



RocketStor 8531AW

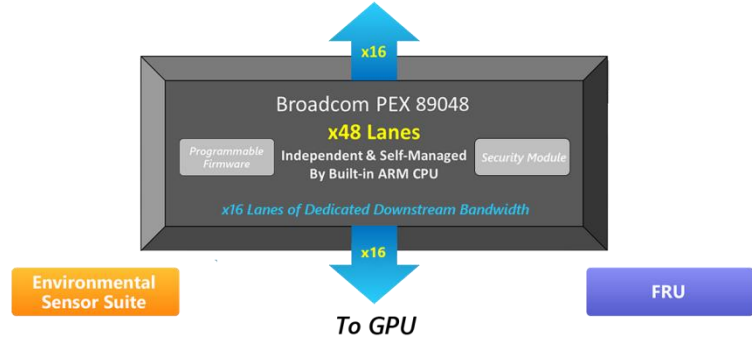
PCIe Gen4 x16 eGPU Expansion Chassis

RocketStor 8531AW: PCIe Gen4 x16 eGPU Expansion Chassis

HighPoint's RocketStor 8531AW is a high-performance eGPU expansion chassis designed for applications requiring high bandwidth and low latency. The RocketStor PCIe GPU Expansion chassis represents the industry's only true dedicated PCIe Gen4 x16 solutions, designed to unlock the full potential of top-tier NVIDIA, AMD, and Intel GPUs. This breakthrough technology is ideal for platforms constrained by limited PCIe slot space or encounter performance bottlenecks with Thunderbolt or OcuLink solutions.

Industry Leading PCIe Switching Architecture

RocketStor 8531AW is powered by HighPoint's revolutionary PCIe Gen4 Switching Architecture, which leverages Broadcom's industry-leading PEX89048 IC to optimize signal integrity, minimize latency, and maximize data transfer speed. This solution provides 48 lanes of internal PCIe Gen4 bandwidth; 16 lanes to the upstream connection for both the host platform and GPU; achieves a maximum data transfer rate of 32GB/s; and minimizes latency through optimized design and components.



Feature Highlights

- **Unrestricted Performance:** Industry Leading PCIe Switching technology guarantees x16 host to device bandwidth
- **Universal GPU Compatibility –** Supports full-height, 2-slot and 3-slot NVIDIA, AMD, Intel, etc. GPUs
- Directly Provides up to **600W of power** for high-end GPUs
- Robust, Enterprise Grade External **PCIe x16 CDFP** connectivity
- **Low-profile host interface** adapter is Ideal for compact systems
- **Advanced Dual-Fan Cooling System** with Programmable Smart Fan Control prevents thermal throttling
- **Seamless, Plug-and-Play Software-less Installation** for Linux & Windows Platforms

Advanced Field Service Feature Suite

FRU (Field Replicable Unit) Support: Rocket 1634C is field replaceable units (FRU); the VPD stored on each adapter enables customers and service providers to easily procure replacements with the correct firmware/driver combination.

Superior Performance and Universal GPU Compatibility

Leveraging industry-leading PCIe switching technology, the RocketStor 8531AW ensures x16 host-to-device bandwidth, delivering unrestricted performance for demanding workloads, superior performance than conventional Thunderbolt or OcuLink solutions. The RocketStor 8531AW supports a wide range of full-height, 2-slot, and 3-slot GPUs from leading manufacturers like NVIDIA, AMD, and Intel, making it a versatile choice for diverse computing needs.



Advanced Cooling System

An integrated dual-fan cooling system with programmable smart fan control prevents thermal throttling, ensuring consistent high-performance operation.



Pro-Active Hardware Monitoring System

The RocketStor 8531AW includes automated smart modes and manual operation flexibility, paired with an intuitive user interface that tracks and logs the status of the GPU, enclosure, and hostA dapter hardware in real time. Additionally, the product is equipped with hardware monitoring capabilities, including GPU operating status, electrical characteristics, fan control features, GPU/enclosure temperature, and PCIe connection status, providing comprehensive insights into system health and performance.



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R1634C(111112L111111) $ info
Product: R1634C
Vendor: HighPoint Technologies, Inc.
Model: R8531AW External PCIe Chassis
SN: 111112L111111

PCB Version: 1.0
Firmware Version: 5.12.72.0
MCU Version: 1.0.4
Retimer Version: 2.12.0

Chip temperature: 68 (C)/147 (F)
HID chip temperature: 39 (C)/102 (F)
Enclosure 3.3V Voltage: 3.358 V
Enclosure 12V Voltage: 12.848 V
Enclosure 5V Voltage: 5.836 V
Power Consumption: 32.24 W
Fan Speed: Auto(960 RPM, 1020 RPM)

Channel(Port) Status MaxLinkSpeed LinkSpeed MaxLinkWidth LinkWidth
1( 10) 0N 32.0 GT/s 16.0 GT/s x16 x16

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Vital Product Data
Product Name: HighPoint Rocket 1634C Gen5 NVMe Switch Adapter
[PK] Part number: R1634C-41C0000
[SC] Engineering changes: 0000
[PK] Manufacture ID: 1103
[SN] Serial number: 111112L111111
[V0] Vendor specific: HighPoint Technologies
[V1] Vendor specific: Broadcom PEX9904B
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Elegant & Robust: CDFP Connectivity&Power Delivery

Equipped with external CDFP cables, the RocketStor 8531AW offers enterprise-grade reliability and low-latency connectivity, ensuring seamless and high-performance data transfer for demanding workloads. The chassis provides up to 600W of direct power, ensuring that even the most power-hungry GPUs operate at peak performance.

Up to 600W, direct to the GPU!



Product Model	RocketStor 8531AW
Hardware Features	
Host Interface Card	Rocket 1634C
Enclosure Device	Leon-1
Cable	1M CDFP to CDFP Cable (Gen4)
Rocket 1634C Hardware Features	
Bus Interface	PCI-Express 5.0 x16 (Operates at PCIe Gen4 x16)
Hardware Architecture	Broadcom PEX 89048 PCIe Switch Technology
CooprLink Compliant	Yes (CDFP Pin Definition)
Number of Channel / Devices	1 x CDFP (Dedicated PCIe 4.0 x16 per port)
Port Type	CDFP (Gen4)
Data Transfer Rate	32GB/s
LED Indicators	
Host Status LED	Indicates the Bandwidth of Rocket 1634C's PCIe connection (Connection with MotherBoard)
CDFP Status LED	Indicates the CDFP Connection Status (to External Chassis)
Power Measurement	Yes
FRU Support	Store VPD
CDFP Hotswap	No
Form Factor	Low Profile
Dimensions	68.9 mm X 165 mm
Leon Chassis Hardware Features	
Bus Interface	PCI-Express 4.0 x16
Number of Channel / Host	1
Host Port Type	CDFP (Gen4)
Data Transfer Rate	32GB/s
Number of GPU Supported	1
GPU Support	full-height, 2-slot and 3-slot GPUs
	360mm x 120mm (to Gold Finger) x 75mm & 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)
Front Panel LEDs	
Power Switch	Powers On/Off the unit. Illuminates blue when powered On.
Back Panel	
CDFP Port	Port for CDFP cable
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

Working Temp.	+5°C ~ + 55°C
Storage Temp.	-20°C ~ +80°C
Operating Voltage	100V ~ 240V AC In; 600W
Power	TBA
MTBF (Mean Time Before Failure)	TBA

Kit Contents

Kit Contents	1x Rocket 1634C
	1x External PCIe Chassis (Leon-1)
	1x CDFP-CDFP-1M Cable (Gen4 , 1M)
	1x QIG
	1x 2x4 connectors to 2x4 connectors Cable (x3)
	1x UL Cable

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