



# AMD GEODE™ NX SBC

## PRODUCT HIGHLIGHTS

- Compact Mini-ITX form factor
- 5 yr product lifecycle commitment
- Low power + high performance SBC

## ORDERING INFORMATION

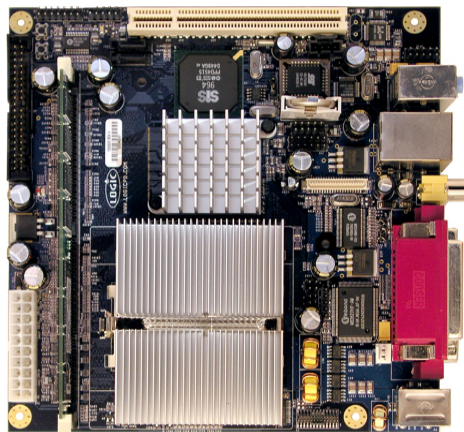
- Development Kits available from Logic and AMD:
  - Part # NX-DB1500S-EVAL-KT-L (Logic)
  - Part # NX-DB1500S-EVAL-KT (AMD)
- Geode SBCs are available from Logic

## CONTACT

For more information on our Embedded Product Solutions, please contact Logic Sales at [product.sales@logicpd.com](mailto:product.sales@logicpd.com) or 612.672.9495.

The AMD Geode™ NX Single Board Computer (SBC) is a product-ready software and hardware platform for developing embedded products with less time, less cost, less risk ... more innovation.

The AMD Geode™ NX SBC is a complete Mini-ITX computing platform offering the essential features for building small form factor PC systems. The Mini-ITX mainboard measures 170mm x 170mm and is aimed at the development of thin clients, medical devices, industrial devices, wireless network devices, set-top boxes, and more. The Geode NX SBC is the ideal foundation for OEMs developing low power, low noise, and compact systems for use in commercial, industrial, and medical settings.



Actual Size (170mm x 170mm)

- **Processor** AMD Geode™ NX 1500@6W processor (development kit processor)
  - Running at 1 GHz with 266 MHz frontside bus
  - AMD PowerNow!™ technology support
  - Fanless heatsink
  - Supports AMD Geode™ NX 1250 and NX 1750 processors
- **Memory** DIMM support for PC 2700 DDR DRAM module up to 1 GB
  - 256 MB module included with kit
- **Chipset**
  - SIS741CX Northbridge
  - SIS964 Southbridge
- **Display** Support via SIS741CX Northbridge
  - One VGA, one TFT flat panel adapter
  - High performance 3D engine
  - High performance 2D accelerator
  - MPEG-2/1 video decoder
- **Touch Screen** Optional 4-wire resistive touch panel support
- **Network Support** SIS900 compatible
  - Full duplex 10/100base-TX
  - Supports "Wake on LAN"
- **Audio** AC97 audio controller interface (SIS7012 Compatible)
  - AC97 v2.3 compliance
  - Realtek ALC203 2-channel audio codec
  - Mic in, line in, headphone out
- **Expansion** One PCI 2.2 expansion slot
- **USB**
  - Support for six USB 2.0 high speed (480 Mbps) host connections
  - Two ports on back panel
  - Four ports through on board headers
- **IO Ports** Winbond W83627 SuperIO controller
  - Parallel port
  - Two serial (one DB9, one header on-board)
  - System/CPU temperature/voltage monitor
- **Power Management** ACPI 2.0
  - Support for S1, S3, and S5 sleep states
- **Software**
  - BIOS from AMI, Award, Insyde Systems
  - Windows CE Board Support Packages (BSPs)
  - Windows XP/XPe and Linux driver support
- **Mechanical** 6.7" (170mm) x 6.7" (170mm) x 1.3" (33mm)



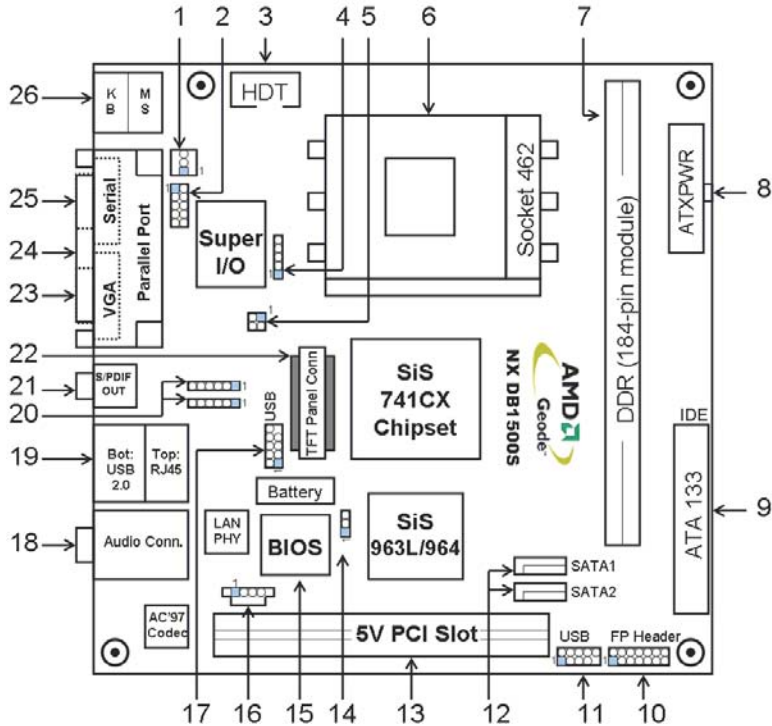
Gold-level Member





# AMD GEODE™ NX SBC

## ■ Geode NX Block Diagram



- 1 CPU Fan Connector
- 2 Serial Port Header (COM2)
- 3 HDT (Hardware Debug Tool Conn.)
- 4 IR Header
- 5 LCD VCC Header
- 6 CPU Socket (Socket 462)
- 7 DDR DIMM Slot
- 8 ATX Power Connector
- 9 IDE Connector
- 10 ATX Front Panel Header
- 11 USB 2.0 Header
- 12 Serial ATA Connectors
- 13 PCI Slot
- 14 Clear CMOS Jumper
- 15 Flash Memory
- 16 CD IN Connector
- 17 USB 2.0 Header
- 18 Audio Ports
- 19 RJ45 & USB 2.0 Ports
- 20 Backlight Header/Keypad Header
- 21 S/PDIF Digital Audio Out Port
- 22 TFT Panel Connector
- 23 VGA Port
- 24 Parallel Port
- 25 Serial Port
- 26 PS/2 Keyboard & Mouse Port

Note: Board layout subject to change

## ■ Geode NX SBC Ordering Options

- SBCNX-10-000AC: Geode NX SBC without processor or DIMM memory
- SBCNX1500-10-000AC: Geode NX SBC with Geode NX 1500 processor and without DIMM memory
- SBCNX1500-10-700AC: Geode NX SBC with Geode NX 1500 processor and 256MB DIMM memory

## ■ Single Board Computer Advantage

*Development Board / SBC and optional Display Kit*



Development Board simplifies:

- » Application specific code development
- » Evaluation of the Geode processor
- » Transfer of Code/OS/Drivers into production

*Custom Form Factor/ Mini-ITX SBC*



Single Board Computer:

- » Fits standard Mini-ITX form factor
- » Design Custom SBC to fit your product form factor

*Final Product*



Final Product results:

- » Accelerated time to market
- » Reduced development cost
- » Customer focuses on core competencies

Get to Market Faster with Logic's Single Board Computer