

ITX-QM77

**Mini-ITX Intel QM77 Ivy Bridge Mobile Motherboard
Supports Intel 3rd Generation Core-i7 / i5 / i3 Processor**

Quick Installation Guide

Packing List

Before you begin installing your single board, please make sure that the following parts have been shipped.

- 1 x ITX-QM77 Mini-ITX motherboard
- 1 x CPC-1500C 1U copper-based CPU cooler
- 2 x SATA cable with lockable clips
- 2 x RS-232 COM port DB9 male cable with brackets
- 1 x DVD disc with OS drivers and user's manual
- 1 x Quick Installation Guide

Disclaimer and Notice



The manufacturer reserves the right to make changes, without notice, to any product, including circuits and/or software described or contained in this manual in order to improve design and/or performance. The manufacturer assumes no responsibility or liability for the use of the described product(s), conveys no license or title under any patent, copyright, or masks work rights to these products, and makes no representations or warranties that these products are free from patent, copyright, or mask work right infringement, unless otherwise specified. For the detail product information, please refer to user's manual.

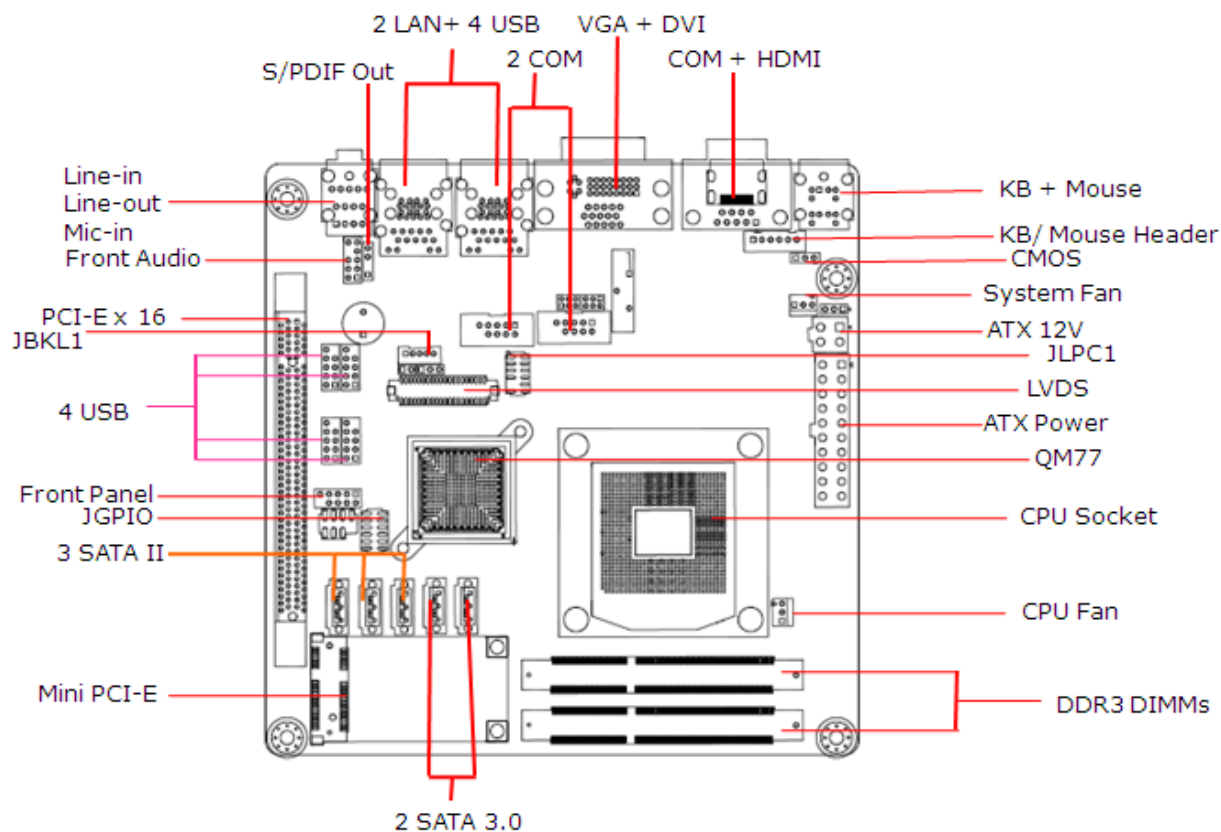
Safety Declaration



This device complies with the requirements in Part 15 of the FCC rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

Product Overview



Specifications

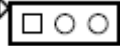
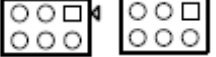
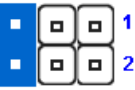
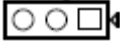
System

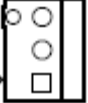
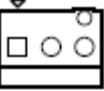
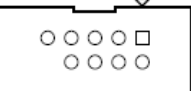
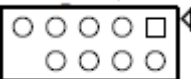
CPU	Intel Core i7/ i5/ i3 Pentium® / Celeron® Mobile CPU
BIOS	AMI 64Mb SPI ROM
System Chipset	Intel QM77
I/O Chipset	Nuvoton NCT6776F
Memory	Two 204-pin SODIMM support up to 16GB dual channel DDR3 1600/ 1333 SDRAM, Non-ECC
Watchdog Timer	Reset: 1 to 255 sec/min per step
H/W Status Monitor	Monitoring temperature, voltage and cooling fan status. Auto throttling control when CPU overheats.
Expansion Slots	1 PCI-E x 16 Gen. 3, 1 Mini PCI-E, 1 CFast
Power State	S1, S3, S4, S5
TPM	TPM 1.2 by Infineon SLB9635 (optional)
Wake up / Boot on LAN	LAN (WOL,PXE)
Smart Fan Control	Yes

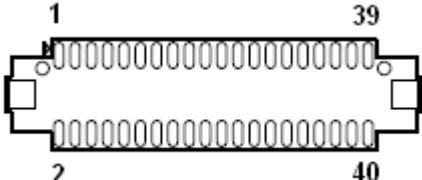
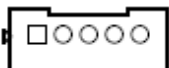
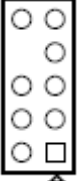
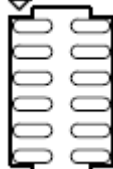
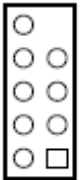
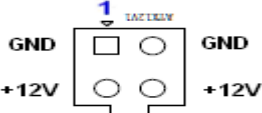
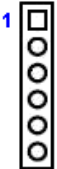
Display

Chipset	Intel GMA HD 4000 /2500 (22nm) , 3000/2000(32nm)
Display Memory	Shared Memory, up to 256MB
Dual Display	VGA + LVDS, VGA + HDMI, VGA + DVI, LVDS + HDMI, LVDS + DVI, HDMI + DVI
VGA	Onboard, supports max resolution 2048 x 1536 (@75Hz)
LVDS	Onboard 24-bit LVDS, supports max resolution 1920 x 1200
HDMI	Onboard HDMI 1.3, supports max resolution 1920 x 1200

DVI	Onboard DVI-D, supports max resolution 1920x1200
LVDS Backlight	Yes
Audio	
Audio Codec	Realtek ALC892, 5.1 Channel HD Audio
Audio Interface	Line-in, line-out, Mic-in, S/PDIF Out, Front Audio Header
Ethernet	
LAN1	Intel 82579LM GbE LAN supports iAMT 8.0
LAN2	Intel 82583V GbE LAN

Jumpers			
Label	Function	Note	
JCMOS1	Clear CMOS 	Normal * 1 	Clear CMOS 1 
JCOMPWR2 JCOMPWR3	COM2 COM3 RI/+5V/+12V Select 	RI 	+5V 
JLVDS_BKL1	BL POWER SELECT  1. +5V 2. BRIGHT 1 3. 3.3V	5V 1 	3.3V 1 
JPSON	 1. ATSEL IN 2. PWRBT 3. ATXSEL ...	AT MODE 	ATX MODE 

Connectors		
Label	Function	Note
CPU_FAN	CPU Fan Connector 	1.GND 2.CPUFAN1_VCC(PWM) 3.CPUFAN1_IO
SYS_FAN1	System Fan Connector 	1.GND 2.SYSFAN1_VCC(PWM) 3.SYSFAN1_IO
Connectors		
Label	Function	Note
COM2 COM3	Serial Port Connector 	1.DCD 6.DSR 2.RXD 7.RTS 3.TXD 8.CTS 4.DTR 9.RI/PWR 5.GND
F_PANEL1	Intel Front Panel connector 	1.HDDLED+ 2.POWERLED+ 3.HDDLED- 4.POWERLED- 5.GND 6.PWSWITCH 7.RESET 8.GND 9.NC

JLVDS	24-bit LVDS Connector		1.VDD(+3.3V) 2.VDD(+5V) 3.VDD(+3.3V) 4.VDD(+5V) 5.I2C_CLK 6.I2C_DATA 7.GND 8.GND 9.LVDS_A1+ 10.LVDS_A0+ 11.LVDS_A1- 12.LVDS_A0- 13.GND 14.GND 15.LVDS_A3+ 16.LVDS_A2+ 17.LVDS_A3- 18.LVDS_A2- 19.GND 20.GND 21.LVDS_B1+ 22.LVDS_B0+ 23.LVDS_B1- 24.LVDS_B0- 25.GND 26.GND 27.LVDS_B3+ 28.LVDS_B2+ 29.LVDS_B3- 30.LVDS_B2- 31.GND 32.GND 33.LVDS_B_CK+ 34.LVDS_A_CK+ 35.LVDS_B_CK- 36.LVDS_A_CK- 37.GND 38.GND 39.VDD(+12V) 40.VDD(+12V)
JBKL	LCD Inverter Connector		1.+12V 2.GND 3.ENBKL 4.VR 5.+5V
JLPC1	LPC Connector		1.NC 2.+3.3 3.LPC_AD3 4.PRST_SIO# 5.LPC_AD1 6.LPC_AD2 7.LPC_FRAME# 8.LPC_AD0 9. 10.GND 11.CLK33M_LPC 12.GND
FPAUD1	Audio Mic.-In & Line-Out Connector		10.LINE_JD 8.NC 6.MIC2_JD 4.PRESENSE 2.GND 9.LIN2_L 7.FIO_SENSE 5.LIN2_R 3.MIC2_R 1.MIC2_L
JGPIO1	GPIO Connector		1.SIO_GPIO0 2.SIO_GPIO4 3.SIO_GPIO1 4.SIO_GPIO5 5.SIO_GPIO2 6.SIO_GPIO6 7.SIO_GPIO3 8.SIO_GPIO7 9.SMB_CLK_RESUME 10.SMB_DAT_RESUME 11.GND 12.VCC GPIO
SPDIF_OUT	SPDIF OUT Connector		1.+5V 2. 3.SPDIFF OUT 4.GND
USB56 USB78 USB910 USB1112	USB 2.0 Connector		9.NC 8.GND 6.USB+ 4.USB- 2.USB+5V 7.GND 5.USB+ 3.USB 1.USB+5V
		ATX12V1 	KB/Mouse PIN Header  1.KB b CLK 2.KB b DAT 3.MS b DAT 4.GND 5.VCC_KBMS 6.MS b CLK