

# SOM-4455

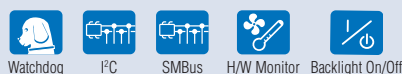
## AMD Geode™ LX800 ETX CPU Module



### Features

- Embedded AMD Geode™ LX800 CPU+ AMD CS5536 Chipset
- AMD LX800 Integrated 2D engine supports 24-bit LVDS or 18-bit TTL
- Supports one DDR-400 memory SODIMM socket up to 1GB
- Supports up to 4 PCI Master, ISA, 2 IDE, 2 SATA, 4 USB 2.0, 1 10/100 Ethernet, 2 COM, 1 LPT/FDD, onboard Type II CF socket, Line-in/out, MIC
- Supports SUSIAccess and Embedded Software APIs

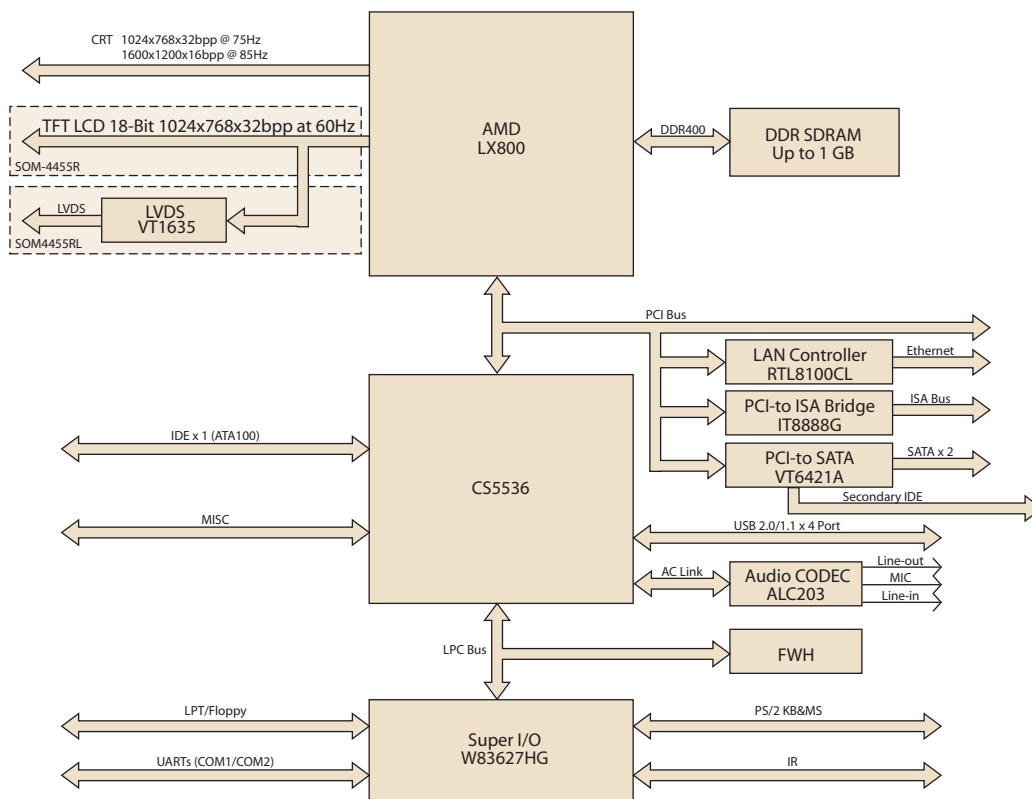
#### Software APIs:



### Specifications

Form Factor		ETX 3.0
Processor System	CPU	AMD Geode LX800
	Front Side Bus	33 MHz
	System Chipset	AMD Geode LX800/CS5536
	BIOS	AWARD 4 Mbit Flash BIOS
Memory	Technology	DDR 200/266/333/400 MHz
	Max. Capacity	Up to 1 GB
	Socket	1 x 200-pin SODIMM socket
Display	Chipset	AMD Geode LX800 Integrated
	VRAM	Shared system memory up to 254 MB
	Graphics Engine	AMD Geode LX800 2D Engine
	LCD	24-bit single channel LVDS or 18-bit single channel TTL
	VGA	Up to 1024 x 768
	Dual Display	CRT + LCD (Simultaneous mode)
Ethernet	Chipset	RTL8100CL-LF 10/100 Mbps Ethernet
	Speed	10/100 Mbps
WatchDog Timer		256 timer intervals, from 1 to 255 sec or min setup by software, jumperless selection, generates system reset
Expansion		4 PCI Master (3 for SATA version), ISA, SMBus, I²C
I/O	PATA	1 IDE (UDMA 100) for non-SATA version, 2 IDE for SATA version
	SATA	2 SATA (150 Gb/s) on ETX Module for SATA version
	USB	4 USB 2.0
	Audio	Realtek ALC203 AC97 CODEC supports Line-in/out, Mic-in
	GPIO	1-bit GPIO, 2-bit GPE
	COM	2 COM ports
	FDD/LPT	1 FDD or LPT
	SSD	1 Type II CF slot
Power	Power Type	ATX, AT
	Power Supply Voltage	+5 V only (+5 VSB is required for ATX power scheme)
	Power Consumption (Typical)	Typical: (1 GB DDR 333) +5 V @ 1.80 A (AMD LX800)
	Power Consumption (Max, test in HCT)	Max: (1 GB DDR 333) +5 V @ 2.01 A (AMD LX800)
Environment	Operating Temperature	0 ~ 60° C (32 ~ 140° F)
	Humidity	Operating: 40° C @ 95% relative humidity, non-condensing Storage: 60° C @ 95% relative humidity, non-condensing
Mechanical	Dimensions	114 x 95 mm (4.5" x 3.74")

## Block Diagram



## Ordering Information

Part No.	CPU	L2 Cache	Chipset	LVDS	VGA	10/100 LAN	AC97 Audio	PCI	USB 2.0	IDE	SATA	ATX Power	AT Power	Thermal Solution	Operating Temp.
SOM-4455R-LOA2E	AMD LX800	128 KB	CS5536	-	Yes	Yes	Yes	4	4	1	-	Yes	Yes	Passive	0 ~ 60° C
SOM-4455RL-LOA2E	AMD LX800	128 KB	CS5536	24-bit	Yes	Yes	Yes	4	4	1	-	Yes	Yes	Passive	0 ~ 60° C
SOM-4455R-LSA2E	AMD LX800	128 KB	CS5536	-	Yes	Yes	Yes	3	4	2	2	Yes	Yes	Passive	0 ~ 60° C
SOM-4455RL-LSA2E	AMD LX800	128 KB	CS5536	24-bit	Yes	Yes	Yes	3	4	2	2	Yes	Yes	Passive	0 ~ 60° C
SOM-4455ZR-LOA2E	AMD LX800	128 KB	CS5536	-	Yes	Yes	Yes	4	4	1	-	Yes	Yes	Passive	-20 ~ 80° C
SOM-4455ZRL-LOA2E	AMD LX800	128 KB	CS5536	24-bit	Yes	Yes	Yes	4	4	1	-	Yes	Yes	Passive	-20 ~ 80° C
SOM-4455ZR-LSA2E	AMD LX800	128 KB	CS5536	-	Yes	Yes	Yes	3	4	2	2	Yes	Yes	Passive	-20 ~ 80° C
SOM-4455ZRL-LSA2E	AMD LX800	128 KB	CS5536	24-bit	Yes	Yes	Yes	3	4	2	2	Yes	Yes	Passive	-20 ~ 80° C

Note: Passive = fanless; Active = with fan

## Development Board

Part No.	Description
SOM-DB4400-00A2E	Development Board for ETX Rev.A2
SOM-DB4700-00A1E	Development Board for ETX Rev.A1

## Optional Accessories

Part No.	Description
1960012091T00S	Semi-Heatsink 114 x 96 x 15 mm

## Packing List

Part No.	Description	Quantity
-	SOM-4455 CPU Module	1
-	Utility CD	1
1960052229T001	Heatspreader	1

## Embedded OS

OS	Part No.	Description
WinCE	2070001579	CE 6.0 Pro GX3 V1.0 ENG
Win XPE	2070007910	XPE WES2009 GX3 LX800 V4.0 MUI24
QNX		V6.4.1