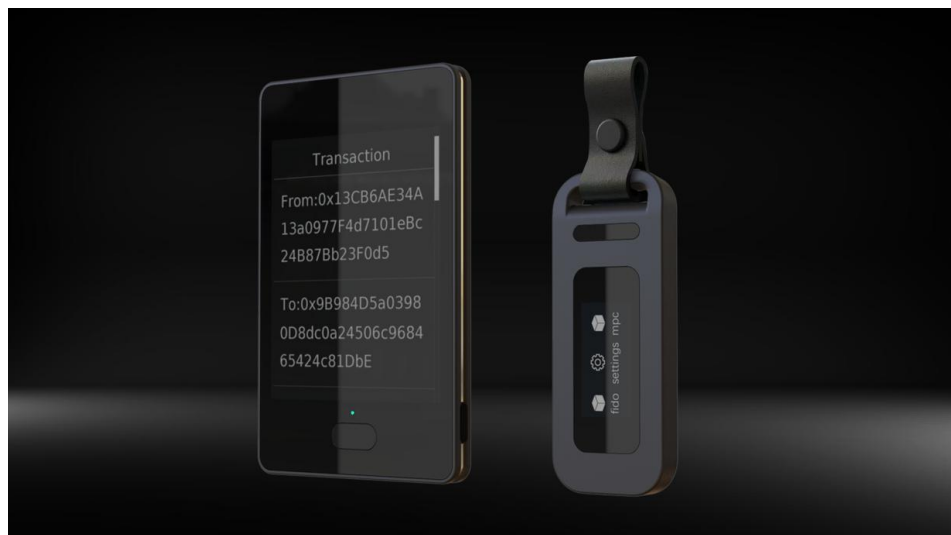


## Cromium PHSM Series SDK Product Introduction

*Manager of Your Digital Life*



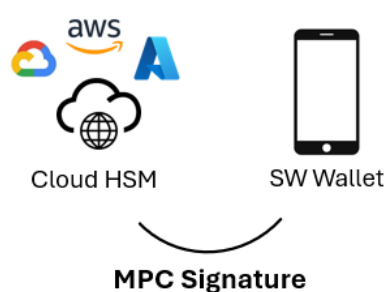
Cromium PHSM 8 & 6 Series are purpose-built for the next generation of secure digital asset storage, authentication, and signing with MPC technology. Leveraging Crossbar’s advanced secure chip and robust security OS, it provides the highest enterprise-grade hardware security wallet with a sleek, portable device.

### First-Ever Hardware Wallet with MPC

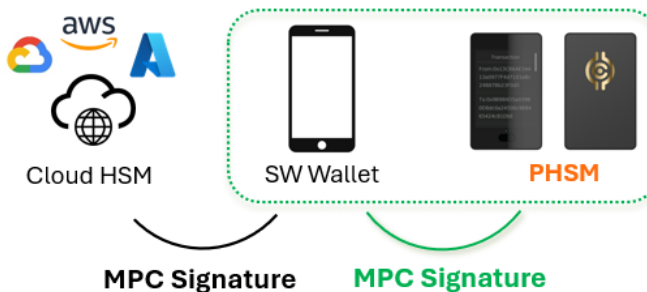
*No Fear of Losing the Hardware Wallet, Carrying Hassle-Free*

Cromium PHSM is the world’s first and only hardware wallet support MPC computation, it is also the first to integrate MCU with a secure element. This enables users with true “self-custody” and hold the majority of key shares when adopting a 2 – of – 3 or T – of – N MPC configuration that Cromium developed. For the first time, MPC wallets can eliminate the single point of failure and be executed with hardware-backed security, setting a new standard for decentralized key management and next-generation digital asset protection.

#### Current MPC Signing Scheme (2/2)



#### Crossbar Enhanced MPC Signing Scheme (2/3)



**When the PHSM is added, users benefit from an enhanced MPC solution with four characteristics at once:** Chain-agnostic, minimal latency, maximum security & privacy, and Cloud HSM as a backup option.

### Your Trusted FIDO2 Security Authenticator

*Secure Beyond Crypto — Passwordless authentication with secure passkey*

Cramium PHSM goes beyond crypto security by doubling as a fully compliant FIDO2 device, enabling strong, passwordless authentication for a wide range of software services. This multi-functionality means users can leverage the same trusted hardware for both secure crypto custody and everyday digital identity protection. Combining advanced MPC signing with FIDO2 capabilities, Cramium PHSM offers seamless convenience and industry-leading security in one compact device—empowering you to safeguard assets and access with unmatched confidence.

Also, the PHSM allows display of metadata about the passkey request, allowing use cases not supported by typical 'blind-signing' devices with no display. For example, multiple accounts for the same relying party (e.g., website) can be stored on Cramium PHSM, and details of a transaction can be displayed with full information.



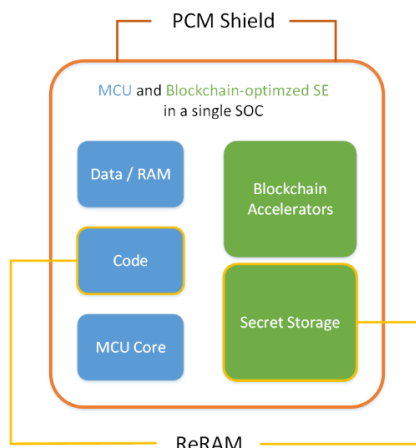
### Introducing Daric, the secure chip engineered from the ground up for next-generation crypto wallets, inside Cramium PHSM

*Built for Ultimate Security and Endurance — The Heart of Next-Gen Crypto Protection*

Combining powerful 700 MHz CPU with a Secure Element, dual-core architecture (ARM Cortex-M7 + RISC-V with MMU), and custom crypto accelerators, Daric delivers unmatched security and performance. Its 4MB radiation-hardened ReRAM ensures over 150 years of data retention, with proven resilience in aerospace and high-altitude environments.

Designed on a compact 22nm node, Daric integrates CPU, ReRAM, accelerators, and power management into a single secure die—ideal for embedded applications. From

display and input to fingerprint recognition and signing, all operations are protected under one unified countermeasure shield, with a supply chain certificate that ensures full traceability to the chip's origin.



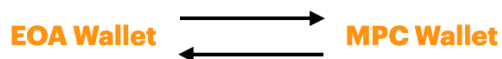
For the utmost security, Cramium PHSM also includes a separate EAL 6+ certified SE. All secrets stored in the PHSM are distributed between Daric and the separate SE, providing ironclad defense-in-depth across two unrelated designs.

### Seamless Compatibility with EOA Wallets Across 30+ Chains (growing)

*Effortless Integration with Your Favorite Wallets — One Click to Next-Level Security*



**30+ Chains Supported**



Cramium's PHSM device effortlessly integrates with existing Externally Owned Account (EOA) wallets through a secure off-chain conversion process. This ensures users can continue using their favorite wallets while benefiting from Cramium's advanced MPC and hardware-level protection—without altering their current wallet setup. Supporting over 30+ major blockchains (growing), Cramium delivers broad, one - click compatibility that bridges the gap between traditional wallet experiences and next-gen security.

## CommandOS - The Hardened OS Behind PHSM Security

*Rooted in Trust - Built for End-to-End Protection.*

CommandOS is a hardened operating system engineered for end-to-end protection in Cramium PHSM devices. Built on a robust Root of Trust, it secures every layer of the device — from power-on to runtime — with verifiable integrity. Key features include Secure Boot ROM, Secure Bootloader, Firmware Slot Management, and File System Encryption, all working together to ensure trusted initialization, firmware integrity, and persistent data protection throughout the device lifecycle.

## Timeless Luxury in a Compact Design

*Elegant Craftsmanship Meets Portability — Luxury You Can Carry Every Day*



**Cramium PHSM 8 Series (left graph)** redefines what a hardware wallet can look and feel like. Designed with a premium aluminum frame, dual Gorilla Glass panels on both front and back, and an anti-fingerprint coating for lasting clarity, it delivers both durability and elegance in one seamless form. Subtle haptic feedback adds a refined tactile response, enhancing user interaction without sacrificing minimalism. As slim as 5.5mm, Cramium PHSM 8 Series combines premium materials, smooth contours, and a real gold-colored bezel — making it not just a secure device, but a luxurious, pocket-ready accessory that stands out with sophistication.

An ultimate portability comes with **Cramium PHSM 6 Series (right graph)**, which retains the full cryptographic strength and core features of the PHSM 8 Series within a minimalist dongle form factor. Powered by the same robust Crossbar Daric platform, its USB-C interface and ultra-lightweight design make it the perfect solution for users seeking secure hardware protection on the go—without the extra bulk.

## One Device for Your Entire Digital Life

*Unifying Identity, Security, and Access — All in Your Pocket*

Cramium PHSM isn't just another wallet — it's an all-in-one platform for your digital life. Designed to replace the fragmented ecosystem of security devices and tools you rely on, it brings together everything from web3 wallets to decentralized identity, FIDO2 passkey, tap-to-pay, and secure file handling. With built-in support for CTAP1/U2F, CTAP2, and one-time codes, it becomes your universal authenticator. Need to store a seed phrase, manage passwords, or encrypt critical documents? It does that too — both on-device with secure NVM and off-device via secure cryptographic operations. Whether it's managing assets, logging in, paying, or proving who you are — PHSM is the one device that does it all.

## Industry-leading Specifications (PHSM 8 Series)

*Setting the Standard — Performance and Security That Lead the Market*

