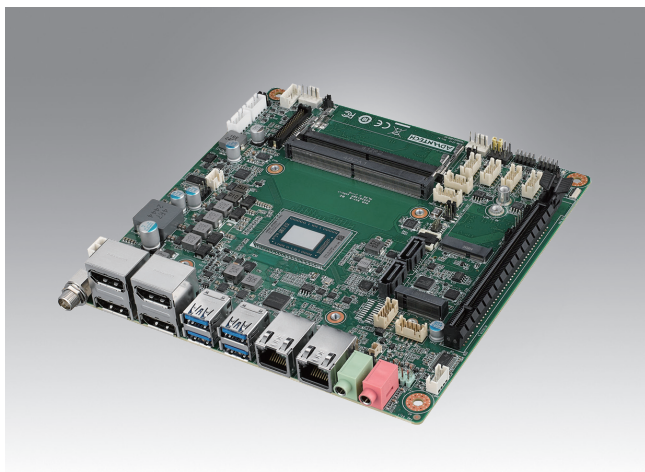


AIMB-2210

Mini-ITX Motherboard AMD Ryzen™ Embedded 8000 Series Processor



Features

- AMD Ryzen™ Embedded 8000 Series Processor
- Up to 96GB DDR5 5600MT/s with two SO-DIMM
- Four independent display with 4 DP or 3 DP + 1 LVDS(or eDP)
- 3 M.2 expansion slots, 6 COM, 4 USB 3.2 Gen2x1, 4 USB 2.0 and 1 PCIe x8 Gen4
- Supports 12-24V wide voltage DC-In (tolerance: -10% / + 20%)
- Windows 11 LTSC & Ubuntu 24.04 LTS; SUSI API and WISE-DeviceOn

Software APIs:

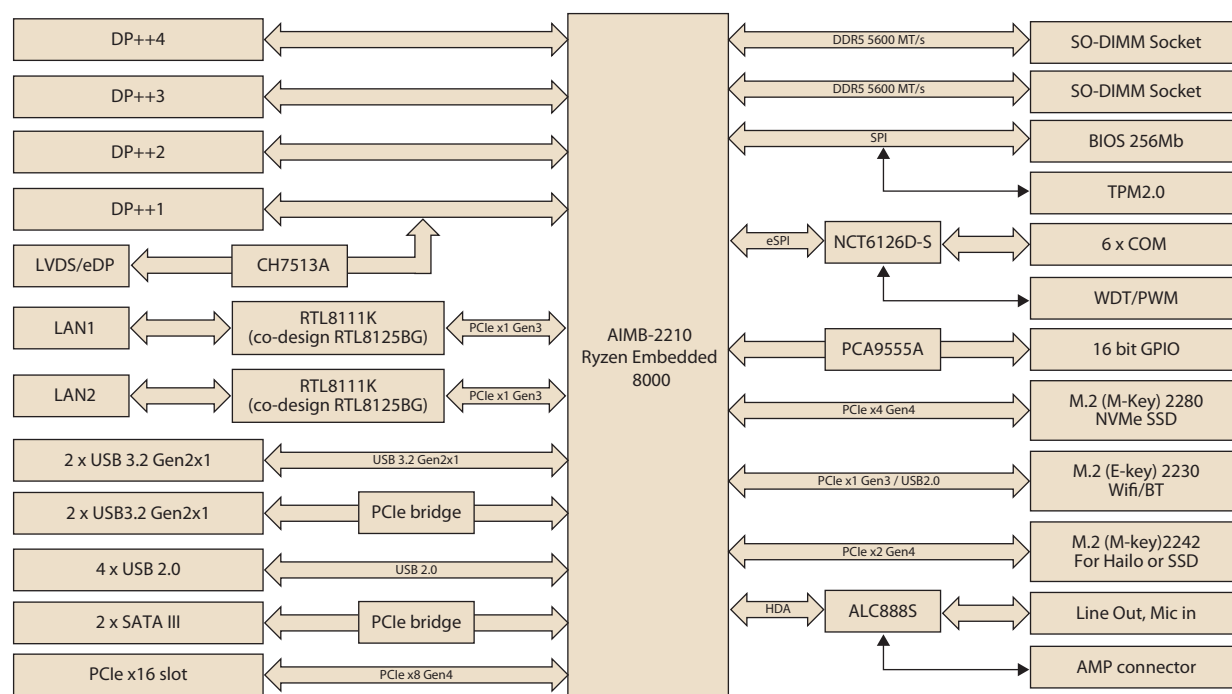


Utilities:



Specifications

Processor System	SoC	Ryzen 7 Pro 8845HS	Ryzen 7 Pro 8840U	Ryzen 5 Pro 8645HS	Ryzen 5 Pro 8640U
	Cores	8	8	6	6
	Base freq. (GHz)	3.8	3.3	4.3	3.5
	L2 Cache (MB)	8	8	6	6
	TDP	45W	28W	45W	28W
	NPU	Yes			
	BIOS	AMI EFI 256 Mbit SPI			
Expansion Slot	M.2	2 x M-key for SSD or Hailo, 1 x E-key for wireless module (WiFi/BT)			
	PCIe	1 x PCIe x16 slot (real bandwidth PCIe x8 Gen4)			
Memory	Technology	Single channel DDR5 5600 MT/s (support ECC)			
	Max. Capacity	Up to 96 GB			
	Socket	2 x 262pin SO-DIMM			
Graphics	Controller	AMD RDNA 3 Radeon Graphics			
	DP	4 x DP++, up to 4096 x 2160 @ 60Hz, DP1 colay with eDP/LVDS			
	LVDS	1 (default, up to 1920x1080@60Hz, colay with DP1)			
	eDP	1 (option, up to 4096x2304 @ 60Hz)			
	Multi Displays	4 independent display.			
		DP1/DP2/DP3/DP4 LVDS or eDP + DP2/DP3/DP4			
Network	Ethernet	10/100/1000/2500 Mbps			
	Controller	RTL8111K (1GbE) default, RTL8125BG (2.5GbE) by option			
	Connector	2 x RJ45			
Audio	Codec	Realtek ALC888S, High Definition Audio (HD), Line out, Mic-in			
	Amplifier	Yes, 4 ohm 8W*2; 8 ohm 6W*2			
SATA	Max data transfer rate	6.0 Gb/s			
	Channel	2 (SATA III)			
Rear I/O	DP	4			
	Ethernet	2			
	USB	4 x USB 3.2 Gen2x1			
	Audio	1 (Line-Out, Mic-In)			
Internal Connector	USB	4 x USB 2.0			
	LVDS/eDP	1 (eDP colay with LVDS)			
	Serial	6,			
		COM1: Support RS-232 (RI Power 5V/12V)			
		COM2 and 5: Support RS-232/422/485, by BOM option			
		COM3: Support RS-232 (CCTalk by BOM option)			
		COM4: Support RS-232 (TTL, RI Power 5V/12V by BOM option)			
	COM6: Support RS-232				
SATA	2				
Watchdog Timer	M.2	2 x M-key (2242/2280, for SSD or Hailo)			
	GPIO	1 x E-key (2230, for WiFi/BT)			
	Output	System reset			
	Interval	Programmable 1 ~ 255 (second or minute)			
Power Requirements	Input voltage	12-24V DC-in (tolerance: -10% / + 20%)			
	Connector	DC Jack, Internal 4-pin ATX			
	Power consumption	Configuration	AMD Ryzen™ 7 Pro 8845HS, 2pcs 48 GB DDR5 5600 MT/s		
		Max.	86.9W		
		Typical	73.9W		
Environment	Temperature	Operating: 0 ~ 60 °C (32 ~ 140 °F)			
	Storage	Non-Operating: -40 ~ 85 °C (-40 ~ 185 °F)			
Physical Characteristics	Dimensions	170 mm x 170 mm (6.69" x 6.69")			



P/N	CPU	TDP	LVDS/eDP	DP	DDR5	GbE	COM	SATAIII	USB3.2	USB2.0	M.2 E key	M.2 M key	PCIex16	TPM	AMP
A1MB-2210R-00A1	8845HS	45W	(1)/(1)	4*	2	2**	6	2	4	4	1	2	1	1	(1)
A1MB-2210R-01A1	8840U	28W	(1)/(1)	4*	2	2**	6	2	4	4	1	2	1	1	(1)
A1MB-2210R-02A1	8645HS	45W	(1)/(1)	4*	2	2**	6	2	4	4	1	2	1	1	(1)
A1MB-2210R-03A1	8640U	28W	(1)/(1)	4*	2	2**	6	2	2 + (2)	4***	1	2	1	1	(1)

Option (rear) 4 x USB 3.2 Gen2x1 + (internal) 4 x USB 2.0

Part Number	Description	Quantity
AIMB-2210 Board	AIMB-2210 motherboard	1
1700003194-21	SATA HDD cable	1
1700034404-01	1-to-1 serial port cable, 50cm	1
1960118411T001	I/O port bracket	1
2046221000	Startup manual for AIMB-2210	1
19350304A0	M.2 Screw, M3x4L R/S D=5.3 H=2 (2+)	3
1700018785-01	SATA power cable	1

Part Number	Description
AIMB-B2000-00YE	AIMB-B2000 wallmount chassis w/o adaptor

Part Number	Description
1700034405-01	1-to-1 USB cable, 50cm
1960089783T001	CPU Cooler (CPU TDP 54W, H: 58.3mm)
1960089784T001	CPU Cooler (CPU TDP 35W, H: 45mm)

OS	Part No.	Description