The Fastest, Quietest Edge Server on the Market for DNA Sequencing

Delivering powerful, quiet, and efficient edge performance for insights and throughput in any medical lab.

kontron



The CG2500 brings uncompromising compute power to the edge for next-generation DNA sequencing and medical imaging. Engineered for speed, efficiency, and quiet operation, it enables faster analysis, higher throughput, and reliable results in any lab environment.

Kontron brings a distinct North American advantage

Through our North American based electronics manufacturing services (EMS), Kontron delivers local design, production, and certification support for medical applications.

From prototype and NPI to full-scale manufacturing, customers benefit from faster turnaround,

tariff mitigation, and in-country expertise — ensuring greater control, lower risk, and consistent quality across the product lifecycle.

Certifications

USA/CANADA - CSA Certified to UL 60950-1 2nd Edition and CSA C22.2 No. 60950-1-07 2nd Edition

EUROPE - CE mark to Low Voltage Directive 2014/35/EU and EN 62368-1

INTERNATIONAL - CB report and certificate to IEC 62368-1

Medical Imaging Benchmark

Based on 2025 testing vs our competition, Kontron CG2500 outperforms in key metrics.

Competitive Overview:

	Kontron CG2500	Top Leading Server
CPU	Single-socket AMD EPYC Turin – 64 cores / 128 threads	Dual-socket Intel Xeon – 2x32 cores (only 48 active)
GPU Configurations Tested	L40S + L4 / L4 only / L40S + L4 + A300	L40S + L4
Performance (Gb/hr)	6 ► 12 ► 17 ► 23 Gb/hr(depending on configuration)	8-9 Gb/hr
Performance Gain	Up to 3x faster	Baseline
CPU Bottleneck	Resolved (80–111 threads active)	Significant (CPU-limited)
Noise Level	65-68 dB	72 dB
Power Handling	Fully powered GPUs (no limitation)	Limited – forced to disable 16 cores
Thermal Stability	Optimized airflow, lower dB	Higher thermal and acoustic footprint

Up to 3X higher processing throughput

Up to 14%, 7 dB quieter



Sequencing Throughput (Gigabases per hour)

dB Noise Level

> Why CG2500 Wins

The CG2500 Advantage in Medical Imaging & Processing

- Up to 3x faster sequencing throughput
- Quieter operation (-5 to -7 dB)
- No power or thermal throttling
- Lower-cost: CPU configurations possible
- Fully scalable GPU options (L4, L40S, A300)
- More efficient CPU utilization (111 threads)

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