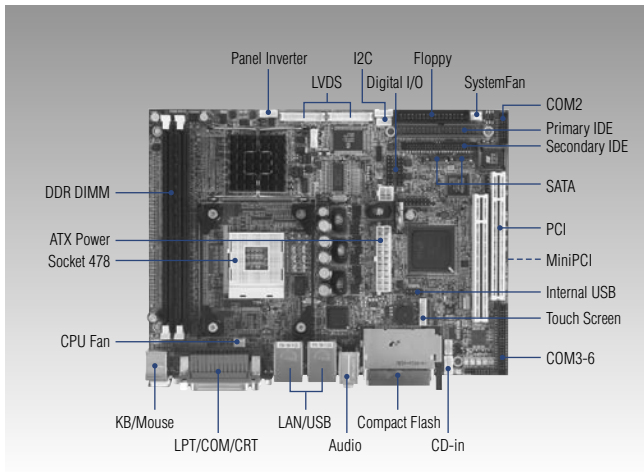


AIMB-641

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



Features

- AIMB-641 is compatible with Embedded ATX and Micro ATX
- Socket 478 supports Intel® Pentium® 4/Celeron® D/Celeron processors
- DDR 333 SDRAM
- Intel 852GME chipset 533 MHz FSB
- Integrated Intel Extreme Graphics 2
- Dual display combinations: CRT + LVDS, LVDS + LVDS
- Two 10/100Base-T or two 10/100/1000Base-T Ethernet ports
- Six USB 2.0 ports, six COM ports
- 1 slot PCI compatible with EmbATX / 1 slot PCI compatible with MicroATX
- TV-out
- Two SATA 150

Specifications

General

- **CPU** Socket 478 supports Intel Celeron D/Pentium 4
- **2nd Cache Memory** 256 KB/512 KB on processor
- **System Chipset** Intel 852GME GMCH/ICH4 Chipset
- **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** 1 x slot PCI for EmbATX, 1 x slot PCI for MicroATX (AIMB-641G), 1 x miniPCI socket
- **Battery** Lithium 3 V/220 mA

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** AC'97 2.2 compliant
- **IrDA** 115.2 kbps, IrDA 1.0 compliant
- **GPIO** 4 TTL digital out, 4 TTL digital in

Ethernet

- **Chipset** Intel 82551ER or Intel 82541GI
- **Speed** 10/100Base-T or 1000Base-T
- **Interface** 2 x RJ-45
- **Standard** IEEE 802.3, IEEE 802.3u, IEEE 802.3z/ab (optional)

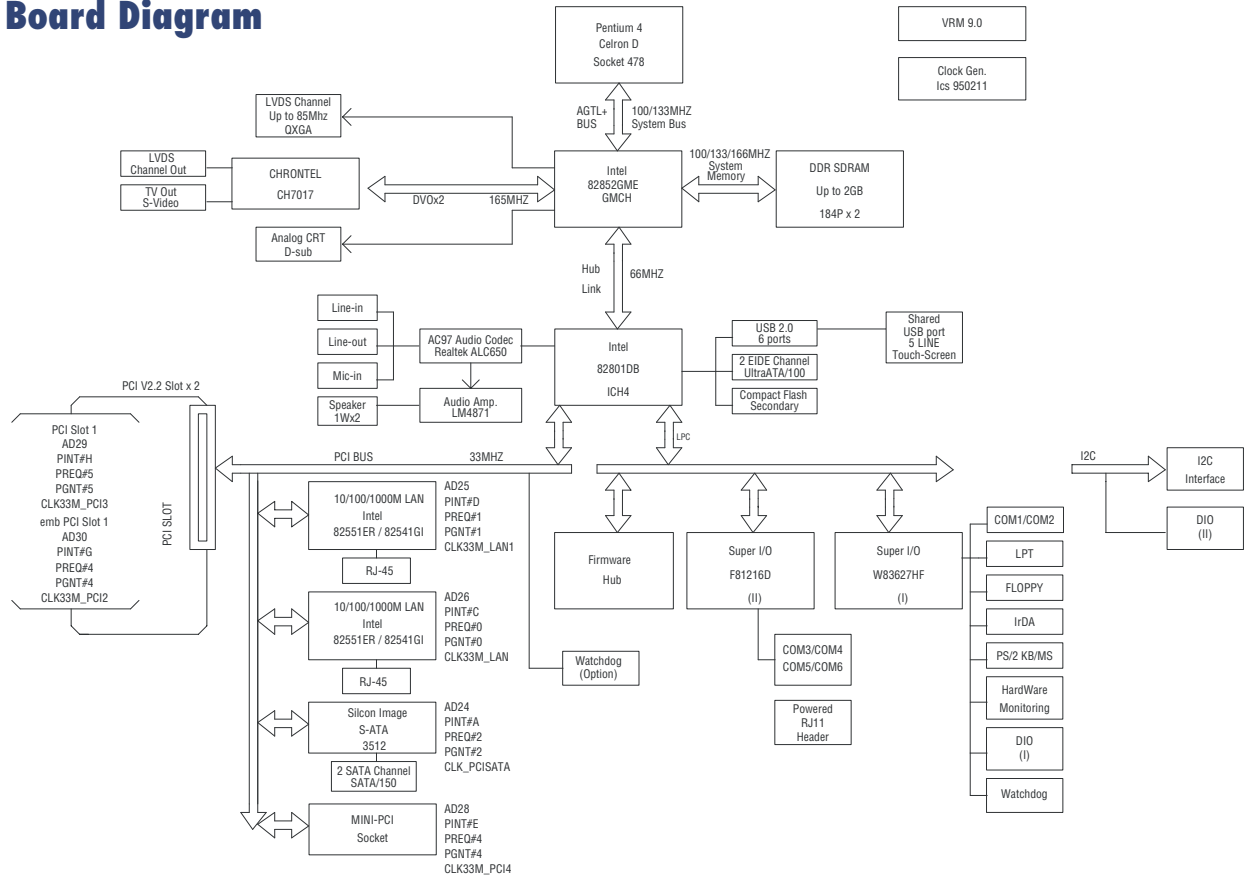
Display

- **Chipset** Intel 852GME
- **Memory Size** Direct Memory Execution model to use system memory
- **Resolution** Maximum 3D resolution: 1600 x 1200 @ 32 bpp at 85 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 + LVDS
LVDS + LVDS

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** (Celeron 2.0 GHz, 512 MB DDR 400)
Max (HCT): 0.45 A @ 5 V, 0.59 A @ 12 V

Board Diagram



Packing List

- 1 x AIMB-641 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)
- TV out cable (p/n: 1703050306)

Ordering Information

| Part No. | LVDS | TV out | 10/100 | Giga | SATA | USB | RS-232 | RS-232/422/485 | GPIO | LPT | CF | miniPCI | PCI |
|-----------------|------|--------|--------|------|------|-----|--------|----------------|-------------|-----|-----|---------|-----|
| AIMB-641F-00A1E | 2 | Yes | 2 | - | 2 | 6 | 5 | 1 | 4 in, 4 out | 1 | Yes | Yes | 1 |
| AIMB-641L-00A1E | 1 | - | 1 | - | - | 6 | 1 | 1 | 4 in, 4 out | 1 | Yes | Yes | 1 |
| AIMB-641G-00A1E | 2 | Yes | - | 2 | 2 | 6 | 5 | 1 | 4 in, 4 out | 1 | Yes | Yes | 2 |