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JL7100
Windows CE Laptop
Laptop for everyone.

Overview:

JL7100 is a low cost portable laptop based on the WinCE Operating system. It has been specialy designed keeping in view the requirement of all the things needed in a laptop while at the same time, reducing the not-so-used components and features to reduce the cost.

You can surf the net, send emails, play multimedia files and video and do all you office work. Its ideal for business people on the go, students, office staff or home users.

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Specifications:

Special Features	**Display screen size**	7" TFT LCD
	CPU & Chipset	ARM 9 Core,Samsung
	Audio	Hi-Definition Audio CODEC; Built-in stereo speaker; Built-in microphone
	Operating system	Win CE 5.0 (Linux optional)
	LAN	10/100MB,WiFi 802.11b/g
	Dimension	225 x 160 x 32 (mm)
	Weight	0.92kg(Including Battery)
Storage	**ROM**	1 GB
	RAM	64MB(Internal)
	SD/MMC	4 GB
	External Storage	Optional via USB
	Webcam	External via USB 2-4GB(Optional)
Memory Performance	**Motherboard memory**	64MB On Board
	Graphic Memory	Built On Board
LCD Specification	**Screen Size (Diagonal)**	7"
	Screen Format	16 : 9
	Pixel Size	22mm×22mm
	Resolution	VGA,640×480
	Colors	65k
Ports	**USB**	3 (2 Host, 1 Device)
	VGA	1 Sub9
	PS/2	For KB/Mouse
	LAN	1 RJ45
	Modem	1 56K
	AC Power	9.5 V
	Audio	Earphone and Mic
Battery	**Type**	Rechargeable Li-Ion
	Life	5.5Hours,7.4V 2200m AH*2
	External Power	9.5 V
Multimedia	**Video**	AVI,WMP
	Images	BMP, JPG, GIF
Support software	MS office (Word,Excel,Powerpoint)	
	Microsoft Media Player	
	Picture viewer,PDF viewer	
	E-Book	
	Outlook	
	MSN messenger	
	Skype	
	Internet Explorer	
	Others	

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Features	**Colors**	Black / Silver / White
	Keys/ buttons	80 Standard keyboard;Power On / Off Switch;Reset Button
	Keyboard printing	English (can be changed)
	Touch pad	Yes
	Mouse	USB or PS2
	Casting Material	PC+ABS Engineering Plastic
Software/OS Licensing Cost	**Windows CE Core**	Free with laptop (Paid by the manufacturer)
	MS Office	USD 15.0
	Media Player	USD 7.0
Accessories	Charger	
	Battery	
	Earphone	
	Power adaptor	
	Manual Book	
	USB Mouse	
	Warranty card	
	CD	
Certifications	CE	
	ROHS	

Pricing (FOB Shenzhen, China)-- HS code: 84713000

	1000 pcs	500 pcs	100 pcs	samples
Basic	USD 99	USD 119	USD 149	USD 249
Basic+WiFi	USD 119	USD 139	USD 169	USD 269
Basic+WiFi+GPRS	USD 139	USD 159	USD 189	USD 289

Length of warranty: 2 Years

WinCE Operating System:

Windows CE (also known officially as Windows Embedded CE, and sometimes abbreviated WinCE) is a variation of Microsoft's Windows operating system for minimalistic computers and embedded systems. Windows CE is a distinctly different kernel, rather than a trimmed-down version of desktop Windows. It is not to be confused with Windows XP Embedded which is NT-based. It is supported on Intel x86 and compatibles, MIPS, ARM, and Hitachi SuperH processors.

Microsoft says it implies a number of Windows CE design precepts, including “Compact, Connectable, Compatible, Companion, and Efficient.”

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A distinctive feature of Windows CE compared to other Microsoft operating systems is that large parts of it are offered in source code form. First, source code was offered to several vendors, so they could adjust it to their hardware. Then products like Platform Builder (an integrated environment for Windows CE OS image creation and integration, or customized operating system designs based on CE) offered several components in source code form to the general public. However, a number of core components that do not need adaptation to specific hardware environments (other than the CPU family) are still distributed in binary form only.

Development tools

Visual Studio
Late versions of Microsoft Visual Studio support projects for Windows CE, producing executable programs and platform images either as an emulator or attached by cable to an actual mobile device.

Embedded Visual C++ (eVC)
The Embedded Visual C++ tool is for development of embedded application for Windows CE based devices. This tool can be used standalone using the SDK exported from Platform Builder or using the Platform Builder using the Platform Manager connectivity setup.

9 Reasons, why WinCE is the right Operating System to select:

"Small+Compact"
The first thing to say here is componentized operating system, so you get to pick and choose the parts of the operating system that are appropriate for the device you are building. Windows CE has around 500 components(Some are device drivers, the rest of the components are operating system technologies).

The Windows CE minimum build size is approximately 200 KB. A residential gateway image would be about 4 MB in size. Support for wired and wireless networking, remote administration UI (web server), and a PDA-like image which includes the Windows-like shell, networking, RDP, Internet browser, Windows Media Player, COM/DCOM, etc., would require around 18 MB. Obviously this could be tuned for the specific application you are building.

"Secure."
Windows CE 5.0: You can totally lock down your operating system images to only run the code that you want on your system by implementing OEMCertifyModule. Also, for Windows CE 5.0, all security features are turned on by default. Windows CE is a componentized operating system, you only include the components and technologies that are required by your device. The other interesting feature is that Windows CE architecture is different from the desktop. On the desktop operating system, three core components are linked by any executable code: Kernel32, GDI32,

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and User32. However, none of these components exist in Windows CE, so even if your device is running on the x86 processor, even a simple application like Notepad from the desktop won't run on Windows CE. This means that desktop viruses, worms, and other security hazards won't run on Windows CE either.

"Configuration"
Windows CE 5.0: The operating system is componentized and the operating system development tool (Platform Builder) ships with a wizard to assist with the initial platform configuration. The wizard contains nine platform configurations ranging from "Kernel only" (200 KB) to Residential Gateway, Internet Appliance, or WebPad. These can be considered to be starting points for your design; you can add or remove features from the platform workspace, such as adding support for the .NET Compact Framework or removing support for the HTTP Web Server. The platform development tool also gives you the ability to add your own custom applications and drivers. See the Windows CE tutorials for more information. Plus, the platform configurations can be extended by creating your own templates.

“Windows CE’s Price"
Windows CE evaluation is available as FREE downloads from the Microsoft Web site. You can download the Windows Embedded Introductory Kit right now. Once you've evaluated the operating system and tools for up to 120 days, you can then purchase the full product. Note that if you download the trial version of Windows CE, you'll get the same tools and 2.5 million lines of source code as in the full product.

"Licensing’s Price"
When you start shipping real products to your customers. You can use the evaluation edition tools (or the full product) to build and send test versions of your operating system image to customers without needing to license anything.

Windows CE has a "Core" license that covers most of the operating system for $3 or a "Professional" license for $16. So the cost of development is pretty low. Development tools are FREE to download from the Microsoft Embedded Web site and can be run for 120 days.

"Support."
There are a number of ways to get support for Windows CE, ranging from FREE support (notice the "free" word being used yet again!) to training courses, partner-assisted development, and Microsoft Developer Support. Free support includes newsgroups monitored by our partners and development teams, online chats, and tutorials.

"Hardware Driver"
Windows CE 5.0: Windows CE ships with at least one board support package for each supported processor (x86, ARM, MIPS, SH4). One of the interesting aspects of Windows CE is the

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capacity for hardware developers, system integrators, and silicon vendors to extend the Windows CE catalog of components by adding support for their own reference boards, BSPs and drivers.

"Different Interfaces"
Each embedded system has its own requirements for user interfaces. In some cases, the embedded system may be headless, in which case the only user interface may be Web-based. Building HTML/DHTML-based user interfaces is extremely flexible and provides for a completely custom look and feel for your remote user interface. In some cases, an HTML-based user interface may also be appropriate for a headed device, in which case you can use the Internet Explorer 6.0 application or ActiveX control for the user interface of your device.

One thing to think about here is that in both Windows CE, the shell can look and feel just like a Windows desktop with a Start button, icons, etc. But in both cases, the Windows Shell can also be completely removed from the operating system. This gives you the ability to boot into your custom application. The end user of the device doesn't need to see any Windows user interface, won't have access to a desktop (since there isn't one), won't have access to the control panel (since there isn't one), and so on. You can develop an application to become the shell of your device.

"Training "
Training is available for Windows CE . Windows CE 5.0 training is available as a 5-day course. Check out the Windows Embedded Partners site to find your nearest training center.
We have more partners than you can shake a stick at - somewhere close to 2,500 in over 50 countries at the last count. Check out the Windows Embedded Partners site to find a product, service, or hardware partner to assist you with your next or current project.