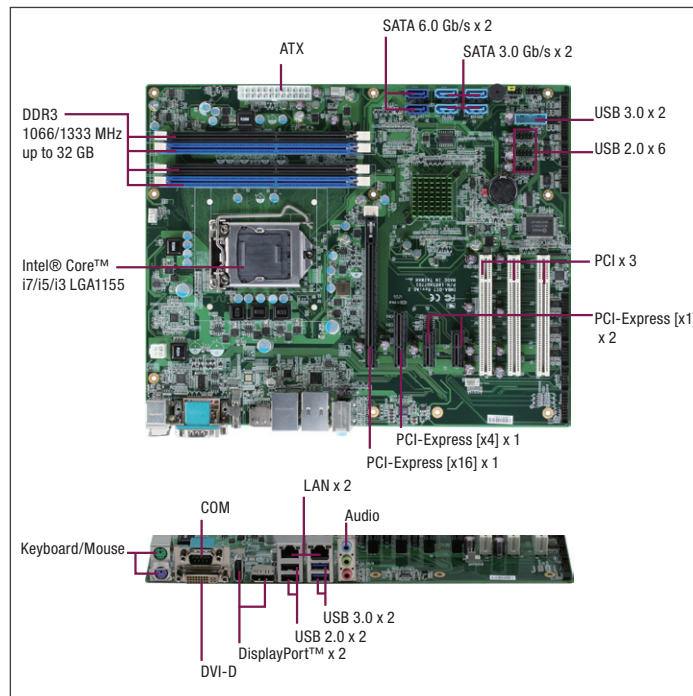


ATX Industrial Motherboard with 3rd Generation Intel® Core™ i7/i5/i3 Processor



Specifications

System	
Processor	Socket LGA1155 3rd Generation Intel® Processor
Chipset	Intel® Q77
Memory	Dual-Channel with 240-pin DRAM x 4, DDR3 1600/1333/1066, up to 32GB
Graphics	Intel® HD Graphics
I/O Chipset	Winbond W83627DHG
Ethernet	Intel® 82579 / 82583V, Gigabit LAN x 2
Audio	Realtek® ALC662
TPM	Infineon SLB9635TT 1.2(Optional)
Expansion Slots	PCIe [x16] x 1, PCIe [x4] x 1, PCIe [x1] x 2, PCI x 3
BIOS	AMI BIOS - 128MB ROM
H/W Monitor	System temperature, Voltage, and Cooling fan status monitoring
WatchDog Timer	1~255 steps by software program
Smart Fan Control	CPU Fan/Chassis Fan
Wake On LAN / PXE	Yes
Power State	S3,S4,S5
Graphics	
Graphics Chipset	Intel® Core™i7/i5/i3 + Q77
Graphics Multi Display	DP x 2+VGA, DP x 2+DVI, HDMI+DP,HDMI+VGA, HDMI+LVDS, VGA+DVI,VGA+LVDS
VGA	1
DVI	1
HDMI	1 (by SKU)
Display Port	2 (by SKU)
LVDS	1
eDP	—
Backlight Control	Voltage/PWM
Environment & Power & ME	
Battery	Lithium Battery
Power Requirement	12V DC
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
Certificate	CE/FCC
Form Factor	ATX form Factor, 12" x 9.6" (305mm x 244mm)
Weight	1.76 lb(0.8 kg)
MTBF (Hours)	56,000

Features

- 3rd Generation Intel® Core™ i7/i5/i3 LGA 1155 Processor
- Intel® Q77
- Dual-Channel DDR3 1600 (Only for 3rd Generation CPU)/1333/1066 MHz DIMM x 4, Up to 32 GB
- 10/100/1000Base-TX x 2 (LAN1 Supports Intel® iAMT 8.0)
- Three Independent Displays with VGA (Onboard Only), DisplayPort™, DVI-D
- SATA 3.0 Gb/s x 4, SATA 6.0 Gb/s x 2, Supports RAID 0,1,5,10
- USB 2.0 x 8, USB 3.0 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)



Rear Panel I/O Ports

USB	USB 3.0 x 2 with Type A connectors, USB 2.0 x 2 with Type A connectors
Display I/O	DP x 2 or DP x 1+HDMI x 1, DVI-D x 1
Audio I/O	Line-in, Mic-in, Line-out
LAN I/O	RJ-45 x 2
Serial Port	RS-232/422/485 x 1
PS/2 Port	Mini-Din PS/2 K/B and Mouse x 1
Others	—

Internal I/O Connectors

Storage	SATA 6.0 Gb/s x 2, SATA 3.0 Gb/s x 4, Supports RAID 0,1,5,10
USB	USB 3.0 x 2, USB 2.0 x 6
Display I/O	VGA x 1, LVDS x 1
Audio I/O	—
Serial Port	RS-232 x 5
PS/2 Port	—
Parallel Port	—
DIO	8-bit programmable (4-in/4-out)
FAN	CPU Fan connector(s) (4-pin) x 1, Chassis Fan connector(s) (4-pin) x 1
Power	24-pin ATX connector x 1, 4-pin connector x 1
Others	—
OS	
OS Support	Windows® XP, Windows® 7 32/64-bit, Linux Fedora

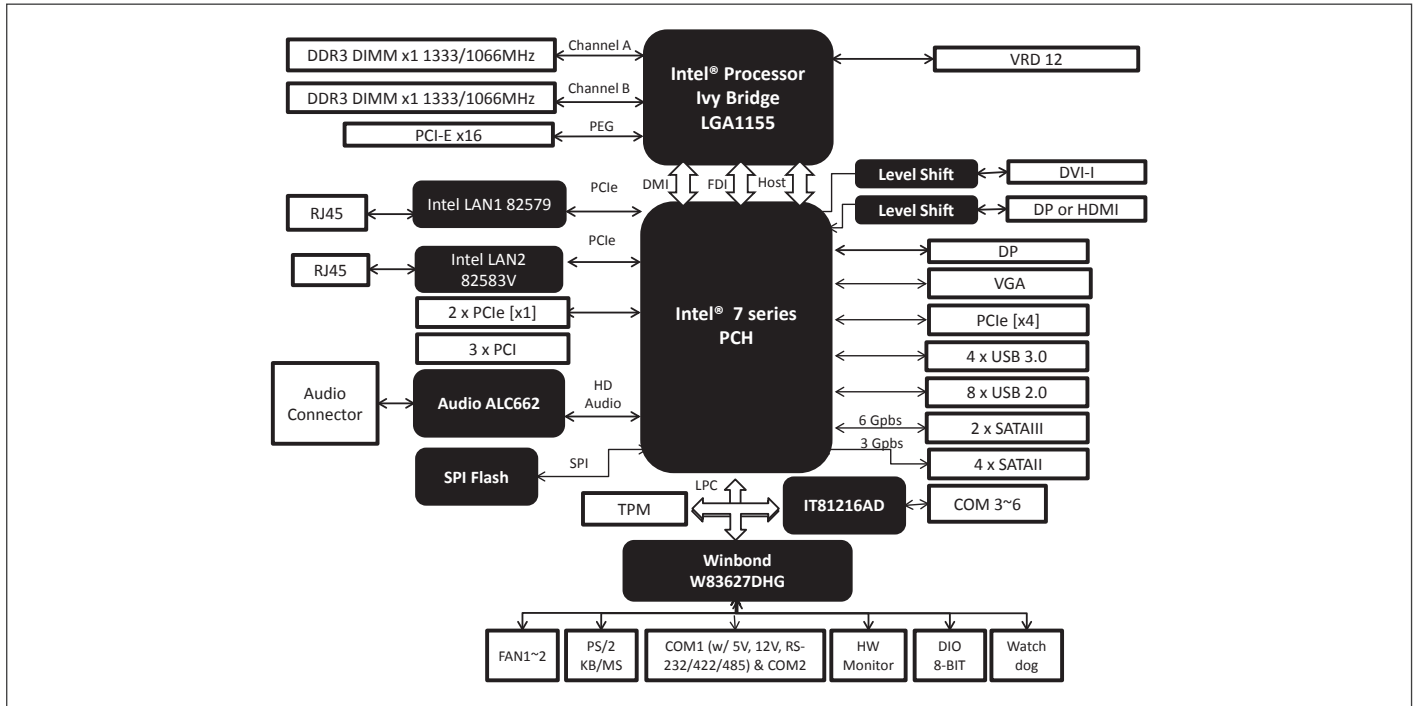
Packing List

- 1700100353
USB 2.0 Cable
- 1701100305
COM Port Cable
- 1709070800
SATA Cable
- Product DVD
- IMBA-Q77

Optional Accessories

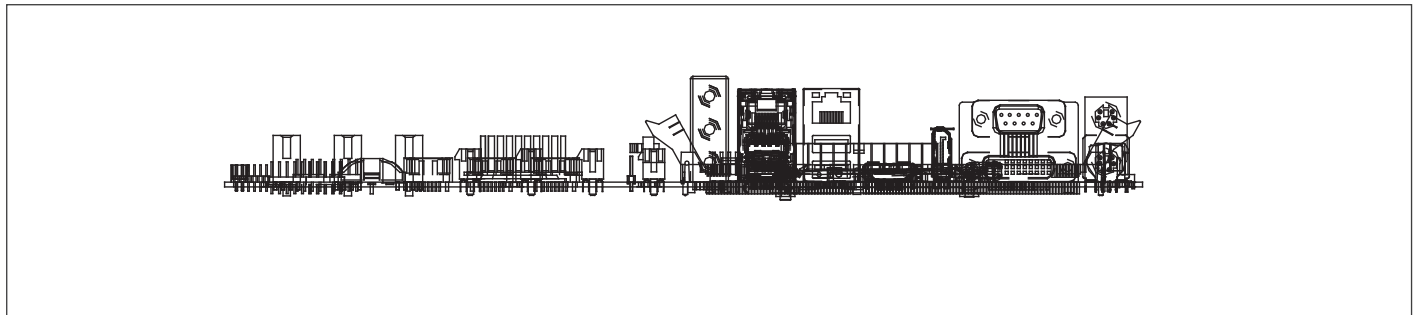
- 1759200172
CPU Cooler for LGA 1155 CPU, TDP 95W
- 1700160253
VGA cable (Without Bracket)
- 1700160254
VGA Cable with Bracket

Block Diagram



Dimension

Unit: mm



Ordering Information

Part Number	CPU	RAM	Fan/Fanless	Display	Storage	LAN	USB	RS-232	RS-232/422/485	Expansion Slot	Power	TPM	Temp.
TF-IMBA-Q77-A10-G2-00-OSP	Socket	DDR3 32GB	Fan	VGA (onboard only)/DVI-D/DP	SATA2 x 4, SATA3 x 2	GbE x 2	USB 2.0 x 12	5	1	PCIe [x16] x 1, PCIe [x4] x 1, PCIe [x1] x 2, PCI x 3	ATX	—	32°F ~ 140°F (0°C ~ 60°C)
TF-IMBA-Q77-A10-G2-01-OSP	Socket	DDR3 32GB	Fan	VGA (onboard only)/DVI-D/DP/HDMI	SATA2 x 4, SATA3 x 2	GbE x 2	USB 2.0 x 12	5	1	PCIe [x16] x 1, PCIe [x4] x 1, PCIe [x1] x 2, PCI x 3	ATX	—	32°F ~ 140°F (0°C ~ 60°C)