

Crank Storyboard Suite

Technical Datasheet

From UI Design to Embedded Device—*faster*



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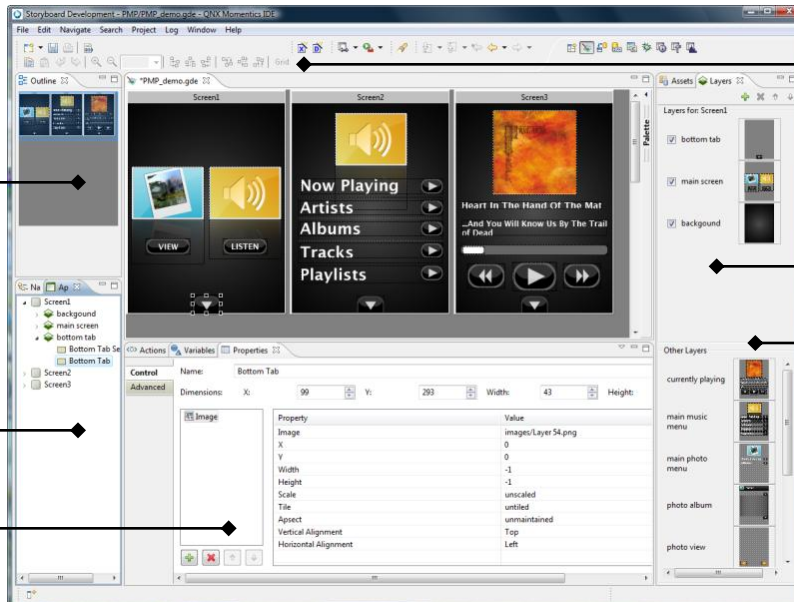
The Crank™ Storyboard™ Suite consists of two graphical display development optimization modules: **Crank Storyboard Designer** and **Crank Storyboard Embedded Engine**. Using one solution, user interface (UI) designers and embedded systems engineers work in parallel to enable the rapid prototype and deployment of rich animated UIs for resource-constrained embedded devices. Storyboard spans—and bridges—the gap between the UI designer who controls the look and feel of the device, and the engineers who are responsible for features and functionality.

Make the best use of your people's skills, streamline the design cycle, optimize hardware performance, and leverage investment in your R&D efforts.

See a complete visual overview of the application being developed

See a hierarchy of all screens, layers, and controls in the application

View and edit the properties of controls, screens, or layers directly



Quick access to common design functions through the Storyboard toolbar

Drag and drop thumbnail graphics directly into the screen design tool

Import directly from Adobe Photoshop and other graphics design programs, maintaining layer and transparency information

Graphical display is captured and summarized in the Embedded Engine: Placement and content for images, text, layers, screens, animations, transitions, the events that will come into the system, and corresponding actions that the events trigger.

Software and hardware is constantly evolving. Storyboard is extendable by way of a plugin interface—you won't be locked out every time a new hardware platform is brought in or a different OS is chosen. At Crank Software, we're ensuring that the investment in a brand-defining user experience (UX) isn't lost.

Target OS Support

Storyboard Embedded Engine supports the following OS target platforms:

- Linux
- QNX Neutrino
- WinCE

Hardware Support

The following target hardware platforms are supported by Storyboard Embedded Engine:

- ARM9, ARM11
- PowerPC
- X86
- SH4

Graphics Rendering

Storyboard Embedded Engine supports a variety of graphics rendering technologies:

- Simple Direct Media Layer
- Frame buffer
- Direct FB
- Win32 GDI
- QNX Advanced Graphics TDK
- Khronos OpenVG 1.x
- Khronos OpenGL ES 1.x
- Custom graphics API

Contact Crank Software

For more information, please email us info@cranksoftware.com, call us at **+1.613.595.1999**, or visit us online at cranksoftware.com.

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Storyboard Embedded Engine

Programming features support

- Animations
- Support for hardware graphics layers
- Optimized for embedded hardware
- Extensible scripting interface
- Screen transitions: fades, easing
- Alpha blending and rotation
- Native system API
- Screen composition
- Gesture engine
- Multiple input sources: touchscreen, keyboard, mouse
- Dynamic data assignment
- Scalable
- Dynamic plugins and action/event invocation
- External application rendering: video, browser, and more
- Regression testing interface

Image support

- PNG
- JPEG
- GIF
- BMP

Text support

- UTF-8 character set
- Dynamic text
- TrueType font support
- Anti-aliasing

Storyboard Designer

- WYSIWYG design of user interfaces for embedded applications
- Import Photoshop files directly into design
- Design using standard formats for fonts and images
- UI templates for standard user interface elements
- One click application simulation
- Receive immediate feedback on UI designs that may be incompatible with hardware capabilities
- Integration with Eclipse-based embedded development platforms
- Generation of cross platform deployment bundle for use with Embedded Engine
- Translation into multiple languages without recompiling or relinking
- Collaboration with graphical model compare
- Scripting engine
- Fully integrated scripting engine debugger
- UI design report generation

Hosted Development

- Windows
- Mac OS X
- Linux

Software Developer Kit

Extend the system by using the plugin interface to create:

- Custom events and actions
- Custom script APIs and hooks
- Target custom rendering engines