

# RHODEUS



Rugged, low-power, low-cost PC/104 Single Board Computer featuring integrated CRT/LCD video, Ethernet, and CompactFlash



## Low Cost SBC

Rhodeus is a full-featured, rugged, PC/104-expandable single board computer offering a wide range of system I/O at a low cost.

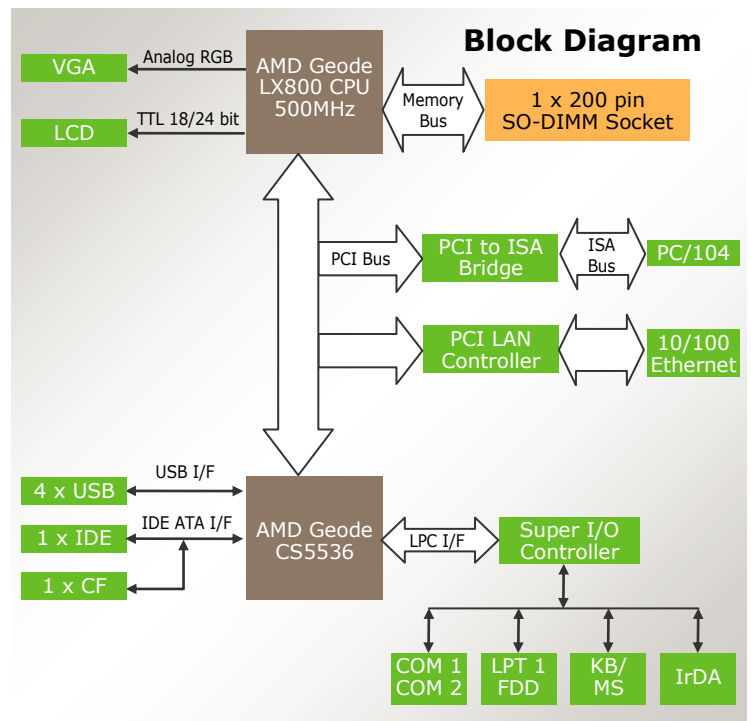
## Low Power Consumption

Rhodeus combines a full set of embedded-PC functions with lower power consumption and rugged construction, allowing it to excel in applications with restricted airflow.

## Wide Operating Temperature

Rhodeus operates over the full extended operating temperature of -40°C to +85°C, allowing it to excel in harsh environments.

- ◆ Low-power PC/104 form-factor single board computer
- ◆ Based on an AMD Geode LX800 CPU operating fanless at 500MHz
- ◆ Up to 1GB of SO-DIMM DDR SDRAM
- ◆ Comprehensive set of I/O interfaces:
  - two USB 2.0 ports
  - one RS-232/422/485 and one RS-232 serial port
  - 10/100Mbps Ethernet
  - one IDE port, supporting 2 devices
  - on-board CompactFlash Type II socket
  - VGA CRT or TTL LCD display
- ◆ PC/104 (ISA) expansion
- ◆ -20°C to +71°C (-2°F to +160°F) or -40°C to +85°C (-40°F to +185°F) operating temperature



# Rhodeus: PC/104 Single Board Computer



## Specifications

<b>Processor</b>	AMD Geode LX800 at 500MHz
<b>Chipset</b>	AMD LX800 + CS5536
<b>Cache</b>	64k L1 cache and 128 L2 cache
<b>Cooling</b>	Heat sink, fan-less
<b>Memory</b>	Up to 1GB DDR SO-DIMM DRAM
<b>Display type</b>	VGA CRT or TTL LCD
<b>Display resolution</b>	1280 X 1024 maximum
<b>USB ports</b>	2 USB 2.0
<b>Serial ports</b>	1 RS-232 1 RS-232/422/485
<b>Parallel port</b>	1 SPP/EPP/ECP mode
<b>Floppy port</b>	1 floppy connector
<b>Networking</b>	10/100Base-T Ethernet from Realtek 8100CL
<b>Mass storage</b>	1 IDE UDMA-33 port Supports 2 IDE devices
<b>FlashDisk</b>	1 Type II CompactFlash socket Supports up to 4GB
<b>Keyboard/Mouse</b>	PS/2
<b>Audio</b>	Speaker out
<b>Hardware monitor</b>	Integrated in W83627HG
<b>Real-time clock</b>	AMD Geode CS5536 built-in RTC with lithium battery
<b>Watchdog timer</b>	255-level reset
<b>Expansion bus</b>	PC/104 (ISA)
<b>Input power</b>	5V ±5%
<b>Power consumption</b>	5W typical @1A
<b>Operating temperature</b>	-20°C to +71°C (-2°F to +160°F) or -40°C to +85°C (-40°F to +185°F)
<b>Dimensions</b>	3.550 x 3.775 in. (90 x 96 mm)
<b>Weight</b>	2.5oz / 71g
<b>RoHS</b>	Compliant

## Key Features

Rhodeus is a fanless PC/104 SBC based on the low-power AMD Geode LX800 processor clocked at 500MHz. It uses SO-DIMM DDR SDRAM, for up to 1GB of system memory.

The highly compact SBC integrates a full set of embedded-PC functionality within a low-power design, enabling it to operate in harsh environments where airflow for heat dissipation is restricted and bulky heat sinks or fans are unacceptable. This makes Rhodeus an excellent choice for embedded applications requiring 24x7 operation in unattended environments.

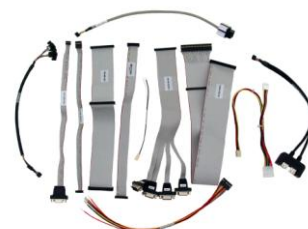
Rhodeus includes a comprehensive set of built-in I/O interfaces, including 10/100Mbps Ethernet, two serial ports, two USB 2.0 ports, a parallel port, IDE and floppy drive interfaces, LCD and CRT display interfaces, and a watchdog timer. Additional functions can be added by means of the on-board CompactFlash socket and the stackable PC/104 (ISA) expansion bus.

## Software Support

Rhodeus supports Linux, Windows CE, Windows XP, and Windows Embedded Standard.

## Cable Kit

A Rhodeus Cable Kit is available with all of the Rhodeus I/O cables.



## Ordering Information

<b>RDS800-XT</b>	Rhodeus SBC, 500MHz LX800, 0MB RAM, -40°C to +85°C operating temperature
<b>RDS800-LC</b>	Rhodeus SBC, 500MHz LX800, 0MB RAM, -20°C to +70°C operating temperature
<b>MEM-256-04</b>	256MB DDR SO-DIMM SDRAM
<b>MEM-512-04</b>	512MB DDR SO-DIMM SDRAM
<b>MEM-1024-04</b>	1024MB DDR SO-DIMM SDRAM
<b>C-RDS-KIT</b>	Rhodeus Cable Kit for all on-board I/O