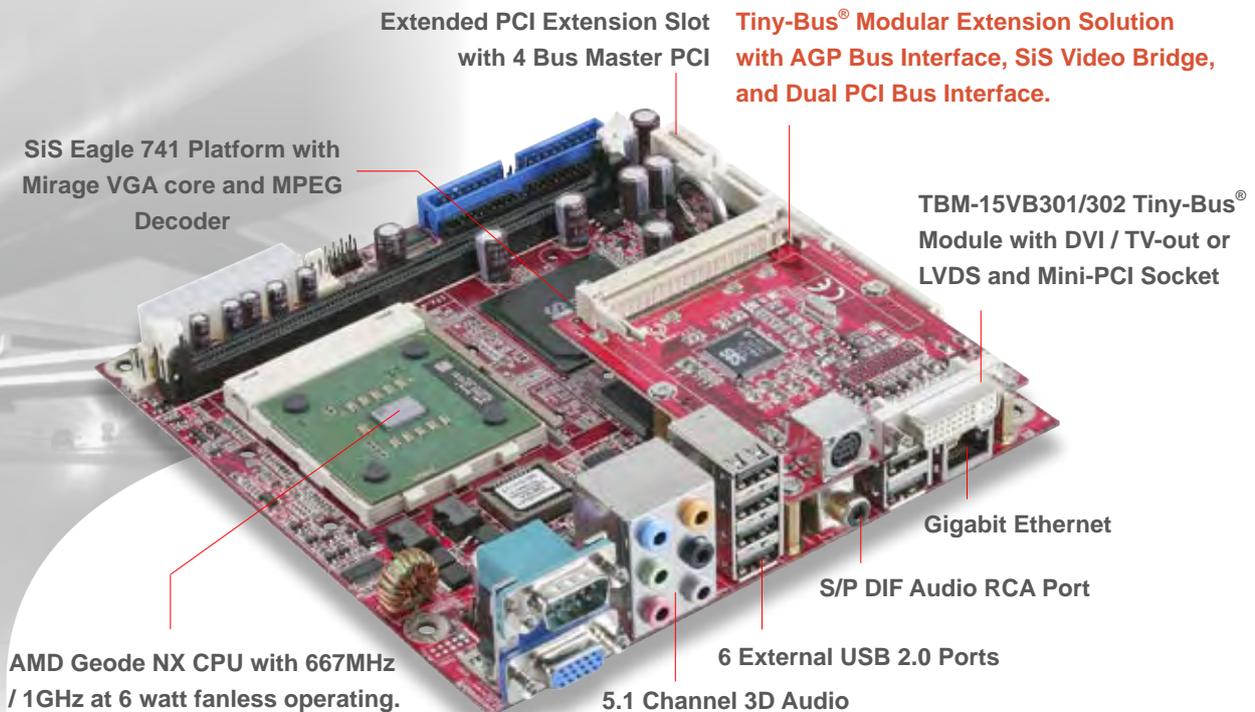


ITX-6700

Mini-ITX AMD Embedded Geode NX EmBoard
with Tiny-Bus® Modular Extension Solution



Overview

The Liantec ITX-6700 is an all-in-one industrial embedded motherboard based on the Mini-ITX form factor and AMD embedded Geode NX platform with AMD low power Geode NX CPU, SiS Eagle 741CX chipset, and features the Liantec Tiny-Bus® Modular Extension Solution with AGP bus interface, SiS video bridge, and dual bus master PCI bus interface. With the AMD embedded Geode NX technology, Mini-ITX form factor and the embedded Tiny-Bus® Modular Extension Solution, the ITX-6700 offers the Small Form Factor (SFF) industrial x86-based computing solution with embedded and flexible modular expansibility.

Key Features

- AMD embedded Geode NX CPU with K7 x86 core with 266 MHz system bus, 128KB L1 / 256KB L2 cache, supports 3DNow!, MMX and SSE technology.
- AMD Geode NX1250 CPU with 667MHz and Geode NX1500 CPU with 1GHz supports fanless operating with 6 watt of power consumption typically.
- SiS embedded Eagle 741 platform with built-in Mirage 3D VGA core, BIOS selectable 8 to 64 MB shared video memory and MPEG-1/2 video decoder.
- Tiny-Bus® SiS video bridge module with LVDS or DVI and TV-out interfaces.
- Onboard 5.1 channel AC97 3D audio and Gigabit Ethernet interface.
- One PCI slot supports four bus master PCI bus interfaces.
- **Tiny-Bus® Modular Extension Solution with 4x / 8x AGP bus interface, SiS video bridge and dual bus master PCI bus interface.**
- 6 external and 2 internal Hi-Speed USB 2.0 ports.
- Compact, slim type and fanless barebone solutions are available.



ITX-6700

Mini-ITX AMD Embedded Geode NX EmBoard
Intel VGA, Audio, Gbit Ethernet, SATA
Optional LVDS, DVI, TV-out, Mini-PCI Socket
and Tiny-Bus® Modular Extension Solution



Industrial
Mini-ITX EmBoard

Embedded Single
Board Computer

Tiny-Bus
Expansion Module

Fanless
Computing Platform

Industrial
Computing Platform

Industrial
Embedded Peripheral

Form Factor

Mini-ITX form factor at 170 x 170 mm or 6.7 x 6.7 inches

CPU

AMD embedded Geode NX CPU with K7 x86 core
AMD Geode NX1250 with 667MHz, Geode NX1500 with 1GHz
Optional AMD Geode NX1750 with 1.4GHz (need fan)

Memory

One 184-pin DDR DIMM socket
supports 1GB non-ECC / registered DDR SDRAM

Chipset

SiS embedded Eagle 741CX northbridge and 964 southbridge

Watchdog Timer

Programmable system reset watchdog timer

Serial ATA (SATA) and IDE (PATA) Port

40-pin primary and 44-pin secondary UltraATA100 IDE ports
2 Serial-ATA (SATA) 150Mbps ports with RAID level 0/1

Extension Bus Interface

One extended PCI slot supports four bus master PCI bus
(one PCI bus master shared with Liantec Tiny-Bus®)
Liantec Tiny-Bus® embedded modular extension solution with
AGP, SiS VB-based video bridge, and PCI bus interface

Video Interface

SiS Eagle 741CX chipset built-in Mirage VGA core
External DB15 female VGA connector on rear I/O panel

DVI and TV-out Interface (with TBM-15VB301)

TBM-15VB301 Tiny-Bus® SiS 301 video bridge module
DVI interface supports up to 1600 x 1200 of resolution
TV-out interface supports AV / S-Video with NTSC / PAL mode
External DVI and AV / S-Video TV-out connector

LVDS Interface (with TBM-15VB302)

TBM-15VB302 Tiny-Bus® SiS 302ELV video bridge module
Supports dual 24-bit LVDS with 1920 x 1600 of resolution
Onboard 40-pin Hirose DF13-40DP-1.25V LVDS connector

Audio Interface

SiS 964 chipset with onboard ALC655 AC97 audio codec
External 6 phone jack and S/P DIF RCA connector

Ethernet Interface

Onboard RTL8110SC-32 Gigabit Ethernet controller
External RJ45 connectors with LED on rear I/O panel

Hi-Speed USB 2.0 and Multi-I/O Port

6 external and 2 internal Hi-Speed USB 2.0 ports
One external and one internal RS232 COM port

External Rear I/O Port

DB15 female VGA and DB9 male COM port
5.1 channel and S/P DIF audio port
Four USB 2.0 ports
S/P DIF In/Out RCA connector
Dual USB ports
RJ45 Gigabit Ethernet port
Other external ports on add-on Tiny-Bus® module

Environment

Power Requirement: onboard 20-pin ATX power connector
Board Dimension: 170 x 170 mm or 6.7 x 6.7 inches (L x W)
Operation Temperature: 0 ~ 60°C (32 ~ 140°F)

Tiny-Bus® Modular Extension Solution

The ITX-6700 EmBoard supports the embedded Tiny-Bus®
Modular Extension Solution with AGP, SiS VB (Video Bridge)
and PCI bus interfaces including (but not only) :

- **TBM-15VB301** : SiS VB DVI, SDTV and Mini-PCI Module
- **TBM-15VB302** : SiS VB LVDS and Mini-PCI Module
- **TBM-1200**: Dual Mini-PCI Type-III/A/B Module
- **TBM-1210**: Dual PCMCIA CardBus and Mini-PCI Module
- **TBM-1220**: 30fps Video Capture and Mini-PCI Module
- **TBM-1222**: 4-CH/120fps Video Capture, Mini-PCI Module
- **TBM-1230**: 4-Port Switch Hub and Mini-PCI Module
- **TBM-1240**: 4-Port Gbit Ethernet and Mini-PCI Module
- **TBM-1250**: 4-/8-Port RS232 COM and Mini-PCI Module
- **TBM-1260**: IEEE1394 Firewire and Mini-PCI Module

Other customized compatible Tiny-Bus® modules for ODM /
OEM projects. For the further information about Tiny-Bus®
modules, please visit the website at <http://www.liantec.com>.

Ordering Code

ITX-6700L Mini-ITX AMD Embedded Geode NX EmBoard
with VGA, Audio, Gbit Ethernet, SATA
and Tiny-Bus® Modular Extension Solution

ITX-6700LDTP (with TBM-15VB301)

ITX-6700L but with TBM-15VB301 Tiny-Bus SiS VB-based
DVI, TV-out and mini-PCI Type-III/A/B module

ITX-6700LXP (with TBM-15VB302)

ITX-6700L but with TBM-15VB302 Tiny-Bus SiS VB-based
Dual 18-/24-bit LVDS and mini-PCI Type-III/A/B module

ITX-6700L-NX1500 (Fanless Operating)

ITX-6700L with AMD Geode NX1500 1.0GHz CPU

Customized ODM/OEM Service

Customized ODM/OEM service based on the ITX-6700
EmBoard with AMD Geode NX CPU, optional function
configuration and embedded Tiny-Bus® extension modules.

For the further information, please visit the website of <http://www.liantec.com>.