

Eagle Eyes-AIHD

6th/7th Generation Intel® Xeon® E3/Core™ S Series (FCLGA1151 Socket) DIN Rail Box Computer, 2x~6x RJ45 GbE



Features

- 6th/7th gen Intel® platform (formerly Skylake/Kaby Lake), Xeon® E3/Core™ S i7, i5, i3, Pentium® and Celeron® processor
- Supports LGA1151 socket desktop processor up to 35W
- Intelligent eKit with AI function to monitor system health via DDM
- Special Power Design:
 - Wide voltage 9~36V DC input
 - RVP/OVP/UVI/OCV support
 - Surge protection: 200V/1ms
 - Power ignition control
- Easy Expansion & Installation:
 - One side bezel access and easy cable management
 - Remote on/off power switch with LED
 - Easily replaceable RTC battery holder
 - 3x SIM push-push slots

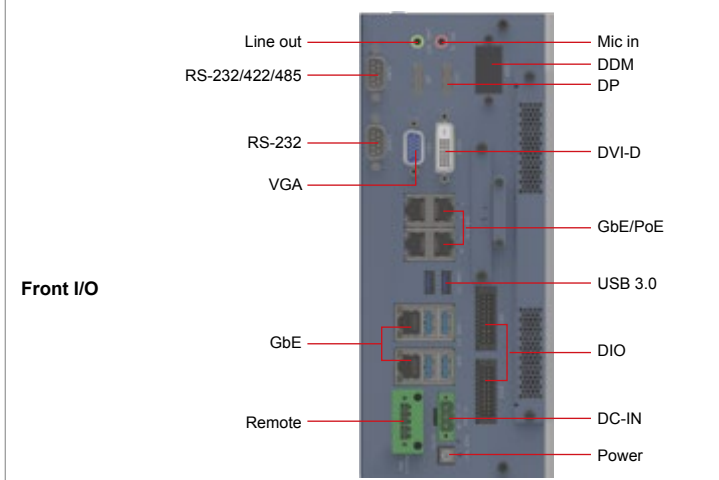


Specifications

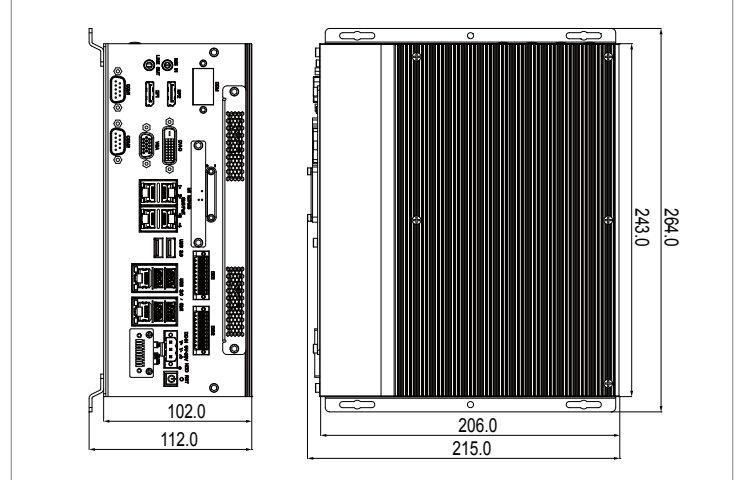
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|--|---|
| System | |
| CPU | 6th/7th gen Intel® Xeon® E3/Core™ S (formerly Skylake/Kaby Lake) LGA1151 socket type CPU (supports TDP up to 35W) |
| Chipset | Intel® C236 Chipset |
| Memory | 2x DDR4 SO-DIMM Max. 64GB (Skylake: DDR4-2133; Kaby Lake: DDR4-2400) |
| Graphics | Xeon®: HD Graphics P530 (Skylake)/P630 (Kaby Lake) Core™ i Series: HD Graphics 530 (Skylake)/630 (Kaby Lake) Pentium®/Celeron®: HD Graphics 510 (Skylake)/610 (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) | SLB9665 (TPM 2.0) / SLB9635 (TPM 1.2) |
| Power | |
| DC Input | 9~36VDC |
| Surge Protection | 200V/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) | 102(W) x 206(D) x 243(H) mm (4.01" x 8.11" x 9.57") |
| Weight (net/gross) | 4.5kg |
| Mounting | DIN rail mount, wall mount bracket and 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 DVI-D/1920x1200@60Hz 1x VGA/1920x1200@60Hz |
| Triple Display Ports Combinations | 2x DP + 1x DVI-D 1x DP + 1x DVI-D + 1x VGA |
| Ethernet | Wake-on-LAN and PXE/ i219 supports iAMT 11.0 6x RJ45 GbE (1x Intel® i219+ 5x Intel® i210) (AIHD(S), AIHD(S)-i, AIHD(S)-i2) 2x RJ45 GbE (1x Intel® i219+ 1x Intel® i210) (AIHD(S), AIHD(S)-i, AIHD(S)-i2) |
| PoE (optional) | 802.3at support up to 30W 4x RJ45 GbE PoE+ (Intel® i210) (AIHD(S), AIHD(S)-i, AIHD(S)-i2) |
| Digital I/O | 32-bit programmable DIO (AIHD(S), AIHDP(S)) 16-bit programmable DIO, isolated 8-bit DI & 8-bit DO, sink/source mode, 5~48V, 100mA (AIHD(S)-i, AIHDP(S)-i) 16-bit isolated DI & 16-bit isolated DO, sink/source mode, 5~48V, 100mA (AIHD(S)-i2, AIHDP(S)-i2) |

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|-----------------------------------|--|
| USB 3.0/2.0 | 6x USB 3.0 ports via native XHCI controller (0.9A each port) |
| COM | 1x RS-232/422/485 (auto flow control), 1x RS-232 port |
| Audio | ALC892 HD audio codec, Mic in, Line out |
| SIM | 3x SIM push-push slots |
| Storage | |
| Internal Drive Bay | 3x internal SATA port for 2.5" HDD/SSD |
| mSATA | 3x full length mSATA (muxed with Mini-PCIe) |
| Removable Drive Bay | NA |
| RAID Mode | RAID 0/1/5 |
| Expansion Slot | |
| Mini-PCIe | 3x full length Mini-PCIe (muxed with mSATA, auto detection) |
| 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 35W 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 | 5Grms with SSD (IEC60068-2-64: random 5~500Hz) |
| Shock During Operation | 50Grms 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



I/O Comparison Chart

| Model Name | DP | DVI-D | VGA | GbE (RJ45) | GbE / PoE (RJ45) | DIO | USB 3.0 | RS-232 | RS-232 / 422 / 485 | Internal 2.5" Disk Bay |
|-------------|----|-------|-----|------------|------------------|--|---------|--------|--------------------|------------------------|
| AIHD(S) | | | | | | 32-bit DIO | | | | |
| AIHD(S)-i | | | | 6 | 0 | 16-bit DIO, isolated 8-bit DI & 8-bit DO | | | | |
| AIHD(S)-i2 | 2 | 1 | 1 | | | isolated 16-bit DI & 16-bit DO | 6 | 1 | 1 | 3 |
| AIHDP(S) | | | | | | 32-bit DIO | | | | |
| AIHDP(S)-i | | | | 2 | 4 | 16-bit DIO, isolated 8-bit DI & 8-bit DO | | | | |
| AIHDP(S)-i2 | | | | | | isolated 16-bit DI & 16-bit DO | | | | |

Ordering Information

| | Model Name | Article Number (A/N) |
|---------------------------------|------------|----------------------|
| Barebone System with Fan Kit | AIHD | 04001 |
| | AIHD-i | 04002 |
| | AIHD-i2 | 04003 |
| | AIHDP | 04211 |
| | AIHDP-i | 04212 |
| | AIHDP-i2 | 04213 |
| Barebone System without Fan Kit | AIHDS | 04036 |
| | AIHDS-i | 04037 |
| | AIHDS-i2 | 04038 |
| | AIHDPS | 04246 |
| | AIHDPS-i | 04247 |
| | AIHDPS-i2 | 04248 |

CPU (Optional)

6th Gen Skylake

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|------------|--|
| E3-1268Lv5 | Xeon® E3-1268L v5 (4 cores/8 threads, 2.4 GHz/3.4 GHz, 8MB cache, 35W TDP) |
| i7-6700TE | Core™ i7-6700TE (4 cores/8 threads, 2.4 GHz/3.4 GHz, 8MB cache, 35W TDP) |
| i5-6500TE | Core™ i5-6500TE (4 cores/4 threads, 2.3 GHz/3.3 GHz, 6MB cache, 35 W TDP) |
| i3-6100TE | Core™ i3-6100TE (2 cores/4 threads, 2.7 GHz, 4MB cache, 35 W TDP) |
| G4400TE | Pentium® G4400TE (2 cores/2 threads, 2.4 GHz, 3MB cache, 35 W TDP) |
| G3900TE | Celeron® G3900TE (2 cores/2 threads, 2.3 GHz, 2MB cache, 35 W TDP) |

7th Gen Kaby Lake

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| i7-7700T | Core™ i7-7700T (4 cores/8 threads, 2.9 GHz/3.8 GHz, 8MB cache, 35W TDP) |
| i5-7500T | Core™ i5-7500T (4 cores/4 threads, 2.7 GHz/3.3 GHz, 6MB cache, 35W TDP) |
| i3-7101TE | Core™ i3-7101TE (2 cores/4 threads, 3.4 GHz, 3MB cache, 35W TDP) |

Optional Accessories

Isolated Module

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| iDIO-8I8O | 8-bit isolated DI & 8-bit isolated DO module |
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Other Accessories

| 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

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|--|--|
| H05VV-F 3G 0.75mm ² , 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

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|--------------------------------------|--|
| 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

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| Mini-PCIe wireless module for 3G/4G LTE/Wi-Fi/BT/NB-IoT/GPS/BDS | |
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Cable & Connector

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| 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

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|---------|---|
| WBK-AIH | Wall mount bracket x2 with M3x6 screws x6 |
| UTA-159 | Phoenix Contact DIN Rail Clip with M3x6 screws x6 |

Packing List

| Item No. | |
|----------|------------------------------------|
| 1 | Eagle Eyes Embedded Box PC AIHD x1 |