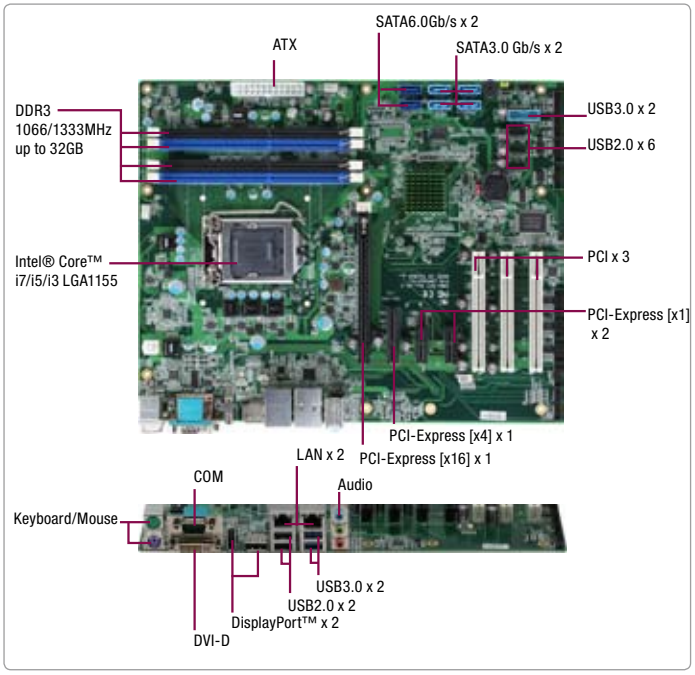
IMBA-Q77

Industrial Motherboard with Intel® 3rd Generation Core™ i7/ i5/ i3 Processor



Features

- **Intel® 3rd Generation Core™ i7/ i5/ i3 LGA 1155 Processor**
- **Intel® Q77**
- **Dual-Channel DDR3 1600 (Only for 3rd Gen CPU)/1333/1066 DIMM x 4 (Up to 32 GB)**
- **10/100/1000Base-TX x 2 (LAN1 Supports Intel® iAMT 8.0)**
- **Three Independent Displays With VGA, DisplayPort™, DVI-D**
- **SATA 3.0Gb/s x 4, SATA 6.0Gb/s x 2, Support RAID 0,1,5,10**
- **USB2.0 x 8, USB3.0 x 4, COM x 6, LPT x 1, IrDA Tx/Rx Header x 1**
- **PCI-Express [x16] x 1, PCI-Express [x4] x 1, PCI-Express [x1] x 2, PCI x 3**
- **TPM 1.2 (Optional)**

Specifications

System	
Form Factor	ATX
Processor	Intel® 3rd generation Core™ i7/ i5/ i3 LGA 1155 Processor
System Memory	Dual-channel DDR3 1600(only for 3rd gen CPU)/1333/1066 DIMM x 4, Max. 32GB, Unbuffered Memory
Chipset	Intel® Q77
Ethernet	LAN1: Intel® 82579 (Supports Intel® iAMT 8.0) , LAN2: Intel® 82583V, 10/100/1000Base-TX, RJ-45 x 2
BIOS	AMI SPI Flash BIOS-128Mb ROM
Expansion Interface	PCI-Express[x16] x 1, PCI-Express[x4] x 1, PCI-Express[x1] x 2, PCI x 3, TPM 1.2 onboard (Optional)
Watchdog Timer	System reset : 1~255 steps by software programming
H/W Status Monitoring	System temperature, Voltage, and Cooling fan status
Battery	Lithium battery
Power Requirement	ATX Standard 24-pin connector x 1, 4-pin +12V connector x 1, CPU fan x 1, System fan x 1 with 4-pin wafer Supports SMART FAN control
Power Consumption	40W with Intel® Core™ i7-3770@3.4GHz
Operation Temperature	32 °F ~ 140 °F (0 °C ~ 60 °C)
Storage Temperature	-4 °F ~ 158 °F (-20 °C ~ 70 °C)
Operation Humidity	5% ~ 90% relative humidity, non-condensing
Board Size	12"(L) x 9.6"(W)(305mm x 244mm)
Gross Weight	1.76 lb (0.8 Kg)
MTBF (Hours)	56,000
Display	
Chipset	Intel® 3rd generation Core™ i7/i5/i3 Processor + Intel® Q77
Graphic Engine	Intel® HD Graphic Support , Three independent display
Resolution	Up to 2048 x 1536 @ 75Hz for CRT, Up to 2560 x 1600 @ 85Hz for DisplayPort™, 1080P for HDMI (optional)
Output Interface	Onboard VGA, DVI-D x 1, DisplayPort™ x 2 (HDMI optional)
I/O	Winbond W83627DHG-P + Fintek F81216AD
Storage	SATA 6.0Gb/s x 2, SATA 3.0Gb/s x 4, Support RAID 0/1/5/10
Serial Port	COM x 6 (Box header x 5 , external DB-9 x 1), COM 1: RS-232/422/485 (external DB-9), COM 2~6 : RS-232 (Box header)
KB & Mouse	Keyboard x 1 & Mouse x 1
USB	USB2.0 x 8 , USB3.0 x 4
Audio	Audio Jack x 3 (Mic-in / Line-in / Line-out)
Digital I/O	8-bit programmable (4-in / 4-out)

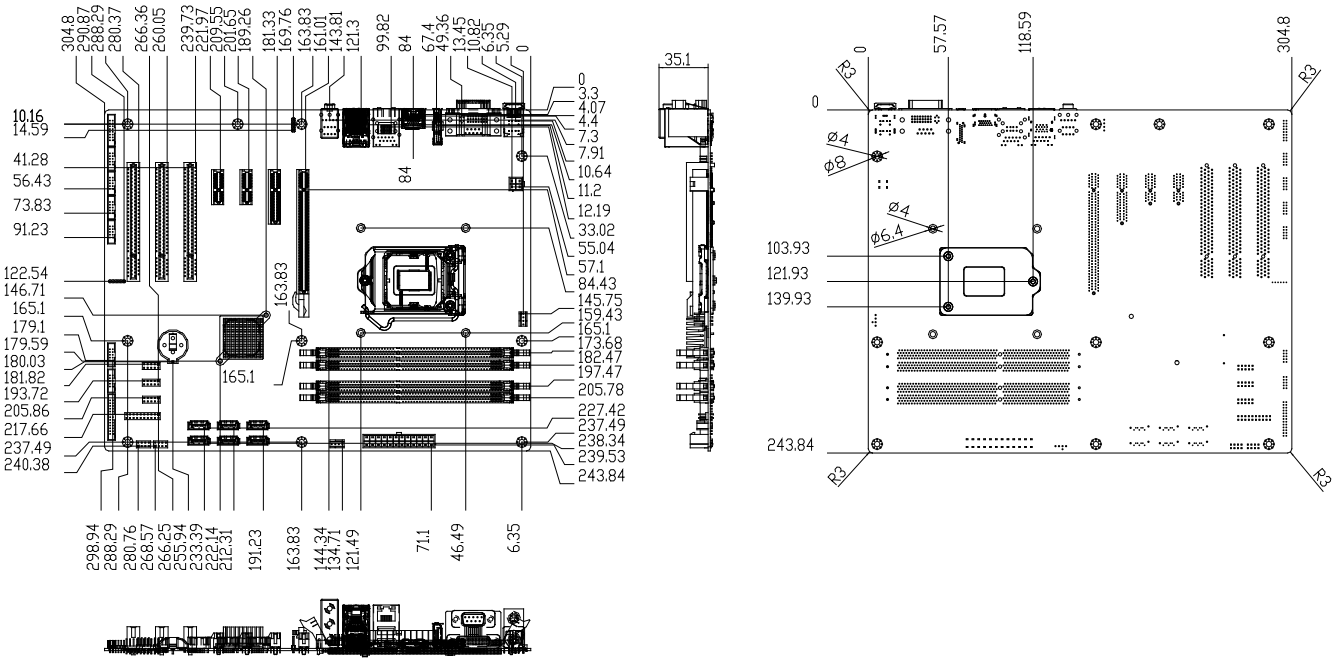
Packing List

- **1700100353**
  USB2.0 Cable
- **1701100305**
  COM Port Cable
- **1709070800**
  SATA Cable
- **Product DVD**
- **IMBA-Q77**

IMBA-Q77

Dimension

Unit: mm



Ordering Information

Part Number	CPU	RAM	Fan/Fanless	Storage	Display	LVDS	LAN	USB	RS-232	RS-232/422/485	Expansion Slot	Power	Temp.
TF-IMBA-Q77-A10-G2-00	Socket	DDR3 32G	Fan	SATA2 x 4, SATA3 x 2	VGA/DVI-D/DP	—	GbE x 2	12	5	1	PCI-E[x16] x 1, PCI-E[x4] x 1, PCI-E[x1] x 2, PCI x 3	ATX	0°C ~ 60°C
TF-IMBA-Q77-A10-G2-01	Socket	DDR3 32G	Fan	SATA2 x 4, SATA3 x 2	VGA/DVI-D/HDMI/DP	—	GbE x 2	12	5	1	PCI-E[x16] x 1, PCI-E[x4] x 1, PCI-E[x1] x 2, PCI x 3	ATX	0°C ~ 60°C

Optional Accessories

- **1759200172**
  CPU Cooler for LGA 1155 CPU, TDP 95W