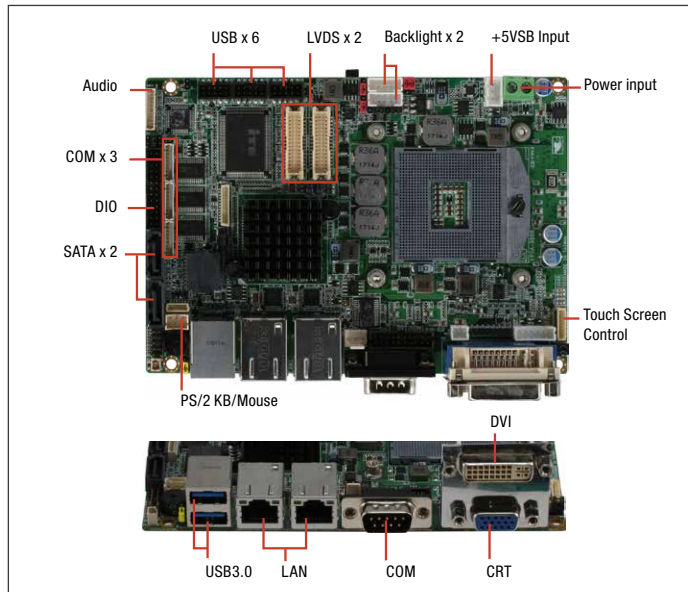


## 3.5" SubCompact Board with Intel® 3rd Generation Core™ i7/i5/i3 Mobile Processor



## 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 (RAID by BIOS), 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, Sharded Mini-Card Interface)
- IEEE 1588 Compatible

## Specifications

System	
Form Factor	3.5" SubCompact Board
CPU	Intel® Core™ i7/i5/i3/Celeron® (Socket-G2 based)
CPU Frequency	Up to 2.7 GHz
Chipset	Intel® PCH QM77/MH76
Memory Type	DDR3 1333/1600, SODIMM x 1
Max. Memory Capacity	8 GB
BIOS	SPI type
Wake on LAN	Yes
Watchdog Timer	255 Levels
Power Requirement	+12V
Power Supply Type	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
Dimension (L x W)	5.75" x 4" (146mm x 101.6mm)
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C)
Storage Temperature	-40°F ~ 176°F (-40°C ~ 80°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	51,000
Certification	CE/FCC
Display	
VGA/LCD Controller	Intel® Core™ i7/i5/i3/Celeron® integrated
Video Output	CRT+LVDS, CRT+DVI, LVDS+DVI, LVDS+LVDS
Backlight inverter supply	Up to 24-bit dual-channel LVDS x 2
I/O	
Ethernet	Intel® 82579LM, Realtek RTL-8111E, 10/100/1000Base
Audio	High Definition Audio Interface
USB Port	USB2.0 x 6, USB3.0 x 2
Serial Port	RS-232 x 3, RS-232/422/485 x 1
Parallel Port	SPP/EPP/ECP x 1 (sharded with DIO, By BIOS setting)
HDD Interface	SATAIII x 2
FDD Interface	—
SSD	CFast™ mSATA (share with Mini-Card by BOM)
Expansion Slot	Mini-Card x 1
DIO	8 bit
TPM	x 1
Touch	x 1



## Packing List

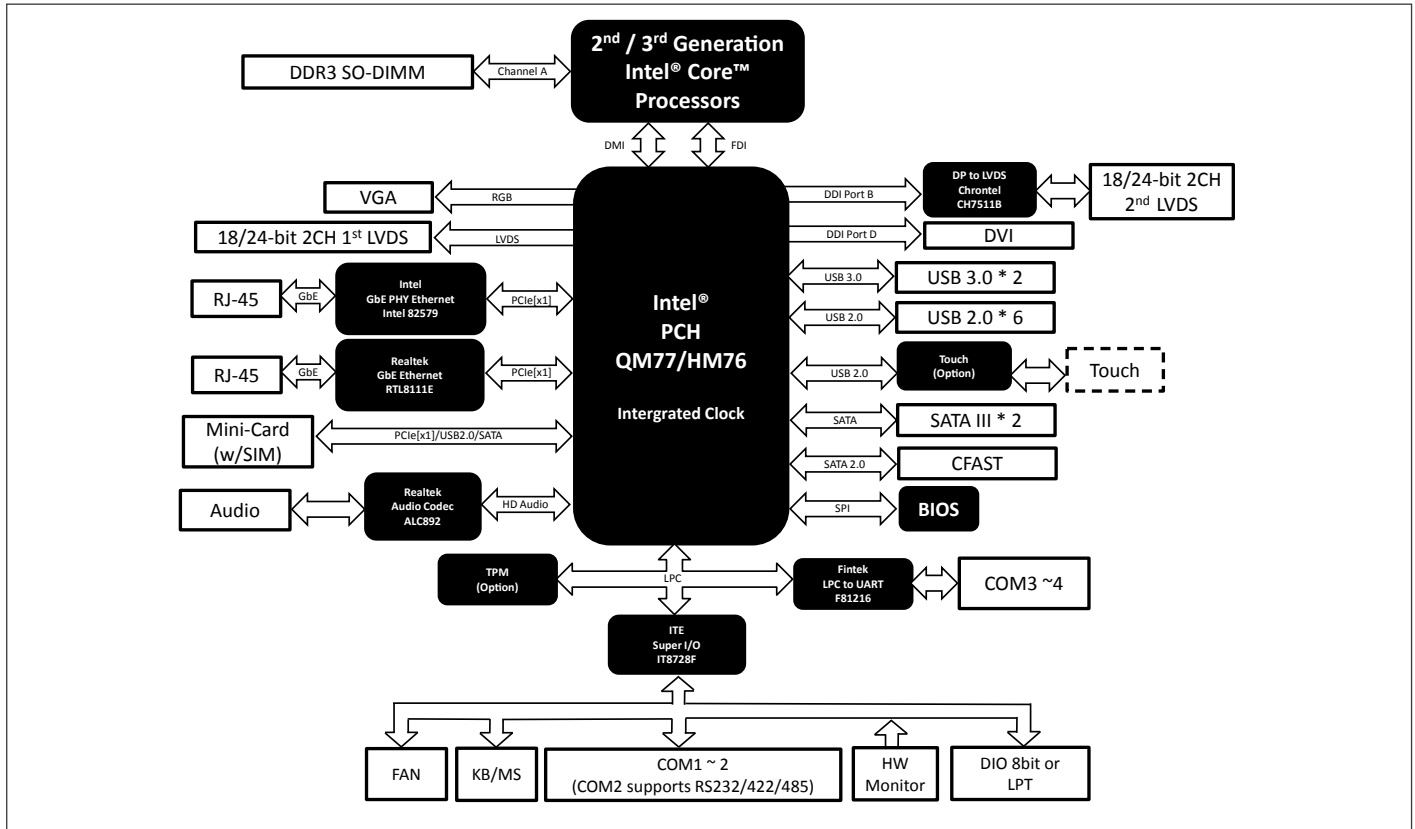
- Cooler
- Product DVD
- GENE-QM77 Rev. A

## 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)

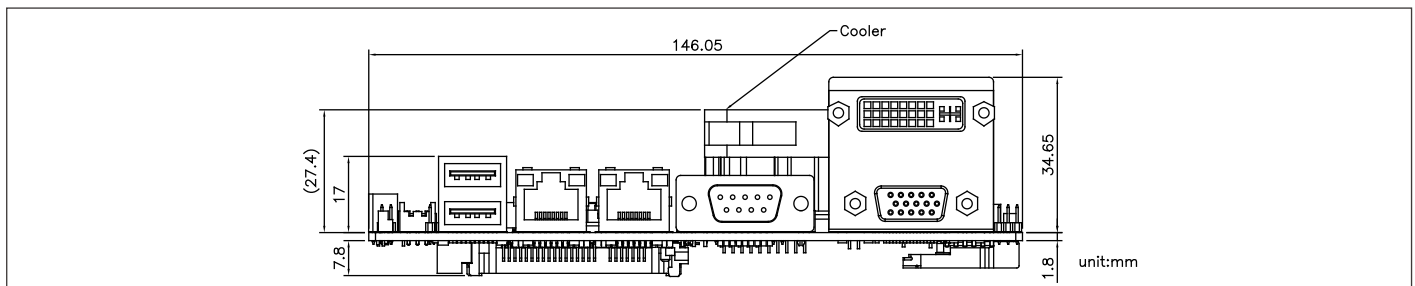
# GENE-QM77 Rev. A

## 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® HM76	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