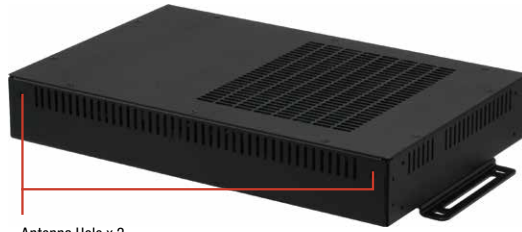


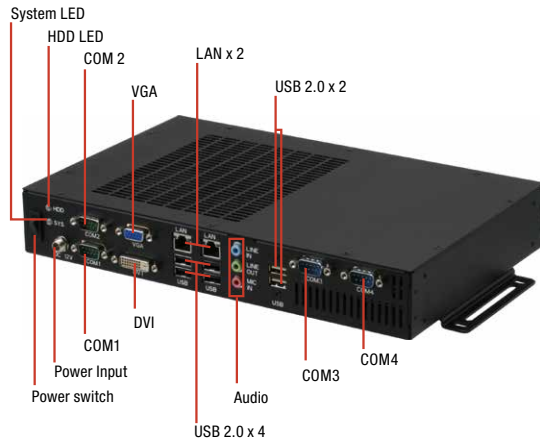
## Fanless Embedded Box PC with Intel® Atom™ D2550 B3 Processor

Front View



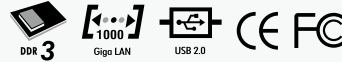
Antenna Hole x 2

Rear View



## Features

- Onboard Intel® Atom™ D2550 B3 Processor
- Intel® GMA 3650 Graphic Engine
- Dual Independent Display: VGA, DVI-D
- Intel® NM10 Chipset (PCH)
- USB 2.0 and SATA 3.0 Gb/s
- Easy to Install Mini-Card with SIM card slot x 1 & Memory & HDD By 4 Screws Only
- Compact Size & Low power
- Cost-Effective Design
- Fanless System Design
- AAEON's Hi-Safe Support



| Indicator             | Front   | —                                 |
|-----------------------|---|-----------------------------------|
|                       | Rear  | Power LED x 1, HDD active LED x 1 |
| Power Requirement     | Lockable DC jack x 1 for DC12V  |                                   |
| Power Consumption     | D2550, 1.21A@12V (14.52W) without USB loading   |                                   |
| System Cooling        | Passive   |                                   |
| Mounting              | Wallmount/VESA/Din Rail   |                                   |
| Operating Temperature | 23°F ~ 113°F (-5°C ~ 45°C) with W/T HDD (with Airflow)<br>with industrial grade device (according to IEC68-2-14)  |                                   |
| Storage Temperature   | 14°F ~ 140°F (-10°C ~ 60°C)   |                                   |
| Anti-Vibration        | 1 Grms/ 5 ~ 500Hz/ operation – HDD  |                                   |
| Anti-Shock            | 20 G peak acceleration (11 msec. duration)  |                                   |
| MTBF (Hours)          | 178,000   |                                   |
| Certification         | EMC   | CE /FCC CLASS A                   |
|                       | Safety  | —                                 |
| Dimension (W x H x D) | 11.81" (W) x 1.83" (H) x 7.48"(D) (300mm x 46.5mm x 190mm)  |                                   |
| Gross Weight          | —   |                                   |
| OS Support            | Windows® XP Pro 32-bit, Windows® Embedded Standard 32-bit,<br>Windows® 7 32-bit, Linux Ubuntu 15/ Kernel 2.6.38.6 |                                   |

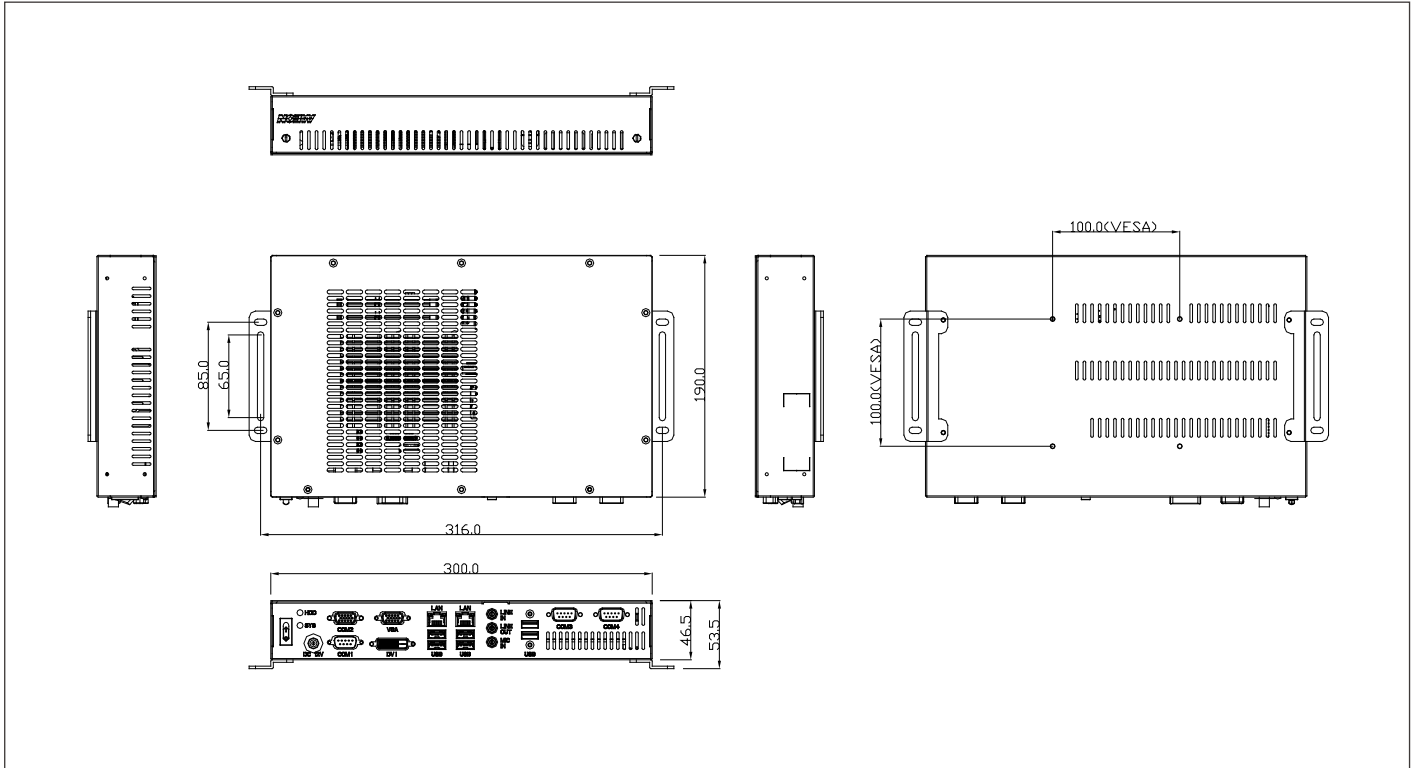
## Specifications

|                   |  |   |   |
|-------------------|--|---|---|
| CPU               | Onboard Intel® Atom™ D2550 B3 Processor          |   |   |
| Chipset           | Intel® NM10                                      |   |   |
| System Memory     | 204-pin DDR3 800/1066 MHz SODIMM x 2, up to 4 GB |   |   |
| Display Interface | VGA  | DB-15 x 1   |   |
|                   | DVI  | DVI-D x 1   |   |
|                   | HDMI   | —   |   |
|                   | Others   | —   |   |
| Storage Device    | CF-SATA  | —   |   |
|                   | HDD/SSD  | 2.5" SATA HDD bay x 1   |   |
|                   | Others   | —   |   |
| Network           | LAN  | Gigabit Ethernet  |   |
|                   | Wireless   | —   |   |
| Front I/O         | USB Port   | —   |   |
|                   | LAN  | —   |   |
|                   | Serial Port                                      | —   |   |
|                   | DIO  | —   |   |
|                   | Audio  | —   |   |
|                   | KB/MS  | —   |   |
|                   | Others   | Antenna hole x 2 for Optional Wi-Fi/Bluetooth kit                                       |   |
|                   | USB Port   | USB 2.0 x 6   |   |
| Rear I/O          | LAN  | RJ-45 x 2   |   |
|                   | Serial Port                                      | DB-9 x 3 for RS-232<br>DB-9 x 1 for RS-232/422/485 with 5/12V                           |   |
|                   | DIO  | —   |   |
|                   | Audio  | Audio jack x 3 for Mic-in / Line-out / Line-in  |   |
|                   | KB/MS  | —   |   |
|                   | Others   | DC jack x 1 for DC12V Power input<br>Power Button x 1<br>DB-15 x 1 for VGA<br>DVI-D x 1 |   |
|                   | Expansion  | PCIe  | — |
| PCI               | —  | —   |   |
| Mini-Card         | Full-size Mini-Card (PCIe[x1]+USB) x 1           |   |   |
| Mini PCI          | —  | —   |   |
| Others            | —  | —   |   |

# AEC-6643

## Dimension

Unit: mm



## Ordering Information

| Part Number      | CPU  | RAM | LAN | USB | RS-232 | RS-232/422/485 | AUDIO   | Storage                         | Accessory Cables | Display              | Expansion                                 | Mounting  | Power  | Temp.   |
|------------------|--|-----|-----|-----|--------|----------------|---|---------------------------------|------------------|----------------------|---|-----------|--------|---|
| AEC-6643-A1-1010 | Intel® Atom™ D2550 B3<br>Dual Core1.86 GHz Processor | —   | 2   | 6   | 3      | 1              | Audio jack x 3 for<br>Mic-in/ Line-out/ Line-in | 2.5" SATA<br>HDD/SSD<br>Bay x 1 | —                | VGA x 1<br>DVI-D x 1 | Full-size Mini-Card<br>(PCIe(x1)+USB) x 1 | Wallmount | DC 12V | 23°F ~ 113°F (-5°C ~ 45°C) with W/T HDD (with<br>Airflow) with industrial grade device (according to<br>IEC68-2-14) |

## Packing List

- Wallmount Bracket x 2
- Screw Package x 1
- RAM Thermal Pad (60mm x 12.5mm x 3mm) x 1
- Product CD
- AEC-6643

## Optional Accessories

- **125530060A - DC Jack for AEC-6643-A1**  
Power Adapter, 100/240V, 12V, w/ lockable Connector, 5A, 60W, DC
- **1702031802**  
Power Cord (US Type)
- **1702031803**  
Power Cord (European Type)
- **170203180E**  
Power Cord (Japanese Type)