



Penbex SDK

Developing Handheld Application Makes Easy

Penbex SDK (Software Development Kit) provides best development environment for developing Penbex applications. Applications generated by the Penbex SDK are fully compatible with any Penbex OS™ embedded device. By using Microsoft Visual C development tool with add-in GNU cross compiler coming from Penbex SDK, you can either develop or port applications to handheld device so easily as programming on personal computer. The effort of developing Penbex applications is minimized with the help of the highly functional Penbex emulator and testing toolkit. Developers could make the application ready even without the real hardware platform.

With open architecture of Penbex OS™, Penbex SDK makes it possible for our global developers to develop and commercialize thousands of applications. The "Penbex Developer Online (www.penbex.com/developer)" also provides the SDK with downloadable sample source codes and the technical support via Internet. Penbex developers could share technical and marketing resources and information through the net. Independent software or hardware vendors can use Penbex SDK to develop more value-added solutions running on Penbex compliant handheld devices.

More and more handheld communication applications and demands for PDA vertical market solution will stimulate the growing of the PDA software industry. Development toolkit with greater productivity becomes therefore essential. Penbex SDK helps improve the progress of embedded application development. All Application Programming Interfaces (APIs) are carefully selected and designed for handheld computer such as PDA. Desktop customization is another unique feature of the Penbex SDK that enables the system integrator to modify the bundled applications and desktop by themselves without the help of the hardware manufacturers.

Internet-ready and wireless communication are the basic functions of the Penbex OS™. Therefore, Penbex SDK provides all APIs required for network programming, IrDA standard protocol, UART and Ymodem protocol. In addition, the Penbex SDK also supports the ANSI-like, file system, graphics and database libraries. The Graphics User Interfaces (GUIs) are also particularly designed for handheld devices with small screen, touch panel, and power management. No matter what the application is designed for PDA, PDA phone, or any embedded device, Penbex OS™ brings global developers with compatibility, portability, productivity and efficiency with Penbex SDK.



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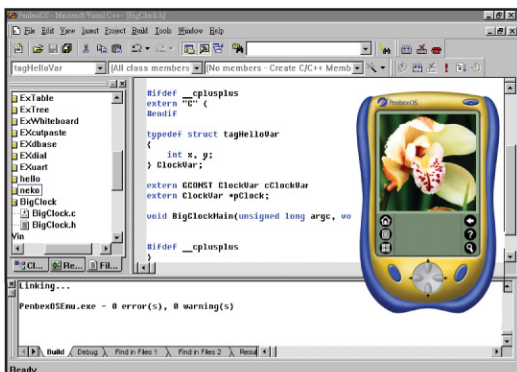
The Penbex SDK Provides

An Open Development Environment

The Penbex SDK provides a workspace for IDE environment running on Microsoft Visual C. Source level debug, breakpoint, trace, step, stack watch, and local/global variables watch become very easy on PC for writing embedded applications.

Built-in PDA Emulator

Running applications within the built-in emulator provides source code level debugging and testing. Emulator fully simulates real PDA functions that include operating system, serial port, networking, display, touch panel, hard key, soft key, back light, date, time, tone, real time clock IrDA and so on. Developers can almost complete developing application without a real platform.



Add-in GNU Cross Compiler

Penbex SDK also provides a GNU-based compiling and makes environment for external applications. This environment includes cross linker, cross compiler, library and header files for GNU tool. As an add-in module, GNU tool is completely integrated with Microsoft Visual C, it is not necessary for Penbex developers to be familiar with command mode operation to use GNU compiler.

Libraries and Header Files

Penbex SDK provides header files and libraries for development environment running on Microsoft Visual C. The libraries include the ANSI-like standard APIs and the Penbex OS™ APIs.

Sample Source Codes and Documentations

Documents provide complete instruction to develop applications on Penbex OS™. Some sample programs in manuals interpret the use of particular Penbex OS™ APIs programming techniques. Those sample codes include games and API demos can be obtained from www.penbex.com/developer.

Developer Program Online Support

For servicing worldwide developers community, Developer Program Online provides SDK and documents download, message board and online training support service. All other news and developer events are also posted on the web. Penbex also provides hotline support for the ISV/IHVs 3rd parties and system integrators worldwide.

The Penbex SDK Features

- Open API architecture
- Downloadable execution file
- Fully support Mono/Color LCD Display
- Support PC Standard BMP file format up to true color (24 bits)
- 160x160 LCD resolution
- dBaseIII database format and data management
- FAT16 file system and 8.3 file naming format
- Provide socket-like networking library, Such as PPP, SLIP, TCP/IP and POP3/SMTP services
- IrDA 1.1 standard protocol
- Power management service
- Emulator under Microsoft Visual C, a full simulation on PC
- Source level debug, breakpoint, trace, step, stack watch, local/global variables watch
- Easy to develop and debug applications
- Customizable desktop and source codes
- Testing procedure recording and playback with emulator
- Support double-byte character and localization



Penbex Data Systems, Inc.

5F-1, No. 106, Chang An W. Rd. Taipei, Taiwan
Tel: +886-2-2558-9900 Fax: +886-2-2555-2600 <http://www.penbex.com>

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ONLINE

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