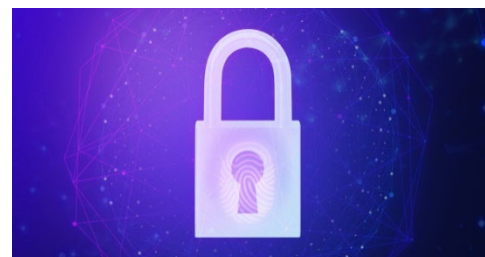


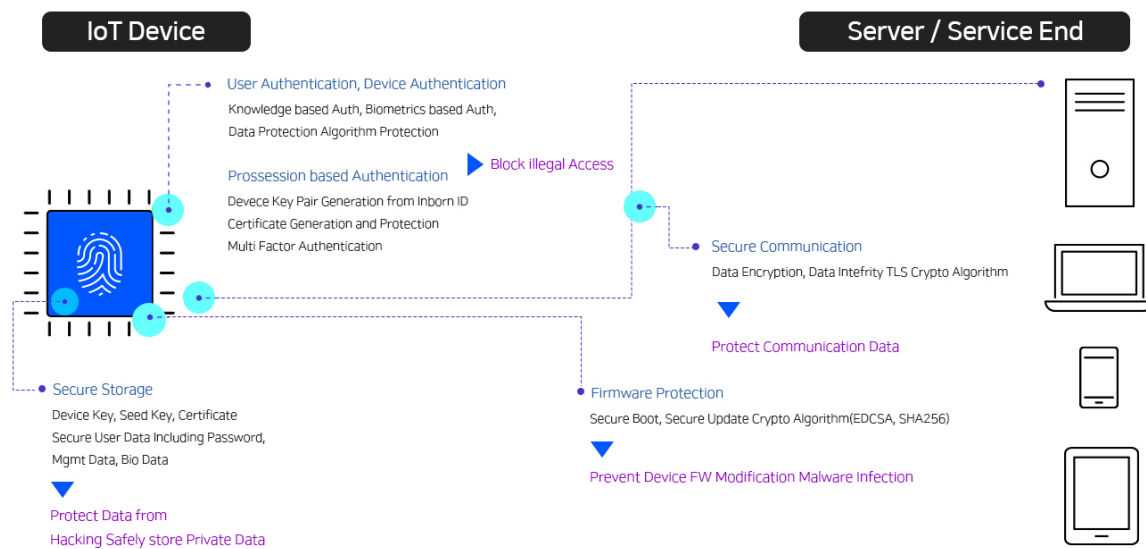
# IoT Security



IoT Device major Security Issues	Requirements	Solutions
<ul style="list-style-type: none"> <li>• Illegal device</li> <li>• Unusual access</li> </ul>	Blocking device duplication and illegal access	Certification
<ul style="list-style-type: none"> <li>• Device F/W falsification &amp; malicious code injection</li> </ul>	Device F/W security enhanced	Secure boot / secure update
<ul style="list-style-type: none"> <li>• Data tampering</li> </ul>	Strengthen network security	Communication data security (data integrity, data encryption)
<ul style="list-style-type: none"> <li>• Data breach</li> </ul>	Reliable Root of Trust	Secure storage
	Dataless	Inborn ID

IoT Device major Security Issues	Requirements	Solutions
<ul style="list-style-type: none"> <li>• Illegal Device</li> <li>• Unusual access</li> <li>• Device F/W falsification &amp; malicious code injection</li> <li>• Data tampering &amp; breach</li> </ul>	Use of secure cryptographic algorithms	ECC 256 AES 128 SHA 256
<ul style="list-style-type: none"> <li>• Physical attack</li> </ul>	Micro-probing, protection from physical attacks such as side-channel attacks	Equipped with PUF-based physical protection and defense solution





### Keys, Certificates, Crypto Accelerators

Key and certificate generation by H/W block in Cloneproof Secure ID-based security chip, Crypto algorithm supported by H/W



### Secure Inborn ID

Provides a service platform using UUID Secure Inborn ID such as non-replicable fingerprints based on Chip's unique HW characteristics



### Secure Storage

Secure data storage through secure storage encrypted based on physical security key (key, certificate, user data)