



Features

- Intel® Core™ i7/ i5/ i3 (FCBGA1023) Processors
- Intel® QM77 Chipset
- Two 204-pin DDR3 SODIMM Up to 16GB DDR3 1333/ 1600 SDRAM
- Support CRT, LVDS, Display Port, HDMI, DVI
- Intel® High Definition Audio
- Intel® 82579LM (PHY) Gigabit Ethernet
- 4 SATA (6.0GB/s x 2 & 3.0GB/s x 2), 8 USB 2.0, 4 USB 3.0, 8-bit GPIO
- +9 ~ +19V Wide Range Power Input
- Type 6 Pin-out
- TPM Support (Only Standard Temperature)
- Wide Temperature Option

Specifications

System

• CPU	Intel® Core™ i7/ i5/ i3 (FCBGA1023) Processors
• BIOS	AMI 64Mbit SPI BIOS
• System Chipset	Intel® QM77
• System Memory	Two 204-pin DDR3 SODIMM Socket, Supports Up to 16GB DDR3 1333/ 1600 SDRAM
• Expansion	7 PCIe1, 1 PCIe16

I/O

• MIO	4 x Serial ATA Ports, SMBus
• USB	8 x USB 2.0, 4 x USB 3.0
• DIO	4-bit GPI and 4-bit GPO

Display

• Chipset	Intel® QM77 Chipset Integrated
• Memory	DVMT 5.0 Up to 512MB
• Resolution	CRT Mode: 2048 x 1536 LCD/ Simultaneous Mode: 1920 x 1200
• LVDS Interface	Dual-Channel 18/24-bit LVDS
• Display Supported	HDMI, DVI, Display Port

Audio Interface

• Chipset	Intel® QM77 Integrated
• Interface	Intel® High Definition Audio

Ethernet

• LAN	Intel® 82579LM (PHY) 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	Standard: 0 ~ 60°C (32 ~ 140°F); Extend: -40 ~ 85°C (-40 ~ 185°F) (Option)
• Storage Temperature	-40 ~ 90°C (-40 ~ 194°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-QM77B (i7-3612QE, i7-3517UE, i3-3120ME)**
Intel® Core™ i7/ i5/ i3 COM Express Type 6 Module with Intel® QM77 Chipset
- **EEV-EX14**
COM Express Type 6 Carrier Board for Evaluation