

NXP JCOP 4.1 V2.2.1

Card ATR: 3B:FA:18:00:00:81:31:FE:45:4A:43:4F:50:34:31:56:32:32:31:9D

Note: Card is probably without garbage collector - it is not possible to test all supported algorithms at once. When certain number of instances is allocated, further instances cannot be obtained, even when supported by card. Re-installation of whole applet is necessary.

Note: Unclear situation with AES support - AES Cipher object can be obtained, but not AESKey object. According to forums posts, AES is available in hardware, but is usually disabled (and cannot be re-enabled).

javacardx.crypto.Cipher	supported	time
ALG_DES_CBC_NOPAD	yes	
ALG_DES_CBC_ISO9797_M1	yes	
ALG_DES_CBC_ISO9797_M2	yes	
ALG_DES_CBC_PKCS5	no	
ALG_DES_ECB_NOPAD	yes	
ALG_DES_ECB_ISO9797_M1	yes	
ALG_DES_ECB_ISO9797_M2	yes	
ALG_DES_ECB_PKCS5	no	
ALG_RSA_ISO14888	no	
ALG_RSA_PKCS1	yes	
ALG_RSA_ISO9796	no	
ALG_RSA_NOPAD	yes	
ALG_AES_BLOCK_128_CBC_NOPAD	yes	
ALG_AES_BLOCK_128_ECB_NOPAD	yes	
ALG_RSA_PKCS1_OAEP	no	
ALG_KOREAN_SEED_ECB_NOPAD	no	
ALG_KOREAN_SEED_CBC_NOPAD	no	
javacard.crypto.Signature		
ALG_DES_MAC4_NOPAD	no	
ALG_DES_MAC8_NOPAD	yes	
ALG_DES_MAC4_ISO9797_M1	no	
ALG_DES_MAC8_ISO9797_M1	yes	
ALG_DES_MAC4_ISO9797_M2	no	
ALG_DES_MAC8_ISO9797_M2	yes	
ALG_DES_MAC4_PKCS5	no	
ALG_DES_MAC8_PKCS5	no	
ALG_RSA_SHA_ISO9796	yes	
ALG_RSA_SHA_PKCS1	yes	
ALG_RSA_MD5_PKCS1	yes	
ALG_RSA_RIPEMD160_ISO9796	no	
ALG_RSA_RIPEMD160_PKCS1	no	
ALG_DSA_SHA	no	
ALG_RSA_SHA_RFC2409	no	
ALG_RSA_MD5_RFC2409	no	
ALG_ECDSA_SHA	yes	
ALG_AES_MAC_128_NOPAD	yes	
ALG_DES_MAC4_ISO9797_1_M2_ALG3	no	
ALG_DES_MAC8_ISO9797_1_M2_ALG3	yes	
ALG_RSA_SHA_PKCS1_PSS	no	

ALG_RSA_MD5_PKCS1_PSS	no	
ALG_RSA_RIPEMD160_PKCS1_PSS	no	
ALG_HMAC_SHA1	no	
ALG_HMAC_SHA_256	no	
ALG_HMAC_SHA_384	no	
ALG_HMAC_SHA_512	no	
ALG_HMAC_MD5	no	
ALG_HMAC_RIPEMD160	no	
ALG_RSA_SHA_ISO9796_MR	no	
ALG_RSA_RIPEMD160_ISO9796_MR	no	
ALG_SEED_MAC_NOPAD	no	
javacard.security.MessageDigest		
ALG_SHA	yes	
ALG_MD5	yes	
ALG_RIPEMD160	no	
ALG_SHA_256	no	
ALG_SHA_384	no	
ALG_SHA_512	no	
javacard.security.RandomData		
ALG_PSEUDO_RANDOM	yes	
ALG_SECURE_RANDOM	yes	
javacard.security.KeyBuilder		
TYPE_DES_TRANSIENT_RESET	yes	
TYPE_DES_TRANSIENT_DESELECT	yes	
TYPE_DES LENGTH_DES	yes	
TYPE_DES LENGTH_DES3_2KEY	yes	
TYPE_DES LENGTH_DES3_3KEY	yes	
TYPE_AES_TRANSIENT_RESET	no	
TYPE_AES_TRANSIENT_DESELECT	no	
TYPE_AES LENGTH_AES_128	no	
TYPE_AES LENGTH_AES_192	no	
TYPE_AES LENGTH_AES_256	no	
TYPE_RSA_PUBLIC LENGTH_RSA_512	yes	
TYPE_RSA_PUBLIC LENGTH_RSA_736	yes	
TYPE_RSA_PUBLIC LENGTH_RSA_768	yes	
TYPE_RSA_PUBLIC LENGTH_RSA_896	yes	
TYPE_RSA_PUBLIC LENGTH_RSA_1024	yes	
TYPE_RSA_PUBLIC LENGTH_RSA_1280	yes	
TYPE_RSA_PUBLIC LENGTH_RSA_1536	yes	
TYPE_RSA_PUBLIC LENGTH_RSA_1984	yes	
TYPE_RSA_PUBLIC LENGTH_RSA_2048	yes	
TYPE_RSA_PRIVATE LENGTH_RSA_512	yes	
TYPE_RSA_PRIVATE LENGTH_RSA_736	yes	
TYPE_RSA_PRIVATE LENGTH_RSA_768	yes	
TYPE_RSA_PRIVATE LENGTH_RSA_896	yes	
TYPE_RSA_PRIVATE LENGTH_RSA_1024	yes	
TYPE_RSA_PRIVATE LENGTH_RSA_1280	yes	
TYPE_RSA_PRIVATE LENGTH_RSA_1536	yes	
TYPE_RSA_PRIVATE LENGTH_RSA_1984	yes	
TYPE_RSA_PRIVATE LENGTH_RSA_2048	yes	
TYPE_RSA_CRT_PRIVATE LENGTH_RSA_512	yes	
TYPE_RSA_CRT_PRIVATE LENGTH_RSA_736	no	

TYPE_RSA_CRT_PRIVATE_LENGTH_RSA_768	yes	
TYPE_RSA_CRT_PRIVATE_LENGTH_RSA_896	yes	
TYPE_RSA_CRT_PRIVATE_LENGTH_RSA_1024	yes	
TYPE_RSA_CRT_PRIVATE_LENGTH_RSA_1280	yes	
TYPE_RSA_CRT_PRIVATE_LENGTH_RSA_1536	yes	
TYPE_RSA_CRT_PRIVATE_LENGTH_RSA_1984	yes	
TYPE_RSA_CRT_PRIVATE_LENGTH_RSA_2048	yes	
TYPE_DSA_PRIVATE_LENGTH_DSA_512	no	
TYPE_DSA_PRIVATE_LENGTH_DSA_768	no	
TYPE_DSA_PRIVATE_LENGTH_DSA_1024	no	
TYPE_DSA_PUBLIC_LENGTH_DSA_512	no	
TYPE_DSA_PUBLIC_LENGTH_DSA_768	no	
TYPE_DSA_PUBLIC_LENGTH_DSA_1024	no	
TYPE_EC_F2M_PRIVATE_LENGTH_EC_F2M_113	yes	
TYPE_EC_F2M_PRIVATE_LENGTH_EC_F2M_131	yes	
TYPE_EC_F2M_PRIVATE_LENGTH_EC_F2M_163	yes	
TYPE_EC_F2M_PRIVATE_LENGTH_EC_F2M_193	yes	
TYPE_EC_FP_PRIVATE_LENGTH_EC_FP_112	no	
TYPE_EC_FP_PRIVATE_LENGTH_EC_FP_128	no	
TYPE_EC_FP_PRIVATE_LENGTH_EC_FP_160	no	
TYPE_EC_FP_PRIVATE_LENGTH_EC_FP_192	no	
TYPE_KOREAN_SEED_TRANSIENT_RESET	no	
TYPE_KOREAN_SEED_TRANSIENT_DESELECT	no	
TYPE_KOREAN_SEED_LENGTH_KOREAN_SEED_128	no	
TYPE_HMAC_TRANSIENT_RESET	no	
TYPE_HMAC_TRANSIENT_DESELECT	no	
TYPE_HMAC_LENGTH_HMAC_SHA_1_BLOCK_64	no	
TYPE_HMAC_LENGTH_HMAC_SHA_256_BLOCK_64	no	
TYPE_HMAC_LENGTH_HMAC_SHA_384_BLOCK_64	no	
TYPE_HMAC_LENGTH_HMAC_SHA_512_BLOCK_64	no	
javacard.security.KeyPair ALG_RSA on-card generation		
ALG_RSA_LENGTH_RSA_512	no	
ALG_RSA_LENGTH_RSA_736	no	
ALG_RSA_LENGTH_RSA_768	no	
ALG_RSA_LENGTH_RSA_896	no	
ALG_RSA_LENGTH_RSA_1024	no	
ALG_RSA_LENGTH_RSA_1280	no	
ALG_RSA_LENGTH_RSA_1536	no	
ALG_RSA_LENGTH_RSA_1984	no	
ALG_RSA_LENGTH_RSA_2048	no	
javacard.security.KeyPair ALG_RSA_CRT on-card generation		
ALG_RSA_CRT_LENGTH_RSA_512	yes	0.531
ALG_RSA_CRT_LENGTH_RSA_736	no	
ALG_RSA_CRT_LENGTH_RSA_768	yes	0.859
ALG_RSA_CRT_LENGTH_RSA_896	yes	2.281
ALG_RSA_CRT_LENGTH_RSA_1024	yes	2.422
ALG_RSA_CRT_LENGTH_RSA_1280	yes	3.266
ALG_RSA_CRT_LENGTH_RSA_1536	yes	17.953
javacard.security.KeyPair ALG_DSA on-card generation		
ALG_DSA_LENGTH_DSA_512	no	
ALG_DSA_LENGTH_DSA_768	no	

ALG_DSA LENGTH_DSA_1024	no	
javacard.security.KeyPair ALG_EC_F2M on-card generation		
ALG_EC_F2M LENGTH_EC_F2M_113	yes	0.703
ALG_EC_F2M LENGTH_EC_F2M_131	yes	0.703
ALG_EC_F2M LENGTH_EC_F2M_163	yes	0.719
ALG_EC_F2M LENGTH_EC_F2M_193	yes	0.797
javacard.security.KeyPair ALG_EC_FP on-card generation		
ALG_EC_FP LENGTH_EC_FP_112	no	
ALG_EC_FP LENGTH_EC_FP_128	no	