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
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.

Intelligence at the Edge of Everywhere — The Blaize AI Edge Computing Platform
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 Grade

### 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 XP1600P-Q PCIe
- PCIe 3.0 x4, x16, 16GB LPDDR4, PCIe HH/FL
- 64 & 80 TOPs, avg 50 – 80W
- Commercial & Enterprise Grade

### Company Overview
Blaize leads new-generation computing, unleashing the potential of AI to enable leaps in the value technology delivers to improve the way we all work and live. Blaize offers transformative solutions that optimize AI wherever data is collected and processed, with focus on automotive/mobility and edge computing markets. Blaize has secured US$155M in funding from strategic and venture investors DENSO, Daimler, SPARX Group, Magna, Samsung Catalyst Fund, Franklin Templeton Temasek, GGV Capital, Wavemaker and SGInnovate. With headquarters in El Dorado Hills (CA), Blaize has teams in Campbell (CA), Cary (NC), and subsidiaries in Hyderabad (India), Leeds and Kings Langley (UK), with 325+ employees worldwide.

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