Set Your Imagination on Fire

SPARK Your Imagination is a joint offering between ICOP Technology and Microsoft Windows Embedded. Combining the Vortex86DX-SPARK hardware kit from ICOP, a full version of Windows Embedded CE 6.0 R2 and Visual Studio 2005 Professional, a software offering previously available only to professionals, SPARK Your Imagination allows you to take advantage of one of the most comprehensive sets of powerful embedded hardware, development tools, technologies and resources. Start building your vision today.

Vortex86DX-SPARK

Windows Embedded CE 6.0 JumpStart Kit

This JumpStart kit is designed to help developer new to Windows Embedded CE learn and become familiar with the development environment quickly.

The kit includes the following:

- VDX-6326, an industrial single-board-computer built with 800 MHz Vortex86DX processor, 256MB DDR2 RAM, 3 10/100Mbps Ethernet, 3 USB 2.0 host, 4 Serial ports, parallel port, 16-bit GPIO, Mini-PCI slot, Compact Flash slot, PC/104 expansion and more...
- 512MB EmbedDisk (IDE bootable flash storage)
- Board-Support-Package (BSP) for Windows Embedded CE 6.0
- SPARK software kit which includes the full version of Windows Embedded CE 6.0 Platform Builder R2 and Visual Studio 2005 Professional.

- Power supply
- Cross-over RJ45 Ethernet cable
- Null RS-232 serial modem cable
- Step-by-step Windows Embedded CE 6.0 R3 JumpStart guide.

The Vortex86DX-SPARK kit is shown without the enclosure. Following are preliminary pictures for the chassis, which will be included as part of the kit. The production version of the enclosure will be in blue.

Enclosure - Front view

Enclosure - Back view

BSP, SDK, JumpStart Guide and Resources on CD

- **Vortex86DX-SPARK Windows Embedded CE 6.0 JumpStart Guide**
  \Vortex86DX_SPARK_WINCE600_JumpStart_Rev1.0.pdf
- **VDX-6326 Board-Support-Package (BSP) for Windows Embedded CE 6.0**
  \Software\ICOP_VDX6326_60B_BSP.msi
- **VDX-6326 SDK for Windows Embedded CE 6.0**
  \Software\VDX6326_WINCE600_SDK.msi
- **CoreCon Connection Framework for Windows Embedded CE 6.0**
  \Software\CoreCon_v200_x86_WINCE600.msi
- **AutoLaunch component for Windows Embedded CE 6.0**
  \Software\AutoLaunch_v200_x86_WINCE600.msi
- **Ethernet boot loader - Eboot**
  \Eboot\eboot.bin

Sample Codes for the Exercises in the JumpStart Guide

MyWinCE OS Design
This is the codes to the OS Design project in the JumpStart guide, used to generate the runtime image preloaded in the Vortex86DX-SPARK hardware kit.

\SampleCodes\OSDesign\MyWinCE_OSDesign.zip
To use this project, unzip the complete \MyWinCE project folder, including all of the sub-folders to the development workstation's C:\WINCE600\OSDesigns\ folder.

Simple C# Managed Code Application Sample - Visual Studio 2005
This is a simple hello world managed code application in C# created using the Visual Studio 2005 IDE. .

\SampleCodes\Application\VS2005_HelloWorld.zip

Simple C# Managed Code Application Sample - Visual Studio 2008
This is a simple hello world managed code application in C# created using the Visual Studio 2008 IDE. .

\SampleCodes\Application\VS2008_HelloWorld.zip

Serial Port Application written in Visual Basic 2005
This serial port application send and receive ASCII text messages through a serial port. By launching two instances of this application and connecting a Null RS-232 serial cable between the device's COM1 and COM2, this application can be used to perform communication test between the device's serial ports using different baudrate.

\SampleCodes\Application\SerialPortApp.zip

Recommended Installation Procedure

Here is a recommended sequence to install the software components for your Windows Embedded CE 6.0 R3 development environment.

1. Install Visual Studio 2005 Professional
2. Install Visual Studio 2005 Service Pack 1
4. Install Visual Studio 2005 SP1 Update for Visa (For Windows Vista workstation only)
5. Install Windows Embedded CE 6.0 Platform Builder
6. Install Windows Embedded CE 6.0 Service Pack 1
7. Install Windows Embedded CE 6.0 R2 update
8. Install Windows Embedded CE 6.0 R3 update
9. Install Board-Support-Package and SDK

URL to download Visual Studio 2005 Service Pack 1
http://www.microsoft.com/downloads/details.aspx?FamilyID=bb4a75ab-e2d4-4c96-b39d-37baf6b5b1dc&DisplayLang=en

URL to download Visual Studio 2005 SP1 update for Vista (for Windows Vista workstation only)
http://www.microsoft.com/downloads/details.aspx?FamilyID=90e2942d-3ad1-4873-a2ee-4acc0aace5b6&DisplayLang=en

URL to download Windows Embedded CE 6.0 Service Pack 1
http://www.microsoft.com/downloads/details.aspx?FamilyId=BF0DC0E3-8575-4860-A8E3-290ADF242678&displaylang=en

URL to download Windows Embedded CE 6.0 QFE and Updates
http://msdn.microsoft.com/en-us/embedded/aa731256.aspx

Windows Embedded CE Information Resources

Additional Windows Embedded CE information resources are available at the following Web sites.

Windows Embedded Developer Center
This web site provides links to Windows Embedded technical resources for developer.

http://msdn.microsoft.com/embedded/

SPARK You Imagination - Windows Embedded CE Classroom
This site provides Windows Embedded CE learning resources.

http://www.microsoft.com/windowsembedded/en-us/products/spark/classroom.mspx

Windows Embedded CE eHow-tos and Tutorials
How-to videos covering Windows Embedded CE entry level to advance subjects are available from this site.

http://msdn2.microsoft.com/en-us/embedded/aa731296.aspx

Introduction to Embedded System Using Windows Embedded CE 6.0 - 2nd Edition
This is a university curriculum material developed by Professor James Hamblen with Georgia Institute of Technology

Course Textbook (English)
http://www.academicresourcecenter.net/curriculum/pfv.aspx?ID=7435

Course Textbook (German)
http://www.academicresourcecenter.net/curriculum/pfv.aspx?ID=7619

Course Textbook (Japanese)
http://www.academicresourcecenter.net/curriculum/pfv.aspx?ID=7618

Course Textbook (Korean)
http://www.academicresourcecenter.net/curriculum/pfv.aspx?ID=7617

Course Textbook (Simplified Chinese)
http://www.academicresourcecenter.net/curriculum/pfv.aspx?ID=7620

Sample Codes for the exercises in the Textbook
http://www.academicresourcecenter.net/curriculum/pfv.aspx?ID=7439

Mike Hall's Blog
Anything has to do with Windows Embedded technologies, Mike Hall probably knows about it. There are tons of useful information related to Windows Embedded on Mike's blog.

http://blogs.msdn.com/mikehall/

Windows Embedded CE Base Team Blog
The Windows Embedded CE team blogs about the CE kernel, storage technologies and system tools on this blog.

http://blogs.msdn.com/ce_base/

Olivier Bloch's Blog
Olivier is the Windows Embedded team's technical evangelist. His blog contains a lot of useful Windows Embedded information resources.

http://blogs.msdn.com/obloch/

Windows Embedded CE KnowlegeBase on EmbeddedPC.NET.
On this site, you can find useful Windows Embedded CE resources for x86 device, application notes and how-to in step-by-step format.

http://www.embeddedpc.net

Windows Embedded Technical Chat

The Windows Embedded CE product team holds routine technical chat online. This is the best opportunity to get answer to question that you can not find answer from documentation and online resources.

http://www.microsoft.com/communities/chats/default.mspx

Windows Embedded News Group
Windows Embedded news groups are monitor by Microsoft development team and expert MVP working in the Windows Embedded field.
These news groups are active. Often, answer posted on these news group receive answer within the same day.

http://msdn2.microsoft.com/en-us/embedded/aa731160.aspx

Windows Embedded Online Community Site - Embedded101.com
The Embedded101 site is an online community site where new and seasoned Windows Embedded developers can come together to learn and share technical knowledge.

http://www.embedded101.com

Windows Embedded CE - Books

Professional Microsoft Windows Embedded CE 6.0
by Samuel Phung
http://www.wrox.com/WileyCDA/WroxTitle/Professional-Microsoft-Windows-Embedded-CE-6-0.productCd-047037733X.html

Programming Windows Embedded CE 6.0 Developer Reference - Fourth Edition
by Douglas Boling
http://msdn.microsoft.com/en-us/library/cc526055.aspx

Windows Embedded CE 6.0 Fundamentals
by Stanislav Pavlov and Pavel Belevsky
http://www.microsoft.com/learning/en/us/Books/12980.aspx

Windows Embedded Shared Source Projects

USB Webcam driver for Windows Embedded CE 6.0
http://www.microsoft.com/downloads/details.aspx?familyid=2EF087C0-A4AE-42CC-ABD0-C466787C11F2&displaylang=en

Bluetooth Wrapper for Windows Embedded CE
http://msdn2.microsoft.com/en-us/embedded/aa714519.aspx

Windows Embedded CE Driver for Phidgets
http://www.codeplex.com/PhidgetsWinCEDriver

Open SSH for Windows Embedded CE
http://www.codeplex.com/CESSH

32feet.NET - Personal Area Networking for .NET
http://www.codeplex.com/32feet

LSP Samples for Windows Embedded CE
http://www.codeplex.com/LSPSamplesWindowsCE

Windows Embedded CE WLAN Driver for Atheros AR-60001
http://www.codeplex.com/CEWifiDriverAR6000

Other Windows Embedded Resources

Preparation Guide for Exam 70-571: Windows Embedded CE 6.0 Development
http://www.microsoft.com/learning/en/us/exams/70-571.mspx
This sites contains learning materials to help prepare for the 70-571 exam. To become a certified trainer, Windows Embedded CE trainer is required to take this test..

Dot Net for Devices
http://www.dotnetfordevices.com
This site is packed with information about managed code application development with .NET Compact Framework using C# and Visual Basic.NET.

Learning CE
http://www.learningce.com
This site is operated by James Y. Wilson, one of the Windows Embedded MVP. James delivered presentation at technical conference, published technical paper on Windows Embedded CE and authored one of the most popular Windows Embedded CE book targeting version 3.0. There are useful application notes on this site.

OpenNETCF - Smart Device Framework
http://www.opennetcf.com/CompactFramework/Products/SmartDeviceFramework/tabid/65/Default.aspx
The Smart Device Framework community edition from OpenNETCF is free. It's a .NET Compact Framework extension library that help bridge the gap between the .NET Compact Framework and the .NET Full Framework.
