

# AIMB-228

## AMD V-series/R-series mini-ITX with 4 DP, 6 USB, 6COM, 12-24V DC-In



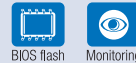
### Features

- Support AMD V1000/R1000 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:

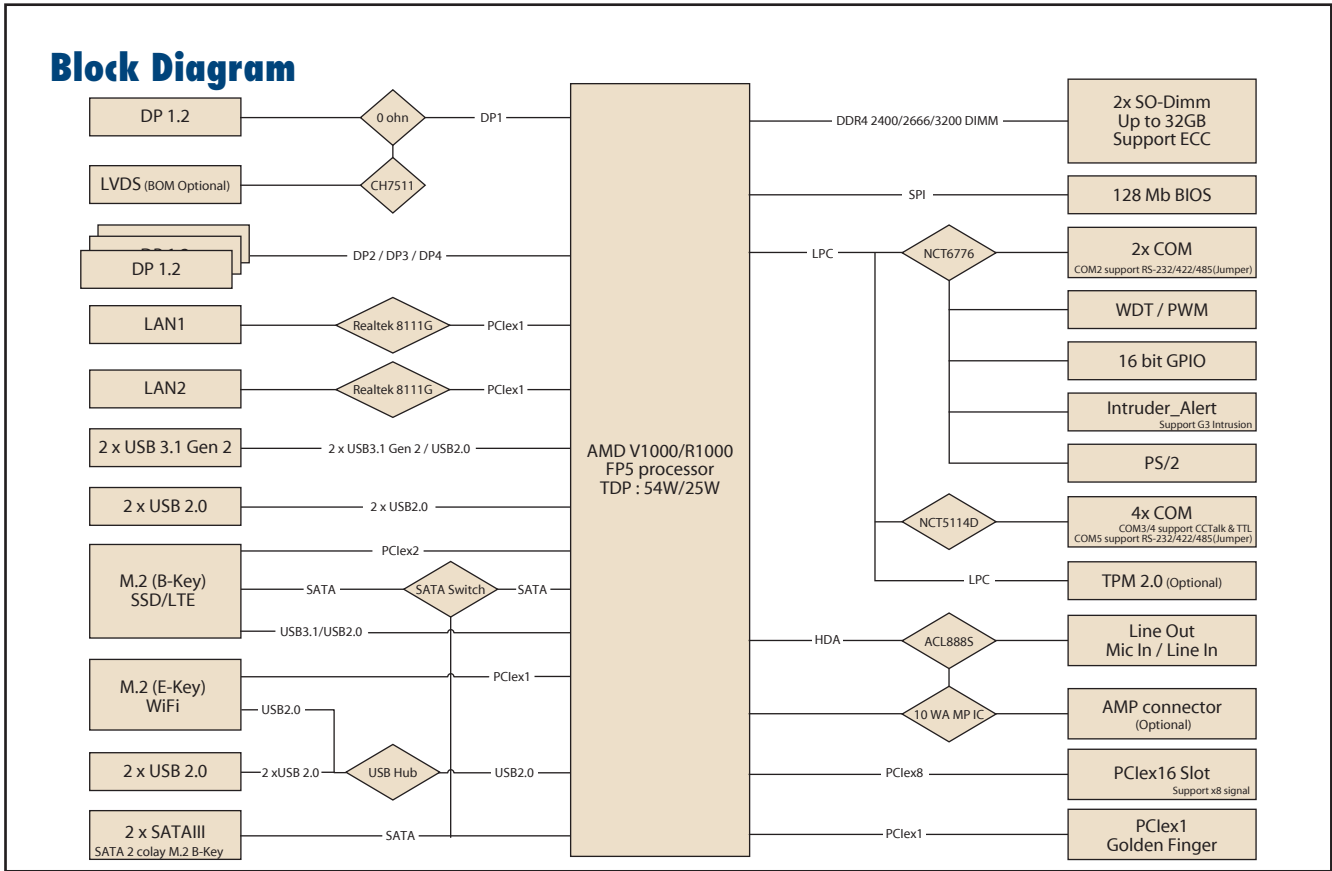


WISE-PaaS/RMM CE FC RoHS COMPLIANT PRODUCT

### Specifications

|                          |                            |   |                              |                           |                            |                           |                           |                          |  |
|--------------------------|----------------------------|---|------------------------------|---------------------------|----------------------------|---------------------------|---------------------------|--------------------------|--|
| Processor System         | SOC (14nm)                 | V1807B  | V1605B                       | V1202B                    | R1606G                     | R1505G                    | R1305G                    | R1102G                   |  |
|                          | Max. Speed                 | 3.8GHZ<br>(Quad Core 54W)   | 3.6GHZ<br>(Quad Core 25W)    | 3.2GHZ<br>(Dual Core 25W) | 3.5GHZ<br>(Dual Core 25W)  | 3.3GHZ<br>(Dual Core 25W) | 2.8GHZ<br>(Dual Core 10W) | 2.6GHZ (Dual<br>Core 6W) |  |
|                          | L2 Cache                   | 2Mb   | 2Mb                          | 2Mb                       | 1Mb                        | 1Mb                       | 1Mb                       | 1Mb                      |  |
|                          | BIOS                       | AMI 128Mbit SPI   |                              |                           |                            |                           |                           |                          |  |
| Expansion Slot           | M.2                        | 1 B-Key, 1 E-Key (V1000 series only)  |                              |                           |                            |                           |                           |                          |  |
|                          | PCIe                       | 1 PCIe x8 (R1000 Series only support x4 signal, R1102 not support), 1 PCIe x1 (V1000 Series only)   |                              |                           |                            |                           |                           |                          |  |
| 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 (R1102 only support 1 socket)   |                              |                           |                            |                           |                           |                          |  |
| Graphics                 | Controller                 | AMD Integrated Vega GCN   |                              |                           |                            |                           |                           |                          |  |
|                          | LVDS                       | 1, supports dual channel 48-bit up to 1920 x 1200 (Optional)  |                              |                           |                            |                           |                           |                          |  |
|                          | Display Port 1.2           | 4, Supports DP++, resolution up to 4096 x 2160 @ 60Hz(V1000 Series)<br>3, Supports DP++, resolution up to 4096 x 2160 @ 60Hz(R1000 Series)<br>2, Supports DP++, resolution up to 4096 x 2160 @ 60Hz(R1102G)   |                              |                           |                            |                           |                           |                          |  |
|                          | Multi Display              | V1000: DP/LVDS+DP+DP+DP<br>R1000:DP/LVDS+DP+DP<br>R1102G:DP/LVDS+DP   |                              |                           |                            |                           |                           |                          |  |
| Ethernet                 | Interface                  | 10/100/1000 Mbps  |                              |                           |                            |                           |                           |                          |  |
|                          | Controller                 | GbE LAN1: Realtek 8111G<br>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; SATA 1 support SATA-DOM device   |                              |                           |                            |                           |                           |                          |  |
| Rear I/O                 | DP1.2 (Default)            | 4(V1000 Series)/3(R1000 Series)/2(R1102G)   |                              |                           |                            |                           |                           |                          |  |
|                          | 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,<br>COM1: support RS-232 with 5V/12V/Ring<br>COM2: support RS-232/422/485 supports 9 bit data/auto flow(select by Jumper)<br>COM3: Colay Cctalk(5/12V; Jumper select) ; singlar mix with RS232<br>COM4: support 5V/12V selection(by jumper); Colay TTL (5V, TX, RX only) ; singlar mix with RS232<br>COM5: support RS-232/422/485 supports 9 bit data/auto flow(select by Jumper)<br>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           |
| AIMB-228RG2-00A1E | R1606G | DP/LVDS, DP, DP     | (1) | (1)  | x4        | 2/4         | 2   | 2    | 6   | Active           |
| AIMB-228RG2-01A1E | R1505G | DP/LVDS, DP, DP     | (1) | (1)  | x4        | 2/4         | 2   | 2    | 6   | Active           |
| AIMB-228RG2-02A1E | R1305G | DP/LVDS, DP, DP     | (1) | (1)  | x4        | 2/4         | 2   | 2    | 6   | Active           |
| AIMB-228RG2-03A1E | R1102G | DP/LVDS, DP         | (1) | (1)  | NA        | 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        |
| 1960091400T001 | I/O port bracket   | 1        |
| 2046022800     | Startup manual   | 1        |
| 1960089783T001 | CPU Cooler (CPU TDP 54W, V1807B)                                     | 1        |
| 1960089784T001 | CPU Cooler (CPU TDP 25W, V1605B/ V1202B/R1606G/R1505G/R1305G/R1102G) | 1        |

### Optional Accessories

| Part Number       | Description                                |
|-------------------|--|
| 1700029538-01     | F Cable D-SUB 9P(M)*4/IDE#2 40P-1.27 35CM  |
| 96PSA-A150W12W7-3 | ADP A/D 100-240V 150W 12V LOCKABLE DC JACK |
| 1702002600        | Power cable 3-pin 180 cm, USA type         |
| 1702002605        | Power cable 3-pin 180 cm, Europe type      |
| 1702031801        | Power cable 3-pin 180 cm, UK type          |
| 1700000237        | Power cable 3-pin PSE Mark 183 cm          |
| 1700000596-11     | Power cable 3-pin 180 cm, China type       |

### Optional Chassis

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

### Embedded OS

| OS    | Part No.       | 968 P/N    | Description  |
|-------|----------------|------------|--|
| Win10 | 20706WX9VS0039 | 968QW19VLE | img W10 19VL AIMB-228 64b 1809 ENU (V1807B/V1605B)         |
| Win10 | 20706WX9ES0049 | 968QW19ELE | img W10 19EL AIMB-228 64b 1809 ENU (V1202B/R1606G/ R1505G) |

### I/O View



# Tento produkt můžete zakoupit u společnosti AutoCont IPC a.s.



## AutoCont IPC a.s.

Váš dodavatel průmyslových počítačů, komponent a speciálních průmyslových IT systémů.

 Uhlířská 1064/3, 710 00 Ostrava, Česká republika

 obchod@autocont-ipc.cz

 +420 552 301 002

 [www.autocont-ipc.cz](http://www.autocont-ipc.cz)



### PRŮMYSLOVÉ POČÍTAČE

*fanless embedded PC, do racku, ...*



### POČÍTAČE S DISPLEJEM

*panelové PC, terminály, do vozidel, ...*



### AUTOMATIZACE A SBĚR DAT

*převodníky, karty, moduly, switche, ...*



### PERIFERIE A KOMPONENTY

*monitory, klávesnice, desky, skříně, ...*



### NOTEBOOKY A TABLETY

*odolné, windows, android, IP65, ...*



### INFORMAČNÍ KIOSKY

*interiérové, venkovní, ...*



### MEDICÍNSKÁ TECHNIKA

*počítače, tablety, LCD, klávesnice, ...*



### SOFTWAREVÁ ŘEŠENÍ

*pro výrobu, zaměstnance, kiosky, ...*



### PŘEJÍT DO E-SHOPU

[eshop.autocont-ipc.cz](http://eshop.autocont-ipc.cz)



### DOPRAVA ZDARMA

Doprava zdarma v ČR a SR při objednávce nad 10 000 Kč bez DPH nebo nad 400 EUR.



### PRODLOUŽENÁ ZÁRUKA

Záruka 2 roky na vyráběné počítače s možností jejího prodloužení až na 5 let.



### ODMĚNA ZA VĚRNOST

Pravidelní zákazníci u nás nakupují za nižší ceny. Výše slevy se odvíjí od realizovaného obrátu.



### SERVIS ON-SITE A IN-TIME

K projektovým dodávkám nabízíme rozšířenou podporu a servis s garancí výměny zařízení do 48 hodin.