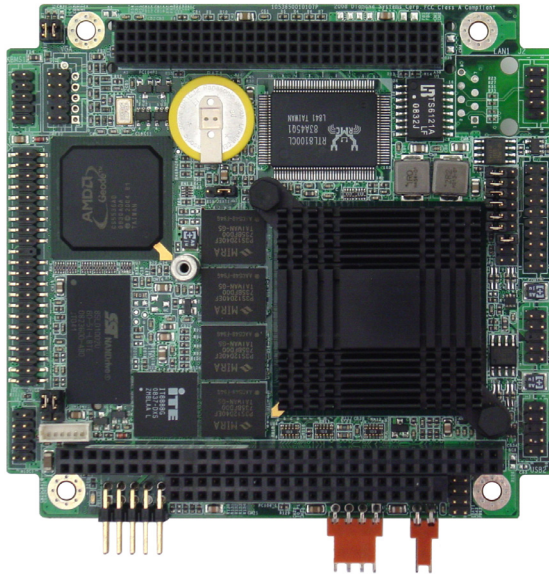# Pegasus™ SBC

Rugged PC/104-*Plus*™ SBC with 500MHz AMD Geode LX800 CPU and integrated Ethernet, CRT/LCD video, and CompactFlash

Key Features

♦ Low-power, mid-range PC/104-*Plus* expandable SBC

♦ 500MHz AMD Geode LX800 CPU

♦ 256MB soldered-on DDR SDRAM

♦ 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 one device
  - VGA CRT or 1280 x 1024 LVDS LCD display
  - Type II CompactFlash socket

♦ PC/104-*Plus* (ISA & PCI) stackthrough expansion

♦ -40°C to +85°C (-40°F to +185°F) operating temperature

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 of shock and vibration, and on-board soldered SDRAM, Pegasus is ideal for use in harsh or unattended environments.

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.

Customization for Increased Ruggedization

Pegasus can be customized in the following ways 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
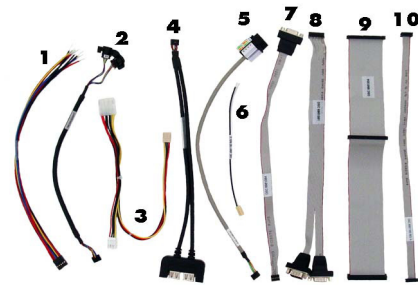
PEGASUS: PC/104-*Plus* Single Board Computer

SPECIFICATIONS

Processor	AMD Geode LX800 at 500MHz
Chipset	AMD LX800 + CS5536
Cache	64kb L1 cache and 128kb L2 cache
Cooling	Heat sink, fanless operation
Memory	256MB DDR SDRAM
Display Type	VGA CRT or LVDS LCD
Display Resolution	1280 x 1024 maximum
USB Ports	4 USB 2.0 ports
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 Temp.	-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
MTBF	87,400 hours
RoHS	Compliant

ORDERING INFORMATION

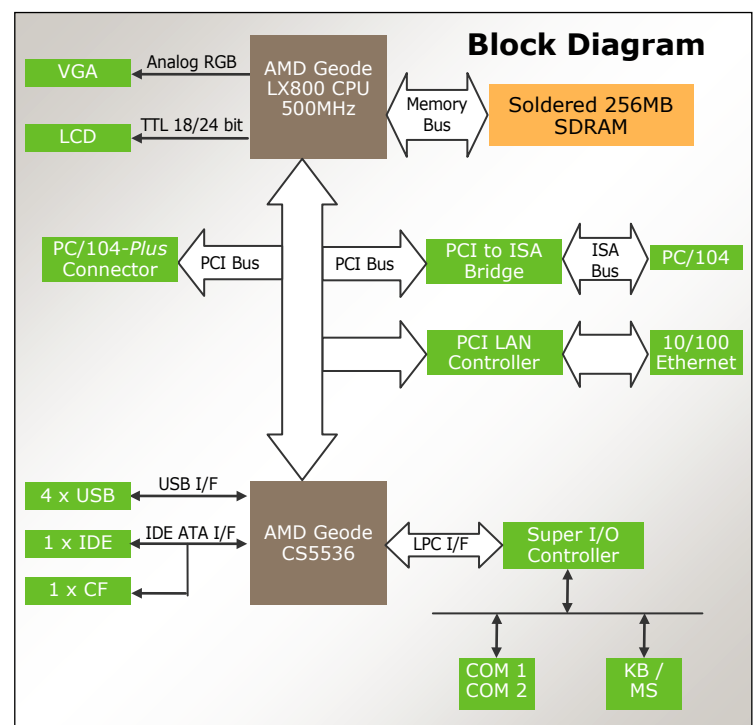|	
PGS800-256	Pegasus SBC, 500MHz LX800, 256MB on-board RAM
SDK-PGS-WCE	Pegasus Windows CE Software Development Kit
C-PGS-KIT	Pegasus Cable Kit for all on-board I/O

Pegasus SBC Cable Kit

Cable Kit

The available Pegasus Cable Kit provides all of the cables necessary to bring the on-board I/O out from the headers to industry-standard connectors.

Block Diagram

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