

MemryX and Edge Impulse Integrate Tools to Accelerate AI Hardware Development

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ANN ARBOR, Mich.--(BUSINESS WIRE)-- Edge Impulse, the world's leading AI developer platform, and MemryX, the world's leading AI hardware-based accelerator, together are transforming the AI workflow by streamlining the development, testing, and deployment of AI models.

Developing and deploying AI models to edge-based hardware has always been a complex challenge for enterprises and developers. The process involves assembling high-quality datasets, extracting data features, and efficiently deploying models to devices, which is often filled with difficulties. The recent platform integration between MemryX and Edge Impulse promises to transform the AI workflow, advancing the deployment of dedicated AI accelerators on the edge.

Developer Hub Integration

The MemryX Developer Hub and Edge Impulse Studio are at the core of this integration, providing complimentary tools for AI model development and deployment. The MemryX Developer Hub is engineered to provide a straightforward, robust, and adaptable solution for edge AI, empowering developers to harness the full potential of MemryX AI accelerator chips. MemryX AI products support all major neural frameworks and thousands of neural models, using all popular host hardware ISAs and all major OS environments. The platform enables users to swiftly simulate and deploy a broad set of pre-trained AI models while offering the flexibility to balance performance, power efficiency, latency, and resource utilization for any application.

Edge Impulse provides a low-to-no-code tool for quickly creating robust AI models that can be deployed directly to edge-based devices such as those powered by MemryX accelerators. From data collection to algorithm generation

to model refinement, Edge Impulse enables enterprises and developers to create, test, and launch AI solutions for real-world applications such as object tracking or anomaly detection.

With this partnership, Edge Impulse users have multiple ways to work seamlessly with MemryX files and devices. Edge Impulse has incorporated the MemryX Developer Hub SDK into its platform, providing users with the ability to complete the full AI model creation and compilation process entirely within the Edge Impulse platform. MemryX developers can leverage all the powerful features that Edge Impulse provides and then simulate and deploy to hardware. Additionally, developers can deploy their Edge Impulse Studio projects as MemryX executable files and utilize MemryX Developer Hub. The Edge Impulse integration also allows developers to download generated files for custom program integration.

MemryX MX3 AI Accelerator Chip

MemryX has made available its MX3 Edge AI Accelerator samples, which boast an innovative pure dataflow architecture equipped with programmable hardware that aligns seamlessly with the data-driven design of AI algorithms. Its cutting-edge architecture is specifically tailored to handle streaming inputs from real-time sources such as cameras and sensors, ensuring seamless integration into applications. The MX3 supports multi-chip configurations which work seamlessly together as one logical chip, offering scalability to achieve desired levels of AI performance and model size. Furthermore, MX3 provides full interoperability with major AI frameworks, application processors, and host operating systems. MemryX MX3 AI Accelerator is now natively supported in Edge Impulse.

A standout feature of the MemryX MX3 is its proprietary 1-click compilation and mapping software. This software optimizes AI model performance without the need for retraining or software fine-tuning to efficiently run on target hardware, significantly accelerating development cycles and allowing for hassle-free edge AI upgrades. By offloading AI inference processing from application processors to the dedicated MX3 AI accelerator(s), users can maximize system efficiencies while minimizing costs.

The MemryX Developer Hub integration is available now for Edge Impulse users; sign up to get started at **edgeimpulse.com**.

For more information about the MemryX MX3 AI Accelerator Chips and Edge Impulse, please visit **[the Edge Impulse/MemryX documentation page](#)**.

About MemryX

MemryX Inc. is a fabless semiconductor company that designs edge AI processing solutions powered by a proprietary compute-at-memory technology and dataflow architecture. By combining high performance and

accuracy with low system power and a high-performance architecture, MemryX solutions are able to power AI needs for a number of industries, including transportation, IoT, and a wide range of industrial and consumer applications. MemryX is backed by leading investors including HarbourVest, Arm IoT Fund, eLab Ventures, M Ventures, and Motus Ventures. MemryX has headquarters in Ann Arbor, Mich., with offices in Bangalore, India, Taipei and Hsinchu, Taiwan.

About Edge Impulse

Edge Impulse offers the latest in machine learning tooling, enabling all enterprises to build smarter edge products. Their technology empowers developers to bring more AI products to market faster, and helps enterprise teams rapidly develop industry-specific solutions in weeks instead of years. Edge Impulse provides powerful automation and low-code capabilities to make it easier to build valuable datasets and develop advanced AI with streaming data. With over 80,000 developers, and partnerships with the top silicon vendors, Edge Impulse offers a seamless integration experience to validate and deploy with confidence across the largest hardware ecosystem. To learn more, visit [**edgeimpulse.com**](https://edgeimpulse.com).

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