"HELLO WORLD"

FOR DESIGNERS

How to design for an optimal
UX on embedded HMI systems

UX

FRESH   CRANK SOFTWARE

TODAY'S **SPEAKERS**

Marc Wallace
UX Director
Fresh Consulting

Daniel Conroy
Design Lead
Crank Software

CRANK SOFTWARE

Who is Dan?

Fancy Dan

- 2011 joined Crank Software

- Support — Customer Design Teams

- Website guy cranksoftware.com

- Storyboard videos

- UI Design – Professional Services

- Sample applications

- Defender Crank Software brand

- Left Handed

Outline

CRANK + EMBEDDED UX

- Intro to Crank and Storyboard

- Best practices for embedded development and UX.

- Do's and Don'ts for design teams.

- Live Demo. Wow!

- UI on a Target Device

ABOUT CRANK SOFTWARE

Built Upon
20+ YEARS
GUI Design & Development
Experience

Global Partner
Network

Extensive
Partnership
Ecosystem

Privately Held
Canadian
Company

NXP | ST life.augmented | Microchip

Embedded Artists | Toradex Swiss. Embedded. Computing.

Texas Instruments | Renesas | Bd Boundary Devices

Awarded
Company of
the Year

Best Ottawa Business Awards
COMPANY
OF THE YEAR
2019-2020

Most
Innovative Software
2020

embeddedaward

Industry Recognized
Award-winnng UIs

reddot design award

BEST IN SHOW AWARDS Embedded WINNER

EDITORS' CHOICE BEST VALUE

EDITORS' CHOICE BEST OVERALL

GOOD DESIGN Award

JOHN DEERE PARTNER INNOVATION AWARD

iF DESIGN AWARD 2020

CES INNOVATION AWARDS 2020

CRANK SOFTWARE

Crank Software

SOFTWARE + SERVICES

Crank Software helps accelerate the design and development of brilliant graphics for embedded devices.
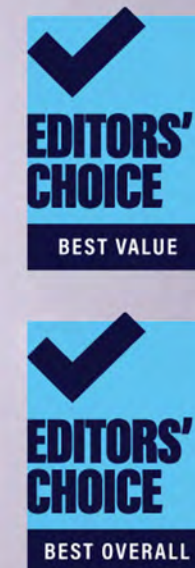
MEDICAL

INDUSTRIAL

AUTOMOTIVE
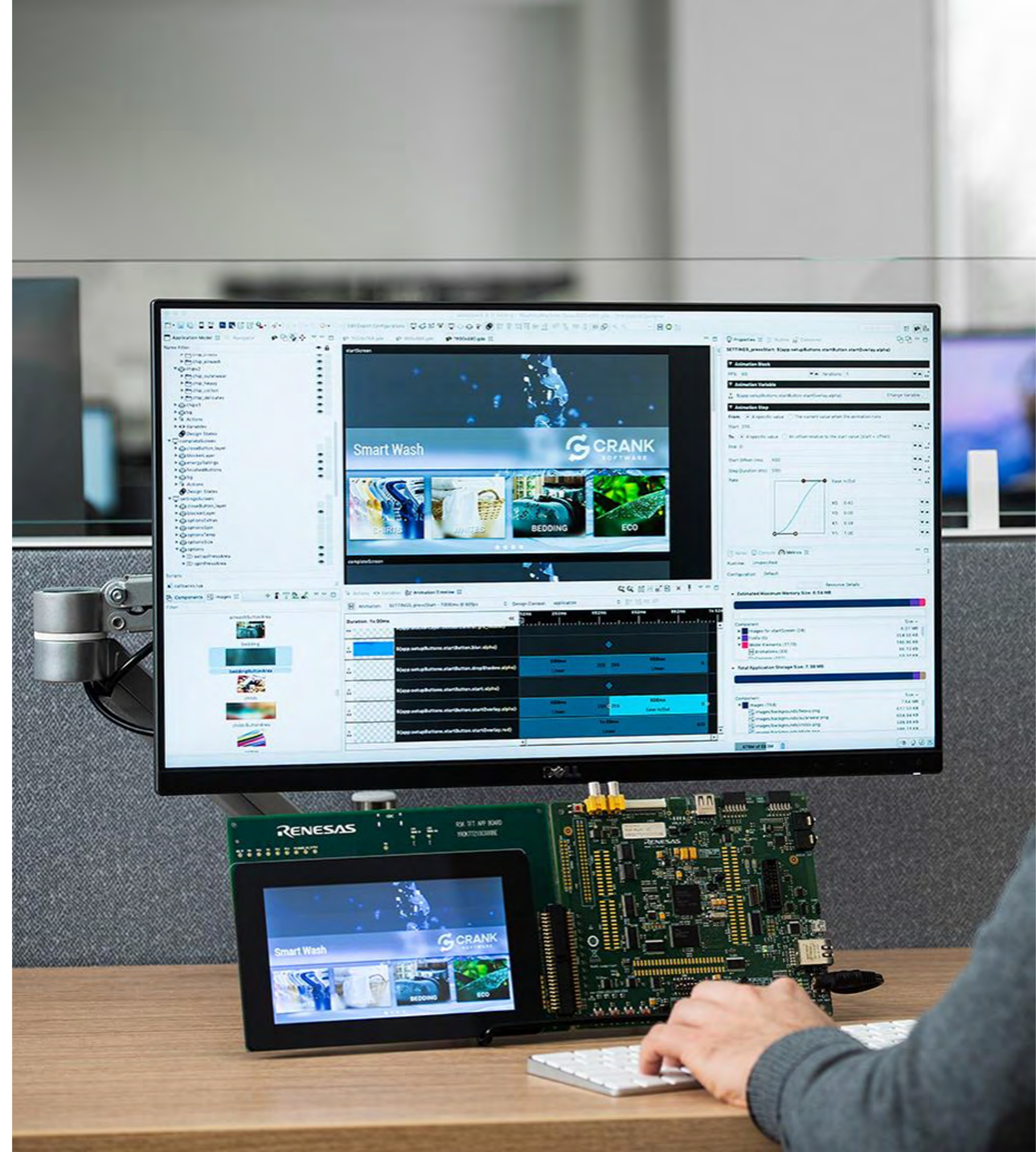
SMARTHOME

How Storyboard helps

ACCELERATE DEVELOPMENT

EMBRACE ITERATIONS

UI FLEXIBILITY

BEST PRACTICES
CONTEXT MATTERS

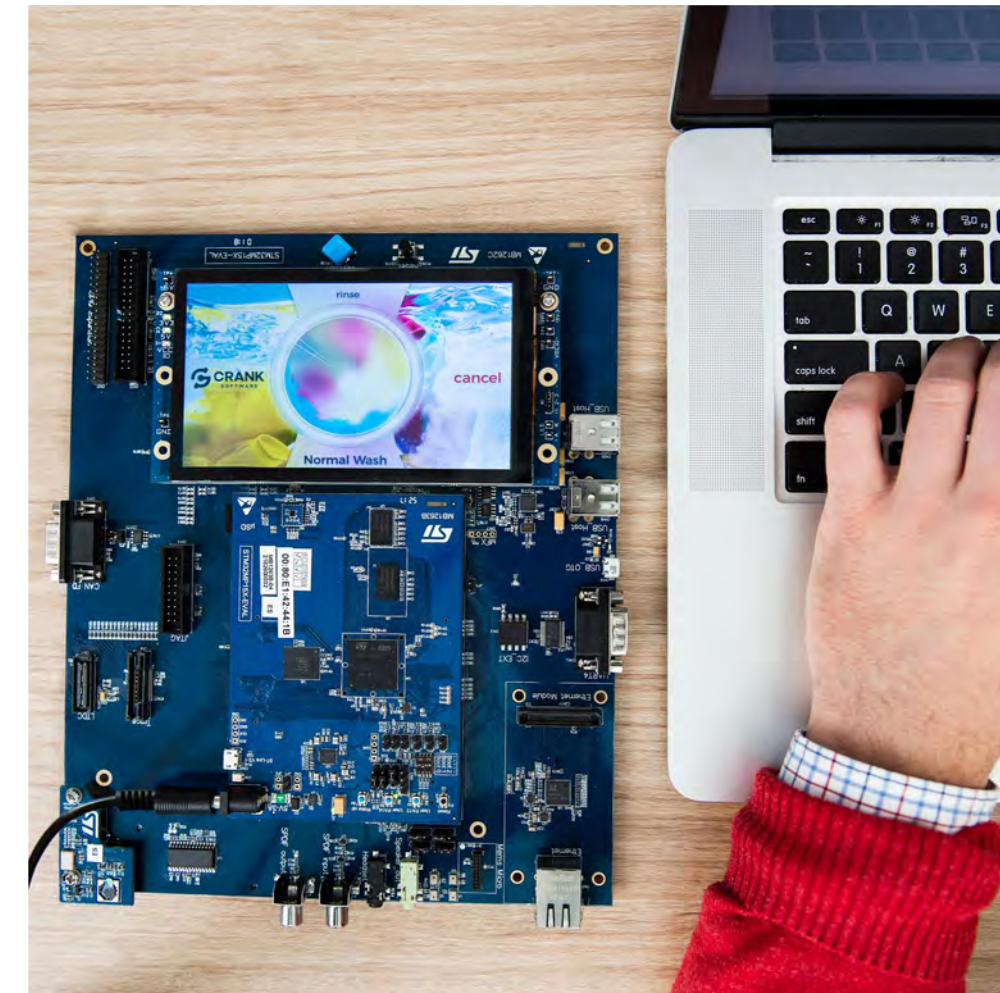**CONSUMER EXPECTATIONS**

EXPECATIONS OF THE DESIGNER

OPTIMZED PERFORMANCE FOR EMBEDDED

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Consumer Expectations

SMARTPHONES

COST PER VALUE

- Touch user interfaces should work the same way as our smartphones.

- Smartphones can cost in excess of $1000. Ultimate performance devices that are worth it.

- Consumers are not prepared to pay $1000 for a coffee machine or for a thermostat.

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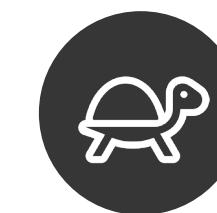
Designer Expectations

DESKTOP   WORLD WIDE WEB

- Design process should be the same as working with other prototyping tools InVision, Sketch, Adobe XD, Figma, Flinto, Framer, Webflow, Principle etc.

- Prototyping tools can simulate the application for Windows, OS X, Android, iOS, Watch OS, Windows 10 Mobile and web.

- Assumption of high performance. Apps can be resource demanding. Gesture interactions, 3D content, video, motion design.

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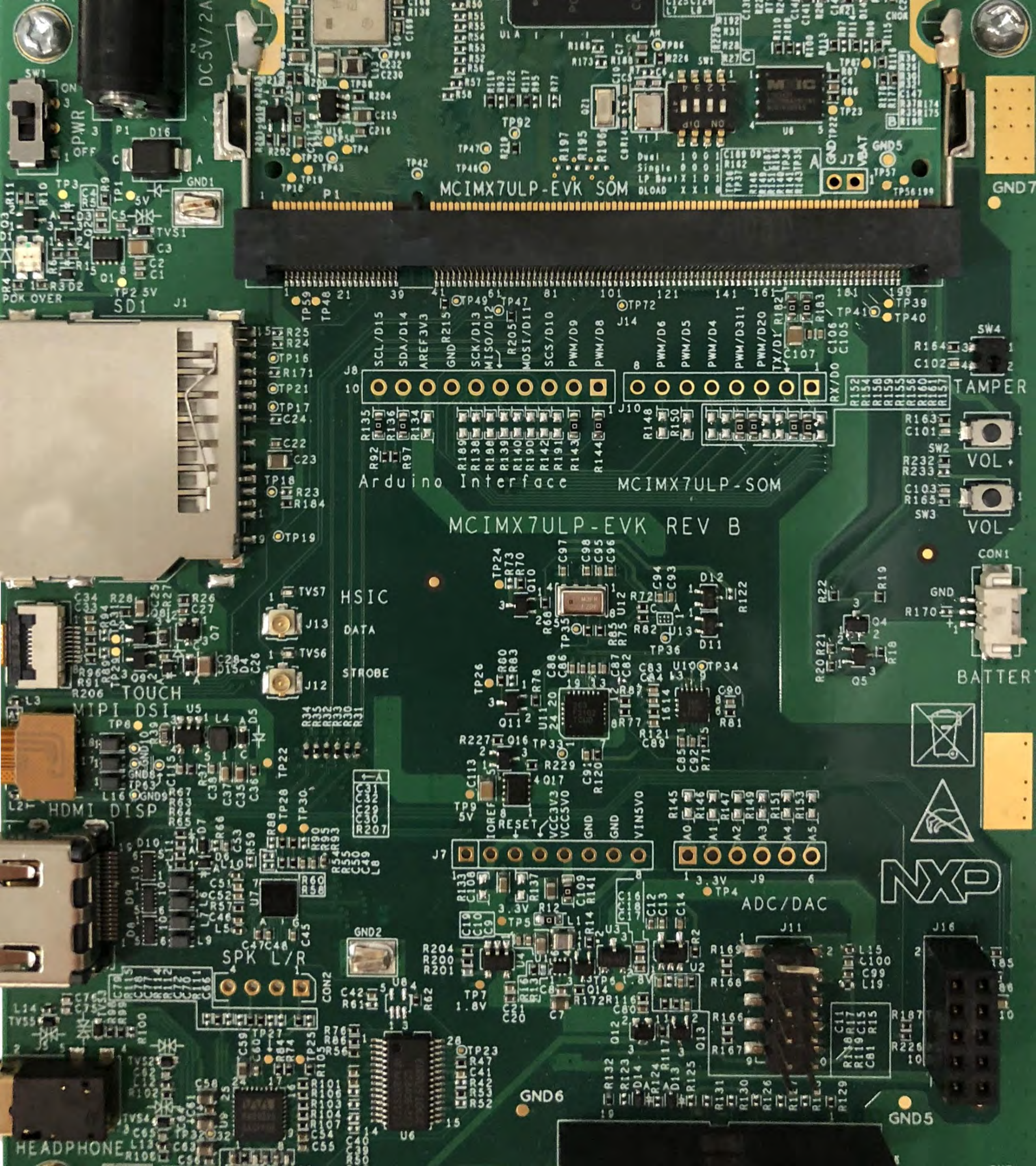
# Optimized Performance

🐰 JUST BECAUSE YOU CAN   🐢 DOESN'T MEAN YOU SHOULD

- Storyboard has the ability to deliver rich UIs specific to the platform configuration.

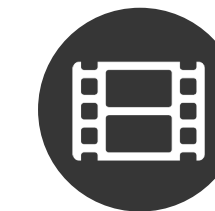- The challenge is achieving the most performance your configuration is capable of.

Do's + Don'ts – Design Teams

Depending on what hardware configuration is being used will influence some of the best practices teams should follow.
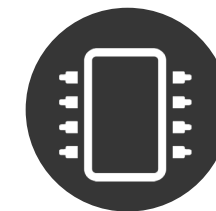
TEST ON HARDWARE
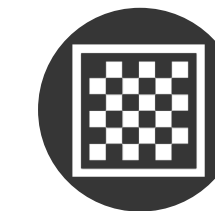Make it a goal to get to hardware as soon as possible.

EMBRACE PARALLEL WORKFLOW
Design once screen/view/mode and hand it off to a developer.

DESIGN ITERATION
Refine the design and re-import artwork.

MOTION
Use motion, but don't use too much motion.

REDUCE ALPHA
Reduce the amount of transparency in images.

MERGE IMAGES
Overlapping non-dynamic images should be merged.
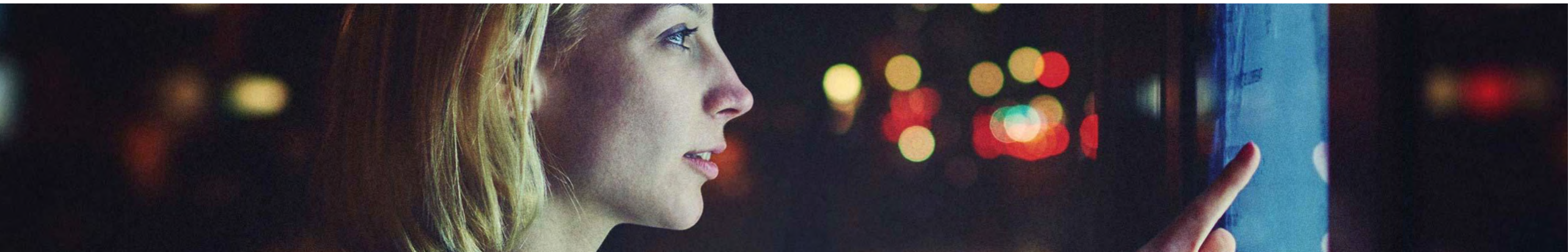
DESIGN

Get super creative. Make an amazing embedded UI in your favorite design tool.

DEVELOP

Import your design to Storyboard and start adding functionality.

DEPLOY

Test your application with the desktop simulator, on mobile, or target device.

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Key take away(s)

Download Storyboard
Give it a try
Visit our Help Center for getting started videos

Download Sample GUI Demo Images
Make it part of your evaluation process

Connect with Crank Software
Leverage our expertise with GUIs to help win designs

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Questions?

www.cranksoftware.com**/free-trial**

www.freshconsulting.com

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Thanks for joining

Accelerating tomorrow's embedded GUI experiences