

# G586ITOX/D

Intel® Pentium® Processor with MMX™ Technology

ATX Format with up to 6 ISA Slots and on-board video

Introduced: Q4/1996

## Features:

- ATX format
- Supports Intel® Pentium® MMX™ processor and 586 class processors from AMD, Cyrix, and IDT
- Intel® TX Core Logic chipset
- Seven Expansion Slots:  
1 PCI, 1 Shared PCI/ISA, and 5 ISA
- Built-in Video Controller
- Watchdog Timer
- Long and stable product life cycle
- Monitors fan speed, temperature, and power supply voltages

9.6" (24.4cm)

12.05" (30.5cm)



G586ITOX/D

The G586ITOX/D combines the power of the Intel® Pentium® MMX™ class processors, the Intel® TX chipset and a built-in graphics accelerator, with the ability to support up to seven expansion cards on an industry standard ATX format motherboard. The on-board video controller eliminates the need to dedicate one of the expansion slots to drive a video display.

The G586ITOX/D will accept up to six full length ISA boards and is an ideal alternative to expensive passive backplane system architectures. In addition, it offers many features, like a watchdog timer and temperature monitoring, designed specifically for industrial applications.

The G586ITOX/D is produced under strict revision control guidelines to provide a long product life cycle. This makes it ideal for computer telephony, industrial control, medical instrumentation and other application environments where certification of the system is required. ITOX revision controlled motherboards reduce your long term costs of system testing, certification and maintenance.

## Markets

- Computer Telephony (CTI)
- Networking
- Medical Imaging
- Security
- Industrial Control
- Voice Recognition
- Embedded Integration



# Revision Controlled Motherboard: G586ITOX/D

## PROCESSOR

- Intel® Pentium® Processor with MMX™ Technology to 233MHz
- Intel® Pentium® Processor to 200MHz
- Cyrrix®/IBM® 6x86™ & 6x86L™ to PR166+
- AMD-K5 to PR166MHz
- AMD K6 to 300MHz; K6-2 to 266/MHz
- IDT C6 to 200MHz

## CHIPSET

- Intel® 82430TX PCI chipset

## CACHE MEMORY

- 512KB pipeline burst, direct map write-back cache onboard

## SYSTEM MEMORY

- 8MB to 256MB onboard memory
- Two 168-pin DIMM sockets using x64 EDO (60/70ns), fast page mode (60/70ns), or SDRAM (10/12/13ns), 3.3V
- Four 72-pin SIMM sockets using EDO or fast page mode x32 DRAM, (60/70ns), 5V.

## BIOS

- Award BIOS, Windows® 95 Plug and Play compatible
- Flash EPROM for easy BIOS upgrades
- Supports LS120 drive and USB functions

## ONBOARD GRAPHICS ACCELERATOR

- S3 Trio64V+ Accelerated 64-bit graphics controller
- 1 MB video memory onboard
- Video playback feature
- VESA DDC2B for Plug and Play monitors

## ENERGY EFFICIENT DESIGN

- Supports ACPI spec and OS Directed Power Management
- RTC timer to power on or wake-up the system
- Modem Ring-On/Wake-Up
- 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

## DAMAGE FREE INTELLIGENCE (D.F.I)

- Monitors processor temperature, with overheat alarm
- Monitors 5V and 12V power voltages, with failure alarm

- Automatic processor fan control to save energy, prevent system overheating, and prolong fan life

## PCI IDE INTERFACE

- Ultra DMA/33 supported (Synchronous DMA mode - data transfer rate up to 33MB/sec.)
- DMA Mode 2 Bus Master IDE (data transfer rate up to 22.2MB/sec.)
- PIO Mode 3 and Mode 4 Enhanced IDE (data transfer rate up to 16.6MB/sec.)
- Bus mastering reduces CPU utilization during disk transfer
- ATAPI CD-ROM supported

## INTEGRATED I/O

- Ultra I/O controller
- Two NS 16C550A-compatible high speed UARTs
- One SPP/ECP/EPP parallel port
- Supports 360KB/720KB/1.2MB/1.44MB/2.88MB floppy drives

## WATCHDOG TIMER

- 8 step counter (0.5/1/2/4/8/16/32/64 sec.) controlled by the BIOS

## PROCESSOR SOCKET

- 321 pin ZIF socket (Intel® Socket 7)
- Switching power module supports 2.8V, 2.9V, 3.2V and 3.5V processors

## CONNECTORS

- 2 USB (Universal Serial Bus) ports
- 1 connector for IrDA interface
- 2 DB-9 serial ports
- 1 DB-25 parallel port
- 1 15-pin VGA connector
- 2 IDE connectors
- 1 floppy connector
- 1 mini-DIN-6 PS/2 mouse port
- 1 mini-DIN-6 PS/2 keyboard port
- 1 20-pin ATX power supply connector

## EXPANSION SLOTS (5-1-1)

- Five dedicated 16-bit ISA slots
- One shared PCI/ISA slot
- One dedicated PCI slot

## CIRCUIT BOARD

- 4 layers, ATX form factor
- 12" (30.5cm) x 9.6" (24.4cm)

## SAFETY

- UL, cUL, FCC Class B, CE



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