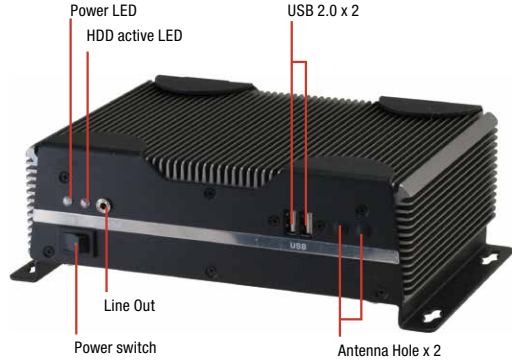
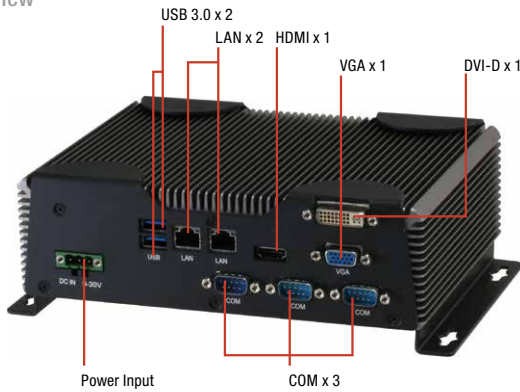


## Fanless Embedded Box PC with 4th Generation Intel® Core™ i7/i5/i3 Processor and PCH QM87

Front View



Rear View



## Features

- 4th Generation Intel® Core™ i7/i5/i3 Processor CPU: i7-4700EQ (2.4 GHz)[37W]/ i5-4400E (2.7 GHz)[37W]/ i3-4100E (2.4 GHz)[37W]
- COM Port x 3, USB 3.0 x 2 , USB 2.0 x 2
- Intel® Gigabit Ethernet x 2 (Intel® I217/I218 Gigabit PHY & Intel® I210/I211 Gigabit)
- VGA Output Resolution: Up to 2048 x 1536 (QXGA) @ 60 Hz
- DVI-D Output Resolution: 1920 x 1200 @ 60 Hz
- HDMI Output Resolution: Up to 3840 x 2160 @ 30 Hz
- Mini-Card x 1 or mSATA x 1 Selected by Jumper Setting
- Fanless System Design
- AAeon's Hi-Safe & Hi-Manager Support



## Specifications

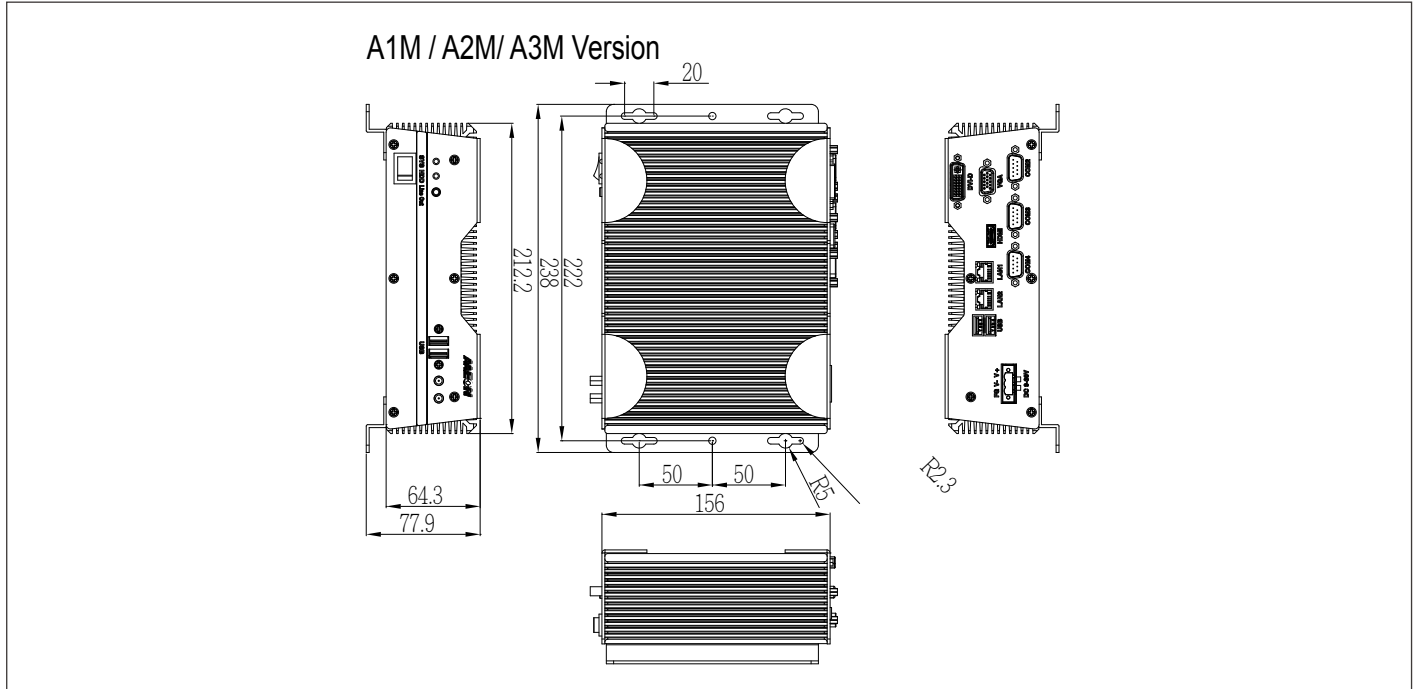
CPU	4th Generation Intel® Core™ i7-4700EQ 2.4 GHz Processor (37W) 4th Generation Intel® Core™ i5-4400E 2.7 GHz Processor (37W) 4th Generation Intel® Core™ i3-4100E 2.4 GHz Processor (37W)
Chipset	Intel® QM87
System Memory	204-pin DDR3L 1333/1600 MHz SODIMM x 1, up to 8GB
Display Interface	VGA DB-15 x 1 for VGA
	DVI DVI-D x 1
	HDMI HDMI x 1
	Others —
Storage Device	CF/CFast™ CFast™ x 1
	HDD/SSD 2.5" SATA 3 (6.0 Gb/s) HDD drive bay x 1
Network	LAN Gigabit Ethernet x 2
	Wireless —
Front I/O	USB Port USB type A x 2 for USB 2.0
	LAN —
	Serial Port —
	DIO —
	Audio Line-out x 1
	KB/MS —
	Others Antenna Hole x 2, Power switch x 1
	—
Rear I/O	USB Port USB type A x 2 for USB 3.0
	LAN RJ-45 x 2
	Serial Port DB-9 x 1 for RS-232/422/485 (Ring/ +5V/ +12V), RS-485 with auto flow DB-9 x 2 for RS-232 x 2
	DIO —
	Audio —
	KB/MS —
	Others 3-pin terminal block x 1 for Power Input

Expansion	PCIe [x1]	—
	PCI	—
	Mini-Card	Mini-Card x 1
	Mini PCI	—
Indicator	Others	—
	Front	Power LED x 1, HDD LED x 1
	Rear	—
Power Requirement	DC 9 ~ 30V with 3-pin terminal block	
Power Consumption	Core i5-4400E 1.8A@19V (34.2W) without USB loading	
System Cooling	Passive	
Mounting	Wallmount	
Operating Temperature	Intel® Core™ i7/i5/i3 37W BGA CPU:	
	(1) 5°F ~ 122°F (-15°C ~ 50°C) W/T CFast™ (with AirFlow) (2) 5°F ~ 131°F (-15°C ~ 55°C) W/T HDD (with AirFlow) with industrial grade device (according to IEC68-2-14)	
Storage Temperature	-4°F ~ 158°F (-20°C ~ 70°C)	
Anti-Vibration	5 Grms/ 5 ~ 500Hz/ operation – CFast™	
	1 Grms/ 5 ~ 500Hz/ operation – HDD	
Anti-Shock	50 G peak acceleration (11 msec. duration) – CFast™	
	20 G peak acceleration (11 msec. duration) – HDD	
MTBF (Hours)	78,000	
Certification	EMC	CE /FCC Class A
	Safety	—
Dimension (W x H x D)	8.35" x 6.14" x 2.53" (212.2mm x 156mm x 64.3mm)	
Gross Weight	7.94 lb (3.6 kg)	
Net Weight	6.0 lb (2.7kg)	
OS Support	Windows® 10, Windows® 8.1 (32/64-bit), Windows® 7(32/64-bit), WES7/WES8, Linux Ubuntu 14.04/ Kernel 3.13.0	

# AEC-6638

## Dimension

Unit: mm



## Ordering Information

Part Number	CPU	RAM	LAN	USB 3.0	USB 2.0	RS-232	RS-232/422/485	Storage	Accessory Cables	Display	Expansion	Mounting	Power	Temp.
AEC-6638-A1M-1010	i3-4100E 2.4GHz processor	—	2	2	2	2	1	CFast™ kit x 1 SSD/HDD kit x 1	—	VGA x 1 DVI-D x 1 HDMI x 1	Mini-Card x 1	Wallmount	DC 9-30V	5°F ~ 122°F (-15°C ~ 50°C) – with W/T CFast™ (with Airflow) 5°F ~ 131°F (-15°C ~ 55°C) – with W/T HDD (with Airflow) With industrial grade device (According to IEC68-2-14)
AEC-6638-A2M-1010	i5-4400E 2.7GHz processor	—	2	2	2	2	1	CFast™ kit x 1 SSD/HDD kit x 1	—	VGA x 1 DVI-D x 1 HDMI x 1	Mini-Card x 1	Wallmount	DC 9-30V	5°F ~ 122°F (-15°C ~ 50°C) – with W/T CFast™ (with Airflow) 5°F ~ 131°F (-15°C ~ 55°C) – with W/T HDD (with Airflow) With industrial grade device (According to IEC68-2-14)
AEC-6638-A3M-1010	i7-4700EQ 2.4 GHz processor	—	2	2	2	2	1	CFast™ kit x 1 SSD/HDD kit x 1	—	VGA x 1 DVI-D x 1 HDMI x 1	Mini-Card x 1	Wallmount	DC 9-30V	5°F ~ 122°F (-15°C ~ 50°C) – with W/T CFast™ (with Airflow) 5°F ~ 131°F (-15°C ~ 55°C) – with W/T HDD (with Airflow) With industrial grade device (According to IEC68-2-14)

## Packing List

- Wallmount Bracket x 2
- Screw Package x 1
- RAM Thermal Pad x 4 (1998F15003 x 1, 199866630 x 2, 199866652 x 1)
- Product DVD
- AEC-6638

## Optional Accessories

- **1255901202**  
Power Adapter (120W), Input: AC100/240V, Output: DC 19V, 6A
- **1702031802**  
Power Cord (US Type)
- **1702031803**  
Power Cord (European Type)
- **170203180E**  
Power Cord (Japanese Type)
- **9741C50W04**  
Factory-install Wireless LAN Kit, for AEC Series, (Spark LAN WPEA-152GN), IEEE 802.11 b/g/n w/ Cable & Antenna
- **9741C50W05**  
Factory-install Wireless LAN kit, for AEC series, (Spark LAN WPEA-251NPEA), IEEE 802.11 a/b/g/n Dual Band w/ Cable & Antenna
- **9741663703**  
Factory-install Dual 2.5" SATA HDD Kit, Removable
- **9741663704**  
Factory-install Dual 2.5" SATA HDD Kit, AEC-6636/6637
- **974166250A**  
Factory-install 3.5" HDD ASS'Y Kit, for AEC-6625/6636/6637
- **9741663701**  
Factory-install 2.5" SATA HDD/DVD Kit w/o DVD-ROM
- **9741663700**  
Factory-install Slim DVD-ROM + 2.5" SATA HDD Kit
- **9741663705**  
External Fan Kit