

Preface™

the first thing you see



The notebook landscape will change when Microsoft® ships Windows Vista™. According to *PC Magazine*, "Vista's sexiest mobility feature is what Microsoft calls SideShow" a secondary processor and display subsystem embedded in a notebook lid, keyboard, or contained in a detachable unit.

Preface is a power-efficient, complete subsystem for adding Windows SideShow displays to notebook computers, along with PortalPlayer's world-class multimedia playback technology.

Windows SideShow will be driven by mini-applications running on a PC, such as such as Microsoft Vista gadgets that can retrieve critical data from hard drives or online information sources, which are then rendered on the secondary Preface subsystem. These applications will provide instant access to critical personal and business data, like contacts, maps, stock quotes or other data, even when the notebook computer is turned off. Consumers and enterprise users alike will benefit from information at their fingertips.



With Preface and Microsoft Vista's new features, PortalPlayer will enable new generations of power efficient notebooks with unparalleled convenience, connectivity and entertainment value. The notebook will evolve from a portable computer to a mobile lifestyle device.

FEATURES

- New notebook subsystem enables the second user interface
- Complete turnkey platform to develop differentiated Windows SideShow devices
- Includes System-in-Package, software and applications framework
- Optimized for gadget display on SideShow
- Supports single line, QSIF and QCIF color screens
- Designed for ultra low power, with Always On access to information
- Multiple modes of operation in multiple power saving states
- Reference Design Kit includes everything needed to run gadgets in real-time on Windows SideShow displays

BENEFITS

- Fully unleash the power of Windows Vista and Windows SideShow
- Trusted PortalPlayer multimedia performance
- Highly customizable for product differentiation
- Simple solution for integration in multiple SKUs and for fast time to market
- Smooth transition to personal media player or other consumer electronics devices
- Excellent platform for custom branded application bundles

Preface™

the first thing you see



portalplayer

PREFACE APPLICATIONS

PortalPlayer, through its Preface Developers Program, is just working with Microsoft to proliferate Windows SideShow technology to the Vista gadget developer ecosystem. The program provides support for the design of SideShow-enabled gadgets that extend applications beyond the every-day desktop computing environment. In addition to gadgets, Preface can support native applications that have been written to work on the platform, and take advantage of the rich firmware developed specifically to support Microsoft SideShow. Below is a list of example gadgets and other mini-applications that can be used on the Preface platform:

MUSIC PLAYER

- Audio Decode – MP3, WMA, WAV
- Post Processing – EQ and other special effects

PRODUCTIVITY TOOLS

- World Clock, Date, Time, Alarm
- Stop Watch
- Notes
- Calculator
- Calendar/schedule
- Contacts
- Emails
- Tasks
- Lid Closed System and Application Control

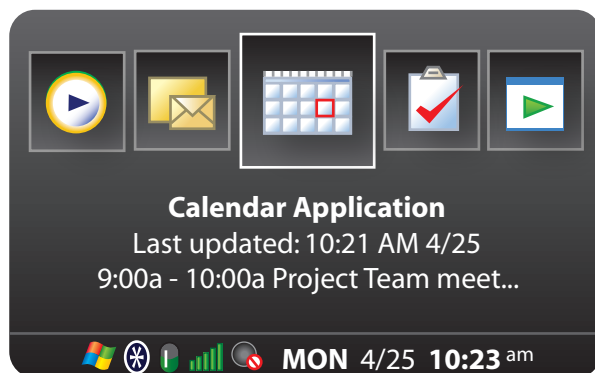


PHOTO AND VIDEO PLAYBACK

- PortalPlayer Photo Slide Show
- JPEG & Video Decode – JPEG, MJPEG
- PortalPlayer Video Player
- Windows Media Player

SYSTEM INTELLIGENCE

- User Name / Information
- System Information Model Number
- Manufacturer
- Serial Number
- OEM Support
- Technical Contact Information
- Logos
- System Functions (On, Off, Hibernate, Standby, Suspend)
- Updated System State
- Battery Facts (Serial Number, Charges, Condition, etc.)
- Notebook Power and Connectivity Status
- Password / Screen Lock
- Language Settings
- Theme Settings



EXAMPLE OF A CALENDAR GADGET

Preface™

the first thing you see



PREFACE REFERENCE DESIGN COMPONENTS

REFERENCE DESIGN BOARD WITH EMBEDDED DISPLAY

- PortalPlayer PP5024 Dual Core System-In-Package
- 32MB of SDRAM Memory
- 1GB of NAND Flash Memory extendable to 8GB
- Preface Development Kit Version 1.0
- Manual
- Engineering Support

PREFACE HARDWARE FEATURES

Memory Support

- 32MB- 1GB NAND Flash
- 8MB-32MB SDRAM

USB2.0 Device support

Key Pad and Touch Screen Support

- Synaptics Touch Pad and Touch Screen, with 3-Wire interface
- Finger Print Sensor with Navigation

TFT, STN or Color Displays Support

- QVGA Landscape and Portrait, 320x240, 240x320, 16bit Color
- QCIF+ Landscape and Portrait, 220x176, 176x220, 16bit Color

DIGITAL RIGHTS MANAGEMENT SUPPORT

- Unique device ID
- RTC
- Microsoft DRM 9.0
- Real Networks

AUDIO

- Decodes MP3
- Sort by Artist, Album, Track and Genre
- Enable industry leading database loading time for all views, enabling fast switching between different views
- OEM configurable 5-band preset EQ
- Supports Sample Rate Conversion
- Bass boost enhancement

PHOTO

Photo/Vide Codecs – JPEG, MJPEG

Photo Management – view thumbnails, play slideshows with concurrent audio

- View Thumbnails (rename, delete, reorder, etc.)
- Organize photos in folders, playlists
- Create slideshows with Concurrent Audio

DRM

- WMA Janus



Preface™

the first thing you see



I/O INTERFACES

- USB 2.0
- Microsoft Device Service Provider Driver
- Sufficient GPIO and button I/O controls
- Color STN & TFT panels various sizes
- 4-bit per pixel gray scale STN display controller supports parallel interfaces
- Serial interface support for LCD bridge interface for external panel controllers (Color and grayscale).

PERIPHERAL

USB

- Data synchronization between primary & secondary environments
- MTP protocol support for protected and clean content transfer
- Application control on primary environment

Debug

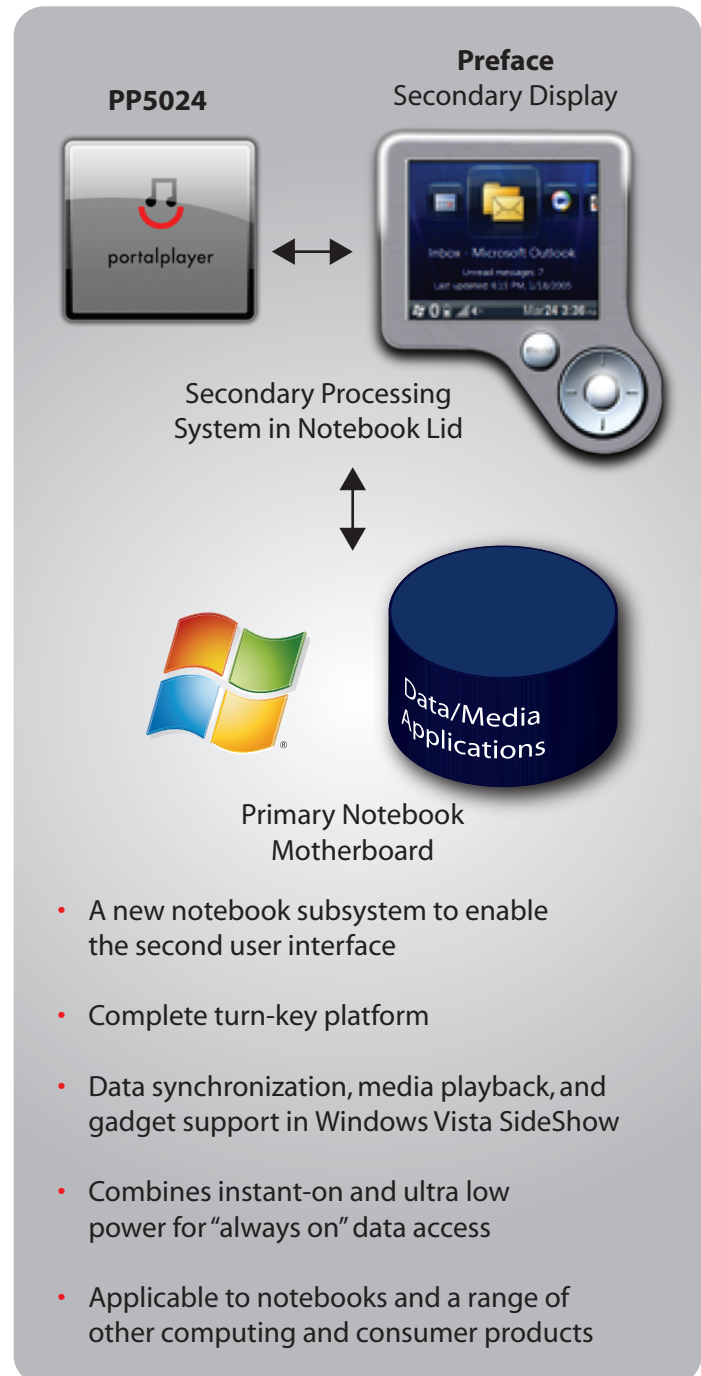
- JTAG

I²C

- System Control
- Embedded Controller

PortalPlayer also provides a host of multimedia features in its custom FDK. For more advanced system implementations, contact your PortalPlayer sales representative.

PortalPlayer software, including the Preface Development Kit Version 1.0, and other PortalPlayer technologies may only be used under a license from PortalPlayer, Inc. The Preface Reference Design Components, including the Preface Development Kit Version 1.0, shall only be used for development purposes. All other uses are expressly prohibited. In addition, technologies of third parties that are referenced above may require a license prior to their use.



PortalPlayer and the PortalPlayer logo and word mark are the registered trademarks and the Preface word mark is the trademark of PortalPlayer, Inc. All other trademarks are the trademarks of their respective owners. All rights reserved.