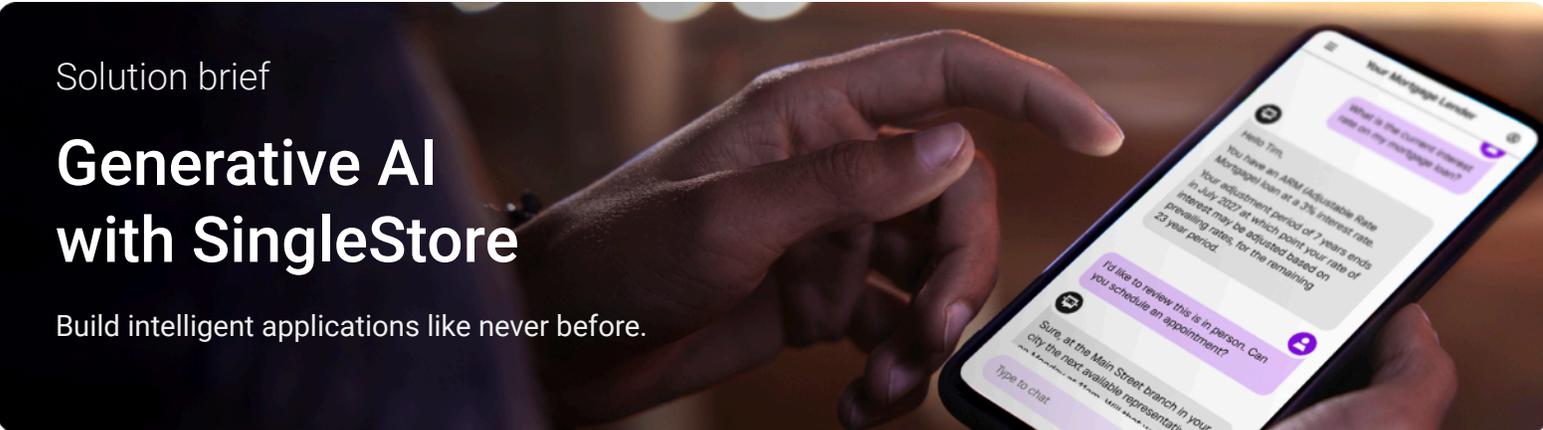**Solution brief**

Generative AI with SingleStore

Build intelligent applications like never before.

Introduction

SingleStore is a real-time data platform that empowers users to transact, analyze and contextualize data — and is built for all kinds of applications, analytics and AI.

- **Vector functions, battle tested.** SingleStore has included vector capabilities since 2017 and several customers use it for storing, processing and performing nearest-neighbor searches to power gen AI applications.

- **Easy to get started.** SingleStore offers integrations or plugins for popular tools like OpenAI, Hugging Face, LangChain and LlamaIndex — making it easy to get started quickly.

Real-time AI with full context, rich query language and powerful analytics

Use all data relevant to your company	Combine vector embeddings from text, images, audio, video, etc., with other kinds of data including logs, stock market data, clickstream or sensor data. All kinds of structured and unstructured data can be co-located and queried using SingleStore — including vectors, JSON, time-series, text, SQL and geospatial data.
Fast data ingestion from other sources	SingleStore supports a wide range of data sources and connectors, allowing users to ingest data from diverse systems including other databases, HDFS, message queues, log files, cloud storage (Amazon S3) and streaming data platforms like Confluent Kafka.
Powerful SQL	Metadata filtering, joins, aggregates, subqueries, window functions and other language features. Ability to rerank semantic search results based on real-time data.
High performance	Low latency queries (~Milliseconds) matching top data warehouses on benchmarks such as TPC-H and TPC-DS.

A simpler and more powerful vector database

Simple	Eliminate the complexity, licensing costs or extra training requirements of a pure vector database.
Fast K-Nearest-Neighbor search	Use 'order by/limit k' queries using 'dot_product' and 'euclidean_distance' metrics, combined with arbitrary SQL for metadata filtering. Re-ranking semantic search results is easy with support for 'dot_product' and 'match'.
Notebooks (Preview)	Quickly prototype and deploy with Notebooks that combine the power of SQL and Python.
Enterprise ready	Get the data security, compliance and high availability appropriate for enterprise applications.

Other key capabilities

Universal storage	Unlimited storage	SingleStore Kai™	High availability	Run anywhere
Both rowstore and columnstore in one database.	Separation of storage and compute.	Up to 1,000x faster analytics on MongoDB® apps.	Your applications should stay online + be highly available.	Hybrid, multi-cloud, SaaS, on-premises, Kubernetes operator

Global leaders choose SingleStore

6sense   Adobe   Lumana   RightSense   SIEMENS   THORN