Premio Announces 2 Edge AI-Focused Carrier Boards for its High-Performance Rugged Industrial Computers at Embedded World

New EDGEBoost I/O provide plug-and-play performance for edge workloads that benefit from the acceleration of m.2 AI modules, NVMe storage, and 5G connectivity.

CITY OF INDUSTRY, CA, USA, March 14, 2023 /EINPresswire.com/ -- Premio Inc., a global leader in rugged edge and embedded computing technology, today released two carrier board modules that support edge AI inference, high-speed NVMe storage, and 5G connectivity capabilities for its line of rugged industrial computers at Embedded World 2023 in Nuremberg, Germany. Embedded World 2023 is one of the largest leading international tradeshows in the world for industrial IoT, automation, and intelligent transportation.

The "EBIO-2M2BK" and "EBIO-M2MK" are the latest additions to Premio's line of [EDGEBoost I/O modules](#) and address key challenges for more modular hardware designs that support the latest edge AI performance acceleration technologies at scale.

"As a manufacturer of industrial and edge computers, Premio is committed to engineering innovative hardware solutions with key disruptive
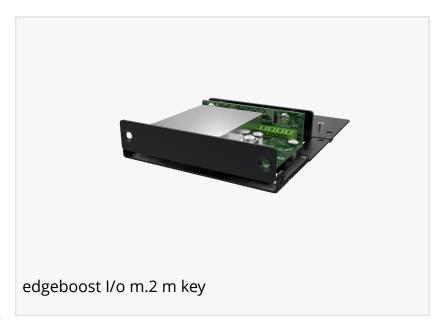

Premio Inc Brand Logo

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technologies that enable faster processing, storage, and connectivity," said Dustin Seetoo, product marketing director, Premio. "As the demand for Edge AI grows, our EDGEBoost I/O carrier boards offer a modular solution to scale new m.2 AI accelerators with ultimate reliability in the harshest edge-level deployments."

The board's unique modular design provides a proprietary plug-and-play solution directly into Premio's line of fanless industrial computers and offers an array of versatility for peripheral

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connectivity. System integrators and OEMs can integrate these new EDGEBoost I/O modules into their Premio computers for edge AI processing applications that require real-time inference and analysis, such as computer and machine vision, security and surveillance, industrial and factory automation, rugged edge computing, intelligent transportation, smart city, and smart agriculture.

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> *Dustin Seetoo, Dir. of Product Marketing*

EBIO-2M2BK

The [EBIO-2M2BK carrier board](#) uses a modular design that readily scales with Premio industrial computers. The design leverages PCIe protocols for high-speed communication and can be easily integrated into a standard I/O slot for specific Premio models. In terms of Edge AI benefits, the EBIO-2M2BK differentiates itself by supporting up to x4 Hailo-8™ AI processors, which provides 104 TOPS (trillion operations per second) of performance and lower TDP (thermal design power) for inference

analysis and object detection in real time. For applications that require scalable performance-focused storage, the EBIO-2M2BK also supports up to x4 m.2 NVMe modules for high-speed PCIe read and write of data. Key features include:

- Supports 5G/AI/NVMe Modules
- 2x M.2 B-Key 2242/3042/3052
-1x Dip Switch for Switching into 2 configurations:
-2x PCIex2, Support AI Module/NVMe Storage
-1x PCIex2, Support AI Module/NVMe Storage & 1x PCIex1 & USB 3.2 Gen1, Support 4G/5G
-1x Mini SIM Slot (on-board)

-3x Antenna Holes for SMA connectors
-Rugged and Passive Cooling Design

"Premio EDGEBoost I/O carrier boards provide partners with an innovative approach to match mission-critical I/O requirements with ease and scale," Seetoo added. "By supporting up to x4 m.2 Hailo-8™ AI processors and NVMe storage options, Premio is first-to-market a modular and scalable solution for m.2 accelerators in a rugged design."

EBIO-M2MK

The [EBIO-M2MK carrier board](#) is similar in its modular design to the EBIO-2M2BK but maximizes a full PCIe x4 lane performance bandwidths for AI and NVMe modules. Specific edge workloads can leverage EBIO-M2MK carrier board for pure real-time performance for Edge AI inference and high-speed NVMe storage. Key features include:

- AI/NVMe Module support
- 1x M.2 M-Key 2242/2260
- Full PCIe x4 Lane bandwidth
- Rugged and Passive Cooling design

In addition, Premio's line of EDGEBoost I/O modules offers other options for a variety of I/O connections to IoT sensors. These add-in modules support up to x8 additional LAN & PoE in wired RJ45/M12 connectors, x8 USB 3.1 gen 2 ports, x4 10GbE in RJ45 connectors, and even an individual 5G-ready module for low-latency wireless connectivity.

To learn more about Premio's full lineup of EDGEBoost I/O modules and how they work with our AI Edge Inference Computers, 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/.

Dustin Seetoo
Premio Inc.
+1 626-839-3100
marketing@premioinc.com
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