DFI-ITOX®

Revision Control   Long Life Cycle

CA100-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 INTERFACE
- 4 Serial ATA ports compliant with SATA 1.0 specifications
- 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 mini-DIN-6 PS/2 mouse port
- 1 mini-DIN-6 PS/2 keyboard port
- 2 DB-9 serial ports
  - COM2 supports RS232/485
- 1 DB-15 VGA port
- 1 DVI-I port (DVI-D signal only)
- 2 RJ45 LAN ports
- 4 USB 2.0/1.1 ports
- Mic-in, line-in and line out jacks

I/O CONNECTORS
- 2 connectors for 4 additional external USB 2.0/1.1 ports
- 1 LVDS LCD panel connector
- 1 LCD/inverter power connector
- 1 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 40-pin IDE connector
- 1 20-pin ATX power connector
- 1 front panel connector
- 2 fan connectors

BIOS
- Award BIOS
- 16Mbit SPI flash memory

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
  - RTC timer to power-on the system
- CPU stopped clock control
- Microsoft®/Intel® APM 1.2 compliant
- 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
- Watchdog timer function

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

PS/2 Mouse | COM 2 | VGA | LAN 1 | LAN 2 | Mic-in | Line-in | Line-out
PS/2 K/B | COM 1 | DVI-I (DVI-D signal only) | USB 0-1 | USB 2-3