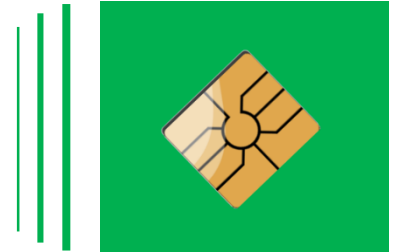


Javacard platform allows you to run user developed application, called applets, permitting many usage in a lot sectors

JaviQ



JaviQ® is a Javacard operating system (OS) answering to projects in many industries such as finance, telecommunication, identity or computer authentication. The speed and multi-application capability of our OS in **contact, contactless or dual** allow our clients to integrate easily the smartcard in their system.

Sectors

- **Telecommunication**
- **Standard payment**
- **Public transportation**
- **Government**
- **Identity**
- **Pay-Tv**
- **NFC**
- **Logical access**

Security

- **Cryptography** AES-128 or 256 (X version)
- **PKI** (RSA & ECC on X version)
- **Cryptographic standards package** (DES, AES, RSA and ECC)
 - Javacard.security
 - Javacardx.crypto

JaviQ is available in two different versions:

- **JaviQ** for low-end projects
- **JaviQ X** for high-end projects

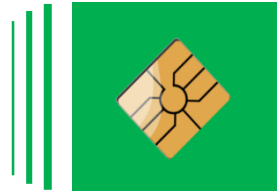
The low-end version is ideal for application that do not require Public Key Infrastructure (PKI) cryptography. For e.g.:

- SIM cards
- identity projects
- public transportation
- ...

JaviQ X can be used for applications requiring PKI cryptography. As a result, it requires a dedicated co-processor.

In order to ensure compatibility with our client applets, **Qilium** follows Javacard and global platform evolutions. It is why **Qilium** can develop or help you develop your own applets.

JaviQ



As far as **JaviQ** is a dematerialized product, it can be implemented on any chip of the market. In addition to the existing range where it has been ported, our team of engineers can help you implement **JaviQ** on your own integrated circuit in ROM, EEPROM or FLASH. **JaviQ** can make use of the available co-processor.



In order to ensure the data integrity during each transaction, an anti-tearing mechanism has been implemented which allows a safe use of your smartcard through data updates.

With RFID, **JaviQ** uses anti-collision. This system avoids multiple cards crashing into each other within a reader's field.

JaviQ provides a flexible and secure way to load applets. The flexibility, thanks to Javacard standard, allows to use the same platform for several kind of projects (applets). About security, **JaviQ** offers secure messaging using AES hardware cryptographic engine for secure data transmission.

Key Features

- **Javacard 2.2.2**
- **GlobalPlatform 2.1.1**
- **T = 0 / T = 1**
- **ISO 14443**
- **ROM, EEPROM or FLASH**
- **JaviQ X on co-processor chips**

Qilium engineers guide you in every step from specifications to integration of our OS in your system. We can also develop different applets for **JaviQ** delivered with our OS. This includes a constant online support.

Technical specifications

	JaviQ	JaviQ X
Javacard 2.2.1	yes	yes
Javacard 3.1	Optionally	Optionally
RSA key	/	4096 bits
ECC key	/	256 bits
SHA/MDS	/	Yes
3DES	yes	Yes
AES	128 bits	256 bits
ISO 7816 / T = 0	yes	yes
ISO 7816 / T = 1	yes	yes
ISO 14443 / T = CL	yes	yes
MIFARE optional	yes	yes
GLOBAL Platform 2.2.1	yes	yes
SCP02	yes	yes
Issuer Security Domain (ISD)	yes	yes
GP API	yes	yes

Available applets

<u>Telecommunication</u>	
3GPP TS	SIM – USIM
	STK – CAT
	RFM – RAM
	ISIM – HPSM
<u>Identity documents</u>	
e-ID	
ICAO	
<u>Smart ticketing</u>	
Calypso	
<u>Banking</u>	
EMV	

Contact us

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