

EPS-QM67E

Fanless Intel® Core™ i7/ i5

Rugged Embedded System with Intel® QM67 Chipset

Quick Reference Guide

2nd Ed –04 June 2019

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OPERATION OF THIS EQUIPMENT IN A RESIDENTIAL AREA IS LIKELY TO CAUSE HARMFUL INTERFERENCE IN WHICH CASE THE USER WILL BE REQUIRED TO CORRECT THE INTERFERENCE AT HIS OWN EXPENSE.

Notice

This guide is designed for experienced users to setup the system within the shortest time. For detailed information, please always refer to the electronic user's manual.

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1. Getting Started

1.1 Safety Precautions

Warning!



Always completely disconnect the power cord from your chassis whenever you work with the hardware. Do not make connections while the power is on. Sensitive electronic components can be damaged by sudden power surges. Only experienced electronics personnel should open the PC chassis.

Caution!



Always ground yourself to remove any static charge before touching the CPU card. Modern electronic devices are very sensitive to static electric charges. As a safety precaution, use a grounding wrist strap at all times. Place all electronic components in a static-dissipative surface or static-shielded bag when they are not in the chassis.

1.2 Packing List

- 1x EPS-QM67E Fanless Intel® Sandy Bridge Processor Rugged Embedded System with Intel® QM67 Chipset
- Other major components include the followings:
 - 4 screws for 2.5" SSD/HDD fixing
 - AC/DC adapter



If any of the above items is damaged or missing, contact your retailer.

1.3 System Specifications

System	
CPU	Support Intel® Core™ i7-2710QE 2.1GHz with 6MB Cache CPU/ Intel® Core™ i5-2510E 2.5GHz with 3MB Cache CPU
BIOS	AMI 8M-bit SPI BIOS
System Chipset	Intel® QM67 Chipset (3.9W)
System Memory	One 204-pin DDR3 SODIMM up to 4GB DDR3 1067/1333 SDRAM
I/O Chip	Nuvoton NTC6776F
Display	Intel® QM67 with Integrated Graphics Engine
Audio	Realtek ALC892 supports 5.1-CH Audio
Ethernet	Dual Intel® Gigabit Ethernet
System Indicators	2 LED Indicators Show Power and HDD status
SSD	1 x mSATA, 1 x SATA
Watchdog Timer	Reset: 1 sec.~65535 sec./min. and 1 sec. or 1 min./step
H/W Status Monitor	Monitoring system temperature and voltage. Auto trotting control when CPU overheats
External I/O	
COM Port	1 x RS232 1x RS232/422/485
LAN Port	2 x RJ45
Antenna	2 Knockouts for Antenna Mounting (Options to Add WiFi & 3G)
Display Port	1 x DVI-I; 1 x HDMI
Audio Port	Min In, Line In and Line Out
USB Port	6 x USB 2.0 (Front x 2; Rear X 4)
Power Supply Unit	
Power Input	100~240Vac / 50~60Hz
Power Output	12Vdc/ 7A (Lockable DC Plug)
Mechanical & Environmental	
Power Requirement	+12V~19V (Lockable DC Jack)
ACPI	Single power ATX Support S0, S3, S4, S5 ACPI 1.0b and 2.0 Compliant
Power Type	AT/ATX
Operating Temp.	-10 ~ 60°C (w/ SSD), Ambient w/ Air Flow; i5-2510E -10 ~ 50°C (w/ SSD), Ambient w/ Air Flow; i7-2710QE.
Storage Temp.	-40 ~ 75°C (-4~167°F)
Operating Humidity	0%~90% relative humidity, non-condensing
Vibration Protection	With SSD: 5Grms, IEC 60068-2-64, Random, 10 ~ 500Hz, 1hr/axis

Quick Reference Guide

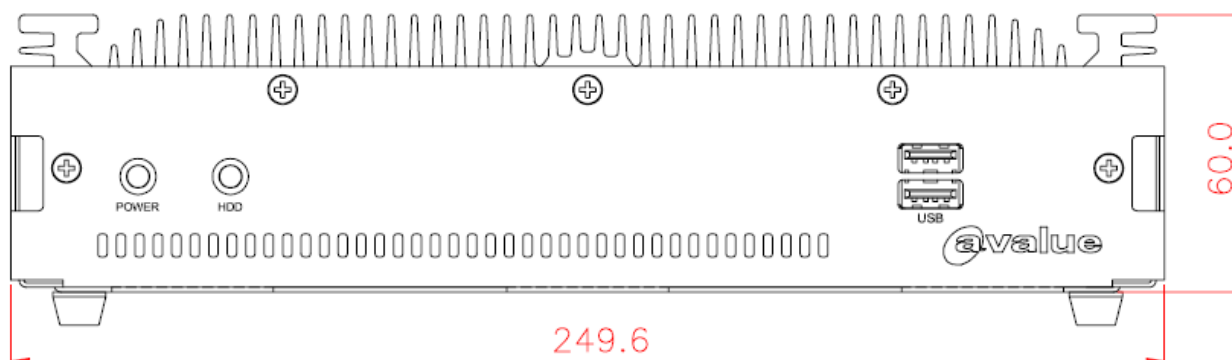
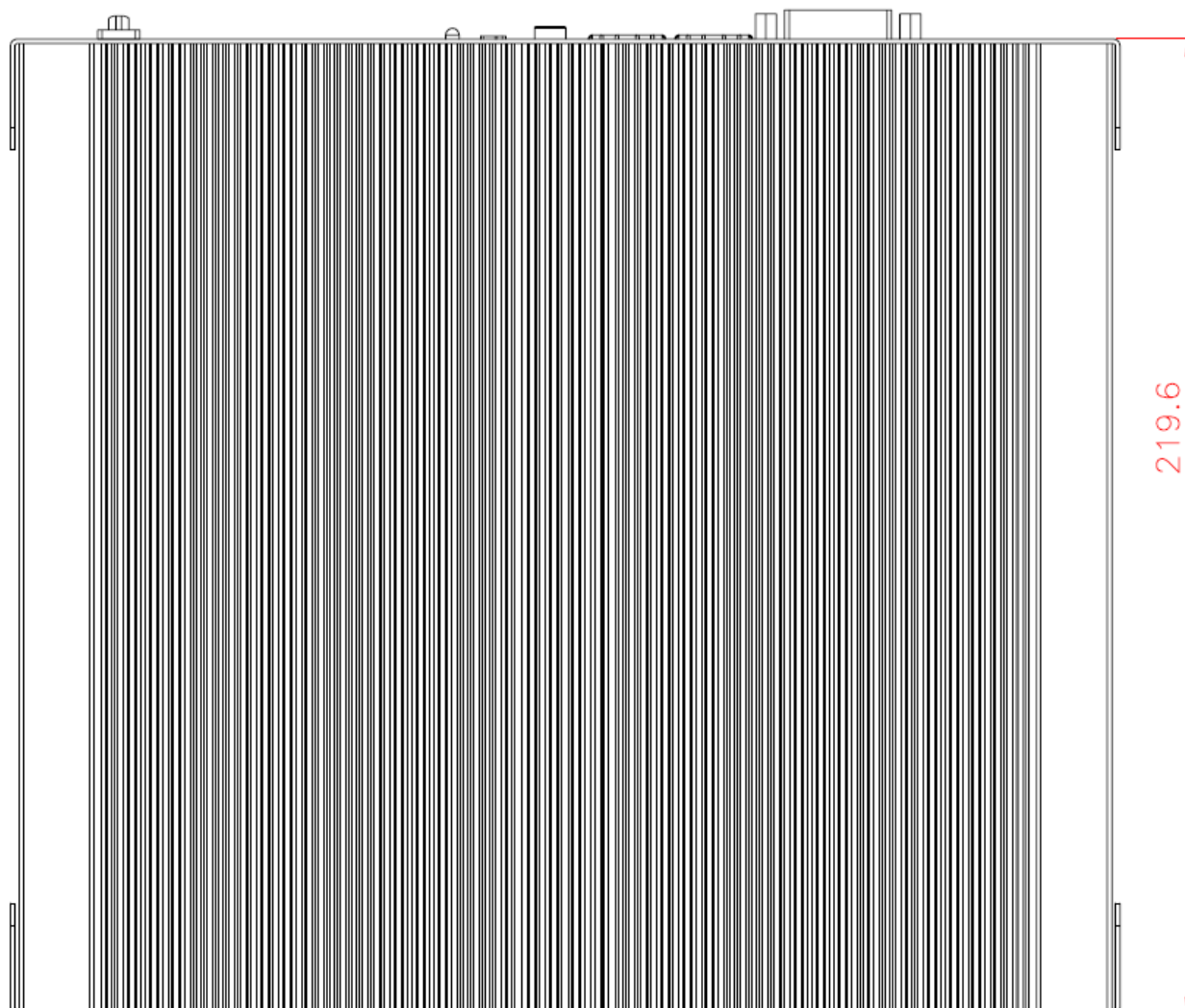
Shock Protection	With SSD: 50G, IEC 60068-2-27, Half Sine, 11ms
Size (L x W x H)	250mm x 220mm x 60mm
Weight	7.7lbs (3.5Kgs)
Mounting	VESA Compliance



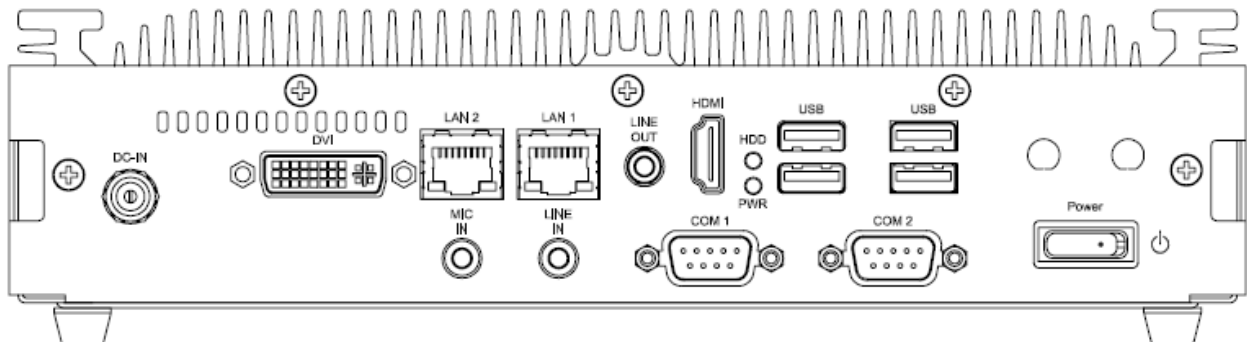
Note: Specifications are subject to change without notice.

1.4 System Overview

1.4.1 Front & Top View



1.4.2 Rear View



Connectors

Label	Function	Note
COM1~2	Serial port connector1~2	
DC-IN	DC power-in connector (lockable DC Jack)	
HDD	HDD Indicator	
PWR	Power Indicator	
LAN1	RJ-45 Ethernet 1	
LAN2	RJ-45 Ethernet 2	
LINE IN	Line-in audio jack	
LINE OUT	Line-out audio jack	
MIC IN	Microphone-in audio jack	
Power	System power switch	
HDMI	HDMI connector	
DVI	DVI connector	
USB1~6	USB connector 1~6	

2. Hardware Configuration

Jumper and Connector Setting, Driver and BIOS Installing

For advanced information, please refer to:

- 1- EPI-QM67 Quick Installation Guide or User's Manual

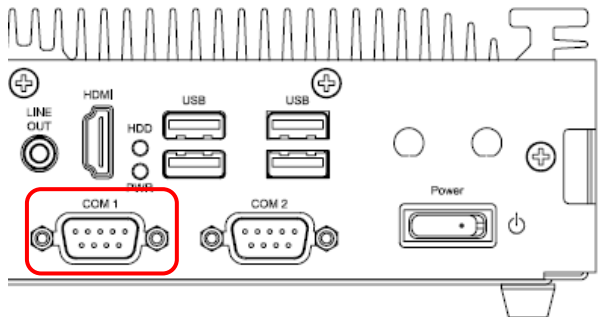


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2.1 EPS-QM67E connector mapping

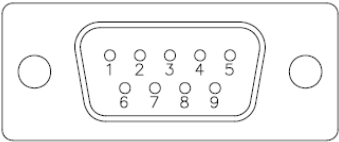
2.2.1 External Serial Port 1 connector (COM1)



*Default

Note:

RS422/RS485 requires OEM BIOS and additional cable.



RS-232*

Signal	PIN	PIN	Signal
DCD1	1	6	DSR1
RXD1	2	7	RST1
TXD1	3	8	CTS1
DTR1	4	9	RI1
GND	5		

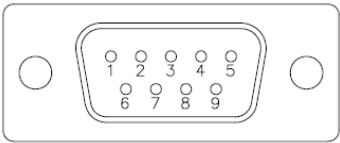
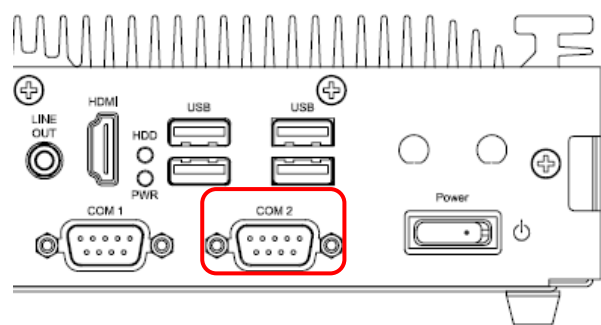
RS-422(Optional)

Signal	PIN	PIN	Signal
NC	1	6	NC
RX+	2	7	RX-
TX+	3	8	TX-
NC	4	9	NC
GND	5		

RS-485(Optional)

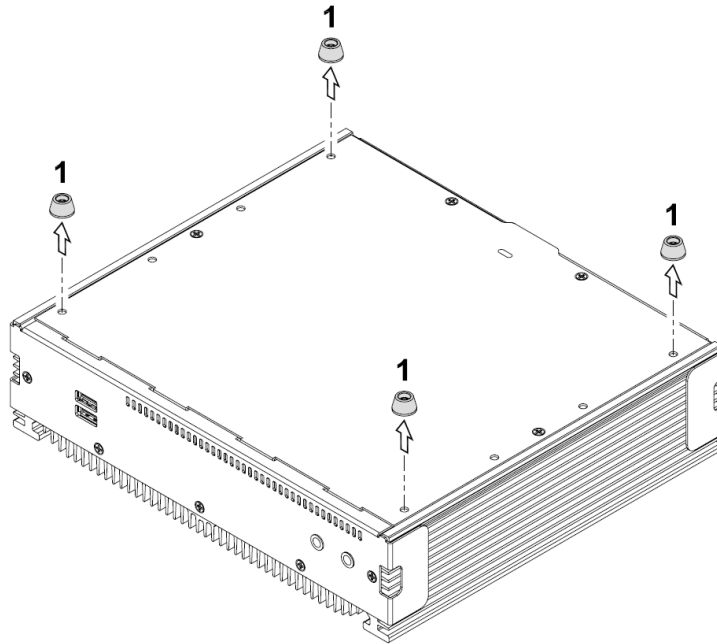
Signal	PIN	PIN	Signal
NC	1	6	NC
NC	2	7	NC
DATA+	3	8	DTAT-
NC	4	9	NC
GND	5		

2.2.2 External Serial Port 2 connector (COM2)

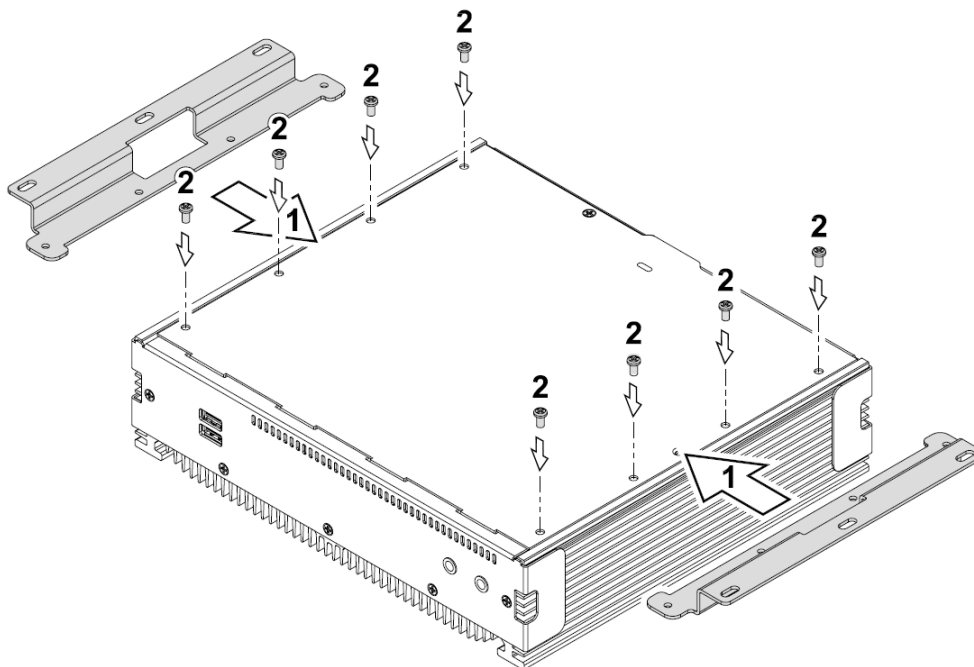


Signal	PIN	PIN	Signal
DCD1	1	6	DSR1
RXD1	2	7	RST1
TXD1	3	8	CTS1
DTR1	4	9	RI1
GND	5		

2.2 Installing Mounting Brackets (EPS-QM67E)

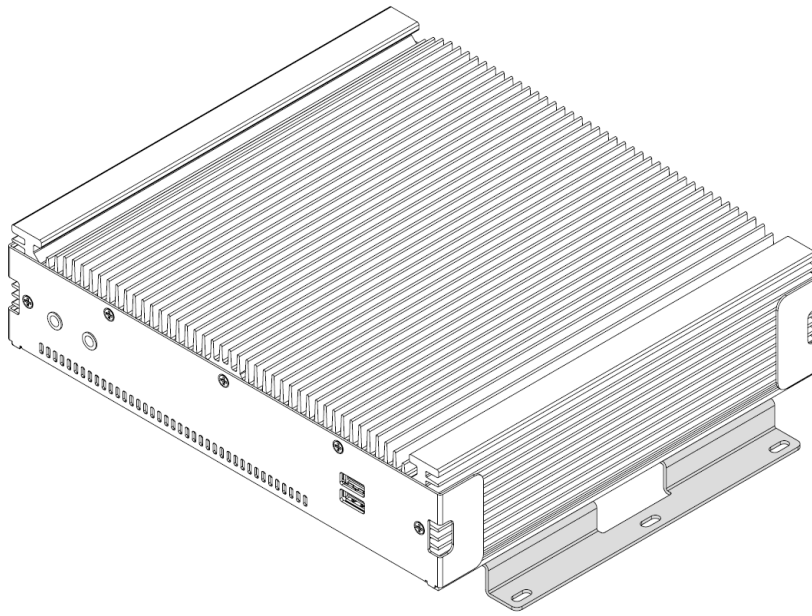


Step 1. Remove 4 stands from the back of your system to install brackets.



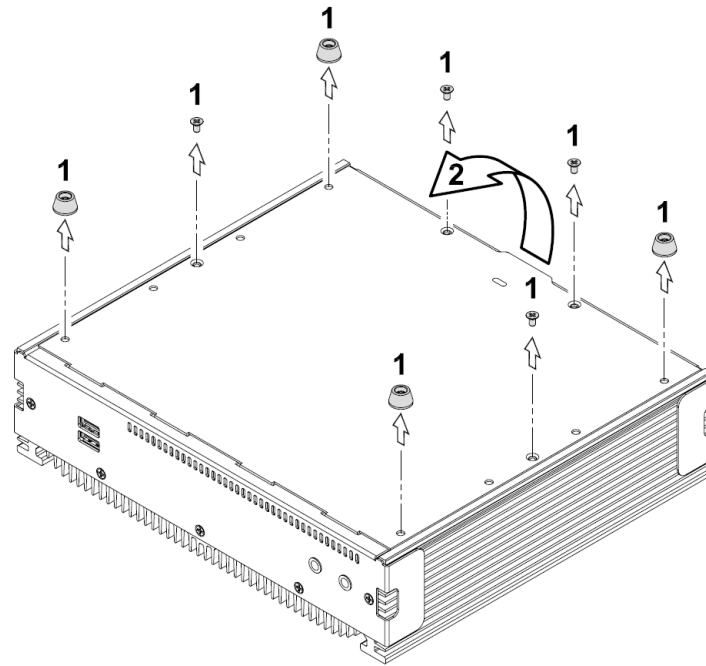
Step 2. Locate brackets on both sides, matching the holes on the system

Step 3. Insert and fasten 4 screws on each side of the system to secure Mounting brackets



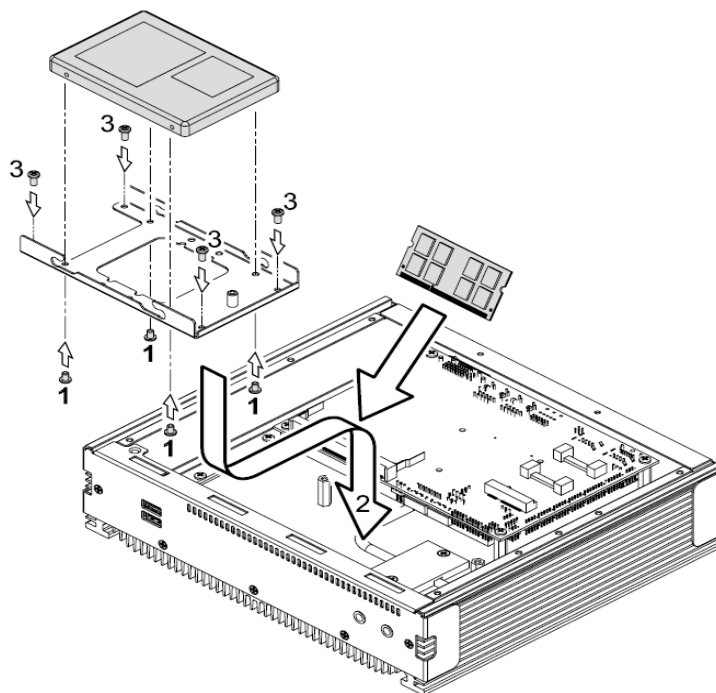
Step 4. Installation completed

2.3 Installing Hard Disk & Memory (EPS-QM67E)



Step 1. Remove 8 screws from the bottom of your system.

Step 2. Remove the chassis cover.



Step 1. Slide HDD into its bracket until properly seated.

Step 2. Secure HDD by means of 4 screws.

Step 3. Connect necessary cables to the HDD

Step 4. Slide the DDR3 SODIMM into the memory socket and press it down to seat it properly.

