

Main Features

- ♦ AMD Geode™ LX800 Processor with 128 KB L2 Cache
- ♦ VIA CS5536 Integrated Chipset
- ♦ 1 x SO-DIMM Socket, Up to 1GB Non-ECC/Non-registered DDR SDRAM
- ♦ 1 x Realtek 8139C+ 10/100 Ethernet Controller
- ♦ Supports CRT/TTL LCD
- ♦ CompactFlash Socket/PCI 104 Interface

Product Overview

The EBC 320 is a 3.5" embedded board featuring AMD LX800 processor supporting one DDR SO-DIMM socket, up to 1GB Non-ECC Non-Registered DDR SDRAM. The EBC 320 incorporates AMD CS 5536 chipsets supporting un-registered non-ECC DDR 200 MHz SDRAM with maximum memory up to 1GB and integrated graphic controller supporting both standard VGA and TFT.

The EBC 320 embedded board supports a various range of Operating Systems such as Windows XP embedded, Win CE, and Linux. The EBC 320 with low power processor, small footprint, and versatile I/O port to offer the best solution for industrial applications.

Specifications

CPU Support

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

Main Memory

- ♦ 1 x 200-pin SO-DIMM socket, up to 1GB Non-ECC/ Non-Registered DDR SDRAM (64-bit, 200 MHz)

Chipset

- ♦ AMD Geode LX800/AMD CS 5536

BIOS

- ♦ Award system BIOS
- ♦ Plug & Play support
- ♦ Advanced Power Management and Advanced Configuration & Power Interface support
- ♦ 4M bits flash ROM ACPI
- ♦ ACPI support: Only support Software Shutdown by 5Vsb Provided

On-board LAN

- ♦ 1 x Realtek 8139C+ 10/100 Fast Ethernet Controller
- ♦ Supports Boot From LAN (PXE)
- ♦ Supports Wake on LAN by 5usb provided
- ♦ 1 x RJ45 with LED

Display

- ♦ The Geode™ LX800 integrated Graphic, supports both standard VGA and TFT
- ♦ Analog VGA Interface:
 - 1 x DB15 VGA port
- ♦ CRT Supports up to 1920x1440x32 bpp at 85 Hz
- ♦ TTL Interface:
 - TTL LCD supports up to 24bit, 1600x1200x32 bpp at 60 Hz for TFT

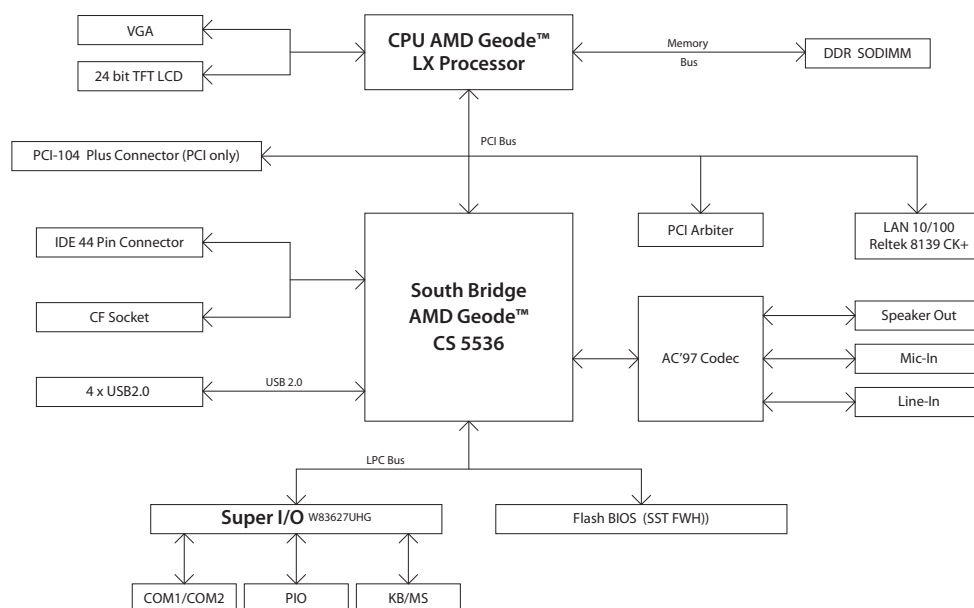
Audio

- ♦ REALTEK, ALC203 CODEC for AC'97 v. 2.0
- ♦ Mic-in and Speaker-out connector, Line-in with pin header

I/O Interface

- ♦ 4 x USB 2.0 port (USB 1/2 on front, USB 3/4 via one JST connector), bandwidth: 480 Mb/s
- ♦ 2 x SIO, 16C550 UARTs (One on DB9 edge connector support RS-232, one onboard with pin header support RS-232/422/485)
- ♦ Parallel ports: Bi-directional, EPP/ECP support, 1 x box header 26-pin connector
- ♦ PS/2: 1 x 6-pin 2.0mm JST box header
- ♦ IrDA: 1 x 5-pin box header for IrDA, TX, RX

Block Diagram



- On Board buzzer
- two x 2 pin header for Reset switch and Power Button
- two x 2 pin header Power LED and HDD LED
- 1 x 3 pin 2.0mm pin header for SMBUS and I²C

Storage Support

- 1 x CF Internal socket
Support One Type I& II Compact Flash Card (Primary Master)
- 1 x IDE 44-pin connector, supports Ultra DMA 33/66/100
- 1 x 2-pin IDE Active LED Header

Watchdog Timer

- Watchdog Timer is programmable by software from 0 to 255 seconds and from 0 minute to 255 minutes (Tolerance 15% under room temperature 25°C)

On-board RTC

- On chip RTC with battery back up
- 1 x External Li-ion Battery

Power Requirements

- Supports both AT and ATX Mode (BIOS and H/W is default to AT mode)
- AT Mode: +5V Power in, No Power On push Button, Software Shutdown function and LAN remote wake up

Power Requirement	+5 V
Full-Loading Mode	1.55A
Light loading Mode	1A

- ATX Mode: Power Required: +5V/-5V/5Vsb Power In
When Change to ATX Mode, the BIOS default setting is as follow:
POWER -SUPPLY TYPE -->[ATX]
AUTO PWR-FAILURE RESUME-->[ON]

Dimensions

- 3.5" form factor
- 146mm (L) x 105mm (W) (5.7" x 4.1")

Environment

- Board level operating temperature: 0°C to 60°C
- Storage temperature: -20°C to 85°C
- Relative humidity: 10% to 90% (Non-condensing)

Certifications

- CE approval
- FCC Class A

Ordering Information

- EBC 320-LX8 (P/N: 10E00032000X0) RoHS Compliant**
3.5" Low Voltage Embedded Board with on board AMD LX800 processor w/ PCI 104/IDE/CF/VGA/COM/Audio/USB2.0/LAN

Packing List

Part No.	Description
60233USB59X00	USB CABLE
60233MK202X00	PS2 Y CABLE
60233IDE86X00	IDE CABLE 44P TO 40P
6023325262X00	PRINT CABLE
60233SIO06X00	COM CABLE w/BRACKET
60233PW145X00	POWER CABLE