

Powerful Software Development Capability
for the AMD Geode™ NX Processors



Product Overview

The AMD Geode™ NX DBI500 development board is an integrated hardware and software system solution that leverages the power of the AMD Geode™ NX processors. The NX DBI500 development board is a complete solution that optimizes the design of high-performance, low power-consumption solutions for embedded applications. It is a comprehensive evaluation unit for customers designing with the NX processor family.

Turnkey Solution

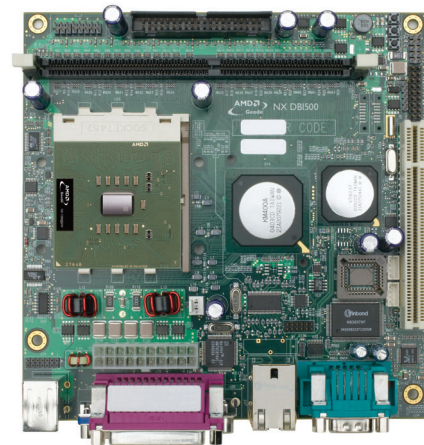
The AMD Geode NX DBI500 development board is a turnkey solution that integrates a processor, memory, and peripherals together on a single board along with debugging assist features and software. The NX DBI500 development board underscores AMD's commitment to providing customers with integrated systems that address hardware and software needs, and positions AMD as a valued partner in the development of future embedded solutions.

New Names to More Accurately Reflect Performance

AMD Geode Solutions have received new model numbers to better reflect total performance beyond just megahertz. This presentation of attributes gives designers greater understanding of the capabilities of AMD Geode Solutions.

Test Processor Performance

The NX DBI500 development board integrates hardware and software into a complete ready-to-run system that enables developers to test the performance of the AMD Geode™ NX processors in a variety of demanding embedded applications.



Bring High-Performance Embedded Applications to Market Faster

The NX DBI500 development board provides a complete platform for software development and hardware validation. The system incorporates an NX processor, VIA KM400A PC Chipset, DDR SDRAM, PCI expansion slot, USB 2.0, CRT Out and AC '97 Audio, and I0/I00 Ethernet Port onto a Mini-ITX form factor single board. The result is a fully integrated system that provides PC-like features and capabilities.

The unit can also be used to evaluate processor performance and as an implementation guide for routing and layout.

Enhanced Capability

The AMD Geode NX DBI500 development board delivers the same value-added development and validation solutions to other members of the AMD Geode™ NX processor family, including the AMD Geode NX I750@I4W processor** and the AMD Geode NX I250@6W processor*** Together with the AMD Geode NX I500@6W* processor, this family of powerful x86 solutions provides a range of features and an optimized combination of low power and high performance to give designers broader versatility. Each of these processors is designed to be fully compatible with the NX DBI500 development board.

*This processor operates at 1GHz. Model number reflects performance as described here: <http://www.amd.com/connectivitysolutions/geodenxbenchmark>.

**This processor operates at 1.4GHz. Model number reflects performance as described here: <http://www.amd.com/connectivitysolutions/geodenxbenchmark>.

***This processor operates at 667MHz. Model number reflects performance as described here: <http://www.amd.com/connectivitysolutions/geodenxbenchmark>.

AMD Geode™ NX DBI500 Development Board

Primary Features

Memory Devices

- DIMM memory support for DDR DRAM module of up to 1GB
- 512Mbit Spansion™ Boot FLASH memory

Expansion

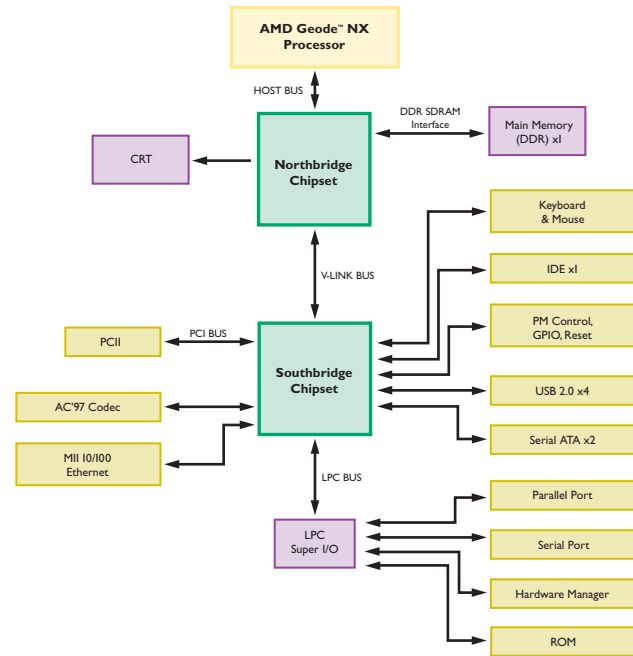
- One PCI 2.2 Expansion slot

Debug Assist Features

- Test Points for Key signals
- Hardware Debug Tool Interface (software & adapter hardware available through 3rd party)
- LEDs for easy notification of system activity

On-Board Peripherals

- AMD IO/100 Ethernet PHY (Am79C874VC)
- USB 2.0 Port
- IDE Port
- Serial ATA Port
- CRT Connector
- AC '97 Audio CODEC stereo with optional 6-channel audio support
- S/PDIF Audio output
- I6550 compatible Serial Port
- EPP/ECP Parallel Port
- IRDA or CIR connector



Software Included

- Custom BIOS implementation
- Quick Start Guide
- Peripheral Initialization routines
- Diagnostics
- Example Code
- Development tools

System Documentation

- User's guide
- Hardware datasheets
- Complete set of hardware design files, including schematics, layout, and BOM

About AMD

AMD (NYSE:AMD) designs and produces innovative microprocessors, Flash memory devices and low-power processor solutions for the computer, communications and

consumer electronics industries. AMD is dedicated to delivering standards-based, customer-focused solutions for technology users, ranging from enterprises and governments to individual consumers.

For more information visit www.amd.com.

For more information, please visit www.amd.com/connectivitysolutions/geodenx



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