NXP EdgeLock™ 2GO

Secure, flexible IoT service platform

Designed for easy, secure deployment and management of IoT devices and services that use an NXP EdgeLock SE050 secure element, this flexible IoT service platform lets you choose the options that are right for you, so you can optimize costs while benefiting from an advanced level of device security.

KEY FEATURES

- Highly flexible approach to IoT security
- Embedded EdgeLock SE050 secure element for hardware-based security with advanced key protection and management capabilities
- NXP provisioning service for key injection at NXP manufacturing facility
- NXP service for device security management over the lifetime of the device in the field

KEY BENEFITS

- **Security**
  - Deliver end-to-end security from chip to cloud, based on a certified Trust Anchor
  - Manage security independent of device manufacturing and supply chain
  - Protect the entire device life-cycle, from day one of deployment
- **Flexibility**
  - Tailor the options for every type of IoT device roll-out
  - Support every type of IoT device, from sensor to edge-computing platform
  - Accelerate time to market with late-stage device configuration in the field
- **Ease of use**
  - Zero-touch onboarding of devices into the cloud
  - Easy migration to different clouds during the lifetime of the device
  - Easy management of large fleets of IoT devices

THREE CONFIGURATIONS

Ready

- EdgeLock SE050 pre-provisioned with default keys and certificates
- Device certificates available for download

Custom

- Custom provisioning of EdgeLock SE050
- Supports complex keys and certificates configurations
- Device certificates available for download

Managed

- NXP cloud service for managing device identities over-the-air
- Add, remove and revoke keys and certificates during the device life-cycle
- Overproduction control

EdgeLock 2GO - Ready

Ideally suited for simple use cases, such as device onboarding to public clouds, EdgeLock 2GO - Ready includes EdgeLock SE050 devices pre-configured with keys and certificates. The three variants of the EdgeLock SE050 secure element provide the following configurations:

EdgeLock SE050A	• One device-unique ECC NIST P-256 key pair and X.509 certificate signed by NXP Root CA
EdgeLock SE050B	• One device-unique RSA 2048-bit key pair and X.509 certificate signed by NXP Root CA
EdgeLock SE050C	• Two device-unique ECC NIST P-256 key pairs and X.509 certificates signed by NXP Root CA • Two device-unique RSA 2048-bit key pairs and X.509 certificates signed by NXP Root CA • One device-unique ECC NIST P-256 and one device-unique RSA-2048-bit attestation key pair with certificate • Two device-unique RSA 4096-bit key pairs

EdgeLock 2GO - Custom

NXP and its distribution partners use EdgeLock 2GO - Custom to create custom EdgeLock SE050 ICs to support complex configurations. Each configuration can be fully customized and can contain as many keys, certificates, data formats, and algorithms as needed.

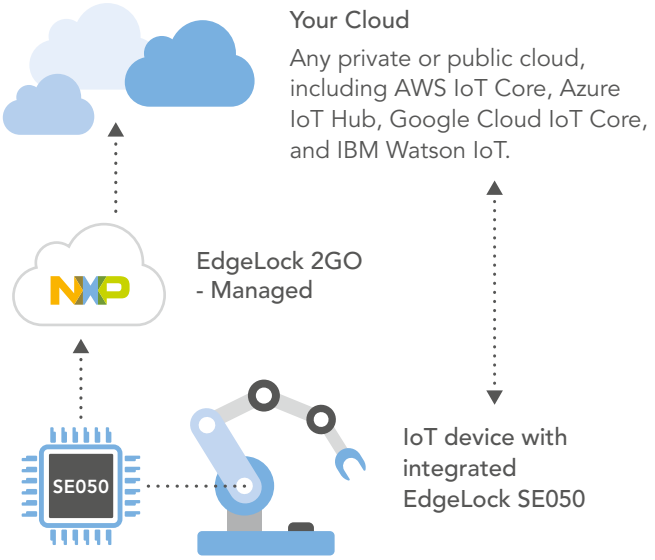
Key pairs	• Device-unique or static • RSA 1024 to 4096 bit • ECC keys for the following curves: - ECC NIST (192 to 521 bit) - Brainpool (160 to 512 bit) - Twisted Edwards Ed25519 - Montgomery Curve25519 - Koblitz (192 to 256 bit) - Barreto-Naehrig Curve (256 bit)
X.509 certificates	• Generated for each key pair • Customizable fields • Signed by customer-specific sub-CA • NXP Root CA or customer-selected Root CA
Secret keys	• AES 128, 192, 256 bit • DES 56, 112, 168 bit
Public key or certificate intake	• Import server certificates, SW verification keys, and other existing keys/certificates
Generic data intake	• Import plain binary data, such as hashes of host SW, device configuration data, license ID, etc.

EdgeLock 2GO - Managed

Let NXP connect your devices to the cloud with this remotely operated service. You configure the services you want to connect to, using our EdgeLock 2GO web portal, and we take care of everything else. We provision the necessary device keys and certificates and even register the device certificates with your cloud service of choice, so you don't have to. It's the zero-touch way to deploy with end-to-end security, from chip to cloud. EdgeLock 2GO - Managed supports all cloud types and comes pre-integrated with AWS IoT Core and Azure DPS.

Evaluation Kit

A comprehensive evaluation kit for EdgeLock 2GO - Managed is available and includes a development board with software and documentation plus an account on the EdgeLock 2GO portal.



Find all information on www.nxp.com

Date of release: February 2020

PLUG&TRUST