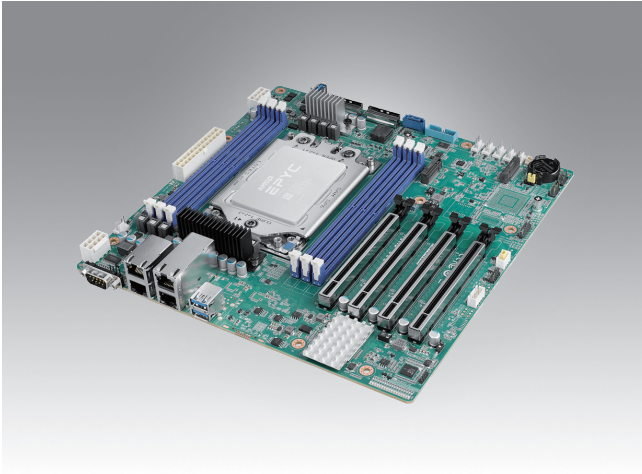


AIMB-593

Micro-ATX Motherboard AMD EPYC 8004 Series Processor



Features

- Supports AMD EPYC 8004 processor
- Supports 576GB DDR5 4800MT/x with 6 RDIMMs
- 2 x M.2 M-Key 2280 slots (PCIe Gen5 x4) for high-speed NVMe SSDs
- Up to 5 x PCIe Gen5x16 slots, default onboard 4 x PCIe Gen5x16 slots
- 2 MCIO x8 (offer extension board for additional 2 PCIe slots)
- Intel® X710-AT2 dual 10GbE ports & I226 dual GbE ports
- WISE-DeviceOn and Embedded Software APIs

Software APIs:



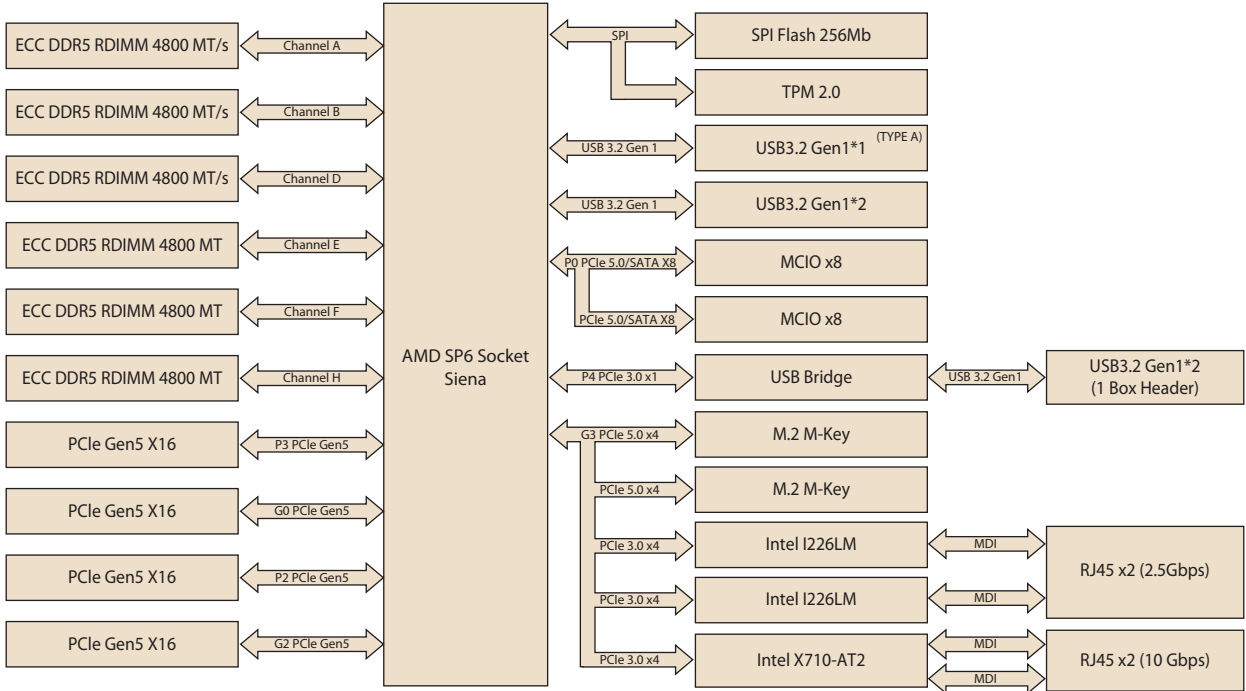
Utilities:



Specifications

Processors	CPU	8534P	8434P	8324P	8224P	8124P	8C24P
	Core	64	48	32	24	16	12
	Base frequency (GHz)	2.3	2.5	2.65	2.55	2.45	2.45
	Max Speed (GHz)	3.1	3.1	3	3	2.95	2.95
	L3 Cache (MB)	128	128	128	64	64	32
	TDP (W)	200	200	180	160	125	100
Processor System	BIOS	AMI EFI 256 Mbit SPI					
Memory	Technology	DDR5, 6 Channel, support RDIMM					
	Frequency	4800MT/x					
	Max. Capacity	576GB (up to 96GB per DIMM)					
	ECC Support	Yes					
	Socket	6 x 288-pin DDR5 RDIMM sockets					
TPM	IC	1 x NPCT760AABYX					
Network	Ethernet	10/100/1000/2500/10000 Mbps					
	Controller	2 x Intel® I226LM + 2 x Intel® X710-AT2					
	Connector	4 x RJ45					
Expansion Slot	M.2	2 x M-key 2280 (PCIe Gen5x4)					
	PCIe x16	4 x PCIe x16 slot with Gen5 x16lanes (PCIe Gen5, #2 and #4 Support CXL)					
	MCIO	2 x MCIO 8i (PCIe Gen5 x8, Support CXL)					
Rear I/O	RJ45	4 x RJ45					
	USB	2 x USB 3.2 Gen1					
	COM	1 x RS232					
Internal Connector	USB	2 x USB 3.2 Gen1, box header 1 x USB3.2 Gen1, Type-A vertical					
	M.2	2 x M-key 2280					
	Intrusion Protection	1					
	CPU & System Fan Connector	1 x CPU FAN 5 x SYS FAN					
	Power Connector	ATX 24-pin(system) + ATX 8-pin(CPU)					
	GPIO	1 x 8-bit					
Watchdog Timer	Output	System reset					
	Interval	Programmable 1 ~ 255 (second or minute)					
Power Requirements	Input voltage	ATX					
	Connector	ATX 24-pin(system) + ATX 8-pin(CPU)					
	Operation	+5V	3.3V	12V	12V_8P		
	Configuration	TBD					
	Standby (5Vsb)	3A					
Environment	Temperature	Operating: 0 ~ 60° C (32 ~ 140° F), depends on CPU speed and cooler solution					
	Storage	Non-Operating: -40 ~ 85° C (-40 ~ 185° F)					
Physical Characteristics	Dimensions	244 mm x 244 mm (9.6" x 9.6") x 2.4mm					

Block Diagram



Ordering Information

P/N	DDR5	PCIe x16 (Gen5)	MCIO 8i (Gen5)	10GbE LAN	2.5GbE LAN	USB 3.2 Gen 1 (Type A) (Rear I/O)	USB 3.2 Gen 1 (Type A) (internal)	USB 3.2 Gen1 (1 x box header) (internal)	RS-232	M.2 2280 Gen5 M-Key	TPM
AIMB-593-0AA1	6	4	2	2	2	2	1	2	1	2	Yes

Packing List

P/N	Description	Quantity
19Z0003391T001	I/O port bracket	1
1930006770-01	M.2 device screw	2
2046059300	Startup manual for AIMB-593	1

Embedded OS/API

P/N	Description	968 PN	Description

Optional Accessories

P/N	Description
1700020277-01	USB 3.0 cable 30cm with IO bracket
1700034192-01	Serial ports cable, 50cm
1700036726-01	MCIO cable, 74Pin to 74Pin, 40cm
1700036679-01	MCIO cable, 74Pin to 4 x SATA, 60 CM
1970005652T001	AIMB-592 Cooler, for CPU TDP 225W, 119.3(W) x78.9(L) x22.6(H) mm
AIMB-59EB1	MCIO to 1 PCIe Gen5 x16 or 2 PCIe Gen5 x8

Optional Chassis

OS/API	Part No.