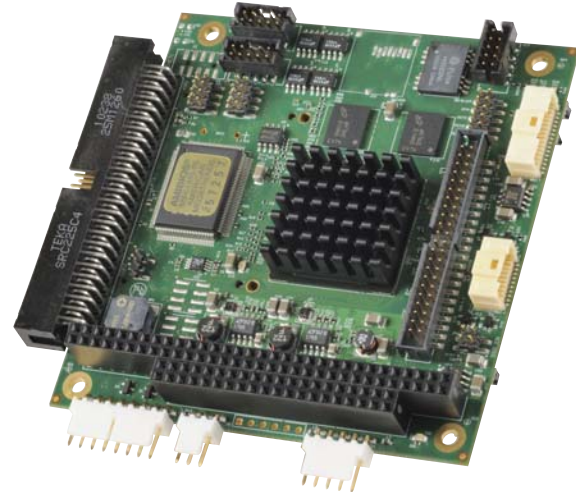


PCM-VDX-1-256

PC/104 Single Board Computer with 500MHz Vortex86DX Processor

Features

- 500MHz Vortex86DX processor
- PC/104 Bus compliant 3.6 x 3.8 inches (90 x 96mm)
- 256MB of soldered down SDRAM
- Optional 512MB on board SSD flash disk
- CompactFlash socket
- Full-featured I/O includes:
 - One 10/100 Mbps Ethernet port
 - Four USB 2.0 ports
 - Two serial RS-232 ports
 - Two serial RS-232/422/485 ports
 - ESD protection on LAN, USB, and serial ports
 - 16 Digital I/O lines with event sense
 - PATA, LPT, PS/2 KYBD and mouse controller
 - MiniPCI and PC/104 expansion connectors
 - WDT, RTC, status LEDs, and beeper
- Fanless: -40°C to +85°C operation
- Runs Linux, DOS, and other x86-compatible operating systems



Product Description

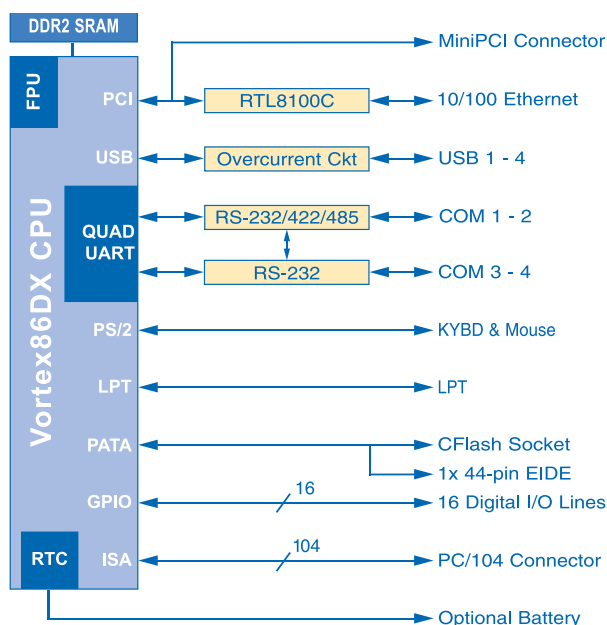
WinSystems' PCM-VDX-1-256 is a 500MHz PC/104 single board computer (SBC) with floating point support based upon the ultra low power Vortex86DX processor. This board replaces older generation WinSystems and other manufacturers' 386SX, 486DX, and SC520-based SBCs, providing long-term product availability.

It has 256MB of soldered down DDR2 SDRAM memory plus a CompactFlash socket. It also has an optional 512MB flash disk that can be soldered directly to the board. Other options include an off board battery, 1MB of battery-backed SRAM, CompactFlash retention clip, and a MiniPCI video card. Contact a factory applications engineer for details and OEM configurations.

The PCM-VDX-1-256 measures 3.6 x 3.8 inches (90 x 96mm) and is PC/104 compliant. This board requires about 4 Watts while operating over an extended temperature range of -40° to +85°C.

The PCM-VDX has easy-to-use connectors to access the wide variety of on board I/O including Ethernet, USB, serial and parallel I/O. Further it has PC/104 and MiniPCI card expansion as well.

The PCM-VDX supports Linux, DOS, and other x86-compatible operating systems. Drivers are available from the WinSystems' website.



PCM-VDX-1-256 Block Diagram

PCM-VDX-1-256 - Fanless PC/104 Single Board Computer

Technical Specifications

Processor

Vortex86DX @ 500MHz

Memory

256KB of L2 cache

256MB of soldered down DDR2 SDRAM

Optional 1MB soldered SRAM that can be battery backed

Display

Optional Volari XGI MiniPCI card

Network Interface

One 10/100 Mbps using the RTL8100C LAN*

Storage

One CompactFlash socket

One UDMA-100 IDE interface for disk drives

One optional 512MB flash SSD

On board I/O

Four USB 2.0/1.1 ports with overcurrent protection*

Two 16C550-compatible RS-232 serial ports*

Two 16C550-compatible RS-232/422/485 serial ports*

One PS/2 keyboard controller

One PS/2 mouse controller

16 lines of digital I/O with event sense

LPT interface with ECP/EPP support

Status LEDs for Link, Activity, and Speed of Ethernet controller plus two CPU activity LEDs

RTC with optional battery back up

Watchdog timer reset adjustable to 255 minutes

Piezo transducer for audio annunciation of BIOS beep tones

Expansion Bus

PC/104 with full 16-bit support

MiniPCI connector accepts type IIIB cards

Power

+5V @ 800mA (typ.)

Software

AMI BIOS

Compatible with most x86 operating systems including Linux and DOS

Environment

Operational from -40° to +85°C

RoHS compliant

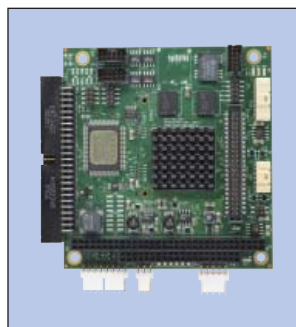
Mechanical

Dimensions 3.6 x 3.8 inches (90 x 96mm)

Weight 3.6 oz (102 gm)

PC Board thickness 0.078"

*ESD suppressors on all data lines



Front and Back Picture of PCM-VDX-1-256

Ordering Information

SBC

PCM-VDX-1-256

Fanless, 500MHz PC/104 SBC with 256MB memory

PCM-VDX-1-256-ST

Stack-thru PC/104 connector configuration

Video

MPCI-VGA-Z9S

MiniPCI video card and cable

Cables

CBL-174-G-1-1.5

Power cable, unterminated

CBL-225-G-1-0.333

PS/2 mouse cable

CBL-247-G-1-1.0

KYBD, LPT, COM1 and COM2 cable

CBL-266-G-2-0.75

HDD cable

CBL-DIO16-000-14

DIO cable, unterminated

CBL-DIO16-001-12

DIO cable with 2x 15 pins with Molex® Pico-Clasp™

CBL-DIO16-002-12

DIO cable, 2x 15 pins on 0.100 centers

CBL-ENET1-202-12

Ethernet cable with RJ45

CBL-ENET1-203-12

Ethernet cable with plug

CBL-SER1-202-12

Serial I/O cable

CBL-USB4-000-14

4x USB cable, unterminated

CBL-USB4-001-12

4x USB ports with Pico-Clasp

CBL-USB4-002-12

4x USB ports with two, 8-pin 2mm connectors

CBL-SET-373-G-1

Cable set for PCM-VDX-1

CBL-SET-373-G-MIN

Minimal cable set for PCM-VDX-1

Optional Battery

BAT-LTC-E-36-16-1

External 3.6V, 1650 mAH

BAT-LTC-E-36-27-1

External 3.6V, 2700 mAH

CompactFlash

CF-DC-A-xxG-I

1 - 16GB High Speed CF cards

CFLASH-G-xxx-I

128MB - 8GB CF cards

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