

Theia

High performance GPU package

Theia is Beeks' high performance GPU solution designed for capital markets infrastructure. Theia combines high-frequency AMD EPYC processing with an NVIDIA L4 Tensor Core GPU, deployed in financial data centres in close proximity to major exchanges. It is provisioned as a single dedicated Linux host, giving you unshared, predictable resource that you control entirely.

Benefits

Faster time to insight

- Accelerates complex analytics and real-time Monte Carlo simulation for options pricing and Greeks, enabling intraday portfolio recalculation as positions change rather than relying on overnight batch runs.

Stronger trading performance

- Powers microsecond ML inference, live order book imbalance modelling and regime detection, enabling dynamic strategy adjustment without CPU-driven latency.

Improved AI and machine learning performance

- Supports faster model iteration with efficient fine-tuning and inference. Enables in-colo optimisation, keeping research and execution logic close to the market.

Lower infrastructure footprint

- Shifts classically CPU-bound workloads to highly parallel GPU architecture, delivering higher performance with fewer servers and reduced power and cooling demand.

Flexibility alongside existing infrastructure

- Designed to sit alongside current trading infrastructure. Supports growing data and compute demands without the need for major redesign.

Reduced operational burden

- Eliminates GPU infrastructure CAPEX, colo power negotiation, and hardware management, letting your team focus on strategy rather than servers.

Secure local LLM inference

- Run fine-tuned or open-weight models entirely within your secure colo environment - no cloud API latency, no per-token costs, and sensitive market data never leaves your security boundary.

Key Features

High performance enterprise GPUs

- Optimised for parallel processing and compute heavy workloads.

Low latency connectivity

- Hosted close to key trading venues and market infrastructure.

Secure data centre environment

- Financial grade hosting with strong physical and network security.

Deployment options

- Flexible configurations aligned to performance and compliance needs.

24/7 monitoring and support

- Proactive management to maintain uptime and stability.

Flexible configuration

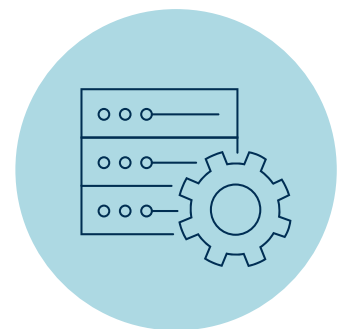
- Supports AI, quantitative modelling, pricing engines, and backtesting.

Integration ready

- Compatible with existing trading platforms and analytics frameworks.

Tech Specifications

- Single-socket AMD EPYC 4584PX CPU 16C/32T
- 4.2GHz
- 128GB RAM
- 1.92TB NVMe SSD
- NVIDIA L4 Tensor Core GPU
- Dual 10GbE NIC



Speak to the Beeks Sales Team today to find out how a GPU package could support your goals.

Contact us

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