

G4V100-P Intel® 845GV Socket 478 Mini Board

PROCESSOR

- Intel® Pentium® 4 Processor with Hyper-Threading Technology
 - 533MHz system data bus
- Intel® Pentium® 4 Northwood processor
 - 533MHz/400MHz system data bus
- Intel® Celeron® Northwood processor
 - 400MHz system data bus
- Socket 478

CHIPSET

- Intel® 845GV chipset
 - Intel® 845GV 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
- Supports maximum of 2GB system memory using 64Mbit, 128Mbit, 256Mbit or 512Mbit technology
 - Double-sided x16 DDR SDRAM DIMM is not supported

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/Mouse
 - Wake-On-LAN
 - RTC timer to power-on the system
- System power management supported
- CPU stopped clock control
- Hardware supported 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

- Graphics memory
 - Shares 512K/1MB/8MB of the system memory in DOS mode
 - Uses Dynamic Video Memory Technology (DVMT) in Windows mode
- Graphics controller
 - Core frequency of 200MHz
 - 350MHz integrated 24-bit RAMDAC
 - Analog display up to 2048x1536 @ 60Hz refresh
 - 3D setup and render engine - Discrete, Triangles, Strips and fans
 - Per pixel perspective corrected texture mapping
 - Software DVD at 30fps, full screen
- 2D graphics features
 - Optimized 256-bit BLT engine
 - 32-bit alpha blended cursor
 - Programmable 3-color transparent cursor
- 3D graphics features
 - 200 megapixels/sec fill rate
 - Maximum 3D resolution: 1600x1200x32 @ 85Hz
 - Flat and Gouraud shading
 - 16- and 24-bit Z-buffering and 16- and 24-bit W-buffering
 - Vertex and programmable pixel fogging and atmospheric effects
 - Double and triple render buffer

LVDS TRANSMITTER

- Chronitel CH7017
- Supports scale up to 1600x1200 pixels
- 18-bit and 24-bit outputs
- 2D dither engine
- Support for second CRT DAC bypass mode
- Dual LVDS supporting pixel rates up to 330Mpixels/sec when both 12-bit input ports are ganged together

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

- Uses Intel 82562EM fast ethernet controller
- IEEE 802.3, 10BASE-T/100BASE-TX compliant physical layer interface
- IEEE 802.3u Auto-Negotiation
- Digital Adaptive Equalization control
- Link status interrupt capability
- 10BASE-T auto-polarity correction
- Alert on LAN functionality
- LAN Connect I/F
- 1:1 transmit transformer ratio support
- Automatic detection of "unplugged mode"

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

- 2 USB 2.0/1.1 ports and 1 RJ45 LAN port
- 2 DB-9 serial ports and 1 DB-15 VGA port
- 1 DB-25 parallel port
- 1 PS/2 mouse port and 1 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
- 1 connector for COM 3 (RS232 or LVDS)
- 1 connector for COM 4 (RS232 or RS485)
- 1 44-pin connector for LVDS LCD panel
- 1 LCD/Inverter power connector
- 1 LCD brightness control connector
- 1 front audio connector and 1 IrDA connector
- 1 CD-in connector and 1 S/PDIF-out connector
- 1 40-pin IDE 1 connector for 3.5" HDD
- 1 44-pin IDE 2 connector for 2.5" HDD
- 1 floppy connector (FPC connector type)
- 2 ATX power supply connectors
- 1 Wake-On-LAN connector
- 1 chassis open 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)

COMPATIBILITY

- PCI 2.2 and AC '97 compliant

PCB

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

