



G5M300-P

Intel® 855GME Socket 479 microATX Board

PROCESSOR

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

CHIPSET

- Intel® 855GME chipset
 - Intel® 855GME Graphics Memory Controller Hub (GMCH)
 - Intel® 6300ESB I/O Controller Hub

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
- Supports SCSI sequential boot-up
- Supports DMI 2.0 function
- 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)/3.3V/1.5V/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 250MHz
- Render core frequency at 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 supports up to UXGA 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 2-channel audio
- 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
- Speaker-out jack supports 2W amplifier providing better audio quality to the headphone or speakers

ONBOARD LAN FEATURES

- RTL8110S Gigabit ethernet controller
- Supports 10Mbps, 100Mbps and 1Gbps data transmission
- IEEE 802.3 (10/100Mbps) and IEEE 802.3ab (1Gbps) compliant

SERIAL ATA INTERFACE

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

IDE INTERFACE

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

IEEE 1394 INTERFACE

- VIA VT6307
- Supports two 100/200/400 Mb/sec ports

ACCELERATED GRAPHICS PORT (A.G.P.)

- Supports 1.5V AGP 4x data transfers and 2x/4x fast write protocol (3.3V AGP card is not supported)
- AGP 2.0 compliant

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 IEEE 1394 port
- 1 RJ45 LAN port
- 4 USB 2.0/1.1 ports
- Mic-in, line-in and speaker-out

I/O CONNECTORS

- 3 connectors for 3 external serial ports
- 1 connector for 1 external IEEE 1394 port
- 1 LCD brightness control connector
- 1 LVDS LCD panel connector
- 1 LCD power connector
- 1 front audio connector for speaker-out and mic-in jacks
- 1 CD-in internal audio connector
- 1 S/PDIF-out connector
- 1 connector for IrDA interface
- 2 Serial ATA connectors
- 2 40-pin IDE connectors
- 1 floppy connector
- 1 ATX power supply connector
- 1 front panel connector
- 3 fan connectors

EXPANSION SLOTS

- 1 AGP 4x slot
- 1 PCI-X slot
- 2 PCI slots

COMPATIBILITY

- PCI 2.2, Intel AGP 2.0, PCI-X 2.2 and AC '97 compliant

PCB

- 4 layers, microATX form factor
- 24.4cm (9.61") x 23cm (9.06")

