# JAVIQ © JavaCard™ Operating System FOR PROGRAMMABLE SMART CARD



# JAVIQ runs Javacard applets

# on high-performance IC designed for various applications



Advanced Access control applets







Telecommunication SIM M2M eUICC







Support for applet development



Biometric Identification applets JaviQ is a GlobalPlatform<sup>™</sup> JavaCard solution ported on Flash Integrated Circuit. Following reference standards, JaviQ ensures ease of integration and interoperability across different industries.

JaviQ allows to easily load applets addressing multiple projects, either written by third-party or Qilium team, these applications can be integrate in:

- Enterprise physical and logical access control
- Payment
- Telecommunication

### **GENERAL FEATURES**

- JavaCard 3.0.4
  - o Javacard Static Support
  - o Integer Support
  - Standard JavaCard APIs
  - o SIM APIs
- ➢ GlobalPlatform 2.1.1
  - o SCP02o SCP80
  - Communication
    - o ISO/IEC 7816-3
      - o T=0

# SECURITY FEATURES

- JavaCard algorithms
  - o DES | 3DES
  - o AES-128 | AES-192 | AES-256 bit
  - o CRC16 | CRC32
  - o SHA-1 | SHA-224 | SHA-256
  - o MD5

# TELECOMMUNICATON

- > SIM | (U)SIM
  - o 3GPP TS 51.011 (R5)
  - o 3GPP TS 31.101 (R11)
  - o 3GPP TS 31.102 (R12)
- > STK | CAT

3GPP TS 51.014 (R4)
3GPP TS 31.111 (R6)

- ≻ RFM | RAM
  - o 3GPP TS 23.048 (R5)
  - o 3GPP TS 31.115 (R12)
  - o 3GPP TS 31.116 (R11)
- ➢ ISIM | HPSIM
  - 3GPP TS 31.103 (R12)
     3GPP TS 31.104 (R12)
- SmartTrust WIB 1.3
- SIMalliance S@T v4.0.0



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#### STANDARD CONFIGURATION

Туре	User memory	RAM	Endurance	Data retention	T°
Standard	29KB	3.5 KB		10 years	-25 to + 85 °C
	74KB	5 KB			
	254 KB	10 KB			
	31 KB	5 KB	100K	25 years	
	35 KB	4 KB			
	127 KB	5 KB			
	131 KB	5 KB			
	243 KB	10 KB	500K		

# TELECOMMUNICATION CONFIGURATION

Туре	Feature	User memory	RAM	Endurance	Data Retention	۲°
SIM	-	44 to 55 KB	3.5 to 4 KB	100K	10 years	
USIM	WIB	33 to 226 KB	3.5 to 10 KB		10 to 25 years	s -25 to + 85 °C
	s@t	68 to 238 KB	4 to 10 KB	10 to 25 y 100 to 500K		
LTE	WIB	61 to 177 KB	4 to 10 KB			
	s@t	83 to 194 KB	4 to 10 KB		25 years	
	CSIM	98 to 208 KB	4 to 10 KB			
M2M	-	143 to 392 KB	8 to 12 KB	500K		-40 to +105 °C

### PACKAGING

TYPE	FEATURE	6-PINS MODULE	8-PINS MODULE	MFF2 VQFN-8	1-2-3-4 FF SMART CARDS	COMMUNICATION		
STANDARD								
Standard	-	Х	Х		Х	Т=0		
TELECOMMUNICATION								
SIM	-	Х	Х		Х			
USIM	WIB	Х	Х		Х			
	S@T	Х	Х		Х			
LTE	WIB	Х	Х		Х	Т=0		
	s@t	Х	Х		Х			
	CSIM	Х	Х		Х			
M2M	-	Х	Х	Х	Х			

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