



## EPS-QM87

4th Gen Intel®Core™ Processor Core™ i7/i5/i3  
Fanless Rugged Embedded System with 2 expansion slots

- > Onboard 4th Gen Intel®Core™ i7/i5/i3 BGA Processor
- > Intel® QM87 Express Chipset
- > Two 204-pin SODIMM Socket Up to 16GB DDR3L 1333/1600MHz SDRAM
- > Rich I/O, 1 VGA, 1 HDMI, 2 DP, 8 COM, 8 USB, 1 LPT, 2 PCI, 8 In/8 Out GPIO, 1 Min-In, 1 Line-In, 1 Line-Out, 1 x EXT PW Switch
- > Expansion Slot Supports 2 Mini PCIe Slot & 2 PCI Slot
- > Triple Display, CRT + DP + DP & HDMI + DP + DP
- > Rugged Design for Vibration & Shock Protection
- > Supports Software Base RAID 0/1
- > Service Window, Easy to Install 2.5" Drive Bay, DOM, Memory, Mini PCIe Module and Maintenance
- > Optional: PCI + PCIe x16 Riser Card, 1 PCIe x16 Riser Card

### + Spec

System	
<b>Processor</b>	4th Gen Intel® Core™ i7-4700EQ 4-Core 2.4GHz processor 4th Gen Intel® Core™ i5-4422E, 2-Core, 1.8GHz processor 4th Gen Intel® Core™ i3-4110E, 2-Core, 2.6GHz processor
<b>System Chipset</b>	Intel® QM87 Express Chipset
<b>System Memory</b>	2 x 204-Pin DDR3L 1333MHz SO-DIMM up to 16 GB or 2 x 204-Pin DDR3L 1600MHz SO-DIMM up to 16 GB
<b>Watchdog Timer</b>	H/W Reset: 1sec.~255min. and 1sec. or 1min./step
<b>H/W Status Monitor</b>	Monitoring CPU & System Temperature and Voltage
<b>Board</b>	EAP-CE02 + ESM-QM87
Expansion	
<b>Expansion</b>	2 x PCI 2 x Mini PCIe
Storage	
<b>Storage</b>	2 x 2.5" Drive Bay
I/O	
<b>USB</b>	4 x USB 2.0 4 x USB 3.0
<b>COM Port</b>	4 x RS-232 4 x RS-232/422/485 Can be set as RS-232/422/485 by BIOS
<b>Other</b>	1 x LPT Port 1 x Power on/off (Control-By-Wire) 2 x Knockouts for Antenna Mounting
<b>DIO</b>	1 x 16bit GPIO
Display	
<b>Chipset</b>	Intel® QM87 Chipset Integrated Supports triple display
<b>Resolution</b>	VGA:Max. resolution 1920x1200@ 60Hz HDMI:Max. resolution 3840x2160@ 24Hz DP:Max. resolution 1920x1200@ 60Hz
Audio	
<b>Chipset</b>	Realtek ALC892 supports 5.1-CH
<b>Audio Interface</b>	Mic-In, Line-In and Line-Out
Ethernet	
<b>Chipset</b>	1 x Intel® 217LM 1 x Intel® 82574L
<b>Ethernet Interface</b>	10/100/1000 Base-Tx GbE compatible
<b>LAN Port</b>	2 x RJ-45
Mechanical & Environmental	
<b>Operating Temp</b>	(w/SSD, SATA DOM), ambient w/ air flow; i7 -10°C ~ 50°C (14°F ~ 122°F) (w/SSD, SATA DOM), ambient w/ air flow; i5/i3 -10°C ~ 60°C (14°F ~ 140°F)
<b>Storage Temp</b>	-40°C ~ 75°C (-40°F ~ 167°F)
<b>Operating Humidity</b>	0% ~ 90% Relative Humidity, Non-condensing
<b>Weight</b>	5.8Kg
<b>Construction</b>	Aluminum + Metal
<b>Mounting Kit</b>	Wall Mount kit (Standard)
<b>Dimension (L x W x H)</b>	9.84" x 10.63" x 4.45" (250mm x 270mm x 113mm)
<b>Vibration Test</b>	With SSD/mSATA : 5Grms, IEC 60068-2-64, Random, 5 ~ 500Hz, 1hr/axis
<b>Shock Test</b>	With SSD/mSATA : 50Grms, IEC 60068-2-27, Half Sine, 11ms
Certifications	



<b>Certification Information</b>	CE FCC Class A
<b>Software Support</b>	
<b>OS Information</b>	Win 7 Win 8 Linux
<b>Power Requirement</b>	
<b>Power Connector</b>	Phoenix Connector & Lockable DC Jack
<b>Power Requirement</b>	+12V ~ +26V Optional +18Vdc~+75Vdc DC/DC Wide Range Power Module
<b>ACPI</b>	Single Power ATX Support S0, S3, S4, S5 ACPI 1.0b and 2.0 Compliant
<b>Power Mode</b>	AT/ATX (ATX is default setting)
<b>Adapter</b>	Optional

**+ Ordering**

EPS-QM87-47-A1-1R  
4th Gen Intel®Core™ Processor Core™ i7-4700EQ Fanless Rugged Embedded System with 2 expansion slots

EPS-QM87-44-A1-1R  
4th Gen Intel®Core™ Processor Core™ i5-4400E Fanless Rugged Embedded System with 2 expansion slots

EPS-QM87-41-A1-1R  
4th Gen Intel®Core™ Processor Core™ i3-4102E Fanless Rugged Embedded System with 2 expansion slots

SSD  
Intel® SSD 535 Series (56GB, 120GB, 180GB, 240GB)