

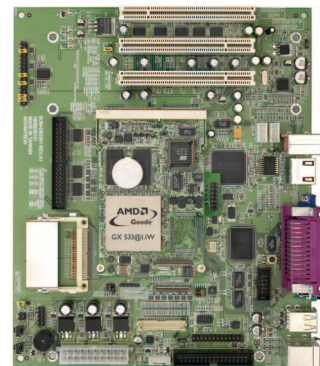
High-Performance Tools for Developers



Product Overview

The AMD Geode™ GX DB533 development board is a high-performance tool designed to enable developers to write and test software code and to simulate hardware for mobile, thin clients and other applications. The GX DB533 development board consists of two separate components: the CPU module board and the base board. This configuration, which can be easily incorporated into a finished product without modification, enables developers to quickly create a wide range of products targeted to many applications.

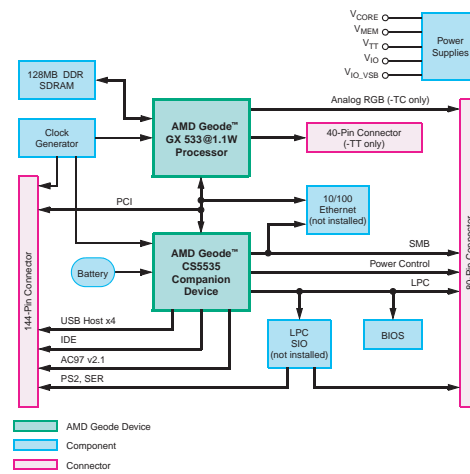
AMD Geode™ Solutions have received new model numbers to better reflect total performance beyond just megahertz. This presentation of attributes gives designers greater understanding of the capabilities of AMD Geode Solutions.



Flexible Components

Using the AMD Geode™ GX DB533 development board, developers can leverage the two-board configuration for maximum design flexibility. Different versions of the CPU module board are available – GX DB533-TC for CRT interface or the GX DB533-TT for TFT interface. Users can easily develop a separate base board to use with either CPU module.

The design of the GX DB533 development board is based on Advantech's SOM I44 interconnection methodology. The entire system can be purchased directly from AMD, or individual component boards can be purchased from Advantech. System BIOS is provided by Insyde Software's XpressROM (on board) or General Software's Embedded BIOS (on CD).



CPU Module Board

Primary Functions

- Software Development and Validation
 - Application software for concept design
 - BIOS firmware validation
- Hardware Design and Development
 - Design development and emulation
 - Proof-of-concept
 - Embedded product
- On-board Silicon Evaluation
 - AMD Geode™ GX 533@1.1W processor*
 - AMD Geode™ CS5535 companion device

Technical Specifications

Processor, Chipset and Supporting Chips

- AMD Geode™ GX 533@1.1W processor
- AMD Geode™ CS5535 companion device
- 128MB Double Data Rate (DDR) SDRAM
- AC97 codec
- NSC PC87364 LPC Super I/O
- NSC DP83816 LAN controller
- 2Mbit firmware hub boot Flash ROM in 32-pin PLCC socket
- Alternative Advantech configuration supports different Super I/O and LAN configurations on CPU module

*This processor operates at 400MHz. Model numbers reflect performance as described here: <http://www.amd.com/connectivitysolutions/geodegxbenchmark>.

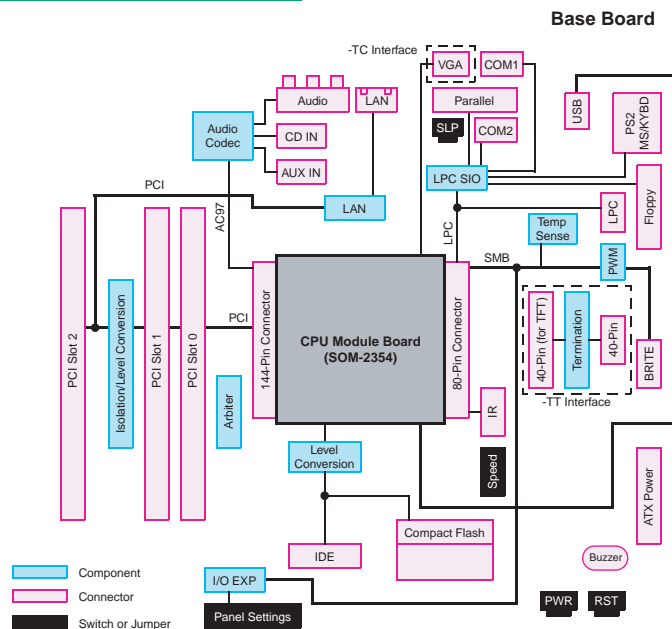
AMD Geode™ GX DB533 Development Board

Standard Connectors, Configurations and Interfaces

- Three PCI slots
- One ATA-5 (UltraDMA 66) IDE interface
- One CompactFlash connector on IDE
- Two USB v1.1 port connectors
- Individual PS/2 keyboard and mouse connectors
- Floppy Disk Drive connector
- DB-9 RS232 serial connector
- I/O-pin header for RS232
- DB-25 Line Printer Terminal connector
- VGA analog monitor connection
- LCD header connection
- Backlight inverter power connector
- Brightness control via software or hardware (variable resistor)
 - LCD panel configuration selection jumper
- Infrared header
- Audio
 - Mic in, Line in, Line out
 - CD in and Aux out
- LEDs for UDMA, power and 3.3VSB
- PC buzzer
- RJ-45 Ethernet connector

Memory and Flash Configurations

- I28MB DDR SDRAM
- BootROM Options
- Embedded EEPROM for storing system parameters and boot options
- Real-time clock



Software Support

- Operating System Support
 - Linux 2.4
 - Windows® CE 4.2
 - Windows XPe
- Firmware: XpressROM
 - Provides standard BIOS functionality
 - AMD's VSA2 (Virtual System Architecture™) technology for legacy functions
 - Legacy USB support
 - Stored in FlashROM
 - Pre-boot execution environment integration code

Mechanical

- FlexATX form-factor (229mm x 191mm)
- Soft On/Off, Sleep and Reset controls

Power Management

- Standard ATX I/O
- Onboard regulators for GX 533@1.1W* and CS5535 core, V_{MEM} and V_{REF}
- Support for Suspend-to-RAM
- NSC LM82 for CPU temperature monitoring

*This processor operates at 400MHz. Model numbers reflect performance as described here: <http://www.amd.com/connectivitysolutions/geodegxbenchmark>.

About AMD

AMD (NYSE:AMD) designs and produces microprocessors, Flash memory devices and system-on-chip solutions for the computer, communications and consumer

electronics industries. AMD is dedicated to helping its customers deliver standards-based, customer-focused solutions for technology users, ranging from enterprises to government agencies and individual

consumers. Founded in 1969, AMD is a Standard & Poor's 500 company with global operations and manufacturing facilities in the United States, Europe, Japan and Asia.

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



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