Premio Releases Technical Whitepaper to Showcase Edge AI Performance with M.2 Accelerators

Domain specific architectures in m.2 modules are unique hardware accelerators designed to enable powerful Edge AI performance.


Premio Inc Brand Logo

INDUSTRY, CA, UNITED STATES, September 29, 2022 / EINPresswire.com/ -- Premio Inc., a global leader in rugged edge and embedded computing technology, today released a technical whitepaper benchmarking key benefits around hardware acceleration for workloads powered with Edge AI. The whitepaper dives deep into understanding M.2 domain specific architectures and how they are enabling breakthrough performance for specific machine learning workloads for Edge AI applications. Download the whitepaper for more information.

“Data growth, combined with real-time analytics from edge computing is driving the AI computing framework away from general CPU/GPU options and toward specialized accelerators based on domain-specific architectures that use the common M.2 standard,” said Dustin Seetoo, Premio’s product marketing director. “Some of the latest AI modules hitting the market today are extremely beneficial for fanless edge computers because they are smaller and even more power-efficient than traditional options.”

This is where M.2 form-factor accelerators come into play for eliminating performance barriers in data-intensive applications. A powerful design option, M.2 accelerators offer system architects domain-specific value to match the exact requirements of AI workloads. In contrast to a comparable system using CPU/GPU technologies, an M.2-based system can manage inference

models significantly faster and far more efficiently. These increases are driving innovative system design perfect for the rugged edge where more systems are deployed in challenging, non-traditional scenarios, and where purpose-built systems offer immense opportunity.

"There is a clear differentiation between a general-purpose embedded computer and one that's designed to balance inferencing algorithms across compute, storage and connectivity," Seetoo also said. "All these factors are necessary to effectively consolidate workload close to the point of data generation, even in rugged settings where environmental challenges are detrimental to system performance.

M2 White Paper Thumbnail

The whitepaper highlights he Hailo-8™ processor as a compact edge AI accelerator that provides up to 26 tera operations per second (TOPS) and only uses a typical power consumption of less than 2.5 watts. Edge AI deployments can integrate a low-power Hailo-8™ module with an industrial-grade Premio inference computer to process inference analysis and object detection workloads in real-time.

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> *Dustin Seetoo, Dir. of Product Marketing*

To learn more about Premio's AI Edge Inference Computer or edge AI performance acceleration please visit www.premioinc.com or contact our embedded computing experts at sales@premioinc.com.

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About Premio, Inc.
Premio is a global solutions provider specializing in computing technology from the edge to the cloud. We design and manufacture highly reliable, world-class computing solutions for enterprises with complex, highly specialized requirements for over 30 years. Our engineering specialty and agile manufacturing push the technical boundaries in Embedded IoT Computers, Rugged Edge Computers, HMI Displays, and HPC Storage Servers. Premio provides robust product engineering, flexible speed to market, and unlimited

manufacturing transparency from strategic locations in the U.S., Taiwan, Malaysia, and Germany. Learn more by visiting our website at https://premioinc.com/.

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