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Embargoed until 5/23/2005

AMD Geode™ LX 800@0.9W Processor

The x86 Everywhere Vision



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AMD is extending x86 to a growing list of new solutions and form factors.



- Expands AMD's addressable markets and increases revenue opportunities
- Advances the x86 ISA as a universal platform architecture
 - Creates increased economic opportunities for customers
 - Gives OEMs a way to increase end-product differentiation and speed time to market using x86 software and AMD processor-powered solutions
 - Drives demand through an improved digital lifestyle experience, increased product interoperability, connectivity and functionality

Consumers request dependable consumer technology products that offer long battery life and familiar operating environments - at increasingly lower price points.

Industry players drive demand by shrinking form factors, and adding functionality and connectivity - empowering a massive, fleet-footed mobile workforce and consumer base.

Designers constantly look for opportunities to create without limits; to blend features and functionality in devices; and to differentiate in fiercely competitive, fast moving markets.

AMD Geode LX 800@0.9W Processor - Design Without Compromise



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• Highest Performance per Watt

- New power of mobility = Longer battery life for most mobile applications
- Runs Windows® XP under a watt (CPU core power, <2W typical for full chipset)
- Higher memory bandwidth through DDR interface
- Higher I/O throughput through USB2.0
- Performance headroom

• Familiarity

- Brings a familiar Operating System to customers
- Simpler design and programming (no DSP or DSP code required)
- Industry standard x86 development environment

• Catalyst

- Pushes the envelope on where Windows can exist
- Drives the convergence of communications and full function computing
- Enables the next generation of mobile applications
- Standard architecture for ease of integration



* This processor operates at 500MHz. Model numbers reflect performance as described here: <http://www.amd.com/connectivitysolutions/geodelxbenchmark>.

AMD Geode™ LX 800@0.9W Processor Target Markets



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Target Markets:

- Computing Devices
- Single Board Computers
- Mobile Computers
- Access Devices
- Multimedia Devices

Target Applications:

- 17 Beta customers actively working designs
- At least one lead customer for each of the following target applications
 - Thin clients
 - IP Set Top Box
 - Router/FW
 - Industrial PC
 - LCD Wall Display
 - Tablet PC
 - HDTV
 - Mobile/μPC
 - PVR
 - POS Kiosks



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AMD Geode LX 800@0.9W Processor Technical Details

Geode™ Family of Silicon Products



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<p>Geode™ GX1 Integrated Processor</p> <p>CS5530A</p>	<p>Geode™ SCx200 Integrated Processor</p> <p>Single Chip Solution</p>	<p>Geode™ SC1100 Integrated Processor</p> <p>Single Chip</p>	<p>Geode™ GX Integrated Processor</p> <p>Geode™ CS5535 Core Logic</p>	<p>Geode™ LX Integrated Processor</p> <p>Geode™ CS5536 Core Logic</p>	<p>Geode™ NX AMD Athlon™ processor- based</p> <p>Customer Selected NB/SB</p>
<ul style="list-style-type: none"> ● 0.18μ CMOS ● 200-333MHz ● 1.6V - 2.2V core ● 16K L1 cache ● 0.8W - 1.2W typ ● 85Hz refresh rate ● SDRAM Memory (111MHz) ● USB ● IDE, I/Os 	<ul style="list-style-type: none"> ● 0.18μ CMOS ● 200-300MHz ● 1.6V - 2.2V core ● 16K L1 cache ● 0.8W - 1.2W ● SDRAM Memory (111MHz) ● VIP ● RTC ● NTSC/PAL ● Video Scaling ● Single Chip ● LPC ● USB, I/Os 	<ul style="list-style-type: none"> ● 0.18μ CMOS ● 200-266MHz ● SDRAM Memory ● Integrated SOC ● No Graphics 	<ul style="list-style-type: none"> ● 0.15μ CMOS ● 333-400MHz ● GeodeLink™ Arch ● 16K/16K I/D L1 ● DDR SDRAM Mem Controller up to 266MHz ● 1.5 V Core 	<ul style="list-style-type: none"> ● 0.13μ CMOS ● 500 MHz ● DDR SDRAM up to 400MHz ● 2x performance of GX2 ● Scalable L1 64K I/ 64K D ● Scalable L2 128KB ● Video Input Port ● Improved Graphics ● Onboard AES ● 1.2V Core 	<ul style="list-style-type: none"> ● 0.13μ CMOS ● 667Mhz-1.0-1.4 Ghz ● 266Mhz FSB ● 1.0V – 1.25V core ● 128K L1 cache ● 256K L2 cache ● 6W-14W typ

Available Available Available Available 2Q'05 Available

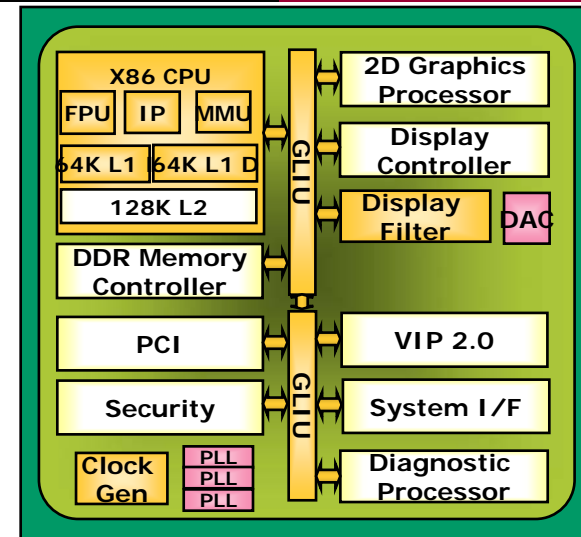


AMD Geode™ LX 800@0.9W Processor Feature Set

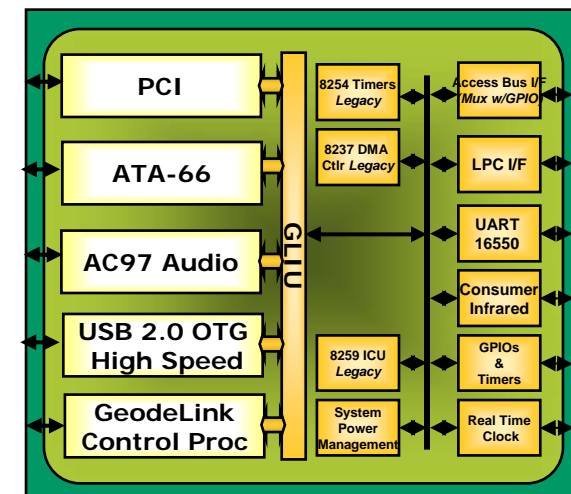


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- CPU
 - ~2x integer performance of GX533
 - 64K I /64K D L1 cache
 - 128K L2 Cache
 - 500MHz typical
- Memory
 - DDR 400MHz
- HD VIP – 8/16 bit
- Graphics
 - Optimized 2D graphics
 - Rotation BLIT graphics/video
 - ~2x increase 2D performance
- SD & HD Video/Graphics Filtering
 - HD Video Bypass
 - Per pixel alpha blending
- Security
 - True Random Number Generator
 - AES 128 ECB/CBC encrypt/decrypt



AMD Geode™ LX 800@0.9W Processor



AMD Geode™ CS5536 companion device

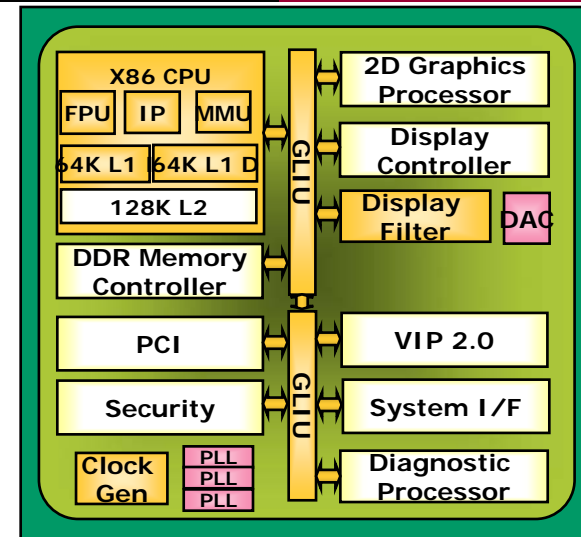
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AMD Geode™ LX 800@0.9W Processor Feature Set

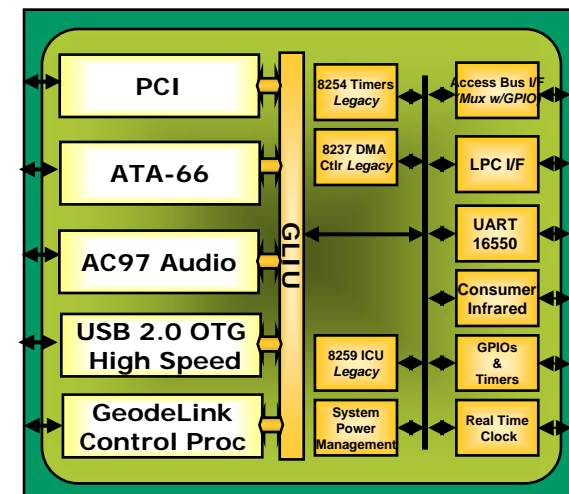


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- Display
 - Single HD VOP 2.0 output
 - 1920x1440x32x85Hz CRT output
 - 1600x1200 TFT output
- PCI 66 MHz
- USB 2.0 High Speed (4 ports)
 - 3 Host Ports, 1 Host/Client/OTG
- ATA 66
- LPC Bus, SM Bus, UART
- AC '97 DMA audio
- 16 GPIO (muxed)
- RTC
- Geodelink™ Power Management Controller
- Flash Options
 - LPC based
 - NAND/NOR(IDE mux)
- 0.13u, 1.2V core



AMD Geode™ LX 800@0.9W Processor



AMD Geode™ CS5536 companion device

Product Features and Benefits



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Features	Benefits
Superior Power/Performance	Greater performance at less power and heat
2 Chips Solution Integrated NB/Processor	Size (board Real estate) Power consumption, Cost, Performance
Integrated High-Definition CRT/LCD Controller	Supports High-Definition needs. No external display controller required
Support of VIP/VOP	Required for emerging IP-STB and HDTV applications
AES 128 Encryption Engine	Growing need for Security Encryption, DRM, etc.

Trademark Attribution



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