

AIMB-228

AMD V-series Quad Core mini-ITX with 4 DP, 6 USB, 6COM, 12-24V DC-In



WISE-PaaS/RMM

Features

- Support AMD V1000 processor
- Two 260-pin SO-DIMM up to 32GB DDR4 2400/2666/3200 SDRAM
- Support multi display, Max up to 4 displays
- Supports 1 PCIe x8, 1x PCIe1(Golden finger) and 2 M.2 expansion slots
- 6 COM, 4 USB 2.0, 2 USB 3.1 Gen2
- Supports WISE-PaaS/RMM and Embedded Software APIs
- Support 12-24V wide voltage DC-In

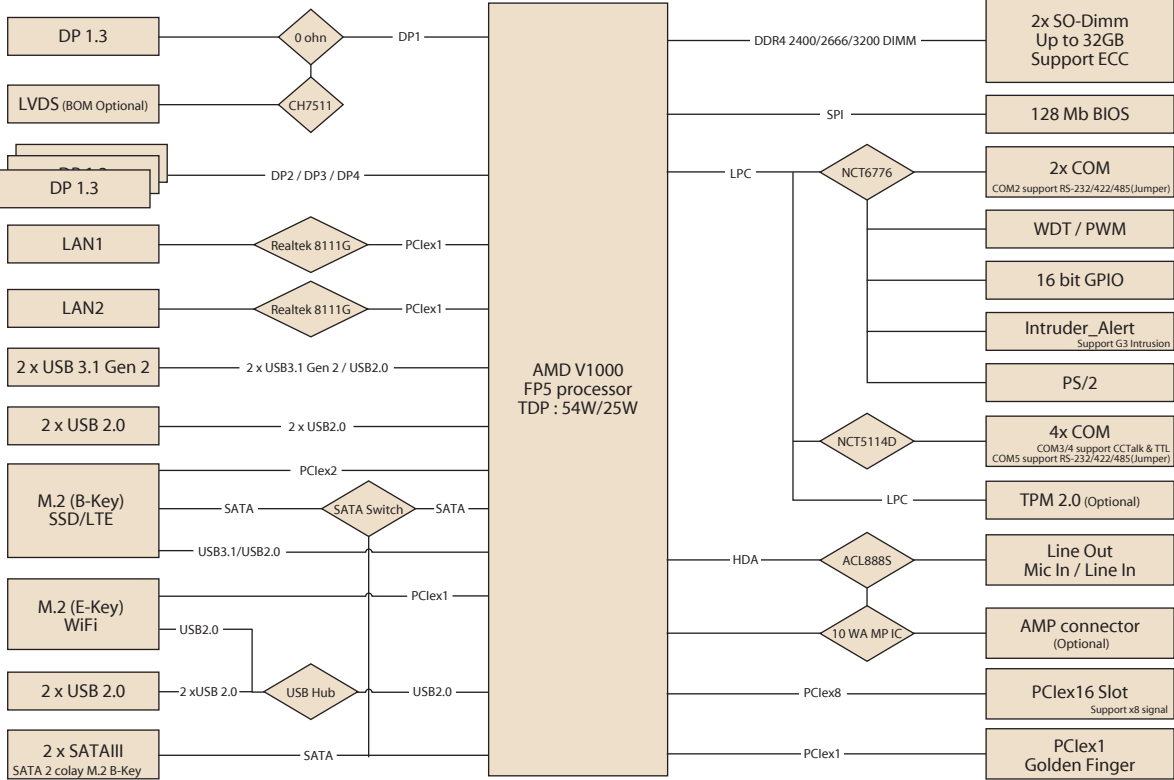
Software APIs:

Utilities:

Specifications

Processor System	SOC (14nm)	V1807B	V1605B	V1202B	
	Max. Speed	3.8GHZ (Quad Core 54W)	3.6GHZ (Quad Core 25W)	3.2GHZ (Dual Core 25W)	
	L2 Cache	2Mb	2Mb	2Mb	
	BIOS	AMI 128Mbit SPI			
	Expansion Slot	M.2	1 B-Key, 1 E-Key		
	PCIe	1 PCIe x8, 1 PCIe x1			
Memory	Technology	Dual Channel DDR4 2400 / 2666 / 3200MHz SDRAM			
	Max. Capacity	32 GB/16 GB per SO-DIMM			
	Socket	2 x 260-pin DDR4 SO-SIMM with ECC Support			
Graphics	Controller	AMD Integrated Vega GCN			
	LVDS	1, supports dual channel 48-bit up to 1920 x colay DP 1.2 port (Optional)			
	Display Port 1.3	4, Supports DP++, resolution up to 4096 x 2160 @ 60Hz			
	Multi Display	V1000: DP/LVDS+DP+DP+DP			
Ethernet	Interface	10/100/1000 Mbps			
	Controller	GbE LAN1: Realtek 8111G GbE LAN2: Realtek 8111G			
	Connector	RJ-45 x 2			
SATA	Max Data Transfer Rate	600 MB/s			
	Channel	2, SATA 2 colay M.2 B-Key (optional); SATA 1 support SATA-DOM device			
Rear I/O	DP1.3 (Default)	4			
	Ethernet	2			
	USB	2 x USB 2.0/2 x USB 3.1 Gen2			
	Audio	2 (Line out + Mic/Line in)			
	DC jack	1 (2.5 mm)			
Internal Connector	LVDS & Inverter (Optional)	1/1			
	USB	2 x USB2.0			
	Serial		6, COM1: support RS-232 with 5V/12V/Ring COM2: support RS-232/422/485 supports 9 bit data/auto flow(select by Jumper) COM3: Colay Cctalk(5/12V; Jumper select) ; singnal mix with RS232 COM4: support 5V/12V selection(by jumper); Colay TTL (5V, TX, RX only) ; singnal mix with RS232 COM5: support RS-232/422/485 supports 9 bit data/auto flow(select by Jumper) COM6: RS-232		
		SATA	2		
		SATA PWR Connector	2		
		PS/2 KB & MS	1		
		Intrusion Protection	1		
	GPIO	16 bit			
	Watchdog Timer	Output	System reset		
		Interval	Programmable 1 ~ 255 sec/min		
Power	Power Type	Wide voltage 12~24V DC input; 1 x External DC jack; 1 x Internal 4-pin (2x2) power connector; Supports AT/ATX mode			
	Typical Power Consumption	TBD			
Environment		Operating	Non-Operating		
	Temperature	0 ~ 60° C (32 ~ 140° F)		-40 ~ 85° C (-40 ~ 185° F)	
Physical Characteristics	Dimensions	170 mm x 170 mm (6.69" x 6.69")			

Block Diagram



Ordering Information

Part Number	CPU	Display	TPM	LVDS	PCIe Slot	USB 3.1/2.0	GbE	SATA	COM	Thermal Solution
AIMB-228VG2-00A1E	V1807B	DP/LVDS, DP, DP, DP	(1)	(1)	x8	2/4	2	2	6	Active
AIMB-228VG2-02A1E	V1605B	DP/LVDS, DP, DP, DP	(1)	(1)	x8	2/4	2	2	6	Active
AIMB-228VG2-03A1E	V1202B	DP/LVDS, DP, DP, DP	(1)	(1)	x8	2/4	2	2	6	Active

*() BOM options available on MP version.

Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	1
1700018785	SATA power cable (1 port, 25cm)	1
1700022363-01	1-to-1 serial port cable 17CM	2
TBD	I/O port bracket	1
TBD	Startup manual	1

Optional Accessories

Part Number	Description
TBD	

Embedded OS

Part Number	Description
TBD	

Optional Chassis

Part Number	Description
TBD	

I/O View

