Embedded Internet Tools

OS component pack
The Windows CE v. 3.0 Add-On Pack provides a number of operating system components for users of Platform Builder v. 3.0. These components include: an XML parser, which implements an interface for validating, parsing, and modifying XML data; Internet connection sharing, which enables a Windows CE-based device to share its Internet connection with one or more devices running on the same network; point-to-point tunneling protocol (PPTP), which enables remote users to access corporate networks securely across the Internet; Crypto API v. 2.0, which provides security through certificate-based functionality and support for smart cards; and remote desktop protocol, which enables footprint-sensitive Windows CE-based devices to access applications running on a Windows 2000-based server. The Add-On pack will be shipped directly to all current Platform Builder v. 3.0 users at no cost.

Microsoft
Redmond, WA
(425) 882-8080
www.microsoft.com

Java platform
The Chai Appliance Platform, a suite of software products designed for use in memory-constrained devices, now supports Linux. One of the Chai appliance Platform’s major components is the ChaiVM, an environment for running Java applications on intelligent devices. Other components include the ChaiServer Web-based application server, connectivity to e-services, device manageability by means of the OpenView Network Node Manager, a mobile database, the ChaiFarer XML microbrowser, a toolkit for creating graphical displays, and standards-based spontaneous networking.

Espial
Ottawa, Ontario
(613) 230-4470
www.espial.com

Joint Internet platform
Together, the iChip Internet controller and the SmartSCM single-chip modem form an Internet-enabled appliance reference design that lets designers add Internet functionality to new devices. The SmartSCM combines a modem controller, data pump, ROM, RAM, and the SmartDAA silicon data access arrangement telephone-network interface. The second major component of the platform, the iChip Internet controller, mediates the connection between the device processor and the Internet. It works in tandem with the modular controller and runs the Internet protocols for sending and receiving e-mail messages and Web pages, and for opening and closing TCP and UDP sockets. It includes 256KB or 512KB of on-board flash memory. The iChip uses the AT+I command set. The joint reference platform is available now.

Connect One Semiconductors
Santa Clara, CA
(408) 986-9602
www.connectone.com

Conexant Systems
Newport Beach
(949) 483-4600
www.conexant.com

Set-top box chip
The STi5518 is a chip that integrates a transport demultiplex block, an ST20 92-bit system CPU, an audio/video MPEG-2 decoder, display and graphics features, a digital video encoder, and system peripherals. The transport demultiplex block includes DirectTV and DVB descriptors, as well as the Macrovision copy protection system. The transport interface block includes a sector processor and a CSS decryption block. The video decoder supports sub-picture decoding. These features coupled with the Dolby Digital and Macrovision capabilities make the STi5518 suitable for DVD-capable set-top boxes. The STi5518 is housed in a 208-pin PQFP package. It’s available now.

STMicroelectronics
Lexington, MA
(781) 861-2650
www.st.com

Internet appliance platform
TotalIA is a Linux- and Java-based Internet appliance reference platform. It integrates the DeviceTop service platform, Tao Group’s Java Virtual Machine, and National Semiconductor’s Media GX processor board, as supplied by Arcom Systems. TotalIA’s core applications include the Escape Web browser, Ebox e-mail, and Assistant personal information management technologies. Additional features include service delivery, remote device upgrade and management capabilities, and multimedia support for Macromedia Flash and MP3.

Hewlett-Packard
Palo Alto, CA
(858) 655-8068
www.hp.com

Internet Appliance Products