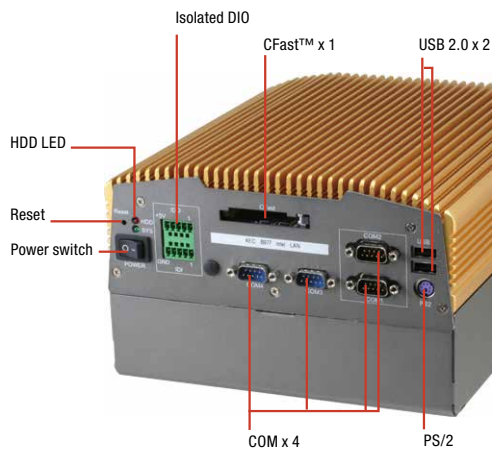
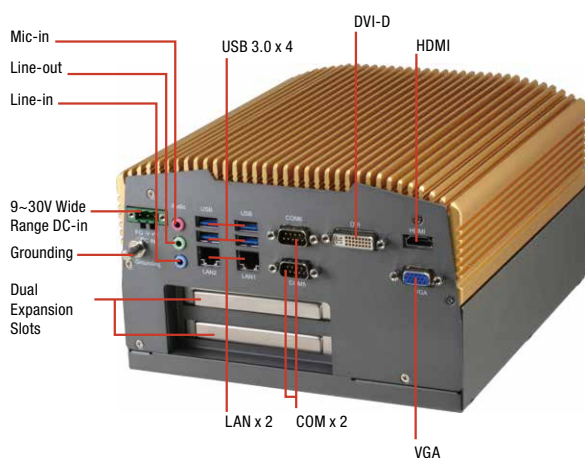


## Fanless Embedded Box PC with Intel® QM77 Chipset

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/ DVM T 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

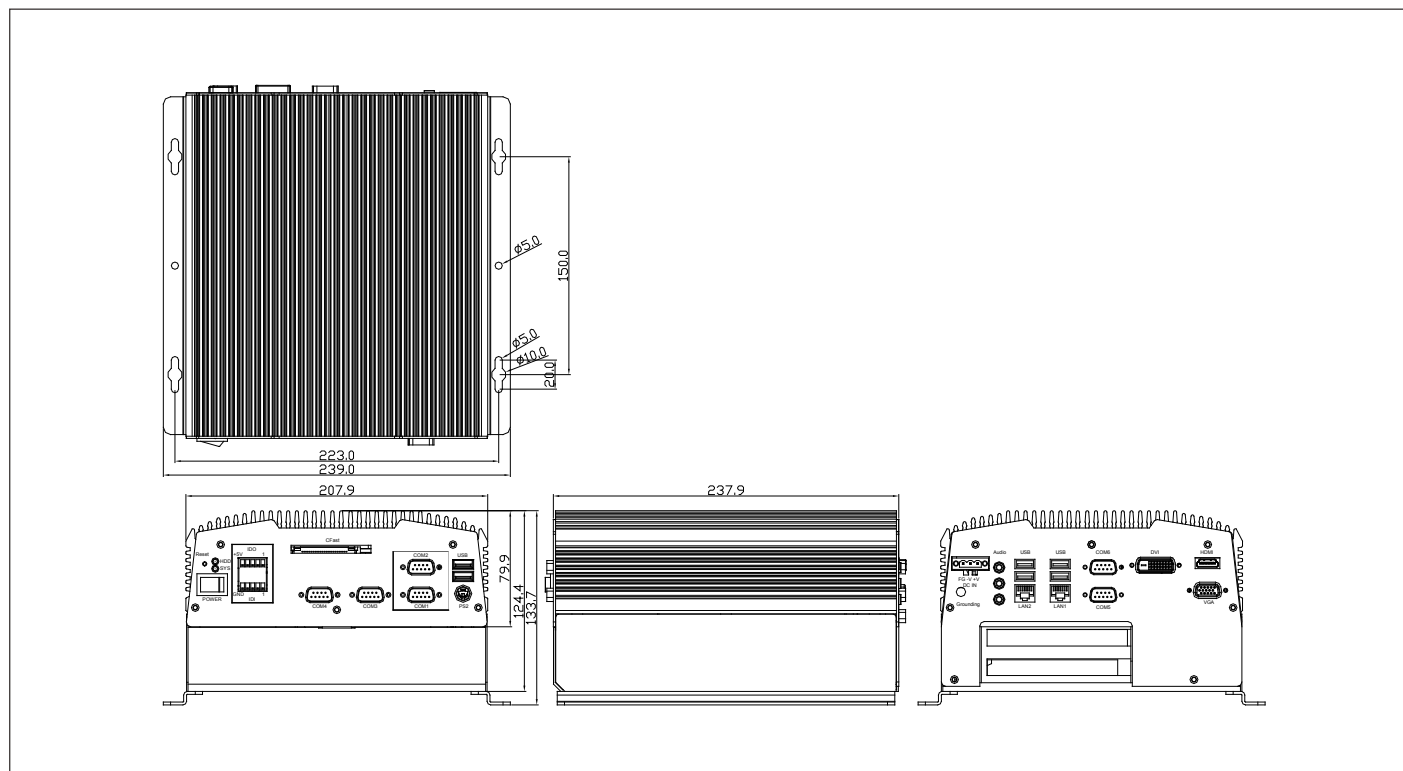
- Intel® Core™ i7-3517UE 1.7 GHz Processor
- QM77 Chipset
- COM x 6 (2.5KV isolation x 2), 2.5KV Isolated DIO
- Mini-PCIe x 2 & CFast™ x 1
- Riser Card: PCI x 2, PCI-E[x4] x 2, PCI x 1 and PCI-E[x4] x 1
- Hi-Safe and Hi-Manager Support
- Built-in TPM



|                       |                                                  |                                                                                                        |
|-----------------------|--------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| 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                                                                              |
|                       | KB/MS                                            | —                                                                                                      |
|                       | Others                                           | 3-pin terminal block x 1, Line out x 1, Line in x 1                                                    |
| Expansion             | 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                                         | —                                                                                                      |
|                       | Others                                           | SIM x 1                                                                                                |
| Indicator             | 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    |                                                                                                        |
|                       | -4°F ~ 122°F (-20°C ~ 50°C) -35W                 |                                                                                                        |
|                       | TDP CPU                                          |                                                                                                        |
|                       | -4°F ~ 149°F (-20°C ~ 65°C) -17W                 |                                                                                                        |
| Storage Temperature   | -4°F ~ 158°F (-20°C ~ 70°C)                      |                                                                                                        |
|                       | 3 Grms/ 5 ~ 500Hz/ operation – CFD               |                                                                                                        |
|                       | 1 Grms/ 5 ~ 500Hz/ operation – HDD               |                                                                                                        |
|                       | 50 G peak acceleration (11 msec. duration) – CFD |                                                                                                        |
| Anti-Shock            | 20 G peak acceleration (11 msec. duration) – HDD |                                                                                                        |
|                       | 59,000                                           |                                                                                                        |
| MTBF (Hours)          | 59,000                                           |                                                                                                        |
|                       | CE/FCC class A                                   |                                                                                                        |
| Certification         | —                                                |                                                                                                        |
|                       | 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                                         |

## 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