AMETEK® CRANK
EMBEDDED GUI SOLUTIONS

RA Ecosystem Partner Solution
AMETEK® CRANK GUI Storyboard

RENESAS RA READY

Solution Summary

Storyboard provides an embedded GUI (Graphical User Interface) development framework for creating HMI applications designed to provide products with exceptional user experiences (UX).

Through its easy-to-use, drag and drop tools and a separate, yet parallel development workflow architecture, Storyboard makes it simple to develop, test, and iterate HMIs at any point in the development cycle. Project teams can invest in refining the applications UX more effectively without destroying already completed work that can cause delays getting to market on time and on budget
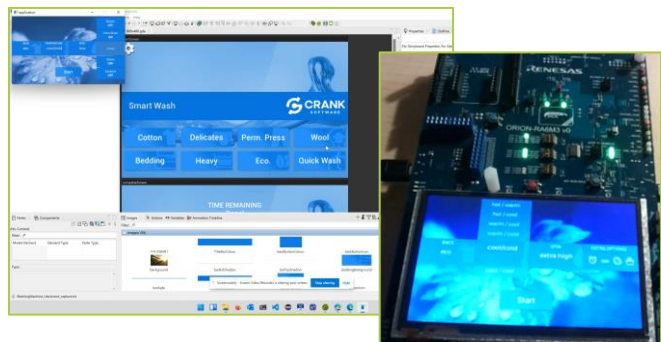
Storyboard supports the RA6M3 family of microcontrollers from Renesas. Please contact your local Renesas sales office for a demo and get started creating your own experience!

Features/Benefits

- **Accelerated GUI Development** – begin GUI development and testing before final hardware selection, import design tool files directly into Storyboard, and leverage low-coding development to easily add enhanced HMI capabilities
- **Rapid Design Iteration** – re-import changed UI design files into the project and graphically compare and merge preferred changed without causing a complete teardown of code or destroying previous development work
- **Project Scalability** – platform and OS independence enables GUI apps to be reused across a wide range of target hardware, with GUIs developed for one product line being reused for others
- **Purpose Built for Collaboration** – reduce development workflow inefficiencies in the product lifecycle from design to testing & validation with collaborative parallel workflows

Diagrams/Graphics

RA6M3 "Orion" Board Demo

Target Markets and Applications

- Industrial Controls
- Smart Home / IoT
- Smart Building
- Wearables
- Home Appliances
- Consumer Electronics
- Medical
- Automotive / Infotainment

https://www.cranksoftware.com/storyboard

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Accelerating the next embedded GUI experience

With Storyboard, embedded UI development can be greatly accelerated, iterations in design changes more easily embraced, and the UIs developed more flexible to technology stack changes, all resulting in faster time to market for your products being developed.

Storyboard core capabilities / features:

- Animations & timers
- Hardware graphic layers
- 2D and 3D content rendering
- Extensible image loading capabilities
- Screen transitions: fades, easing, interactive drags
- Alpha blending and rotation
- Manual animation frame position control from screen composition
- Multiple input sources: touchscreen, keyboard, mouse
- Gesture engine
- Dynamic data assignment
- External application rendering: video, browser, and more
- Regression testing interface
- Event/action invocation
- Scalable across multiple platforms – no code generator
- Plugin feature functionality
- Custom bitmap glyphs export selection
- SVG files rasterized on export
- Gradients not tied to a canvas
- Mask support for controls
- Custom OpenGL Shaders
- FBX and OBJ 3D model support
- Software Developer Kit (SDK):
  - Custom input events and actions
  - Custom script APIs and hooks
  - Custom visualizations and rendering extensions
  - Custom rendering engines

About Us

AMETEK Crank is a global innovator in embedded GUI solutions that accelerate the design and development of modern UI/UX for tomorrow's embedded devices.

Founded in 2007, AMETEK Crank created Storyboard to overcome the barriers and issues that typically impacted efficient GUI design and development. With decades of domain expertise, brands such as Coca-Cola, John Deere, and Vorwerk rely on Crank to bridge the gap between their UX vision and customer expectations.

AMETEK Crank's team of friendly GUI experts are specialized in backend, frontend, and GUI design and are ready to assist with custom engineering services for those projects that lack resources.

Check out Storyboard on your Renesas hardware via free downloadable GUI apps:
https://www.cranksoftware.com/ partners/renesas

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