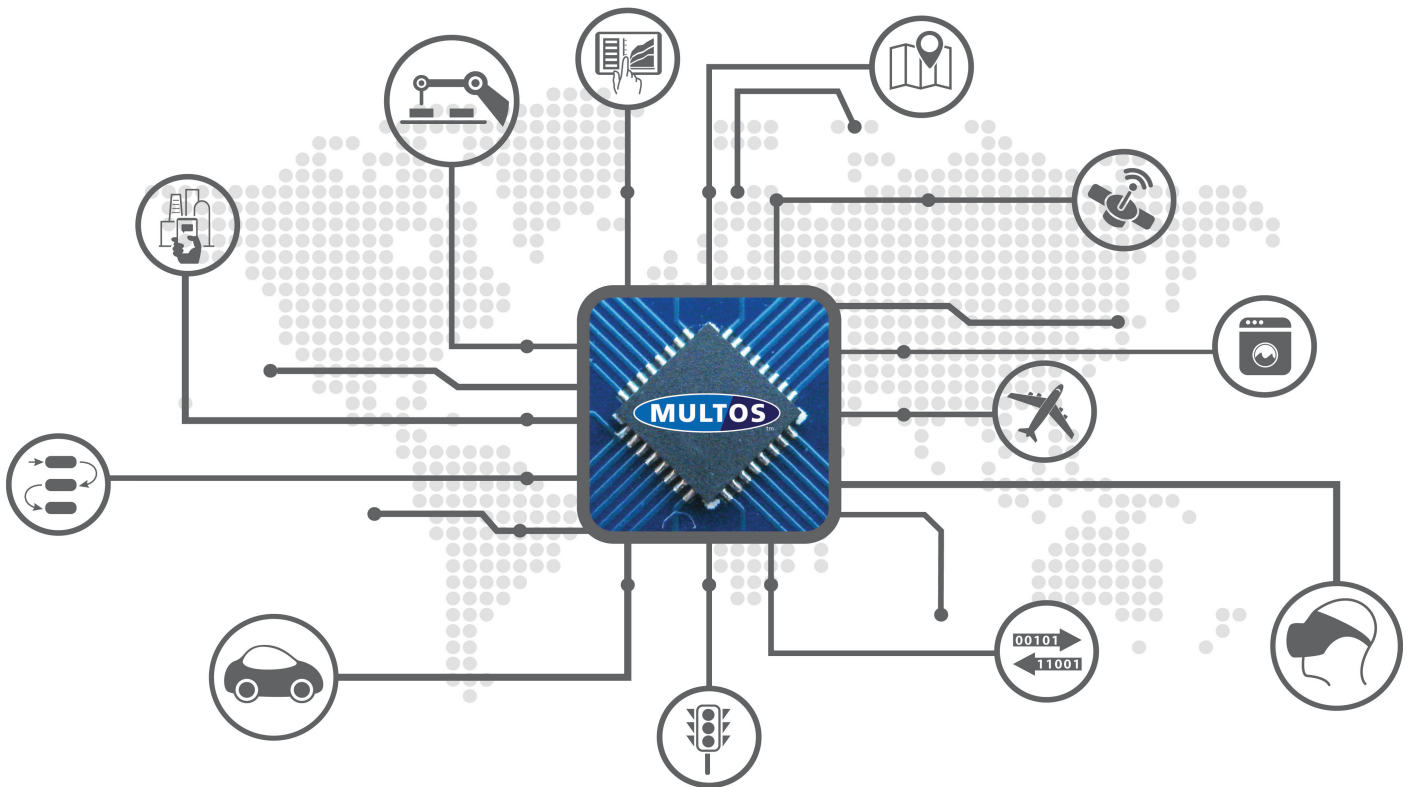




# CONNECTED DEVICE SECURITY

A Ready-made Secure IoT Environment

MULTOS is a secure chip platform that combines state-of-the-art hardware with a proven multi-function, multi-application secure software operating system. With built-in asymmetric cryptography for device management, the MULTOS Trust Anchor offers a ready-made secure environment for IoT.



## Application Features

### Data Protection



Data from devices is secured by hardened MULTOS OS and secure chip.

### Flexible Provisioning



MULTOS offers built-in asymmetric cryptography for device management.

### Robust Lifecycle



Supports full lifecycle management controlled by the customer.

### Endpoint Identity



Provides strong cryptographic identity to each device within a tamper resistant integrated circuit.

### Runtime Security



Protects runtime of the device separating applications and preventing malware intrusion.

### Cost Efficient



Easily scalable. Optimises key management costs and reduces complexity.

## Built-in Features

There are a range of ready-made features available to reduce the effort to design-in the right security for your IoT solution. Or you can develop your own custom functionality using the free SDK and obtaining our developer kit. See options below.

### Feature

#### Managed Chip to Cloud Security for the IoT

A Secure by Design solution integrating MULTOS' key provisioning and key insertion for initial device trust, and compatible with Device Authority's Keyscaler cloud-based management service.

#### TLS 1.2 / DTLS

MULTOS can provide the cryptographic functions necessary to securely implement the TLS handshake, perform mutual authentication and subsequently message encryption/decryption. All cryptography is performed totally inside the MULTOS chip. Private keys, master secrets and session keys can therefore all be kept secure. Open-source packages such as open SSL and mbedTLS can be used.

#### PKCS#11

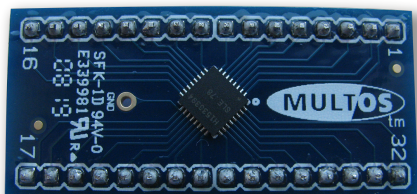
MULTOS can provide the cryptographic functions necessary to support the standard PKCS#11 cryptography interface, essentially turning a MULTOS chip in to a mini Hardware Security Module (HSM).

#### Emulation

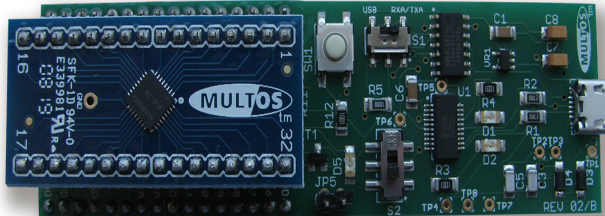
MULTOS is able to emulate other popular cryptographic hardware making it easier to transition to the more capable MULTOS platform.

\* Additional features are being added regularly so check back on what is available, or let us know if you have specific features in mind.

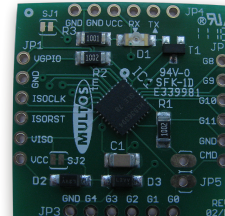
Breakout Board  
(multi-functional & multi-interface)



Development Board



Nano Board  
(for prototype development)



## Why choose MULTOS?



**Reduced Time to Market:** MULTOS is a complete security framework reducing the effort required for prototype development for designers. It supports popular prototyping platforms such as Raspberry Pi and Arduino environments.



**Easy to Implement:** The MULTOS environment uses C coding to quickly write applications. Training and support is widely available and a Development Kit is available for purchase. Libraries are available for using MULTOS chips with Raspberry Pi and Arduino.



**Simplified Provisioning:** MULTOS enables remote and secure provisioning of data, and can be implemented over insecure communication channels.



**Security & Quality:** MULTOS has been at the heart of the secure token industry for over 25 years with more than 2 billion smartcards and other devices shipped to date. Industry renowned as the premier standard of security and quality, it is the only such platform that has obtained the highest band of security approval, the Common Criteria EAL7 certification.