SOLUTION BRIEF

NETAPP AIPOD MINI WITH INTEL FOR MANUFACTURING

Affordable, simple, and secure AI anywhere you need it. Unlock high-performing, flexible AI solutions that grow with your business and drive transformation.

Breaking through barriers to AI success

Deploying AI inferencing solutions for manufacturing organizations presents distinct challenges. Traditional AI projects can demand huge investments in high-end, on-site technology that can be fast and reliable enough for the factory floor. Costs to stream massive amounts of data to the cloud for processing can be prohibitive. Sending proprietary production data to the cloud poses a major IP security risk. IT and OT teams often lack the specialized skills for complex AI deployments. These solutions must be cost-effective, easy to implement, and scalable. However, enterprise AI infrastructures are often oversized and unnecessarily complex for these needs. This mismatch leads to wasted resources and slowed innovation.

To address these challenges, NetApp and Intel have collaborated to deliver NetApp® AIPod™ Mini, a purpose-built runtime AI solution for manufacturers. This streamlined, easy-to-deploy solution removes barriers to AI adoption. By combining Intel® Xeon® processors with NetApp's trusted storage and data management capabilities, it empowers teams with precise, context-aware AI insights, seamlessly integrating into workflows while delivering a powerful combination of affordability, efficiency, and high performance.

Harnessing the power of AI inferencing for manufacturing

NetApp AIPod Mini with Intel makes AI more accessible, empowering manufacturers to achieve meaningful outcomes. From optimizing operations to generating actionable insights, this solution is built for practical, scalable innovation. Its simplified approach helps manufacturers meet their goals while avoiding the common complexities of AI adoption.

An integral part of the solution is the Open Platform for Enterprise AI (OPEA), an open-source framework that simplifies deploying enterprise-grade generative AI solutions. OPEA ensures compatibility with current workflows and provides a modular approach to configuring

and optimizing AI workloads for specific manufacturing needs. By removing technical barriers and enhancing workflow integration, OPEA accelerates results and boosts efficiency.

The solution
NetApp AIPod Mini with Intel is a fully integrated solution designed for department-level manufacturing efficiency and flexibility. Key components include:

- Intel Xeon 6 processors with Intel Advanced Matrix Extensions
- NetApp AFF A-Series high-performance storage systems
- Open Platform for Enterprise AI (OPEA) framework

This solution is ideal for hosting departmental AI workloads, such as Retrieval-Augmented Generation (RAG) workflows, predictive analytics, and advanced inferencing models. Whether enabling local knowledge management or automating complex tasks like predictive maintenance, quality control and defect detection, or supply chain optimization, NetApp AIPod Mini drives measurable results from day one.

NetApp AIPod Mini is designed with security at its core. NetApp ONTAP® robust access control lists (ACLs) and metadata-driven governance ensure that sensitive data remains safe, preventing it from being shared inadvertently across teams or outside the organization. NetApp's unparalleled certifications, including FIPS 140-3 and NSA Commercial Solutions for Classified (CSfC), guarantee data protection at every level.

Achieve the full potential of AI inferencing
NetApp AIPod Mini with Intel combines the raw power of Intel Xeon 6 processors with Intel AMX, OPEA (an open source AI software stack) and NetApp's trusted data management capabilities to deliver high-performance departmental AI. It avoids unnecessary complexity and costs, giving manufacturers the power of cutting-edge inferencing without overspending.

Pretrained large language models (LLMs) and access to proprietary data repositories mean NetApp AIPod Mini can deliver precise, context-aware insights. Even subtle differences in interpretation or language are handled effectively, enabling AI models to adapt uniquely to your needs. Leveraging RAG knowledge graphs reduces computational loads, optimizing costs and performance.

Enable simpler, faster AI implementation
NetApp AIPod Mini tackles traditional challenges of AI implementation head-on. The intuitive OPEA framework accelerates deployment and ensures compatibility with existing infrastructures. Flexible configuration options make it easy to tailor the platform to specific workflows without adding overhead or complexity.

Automated processes powered by OPEA foster seamless scalability and adaptability, making NetApp AIPod Mini the go-to solution for evolving workflows. Easily update departmental models and ensure adaptive, dependable performance over time.

KEY FEATURES

Contextual accuracy and precision

- Uses pretrained LLMs to understand key nuances, providing more precise results—even subtle differences in wording or interpretation are handled effectively.

Instant access to local knowledge

- Integrates with local and proprietary data repositories to tailor AI models to manufacturing needs.

Proven security

- NetApp is the only enterprise storage vendor who is validated to store top-secret data. Our certifications include:
  - FIPS 140-2 and FIPS 140-3
  - Department of Defense Information Network (DoDIN) Approved Products List (APL)
  - Common Criteria
  - U.S. National Security Agency (NSA) Commercial Solutions for Classified (CSfC) Components List

Cost savings

- Optimized processing power through use of a RAG knowledge graph reduces computational load and operating costs.
- Efficient data handling minimizes errors and the workload on staff, significantly reducing costs.

Optimize to achieve success
NetApp AIPod Mini delivers tangible, high-impact results tailored to the unique needs of manufacturing organizations. By automating and enhancing key processes such as predictive maintenance, quality control, and supply chain optimization, it allows departments to focus on their core priorities and strategic goals.

This cost-effective AI solution reduces resource consumption while increasing operational productivity. By processing workloads closer to data sources, it ensures stronger data privacy, enhances governance, and lowers operational expenses. NetApp AIPod Mini empowers teams to harness the full potential of AI, driving actionable insights and meaningful outcomes while staying agile and efficient at scale.

KEY USE CASES FOR SECURE AI INFERENCING FOR MANUFACTURERS

PREDICTIVE MAINTENANCE

Predict equipment failures by analyzing real-time and historical data for proactive maintenance that minimizes unplanned downtime, reduces repair costs, and maximizes operational efficiency. This reduces reliance on external expertise and accelerates workflows.

QUALITY CONTROL AND DEFECT DETECTION

Identify product defects and anomalies with high precision to ensure quality, reduce waste, and enhance customer satisfaction.

SUPPLY CHAIN OPTIMIZATION

Improve demand forecasting, inventory control, and logistics to reduce costs, prevent stockouts, and enhance supply chain agility.

Get started today

NetApp AIPod Mini with Intel is your key to unlocking AI's full potential for your manufacturing organization.

NetApp

About NetApp

NetApp is the intelligent data infrastructure company, combining unified data storage, integrated data services, and CloudOps solutions to turn a world of disruption into opportunity for every customer. NetApp creates silo-free infrastructure, harnessing observability and AI to enable the industry's best data management. As the only enterprise-grade storage service natively embedded in the world's biggest clouds, our data storage delivers seamless flexibility. In addition, our data services create a data advantage through superior cyber resilience, governance, and application agility. Our CloudOps solutions provide continuous optimization of performance and efficiency through observability and AI. No matter the data type, workload, or environment, with NetApp you can transform your data infrastructure to realize your business possibilities.