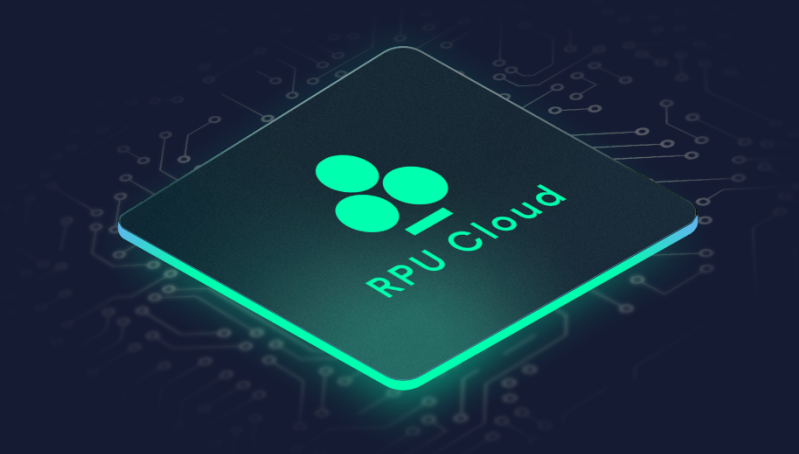


Quside RPU Cloud



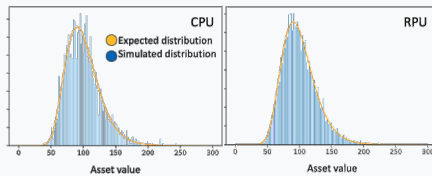
Accelerate your randomized workloads with the power of Quside™ Randomness Processing Units (RPU) on the Cloud. A wide range of software relies on randomness for performance and efficiency. The RPU Cloud is the ideal platform to host this increasing type of computations natively in your public cloud environment.

APPLICATIONS

BFSI

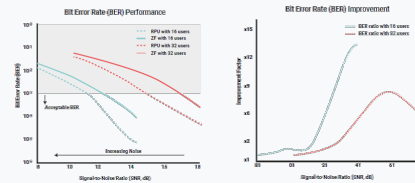
Acceleration of Monte Carlo risk simulation

Using Quside's RPUs enables better convergence of the asset price distribution with the same simulation time.



Telco

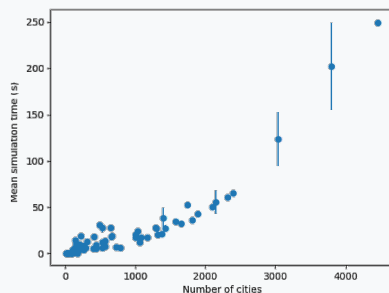
By leveraging the power of stochastic methods for MIMO detection, 5G technologies can benefit significantly, such as increased quality of service for a given infrastructure or reduced infrastructure needs (up to 50% less).



Logistics

Complete, deterministic travelling salesman problem (TSP) algorithms have exponential run times, making them prohibitive for large problems.

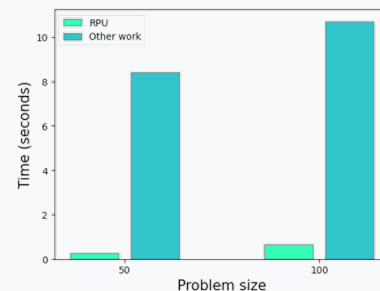
The relaxation of the optimal condition by introducing stochastic methods allows for a polynomial scaling of the TSP calculations.



BFSI – Improved High Frequency Trading

Correlation Diversified Passive Portfolio (CDPP) is a fast and efficient method to improve investments following market evolution while decreasing the risk.

In searching for the best combination in a large, complex solution space, stochastic optimization algorithms can approach the best solution at light speeds.



SPECIFICATIONS

	RPU Cloud
Distributions	
Uniform	32-bit and 64-bit floating-point (IEEE-754) and n-bits integer
Normal	32- and 64-bit floating-point (IEEE-754)
Log-uniform	32- and 64-bit floating-point (IEEE-754)
Performance	
All distributions	60 Gb/s
Tools	
User programmability	Yes
Available IP cores	Distribution sampling Including reproducibility and repeatability of simulations
Tools	Accelerator, distributions quality, and performance check tool for troubleshooting
Usage examples	Several usage examples ready to be compiled and executed in the supported programming languages C++ and Python
Public cloud (Marketplaces)	
AWS	F1 Instances
OS compatibility	
Image OS	Ubuntu 20.04
Libraries	C++ and Python

Thanks for being part
of our quantum journey!