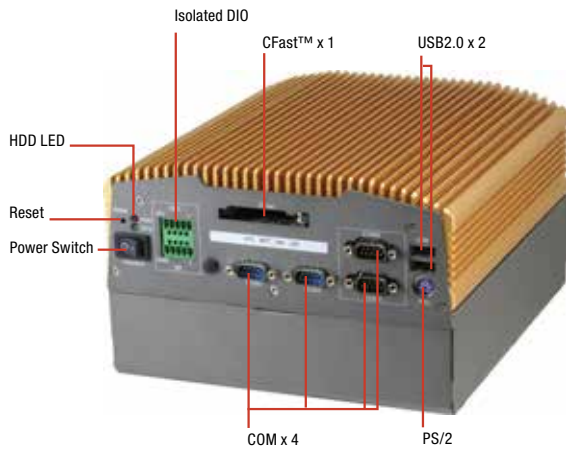
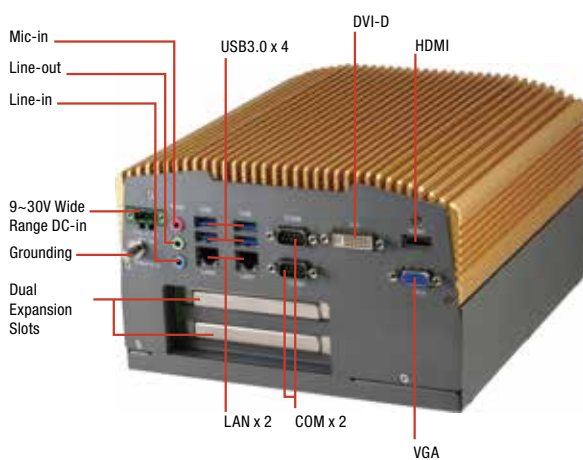


Fanless Embedded Controller with Intel® QM77 Chipset

Front View



Rear View



Specifications

CPU	Intel® Core™ i7/i5/i3/Celeron® processor with BGA type		
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	USB2.0 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
- TPM Support

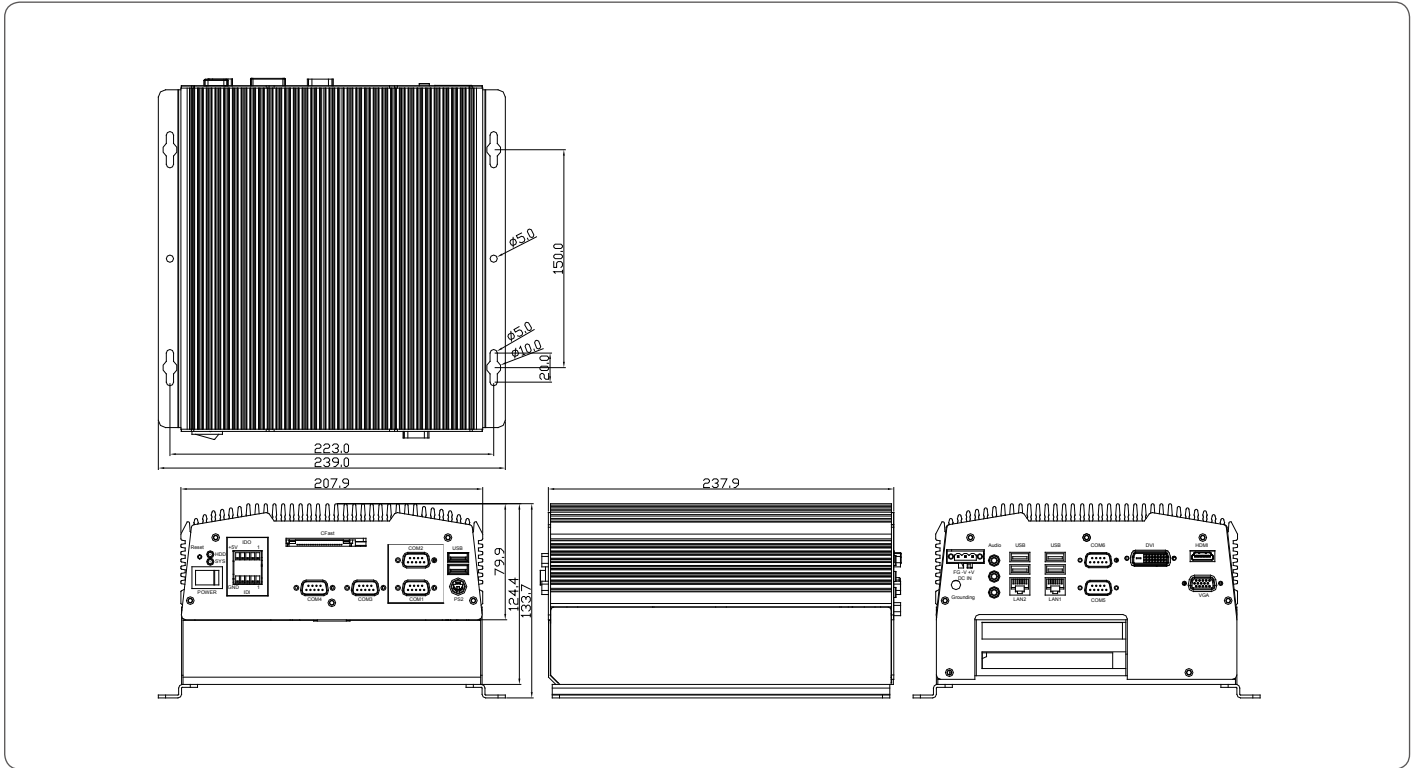


Rear I/O	Display	VGA x 1, DVI-D x 1, HDMI x 1, Mic in x 1
	USB Port	USB3.0 x 4
	LAN	RJ-45 x 2
	Serial Port	RS-232 x 2
	DIO	—
	Audio	Mic-in, Line-in, Line-out
	KB/MS	—
Expansion	Others	3-pin terminal block x 1, Line out x 1, Line in x 1
	PCI-E [x4]	Riser card: PCI-E[x4] x 2, or PCI-E[x4] and PCI x 1
	PCI	Riser card: PCI x 2
	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	-4°F ~ 140°F (-20°C ~ 60°C) -35W TDP CPU
	-4°F ~ 149°F (-20°C ~ 65°C) -17W TDP CPU, not include Riser Card	-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 g rms/ 5 ~ 500Hz/ operation – CFD 1 g rms/ 5~ 500Hz/ operation – HDD	
Anti-Shock	50 G peak acceleration (11 msec. duration) – CFD 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	—	
Note	Windows® XP Embedded, Windows® XP, Windows® 7, Linux Fedora 10	

AEC-6977

Dimension

Unit: mm



Ordering Information

Part Number	CPU	RAM	LAN	USB3.0	USB2.0	RS-232	RS-232 + Isolation	RS-232/422/485 + Isolation	Isolation DIO	Storage	Display	Expansion	Mounting	Power	Temp.
AEC-6977-A1-1010	i7-36120E – 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-E x 2	Wallmount	9-30V	-20°C ~ 50°C (w/o air)
AEC-6977-A2-1010	i7-36120E – 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	i7-36120E – 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 & PCI-E 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, PCI-E 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 & PCI-E 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, PCI-E 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 & PCI-E 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, PCI-E 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 & PCI-E 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

- **1757912001**
Power Adapter (120W), Output: DC 19V
- **1757908401**
Power Adapter (84W), Output: DC 12V
- **1702031830**
Power Cord (US Type)
- **1702031831**
Power Cord (European Type)
- **1702031810**
Power Cord (Japanese Type)
- **9741696701**
I/O Dust Cover Kit
- **9741696702**
2nd 2.5" SATA HDD Kit