# PalmSource™ mFone™ for Smart Phones

**palmsource**™

## The powerful, flexible, one-stop solution for smart phones.

**Highlights:**

- A comprehensive software platform solution for smart phones

- Mobile Telephony and Data

- Wireless Messaging - SMS, MMS and email

- Strong Multimedia Support for Wireless Internet - HTTP, HTML, WAP

- Advanced Graphics

- OTA provisioning

- Full security

- A comprehensive suite of applications

- Java support

### PalmSource mFone for Smart Phone Overview

PalmSource mFone for Smart Phones is a highly efficient, software solution for smart phones that includes everything from the Graphical User Interface (GUI), to device drivers, network protocols, development tools, and end-user applications such as a browser, PIM functions, email, SMS, MMS, MP3 players, games, and more.

PalmSource mFone for Smart Phones runs on the PalmSource™ mLinux™ kernel or under other standard embedded Linux distributions.

### A Total Solution for Smart Phones

The PalmSource mFone for Smart Phones platform provides a turn-key solution for the hardware manufacturers' direct needs, and a stable and effective platform for third-party developers to create applications. It consists of the following key elements:
- GUI, a fully optimized graphical user interface system
- A rich set of networking protocols
- A comprehensive suite of end-user applications

### Applications
**Messaging Services**

Full-featured SMS, MMS and email clients. The email client supports POP3, SMTP and SMTP authorization, IMAP4, email attachments, forwarding and group emailing.

**Wireless Internet**

PalmSource mBrowser is a fully-featured micro browser optimized for smart phones, feature phones, and other wireless devices. The browser is small, fast, and includes a WAP 1.2.1 or WAP 2.0 protocol stack.

## Platform

### Telephony Services

PalmSource implemented a Communication Server abstraction layer to speed development of new applications using telephony functions. This layer abstracts the differences in AT Command sets from different vendors. This makes it easy to support modules (GSM/ GPRS, CDMA, etc.) from different manufacturers.

### Application-Aware Power Management

PalmSource™ mLinux™ adopts a unique application-driven power management policy. Since there is a critical need for next generation phones with faster CPUs, more memory, more capability, features, and increased battery life, no one wants a phone that needs to be recharged too often. Our power management improves the basic power management facilities provided with chipsets with an application-driven power management policy that ensures long standby times and in-use times.

### GUI

A Graphic User Interface (GUI) for embedded devices must be simple and efficient. PalmSource's GUI is designed specifically for mobile and wireless devices. The GUI features a small footprint, low CPU requirements, and automatic configuration for small screens. The GUI is designed to support all requirements for mobile devices, including Java (J2ME). It includes an SDK with a Windows-based emulator, and is based upon a client/server architecture enabling quick switching between applications.

### SyncML

PalmSource's industry standard implementation of SyncML provides full two-way synchronization capability to: 1) synchronize data on the network with mobile terminal data; and 2) synchronization with Microsoft Outlook 2000 on the desktop.

### Development Tools

PalmSource provides tools based upon the industry standard GNU toolchain, including an SDK and PC emulators for Windows.

### Over-the-Air (OTA) provisioning

PalmSource™ mFone™ for Smart Phones is designed to support "over the air" (OTA) downloading of Java and native mode applications. This enables users to download and install new applications such as games and other new features.

### Security

PalmSource mFone for Smart Phones is designed to manage system resources at different levels. Only system applications can access and modify key system resources – normal user applications do not have these rights. This provides better security and ensures resistance to viruses, and ill-behaved applications.

### Multimedia Support

PalmSource mFone for Smart Phones is designed to support voice recording and playback, including MP3 Player (MP3, WAV, MIDI), digital camera, Picture Viewer (GIF, JPEG, PNG, BMP) and Media Player (MPEG4 is available from a third party).

### Java Support

PalmSource mFone for Smart Phones includes an internal KVM, supports CLDC, MIDP 2.0, and complies with the J2ME standard plus the China Mobile operator standard.
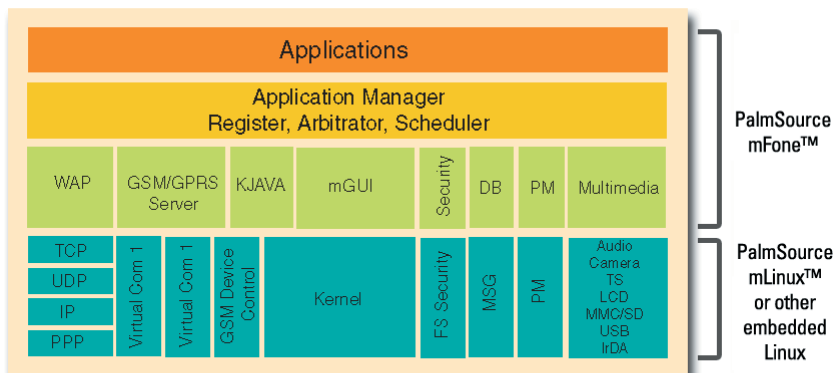
## Services

**From design to production, PalmSource gets your product to market quickly and efficiently.** PalmSource knows what it takes to produce successful mobile products. Provided with your hardware, PalmSource will deliver the software, system integration, user interface, and support and maintenance services that meet specific design and marketing objectives.

### Specification: Platform

**Wireless Telephony / Data**
- GSM Phase 2+
- SIM Application ToolKit
- GPRS, class B (R97/98)
- HSCSD

**PalmSource mFone™ Architecture with Linux OS**



From design to production - we get your product to market quickly and efficiently.

**Wireless Internet**
- HTTP1.1
- WAP 1.2.1 and WAP 2.0

**Java**
- Internal KVM support
- CLDC, MIDP 2.0
- Compiles with J2ME and
- China Mobile Operator Standard

**Data Synchronization**
Two way data synchronization: Mobile Terminals <-> Network Synchronization with Microsoft Outlook 2000

**Security**
TLS/WTLS

## Specification: Applications
**Basic Applications:**
Phone Dialer, SMS, Alert, Time, Signal Gauge, Battery Gauge, Settings, File Manager, Alarm Clock, Calendar, Tasks, Memo, Video Recorder, Calculator, Dictionary

**Communications:**
Address Book, Call History, mBrowser, mEmail, MMS, SMS, Wireless Network Setting

**Messaging: GSM, SMS, MMS**
- SMIL 3GPP R5 (PSS5) support
- WSP transport EMAIL (POP3, IMAP4, forwarding, group emailing, SMTP, SMTP auth.)

**Entertainment**
- Multimedia
- Video recording and playback
- MP3 player: MP3, WAV, MIDI
- Digital Camera
- Picture Viewer: GIF, JPEG, PNG, BMP, WBMP

- Media Player: MPEG4 from third party
- Image Viewer (Photo Album), Camera, Boxman, Pente

## Tools:
- PC emulator
- API reference
- Programmer's Guide

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