

NXP JCOP Product Range

JCOP Version	JCOP 2.3.1	JCOP 2.3.2			JCOP 2.4.1	
JCOP Type	4x	1x	2x	3x	J2A	J3A
Communication						
ISO 7816, T=0, T=1 (communication speed, kbit/s)	223.2	223.2	223.2	223.2	223.2	223.2
ISO 14443 T=CL (communication speed, kbit/s)	424	-	-	424	-	848
USB 2.0 LS	yes	-	-	-	-	-
NFC	S2C	-	-	-	-	-
Memory						
Available EEPROM Options KByte	72	10/18	10/18/36	12/36/72	40/80	40/80
ROM (free for Applets, up to KBytes)	65	17	13	46	76	76
APDU Buffer (RAM/Bytes)	261	261	261	261	1462	1462
JC&GP						
Java Card Version	2.2.1	2.2.1	2.2.1	2.2.1	2.2.2	2.2.2
Java Card STATIC Option (EEPROM versions)	-	10	10	12	-	-
VGP CIR	2.0.1	2.1.1	2.1.1	2.1.1	-	-
Global Platform	2.1.1	2.1.1	2.1.1	2.1.1	2.1.1	2.1.1
SCP Secure Channel Protocol	SCP01, SCP02	SCP01, SCP02	SCP01, SCP02	SCP01, SCP02	SCP01, SCP02	SCP01, SCP02
Cryptography						
DES/TDES [bit]	56/112/168	56/112/168	56/112/168	56/112/168	56/112/168	56/112/168
AES [bit]	-	-	256*	-	256	256
RSA [bit]	2432	-	2432	2432	2048	2048
ECC GF(p) [bit]	-	-	-	-	320	320
ECC GF(2n) [bit]	239	-	239	239	-	-
SEED [bit]	128	-	128	128	128	128
SHA	SHA-1	-	SHA-1	SHA-1	SHA-1 / 2	SHA-1 / 2
MD5	yes	-	yes	yes	yes	yes
Random Number Generation	yes	yes	yes	yes	yes	yes
RSA Key Generation	yes	-	yes	yes	yes	yes
Additional Features						
Logical Channels	1	1	1	1	1	1
RMI Remote Method Invocation	yes	yes	yes	yes	yes	yes
SSD Supplementary Security Domain support	yes	-	yes	yes	yes	yes
Mifare™ API	yes	-	yes	yes	-	yes
Extended Length APDU	-	-	-	-	yes	yes
Random UID	yes	-	-	yes	yes	yes
Custom ROM Masking	yes	yes	yes	yes	yes	yes
Technology	0.18 µm	0.18 µm	0.18 µm	0.18 µm	0.14 µm	0.14 µm
All Delivery Types Wafer and Module (as available for SmartMX Family)	yes	yes	yes	yes	yes	yes
eGov + Banking Features						
BAC Support (ICAO9303)	yes	-	-	yes	yes	yes
EAC Support (ICAO9303, BSI TR 03110 v1.1.1)	-	-	-	-	yes	yes
BAC/EAC Accelerator API	-	-	-	-	yes	yes
BAC Performance (20KByte Read)	7s	-	-	7s	-	1.2s
EAC Performance (36KByte Read)	-	-	-	-	-	< 5s
eGov + Banking Applets						
EAC / BAC Applet	-	-	-	-	EAC v1.0	EAC v1.0
VISA VSDC	-	v2.7.1	v2.7.1	v2.7.1	-	-
MCW M/Chip (Contact)	-	-	4 v1.1	-	-	-
MCW PayPass M/Chip (Dual Interface)	-	-	-	4 v1.3.1	-	-
MCW Lite & Select (SDA & DDA)	-	-	yes	yes	-	-
MCP Paypass Magstripe transaction support	-	-	-	yes	-	-
Certification & Approvals						
EMVCo (HW approval)	yes	yes	yes	yes	yes	yes
VISA	-	yes	yes	yes	-	-
MasterCard PIC+CAST	-	-	yes	yes	-	-
Common Criteria (EAL)	-	-	-	-	5+	5+

* Available on 72K version only

** Not all possible combinations may be commercially available

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