



Main Features

- ♦ Low Power ETX CPU Module
- ♦ On-Board AMD Geode™ LX 800 with 128 KB L2 Cache
- ♦ Supports Non-registered Non-ECC DDR up to 1GB
- ♦ Intel® 82551ER 10/100 Ethernet Controller
- ♦ VIA VT1613G CODEC - AC'97 Audio Interface
- ♦ Supports LVDS Interface
- ♦ Supports on-board 2 x SATA
- ♦ Supports on-board Compact Flash Socket

Product Overview

The ICES 122 is an ETX CPU module with an AMD Geode™ LX800 processor and AMD Geode™ CS5536 chipset supporting one DDR SO-DIMM socket up to 1GB Non-ECC Non-Registered DDR SDRAM. The ICES 122 chipset supports ISA, PCI, IDE, LPT, VGA, LVDS, serial, USB interfaces and others. The on-board provided 2 x Serial ATA and Compact Flash socket and Intel® 82551ER 10/100 Ethernet controller and VIA VT1613G CODEC provide one LAN port and an AC'97 audio interface through the ETX connectors for your external communications. The ICES 122 follows the ETX standard x 1, x 2, x 3, x 4 connections between the ETX CPU module and I/O carried board, thus it is compatible with the carried board from other brands like Kontron and Advantech. The ICES 122 provides cost effective, versatile functionality and is an ideal ETX module for embedded applications.

Specifications

CPU Support

- ♦ AMD Geode™ LX800, 500MHz
- ♦ 64 KB I-cache/ 64 KB D-cache
- ♦ 128 KB L2 cache

Main Memory

- ♦ 1 x 200-pin SODIMM socket supports up to 1GB Non-ECC Non-Registered DDR SDRAM

Chipset

- ♦ AMD Geode™ CS5536

BIOS

- ♦ Award System BIOS
- ♦ Advanced Power Management support
- ♦ 8 Mbit flash ROM

On-board LAN

- ♦ Intel® 82551ER 10/100 Ethernet.
- ♦ Supports PEX LAN boot Function
- ♦ Signals down to I/O Board

Display

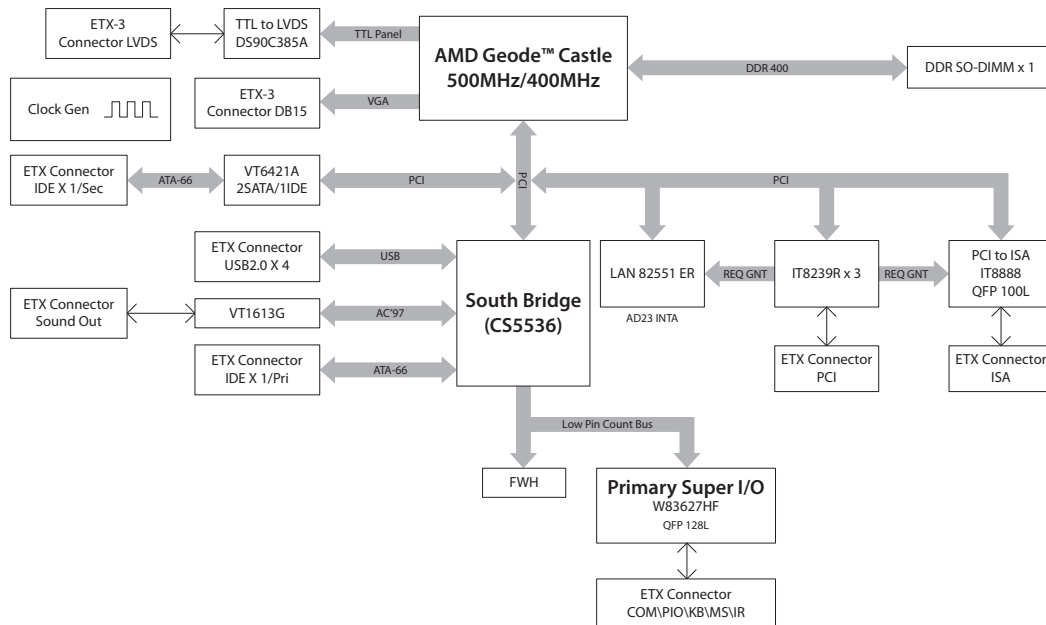
- ♦ The Geode™ LX800 with integrated graphics, supports both standard VGA and TFT

- ♦ Supports CRT resolution up to 1920 x 1440 at 85 Hz
- ♦ Supports Single Channel 24-bit, Up to 1600 x 1200 at 60 Hz for TFT
- ♦ Supports CRT and LVDS down to the I/O board

ETX Connector

- ♦ X 1
 - 4 x 32-bit/33 MHz PCI
 - VIA VT1613G - AC'97 Audio Interface (Line-in/ Line-out/ Mic-in)
 - 4 x USB 2.0
- ♦ X 2
 - ISA Interface
- ♦ X 3
 - 1 x VGA
 - 1 x LVDS
 - 1 x Parallel port
 - 1 x KB/ Mouse
 - COM1 and COM2
 - 1 x IrDA
- ♦ X 4
 - 1 x Ethernet (10/100)
 - SMBus/ I2C
 - 2 x IDE

Block Diagram



On-board I/O

- 2 x SATA Connectors
- 1 x CF Socket

Power Requirements

- +5 V, +5VSB (for ATX), follows ETX power and ground pin definitions
- Support AT and ATX Power mode

Dimensions

- 95mm (W) x 114mm (L) (3.7" x 4.5")

Environment

- Operating temperature: 0°C to 60°C
- Storage temperature: -20°C to 80°C
- Relative humidity:
 - Operating 10% - 90%, non-condensing
 - Non-operating 5% - 95% (non-condensing)

Certifications

- CE approval
- FCC Class A

Ordering Information

• ICES 122 (P/N: 10K00012200X0)

ETX Module AMD Geode™ LX800 and CS5536 with 128 KB L2 cache, VGA/ISA/PCI/IDE/LVDS/Audio/COM/LPT/USB 2.0/LAN Interface