

Thank you for your interest in Gemalto's line of IDPrime PIV cards. The cards are FIPS201 compliant and validated by NIST SP800-73-3. Note Gemalto offers flexible profile options for features such as: dual- and tri-interface cards, DES or AES application keys, RSA or ECC asymmetric algorithms, T=0 or T=1 protocols, ISO14443 Type A or Type B contactless protocols, and an optional OATH compliant OTP applet. Card artwork, magnetic stripe, security features, and laser engraving services are also available.

Should you have additional questions, you may contact your local Gemalto Sales Representative or reach out to us on the following link: <http://www.gemalto.com/govt/index.html>

Your card samples pertain to the following electrical profile:

Java Card Details:

IDPrime PIV Card v2.0 (128K v2 dual-interface)

Card Configuration:	Preloaded with IDPrime PIV Applet v2.0, selected by default OATH compliant Gemalto OTP Applet included
Contact chip card ATR:	3B 7D 96 00 00 80 31 80 65 B0 83 11 11 E5 83 00 90 00
Card Manager AID:	A0 00 00 00 03 00 00 00
Card Manager Keys:	
Master Key Value:	47 45 4D 58 50 52 45 53 53 4F 53 41 4D 50 4C 45
Diversified:	SCP01-05 CPG2.02, Keyset Version=01
Contact Chip Protocol:	T=0
Contactless Protocol:	ISO14443 Type A
Card Body:	PET/PVC blend, blank white w/ laser engrave overlay, HiCo 3-track magnetic stripe.
Gemalto Order Reference:	TBD (ordering with Customer Service for this exact profile)

PIV Card v2.0 DATA OBJECTS:

CONTAINER	CONTAINER ID	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
CARD CAPABILITY CONTAINER	0XDB00	'5FC107'	311	0xFFF307	CONTACT-READ : ALWAYS Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : ALWAYS Contactless ACs : * PutData : NEVER * GetData : NEVER
CARD HOLDER UNIQUE IDENTIFIER	0X3000	'5FC102'	2903	0xFFF302	CONTACT and CONTACTLESS-READ : ALWAYS Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : ALWAYS Contactless ACs : * Put Data : NEVER * GetData : ALWAYS

CONTAINER	CONTAINER ID	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
X.509 CERTIFICATE FOR PIV AUTHENTICATION (KEY REFERENCE '9A')	0X0101	'5FC105'	2400	0xFFFF305	CONTACT- READ : ALWAYS Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : ALWAYS Contactless ACs : * PutData : NEVER * GetData : NEVER
CARDHOLDER FINGERPRINTS	0X6010	'5FC103'	4051	0xFFFF303	CONTACT- READ : with User PIN Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : User PIN Contactless ACs : * PutData : NEVER * GetData : NEVER
SECURITY OBJECT	0X9000	'5FC106'	1080	0xFFFF306	CONTACT-READ : ALWAYS Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : ALWAYS Contactless ACs : * PutData : NEVER * GetData : NEVER

CONTAINER	CONTAINER ID	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
CARDHOLDER FACIAL IMAGE	0X6030	'5FC108'	12723	0xFFFF308	CONTACT-READ : with User PIN Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : User PIN Contactless ACs : * PutData : NEVER * GetData : NEVER
PRINTED INFORMATION	0X3001	'5FC109'	170	0xFFFF309	CONTACT-READ : with User PIN Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : User PIN Contactless ACs : * PutData : NEVER * GetData : NEVER
X.509 CERTIFICATE FOR DIGITAL SIGNATURE(KEY REFERENCE '9C')	0X0100	'5FC10A'	2400	0xFFFF30A	CONTACT-READ : ALWAYS Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : ALWAYS Contactless ACs : * PutData : NEVER * GetData : NEVER

CONTAINER	CONTAINER ID	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
X.509 CERTIFICATE FOR KEY MANAGEMENT (KEY REFERENCE '9D')	0X0102	'5FC10B'	2400	0xFFFF30B	CONTACT- READ : ALWAYS Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : ALWAYS Contactless ACs : * PutData : NEVER * GetData : NEVER
X.509 CERTIFICATE FOR CARD AUTHENTICATION (KEY REFERENCE '9E')	0X0500	'5FC101'	2400	0xFFFF301	CONTACT and CONTACTLESS : READ ALWAYS Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : ALWAYS Contactless ACs : * PutData : NEVER * GetData : ALWAYS
DISCOVERY OBJECT	0X6050	'7E'	30	0xFFFF30C	CONTACT and CONTACTLESS : READ ALWAYS Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : ALWAYS Contactless ACs : * PutData : NEVER * GetData : ALWAYS

CONTAINER	CONTAINER ID	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
KEY HISTORY OBJECT	0X6060	'5FC10C'	128	0xFFFF30D	CONTACT-READ ALWAYS Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : ALWAYS Contactless ACs : * PutData : NEVER * GetData : NEVER
RETIRED X.509 CERTIFICATE FOR KEY MANAGEMENT 1 (KEY REFERENCE '82')	0X1001	'5FC10D'	2400	0xFFFF30E	CONTACT-READ ALWAYS Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : ALWAYS Contactless ACs : * PutData : NEVER * GetData : NEVER
RETIRED X.509 CERTIFICATE FOR KEY MANAGEMENT 2 (KEY REFERENCE '83')	0X1002	'5FC10E'	2400	0xFFFF30F	CONTACT-READ ALWAYS Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : ALWAYS Contactless ACs : * PutData : NEVER * GetData : NEVER

CONTAINER	CONTAINER ID	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
RETIRED X.509 CERTIFICATE FOR KEY MANAGEMENT 3 (KEY REFERENCE '84')	0X1003	'5FC10F'	2400	0xFFFF310	CONTACT-READ ALWAYS Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : ALWAYS Contactless ACs : * PutData : NEVER * GetData : NEVER
RETIRED X.509 CERTIFICATE FOR KEY MANAGEMENT 4 (KEY REFERENCE '85')	0X1004	'5FC110'	2400	0xFFFF311	CONTACT-READ ALWAYS Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : ALWAYS Contactless ACs : * PutData : NEVER * GetData : NEVER
RETIRED X.509 CERTIFICATE FOR KEY MANAGEMENT 5 (KEY REFERENCE '86')	0X1005	'5FC111'	2400	0xFFFF312	CONTACT-READ ALWAYS Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : ALWAYS Contactless ACs : * PutData : NEVER * GetData : NEVER

CONTAINER	CONTAINER ID	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
RETIRED X.509 CERTIFICATE FOR KEY MANAGEMENT 6 (KEY REFERENCE '87')	0X1006	'5FC112'	2400	0xFFFF313	CONTACT-READ ALWAYS Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : ALWAYS Contactless ACs : * PutData : NEVER * GetData : NEVER
RETIRED X.509 CERTIFICATE FOR KEY MANAGEMENT 7 (KEY REFERENCE '88')	0X1007	'5FC113'	2400	0xFFFF314	CONTACT-READ ALWAYS Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : ALWAYS Contactless ACs : * PutData : NEVER * GetData : NEVER
RETIRED X.509 CERTIFICATE FOR KEY MANAGEMENT 8 (KEY REFERENCE '89')	0X1008	'5FC114'	2400	0xFFFF315	CONTACT-READ ALWAYS Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : ALWAYS Contactless ACs : * PutData : NEVER * GetData : NEVER

CONTAINER	CONTAINER ID	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
RETIRED X.509 CERTIFICATE FOR KEY MANAGEMENT 9 (KEY REFERENCE '8A')	0X1009	'5FC115'	2400	0xFFFF316	CONTACT-READ ALWAYS Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : ALWAYS Contactless ACs : * PutData : NEVER * GetData : NEVER
RETIRED X.509 CERTIFICATE FOR KEY MANAGEMENT 10 (KEY REFERENCE '8B')	0X100A	'5FC116'	2400	0xFFFF317	CONTACT-READ ALWAYS Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : ALWAYS Contactless ACs : * PutData : NEVER * GetData : NEVER
RETIRED X.509 CERTIFICATE FOR KEY MANAGEMENT 11 (KEY REFERENCE '8C')	0X100B	'5FC117'	2400	0xFFFF318	CONTACT-READ ALWAYS Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : ALWAYS Contactless ACs : * PutData : NEVER * GetData : NEVER

CONTAINER	CONTAINER ID	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
RETIRED X.509 CERTIFICATE FOR KEY MANAGEMENT 12 (KEY REFERENCE '8D')	0X100C	'5FC118'	2400	0xFFFF319	CONTACT-READ ALWAYS Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : ALWAYS Contactless ACs : * PutData : NEVER * GetData : NEVER
RETIRED X.509 CERTIFICATE FOR KEY MANAGEMENT 13 (KEY REFERENCE '8E')	0X100D	'5FC119'	2400	0xFFFF31A	CONTACT-READ ALWAYS Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : ALWAYS Contactless ACs : * PutData : NEVER * GetData : NEVER
RETIRED X.509 CERTIFICATE FOR KEY MANAGEMENT 14 (KEY REFERENCE '8F')	0X100E	'5FC11A'	2400	0xFFFF31B	CONTACT-READ ALWAYS Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : ALWAYS Contactless ACs : * PutData : NEVER * GetData : NEVER

CONTAINER	CONTAINER ID	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
RETIRED X.509 CERTIFICATE FOR KEY MANAGEMENT 15 (KEY REFERENCE '90')	0X100F	'5FC11B'	2400	0xFFFF31C	CONTACT-READ ALWAYS Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : ALWAYS Contactless ACs : * PutData : NEVER * GetData : NEVER
RETIRED X.509 CERTIFICATE FOR KEY MANAGEMENT 16 (KEY REFERENCE '91')	0X1010	'5FC11C'	2400	0xFFFF31D	CONTACT-READ ALWAYS Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : ALWAYS Contactless ACs : * PutData : NEVER * GetData : NEVER
RETIRED X.509 CERTIFICATE FOR KEY MANAGEMENT 17 (KEY REFERENCE '92')	0X1011	'5FC11D'	2400	0xFFFF31E	CONTACT-READ ALWAYS Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : ALWAYS Contactless ACs : * PutData : NEVER * GetData : NEVER

CONTAINER	CONTAINER ID	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
RETIRED X.509 CERTIFICATE FOR KEY MANAGEMENT 18 (KEY REFERENCE '93')	0X1012	'5FC11E'	2400	0xFFFF31F	CONTACT-READ ALWAYS Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : ALWAYS Contactless ACs : * PutData : NEVER * GetData : NEVER
RETIRED X.509 CERTIFICATE FOR KEY MANAGEMENT 19 (KEY REFERENCE '94')	0X1013	'5FC11F'	2400	0xFFFF320	CONTACT-READ ALWAYS Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : ALWAYS Contactless ACs : * PutData : NEVER * GetData : NEVER
RETIRED X.509 CERTIFICATE FOR KEY MANAGEMENT 20 (KEY REFERENCE '95')	0X1014	'5FC120'	2400	0xFFFF321	CONTACT-READ ALWAYS Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : ALWAYS Contactless ACs : * PutData : NEVER * GetData : NEVER

CONTAINER	CONTAINER ID	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
CARDHOLDER IRIS IMAGES	0X1015	'5FC121'	7127	0xFFFF322	CONTACT-READ : User PIN Contact ACs : * Put Data : External Authentication using Card Management Key (9B) * GetData : User PIN Contactless ACs : * PutData : NEVER * GetData : NEVER

PIV v2.0 PIN OBJECTS:

PIN TYPE	Key Reference Value	BER_TLV TAG	MINIMUM SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
GLOBAL PIN	0x00				ALWAYS
PIV CARD APPLICATION PIN	0x80			0xFF8102	ALWAYS
PIN UNBLOCKING KEY (PUK)	0x81			0xFF8101	ALWAYS

User PIN value
 Retry counter = **3** PIN Value (hexa) = **31323334FFFFFFFF**
 PIN Value (ascii) = **1234**

Admin PIN value
 Retry counter = **3** PIN Value (hexa) = **31323334FFFFFFFF**
 PIN Value (ascii) = **1234**

Global PIN value
 Retry counter = **3** PIN Value (hexa) = **31323334FFFFFFFF**
 PIN Value (ascii) = **1234**

PIV Card v2.0 KEY OBJECTS:

PIV admin Key 9B

Value: 010203040506070801020304050607080102030405060708

CONTAINER	Key Reference Value	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
PIV AUTHENTICATION KEY	0x9A			0xFF900A	USE KEY in CONTACT : User PIN USE KEY in CONTACTLESS : NEVER Contact ACs : * Clear = NEVER * General Authenticate : User PIN * Generate Key Pair : External Authentication using Card Management Key (9B) * Put Data : External Authentication using Card Management Key (9B) * GetData : NEVER Contactless ACs : * Clear = NEVER * General Authenticate : NEVER * Generate Key Pair : NEVER * Put Data : NEVER * GetData : NEVER

CONTAINER	Key Reference Value	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
CARD MANAGEMENT KEY (9B)	0x9B			0xFF840B	<p>USE KEY in CONTACT and CONTACTLESS : ALWAYS</p> <p>Contact ACs :</p> <ul style="list-style-type: none"> * Clear = NEVER * General Authenticate : ALWAYS * Put Data : External Authentication using Card Management Key (9B) * GetData : NEVER <p>Contactless ACs :</p> <ul style="list-style-type: none"> * Clear = NEVER * General Authenticate : ALWAYS * Put Data : NEVER * GetData : NEVER

CONTAINER	Key Reference Value	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
DIGITAL SIGNATURE KEY	0x9C			0xFF900C	USE KEY in CONTACT : User PIN USE KEY in CONTACTLESS : NEVER Contact ACs : * Clear = NEVER * General Authenticate : User PIN ALWAYS * Generate Key Pair : External Authentication using Card Management Key (9B) * Put Data : External Authentication using Card Management Key (9B) * GetData : NEVER Contactless ACs : * Clear = NEVER * General Authenticate : NEVER * Generate Key Pair : NEVER * Put Data : NEVER * GetData : NEVER

CONTAINER	Key Reference Value	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
KEY MANAGEMENT KEY	0x9D			0xFF900D	USE KEY in CONTACT : User PIN USE KEY in CONTACTLESS : NEVER Contact ACs : * Clear = NEVER * General Authenticate : User PIN * Generate Key Pair : External Authentication using Card Management Key (9B) * Put Data : External Authentication using Card Management Key (9B) * GetData : NEVER Contactless ACs : * Clear = NEVER * General Authenticate : NEVER * Generate Key Pair : NEVER * Put Data : NEVER * GetData : NEVER

CONTAINER	Key Reference Value	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
CARD AUTHENTICATION KEY (SYMMETRIC)	0x9E			0xFF840E	USE KEY in CONTACT and CONTACTLESS : ALWAYS Contact ACs : * Clear = NEVER * General Authenticate : ALWAYS * Put Data : External Authentication using Card Management Key (9B) * GetData : NEVER Contactless ACs : * Clear = NEVER * General Authenticate : ALWAYS * Put Data : NEVER * GetData : NEVER

CONTAINER	Key Reference Value	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
CARD AUTHENTICATION KEY (ASYMMETRIC)	0x9E			0xFF900E	USE KEY in CONTACT and CONTACTLESS : ALWAYS Contact ACs : * Clear = NEVER * General Authenticate : ALWAYS * Generate Key Pair : External Authentication using Card Management Key (9B) * Put Data : External Authentication using Card Management Key (9B) * GetData : NEVER Contactless ACs : * Clear = NEVER * General Authenticate : ALWAYS * Generate Key Pair : NEVER * Put Data : NEVER * GetData : NEVER

CONTAINER	Key Reference Value	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
RETIRED KEY MANAGEMENT KEY 1	0X82			0xFF9010	USE KEY in CONTACT : User PIN USE KEY in CONTACTLESS : NEVER Contact ACs : * Clear = NEVER * General Authenticate : User PIN * Generate Key Pair : 9B Auth * Put Data : External Authentication using Card Management Key (9B) * GetData : NEVER Contactless ACs : * Clear = NEVER * General Authenticate : NEVER * Generate Key Pair : NEVER * Put Data : NEVER * GetData : NEVER

CONTAINER	Key Reference Value	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
RETIRED KEY MANAGEMENT KEY 2	0X83			0xFF9011	USE KEY in CONTACT : User PIN USE KEY in CONTACTLESS : NEVER Contact ACs : * Clear = NEVER * General Authenticate : User PIN * Generate Key Pair : 9B Auth * Put Data : External Authentication using Card Management Key (9B) * GetData : NEVER Contactless ACs : * Clear = NEVER * General Authenticate : NEVER * Generate Key Pair : NEVER * Put Data : NEVER * GetData : NEVER

CONTAINER	Key Reference Value	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
RETIRED KEY MANAGEMENT KEY 3	0X84			0xFF9012	USE KEY in CONTACT : User PIN USE KEY in CONTACTLESS : NEVER Contact ACs : * Clear = NEVER * General Authenticate : User PIN * Generate Key Pair : 9B Auth * Put Data : External Authentication using Card Management Key (9B) * GetData : NEVER Contactless ACs : * Clear = NEVER * General Authenticate : NEVER * Generate Key Pair : NEVER * Put Data : NEVER * GetData : NEVER

CONTAINER	Key Reference Value	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
RETIRED KEY MANAGEMENT KEY 4	0X85			0xFF9013	USE KEY in CONTACT : User PIN USE KEY in CONTACTLESS : NEVER Contact ACs : * Clear = NEVER * General Authenticate : User PIN * Generate Key Pair : 9B Auth * Put Data : External Authentication using Card Management Key (9B) * GetData : NEVER Contactless ACs : * Clear = NEVER * General Authenticate : NEVER * Generate Key Pair : NEVER * Put Data : NEVER * GetData : NEVER

CONTAINER	Key Reference Value	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
RETIRED KEY MANAGEMENT KEY 5	0X86			0xFF9014	USE KEY in CONTACT : User PIN USE KEY in CONTACTLESS : NEVER Contact ACs : * Clear = NEVER * General Authenticate : User PIN * Generate Key Pair : 9B Auth * Put Data : External Authentication using Card Management Key (9B) * GetData : NEVER Contactless ACs : * Clear = NEVER * General Authenticate : NEVER * Generate Key Pair : 9B Auth * Put Data : NEVER * GetData : NEVER

CONTAINER	Key Reference Value	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
RETIRED KEY MANAGEMENT KEY 6	0X87			0xFF9015	USE KEY in CONTACT : User PIN USE KEY in CONTACTLESS : NEVER Contact ACs : * Clear = NEVER * General Authenticate : User PIN * Generate Key Pair : 9B Auth * Put Data : External Authentication using Card Management Key (9B) * GetData : NEVER Contactless ACs : * Clear = NEVER * General Authenticate : NEVER * Generate Key Pair : NEVER * Put Data : NEVER * GetData : NEVER

CONTAINER	Key Reference Value	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
RETIRED KEY MANAGEMENT KEY 7	0X88			0xFF9016	USE KEY in CONTACT : User PIN USE KEY in CONTACTLESS : NEVER Contact ACs : * Clear = NEVER * General Authenticate : User PIN * Generate Key Pair : 9B Auth * Put Data : External Authentication using Card Management Key (9B) * GetData : NEVER Contactless ACs : * Clear = NEVER * General Authenticate : NEVER * Generate Key Pair : NEVER * Put Data : NEVER * GetData : NEVER

CONTAINER	Key Reference Value	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
RETIRED KEY MANAGEMENT KEY 8	0X89			0xFF9017	USE KEY in CONTACT : User PIN USE KEY in CONTACTLESS : NEVER Contact ACs : * Clear = NEVER * General Authenticate : User PIN * Generate Key Pair : 9B Auth * Put Data : External Authentication using Card Management Key (9B) * GetData : NEVER Contactless ACs : * Clear = NEVER * General Authenticate : NEVER * Generate Key Pair : NEVER * Put Data : NEVER * GetData : NEVER

CONTAINER	Key Reference Value	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
RETIRED KEY MANAGEMENT KEY 9	0X8A			0xFF9018	USE KEY in CONTACT : User PIN USE KEY in CONTACTLESS : NEVER Contact ACs : * Clear = NEVER * General Authenticate : User PIN * Generate Key Pair : 9B Auth * Put Data : External Authentication using Card Management Key (9B) * GetData : NEVER Contactless ACs : * Clear = NEVER * General Authenticate : NEVER * Generate Key Pair : NEVER * Put Data : NEVER * GetData : NEVER

CONTAINER	Key Reference Value	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
RETIRED KEY MANAGEMENT KEY 10	0X8B			0xFF9019	USE KEY in CONTACT : User PIN USE KEY in CONTACTLESS : NEVER Contact ACs : * Clear = NEVER * General Authenticate : User PIN * Generate Key Pair : 9B Auth * Put Data : External Authentication using Card Management Key (9B) * GetData : NEVER Contactless ACs : * Clear = NEVER * General Authenticate : NEVER * Generate Key Pair : NEVER * Put Data : NEVER * GetData : NEVER

CONTAINER	Key Reference Value	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
RETIRED KEY MANAGEMENT KEY 11	0X8C			0xFF901A	USE KEY in CONTACT : User PIN USE KEY in CONTACTLESS : NEVER Contact ACs : * Clear = NEVER * General Authenticate : User PIN * Generate Key Pair : 9B Auth * Put Data : External Authentication using Card Management Key (9B) * GetData : NEVER Contactless ACs : * Clear = NEVER * General Authenticate : NEVER * Generate Key Pair : NEVER * Put Data : NEVER * GetData : NEVER

CONTAINER	Key Reference Value	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
RETIRED KEY MANAGEMENT KEY 12	0X8D			0xFF901B	USE KEY in CONTACT : User PIN USE KEY in CONTACTLESS : NEVER Contact ACs : * Clear = NEVER * General Authenticate : User PIN * Generate Key Pair : 9B Auth * Put Data : External Authentication using Card Management Key (9B) * GetData : NEVER Contactless ACs : * Clear = NEVER * General Authenticate : NEVER * Generate Key Pair : NEVER * Put Data : NEVER * GetData : NEVER

CONTAINER	Key Reference Value	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
RETIRED KEY MANAGEMENT KEY 13	0X8E			0xFF901C	USE KEY in CONTACT : User PIN USE KEY in CONTACTLESS : NEVER Contact ACs : * Clear = NEVER * General Authenticate : User PIN * Generate Key Pair : 9B Auth * Put Data : External Authentication using Card Management Key (9B) * GetData : NEVER Contactless ACs : * Clear = NEVER * General Authenticate : NEVER * Generate Key Pair : NEVER * Put Data : NEVER * GetData : NEVER

CONTAINER	Key Reference Value	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
RETIRED KEY MANAGEMENT KEY 14	0X8F			0xFF901D	USE KEY in CONTACT : User PIN USE KEY in CONTACTLESS : NEVER Contact ACs : * Clear = NEVER * General Authenticate : User PIN * Generate Key Pair : 9B Auth * Put Data : External Authentication using Card Management Key (9B) * GetData : NEVER Contactless ACs : * Clear = NEVER * General Authenticate : NEVER * Generate Key Pair : NEVER * Put Data : NEVER * GetData : NEVER

CONTAINER	Key Reference Value	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
RETIRED KEY MANAGEMENT KEY 15	0X90			0xFF901E	USE KEY in CONTACT : User PIN USE KEY in CONTACTLESS : NEVER Contact ACs : * Clear = NEVER * General Authenticate : User PIN * Generate Key Pair : 9B Auth * Put Data : External Authentication using Card Management Key (9B) * GetData : NEVER Contactless ACs : * Clear = NEVER * General Authenticate : NEVER * Generate Key Pair : NEVER * Put Data : NEVER * GetData : NEVER

CONTAINER	Key Reference Value	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
RETIRED KEY MANAGEMENT KEY 16	0X91			0xFF901F	USE KEY in CONTACT : User PIN USE KEY in CONTACTLESS : NEVER Contact ACs : * Clear = NEVER * General Authenticate : User PIN * Generate Key Pair : 9B Auth * Put Data : External Authentication using Card Management Key (9B) * GetData : NEVER Contactless ACs : * Clear = NEVER * General Authenticate : NEVER * Generate Key Pair : NEVER * Put Data : NEVER * GetData : NEVER

CONTAINER	Key Reference Value	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
RETIRED KEY MANAGEMENT KEY 17	0X92			0xFF9020	USE KEY in CONTACT : User PIN USE KEY in CONTACTLESS : NEVER Contact ACs : * Clear = NEVER * General Authenticate : User PIN * Generate Key Pair : 9B Auth * Put Data : External Authentication using Card Management Key (9B) * GetData : NEVER Contactless ACs : * Clear = NEVER * General Authenticate : NEVER * Generate Key Pair : NEVER * Put Data : NEVER * GetData : NEVER

CONTAINER	Key Reference Value	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
RETIRED KEY MANAGEMENT KEY 18	0X93			0xFF9021	USE KEY in CONTACT : User PIN USE KEY in CONTACTLESS : NEVER Contact ACs : * Clear = NEVER * General Authenticate : User PIN * Generate Key Pair : 9B Auth * Put Data : External Authentication using Card Management Key (9B) * GetData : NEVER Contactless ACs : * Clear = NEVER * General Authenticate : NEVER * Generate Key Pair : NEVER * Put Data : NEVER * GetData : NEVER

CONTAINER	Key Reference Value	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
RETIRED KEY MANAGEMENT KEY 19	0X94			0xFF9022	USE KEY in CONTACT : User PIN USE KEY in CONTACTLESS : NEVER Contact ACs : * Clear = NEVER * General Authenticate : User PIN * Generate Key Pair : 9B Auth * Put Data : External Authentication using Card Management Key (9B) * GetData : NEVER Contactless ACs : * Clear = NEVER * General Authenticate : NEVER * Generate Key Pair : NEVER * Put Data : NEVER * GetData : NEVER

CONTAINER	Key Reference Value	BER_TLV TAG	SIZE	INTERNAL OBJECT TAG	INTERFACE & ACCESS CONDITION
RETIRED KEY MANAGEMENT KEY 20	0X95			0xFF9023	USE KEY in CONTACT : User PIN USE KEY in CONTACTLESS : NEVER Contact ACs : * Clear = NEVER * General Authenticate : User PIN * Generate Key Pair : 9B Auth * Put Data : External Authentication using Card Management Key (9B) * GetData : NEVER Contactless ACs : * Clear = NEVER * General Authenticate : NEVER * Generate Key Pair : NEVER * Put Data : NEVER * GetData : NEVER

OTP Applet:

AID: xA0000000308000000000280101

Event based

Fixed initial HOTP Key: x3132333435363738393031323334353637383930

PIN Required: Yes, Global PIN