

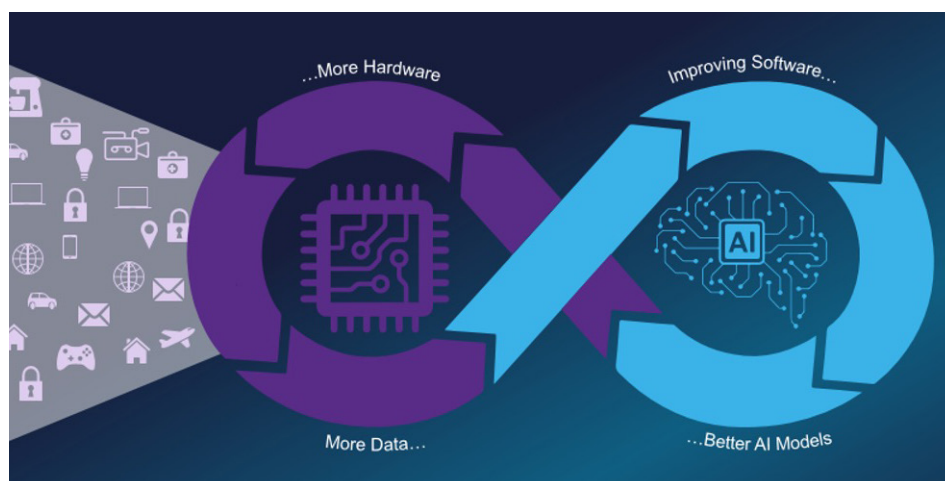


# Intelligence at the Edge of Everywhere

The First AI Computing Platform Reimagined for Generations of AI Edge Systems.

# New Architectures for Edge AI Computing

Edge devices and applications are creating new and more data than ever before. Traditional compute architectures and infrastructure are unable to keep up with these new requirements, thus systems are adopting AI to process the data, provide more insight, develop new AI models and deploy new edge systems. This virtuous cycle calls for new hardware and software architectures that make it easy to develop, deploy and run AI inference at the edge.



## Rethinking Everything

To address these challenges Blaize looked at everything from silicon to software. Blaize® architected a breakthrough Graph Streaming Processor® (GSP®) architecture and Blaize AI Studio, code-free AI application lifecycle software. Both are purpose built to develop, compute, manage and deploy AI inference workloads in edge deployments. Blaize tightly coupled software and hardware delivers an end-to-end efficient, usable AI edge workflow, and solutions that fit into real-life budgets of power, cost, size and complexity.

With multiple feature advancements over legacy GPU and CPU solutions, the Blaize® Pathfinder® and Xplorer® accelerators coupled with the Blaize AI Software Suite enable a new era of more practical and commercially viable edge AI products across a wide range of edge use cases and industries.

The Blaize AI software suite consists of Blaize AI Studio, a code free user experience enabling system managers and application users to design, update and maintain AI inference system at the edge. It also includes the Blaize® Picasso® SDK, a traditional coding software developer kit for experience software and embedded design engineers that want to get under the hood and customize their AI inference solution.

 **Learn More:** [www.blaize.com](http://www.blaize.com)

## MARKETS



- Autonomous Optical Inspection
- Smart Parking & Traffic Management
- Smart Retail Applications
- Network Video Recorders
- Warehouse & Factory Applications
- Robotics
- Safety & Security Systems
- Industrial PCs & Servers



- **In-Cabin:** Occupant detection & monitoring, SeqABD, Gesture control, Internal sentry,
- **Assisted Operation:** ACC, Stop & Go, Lane Departure Warning, Traffic sign assist, Park Assist, Collision Warning & Assist, Blind spot monitoring, Surround view camera, chassis pre-assist, road boundary mapping
- **Autonomous Operation:** Automotive A/D SAE level 4+, Last Mile Delivery, Autonomous worksite /heavy duty, Mobility robotics/manufacturing

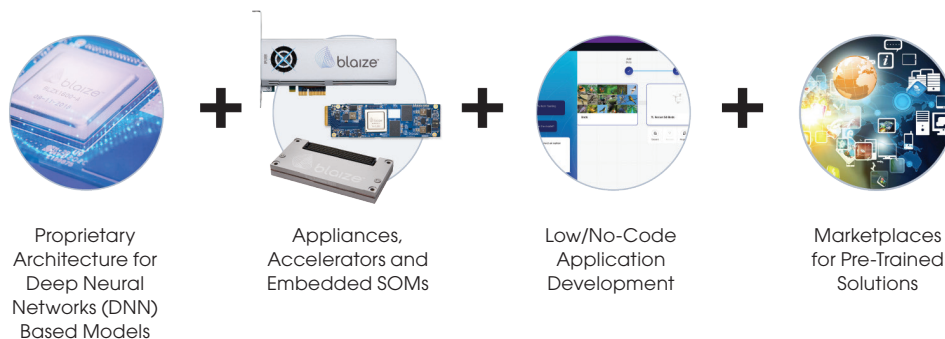
# Comprehensive, Programmable, and Tightly Coupled AI Hardware and Software For Edge AI

## Blaize AI Studio: Taking Edge AI Products from Idea to Production Fast

Blaize AI Studio is the first open and code-free AI software platform to span the entire AI application lifecycle from idea through development, deployment, and management. With AI Studio, users reduce the complexity and time spent developing edge AI inference applications. AI Studio is a one stop software suite for development, deployment and maintenance of edge AI inference systems, enabling system users to define and deploy AI for their application needs while reducing time and cost.

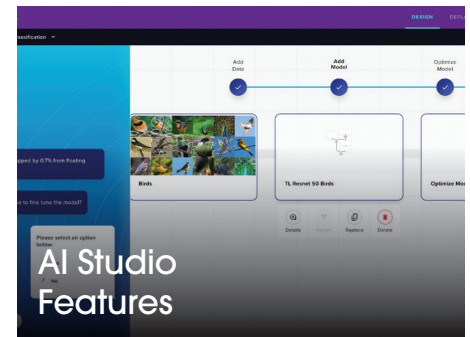
AI Studio is built on open standards and supports modern AI frameworks, backbones and networks that are compiled to run and take advantage of Blaize AI accelerators. It eliminates the need for integration of disparate tools and workflows and introduces multiple ease-of-use and intelligence features, including a marketplace to leverage AI models from Blaize, 3rd parties, or even other teams within a company. AI Studio reduces from months to days the time required to go from models to deployed production applications.

### The Blaize End-to-End Computing Platform

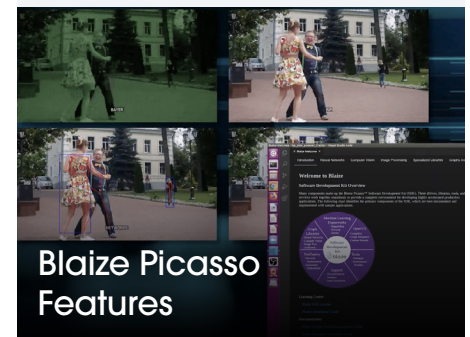


## Blaize Picasso® SDK: Design, Deploy & Optimize

Blaize Picasso SDK is a traditional developer kit that gives coders and developers the power to design, deploy and optimize their AI models to take advantage of Blaize accelerators. The Blaize Picasso SDK enables developer to accelerate the entire AI application development cycle — build, integrate, optimize, run and continuously improve their models after deployment. Picasso SDK supports common open standards, modern frameworks and networks and utilizes Blaize NetDeploy to optimize models for Blaize accelerators.



- ONNX and OpenVX standards for user flexibility, broader adoption
- Easy-to-Use application development workflow
- Ground-breaking edge MLOps/ DevOps features
- Expert knowledge-drive recommendation systems
- Marketplace's collaboration
- Code-free assistive UI for more users, more productivity
- Cloud and on-premises, microservices architecture



- **AI Toolkit:** Libraries and tools to build AI apps
- **Graph Framework:** Graph-native framework built to compile and running graphs natively
- **Development Kit:** Suite of tools to verify and debug applications running on Blaize GSP hardware.
- **NetDeploy:** Automated hardware-aware optimization of neural networks, balancing hardware performance with neural network model accuracy



# Blaize AI Edge Accelerators: AI at the Edge without Compromise

With multiple form factors based on the revolutionary Blaize GSP® architecture, Blaize brings a new class of efficient, low power, low latency processing that enables real-time applications for AI Inference at the Edge. Built for the balance of power, performance, latency, and cost required for edge computing, Blaize Pathfinder and Xplorer AI edge platforms are more efficient, more flexible, more accurate and more cost effective.

## Product family features

- **System Efficiency:** The Blaize GSP architecture is designed to run at a task level and takes advantage of tasks that are not dependent on each other and runs these in parallel. This reduces the latency, number of external memory access and overall system efficiency when processing AI inference models.
- **Energy Efficiency:** With fewer external memory accesses, lower latency and tasks run in parallel, Blaize accelerators use less power and time to process models leading to a more power efficient solution.
- **Low Latency:** The Blaize GSP task parallelism reduces latency from inputs to output making Blaize accelerators more efficient and better for real-time AI applications.
- **Flexibility:** Blaize accelerators are fully software programmable, giving flexibility in design, and allowing developers and users to keep pace, update and deploy rapidly changing AI models.

### Pathfinder® P1600 SOM



- Dual ARM core A53, 4GB LPDDR4, Ethernet, PCIe Gen3, MIPI CSI, CODECs, & Standard IO
- 16 TOPs, avg 10W
- Industrial & Commercial

### Xplorer® X1600E EDSFF



- PCIe 3.0 x4, 4GB LPDDR4
- 16 TOPs, avg 10W
- Enterprise Grade

### Xplorer® X1600P PCIe



- PCIe 3.0 x4, x16, 4GB LPDDR4
- PCIe HH/HL
- 16 & 20 TOPs, avg 10 – 15W
- Industrial Grade

### Xplorer® X1600P-Q PCIe



- PCIe 3.0 x4, x16, 16GB LPDDR4, PCIe HH/FL
- 64 & 80 TOPs, avg 50 – 80W Commercial & Enterprise Grade

## Company Overview

Blaize is a leading provider of a proprietary purpose-built, full-stack processor hardware architecture and low-code/no-code software platform that enables AI processing solutions from cloud to edge, targeting multiple large and rapidly growing markets. Blaize's novel solution solves the technical problem from cloud to edge AI processing requiring — low TCO, very low latency and high thermal and power efficiency and significant ease of programming. Blaize has raised \$224 million from strategic investors such as DENSO, Mercedes Benz, Magna, and Samsung, financial investors such as Franklin Templeton, Temasek, GGV and Bess Ventures. Headquartered in El Dorado Hills (CA), Blaize has more than 200 employees worldwide with teams in San Jose (CA), Cary (NC) and subsidiaries in Hyderabad (India) and Leeds and Kings Langley (UK).

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