

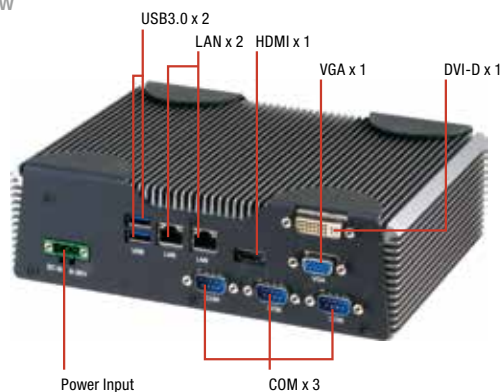
# AEC-6638

Fanless Embedded Controller with 4th Generation Intel® Core™ i5/i3 Processor and PCH QM87

Front View



Rear View



## Features

- Intel® 4th Generation Core™ Processors Support Core i5/i3 CPU: 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
- Dual Gbe LAN (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
- MiniCard x 1 or mSATA x 1 by Jumper Setting
- Fanless System Design



Indicator	Front	Power LED x 1, HDD LED x 1
	Rear	—
Power Requirement	DC 9 ~ 30V with 3-pin terminal block	
Power Consumption	—	
System Cooling	Passive	
Mounting	Wall-mount	
Operating Temperature	Intel® Core™ i5/i3 37W BGA CPU: (1) 14°F ~ 113°F (-10°C ~ 45°C) W/T CFast w/o AirFlow (2) 14°F ~ 122°F (-10°C ~ 50°C) W/T HDD w/o AirFlow	
Storage Temperature	-4°F ~ 158°F (-20°C ~ 70°C)	
Anti-Vibration	5g RMS/5 ~ 500Hz/operation – CFast™ 1g RMS/5 ~ 500Hz/operation – HDD	
Anti-Shock	50G peak acceleration (11 msec. duration) – CFast™ 20G peak acceleration (11 msec. duration) – HDD	
MTBF (Hours)	78,000	
Certification	EMC	CE /FCC Class A
	Safety	—
Dimension (W x H x D)	—	
Gross Weight	—	
Note	—	

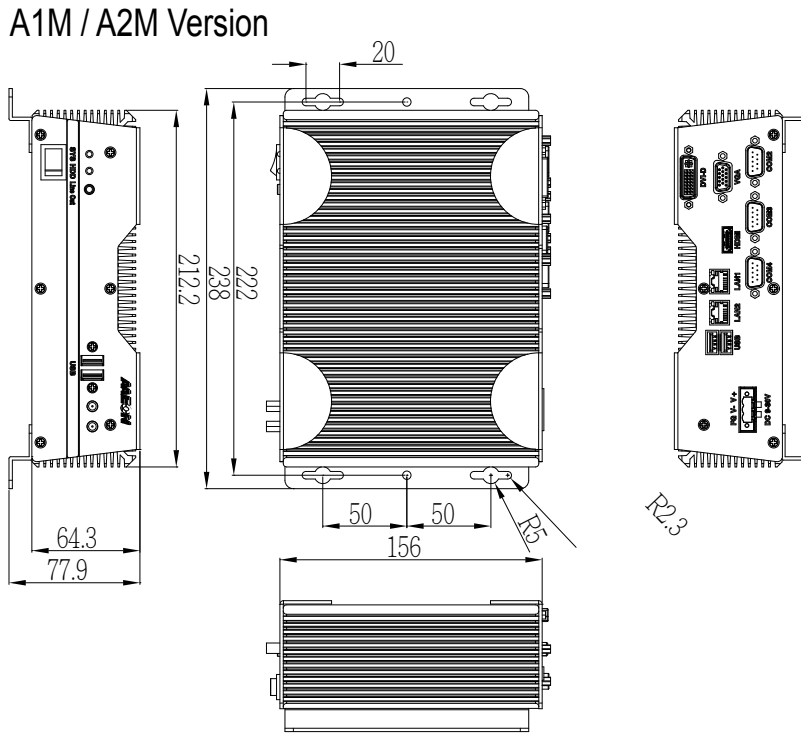
## Specifications

CPU	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	DDR3 SODIMM x 1, supports DDR3L 1333/1600, Max. 8GB
Display Interface	VGA DB-15 x 1 for VGA
	DVI DVI-D x 1
	HDMI HDMI x 1
	Others —
Storage Device	CF/CFast™ Either CFast™ x 1 or mSATA x 1(By Jumper Setting)
	HDD/SSD 2.5" SATA 3(6.0Gb/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 typeA(USB 3.0) x 2
	LAN RJ-45 x 2 for 10/100/1000 base-T
	Serial Port DB-9 x1 for RS-232/ RS-422/ RS-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	PCI-E [x1] —
	PCI —
	Mini Card MINI card x 1 (If choose mSATA, then there will be no MiniCard)
	Mini PCI —
	Others —

# 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	Display	Expansion	Mounting	Power	Temp.
AEC-6638-A1M-1010	i3-4100E	-	2	2	2	2	1	-	DVI-D x 1, HDMI x 1, VGA x 1	MINI-card x 1	Wall Mount	9 ~ 30V	-10°C ~ -45°C with CFast™ w/o Airflow -10°C ~ -50°C with HDD w/o Airflow
AEC-6638-A2M-1010	i5-4400E	-	2	2	2	2	1	-	DVI-D x 1, HDMI x 1, VGA x 1	MINI-card x 1	Wall Mount	9 ~ 30V	-10°C ~ -45°C with CFast™ w/o Airflow -10°C ~ -50°C with HDD w/o Airflow

## 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

Part Number	Description
1757912001	Power Adapter (120W), Input: AC100/240V, Output: DC 19V, 6A
1702031830	Power Cord (US Type)
1702031831	Power Cord (European Type)
1702031810	Power Cord (Japanese Type)