" (2.54mm) pitch header - Please see ordering Information.

ZX200L508-HD-x is USB based , self contained termination module with low insertion loss module, tailored for HDMI CTS applications as well as any high speed test and measurements.

Insertion loss: -1.62dB at 3GHz
 -6.07dB at 6GHz
 -13.6dB at 8GHz

Termination load: Precision 49.9 Ω 0.1%
 Termination supply: 3.3V 0.1% tolerance
 SMA connector: Jack or Plug, Please see ordering Information.
 USB interface: USB cable assembly to interface to scope's USB port (Tektronix, Keysight / Lecroy)

ZX200L508-HD-x supports Keysight Tektronix Lecroy test equipment by providing SMA Plug or Jack. Please see ordering information.

Application: HDMI 2.0 as required by CTS – all signal measurements requiring low loss solution with precision termination and voltage

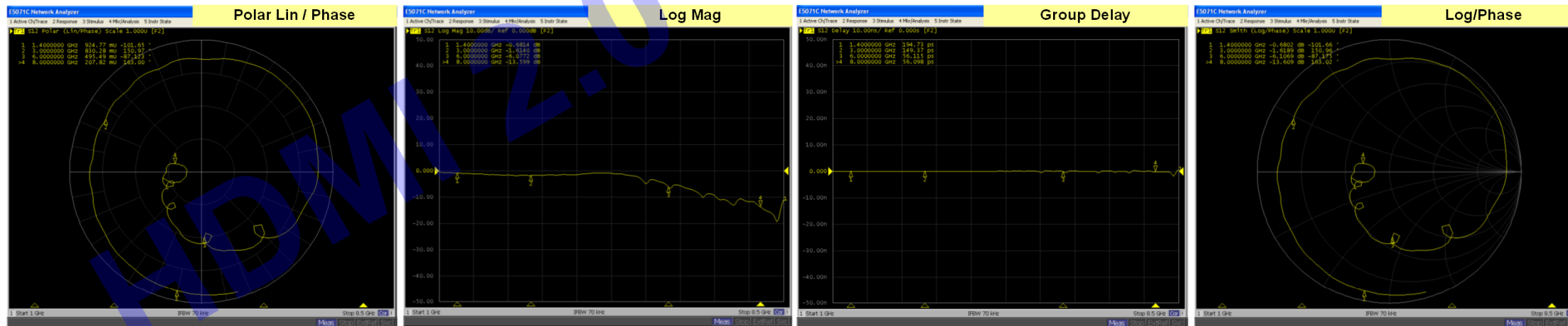
Operating frequency: DC to 10GHz signal bandwidth at the header landing pad

Mates with : **SMA connectors** mate with standard SMA cable assembly , please see ordering information
USB Plug type B. The USB cable assembly is supplied with the ZX200L508-x-x

Test procedure: [ZXAN-HDMI-2.0-Test-Procedure](#) application note provides HDMI test procedure.

S-Parameter, Insertion loss: ZX200L508-HD-x exhibits low insertion loss for high high frequency applications. The following data is obtained from ZX200L508-NA-x termination module using network analyzer. Please see diagram for details. Please download the S-Parameter file, .s2p file from here :

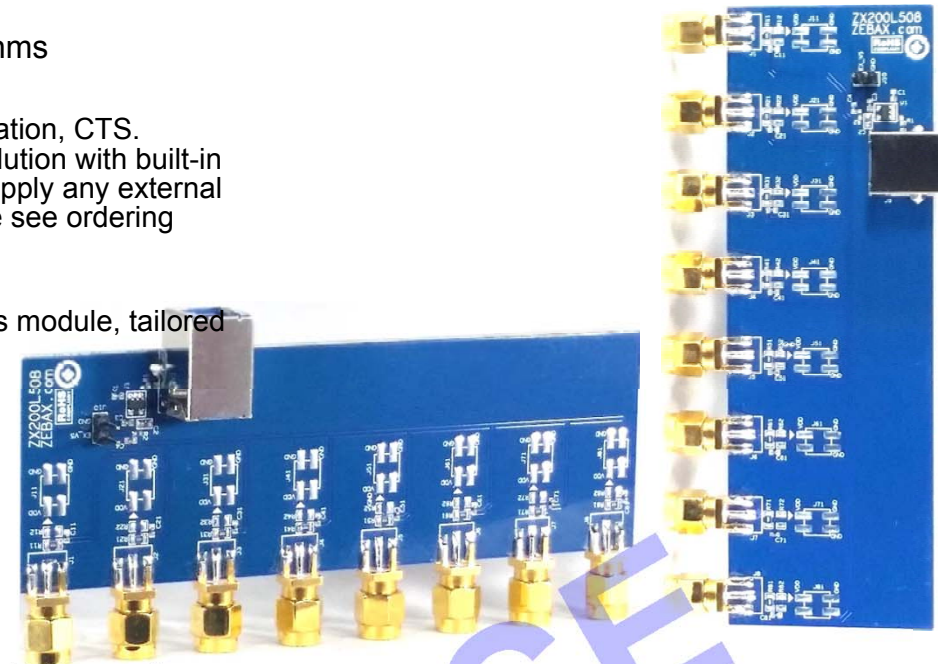
S-Parameter : [ZX200L508-HD-S-Parameter](#)



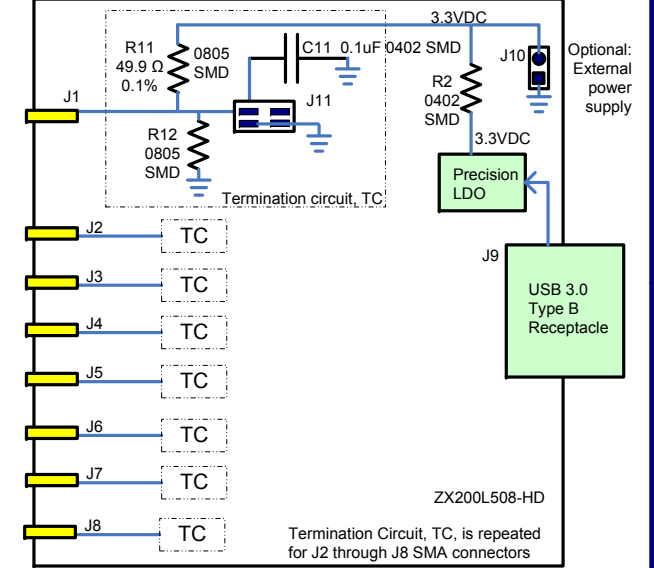
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Circuit Diagram



Note: To stimulate the termination circuit via external source, please remove R2.

Package includes:

Item	Part number	Quantity	Description
1	ZX200L508-x-x	1	HDMI TPA-T terminal module
2	ZX0030PAPB	1	USB 3.0 Type A Plug to Type B Plug
3	ZX000101xx	0	SMA Jack to SMA Jack cable assembly
4	ZX000202xx	0	SMA Plug to SMA Plug cable assembly
5	ZX00WT-09NM	0	SMA Wrench Torque 0.9N.m (8 lb-in)

Ordering INFO:

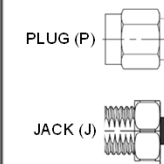
Part Number
 ZX200L508-X-X options

- J : SMA Jack (Standard)
- P : SMA Plug connector

HD : 49.9 Ω 0.1% pull up termination
 75U : 75 Ω 0.1% pull up termination
 50D : 49.9 Ω 0.1% pull down termination
 75D : 75 Ω 0.1% pull down termination
 NA : No R1x or R2x are stuffed

HD : All R1x [x=1 to 8] are stuffed with precision 49.9 Ω 0.1% - HDMI CTS
 75U : All R1x are stuffed with precision 75 Ω 0.1%
 50D : All R2x components are stuffed with precision 49.9 Ω 0.1%
 75D : All R2x components are stuffed with precision 75 Ω 0.1%
 NA : All R1x and R2x will NOT be stuffed, user option to install with any other value or components

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



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SPECIFIED DIMENSIONS ARE INCHES (MM). ROHS COMPLIANT

ASSEMBLY DRAWING

ITEM: ZX200L508-X

DESCRIPTION: HDMI-TPA-T Termination Block – High Frequency terminal block 50 75 Ohms

CHECKED: M. MARINA

DRAWN: SLAVIK

REVISION: 1.0

SHEET: 1 OF 2