

G4M300-P Intel® 852 microATX Board

PROCESSOR

- Intel® Pentium® 4 (Prescott and Northwood) processor
 - FSB: 533MHz system data bus
- Intel® Celeron® Northwood processor
 - 400MHz system data bus
- Socket 478

CHIPSET

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

SYSTEM MEMORY

- Two 184-pin DDR SDRAM DIMM sockets
- 2.5V unbuffered PC2100 (DDR266) or PC2700 (DDR333) DDR SDRAM DIMM with ECC support
- Supports 128Mbit, 256Mbit and 512Mbit technologies providing maximum capacity of 1GB with x16 devices and up to 2GB 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-PS/2 Keyboard/Mouse
 - Wake-On-USB
 - 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)/1.5V/3.3V/5V/±12V/CPU(V) voltages and failure alarm
- Monitors CPU/chassis/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
- Display core frequency at 133/200/250/266MHz
- Render core frequency at 100/133/166/200/250/266MHz
- 2D graphics engine
 - Optimized 128-bit BLT engine
 - 32-bit Alpha Blended cursor
- 3D graphics engine
 - 3D setup and render engine
 - Supports DirectX and OpenGL
 - 266-MegaTexel/s peak performance
 - 16- and 24-bit Z-buffering; 16- and 24-bit W-buffering
 - Double and triple render buffer

LFP (Local Flat Panel) LVDS INTERFACE

- Single- or dual-channel LVDS panel support up to UXGA panel resolution with frequency range from 25MHz to 112MHz (single/dual channel)
- Integrated PWM interface for LCD backlight inverter control
- Analog display
 - 350MHz integrated 24-bit RAMDAC
 - Maximum 3D resolution up to 1600x1200 at 85Hz

ONBOARD AUDIO FEATURES

- Realtek ALC202A
- 18-bit stereo full-duplex codec with independent variable sampling rate
- S/PDIF-out interface
- 2-channel audio output

ONBOARD LAN FEATURES

- Intel 82562EM fast ethernet controller
- Basic 10/100 Client Connection
- IEEE 802.3, 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
- 24.4cm (9.6") x 24.4cm (9.6")

REAR PANEL I/O PORTS

