ITOX
Applied Computing

○ Revision Control ○ Long Life Cycle

RoHS

G4V620-B-G
Intel 845GV chipset
Socket 478-based Intel® ATX board

PROCESSOR (Socket 478-based Intel®)
• Intel® Pentium® 4 Processor with Hyper-Threading Technology
• Intel® Pentium® 4 Processor (478-pin)
  - 533MHz system data bus
  - 400MHz system data bus
• Intel® Celeron® Processor (478-pin)
  - 400MHz system data bus

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 (DDR 333) 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
• Flash EPROM for easy BIOS upgrades
• 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-Keyboard
- Wake-On-USB Keyboard
- Wake-On-Ring (through internal or external modem)
- Wake-On-LAN
- 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/VBAT/1.5V/3.3V/±5V/±12V/Vcore voltages and failure alarm
• Monitors CPU/system/second fan speed and failure alarm
• Automatic system/second fans on/off control
• Read back capability that displays temperature, voltage, and fan speed
• Opened chassis alarm
• 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
• Software drivers
- Windows® 98SE/2000/ME/XP and Windows® NT® 4.0

ONBOARD AUDIO FEATURES
• 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
• Uses 82562 fast Ethernet controller
- Basic 10/100 Client Connection. Supports 559 level cable and PHY Stats. Support for Server OS included as check item, but no server function included
- Same Quality Driver suits as 82559
- Supports DMI/SNMP/WMI
- 10/100 Auto Sensing
- IEEE 802.3, 10BASE-T/100BASE-TX compliant physical layer interface
- IEEE 802.3u Auto-Negotiation
- 48-pin SSOP, 3.3V device

PCI IDE INTERFACE
• Supports ATA/33, ATA/66 and ATA/100 hard drives
• PIO Mode 4 Enhanced IDE (data transfer rate up to 14MB/sec.)
• Bus mastering reduces CPU utilization during disk transfer
• Supports ATAPI CD-ROM, LS-120 and ZIP

REAR PANEL I/O PORTS
• 4 USB 2.0/1.1 ports
• 1 RJ45 LAN port
• 1 DB-9 serial port
• 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
• 1 CompactFlashTM socket
• 1 connector for 2 additional external USB 2.0/1.1 ports
• 1 connector for 1 external serial port
• 1 connector for an external game/MIDI port
• 2 internal audio connectors (CD-in and AUX-in)
• 1 S/PDIF-out connector
• 1 connector for IrDA interface
• 2 IDE connectors
• 1 floppy connector
• 2 ATX power supply connectors
• 1 Wake-On-LAN connector
• 1 Wake-On-Ring connector
• 1 chassis open connector
• CPU fan, system fan and second fan connectors

EXPANSION SLOTS
• 1 ADD (AGP Digital Display) slot for flat panel support.
• 3 PCI slots
• 1 Shared PCI/ISA slot
• 2 ISA slots

COMPATIBILITY
• PCI 2.2 and AC '97 compliant

CIRCUIT BOARD (PCB)
• 4 layers, ATX form factor
• 30.5cm (12") x 24.4cm (9.6")

SAFETY
• UL, cUL, FCC Class B, CE