

## Cerio Solutions for Media & Entertainment

COMPOSE DYNAMIC SYSTEMS TO ACCELERATE YOUR DIGITAL CREATION INFRASTRUCTURE - ALL WITH THE BEST ECONOMICS AND SUSTAINABILITY.

## cerio

## Advancing innovation across the media pipeline CERIO M&E PACKAGE FUELS CONTENT CREATION

Acceleration is fueling innovation across the media production pipeline from pre to post, advancing everything from LED volume walls and VFX editing to Al-augmented breakthroughs. GPUs and new accelerators are the currency of this computing revolution, making it essential to find a more cost-effective way to access and use these critical resources.

The Cerio M&E Package reimagines system design, providing full control over the cost, choice and scale of digital creation infrastructure.

## Cut infrastructure by up to 50 percent

Traditional fixed systems force tradeoffs between density, scale and cost, while limiting the choice of servers or workstations. Getting the right level and availability of acceleration requires expensive redundancy to ensure reliable performance.

Cerio makes it possible to compose systems to match your workload – all defined and implemented in software. Significant reductions in footprint, over-provisioning, power and cooling translate into significant cost savings at any scale.

# Gain 4x productivity from your system

Proprietary stacks with fixed GPU ratios limit the availability of accelerators to run advanced preto post-production workloads. Overheated GPUs means adding more workstations to handle the load. And when GPUs are idle, they can't be reallocated to another workload or user.

With Cerio, you can design the system to fit the application and use case. Increase productivity by adding more GPUs, or mix GPUs and DPUs from different classes and vendors – without throttling.

## Cerio M&E Package Benefits

- Compose any GPU to any server or workstation with no BIOS changes
- Get more from your accelerators – minimize overheating and over-provisioning
- Choose any accelerator and mix with DPUs or other PCIe devices
- Dynamically remove or add devices – with zero downtime
- Use out of the box optimized for DaVinci Resolve, Unreal Engine and other widely used applications

## Right-size without compromise

Running a wide variety of applications and workloads for digital creation makes it very difficult to anticipate spikes in demand. With Cerio, you can make independent infrastructure choices that give you the highest productivity, efficiency and flexibility from your system.

- Choose the right workstation or server host and operating system
- Choose the right number of hosts and deliver full redundancy
- Choose the right accelerator and density and scale at any time

## Accelerate applications and workflows

Cerio provides the foundation for digital creation infrastructure to fit any application or workflow, from virtual production to VFX editing and finishing. Out-of-the-box support for Windows 10/11 and optimizations for widely used applications ensure rapid deployment and productivity. Use case examples include:

### VIRTUAL PRODUCTION - LED VOLUME WALLS

Studios rely on accelerators to create virtual worlds using tools such as Unreal Engine.

Issues: GPU throttling from overheating and redundant stacks for reliability increase cost and footprint.

How Cerio helps: Up to 2x GPU density and built-in redundancy reduce workstations and throttling by 30-50%.

#### **POST-PRODUCTION - FINISHING**

Creative teams use software such as DaVinci Resolve to collaborate on a range of finishing tasks, from editing to color grading. Accelerators increase efficiency and productivity. **Issues:** Low-density GPU workstations are creating bottlenecks in the workflow.

How Cerio helps: Up to 4x GPU density reduces over-provisioning and idle time.

#### **REMOTE VFX EDITING**

Access to accelerators for virtual desktop infrastructure (VDI) increases collaboration for remote creators. **Issues:** Low-density GPU workstations limit processing power and expensive licensing increases costs. **How Cerio helps:** Up to 4x GPU density without virtual licensing costs.

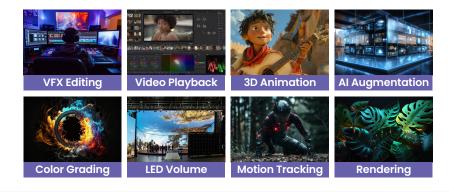


Figure 1: Drive more productivity from your infrastructure to accelerate innovation from pre- to post-production.

## Cerio Platform Technologies

The Cerio M&E Package is built on the proven technologies at the core of the Cerio Platform, providing a proven and robust foundation for highly available and dynamic operation. Fully PCIe-compliant, Cerio can be used with standard PCIe chassis, devices, workstations and servers to create the right system in minutes.

#### FABRIC MANAGER

The Cerio Fabric Manager is the software console that manages compositions and device chassis using a standards-based composability model. The Fabric Manager provides the logic and policies that automate system composition and resource allocation.

### FABRIC NODE

The Cerio Fabric Node delivers highly optimized distributed switching and transport services for composed systems. Self-configuring and self-healing, the Fabric Node connects server and workstation hosts to chassis containing GPUs and other PCIe devices - all inside a single high-performance domain.

## FABRIC INTERCONNECT

The Cerio Fabric SHFL brings the simplicity of prewired topologies to digital creation infrastructure. By decoupling the optics from the underlying switching, Cerio delivers scalable performance at a significantly lower cost and footprint using cabling that is entirely passive and requires zero power or cooling.



Figure 2: Design the infrastructure system that fits your content creation workflow.

## Cerio M&E Package TECHNICAL SPECIFICATIONS

## **DIGITAL CREATION SYSTEM REQUIREMENTS**

Platform Component	Specification	Description
Cerio Fabric Manager Software console	Server/OS	Any Windows 10/11, Linux worksta- tions or equivalent
Cerio Fabric Node Passively cooled, with double density Quad Small Form Factor	Form Factor	PCIe full-height, half-length
	Dimensions	111.15 mm x 167.65 mm
	Host Interface (PCIe)	PCIe Gen5 x8, Gen4 x16
	Power Consumption	40 W
Cerio SHFL Direct interconnect	Dimensions	Height: 88.4 mm Width: 482.6 mm Depth: 203.2 mm
	Weight	350 g
	Power Consumption	0 W
	3rd Party Hardware Specifications	
Hosts	Servers and Workstations	Supports any server or workstation - no BIOS changes required Windows 10/11 and Linux OS
Enclosures	PCIe Chassis	Gen 4, Gen 5
Resources	PCI Devices	Gen 3, Gen 4 and Gen 5
		RTX Series, Data Center-grade Accelerators
Ethernet Interface	Ethernet Management Port	10/100/GE RJ45
Console Interface	Management Port	USB-C serial

### ABOUT CERIO

Cerio is reimagining infrastructure with dynamic systems designed to accelerate productivity and fuel innovation at a sustainable cost and footprint. Leaders in software-defined composable infrastructure, Cerio has offices and projects spanning international markets, with Centers of Excellence in Europe and North America. Visit cerio.io.

Cerio is a tradename of Rockport Networks Inc. Other company product names, service names or trademarks mentioned herein may be trademarks of their respective owners.

# Get a technical deep-dive with one of our experts on what you've learned in our brochure.

Let's get social 🚫 in

#### CONTACT US

#### Headquarters

515 Legget Drive, Suite 500 Ottawa, Ontario, K2K 3G4 Canada

USA

530 Lytton Avenue, Floor 2 Palo Alto, California 94301 USA **Toll Free** 1.855.771.3818

Website cerio.io

Email info@cerio.io

Various trade names and trademarks, including Cerio and Simplify the Network, are trade names and trademarks of Rockport Networks Inc., DBA Cerio in Canada, the United States and/or other countries. Other company product names, service names or trademarks mentioned herein may be trademarks of their respective owners. Cerio does not grant any express or implied right to you under any trademarks.

This guide is copyrighted and protected by worldwide copyright laws and treaty provisions, and may not be copied, reproduced, modified, published, posted, uploaded, distributed, or transmitted, in whole or in part, without Cerio's prior written permission. Any unauthorized use of these materials may violate copyright, trademark, and/or other laws. Cerio does not grant any express or implied right to you under any copyrights.

© Copyright 2024 Cerio Inc. All rights reserved.