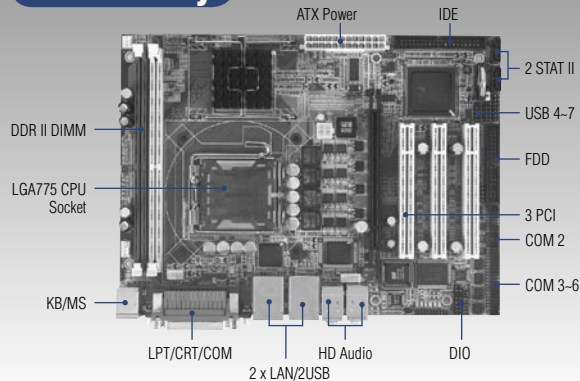


AIMB-643

Core 2 Duo LGA 775 Socket MiniATX
SBC w/LVDS, SATA, 6 COM

Preliminary



Features

- AIMB-643 is compatible with MicroATX
- Supports Intel LGA775 Core 2 Duo Processor
- Supports DDRII 400/533/667MHz SDRAM
- Intel Q965 chipset 533/800/1066 MHz FSB
- Integrated Graphics up to 256MB of DVMT for graphics memory.
- Dual Display Function support CRT + LVDS, DVI + LVDS
- Supports 2 10/100Base-T Ethernet or 2 10/100/1000Base-T Ethernet
- 10 USB 2.0 ports
- 6 COM ports
- 3 PCI slots, 1 PCI-Express x 16 and 1 mini PCI (optional)
- Supports 2 SerialATA II devices

Specifications

General

- **CPU** Intel LGA775 Core 2 Duo Processor
- **2nd Cache Memory** E6400 2M Cache
- **System Chipset** Intel Q965/ICH8 Chipset
- **BIOS** 4 Mbit Flash BIOS
- **System Memory** 2 x DDR II DIMM, Max. 4 GB
- **Power Management** APM 1.2, supports ACPI
- **SSD** CompactFlash® card support
- **Watchdog Timer** 255 levels, System reset
- **Expansion Interface** 3 x PCI slots, 1 x PCI-Express X16, 1 x miniPCI (optional)
- **Battery** Lithium 3 V/195 mA

I/O

- **I/O Interface** 1 x EIDE (40-pin Ultra DMA 66 & 100), 1 x K/B, 1 x mouse, 1 x RS-232/422/485, 5 x RS-232, 1 x LPT, 1 x FDD
- **USB** 10 x USB 2.0 (4 External Ports)
- **Audio** Supports HD Audio
- **IrDA** 115.2 kbps, IrDA 1.0 compliant
- **GPIO** 4 TTL digital out, 4 TTL digital in

Ethernet

- **Chipset** Intel 82551ER (10/100) or Intel 82541PI (Giga)
- **Speed** 10/100Base-T or 1000Base-T
- **Interface** 2 x RJ45
- **Standard** IEEE 802.3, IEEE 802.3ab

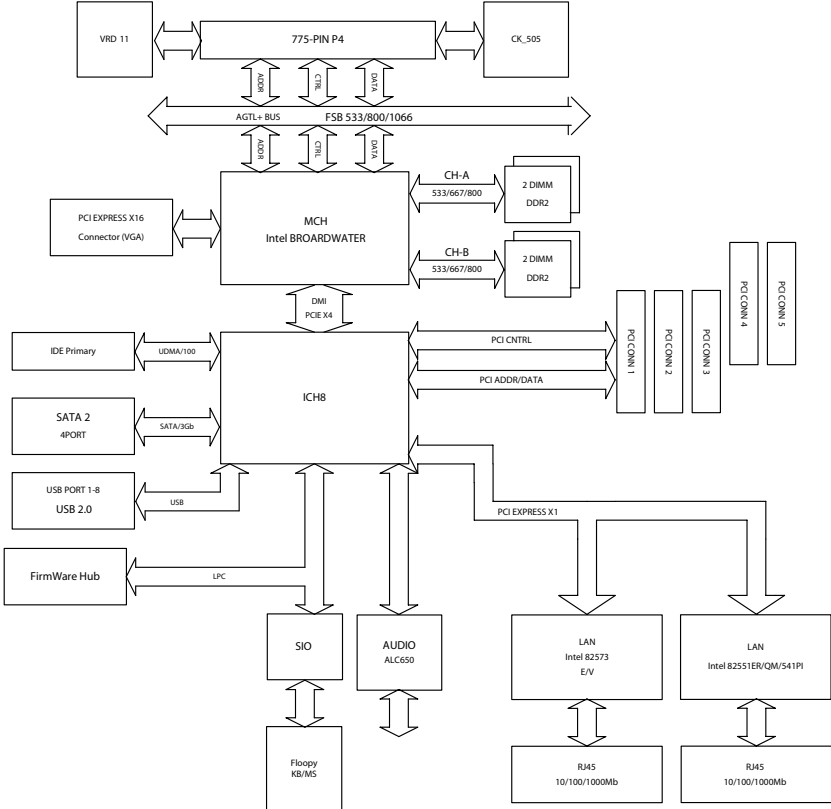
Display

- **Chipset** Intel Q965
- **Memory Size** Up to 256MB with DVMT
- **Resolution** Maximum 3D Resolution Supported:
1600 x 1200 @ 32 bpp at 85 Hz
2048 x 1536 @ 32 bpp at 75 Hz
Maximum Video Overlay Display Resolution:
1600 x 1200 @ 32 bpp at 60 Hz
1280 x 1024 @ 32 bpp at 85 Hz
- **Dual Independent Display** CRT+ LCD panel (LVDS)
DVI+ LCD panel (LVDS)
CRT + DVI

Mechanical and Environmental

- **Dimension (L x W)** 244 x 180 mm
- **Weight** 0.56 kg (weight of single board)
- **Operating Temperature** 0 ~ 60° C (32 ~ 140° F), operating
- **Operating Humidity** 0% ~ 90% relative humidity, noncondensing
- **Power Supply Voltage** +5 V ±5 %, +12 V ±5 %, -12 V ±5 %

Board Diagram



Ordering Information

Standard	LVDS	DVI	TV out	10/100	SATA	USB	RS-232	RS-232/422/485	GPIO	LPT	CF	miniPCI	PCI	PCI-E	CPU
AIMB-643F-00A1E	1	Yes	Yes	2	2	10	5	1	4in 4 out	1	Yes	Yes	3	Optional	-