DFI-ACP

Revision Control
Long Life Cycle Motherboard

G5M150-N

Intel® 852GME Socket 479 Mini Board

PROCESSOR
- Intel® Pentium® M / Celeron® M processor (478-pin)
  - 400/533MHz system bus
  - Supports 64-bit host data bus and 32-bit addressing
- Processor socket: mPGA479M

※ The following Intel Celeron® M 65nm processors are NOT supported: 410, 420, 423, 430, 440 and 450.

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 PC1600 (DDR200), 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 Keyboard
  - Wake-On-LAN
  - Wake-On-Ring
  - 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)/±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 133/200/250MHz
- Render core frequency at 100/133/166/200/250MHz
- Intel® Dual-Frequency Graphics Technology
- 2D graphics engine
  - Optimized 128-bit BLT engine
  - 32-bit Alpha Blended cursor
  - 8-bit, 16-bit and 32-bit color
- 3D graphics engine
  - Enhanced Hardware Binning Instruction Set
  - Bi-Cubic Filtering
  - Linear Gamma Blending for Video Mixer Rendering (VMR)
  - Video Mixer Rendering (VMR)
  - 3D setup and render engine
  - DirectX and OpenGL pixelization rules
  - 266-MegaTexel/s peak performance
  - 16- and 24-bit Z-buffering; 16- and 24-bit W-buffering
  - Optimal 3D resolution
  - Double and triple render buffer
- Graphics Power Management
  - Dynamic Frequency Switching
  - Memory Self-Refresh During C3
  - Intel® Display Power Saving Technology

DISPLAY
- Dedicated LFP (Local Flat Panel) interface
  - Supports data format up to 24-bpp
- Analog display
  - 350MHz integrated 24-bit RAMDAC
  - Pixel resolution up to 1600x1200 at 85Hz and up to 2048x1536 at 75Hz

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 (single/dual channel)
- Integrated PWM interface for LCD backlight inverter control

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-out interface
- 2-channel audio output

ONBOARD LAN FEATURES
- Intel 82562GT 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
- Intel 82551QM fast ethernet controller
  - Integrated IEEE 802.3, 10BASE-T and 100BASE-TX compatible PHY
  - Glueless 32-bit PCI master interface
  - Glueless CardBus master interface
  - 128 Kbyte Flash interface
  - Thin BGA 15 mm^2 package

IDE INTERFACE
- Supports up to UltraDMA 100Mbps hard drives
- PIO Mode 4 Enhanced IDE (data transfer rate up to 14MB/sec.)

REAR PANEL I/O PORTS
- 4 USB 2.0/1.1 ports
- 2 RJ45 LAN ports
- 3 DB-9 serial ports
- 1 DB-15 VGA port
- 1 mini-DIN-6 PS/2 mouse port
- 1 mini-DIN-6 PS/2 keyboard port
- Line-out, line-in and mic-in

I/O CONNECTORS
- 1 connector for 2 additional external USB 2.0/1.1 ports
- 1 connector for LCD brightness control
- 1 connector for LVDS LCD panel
- 1 connector for LCD/inverter power
- 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
- 1 40-pin IDE 1 connector for 3.5" HDD
- 1 44-pin IDE 2 connector for 2.5" HDD (2.0 pitch)
- 1 floppy connector (FPC type)
- 1 parallel connector
- 1 ATX power supply connector
- 1 Wake-On-LAN connector
- 1 Wake-On-Ring connector
- 1 chassis open connector
- 1 front panel connector
- 3 fan connectors

EXPANSION SLOTS
- 1 PCI slot for PCI expansion card or customized riser card for 1, 2 or 3 PCI slots expansion (for low profile PCI card only)
- 1 mini PCI socket (124-pin)

COMPATIBILITY
- PCI 2.2 and AC '97 compliant

PCB
- 6 layers, mini board (Mini-ITX compatible)
- 17cm (6.7") x 17cm (6.7")

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