

Cool SpaceRunner-LX800

PC/104-Plus Single Board Computer

AMD Geode™-LX800

Features

AMD Geode LX800@0.9W, 500 MHz

256 MB soldered DDR SDRAM

Graphics up to 1920 x 1440 pixels

CRT, LVDS, with backlight

100/10BaseT Ethernet

4 x USB 2.0

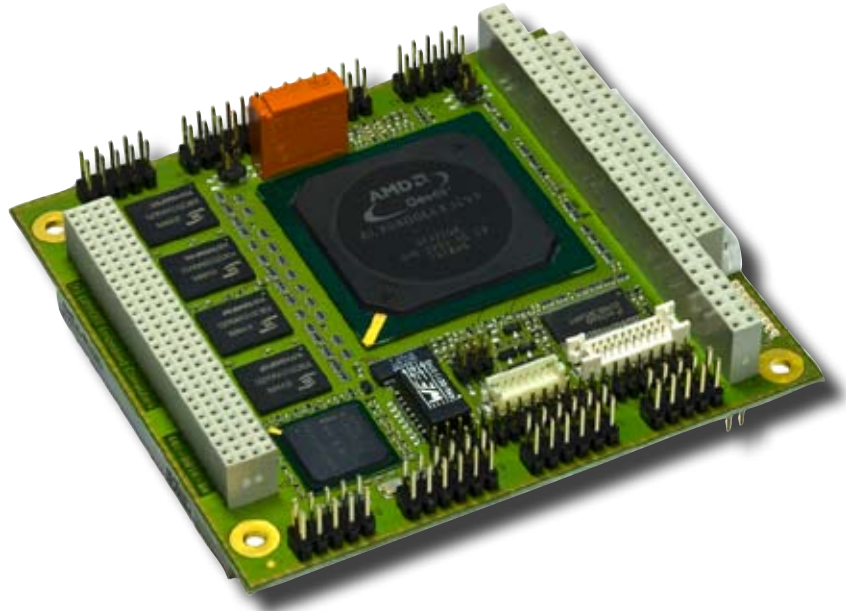
2 x RS232/RS422/RS485

IDE Ultra ATA100

2 GB Solid State Disk

Low power consumption

Extended temperature range -40 °C...+85 °C



More Features

- LEMT
- Watchdog
- Flash BIOS



The Cool SpaceRunner-LX800 is a fully self-contained, rugged single board computer. Its X86-compatible AMD Geode LX800 processor is combined with 256MB soldered RAM and a 2 GB solid state disk to create a single board computer without moving parts. The small PC/104-Plus board features an integrated graphics controller and handles either VGA or LVDS displays. There is a LAN interface, four USB host ports, and two serial interfaces, user configurable to handle either RS232 or RS485 levels. An IDE interface for external harddisks and a flexible parallel printer port complete the interface range.

The Cool SpaceRunner-LX800 features status indication LED's and a programmable watchdog. The computer can be expanded with standard peripheral cards for the PC/104 or PC/104-Plus bus.

Power consumption is a mere 5 watts and allows fanless operation of the processor. The board is specified for the extended ambient temperature range of -40 °C...+85 °C. The Cool SpaceRunner-LX800 uses the LiPPERT Enhanced Management Technology (LEMT). It handles the boards housekeeping tasks like power sequencing and watchdog, and provides useful utility functions for the application. Among them is a secure, write and clear protected Flash area that can be used for security keys. LEMT also enables remote condition monitoring.

With its soldered RAM, the solid state disk, the very low power consumption, and the rugged through-hole-connectors, the Cool SpaceRunner-LX800 is the best choice for devices that need to operate in adverse environments. Applications like remote data processing, security and medical devices, and many industrial controllers profit from its special features, as do all kind of mobile appliances.

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

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PC/104-Plus Single Board Computer

AMD Geode™-LX800

Technical Data

Board Format	PC/104-Plus, 96 mm x 90 mm (3.775" x 3.550")	Watchdog	Yes
Processor	AMD Geode™ LX800@0.9W	Status LED	HDD, power, standby, power mode, live, 3x Ethernet, watchdog
Speed	500 MHz	Operating temperature	0°C...+60°C (commercial, all versions) -20°C...+60°C (industrial, all versions) -40°C...+85°C (extended, optional)
Core Logic	I/O companion: CS5536 Super I/O: ITE8712	ISA Bus	PC/104
RAM	256MB DDR400, soldered on board	PCI Bus	PC/104-Plus, 3.3V compliant. Peripherals need their own 3.3V supply.
RAM clock	400MHz	RTC Backup	Integrated Lithium battery
Graphics	Integrated in LX800 up to 254 MB video memory	Power Supply	5 V ±5 % All necessary voltages are generated on-board.
CRT	Analog VGA 1920x1440 pixel at 85 Hz max.	Power Consumption	< 5 watts
LVDS	Single channel, 18 and 24 bits 1600x1200 pixel at 60 Hz max.	Cooling	passive
USB	4xUSB 2.0 host	MTBF	294.173 hours at 25 °C
Ethernet	10/100 MBit with Intel 82551IT	BIOS	Insyde Technology BIOS parameters are also saved in Flash
Serial	2xRS232/RS422/RS485	Supported OS	Windows XP, XP Embedded, Windows CE, Linux, VxWorks
IDE	1 xUDMA-5 (ATA6) port		
Solid State Disk	2 GB		
LPT	Multi-Mode™ bi-directional Parallel		



Ordering Information

Ordering Number	Description
#03-0019-10	PC/104+ CPU board with AMD Geode™ LX800

Note: t denotes the temperature range. Use 8 for industrial and 9 for extended temperature range

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