Introduction

The full size GT-612 is a full featured, industrialized, PICMG single board computer with a high-frequency Intel Pentium RIII, Pentium RII, or Celeron Rprocessor that brings advanced CPU technology and processing power to the latest ISA/PCI (PICMG) applications and to older ISA systems. The 440BX AGP set built in to the single board computer is the most efficient and reliable way to upgrade existing ISA systems to Pentium II technology for both the performance PC market (Pentium III) and the basic PC market (Celeron).



The Pentium III, Pentium II, and Celeron processors use the PICMG form factor with a right angle Slot 1 Connector. The PICMG design contains two gold leaf edge connectors compatible with PCI and ISA connectors to allow all peripherals to interface with the processor. This lets the GT-612 take advantage of the high pin density and strict electromechanical criteria imposed on PCI and ISA connectors. The ISA bus buffer by using 48mA drivers to ensure reliable operation for backplanes with more than five ISA slots.

The GT-612 combines the many features needed for system operation into one compact single board computer, including Ultra/ DMA IDE drive controllers, high-performance serial ports, enhanced parallel port, and the latest BIOS features.

Additional enhancements to the GT-612 include two USB ports and a programmable watchdog timer. Two dual in-line memory module (DIMM) sockets support up to 512MB of synchronous DRAM (SDRAM) memory. An internal 64-bit second level (L2) cache supports 512K memory.

The 440BX AGP set in the GT-612 incorporates the latest microprocessor technology from Intel to provide the increased bandwidth needed to operate your system bus at speeds up to 100MHz.

Specification

CPU	SLOT 1 Socket to support different level CPU INTEL Pentium III up to 700+ Mhz
System Memory	16MB up to 512MB maximum, supports 2 banks 168-pin DIMM Sockets, PC-100 Compatible
Disk-on-chip	Socket for M-system disk on-chip
System BIOS	AWARD BIOS
System Chipset	82443BX Host Bridge Controller, 82371EB PCI/ISA/IDE Accelerator, supports 66/100MHz FSB
Super I/O	SMC 37C669
Bus Type	PICMG Standard
Expansion Bus	A 16-bit PC104 connector for expansion modules
Floppy Disk Interface	Supports 1.44MB and 360K floppy drives
IDE HDD Interface	Two Enhanced IDE interface, supports 4 IDE devices
	PIO Mode 4 and Ultra DMA/33/66 support, full support for LS-120 HD floppy drive
Parallel Port	Enhanced Bi-directional EPP/ECP/SPP parallel port
Serial Port	Two RS232, 16C550-compatible, FIFO buffer
USB	Dual USB connectors at rear panel via separate cable and bracket assembly (optional)
PS/2 Keyboard Connector	One 6-pin mini-DIN connector at rear panel Power supplied through +5VDC self-healing fuse
	Single 5-pin header connector for external keyboard interface
PS/2 Mouse Connector	One 6-pin mini-DIN connector at rear panel
	Power supplied through +5VDC self-healing fuse
Watchdog Timer	Can generate a system RESET, The timer interval is 0 ~ 63 sec (14 level)
Real Time Clock	+5V typical current draw: 6 - 8A
	+5V maximum current draw: 8 - 15A
	+12V maximum current draw: 600mA
	-12V maximum current draw: 200mA
Operating Temperature	32° to 140° F (0° to 60° C)
Board Size	337mm x 121mm

Order Information

GT-612

Pentium II/III Slot-1 PICMG Full size CPU Card

