SQREAM

SQREAM NANO

DATA MANAGEMENT SOLUTION FOR THE EDGE

The explosion of data from IoT devices, M2M computing, sensors and the ongoing automation of manufacturing and industrial systems brings with it the need to manage, access and analyze the increasing amount of data at the Edge.

SQream Nano is an embedded Database Management System (DBMS) for collecting, storing, and gaining insight from terabytes of data at the Edge. SQream's minimal footprint solution provides rapid analytics capabilities never-before-seen in Edge computing, with limited resources required.

Leveraging the power of the GPU, SQream Nano is capable of querying for over hundreds of millions of rows in seconds, enabling fast operational and predictive insights for IoT, Industry 4.0 and automotive applications.

SQream Nano helps avoid data loss, increase security with data paring, and take the load off your central control function. Rapid analytics enable the storage and upload of relevant data, ensuring data efficiency, especially in devices with limited space.

- EMBEDDED DBMS
- HIGH DATA CAPACITY
- VERY SMALL FOOTPRINT
- HIGH-POWERED
- COST-EFFICIENT
- ANALYTICS AT THE EDGE

CRITICAL INTELLIGENCE AT THE EDGE

IoT

- Retain sensor data
- Analyze and pare data at the edge
- Reduce data storage and transmission costs

Automotive

- Store metadata generated by autonomous driving
- Retain and analyze in-car data for preventive maintenance

Industry 4.0

- Predict equipment failure
- Streamline production
- Extend life of costly equipment
- Avoid data loss

Smart Cities

- Improve traffic flow
- Dispatch emergency personnel
- Prevent utility issues
- Efficient lighting control

Technical Specifications

Hardware	Minimum Configuration	Medium Configuration	Maximum Configuration
Arm CPU	Quad-core ARM® A57	8-core ARM v8.2	Intel(R) Xeon(R) 2.20GHz
GPU Cores	128-core NVIDIA Maxwell™	512-core Volta GPU with Tensor Cores	NVIDIA Tesla T4 16GB PCIe Passive GPU NVIDIA Turing Tensor Cores320NVIDIA CUDA® Cores 2,560
Memory	4 GB 64-bit LPDDR4; 25.6 GB/s	32GB 256-Bit LPDDR4x 137GB/s	Support for up to 4 TruDDR4 memory DIMMs an up to 256 GB of memory using 64 GB DIMMs
Applications Supported	Data retention, paring, and transmission	Lightweight AI/ ML	Real-time video processing
TPCH Results - Ingest	30 min (100 GB)	4 min (100 GB)	25 min (1TB)
TPCH Results - Query	120 sec (100 GB)	21 sec (100 GB)	373 sec (1TB)
Sample Supported HW	Jetson	Xavair	Lenovo