



Intel® 4th Generation Core™ Haswell-Refresh i5/i3 Processors

Features

- Onboard Intel® 4th Generation Core™ Haswell-Refresh i5/i3 Processors
- One 204-pin DDR3L SODIMM Socket, Supports Up to 8GB 1.35V DDR3L 1333/1600MHz SDRAM
- Triple Independent Display
- 18/24-bit Dual-channel LVDS, 1 DVI, 2 HDMI
- Dual Gigabit Ethernet, HD Audio
- 2 SATA III, 1 Mini PCIe, 6 USB 3.0, 2 USB 2.0, 4 COM, 8-bit DIO
- Support mSATA
- TPM 1.2 Function
- iAMT 9.0



Specifications

System

CPU	Intel® Core™ i5-4422E, 2-Core, 1.8GHz, 3M Cache Intel® Core™ i3-4110E, 2-Core, 2.6GHz, 3M Cache
BIOS	AMI uEFI BIOS, 128 Mbit SPI Flash ROM iAMT 9.0 Supported
System Chipset	Intel® QM87 PCH
I/O Chip	EC (IT8518E)
System Memory	One 204-pin DDR3L SODIMM Socket, Supports Up to 8GB 1.35V DDR3L 1333/1600MHz SDRAM
SSD	1 x mSATA (From Mini PCIe Slot)
Watchdog Timer	H/W Reset, 1sec. ~ 65535sec./min. and 1sec. or 1min. step
H/W Status Monitor	Monitoring System Temperature, voltage with Auto Throttling Control
Expansion	1 x Mini PCIe (mSATA Supported)

I/O

MIO	2 x SATA III, 2 x RS-232, 2 x RS-232/422/485, LPC
IrDA	FINTEK 81216 (IR Supported)
USB	2 x USB 3.0, 2 x USB 2.0 (Wafer), 4 x USB 3.0 (Edge Connectors)
DIO	4-bit GPI, 4-bit GPO

Display

Chipset	Intel® QM87
Resolution	DVI Mode: 1920 x 1200 @ 60Hz LCD/Simultaneous Mode: 1920 x 1080 @ 60Hz HDMI Mode: 4000 x 2000 @ 25Hz
Multiple Display	Dual HDMI + LVDS/HDMI + LVDS + DVI or Dual HDMI + CRT/HDMI + LVDS + CRT
LVDS	Dual-channel 18/24-bit LVDS
DVI	One DVI Port Co-lay with VGA

Built-in Touch Screen (Optional)

Chipset	PenMount 6000
Touch Screen Interface	With 9-pin 2.0mm Box Header (Can be Selected to Support 4/5/8-wire Touch Screen)

Audio

Chipset	Realtek ALC892 Supports 5.1-CH HD Audio Codec
Audio Interface	Mic-in, Line-in and Line-out

Ethernet

LAN Chip	1 x Intel® I210AT Gigabit Ethernet Controller 1 x Intel® I217LM Gigabit Ethernet PHY
Ethernet Interface	10/100/1000 Base-Tx Gigabit Ethernet Compatible

Mechanical & Environmental

Power Requirement	+12V ~ 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)	4.5" x 6.5" (115mm x 165mm)
Weight	0.4lbs (0.18kg)

Ordering Information

EPI-QM87R

Intel® 4th Generation Core™ Haswell-Refresh i5/i3 Processor EPIC Module with Intel® QM87 Chipset

ACC-MEM-xx

Memory Series (xx = Capacity, Capacity Option: 128, 256, 512MB, 1GB)