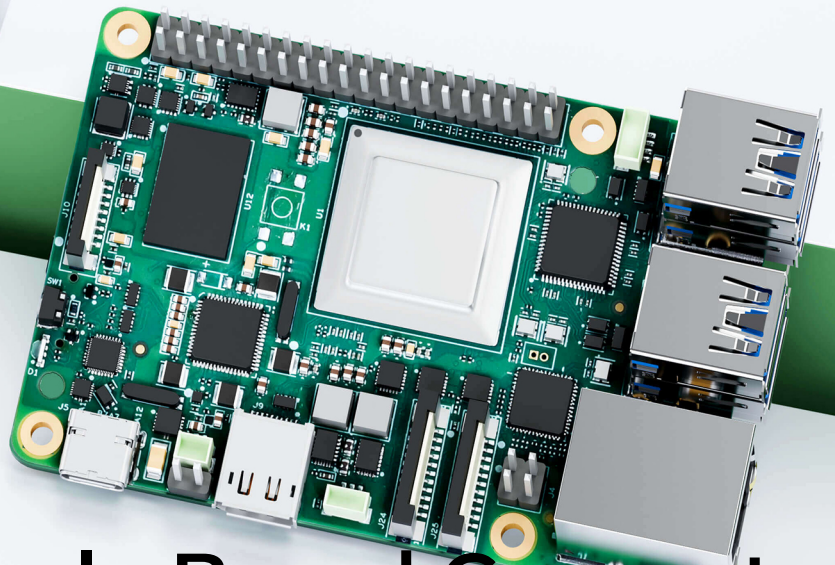
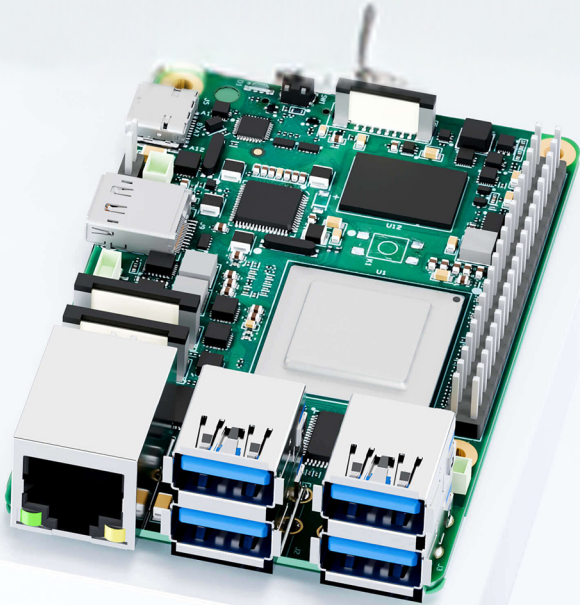


Embrace Edge AI, Empower Intelligent Vision



Mo 68A AI Single Board Computer

· Open SDK

· Linux Distribution

· HAT Expansion

· Edge AI

1. Product Overview

The Mo 68A is an 8 TOPS edge AI single-board computer based on the TI AM68A SoC, designed for AI vision boxes, intelligent cameras, and edge AI inference terminals.

Product Features:

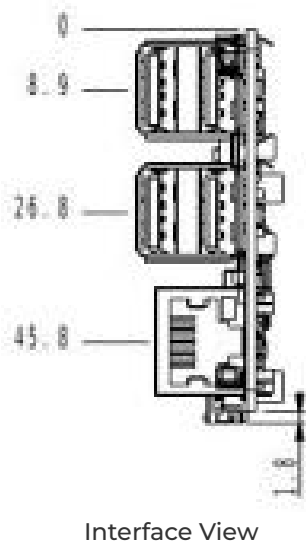
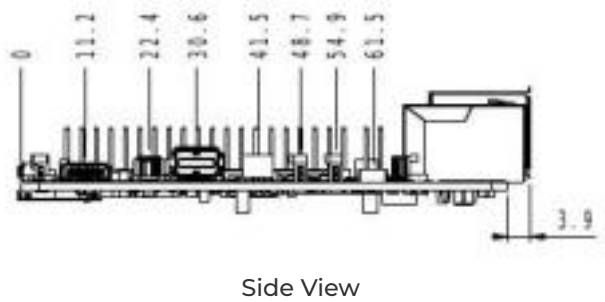
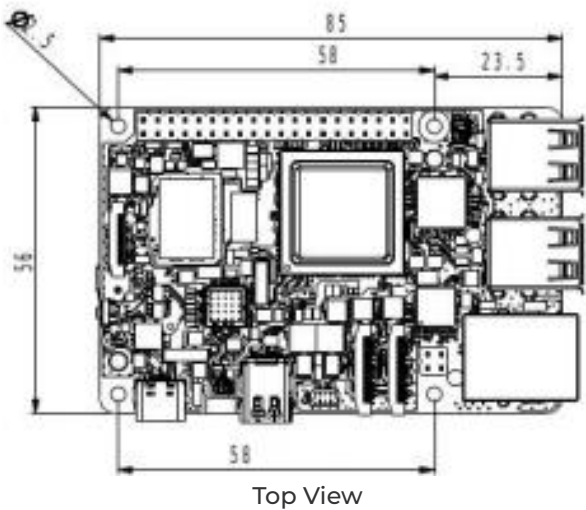
- **Edge AI Acceleration:** 8 TOPS on-device AI inference with TI TIDL runtime supporting TFLite / ONNX
- **Complete Vision Pipeline:** Dual 4-lane MIPI CSI-2, VPAC, DMPAC, 4K@60fps H.265 / H.264 codec
- **Rich Interfaces:** Gigabit Ethernet, PCIe 3.0, 4 × USB 3.0, mini DP, 40-pin HAT connector
- **SBC Ecosystem:** Standard form factor, Debian 13 Trixie, open SDK, Python / C / C++
- **High Security:** Secure Boot, TrustZone, OP-TEE, hardware crypto accelerator

Core Technical Specification

Technical Indicator	Specification
OS	Debian 13 (Embedded Linux)
AI Accelerator	2 x C7 x DSP + Deep Learning Accelerator, 8 TOPS
AI Runtime	TI TIDL, supports TFLite / ONNX
Vision	VPAC, DMPAC, 4K@60fps H.265 / H.264 codec
Security	Secure Boot, TrustZone, OP-TEE, Hardware AES-256
Development	Python, C/C++, OpenCV, GStreamer
CPU	2 × Cortex-A72 @ 2.0 GHz
RAM	LPDDR4 4 GB / 8 GB (default)

Technical Indicator	Specification
Interface	1 × GbE, 4 × USB 3.0, PCIe 3.0, mini DP, MIPI DSI/CSI-2
Power	USB Type-C 5 V / 5 A DC; ≤ 25 W
Dimensions (W × D × H)	85 × 56 mm (3.35 × 2.2 in)
Operating Temperature	0 °C ~ +50 °C (32 °F ~ +122 °F)

2. Product Dimensions



- Note:
- 1. All dimensions are in millimeters (mm), with inches (in) in parentheses.
 - 2. All dimensions are approximate values for **reference only**.
 - 3. The dimensions shown **shall not be used for production or processing**.
 - 4. Dimensions shall comply with part and manufacturing tolerance requirements.
 - 5. Dimensions are subject to change without notice.

3. Hardware Specifications

Category / Parameter	Specification
Hardware Platform	
CPU	TI AM68A, 2 × Cortex-A72 @ 2.0 GHz
AI Accelerator	2 × C7x DSP + Deep Learning Accelerator, 8 TOPS
ISP / Vision	On-chip ISP + VPAC (RGB-IR, WDR, LDC)
RAM	LPDDR4 4 GB / 8 GB (default)
Interface	
Ethernet	1 × Gigabit Ethernet
USB	4 × USB 3.0 Type-A
PCIe	1 × PCIe 3.0
Display	1 × mini DP + up to 2 × 4-lane MIPI DSI
Camera	up to 2 × 4-lane MIPI CSI-2
Audio	I ² S via 40-pin connector
40-pin Connector	GPIO / I ² C / I ² S / SPI / UART / PCM, HAT-compatible
Fan Connector	1 × 4-pin fan connector (5 V, PWM, GND, TACH)
Button	1 × Reset button
Storage	microSD
Debug	1 × TTL UART
LED	PWR, STATUS
Power	
Power Input	USB Type-C 5 V / 5 A DC

Category / Parameter	Specification
Power Consumption	25 W (MAX)
Mechanical	
Dimensions (W × D × H)	85 × 56 mm (3.35 × 2.2 in)
Weight	53 g (0.12 lb)
Housing	PCB
Cooling	Active fan (optional)
RTC	Support (battery backup)
Environmental	
Operating Temperature	0 °C ~ +50 °C (32 °F ~ +122 °F)
Storage Temperature	-20 °C ~ +70 °C (-4 °F ~ +158 °F)

4. Software Specifications

Category / Parameter	Specification
Operating System	
OS	Debian 13 Trixie
Kernel	Linux Kernel 6.12
AI & Vision	
AI Runtime	TI TIDL, supports TFLite / ONNX
Vision SDK	TI EdgeAI SDK
Camera Framework	V4L2

Category / Parameter	Specification
Display Framework	DRM / KMS
Network Features	
IP Application	TCP / UDP, ICMP, DNS, DHCP
IP Routing	Static routing
Security	
Secure Boot	Support
TrustZone	Support
OP-TEE	Support
Crypto Accelerator	Hardware AES-256
Development	
Languages	Python, C/C++
Libraries	OpenCV, GStreamer, NumPy
Package Manager	apt (Debian)
Open SDK	Supports custom system build by customer
System Management	
Remote Access	SSH
Firmware Upgrade	SD card flash
Debug	UART console

5. Ordering Information

Model Code Rule

Model code: Mo 68A-<x>

<x>: Memory

Product Models

Base Model	-x	Memory
Mo 62A	4G	4GB
Mo 62A	8G	8GB

Example

Model: Mo 68A-8G

"Mo 62A" means Base Model

"-8G" means 8GB memory

6. Contact Us

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