

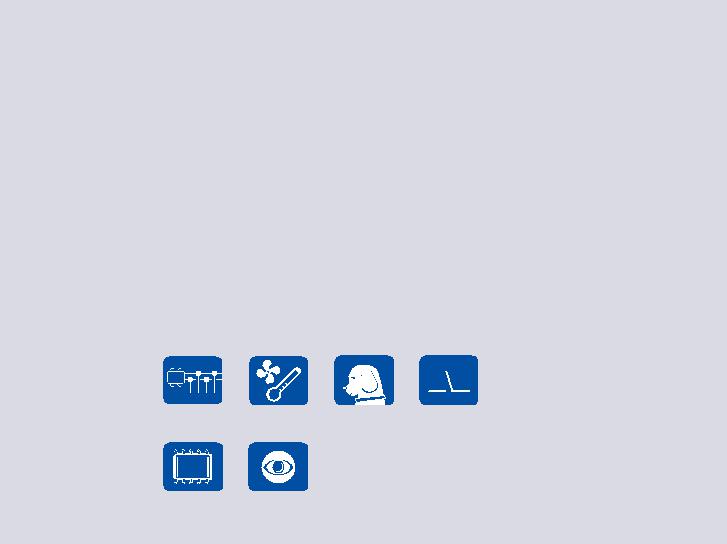
**AIMB-290**



**NEW**

 Windows Server 2016

**Intel ATOM C3000 处理器与 DDR4 ECC/ non-ECC内存, VGA, 双GbE, Dual 10GbE, PCIe x8, eMMC ATX 或直流输入**



**特性**

****支持IPMI 2.0

**** 搭载多达16核Intel ATOM C3000处理器

* eMMC on board
* 双288-pin DDR4 ECC/non-ECC DIMM高达64GB/32GB DDR4 2400/2133 MHz DRAM
* 双10GbE 和双GbE LANs
* EMMC 5.1, 6xSATAIII, 1xmSATA
* TPM 2.0 (optional)
* 支持直流12V 4-pin 或r ATX 24-pin 连接器

**软件APIs:**

SMBus H/W Monitor Watchdog GPIO

**公用设施:**

BIOS flash Monitoring

**规格列表**



|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | CPU | C3958 | | C3758 | C3558 |  |
|  | 芯片数 | 16c | | 8c | 4c |  |
| 处理器 | 最大主频 | 2.0GHz | | 2.2 GHz | 2.2GHz |  |
| 二级缓存 | 16MB | | 16 MB | 8MB |  |
|  |  |
|  | TDP | 31W | | 25 W | 16W |  |
|  | BIOS | AMI EFI 128Mbit SPI | |  |  |  |
| 扩展槽 | Mini-PCIe | 1 | F/S miniPCIe slot support mSATA |  |  |  |
| PCIe x8 (Gen3) | 8 GB/s per direction, 1 slot (by sku) | |  |  |  |
|  |  |  |  |
|  | 规范 | 单通道, DDR4 1600/1866/2133/2400MHz ECC/Non-ECC 带288-pin U-DIMM/R-DIMM | | | |  |
| 内存 | 最大可支持容量 | 16GB/per DIMM for DDR4 non-ECC/ECC 2400MHz with U-DIMM, | | |  |  |
| 32GB/per DIMM for DDR4 ECC 2400MHz with R-DIMM | | |  |  |
|  |  |  |  |
|  | 插槽 | 2 x 288pin DDR4 DIMM socket | |  |  |  |
| 显示芯片 | 控制器 | ASPEED AST2500/2510 BMC 控制器 (by sku) | | |  |  |
| VGA | Yes,支持最大分辨率1920 x 1200 @ 60 Hz | | |  |  |
|  |  |  |
|  | 接口 | 2x 100/1000Mbps & 2x 10GbE | |  |  |  |
|  |  | LAN 1/2: Marvell 88E1512 with RJ45 for 1GbE | | |  |  |
| 以太网 | 控制器 | LAN 3/4: Intel X557-AT2 with RJ45 for 10GbE (optional) | | |  |  |
|  |  | LAN 5: Realtek RTL8201 with RJ45 for IPMI (optional) | | |  |  |
|  | 连接器 | 5 x RJ-45 (optional) | |  |  |  |
| eMMC | 容量 | 16GB | |  |  |  |
| SATA | 带宽 | 600 MB/s (SATA 3.0) | |  |  |  |
| 通道 | 6 | (SATA III) |  |  |  |
|  |  |  |  |
|  | VGA | 1 |  |  |  |  |
| 后置 I/O | 以太网 | 5 | (optional) |  |  |  |
| USB | 4 | (3 x USB3.0,1 x USB2.0) |  |  |  |
|  |  |  |  |
|  | 系列 | 1 | (RS-232) |  |  |  |
|  | USB | 0 or 2 (USB2.0) (by sku) | |  |  |  |
|  | 系列 | 1 | (RS-232/422/485 autoflow control) |  |  |  |
| 内置I/O | SATA | 6 | (SATA III) |  |  |  |
| Mini-PCIe | 1 | (F/S Mini-PCIe colay mSATA) |  |  |  |
|  |  |  |  |
|  | GPIO | 8bit | |  |  |  |
|  | KB/MS | 1 |  |  |  |  |
| 看门狗计时器 | 输出 | 系统复位 | |  |  |  |
| 间隔 | 可编程的1 ~ 255 sec/min | |  |  |  |
|  |  |  |  |
| 电源需求 | 输入功率 | ATX 24-pin or 12V 4-pin \* | |  |  |  |
| 功耗 | Intel C3958 + 32GB RAM + 64GB SSD: 35W | | |  |  |
|  |  |  |
|  |  | 工作 | |  | 非工作 |  |
| 环境 | 温度 | 0 | ~ 60° C (32 ~ 140° F) |  | -40 ~ 85° C (-40 ~ 185° F) |  |
|  | (10GbE IC使用AIMB-290标准冷却器和系统风扇) | | |  |
|  |  |  |  |
| 物理特性 | 尺寸 | 170 mm x 170 mm (6.69" x 6.69") | |  |  |  |

* 请使用EATXPWR1或ATX12V1。不要同时使用两个接头。



**Industrial Motherboards & Systems**

All product specifications are subject to change without notice. Last updated: 22-Nov-2018

**AIMB-290**

**框架图**



VGA

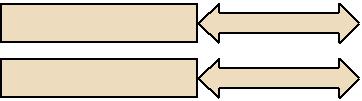
DDR3

SPI 16MB

REAR I/O

RJ-45 MDI RTL8201 10/100m

PCIe x8 slot



6 SATA ports



3 USB 3.0 port



1 or 3 USB 2.0 ports

eMMC 16GB

AST 2500

Co-lay

AST 2510

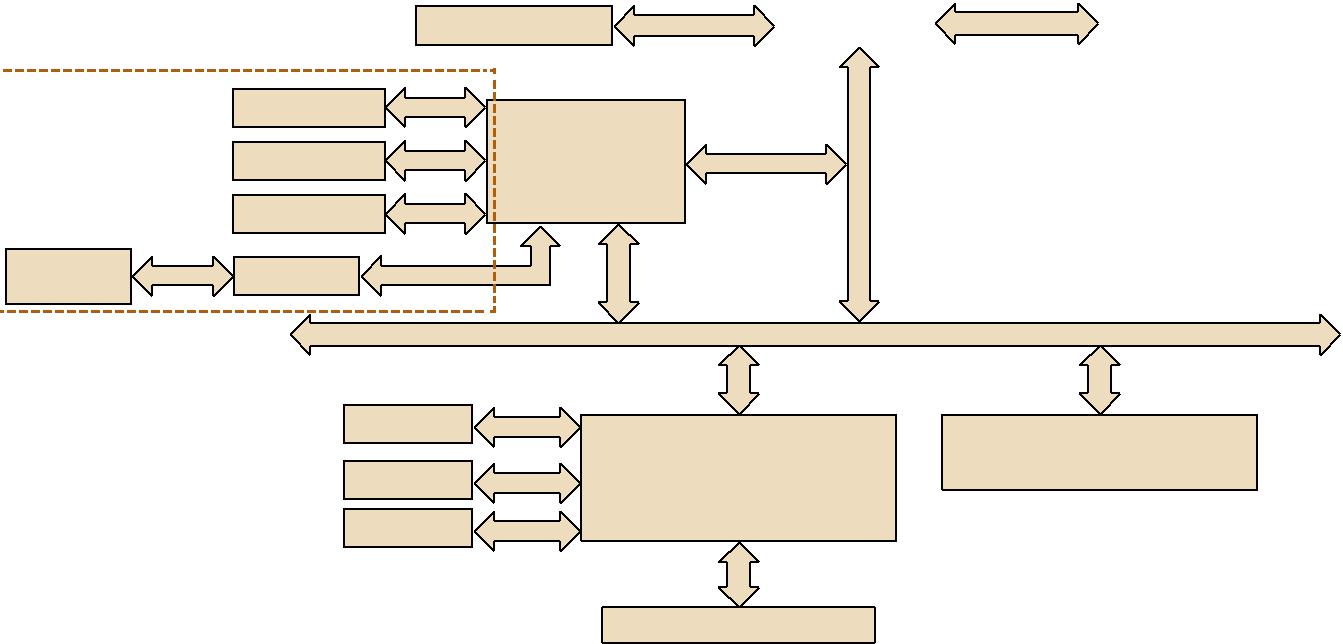
RMII LPC

BIOS SPI

8-bit GPIO

PS/2 KB/MS

|  |  |  |
| --- | --- | --- |
| PCIe Gen3 |  |  |
| 600 MB/s |  |  |
|  | Intel ATOM |  |
| USB 3.0 | C3000 Processor |  |
|  |  |
| USB 2.0 |  |  |
|  |  |  |



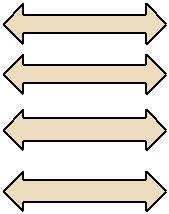
PCIe x1

LPC

Super I/O Winbond

NCT6776D

|  |  |  |  |
| --- | --- | --- | --- |
| Channel A | DDR4 2133/2400MHz DIMM | |  |
|  |  |  |  |
| Channel B | DDR4 2133/2400MHz DIMM | |  |
|  |  | |  |
| SGMII | 1GbE LAN1&2: |  |  |
|  | Marvell 88E1512 |  |  |
|  |  |  |  |
| KR | 10GbE LAN3&4: |  |  |
|  | Intel X557-AT2 (optional) |  |  |
| (PCIex1/USB signal) |  |  |  |
| PCIe x1 | Full-size Mini-PCIe |  |  |
| (colay mSATA) |  |  |
|  |  |  |

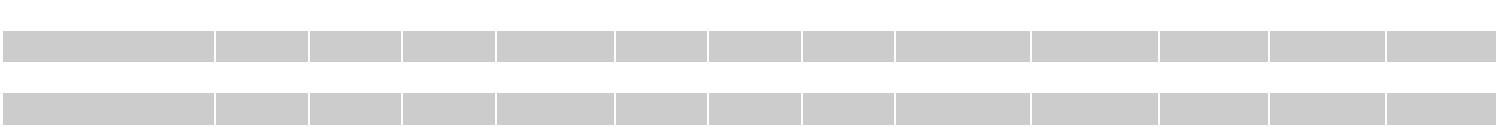


In neon TPM 2.0

(optional)

1 RS-232, 1 RS-232/422/485

**订购信息**

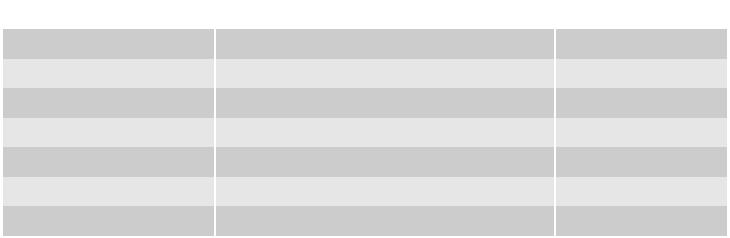


|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **P/N** | **CPU** | **eMMC** | **VGA** | **GbE LAN** | **10GbE** | **COM** | **SATA** | **USB3.0/2.0** | **MiniPCIe** | **TPM** | **PCIEx8** | **IPMI** |
| AIMB-290G4-S1A1E | C3958 | 16GB | 1 | 2 | 2 | 2 | 6 | 3/1 | 1 F/S | (1) | 1 | Yes |
| AIMB-290G4-S2A1E | C3758 | 16GB | 1 | 2 | 2 | 2 | 6 | 3/1 | 1 F/S | (1) | 1 | Yes |
| AIMB-290G2-S3A1E | C3558 | 16GB | 1 | 2 | 0 | 2 | 6 | 3/3 | 1 F/S | (1) | 0 | NA |

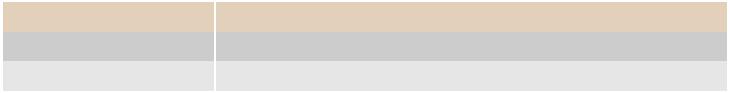
\*() BOM options available on MP version.

**包装列表**

|  |  |  |
| --- | --- | --- |
| **料号** | **说明** | **数量** |
| 1700003194 | SATA HDD cable | 4 |
| 1700027538-01 | SATA power cable | 1 |
| 1700100250 | Serial port cable (1 port, 25cm) | 1 |
| 1960084693T000 | I/O port bracket | 1 |
| 2006029000 | Startup manual | 1 |
| 2026029000 | China RoHS letter | 1 |
| 1960054541N031 | CPU cooler | 1 |

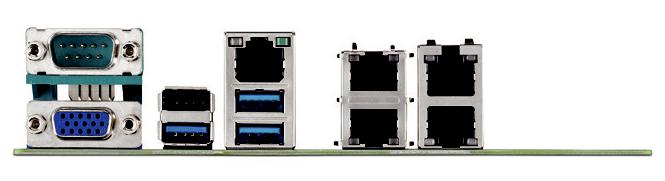


**嵌入式OS/API**

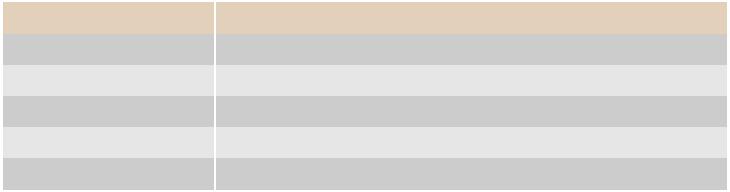


|  |  |
| --- | --- |
| **OS/API** | **说明** |
| Windows Server | Windows Server 2016 |
| Linux Server | Red Hat Enterprise Linux Server (x64) |

**后置 I/O**



**可选附件**



|  |  |
| --- | --- |
| **料号** | **说明** |
| 1703100121 | USB 2.0 cable with two ports, 12 cm |
| 1703100261 | USB 2.0 cable with two ports, 26 cm |
| 1703060191 | KB/MS cable 1\*6P-2.0/M-DIN 6P(F)\*2, 19cm |
| AIMB-RF10F-01A1E | Riser, PCIex16 to PCIex16 |
| AIMB-RF20F-02A1E | Riser, PCIex16 to 2 PCIex16 |

**可选底盘**



**料号** **说明**

AIMB-B2000-15ZE Mini-ITX chassis with 150W power

Note :

1. 为防止干扰，当您将aimb-mb集成到aimb-b2000系列时，请再次用机箱数据表确认CPU冷却器的零件号。
2. 10GbE局域网集成电路由于其优异的性能，温度很高。在用AIMB-290组装外壳时，请确保所实施的系统风扇能够将机箱中的10GbE LAN IC散热。

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