



# Crank Software – Storyboard Suite Technical Datasheet

From UI Design to Embedded Device – *faster*



## Crank Storyboard Suite

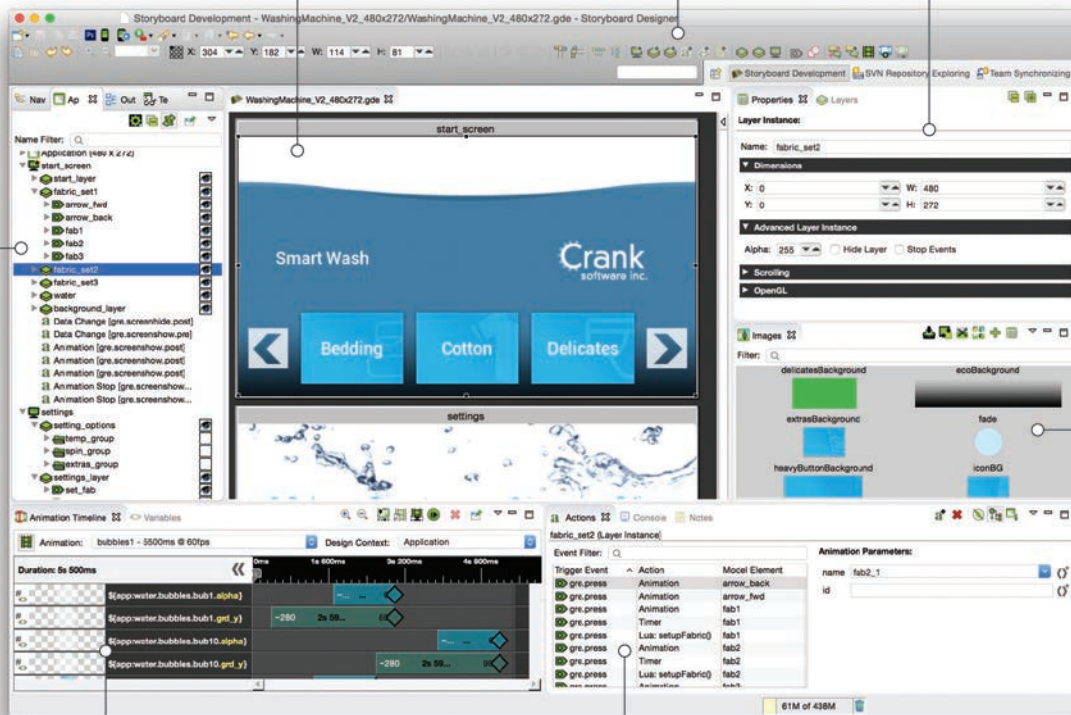
Crank Storyboard™ Suite consists of Storyboard Designer, a graphical development environment; and Storyboard Engine, an optimized runtime for target hardware. Using one solution, user interface (UI) designers and embedded system engineers can work in parallel to quickly prototype and deployment rich animated UIs for embedded devices. Storyboard Suite bridges the gap between the UI designer who controls the look and feel of the project, and the system engineer who is responsible for implementing core system functionality.

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

Quick access to common design functions through the Storyboard toolbar

Quickly view and edit the properties of controls, screens and layers

Organize application in a hierarchical manner, from screens, to layers, to groups, and controls



Merge, split, and consolidate images to optimize performance and resources and then use tools to analyze

Drag and drop graphics directly into the screen design editor

Easily create and customize animations by using the animation timeline editor

Manage application variables, events, and actions



Software and hardware are constantly evolving. With a plug-in interface, Storyboard is extendable so you won't be locked out every time a new hardware platform is supported 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

- Real-time operating systems including QNX, WinCE, SEGGER emOS, Linux, FreeRTOS, Micrium µC/OS-II, & Green Hills INTEGRITY
- Mobile OS targets including Android & iOS

### Hardware Support

- ARM
- PowerPC
- X86
- SH4 / SH2A
- FPGA

### Graphics Rendering

- OpenGL ES 1.x / 2.x
- Raw Framebuffer
- QNX Screen
- Win32 GDI
- Direct FB
- Simple Direct Media Layer (SDL)
- OpenVG 1.x
- SEGGER emWin



### Storyboard Engine

#### Programming features support

- Animations & Timers
- Hardware graphic layers
- Resource Management
- Extensible scripting interface
- Screen transitions: fades, easing
- Alpha blending and rotation
- Screen composition
- Multiple input sources: touchscreen, keyboard, mouse
- Gesture engine
- Dynamic data assignment
- External application rendering: video, browser, and more
- Regression testing interface

#### Designed For Embedded

- Event/Action invocation
- Scalable across multiple platforms - no code generator
- Plugin feature functionality

#### 3D Support

- OpenGL ES 2.0
- Combine 2D and 3D rendering
- Custom OpenGL Shaders
- 3D model support
- FBX and OBJ 3D model support

#### Image support

- PNG
- 9-Patch
- JPEG
- GIF
- BMP

#### Text support

- UTF-8 text encoding
- Dynamic text content
- TrueType & OpenType font
- Anti-Aliased text rendering

### Storyboard Designer

- WYSIWYG user interface design for embedded applications
- Import and re-import Photoshop files directly into Storyboard Designer
- Design using standard formats for fonts and images
- UI templates for standard user interface elements
- One-click application simulation
- Create, edit, and preview animations directly in Storyboard Designer
- Receive immediate feedback on UI designs that may be incompatible with hardware capability analysis
- Integration with Eclipse-based embedded development platforms
- Generation of cross-platform deployment bundle for use with Storyboard Engine
- Internationalization
- Collaboration with graphical model compare
- Lua scripting engine with debugger
- UI design report generation
- User-defined action and render templates

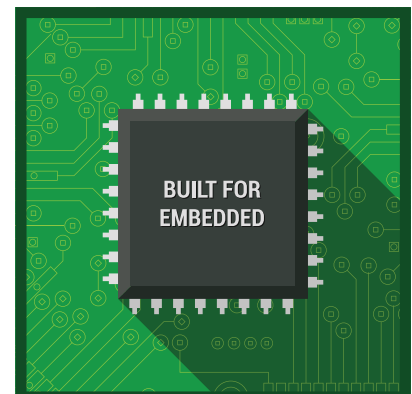
#### Hosted Development

- Windows
- OS X
- Linux

### Software Developer Kit

Extend the system by using the SDK plugin interface to create:

- Custom input events and actions
- Custom script APIs and hooks
- Custom visualizations and rendering extensions
- Custom rendering engines



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#### Contact Crank Software

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