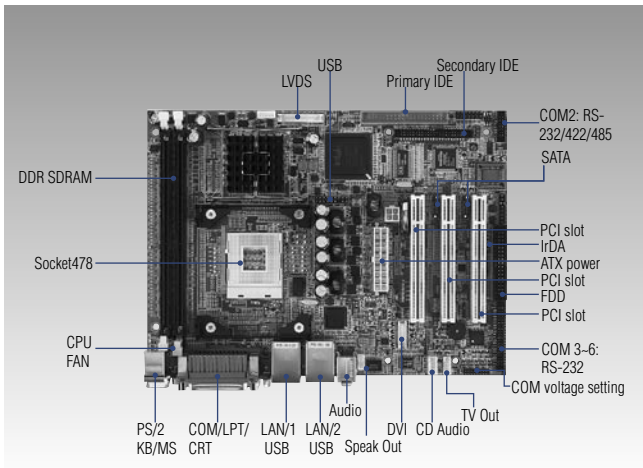


AIMB-640

Socket 478 Mini ATX SBC
w/LVDS, SATA, 6 COM



Specifications

General

- **CPU** Socket 478 supports Intel Celeron D/Pentium 4
- **2nd Cache Memory** Celeron D 335: 256 KB/Pentium 4: 512 KB
- **System Chipset** Intel 852GME/ICH4 Chipset, Intel 852GM/ICH4 Chipset (AIMB-640L2-00A2E)
- **BIOS** 4 Mbit flash BIOS
- **System Memory** 2 x DDR DIMM, Max. 2 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 miniPCI socket
- **Battery** Lithium 3 V/195 mAh

I/O

- **I/O Interface** 2 x EIDE (40-pin Ultra DMA 66 & 100 and 44-pin Ultra DMA 33), 1 x K/B, 1 x mouse, 1 x RS-232/422/485, 5 x RS-232, 1 x LPT, 1 x FDD
- **USB** 6 x USB 2.0
- **Audio** Supports AC'97
- **IrDA** 115.2 kbps, IrDA 1.0 compliant
- **GPIO** 4 TTL digital out, 4 TTL digital in

Ethernet

- **Chipset** Intel 8251ER (10/100) or Intel 82541GI (Giga)
- **Speed** 10/100Base-T or 1000Base-T
- **Interface** 2 x RJ-45
- **Standard** IEEE 802.3, IEEE 802.3ab

Features

- Compatible with Micro ATX
- Supports Socket 478 Intel® Pentium® 4/Celeron® D processors
- DDR 333 SDRAM
- Intel 852GME chipset 400/533 MHz FSB
- Integrated Graphics
- Dual display combinations: CRT + LVDS, DVI + LVDS
- Two 10/100Base-T or 10/100/1000Base-T Ethernet ports
- Six USB 2.0 ports
- Six COM ports
- Three PCI slots and one Mini PCI
- Two Serial ATA devices
- TV Out

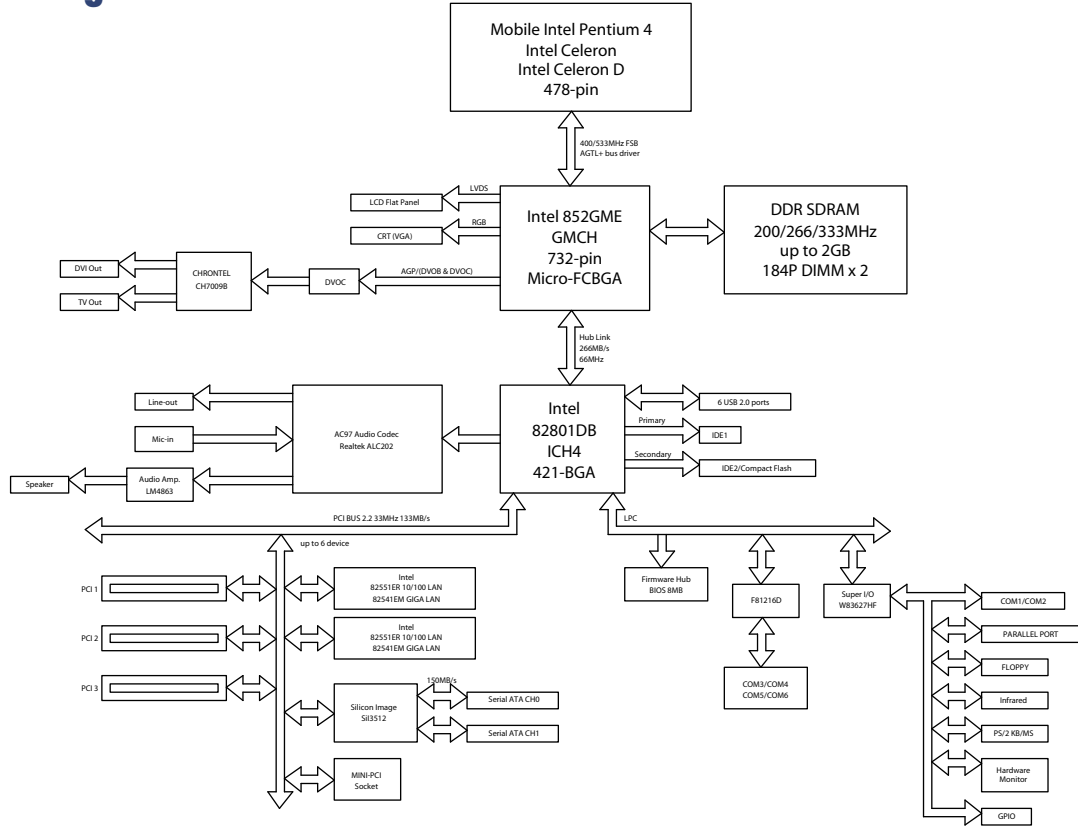
Display

- **Chipset** Intel 852GME or Intel 852GM
- **Memory Size** Direct Memory Execution model uses 64 MB system memory
- **Resolution** Maximum 3D resolution:
1600 x 1200 @ 32 bpp at 85 Hz
2048 x 1536 @ 32 bpp at 75 Hz
Maximum Video Overlay Display resolutions
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** 0.7 kg (weight of total package)
- **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 %
- **Power Consumption** (Pentium 4 3.06 GHz, 256 MB DDR266)
Max (HCT): 1.46 A @ 5V, 5.93 A @ 12 V
Typical: 1.44 A @ 5 V, 5.46 A @ 12 V
(Celeron D 2.66 GHz, 256 MB DDR266)
Max (HCT): 1.46 A @ 5 V, 5.59 A @ 12 V
Typical: 1.46 A @ 5 V, 5.48 A @ 12 V
(Celeron 2.0 GHz, 256 MB DDR266)
Max (HCT): 1.46 A @ 5 V, 4.14 A @ 12 V
Typical: 1.42 A @ 5 V, 4.14 A @ 12 V

Board Diagram



Packing List

- 1 x AIMB-640 SBC
- 1 x IDE HDD cable (p/n: 1701400452)
- 1 x Secondary IDE cable (p/n: 1701440350)
- 1 x COM port cable (p/n: 1701140201)
- 1 x COM3-6 cable (p/n: 1701400181)
- 1 x Jumper pack (p/n: 9689000068)
- 1 x I/O shield (p/n: 1960003633)
- 1 x Startup Manual
- 1 x Utility CD

Optional Accessories

- FDD cable (p/n: 1700340640)
- 2 serial ATA HDD data cable (p/n: 1700071000)
- 2 serial ATA HDD power cable (p/n: 1703150102)
- USB cable (2.54 mm) (p/n: 1700000719)
- TV out cable (p/n: 1703050306)

Ordering Information

Part No.	LVDS	DVI	TV out	10/100	Giga	SATA	USB	RS-232	RS-232/ 422/485	GPIO	LPT	CF	miniPCI	PCI	N.Bridge
AIMB-640F-00A2E	1	Yes	Yes	2	-	2	6	5	1	4 in, 4 out	1	Yes	Yes	3	852GME
AIMB-640G-00A2E	1	Yes	Yes	-	2	2	6	5	1	4 in, 4 out	1	Yes	Yes	3	852GME
AIMB-640L2-00A2E	1	-	-	1	-	-	6	5	1	4 in, 4 out	1	Yes	Yes	3	852GM