

# G4M100-MS12-G

## Intel® 852GM chipset Mini-ITX Board with CPU

### PROCESSOR

- Mobile Intel® Celeron® 1.2GHz processor  
(CPU included with board.)
  - 400MHz system bus
- Processor socket: Socket 479

### CHIPSET

- Intel® 852GM chipset
  - Intel® 852GM Graphics 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

### POWER MANAGEMENT

- Supports ACPI specification and OS Directed Power Management
- Supports ACPI STR (Suspend to RAM) function
- Wake-On-Events include:
  - Wake-On-PS/2 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

### HARDWARE MONITOR

- 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/2nd 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 ALC655
- 16-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
- 5.1-channel audio output

### ONBOARD LAN FEATURES

- Intel 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

### SERIAL ATA INTERFACE

- VIA VT6421L controller
- Supports two Serial ATA (SATA) interfaces which are compliant with SATA 1.0 specification (1.5Gbps interface)

### PCI IDE INTERFACE

- IDE 1 supports up to UltraDMA 100Mbps hard drive
- IDE 2 supports UltraDMA 33Mbps hard drive
- 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
- 3 DB-9 serial ports
- 1 DB-15 VGA port
- 1 RJ45 LAN port
- 4 USB 2.0/1.1 ports
- 3 audio jacks: mic-in, line-in and line-out

### I/O CONNECTORS

- 1 connector for 2 additional external USB 2.0/1.1 ports
- 1 connector for 1 additional external COM port
- 1 connector for LVDS LCD panel
- 1 LCD/Inverter power connector
- 1 LCD brightness control connector
- 1 DIO connector
- 1 front audio connector for line-out and mic-in jacks
- 1 CD-in internal audio connector
- 1 S/PDIF-in/out connector
- 1 connector for IrDA interface
- 2 Serial ATA connectors
- 1 40-pin IDE connector for 3.5" HDD
- 1 44-pin IDE connector for 2.5"/3.5" HDD
- 1 floppy connector (FPC type)
- 1 20-pin ATX power connector
- 1 4-pin ATX 12V power connector
- 1 front panel connector
- 1 chassis open connector
- 3 fan connectors

### EXPANSION SLOTS

- 1 PCI slot

### PCB

- 6 layers, Mini-ITX form factor
- 17cm (6.7") x 17cm (6.7")