G5M300-P

Intel® Pentium® M Processor and Intel® Celeron® M Processor

PROCESSOR
- Intel® Pentium® M Processor
  - 400MHz system data bus
  - Supports 64-bit host data bus and 32-bit addressing
- Intel® Celeron® M Processor
  - 400 MHz 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)
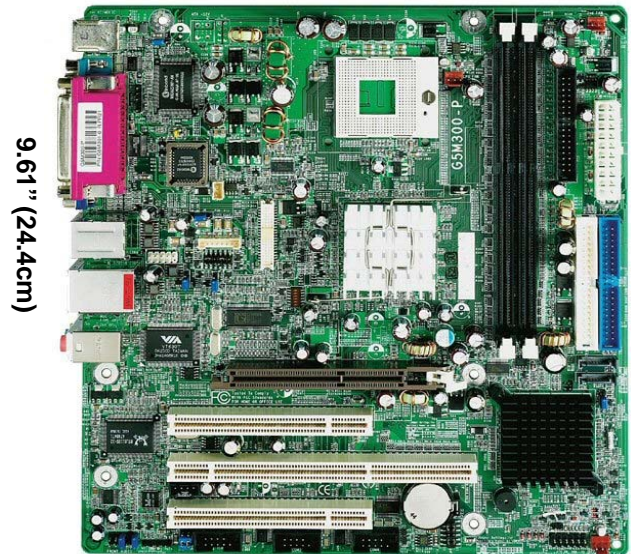 - Intel® 6300ESB I/O Controller Hub

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, Windows® 98SE/2000/ME/XP Plug and Play compatible
- 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

9.61" (24.4cm)

9.06" (23cm)

ONBOARD GRAPHICS FEATURES
- Up to 64MB of dynamic video memory allocation
- Display core frequency at 133/200/250 MHz
- 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-bit and 24-bit Z-buffering; 16-bit 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

G5M300-P Revision Controlled Motherboard

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

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-channel 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
- 10Mbps, 100Mbps, and 1Gbps IEEE 802.3 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 tranfers and 2x/4x fast write protocol (3.3V AGP card is not supported)
- AGP 2.0 compliant

REAR PANEL I/O PORTS
- 4 USB 2.0/1.1 ports
- 1 IEEE 1394 port
- 1 RJ45 LAN port
- 1 DB-9 serial ports
- 1 DB-15 VGA port
- 1 DB-25 parallel port
- 1 mini-DIN-6 PS/2 mouse port
- 1 mini-DIN-6 PS/2 keyboard port
- 3 audio jacks: line-out, line-in and mic-in

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 of IrDA interface
- 2 Serial ATA connectors
- 2 40-pin IDE connectors
- 1 floppy connector
- 1 ATX power supply connectors
- 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")

SAFETY
- UL, cUL, FCC, CE