G4V300-D

Intel® Pentium® 4 Processor and Intel® Celeron® Processor

MicroATX board with 3 PCI slots, on-board Video, Audio, and LAN Introduced: Q2/2003

Features:

- MicroATX format
- Supports Intel® Pentium® 4 Processor and Intel® Celeron® Processor
- Hyper Threading Technology
- Intel® 845GV chipset 400/533 MHz data bus
- On-board Graphics
- On-board LAN
- On-board Audio
- Supports up to 6 USB (2.0/1.1)
- Stable product life cycle
- Open chassis alarm
- Monitors fan speed, temperature, and power supply voltages

9.65" (24.5cm)



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The G4V300-D revision controlled motherboard offers the combination of Intel® Pentium® 4 or Intel® Celeron® processor power (478 pin), with three PCI slots and 1 ADD slot for AGP Digital Display Cards. This microATX motherboard has a great combination of on-board audio, on-board video, on-board LAN, and up to 6 USB 2.0/1.1 ports.

The G4V300-D features the Intel® 845GV chipset on a MicroATX format motherboard. The 533MHz system data bus provides a seamless user interaction while other features include read back capability that displays voltage, fan speed, temperature monitoring and a S/PDIF connector offering a digital audio interface.

The G4V300-D is produced under strict revision control guidelines to provide a long life cycle (3-5 yrs or more). This reduces your long-term costs for system testing, certification, and maintenance. ITOX motherboards are used in a variety of applications and in many industries including those listed below.

Markets

- ATM machines
- POS Terminals
- Networking
- Medical Imaging
- Security
- Industrial Control
- Voice Recognition
- Embedded Integration





Revision Controlled Motherboard: G4V300-D

PROCESSOR

- Intel® Pentium® 4 Processor with Hyper-Threading Technology-533MHz FSB
- 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 B1 stepping 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) or PC2100 (DDR266) or
 PC2700 (DDR333) DDR SDRAM DIMM
 Supports maximum of 2GB systems 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 Manadement
- Supports ACPI STR (Suspend to RAM) function
- Wake-On-Events include:
 - Wake-On-Keyboard/Mouse
 - Wake-On-USB
 - Wake-On-Ring
 - Wake-On-Lan
- RTC timer to power-on the system System power management supported

- GPU 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)/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
- Opened chassis alarm
- Watchdog timer function

ONBOARD GRAPHICS FEATURES

- Graphics memory
 - Shares 512MB/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



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- 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
 - 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 Intel® 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 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

PROCESSOR SOCKET

Socket 478-based Intel®

REAR PANEL I/O PORTS

- 2 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
- mini-DIN-6 PS/2 keyboard port
- 1 game 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
- connector for 1 external serial port
- connector for external line-out and mic-in jacks
- 2 internal audio connectors (CD-in and AUX-in)
- S/PDIF-out connector (audio digital interface)
- 1 connector for IrDA interface
- 2 IDE connectors
- 1 floppy connector
- 2 ATX power supply connectors
- 1 Wake-On-LAN connector
- Wake-On-Ring connector
- 1 chassis open connector
- 3 fan connectors for CPU fan, chassis fan and 2nd fan

EXPANSION SLOTS

- 1 ADD slot; supports (AGP Digital Display) card only
- 3 PCI slots

COMPATIBILITY

• PCI 2.2 and AC '97 compliant

- 4 layers, MicroATX form factor
- 24.5cm (9.65") x 24.5cm (9.65")

SAFETY

UL, FCC Class B, CE

