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PTi's 82C802G single chip GREEN PC chipset is the optimum solution to support systems bearing the energy star standard approval. The 82C802G provides support for

Intel SLe type CPUs, as well as 486SX/DX/DX2 and write-back CPUs, such as the P24T.

The 82C802G has a built-in activity timer which monitors interrupts, DMA, video, keyboard, floppy, and hard disk accesses. Coupled with the OPTi 82C602 data buffer chip, the GREEN PC chipset offers three power control ports that control such features as a clock synthesizer chip, monitor . IX clock source, supporting systems running syncs, and STPCLK# to the CPU.

The 82C802G consists of a single chip VLSI that acts as a controller for: WB and SLe CPU, VESA local bus, L2 cache, AT bus, and ISA Bus peripherals. It is also a superset of the proven 82C801 and 82C802 core.

The 82C802G has the capability to trigger the system into a power savings mode. OEMs can now enjoy power savings, while having the flexibility of supporting both SLe and non-SLe type systems.

# Features/Benefits

- · Supports L1 write-back
- Supports STPCLK# and SMI# on LSe CPUs •
- Easy upgrade from 82C802
- Support s Intel SLe CPUs
- Monitor/timer for entering and exiting GREEN mode
- · External power management input to allow external trigger to GREEN mode
- · Two power saving modes: Auto\_GREEN and SMI\_GREEN
- Power management port to control external devices during GREEN mode when coupled with the 82C602
- · Support APM drivers to allow system to enter **GREEN** mode
- Single chip PC/AT solution: one 208 pin CMOS Plastic Flat Package (PFP)
- from 16 MHz to 50 MHz
- · Write-back, direct-mapped, back interleave cache with size selections: 64, 128, 256, and 512K
- Supports 2-1-1-1, 3-1-1-1, 2-2-2-2, and 3-2-2-2 cache burst cycles
- Support for two programmable non-cacheable regions
- Built-in TAG auto-invalidation circuitry
- Option for write-protected, cacheable Video and System BIOS
- · Supports System Management Mode (SMM) for Green-PC Management
- . Programmable cache and DRAM read/write cycles
- Supports 8 banks of 256K to 16M DRAMs for configurations up to 128 MB
- Support 3-2-2-2 DRAM burst cycles
- · Shadow RAM option
- Hidden refresh and conventional refresh support
- · VESA VL local bus support
- · Synchronous and Asynchronous AT Bus clock support







High Volume Commodity GREEN

VL Riser with Two Masters

PCI Riser with Three Masters

System Evolution

**OPTi's** 82C802G: Optimum power savings for a multitude of systems.



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