

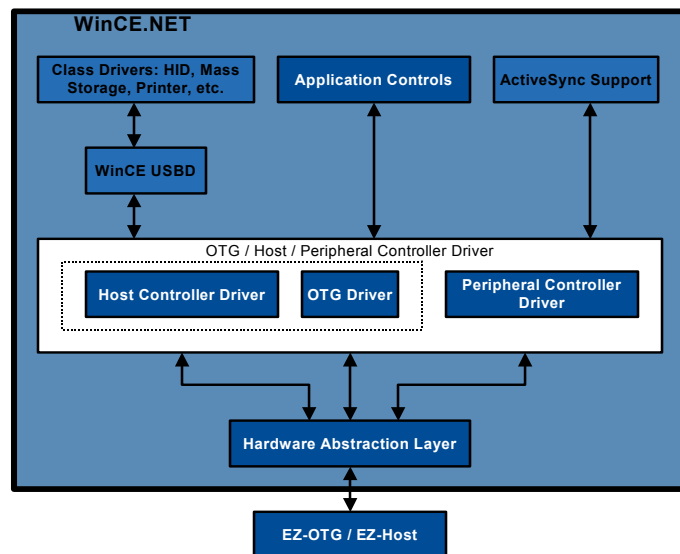
# EZ-OTG / EZ-Host Windows® CE USB Host/Peripheral/On-The-Go Driver

## Develop Host and On-The-Go enabled Smart Devices

With their introduction, EZ-OTG and EZ-Host brought a new realm of USB connectivity to portable and embedded devices. Now, with a Windows CE driver compatible with Windows® CE .NET v4.2 and Windows Mobile™ 2003, Cypress makes designing a smart device even easier. The robust driver architecture bridges the power of EZ-OTG and EZ-Host with the extensive capabilities of the Windows® CE operating system.

## Highlights

- **USB Host Support**
  - Multiple USB ports
  - Supports 5 tiers of hubs
  - Up to 32 USB devices per port
- **Uses Standard WinCE Class Drivers**
  - Hub
  - Mass Storage
  - Human Interface Device
  - Printer
  - Others...
- **ActiveSync Compatible in USB Peripheral Mode**
- **USB On-The-Go Compliance Tested**
- **16-bit HPI CPU interface**
- **Available in 3 builds**
  - Host/Peripheral/OTG
  - Host-only
  - Peripheral-only



The Cypress WinCE driver works with the existing USB stack and class drivers provided in Windows CE to instantly enable your product to communicate with millions of existing USB peripherals. Windows® CE already includes the most popular USB class drivers so you can connect to HID class devices (mice and keyboards), mass storage class devices (hard disk drives, NAND Flash drives, MP3 players, and many Digital Still Cameras), and printer class devices. And with the OTG protocol fully supported and compliance tested in both the silicon and the driver, your product can conform to the latest addition to the USB specification: USB On-The-Go.

The driver provides native support for ActiveSync as a USB peripheral. This delivers out-of-the-box connectivity for the most common method of interfacing Windows® CE peripherals to PCs.



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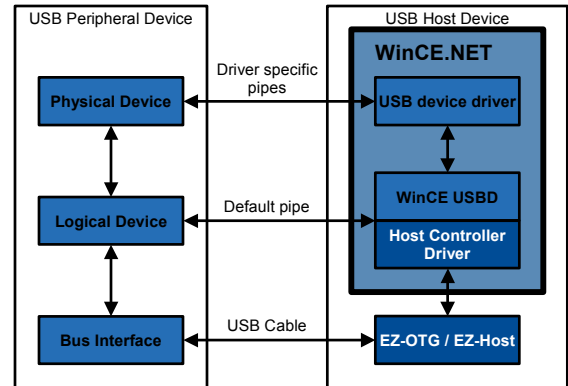
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 Press "1" to reach your local sales rep

## Windows® CE Mobile USB Host Connectivity

### High performance design with full-featured support

The driver utilizes the Host Port Interface (HPI) of the EZ-OTG and EZ-Host for 16-bit high performance data transfer with the system processor. The Intel XScale® PXA255 was used for driver development. Porting guides in the driver documentation provide the necessary information to adapt the driver to any hardware platform running Windows® CE.

Various Serial Interface Engine (SIE) and USB port combinations of the chips are supported, allowing a range of host, peripheral, and OTG port combinations. These include multi-port USB host, dual-role (host or peripheral) on the same SIE, such as that used by OTG devices, and simultaneous host and peripheral on separate SIEs.



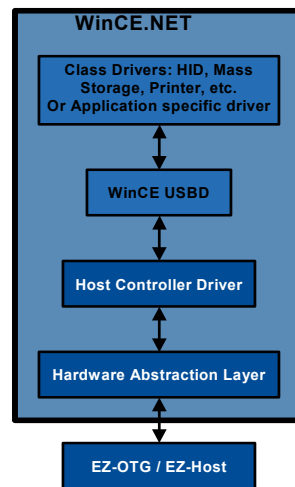
Typical system diagram showing a WinCE Host and a USB Peripheral device

### Driver builds ready to meet your application needs

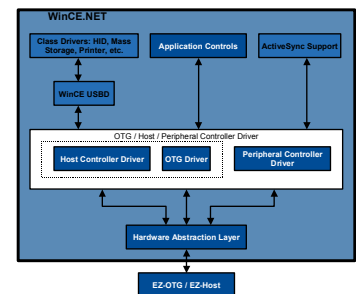
Three driver builds are offered to simplify the basic driver construction for the most common implementations. The builds are:

- Host/Peripheral/On-The-Go
- USB Host only
- USB Peripheral only

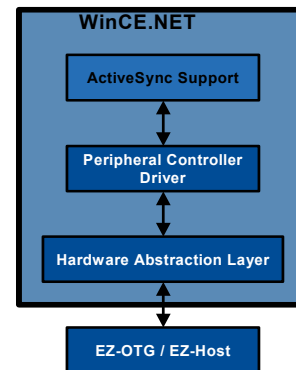
Complete source code and documentation are provided to allow customization of the driver for application specific needs.



Host driver architecture



Host/Peripheral or OTG driver architecture



Peripheral driver architecture

### Availability

All software is available for download from the Cypress website, [www.cypress.com](http://www.cypress.com), under "Software Downloads".

[www.cypress.com/support/link.cfm?rd=otghostwince](http://www.cypress.com/support/link.cfm?rd=otghostwince)

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