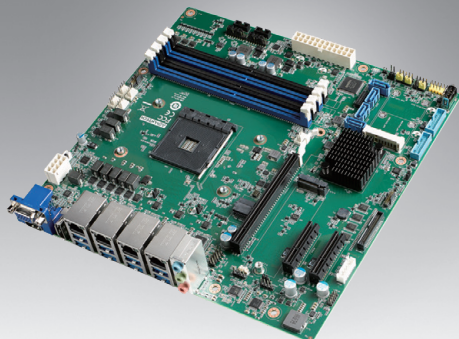


# AIMB-522

**AMD AM4 Ryzen™ 5000 Series  
MicroATX with 1 DP/HDMI/VGA,  
6 COM, 4 GbE LANs, 8 USB 3.2,  
4 USB 3.0, 3 USB2.0**

Preliminary



**WISE-DeviceOn**

## Features

- Supports AMD AM4 Ryzen™ 5000 series processor with X570 chipset
- Supports triple displays. (DP, VGA, HDMI display)
- Supports PCIe Gen4, max up to 8 x USB 3.2 Gen2, 4 x USB 3.0 Gen2, 3 x USB 2.0, 4 x SATAIII, 2 x 2.5GbE, 2 x 1GbE, M.2 (M Key)
- Supports DeviceOn and Embedded Software APIs

Software APIs:



SMBus

H/W Monitor

Watchdog

GPIO

Utilities:



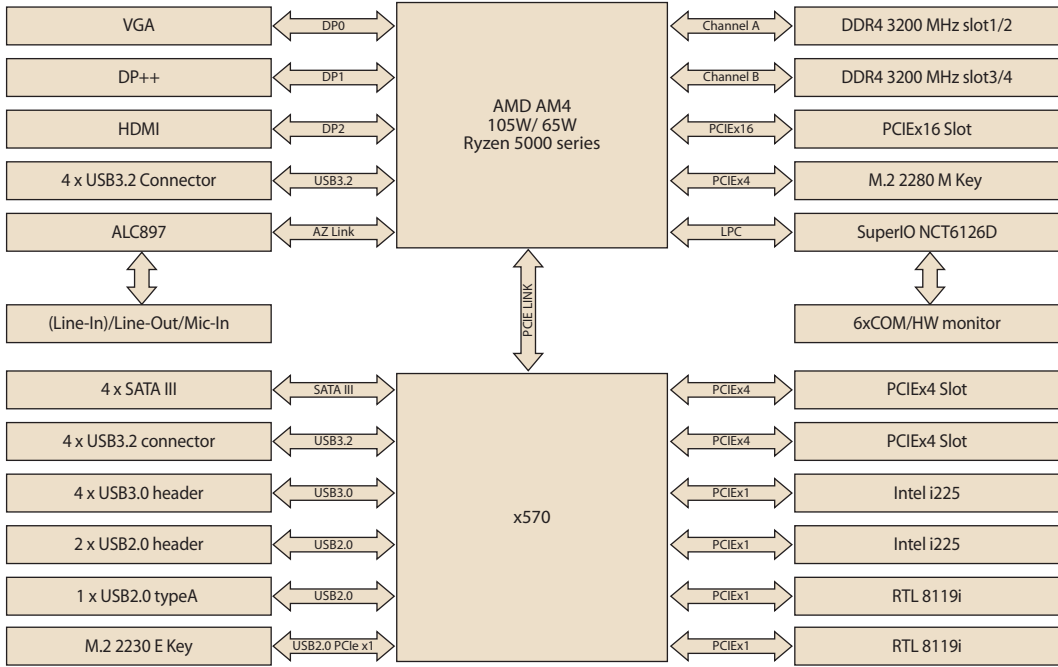
BIOS flash

Monitoring

## Specifications

Processor System	CPU	5950E	5900E	5800E	5600E	5950X	5900X	5800X	5600G	5700G	
	Core Number	12	10	8	6	16	12	8	6	8	
	Max. Speed	3.4 GHz	3.7 GHz	3.7 GHz	3.6 GHz	3.4GHz	3.7GHz	3.8GHz	3.9GHz	3.8GHz	
	L3 Cache	64 MB	64 MB	32 MB	32 MB	64MB	64MB	32MB	16MB	16MB	
	TDP (W)	105W	105W	100W	65W	105W	105W	105W	65W	65W	
	Chipset	X570									
Expansion Slot	BIOS	AMI EFI 256 Mbit SPI									
	PCIe x16	1 (x16 Gen4 x4 signal from CPU; Gen3 x4 signal from APU)									
	PCIe x4 slot 1	1 (x4 signal from X570), only support half-length card and up-to PCIe x8 card									
	PCIe x4 slot 2	1 (x4 signal from X570), only support half-length card and up-to PCIe x8 card									
	M.2	1 (2280 M key, PCIe Gen4 x4 from CPU, Gen3 x4 from APU) 1 (2230 E key, USB 2.0 and PCIe Gen4 x1 from X570)									
Memory	Technology	Supports Dual Channel DDR4 3200MHz									
	Max. Capacity	128GB (32GB per DIMM)									
	Socket	4 x 288 pin U DIMM									
Graphics	Controller	APU : Radeon™ Graphics CPU: N/A (Discrete Graphics Card Required)									
	VGA	1, up to 1920x1200@60Hz, 2048x1152@60Hz									
	HDMI	1, up to 4096x2304@30Hz									
	Display Port	1, up to 4096x2304@30Hz									
	Triple Display	VGA+DP+HDMI (APU only)									
Ethernet	Controller	2 x INTEL LAN i225LM, 2 x Realtek 8119i									
	Connector	4 x RJ 45									
SATA	Max Data Transfer Rate	600 MB/s Max. (SATA 3.0)									
	Q'ty	4									
Rear I/O	Display Port	1									
	VGA	1									
	HDMI	1									
	Ethernet	4									
	USB	8 USB 3.2 ports (4 ports from CPU/APU, 4 ports from X570)									
	Audio	2 Jacks (colay 3 Jacks)									
	Internal Connector	USB 3.0	4								
USB 2.0		2 for pin header and 1 for type A connector									
Serial		COM1, COM2 with 10pin box header (RS-232/422/485) COM3456 with 40pin box header (RS-232 only)									
SATA 3.0		4									
PS/2 (KBMS1)		1 (6-pin header)									
M.2 (M key)		1 (2280 NVMe PCIe4)									
GPIO		1, 8bit pin header									
Watchdog Timer	HDMI										
Power Requirements	Power On	+5 V	3.3 V	12 V	12 V(8-pin)	-12V	+5VSB	GND			
		23A	17.73A	25.3A	16.1A	0.12A	2.5A	0A			
Environment		Operating					Non-Operating				
	Temperature	0 - 60 °C (depend on CPU)					-40 ~ 85 °C (-40 ~ 185 °F)				
Physical Characteristics	Dimensions	244 x 244 mm									
Power	Input Mode	ATX input									

**Block Diagram**



**Ordering Information**

P/N	Chipset	Rear IO USB3.2	Rear IO USB2.0	Internal USB3.2 header	Internal USB2.0 header	Internal USB2.0 typeA	DP++/VGA	HDMI	GbE LAN	SATA III	COM	M.2 E-key	M.2 M-key	TPM	AMP (6W)
AIMB-52200-00A1E	X570	8	0	4	2	1	1/1	1	4	4	6	1	1	1	(1)
AIMB-52200-01A1E	X570	8	0	4	2	1	1/1	1	2 (Realtek 8119i only)	4	6	1	1	1	(1)

\* () means BOM option