

Eagle Eyes-AIMB

6th/7th Generation Intel® Core™ U Series Processor Fanless Box Computer



Features

- 6th/7th gen Intel® platform (formerly Skylake/Kaby Lake), Core™ U series processor
- Intelligent eKit with AI function to monitor system health via DDM
- Special Power Design:
 - Wide voltage 9~36V DC input
 - RVP/OVP/UVP/OCP support
 - Surge protection: 80V/1ms
 - Power ignition control
- Easy Expansion & Installation:
 - Remote on/off power switch with LED
 - Easily replaceable RTC battery holder
 - 2x SIM push-push slots



Specifications

| | |
|---|--|
| System | |
| 6th Gen Intel® Core™ (formerly Skylake U-Series) | Core™ i7-6600U (2/4 Cores, 2.6 GHz, 4M Cache, 15W TDP) Core™ i5-6300U (2/4 Cores, 2.4 GHz/3.0 GHz, 3M Cache, 15W TDP) Core™ i3-6100U (2/4 Cores, 2.3 GHz, 3M Cache, 15W TDP) Celeron® 3965U (2/2 Cores, 2.0 GHz, 2M Cache, 15W TDP) |
| 7th Gen Intel® Core™ (formerly Kaby Lake U-Series) | Core™ i7-7600U (2/4 Cores, 2.8 GHz/3.9 GHz, 4M Cache, 15W TDP) Core™ i5-7300U (2/4 Cores, 2.6 GHz/3.5 GHz, 3M Cache, 15W TDP) Core™ i3-7100U (2/4 Cores, 2.4 GHz, 3M Cache, 15W TDP) Celeron® 3965U (2/2 Cores, 2.2 GHz, 2M Cache, 15W TDP) 1x SO-DIMM DDR4 2133 (32GB Max.) |
| Memory | 1x SO-DIMM DDR4 2133 (32GB Max.) |
| Graphics | Intel® HD Graphics 610 (3965U) Intel® HD Graphics 520 (Skylake) Intel® HD Graphics 610 (3965U) Intel® HD Graphics 620 (Kaby Lake) |
| BIOS | AMI 128Mbit SPI BIOS |
| AI Controller (AIC) | AI for system monitoring and predictive analysis |
| Watchdog Timer | Runtime: 10 – 65535 seconds Powerup: 120 – 65535 seconds |
| TPM (optional) | SiLB9665 (TPM 2.0) / SiLB9635 (TPM 1.2) |
| Power | |
| DC Input | 9~36VDC |
| Surge Protection | 80V/1ms |
| Power in Protection | Reverse-Voltage, Over-Voltage, Under-Voltage, Over-Current |
| Remote/ignition | 1x ATX power on/off switch, 5-pin terminal block including 3-pin remote control and 2-pin ignition signals (pitch 3.81 mm) |
| Power Mode | AT/ATX (BIOS setting) |
| Mechanical | |
| Dimensions (WxDxH) | 161(W) x 130(D) x 68.1(H) mm (6.34" x 5.12" x 2.68") |
| Weight (net/gross) | 1.7kg |
| Mounting | Wall mount bracket, foot stand |
| Construction | Aluminum and metal chassis with fanless design |
| Battery | Easily replaceable RTC battery holder |
| Dynamic Display Module (DDM) | 0.96 inch LCM work with AIC to display system status |
| External IO | |
| Display Ports / Resolution | 2x DP 4096x2304@60Hz 1x VGA/1920x1200@60Hz |
| Triple Display Ports | 2x DP + 1x VGA |
| Ethernet | 4x RJ45 GbE (1x Intel® i219 + 3x Intel® i210) / Wake-on-LAN and PXE / i219 supports iAMT 11.0 |
| LAN Bypass | 1 pair LAN bypass |
| USB 3.0/2.0 | 4x USB 3.0 ports via native XHCI controller (0.9A each port) |
| COM | 2x RS-232/422/485 (auto flow control), 2x RS-232 port |

Digital I/O

16-bit programmable DIO (AIMB6)
8-bit isolated DI & 8-bit isolated DO, sink/source mode, 5~48V, 100mA (AIMB6-1)

Audio ALC892 HD audio codec, Mic in, Line out
SIM 2x SIM push-push slots

Storage

Internal Drive Bay 1x Internal SATA port for 2.5" HDD/SSD
1x mSATA (muxed with Mini-PCIe)
M.2 1x M.2 M Key 2242

Expansion Slot 1x full length Mini-PCIe (PCIe/mSATA + USB + USIM)
1x full length Mini-PCIe (PCIe + USB + USIM)

Other

USB 2.0 Dongle Internal 1x USB 2.0 for dongle security key
Antenna 4x antenna openings
LED Power status, HDD status, IO status

Environment

Operating Temperature Standard: -20°C to 50°C (-4°F~122°F), supports 15W TDP CPU
Extended temperature: -25°C to 70°C (-13°F~158°F)
Storage Temperature -40°C to 85°C (-40°F to 185°F)

Relative Humidity 95% @ 40°C (104°F), non-condensing

Vibration During Operation 5Gms with SSD (IEC60068-2-64, random 5-500Hz)
Shock During Operation 50Gms with SSD (IEC60068-2-27, Half Sine, 11ms duration)

Certification

EMC CE/FCC Class A

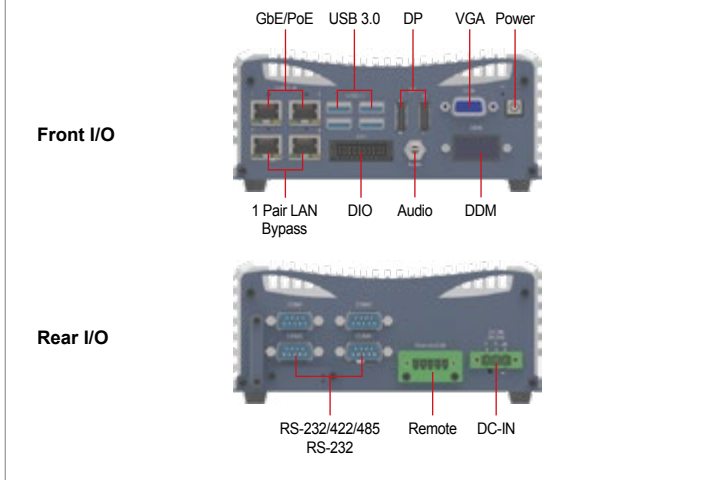
Safety Certifications

CB

OS Support

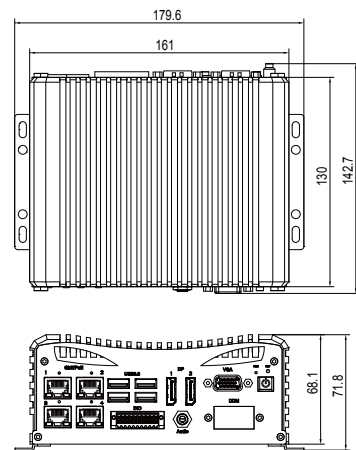
Windows Windows 7 32-bit/64-bit (Skylake only)
Windows 8.1 32-bit/64-bit (Skylake only)
Windows Embedded Standard 7 (Skylake only)
Windows Embedded 8 Standard (Skylake only)
Windows 10 64-bit
Windows 10 IoT
Linux Linux

I/O Interfaces



Dimensions

Units: mm



I/O Comparison Chart

| Model Name | DP | VGA | GbE (RJ45) | GbE / PoE (RJ45) | DIO | USB 3.0 | RS-232 | RS-232 / 422 / 485 | Internal 2.5" Disk Bay |
|------------|----|-----|------------|------------------|---------------------------------------|---------|--------|--------------------|------------------------|
| AIMB6-i | 2 | 1 | 4 | 1 | 8-bit isolated DI & 8-bit isolated DO | 4 | 2 | 2 | 1 |
| AIMB6 | | | | | 16-bit DIO | | | | |

Ordering Information

| | Model Name | * Following models include Intel® 6th Gen Skylake U (SKL-U) platform, 2x DP, 1x VGA, 4x USB 3.0, 2x RS-232/422/485, 2x RS-232, 1x Internal SATA port for 2.5" HDD/SSD | Article Number (A/N) |
|-----------------|-------------|---|----------------------|
| AIMB6-i | AIMB6-6600i | Core™ i7-6600U CPU, 8-bit isolated DI & 8-bit isolated DO | 02051 |
| | AIMB6-6300i | Core™ i5-6300U CPU, 8-bit isolated DI & 8-bit isolated DO | 02052 |
| Barebone System | AIMB6-6100i | Core™ i3-6100U CPU, 8-bit isolated DI & 8-bit isolated DO | 02053 |
| | AIMB6-3955i | Celeron® 3955U CPU, 8-bit isolated DI & 8-bit isolated DO | 02054 |
| AIMB6 | AIMB6-6600 | Core™ i7-6600U CPU, 16-bit DIO | 02055 |
| | AIMB6-6300 | Core™ i5-6300U CPU, 16-bit DIO | 02056 |
| Barebone System | AIMB6-6100 | Core™ i3-6100U CPU, 16-bit DIO | 02057 |
| | AIMB6-3955 | Celeron® 3955U CPU, 16-bit DIO | 02058 |

Optional Accessories

| | | |
|------------------------------|---|---|
| Isolated Module | iDIO-8I8O | 8-bit isolated DI & 8-bit isolated DO module |
| AC-DC Power Adapter | AC-DC power adapter with pitch 5.0mm 3-pin terminal block plug | |
| | ADT-24V60-T3A | 24V/60W |
| | ADT-24V90-T3A | 24V/90W |
| | ADT-24V120-T3A | 24V/120W |
| | ADT-24V160-T3A | 24V/160W |
| | ADT-24V220-T3A | 24V/220W |
| | ADT-24V280-T3A | 24V/280W |
| AC Power Cord | H05VV-F 3G 0.75mm2, 1.8m, 250V, 10A | |
| | PCBL-B12 | YP12-YC12:category B type plug, TW/JP/US/CA/TH/PH/Central America |
| | PCBL-D03 | YP03-YC12:category D type plug, CN |
| | PCBL-D35 | YP35-YC12:category D type plug, AU/NZ |
| | PCBL-G22 | YP22-YC12:category G type plug, DE |
| | PCBL-I61 | YP61-YC12:category I type plug, UK/HK/MO/SG/MY |
| SO-DIMM Memory | DDR4-2133/2400 2GB/4GB/8GB/16GB/32GB | |
| SSD | mSATA SSD: 16GB/32GB/64GB/128GB/256GB/512GB/1TB | |
| | 2.5 inch SSD: 16GB/32GB/64GB/128GB/256GB/512GB/1TB | |
| | 2.5 inch HDD: 500GB/1TB/1.5TB/2TB | |
| Wireless Module | Mini-PCIe wireless module for 3G/4G LTE/Wi-Fi/BT/NB-IoT/GPS/BDS | |
| Cable & Connector | | |
| | CBL-S01 | SATA (Data + Power) cable x1 |
| | TBP5-S03 | 3-Pin, pitch5.0mm Female Terminal Block Plug for DC input x1 |
| | TBP3-S05 | 5-Pin, pitch3.81mm Female Terminal Block Plug for remote connector x1 |
| | TBP3-D20 | 2x10-Pin, pitch2.54mm Female Terminal Block Plug for DIO connector x1 |
| Mounting Kit | | |
| | WBK-AIH | Wall mount bracket x2 with M2.5x5 screws x4 |

Packing List

| Item No. | |
|----------|--------------------------------------|
| 1 | Eagle Eyes Embedded Box PC AIMB x1 |
| 2 | Rubber foot x4 with M2.5x5 screws x4 |