



Case Study:

Enhancing AI Application Performance with Cost-Effective RoCE Solutions at a Leading Semiconductor Company



Background

A leading technology company at the forefront of artificial intelligence (AI) faced a critical challenge: optimizing RoCE (RDMA over Converged Ethernet) performance for its AI applications without escalating costs. The company sought a solution that provided high performance without the premium price tag of specialized hardware, a necessity to maintain its competitive edge in a fast-paced market.

Objective

The goal was ambitious: to leverage the best possible performance for RoCE to enhance AI applications, ensuring both efficiency and economic viability. This required a solution that could sidestep the limitations of proprietary hardware solutions, which often come with high costs and limited flexibility.

Strategic Issue

The primary obstacle was the absence of a RoCE solution that allowed the use of commoditized, cost-effective hardware. Existing market solutions failed to offer the necessary balance of performance and cost, impeding the company's ability to scale its AI applications efficiently.

Solution

After thorough market exploration, the company adopted an innovative suite known as Aviz ONES with Disaggregated support.

Why Choose This Innovative Suite?

The decision to go with this particular solution was based on several key factors:

➤ **Vendor Agnostic:**

The company valued the flexibility to select hardware freely without being tied to specific vendors, reducing costs and increasing negotiation leverage.

➤ **Tailored for AI:**

The solution's RoCE stack was specifically optimized for AI applications, ensuring top-tier performance.

➤ **Economic Efficiency:**

It promised the lowest Total Cost of Ownership (TCO) efficiency, aligning with the company's strategic objective to keep solution costs low.

The Competitive Landscape

Despite considering other market players, the unique offerings of the selected suite—particularly its focus on cost efficiency and vendor neutrality—distinguished it from competitors, making it the preferred choice.

Key Outcomes

Implementing the Aviz ONES suite transformed the company's AI infrastructure. The company successfully designed, developed, tested, and automated their entire AI Fabric using Aviz ONES. This integration significantly reduced the TCO for their end-to-end solution, marking a substantial achievement in their pursuit of performance and cost efficiency.

Next Steps

Looking for a similar transformation? Contact Aviz Networks to discover how we can replicate this success for you. Visit us at www.aviznetworks.com.