



Windows CE and Windows XP Embedded

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Overview

- What Is Windows CE?
- Windows CE Skills
- Example Windows CE Development
- What Is Windows XP Embedded?
- Windows XP Embedded Skills
- Example Embedded XP Development

What is Windows CE

- Compact Modular Operating System
- Supports multiple architectures (Intel x86, MIPS, SH, ARM)
- Flexible licensing model
- Cut down Win32 API for applications
- Runs from Flash, ROM or Disk

Windows CE Skills

- Bootstrap and code download
- Board Support Package(BSP) Development
- Custom OS configuration
- Driver development
- Application development
- Experience with OS and Development tools

Windows CE Power Management

- Battery Powered handheld system
- Hardware Based on Intel Assabet evaluation board
- BSP and drivers had limited power management support
- Needed full power management for all onboard devices

System Power Management

- System Idling
- User Interface Idle Timeouts
- Soft Power Off

Driver Power Management

- Many devices
 - Display
 - RS232
 - USB
 - Bar Code Reader
 - IR port
 - PCMCIA
- Device initialisation
- Soft power off handling



Questions?



What is Windows XP Embedded

- Modular version of Windows XP Professional.
- Supports only Intel x86 architecture
- Flexible licensing model
- Boots from any disk like media.
- Can run any software that works on Windows XP Professional



Windows XP Embedded Skills

- Custom OS configuration
- Driver development
- Application development
- Experience with OS and Development tools

Windows XP Audio Driver

- Axiom PC104 board
- Based National Semiconductor Geode
- Onboard audio not detected

Driver Implementation

- BIOS has limited Soundblaster 16 emulation
- Customised SB16 driver available in XP DDK to handle BIOS limitations

Driver Installation

- Vital on XP Embedded to avoid manual configuration of each device
- Produced .INF file for Plug and Play installation
- Packaged up into component for easy integration into Target Designer

More Information

- <http://www.microsoft.com/embedded/>
- <http://www.mpc-data.co.uk/>
- **Distributors**
 - <http://www.abacus.co.uk/> - Abacus Polar PLC
 - <http://www.eurodis.com/> - Eurodis



Questions?

