

## Rocket 7634D

External PCIe Gen5 x16 CopprLink HIC

### The industry's 1st Independent PCIe Gen5 x16 External CopprLink Adapter

Engineered to serve as the cornerstone of next-generation external PCIe fabrics, the Rocket 7634D robust external CDFP-CopprLink connectivity compact low-profile form factor, and proven PCIe Gen5 switching technology deliver the bandwidth, reliability, and interoperability demands of disaggregated computing, AI driven applications and performance hungry HPC and professional media workflows.

Built in full compliance with the PCI-SIG CopprLink specification, the Rocket 7634D functions as a professional-grade Host Interface Card (HIC); enabling direct, non-blocking connections between servers or workstations and external GPUs, accelerator and I/O cards, or NVMe storage enclosures - without the compromises of tunneling or legacy interconnects.

### Feature Highlights

- Dedicated Industry's 1st External PCIe Gen5 CopprLink HIC
- x16 Dedicated Gen5 lanes for CopprLink compliant devices
- Uncompromised external Expansion Solution for High-End Accelerators: GPUs, FGPA, I/O Devices & NICs
- Seamless, Plug-and-Play Software-less Installation
- Compatible with x86 & ARM Platforms

### Key Features

#### Proven PCIe Gen5 x16 Switch Architecture



- Powered by Broadcom's PEX 89048 PCIe Gen5 Switch Chipset
- Eliminates compute and storage contention for maximum throughput

#### The Standard of Reliability: PCI-SIG CopprLink



1x External CDFP-CopprLink Port for Accelerator expansion: *Complies with PCI-SIG CopprLink standard, ensuring signal integrity at Gen5 speeds*

#### Rapid Integration



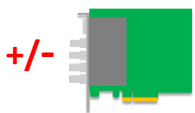
Pair the Rocket 7634D with validated, off-the-shelf NVMe Storage Enclosures, such as the RocketStor 6600 series, or eGPU Expansion Enclosures, such as the RocketStor 8000 series, for quick deployment into existing industrial server or workstation environments.

#### Designed for Space-Constrained Servers:



The Rocket 7634D is built with system integration in mind. Its CEM Low-Profile form factor ensures the card fits seamlessly into compact, space-constrained server environments, maximizing rack density without sacrificing the massive Gen5x16 bandwidth it enables.

#### Expansion on Demand: Disaggregated Computing Solutions



External CDFP/CopprLink connectivity enables administrators to quickly add or remove accelerators and I/O devices to the host platform, as needed, simplifying integration and maintenance procedures while freeing up valuable interior space for core hardware componentry.

#### Offset Power Consumption and Heat Management from Server and Workstation environments:



The Rocket 7634D can enhance the efficiency & reliability of compact server and workstation platforms. The external CopprLink connectivity enables demanding I/O and accelerator cards to be hosted outside of the chassis, effectively isolating sensitive computing hardware from waste heat and power demands of high-performance PCIe Gen5 devices.

#### Firmware Customization and Project Support:

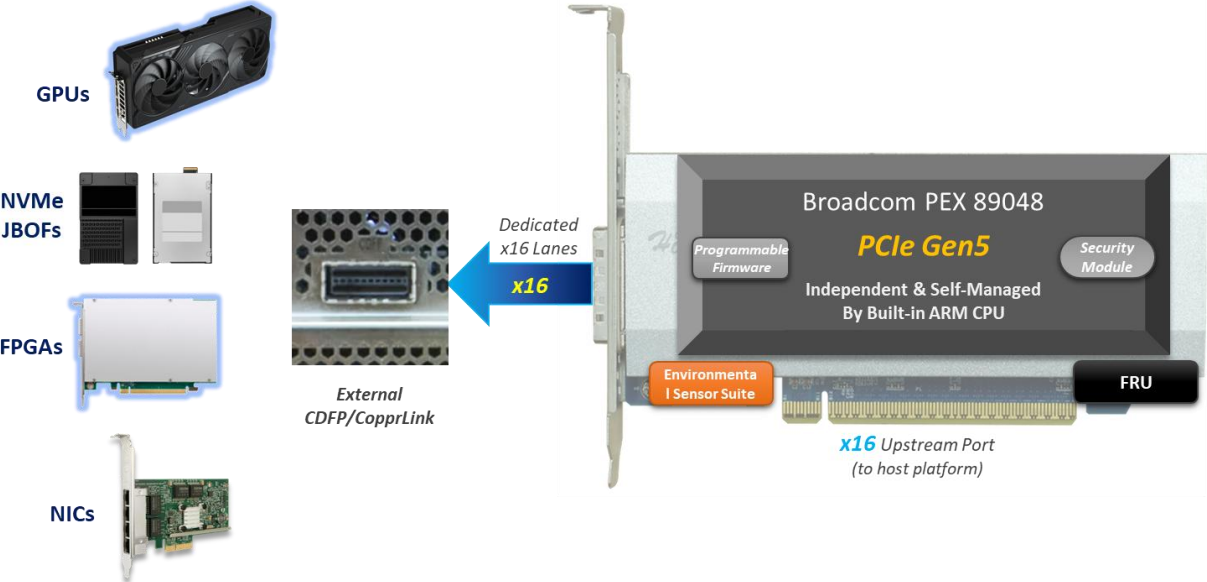


The integrated Broadcom 89048 Switch and HighPoint's engineering expertise enables flexible Firmware customization for customer defined projects; ideal for OEM solutions or looking to integrate HighPoint NVMe Storage or external PCIe expansion enclosures.



Widely compatible with Industry Standard CopprLink Devices

The Rocket 7638D is powered by industry proven PCIe Gen5 Switching Architecture, which delivers a full x16 lanes of PCIe bus bandwidth, and is capable of transmitting data at a staggering 60 GB/s, in either direction, with minimal latency! This level of sustained transfer speed is essential for data intensive applications including AI, ML, Scientific modeling and Engineering, and 3D design and animation workflows, all of which increasingly rely on high end GPUs and today’s fastest NVMe storage to maintain optimal performance.




Full Ecosystem Support for Industrial Applications

The Rocket 7634D's compliance ensures it functions as a universal Host Interface Card (HIC), enabling it to serve as a critical bridge for connecting industrial servers and workstations to performance-hungry external compute devices and NVMe storage.


Application Type	External Device	Benefit & Use Case
Compute / Accelerator	GPU/PCIe Expansion Enclosures	<b>Unlocks Maximum Compute Power:</b> Provides dedicated, non-blocking Gen5×16 bandwidth to high-TDP GPUs, FPGAs, or DPUs. Critical for AI training and scientific simulation.
Performance Storage	NVMe JBOF Enclosures	<b>Eliminates Storage Bottlenecks:</b> Creates a direct-attached storage fabric, delivering the raw Gen5 throughput necessary to feed high-performance accelerators. Essential for I/O-intensive database and data analytics.

Artificial Intelligence & Machine Learning (AI/ML)




Uncompromised host to device bandwidth facilitates Faster training and inference

HPC (High Performance Computing)




Optimized throughput for complex simulations, climate modeling, and analytics

Scientific Research



Accelerated workflows for imaging, data acquisition, and real-time processing

Media Editing & Content Creation






Smooth 8K video editing, VFX rendering, and data-intensive production pipelines



Product	RocketStor 8631D
Bus Interface	PCI-Express 5.0 x16
Hardware Architecture	Asteralabs PCIe 5.0 Retimer Technology
CoopLink Compliant	Yes (CDFP Pin Definition)
Number of Channel / Devices	1 x CDFP (Dedicated PCIe 5.0 x16)
Port Type	CopprLink CDFP (Gen5)
Data Transfer Rate	64GB/s
Power Measurement	Yes
Number of GPU Supported	1
GPU Support	Full-height, 2-slot and 3-slot GPUs
	Up to 370mm x 170mm (to Gold Finger) x 88mm & below
Power Measurement	Real Time Power Measurement
Audible Alarm	High Temperature, Low-Fan Speed Warnings
Smart Fan Control	Dynamically adjusts fan speed to address changing temperature conditions
	Manually Select from 5 Speed settings (Ultra-Low to Full)
Enclosure Dimensions	18.66" x 11.26" x 6.10"
Product Weight	13.4 lbs.
Front Panel LEDs	
Power Switch	Powers On/Off the unit. Illuminates blue when powered On.
Back Panel	
CDFP Port	Upstream Port for PCIe 5.0 1x16
Mute Button	used to mute the audible alarm
Supported Systems	
OS Support	Any OS with native PCIe device support
Software Secure Boot	Yes
Hardware Secure Boot	Yes
Management Software	
Firmware Upgrade Tools (MPT Utility)	Used to upgrade both the MCU firmware and Retimer Firmware
Operating Environment	
Work Temp	+5°C ~ + 55°C
Storage Temp	-20°C ~ +80°C
Operating Voltage	100V ~ 240V AC In
Power Supply	1300W



Expansion Accessories			
RocketStor 8631D - PCIe Gen5 x16 CopprLink Expansion Enclosure		RocketStor 8631C - PCIe Gen5 x16 eGPU Expansion Chassis	
	<p><b>Supports 1x Gen5/Gen4 Accelerator:</b></p> <ul style="list-style-type: none"><li>• Full-length, Full-height</li><li>• Up to 3-Slot Width</li></ul> <p><b>Max Card Size:</b> 370mm x 170mm x 88mm Includes Gen5 x16 CDFP/CopprLink cable</p>		<p><b>Supports 1x Gen5/Gen4 GPU:</b></p> <ul style="list-style-type: none"><li>• Full-length, Full-height</li><li>• Up to 3-Slot Width</li></ul> <p><b>GPU Max Card Size:</b> 370mm x 170mm x 88mm Includes Gen5 x16 CDFP/CopprLink cable</p>
CDFP-CDFP-1M - 1 Meter CDFP to CDFP cable			
	<ul style="list-style-type: none"><li>• PCIe Gen5 x16</li><li>• Compatible with CopprLink Devices</li></ul>		

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