



Features

- Intel® 4th Generation Core™ Haswell-Refresh i5/i3 Processor
- Intel® QM87 Express Chipset
- Two 204-pin SODIMM Up to 16GB DDR3L 1333/1600 SDRAM
- Dual-channel 18/24-bit LVDS, VGA, DP/HDMI/DVI, eDP Option
- Intel® High Definition Audio
- Intel® I217LM Gigabit Ethernet
- 7 PCIe1, 1 PCIe16, 4 SATA, 8 USB 2.0, 4 USB 3.0
- 8-bit GPIO, SMBus, LPC
- +9 ~ +19V Wide Range Power Input
- Type 6 Pin-out



Specifications

System

CPU	Intel® 4 th Generation Core™ Haswell-Refresh i5/i3 Processor
BIOS	AMI 64Mbit SPI BIOS
System Chipset	Intel® QM87 Express
System Memory	Two 204-pin SODIMM Up to 16GB DDR3L 1333/1600 SDRAM
Expansion	7 PCIe1, 1 PCIe16
Form Factor	COMe 2.1.Type 6

I/O

MIO	4 SATA (6Gb x 2, 3Gb x 2), SMBus, LPC
USB	8 x USB 2.0, 4 x USB 3.0
DIO	4-bit GPI and 4-bit GPO

Display

Chipset	Intel® QM87 Express Chipset Integrated
Resolution	VGA Mode: 1920 x 2000 @ 60Hz LVDS Mode: 1920 x 1200 @ 60Hz
Multiple Display	VGA + LVDS + DDI (3 Independent Display)
LCD	Dual-channel 18/24-bit LVDS, Up to 1920 x 1200, Optional eDP 2 Lanes Up to 1920 x 1200

Audio

Chipset	Intel® QM87 Express Integrated
Interface	Intel® High Definition Audio

Ethernet

LAN Chip	Intel® I217LM Gigabit Ethernet
Ethernet Interface	10/100/1000 Base-Tx Gigabit Ethernet Compatible

Mechanical & Environmental

Power Requirement	+9 ~ +19V
ACPI	Single Power ATX Support S0, S3, S4, S5 ACPI 3.0 Compliant
Power Type	AT/ATX
Operating Temperature	0 ~ 60°C (32 ~ 140°F)
Storage Temperature	-40 ~ 75°C (-40 ~ 167°F)
Operating Humidity	0% ~ 90% Relative Humidity, Non-condensing
Size (L x W)	5" x 3.7" (125mm x 95mm)
Weight	0.44lbs (0.2kg)

Ordering Information

ESM-QM87R

Intel® 4th Generation Core™ Haswell-Refresh i5/i3 Processor COM Express Type 6 Module with Intel® QM87 Express Chipset

EEV-EX14

COM Express Type 6 Carrier Board for Evaluation