



### **128-bit Super-Socket7 North Bridge for AMD-K6-III with integrated 3D and Video Highest-performance game playing in a single integrated chip**

#### North Bridge Features

- 128-bit Data Streaming architecture for highest performance SMA/UMA
- PC99 compliant
- 100/66MHz CPU Front Side Bus, 1XXMHz ready
- Standard PC-100/66 SDRAM (up to 1 GB) PC-1XX ready
- 33 MHz PCI 2.2 compliant I/O bus
- ACPI power management
- Compatible with single-chip ALi M1535D and M1543 South Bridges

#### Performance 3D Graphics by ArtX™

- First integrated North Bridge with **hardware-accelerated geometry** transformation & lighting (T&L)
- Setup engine
- Delivers fastest real game performance
- Revolutionary new parallel rendering architecture for state-of-the-art pixel fill rates
- Industry-leading 8X Virtual AGP™ graphics performance and functionality
- Hardware features
  - Accelerated floating point Geometry and texture coordinate transformation, clipping, perspective projection
  - Accelerated specular, diffuse, and ambient lighting
  - 3D points, lines, triangles, polygons
  - Perspective-correct trilinear-filtered MIP-mapped texture mapping
  - Alpha blending
  - Exponential pixel fog
  - Depth, stencil buffering
  - Anti-aliasing
  - Framebuffer clear and copy

#### 2D/Multimedia Features

- 30fps DVD playback with hardware acceleration (motion compensation)
- 128-bit BitBLT engine, 256 raster operations
- Full color RGBA, color expansion, color keying
- YUV planar 4:2:0, 4:2:2 video overlay, video scaling and filtering

#### Display Controller

- Up to 1600x1200 non-interlaced screen resolution
- Hardware features:
  - Analog CRT monitor output
  - 32-bit full-color
  - Fully compliant VGA adapter
  - Downloadable RAMDAC, hardware cursor
- VBE 3.0 support

#### Memory interface

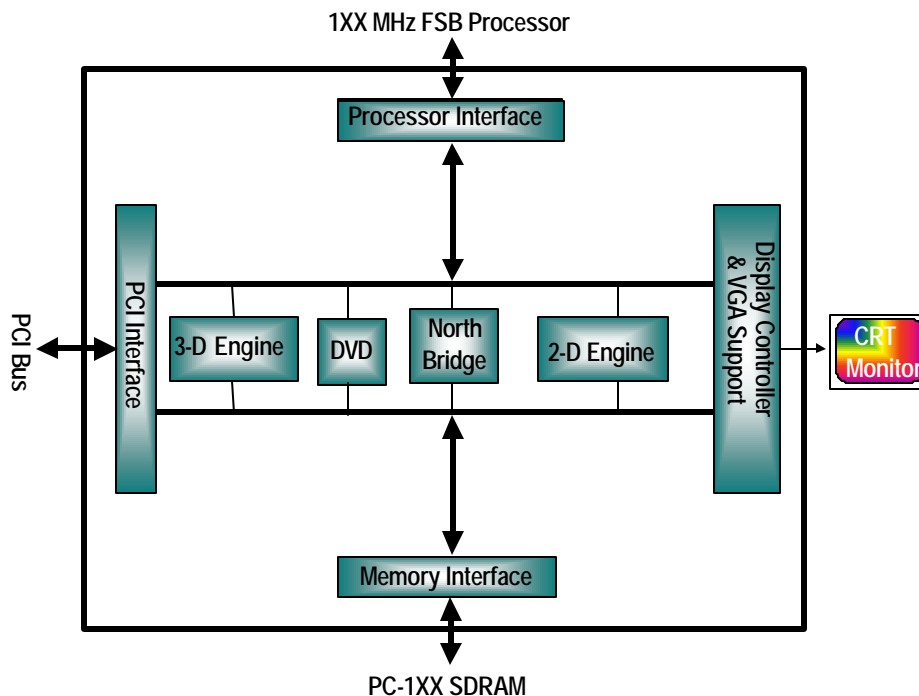
- 128-bit PC100/PC66 SDRAM, PC-1XX Ready
- Up to 2.1 Gbytes/second bandwidth

#### Drivers

- Optimized driver for DirectX 7 with Direct3D, OpenGL ICD, HWMC and GDI acceleration on Windows 98 and Windows 2000
- Dynamic memory allocation for texture
- Drivers available for Windows 98, Windows 2000 and Windows NT 4.0

#### Packaging

- 492-BGA, 35x35mm



NORTH BRIDGE PRODUCT COMPARISON				
	ALADDIN7	WHITNEY I 810	SIS540	VIA MVP4
System Memory Bus (CPU access)	128 bits	64 bits	64 bits	64 bits
Graphics Bus	128 bits	64 bits	128 bits	64 bits
Premium Game Performance (Real-world games)	YES Hardware Geometry	NO Slow games on Celeron®	NO Slow games on K6-III®	NO Slow games on K6-III®
CPU Performance	High	Low	Med	Med
Virtual AGP Speed	8X  2.1 GB/sec (with PC1XX)	4X  1 GB/sec	4X  1 GB/sec (limited by main mem only 64-bits)	4X  1 GB/sec
Socket 7 and Slot1/370 versions available	Yes	No	Yes	No
Integrated AC97 Audio	Yes w/ Ali 1535D	Yes	Yes	Yes
Integrated Super I/O	Yes w/ Ali 1535D	No	No	Yes
PC-1XX SDRAM	Yes	No	Yes	Yes
Maximum SDRAM	1 GB	256 MB	1 GB	768 MB