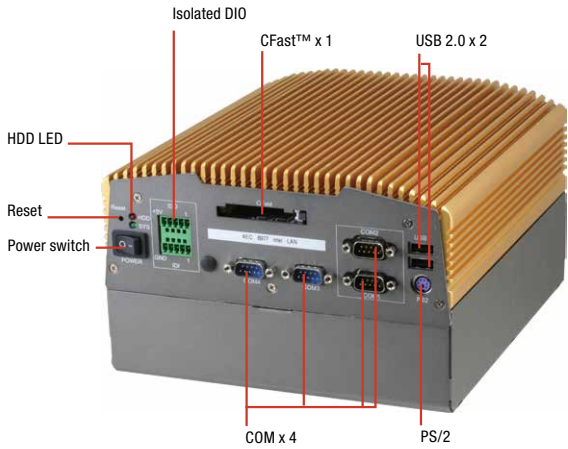
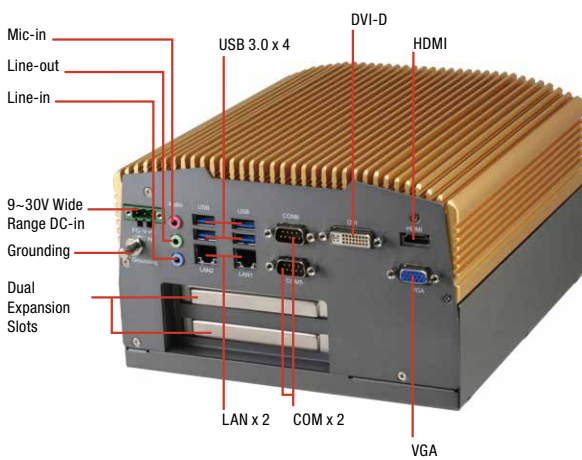


## Fanless Embedded Box PC with Intel® QM77 Chipset

Front View



Rear View



## Specifications

|                   |   |   |               |
|-------------------|---|---|---------------|
| CPU               | Intel® Core™ i7/i5/i3/Celeron® processor with (BGA) |   |               |
| Chipset           | Intel® QM77   |   |               |
| System Memory     | DDR3 1066/1333 MHz SODIMM x 2, up to 16 GB          |   |               |
| Display Interface | VGA   | DB-15 x 1, shared system memory above 512MB/ DVMT 5.0                               |               |
|                   | DVI   | DVI-D x 1 (optional 2nd DVI), supports 1920 x 1200 @ 60 Hz                          |               |
|                   | HDMI  | HDMI x 1, supports 1920 x 1200 @ 60 Hz  |               |
|                   | Others  | Dual-channel 24-bit LVDS (optional extension kit)                                   |               |
| Storage Device    | SSD   | CFast™ slot   |               |
|                   | HDD   | SATA 6.0 Gb/s x 2 (SATA 0, 2), SATA 3.0 Gb/s x 2 (SATA 2, 3), Support RAID 0,1,5,10 |               |
| Network           | LAN   | Gigabit Ethernet  |               |
|                   | Wireless  | Optional by Mini-Card   |               |
| Front I/O         | USB Port  | USB 2.0 x 2   |               |
|                   | LAN   | —   |               |
|                   | Serial Port   | RS-232 x 1, RS-232/422/485 x 1, both support optional 2.5KV isolation, RS-232 x 2   |               |
|                   | DIO   | 8-bit programmable, optional 2.5KV isolation protection                             |               |
|                   | Audio   | —   |               |
|                   | KB/MS   | PS/2 x 1  |               |
|                   | Others  | Power switch  | x 1           |
|                   |   | Reset button  | x 1           |
|                   |   | LED   | x 2           |
|                   |   | SMA antenna   | x 3 if needed |

## Features

- Intel® Core™ i7-3517UE 1.7 GHz Processor
- QM77 Chipset
- COM x 6 (2.5KV isolation x 2), 2.5KV Isolated DIO
- Mini-PCIe x 2 & CFast™ x 1
- Riser Card: PCI x 2, PCI-E[x4] x 2, PCI x 1 and PCI-E[x4] x 1
- Hi-Safe and Hi-Manager Support
- Built-in TPM

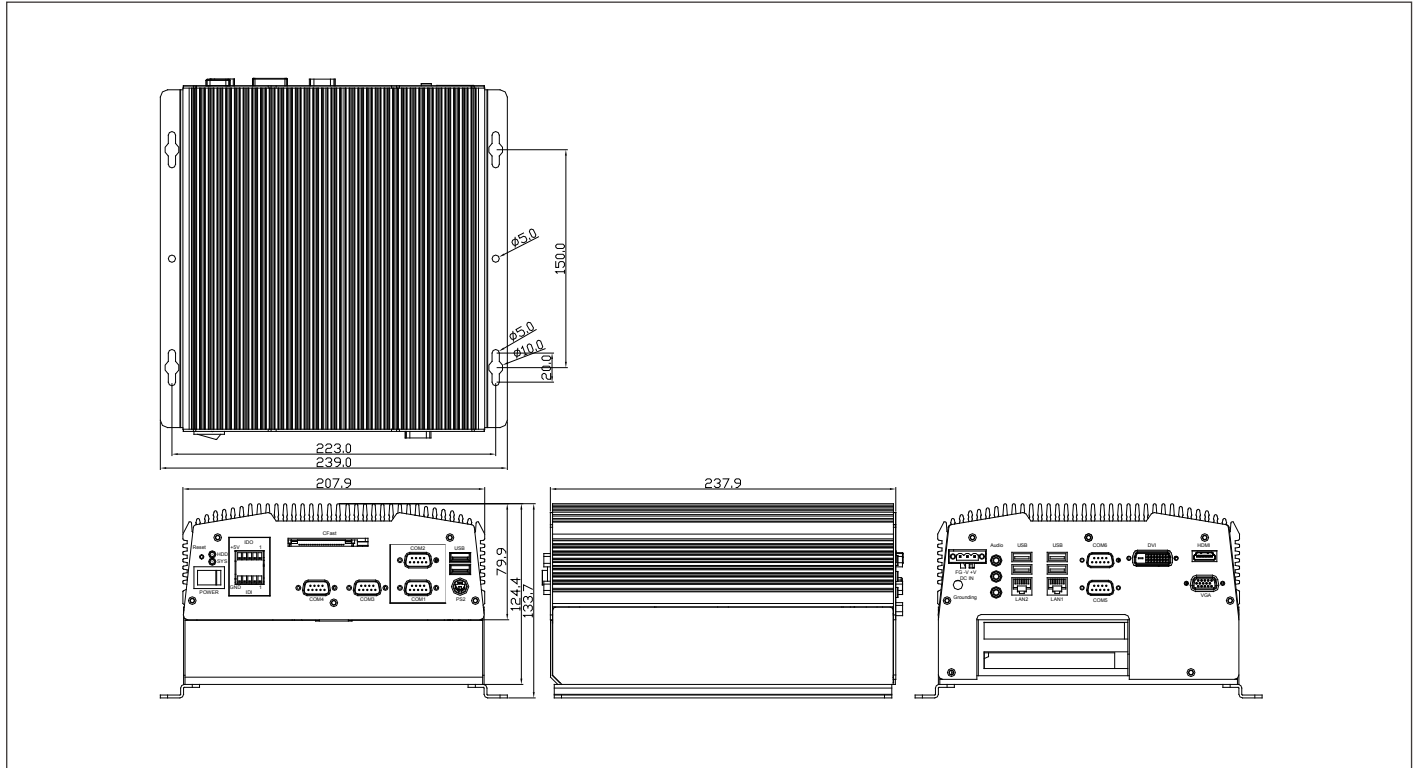


|                       |  |  |
|-----------------------|--|--|
| Rear I/O              | Display  | VGA x 1, DVI-D x 1, HDMI x 1, mic in x 1   |
|                       | USB Port   | USB 3.0 x 4  |
|                       | LAN  | RJ-45 x 2  |
|                       | Serial Port  | RS-232 x 2   |
|                       | DIO  | —  |
|                       | Audio  | Mic-in, line-in, line-out  |
| Expansion             | KB/MS  | —  |
|                       | Others   | 3-pin terminal block x 1, Line out x 1, Line in x 1  |
|                       | PCI-E [x4]   | Riser card: PCI-E[x4] x 2, or PCI-E[x4] and PCI x 1, supports up to 167 mm (length) for expansion card       |
|                       | PCI  | Riser card: PCI x 2, supports up to 167 mm (length) for expansion card                                       |
|                       | Mini-Card  | 2  |
|                       | Mini PCI   | —  |
| Indicator             | Others   | SIM x 1  |
|                       | Front  | System LED x 1, HDD LED x 1  |
|                       | Rear   | —  |
| Power Requirement     | DC-in 9~30V input, 100~240V (optional)   |  |
| Power Consumption     | —  |  |
| System Cooling        | Passive  |  |
| Mounting              | Wallmount  |  |
| Operating Temperature | Without airflow, with wide-temp storage & RAM  | ambient with airflow, with wide-temp storage & RAM   |
|                       | -4°F ~ 122°F (-20°C ~ 50°C) -35W TDP CPU<br>-4°F ~ 149°F (-20°C ~ 65°C) -17W TDP CPU. not include riser card | -4°F ~ 140°F (-20°C ~ 60°C) -35W TDP CPU<br>-4°F ~ 167°F (-20°C ~ 75°C) -17W TDP CPU. not include riser card |
| Storage Temperature   | -4°F ~ 158°F (-20°C ~ 70°C)  |  |
| Anti-Vibration        | 3 Grms/ 5 ~ 500Hz/ operation – CFD<br>1 Grms/ 5 ~ 500Hz/ operation – HDD                                     |  |
| Anti-Shock            | 50 G peak acceleration (11 msec. duration) – CFD<br>20 G peak acceleration (11 msec. duration) – HDD         |  |
| MTBF (Hours)          | 59,000   |  |
| Certification         | EMC  | CE/FCC class A   |
|                       | Safety   | —  |
| Dimension (W x H x D) | 8.19" x 4.9" x 9.37" (208mm x 124.4mm x 238mm)   |  |
| Gross Weight          | 13.2 lb (6.0 kg)   |  |
| Note                  | Windows® XP Embedded, Windows® XP, Windows® 7, Linux Fedora 10   |  |

# AEC-6977

## Dimension

Unit: mm



## Ordering Information

| Part Number       | CPU                      | RAM  | LAN | USB 3.0 | USB 2.0 | RS-232 | RS-232 + Isolation | RS-232/422/485 + Isolation | Isolation DIO   | Storage                      | Display                    | Expansion                         | Mounting  | Power | Temp.                  |
|-------------------|--------------------------|------|-----|---------|---------|--------|--------------------|----------------------------|-----------------|------------------------------|----------------------------|-----------------------------------|-----------|-------|------------------------|
| AEC-6977-A1-1010  | i7-3612QE – 2.1 GHz      | 4 GB | 2   | 4       | 2       | 4      | 1                  | 1                          | DI x 4 & DO x 4 | CFast™ slot x 1, HDD kit x 1 | HDMI x 1, DVI x 1, VGA x 1 | Mini-Card x 2, PCIe x 2           | Wallmount | 9-30V | -20°C ~ 50°C (w/o air) |
| AEC-6977-A2-1010  | i7-3612QE – 2.1 GHz      | 4 GB | 2   | 4       | 2       | 4      | 1                  | 1                          | DI x 4 & DO x 4 | CFast™ slot x 1, HDD kit x 1 | HDMI x 1, DVI x 1, VGA x 1 | Mini-Card x 2, PCI x 2            | Wallmount | 9-30V | -20°C ~ 50°C (w/o air) |
| AEC-6977-A3-1010  | i7-3612QE – 2.1 GHz      | 4 GB | 2   | 4       | 2       | 4      | 1                  | 1                          | DI x 4 & DO x 4 | CFast™ slot x 1, HDD kit x 1 | HDMI x 1, DVI x 1, VGA x 1 | Mini-Card x 2, PCI x 1 & PCIe x 1 | Wallmount | 9-30V | -20°C ~ 50°C (w/o air) |
| AEC-6977-A4-1010  | i3-3217UE – 1.6 GHz      | 4 GB | 2   | 4       | 2       | 4      | 1                  | 1                          | DI x 4 & DO x 4 | CFast™ slot x 1, HDD kit x 1 | HDMI x 1, DVI x 1, VGA x 1 | Mini-Card x 2, PCIe x 2           | Wallmount | 9-30V | -20°C ~ 65°C (w/o air) |
| AEC-6977-A5-1010  | i3-3217UE – 1.6 GHz      | 4 GB | 2   | 4       | 2       | 4      | 1                  | 1                          | DI x 4 & DO x 4 | CFast™ slot x 1, HDD kit x 1 | HDMI x 1, DVI x 1, VGA x 1 | Mini-Card x 2, PCI x 2            | Wallmount | 9-30V | -20°C ~ 65°C (w/o air) |
| AEC-6977-A6-1010  | i3-3217UE – 1.6 GHz      | 4 GB | 2   | 4       | 2       | 4      | 1                  | 1                          | DI x 4 & DO x 4 | CFast™ slot x 1, HDD kit x 1 | HDMI x 1, DVI x 1, VGA x 1 | Mini-Card x 2, PCI x 1 & PCIe x 1 | Wallmount | 9-30V | -20°C ~ 65°C (w/o air) |
| AEC-6977-A7-1010  | Celeron® 1020E – 2.2 GHz | 4 GB | 2   | 4       | 2       | 4      | 1                  | 1                          | DI x 4 & DO x 4 | CFast™ slot x 1, HDD kit x 1 | HDMI x 1, DVI x 1, VGA x 1 | Mini-Card x 2, PCIe x 2           | Wallmount | 9-30V | -20°C ~ 50°C (w/o air) |
| AEC-6977-A8-1010  | Celeron® 1020E – 2.2 GHz | 4 GB | 2   | 4       | 2       | 4      | 1                  | 1                          | DI x 4 & DO x 4 | CFast™ slot x 1, HDD kit x 1 | HDMI x 1, DVI x 1, VGA x 1 | Mini-Card x 2, PCI x 2            | Wallmount | 9-30V | -20°C ~ 50°C (w/o air) |
| AEC-6977-A9-1010  | Celeron® 1020E – 2.2 GHz | 4 GB | 2   | 4       | 2       | 4      | 1                  | 1                          | DI x 4 & DO x 4 | CFast™ slot x 1, HDD kit x 1 | HDMI x 1, DVI x 1, VGA x 1 | Mini-Card x 2, PCI x 1 & PCIe x 1 | Wallmount | 9-30V | -20°C ~ 50°C (w/o air) |
| AEC-6977-A10-1010 | i7-3517UE                | 4 GB | 2   | 4       | 2       | 4      | 1                  | 1                          | DI x 4 & DO x 4 | CFast™ slot x 1, HDD kit x 1 | HDMI x 1, DVI x 1, VGA x 1 | Mini-Card x 2, PCIe x 2           | Wallmount | 9-30V | -20°C ~ 65°C (w/o air) |
| AEC-6977-A11-1010 | i7-3517UE                | 4 GB | 2   | 4       | 2       | 4      | 1                  | 1                          | DI x 4 & DO x 4 | CFast™ slot x 1, HDD kit x 1 | HDMI x 1, DVI x 1, VGA x 1 | Mini-Card x 2, PCI x 2            | Wallmount | 9-30V | -20°C ~ 65°C (w/o air) |
| AEC-6977-A12-1010 | i7-3517UE                | 4 GB | 2   | 4       | 2       | 4      | 1                  | 1                          | DI x 4 & DO x 4 | CFast™ slot x 1, HDD kit x 1 | HDMI x 1, DVI x 1, VGA x 1 | Mini-Card x 2, PCI x 1 & PCIe x 1 | Wallmount | 9-30V | -20°C ~ 65°C (w/o air) |

## Packing List

- Phoenix Power Connector x 1
- Wallmount Bracket x 2
- Product DVD
- AEC-6977

## Optional Accessories

- **1255901202**  
Power Adapter (120W), Output: DC 19V
- **1255900841**  
Power Adapter (84W), Output: DC 12V
- **1702031802**  
Power Cord (US Type)
- **1702031803**  
Power Cord (European Type)
- **170203180E**  
Power Cord (Japanese Type)
- **9741696701**  
I/O Dust Cover Kit
- **9741696702**  
2nd 2.5" SATA HDD Kit