# Intel® Pentium® 4 /Celeron® G4C600-DG

# **Revision Controlled Motherboard**

Intel® Pentium® 4 Motherboard with Gigabit LAN CSA Interface **Extended Life Motherboard** 

# **High Performance ATX board**

# **Features:**

- ATX format
- Supports Intel® Pentium® 4 or Celeron® processor
- Intel® 875P chipset 800/533/400 MHz data bus
- On-board Gigabit LAN
- On-board Audio
- 6 expansion slots: 5 PCI and 1 AGP
- Supports up to 8 USB (2.0)
- Supports two SATA interfaces with RAID 0 support
- Monitors fan speed, temperature, and power supply voltages

9.6" (24.4cm)



The G4C600-DG revision controlled motherboard offers the combination of Intel® Pentium® 4 or Celeron® power (478 pin), with 5 PCI slots and 1 AGP slot. This ATX motherboard has a great combination of on-board audio, on-board Gigabit LAN, and up to 8 USB 2.0 ports.

The G4C600-DG features the Intel® 875P chipset on an ATX format motherboard. The 800Mhz/ 533MHz/400MHz system data bus provides a seamless user interaction while other features include read back capability that displays temperature, voltage, and fan speed.

The G4C600-DG is produced under strict revision control guidelines to provide an extended product life cycle (2-3 years 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**

12.05" (30.5cm)

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





# Revision Controlled Motherboard: G4C600-DG Intel® 875P Socket 478 ATX System Board

#### **PROCESSOR**

- Intel® Pentium® 4 Processor with Hyper-Threading Technology - 800MHz/533MHz system data bus
- Intel® Pentium® 4 processor (478-pin)
  - 800MHz/533MHz/400MHz system data bus
  - Intel® Celeron® processor (478-pin)
  - 400MHz system data bus

#### **CHIPSET**

- Intel® 875P chipset
  - Intel® 82875P Memory Controller Hub (MCH)
  - Intel® 82801ER I/O Controller Hub (ICH5R)

# SYSTEM MEMORY

- Supports dual channel (128-bit wide) memory interface
  - Each channel supports 2 DIMM sockets
- Supports up to 4GB system memory
- Supports Dynamic mode to optimize system performance
- Synchronous operation with processor system bus
  - PC2100/PC2700/pc3200 (DDR266/DDR333/DDR400) with 800MHz FSB CPU (supports PAT mode). DDR333 will run at 320MHz memory frequency when used with 800MHz FSB CPU.
  - PC2100/PC2700 (DDR266/DDR333) with 533MHz FSB CPU
  - PC2100 (DDR266) with 400MHz FSB CPU
- Supports ECC/non-ECC DIMMs
- Supports unbuffered DIMMs

#### **BIOS**

- Award BIOS, Windows® 98SE/2000/ME/XP Plug and Play compatible
- 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/Mouse
  - Wake-On-USB Keyboard
  - Wake-On-Ring (external modem)
  - 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 CPU/1.5V/5VSB/VBAT/3.3V/5V/±12V voltages and failure alarm
- Monitors CPU/chassis/2nd fan speed and failure alarm
- Automatic chassis/second fans on/off control
- Read back capability that displays temperature, voltage and fan speed

# **ONBOARD AUDIO FEATURES**

- 20-bit stereo full-duplex codec with independent variable sampling rate
- · High quality differential CD input
- True stereo line level outputs
- S/PDIF-in/out interface
- 6-channel audio output

# **ONBOARD LAN FEATURES**

- 82547El Gigabit LAN CSA interface
- Integrated power management functions
- Full dupliex support at both 10, 100, and 1000 Mbps
- Supports IEEE 802.3u auto-negotiation
- · Supports wire for management

# **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

# ICH5R SATA IDE/RAID 0 INTERFACE

- Supports two SATA (Serial ATA) interfaces which are compliant with SATA 1.0 specification (1.5Gbps interface)
- Supports RAID 0

# PROCESSOR SOCKET

Socket 478-based Intel®

# ACCELERATED GRAPHICS PORT (A.G.P.)

- Supports 1.5V AGP 8x (2.13GB/sec.) and AGP 4x (1066MB/sec.) for 3D graphics applications (AGP 2x and 3.3V AGP card are not supported)
- Supports AGP 3.0 and AGP 2.0 spec.

# **REAR PANEL I/O PORTS**

- 4 USB 2.0/1.1 ports
- 1 RJ45 LAN port
- 2 DB-9 serial port
  1 DB 25 parallel port
- 1 DB-25 parallel port
- 1 mini-DIN-6 PS/2 mouse port
  1 mini-DIN-6 PS/2 have been port
- 1 mini-DIN-6 PS/2 keyboard port
  2 gudio inclusiting out line in and min
- 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 front audio connector for external line-out and mic-in jacks
- 1 connector for an external game/MIDI port
- 2 internal audio connectors (CD-in and AUX-in)
- 1 4-channel audio output connector
- 1 S/PDIF-in/out connector
- 1 connector for IrDA interface
- 2 Serial ATA connectors
- 2 IDE connectors
- 1 floppy connector
- 2 ATX power supply connectors
- 1 Wake-On-LAN connector
- 3 fan connectors for CPU fan, system fan and 2nd fan

# **EXPANSION SLOTS**

- 1 AGP slot-1.5V
- 5 PCI slots

# **COMPATIBILITY**

- PCI 2.2 and AC '97 compliant
- Intel® AGP version 3.0

# PCB

- 4 layers, ATX form factor
- 30.5cm (12.05") x 24.4cm (9.6")

# CVEEL

• UL, cUL, FCC Class B, CE





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