Model 8264

SPARK 6U OpenVPX Development System for Cobalt, Onyx, and Jade Boards

6U VPX

Features

- 9-slot, 6U 19-inch rackmount, 12-inch deep chassis for 6U VPX boards
- Windows® or Linux® workstation
- Intel® processor
- 8 GB DDR SDRAM
- Delivered with board-appropriate software installed: ReadyFlow® or Navigator® drivers and board support libraries
- Out-of-the-box ready-to-run examples

General Information

The Model 8264 is a fully-integrated, 6U VPX development system for Pentek Cobalt®, Onyx®, and Jade™ software radio, data acquisition, and I/O boards. It was created to save engineers and system integrators the time and expense associated with building and testing a development system that ensures optimum performance of Pentek boards.

A fully-integrated system-level solution, the 8264 provides the user with a streamlined out-of-the-box experience. It comes pre-configured with Pentek hardware, drivers and software examples installed and tested to allow development engineers to run example applications out of the box.

System Implementation

Built on a professional 6U rackmount workstation, the 8264 is equipped with the latest Intel processor, DDR SDRAM and a high-performance single-board computer. These features accelerate application code development and provide unhindered access to the high-bandwidth data available with Cobalt, Onyx, and Jade analog and digital interfaces. The 8264 can be configured with Windows or Linux operating systems.

The 8264 uses a 19-inch 6U rackmount chassis that is 12 inches deep. Nine VPX slots provide ample space for an SBC, a switch card, and multiple Pentek boards. Enhanced forced-air ventilation assures adequate cooling for all boards and dual 500-W power supplies guarantee more than adequate power for all installed boards.

Mounting provisions for two 3.5-inch drives with front-accessible trays allow for easy removable storage. Front-panel access to USB, display, Ethernet, and RS-232 ports simplifies development; an optional rear transition module supplements the front panel connections with SATA, audio, a second video interface, and additional USB ports.

ReadyFlow and Navigator Board Support Packages (BSPs)

SPARK systems are delivered with board-appropriate software installed:

- ReadyFlow software supports Cobalt, Onyx, and Flexor boards.
- Navigator software supports Jade boards.

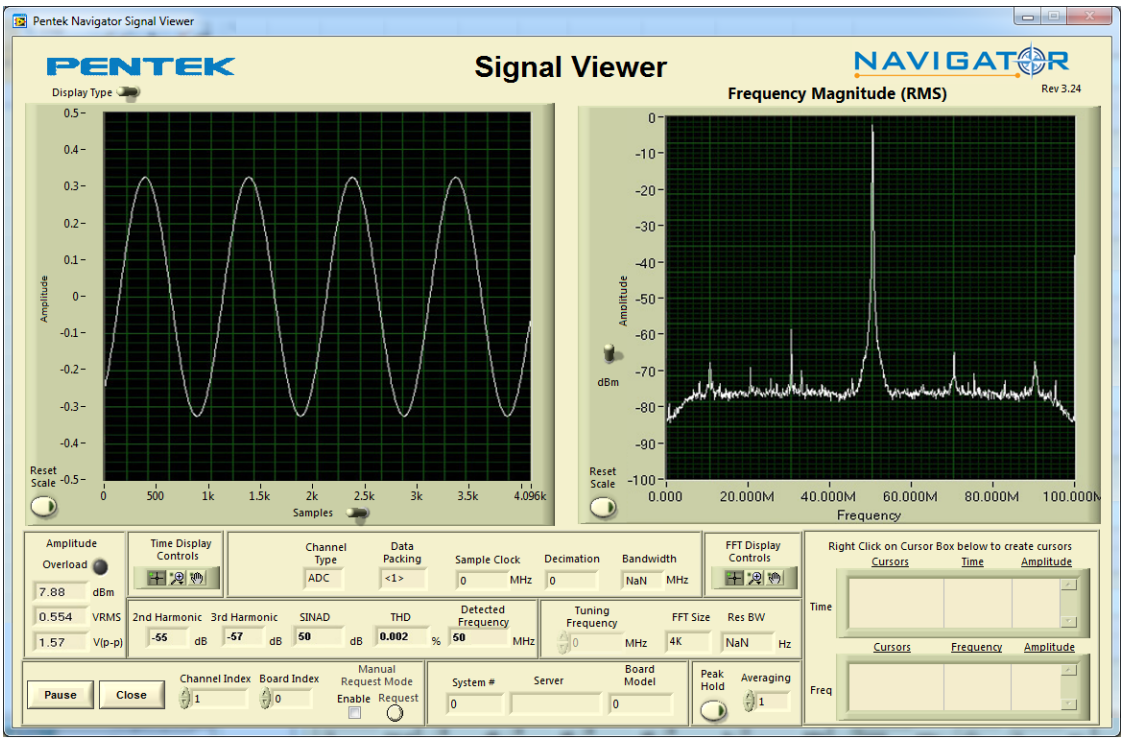
Users of high-performance data acquisition and signal processing boards often find themselves frustrated by the fact that when their new devices are delivered, they are unable to put them to immediate use. Because these boards are largely software-controlled and offer a flexible range of functionality, a certain amount of programming is generally necessary to put the new cards through their paces. Then, if something does not go as planned, there is no way of knowing for sure whether the problem lies with the new code, or with the hardware itself.

To address this issue, Pentek has developed BSPs for all its board-level products. Pentek's BSPs contain C-language examples that can be used to demonstrate the capabilities of Pentek products. They provide sample code that is known to work, giving new users a means of verifying that their board set is operational.

Pentek's BSPs are designed to reduce development time not only during the initial stages, but any time new hardware is added to the system. All packages are built with a consistent style and function-naming convention. Similar parameters on different boards have similar function calls, thereby allowing immediate familiarity with new hardware as it's added, further shortening the learning curve. The BSP command line interface provides access to precompiled executable examples that operate the hardware right out of the box, without the need to write any code.

Signal Viewer

The ReadyFlow and Navigator BSPs include the Signal Viewer, a full-featured analysis tool, which displays data in time and frequency domains. Built-in measurement functions display 2nd and 3rd harmonics, THD (total harmonic distortion), and SINAD (signal to noise and distortion). Interactive cursors allow users to mark data points and instantly calculate amplitude and frequency of displayed signals. With the Signal Viewer, users can start viewing analog signals immediately.



Specifications

Operating System: Windows or Linux
Processor: Intel Core i7 processor or better
SDRAM: 8 GB standard, 16 GB optional
Dimensions: 6U Chassis, 19" W x 12" D x 7" H
Weight: 35 lb, approx.
Operating Temperature: 0° to +50° C
Storage Temperature: –40° to +85° C
Relative Humidity: 5 to 95%, non-condensing
Power Requirements: 100 to 240 VAC, 50 to 60 Hz, 1000 W max.

These specifications are subject to change. Contact Pentek for details.

Configuration

All 8264 systems come with software and hardware installed and tested. Up to seven Pentek boards in the 8264 can be supported. Please contact Pentek to configure a system that matches your specific requirements.

Ordering Information

Click here for more information.

Model 8264	6U VPX Development System for Cobalt, Onyx, and Jade Boards
Option -094	64-bit Linux OS
Option -095	Windows OS
Option -101	Upgrade to 16 GB DDR SDRAM
The addition of third-party VPX boards may affect system performance. Please consult with us before doing so.	

Options

Available options include high-end multicore CPUs and extended memory support.

Lifetime Support

Pentek offers the worldwide military embedded computing community shorter development time, reliable, rugged solutions for a variety of environments, reduced costs, mature software development tools, and **free** lifetime support that our customers can depend on: phone and email access to engineering staff as well as software updates. Take advantage of Pentek's expertise in delivering high-performance radar, communications, SIGINT, and data acquisition MIL-Aero solutions worldwide for over 30 years.

Pricing and Availability

To learn more about our products or to discuss your specific application please contact your local representative or Pentek directly:

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