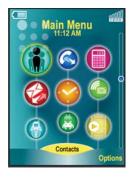


uiOne™ Handset Development Kit (HDK)

Driving New Handsets to Market Faster with Reduced Design and Development Costs





QUALCOMM's uiOne[™] Handset Development Kit (HDK) is an integrated package of application and user interface (UI) software solutions optimized to run on QUALCOMM's Mobile Station Modem[™] (MSM[™]) chipsets. The uiOne HDK provides manufacturers with a framework for the integration of third-party engines and a reference user interface ready to be customized to meet internal UI requirements as well as those specified by operators.

The uiOne HDK includes various user interface application engines for truly exceptional handset functionality, including the idle screen, main menu and settings, messaging, media viewer, music player and call handling. In addition, the uiOne HDK supports customization of the user interface for each of these functions. By separating the UI layer from the actual engines and using uiOne's easy-to-modify TrigML markup language rather than the more complex C language, the uiOne HDK delivers several important benefits to device manufacturers:

- · Faster time to market for new mobile devices
- Reduced development costs
- Customizable user interface and engines to meet UI requirements specified by operators as well as market requirements across regions to enable the differentiation of handsets by feature sets and UI

FULLY CUSTOMIZABLE USER EXPERIENCE
REDUCED DEVELOPMENT COSTS • FASTER TIME TO MARKET



uiOne HDK

The uiOne HDK is a fully customizable handset UI framework built on QUALCOMM's uiOne SDK (Software Development Kit — see page 3 for more information) and Open BREWapi™ software. The uiOne HDK includes reference implementation of core handset and multimedia UI applications while providing an open framework for the integration of third-party applications and engines. The uiOne HDK supports standards-based application engines from third-party vendors who have their engines integrated into the framework as swappable plug-ins with included UIs. The uiOne HDK represents a complete UI development solution for handset manufacturers.

uiOne Handset Development Kit (HDK)



uiOne HDK v.1.0

Version 1.0 of the uiOne HDK includes core telephony and multimedia applications. General features include:

- Fully customizable user experience:
 - > Application behavior
 - > Screen layout
 - > Menu organization
 - > Look and feel
- · Application history stack management
- · Unified notification handling
- Multiple language support
- · Off-target simulation on PC
- Full TrigML and actor source code provided
- · Extensible through custom application and actor development



Applications in the uiOne HDK

The core handset and multimedia applications in the uiOne HDK include:

- Idle/Home Screen (idle, power up, power down, search, user-selectable wallpaper, personal greeting, time, date, current phone mode)
- Main Menus and Settings
- Call Handling and Supplementary Services (caller ID, call timer, volume control)
- Call Log (including incoming, outgoing and missed calls)
- SMS (text entry)
- Contacts (contact manager, phonebook)
- Camera/Camcorder (still images, video)
- Media Viewer (graphic files display, video playback)
- Music Player (music files)
- Utilities (theme manager, world clock, calendar, alarm clock, countdown, stopwatch, calculator)

Future versions of the uiOne HDK will support additional applications, including browsers, advanced messaging clients, data synchronization, device management, and more.

Further Reducing Costs and Efforts for Manufacturers

The uiOne HDK is an open framework with published interfaces that allow manufacturers to select from multiple third-party application engines. Additionally, QUALCOMM will make available pre-integrated and pre-tested third-party engines for use with the uiOne HDK to minimize development, integration, test and overall product cost.

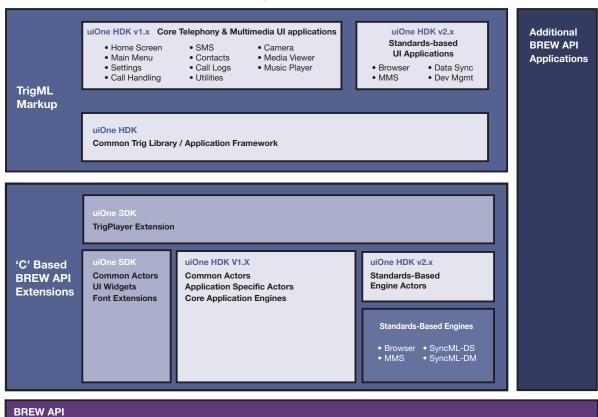
uiOne SDK

The uiOne SDK provides the tools to create, simulate and run customized UIs on handset devices, as well as the ability to test the UI on PCs during the development process.

The uiOne SDK is a suite of core technologies and tools, including the powerful TrigML markup-language-based UI development environment and the high-performance TrigPlayer rendering engine. Based on a relatively small and extensible number of tags, the TrigML language can incorporate any required or requested tags and attributes as needed. TrigPlayer renders the compiled TrigML that constitutes the UI layer. The uiOne SDK's authoring tool is the Windows-based TrigBuilder which enables UI design and prototyping, creation of UI updates, simulation and debugging.

Built on Open BREWapi software for portability across chipsets and product tiers, the uiOne SDK does not specifically include UI applications or UI design.

uiOne SDK and HDK Client Components



Go Online

Please visit www.cdmatech.com/launchpad for more information about QUALCOMM's Launchpad suite of integrated applications, which provide network operators and wireless device manufacturers with a seamless, cost-effective solution for providing advanced wireless data services. Ranging from multimedia applications to position-location technology, connectivity tools, customizable user interfaces and storage capabilities, a select set of Launchpad features is incorporated into each QUALCOMM chipset to enrich the user experience while maintaining cost-target objectives.

About QUALCOMM

QUALCOMM CDMA Technologies is shaping and creating new ways to communicate. Working with manufacturers and operator partners worldwide, we develop systems that provide the foundation for tomorrow's wireless services while delivering what the market needs today.

Our industry-leading CDMA engineers create detailed reference designs to accelerate testing and deployment for our partners. Our chipsets and systems bring advanced features and functionality to legacy and next-generation networks and devices. With QUALCOMM CDMA Technologies, manufacturers and wireless operators can deliver the products and services the world wants now and be first to market with future developments.

