

## CA101-D Intel® GM45 mini-ITX Board

### PROCESSOR

- Socket P 478-pin Micro FCPGA for:
  - Intel® Core™2 Duo processor
  - Intel® Celeron® 575 processor
- 1066/800/667MHz FSB
- Intel® 45nm transistor technology
- Intel® Trusted Execution Technology (Intel® TXT)
- Intel® Virtualization Technology (Intel® VT) DMA
- Supports Data Bus Inversion (DBI)
- Supports Message Signaled Interrupt (MSI)
- Supports Intel® architecture with Intel® Wide Dynamic Execution

### CHIPSET

- Intel® chipset
  - Intel® GM45 Express chipset
  - Intel® ICH9M I/O Controller Hub

### SYSTEM MEMORY

- Two 204-pin SODIMM sockets
- Supports DDR3 800/1066MHz
- Supports up to 8GB system memory
- 64-bit wide per channel
- 256Mb, 512Mb, 1Gb and 2Gb memory technologies
- Supports non-ECC x8 and x16 DIMMs
- Supports On-Die Termination (ODT)
- Supports partial writes to memory using data mask signals (DM)

### EXPANSION SLOTS

- 1 PCI Express x1 slot
- 1 PCI slot

### ONBOARD GRAPHICS FEATURES

- Intel® GMA 4500 integrated graphics engine
  - Supports 3D, 2D and video capabilities, DX10 and OpenGL 2.1

### ONBOARD AUDIO FEATURES

- Realtek ALC262 2-channel High Definition Audio
- Three stereo ADCs support 16/20-bit PCM format for multiple input streaming
- High quality analog differential CD input
- 16/20/24-bit S/PDIF-OUT supports 44.1K/48K/96K/192kHz sample rate
- 16/20/24-bit S/PDIF-IN supports 44.1K/48K/96K/192kHz sample rate

### ONBOARD LAN FEATURES

- Two Realtek RTL8111C-GR PCI Express Gigabit Ethernet controllers
- Integrated 10/100/1000 transceiver
- Supports Full Duplex flow control (IEEE 802.3x)
- Fully compliant with IEEE 802.3, IEEE 802.3u, IEEE 802.3ab
- Supports power down / link down power saving

### SERIAL ATA (SATA) INTERFACE

- 4 Serial ATA ports compliant with SATA 1.0 specification
- SATA speed up to 3Gb/s (SATA 2.0)
- Integrated Advanced Host Controller Interface (AHCI) controller

### IDE INTERFACE

- JMicron JMB368 PCI Express to PATA host controller
- Supports Native Mode operation
- Supports PIO Modes 0, 1, 2, 3, 4
- Supports Multiword DMA Modes 0, 1, 2
- Supports Ultra DMA 33/66/100/133
- Supports ATA/ATAPI command

### REAR PANEL I/O PORTS

- 1 DC-in 12V jack
- 1 mini-DIN-6 PS/2 port for PS/2 keyboard/mouse
- 1 DB-9 RS232/485 serial port
- 1 HDMI port
- 1 DB-15 VGA port
- 1 DVI-I port
- 2 RJ45 LAN ports
- 4 USB 2.0/1.1 ports
- Mic-in, line-in and line out jacks

**Note:** Dual display is not supported when using HDMI and DVI-I at the same time. For dual display, use an analog CRT monitor with either HDMI or DVI-I.

### I/O CONNECTORS

- 2 connectors for 4 external USB 2.0/1.1 ports
- 1 connector for an external RS232 serial port
- 1 LVDS LCD panel connector
- 1 LCD/inverter power connector
- 1 8-bit Digital I/O connector
- 1 front audio connector for line-out and mic-in jacks
- 1 CD-in connector
- 1 S/PDIF connector
- 4 Serial ATA connectors
- 1 44-pin IDE connector
- 1 4-pin peripheral power connector or DC-in jack
- 1 front panel connector
- 2 fan connectors

### BIOS

- AMI BIOS
- 16Mbit SPI BIOS

### ENERGY EFFICIENT DESIGN

- ACPI v2.0 specification
- System Power Management
- Wake-On-Events include:
  - Wake-On-PS/2 Keyboard/Mouse
  - Wake-On-USB Keyboard/Mouse
  - Wake-On-LAN
  - Wake-On-Ring
- CPU stopped clock control
- AC power failure recovery

### DAMAGE FREE INTELLIGENCE

- Monitors CPU/system temperature and overheat alarm
- Monitors Vcore/12V/1.5V/5V/5VSB voltages and failure alarm
- Monitors CPU/chassis fan speed and failure alarm
- Read back capability that displays temperature, voltage and fan speed

### TEMPERATURE

- 0°C to 60°C

### HUMIDITY

- 10% to 90%

### PCB

- mini-ITX form factor
- 170mm (6.7") x 170mm (6.7")

### REAR PANEL I/O PORTS

