

RecAccel™ N3000 PCIe

Unprecedented Accelerator for Recommendation



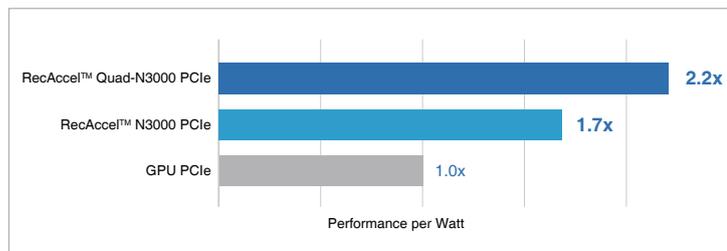
The Most Power-Efficiency Compute Platform for Recommendation

The RecAccel™ N3000 PCIe card is a state-of-the-art hardware solution that delivers powerful acceleration capabilities for AI recommendation systems in the most demanding elastic data centers. This dual-slot PCI Express Gen5 card is built around the NEUCHIPS RecAccel™ N3000 series AI chip, that ensures exceptional performance and reliability.

The card features LPDDR5 memory, which delivers an impressive memory bandwidth of up to 6400Mbps, making it suitable for handling large models and massive datasets with ease. Its passive heat sink cooling mechanism ensures optimal operation, provided the system airflow is maintained to keep temperatures in check.

With a thermal design power (TDP) level of 70W, RecAccel™ N3000 PCIe card can operate unconstrained and provide the high data throughput necessary for accelerating applications that require exceptional performance.

Industry Leading Results for MLPerf™ DLRM Inference Benchmarking



RecAccel™ N3000 PCIe card demonstrated industry leading performance and power efficiency in MLPerf™ v3.0. The RecAccel™ N3000 system delivered 1.7x better perf-per-watt for inference DLRM while maintaining 99.9 % accuracy leveraging its INT8 calibrator. During the system testing, the RecAccel™ N3000 performance resulted in nearly 100% scaling across each card.



Product Specification

BFLOAT16	32 TFLOPS
INT8	206 TOPS
Memory	32GB LPDDR5
Memory Bandwidth	200 GB/s
Thermal Design Power (TDP)	70W
Form Factor	Full-height, Full-length (FHFL) 10.5" Dual-slot (266mm/10.5 inch)
PCI Express Interface	PCI Express 5.0 x 16 Lane and Polarity Reversal Supported
Interconnect	PCIe Gen5: 64 GB/s
Server Options	Partner and NEUCHIPS-certified Systems with 1-8 Accelerator

Environmental Specification

Ambient Operating Temperature	0°C~50°C
Storage Temperature	-40°C~75°C
Operating Humidity	5%~85% Relative Humidity
Storage Humidity	5%~95% Relative Humidity