NeuroBlade SPU
SQL Processing Unit

Holistic, industry-first, proven acceleration for petabyte-scale analytics processing

Level Up Your Analytics

10–100x performance improvement with **NeuroBlade**

The NeuroBlade SPU revolutionizes data analytics with 10-100x faster SQL query acceleration. The SPU seamlessly integrates with your current infrastructure, tools and queries, offloading SQL tasks from the CPU for optimal efficiency. NeuroLink™ provides a direct, optimized chip-to-chip network that allows for SPUs to expand to multiple nodes without compromising performance.

SPU G200

Size	FHHL Form Factor
Power (TDP)	150W
SPU	Up to 4 SPU G200 per server
CPU	--
Memory	--
Storage	Up to 64TB Uncompressed
NeuroLink™	No
Supported OS	Linux

Dell PowerEdge R760XL

Size	2U
Power (TDP)	1800W
SPU	Up to 4 SPU G200
CPU	2x Intel Xeon Platinum
Memory	512GB to 4TB
Storage	Up to 256TB Uncompressed
NeuroLink™	No
Supported OS	Linux

HEQS G100

Size	6U
Power (TDP)	4000W
SPU	8
CPU	2x Intel Xeon or 2x AMD EPYC
Memory	512GB
Storage	Up to 512 TB Uncompressed
NeuroLink™	Yes
Supported OS	Linux

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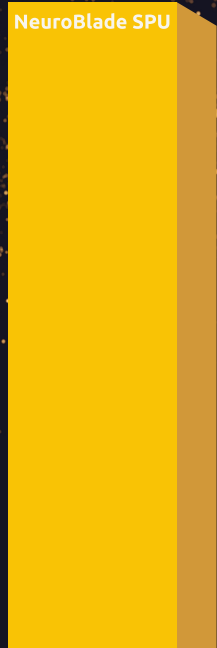
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10-100x

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Illustrative Performance Benchmarks

10-100x

NeuroBlade SPU

1x

Without SPU

Illustrative performance of NeuroBlade SPU vs alternatives available, with a reference benchmark running Apache Spark

Hardware-enhanced acceleration at the speed of I/O for any query engine

No change to existing query platforms and file formats (e.g. refactoring, optimization)

Consistent performance agnostic of query complexity

Accelerate AI/ML pipelines for faster and more accurate results

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