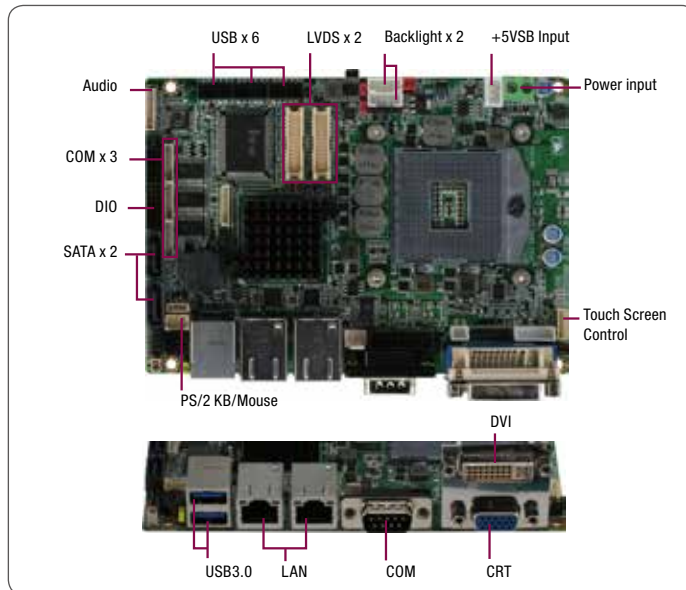


GENE-QM77 Rev. A

3.5" SubCompact Board with Intel® 3rd Generation Core™ i7/i5/i3 Mobile Processor



Features

- Intel® 3rd Generation Core™ i7/i5/i3 Mobile Processor
- Intel® QM77/HM76
- DDR3 1333/1600 MHz SODIMM, Up to 8 GB
- Gigabit Ethernet x 2, RJ-45 x 2
- CRT, 18/24-bit Dual-Channel LVDS LCD x 2, DVI
- 2CH HD Audio
- SATA 6.0 Gb/s x 2 (Optional RAID), CFAST™ x 1
- USB3.0 x 2, USB2.0 x 6, COM x 4, 8-bit Digital I/O
- Mini-Card x 1
- +12V Only Operation
- Supports iAMT with Intel® QM77
- Onboard 4/5/8-wire Resistive Touch Screen Controller
- AAEON Hi-Safe/Hi-Manager SDK/Utility Supported
- mSATA x 1 (Optional, Would Replace Mini-Card Interface)
- IEEE 1588 Compatible

Specifications

System	
Form Factor	3.5"
Processor	Intel® 3rd Generation Core™ i7/i5/i3 Mobile processor
System Memory	204-pin DDR3 1333/1600 MHz SODIMM x 1, up to 8 GB
Chipset	Intel® QM77/HM76
I/O Chipset	ITE IT8728
Ethernet	Intel® 82579LM & Realtek RTL-8111E, 10/100/1000Base-TX, RJ-45 x 2
BIOS	AMI BIOS - 16 MB SPI Flash
Wake on LAN	Yes
Watchdog Timer	Generates a time-out system reset
H/W Status Monitoring	Supports power supply voltages and temperature monitoring
Expansion Interface	Mini-Card x 1, LPC
Trusted Platform Module (TPM)	Infineon SLB 9635TT 1.2
Battery	Lithium battery
Power Requirement	+12V, AT/ATX
Power Consumption (Typical)	Intel® Core™ i7-3610QE 2.3 GHz, DDR3 1333 8 GB 5.2A@+12V Intel® Core™ i5-3610ME 2.7 GHz, DDR3 1333 8 GB 3.47A@+12V
Board Size	5.75" x 4" (146mm x 101.6mm)
Gross Weight	0.88 lb (0.4 kg)
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C)
Storage Temperature	-40°F ~ 176°F (-40°C ~ 80°C)
Operating Humidity	0% ~ 90% R/H, non-condensing
MTBF (Hours)	51,000
Display	Supports CRT/LCD, DVI/LCD simultaneous/ dual view displays
Chipset	Intel® CPU integrated
Memory	Shared system memory up to 512 MB
Resolutions	Up to 2048 x 1536 for CRT, up to 1920 x 1200 for LCD, DVI
LCD Interface	Up to 24-bit dual-channel LVDS x 2
DVI	DVI x 1
I/O	
Storage	SATA 6.0 Gb/s x 2, CFAST™ x 1
Serial Port	RS-232 x 3, RS-232/422/485 (auto flow) x 1
Parallel Port	SPP/EPP/ECP x 1 (By BIOS setting)
USB	USB3.0 x 2, USB2.0 x 6
PS/2 Port	Keyboard x 1, Mouse x 1
Digital I/O	Supports 8-bit (Programmable)
Audio	Line-in, Line-out, Mic-in
Touch Screen	Supports 4/5/8-wire resistive touch screen



Packing List

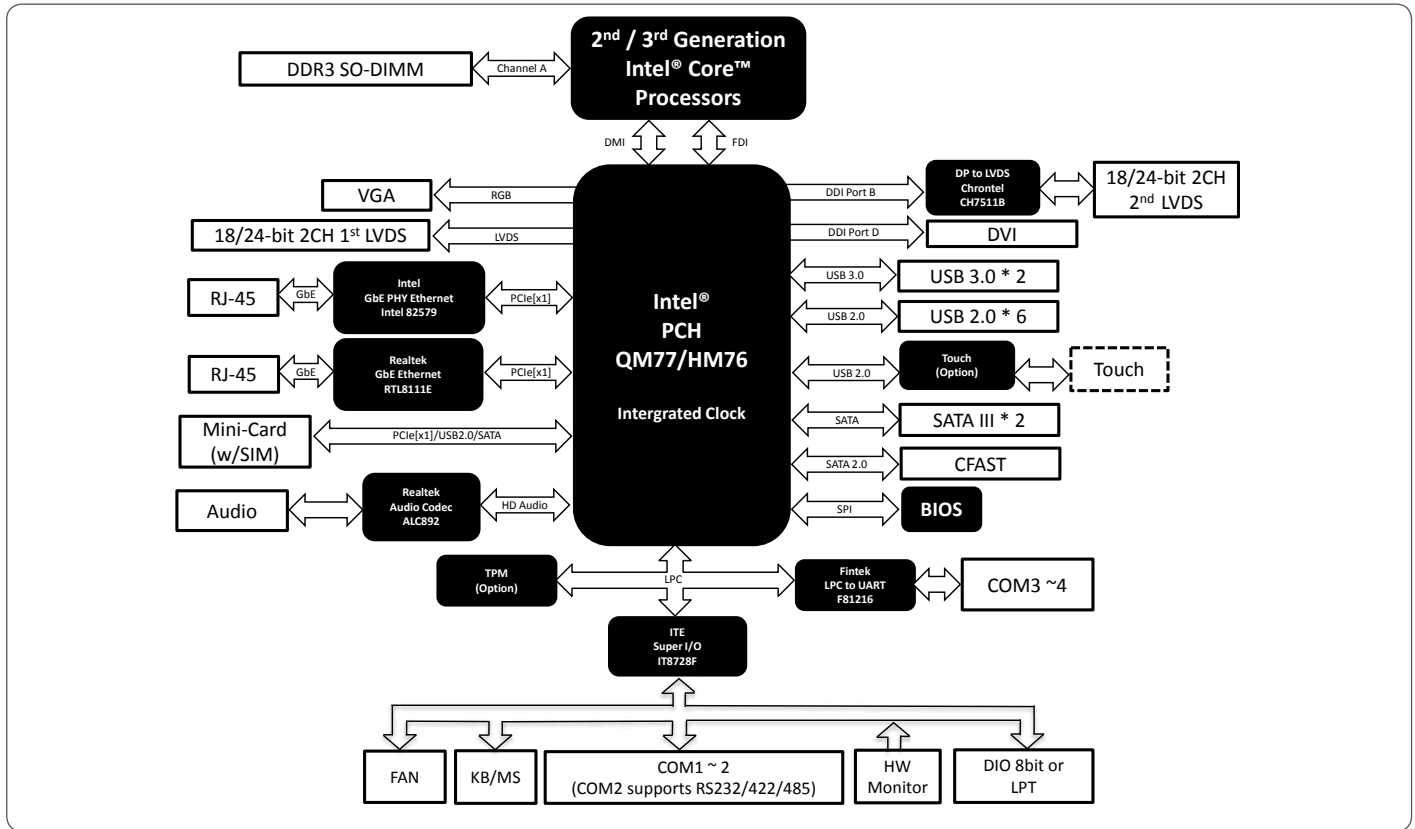
- Cooler
- Product DVD
- GENE-QM77 Rev. A

Optional Accessories

- 1709100208
USB Cable, Length 20cm
- 1701090150
COM Port Cable, Length 15cm
- 1709100254
Audio Cable, Length 25cm
- 1702150155
Power Cable for 2.5" SATA Hard Disk, Length 15cm
- 1709070500
SATA Cable, Length 50cm
- 170204010R
Big Double Row 4-Pin Power Input Cable For +12V Input, Length 10cm
- 1700060157
Keyboard/Mouse Cable
- 17592QM774
CPU Cooler 47W FAN + Heatsink, 60 x 60 x 25 mm (1U)

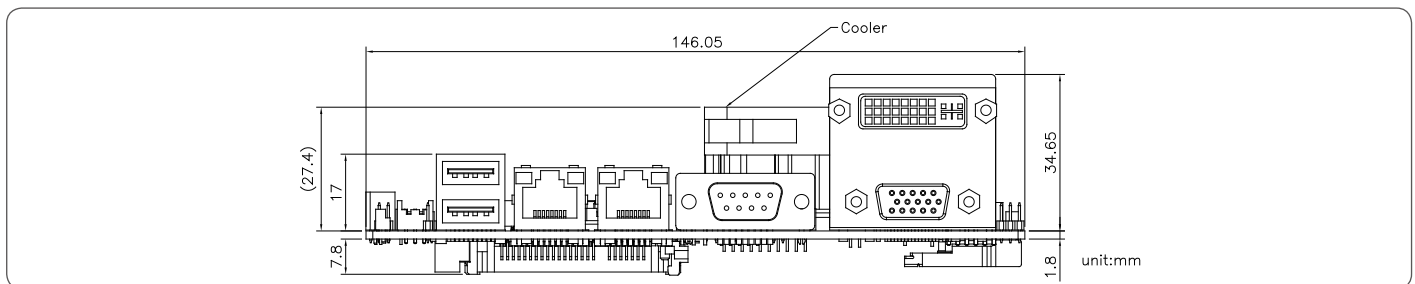
GENE-QM77 Rev. A

Block Diagram



Dimension

Unit: mm



Ordering Information

Part Number	CPU	Chipset	Fan/Fanless	Display	LVDS	Storage	LAN	USB	RS-232	RS-232/422/485	Expansion Slot	Power	Power Temp	Others
TF-GENE-QM77-A10	Socket	Intel® QM77	Fan	CRT + LVDS CRT+ DVI LVDS + DVI LVDS + LVDS	1st 18/24b, 2CH 2nd 18/24b, 2CH	SATA x 2 CFast™ x 1	GbE x 2	USB3.0 x 2 USB2.0 x 6	3	1	Mini-Card x 1	+12V, AT/ATX	0°C ~ 60°C	TPM, Touch Controller, DIO x 8
TF-GENE-QM77-A10-06	Socket	Intel® QM77	Fan	CRT + LVDS CRT+ DVI LVDS + DVI LVDS + LVDS	1st 18/24b, 2CH 2nd 18/24b, 2CH	SATA x 2 CFast™ x 1	GbE x 2	USB3.0 x 2 USB2.0 x 6	3	1	Mini-Card x 1	+12V, AT/ATX	0°C ~ 60°C	TPM, Touch Controller, DIO x 8