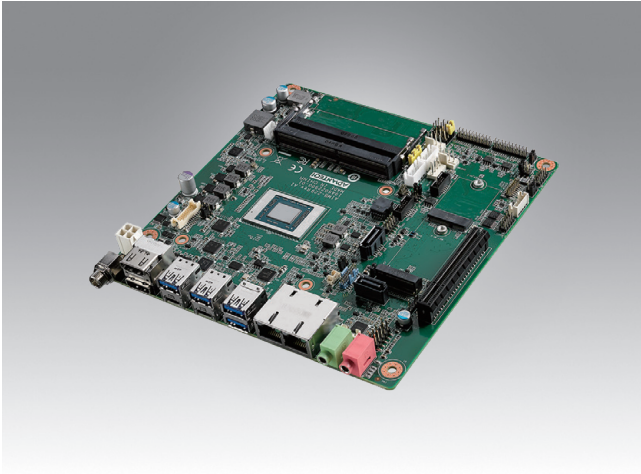


# AIMB-229

## AMD V-series mini-ITX with 2HDMI/2DP/ 8USB/6COM/2Gb/2M.2



### Features

- Support AMD V2000 processor
- Two 260-pin SO-DIMM up to 64GB DDR4 3200 SDRAM
- Support multi display, Max up to 4 displays
- Supports 1 PCIe x8, 1 E-Key 2230 M.2 slot, 1 M-Key 2242/2280 M.2 slot
- 6COM, 4 USB3.2 Gen2, 2 USB3.2 Gen1, 2 USB2.0, 2 SATA, 16bit GPIO
- Support SUSI, WISE-DeviceOn and Edge AI Suite

#### Software APIs:



#### Utilities:



Windows 10 IoT

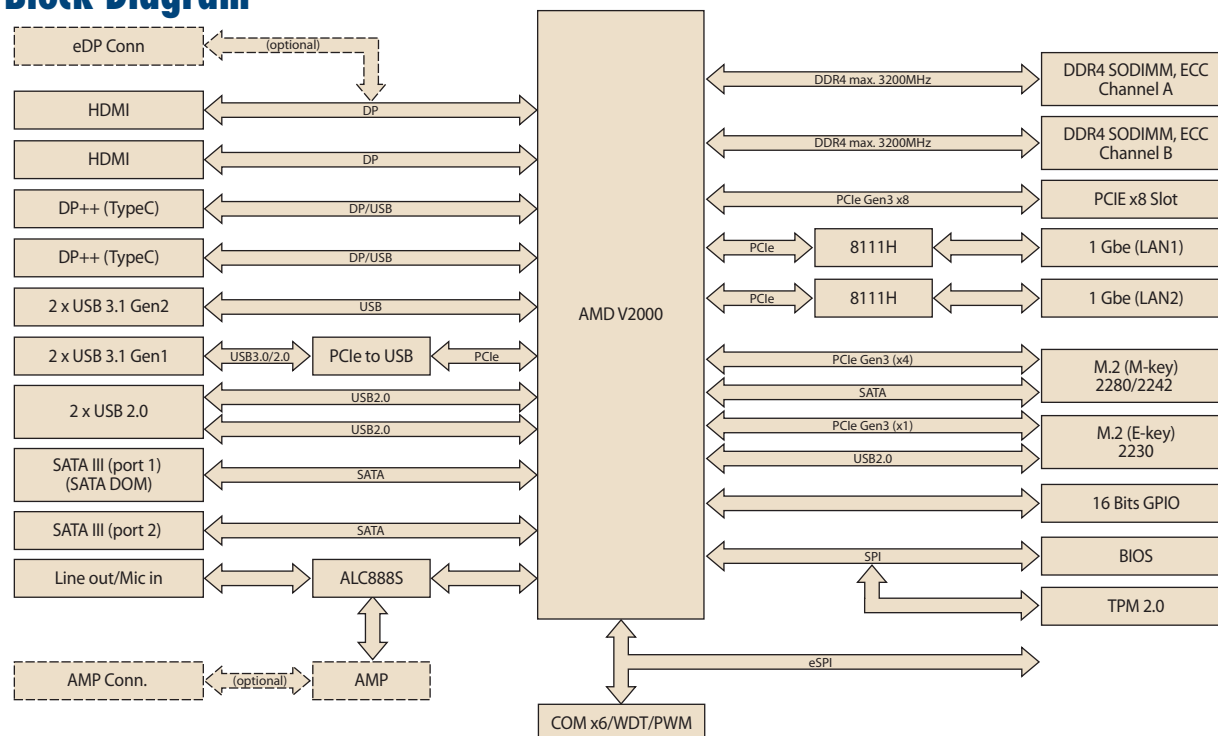
WISE-DeviceOn CE FCC



### Specifications

Processor System	SOC (7nm)	V2748	V2718	V2516
	Max. Speed	4.15Ghz (8 Core 54W)	4.15Ghz (8 Core 25W)	3.95Ghz (6 Core 25W)
	L2 Cache	4Mb	4Mb	4Mb
	BIOS	AMI 128Mbit SPI		
Expansion Slot	M.2	1 M-Key (support 2242/2280), 1 E-Key (support 2230)		
	PCIe	1 PCIe x8		
Memory	Technology	Dual Channel DDR4 3200MHz SDRAM		
	Max. Capacity	64 GB/ 32 GB per SO-DIMM		
	Socket	2 x 260-pin DDR4 SO-SIMM with ECC Support		
Graphics	Controller	AMD Integrated Vega GCN		
	eDP	1, resolution up to 5120x2880@60Hz Max (Optional)		
	Display Port	2, Supports DP++(via USB Type-C), resolution up to 4096 x 2160 @ 60Hz		
	HDMI	2, resolution up to 4096x2160@60Hz (HDMI2.0 supported by SKU)		
	Multi Display	HDMI/HDMI/DP/DP eDP/HDMI/DP/DP		
Ethernet	Interface	10/100/1000 Mbps		
	Controller	GbE LAN1: Realtek 8111H GbE LAN2: Realtek 8111H		
	Connector	RJ-45 x 2		
SATA	Max Data Transfer Rate	600 MB/s		
	Channel	2, SATA III		
Rear I/O	DP++ Type-C	2		
	Ethernet	2		
	HDMI	2		
	USB	4 x USB3.2 Gen2/2 x USB3.2 Gen1		
	Audio	2 (Line out + Mic/Line in)		
	DC jack	1 (2.5 mm)		
Internal Connector	eDP (Optional)	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) ; signal mix with RS232 COM4: support 5V/12V selection(by jumper); Colay TTL (5V, TX, RX only) ; signal 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		
	Intrusion Protection	1		
	GPIO	16 bit		
	Watchdog Timer	Output	System reset	
Interval		Programmable 1 ~ 255 sec/min		
Power	Power Type	12V 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

P/N	Chipset	HDMI	eDP	DP 1.2	GbE LAN	COM	SATAIII	USB3.2 Gen2	USB3.2 Gen1	USB2.0	M.2	PCIex8	TPM	AMP
AIMB-229VG2-00A1E	V2748	2 (HDMI 2.0)	(1)	2	2	6	2	4	2	2	2	1	1	1
AIMB-229VG2-02A1E	V2718	2 (HDMI 1.4)	(1)	2	2	6	2	4	2	2	2	1	1	(1)
AIMB-229VG2-03A1E	V2516	2 (HDMI 1.4)	(1)	(2)	2	6	2	2	2	2	2	1	1	(1)

\*(1) BOM options available on MP version.

### Packing List

Part Number	Description	Quantity
1700003194-21	SATA HDD cable	1
1700018785-01	SATA power cable(1 port, 25cm)	1
1701200220-01	1 to 2 Serial port cable	1
1700022363-01	1 to 1 Serial port cable	1
1700023082-11	ATX cable 2*10P-4.2/1*3P-2.0 15cm	1
1960104751T001	IO Bracket	1
1910004710	M.2 POST	1
1930000207-01	M.2 Screw	2

### I/O View



### Optional Chassis

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

### Optional Accessories

Part Number	Description	Quantity
1960089783T001	CPU Cooler (CPU TDP 54W, V2748/V2546, H: 58.3mm)	1
1960089784T001	CPU Cooler (CPU TDP 25W, V2718/V2516, H: 45mm)	1
1700026162-01	USB 2.0 cable with two ports, 30 cm with bracket	1

### Embedded OS

OS	Part No.	968 P/N	Description
Windows 10	20706WX9HS0147	968QW19HLE	img W10 19HL AIMB-229 64b 1809 ENU
Windows 10	20706WX9VS0151	968QW19VLE	img W10 19VL AIMB-229 64b 1809 ENU
Windows 10	20706WX9ES0162	968QW19ELE	img W10 19EL AIMB-229 64b 1809 ENU
Ubuntu 20.4	20706U20DS0037	968MOU204D	img Ubu20.4 AIMB-229 64b 2004 ENU