



# MB-G4M300-M12G

## Intel® 852GM Chipset, Socket 478-based Intel® microATX Board

### PROCESSOR (Socket 478-based Intel®)

- Mobil Intel® Celeron® 1.2GHz processor  
(CPU included with board. **Heatsink/Fan Not included.**)
- 400MHz system data bus
- Processor socket: Socket 478

### CHIPSET

- Intel® 852GM chipset
- Intel® 852GM Memory Controller Hub (GMCH)
- Intel® 82801DB I/O Controller Hub (ICH4)

### SYSTEM MEMORY

- Two 184-pin DDR SDRAM DIMM sockets
- 2.5V unbuffered PC1600 (DDR200) or PC2100 (DDR266) DDR SDRAM DIMM
- Supports 128Mbit, 256Mbit and 512Mbit technologies providing maximum capacity of 512Mb with x16 devices and up to 1GB with high density 512Mbit technology

### BIOS

- Award BIOS
- 4Mbit flash memory

### ENERGY EFFICIENT DESIGN

- Supports ACPI specification and OS Directed Power Management
- Supports ACPI STR (Suspend to RAM) function
- Wake-On-Events include:
  - Wake-On-Keyboard/Mouse
  - Wake-On-USB Keyboard/Mouse
  - Wake-On-LAN
  - RTC timer to power-on the system
- System power management supported
- CPU stopped clock control
- Hardware supports SMI green mode
- Microsoft®/Intel® APM 1.2 compliant
- Soft Power supported - ACPI v1.0a specification
- AC power failure recovery

### DAMAGE FREE INTELLIGENCE

- Monitors CPU/system temperature and overheat alarm
- Monitors 5VSB(V)/VBAT(V)/1.2V/3.3V/5V/±12V/CPU(V) voltages and failure alarm
- Monitors CPU/system/second fan speed and failure alarm
- Read back capability that displays temperature, voltage, and fan speed
- Watchdog timer function

### ONBOARD GRAPHICS FEATURES

- Up to 64MB of dynamic video memory allocation
- Graphics core frequency at 133MHz
- Analog display
  - 350MHz integrated 24-bit RAMDAC
- 3D graphics engine
  - 3D setup and render engine

### LFP (Local Flat Panel) LVDS INTERFACE

- Single- or dual-channel LVDS panel support up to SXGA
- panel resolution with frequency range from 25MHz to 112MHz
- Supports data format of 18-bpp

### ONBOARD AUDIO FEATURES

- Realtek ALC202A
- 18-bit stereo full-duplex codec with independent variable sampling rate
- High quality differential CD input
- True stereo line level outputs
- S/PDIF-in/out interface
- 2-channel audio output

### ONBOARD LAN FEATURES

- Uses 82562GT fast Ethernet controller
- Basic 10/100 Client Connection
- IEEE 802.3u, 10BASE-T/100BASE-TX compliant physical layer interface
- IEEE 802.3u Auto-Negotiation
- 48-pin SSOP, 3.3V device

### PCI IDE INTERFACE

- Supports ATA/33, ATA/66 and ATA/100 hard drives
- PIO Mode 4 Enhanced IDE (data transfer rate up to 14MB/sec.)

### REAR PANEL I/O PORTS

- 1 mini-DIN-6 PS/2 mouse port
- 1 mini-DIN-6 PS/2 keyboard port
- 1 DB-25 parallel port
- 1 DB-9 serial port
- 1 DB-15 VGA port
- 1 RJ45 LAN port
- 2 USB 2.0/1.1 ports
- 1 game/MIDI port
- 3 audio jacks: line-out, line-in and mic-in

### I/O CONNECTORS

- 2 connectors for 4 additional external USB 2.0/1.1 ports
- 3 connectors for 3 additional external COM ports
- 1 connector for LVDS LCD panel
- 1 LCD/Inverter power connector
- 1 LCD brightness control connector
- 1 front audio connector for line-out and mic-in jacks
- 1 CD-in internal audio connector
- 1 S/PDIF-out connector
- 1 connector for IrDA interface
- 2 40-pin IDE connectors for 3.5" HDD
- 1 floppy connector
- 1 20-pin ATX power connector
- 1 4-pin ATX 12V power connector
- 1 Wake-On-LAN connector
- 1 front panel connector
- 3 fan connectors

### EXPANSION SLOTS

- 3 PCI slots

### PCB

- 4 layers, microATX form factor
- 24.4 cm (9.6") x 24.4 cm (9.6")

### SAFETY

- UL, cUL, FCC, CE