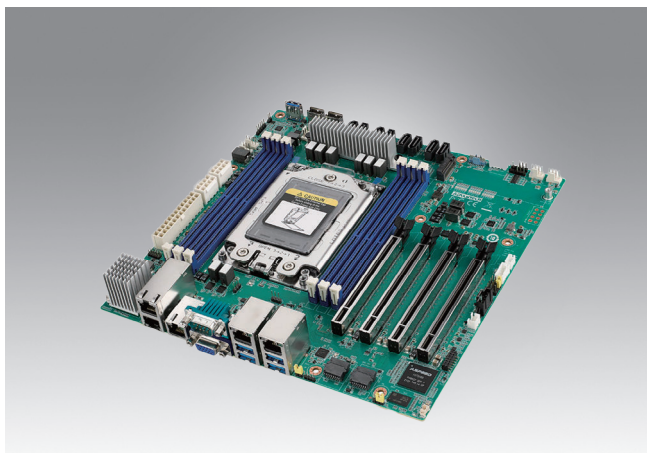


# AIMB-592

**AMD EPYC 7003 Zen 3 Core, MicroATX with 4 x PCIe X 16 Slots, 2 x 10GbE LANs, 2 x 2.5GbE LANs, 5 x USB 3.2 Gen1, IPMI 2.0**



## Features

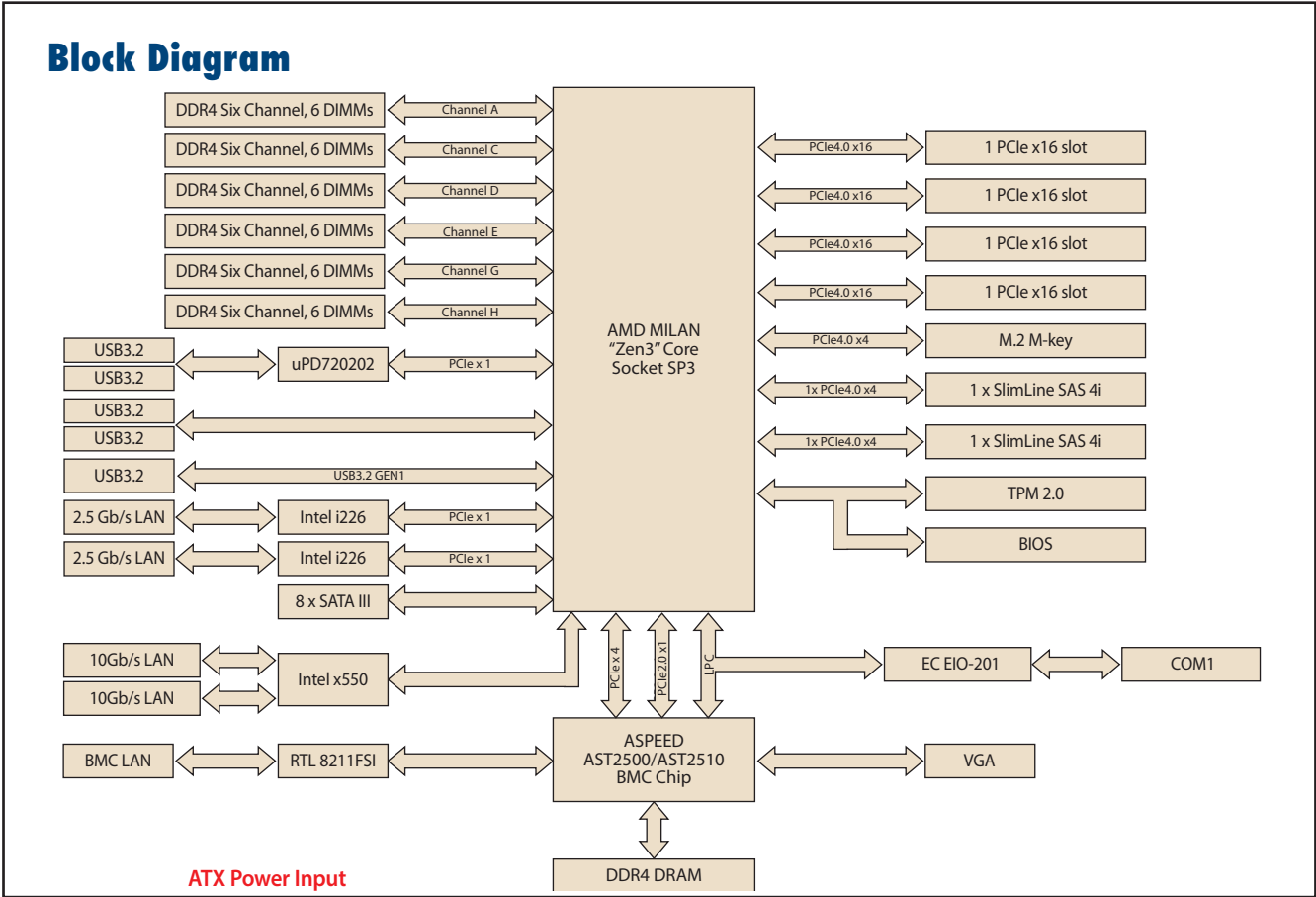
- Supports AMD EPYC™ 7003 up to 64 Zen 3 cores
- Supports 4 x PCIe Gen 4 x16 slots
- Supports 128GB DDR4 3200MHz with 6 RDIMMs
- Supports 2 x 10GbE, 2 x 2.5GbE LANs, 1 x BMC LAN
- Max up to 5 x USB 3.2 Gen1, 4 x PCIe x16, 6 x DDR4, 8 x SATA III, 2 x PCIe x4 slimline SAS, 1 x COM, 1 x VGA
- WISE-DeviceOn and Embedded Software APIs



## Specifications

Processor System	CPU	7313P	7543P	7713P
	Core Number	16	32	64
	Max. Speed	3.7GHz	3.7GHz	3.675GHz
	L3 Cache	128MB	256MB	256MB
	TDP (W)	155W	225W	225W
	Supports Model	AIMB-592SF, AIMB-592SL		
	BIOS	AMI BIOS 256 Mb SPI		
Expansion Slot	PCIe x16 (Gen4)	4 slots		
	Slimline SAS 4i	2 slimline SAS connector support 2 x PCIe x4 SAS		
Memory	Technology	6 Channel DDR4 up to 3200, ECC memory supported		
	Max. Capacity	768GB (128 GB per DIMM)		
	Socket	6 RDIMM 288-pin		
Graphics	Controller	BMC (AST2500/AST2510)		
Ethernet	Controller	LAN1: 2.5GbE Intel i226-LM (AIMB-592SF/AIMB-592SL) LAN2: 2.5GbE Intel i226-LM (AIMB-592SF/AIMB-592SL) LAN3: 10GbE Intel X550 (AIMB-592SF) LAN4: 10GbE Intel X550 (AIMB-592SF) LAN5: BMC LAN (AIMB-592SF)		
	Connector	RJ45 x5 (592SF) / RJ45 x2 (592SL)		
SATA	Max Data Transfer Rate	600 MB/s Max. (SATA 3.0)		
	Q'ty	8 (AIMB-592SF/AIMB-592SL)		
Rear I/O	VGA	1		
	Ethernet	5 (AIMB-592SF); 2 (AIMB-592L)		
	Serial	1 RS-232		
	USB 3.2 Gen1	4 (AIMB-592SF/AIMB-592SL)		
Internal Connector	USB 3.2 Gen1	1 (AIMB-592SF/AIMB-592SL)		
	SATA 3.0	8		
	M.2 (M key)	1 2280 NVMe PCIe4 support (AIMB-592SF/AIMB-592SL)		
	GPIO	8-bit GPIO		
Management Interface	IPMI	IPMI 2.0		
Watchdog Timer	Output	System reset		
	Interval	Programmable 1 ~ 255 sec/min		
Power Requirements	Power On	AMD EPYC 7543P 32-Core Processor 2.79GHz, with RDIMM DDR4 3200 128GB*6pcs		
		+5 V	3.3 V	+V12_8P
Environment	Temperature	Operating	Non-Operating	
		0 ~ 40 °C (32 ~ 113 °F), depends on CPU speed and cooler solution	-40 ~ 85 °C (-40 ~ 185 °F)	
Physical Characteristics	Dimensions	244 mm x 244 mm (9.6" x 9.6")		
Power	Input Mode	ATX input		

### Block Diagram



### Ordering Information

P/N	USB 3.2 (Rear)	USB 3.2 (Internal)	VGA	PCIe x16 Gen4	DDR 4 Memory	10GbE LAN	2.5GbE LAN	IPMI 2.0	BMC	BMC LAN	SATA III	M.2 M-key	TPM	Slimline
AIMB-592SF-0AA1	4	1	1	4	6	2	2	Yes	1 (AST2500)	1	8	1	1	2 (PCIex4)
AIMB-592SL-0AA1	4	1	1	4	6	0	2	No	1 (AST2510)*	0	8	1	1	2 (PCIex4)

\* No BMC function

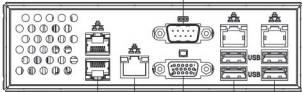
### Packing List

Part Number	Description	Quantity
1960109979N001	AIMB-592 I/O bracket	1
2046059200	AIMB-592 Startup manual	1
1700003194	SATA HDD cable	4
19350304A0	M.2 screws	2

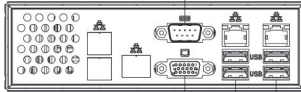
### Optional Accessories

Part Number	Description
1970004817N001	AIMB-592 Cooler, for CPU TDP 225W, 120.0(W) x 80.0(L) x 64.0 (H)
1700019748	CPU power cable

### I/O View



AIMB-592SF



AIMB-592SL

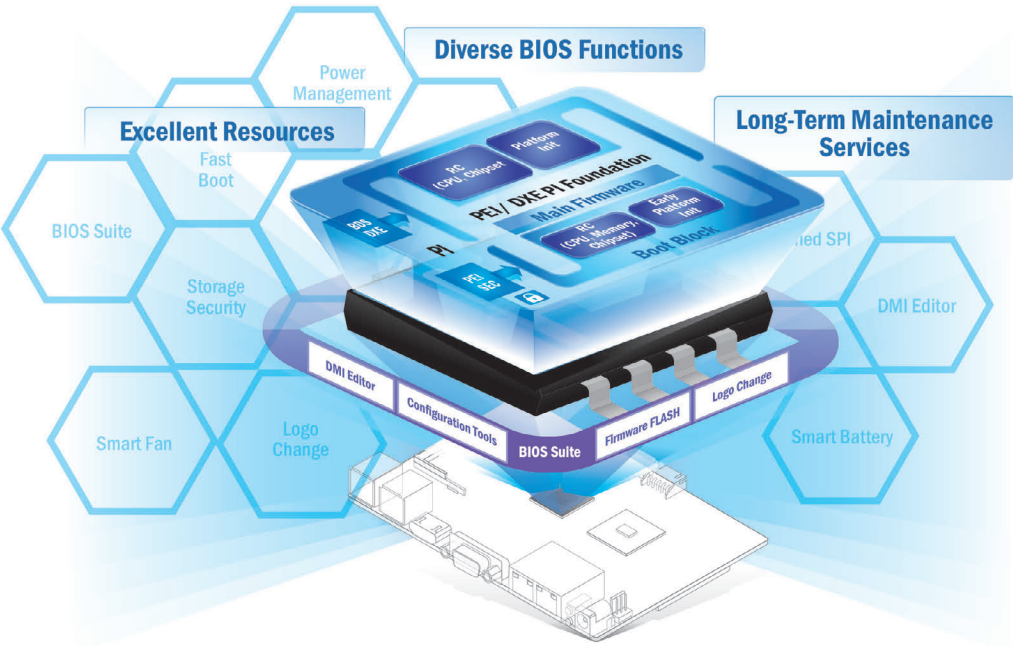
### Embedded OS/API

OS/API	Part No.	Description
Windows Server	20706WS96S0001	Windows Server 2019 Standard image (64b)
Ubuntu	20706U22DS0030	Ubuntu 22.04

# Reliable Embedded BIOS Solutions

Custom BIOS services with long-term support

Advantech's high-quality embedded BIOS solutions deliver rapid execution and feature expert BIOS team support. These solutions feature multi-functional designs that ensure security and enable power/boot management. Advantech further provides 10+ years of BIOS version management, internal management, and longevity support for both hardware and BIOS — enhancing application efficiency, diversifying functionality, and optimizing performance.



## Embedded BIOS Solution Advantages

### Sufficient Sources

- Strong partnership with BIOS vendors
- 50+ engineers with extensive industrial BIOS experience

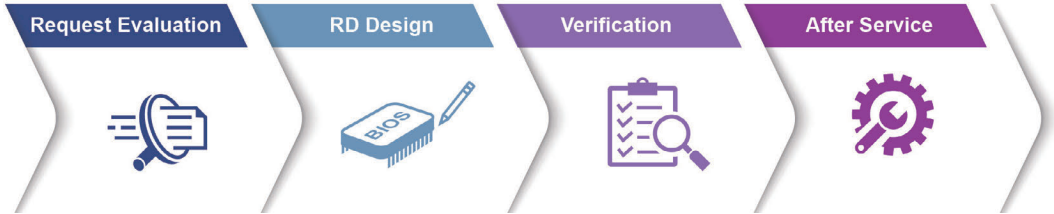
### Diverse BIOS Functions

- Multi-layer security
- 3 second fast boot
- Power management
- BIOS suite utility

### Long-Term Maintenance Services

- Platform longevity support
- 10-year BIOS version control
- BIOS remote backup

## Value-Added Customization Process



# WISE-DeviceOn

## Massive IoT Device Management Utility

IoT deployment and management typically involves numerous disparate devices installed on multiple sites. These devices require effective monitoring, managing, and tracking. Advantech's easy-to-use WISE-DeviceOn interface enables users to remotely monitor device health, troubleshoot problems, and send software/firmware updates over-the-air (OTA). In sum, DeviceOn empowers quick real-time responsiveness to emerging problems.



### Features

Comprehensive Management	Remote Access	Efficient Operations
<ul style="list-style-type: none"><li>• Devices status</li><li>• Peripherals/firmware</li><li>• Open for extension</li></ul>	<ul style="list-style-type: none"><li>• Real-time monitoring</li><li>• Remote controls</li><li>• Troubleshooting</li></ul>	<ul style="list-style-type: none"><li>• Zero-touch on-boarding</li><li>• OTA updates</li><li>• Batch control</li></ul>

### Product Highlights

 <p><b>SOM-6883</b> High-performance 11<sup>th</sup> Gen Intel<sup>®</sup> COMe Type 6 Module</p>	 <p><b>MIO-5375</b> Compact 11<sup>th</sup> Gen Intel<sup>®</sup> Outdoor Focused 3.5" SBC</p>	 <p><b>EPC-B5587</b> 10<sup>th</sup> Gen Intel<sup>®</sup> Xeon<sup>®</sup> based Edge server</p>	 <p><b>EPC-R3220</b> Arm based IoT Edge Gateway</p>
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# Edge AI Suite

AI development for diverse application at the Edge

Increasing demand for AI inference/analytic capabilities at the Edge make AI training models, software development environments, and hardware configuration key factors in successful solution deployment. Advantech's Edge AI Suite helps users build AI demo devices quickly and choose optimal hardware solutions easily.



5x Performance Boost	All-in-one Installation	One Click AI Experience	Plug-and-play Environment	Discover Cost-effective Hardware
<ul style="list-style-type: none"><li>Integrated Intel® OpenVINO™ technology</li><li>Boost AI using Advantech hardware</li></ul>	<ul style="list-style-type: none"><li>Build AI environment in under 5 minutes</li><li>Ready-to-use configuration</li></ul>	<ul style="list-style-type: none"><li>User friendly configuration guidance</li><li>One-click Benchmark acquisition</li></ul>	<ul style="list-style-type: none"><li>Easy access to 100+ AI inference extensions</li><li>Software development package available</li></ul>	<ul style="list-style-type: none"><li>Diverse CPU/RAM options</li><li>Find hardware solutions for AI development</li></ul>

# Embedded Linux Support and Design-in Services

## Hardware Certified Ubuntu and Yocto with Eco Partner Services

Linux is the most popular embedded OS for transportation, outdoor services, factory automation, and mission critical applications. Its open source and kernel reliability features ease security updates, and make it particularly adaptable to new AI and Edge computing technology. Advantech has cooperated with Canonical and other software partners to provide hardware certified Ubuntu image and Yocto BSP as Linux offerings. The Advantech, Embedded Linux, and Android Alliance (ELAA) delivers local software services and consultation.



### Features

Certified OS and BSP	Licensed Services	Numerous AI and Edge Resources	Local Partner Alliance
<ul style="list-style-type: none"> <li>Platform compatibility tests</li> <li>Preloaded functional driver and software stacks</li> </ul>	<ul style="list-style-type: none"> <li>License authorized Canonical delivers 10-years of bug fixes and security updates</li> <li>In-house bundled service</li> </ul>	<ul style="list-style-type: none"> <li>Containerized technology for service provision and deployment</li> <li>AI resources from Caffe, TensorFlow, and mxnet</li> </ul>	<ul style="list-style-type: none"> <li>Embedded Linux and Android Alliance (ELAA)</li> </ul>

# Tento produkt můžete zakoupit u společnosti AutoCont IPC a.s.



## AutoCont IPC a.s.

Váš dodavatel průmyslových počítačů, komponent a speciálních průmyslových IT systémů.

 Uhlířská 1064/3, 710 00 Ostrava, Česká republika

 obchod@autocont-ipc.cz

 +420 552 301 002

 [www.autocont-ipc.cz](http://www.autocont-ipc.cz)



### PRŮMYSLOVÉ POČÍTAČE

fanless embedded PC, do racku, ...



### POČÍTAČE S DISPLEJEM

panelové PC, terminály, do vozidel, ...



### AUTOMATIZACE A SBĚR DAT

převodníky, karty, moduly, switche, ...



### PERIFERIE A KOMPONENTY

monitory, klávesnice, desky, skříně, ...



### NOTEBOOKY A TABLETY

odolné, windows, android, IP65, ...



### INFORMAČNÍ KIOSKY

interiérové, venkovní, ...



### MEDICÍNSKÁ TECHNIKA

počítače, tablety, LCD, klávesnice, ...



### SOFTWAREVÁ ŘEŠENÍ

pro výrobu, zaměstnance, kiosky, ...



### PŘEJÍT DO E-SHOPU

[eshop.autocont-ipc.cz](http://eshop.autocont-ipc.cz)



### DOPRAVA ZDARMA

Doprava zdarma v ČR a SR při objednávce nad 10 000 Kč bez DPH nebo nad 400 EUR.



### PRODLOUŽENÁ ZÁRUKA

Záruka 2 roky na vyráběné počítače s možností jejího prodloužení až na 5 let.



### ODMĚNA ZA VĚRNOST

Pravidelní zákazníci u nás nakupují za nižší ceny. Výše slevy se odvíjí od realizovaného obrátu.



### SERVIS ON-SITE A IN-TIME

K projektovým dodávkám nabízíme rozšířenou podporu a servis s garancí výměny zařízení do 48 hodin.