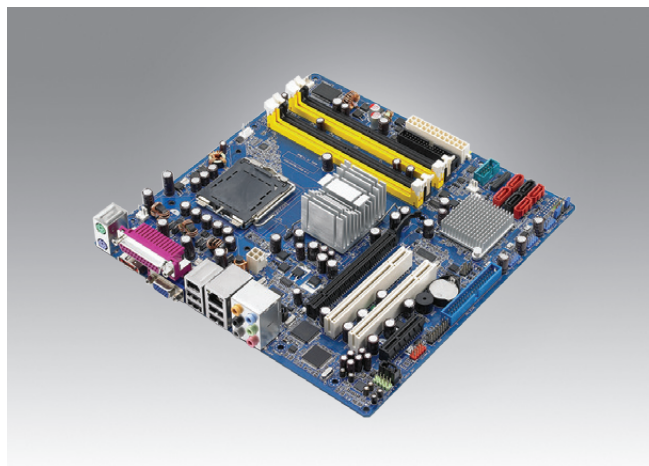


# AIMB-564

Intel® Core™2 Quad/Core™2 Duo LGA775  
MicroATX with CRT, PCIe, SW RAID, and LAN

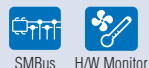


susIAccess   

## Features

- Intel® Q965 chipset 533/800/1066 MHz FSB
- Supports Intel® Core™ 2 Quad/Core™ 2 Duo processor
- Two 240-pin DIMMs up to 8 GB DDR2 533/667/800 MHz SDRAM
- Chipset integrated VGA sharing 256 MB system memory
- Supports SATA RAID 0, 1, 5, and 10
- Supports single 10/100/1000 Mbps Ethernet via dedicated PCIe x1 bus
- Supports SUSIAccess and Embedded Software APIs

### Software APIs:



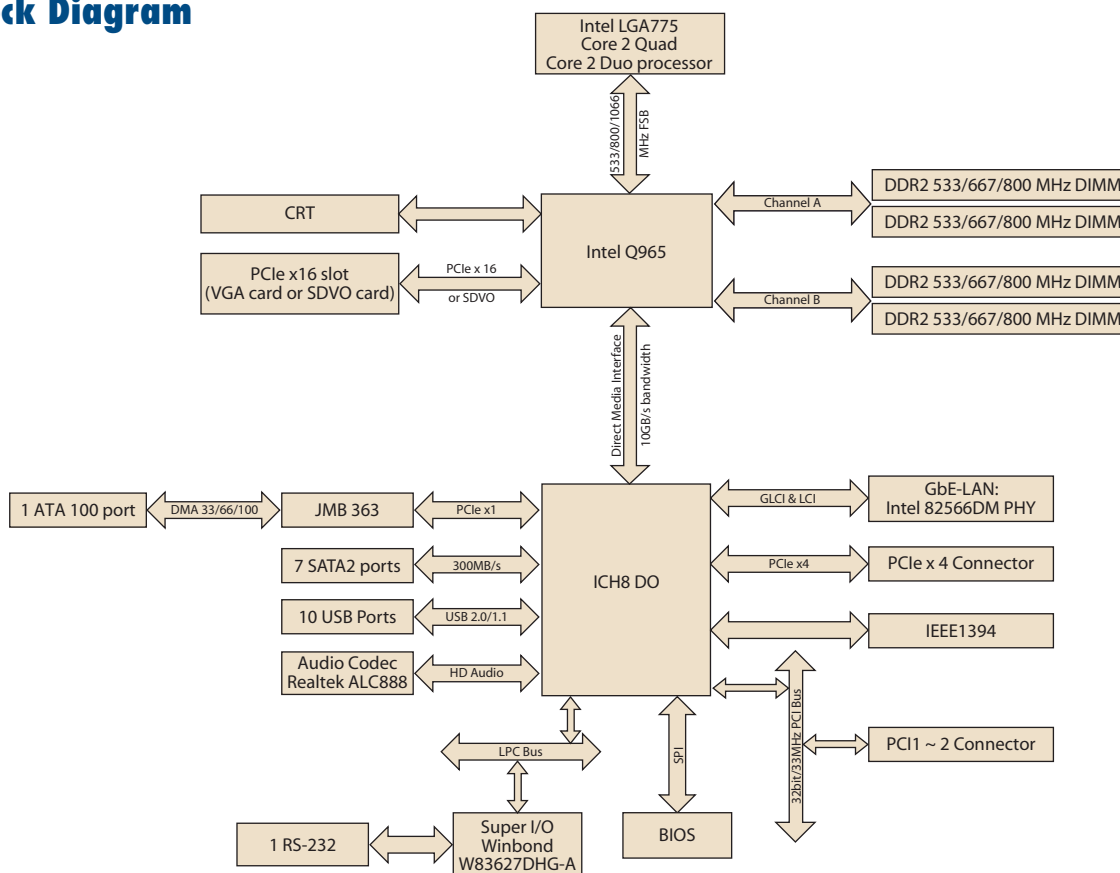
### Utilities:



## Specifications

|                          |                         |                                                                   |                  |                         |                           |                 |
|--------------------------|-------------------------|-------------------------------------------------------------------|------------------|-------------------------|---------------------------|-----------------|
| Processor System         | CPU (65nm/ 90nm)        | Intel Core 2 Quad                                                 | Intel Core 2 Duo | Intel Pentium Dual-Core | Intel Pentium 4           | Intel Celeron D |
|                          | Max. Speed              | Q6700 2.66 GHz                                                    | E7400 2.8 GHz    | E2200 2.2 GHz           | 672 3.8 GHz               | 352 3.2 GHz     |
|                          | L2 Cache                | 8 MB                                                              | 3 MB             | 1 MB                    | 2 MB/1 MB                 | 512 KB          |
|                          | Chipset                 | Intel Q965+ICH8 DO                                                |                  |                         |                           |                 |
|                          | BIOS                    | AMI 16 Mbit, SPI                                                  |                  |                         |                           |                 |
|                          | Front Side Bus          | 533/800/1066 MHz                                                  |                  |                         |                           |                 |
| Expansion Slot           | PCIe x16                | 4.0 GB/s per direction, 1 slot                                    |                  |                         |                           |                 |
|                          | PCIe x4                 | 1.0 GB/s per direction, 1 slot                                    |                  |                         |                           |                 |
|                          | PCI                     | 32-bit/33 MHz, 2 slots                                            |                  |                         |                           |                 |
| Memory                   | Technology              | Dual channel DDR2 533/667/800 MHz SDRAM                           |                  |                         |                           |                 |
|                          | Max. Capacity           | 8 GB/2 GB per DIMM                                                |                  |                         |                           |                 |
|                          | Socket                  | 4 x 240-pin DIMM (Non-ECC)                                        |                  |                         |                           |                 |
| Graphics                 | Embedded                | Intel GMA 3000 sharing 256 MB system memory                       |                  |                         |                           |                 |
|                          | Add-on                  | PCIe x 16 slot                                                    |                  |                         |                           |                 |
| Ethernet                 | Interface               | 10/100/1000 Mbps                                                  |                  |                         |                           |                 |
|                          | Controller              | GbE LAN: Intel 82566DM                                            |                  |                         |                           |                 |
|                          | Connector               | RJ-45 x 1                                                         |                  |                         |                           |                 |
| SATA                     | Max. Data Transfer Rate | 300 MB/s (SATA 2.0)                                               |                  |                         |                           |                 |
|                          | Channel                 | 7                                                                 |                  |                         |                           |                 |
| EIDE                     | Mode                    | ATA 100/66/33                                                     |                  |                         |                           |                 |
|                          | Channel                 | 1 (max. 2 devices)                                                |                  |                         |                           |                 |
| I/O Interface            | CRT                     | 1                                                                 |                  |                         |                           |                 |
|                          | USB                     | 10 (USB 2.0)                                                      |                  |                         |                           |                 |
|                          | Audio                   | 8-CH HD Audio (Mic-in, Line-in, Line-out, CD-in, 6 jacks)         |                  |                         |                           |                 |
|                          | Serial                  | 1 (RS-232)                                                        |                  |                         |                           |                 |
|                          | Parallel                | 1 (SPP/EPP/ECP)                                                   |                  |                         |                           |                 |
|                          | FDD                     | 1                                                                 |                  |                         |                           |                 |
|                          | PS/2                    | 2 (1 x keyboard and 1 x mouse)                                    |                  |                         |                           |                 |
|                          | eSATA                   | 1                                                                 |                  |                         |                           |                 |
|                          | IEEE 1394               | 2 (1 on rear panel, 1 on internal connector)                      |                  |                         |                           |                 |
| Watchdog Timer           | Output                  | System reset                                                      |                  |                         |                           |                 |
|                          | Interval                | Programmable 1~255 sec/min                                        |                  |                         |                           |                 |
| Power Requirements       | Power On                | Pentium 4 3.4 GHz, 1 GB SDRAM, 80 GB HDD                          |                  |                         |                           |                 |
|                          |                         | +12 V                                                             | +5 V             | +3.3 V                  | 5 Vsb                     |                 |
|                          |                         | 3.07A                                                             | 10.37A           | 2.83A                   | 0.46A                     |                 |
| Environment              |                         | Operating                                                         |                  |                         | Non-Operating             |                 |
|                          | Temperature             | 0 ~ 60° C (32 ~ 131° F), depends on CPU speed and cooler solution |                  |                         | -20 ~ 70° C (-4 ~ 158° F) |                 |
| Physical Characteristics | Dimensions (W x D)      | 244 x 244 mm (9.6" x 9.6")                                        |                  |                         |                           |                 |

## Block Diagram



## Ordering Information

| Part Number      | CRT | GbE LAN |
|------------------|-----|---------|
| AIMB-564VG-00A1E | Yes | Single  |

\*AIMB-564 cannot be installed in ACP-2000MB and 1U chassis.

\*\*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-RP3PF-21A1E | 2U riser card for 1 PCIe x16 and 2 PCI expansion |

## I/O View



AIMB-564VG-00A1E

## Packing List

| Description                | Quantity |
|----------------------------|----------|
| IDE HDD cable              | 1        |
| Serial ATA HDD data cable  | 4        |
| Serial ATA HDD power cable | 2        |
| I/O port bracket           | 1        |
| Startup manual             | 1        |
| Utility CD                 | 1        |

## Optional Accessories

| Part Number    | Description                                           |
|----------------|-------------------------------------------------------|
| 1750000334     | LGA775 CPU cooler (115 W)                             |
| 1960022033T000 | LGA775 CPU cooler for 2U chassis                      |
| 1700006915     | Power relay cable to activate ACP-4000 LED indicators |
| 1700006916     | Power relay cable to activate IPC-610H LED indicators |

## Embedded OS/API

| OS/API       | Part No.   | Description                                |
|--------------|------------|--------------------------------------------|
| Win XPE      | 2070003977 | XPE SP2 FP2007 AIMB-564 V3.1 ENG 792.81 MB |
|              | 2070006570 | XPE FP2007 AIMB-564 V3.01 CHT              |
| Software API | 205E564010 | SUSI 3.0 SW API for AIMB-564 XP            |