

# AIMB-764

LGA 775 Core™ 2 Quad/ Core™ 2 Duo/  
Pentium® 4 / Celeron® D Processor-based  
ATX with DDR2/PCIe/Dual LAN

**NEW**



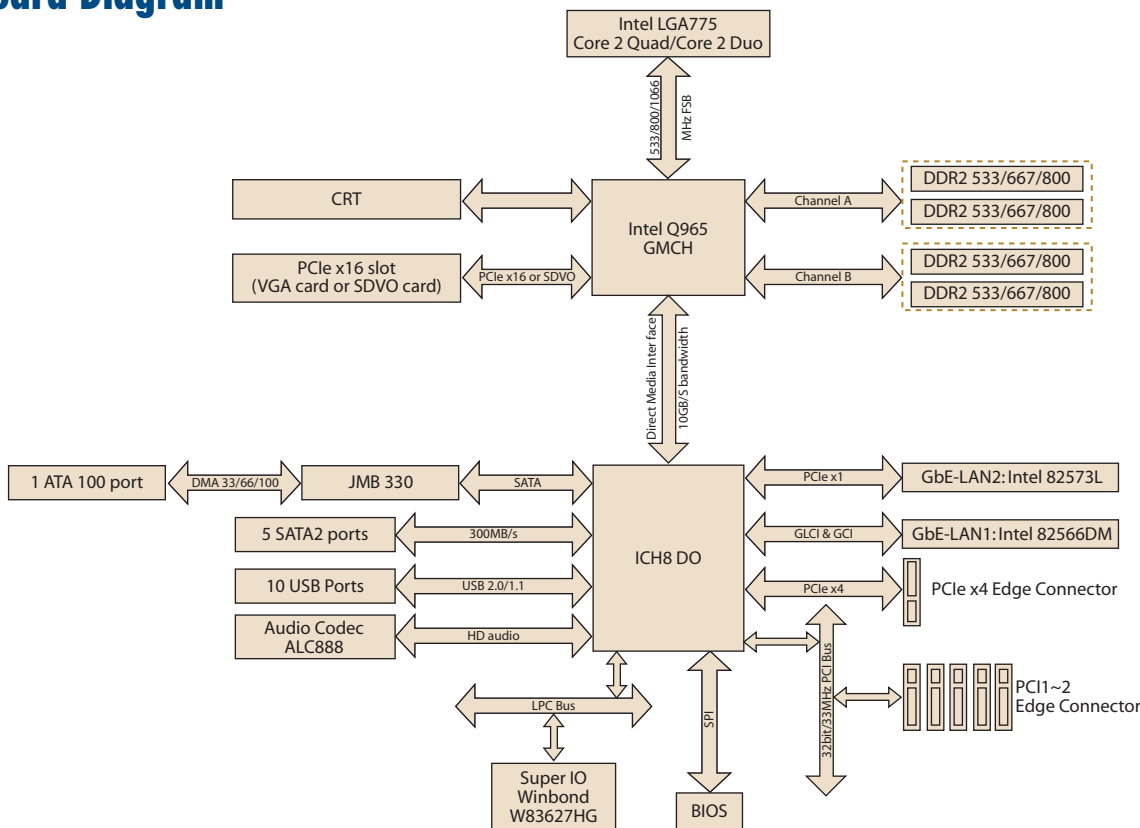
## Features

- Intel® Q965 533/800/1066 MHz FSB
- Supports Intel Core™ 2 Duo processor
- Dual channel DDR2 533/667/800 SDRAM up to 8GB
- Chipset integrated VGA sharing 256MB system memory
- PCIe x16 slot for VGA card
- Five SATA II ports with 300 MB transfer rate
- Supports SATA RAID 0,1,5 and 10
- Supports Dual 10/100/1000Base-T Ethernet via dedicated PCIe x1 bus

## Specifications

|                          |                         |   |            |                   |           |                           |
|--------------------------|-------------------------|---|------------|-------------------|-----------|---------------------------|
| Processor System         | CPU (45nm/ 65nm/ 90nm)  | Intel Core 2 Quad   | Core 2 Duo | Pentium dual-core | Pentium 4 | Celeron D                 |
|                          | Max. Speed              | 2.66 GHz  | 2.8 GHz    | 2.2 GHz           | 3.8 GHz   | 3.06 GHz                  |
|                          | L2 Cache                | 8 MB  | 3 MB       | 1 MB              | 2 MB/1 MB | 512 KB/ 256 KB            |
|                          | Chipset                 | Intel Q965+ICH8DO   |            |                   |           |                           |
|                          | BIOS                    | Award 16Mbit SPI  |            |                   |           |                           |
|                          | Front Side Bus          | 533/800/1066 MHz  |            |                   |           |                           |
| Expansion Slot           | PCIe x16                | 4.0 GB/s per direction, 1 slot                                    |            |                   |           |                           |
|                          | PCIe x4                 | 1 GB/s per direction, 1 slot                                      |            |                   |           |                           |
|                          | PCI                     | 32-bit/33MHz, 5 slots   |            |                   |           |                           |
| Memory                   | Technology              | Dual channel DDR2 533/667/800 MHz                                 |            |                   |           |                           |
|                          | Max. Capacity           | 8 GB  |            |                   |           |                           |
|                          | Socket                  | 240-pin DIMM x 4  |            |                   |           |                           |
| Graphics                 | Embedded                | Intel GMA 3000 sharing 256 MB system memory                       |            |                   |           |                           |
|                          | Add-on                  | PCIe x16 slot   |            |                   |           |                           |
| Ethernet                 | Interface               | 10/100/1000 Base-T  |            |                   |           |                           |
|                          | Controller              | GbE LAN1 Intel 82556DM; GbE LAN2: Intel 82573L                    |            |                   |           |                           |
|                          | Connector               | RJ-45 x 2   |            |                   |           |                           |
| SATA II                  | Max. Data Transfer Rate | 300 MB/s  |            |                   |           |                           |
| EIDE                     | Channel                 | 5   |            |                   |           |                           |
|                          | Mode                    | ATA 100/66/33   |            |                   |           |                           |
| I/O Interface            | Channel                 | 1 (Max. 1 device)   |            |                   |           |                           |
|                          | VGA                     | 1   |            |                   |           |                           |
|                          | USB                     | Max. 10 (USB 2.0 compliant), 4 ports on board                     |            |                   |           |                           |
|                          | Audio                   | 2 (MIC-In, Line-Out)  |            |                   |           |                           |
|                          | Serial                  | 2 (COM2 for RS232/422/485)  |            |                   |           |                           |
|                          | Parallel                | 1 (SPP/EPP/ECP)   |            |                   |           |                           |
|                          | FDD                     | 1   |            |                   |           |                           |
|                          | PS/2                    | 2   |            |                   |           |                           |
| Watchdog Timer           | Out put                 | System reset  |            |                   |           |                           |
|                          | Interval                | Programmable 1~255 sec/ min                                       |            |                   |           |                           |
| Power Requirement        | Typical                 | Intel Core 2 Duo 2.13 GHz and four 1 GB DDR2 667Mhz SDRAM         |            |                   |           |                           |
|                          |                         | +12 V   | +5 V       | +3.3 V            | 5 Vsb     |                           |
|                          |                         | 10A   | 4.5A       | 4A                | 1A        |                           |
| Environment              | Operating               |   |            |                   |           | Non-Operating             |
|                          | Temperature             | 0-55° C (32 ~ 131° F), depends on CPU's speed and cooler solution |            |                   |           | -20 ~ 70° C (-4 ~ 158° F) |
| Physical Characteristics | Dimensions (W x D)      | 304.8 x 244 mm (12" x 9.6")                                       |            |                   |           |                           |

## Board Diagram



## Ordering Information

| Part Number      | VGA | GbE LAN |
|------------------|-----|---------|
| AIMB-764G2-00A1E | Yes | Dual    |

\*\*We strongly suggest using only Advantech's certified LGA 775 CPU coolers to ensure board reliability under harsh conditions.

## Riser Card

| Part Number      | Description  |
|------------------|--|
| AIMB-R430P-03A1E | 2U riser card with 3 PCI slot expansion              |
| AIMB-R4301-03A1E | 2U riser card with 3 PCIe x 1 slot expansion         |
| AIMB-R4104-01A1E | 1U riser card with 1 PCIe x 4 slot expansion         |
| AIMB-R431F-21A1E | 2U riser card with 1PClex16 & 2PClex1 slot expansion |
| AIMB-R43PF-21A1E | 2U riser card with 1PClex16 & 2PCI slot expansion    |

## Bracket View



AIMB-764G2-00A1E

## Packing List

| Part Number    | Description                | Quantity |
|----------------|----------------------------|----------|
| 1700340640     | FDD cable                  | x 1      |
| 1701400452     | IDE HDD cable              | x 1      |
| 1700003194     | Serial ATA HDD data cable  | x 2      |
| 1703150102     | Serial ATA HDD power cable | x 2      |
| 1701090401     | COM port cable kit         | x 1      |
| 9689000068     | Jumper pack                | x 1      |
| 1960012533T000 | I/O port bracket           | x 1      |
| -              | Startup manual             | x 1      |
| -              | Utility CD                 | x 1      |

## Accessories

| Part Number | Description   |
|-------------|---|
| 1750001661  | LGA 775 CPU Cooler for 2U chassis (supports Core 2 Duo, Pentium 4 max. 3.4 GHz, and Celeron D processors) |
| 1750000334  | LGA 775 CPU Cooler for 4U+ chassis (supports Core 2 Duo, Pentium 4 and Celeron D processor)               |
| 1700002314  | USB cable with four ports, 30.5cm   |
| 1700002204  | USB cable with dual ports, 27cm   |
| 1700003195  | USB cable with dual ports, 17.5cm   |