ADVANTECH

AIMB-262 (Intel® LGA775 Core 2 Duo Mini ITX Motherboard with DDR2/LAN/4COM/PCIe x16)

Startup Manual

Packing List

Before you begin installing your card, please make sure that the following items have been shipped:

- AIMB-262 Intel® LGA775 Core 2 Duo Mini ITX Motherboard
- 2. SATA HDD cable x 2
- 3. SATA Power cable x 2
- 4. Serial port cable x 2
- 5. I/O port bracket x 1
- 6. Startup manual x 1
- 7. Driver CD x 1

Optional Cable

- 1. Parallel cable with bracket (P/N: 1700008809)
- Dual port USB cable (27 cm) with bracket (P/N: 1700002204)

If any of these items are missing or damaged, please contact your distributor or sales representative immediately.

Note: Acrobat Reader is required to view any PDF file.

Acrobat Reader can be downloaded at:

www.adobe.com/Prodindex/acrobat/readstep.html (Acrobat is a trademark of Adobe).

For more information on this and other Advantech products, please visit our website at:

http://www.advantech.com

http://www.advantech.com/eplatform

For technical support and service, please visit our support website at:

http://www.advantech.com/support

This manual is for the AIMB-262 series Rev. A1

Part No. 2006026210 1st Edition,
Print in Taiwan August 2008

Specifications

Standard SBC functions

- CPU: Intel® LGA775 Core 2 Due,Pentium® due-core,
- Pentium® 4, Celeron® D
 FSB: 533/ 800 MHz
- BIOS: Award 16 Mbit SPI
- · Chipset: Intel 945GC with ICH7
- System Memory: Up to 2 GB; 200-pin SODIMM x 2, Supports dual channel DDR 533/667 SDRAM
- SATA: Two onboard serial ATA connectors with a data transmission rate of up to 300 MB/s
- Serial ports: Four serial ports: Three of RS-232; One of RS-232/422/485
- Parallel port: One parallel port, supports SPP/EPP/ECP mode (with pin header)
- Keyboard/mouse connector: Supports one standard PS/2 keyboard, one standard PS/2 mouse
- Watchdog timer: 255 level timer intervals
- USB 2.0: Supports up to six USB 2.0 ports, four external ports and two onboard pin headers

Graphic Interface

- . Controller: Chipset integrated VGA controller
- Display memory: Dynamically shared system memory up to 224 MB
- CRT: Up to 2048x1536 resolution, 400MHz RAMDAC

Ethernet Interface

• Single 10/100/1000Base-T GbE LAN Realtek RTL8111C

Mechanical and Environmental

- Dimensions (L x W): 170 x 170 mm
- Power supply voltage: +5 V, +12 V, +3,3 V, +5 V_{SB},
 -12 V
- Power requirements:

 Intel LGA775 Core 2 Due 1.8Mhz FSB800Mhz,2GB DDR2

-+5 V @ 4 A, +3.3 V @ 1.02 A, +12 V @ 2.35 A, 5 VsB @ 0.26, -12 V @ 0.12 A Measure the maximum current value which system under maximum load (CPU: Top speed, RAM & Graphic: Full loading)

- Operating temperature: 0 ~ 60° C (depending on CPU)
- Weight: 0.365 kg (weight of board)

Jumpers and Connectors

The board has a number of connectors and jumpers that help to configure the system to suit your application requirements. The tables below list the function of each of the connectors and jumpers.

| Label | Function |
|------------|---|
| JFP2_1 | Reset connector HDD LED connector ATX soft power switch (PS_ON) Power/Sleep LED |
| CMOS1 | CMOS clear |
| PSON1 | AT/ATX mode selector |
| LPT1 | Parallel port |
| USB56 | USB port 5, 6 (on board) |
| VGA1 | VGA connector |
| COM1/2 | Serial port: COM1/2 (rear panel port) |
| JSETCOM1 | Serial port configuration: RS232/RS422/RS485 |
| KBMS1 | PS/2 keyboard and Mouse connector |
| CPU_FAN1 | CPU fan connector |
| CHA_FAN1 | System fan connector |
| СОМЗ | Serial port connector |
| COM4 | Serial port connector |
| LAN1_USB12 | LAN1 / USB port 1,2 |
| USB34 | USB port 3,4 |
| AUDIO1 | Line IN, Line Out, Mic IN (Mother-board) connector |
| EATXPWR1 | ATX power connector |
| TPM_SLOT | TPM2.0 Module connector |
| SPI_CN1 | SPI flash card pin header |
| SATA1 | Serial ATA0 connectors |
| SATA2 | Serial ATA1 connectors |

| CMOS1: Clear CMOS | | |
|-------------------|-----------------|--|
| Pins | Result | |
| 1-2* | Keep CMOS data* | |
| 2-3 | Clear CMOS data | |

^{*} Default

Jumpers and Connectors



| JSETCOM1: COM1 RS232/422/485 Mode Selector | | | | | |
|--|--|--|--|--|--|
| | DM1 to select among RS r COM1. The default setting is | | | | |
| RS-232 Configuration (default) | 17 15 13 11 9 7 5 3 1 0 0 0 0 0 0 0 0 0 0 18 16 14 12 10 8 6 4 2 | | | | |
| RS-422 Configuration | 17 15 13 11 9 7 5 3 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | | | | |

| JPSON1: ATX, AT Mode Slector | | |
|------------------------------|-----------|--|
| Closed Pins Result | | |
| 1-2 | AT Mode | |
| 2-3* | ATX Mode* | |
| * Default | | |

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|------------|------------|
| 0 0 0 | 0 0 0 |
| AT Mode | ATX Mode |
| 1-2 locsed | 2-3 closed |

Declaration of Conformity

RS-485 Configuration

The device complies with the requirements in Part 15 of the FCC rules. Operation is subject to the following two conditons:

- 1. This device may not cause harmful interference;
- This device must accept any interference received, including interference that may cause undesired operation.

Software Installation

The CD disc contains a driver installer program that will lead you through the installation os various device drivers needed to take full advantage of your motherboard.

Software Installation

The computer is supplied with a battery-powered Real-time Clock circuit. There is a danger of explosion if the battery is incorrectly replaced. Replace only wih same or equivalent type recommended by the manufaturer. Discard used batteries according to manufaturer's instructions.

Board Diagram

