

## AIMB-769 Socket LGA775 Intel® Core™2 Quad ATX with VGA, 2 COM, Single LAN Startup Manual

### Packing List

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

- AIMB-769 ATX IMB
- 1 AIMB-769 Startup Manual
- 1 Driver CD (user's manual is included)
- 2 Serial ATA HDD data cables
- 1 Serial ATA HDD power cable
- 1 I/O port bracket
- 1 jumper package
- 1 warranty card

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/Products/acrobat/readstep2.html](http://www.adobe.com/Products/acrobat/readstep2.html) (Acrobat is a trademark of Adobe)

### Specifications

#### Standard SBC Functions

- **CPU:** LGA775 Intel® Core™ 2 Quad/Core™ 2 Duo/Pentium® Dual Core/Celeron®
- **BIOS:** AMI 16 Mb SPI BIOS
- **FSB:** 800/1066/1333 MHz
- **Chipset:** G41 with ICH7
- **System memory:** Up to 4 GB with two 240-pin DIMM sockets. Supports dual channel DDR3 800/1066 SDRAM.

**Note:** Due to the inherent limitations of PC architecture, the system may not fully detect 4 GB RAM when 4 GB RAM is installed.

- **SATA II Interface:** Four on-board serial SATA II connectors with a data transmission rate of up to 300 MB/s and supporting Advanced Host Controller Interface (AHCI) technology.

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

<http://www.advantech.com>

<http://www.advantech.com/intelligent-systems>

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

<http://www.advantech.com/support>

This manual is for the AIMB-769 series Rev. A2

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### Specifications

- **FDD interface:** Supports one FDD
- **Serial ports:** Two RS-232 serial ports with DC power (+5 V or +12 V) support for industrial applications.
- **Keyboard/mouse connector:** Supports standard PS/2 keyboard and mouse.
- **Watchdog timer:** 255 level timer intervals.
- **USB 2.0:** Supports up to eight USB 2.0 ports.

#### VGA Interface

- **Chipset:** Chipset integrated VGA controller.
- **Display Memory:** Dynamically shared system memory up to 352 MB.
- **Resolution:** Up to resolution 2048 x 1536 @ 75 Hz refresh rate.

#### Ethernet interface

- **Interface:** 10/100/1000 Base-T
- **Controller:** LAN1: REALTEK RTL8111G-CG

#### Mechanical and Environmental

- **Dimensions (L x W):** 304.8 x 228.6 mm
- **Power supply voltage:** +3.3 V, +5 V, ±12 V, 5 VSB
- **Power requirements:** Maximum: +5 V at 1.76 A, +3.3 V at 2.28 A, +12 V at 4.7 A, 5 VSB at 0.19 A, (Intel® Core™ 2 Quad Q9650 3.0 GHz, two 1GB DDR3 1066 MHz SDRAM)
- **Operating temperature:** 0 ~ 60 °C (depending on CPU)
- **Weight:** 0.5 Kg (weight of board)

### Jumpers and Connectors

The board has a number of jumpers that allow you to configure your system to suit your application. The table below lists the function of each of the jumpers and connectors.

#### Connector/Jumper list

Label	Function
CMOS1	Clear CMOS
JWDT1	Watchdog Timer Output Option
FDD1	FDD connector
LAN1_USB34	LAN1 / USB port 3, 4
VGA1	VGA connector
COM12	Serial port: RS-232

## Jumpers and Connectors

CN32 CN33	COM1 DC Power Switch COM2 DC Power Switch
KBMS1	PS/2 Keyboard and Mouse connector
KBMS2	External Keyboard and Mouse connector (6-pin)
JFP1	Power Switch / Reset connector
JFP2	External Speaker/HDD LED/SMBus Connector
JFP3	Keyboard Lock and Power LED Suspend: Fast flash (ATX/AT) System On: ON (ATX/AT) System Off: OFF (AT) System Off: Slow flash (ATX)
JCASE1	Case Open
PSON1	AT(1-2) / ATX(2-3)
VOLT1	Voltage Monitoring for Alarm Board
CPUFAN1	CPU FAN connector (4-pin)
SYSFAN1	System FAN connector (3-pin)
SYSFAN2	System FAN connector (3-pin)
AUDIO1	Audio connector
FPAUD1	HD Audio Front Panel Pin Header
USB12	USB port 1, 2
USB56	USB port 5, 6
USB78	USB port 7, 8
SATA1	Serial ATA1
SATA2	Serial ATA2
SATA3	Serial ATA3
SATA4	Serial ATA4
ATX12V1	ATX 12V Auxiliary power connector (for CPU)
EATXPWR1	ATX 24 Pin Main power connector (for System)
SPDIF_OUT	SPDIF Audio out pin header
BIOS1	SPI BIOS
JOBS1	Close: Enable OBS Alarm Open: Disable OBS Alarm
IR_CON	Infrared connector

## Jumpers and Connectors

### CMOS1: CMOS clear function

Pins	Result
1-2	Keep CMOS data*
2-3	Clear CMOS data

\* Default



Keep CMOS data



Clear CMOS data

### JWDT1: Watchdog timer output option

Closed Pins	Result
1-2	No Function
2-3	*System reset when it is triggered.

\* Default



NC 1-2 closed



System Reset 2-3 closed

### PSON1: ATX, AT mode selector

Closed Pins	Result
1-2	AT Mode
2-3	ATX Mode*

\* Default



AT Mode 1-2 closed



ATX Mode 2-3 closed

## Software Installation

The CD disc contains programs that will lead you through the installation of various device drivers needed to take full advantage of your motherboard.

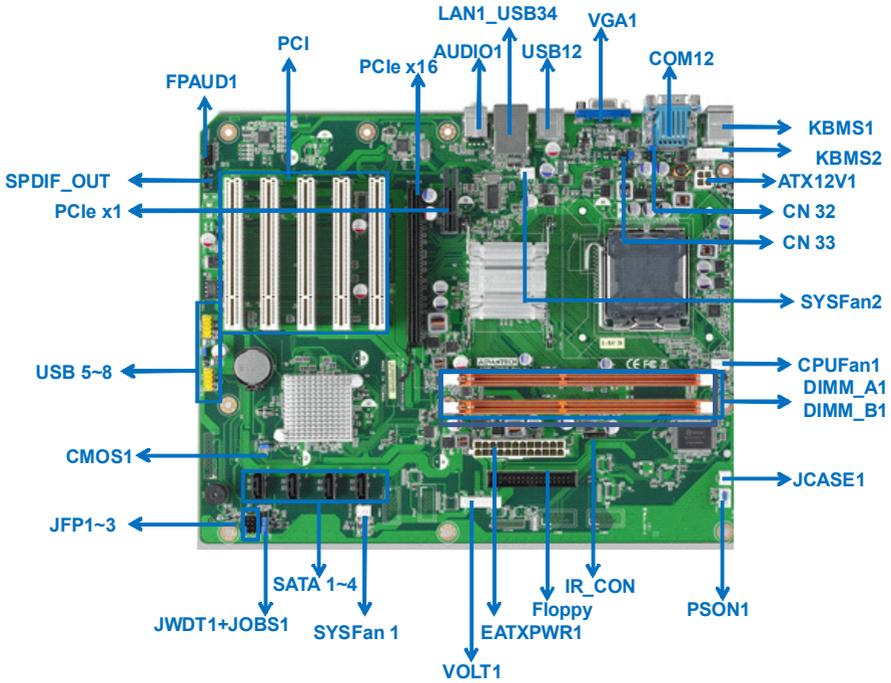
The computer is supplied with a battery-powered realtime clock circuit. There is a danger of explosion if battery is incorrectly replaced. Replace only with same or equivalent type recommended by the manufacturer. Discard used batteries according to manufacturer's instructions.

## Declaration of Conformity

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

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

# Jumper and Connector Locations



SPEAKER		10	7	4	1	▶
SM_BUS	HDDLED	11	8	5	2	
RESET	PWRSW	12	9	6	3	
PWRLED & KEYLOCK		5	4	3	2	1 ▶

Figure 1: Board Layout - Jumper and Connector Locations