



**Fanless,
ASIC-Based Edge System**
AIE-CP1A-A1



High Degree of Customization for AI Inference

Edge AI computing systems powered by ASIC are poised to become the devices of choice for specific AI applications, such as neural network (NN) and deep learning (DL) acceleration. Aetina provides a comprehensive ASIC-based product line to benefit the high efficiency and low latency to accelerate edge AI operational processing.

Aetina **AIE-CP1A-A1** is the compact and fanless designed edge system that employs the Blaize P1600 GSP with 16 TOPS AI performance offered at superb energy efficiency. Thanks to Blaize's innovative software technology, the AIE-CP1A-A1 is inherent to support Blaize NetDeploy and Picasso software development platform, enabling developers faster and easy to port, optimize, and flexibly develop their custom AI algorithms for higher accuracy at given performance.

Feature Highlights



High Edge Inference Capability

16 TOPS AI performance



Brilliant System Efficiency

Blaize P1600 with 16 core El Cano GSP
Less memory bandwidth and low latency



Great Sensor Fusion Capability

H.264/H.265 video encoder and decoder
HDMI integrated and ISP processing



Multiple I/O and Expansion Interfaces

2x USB 3.2 Gen1 Type-A, 1x USB Type-C, 1x GbE,
1x COM Port for RS232, 1x Micro-SD slot



Fanless, Compact and Reliable



Powerful AI Software Tools

Extensive libraries, 100% programmability and
open source software stack

Applications : Edge Network Inferencing



Smart Factory

- Pose and position monitoring
- Workplace Safety detection



Smart Retail

- Consumer dwell time detection
- Shelf inventory management

Specification

Model Number	AIE-CP1A-A1
Module Compatibility	Blaize P1600 SoM
Storage	8GB eMMC 1x Micro-SD slot
Display	1x HDMI 1.4 With HDMI A Type Connector
Audio	HDMI Integrated
LAN	1x RJ-45 For GbE
USB	2x USB 3.2 Gen1 Type A 1x USB Type-C (Support UART)
COM	1x COM Port for RS232 (DB9)
MISC. Function	1x LED for SoM Power Good 1x Reset Button
Power Input /Connector	DC-in 12V / DC Jack 4pin
Dimension(Wx Dx H)	160 x 125 x 80mm (6.29" x 4.92" x 3.14")
Mounting	Desk Mount
Net Weight	1.886kg (4.154lb)
Vibration	3 Grms, IEC 60068-2-64, Random, 5 ~ 500 Hz, 1 Hr/axis
Shock	30 G, IEC 60068-2-27, Half Sine, 11 ms Duration
Temperature	Operating Temperature: 0°C ~ +60°C (32°F~ 140°F) / Storage Temperature: -40°C ~ +85°C (- 40°F ~ 185°F)
Humidity	95% @ 40°C Related Humidity, Non-condensing
Certification	CE/FCC

* Product Specifications are subject to change without prior notice