



Key Features

1. Embedded 3rd Generation Intel® Core i5 Mobile ECC processor
2. Intel® QM77 Chipset
3. Up to 16GB ECC DDR3 1066/1333MHz on 2x SO-DIMMs
4. 1x PCI-E 3.0 x16 slot
5. 4x SATA2 3Gb/s w/ RAID 0, 1, 5, 10; 2x SATA3 6Gb/s w/ RAID 0, 1
5. Intel® 82574L; 2x GbE LAN ports
7. IPMI with dedicated LAN
8. 4x USB 3.0 ports (via header)
6x USB 2.0 ports (4 rear, 2 via header)
9. Intel Integrated Graphics HD 4000 or Matrox G200eW to VGA via BIOS
10. SATA DOM Power connector

Specifications

Physical Stats

Form Factor	•	Mini-ITX
Dimensions	•	6.75" x 6.75", (17.15cm x 17.15cm)

Processor/Cache

CPU	•	3rd Generation Intel® Core i7 Mobile ECC processor
	•	Core i7-3612QE processor

System Memory

Memory Capacity	•	2x 204-pin DDR3 SODIMM sockets
	•	Supports up to 16 GB DDR3 ECC memory
Memory Type	•	1333/1066MHz ECC DDR3 SO-DIMM, 204-pin gold-plated DIMMs
DIMM Sizes	•	8GB, 4GB, 2GB

Expansion Slots

PCI-Express	•	1 PCI-E 3.0 x16 slot
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System BIOS

BIOS Type	•	128Mb SPI Flash EEPROM with AMI BIOS
	•	DMI 2.3
	•	PCI 2.3
BIOS Features	•	ACPI 1.0 / 2.0
	•	USB Keyboard support
	•	SMBIOS 2.3

Power

	•	ACPI / ACPM Power Management
	•	Main Switch Override Mechanism
Power Configurations	•	Keyboard Wakeup from Soft-Off
	•	Power-on mode for AC power recovery

Memory Voltage • 1.5 V, 1.35 V

On-Board Devices

Chipset • Intel® QM77 Chipset

SATA • 5, 10
 • SATA 2.0 3Gb/s with RAID 0, 1,
 • SATA 3.0 6Gb/s with RAID 0, 1

IPMI • Support for Intelligent Platform Management Interface v.2.0
 • IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
 • Nuvoton WPCM450 BMC

Network Controllers • Intel® 82574L Gigabit Ethernet controllers
 • Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output
 • 1x Realtek RTL8201F PHY (dedicated IPMI)

Graphics • Intel Integrated Graphics HD 4000 or Matrox G200eW to VGA via BIOS setup

Input / Output

SATA • 2x SATA 3.0 ports (6Gb/s)
 • 4x SATA 2.0 ports (3Gb/s)

LAN • 2x RJ45 Gigabit Ethernet LAN ports
 • 1x RJ45 Dedicated IPMI LAN port

USB • 4x USB 3.0 ports (via header)
 • 6x USB 2.0 ports (4 rear, 2 via header)

VGA • 1x VGA port

Serial Port / Header • 2x COM ports (1 rear, 1

PC Health Monitoring

Voltage • Monitors for CPU Cores, +1.8V, +3.3V, +5V, ±12V, +3.3V Standby, +5V Standby, VBAT, HT, Memory, Chipset Voltages.

FAN • Total of four 4-pin fan headers supporting up to 4 fans
 • Low noise fan speed control
 • Pulse Width Modulated (PWM) fan connectors

Temperature • Monitoring for CPU and chassis environment
 • CPU thermal trip support
 • FC temperature sensing logic

LED • CPU / System Overheat LED
 • +5V Standby alert LED

header)

DOM	•	1 DOM (Disk on Module) power connector
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