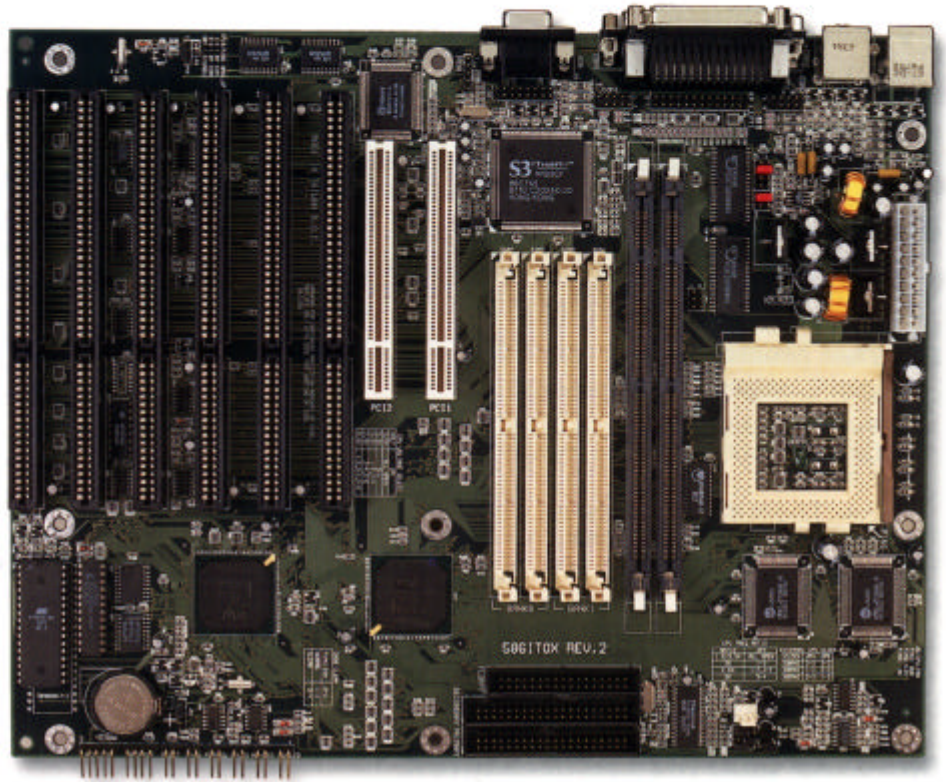# G586ITOX™
INDUSTRIAL PC MOTHERBOARD

The G586ITOX 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 will accept up to six full-length ISA cards 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.

One of the most important qualities of the G586ITOX is that it is produced under strict revision-control guidelines to provide a long and stable product life cycle. This makes it ideal for computer telephony, industrial control, medical instrumentation and other application environments where extensive testing or certification of the system is required. ITOX revision-controlled motherboards reduce your long-term costs for system testing, certification and maintenance.

Features:

- Long and stable product life cycle

- 7 expansion slots; supports up to 6 full-length ISA cards

- Intel 82430TX chipset

- Built-in video controller

- Supports Intel Pentium MMX and 586 class processors from AMD, Cyrix, STMicroelectronics and others

- ATX industry standard form factor

- Watchdog timer

- Monitors fan speed, processor temperature, and power supply voltages

- High quality, long life components

- ISO 9002 certified manufacturing process

ITOX™
a DFI company

PROCESSOR

- Intel Pentium® Processor with MMX™ Technology 166/200/233MHz
- Intel Pentium 90/100/120/133/150/166/200MHz
- Cyrix®/IBM® 6x86™ & 6x86L™ PR150+/PR166+
- AMD-K5 PR90/PR100/PR120/PR133/PR150/PR166
- AMD K6/166/200/233/266/300; K6-2/266
- IDT C6 180, C6 200

CHIPSET

- Intel® 82430TX PCIset

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)