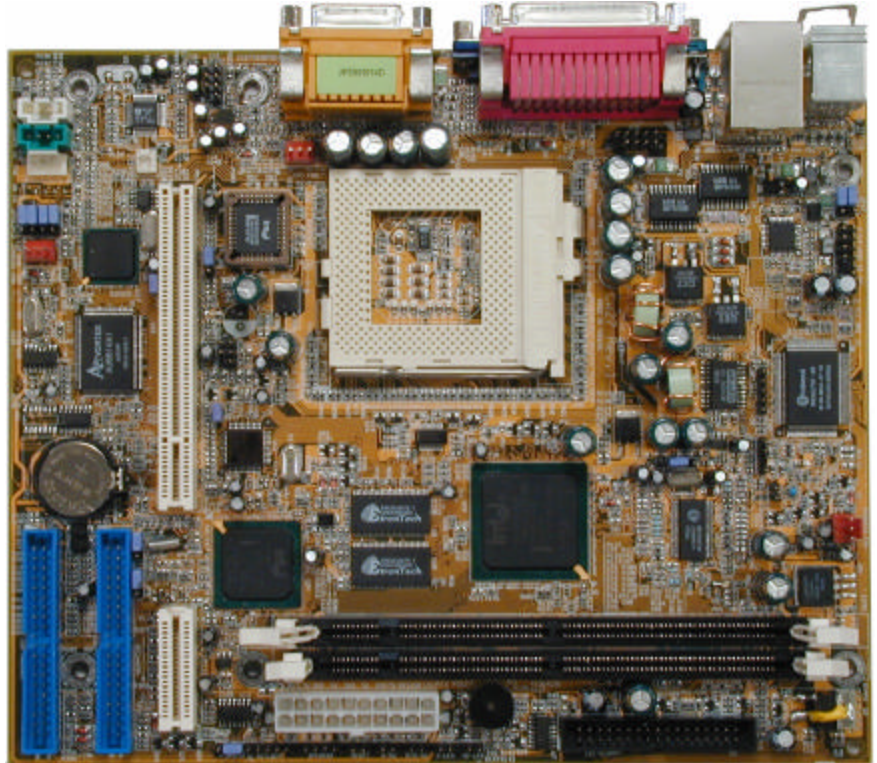# G370IF10

REVISION CONTROLLED MOTHERBOARD

The G370IF10 revision controlled motherboard packs the full power of Intel's latest Pentium® III processors, on-board video, on-board audio, and on-board 10BASE-T/100BASE-TX LAN controller into a very compact FlexATX format motherboard.

This motherboard features a Socket 370 processor socket that will accept either the Pentium III in the FC-PGA package or the economical Intel Celeron processors. Both processor types are part of Intel's embedded division's long life product line. The G370IF10 features the Intel 810 chipset with integrated video controller and the Intel 82559 Fast Ethernet Controller to enhance overall system performance . The on-board graphics accelerator, LAN controller and audio subsystem eliminate the need to add bulky expansion cards for these functions. The G370IF10 is ideal for kiosks, instrumentation, and other applications where a powerful but compact PC platform is required. Optionally available riser cards may be added to enable two PCI expansion cards, or one PCI card and one AMR card, to be added to the systems and still maintain a low profile.

The G370IF10 is produced under strict revision-control guidelines to provide a long and stable product life cycle. It is ideal for applied computing and embedded applications requiring a PC platform with long term availability. ITOX revision-controlled motherboards can reduce your long term costs for system revisions, testing, certification and maintenance.

Features:

- **Supports Intel Pentium III and Celeron processors**
- **On-board VGA graphics, audio and LAN controller**
- **Chrontel CH7007 chip provides TV format video output**
- **Compact FlexATX format**
- **Intel 810 chipset – 100MHz front side bus**
- **Intel 82559 10BASE-T/100BASE-TX controller**
- **Optional riser card adds up to 2 expansion slots**
- **Revision controlled for long and stable product life cycle**
- **Monitors fan speed, temperature and power supply voltages**
- **ISO 9001 certified design and manufacturing**

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ITOX
Applied Computing

G370IF10   REVISION CONTROLLED MOTHERBOARD

PROCESSOR
- Intel® Pentium III (FC-PGA) to 1100MHz
- Intel® Pentium III (PPGA) to 533MHz
- Intel® Celeron™ to 1100MHz
- Socket 370 equipped with a switching voltage regulator that automatically detects required voltage (1.30V to 2.05V)

CHIPSET
- Intel® 810
- 66 and 100 MHz front side bus speed

CACHE MEMORY
- Pentium III: 256kB on processor
- Celeron: 128kB on processor

SYSTEM MEMORY
- 16MB to 512MB memory using unbuffered DIMMs
- Two 168-pin DIMM sockets
- Uses x64 PC-100 SDRAM DIMM, 3.3V

BIOS
- Award BIOS, Windows® 95/98 Plug and Play compatible
- Flash EPROM for easy BIOS upgrades (4Mbit)
- Includes NCR 810 SCSI BIOS;
- Supports SCSI sequential boot-up
- Supports DMI 2.0 function

COMPATIBILITY
- Microsoft PC'98 compliant
- VESA DDC2B for Plug and Play monitors
- VESA Display Power Management Signaling (DPMS)
- PCI 2.2, AMR 1.0 and AC '97 compliant

ONBOARD VGA GRAPHICS ACCELERATOR
- Graphics memory
  - Shares 1MB of the system memory
  - Uses Dynamic Video Memory Technology (DVMT)
- 3D hyper pipelined architecture
- 2D hardware and motion video acceleration
- 9-bit precision hardware motion compensation assistance for software MPEG2 decode
- Software DVD at 30fps
- Resolutions: up to 1600x1200, 8-bit color at 85Hz refresh
- Software drivers: Windows® 95/98, Windows NT® 4.0

TV COMPATIBLE VIDEO OUT
- Uses Chrontel CH7007 chip
- Supports NTSC, NTSC-EIA and PAL TV systems
- Supports 9-bit video DAC outputs; supports VBI pass-through
- Software switch to select between TV and CRT display

ONBOARD AUDIO FEATURES
- Supports Microsoft® DirectSound/DirectSound 3D
- 32-voice wavetable synthesis
- 3D positional audio effects
- AC'97 supported with full duplex, independent sample rate converter for audio recording and playback
- Downloadable sound (DLS) level-1

ONBOARD LAN FEATURES
- Uses Intel 82559 fast ethernet controller
- Integrated IEEE 802.3 10BASE-T and 100BASE-TX compatible
- 32-bit PCI master interface
- Integrated power management functions
- Full duplex support at both 10 and 100 Mbps
- Supports IEEE 802.3u auto-negotiation

- Supports wire for management

ENERGY EFFICIENT DESIGN
- Supports ACPI spec. and OS Directed Power Management
- Supports ACPI STR (Suspend to RAM) function
- System power management supported
- CPU stopped clock control
- Wake-On-Events include: RTC timer to power-on the system, Wake-On-Ring (through internal or external modem), Wake-On-LAN, Wake-On-Keyboard/Mouse
- Hardware supports SMI green mode
- Microsoft®/Intel® APM 1.2 compliant
- Soft Power supported - ACPI v1.0a specification
- AC power failure recovery

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

DAMAGE FREE INTELLIGENCE
- Monitors processor/system temperature with alarm
- Monitors 5VSB/VBAT/1.5V/3.3V/5V/±12V/processor voltages and failure alarm
- Monitors and controls processor and chassis fans
- Read back capability that displays temperature, voltage and fan speed
- Supports Celeron™ processor thermal diode output (real processor temperature)
- Supports hardware Random Number Generator (RNG) to enable a new security and manageability infrastructure

INTEGRATED I/O
- Two NS16C550A-compatible high speed UARTs
- One SPP/ECP/EPP parallel port
- Supports up to 2.88MB floppy drive

ATX DOUBLE DECK PORTS
- 2 USB ports
- 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
- 1 game/MIDI port
- 3 audio jacks: line-out, line-in and mic-in
- 1 RJ45 LAN port

CONNECTORS
- 1 connector for 2 additional external USB ports
- 1 9-pin connector for external serial port
- 1 connector for IrDA interface
- 2 IDE connectors
- 1 floppy connector
- 1 20-pin ATX power supply connector
- 1 Wake-On-LAN connector
- 1 Wake-On-Ring connector
- 3 connectors for CPU, chassis and second chassis fans
- 1 opened chassis alarm connector
- 4 internal audio connectors (video-in, AUX-in, CD-in and TAD)

EXPANSION SLOTS
- Optional riser card slot for 2 PCI or 2 PCI/1 AMR

CIRCUIT BOARD (PCB)
- 4 layers, FlexATX form factor
- 22.8cm (9") x 19cm (7.5")