

Kudelski IoT Labs

Device Design & Security Assessment Services

IoT DEVICE CHALLENGES

From IoT idea to securing IoT success

Translating great IoT ideas into great IoT devices represents a major challenge for many companies. The process of defining, prototyping and testing IoT products is critical to achieving success. Failure to carefully follow this process is what causes such a large percentage of IoT ideas never to make it past the prototyping phase.

Ensuring your product is secure by design is a second major challenge. But getting it right from the start is exponentially more cost effective than addressing security flaws after a product is launched, and embedding the right security features can not only protect against threats, but enable new business models and new opportunities.



How do I take my product from idea to manufacture?



What are the threats to my IoT product or ecosystem?



Is my IoT product secure against those threats?

WHAT WE DO

We help you deliver secure IoT devices to market

Kudelski has been helping customers design, secure and sustain profitable connected devices and ecosystems for decades.

Our IoT design and assessment services help companies successfully navigate the process of turning IoT ideas into IoT success.

Whether it's designing an IoT device to your specifications and preparing it for manufacturing or working with you to inventory threats and assess the security of your existing devices, we can ensure you launch and sustain the success of your IoT product with confidence.

DESIGN SERVICES



We design your IoT device HW & SW to be ready for manufacturing



We enable critical security controls and capabilities by design



We manage the SW SLA and HW production or manufacturing

ASSESSMENT SERVICES



We identify existing and emerging threats to your devices



We assess the HW and SW security of your devices



We continue to monitor the dark web to identify new threats

WHO WE ARE

30+ years creating & protecting high-value business models

\$100B_{/yr}

revenue protected

400M+

devices secured

11,000

clients

32

offices worldwide

\$827M

revenues (2019)

END-TO-END IOT DEVICE DESIGN

Our full suite of services takes your IoT idea from business concept to ready for production, secured by design.

PHASE 0 PLANNING

We help you establish the critical link between business opportunities and technology capabilities and fully test your ideas before you invest. We then work with you to clearly define potential risks and ways to avoid them.

IoT Design Sprint

We guide you through understanding, exploring, materializing and prototyping IoT product ideas that can be tested with key stakeholders to accelerate the new product decision-making and validation process.

Threat Assessment

We help you understand potential threats to your business, their likelihood and impact in order to focus security development.

PHASE 1 DESIGN & DEVELOPMENT

We design your device based on your business requirements, including protection of all key IoT assets and critical security functions at the heart of your device.

Device Design & Development

We design, develop prototype and mass produce a secure IoT device based on your business requirements and state-of-the-art design and security principles, providing SW SLA support after launch.

Security Architecture

We create a security architecture that addresses key threats defined during the Threat Assessment exercise.

PHASE 2 POST-DEVELOPMENT

We ensure you are ready for market with a product that is fully validated against your requirements as well as agreed security targets.

Lab Assessment

Test products against requirements for both functionality, security and manufacturability, address any potentially business-impacting issues before delivery to manufacturing.

PHASE 3 POST-LAUNCH

We help you manage the lifecycle of your entire product (HW & SW) with feature upgrades and security updates to address changing customer requirements and the evolving threat landscape.

Lifecycle Services

Secure Firmware Over The Air (FOTA) updates, security monitoring and response, product support and the development of new products. Update the threat model to account for evolving risks.

A LA CARTE SERVICES

Whether we are helping you conceive, design, test, launch, operate and sustain your IoT device or are providing security expertise and testing for the device you're designing, Kudelski delivers clear value and results at every or any phase of your IoT journey.

Design Sprint

We help you understand, explore, materialize and prototype your IoT concepts so they can be validated with your company's key decision-makers. This allows you to launch carefully validated products to market with a better chance of success.

- Facilitated workshop (in person or virtual)
- 2-5 days (depending on the modules chosen)
- Includes our expert facilitators and your key stakeholders and subject matter experts to ensure that there is full internal buy-in at the end of the Sprint

Threat Assessment

We work with you to create a clear view of the specific threats to your business in order to help you focus your product development and close critical security gaps.

- Prioritized overview of threats
- Associated costs of each attack
- Recommended mitigations and controls
- Dark web threat monitoring

Security Architecture

Our expert security architects provide you with detailed recommendations and plans on how to secure your IoT device and ecosystem against identified threats.

- Proposed device/system architecture (HW/SW)
- Configuration recommendations
- Component recommendations
- System optimization recommendations

Security Assessment

Our advanced IoT security labs assess the hardware and software security of your device and/or ecosystem, providing prioritized advice on how to close critical security gaps.

- Key strengths and weaknesses of your device
- Root cause of the weaknesses
- Estimation of the effort, cost and expertise to achieve an attack
- Suggested remediation options to improve and reach the desired security level.