



Blaize® to power New ASIC-Based Edge AI System from Aetina

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Small-sized embedded AI inference system to facilitate computer vision applications

El Dorado Hills, CA, December 8, 2022 —[Aetina](#), an edge AI solution provider that offers embedded computing hardware and software for AI and IoT, has launched a new ASIC-based edge AI system powered by the programmable Blaize® Pathfinder® P1600 Embedded System on Module (SoM). The Aetina AI inference system—AIE-CP1A-A1—is a small-sized embedded computer designed for different computer vision applications, including object detection, human motion detection, and automated inspection.

The AIE-CP1A-A1 model features the small form factor Blaize® Pathfinder P1600 Embedded SoM, ideal for rugged and challenging environments and embedded systems that need extended temperature ranges. It features Dual ARM Cortex A53 processors, 16 GSP cores providing 16 TOPS AI performance, and the benefits of low memory bandwidth and low latency, making it capable of accelerating neural network (NN) deployment and deep learning (DL) process.

Based on the Blaize® Graph Streaming Processor® (GSP®) architecture, the Pathfinder enables energy-efficient processing power ideal for AI inferencing workloads at the edge, easily plugs into a custom carrier board, and runs autonomously or integrated within a larger system. Due to its compact, fanless design and multiple I/O ports, the AIE-CP1A-A1 can fit both commercial and industrial-grade AI-powered systems that involve vision AI-related inference. The Blaize Pathfinder also supports H.264/H.265 video encoder and decoder, making it compatible with different sensors to run quick image recognition and video analytics tasks.

Aetina offers customized carrier boards and computer cases for sophisticated system integration and chip-down design service to provide other kinds of embedded computing models, such as single-board computer (SBC) with the Blaize Pathfinder in addition to regular box PCs. Moreover, Aetina helps developers convert their AI inference models to a format that can run and function normally on edge devices built with ASIC chips.

“We are now expanding our edge computing product line to bring more GPU and ASIC-based solutions to help developers build their AI systems in various verticals and industries,” said Jackal Chen, Senior Product Manager at Aetina. “The AIE-CP1A-A1 model, powered by Blaize Pathfinder P1600 SoM, is our first ASIC-based system. In the future, by integrating different types of chips and modules, we can offer heterogeneous computing devices that are suitable for different AI models.”

“Keeping AI processing and inferencing workloads at the edge, rather than sending data to the cloud, is critical for cost-effective and almost latency-free AI applications,” said Dinakar Munagala, CEO and Co-founder of Blaize. “The Pathfinder SoM and our GSP architecture enable this key business objective for the demands of computer vision applications, including object detection, autonomous optical inspection, robotics, and more.”

Additionally, Aetina is now developing more ASIC-based AI accelerators with M.2 and EDSFF specification for developers, speeding up the inference processes of their AI models at the edge.

About Blaize

Blaize is a leading provider of a proprietary purpose-built, full-stack hardware architecture and low-code/no-code software platform that enables edge AI processing solutions at the network’s edge for computing in multiple large and rapidly-growing markets — automotive, mobility, retail, security, industrial automation, medical devices, and many others. Blaize’s novel solution solves the technical problem that edge AI processing requires across those verticals — very low latency and high thermal and power efficiency — which previously relied on retrofitting sub-optimized AI solutions designed more for data centers and the cloud. Blaize has previously raised over \$180MM from strategic investors such as DENSO, Daimler, Magna, and Samsung, and financial investors such as Franklin Templeton, Temasek, GGV, and others. With headquarters in El Dorado Hills (CA), Blaize has teams in San Jose (CA) and subsidiaries in Hyderabad (India), and Leeds and Kings Langley (UK), with 300+ employees worldwide. www.blaize.com. Follow Blaize on Twitter ([@blaizeinc](#)) and LinkedIn ([Blaize](#)).

About Aetina

Aetina Corporation, founded in 2012 in Taipei, Taiwan, is a leading provider of state-of-the-art AI solutions involving high-performance edge computing hardware and low-code/no-code software to help developers build different AI verticals quickly. With a focus on the global AI market, Aetina is committed in delivering professional longevity services to solve the developers’

pain points and speed up their AI adoption processes. Follow Aetina on Twitter ([@AetinaCorp](#)) and LinkedIn ([Aetina](#)).