

PEGASUS



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



- ◆ Low-power, mid-range PC/104-Plus expandable SBC
- ◆ Based on 500MHz AMD Geode LX800 CPU
- ◆ 256MB soldered-on DDR DRAM
- ◆ Comprehensive set of I/O interfaces:
 - four USB 2.0 ports
 - one RS-232/422/485 and one RS-232 serial port
 - 10/100Mbps Ethernet
 - IDE port, supports two devices
 - Type II CompactFlash socket
 - VGA CRT or 1280 x 1024 LVDS LCD display
- ◆ PC/104-Plus (ISA & PCI) stackthrough expansion
- ◆ Operating temperature of -40°C to +85°C (-40°F to +185°F)

Compact, Low-power SBC

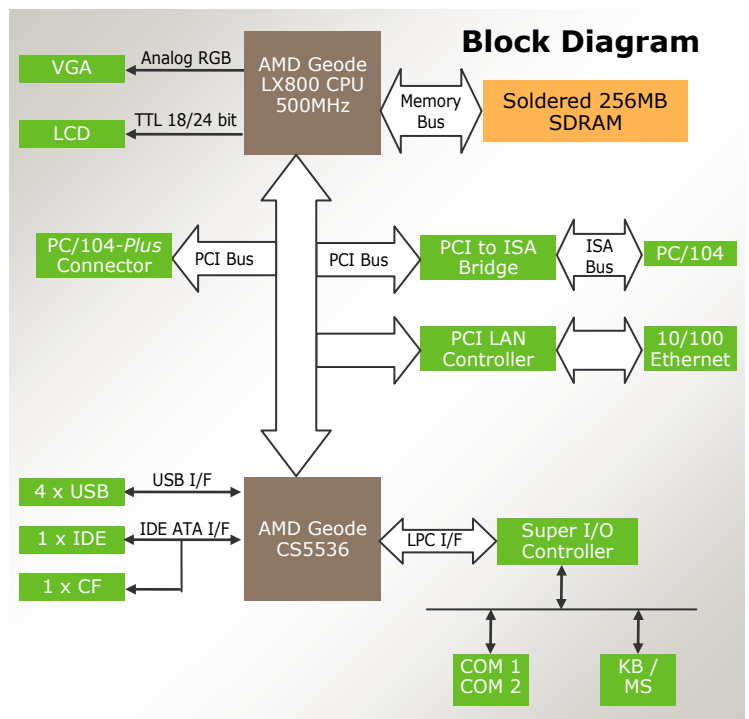
Pegasus combines a low power AMD Geode LX800 CPU with fully integrated embedded-PC functionality, all in the compact PC/104-Plus form-factor.

Price/Performance Advantage

Pegasus offers an excellent balance of CPU performance and I/O functionality at a low cost, making it an excellent choice for a wide variety of embedded computing applications.

Rugged Design

Pegasus was designed with rugged applications in mind. With a fanless operating temperature of -40°C to +85°C, a high tolerance to shock and vibration, and on-board soldered SDRAM, Pegasus is ideal for applications in harsh or unattended environments.



Pegasus: PC/104-Plus Single Board Computer



Specifications

Processor	AMD Geode LX800 at 500MHz
Chipset	AMD LX800 + CS5536
Cache	64k L1 cache and 128 L2 cache
Cooling	Heat sink, fan-less
Memory	256MB SDRAM
Display type	VGA CRT or LVDS LCD
Display resolution	1280 X 1024 maximum
USB ports	4 USB 2.0
Serial ports	1 RS-232; 1 RS-232/422/485
Networking	10/100Base-T Ethernet from Realtek 8100CL
Mass storage	1 IDE UDMA-33 port, supports 1 device
FlashDisk	1 Type II CompactFlash socket Supports up to 4GB
Keyboard/Mouse	PS/2
Audio	Speaker out
Hardware monitor	Integrated in W83627HG
Real-time clock	AMD Geode CS5536 built-in RTC with lithium battery
Watchdog timer	255-level reset
Expansion bus	PC/104-Plus (ISA & PCI) stackthrough
Input power	5V ±5%
Power consumption	5W typical @1A
Operating temperature	-40°C to +85°C (-40°F to +185°F)
Dimensions	4.05 x 3.78 in. (103 x 96 mm)
Weight	4.5oz / 127g
RoHS	Compliant

Cable Kit

A cable kit is available that provides all of the cables necessary to bring the on-board I/O out from the pine headers to industry standard connectors.



Customization for More Ruggedization

Pegasus can be customized as follows to meet your specific application requirements. Minimum order quantities may apply.

- Latching connectors for all I/O
- Conformal coating: Acrylic, Urethane, or Silicone
- Hardwired configurations to replace jumpers
- Battery-less boot
- Custom splash screen at boot-up

Key Features

Pegasus is a ruggedized, PC/104-Plus form-factor single board computer offering mid-range performance and low power consumption. It is a superior choice for embedded applications in harsh environments, such as on the factory floor or in mobile outdoor applications.

Pegasus is based on the AMD Geode LX800 system-on-chip processor, which operates fanless at 500MHz. In addition to CPU functions, the LX800 also integrates a VGA display controller with 2D hardware acceleration and support for high-resolution CRT and LCD displays. The board's 256MB of SDRAM system memory is soldered on-board for improved reliability. An on-board Type II CompactFlash socket supports up to 4GB of removable flashdisk media.

Other I/O interfaces provided by Pegasus include a 10/100Mbps Ethernet port with wake-on-LAN capability in BIOS; UDMA-33 IDE; PS/2 keyboard/mouse; four USB 2.0 ports; and two 16450-compatible serial ports with one jumper-selectable for RS-232/422/485. A programmable watchdog timer offers protection from software crashes.

Software Support

Pegasus supports Linux, Windows CE, Windows XP, Windows XP Embedded, and DOS. The Pegasus Windows CE Software Development Kit, which includes a bootable image and drivers, can help get you started on your design project right out of the box.

Ordering Information

PGS800-256 Pegasus SBC, 500MHz LX800, 256MB RAM, no on-board IDE flashdisk

SDK-PGS-WCE Pegasus Windows CE Software Development Kit

C-PGS-KIT Pegasus Cable Kit for all on-board I/O