# **SafeCase**: Trusted hardware

The most secure architecture starts with trusted hardware.



Borne of an unrelenting security focus, the hardware underlying the SafeCase has earned the trust of some of the most security-conscious organizations around. For those who think "good enough" mobile security just isn't good enough, the SafeCase provides a trusted alternative.



# SafeCase: Trusted hardware

FROM SYSTEM ARCHITECTURE TO MANUFACTURING, EVERY FACET OF THE SAFECASE HAS BEEN CAREFULLY CONSIDERED AND RIGOROUSLY EXECUTED.

#### Trust instilled at the core

Each SafeCase has its own unalterable, cryptographically secure foundation for the services and protections built on top of it.

- Hardware root of trust (HRoT) with immutable bootloader
- Air-gapped provisioning process via closed PKI
- Root key generated on device and never exposed

#### Minimal attack surface

The firmware controlling the SafeCase is developed with a focus on limiting exploitable bugs and other opportunities for attack.

- Small firmware base with minimal third-party code
- Internal and external code reviews
- · Secure execution environment

# Approved code only

The system architecture of the SafeCase virtually eliminates the possibility of untrusted, third-party code running on the device.

- Closed-system architecture running only approved firmware
- Strict code signing and validation
- Execution in place from an internal, read-only store
- Secure firmware update process over encrypted data channel

## Protected supply chain and manufacturing

Protections for the sourcing and assembly of SafeCase components mitigate the risks of hardware backdoors.

- Trusted suppliers with documented security controls
- Inspection and validation of individual components and sub-components
- · Manufacturing in a US-based ITAR facility

## Safeguards for physical attacks

The SafeCase has a variety of physical protections preventing access to the device's critical security elements.

- Seal preventing access to internal electronics
- Post-provisioning lockdown of debug interfaces
- Tamper detection and reaction mechanisms
- Protections against side-channel attacks

