THE PROCESSOR AT THE HEART OF INTELLIGENT SYSTEMS



SUCCESSFUL CERTIFICATION OF KALRAY'S SMART STORAGE ADAPTER

A Major Step towards Commercial Launch of Kalray's Coolidge™-based Cards for Storage Appliances

Grenoble - France, October 19, 2020 – Kalray (Euronext Growth Paris: FR0010722819 – ALKAL), a pioneer in processors for new intelligent systems, today announced that its K200[™] Coolidge[™] based smart storage adapter solution has been certified for NVM Express[™] over Fabrics (NVMe-oF) with TCP (NVMe[™]/TCP) protocol by the NVM Express organization through the University of New Hampshire InterOperability Laboratory (UNH-IOL), an independent testing provider of standard conformance solutions and multi-vendor interoperability.

Data Centers are undergoing a very important revolution with rapidly evolving network architectures and technologies. This is mainly due to the explosion of usages, the surge of data to be processed and the resulting exponential growth of the number of machines to be managed to support this growth.

Until now, storage has been one major bottleneck of this expansion. The introduction of flash memory-based SDD (Solid-State Drive) with hyper-fast communication protocols such as NVMe[™]/TCP, offers a breakthrough solutions to the industry to massively scale up and increase performance of existing data centers. Smart storage adapters and associated storage appliances (including Ethernet storage expansion servers called "JBOF") are at the heart of this revolution.

Dennis Hahn, Senior Analyst, Cloud & Data Center at OMDIA stated in his report, Data Center Storage Equipment Market Tracker: "*NVMe-oF JBOF is just starting to experience an uptake in on-premises enterprise DC segments for its ultra-high performance and is ramping aggressively for use by hyper converged infrastructure and in data intensive applications*".

Eric Baissus, President and CEO of Kalray, has declared: "Certification is a major step in our journey to mass production. Kalray is on schedule with its strategic roadmap and actively preparing the commercial deployment of a new type of hyper-fast storage solution. Together with our partners and customers, we are actively working to integrate and qualify our technology and products".

Based on its 3rd generation MPPA® (Massively Parallel Processor Array) processor, Kalray's storage smart adapter solution, targets the new generations of hyper-fast storage solutions. Whereas competitive solutions are limited in term of performance, for example when demanding algorithms such as data protection and footprint reduction are running, Coolidge™ Intelligent processors have the capability to run such protocols without degradation of the server bandwidth, in real time. Kalray's fully programmable smart storage adapter delivers high performance while ensuring offloading of demanding data services. This Coolidge™-based solution also offers new horizons in term of storage performance, targeting the booming market of data intensive application such as AI, Data Analytics or IoT.







Kalray's solution offers both extremely high computing power capable of processing considerable data volumes while minimizing energy consumption; as well as on-the-fly heterogenous processing capabilities. The K200^m smart storage adapter is a standard PCIe card supporting both NVMe^m/TCP and NVMe^m/RoCE, with associated software suite, highly configurable for composability needs, based on its MPPA[®] processor implementing leading edge interfaces, including PCIe Gen4 x16 and 2 x 100G Ethernet. As an example, coupled with the latest PCIe Gen4 AMD processor MPPA[®] can be used as an accelerator delivering a full duplex bandwidth of up to 200 Gbit/s. In addition, K200^m delivers up to 4 MIOPS (Millions of I/O Operations Per Second).

For more information, please contact Kalray's sales team at contact@kalrayinc.com

ABOUT KALRAY

Kalray (Euronext Growth Paris - FR0010722819 - ALKAL) is a fabless semiconductor company, pioneer in a new generation of processors for intelligent systems. MPPA® Intelligent processors are able to capture and analyze on the fly massive data flows, close to where they are generated, and interact in real time with the outside world. These processors are capable of running demanding AI algorithms and simultaneously a wide set of different processing and control tasks such as mathematical algorithms, signal processing, network or storage software stacks. Kalray's Intelligent Processors can be deployed in fast-growing sectors of Edge Computing and AI: Modern data centers, networks (5G), autonomous vehicles, healthcare equipment, industry 4.0, drones and robots... Kalray's offering includes processors, system boards and a software suite, for a broad spectrum of customers such as data storage systems and compute server manufacturers, intelligent system integrators and consumer product manufacturers such as car makers. Founded in 2008 as a spin-off of CEA French lab, Kalray counts among its investors: Alliance Venture (Renault-Nissan-Mitsubishi), Safran, NXP Semiconductors, CEA and Bpifrance. Read more at: www.kalrayinc.com

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