Applied Computing

Revision Control Long Life Cycle

G7V300-P-G

Intel 915GV chipset

Socket 775-based Intel® microATX board

PROCESSOR (Socket 775-based Intel®)

- Intel® Pentium® 4 processor with Hyper-Threading Technology
  - 800MHz/533MHz system data bus
- Intel® Celeron® D processor
  - 533MHz system data bus

CHIPSET

- Intel® 915GV chipset
  - Intel® 915GV Graphics Memory Controller Hub (GMCH)
  - Intel® 82801FB I/O Controller Hub (ICH6)

SYSTEM MEMORY

- Four 184-pin DDR SDRAM DIMM sockets
- Supports dual channel (128-bit wide) memory interface
- Unbuffered PC3200 (DDR400), or 2700 (DDR333) DDR SDRAM DIMM
- Supports maximum of 4GB system memory up to 512Mbit technology for x8 and x16 devices

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/Mouse
  - Wake-On-Ring
  - Wake-On-LAN
  - RTC timer to power-on the system
- System power management supported
- CPU stopped clock control
- 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 VBAT(V)/3.3V/V5SB/V3SB/5V/12V/CPU(V) voltages and failure alarm
- Monitors CPU/chassis fan speed and failure alarm
- Read back capability that displays temperature, voltage, and fan speed
- Watchdog timer function

ONBOARD GRAPHICS FEATURES

- Graphics Memory
  - Shares 1MB/8MB of the system memory in DOS mode
  - Uses Dynamic Video Memory Technology (DVMT) in Windows mode
- Graphics Controller
  - Core frequency of 333MHz
  - 400MHz integrated 24-bit RAMDAC
  - Analog display up to 2048x1536 @ 85Hz refresh
  - 3D setup and render engine – Discrete, Triangles, Strips, and Fans
  - Hardware Pixel Shader 2.0
  - Supports 3D and OGL pixelization rules
  - Per pixel perspective corrected texture mapping
  - 533 MegaTexel/sec performance, 266 Megapixels/sec fill rate up to two bilinear textures
- 2D Graphics Features
  - Optimized 256-bit BLT engine
  - 32-bit alpha blended cursor
  - Programmable 3-color transparent cursor
- 3D Graphics Features
  - Supports maximum 3D resolution: 1600x1200x32 @ 85Hz
  - Flat and Gouraud shading
  - 16-bit and 24-bit Z-buffering and 8-bit Stencil buffering
  - Vertex and programmable pixel fogging and atmospheric effects
  - Supports Double and triple render buffer
- Software drivers
  - Windows ® 2000/XP

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-out interface
- 5.1-channel audio output

ONBOARD LAN FEATURES

- RTL8110SB 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 four 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)

REAR PANEL I/O PORTS

- 4 USB 2.0/1.1 ports
- 1 RJ45 LAN ports
- 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

- 2 connectors for 4 additional external USB 2.0/1.1 ports
- 3 connectors for 3 external COM ports
- 1 front audio connector for line-out and mic-in jacks
- 1 S/PDIF-out connector
- 1 CD-in internal audio connector
- 1 connector for IrDA interface
- 4 Serial ATA connectors
- 1 40-pin IDE connector
- 1 floppy connector
- 1 24-pin ATX power connector
- 1 4-pin 12V power connector
- 1 front panel connector
- 2 fan connectors
- 1 chassis open connector

EXPANSION SLOTS

- 4 PCI slots

COMPATIBILITY

- PCI 2.2 and AC '97 compliant

CIRCUIT BOARD (PCB)

- 4 layers, microATX form factor
- 24.4 cm (9.6") x 24.4 cm (9.6")

SAFETY

- UL, cUL, FCC Class B, CE