

SOPM-QM87

4th Gen Intel® Core™ Open Pluggable Specification (OPS)
Digital Signage Player with Intel® QM87 Chipset

Quick Reference Guide

1st Ed – 13 October 2014

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FCC Statement



THIS DEVICE COMPLIES WITH PART 15 FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:

- (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE.
- (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRE OPERATION.

THIS EQUIPMENT HAS BEEN TESTED AND FOUND TO COMPLY WITH THE LIMITS FOR A CLASS "A" DIGITAL DEVICE, PURSUANT TO PART 15 OF THE FCC RULES.

THESE LIMITS ARE DESIGNED TO PROVIDE REASONABLE PROTECTION AGAINST HARMFUL INTERFERENCE WHEN THE EQUIPMENT IS OPERATED IN A COMMERCIAL ENVIRONMENT. THIS EQUIPMENT GENERATES, USES, AND CAN RADIATE RADIO FREQUENCY ENERGY AND, IF NOT INSTALLED AND USED IN ACCORDANCE WITH THE INSTRUCTION MANUAL, MAY CAUSE HARMFUL INTERFERENCE TO RADIO COMMUNICATIONS.

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.

A Message to the Customer

Avalue Customer Services

Each and every Avalue's product is built to the most exacting specifications to ensure reliable performance in the harsh and demanding conditions typical of industrial environments. Whether your new Avalue device is destined for the laboratory or the factory floor, you can be assured that your product will provide the reliability and ease of operation for which the name Avalue has come to be known.

Your satisfaction is our primary concern. Here is a guide to Avalue's customer services. To ensure you get the full benefit of our services, please follow the instructions below carefully.

Technical Support

We want you to get the maximum performance from your products. So if you run into technical difficulties, we are here to help. For the most frequently asked questions, you can easily find answers in your product documentation. These answers are normally a lot more detailed than the ones we can give over the phone. So please consult the user's manual first.

To receive the latest version of the user's manual; please visit our Web site at:

<http://www.avalue.com.tw/>

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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

- 1 x SOPM-QM87
- 1 x DVD-ROM



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

1.3 System Specifications

Component	
Mother Board	EPIC board with Intel® QM87 Express Chipset
CPU	Onboard Intel® 4 th Generation Core™ i7/i5/i3, Pentium® and Celeron® Processors. (Max TDP 37W)
CPU Cooler (Type)	CPU Fan
Memory	Two 204-pin Dual-channel DDR3L 1333/1600MHz Non-ECC SODIMM, Up to 16GB
BIOS	AMI uEFI BIOS, 128 Mbit SPI Flash ROM
System Chip	Intel® QM87 Express Chipset
I/O Chip	ITE8772E
Power Supply	The 80-pin right angle blind mate plug connector (p/n: TX25-80P-LT-H1E)
The Pluggable Module supports a voltage range	Power: DC IN +12V~+19V (from monitor)
Audio	Mic-In, Line-Out
Wireless LAN	Optional Wireless 802.11 b/g/n (via mini PCI-e or USB)
Watchdog Timer	H/W Reset, 1sec. – 65535sec./min. 1sec. or 1min. Step
H/W Status Monitor	CPU & system temperature monitoring Voltages monitoring
Expansion Card	1 x Half size Mini PCI-e socket Support mSATA SSD Switch Through BIOS
Storage	
Device bay	Support 1 x 2.5" SATA HDD /SSD (7mm)
External I/O	
USB Port	2 USB 3.0 type A
Video Port	Supports HDMI with max. resolution 4096 x 2304 @ 24 Hz / 2560 x 1600 @ 60 Hz Supports DP interface for 2nd display max. resolution 3840x2160 @ 60 Hz
Audio Port	Line-out, Mic-In
LAN Port	1 x Intel® I217LM PCI-Express Gigabit Ethernet
SAM connector	2 x SMA connector
Switch	1 Power button, 1 SATA LED, 1 reset button
Audio code	Realtek ALC662 Audio Codec
Mechanical	
Power Type	Single power ATX Support S0, S1, S3, S4, S5

SOPM-QM87

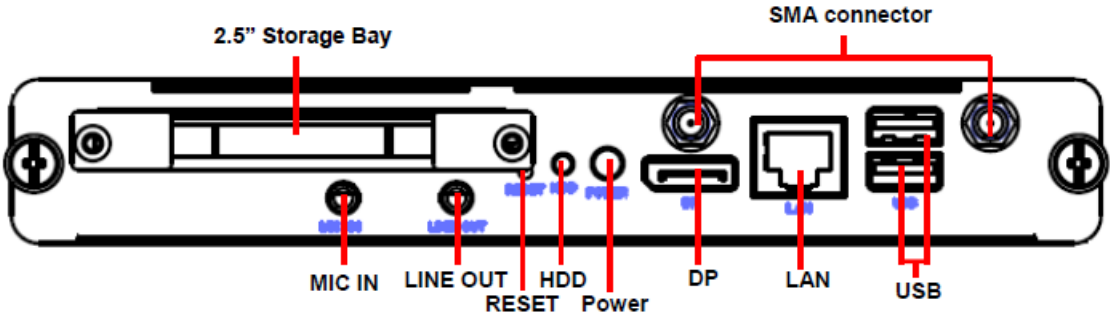
Dimension	200 x 119 x 30mm
Weight	1.97lbs(0.89Kgs)
Color	Black
Reliability	
EMI Test	CE/FCC Class A
Operating Temperature	0 ~ 40°C (32 ~ 104°F) (w/HDD), Ambient w/Air Flow
Operating Humidity	-20 ~ 75°C (-4 ~ 167°F)
Storage Temperature	0 ~ 90% Relative Humidity, Non-condensing



Note: Specifications are subject to change without notice.

1.4 System Overview

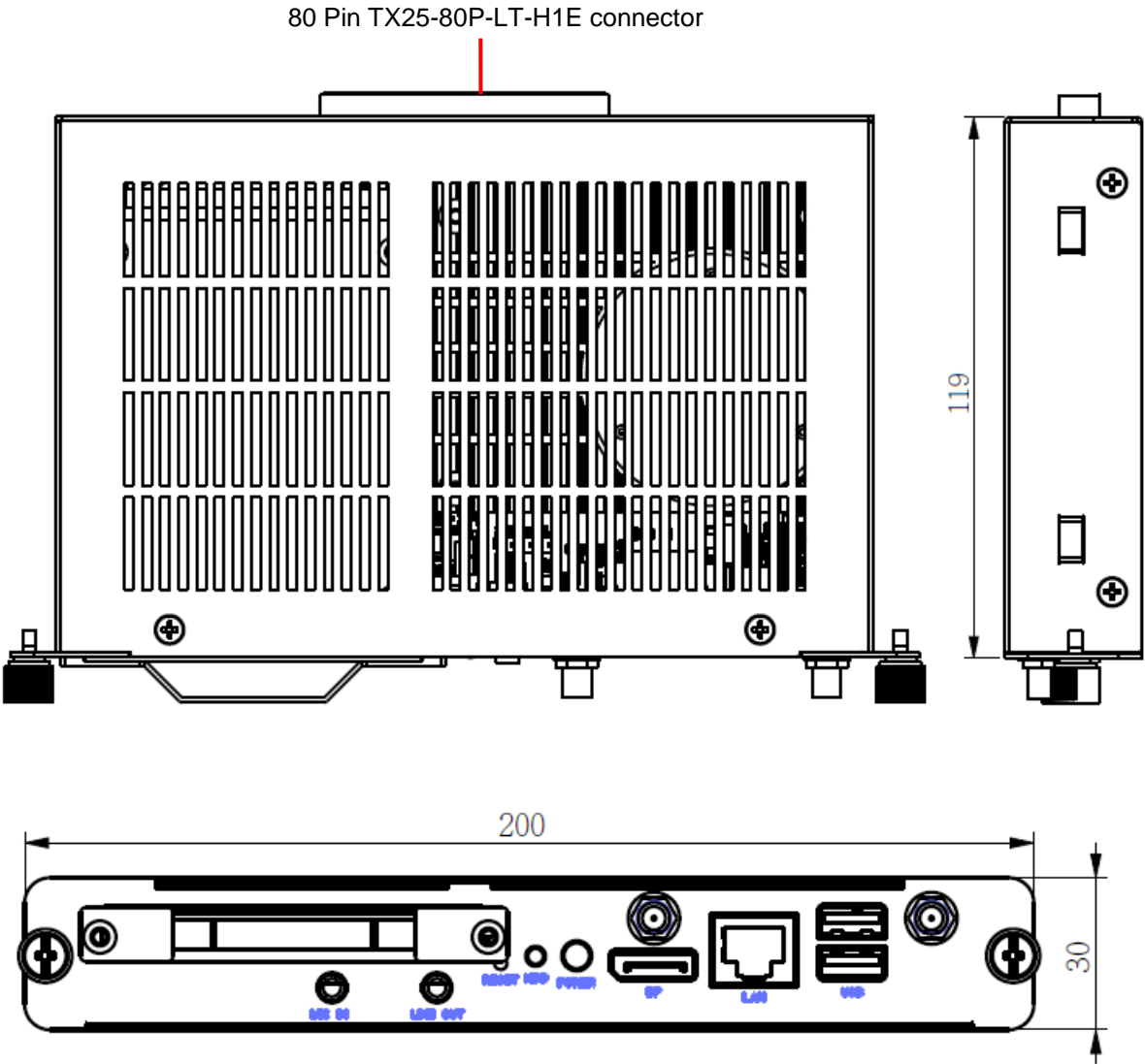
1.4.1 Front View



Connectors		
Label	Function	Note
Power	Power on button	
MIC IN	Microphone-in audio jack	
LINE OUT	Line-out jack	
HDD	HDD indicator	
RESET	Reset button	
DP	DisplayPort connector	
LAN	RJ-45 Ethernet connector	
USB	2 X USB 3.0 Type A connectors	
SMA connector	SMA connector	
2.5" Storage Bay	HDD slot	

1.5 System Dimensions

1.5.1 Front & Top view



(Unit: mm)

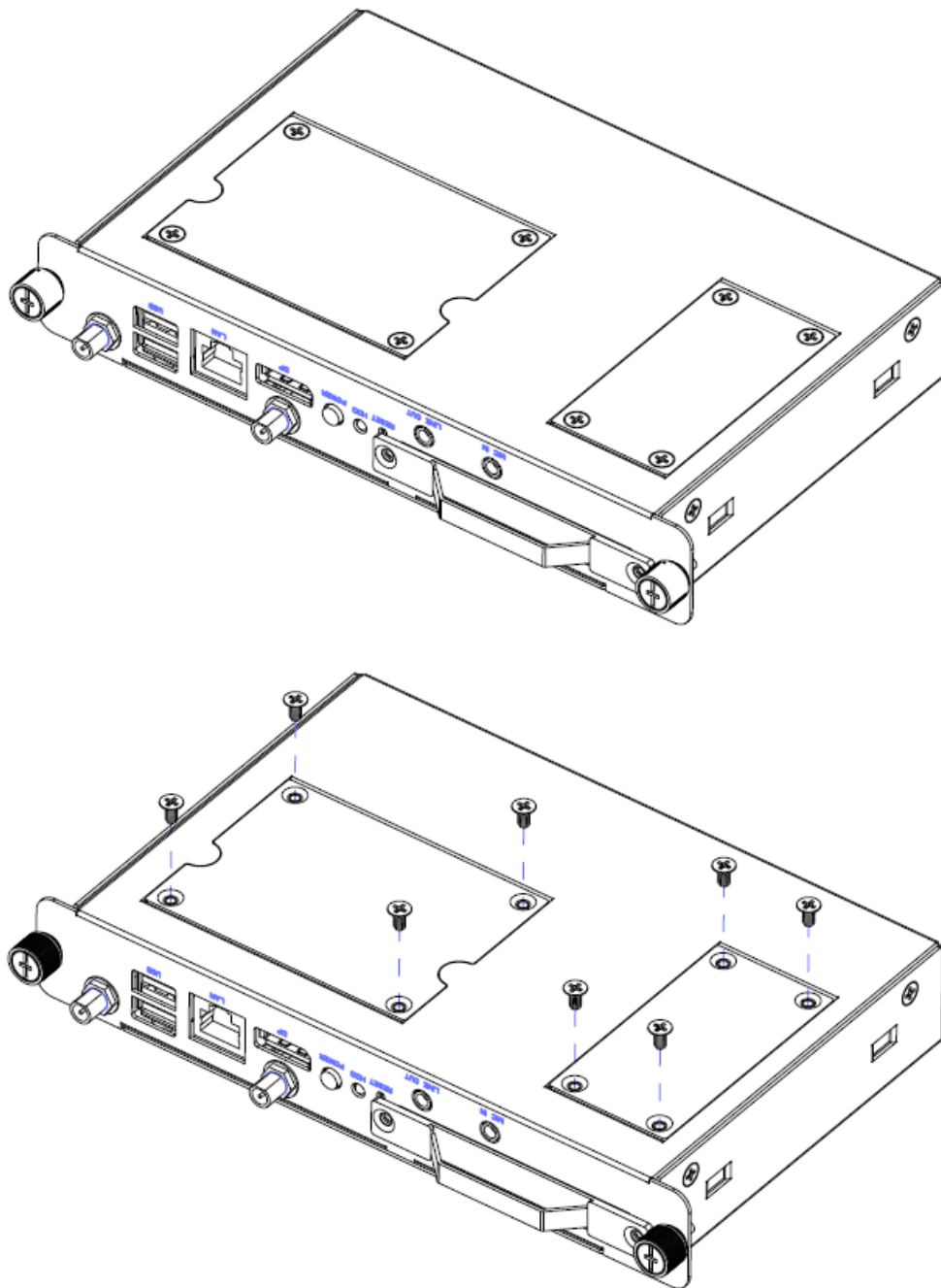
2. Hardware Configuration



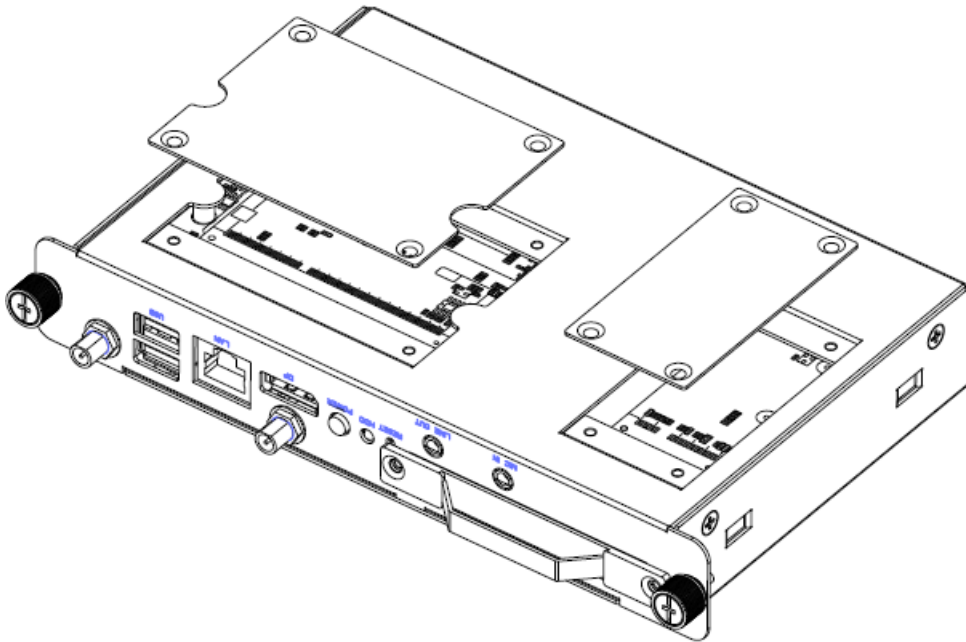
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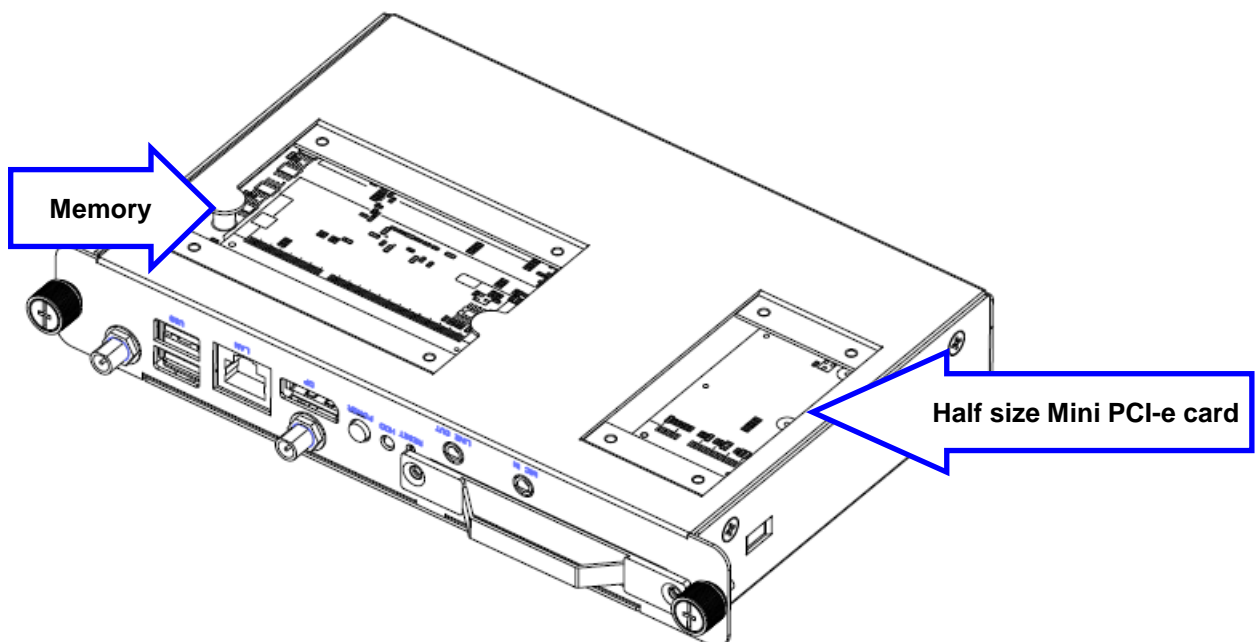
2.1 Installing Memory & Half size Mini PCI-e device



Step1. Remove 8 screws from the bottom of your system.



Step2. Remove the chassis.



Step3.1 Properly install the Memory & Half size Mini PCI-e device module and press until properly seated.

Step3.2 Re-assemble your system back through previous steps to complete the installation.

