Cool LiteRunner-LX800

PC/104 Single Board Computer
AMD Geode™ LX800

Features

- AMD Geode-LX800@0.9W, 500 MHz
- 256 MB soldered DDR400 RAM
- Graphics up to 1920 x 1440 pixels
- CRT, TFT, LVDS, with backlight
- 2 x LAN
- 4 x USB 2.0
- 2 x RS232/RS422/RS485
- 1 x RS485/Irda
- IDE Ultra ATA100
- CompactFlash™ socket
- Low power consumption
- Opt. ext. temperature range -40 °C…+85 °C

The Cool LiteRunner-LX800 is an affordable PC/104 single board computer, powered by an AMD Geode LX800 processor running at 500 MHz. It features 256 MB soldered DDR-RAM, AC97 sound and four USB 2.0 host ports. It is plug-in compatible to the familiar Cool LiteRunner 2, which has reached its end of life.

The processor's CS5536 I/O companion already integrates many of the standard PC peripherals. It has an integrated graphics controller that shares its memory with the system memory. (UMA) Both, VGA monitors or digital TFT panels, (18 bit parallel or 24 bit LVDS) are supported and selectable via jumper or BIOS settings.

A Super I/O chip provides serial and printer interfaces, as well as floppy disk and PS/2 ports. The Cool LiteRunner-LX800 can be expanded using the PC/104 connector or the built-in miniPCI slot. Two independent Fast Ethernet controllers are on-board, making the Cool LiteRunner-LX800 the selection of choice for applications like managed bridges and industrial automation.

Two of the three serial ports can be software configured for the RS232 or RS485 line levels, the third is RS485 only.
An integrated GoldCap buffers the real time clock. Eight I/Osignals are freely usable for application defined signals and are accessible on a flat cable connector. The ATA-66 compliant EIDE interface connects to storage devices.
A CompactFlash adapter facilitates construction of devices without moving parts, as it is often required for mobile applications.

Troubleshooting is easy with supervision LEDs for power, watchdog, Ethernet and application-defined life signalization on the module. The PC/104 bus allow system expansion with many commercially available peripheral I/O boards.

LiPPERT is an independent design house and manufacturer that develops and builds special customer specific solutions. Please ask for a specific quotation

LiPPERT Embedded Computers GmbH
Hans-Thoma-Str. 11 · D-68163 Mannheim
Phone +49 621 43214-0 · Fax +49 621 43214-30
sales@lippertembedded.com
www.lippertembedded.com

LiPPERT Embedded Computers Inc.
5555 Glenridge Connector, Suite 200
Atlanta, GA 30342
Phone (404) 459 2870 · Fax (404) 459 2871
ussales@lippertembedded.com

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PC/104 Single Board Computer

AMD Geode™ LX800

Technical Data

Board Format	PC/104, 96 mm x 90 mm (3.775” x 3.550”)
Processor	AMD Geode LX800@1.0W
Speed	500 MHz
Core Logic	I/O companion: CS5536 Super I/O: ITE8712
RAM	256 MB DDR400, soldered on board
RAM clock	400 MHz
Graphics	Integrated in the Geode LX800. Up to 254 MB video memory.
CRT	Analog VGA 1920 x 1440 pixel at 85 Hz max.
TFT	Single channel, 18 bits 1600 x 1200 pixel at 60 Hz max.
LVDS	Single channel, 18 and 24 bits 1600 x 1200 pixel at 60 Hz max.
Audio	AC97, 2 channels
USB	4 x USB 2.0 host ports
Ethernet	2 x 10/100 MBit with Intel 82551IT
Serial	2 x RS232/RS422/RS485 1 x RS485/Irda
IDE	1 x Ultra ATA100 (ATA6) port
Compact Flash	Type 2 socket

LPT	Multi-Mode™ bi-directional Parallel
GPIO	8 programmable signals
Watchdog	Yes
Status LED	HDD, power, standby, power mode, live, 4x Ethernet, watchdog
Operating temperature	-20°C … +60°C -40°C … +85°C (optional)
ISA Bus	PC/104
I²C bus	Supported
RTC Backup	Battery on board
Power Supply	5 V ±5 % All necessary voltages are generated on-board.
Power Consumption	Max. 7.0 watts Typ. 5.0 watts
Cooling	passive
MTBF	308.342 hours at 25 °C
BIOS	Insyde Technology BIOS parameters are also saved in FEPROM
Supported OS	Windows XP, XP Embedded, Windows CE, Linux, VxWorks

Ordering Information	
Ordering Number	**Description**
t02-0008-10	PC/104 CPU board with AMD Geode™-LX800@0.9W

Note: ***t*** denotes the temperature range. Substitute with 8 (industrial) and 9 for extended temperature range

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5555 Glenridge Connector, Suite 200
Atlanta, GA 30342
Phone (404) 459 2870 · Fax (404) 459 2871
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