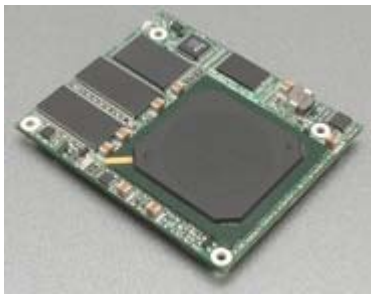
Products

Computer-On-Module's
CM-X270
CM-X255
CM-iGLX
CM-F82
CM-i686M
CM-i686B
CM-iVCF
CM-i886 (NFND)
CM-i586 (NFND)
PC/104+ & ATX boards
SBC-X270
SBC-X255
SBC-i686
SBC-iVCF
SBC-i886 (NFND)
ATX

Related Topics:

- CoM Comparison
- PC/104 Comparison
- Linux Support
- Evaluation Kits
- Industrial Temperature
- RoHS Compliance

CM-iGLX Computer-On-Module



CM-iGLX Top

CM-iGLX Bottom

CM-iGLX Highlights

- **Full Featured PC-Compatible Computer-On-Module**
- **AMD Geode LX800 CPU at 500 MHz, 256 KB cache**
- **256 Mbyte DDR**
- **512 Mbyte Flash Disk**
- **Graphics Controller for LCD and FPM, up to 1920 x 1440** see LCD panel support
- **General purpose bus and optional PCI, LPC, AC97 busses**
- **Video Input Port**
- **Sound codec with speaker and microphone support**
- **Touchscreen Controller**
- **3 host USB-2 ports, including keyboard and mouse support**
- **Serial ports, GPIO, hard-disk interface**
- **100 Mbps Ethernet port**
- **Low power consumption**
- **Small size - 68 x 58 mm**
- **Interchangeable with other**

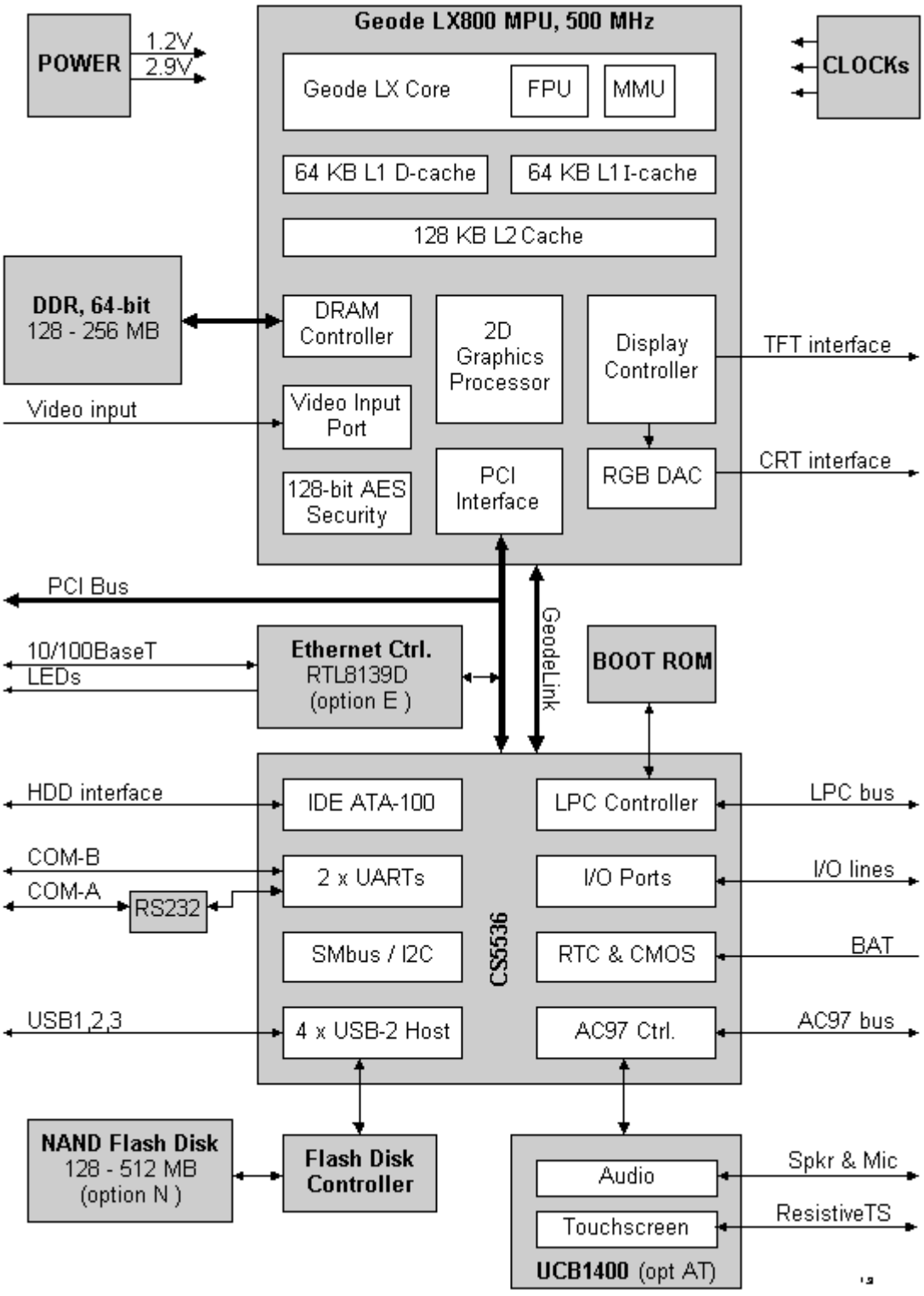
The CM-iGLX packs up-to-date 2006 technologies into the most compact, lightweight PC-on-module available in the market. Its on-board resources suffice to smoothly run operating systems such as Linux and Windows XP / CE, while it is just as small as a credit card and can run on a battery. These, in addition to the module's low cost, make it an ideal building block for any embedded application.

The feature set of the CM-iGLX combines a 32-bit X86-compatible CPU, DDR, Flash Disk and vital computing peripherals. For embedded applications, the CM-iGLX provides a 32-bit PCI bus, 100Mbit Ethernet, serial ports, general purpose I/O lines and many other essential functions. The user interface is supported by an enhanced graphics controller, touchscreen, USB interface for keyboard / mouse and Audio system.

The standardized CAMI ("CompuLab's Aggregated Module Interface") connectors of the CM-iGLX module allow interchangeability with other Computer-On-Module's available from CompuLab, enabling the flexibility required in a dynamic market where application requirements can change rapidly.

modules via CAMI connectors **For more information, see Developer Resources page** *Note: Some features are optional. Values are specified at their maximum.*	See O/S Support Coverage Map

Block Diagram



CM-iGLX Features

"Option" column specifies the configuration code required to have the particular feature.
"+" means that the feature is available always.

CPU, Memory and Busses

Feature	Specifications	Option
CPU	AMD LX800 / LX700 CPU, Pentium compatible, up to 500 MHz. 64 + 64 KB L1 and 128 KB L2 cache. DMA and Interrupt controllers, Timers	C
DRAM	64 - 256 MB DDR, 333 MHz, 64-bit	D
BIOS Flash	1/2 Mbyte, on-board reprogrammable	+
NAND Flash Disk	128 / 512 Mbytes, more in future. 10 MB/s transfer rate.	N
External Busses	PCI, LPC, AC97	+
AC97	AC97 Rev 2.3 compliant	+
PCI bus	32-bit, rev 2.2-compliant, 132 MB/s, 3.3-volt tolerant Arbiter and clock for one or two masters	+
LPC bus	Host, 33 MHz, Intel LPC v1.0 compatible	+

Peripherals

Feature	Specifications	Option
Graphics Controller	Resolution up to 1920 x 1440 x 32 bpp @ 85Hz, frame buffer in system memory, 2D graphic processor	+
Display Interface	LCD - 18-bit parallel RGB for TFT panels CRT - 24-bit analog RGB for CRT / FPM	+ +
Video Input Port	VESA1.1 & VESA2.0 standard, BT.601, BT.656, 8-bit port, 150 MHz data rate	+
USB	Three Host USB 2.0 ports, 480 Mbps, EHCI / OHCI compliant	+
Serial Ports	Two UART's, Rx & Tx only	+
GPIO	4 lines dedicated + 4 lines shared	+
Hard Disk Interf.	IDE interface, UDMA ATA-100 mode	+
Kbrd & Mouse	USB or redirection from serial port	+
Ethernet	100 Mb/s, Activity LED's. RTL8139	E
Audio codec	Phillips UCB1400, AC97 interface, mono microphone input, stereo line input and 25 mW output for active speakers	AT
Touchscreen ctrl.	A part of the UCB1400 codec chip. Supports resistive touch panels	AT
RTC	Real Time Clock, powered by external lithium battery	+
Encryption unit	128 bit DMA based crypto acceleration block up to 44 Mbps	+

Electrical, Mechanical and Environmental Specifications

Supply Voltage	3.3V
Active power consumption	3 - 5 W, depending on configuration and CPU speed
Dimensions	68 x 58 x 8 mm
Weight	37 gram
MTBF	> 100,000 hours
Operation temperature (case)	Commercial: 0° to 70° C Extended: -20° to 70° C Industrial: -40° to 85° C. Click for availability note
Storage temperature	-40° to 85° C
Relative humidity	10% to 90% (operation) 05% to 95% (storage)
Shock	50G / 20 ms
Vibration	20G / 0 - 600 Hz
Connectors	3 x 140 pin, 0.6 mm. Insertion / removal up to 50 cycles

For more information see:
- CM-iGLX Reference Guide
- Developer Resources

Contact