

## FRUSTRATION-FREE EMBEDDED SECURITY

SUPERCHARGED WITH THE SEL4 MICROKERNEL

The complexity of embedded security shouldn't hold your team back from innovation.

seL4 has already been proven secure, so you don't have to do the extreme math yourself. DornerWorks will help you fill in the gaps to enhance your security story.





### seL4 on a working platform

- Build environment and instructions.
- ARM target selection,
- seL4 & CAmkES examples.



#### **Training workshop**

A one-day, hands-on tutorial-style workshop with your entire team, covering a range of seL4 and virtualization topics, and more,



#### **Consulting report**

Clear, written recommendations from our experts to further guide you through implementing seL4 with your product.

DornerWorks.com

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I am fortunate to work with DornerWorks as a

# STRONG SYSTEMS SOLUTION PARTNER

supporting our customers across so many disparate system architectures and technical challenges.

~Senior Project Manager



Getting your feet wet with complex technology can be intimidating. DornerWorks has been working with seL4 for several years, supported by Small Business Innovative Research contract awards from DARPA.

We understand how to leverage the seL4 microkernel to support your needs, including customization, certification, and optimization.

With our seL4 Quick Start Package, you can rely on our expertise and win back freedom to focus on your product.



- A DoD customer was interested in using seL4 as a hypervisor to provide robust security and isolation and they wanted to run on the latest ARMv8 platform, due to its performance and feature set.
- DornerWorks ported the existing ARMv7 virtualization support to an ARMv8 implementation, and provided BSP layers for the Xilinx Zynq UltraScale+ MPSoC and the NXP i.MX8 platforms.
- The prototype showed the isolation benefits that the customer required on the platform they needed.



The Zynq UltraScale+ is a Multi-Processor System on a Chip that has a quad-core Cortex-A53, a dual-core Cortex-R5, a GPU, and an FPGA. This chip is Xilinx's most secure solution yet, with features like Secure Boot, Xilinx Memory Protection Unit (XMPU), and Xilinx Peripheral Protection Unit (XPPU).

DornerWorks ported seL4 to the MPSoC, allowing it to be run as a Hypervisor, which is another means of reinforcing the budding seL4 ecosystem, by allowing guest operating systems to run on top of seL4.

#### **GET STARTED TODAY**

Contact us for a free consultation and together we will determine a solution that fits your product security goals.

#### **SCHEDULE A CONSULTATION**

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