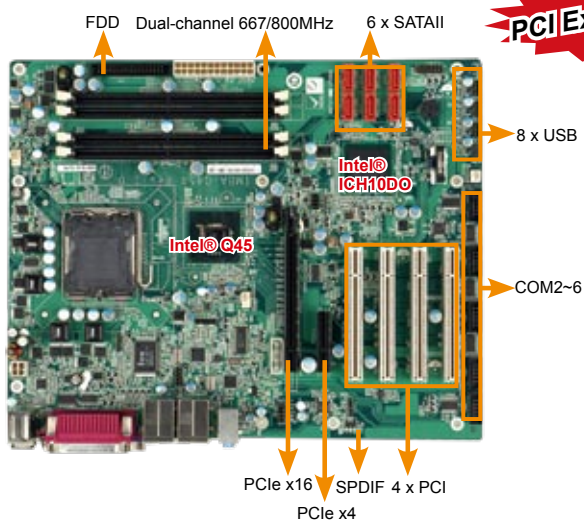


# IMBA-Q454

ATX motherboards supports 45nm Intel® LGA775 Core™ 2 Duo/ Quad with a 1333/1066/800MHz FSB, Dual Intel® GbE, six SATA II with RAID, six COM ports, USB and Audio

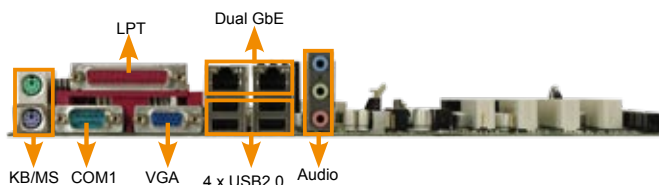


PCI Express 2.0

Intel® Core™ 2 Quad 45nm Yorkfield/ Wolfdale Processor supported

### Benefit

- Higher frequency and larger cache within the same power and thermal envelopes as 65nm products
- SSE4 New multimedia instructions
- Enhancements to the Intel®Core™ Microarchitecture



## Specifications

- ◆ CPU  
LGA 775 45nm Intel® Core™ 2 Duo/Quad, Celeron® CPU with a 1333/1066 / 800 MHz FSB
- ◆ System Chipset  
Intel® Q45 + Intel® ICH10DO
- ◆ BIOS  
AMI BIOS
- ◆ System Memory  
Four 240-pin 800/667 MHz dual-channel DDR2 SDRAM DIMM support Up to 8 GB
- ◆ Ethernet Chipset  
LAN 1: Intel® 82567LM (iAMT 5.0 supported)  
LAN 2: Intel® 82574L
- ◆ IO Interface  
6 x RS-232  
1 x LPT  
12 x USB2.0  
2 x PS/2 for KB & MS  
1 x VGA  
2 x RJ-45  
1 x Audio Jack for Line in/Line out/Mic in
- ◆ Expansion  
One PCIe x16  
One PCIe x4  
Four PCI
- ◆ Graphics Integrated  
Intel® GMA 4500 support for Microsoft DirectX® 10, Shader Model 4.0 and OpenGL® 2.0
- ◆ Display Output  
Analog CRT and PEG x 16
- ◆ Super IO  
ITE 8718F
- ◆ Storage  
1 x FDD  
6 x SATA II (with RAID 0, 1, 5, 10 function)
- ◆ Digital I/O  
8-bit (4-bit input / 4-bit output)
- ◆ Audio  
Realtek ALC888
- ◆ TPM  
iTPM1.2
- ◆ Watchdog Timer  
Software programmable supports 1~255 sec. system reset
- ◆ Power Supply  
ATX supported
- ◆ FAN connector  
1 x 4-pin CPU Fan  
1 x 4-pin Chipset Fan  
1 x 3-pin System Fan
- ◆ Power Consumption  
3.3V@2.64A, 5V@5.4A, 12V@0.28A  
(Intel® Core™ 2 Duo E8500 3.16 GHz with DDR2 800 MHz 2 GB x 4)
- ◆ Temperature  
Operation: 0° C ~ 60° C (32° F ~ 140° F)
- ◆ Humidity  
Operation: 5% ~ 95%, non-condensing
- ◆ Dimensions  
305 mm x 244 mm
- ◆ Weight  
GW:1.2 kg / NW:0.6 kg

Dual DDR2  
800

FSB 1333



Intel® Matrix  
Storage Manager

## Features

1. Designed for use with the Intel® Core™ 2 Quad/Duo processor Q9000/ E8000/E7000 series in the LGA775 with a 1333/1066/800 MHz FSB
2. Intel® GbE LAN with iAMT5.0 supported
3. Q45 chipset integrated high performance graphic with DX10 and OpenGL 2.1 supported, external graphic card PCIe 2.0 PEG 1X16 supported
4. PCIe x16 expansion slot and VGA output for dual display supported

## Packing List

|  |
|--|
| 1 x IMBA-Q454 single board computer          |
| 2 x Dual RS-232 cable (P/N: 19800-000051-RS) |
| 6 x SATA cable (P/N: 32000-062800-RS)        |
| 1 x I/O shielding (P/N: 45002-450903-00-RS)  |
| 1 x Mini Jumper Pack                         |
| 1 x Utility CD                               |
| 1 x QIG (quick installation guide)           |

## Ordering Information

| Part No.             | Description   |
|----------------------|---|
| IMBA-Q454-R10        | ATX motherboard supports 45nm Core™ 2 Duo/ Quad with a 1333/1066/800 MHz FSB, Intel® Q45 & ICH10DO platform, dual Intel® GbE, six SATA II with RAID, six COM ports, USB and audio |
| CF-775A-RS/CF-520-RS | CPU cooler  |
| CB-USB02-RS          | Dual USB cable  |
| CB-USB14-RS          | Four USB cable  |
| SDVO-100VGA-R10      | PCIe x16 VGA output SDVO card support dual display (IEI CPU board only)   |
| SDVO-100DVI-R10      | PCIe x16 DVI output SDVO card support dual display (IEI CPU board only)   |
| 32200-000017-RS      | FDD cable   |
| 32100-088600-RS      | SATA power cable  |

1

Industrial  
Computing  
Solutions

2

Embedded  
Computing  
Solutions

3

RISC-Based  
Embedded  
Solutions

4

Industrial  
Data  
Collector/  
Server  
Solutions

5

Video  
Capture  
Solutions

6

I/O  
Communication  
Solutions

7

Panel  
Solutions

8

Power Supply/  
Network  
Communication/  
Peripherals