

Product Brief



Xgig[®] 5K8 Analyzer Platform

for PCI Express[®] 5.0 early eco-system enablement

Provides full-speed 32GTps data capture, enabling detailed functional and performance analysis of PCIe protocol



The Xgig 5K8 platform provides protocol analysis for PCIe 5th generation traffic at all layers of the stack. It supports link widths up-to 8-lanes and link speeds to 32GT/s.

The Xgig 5K8 Protocol Analyser expands the family of Viavi protocol analysis products targeting early PCIe 5.0 eco-system chip development companies. In today's complex multiprotocol environments where integrated analysis with other interfaces such as Ethernet, SAS and FC are required, the Xgig 5K8 connects with other Viavi protocol analysers designed for these protocols to provide time correlated multi-protocol views.

The Xgig 5K8 chassis has 128 GB of memory; 64GB for upstream and 64GB for downstream traffic capture. The chassis provides advanced PCIe and NVMe level trigger and search capabilities designed to reduce debug and problem resolution down time. Interposer auto-tuning greatly simplifies and speeds up system use and enables repeatable capture results.

KEY FEATURES

- 32GTps, PCIe 5.0 data rate operation. Fully compatible with other PCIe data rates of 2.5, 5.0, 8.0 and 16.0 GTps
- Link widths to 8-lanes
- 128GB memory (64GB Upstream and 64GB Downstream)
- Memory segmentation for capture of multiple traces
- Host-Client connection for remote debugging using Ethernet or local debugging using USB
- Decodes all PCIe and NVMe traffic at all layers of the stack including the TLP, DLLP and PHY layer logic sub-blocks
- Trigger and search events including training sequences, ordered sets, queue pairs, PRPs, Scatter/Gather Lists (SGL) etc.
- Cascade up to 4 Xgig captures into a single trace view
- Full support of LTSSM for PCI Express
- Field replaceable modular fan and power supply assemblies
- LED's give quick indicators of power and status
- Size (W x D x H): 17.0 x 14.5 x 2.3 in; 43.2 x 36.8 x 5.8 cm
- Weight: 15 lbs; 6.8 kg
- Power: 100—240 VAC, 450W maximum
- Works with Gen5 interposer for CEM x8
- Works with Gen 4 interposers for CEM slot, Flying Lead probes, U.2 (SFF-8639), M.2, SFF-8674/8644, Oculink etc.

Additional features include configuration space viewer, PCIe link performance measurements, trace view packet compression and sideband signal triggers for PERST#, PEDET#, PEWAKE# and CLKREQ#. Multicoloured LEDs on the front panel specify Link Speed, Lane Width and Signal Quality.

APPLICATIONS

The 5K8 hardware chassis and complementary Xgig software tools support the latest PCIe 5.0 and NVMe specifications.

Analysis will alert the user to all protocol errors at every layer of the PCIe stack, including state and sub-state level errors within the LTSSM viewer.

When purchasing the 5K8 platform also select an analyser licence and interposers to fit your specific application requirements

KIT CONTENTS

Item	Description	Qty
1	Xgig4K-PCIe5-X8, 4-lane chassis for PCIe 5.0	1
2	Mechanical accessory kit (includes: Cat5e and USB cables, USB recovery drive, power cord)	1
3	Rack mounting tray	1
4	Hard-shell, wheeled travel case with padding	1

ORDERING INFORMATION

Part Number	Description
Xgig4K-PCIe5-X8	8-lane, 32GTs PCIe 5.0 Analyzer Platform Chassis with 1-yr HW and 1-yr SW maintenance
Xgig4K-PCIe5-X8-H1	Optional 1-year extended hardware warranty
Xgig4K-PCIe5-X8-M1	Optional 1-year extended software maintenance warranty



GCH Test & Computer Services Limited
 Tel. +44 (0) 1628 559980
 Email: sales@gch-services.com
 Web: www.gch-services.com

©2020 GCH / Viavi Solutions Inc.
 Product specification and descriptions in this document are subject to change without notice